SAN DIEGO AREA

(619) 767-2370

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CALIFORNIA COASTAL COMMISSION

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Addendum

December 1, 2016

To: Commissioners and Interested Persons

From: California Coastal Commission San Diego Staff

Subject: Addendum to Item W14a, Coastal Commission Permit Application #6-16-0132 (Oceanus GHAD & Nolan), for the Commission Meeting of December 7, 2016

The purpose of this addendum is to provide clarification and to address the concerns raised by the applicant. Staff recommends the following changes be made to the above-referenced staff report. Deletions shall be marked by a strikethrough and additions shall be <u>underlined</u>:

1. On Page 1 of the staff report, The Project Description shall be revised as follows:

Follow up to an emergency permit for construction of an approximately 50 70 ft. long, 34 ft. 6 in. high, 28 in. wide colored and textured concrete tiedback seawall; new construction of an additional 57 ft. feet of seawall.

2. On Page 1 of the staff report, the first paragraph of the Summary of Staff Recommendation shall be revised as follows:

Staff recommends that the Commission **approve** the applicants' request for shoreline armoring to protect a 13-unit condominium structure, a duplex, and a 5-unit apartment building on the blufftop. The southern part, approximately 50 feet, of the proposed 125 ft. long seawall has already been constructed pursuant to an emergency permit issued in March 2016 (CDP G-6-15-0052/Oceanus GHAD). <u>Although the total length of the proposed seawall is approximately 125 ft.</u>, 106 ft. of the seawall will encroach onto the public beach and natural bedrock shelf...

3. On Page 4 of the staff report, the following shall be added to the list of exhibits:

Exhibit 13 – Applicant Response Letter Exhibit 14 – Natural Bedrock Shelf 4. On Page 16 of the staff report, the first paragraph of the Project History/Site History shall be modified as follows:

The applicants are proposing construction of a new, approximately 125 ft. long, 35 foot high, 28 in. wide, colored and textured concrete tiedback seawall. The applicant initially proposed to construct the entirety of the seawall on the public beach. However, after discussions with Commission staff, the applicant now proposes to construct the northern approximately 25 ft. of the seawall on top of an existing natural bedrock shelf and to support that section of the seawall with a caisson foundation. The bedrock shelf is identified in Exhibit 14 and is also visible directly landward of the two beach users in Exhibit 5. The caissons may become exposed in the future as the bedrock shelf continues to erode and may require shotcrete encasement. The design change will minimize the seawall's immediate encroachment on the public beach and will allow for the creation of additional beach area as the bedrock shelf erodes. The remainder of the seawall will be located on the beach and will employ a standard keyed-in foundation.

5. On Page 28 of the staff report, the final incomplete paragraph shall be revised as follows:

However, the Commission has not established a single method to quantify and then mitigate for recreational losses due to encroachment by a seawall and then long-term beach loss due to fixing the back of the beach. Although the total length of the proposed seawall is approximately 125 ft., 106 ft. of the seawall will encroach onto the public beach and natural bedrock shelf. The 106 feet foot long portion of the proposed seawall will encroach a maximum of 2 1/3 feet (28 inches) onto the public beach and public beach shelf. The total encroachment that will occur from the proposed seawall will be approximately 247 square feet (2 1/3 ft. x 106 ft.) of 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 and shelf area fails to keep pace with the loss of or inundation of the seaward portion of the beach and bluff.

The applicants contend, in a letter dated November 30, 2016 and attached as Exhibit 13, that the portion of the seawall proposed to be located on the bedrock shelf will not result in impacts to beach recreation or public access and therefore, they should not be required to mitigate for public access and recreation impacts for that portion of the wall. Instead, the applicants assert that mitigation for public access and recreation impacts for that portion of the shelf erodes to the point that the foundation of the seawall is located seaward of the base of the bluff. In the letter, the applicants states that 20 ft. of the seawall is proposed to be located on the shelf, while the submitted plans show that 25 ft. of the seawall is

proposed to be located on the shelf. The Commission recognizes that the shelf is approximately 12 ft. above the current beach level, so it is currently not easy to access. However, the entirety of the natural bedrock shelf is public property. It may be the case that there will be more sand on this beach at some point during the 20 year mitigation period that makes the shelf easier to access. In addition, a more adventurous beach may user chose to scale up the ledge and sit or stand on the shelf. Furthermore, in cases of big waves, a surfer or swimmer may be able to scramble onto the shelf for safety. In this area of the coast, bedrock shelves are important coastal access resources because often there is no beach. An example is the area of natural shelf adjacent to the south of the Ocean Beach pier which is highly used by walkers and tide poolers. Another example is the landing for the Ladera bluff stairway, located south of the subject site, where a natural shelf formation improves beach access at the primary access point for one of the most highly used surf breaks in the area. The shelf at the subject site is part of the natural bluff environment that is being impacted by the construction of the proposed wall on and above it. Although the portion of the seawall founded on the natural shelf is not impairing the creation of additional sandy beach area at this time, it does stop erosion of the bluff above the shelf and thus impairs the creation of additional public shelf area. Therefore, mitigation for impacts to recreation and public access for the portion of the seawall located on the public bedrock shelf is appropriate.

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 and confirmed by the Commission's geologist), approximately 424 square feet of beach will be inundated and will not be replaced by new inland beach area (.2 ft./yr. [erosion rate] x 106 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 247 square feet of public bluff/beach and the on-going loss of beach area (424 sq. ft.), for a total of 671 sq. ft. after 20 years.

(G:\San Diego\Reports\2016\6-16-0132 Oceanus Staff Report Addendum.docx)

The Trettin Company Community & Government Relations / Project Development

Public Hearing Date; Agenda Item # 14a

November 30, 2016

то:	Eric Stevens, Coastal Planner	RECEIVED		
	San Diego Area	NOV 3 0 2016		
FROM:	Robert Trettin, Principal The Trettin Company	CALIFORNIA COASTAL COMMISSION SAN DIEGO COAST DISTRICT		
RE:	CDP Application #6-16-0132; Oceanus Geologic Hazard Abatement Dist Proposed Reduction in Beach Recreation	trict (GHAD & Rick Nolan) / Public Access Mitigation Fee		

On behalf of the applicants, I want to extend my appreciation to you, Dr. Mark Jonnson and Dr. Leslie Ewing for working so diligently and professionally with me and with the applicants' other technical consultants involved with this project.

The proposed project has changed somewhat in consideration of Coastal staffs' review comments, and the applicants certainly support Coastal staffs' recommendation for Commission approval. Due to significant ongoing bluff failure at the site, it is our hope that the Commission will approve the project, as presented, at the December hearing. Although some work has been completed under Coastal Emergency Permit, the applicants are anxious to move forward and complete this necessary protection for their residential structures.

There is one condition in the staff report, however, where we believe an adjustment needs to be addressed. The changes we implemented to comply with staff recommendations reduced the proposed seawall's impact on beach recreation / public access by 20 lineal feet. Yet, Special Condition #7, addressing the Beach Recreation / Public Access Mitigation Fee was proposed by the applicant prior to this 20 lineal foot reduction.

As you are aware, the proposed Beach Recreation / Public Access Fee for the subject project was based on the applicants' submittal of a permit application for a 106' long seawall fronting the failing Point Loma Formation and face of the coastal bluff. After extensive discussions with Coastal staff, however, it was determined that the Point Loma Formation was sufficiently wide enough along the last (northern) 20 feet of the project (from western edge of formation materials to the western edge of the failing upper bluff) to allow caissons to be mounted through the formation to bedrock, with an upper bluff retention wall extending to the top of bluff.



It was Coastal staff's determination that the formation materials in this area could then erode naturally, creating more useable beach area in the future.

Inasmuch as the base of the coastal bluff in this segment is being allowed to erode naturally under the revised permit application being recommended for approval by Coastal staff, it seems logical that the applicants should not be assessed a beach recreation / public access fee for this 20 feet of the project. There will be no seawall blocking movement of the Pt. Loma formation to the east until such time that the existing formation materials have eroded to a point where they intersect the caissons. At that time, when the applicant's would be required to surface the exposed caissons, it would be appropriate to provide an additional beach recreation / public access mitigation for this 20 foot segment.

The applicant's current beach recreation / public access mitigation proposal breaks down to \$675 per lineal foot. Therefore, the applicants' request that the total amount proposed in the staff report be reduced by 20 feet x \$675.00, for a total reduction of \$13,500. The applicants' total payment for sand and beach recreation / public access would therefore be \$68,564.00.

The applicants are willing to accept an additional special condition that notes if any portion of the 20' of Point Loma Formation frontage not proposed to be encompassed by the seawall erodes or fails prior to completion of construction, they will pay an additional \$675 per lineal foot for any amount of eroded / failed formation frontage. Since mitigation cannot be required when there is no identified impact, as is the case for the northern 20 foot segment of the proposed project, we believe this to be a reasonable and fair amendment to the staff recommendation.

Again, on behalf of the applicants and their technical consultants, our thanks to all Coastal staff members who provided their expertise during the review process for this project.

Respectfully submitted,

BOB TRETTIN, Principal The Trettin Company



Geotechnical • Geologic • Coastal • Environmental

5741 Palmer Way • Carlsbad, California 92010 • (760) 438-3155 • FAX (760) 931-0915 • www.geosoilsinc.com

July 25, 2016

Mr. Bob Trettin The Trettin Company 560 N. Highway 101, Suite #5 Encinitas, CA 92024

SUBJECT: California Coastal Commission Beach Sand Replenishment Fee, 1466-72 Pescadero Drive and 1476-80 Pescadero Drive, San Diego.

Dear Mr. Trettin:

At your request, GeoSoils Inc. (GSI) is pleased to provide the following sand mitigation fee calculations for the subject projects in Ocean Beach, San Diego.

1466-72 Pescadero and 1476-80 Pescadero SAND MITIGATION WORKSHEET

Ve = Ae x v	Ve=212 x .9	Ve = 190.8
Ae = W x E	Ae = 106 x 2	Ae = 212
Vw = Aw x v	Vw = 424 x .9	Vw = 381.6
Aw = R x L x W	Aw = .2 x 20 x 106	Aw = 424

 $\begin{array}{l} \mathsf{Vb} = (\mathsf{S} \; \mathsf{x} \; \mathsf{W} \; \mathsf{x} \; \mathsf{L}) \; \mathsf{x} \; [(\mathsf{R} \; \mathsf{x} \; \mathsf{hs}) + (1/2 \; \mathsf{hu} \; \mathsf{x} \; (\mathsf{R} + (\mathsf{Rcu}\text{-}\mathsf{Rcs})))]/ \; 27 \\ \mathsf{Vb} = (.53 \; \mathsf{x} \; 106 \; \mathsf{x} \; 20) \; \mathsf{x} \; [(.2 \; \mathsf{x} \; 34.5) + (0 \; \mathsf{x} \; (.2 + (.2 \text{-} 0)))] \; / \; 27 \\ \mathsf{Vb} = (1,124) \; \mathsf{x} \; [(6.9) + (0)))]/ \; 27 \\ \mathsf{Vb} = 7,755.6 \; / \; 27 \\ \mathsf{Vb} = 287.24 \\ \end{array}$

Vt = Vb + Vw + Ve Vt = 287.24 + 381.6 + 190.8 Vt = 859.64

M= Vt x C C = Cost of Sand C= \$15.54 (per average of attached sand bids)

 $M = 859.64 \times 15.54

Breakdown

Vb = 287.24 x \$15.54 \$ 4,463.71 Vw= 381.60 x \$15.54 \$ 5,930.10 Ve = 190.80 x \$15.54 \$ 2,965.00 Total \$13,359.00 (rounded)

\$4,463.71: Sand Fee, when assessed in conjunction with Public Access / Beach Recreation Fee

Public Access / Beach Recreation Mitigation Fee 1466-72 Pescadero and 1476-80 Pescadero

The initial Oceanus project provided an assessment of \$81,000 to offset impacts to Public Access and Beach Recreation. The Coastal Commission, determining that this very small pocket was unlikely to retain sand, added the sand impact fee calculated for Vb (=/- \$5,000) and the applicants paid a total fee of \$86,000 to the SANDAG holding account for the Public Access / Beach Recreation Mitigation.

\$81,000 for a 120' long seawall equates to \$675 per lineal foot.

For the extension of this project northerly from the first Oceanus project, the applicants propose a Public Access / Beach Recreation mitigation fee as follows:

Part 1. \$71,550 (106' x \$675).

Part 2. \$ 4,552.75 It is assumed that staff would also add the value of Vb from the sand mitigation. formula, which would add an additional \$4,423.50, or a total of \$75,973.50.

Part 3. \$6,050. In addition, a 22' long section of the failing coastal bluff at the project site is undercut by an average of 2.5'. As the seawall would front this undercut (which would be infilled), this would account for an additional 55 sq. ft. of beach that would be removed from future public use in the near future. Based on the initial Oceanus project's mitigation assessment average of approximately \$110 per sq. ft., this would add an additional \$6,050 in mitigation.

The total proposed assessment, therefore, would be:

\$71,550.00 (consistent with initial Oceanus project)

\$ 4,463.71 (funds that would otherwise be placed in a sand mitigation account; consistent with initial Oceanus project)

<u>\$ 6,050.00</u> (additional funds to offset the existing undercut area)

\$82,063.71 TOTAL

Based on the initial Oceanus Project of approximately \$110 per square foot of impact, which was approved by Coastal staff and the Commission, the above proposal for this extension of the Oceanus GHAD seawall would be comparable.

2.5' x 106= 265 sq. ft. (impact of wall on beach)2.5' x 22'= 55 sq ft. (additional impact of wall on beach / undercut area, which ranges from 1' to 5' in depth)20 x .20 x 106= 424 Sq. ft. (future impact on public beach space)

Total = 744 sq. ft. x \$110 = \$81,840

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to contact our office.

Respectfully Submitted,

Dulw Shilly



GeoSoils, Inc. David W. Skelly, MS RCE #47857

PHOTO OF NATURAL BEDROCK SHELF



Natural Bedrock Shelf



7575 METROPOLITAN DRIVE, SUITE 103

SAN DIEGO AREA

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SAN DIEGO, CA 92108-4421

CALIFORNIA COASTAL COMMISSION

W14a

7/25/2016
1/21/2017
E.Stevens-SD
11/17/2016
12/7/2017

STAFF REPORT: REGULAR CALENDAR

Application No.:	6-16-0132	
Applicant:	Oceanus Geologic Hazard Abatement District (GHAD) & Rick Nolan	
Agent:	Bob Trettin	
Location:	On the public beach and bluff fronting 4848 Bermuda Avenue, 1466-1472 Pescadero Drive, and 1476-1480 Pescadero Drive, Ocean Beach, San Diego, San Diego County (APN Nos: 448-242-27-01 through 13, 448-242-02, -03)	
Project Description:	Follow up to an emergency permit for construction of an approximately 50 ft. long, 34 ft. 6 in. high, 28 in. wide colored and textured concrete tiedback seawall; new construction of an additional 57 ft. feet of seawall.	
Staff Recommendation:	Approval with Conditions	

SUMMARY OF STAFF RECOMMENDATION

Staff recommends that the Commission <u>approve</u> the applicants' request for shoreline armoring to protect a 13-unit condominium structure, a duplex, and a 5-unit apartment building on the blufftop. The southern part, approximately 50 feet, of the proposed 125 ft. long seawall has already been constructed pursuant to an emergency permit issued in March 2016 (CDP G-6-15-0052/Oceanus GHAD). The applicants' 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 structures to the bluff edge, the existing blufftop structures, all of which were constructed pre-Coastal Act and pre-Proposition 20, are in danger from erosion. There are no feasible alternatives to the proposed project that would lessen the impacts on coastal resources.

The Commission's staff engineer and geologist have reviewed the applicants' geotechnical assessment and concur with its conclusions.

The subject site is north of and adjacent to a 120 ft. long seawall and upper bluff reconstruction project the Commission approved in 2012 (6-11-010/Oceanus). Construction of the previously approved shoreline armoring is nearly complete (Exhibit 3), and the subject seawall will tie into this wall.

Staff is recommending approval with a number of conditions that address the direct impact of the proposed shoreline armoring 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. In this particular case, the seawall and upper bluff wall are located primarily on publicly-owned beach and bluffs and partially within the closed paper street, Ocean Boulevard. A relatively small segment of the upper bluff is privately owned.

Staff is also recommending that the proposed shoreline armoring be approved only for as long as the existing bluff top structures that the armoring is authorized to protect still exist. Special Conditions require the applicants to submit a complete coastal development permit application to remove or modify the terms of authorization of the armoring when the existing structures warranting armoring are redeveloped, are no longer present, or no longer require armoring. One purpose of these conditions is to tie the life of the shoreline armoring to the structures it is approved to protect, and to waive any potential rights to augment or reconstruct the armoring to protect new development. This helps to preserve future adaptation options that may be necessary to mitigate adverse beach and public access conditions triggered by ongoing erosion and sea level rise.

Special Condition 7 of this CDP requires the applicant to submit a payment of \$82,064 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, and to mitigate for impacts to sand supply. The funds must 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. The initial sand supply and public access and recreation mitigation period for the proposed shoreline armoring is 20 years. However, if the approved shoreline armoring remains in place after 20 years because it continues to be necessary to protect the existing endangered structures, additional mitigation will be required. Therefore, Special Condition 7 also requires that prior to the completion of the initial 20-year mitigation period, the applicant must obtain a CDP amendment to assess the continued impacts on public access and sand supply as a result of the shoreline armoring built primarily on the publicly-owned beach and bluff.

With the required public access and recreation mitigation, as well as the limitation on the time for which the shoreline armoring 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 shoreline armoring 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 6-16-0132, as conditioned.

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

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APPENDICES

Appendix A – Substantive File Documents

EXHIBITS

Exhibit 1 – Project Location Exhibit 2 – Bluff Top Structures and Accessways Exhibit 3 – Current Photo of Project Site Exhibit 4 – Site Plan Exhibit 5 – Pocket Beach Seaward of Proposed Shoreline Armoring Exhibit 6 – Access Mitigation Memo, Dr. Mary Matella Exhibit 7 – Sand Calculations Exhibit 8 – Surfgrass Biological Report Exhibit 9 – State Lands Jurisdiction Letter Exhibit 10 – Emergency CDP G-6-15-0052/Oceanus GHAD Exhibit 11 – Oceanus GHAD Boundaries Exhibit 12 – Letter from Applicant

I. MOTION AND RESOLUTION

Motion:

I move that the Commission **approve** *Coastal Development Permit Application No.* 6-16-0132 subject to the conditions set forth in the staff recommendation.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit 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 coastal development permit 6-16-0132 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

This permit is granted subject to the following special conditions:

- 1. **Revised Final Plans.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for review and written approval of the Executive Director, one full-size set of the revised final plans, that substantially conform with the plans submitted to the Commission, titled Repairs to Coastal Bluff, by Soil Engineering Construction, received November 10, 2016, except that they shall be modified to reflect all of the following:
 - a. 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.
 - b. All runoff from impervious surfaces on the top of the bluff shall be collected and directed away from the bluff edge towards the street.
 - c. A final site plan shall be submitted that includes the bluff top structures and square footage of all bluff top structures and property lines for the subject sites. In addition, existing accessory improvements (i.e., decks, patios, walls, windscreens, etc.) located in the geologic setback area on the residential sites 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 or removal 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.

The permittee shall undertake development in conformance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

2. Shoreline Structure Authorization, Design, Monitoring and Maintenance.

- a. **Shoreline Structure Terms.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, a final revised plan for the authorized shoreline structure. The revised plans shall, prior to submittal to the Executive Director, be reviewed and certified by a licensed civil or geotechnical engineer to ensure they are consistent with the Commission's approval and the following specific requirements:
 - i. **Authorization Terms.** This CDP authorizes the shoreline structure pursuant to all of the following terms:
 - A. **Expiration**. This authorization expires when the condominium building at 4848 Bermuda Avenue, the seaward duplex at 1466-1472 Pescadero, or the apartment building at 1476-1480 Pescadero (1) is redeveloped as defined in Special Condition 3; (2) is no longer present; or (3) no longer requires shoreline armoring, whichever occurs first. Prior to the anticipated expiration of the permit or in conjunction with redevelopment of the property, the permittees shall apply for a new CDP or amendment to this CDP to remove the shoreline armoring or to modify the terms of its authorization, including with respect to any necessary mitigation pursuant to subsection a.i.B.1 of this condition.
 - B. Extension of Authorization and Mitigation. If the permittees intend to keep the shoreline structure in place beyond the 20 year mitigation period (beginning from May 3, 2016 the date that the shoreline structure construction began, or is anticipated to begin, impacting resources, and ending May 3, 2036, the permittees shall submit a complete application for a CDP or amendment to this CDP to reassess mitigation for the ongoing impacts of the structure, including an evaluation of actions to reduce or eliminate those impacts. The complete application shall be submitted no later than 6 months prior to the end of the mitigation period. 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 include the following at a minimum:
 - 1. 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, Geotechnical Engineer, or Registered Civil Engineer with expertise in soils;

- 2. An evaluation of alternatives that will increase stability of the existing principal structures for their remaining life or re-site any new development to an inland location, such that further alteration of natural landforms or impact to adjacent City-owned bluffs and beach, tidelands, or public trust lands is avoided;
- 3. 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;
- 4. 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 all applicable Chapter 3 policies of the Coastal Act;
- 5. For amendment applications to extend the authorization period, a proposed mitigation program to address unavoidable impacts identified in subsection 3 above; and
- 6. 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 consent or approval of all underlying landowners, including the City of San Diego and the State Lands Commission, and 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, as applicable) of the proposed amendment shall be required prior to issuance of the permit amendment to extend the authorization period.

The permittee shall undertake development in conformance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviations.

- b. **Structure Color and Texture.** The color and texture of the structure shall be compatible with the nearby unarmored natural bluffs, including, at a minimum, that:
 - i. the structure will be designed, including shaped, contoured and textured, as necessary to match the adjacent landforms; and
 - ii. the color, contours, and texture will be maintained throughout the life of the structure.

c. Monitoring and Maintenance.

- i. **Monitoring Plan.** PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit a monitoring plan, prepared by a licensed geologist, civil engineer, or geotechnical engineer for the review and written approval of the Executive Director. The plan shall be sufficient to assess the condition of the seawall and shall include at a minimum:
 - A. A description of the approved shoreline protection device;
 - B. A discussion of the goals and objectives of the plan, which shall include observations of whether the seawall remains in its approved state;
 - C. Provisions for taking measurements of the distance between each of the three bluff top structures protected by the seawall and the top of the seawall, including identification of exactly where such measurements will be taken, e.g. by reference to benchmarks, survey positions, points shown on an exhibit, etc. and the frequency with which such measurements will be taken;
 - D. Mean High Tide Line Monitoring. Monitoring pegs or markers flush with the seawall and suitable to withstand a marine environment shall be installed eight to ten feet on center into the face of the seawall at the same elevation of the MHTL and at an elevation of five feet above the MHTL. The placement of the monitoring pegs shall be certified by a licensed surveyor. These monitoring pegs/markers shall be inspected regularly and any missing pegs shall be replaced within a month from the time that the missing peg is noticed; and
 - E. Provisions for submission of "as-built" plans, showing the permitted structure in relation to the existing topography and showing the measurements described in subsection c.i.C. above, within 30 days after completion of construction.
- ii. **Monitoring Requirement**. By May 1 of every year (beginning the first year after construction of the project is completed) for a period of three years and after that period, each third year for the life of the structure, the permittee shall submit a monitoring report that has been prepared by a licensed geologist, civil engineer, or geotechnical engineer. Each monitoring report shall contain the following at a minimum:
 - A. An evaluation of the condition and performance of the approved shoreline protection device, including an assessment of whether any weathering or damage has occurred that could adversely impact future performance of the device;

- B. All measurements taken in conformance with the approved monitoring plan;
- C. An analysis of erosion trends, annual retreat, or rate of retreat of the bluff based upon the measurements and in conformance with the approved monitoring plan; and
- D. Recommendations for repair, maintenance, modifications or other work to the device.

If a monitoring report contains recommendations for repair, maintenance or other work, 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.

- 3. **Reliance on Permitted Shoreline Armoring.** No future development that is not otherwise exempt from coastal development permit requirements, including additions or redevelopment of the structures on the subject blufftop properties, may rely on the permitted shoreline armoring to establish geologic stability or protection from hazards. Such future development and redevelopment on the site shall be sited and designed to be safe without reliance on shoreline armoring. As used in this condition, "redeveloped" or "redevelopment" means:
 - a. Development that consists of alterations including (1) additions to an existing structure, (2) exterior and/or interior renovations, and/or (3) demolition or replacement of an existing home or other principal structure, or portions thereof, which results in:
 - i. Destruction, demolition, or removal of 50% or more of the structure's exterior walls; destruction, demolition, or removal of 50% or more of the capacity of the lateral or vertical load resisting system of the structure; or a 50% increase in gross floor area.

OR

ii. Destruction, demolition, or removal of less than 50% of the structure's exterior walls or removal of less than 50% of the capacity of the lateral or vertical load resisting system of the structure, where the proposed alteration would result in cumulative alterations exceeding 50% or more of the exterior walls or capacity of the lateral or vertical load resisting system of the structure, taking into consideration previous alterations approved on or after October 6, 2016; or an alteration that constitutes less than 50% increase in gross floor area where the proposed alteration would result in a cumulative

addition of greater than 50% of the gross floor area, taking into consideration previous additions approved on or after October 6, 2016.

- 4. Assumption of Risk, Waiver of Liability and Indemnity. By acceptance of this permit, the applicants acknowledge and agree (i) that the site may be subject to hazards, including but not limited to waves, storms, flooding, landslide, bluff retreat, erosion, and earth movement, many of which will worsen with future sea level rise; (ii) to assume the risks to the permittees and the properties that are 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.
- 5. Other Agency Approvals. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall provide to the Executive Director a copy of necessary permits issued by the City of San Diego, or letters of permission, or evidence that no permit or permission is required. The applicants shall inform the Executive Director of any changes to the project required by the City of San Diego. Such changes may not be incorporated into the project until the applicants obtain a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
- 6. Future Response to Erosion. If in the future the permittees seek a coastal development permit to construct additional bluff or shoreline protective devices, the permittees agree, 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 structures that are threatened; structural underpinning; and other known remedial measures capable of protecting the principal residential structures and allowing reasonable use of the properties 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 local government implementing a certified Local Coastal Plan to evaluate the feasibility of each alternative and whether each alternative is capable of protecting the relevant existing principal structures for the remainder of their economic lives. No additional bluff or shoreline protective devices may be constructed unless the alternatives required above are demonstrated to be infeasible. No additional shoreline protective devices may be constructed in order to protect ancillary improvements (patios, decks, fences, landscaping, etc.) located between the principal residential structures and the ocean. Any future redevelopment on the lots may not rely on the subject shoreline protective devices to establish geological stability or protection from hazards.

7. 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 \$82,064 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 mitigation period of the seawall. No later than 19 years after the issuance of this permit, the permittees or their successors in interest shall apply for and obtain an amendment to this permit that either requires the removal of the seawall within its initial 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 permit life. If within the initial permit life of the seawall the permittees or their successors 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 permittees 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 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 use for the expected life of the seawall or perform repair work that extends 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 use for the expected life of the seawall or perform the expected life of the seawall or perform the expected life of the seawall or perform the expected performs the expected life 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 permit 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 that provide public access or recreational opportunities along the shoreline, and may not be used 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.

8. **Storage and Staging Areas/Access Corridors.** PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants 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, at a minimum:

- 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 may occur on the beach on weekends or holidays; and
- d. The applicants shall submit evidence that the approved plans and plan notes have been incorporated into construction bid documents.
- e. The permittees shall remove all construction materials/equipment from the staging site and restored the staging site to its prior-to-construction condition within 72 hours following completion of the development.

The permittees 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.

9. Water Quality--Best Management Practices. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit for review and written approval of the Executive Director a Best Management Practices Plan that ensures no shotcrete or other construction byproduct will be allowed onto the sandy beach 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 coastal waters. All shotcrete and other construction byproduct shall be properly collected and disposed of off-site.

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

- a. The contractor shall be advised of the adjacent surfgrass beds and the need to protect and avoid these resources (Exhibit 8);
- b. Temporary fences shall be erected by a qualified biologist on each day that mechanized equipment is used on the beach, to mark the maximum extent of beach on which work may be done;
- c. All work shall be monitored during all times 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; and
- d. No work may be conducted from the lower formational terrace supporting algal turf or surfgrass resources.

The applicants 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.

- 11. As-Built Plans. WITHIN 30 DAYS 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. The As-Built Plans shall include a graphic scale and all elevation(s) shall be described in relation to National Geodetic Vertical Datum (NGVD) 88. The As-Built Plans shall include color photographs that clearly show all components of the as-built project, with 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 taken from representative viewpoints of beaches located 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, who is acceptable to the Executive Director, verifying that the seawall has been constructed in conformance with the approved final plans.
- 12. **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 applicants acknowledge, on behalf of him/herself/itself and his/her/its successors in interest, that issuance of the permit and construction of the permitted

development shall not constitute a waiver of any public rights that may exist on the property.

- 13. Deed Restriction/CC&R's Modification PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Oceanus Apartments 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 #6-16-0132. This addition to the CC&Rs shall not be removed or changed without a Coastal Commission-approved amendment to this coastal development permit.

14. Deed Restriction. PRIOR TO ISSUANCE OF THE COASTAL

DEVELOPMENT PERMIT, applicants Michael Corica and Richard Nolan III shall submit to the Executive Director for review and approval documentation demonstrating that the landowners have executed and recorded against their respective parcel(s) governed by this permit a deed restriction, 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 covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed 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.

15. 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 (office address, office and mobile phone numbers, e-mail address) 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 72 hours of receipt of the complaint or inquiry.
- c. **Notification.** The permittee shall notify planning staff of the Coastal Commission's San Diego Coast District Office at least three working days in advance of commencement of construction or maintenance activities, and immediately upon completion of construction or maintenance activities.

IV. FINDINGS AND DECLARATIONS

A. **PROJECT DESCRIPTION/SITE HISTORY**

The applicants are proposing construction of a new, approximately 125 ft. long, 35 foot high, 28 in. wide, colored and textured concrete tiedback seawall. The applicant initially proposed to construct the entirety of the seawall on the public beach. However, after discussions with Commission staff, the applicant now proposes to construct the northern approximately 25 ft. of the seawall on top of an existing natural bedrock shelf and to support that section of the seawall with a caisson foundation. The caissons may become exposed in the future as the bedrock shelf continues to erode and may require shotcrete encasement. The design change will minimize the seawall's immediate encroachment on the public beach and will allow for the creation of additional beach area as the bedrock shelf erodes. The remainder of the seawall will be located on the beach and will employ a standard keyed-in foundation.

The southern part of the wall, approximately 50 feet was previously approved pursuant to an emergency CDP (G-6-15-0052/Oceanus GHAD) issued in March 2016 (Exhibit 10). The emergency seawall construction commenced on May 3, 2016 and is currently under construction (Exhibit 3). The applicant originally proposed to construct the entire 125 foot length of the wall under an emergency permit; however, Commission staff determined that the minimum amount of development needed to address the emergency situation consisted only of the southernmost 50 feet of the wall. The subject permit will serve as the required follow-up to the emergency permit, as well as authorizing construction of the remaining portion of the wall.

The proposed shoreline armoring will be located seaward of 4848 Bermuda Avenue, 1466-1472 Pescadero Drive, and 1476-1480 Pescadero Drive. The uppermost portion of the shoreline armoring subject to this application is proposed to be located on a privately owned bluff, while the majority of the armoring will be located on publicly owned bluffs and on the publicly owned beach. The beach in this location is located within lands the State has granted to the City of San Diego (Exhibit 9). The armoring is also proposed to be located within a paper street (Ocean Boulevard) which is bounded on the west by the mean low water mark and is bounded to the east by the applicants' western property lines. The seawall is proposed to tie into existing armoring to both the north and to the south (Exhibits 3 & 4).

The residential structures on all three properties subject to this permit application were constructed prior to the Coastal Act. The blufftop lot at 4848 Bermuda Avenue contains an existing three-story, 13-unit condominium. The condominium structure is currently located as close as 15 ft. from the bluff edge. In 2012, the Commission approved a CDP to remove existing rip-rap and a failed seawall from the beach and bluff fronting the condominium and to construct 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 (CDP 6-11-010/Oceanus GHAD). The development approved pursuant to CDP 6-11-010/Oceanus GHAD is nearly completed. The remaining development includes aesthetically coloring the seawall and installing soil and landscaping above the rocks placed on the bluff landward of the seawall. The shoreline protection approved through this permit does not completely cover the bluff adjacent to the structure, which is why the subject project has been proposed. The proposed seawall would tie into northern end of the previously approved, now existing seawall and reconstructed slope.

The blufftop lot at 1466-1472 Pescadero Drive contains two detached duplexes. The seaward duplex is located within 15 ft. of the bluff edge. In May 2007, the City of San Diego approved demolition of the two existing duplexes and construction of a two-story approximately 5,000 sq. ft. duplex on the site, including a cantilevered portion within 25 ft. of the bluff edge (City of San Diego CDP #86511). The City approval was appealed to the Commission and in August 2008, the Commission found no substantial issue on the appeal (A-6-OCB-08-061/Smith & Taylor). The City approval has subsequently expired. Furthermore, the current property owner has submitted a letter to the Commission relinquishing any rights to construct the development previously approved by the City (Exhibit 12).

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The blufftop lot at 1476-1480 Pescadero Drive contains a five unit, two-story apartment building and is located as close as seven ft. from the bluff edge. The apartment building is partially protected by an existing seawall and riprap revetment that was constructed as part of the Sunset Cliffs Stabilization project in the early 1980s (Ref: CDP F9655/6-81-067, and amendments A1, A9, A10). The Commission subsequently approved repairs to the seawall in 2002 (Ref: CDP 6-81-067-A17). The southern side of the existing seawall at this site is currently being flanked by ongoing erosion of the bluff.

The bluff fronting the proposed seawall is approximately 35 ft.-high. During low tides, a pocket beach exists below the blufftop structures. However, due to a rock headland on the southern border of the subject site and extensive rip-rap adjacent to the north, 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 structures is another public stairway leading down to a public pathway at the base of the bluff seaward of Pescadero Avenue (Exhibit 2).

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 11), but does not include the 5-unit apartment building at 1476-1480 Pescadero Drive. 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.

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 applicants 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 and the City's certified LCP used as guidance (Exhibit 1).

B. 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...

Ocean Beach Community Plan Land Use Plan (LUP) Policy 7.3.4 states, in part:

Allow the placement of shoreline protective devices, such as concrete seawalls, and revetments, only when required to serve coastal-dependent uses or when there is no other feasible means to protect existing principal structures, such as homes, in danger from erosion, consistent with Coastal Act Section 30235 and 30253. Use "soft" or "natural" solutions as a preferred alternative for protection of existing endangered structures. Shoreline protective works should be designed to blend with the surrounding shoreline and provide lateral public access. The seawall along the Bermuda Avenue beach is an excellent example of an appropriately designed shoreline protective work. Site and design development so it does not rely on existing or future shoreline protective devices.

Ocean Beach Community Plan LUP Policy 7.3.5 states, in part:

Develop and implement shoreline management strategies to ensure all shoreline development will provide long term protection of the coastal bluffs, beaches, and public coastal access in the community.

[...]

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b. Tie a shoreline protective device to the life of the structure it has been permitted to protect and address the feasibility of removing such devices when the structure it is authorized to protect is demolished, redeveloped, or no longer requires a protective device, whichever occurs first. Include mitigation for shoreline armoring, if allowed, for coastal resource impacts, including but not necessarily limited to ecological impacts and impacts to shoreline sand supply and public access and recreation over the life of the protective device. Require periodic assessment of the need for additional mitigation and of changed site conditions that may warrant removal or modification of the protective device...

Ocean Beach Community Plan LUP Policy 7.3.7 states:

In the review of any Coastal Development Permits for bluff or shoreline protection devices, implementation should consider the following factors: an assessment of changes to geologic site and beach conditions, changes in beach width relative to sea level rise, implementation of any long-term large scale sand replenishment or shoreline restoration programs, and any ongoing impacts to coastal resources and public access and recreation from the existing device. Include in the permit review a reassessment of the need for the protective device, and provide options for the ultimate removal of the protective device.

Ocean Beach Community Plan LUP Policy 7.6.3 states, in part:

Use best available science and site-specific geotechnical reports as needed, to assess public and private projects for their vulnerability to impacts from sea level rise and, if vulnerable, propose a reasonable adaptation strategy. Analyze options for removal or relocation of structures that become threatened by coastal hazards. Use best available adaptation strategies that do not rely on shoreline protective devices in accordance with the California Coastal Act)...

The Coastal Act and certified LUP acknowledge that seawalls, revetments, cliff retaining walls, groins and other such structural or "hard" methods designed to forestall erosion alter natural landforms and natural shoreline processes resulting in a variety of negative impacts on coastal resources, including adverse effects on sand supply, public access and recreation, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, including ultimately resulting in the loss of beach. Thus, such devices are required to be approved only when necessary to protect existing structures or public beaches in danger from erosion, and only when designed to eliminate or mitigate adverse impacts on local sand supply.

The slope stability analysis performed by the applicants' engineer indicates that the slope at the site has experienced rapid erosion, and that further collapse of the upper bluff would threaten the structures at the top of the bluff. Slope stability analyses for the bluff at 1466-1472 Pescadero Drive and 1476-1480 Pescadero Drive demonstrate a factor of safety of 1.01 and 1.15, respectively. 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 1.5. These factors 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 structures to the bluff edge, the geotechnical analysis concludes that shoreline protection is warranted.

The Commission's geologist and engineer have reviewed the geotechnical information provided by the applicants and concur that the proposed shoreline armoring is necessary to protect the condominium building at 4848 Bermuda Avenue, the seaward duplex at 1466-1472 Pescadero Drive and the apartment building at 1476-1480 Pescadero Drive; and that the armoring has been adequately designed to minimize its encroachment on public property. The shoreline armoring approved by the Commission in 2012 (Ref: CDP 6-11-010/Oceanus GHAD), which is required to protect the condominium complex at 4848 Bermuda Avenue, is also threatened by continued erosion of the bluff at this site. Following construction of the proposed approximately 125 ft. long seawall, the applicants' engineer has demonstrated that the factor of safety for the structures will be increased to a factor of safety of at least 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 structures to the bluff edge, substantial evidence has been provided to document that the existing primary blufftop structures are 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.

Alternatives

The applicants' geotechnical report includes an alternatives analysis to demonstrate that no other feasible less-environmentally-damaging structural alternatives exist to address the threats to the residential structures at the top of the bluff (Ref. GeoSoils, Inc. W.O. S6975 dated February 10, 2016). Alternatives considered were to:

• Modify the threatened portions of the blufftop structures in order to increase bluff edge setbacks and avoid bluff retention devices

The subject blufftop lots are not large enough to modify the threatened portions of the blufftop structures in order to avoid the need for shoreline armoring in the relatively near future. Thus, modification would only delay the need for shoreline armoring for a short time.

• Construct of seawall with a reduced height that does not entirely capsulate the bluff face

The applicants have documented that the upper bluff is actively eroding due to sea spray and subaerial erosion and will continue to do so if not fully armored. Thus, construction of a seawall that does not encompass the entire bluff face would not provide adequate protection for the threatened blufftop structures.

• Construct of a lower seawall and a geogrid structure on the mid- and upper bluff

The applicants contend that a seawall and geogrid is not feasible at this site due to the near vertical topography of the bluff face and the limited distance between the blufftop structures and the bluff edge. Construction of a geogrid slope would either require removal of the seaward portions of the blufftop structures or construction of the seawall and geogrid structure further seaward of the bluff face, which would decrease available public beach area. In addition, the bluff at this location is subject to strong wave action during large storm events and geogrid structures cannot withstand repeated wave runup attack.

• Place rock rip-rap alone with no seawall

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.

• Drill and install a pier wall 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 structures, which would be aesthetically unappealing and create visual resource impacts. Furthermore, the drilled piers would need to be encased in shotcrete to prevent undermining of the blufftop structures. In addition, continued erosion would result in flanking of the existing permitted shoreline armoring to the north and south of the subject site.

• Improved drainage and landscaping

Improved drainage and landscaping atop the bluffs is another option that is typically considered. Appropriate drainage measures coupled with planting long-rooted native bluff species can help to stabilize some bluffs and extend the useful life of setbacks. Thus, Special Condition 1 requires that all runoff from impervious surfaces on the bluff be collected and drain towards the street, so that any drainage over the bluff face will be minimized and not adversely impact bluff stability. However, these measures alone will not address the entire identified threat to the existing bluff top structures.

• No project alternative

This alternative is not feasible because erosion of the bluff would continue to threaten the subject blufftop structures and would likely flank the existing permitted shoreline

armoring to the south and to the north of the subject site which supports a public stairway and existing residential structures.

The applicants 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 blufftop structures subject to this permit. The Commission's staff engineer and geologist have reviewed the project and concur that there do not appear to be feasible less environmentally damaging alternatives that could be applied in this case to protect the subject bluff top structure which are in danger from erosion.

Duration of Armoring Approval

While the Commission is required to approve shoreline armoring to provide protection for the subject bluff top structures, as discussed in greater detail below under Section C. Public Access and Recreation, D. Environmentally Sensitive Habitats, and E. Visual Resources/Alteration of Natural Landforms, the proposed shoreline armoring fronting the subject site will impede public access to and along the shoreline, impact beaches and related habitats, and visually impair the coastal area. Thus, it is important to limit the life of the shoreline armoring to that of the structure it is required to protect.

Sections 30235 and 30253 require new development on a bluff top lot to be sited and designed so that it does not require the construction of new shoreline armoring or reliance on existing shoreline armoring. However, when the approval of shoreline armoring is not expressly linked to a particular bluff top structure, shoreline armoring can remain long after the structure it was required to protect has been removed, and therefore may encourage the construction of new structures in an unsafe location while adversely affecting resources, including sand supply and recreation. Therefore, Special Condition 2 limits the duration of the subject CDP approval to when the bluff top structures requiring protection are redeveloped (as defined in Special Condition 3), are no longer present (i.e. demolished), or no longer require the shoreline armoring approved under this CDP, whichever occurs first.

The Commission approved LCP-6-SAN-16-0043-3 (Previously Conforming Development) as submitted on October 6, 2016. This LCP amendment included an updated definition of bluff top redevelopment for the City of San Diego and went into effect on the day of Commission approval. Bluff top redevelopment is defined as alteration of greater than 50% of an existing structure's exterior walls, alteration of greater than 50% of the lateral or vertical load resisting system capacity of an existing structure, or an addition greater than 50% of an existing structure's gross floor area. Alterations to blufftop structures are cumulative over time on or after October 6, 2016. Thus, if in the future, the applicants proposed to modify 40% of the exterior walls or the lateral or vertical load resisting system capacity of the structure, the project were to come back for a subsequent CDP to modify an additional 10% of the exterior walls or the lateral or vertical load resisting system capacity of the structure, the project would be considered redevelopment, because it would result in a cumulative alteration to 50% of the exterior walls or the lateral or vertical load resisting system capacity of the structure. Additions are also cumulative over time such that an initial 25% addition would not be considered redevelopment; but a subsequent 25% addition would result in a cumulative 50% increase in gross floor area, and would thus constitute redevelopment.

Consistent with the definition in the certified LUP, Special Condition 3 defines redevelopment as destruction, demolition, or removal of 50% or more of the structure's exterior walls, destruction, demolition, or removal of 50% or more of the capacity of the lateral or vertical load resisting system of the structure, or a 50% increase in gross floor area.

If in the future the permittees seek a coastal development permit to construct additional bluff or shoreline protective devices, Special Condition 6 requires the applicant to include the submittal of sufficient information for the Commission to consider the need and potential alternatives.

Monitoring and Maintenance

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 the first three years and then at subsequent threeyear intervals. 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 2 requires the applicant to submit a monitoring report that evaluate the condition and performance of the seawall and overall site stability, and to submit recommendations, if any, for necessary maintenance, repair, changes or modifications to the project. Special Condition 2 also requires that the applicants install monitoring pegs into the face of the seawall at the same elevation of the Mean High Tide Line (MHTL) and at an elevation of five feet above the MHTL to be used to monitor sand levels and to identify times when the MHTL intersects the face of the seawall. The placement of the monitoring pegs shall be certified by a licensed surveyor. In addition, the condition requires the applicant to perform necessary repairs through the coastal development permit process, when required.

Special Condition 1 requires the applicant to submit a final approved site plan that includes the bluff top structures and square footage of all bluff top structures and property lines for the subject sites. In addition, final plans for the project must indicate that the seawall conforms to the bluff contours and 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.

To assure the proposed shore/bluff protection has been constructed properly, Special Condition 11 requires that, within 30 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. Special Condition 5 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 15 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, in part, 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. Therefore, consistent with the section of the City of San Diego's certified Land Development Code (part of the certified IP), which is used for guidance, Special Condition 2 requires that the applicant provide written permission from the City, as property owner and as trustee of the adjacent public trust lands, before this CDP can be issued. This stretch of beach and bluff has historically been used by the public for access and recreation purposes. Special Condition 12 acknowledges that the issuance of this permit does not waive any 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.

Deed Restriction and Liability

Due to the inherent risk of shoreline development, Special Condition 4 requires the applicants 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 blufftop structures from bluff collapse and erosion. In addition, the structure itself may cause damage either to the blufftop structures 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 applicants have chosen to construct the proposed shoreline device despite these risks, the applicants must assume the risks.

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Special Condition 13 requires the applicants at 4848 Bermuda Avenue to execute and record a deed restriction against each individual condominium unit or structure 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. Special Condition 14 requires the property owners of 1466-1472 Pescadero Drive and 1476-1480 Pescadero Drive to record a deed restriction against the respective properties that will be governed by this CDP.

In summary, the applicants have documented that the existing bluff top structures (which were originally constructed prior to the Coastal Act's enactment and pre-Proposition 20) are 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 depletes sand supply, occupies public beach and bluff and fixes the back of the beach, Special Condition 7 requires the applicants 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 structures to the bluff edge, substantial evidence has been provided to document that the existing primary blufftop structures are in danger from erosion and that the proposed seawall is necessary to protect the structure. In addition, the above-described alternatives presented by the applicants support a conclusion that there is not a lessenvironmentally-damaging feasible structural alternative. The Commission's staff geologist and coastal engineer have reviewed the applicants' geotechnical assessment of the site along with the alternatives analysis and concur that the proposed shoreline armoring is necessary to protect the primary structures at the subject site. Therefore, the Commission finds that the proposed shoreline armoring, as conditioned, is consistent with Sections 30235 and 30253 of the Coastal Act and is the least environmentally damaging feasible structural alternative.

C. 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 (Neptune Avenue). Coastal Act Sections 30210 through 30214 and 30220 through 30224 specifically protect public access and recreation. In particular:

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

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

vegetation.

30212. Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects

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

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

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

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. An issue of major concern facing California today is the fast pace of disappearing beaches due to natural processes (i.e. erosion, subsidence and storm events) and anthropogenic factors (coastal development and sand supply interruptions). Seawalls, revetments, and other types of hard armoring have long been used to protect backshore development from erosion and flooding, but future accelerated sea level rise and extreme storm events will heighten the rate of beach loss and potential exposure of the backshore to hazards. Hard armoring already results in unintended ecological and public access consequences, such as loss of biodiversity and ecosystem services and displacement of recreational beach area with protective structures.

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.

In recent years the Commission has calculated and required separate mitigation for both the direct losses of beach area and the losses of beach sand. The Commission's mitigation approach for sand loss has been relatively straightforward. The sand mitigation fee quantifies lost sand volume and the cost of the replacement sand. The proposed seawall will 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 applicant estimated that the seawall will prevent approximately 287 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). At estimated sand cost of \$14.54 per cubic yard (provided by the applicant, and based on three estimates from local contractors); this sand would have a value of \$4,464 (Exhibit 7).

However, the Commission has not established a single method to quantify and then mitigate for recreational losses due to encroachment by a seawall and then long-term beach loss due to fixing the back of the beach. Although the total length of the proposed seawall is approximately 125 ft., 106 ft. of the seawall will encroach onto the public beach and natural bedrock shelf. The 106 feet long portion of the proposed seawall will encroach a maximum of 2 1/3 feet (28 inches) onto the public beach and public beach shelf. The total encroachment that will occur from the proposed seawall will be approximately 247 square feet (2 1/3 ft. x 106 ft.) of 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 longterm average annual retreat rate of 0.2 ft./yr. (retreat rate provided by the applicant's engineer and confirmed by the Commission's geologist), approximately 424 square feet of beach will be inundated and will not be replaced by new inland beach area (.2 ft./yr. [erosion rate] x 106 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 247 square feet of public bluff/beach and the on-going loss of beach area (424 sq. ft.), for a total of 671 sq. ft. after 20 years.

This loss of beach area has impacts on public access and recreation. The project site is primarily located on a public beach and bluff 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 (Exhibit 5). 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. The beach fronting the subject site is narrow, and at mid and high tides throughout the year it is inundated with water and inaccessible. During low tides, the beach is accessible only by climbing over rock headlands 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. The proposed seawall will be constructed on the public beach and public shelf 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.

As designed and conditioned, 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 structures. Nevertheless, an encroachment of any amount 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.

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. Thus, the Commission has looked for other ways to both quantify and mitigate for the loss of beach area. In this case, payment of a mitigation fee for both sand supply and public access impacts that could be directed towards a variety of public access improvements is appropriate, because there 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. Thus, contributing to a regional sand fund would not likely yield a noticeable sand increase to the pocket beaches in the Sunset Cliffs area.

In addition to determining how to best to direct mitigation fees, the Commission has looked at various methods of calculating the appropriate fees. (See Exhibit 6, Access Mitigation Memorandum.) One method currently being studied consists of estimating the loss of recreational value due to a seawall is by estimating the recreational value of the beach with and without the seawall, using an erosion loss beach valuation model. Such a model assumes that an individual beach user will receive diminishing recreational value as the beach narrows. With knowledge of the length of armoring, beach width, erosion rate, and attendance, the recreational value of beach area loss due to a seawall can be calculated. Key to this calculation is the value of a beach day (also called consumer surplus value) for each visitor. The consumer surplus is developed from detailed studies of beach visitation and it is challenging to determine for every specific beach. Thus, economists often assume that a benefit transfer approach that uses peer reviewed studies of comparable locations provides the most efficient way for local communities to assess resource value for their areas. Studies of beaches throughout California have found consumer surplus values ranging from \$15 to \$111 (\$ 2015), with a median value of approximately \$39/visitor day in 2015 dollars.¹

Once the initial day use value is known, the general recreational value of an area of beach can be determined from the value of a visit, the number of visitors and the beach area. The general equation for calculating annual recreation value is below:

Annual Recreational Value = Day use value * attendance density * length * width

Where, day use value (consumer surplus) will change as a function of beach width,

Attendance will change as a function of beach area, Length (the length of the shoreline protection) will be constant, and Width (beach width at location of shore protection) will change due to erosion.

Since the day use value, the attendance, and the beach width will change yearly, the annual recreational value will also change for each year that the armoring is place.

Commission staff looked at how this methodology could be applied to the subject site. In the case of the proposed seawall location, the day use value of approximately \$39/visitor was adjusted to \$28/visitor day, primarily as a result of the narrow beach width at the subject beach and access issues resulting in low attendance at this beach. For the Oceanus project, the recreational value over the permit period is the summation of present value annual recreational values for 20 years. The recreational losses due to the shore protection are the difference between the recreational value 'without armoring' and the recreational value 'with armoring' conditions. With armoring, the beach area is reduced, which lowers attendance and the value of the beach day use (because narrower beaches are valued less in the benefit transfer model).

The Oceanus CDP values below were used to calculate recreational value lost due to armoring:

Length of seawall = 106 ft. Beach Width = 25 ft. Erosion rate = 0.2 ft. /yr. Attendance = 1000 people/yr. Day use value scaled to width of 25 ft. = \sim \$28 for year 1

¹ Pendleton, L., and Kildow, J. (2006). The non-market value of beach recreation in California. *Shore and Beach*, *74*(2), 34.

The present value loss in recreational value over a 20-year period, assuming a standard 2% discount rate was calculated at ~\$90,200. This amount does not include the approximately \$4,464 worth of sand that would be prevented from reaching the beach.

A more detailed discussion of the recreation loss calculation can be found in a memo from Dr. Matella that is provided as Exhibit 6.

The above methodology represents one possible means of quantifying the public access and recreation impacts associated with the proposed development. The applicant was also 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 could 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 response to the staff request, in addition to the \$4,464 sq. ft. sand mitigation fee, the applicant has proposed to pay \$77,600 for public access mitigation, for a total fee of \$82,064.

The applicant's proposal results from calculating a payment proportional to the mitigation payment required in the Commission's 2012 approval of the existing seawall covering a portion of the subject site (Ref: 6-11-010/Oceanus GHAD). For that project, the Oceanus GHAD was required to pay \$86,000 into a SANDAG Public Access and Recreation Fund to mitigate for loss of beach area available for public use and for impacts to sand supply. The \$86,000 fee was the applicant's estimate of what it might cost to repair an adjacent City seawall that supports a damaged public accessway, but would not have improved the actual accessway. Creation or enhancement of public recreation or public access improvements can be another form of mitigation for the loss of beach area. In the case of CDP No. 6-11-010/Oceanus GHAD, the Commission declined to require the funds be directed towards any particular public access program, but to contribute to SANDAG's fee, in the hope of identifying a project that would result in a more direct improvement to public access.

The previously paid funds have not yet been spent. Thus, the applicant has suggested that the proposed mitigation payment for this project and the previously required funds be used to pay for repairs to the existing public access stairway directly adjacent to the south of the subject site at the seaward end of Bermuda Avenue, rather than the seawall. The stairway recently collapsed and is currently closed. The seawall the stairway is founded on is aging and subject to structural issues. The City of San Diego, which is responsible for the seawall and stairway, is in the process of studying a potential long term solution to redesign the city-owned seawall and stairway. The Commission's coastal engineer has conducted a brief preliminary review of the aging seawall and has opined that it is likely the seawall could be rebuilt landward of its current location such that more public beach area can be made available, and the stairway be rebuilt on the relocated seawall. City staff has indicated that they would be in support of using the public access and mitigation funds to help pay for the repair or replacement of the adjacent public stairway. Providing public access to the pocket beaches and preventing impacts to lateral access from shoreline structures is critical to maintaining and enhancing public access along this stretch of coastline. Therefore, a future replacement of the stairway or other recreational

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opportunity in this vicinity would be the best mitigation for the public access impacts of the proposed seawall.

Despite using completely disparate approaches to calculating mitigation, the applicant's proposal to pay a total of \$82,064 fee to mitigate for public access and sand impacts is fairly close to the approximately \$90,200 (plus \$4,464 in sand fees) estimate generated by the recreational value methodology detailed above. Evaluating the impacts of this wall, and the various ways in which the loss of beach can be assessed, the Commission finds that the applicants have proposed a reasonable mitigation payment for the initial 20 years of impacts. The proposed mitigation fee is proportional to the mitigation fee approved by the Commission in 2012 for an adjacent armoring project with very similar impacts.

Therefore, Special Condition 7 requires that prior to issuance of the CDP; the applicant shall submit a payment of \$82,064 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 funds shall be used for public access improvements in the vicinity of Bermuda Street as a first priority. 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.

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 that provide public access or recreational opportunities along the shoreline, and 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.

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 8 requires that the applicant submit a construction staging and material storage plan for the subject development. Special Condition 8 also 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 Commission typically prohibits work on the beach during the summer. However, the Commission recently approved an emergency permit for shoreline armoring at this site and work during the summer may reduce the need for further emergency approvals. In addition, the subject beach has relatively low attendance compared to most beaches. Furthermore, the applicants' representative has explained that mechanized equipment won't be placed on the beach and that any scaffolding on the beach will be removed daily to prevent damage from high tides. Special Condition 8 prohibits construction on the beach during weekends and holidays in order to minimize impacts to public access.

In summary, while the proposed shoreline construction will reduce available public beach area and sand supply, the project has been designed and conditioned to minimize these impacts to the public beach. Therefore, 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.

D. 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.

No native flora currently exists on the bluff top or face of the bluff where the seawall is proposed to be installed. However, the wall will be mostly located on the sandy beach. Sandy beach ecosystems are unique--their intrinsic biota and ecological functions are not

provided by any other coastal ecosystem. Sandy beaches are comprised of three different biological zones: the supra-littoral zone, the mid-littoral zone, and the surf zone, each of which provides critical habitat, food and/or breeding grounds for many species. These zones provide functions that include buffering and absorption of wave energy by stored sand, filtration of large volumes of seawater, extensive detrital and wrack processing and nutrient recycling, and the provision of critical habitat and resources for declining and endangered wildlife, such as shorebirds and pinnipeds.

The effects of shoreline armoring on sandy beach ecosystems are increasingly recognized, though difficult to quantify. Armoring directly encroaches upon the beach and fixes shoreline position, constraining the possible responses and evolution of beach ecosystems to adjust to changes in sea level and other dynamic coastal processes. This loss of the scope and ability of beaches to respond to coastal processes results in the reduction of overall width and the elimination of habitat zones and the space needed by biota to adjust to changing swell, tide and beach conditions. As pressure to develop the coast continues, and sea level rise and coastal erosion accelerates, the need to understand the ecological consequences of armoring on coastal ecosystems is increasingly urgent.

Quantitatively assessing effects of armoring on ecological components and functions potentially altered or lost on a given stretch of sandy beach is complex and costly. An alternative option for mitigating ecological impacts of coastal armoring is to use the cost of restoring suitable natural habitat, either at that site or nearby as a proxy for ecological value. Assuming that the restored ecosystem function is equivalent to the natural function lost and is the least costly way to regain that natural function is fundamental to the replacement cost method.^{2,3} This replacement cost approach relies on determining proportional and appropriate ecological restoration for identifying equitable mitigation and thus requires a robust set of suitable restoration projects to draw upon for valuation.

However, a replacement cost approach is only one alternative to delving into the array of methods for identifying, replicating, and monitoring lost ecological components of a specific stretch of beach and still requires further study before a mitigation methodology can be devised and implicated. Thus, the Commission acknowledges that the full ecological impacts of shoreline armoring on beach habitat may not be fully identified, or mitigated at this time. Research continues and staff anticipates this issue to be resolved in the future.

Approximately 30 feet west of the project footprint, a surfgrass bed is present on a small terrace (Exhibit 8). Surfgrass beds provide important habitat for algae, invertebrates, and fishes. Special Condition 10 requires that the existing surfgrass beds not be impacted during project construction. Specifically, a qualified biologist shall erect a temporary fence and be present anytime that there is mechanized equipment on the beach. As

² US National Research Council. 2005. *Valuing Ecosystem Services: Toward Better Environmental Decision- Making*. The National Academies Press. Washington, DC. http://www.nap.edu/catalog/11139.html

³ Bockstael, N.E., A.M. Freeman, R.J. Kopp, *et al.* 2000. On measuring economic values for nature. *Environ. Sci.Technol.* 34: 1384–1389.

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.

E. 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. Existing seawalls and rock rip-rap exist directly adjacent to the north of the site and an existing seawall with a reconstructed mid and upper bluff exists directly south of the subject site. An existing seawall and public stairway exists directly to the south of the subject site. The proposed approximately 106 ft.-long seawall has the potential for adverse impacts on visual resources of the existing natural bluffs. 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 for recently completed seawall directly adjacent to the south (ref. CDP 6-11-010/Oceanus). 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 and blend into the natural environment. 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 for Executive Director approval.

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.

F. PROTECTION OF OCEAN WATER/BMPS

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 9 requires that during the construction of the project, the permittee may not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. Additionally, to further assure that the subject development will not result in the pollution of the ocean waters, Special Condition 9 requires the applicant to submit a Best Management Practices 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.

G. 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 10) Therefore, Oceanus GHAD is not authorized to develop 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, the proposed project is located within both the Commission's area of original jurisdiction and the City of San Diego appealable jurisdiction. Pursuant to Coastal Act section 30601.3, with the consent from the applicants 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 and the City's certified LCP used as guidance. 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, 1466-1472 Pescadero Drive, and 1476-1480 Pescadero Drive is zoned for multifamily 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.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT

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.

6-16-0132 (Oceanus Geologic Hazard Abatement District (GHAD) & Rick Nolan)

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. Special conditions to mitigate for sand supply, public access and recreation, encroachment on public property, impacts to public trust lands, a permit term for seawall authorization and potential seawall removal, and a project monitoring and maintenance program, address 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.

(G:\San Diego\Reports\2016\6-16-0132 Oceanus Staff Report.docx)

APPENDIX A - SUBSTANTIVE FILE DOCUMENTS

- Site Plans titled "Repairs to Coastal Bluff" by Soil Engineering Construction, received November 10, 2016
- Response to California Coastal Commission Comments Dated January 29, 2016 Emergency Permit to Construct Permanent Coastal Bluff Stabilization at 1466 Through 1472 Pescadero Drive and a Portion of 4848 Bermuda Avenue by GeoSoils, Inc., dated February 10, 2016 (W.O. S6975-SC)
- Surfgrass Avoidance Letter Report for the Oceanus Condominium Shoreline Stabilization Project by Coastal Environments Oceanographic and Coastal Services dated April 28, 2016
- Engel, Jonna et al. Improved Valuation of Impacts to Recreation, Public Access, and Beach Ecology from Shoreline Armoring Administrative Draft Not Approved by the Commission. September 28, 2015.
- City of San Diego certified LCP and Ocean Beach Precise Plan
- City of San Diego Resolution Number 306493 Passed on December 7, 2010 (Oceanus GHAD Formation)

PROJECT LOCATION



Google Maps

BLUFF TOP STRUCTURES AND ACCESSWAYS



Google Maps



- 1. Pescadero Ave. Public Access Stairway and Pocket Beach
- 2. 1476-1480 Pescadero Avenue (5 unit Apartment Building)
- 3. 1466-1472 Pescadero Drive (2 Detached Duplexes)
- 4. 4848 Bermuda Ave. (13-Unit Condominium Structure)
- 5. Bermuda Ave. Public Access Stairway and Pocket Beach

EXHIBIT NO. 2 APPLICATION NO. 6-16-0132	
Existing Development	
California Coastal Commission	

CURRENT PHOTO OF PROJECT SITE



Armoring undertaken pursuant to CDP 6-11-010, continues to the south, remaining work to landscape mid/upper bluff

- Armoring undertaken pursuant to Emergency CDP G-6-15-0052
- New armoring proposed pursuant to CDP 6-16-0132



SITE PLAN





POCKET BEACH SEAWARD OF PROPOSED SHORELINE ARMORING







ACCESS MITIGATION MEMO DR. MARY MATELLA



Page 1 of 7

MEMORANDUM



DATE: November 16, 2016

TO: Eric Stevens, Coastal Program Analyst

FROM: Dr. Mary Matella, Environmental Scientist

SUBJECT: Recreation Impacts for CDP #6-16-0132 (Oceanus)

Recreation Impacts for CDP #6-16-0132 (Oceanus)

Recreational value of a beach area can be determined in many different ways. Almost all methods can be reduced to two separate components – the average value that individual beach users place on their recreational experience (consumer surplus) and the number of people recreating on a specific beach (attendance). Consumer surplus is an economic concept, developed from the difference between the actual costs of a beach visit and what individuals (consumers) would be willing to pay for the experience. Attendance is a concept that most people can understand although it is often difficult to quantify. Coastal Commission staff has worked with economists experienced in applying recreational valuation methods to explore potential applications to Commission mitigation practices for shoreline armoring projects. Dr. Phil King and Dr. Chad Nelson provided much of the material summarized below.^{1,2}

This memo is meant to elaborate upon the recreational value method used to assess an appropriate in-lieu mitigation fee for recreational beach loss for CDP #6-16-0132. It details assumptions for consumer surplus and attendance variables used to calculate a recreation impact fee for a 20-year permit period.

Consumer Surplus

Several studies have been undertaken to determine a beach day-use value (consumer surplus) for California beaches. Most of the studies have focused on highly used beaches in southern and central California; however, even for these beaches there is little agreement on consumer surplus between different studies. The consumer surplus values (day use values) vary greatly, ranging from \$14.77 to \$110.06 (all in 2015 dollars) (See Table 1 for the individual study results), not because of flaws in any of the studies, but because it is difficult to control for all the variability that can influence each consumer surplus study. Due to this range of values and the sparseness

¹ CCC Administrative Draft. September 2015. Improved Valuation of Impacts to Recreation, Public Access, and Beach Ecology from Shoreline Armoring. FY 2012 NOAA Project of Special Merit (NA12NOS4190026) grant report.

² Dr. Phil King and Dr. Chad Nelson have not reviewed the subject application, 6-16-0132/Oceanus

of beach specific data for areas outside of southern and central California, King and Nelson recommended that beach recreation valuation for new armoring permits not be based on studies for an individual beach, but rather that a single consumer surplus value should be used for the entire state. The consumer surplus value that they recommended is \$39.49 per attendee per day (2015 dollars). The state-wide value was developed from a state-wide range proposed by Pendleton and Kildow (Table 1) for representing the high (\$50) and low (\$15) state-wide values for a day at the beach. Their recommended value of \$37.50 was adjusted for inflation and is currently \$39.49 per attendee per day (2015 dollars).

This consumer surplus value represents the visitor day use value for an ideal beach experience, which assumes a wide beach. King and Nelson recommend reducing the consumer surplus values for beaches that are less than 250 feet in width, due to the reduced consumer value that they associate with narrower beaches.

Region	Counties	Usage Level*	Consumer Surplus Studies	CS Values (\$2015)
Southern	San Diego Orange Los Angeles Ventura Santa Barbara	High	12	$$14.77^{1}$ $$21.35^{2}$ $$23.95^{3}$ $$27.41^{2}$ $$30.01^{2}$ $$33.24^{1}$ $$34.35^{4}$ $$37.62^{2}$ $$44.63^{5}$ $$94.03^{1}$ $$103.75^{6}$ $$110.06^{6}$
		Low	0	
Central	San Luis Obispo Monterey	High	1	\$47.44 ⁶
	Santa Cruz San Mateo San Francisco	Low	0	
Northern	Marin Sonoma	High	0	
	Mendocino Humboldt Del Norte	Low	0	
CA Average		N/A		\$47.29
Midpoint Kildow & Pendleton (2006)		N/A		\$39.497

Table 1. Example day use (consumer surplus) values for California Beaches

¹ Leeworthy & Wiley (1993)

² King (2001) – midpoint between two methods

³ Chapman and Hanemann (2001) – corrected for inflation using CPI

⁴ Lew and Larson (2005)

⁵ Lew (2002)

6 Leeworthy (1995)

⁷ Midpoint of Kildow & Pendleton (2006) adjusted for inflation (\$2015)

The method for adjusting consumer surplus according to beach width for locations without economic studies is amenity-based and uses a benefit transfer approach. The most widely used benefits transfer model for beaches in California is the California Sediment Benefits Analysis Tool (CSBAT). The CSBAT model estimates the value of a beach day based on the "dry" beach width (mean high tide line to back of beach) during high season (summer). As a benefit transfer method, the amenity-based approach adjusts the consumer surplus of a study site by weighting and rating the amenities at the policy site, compared to some baseline study site. The model has been calibrated from survey data collected at beaches in Orange County, San Diego County, Santa Barbara County and Ventura County. The CSBAT Model that King and Nelson used to model the loss of beach recreation value due to erosion uses 6 separate criteria or amenities to assess the recreational value of California Beaches.³ King describes the CSBAT criteria in the following way:

- 1. Weather: Typically California beaches are overcast early in the morning and clear before noon, though some beaches remain overcast for a significant number of days. In assessing the weather, many sub-criteria are considered: the number of sunny days, average temperature of the air and water, currents, and wind.
- 2. Water Quality/ Surf: Water quality has become a critical issue for southern California, leading to the closure of many beaches.
- 3. Beach Width and Quality: While a wide beach is not crucial to high recreation value, all else equal, people generally prefer wider beaches. When beaches at study sites have good sand quality, distinguishing sand quality is not a priority issue.
- 4. Overcrowding: Previous surveys of beachgoers indicate that overcrowded beaches are considered less desirable. Crowding is often measured by the amount of sand available per person, though crowding can also occur in the water, in parking lots, at snack bars, and elsewhere.
- 5. Beach Facilities and Services: Beachgoers generally prefer access to restrooms, trashcans, and lifeguards.
- 6. Availability of Substitutes: Scarcity also affects the relative value of a beach. If similar beaches are available within a short distance, a beach is considered less valuable than if it were the only choice. However, one must keep in mind the differing preferences of beach users. For example, some prefer a city beach with an urban or tourist ambiance while others prefer a more "natural" beach. A critical issue often overlooked in studies of California beaches is congestion and availability of parking.

Each of these criteria is provided with both a value and a weighting in the CSBAT model. In a report provided to the Commission, King and Nelson provided a modified CSBAT Model that assigns a value of 50% for each amenity except for beach width (100% points) and a weighting that sums to 100% for all the amenities (Table 2).⁴ The model includes an adjustment to the

³ King, P. 2006. The Economics of Regional Sediment Management in Ventura and Santa Barbara Counties: A Pilot Study Interim Report To The Coastal Sediment Management Workgroup. (T. B. E. A. for C. O. and N. (BEACON), Ed.).

King, P.G., McGregor, A.R., Whittet, J.D. (2008). The Economic Costs of Sea Level Rise to California Beach Communities. California Department of Boating and Waterways and San Francisco State University.

⁴ CCC Administrative Draft. September 2015. Improved Valuation of Impacts to Recreation, Public Access, and Beach Ecology from Shoreline Armoring. FY 2012 NOAA Project of Special Merit (NA12NOS4190026) grant report.

beach width amenity to reflect the reduction in consumer value for widths narrower than 250 feet (Figure 1).

Table 2. Amenity factors

Amenity	Amenity Point Value	Weight	Weighted Amenity Value
Weather	50%	20.00%	87.1%
Water Quality	50%	20.00%	87.1%
Beach Width and Quality	100%	15.00%	100.0%
Overcrowding	50%	15.00%	90.1%
Facilities/Services	50%	15.00%	90.1%
Availability of Substitutes	50%	15.00%	90.1%
Total Index Value		100%	55.5%
Maximum value per day	\$ 71.18		
Day use value	\$ 39.49		

The functional form used in the CSBAT analysis is a Cobb-Douglas utility function—a standard practice in the economic field. The equation is of the general form:

 $CS_p = CS_s * IV$ (Eq. 1)

Using the Index Value (IV) to adjust the consumer surplus as the policy site (CS_p)

 $IV = W^{a} * WQ^{b} * BWQ^{c} * C^{d} * A^{e} * S^{f}$ where: a + b + c + d + e + f = 1 (Eq. 2)

Index Value (IV) based on weighted amenities

Where CS_p is the Consumer surplus at the policy site and CS_s is the consumer surplus at the study site and IV is the index value from the weighted amenities.

In practice, the values and weights have been based on professional judgment and have not been empirically based. Empirical values could best estimated through a multiple site Random Utility Model study designed specifically to estimate the relative value of these parameters. Further research would be required to determine how those values change with changes to beach width.

Weighted beach amenities are also used to determine the decrease in consumer surplus value from t=0 and over the project lifetime (t=n) as the beach width decreases. As beach width decreases the amenity point values for beach width (BWQ) decreases proportional to percentage of total beach width (B_n). The total lost consumer surplus is from lost amenity value to each visitor due to the narrowing beach over the lifetime of the project adjusted to net present value.

$$CS_{SL} = \sum_{t=0}^{n} \frac{CS_{P} - (CS_{P} * IV_{t}) * att}{(1+r)^{t}}$$
(Eq. 3)

Where
$$IV_t = W^a * WQ^b * (B_t * BWQ^c) * C^d * A^e * S^f$$
 (Eq. 4)

Where
$$a+b+c+d+e+f=1$$
 and $B_t = \frac{bw_t}{bw_{t=0}}$ (Eq. 5)

Consumer surplus lost over project lifetime due to lost amenity value from beach erosion⁵

Where CS_{SL} is the net present value of the total lost consumer surplus over the project lifetime (t=n), CS_P is the consumer surplus at the policy site, IV_n is the amenity value adjusted for a narrowing beach, *att* is attendance, and B_t is the percentage of beach remaining. r is the discount rate. When $B_t = 0$, the lost consumer surplus of the beach in front of the sea wall (CS_{SL}) is at its maximum for the remaining project lifetime.



King and Nelson have not provided any direction or guidance for adjusting any of the other criteria or amenities to tailor the general valuation to individual beaches and instead recommend that the \$39.49 value be used for all beaches throughout the state, with adjustments only for beach width and inflation.

Attendance

Some assumptions about beach visitor attendance are necessary for recreation loss models. Because of the assumption that attendance will decrease as the beach width decreases, a density number is required for the model. Due to the difficulty in accessing this pocket beach during all but the lowest tides, district staff suggested that 1000 visitors per year was an appropriate average number to use for the beach where the armoring project is proposed. 1000 visitors divided by the area of the project (25 ft wide beach x 106ft long shoreline) produces an attendance density of 0.38 visitors per sq. ft. per year.

⁵ King, P. 2006. The Economics of Regional Sediment Management in Ventura and Santa Barbara Counties: A Pilot Study Interim Report To The Coastal Sediment Management Workgroup. (T. B. E. A. for C. O. and N. (BEACON), Ed.).

Oceanus CDP Calculation

The following parameters were entered into the recreation loss model (Equation 6).

Length of seawall = 106 ft Beach Width = 25 ft Erosion rate = 0.2 ft/yr (rate provided by the applicant and concurred with by the Commission Geologist) Attendance = 1000 people/yr (or attendance density = 0.38 visitors per sq. ft. per year) Day use value scaled to width of 25 ft = ~\$28 for year 1

Annual Recreational Value = Day use value * attendance density * length * width (Eq. 6)

Where, Day use value (consumer surplus) will change as a function of beach width,

Attendance will change as a function of beach area,

Length (the length of the shoreline protection) will be constant, and

Width (beach width at location of shore protection) will change due to erosion

The recreational value over the permit period is the summation of annual recreational values for 20 years. To compare costs occurring at different time scales, a discount rate of 2% was assumed for present value calculations. Thus, the 20-year recreational value for the project is calculated as the difference between the without project and with project net present value calculations for the permit period.

	For 20-years	
PV Total Recreational Value without Project	\$466,300	
- PV Total Recreational Value with Project	\$376,100	
PV Loss in Recreational Value Due to Project	\$ 90,200	

In summary, the calculation above demonstrates a potential method for valuing lost recreational use of the beach due to armoring at this project site. It relies on reasonable assumptions of visitor enjoyment (consumer surplus), attendance, erosion rate, and investment rates.

SAND CALCULATIONS



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Geotechnical • Geologic • Coastal • Environmental

5741 Palmer Way • Carlsbad, California 92010 • (760) 438-3155 • FAX (760) 931-0915 • www.geosoilsinc.com

July 25, 2016

Mr. Bob Trettin The Trettin Company 560 N. Highway 101, Suite #5 Encinitas, CA 92024

SUBJECT: California Coastal Commission Beach Sand Replenishment Fee, 1466-72 Pescadero Drive and 1476-80 Pescadero Drive, San Diego.

Dear Mr. Trettin:

At your request, GeoSoils Inc. (GSI) is pleased to provide the following sand mitigation fee calculations for the subject projects in Ocean Beach, San Diego.

1466-72 Pescadero and 1476-80 Pescadero SAND MITIGATION WORKSHEET

Ve = Ae x v	Ae x v Ve=212 x .9 Ve = 190.8	
Ae = W x E	W x E Ae = 106 x 2 Ae	
Vw = Aw x v	Vw = 424 x .9	Vw = 381.6
Aw = R x L x W	Aw = .2 x 20 x 10	06 Aw = 424
Vb = (S x W x L) x Vb = (.53 x 106 x 2 Vb = (1,124) x [(6. Vb = 7,755.6 / 27 Vb = 287.24	[(R x hs) + (1/2 hu x 20) x [(.2 x 34.5) + (0 9) + (0)))]/27	x (R + (Rcu-Rcs)))]/ 27 x (.2 + (.2-0)))] / 27
Vt = Vb + Vw + Ve Vt = 287.24 + 381	.6 + 190.8 Vt	= 859.64
M= Vt x C C = Cost of Sand C= \$15.54 (per av	erage of attached sa	and bids)
M = 859.64 x \$15.	54 M	= \$13,359 (rounded)

Breakdown

\$4,463.71: Sand Fee, when assessed in conjunction with Public Access / Beach Recreation Fee

Public Access / Beach Recreation Mitigation Fee 1466-72 Pescadero and 1476-80 Pescadero

The initial Oceanus project provided an assessment of \$81,000 to offset impacts to Public Access and Beach Recreation. The Coastal Commission, determining that this very small pocket was unlikely to retain sand, added the sand impact fee calculated for Vb (=/- \$5,000) and the applicants paid a total fee of \$86,000 to the SANDAG holding account for the Public Access / Beach Recreation Mitigation.

\$81,000 for a 120' long seawall equates to \$675 per lineal foot.

For the extension of this project northerly from the first Oceanus project, the applicants propose a Public Access / Beach Recreation mitigation fee as follows:

Part 1. \$71,550 (106' x \$675).

Part 2. \$ 4,552.75 It is assumed that staff would also add the value of Vb from the sand mitigation. formula, which would add an additional \$4,423.50, or a total of \$75,973.50.

Part 3. \$6,050. In addition, a 22' long section of the failing coastal bluff at the project site is undercut by an average of 2.5'. As the seawall would front this undercut (which would be infilled), this would account for an additional 55 sq. ft. of beach that would be removed from future public use in the near future. Based on the initial Oceanus project's mitigation assessment average of approximately \$110 per sq. ft., this would add an additional \$6,050 in mitigation.

The total proposed assessment, therefore, would be:

\$71,550.00 (consistent with initial Oceanus project)

\$ 4,463.71 (funds that would otherwise be placed in a sand mitigation account; consistent with initial Oceanus project)

\$ 6,050.00 (additional funds to offset the existing undercut area)

\$82,063.71 TOTAL

Based on the initial Oceanus Project of approximately \$110 per square foot of impact, which was approved by Coastal staff and the Commission, the above proposal for this extension of the Oceanus GHAD seawall would be comparable.

20 x .20 x 106	i	= 424 Sq. ft. (future impact on public beach space)
2.5' x 22'	=	55 sq ft. (additional impact of wall on beach / undercut area, which ranges from 1' to 5' in depth)
2.5' x 106	=	265 sq. ft. (impact of wall on beach)

Total = 744 sq. ft. x \$110 = \$81,840

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to contact our office.

Respectfully Submitted,

Dula Shilly



GeoSoils, Inc. David W. Skelly, MS RCE #47857

SURFGRASS BIOLOGICAL REPORT



Page 1 of 5

28 April 2016



Mr. Bob Trettin Soil Engineering Construction 500 N. Hwy 101, Suite 5 Encinitas, CA 92024 E-mail: <u>trettincompany@gmail.com</u> Tel.: (858) 603-1741

Subject: Surfgrass Avoidance Letter Report for the Oceanus Condominium Shoreline Stabilization Project

Dear Mr. Trettin:

INTRODUCTION

Coastal Environments, Inc. (CE) appreciates the opportunity to provide a Surfgrass Avoidance Plan letter report for the Oceanus Condominium Coastal Seawall Project. The site visit and report preparation were carried out by Ms. Emily Callahan and Mr. Tim Norall both are marine biologists with Coastal Environments.

PROJECT DESCRIPTION

The Oceanus Condominium shoreline stabilization project is located on the coastal bluff within urbanized Ocean Beach between Bermuda Avenue and Pescadero Drive in San Diego. A portion of the site directly below the condominium complex consists of steep grouted riprap structure that extends to mean sea level. The project proposes the replacement of a previous seawall that has since fallen down.

The proposed shoreline construction (outlined in black in Figure 1 below) will result in the replacement of a compromised seawall and riprap within the footprint of an existing structure in the supra-tidal fringe and upper intertidal zones. The project proposes the construction of a 49 ft. long, 34.5 ft. high, 2-2.5 ft. thick concrete tiedback seawall and an approximately 25 ft. long, 25 ft. high, 2-2.5 ft. thick concrete tiedback triangle shaped mid and upper bluff wall to tie into an existing seawall and reconstructed upper bluff slope protection currently under construction to the south. There will be no mechanized equipment on the beach. The replacement wall will be constructed by drilling rebar directly into the bluff, and into the bedrock below. Since the project would occur within the existing structure, there will be no loss of habitat. There is no expected impact to the surfgrass beds occupying the shallow sub-tidal zone below the proposed project site. No mechanized equipment will be on the beach, therefore only the manual construction activities at the toe of the seawall will disturb the sediments. Due to the construction work being conducted above the mean high water line, or during tidal intervals when the waters have receded from the authorized work area, and the use of erosion/sediment controls, no increase in turbidity or burial due to sedimentation is expected during the project construction. The erosion/sediment controls will be put in place prior to the commencement of construction and

Mr. Bob Trettin Soil Engineering Construction Subject: Surfgrass Avoidance Letter Report for the Oceanus Condominium Shoreline Stabilization Project 27 April 2016 Page 2

will be amended at the beginning of each work day as needed. In addition, the actual construction is at least 30 ft. from the nearest surfgrass patch.



Figure 1. Project area map indicating the project location and the existing surfgrass patches. The area highlighted in yellow is the recently completed seawall. The area immediately to the left, outlined in black is the location of the planned shoreline stabilization project and seawall repair. The areas outlined in blue indicate surfgrass patches surveyed in 2005, 2007, and 2011. The area in orange is a newly observed patch of surfgrass not indicated on the previous map; the surfgrass is well outside of the planned scope of the project area.

Mr. Bob Trettin Soil Engineering Construction Subject: Surfgrass Avoidance Letter Report for the Oceanus Condominium Shoreline Stabilization Project 27 April 2016 Page 3

SURFGRASS

Approximately 30 ft. west of the project footprint, a small surfgrass bed is present, as are several other patches; however, the latter are far away from the immediate project construction zone (Figure 1). Surfgrass beds provide important habitat for algae, invertebrates, and fishes. It is not expected that the proposed project will have any direct or indirect impacts to the existing surfgrass beds.

SURFGRASS AVOIDANCE PLAN

In response to the conditions listed by the California Coastal Commission, CE has put forth the following surfgrass avoidance recommendations:

- CE has advised the contractor of the locations of the existing surfgrass beds (see Appendix A) and the need to protect and avoid these resources, including the recently described patches indicated in orange in Figure 1.
- CE recommends that a qualified biological (QB) monitor be on site prior to project commencement, at the project's midpoint, and at the projects conclusion to monitor ongoing construction activities and ensure that the erosion/sediment controls are in place and functioning and that there is no impact to the surfgrass.
- Should the use of any mechanized equipment be implemented, a biological monitor will be required, who shall be given the authority to stop work if it threatens to impact the surfgrass beds.
- CE recommends that a QB be permitted to collect photographs of the project area and surfgrass beds preceding the onset of construction activities, at the project midpoint, and at the conclusion of construction. These photos will be of the patches directly in front of the project area (area of potential effect) and at a control, which will be in an area nearby the project.
- The CE QB will compare the surfgrass photographs from post-construction with the photographs collected prior to construction from both the area of potential effect and the control. This will allow for an assessment of whether the surfgrass distribution within the potential area of effect was impacted differentially from the control (i.e. whether there was a project impact). Although no project impacts on surfgrass are projected, this assessment will enable the evaluation of potential impacts.

Mr. Bob Trettin Soil Engineering Construction Subject: Surfgrass Avoidance Letter Report for the Oceanus Condominium Shoreline Stabilization Project 27 April 2016 Page 4

If the above measures are taken into consideration during project construction, CE does not envision any impacts to the existing surfgrass beds near the project location.

Sincerely,

COASTAL ENVIRONMENTS

any

Hany Elwany, Ph.D. President

Appendix A. Proposed Project Site Photos and Construction Photos from Previously Completed Adjacent Seawall

STATE LANDS JURISDICTION LETTER



Page 1 of 4

STATE OF CALIFORNIA

EDMUND G. BROWN JR., Governor

CALIFORNIA STATE LANDS COMMISSION 100 Howe Avenue, Suite 100-South Sacramento, CA 95825-8202



JENNIFER LUCCHESI, Executive Officer (916) 574-1800 FAX (916) 574-1810 California Relay Service From TDD Phone 1-800-735-2922 from Voice Phone 1-800-735-2929

> Contact Phone: (916) 574-1900 Contact FAX: (916) 574-1835

March 29, 2016

File Ref: SD 2016-03-23.2

The Trettin Company Attn: Bob Trettin 560 N. Highway 101, Suite 5 Encinitas, CA 92024

SUBJECT:

Seawall Construction on Beach and Bluff, adjacent to 4848 Bermuda Avenue and 1466-1472 Pescadero Drive, at Ocean Beach, San Diego County

Dear Mr. Trettin:

This letter is in response to a request you submitted to the California State Lands Commission (CSLC) for a jurisdictional review of your proposed project to construct a new 40-foot seawall on the beach and bluff adjacent to 4848 Bermuda Avenue and 1466-1472 Pescadero Drive, at Ocean Beach, in San Diego County, and determine whether the CSLC asserts a sovereign title interest in the property that the abovereferenced seawall will occupy.

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (PRC §6301 and §6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court decision. On navigable non-tidal waterways, including lakes and rivers, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court decision. Such boundaries may not be readily apparent from present day site inspections. MHTL surveys do not create a permanent boundary, but rather serve as evidence as to the MHTL location at that single point in time. In the absence of a boundary line agreement with this agency, or an adjudicated boundary line, the boundary between sovereign land and privately-held uplands remains ambulatory.

According to tide data maintained by the National Oceanic and Atmospheric Administration (NOAA), the California coast is experiencing differing rates of sea level rise. The closest NOAA tide station to the subject property indicates a rising sea level trend. Climate models indicate that sea level could rise by nearly 66 inches (167 cm) by the end of this century, exacerbating the effects of existing natural hazards, including storms and high tides.

Sea level rise will also affect the boundary between sovereign public trust lands and privately owned uplands by causing the MHTL to migrate landward over time. Although we expect the MHTL to continue to fluctuate but generally move landward at the project location, at this time CSLC staff does not have sufficient information to determine the rate or extent to which the boundary might move. Additional research might reveal where the boundary is likely to move, but staff believes that the time, effort, and cost to develop such information is not warranted at this time and in this situation.

According to staff's review of our in-house records and maps, it appears that portions of the proposed project will be located within lands the State granted to the city of San Diego (City). All remaining State interest has been granted to the City, pursuant to Chapter 688, Statutes of 1933, and as amended. As day to day administration of these lands has been granted, in trust, to the City, the City need not obtain authorization from the CSLC to proceed with this project. However, the City should contact any additional regulatory agencies with permitting authority for this project.

Based on the circumstances as set forth above, the property location, the character, and history of adjacent development, CSLC staff does not presently claim that the proposed project intrudes onto ungranted sovereign lands. Therefore, no lease is required at this time. A lease may be required at such time in the future that the exact extent of the State's fee ownership is determined.

This determination is without prejudice to any future assertion of State ownership or public rights, should circumstances change, or should additional information come to our attention. This letter is not intended, nor should it be construed as, a waiver or limitation of any right, title, or interest of the State of California in any lands under its
Bob Trettin Page 3

jurisdiction. Please call Sandra Kreutzburg at (916) 574-0282 or contact her by e-mail at <u>sandra.kreutzburg@slc.ca.gov</u> if you have questions concerning the above.

Sincerely,

Brian Bugsch, Chief Land Management Division

cc: Eric Stevens, Analyst California Coastal Commission San Diego Area 7675 Metropolitan Drive, Suite 103 San Diego, CA 92108-4421

> Ken Foster Public Land Manager CSLC

EMERGENCY CDP G-6-15-0052 OCEANUS GHAD



Page 1 of 11

CALIFORNIA COASTAL COMMISSION

SAN DIEGO COAST DISTRICT OFFICE 7575 METROPOLITAN DRIVE, SUITE 103 SAN DIEGO, CALIFORNIA 92108-4402 PH (619) 767-2370 FAX (619) 767-2384 WWW.COASTAL.CA.GOV



EMERGENCY PERMIT

Issue Date: Emergency Permit No. March 9, 2016 G-6-15-0052

APPLICANT: Oceanus GHAD

AGENT:

Robert Trettin

LOCATION OF EMERGENCY:

On beach and bluff face fronting 4848 Bermuda Avenue and 1466-1472 Pescadero Avenue, Ocean Beach, San Diego, San Diego County ((APNs): 448-242-27-01 through 13 and 448-242-02)

EMERGENCY WORK:

Construction of a 49 ft. long, 34 ft. 6 in. high, 24-28 in. wide colored and textured concrete tiedback seawall and an approximately 25 ft. long, 25 ft. high, 24-28 in. wide colored and textured concrete tiedback triangle shaped mid and upper bluff wall to tie into an existing seawall and reconstructed upper bluff slope protection currently under construction to the south. No backfill is proposed. El Niño related.

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 that an unexpected occurrence in the form of several bluff failures and a slope stability analysis showing that the seaward bluff top duplex at 1466-1472 Pescadero Avenue, San Diego (San Diego County) is at risk and 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 California Coastal Commission hereby finds that:

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

(b) Public comment on the proposed emergency development has been reviewed if time allows.

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

Page 2 March 9, 2016 Emergency Permit No.: G-6-15-0052

Sincerely,

John Ainsworth Acting Executive Director

Schorah N. Sel Sister Manager for By: Sherilyn Sarb, Deputy Director

cc: Local Planning Department

Enclosures: 1) Acceptance Form

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 (by March 24, 2016).
- 2. Only that work specifically described in this permit and as more specifically described in the Commission's file for the Emergency CDP for the specific property listed above is authorized. The work permitted under this permit is the minimum necessary to address the emergency situation at hand. Any additional work or maintenance to the structures installed pursuant to this permit requires separate authorization from the Executive Director. All emergency development shall be limited in scale and scope to that specifically identified in the Emergency Permit Application Form dated received in the Coastal Commission's San Diego Coast District Office on December 30, 2015 and modified on March 8, 2016.
- 3. All work shall take place in a time and manner to minimize any potential damages to any resources, including intertidal species, and to minimize impacts to public access. Construction materials, equipment or debris shall not be stored where it will or could potentially be subject to wave erosion and dispersion. Construction shall be conducted pursuant to typical best management practices such as:
 - a. All construction areas shall be minimized and allow public recreational access along the beach and shall protect public safety to the maximum extent feasible. Construction (including but not limited to construction activities, and materials and/or equipment storage) is prohibited outside of the defined construction, staging, and storage areas.
 - b. Construction work and equipment operations shall not be conducted seaward of the mean high water line, unless tidal waters have receded from the authorized work areas.
 - c. Any construction materials and equipment placed on the beach during daylight construction hours shall be stored beyond the reach of tidal waters. All construction materials and equipment shall be removed in their entirety from the beach area by sunset each day that work occurs.
 - d. All construction activities that result in discharge of materials, polluted runoff, or wastes to the beach or the adjacent marine environment are prohibited. Equipment washing, refueling, and/or servicing shall not take place on the beach. Any erosion and sediment controls used shall be in place prior to the commencement of construction as well as at the end of each work day.
- 4. The work authorized by this permit must be completed by May 27, 2016 (the start of Memorial Day Weekend), which shall become null and void unless extended by the Executive Director for good cause.

- 5. The applicant recognizes that the emergency work is considered temporary and subject to removal unless and until a regular coastal development permit permanently authorizing the work is approved. A regular permit would be subject to all of the provisions of the California Coastal Act, would be conditioned accordingly, and may not allow for any further armoring or may require a different configuration of the seawall. These conditions may include provisions for public access (such as offers to dedicate, easements, in-lieu fees, etc.) and/or a requirement that a deed restriction be placed on the property assuming liability for damages incurred from strong waves. In addition, any follow-up permit would account for and analyze the impacts of long-term sea level rise.
- 6. 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.
- This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies, including but not limited to the California Department of Fish & Wildlife, U.S. Fish & Wildlife, U.S. Army Corps of Engineers, and the California State Lands Commission.
- 8. Within 30 days of completion of construction authorized by this Emergency CDP, the Permittee shall submit site plans and cross sections clearly identifying all development completed under this emergency authorization (comparing any previously permitted condition to both the emergency condition and to the post-work condition), and a narrative description of all emergency development activities undertaken pursuant to this emergency authorization. Photos showing the project site before the emergency (if available), prior to and during emergency project construction activities, and after the work authorized by this Emergency CDP is complete shall be provided with the site plans and cross sections.
- 9. This Emergency CDP shall not constitute a waiver of any public rights which may exist on the property. The permittee shall not use this Emergency CDP as evidence of a waiver of any public rights which may exist on the property.
- 10. PRIOR TO CONSTRUCTION OF THE SEAWALL, 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.
 - b. Temporary fences shall be erected each day by a qualified biologist during any time that mechanized equipment is used on the beach to mark the maximum extent of beach within which work can be done.

Page 5 March 9, 2016 Emergency Permit No.: G-6-15-0052

- c. All work shall be monitored during any 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 prior written consent of the Executive Director.

- 11. PRIOR TO CONSTRUCTION OF THE SEAWALL, the applicant shall submit to the Executive Director, evidence that the proposed plans have been reviewed and approved by the City of San Diego. The plans shall indicate the seawall is located as far landward as possible and is located to keep as much of the beach as possible available for public use.
- 12. Copies of this Emergency CDP shall be maintained in a conspicuous location at the construction jobsite 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 this Emergency CDP, and the public review requirements applicable to it, prior to commencement of construction.
- 13. 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 their contact information (i.e., address, email, phone numbers, etc.) including, at a minimum, a telephone number and email address 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 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 should be contact information (e.g., name, address, email, phone number, etc.) and nature of all complaints received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry. Within 30 days of completion of construction authorized by this Emergency CDP, the Permittee shall submit the record (of complaints/inquiries and actions taken in response) to the Executive Director.
- 14. By May 27, 2016 (the start of Memorial Day Weekend), or as extended by the Executive Director through correspondence, for good cause, the applicant shall either: (a) remove all of the materials placed or installed in connection with the emergency development authorized in this Permit and restore all affected areas to their prior condition after consultation with California Coastal Commission staff, and consistent with the Coastal Act; or (b) submit a complete follow-up Coastal Development Permit (CDP) that satisfies the requirements of Section13056 of Title 14 of the California Code of Regulations. If the Executive Director determines that the follow-up CDP application is incomplete and requests additional

information, the applicant shall submit this additional information by a certain date, as established by the Executive Director. If such a follow-up CDP application is withdrawn by the applicant or is denied by the Commission, or if the follow-up CDP application remains incomplete for a period of 120 days after the Executive Director informs the applicant that the application is incomplete, the emergency-permitted development shall be removed and all affected areas restored to their prior condition, after consultation with CCC staff and consistent with the Coastal Act, within 30 days, subject to any regulatory approvals necessary for such removal. In some instances, a permit may be needed for removal.

15. Failure to a) submit a complete follow-up CDP Application that complies with Condition 8 above, or b) remove the emergency development and restore all affected areas to their prior condition after consultation with CCC staff, and consistent with the Coastal Act (if required by this Emergency Permit) by the date specified in this Emergency Permit¹, or c) comply with all terms and conditions of the required follow-up CDP, including any deadlines identified therein, or d) remove the emergency-permitted development and restore all affected areas to their prior condition after consultation with CCC staff and consistent with the Coastal Act immediately upon denial of the required follow-up CDP² will constitute a knowing and intentional violation of the Coastal Act³ and may result in formal enforcement action by the Commission or the Executive Director. This formal action could include a recordation of a Notice of Violation on the applicant's property; the issuance of a Cease and Desist Order and/or a Restoration Order; imposition of administrative penalties for violations involving public access: and/or a civil lawsuit, which may result in the imposition of monetary penalties, including daily penalties of up to \$15,000 per violation per day, and other applicable penalties and other relief pursuant to Chapter 9 of the Coastal Act. Further, failure to follow all the terms and conditions of this Emergency Permit will constitute a knowing and intentional Coastal Act violation.

(G:\San Diego\Emergency Permits\G-6-15-0052 Oceanus GHAD Seawall\Final Emergency Permit\G-6-15-0052 Oceanus GHAD EMERGENCY PERMIT.docx)

¹ In some instances, a permit may also be required for removal.

² As noted above, in some instances, a permit may also be required for removal.

³ The Coastal Act is codified in sections 30000 to 30900 of the California Public Resources Code. All further section references are to that code, and thus, to the Coastal Act, unless otherwise indicated.

WWW.COASTAL.CA.GOV

CALIFORNIA COASTAL COMMISSION SAN DIEGO COAST DISTRICT OFFICE 7575 METROPOLITAN DRIVE, SUITE 103 SAN DIEGO, CALIFORNIA 92108-4402 PH (619) 767-2370 FAX (619) 767-2384



EMERGENCY PERMIT ACCEPTANCE FORM

 TO: CALIFORNIA COASTAL COMMISISON San Diego Coast District Office
7575 Metropolitan Drive, Suite 103 San Diego, California 92108-4402

RE: Emergency Permit No. G-6-15-0052

INSTRUCTIONS: After reading the attached Emergency Permit, please sign this form and return to the San Diego Coast District 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 that a regular Coastal Development Permit is necessary for any permanent installation. I agree to complete the regular Coastal Development Permit application by May 27, 2016 (the start of Memorial Day Weekend) or I will remove the emergency work in its entirety by May 27, 2016. Finally, I understand that my failure either to:

a) submit a complete follow-up Coastal Development Permit (CDP) Application that satisfies the requirements of Section 13056 of Title 14 of the California Code of Regulations by the date specified in this Emergency Permit, which date may be extended by the Executive Director for good cause, or

b) Remove the emergency development and restore all affected areas to their prior condition after consultation with Coastal Commission staff as you identified consistent with the Coastal Act, will constitute a knowing and intentional violation of the Coastal Act and may result in formal enforcement action by the Commission or the Executive Director.

In some instances, a permit may be required for removal (if required by this Emergency Permit) by the date specified in this Emergency Permit. This formal action could include a recordation of a Notice of Violation on my property; the issuance of a Cease and Desist Order and/or Restoration Order; imposition of administrative penalties for violations involving public access, and/or a civil lawsuit, which may result in the imposition of monetary penalties, including daily penalties of up to \$15,000 per violation per day, and other applicable penalties and other relief pursuant to Chapter 9 of the Coastal Act. Further, failure to follow all the terms and conditions of this Emergency Permit will constitute a knowing and intentional Coastal Act violation.

Address:__

Signature of Property Owner or Authorized Representative

Print Name

Date of Signing

PROJECT LOCATION



Project Location

° 🔊

California Coastal Commission





OCEANUS GHAD BOUNDARIES

public property.



California Coastal Commission

Oceanus GHAD

Boundaries

LETTER FROM APPLICANT



Page 1 of 2

Mike Corica 1466-72 Pescadero Drive San Diego, California 92107

February 7, 2016

TO:	California Coastal Commission
FROM:	Mike Corica
RE:	Stipulation; Prior City of San Diego Project Approval has Expired and is Void

I am the current owner of the property at 1466-72 Pescadero Avenue, San Diego, California.

The prior owner of this property obtained discretionary permit approval to demolish the existing units on this site and to construct two new residential units (CDP #274486 / SDP #277639 / PDP # 524160; Project #281984).

On May 28, 2012, the prior owner of the property obtained approval for a three year Extension of Time on the subject permit. This was the maximum period of time allowed by the City of San Diego. The recorded time extension specifically stated that "This Permit must be utilized prior to May 28, 2015 ..." It also states that, "... failure to utilize and maintain utilization of this Permit as described in the SDMC will automatically void the permit."

Finally, the time extension stipulated that "No further Extension of Time may be granted pursuant to SDMC Section 126.0111(a)."

If a Permit has been "utilized" (as defined in SDMC Section 126.0108) prior to its expiration, then the Permit could remain valid. Therefore, I hereby stipulate that the subject Permit was not "utilized" prior to its May 28, 2015 expiration. Nor would I ever attempt to argue that any of the criteria listed in SDMC Section 126.0111(a) had ever been met by the original owner or by me, as the current owner of record.

In summary, I hereby acknowledge that the subject City of San Diego project approval (CDP #274486 / SDP #277639 / PDP #52160; Project #281984) has expired and is void.

Respectfully submitted,

 $\frac{2-10-16}{(date)}$

Mike Corica