CALIFORNIA COASTAL COMMISSION
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

Item Th7b

Filed:	7/28/14
180th Day:	1/21/15
Staff:	L. Roman-LB
Staff Report:	8/23/14
Hearing Date:	9/11/14

STAFF REPORT: CONSENT CALENDAR

Application No.:	**5-14-1284**
Applicant:	**Richard Zamboni**
Agent:	Gregory Reid, P.E.
Location:	16591 Nalu Circle, Huntington Beach, Orange County
Project Description:	Repairs to an existing approximately 154 linear feet seawall/bulkhead consisting of removal of seawall cut-off wall for access to and repair of timber piles; removal of 38.25 sq. ft. of existing concrete overpour along the toe of the bulkhead footing to allow for installation of 154 linear feet of marine grade vinyl ester resin sheetpile panels along the toe of the seawall footing imbedded into the harbor bottom and flush along the vertical face of the seawall footing thereby avoiding fill of open coastal waters, and injection of grout to fill the voids behind the seawall and around the repaired wood piles on a single family residential lot.
Staff Recommendation:	Approval with conditions.

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** the Coastal Development Permit Applications included in the consent calendar in accordance with the staff recommendations.*

Staff recommends a **YES** vote. Passage of this motion will result in approval of all the permits included on the consent calendar. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Bulkhead Monitoring Plan.** The permittee shall maintain the bulkhead reinforcement in good condition throughout the life of the development. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit to the Executive Director for review and approval a Bulkhead Monitoring Plan. The permittee, and their successors in interest shall be responsible for carrying out all provisions of the approved Monitoring Plan for as long as the bulkhead reinforcement remains in place. The monitoring plan, at a minimum, shall provide for: (a) regular inspections by a qualified person familiar with bulkhead structures who is able to document via photos and provide written descriptions based on personal observation whether any cracks, breaks or deterioration have occurred. These inspections shall be performed at least every 2 years; (b) inspections shall examine the exposed portions of the bulkhead reinforcement (to the mud line) for signs of weakness or possible failure, including, but not limited to cracking, bending, splitting, splintering, or flaking. All weak or potential failure areas should be marked on an as-built plan of the bulkhead reinforcement, and there should be photographs and text to explain the nature and extent of each weakness.

   Inspection reports shall be prepared and conveyed to the Executive Director within 30 days of the inspection work. These reports shall provide information on and photographs from the date of the inspection, the name and qualifications of the person performing the inspection, and an overall assessment of the continued integrity of the bulkhead reinforcement. If the inspection identifies any areas where the bulkhead reinforcement has been damaged, the report shall identify alternatives to remedy the damage.

   In the event that any sections of the bulkhead reinforcement are damaged or flaking, the permittees shall notify the Commission within 10 days; and in such event, within 30 days of such notification, submit to the Commission a complete application for any coastal development permit amendment, or new permit, necessary for the repair or replacement of the bulkhead reinforcement.

2. **Alternatives to Plastic.** By acceptance of this permit, the applicant agrees to submit an application for an amendment to this permit or a new coastal development permit if new information becomes available that indicates that plastic has harmful effects on the marine environment, and that environmentally superior, feasible alternative(s) are available. The amendment or new coastal development shall include measures to eliminate or significantly reduce the adverse impacts of the plastic including, if necessary, the replacement of the bulkhead.

3. **Soft Bottom Mitigation.** By acceptance of this permit, the applicant shall assure that the soft bottom mitigation shall be carried out as proposed by the removal of the existing 38.25 sq. ft. of concrete overpour at the existing bulkhead toe at the subject site and furthermore agrees that the 29.98 sq. ft. (i.e., 38.25 sq. ft. existing concrete overpour minus the 8.27 sq. ft. of soft bottom area taken up by the proposed new sheetpile) of mitigation area (in excess of the required 2:1 mitigation ratio) at the project site shall be reserved as mitigation specific to the project site at 16591 Nalu Circle and shall not be allowed to serve as mitigation for any other project.

4. **Construction Responsibilities and Debris Removal.** The permittee shall comply with the following construction related requirements:

A. No demolition or construction materials, equipment, debris, or waste shall be placed or stored where it may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain or tidal erosion and dispersion;

B. Any and all debris resulting from demolition or construction activities, and any remaining construction material, shall be removed from the project site within 24 hours of completion of the project;

C. Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters;

D. Machinery or construction materials not essential for project improvements will not be allowed at any time in the intertidal zone;

E. If turbid conditions are generated during construction a silt curtain will be utilized to control turbidity;

F. Floating booms will be used to contain debris discharged into coastal waters and any debris discharged will be removed as soon as possible but no later than the end of each day;

G. Non buoyant debris discharged into coastal waters will be recovered by divers as soon as possible after loss;

H. The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction;

I. Debris shall be disposed of at a legal disposal site or recycled at a recycling facility. If the disposal site is located in the coastal zone, a Coastal Development Permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required;

J. All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil;

K. Sand from the beach, cobbles, or shoreline rocks shall not be used for construction material;

L. Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems;

M. The discharge of any hazardous materials into any receiving waters shall be prohibited;

N. Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible;

O. Best Management Practices (BMP's) and Good Housekeeping Practices (GHP's) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity; and

P. All BMP's shall be maintained in a functional condition throughout the duration of construction activity.

5. **Pre-Construction Eelgrass Survey.** A valid pre-construction eelgrass (*Zostera marina*) survey shall be completed during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed prior to the beginning of construction and shall be valid until the next period of active growth. If any portion of the project commences in a previously undisturbed area after the last valid eelgrass survey expires, a new survey is required prior to commencement of work in that area. The survey shall be prepared in full compliance with the "*Southern California Eelgrass Mitigation Policy*" Revision 8 (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Game. The applicant shall submit the eelgrass survey for the review and approval by the Executive Director within five (5) business days of completion of each eelgrass survey and in any event no later than fifteen (15) business days prior to commencement of any development. If the eelgrass survey identifies any eelgrass within the project area, which would be impacted by the proposed project, the development shall require an amendment to this permit from the Coastal Commission or a new Coastal Development Permit.

Post-Construction Eelgrass Survey. If any eelgrass is identified in the project area by the survey required by this special condition, within one month after the conclusion of construction, the applicant shall survey the project site to determine if any eelgrass was adversely impacted. The survey shall be prepared in full compliance with the "*Southern California Eelgrass Mitigation Policy*" Revision 8 (SCEMP) (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Game. The applicant shall submit the post-construction eelgrass survey for the review and approval by the Executive Director within thirty (30) days after completion of the survey. If any eelgrass has been impacted, the applicant shall replace the impacted eelgrass at a minimum 1.2:1 ratio on-site, or at another location, in accordance with the SCEMP. All impacts to eelgrass habitat shall be mitigated at a minimum ratio of 1.2:1 (mitigation:impact). The exceptions to the required 1.2:1 mitigation ratio found within SCEMP shall not apply. Implementation of mitigation shall require an amendment to this permit or a new Coastal Development Permit unless the Executive Director determines that no amendment or new permit is legally required.

6. **Pre-Construction Caulerpa taxifolia Survey.** Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any development authorized under this Coastal Development Permit (the "*project*"), the applicant shall undertake a survey of the project area and a buffer area at least 10 meters beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate. If any portion of the project commences in a previously undisturbed area after the last valid *Caulerpa taxifolia* survey expires, a new survey is required prior to commencement of work in that area.

   The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Game, and the National Marine Fisheries Service. Within five (5) business days of completion of the survey, the applicant shall submit the survey:

   (1) for the review and approval by the Executive Director; and

   (2) to the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through William Paznokas, California Department of Fish & Game (858/467-4218) or Robert Hoffman, National Marine Fisheries Service (562/980-4043), or their successors.

   If *Caulerpa taxifolia* is found within the project or buffer areas, the applicant shall not proceed with the project until 1) the applicant provides evidence to the Executive Director that all *Calurpa taxifolia* discovered within the project and buffer area has been eliminated in a manner that complies with all applicable governmental approval requirements, including but not limited to those of the California Coastal Act, or 2) the applicant has revised the project to avoid any contact with *Calurpa. taxifolia*. No

revisions to the project shall occur without a Coastal Commission approved amendment to this Coastal Development Permit unless the Executive Director determines that no amendment is legally required.

7 . **Conformance with Proposed Plan.** The applicant shall conform to the plans dated 6/2/2014, received in the Commission's office on 7/25/2014, including the restoration of 29.52 square feet of soft bottom habitat (i.e., 38.25 sq. ft. existing concrete overpour to be removed minus the 8.27 sq. ft. of soft bottom area taken up by the proposed new sheetpiles) at 16591 Nalu Circle (to be used as mitigation for soft bottom impacts at the subject site) as described in the *Pre-Construction Marine Biological Assessment for a Seawall Repair Project at 16591 Nalu Circle, Huntington Beach, CA 92649*, prepared by Coastal Resources Management, Inc., dated 6/3/14. Any proposed changes to the approved plan shall be reported to the Executive Director. No changes to the approved plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

8 . **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. The permittee shall not use this permit as evidence of a waiver of any public rights that may exist on the property.

9. **Assumption of Risk, Waiver of Liability and Indemnity.** By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from waves, storm waves, and flooding; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

IV. FINDINGS AND DECLARATIONS:

A. PROJECT LOCATION AND DESCRIPTION

The proposed project site is located at 16591 Nalu Circle on Davenport Island in Huntington Harbor in the City of Huntington Beach, Orange County (**Exhibit 1**). Huntington Harbor was developed in the 1960s constructed using cast in place, reinforced concrete seawall/bulkheads with foundations supported on vertical and battered (i.e., angled) untreated timber piles. Single family residences are located behind the bulkhead and private boat docks associated with the residences are located seaward of the bulkhead. The subject bulkhead is approximately 154 linear feet long at this single property.

The City has a certified Local Coastal Program. However, because the proposed development is located seaward of the mean high tide line (seaward of the existing bulkhead), the project falls

within the Commission's retained permit jurisdiction. No public access currently exists at the project site. The nearest public access in the area is at a small pocket beach located at the Davenport Drive bridge (approximately 900 feet to the south).

The concrete bulkhead wall is supported by untreated timber piles that extend below the bulkhead footing. In the past 40-50 years since the creation of the Harbor, sediments have settled or eroded away from the toe of the bulkhead and from beneath the bulkhead footing exposing the timber piles. The applicant's engineering consultant has indicated that undermining of the bulkhead footings does not affect the structural integrity of the wall, however, the exposure allows access to the timber piles by marine wood boring organisms. The wood boring organisms house themselves and feed on the wood piles, which decreases the cross section of the pile, and decreases the pile's ability to support the bulkhead. If protective measures are not implemented, damage to the bulkhead could result, leading to failure of the bulkhead and damage to the residences landward of the bulkhead.

In May 2014, during a preliminary dive inspection of the timber piles to assess their condition, the applicant's marine engineer discovered significant exposure and deterioration of the timber piles that provide support to the concrete bulkhead and requested an Emergency Permit to begin the bulkhead repair. Based on the information the applicant provided to staff, Emergency Permit #5-14-0018-G was issued on May 16, 2014 to begin the pile repair work by approving the removal of a concrete cut-off wall and over-pour for full access to the timber piles in order to conduct a thorough inspection of the timber piles that support the approximately 154' long bulkhead then subsequently be able to remove deteriorated portions of piles and install jacks where necessary to provide support for the bulkhead structure and to place sleeves around the jacks and/or piles and inject epoxy grout into the voids inside the sleeve.

The work conducted under the emergency permit exposed and evaluated seven piles, two of which required repair prior to sealing off and filling the voids that have exposed the piles to active deterioration. This coastal development permit application #5-14-1284 is for the follow-up work required to finalize the bulkhead repair. Now that the timber piles have been repaired, the applicant proposes removal of existing concrete overpour along the toe of the seawall/bulkhead footing to allow the installation of panels (sheetpiles) flush along the vertical face of the seawall footing to seal off the voids and prevent future development of voids beneath the seawall footing. After installation of the panels, grout will be injected into the voids beneath the footing and around the repaired timber piles supporting the seawall thereby sealing the untreated timber piles and protecting them from marine boring organisms, ensuring the necessary support to the bulkhead.

The proposed bulkhead foundation repair includes installation of 7/16th inch thick, 7' 6" tall, marine grade carbon fiber reinforced vinyl ester resin sheetpile panels immediately adjacent to the existing foundation footing of the 154 foot long bulkhead. The sheetpile panels are connected by 2 inch by 2 inch carbon fiber reinforced vinyl ester resin interlocks at the toe of the existing bulkhead footing, and the top of each panel of sheet pile is proposed to be anchored with bolts into the bulkhead footing to provide support. Grout will then be injected behind the sheetpile to fill the voids beneath the bulkhead foundation footing and around the untreated timber piles. Due to the voids and varying mudline depth along the toe of the bulkhead, the

actual depth that the panels will extend into the harbor bottom below the bottom of the concrete bulkhead footing will vary. The minimum amount of panel penetration into the harbor bottom for structural stability has been determined to be at least 2.5 feet, the applicant proposes a minimum embedment of 3' 9" at this particular site. Project Plans are included as **Exhibit 2**. No rock/toe-stone is proposed as part of the bulkhead repair as has been the case in other bulkhead repair projects within Huntington Harbor.

The proposed sheetpile panels will be installed using a modified driving hammer from a waterside work platform. No spuds or anchors or other bottom disturbing activities are associated with the work platform. The hammer size and impact is less than that needed to drive steel or PVC sheetpiles due to the material properties of the carbon fiber reinforced vinyl ester resin sheetpiles. Each sheet pile has an interlocking mechanism that acts as a guide to keep the pile aligned while driving and provides for a mechanical attachment at each joint. The sheet piles will attach to the wall footing and extend the entire length of the property. The piles will terminate at each end of the property. Due to the relatively thin nature of the piles ($7/16^{th}$ inch thick), no special termination or transition is required. Any future protection, repair, or replacement of the bulkheads at the adjacent properties can progress unimpeded by the protective measures proposed at the subject site.

Fill of Coastal Waters - Soft Bottom Impacts

The proposed development will occur in the waters of Huntington Harbour, in an area that is entirely submerged. The proposed placement of the sheetpile panels and interlocks would result in the permanent coverage of 8.27 square feet of soft bottom habitat and associated benthic (bottom-dwelling) organisms. The impacted habitat consists of soft bottom sediments containing amphipods and hydroids. These species are common to soft bottom habitat throughout the harbor. No sensitive plant or wildlife species are known to occur within this habitat at the subject site.

To mitigate the permanent coverage of 8.27 square feet of soft bottom habitat, the applicant proposes to remove existing concrete overpour adjacent to the bulkhead which dates from the time of the bulkhead's original construction in the 1960s. The area of existing concrete overpour at the subject site proposed to be removed is 38.25 sq. ft. The area of concrete overpour was determined through field measurements by the applicant taken along the bulkhead footings (**Exhibit 3**). Since the area of concrete overpour proposed for removal exceeds the area of sheetpile being installed, there will be an increase in soft bottom of 29.98 sq. ft. (38.25 sq.ft. restored soft bottom minus 8.27 sq. ft. taken up by proposed new sheetpiles).

In similar circumstances, the Commission has found a mitigation ratio of 2:1 (mitigation to impact) to be acceptable and prefers that mitigation occur on-site and if not possible in the vicinity. The required soft bottom mitigation at the subject site (at a 2:1 mitigation ratio) requires creation of 16.54 sq. ft. of newly created soft bottom habitat; as proposed, the project would result in an increase of soft bottom habitat of 29.98 sq. ft. in Huntington Harbor, exceeding the required mitigation. The proposed project and mitigation have been reviewed and accepted by the California Department of Fish & Game.

Thus, the proposed project as conditioned to carry out the proposed mitigation is consistent with the requirements of Section 30233 regarding fill of coastal waters in that the project be an allowable use, the least environmentally damaging feasible alternative, and provides adequate mitigation.

Shoreline Protection
The proposed project involves the fill of coastal waters in the form of the 154 linear feet of 7/16th inch thick sheet piles with 2-inch by 2-inch interlocks for a total fill amount of 8.27 sq. ft. The purpose of the proposed fill is to protect the existing residence, which is not one of the seven allowable uses enumerated for allowable fill under section 30233 of the Coastal Act. However, Section 30235 of the Coastal Act requires the Commission to approve seawalls and other similar structures when such protection structures are necessary to protect existing primary structures and provided that the protection structures are designed to eliminate or mitigate adverse impacts on local shoreline sand supply.

Alternatives considered were: 1) installation of driven sheet piles with rip rap rock at the base; 2) concrete encasement of the existing wood piles in place; 3) the use of steel sheet piles rather than plastic (ester vinyl resin); 4) placement of filter fabric across the void to be held in place by new rock; and 5) repair of individual piles as they become damaged (do nothing alternative). All of the alternatives other than the proposed project would result in greater impacts to the marine environment. Thus, the proposed project is the least environmentally damaging feasible alternative.

The proposed bulkhead reinforcement is necessary to maintain the existing bulkhead and thus to protect the adjacent single family residence. Therefore, the Commission finds that the proposed project is consistent with Section 30235 of the Coastal Act.

Water Quality and Construction Impacts
Due to the proposed project's location in the water, the proposed work may have adverse impacts upon water quality and the marine environment. To address potential adverse impacts to water quality the applicant has proposed a number of Best Management Practices including: monitoring for adherence to the Regional Water Quality Control Board specifications for discharges limiting the dispersion of any turbidity plume for the duration of construction; if regulatory levels are exceeded work shall stop until turbidity decreases and corrective actions (including reducing the rate of construction activities) are implemented; disposal of all debris and trash in suitable containers on land at the end of each construction day; and prohibition of the discharge of hazardous materials into the waters of Huntington Harbor. In addition, the project has been conditioned to prevent the improper storage of construction equipment and materials during construction and to conform with specific construction responsibilities and debris removal procedures. Thus, the proposed project is consistent with the requirements of Sections 30230 and 30231 regarding protection of coastal waters.

Plastics in the Marine Environment
The Commission has expressed concern about the use of plastic in the marine environment. In past actions, the Commission has accepted plastic for the proposed purpose when monitoring is included and when future alternatives are considered. Consequently the plastic sheet piles must

be monitored to ensure that they are maintained in an environmentally safe operating condition and replaced when damage or degradation has occurred. To minimize the potential of the plastic sheet piles breaking apart and entering the water due to damage or deterioration, a special condition is imposed which requires that the project be carefully monitored at least once every two years for the life of the project. Further, the project has been conditioned to require the applicant to submit an application for an amendment to this permit or a new coastal development permit if new information becomes available that indicates that plastic has harmful effects on the marine environment, and that environmentally superior, feasible alternative(s) are available. The Commission has found such conditions necessary in past actions (5-10-106 (Hernandez); 5-03-078 & 5-03-078-A1 (Buchanan), 5-06-436 & 5-06-438 (Tetra Tech, et al).

Eelgrass

An eelgrass survey was conducted on April 30, 2014 as part of the Pre-Construction Biological Survey Assessments prepared by Coastal Resources Management and submitted with the CDP application. The survey found no eelgrass within the projects' vicinity. Due to the ephemeral nature of eelgrass, however, an eelgrass certification is only valid until the next period of active growth. More than a year may elapse before construction commences. Even though the eelgrass inspection indicates that no eelgrass is present, and therefore eelgrass is not expected to be impacted by the proposed project, eelgrass may have established within the project area between the time the survey was conducted and commencement of construction. If eelgrass is present in the project area, adverse impacts from the proposed project could result. Therefore, measures to avoid or minimize such potential impacts must be in place in order for the project to be found consistent with Section 30230 of the Coastal Act. Therefore, the Commission imposes a special condition which requires that a current pre-construction eelgrass survey be conducted within the boundaries of the proposed project during the period of active growth of eelgrass (typically March through October), and which identifies steps to be taken should eelgrass be found onsite via a future survey.

Caulerpa taxifolia

The Pre-Construction Marine Biological Survey Assessment prepared by Coastal Resources Management also surveyed the site for caulerpa taxifolia. None was found at the subject site. However, caulerpa taxifolia surveys are valid for a limited period of time (90 days for *Caulerpa taxilfolia*). Due to the potential that commencement of construction may not occur during the period the survey remains valid, a special condition is imposed which requires a *Caulerpa taxifolia* survey not more than 90 days prior to commencement of construction. If construction does not occur within the respective time periods, subsequent surveys will be required. A special condition is imposed that identifies the procedures necessary to be completed prior to beginning construction in case the survey expires prior to commencement of construction. In addition, the special condition identifies post-construction procedures.

Conclusion

The proposed bulkhead repair project is necessary to protect the existing residence. Section 30235 of the Coastal Act requires the Commission to approve such projects when necessary to protect existing structures and when designed to eliminate or mitigate adverse impacts. A number of alternatives were considered, and the proposed alternative has been found to be the least environmentally damaging alternative. The proposed project includes on-site mitigation that

exceeds the typically required 2:1 mitigation ratio. As proposed, and as conditioned, measures will be in place to protect water quality during and after construction. Also, as conditioned, surveys will be conducted pre- and post- construction to assure that any unanticipated impacts to eelgrass that may occur are addressed and to assure that the project will not result in the spread of the invasive algae caluerpa taxifolia. Therefore, as conditioned, the Commission finds that the project is consistent with Sections 30210 and 30231 regarding protection of the marine environment.

B. PUBLIC ACCESS

The proposed development will not affect the public's ability to gain access to, and/or to use the coast and nearby recreational facilities. Therefore, as conditioned, the development conforms to Sections 30210 through 30214, Sections 30220 through 30224, and 30252 of the Coastal Act.

C. LOCAL COASTAL PROGRAM

Coastal Act section 30604(a) states that, prior to certification of a local coastal program ("LCP"), a coastal development permit can only be issued upon a finding that the proposed development is in conformity with Chapter 3 of the Act and that the permitted development will not prejudice the ability of the local government to prepare an LCP that is in conformity with Chapter 3. The Land Use Plan for the Sunset Beach was effectively certified on in 1982 and updated in 1992, however, Sunset Beach was annexed into the City of Huntington Beach effective August 2011. The City of Huntington Beach has since submitted an LCP Amendment to incorporate the Sunset Beach area into the City of Huntington Beach LCP. In the interim, Chapter 3 of the Coastal Act is the standard of review and the previously certified Sunset Beach LCP may be used as guidance. As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act. Approval of the project, as conditioned, will not prejudice the ability of the local government to prepare an LCP that is in conformity with the provisions of Chapter 3 of the Coastal Act.

D. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the Commission's regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, 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 City of Huntington Beach is the lead agency responsible for CEQA review. As determined by the City, this project is categorically exempt from CEQA as a Class 1; Section 15301 exemption. As conditioned, there are no additional feasible alternatives or additional feasible mitigation measures available which will substantially lessen any significant adverse impact the activity would have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified possible impacts, is consistent with CEQA and the policies of the Coastal Act.

APPENDIX A - SUBSTANTIVE FILE DOCUMENTS

1) City of Huntington Beach Local Coastal Program

2) City of Huntington Beach Approval in Concept dated 7/24/14

3) City of Huntington Beach CEQA Exemption, Class 1; Section 15301 filed 7/24/14

4) Coastal Resources Management, Inc., 30 April 2014, "Pre-Construction Marine Biological Assessment for a Seawall Repair Project at16591 Nalu Circle, Huntington Beach, CA 92649"

5) Emergency CDP 5-14-0018-G(Richard Zamboni Trust), CDP 5-10-004(Hernandez), 5-12-006(Nielsen), 5-12-007(Wirtz), and 5-12-019(Nichols)

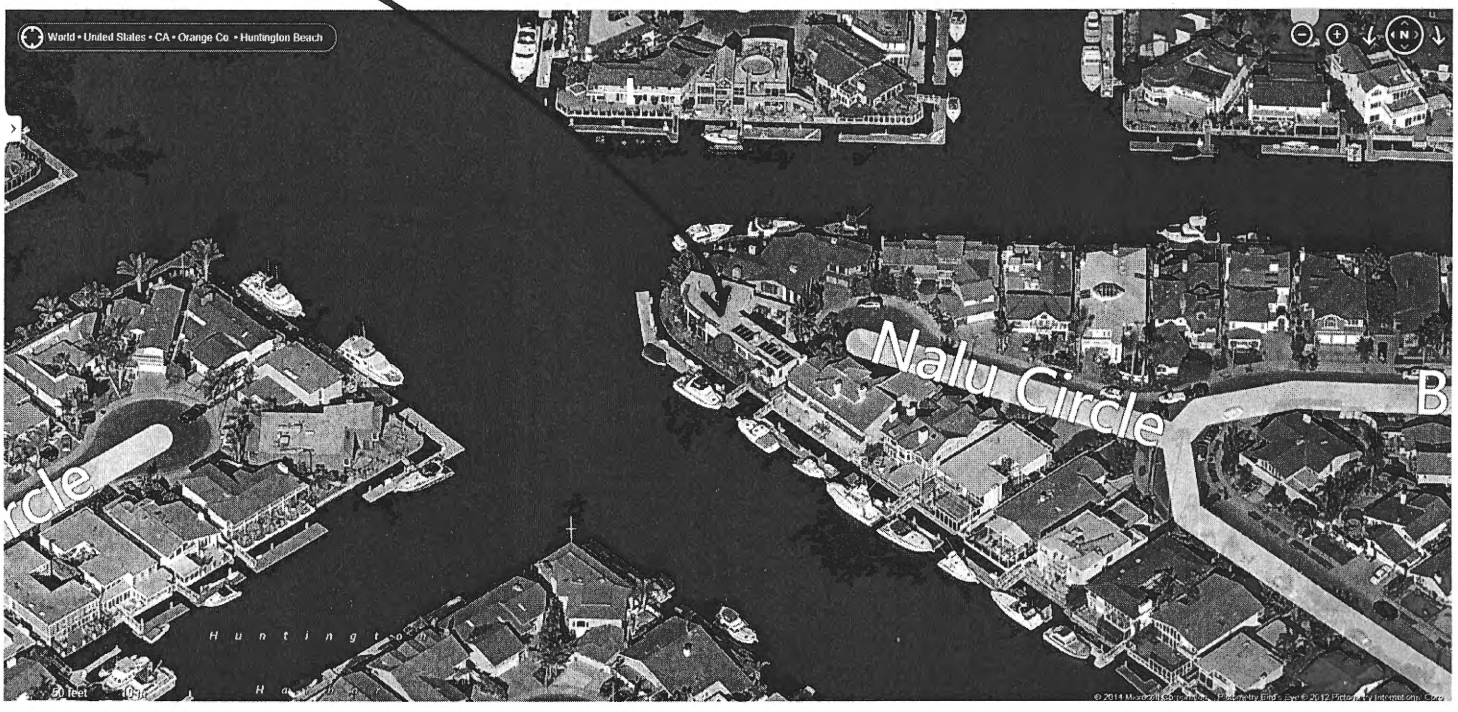
Google earth

miles 1
km 3

COASTAL COMMISSION

EXHIBIT # 1
PAGE 1 OF 2

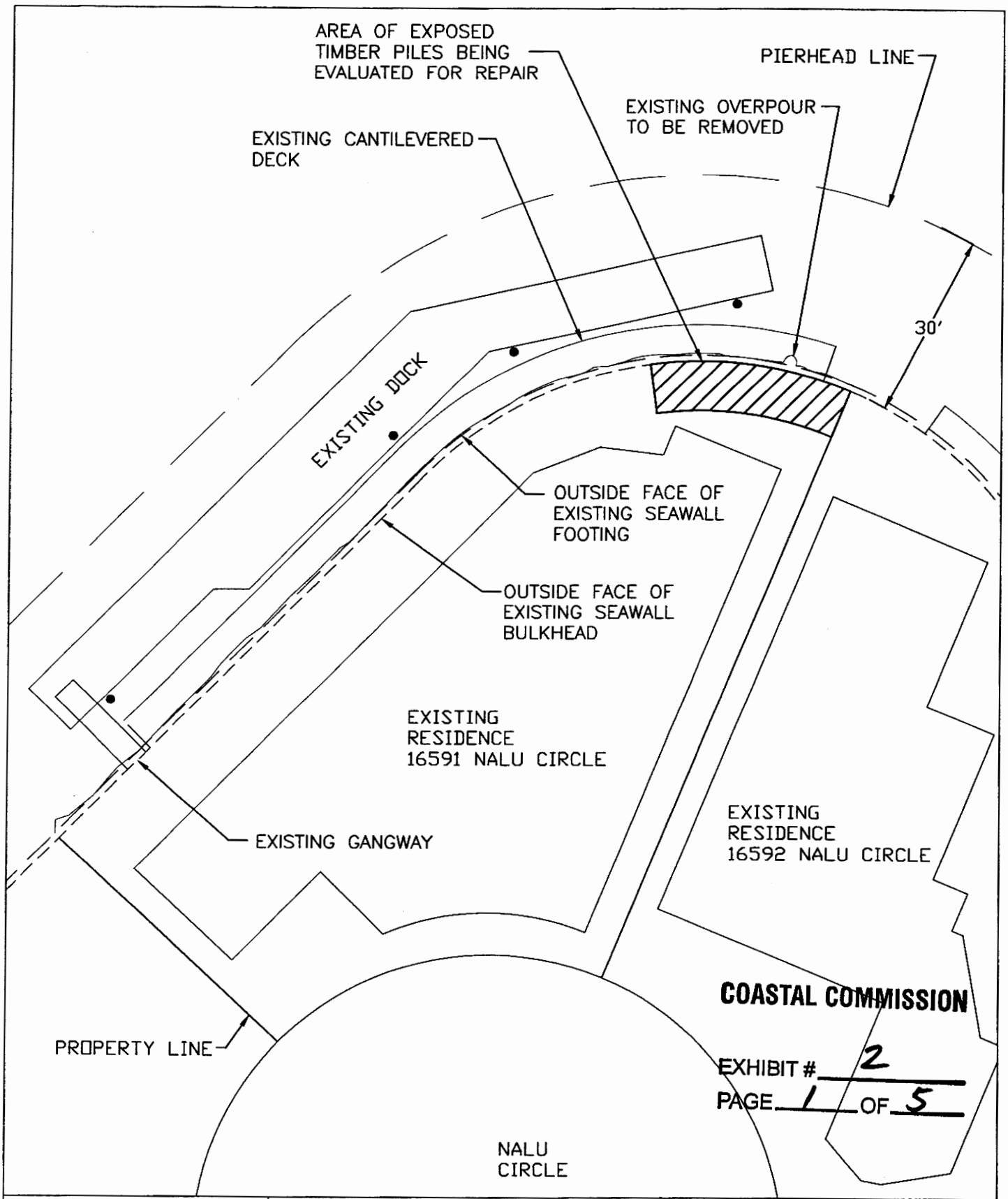
subject site



COASTAL COMMISSION

EXHIBIT # 1

PAGE 2 OF 2

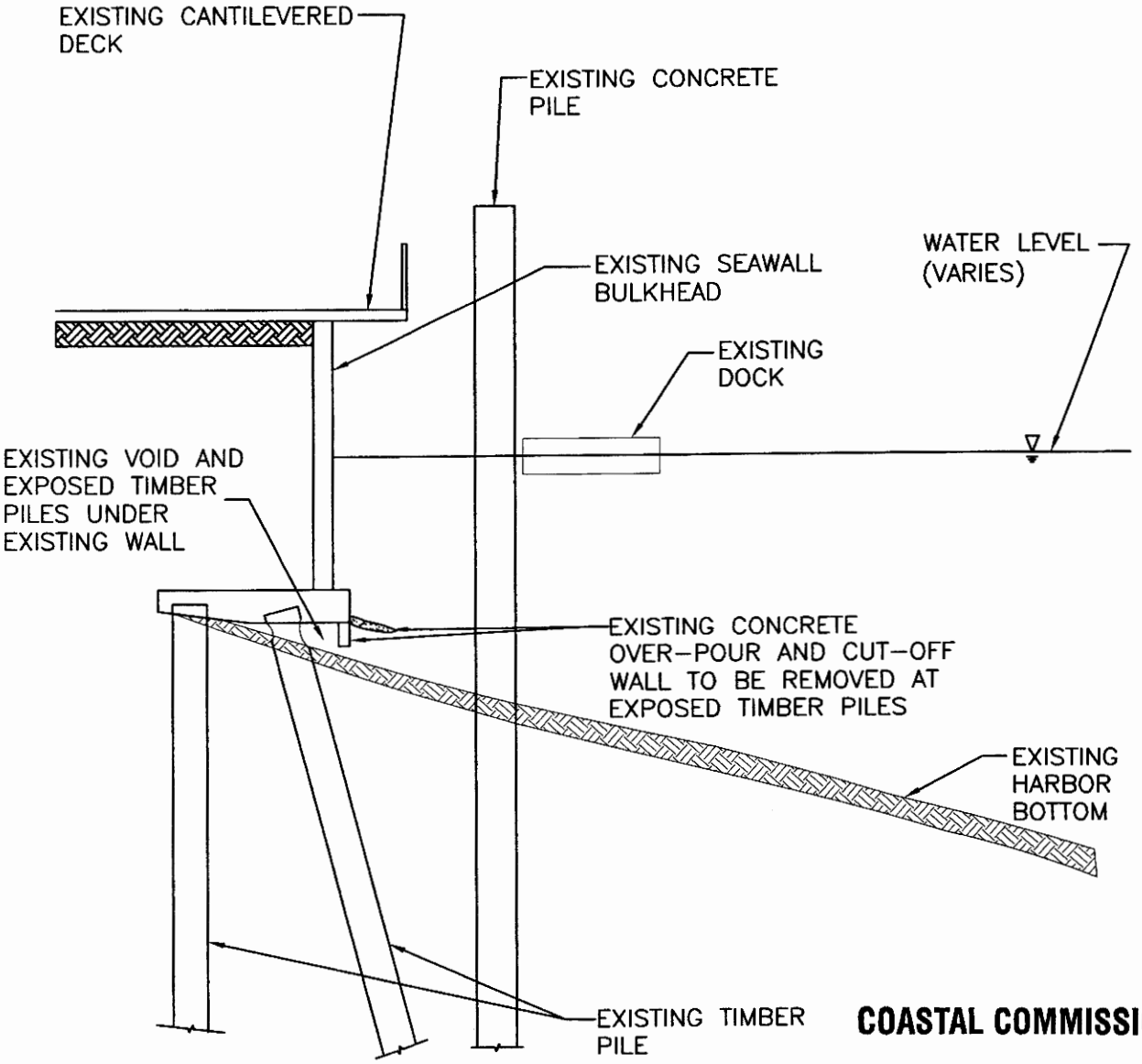


COASTAL COMMISSION

EXHIBIT # 2

PAGE 1 OF 5

Streamlinewest ENGINEERING LLC	ZAMBONI SEAWALL HUNTINGTON BEACH, CA.	Designed by: GSR	Date: 6/2/2014	Job No. 1403
			Scale: 1"=20'	PAGE 1 of 5
	EXISTING SITE PLAN	Drawn by: GSR	Rev. 1	

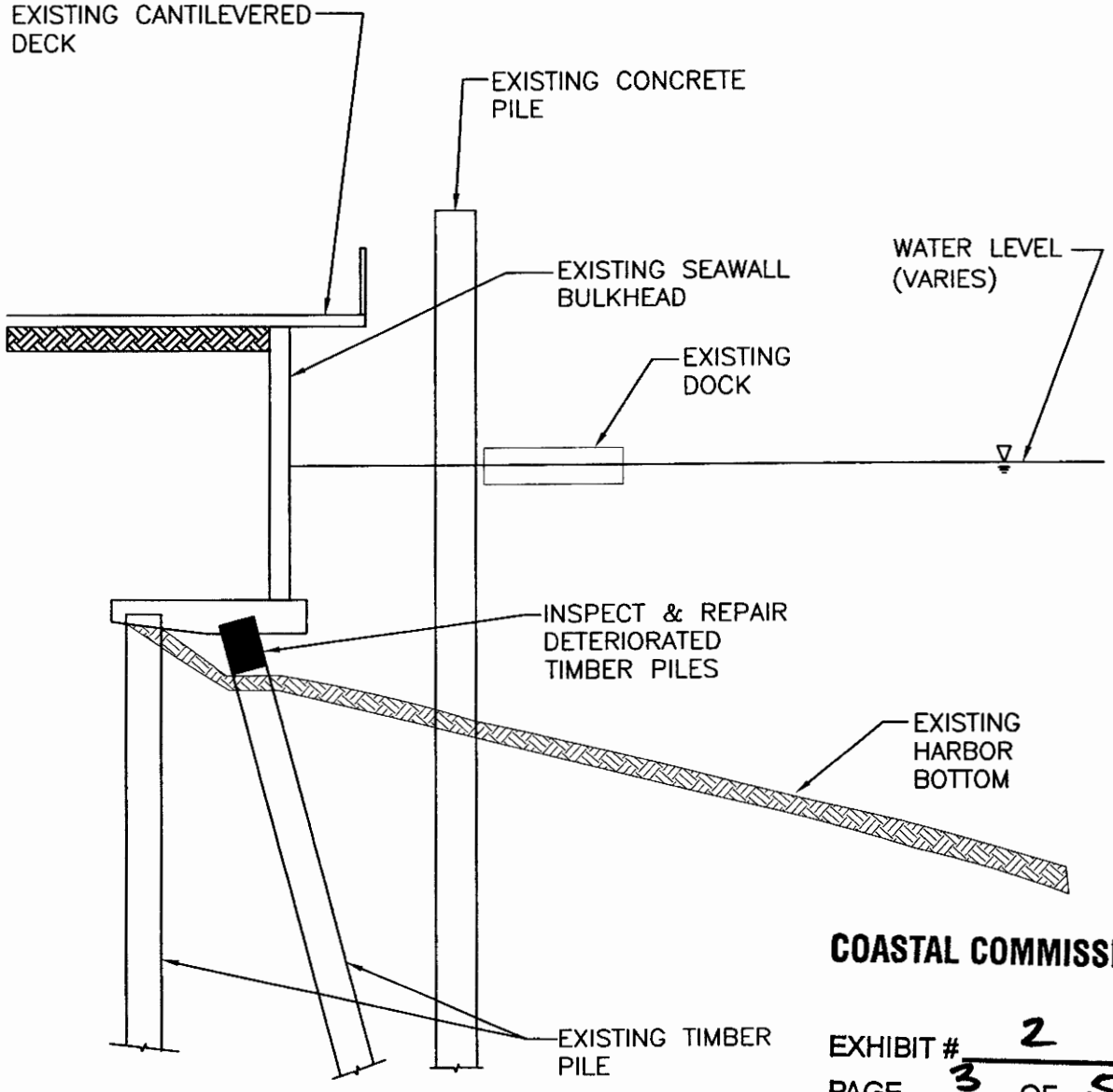


COASTAL COMMISSION

EXHIBIT # 2

PAGE 2 OF 5

Streamline**WEST** ENGINEERING LLC	**ZAMBONI SEAWALL HUNTINGTON BEACH, CA.**	*Designed by:* GSR	*Date:* 6/2/2014	*Job No.* 1403
			Scale: 1"=10'	*PAGE* 2 of 5
	EXISTING ELEVATION	*Drawn by:* GSR	*Rev.* 1	

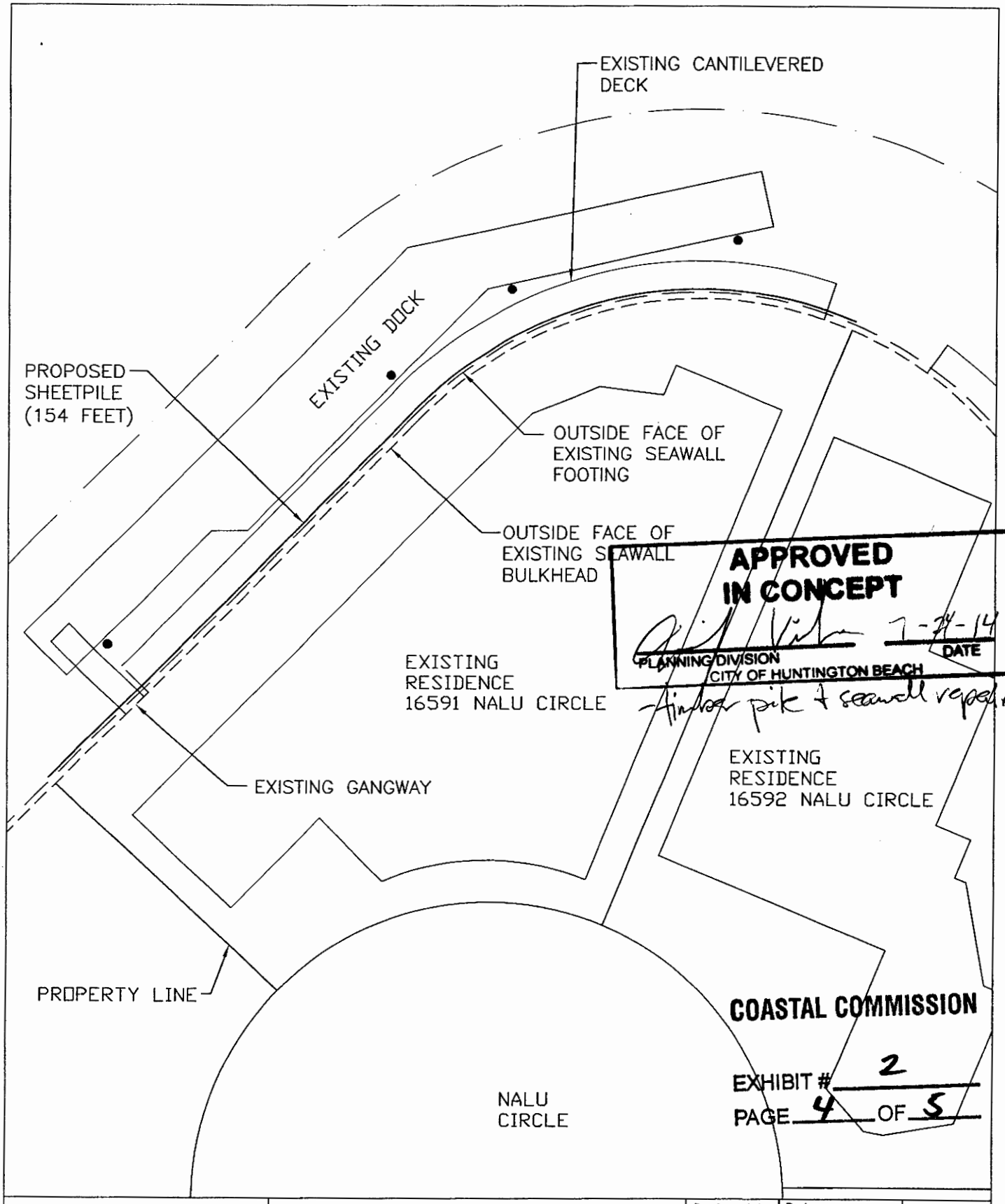


COASTAL COMMISSION

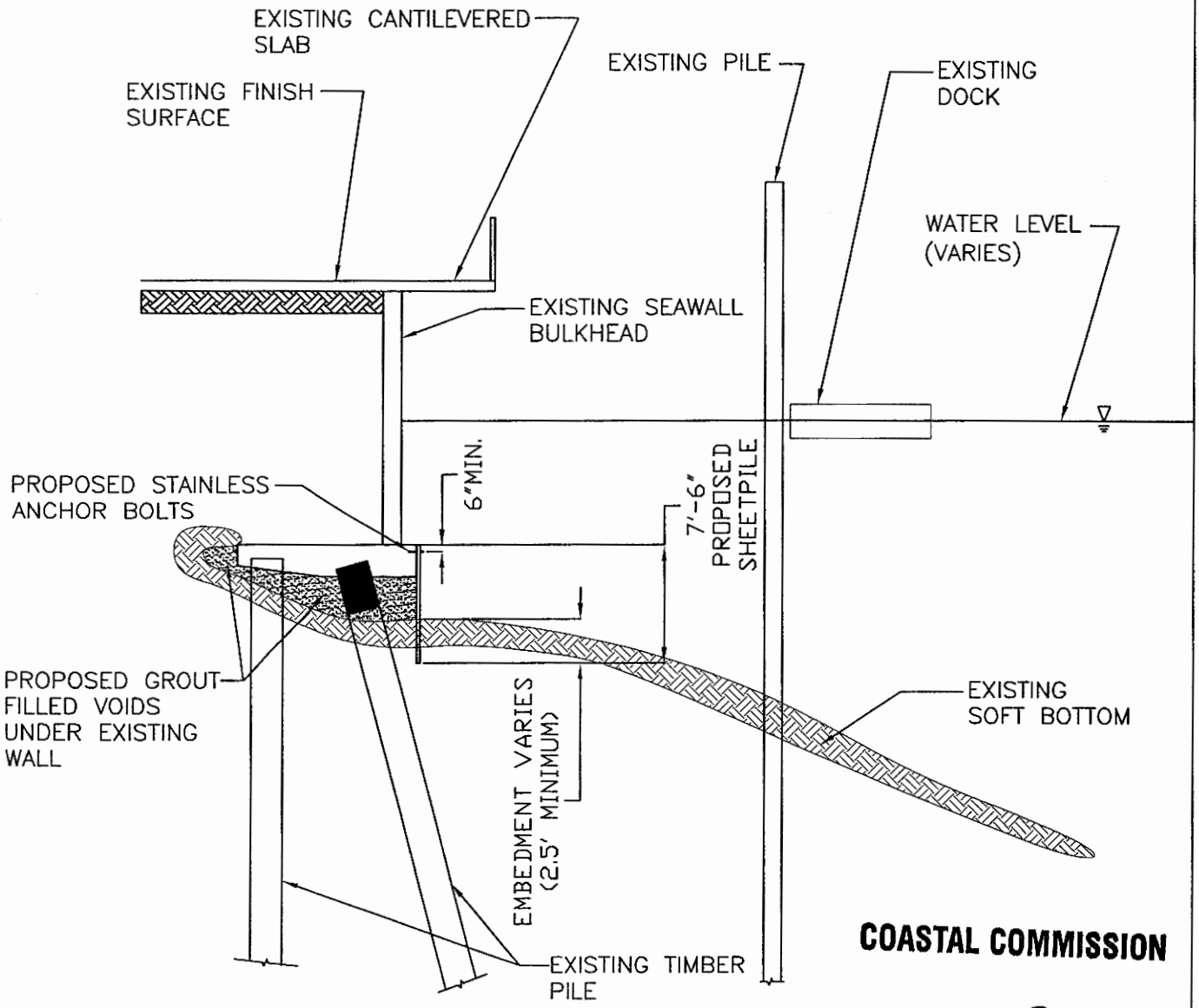
EXHIBIT # 2

PAGE 3 OF 5

Streamline**WEST** ENGINEERING LLC	**ZAMBONI SEAWALL HUNTINGTON BEACH, CA.**	*Designed by:* GSR	*Date:* 6/2/2014	*Job No.* 1403
			Scale: 1"=10'	*PAGE* 3 of 5
	ELEVATION 2	*Drawn by:* GSR	*Rev.* 1	



StreamlineWEST ENGINEERING LLC	ZAMBONI SEAWALL HUNTINGTON BEACH, CA.	Designed by: GSR	Date: 6/2/2014	Job No. 1403
	PROPOSED SITE PLAN	Drawn by: GSR	Scale: 1"=20'	PAGE 4 OF 5
			Rev. 1	



COASTAL COMMISSION

EXHIBIT # 2

PAGE 5 OF 5

Streamline**WEST** ENGINEERING LLC	ZAMBONI SEAWALL HUNTINGTON BEACH, CA.	Designed by: GSR	Date: 6/2/2014	Job No. 1403
	REPAIR ELEVATION 3	Drawn by: GSR	Scale: 1"=10'	PAGE 5 OF 5
			Rev. 1	

Project: Zamboni Seawall Repair
Location: 16591 Nalu Circle, Huntington Beach, CA 92649
Date: 5/1/2014

OVERPOUR MEASUREMENTS		
Station	Inches	Square Feet
00+00.0	1.5	
00+02.0	3	0.38
00+04.0	0	0.25
00+06.0	4	0.33
00+07.0	2	0.25
00+08.0	20	0.92
00+09.0	3	0.96
00+13.0	0	0.50
00+18.0	0	0.00
00+19.0	3	0.13
00+26.0	2	1.46
00+29.0	5	0.88
00+34.0	2	1.46
00+37.0	0	0.25
00+39.0	5	0.42
00+42.0	0	0.63
00+46.0	4	0.67
00+53.0	2	1.75
00+54.0	0	0.08
00+60.0	2	0.50
00+62.0	3	0.42
00+72.0	2	2.08
00+73.0	2	0.17
00+74.0	3	0.21
00+88.0	0	1.75
00+90.0	5	0.42
00+96.0	4	2.25
01+01.0	6	2.08
01+08.0	3	2.63
01+11.0	9	1.50
01+17.0	7	4.00
01+19.0	3	0.83
01+28.0	2	1.88
01+31.0	1	0.38
01+36.0	0	0.21
01+40.0	5	0.83
01+46.0	0	1.25
01+51.0	5	1.04
01+53.0	17	1.83
01+54.0	0	0.71
	sqft	38.25

Project: Zamboni Seawall Repair
Location: 16591 Nalu Circle, Huntington Beach, CA 92649

Impact/Credit Area Summary

Property	Proposed Sheetpile Areas (SF)	Proposed Rock Footprint (SF)	Overpour Removal Area (SF)	Credit (+)/Impact (-) Area (SF)
Zamboni	8.27	0.00	38.25	**29.98**

Note: The project results in a decrease in the size of the structures and an increase in soft bottom habitat.

Project: Zamboni Seawall Repair
Location: 16591 Nalu Circle, Huntington Beach, CA 92649

Sheetpile Area Calculations

Length of seawall footing (ft): 154
Length of sheetpile (ft): 2.6667
# of Sheets: 57.75 Use: 58

Area per sheet:
Sheet area (in^2)= 16.53 = 0.11 ft^2
Interlock area (ft^2): 0.0278
Area of impact (ft^2) = **8.27**