CALIFORNIA COASTAL COMMISSION

South Coast Area Office 200 Oceangate, Suite 1000 Long Beach, CA 90802-4302 Staff: Staff Report: Hearing Date: Commission Action: FSY-LB FSY July 28, 2004 August 11-13, 2004



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STAFF REPORT: REVISED FINDINGS

APPLICATION NO.:

5-03-491

APPLICANTS:

William Johnson

AGENT:

Culbertson, Adams & Associates, Mr. David B. Neish and Mr.

David J. Neish

PROJECT LOCATION:

1008 West Bay Avenue, City of Newport Beach (County of

Orange)

PROJECT DESCRIPTION:

Construction of a new 70 foot long bulkhead fronting Newport

Bay. The bulkhead and backfill will result in the fill of 0.024 acres

(1,045 square feet) of high intertidal sandy habitat.

SUMMARY OF COMMISSION ACTION:

Commission staff recommends that the Commission adopt the following revised findings in support of the Commission's action of April 14, 2004 approving the construction of the bulkhead. Commission staff had recommend denial of the proposed project. At the hearing, the Commission determined that the location of the proposed development is in an area where other bulkheads exist, the proposed bulkhead would maintain the existing channel configuration and that the proposed bulkhead would be necessary to protect the existing structure from erosion. These findings have been incorporated beginning on page 9.

In approving this project, **Two (2) Special Conditions** were imposed. **Special Condition No.1** relates to construction responsibilities and debris removal. **Special Condition No. 2** requires submittal of evidence that funding has been submitted to Community Conservancy International (CCI) for the proposed mitigation.

COMMISSIONERS VOTING ON THE PREVAILING SIDE: Commissioners Burke, Iseman, Kruer, Nichols, Allgood, Potter, Wooley and Reilly.

LOCAL APPROVALS RECEIVED: Approval-In-Concept from the City of Newport Beach Harbor Resources Division dated June 7, 2001; Section 401 Water Quality Standards Certification dated May 8, 2002 from the Regional Water Quality Control Board; and Approval-In-Concept from the City of Newport Beach Harbor Resources Division dated November 20, 2003.

SUBSTANTIVE FILE DOCUMENTS: City of Newport Beach Certified Land Use Plan; Coastal Development Permits: 5-02-378-[Johnson]; 5-00-495-[Schulze]; 5-01-104-[Fluter]; 5-01-117-

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[Childs]; Geotechnical Investigation, Proposed Rear Yard Seawall, 1008 West Bay Avenue, Newport Beach, California. prepared by Petra (Project No. J.N. 178-01) dated May 29, 2001; letter from Commission staff to Marshall Steele dated July 16, 2001; Letter from Richard Okimoto to Commission staff dated December 17, 2001; letter from Richard Okimoto to Commission staff dated February 26, 2002; letter from the City of Newport Beach to William Johnson dated November 1, 2002; letter from Skelly Engineering dated November 27, 2001; letter from the California State lands Commission to Richard Okimoto dated January 30, 2002; Marine Biological Resources Impact Assessment, Bulkhead Construction Project, 1008 West Bay Avenue, Newport Beach, California, Coastal Development Permit #5-01-229 prepared by Coastal Resources Management dated February 21, 2002; letter from Commission staff to Richard Okimoto dated March 28, 2002; Conceptual Mitigation Plan for the Restoration of Saltmarsh Habitat Upper Newport Bay, California, 1008 West Bay Avenue, Newport Beach. California, Coastal Development Permit #5-01-229 prepared by Coastal Resources Management dated April 19, 2002; letter from the California Department of Fish and Game to Commission staff dated November 6, 2001; letter from the California Department of Fish and Game to Coastal Resources Management dated April 19, 2002; letter from the California Department of Fish and Game to the United States Army Corps of Engineers dated August 1, 2002; letter from the United States Fish and Wildlife Service to the United States Army Corps of Engineers dated August 5, 2002; letter from the National Marine Fisheries Service to the United States Army Corps of Engineers dated August 6, 2002; letter to David Neish Jr. from Commission staff dated August 9, 2002; letter from David Neish Jr. to Commission staff dated August 16, 2002; letter from William Johnson to Commission staff dated August 16, 2003; letter from letter from Lesley Ewing, California Coastal Commission Coastal Engineer, dated October 14, 2002; letter from David Neish Jr. to Commission staff dated October 29, 2002; letters from David Neish Jr. to Commission staff dated February 27, 2003; Letter from Noble Consultants, Inc. to United States Army Corps of Engineers (ACOE) dated March 5, 2003 letter from United States Army Corps of Engineers (ACOE) to Noble Consultants, Inc. dated April 1, 2003; letter from Noble Consultant's to Commission staff dated April 4, 2003; Big Canyon Creek Restoration Project Mitigation Fee Proposal by Noble Consultants; letter from Community Conservancy International to David Altman (Noble Consultant's, Inc.) dated April 29, 2003; and email from United States Army Corps of Engineers (ACOE) to David Altman (Noble Consultants) dated April 4, 2003.

EXHIBITS

- 1. Vicinity Map
- 2. Assessor's Parcel Map
- 3. Approval in Concept
- 4. Project Plans
- 5. Letter from the Department of Fish & Game (DF&G) to Commission staff dated November 6, 2001
- 6. Letter from the Department of Fish & Game (DF&G) to the Army Corps of Engineers (ACOE) dated August 1, 2002
- 7. Letter from the Fish & Wildlife Services (F&WS) to the Army Corps of Engineers (ACOE) dated August 5, 2002
- **8.** Letter from the National Marine Fisheries Service (NMFS) to the Army Corps of Engineers (ACOE) dated August 6, 2002
- Letter from Lesley Ewing, California Coastal Commission Coastal Engineer, dated October 14, 2002

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- **10.** Letter from Lesley Ewing, California Coastal Commission Coastal Engineer, dated March 16, 2004
- 11. Letter from Noble Consultants. Inc. dated April 4, 2003
- 12. Letter from Skelly Engineering dated November 27, 2001

I. STAFF RECOMMENDATION

Staff recommends that the Commission adopt the following motion and resolution:

MOTION:

"I move that the Commission adopt the revised findings in support of the Commission's action of April 14, 2004 in approving coastal development permit application 5-03-491 with conditions."

Staff recommends a <u>YES</u> vote on the motion. Passage of this motion will result in the adoption of revised findings as set forth in this staff report. The motion requires a majority vote of the members from the prevailing side present at the April 14, 2004 hearing, with at least three of the prevailing members voting. Only those Commissioners on the prevailing side of the Commission's action are eligible to vote on the revised findings.

RESOLUTION TO ADOPT REVISED FINDINGS:

The Commission hereby adopts the findings set forth below for its approval of coastal development permit application 5-03-491 with conditions on the grounds that the findings support the Commission's decision made on April 14, 2004 and accurately reflect the reasons for it.

II. STANDARD CONDITIONS

- 1. <u>Notice of Receipt and Acknowledgment.</u> 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. <u>Expiration.</u> If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. 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. <u>Interpretation.</u> Any questions of intent or interpretation of any condition will be resolved by the Executive Director of the Commission.
- 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.

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5. <u>Terms and Conditions Run with the Land</u> 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

1. CONSTRUCTION RESPONSIBILITIES AND DEBRIS REMOVAL

- A. No construction materials, equipment, debris, or waste will be placed or stored where it may be subject to wave wind, or rain erosion and dispersion.
- **B.** Any and all construction material will be removed from the site within 10 days of completion of construction.
- C. Machinery or construction materials not essential for project improvements will not be allowed at any time in the intertidal zone.
- **D.** If turbid conditions are generated during construction a silt curtain will be utilized to control turbidity.
- E. 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.
- F. Non-buoyant debris discharged into coastal waters will be recovered by divers as soon as possible after loss.

2. <u>MITITGATION PLAN</u>

- A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the Executive Director's review and approval, written evidence from Community Conservancy International (CCI) that the applicant has submitted funding to CCI adequate for CCI or their designee to substantially restore or create, as part of their Big Canyon Creek Restoration Project, a minimum 0.096 acres of intertidal habitat that shall be designated mitigation for the loss of 0.024 acres of sandy, high intertidal habitat at the project site, in substantial conformance with the Big Canyon Creek Restoration Project Mitigation Fee Proposal received November 20, 2003.
- B. UPON IMPLEMENTATION OF THE BIG CANYON CREEK RESTORATION PROJECT, the applicant shall submit, for the Executive Director's review and approval, documentation that 0.096 acres of intertidal habitat have been substantially restored or created as required in subsection A. of this condition, including but not limited to as-built plans and photographs of the designated mitigation area.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

A. Project Location, Description and Background

1. Project Location

The proposed project is located on a bayfront lot fronting Newport Bay at 1008 West Bay Avenue in the City of Newport Beach, County of Orange (Exhibits #1-3). North of the project site is Newport Bay; South of the project site is West Bay Avenue and to the East and West are existing residential structures on bulkheaded lots. The project site is located in a residential area where the majority of the homes fronting Newport Bay are located on bulkheaded lots. Commission staff has researched and determined that these existing bulkheads are pre-coastal (meaning that they pre-date the Coastal Act and the creation of the Coastal Commission). Site conditions include a low retaining wall, beach and a narrow wooden pier with a rectangular deck in the area where the proposed bulkhead will be constructed.

2. Project Description

The proposed project consists of construction of a new 70-foot long bulkhead fronting Newport Bay located at approximately the +6.08' MLLW elevation (based on the property conditions as surveyed January 17, 2003), which would result in the filling of 0.024 acres (1,045 square feet) of high intertidal habitat (Exhibits #3-4). The location of the bulkhead would be approximately 3.5 feet landward of the location proposed in CDP #5-02-378 that was denied at the May 2003 Coastal Commission hearing (to be discussed further in Section II.A.3). The Mean Higher high Waterline (MHHW) is located at +5.4 feet, Mean Lower Low Water (MLLW) and sandy intertidal habitat is located at elevations between +5.2 and +7 MLLW. A more thorough project description is provided in a letter from Noble Consultants, Inc. to ACOE dated March 5, 2003; "The wall structure is composed of 4 feet wide interlocking, conventionally reinforced precast concrete sheetpiles with a reinforced concrete cap. All reinforcing will be epoxy-coated to reduce long term corrosion. The precast concrete sheetpiles will be installed via water jetting and self weight impact. No impact or vibratory hammers will be used during construction. Siltation curtains will be deployed around the construction site to minimize turbidity and impacts to the marine environment during sheetpile installation. The precast concrete sheetpiles will terminate approximately 4 feet from the edge of each property line. The remaining portions of the structure, including the return sections, will be installed as a conventionally formed and pour-in-place reinforced concrete wall. The return sections will connect to the main span via reinforcing dowels. The top elevation of the bulkhead will be located at +9.0 feet, MLLW with a design toe elevation of -2.0 feet, MLLW resulting in a minimum embedment depth of approximately 8 feet. The return sections will be buried below the grade surface and will be connected to the neighboring bulkhead returns with a concrete filler to prevent the escape of fine soil materials from behind the structure. This design is intended to create an isolation joint between the new bulkhead and the existing adjacent bulkheads."

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The applicant currently states that there are three reasons why the bulkhead is necessary: 1) to protect the residence's foundation; 2) since the lot is a collection point for debris, trash and other detritus due to it being the only developed lot in the neighboring community without some form of retaining structure; and 3) since the vessel berthing area of the applicant shoals above the design basin depth (Exhibit #11). Previously, the applicant stated that there were three other reasons why the bulkhead was necessary: 1) to provide continuity of the bulkhead which would be in place along the approved bulkhead line; 2) to prevent movement of land into the water (erosion of the shoreline); and 3) to eliminate damage to the neighboring boundary walls (Exhibit #12). The applicant continues to assert these claims in the present application.

3. Prior Commission Action at the Subject Site

On May 24, 1983, the Commission approved Coastal Development Permit #5-83-248-[Bergt] for the relocation and revision of a private boat dock located at 1008 West Bay Avenue in the City of Newport Beach. The permit was approved with no special conditions.

On March 5, 2002, the Commission approved Waiver 5-01-356-[Johnson]. Coastal Development Permit# 5-01-356-W was a waiver that allowed the demolition of an existing two-story single family residence and construction of a new 5,965 square foot two-story single family residence with an attached 342 square foot guest room and an 808 square foot three car garage located at 1008 West Bay Avenue in the City of Newport Beach. The project also consisted of 364 square foot for a veranda on the first floor and 364 square feet for verandas located on the second floor. In addition, the project also consisted of construction of new gates and wrought iron fencing and the existing wood deck and planter wall and bench structure located in the rear will be modified as necessary for construction of the new home. The maximum height of the structure would be 26 feet above finished grade. Grading to take place would consist of recompaction of existing soils. There would be 580 cubic yards of grading, which would balance on site. Runoff would be collected by a system of drain inlets and pipes and discharged into a drainage pit and percolated into the ground. At that time, no evidence had been submitted in connection with application 5-01-356 to indicate that the existing home or the new home would require the construction of the bulkhead.

On May 6, 2002, the Commission denied Coastal Development Permit Application #5-02-378-[Johnson]. The proposed project was for the construction of a new 70-foot long bulkhead (located at approximately the +5.23' MLLW) fronting Newport Bay. The bulkhead and backfill would have resulted in the fill of 914 square feet of high intertidal sandy habitat

The proposed project was primarily inconsistent with Sections 30233 and 30235 of the Coastal Act. Section 30233 of the Coastal Act identifies an exhaustive list of eight uses for which fill of open coastal waters is allowed. The proposed bulkhead did not qualify as one of the eight permitted uses. The proposed bulkhead would have resulted in the fill of 1,300 square feet on high intertidal habitat, to be converted to yard space for the residence. Fill of wetland or coastal waters for private residential development is not one of the allowable uses identified under Section 30233.

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Although the subject site apparently experienced nominal erosion which appeared to be the result of natural processes, the applicant had not demonstrated that the erosion affecting the adjacent boundary walls, patio slabs and building slabs was occurring at a rate which demanded attention or that any existing structure was in danger and could only be protected via the construction of the proposed bulkhead pursuant to Section 30235. Section 30235 of the Coastal Act requires the Commission to allow construction of a bulkhead when it is both (1) required to protect existing development that is in danger due to erosion and (2) designed to eliminate or mitigate adverse impacts on local shoreline sand supply. No information regarding the need for the bulkhead to protect the existing principle structure had been submitted. In addition, the proposed project was reviewed by the Commission's Coastal Engineer who concluded that the bulkhead was not needed to protect the existing principal structure from erosion.

Furthermore, feasible alternatives to the proposed project that comply with Coastal Act policies existed, thus adding additional reasons why the proposal could not be approved. For example, if erosion was a problem, periodic beach nourishment could have been undertaken to maintain the existing beach profile.

B. Marine Resources

Section 30233 of the Coastal Act, in relevant part, states:

- (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
 - (I) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
 - (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
 - (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.
 - (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

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- (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
- (7) Restoration purposes.
- (8) Nature study, aquaculture, or similar resource dependent activities.
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

The City of Newport Beach Land Use Plan (LUP) was certified on May 19, 1982. The certified LUP was updated on January 9, 1990. Since the City has an LUP, which is one component of a complete Local Coastal Program (LCP), but does not have a full LCP, the policies of the LUP are used only as guidance. The Newport Beach LUP includes the following policies that relate to development at the subject site:

Dredging, Diking and Filling in Open Coastal Waters, Wetlands, and Estuaries

- Only the following types of developments and activities may be permitted in the parts
 of Newport Bay which are not within the State Ecological Reserve where there is no
 feasible less environmentally damaging alternative, and where feasible mitigation
 measures have been provided to minimize adverse environmental effects:
 - a. Construction or expansion of Port/marine facilities.
 - Construction or expansion of coastal-dependent industrial facilities, including commercial fishing facilities, haul-out boat yards, commercial ferry facilities.
 - c. In open coastal waters, other than wetlands, including estuaries, new or expanded boating facilities, including slips, access ramps, piers, marinas, recreational boating, launching ramps, haul-out boat yards, and pleasure ferries. (Fishing docks and swimming and surfing beaches are permitted where they already exist in Lower Newport Bay).
 - d. Maintenance of existing and restoration of previously dredged depths in navigational channels and turning basins associated with boat launching ramps, and for vessel berthing and mooring areas. The 1974 U.S. Army Corps of Engineers maps shall be used to establish existing Newport Bay depths.

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- e. Incidental public service purposes which temporarily impact the resources of the area, such as burying cables and pipes, inspection of piers, and maintenance of existing intake and outfall lines.
- 2. New developments on the waterfront shall take into consideration existing usable water are for docking facilities. Residential and commercial structures (except piers and docks used exclusively for berthing of vessels) shall not be permitted to encroach beyond the bulkhead line. However, this policy shall not be construed to allow development which requires the filling of open coastal waters, wetlands or estuaries which would require mitigation for the loss of valuable habitat in order to place structures closer to the bulkhead line or create usable land areas. No bayward encroachment shall be permitted except where there is no feasible less environmentally damaging alternative and where mitigation is provided through payment of in-lieu fees to the Upper Newport Bay Mitigation Fund Administered by the City. (Emphasis Added)
- 3. The City shall examine proposals for construction of anti-erosion structures, offshore breakwaters, or marinas, and regulate the design of such structures to harmonize with the natural appearance of the beach.

The proposed bulkhead is to be placed at an elevation of +6.08' MLLW and the top of seawall elevation shall be +9.0 MLLW with a design toe elevation of -2.0 MLLW resulting in minimum embedment depth of approximately 8 feet and would result in the filling of 0.024 acres (1,045 square feet) of high intertidal sandy habitat. This intertidal habitat is located at elevations between +5.2 and +7 MLLW.

Section 30108.2 of the Coastal Act defines 'Fill" as the placement of earth or any other substance or material placed in a submerged area. Section 30233 of the Coastal Act limits the fill of wetlands and coastal waters to the eight enumerated uses above. In addition, the City has a LUP policy regarding Dredging, Diking and Filling in Open Coastal Waters, Wetlands, and Estuaries that is similar to Section 30233 of the Coastal Act. Commission staff previously recommended denial of the proposed project stating that the proposed fill of the intertidal area. which would provide yard space for the residence and allegedly provide greater protection to the existing landward development, is not designed or intended to serve any of the allowable uses identified by Section 30233 or the City's LUP. However at the hearing, the Commission determined that the proposed fill of intertidal area is necessary to maintain existing depths in existing navigational channels, which is one of the allowable uses under Section 30233 and the City's LUP, and is necessary to provide protection to the existing development from erosion. In addition to the requirement that a proposed fill of coastal waters be an allowable use under Section 30233 (and the City's LUP), both of those rules require that, in order to receive approval, projects involving the fill of wetlands and open coastal waters must also demonstrate that there is no feasible less environmentally damaging alternative and that all feasible mitigation has been provided. The applicant has proposed to mitigate the fill resulting from the proposed project and during the course of the Commission hearing, it was determined that the project's amount of fill is the least environmentally damaging alternative while maintaining the existing channel configuration, thus resulting in adherence to Section 30233 of the Coastal Act. Furthermore, the proposed fill (1,045 square feet) of the current project (CDP# 5-03-491) is less than the previously proposed project (CDP# 5-02-378) related fill (1,300 cubic yards).

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1. Other Agency Comments

a. <u>California Department of Fish and Game (DF&G)</u>

The originally proposed project (CDP# 5-02-378) was submitted to the California Department of Fish & Game (DF&G) for its review. In a letter from the DF&G to Commission staff dated November 6, 2001 (Exhibit #5), it stated: "It is the Department's position to recommend that seawall/bulkhead projects be constructed in such a manner to be least environmentally damaging, with minimal impacts to marine habitats. The loss of marine intertidal habitat associated with the proposed seawall does not appear to be necessary for the continued protection of the property. Therefore, we recommend the seawall proposal be modified to eliminate any loss of intertidal habitat." Furthermore, in an additional letter from the DF&G to the Army Corps of Engineers (ACOE) dated August 1, 2002 (Exhibit #6), DF&G restated the request for modification of the proposed bulkhead (CDP#5-02-378): "Accordingly, we recommend to the Corps that the applicant not be granted a permit until the project is modified to eliminate the further loss of intertidal habitat. To accomplish this goal, the seawall could be placed shoreward so that its installation results in no loss or reduced loss of intertidal habitat. If this approach is deemed feasible, the applicant should be required to mitigate for the loss of in ortidal habitat and a mitigation plan submitted prior to any construction." The currently proposed project positions the new bulkhead at an elevation of +6.08' MLLW and would result in the filling of 0.024 acres (1,045 square feet)of high intertidal sandy habitat (CDP#5-02-378 originally located the bulkhead at +5.23 MLLW, which is 3.5 feet bayward of the proposed location). The currently proposed bulkhead would still result in the fill of intertidal habitat, which was major concern of the DF&G. Commission staff has contacted DF&G and they have concluded that their concerns and comments on the previous application, CDP#5-02-378, remain valid and are applicable to the current proposal.

b. <u>United States Department of the Interior, Fish and Wildlife Services</u> (F&WS)

The originally proposed project (CDP# 5-02-378) was also submitted to the United States Department of the Interior, Fish and Wildlife Services (F&WS) for their review. A letter from the F&WS to the Army Corps of Engineers (ACOE) dated August 5, 2002 (Exhibit #7), stated: "We are concerned for the loss of biological resources associated with the proposed fill into waters of the U.S. As discussed in the PN [Public Notice 200101390-DPS], the intertidal soft bottom areas that would be filled provide habitat for burrowing and epibenthic invertebrates and can be used for foraging by invertebrates, fish and birds including the federally listed California least tern (Sterna antillarum brown). Such projects could cause significant cumulative impacts to these important biological resources in Newport Bay. Given the small amount of proposed fill, it appears that relatively minor changes in the bulkhead design would allow the project to avoid any fill unto waters of the U.S. Therefore, the practicability of alternative bulkhead designs that would avoid fill into waters of the U.S. should be evaluated... If avoidance of fill into waters of the U.S. is determined to be

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impracticable, the applicant should mitigate for the loss of any intertidal habitat by creating and preserving a minimum of 0.01 acre of intertidal habitat within Newport Bay." The currently proposed project positions the new bulkhead at an elevation of +6.08' MLLW and would result in the filling of 0.024 acres (1,045 square feet) of high intertidal sandy habitat (CDP#5-02-378 originally located the bulkhead at +5.23 MLLW, which is 3.5 feet bayward of the proposed location). The currently proposed bulkhead would still result in the fill of intertidal habitat, which was major concern of the F&WS. Commission staff has contacted F&WS and they have concluded that their concerns and comments on the previous application, CDP#5-02-378, remain valid and are applicable to the current proposal project.

c. <u>United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS)</u>

The United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) reviewed the originally proposed project (CDP# 5-02-378) as well. A letter from the NMFS to the Army Corps of Engineers (ACOE) dated August 6, 2002 (Exhibit #8), stated: "The proposed project is located in an area identified as Essential Fish Habitat (EFH) for fish species federally managed under the Pacific Groundfish Management Plan and Coastal Pelagic Fishery Management Plan. While we do concur with your assessment that the impacts associated with this individual project are insignificant, the cumulative impacts of many such projects are significant. Given the history of many similar small projects being implemented in Newport Bay, we believe the impacts of this project must be considered to be significant in an cumulative context...In addition, it is not clear from the information supplied in the Public Notice what the distance between the existing Mean High Water and the proposed location of the new bulkhead. Regardless of what distance this may be, we disagree with your conclusion that this bulkhead work is water dependant. It appears that the applicant is simply attempting to gain additional property at the expense of existing marine habitats. The location of adjacent property bulkheads is not justification for further loss of aquatic habitats." The letter further stated that the following provisions should be incorporated into the project: 1) The construction of any bulkhead only occur at or above the MHW elevation; 2) Should the need for the construction of the bulkhead below the Mean High Water be clearly demonstrated, mitigation satisfactory to NOAA Fisheries to offset the loss of any marine habitat will be agreed to prior to issuance of the permit; and 3) Any required mitigation will be completed prior to or concurrent with the construction of the bulkhead. The NMFS reviewed the currently proposed project and concluded that their concerns would be addressed if the bulkhead was located landward of the Mean Higher High Water Line (+5.4 MLLW).

d. <u>United States Army Corps of Engineers (ACOE)</u>

The United States Army Corps of Engineers (ACOE) has issued a Public Notice inviting parties to provide their views on the proposed work. In a letter dated

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April 1, 2003, the ACOE had stated that the modified project would qualify for a Nationwide Permit 18 with conditions. The conditions would be: 1) prior to construction, the applicant will submit a habitat mitigation and monitoring plan (HMMP) and 2) a pre-construction *Caulerpa taxifolia* survey. Before obtaining authorization under Nationwide Permit Number 18, the applicant must first obtain Coastal Zone Management (CZM) consistency certification from the California Coastal commission.

e. Regional Water Quality Control Board (RWQCB)

Because this project will require a federal license or permit from the ACOE and may result in a discharge into the water, the project was submitted to the California Regional Water Quality Control Board (RWQCB) for its review under section 401(a) of the Clean Water Act. 33 U.S.C. § 1341(a). The RWQCB issued a Section 401(a) certification for the proposed project on May 8, 2002, contingent upon the execution of the following conditions: 1) No fueling, lubrication, or maintenance of construction equipment within 500 feet of waters of the State; 2) No discharge into Newport Bay; and 3) Adherence to the Caulerpa taxifolia stipulation.

2. Allowable Use Test¹

The applicant contends that the primary purpose of the project is to protect its property. The applicant states that the subject site is experiencing erosion, which is having adverse impacts on the property (vessel berthing area, adjacent boundary walls, patio slabs, building slabs) and that the proposed bulkhead is necessary to protect existing structures. Though the project may resolve the applicant's concerns that erosion is having an adverse impact on the property, the approvability of the project is not based on the adequacy of the engineering or its efficacy to achieve a desired goal, but its conformance with Section 30233.

The proposed development would result in 0.024 acres (1,045 square feet) of fill in intertidal coastal waters and Commission staff had stated that this action would expand the yard space of the residence. However at the hearing, the Commission determined that the proposed fill of intertidal area is necessary to maintain existing depths in existing navigational channels, which is one of the allowable uses under Section 30233 and the City's LUP, and is necessary to provide protection for the existing development from erosion. Therefore, the proposed bulkhead does qualify as one of the allowable uses identified in Section 30233 of the Coastal Act or in the City's LUP.

Although Section 30235 of the Coastal Act does require the Commission to approve bulkheads when necessary to protect an existing structure or beaches in danger from erosion (and when designed to eliminate adverse impacts on shoreline sand supply), and the subject site is apparently experiencing some erosion, Commission staff concluded that the applicant had not demonstrated that the erosion is occurring at a rate which demands attention or that any existing structure is in danger and can only be

¹ Before a project can be approved under Section 30233 of the Coastal Act, it must be evaluated and determined to pass three tests. The three tests involve: 1) allowable use; 2) alternatives analysis; and 3) mitigation. This is the "first" of the three tests.

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protected via the construction of the proposed bulkhead. However at the hearing, the Commission determined that the applicant has demonstrated that the erosion is occurring at a rate which demands attention and that the existing structures are in danger and can only be protected via the construction of the proposed bulkhead. Therefore, the Commission finds that the proposed development is approvable pursuant to Section 30235 of the Coastal Act. This will be discussed further in Section II.C.

3. Alternatives Analysis Test

To demonstrate that the proposed bulkhead is the least environmentally damaging alternative, the applicant previously provided an alternatives analysis for CDP#5-02-378 found within the *Marine Biological Resources Impact Assessment, Bulkhead Construction Project, 1008 West Bay Avenue, Newport Beach, California, Coastal Development Permit #5-01-229* (hereinafter referred to as the "Assessment"). This document was prepared by Coastal Resources Management, dated February 21, 2002, and it explores options other than the proposed bulkhead. No new additional alternatives analysis was submitted for the currently proposed project. Rather, the previous alternatives analysis was submitted by the applicant for consideration again in this application.

a. Alternative #1

The first alternative provided by the applicant is a no project alternative. The Assessment states that this would not mitigate the soil sloughing from the site and the resulting damage to the adjacent boundary walls, patio slabs and building slabs.

Analysis

This alternative would maintain the existing "natural" condition and not result in the loss of 1,300 square feet of high intertidal habitat or the creation of a new man made structure on the beach in the form of the proposed bulkhead. During the hearing, the Commission determined that the applicant has provided information documenting that the erosion that is occurring poses an imminent threat to the existing structures from erosion. Commission's Coastal Engineer (Exhibits #9-10) reviewed the original project (CDP#5-02-378) and the current proposed project (CDP# 5-03-491) and concluded that the bulkhead addressed all the concerns raised by the applicant's experts and that it would retain sediment and prevent further erosion from the site into Newport Bay, but also concluded that it is not needed to protect the existing principal structure from erosion. As stated previously, during the hearing, the Commission determined that the applicant had provided information documenting that the erosion that is occurring poses an imminent threat to the existing structures from erosion. The applicant has proposed to mitigate the fill resulting from the proposed project and during the course of the Commission hearing, it was determined that the project's amount of fill is the least environmentally damaging alternative while maintaining the existing depths of the existing navigational channels, thus resulting in adherence to Section 30233 of the Coastal Act. Furthermore, the proposed fill (1,045 square feet) of the current project (CDP# 5-03-491) is less

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than the previously proposed project (CDP# 5-02-378) fill (1,300 cubic yards). While a no project alternative is a feasible less environmentally damaging alternative, the Commission concluded that the fill is allowable and that the proposed fill would be the least environmentally damaging alternative. Therefore, the Commission finds that the proposed development is consistent with Section 30233 of the Coastal Act.

b. Alternative #2

The second alternative provided by the applicant consists of a quarry stone-revetted bulkhead replacing the proposed vertical bulkhead. The Assessment states that the quarry bulkhead would be in the same location as the proposed vertical bulkhead. The Assessment asserts that a revetment reduces scouring effects associated with wave activities. However, the project site is not affected by strong waves associated with wave activity. Therefore, the Assessment concludes that a quarry stone revetment would not provide any substantial net benefit over the vertical bulkhead. Furthermore, the quarry bulkhead would require additional intertidal fill to construct, resulting in an increase in the amount of habitat lost. For these reasons, the revetted bulkhead plan alternative was not chosen by the applicant.

<u>Analysis</u>

Though this is a feasible alternative, it would be environmentally more damaging than the applicant's original proposed bulkhead since it would result in additional fill of intertidal habitat. Thus, this is not the least environmentally damaging alternative. In addition, the construction of a quarry stone revetted bulkhead to protect a residence is not listed as one of the allowable uses identified in Section 30233 of the Coastal Act. Therefore, the Commission cannot find that this alternative consistent with Section 30233 of the Coastal Act.

c. Alternative #3

The third alternative evaluated by the applicant is the periodic addition of sand (beach nourishment) to maintain the existing beach as it currently exists and to prevent the overall net loss of soil at the site. The Assessment states that this would not mitigate the soil sloughing from the site and the resulting damage to the adjacent boundary walls, patio slabs and building slabs and does not meet the engineering requirements for the protection of the residential walls and building slabs. Furthermore, the Assessment states that the continual addition of soil on site would result in periodic disturbances to intertidal invertebrates, and potentially short term reductions in mid-intertidal beach productivity.

Analysis

This alternative would not result in the loss of 0.024 acres (1,045 square feet) of high intertidal habitat or in the creation of a new man made structure on the beach similar to the proposed bulkhead, which makes it a less environmentally damaging alternative than the proposed bulkhead. This approach has been

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taken by the City of Newport Beach on Coastal Development Permit #5-99-282 (City of Newport Beach), approved by the Coastal Commission.

The Assessment states that this alternative will not mitigate the soil sloughing and the resulting structural damage. While it is true that it will not prevent soils from leaving the site, it will *replace* the lost soil so that there is no net change in the amount of soil present, and it will thus maintain the beach profile. Moreover, if it is done frequently enough to prevent even a temporary significant change in the beach profile and to prevent any loss of underlying supporting soils, the maintenance of the underlying soils will prevent any further damage to the adjacent boundary walls, patio slabs and building slabs.

As indicated above, not only does this alternative eliminate damage to the adjacent boundary walls, patio slabs and building slabs, but it does so in a less environmentally damaging method than the applicant's proposal. However at the hearing, the Commission determined that the proposed fill of intertidal area is necessary to maintain existing depths in existing navigational channels, which is one of the allowable uses under Section 30233 and the City's LUP, and is necessary to provide protection for the existing development from erosion.

Periodic dredging with deposition on the beach would be a preferable method of maintaining the existing beach profile and protecting the existing structures from the effects of erosion, to the extent that there are any significant adverse effects of erosion on the structures. However at the hearing, the Commission determined that the applicant has demonstrated that the erosion is occurring at a rate which demands attention or that any existing structure is in danger and can only be protected via the construction of the proposed bulkhead, therefore, while an alternative such as beach nourishment is a less environmentally damaging alternative than the proposed bulkhead, it would not aid in maintaining the existing depths in existing navigational channels, which is one of the allowable uses under Section 30233 and the City's LUP, and is necessary to provide protection for the existing development from erosion.

4. <u>Mitigation Test</u>

Projects that involve fill of open coastal waters must qualify as an allowable use under Section 30233 of the Coastal Act, and then, if the proposed project has not avoided adverse impacts to coastal resources, mitigation is also required to minimize the remaining adverse environmental effects. Commission staff had determined that in this case, the proposed project had not qualified as an allowable use under the Coastal Act or avoided (or even minimized) its impacts. However at the hearing, the Commission determined that the proposed fill of intertidal area is necessary to maintain existing depths in existing navigational channels, which is one of the allowable uses under Section 30233 and the City's LUP.

The applicant has indicated that he is willing to provide mitigation to offset impacts arising from the project as proposed. The applicant has submitted a Mitigation Fee Proposal prepared by Noble Consultants, Inc. The mitigation fee would be submitted to Community Conservancy International (CCI), which in turn would use these funds for the

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Big Canyon Creek Project, which would restore a number of wetlands habitats; restore the marine tidal influence in Big Canyon, repair flood damage; remove non-native invasive plant species and improve nature trails and public access to Big Canyon Nature Park. The proposed mitigation plan would mitigate the loss of 0.024 acres (1,045 square feet)of high intertidal sandy beach habitat at a mitigation ratio of 4:1, as typically required by the Commission for this type of impact, resulting in the restoration of 0.096 acres (4,182 square feet)of high intertidal habitat. Before the Commission can approve the project, the project must meet all the requirements of Section 30233 which are that the project must be an allowable use and be the least environmentally damaging alternative, in addition to providing adequate mitigation. In this case, the proposed project does meet the three requirements. In order to verify that the required mitigation is carried out, the Commission imposed **Special Condition No. 2**, which requires submittal of evidence that funding has been submitted to Community Conservancy International (CCI) for the proposed mitigation.

City's LUP

The proposed project is not in conflict with the City's LUP regarding Dredging, Diking and Filling in Open Coastal Waters, Wetlands, and Estuaries. The City's LUP limits the fill of estuaries, wetlands and coastal waters to the five enumerated uses listed previously. The proposed fill of the intertidal area would be for one of the five uses listed in the LUP. The proposed project is consistent with City's LUP.

6. Review of Project By Staff Coastal Engineer

Commission's Coastal Engineer (Exhibits #9-10) reviewed the original project (CDP#5-02-378) and the current proposed project (CDP# 5-03-491) and concluded that the bulkhead addressed all the concerns raised by the applicant's experts and that it would retain sediment and prevent further erosion from the site into Newport Bay. But, her review also concluded that it is not needed to protect the existing principal structure from erosion. However at the hearing, the Commission determined that the applicant had provided information documenting that the erosion that is occurring poses an imminent threat to the existing structures from erosion and that a bulkhead was necessary for the project site.

7. Conclusion

Commission staff previously recommended denial of the proposed project since it would result in the fill of 0.024 acres (1,045 square feet) of intertidal area, which would provide yard space for the residence and allegedly provide greater protection to the existing landward development, which is not one of the allowable uses identified by Section 30233 or the City's LUP. However at the hearing, the Commission determined that the proposed fill of intertidal area is necessary to maintain existing depths in existing navigational channels, which is one of the allowable uses under Section 30233 and the City's LUP, and is necessary to provide protection to the existing development from erosion. In addition to the requirement that a proposed fill of coastal waters be an allowable use under Section 30233 (and the City's LUP), both of those rules require that, in order to receive approval, projects involving the fill of wetlands and open coastal waters must also demonstrate that there is no feasible less environmentally damaging

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alternative and that all feasible mitigation has been provided. The applicant has proposed to mitigate the fill resulting from the proposed project and during the course of the Commission hearing, it was determined that the project's amount of fill is the least environmentally damaging alternative while maintaining the existing depths of the existing navigational channels, thus the project meets all the requirements of Section 30233, which are that the project must be an allowable use, be the least environmentally damaging alternative and provide adequate mitigation. Therefore, the Commission finds that the proposed project is consistent with Section 30233 of the Coastal Act and the City's LUP.

C. Protective Structures and Hazards

Section 30235 of the Coastal Act states:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

The proposed project consists of the construction of a new bulkhead fronting Newport Bay. Although the proposed bulkhead, from an engineering perspective, accomplishes its intended use of protecting existing structures such as the adjacent boundary walls, patio slabs, building slabs and the building's foundation, the approvability of the project is not the adequacy of the engineering, but its conformance with Section 30235. In addition, information regarding the need for the bulkhead to protect the existing principle structure has been submitted. The Commission's Coastal Engineer (Exhibits #9-10) reviewed the original project (CDP#5-02-378) and the current proposed project (CDP# 5-03-491) and concluded that the bulkhead addressed all the concerns raised by the applicant's experts and that it would retain sediment and prevent further erosion from the site into Newport Bay, but also concluded that it is not needed to protect the existing principal structure from erosion. However at the hearing, the Commission determined that the applicant had provided information documenting that the erosion that is occurring poses an imminent threat to the existing structures from erosion and that a bulkhead was necessary for the project site.

Section 30235 of the Coastal Act requires the Commission to approve bulkheads when necessary to protect an existing structure or beaches in danger from erosion and when designed to eliminate adverse impacts on shoreline sand supply. The subject site is apparently experiencing nominal erosion which appears to be the result of natural processes. The Commission determined at the hearing that the applicant has demonstrated that the erosion affecting the adjacent boundary walls, patio slabs, building slabs and the building's foundation is occurring at a rate which demands attention or that any existing structure is in danger and can only be protected via the construction of the proposed bulkhead. The applicant did not submit evidence that a bulkhead was needed when they submitted an application to demolish and construct a new house at the project site. Coastal Development Permit 5-01-356-W for the demolition and construction of a new single-family residence was approved by the Commission on March 5, 2002. However, the applicant has provided this information with the

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current application and the Commission concluded that the existing structure is in danger. Therefore, the Commission finds that the proposed development is approvable pursuant to Section 30235 of the Coastal Act and the City's LUP.

1. Noble Consultants, Inc.

In a letter dated April 4, 2003 from *Noble Consultants*, Inc. it states that the bulkhead is necessary: 1) to protect the residence's foundation; 2) since the lot is a collection point for debris, trash and other detritus due to it being the only developed lot in the neighboring community without some form of retaining structure; and 3) since the vessel berthing area of the applicant shoals above the design basin depth (Exhibit #11).

a. Reason #1

The first reason the letter states is that the new bulkhead is needed to protect the residence's foundation. The letter states: "The main function of the bulkhead is to retain sand in the lee of the structure; thereby, protecting the residence from seawater exposure. At this time, no such structure exists. As a result, sand bayward of the residence is free to migrate into the vessel berthing area, which can effectively lower the design grade elevations adjacent to the residence's foundation. Over time the exposure of the residence's support system to seawater will weaken the footings putting the stability of the residence under increased risk. In addition, from an environmental and maintenance standpoint, it is extremely undesirable to have seawater impinging upon the subject residence. The harsh marine environment will act to deteriorate the exposed sections of the residence at an accelerated rate and the bayward migration of the design grade sediment could potentially undermine the existing structural foundation of the residence. Moreover, since bulkheads span across each neighboring property, the erosion of the fill material from the subject residence could act to undermine the retaining structures at both adjacent properties."

b. Reason #2

The second reason why the letter states that the new bulkhead is needed is to prevent the site from accumulating debris, trash and other detritus due to it being the only developed lot in the neighboring community without some form of retaining structure.

c. Reason #3

The third reason why the letter states that the bulkhead is necessary is to prevent the applicant's vessel berthing area from shoaling.

Analysis

The applicant states that the proposed bulkhead is necessary to protect the residence. The Commission's Coastal Engineer (Exhibits #9-10) reviewed the original project (CDP#5-02-378) and the current proposed project (CDP# 5-03-491) and concluded that the bulkhead addressed all the concerns raised by the

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applicant's experts and that it would retain sediment and prevent further erosion from the site into Newport Bay, but also concluded that it is not needed to protect the existing principal structure from erosion. However at the hearing, the Commission determined that the applicant had provided information documenting that the erosion that is occurring poses an imminent threat to the existing structures from erosion and that a bulkhead was necessary for the project site. Therefore, the proposed project is consistent with Section 30235 of the Coastal Act and the City's LUP.

2. Skelly Engineering

In addition, a previous evaluation for CDP#5-02-378 conducted by *Skelly Engineering* dated November 27, 2002 discusses the need for the new bulkhead. This letter also provided additional reasoning why the applicant feels that a bulkhead is necessary. The letter states that there are three reasons why the bulkhead was necessary: 1) to provide continuity of the bulkhead which would be in place along the approved bulkhead line; 2) to prevent movement of land into the water (erosion of the shoreline); and 3) to eliminate damage to the neighboring boundary walls (Exhibit #12).

a. Reason #1

The first reason the letter states that the new bulkhead is needed is to provide continuity of the bulkhead with other adjacent and existing bulkheads. It further stated: "The Bulkhead's primary function is to fix the geometry of the Newport Bay channels. Without the bulkhead system in place the circulation within the bay would change as erosion and accretion takes place over time. Because of the docks, pier and wharfs within the bay, the sediment transport within the bay needs to be in quasi equilibrium. Erosion and accretion can adversely impact the berthing facilities which can only be mitigated by dredging. Filling in the gap in the bulkhead line will contribute to the continued proper functioning of the bay system and possibly help to reduce the need for dredging."

b. Reason #2

The second reason why the letter states that the new bulkhead is needed is to prevent movement of land into the water (erosion of the shoreline). The letter goes on to say that the site has been subject to soil movement and erosion over time, which has caused damage to the patio and building slabs

c. Reason #3

The third and final reason the letter states that the new bulkhead is needed is to eliminate damage to the neighboring boundary walls. The letter states: "the damage is primarily cracking of the masonry due to soil movement from the lack of lateral support of the soil, and erosion on one side of the boundary wall."

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Analysis

As discussed previously, the Commission at the hearing determined that the proposed fill of intertidal area is necessary to maintain existing depths in existing navigational channels, which is one of the allowable uses under Section 30233 and the City's LUP. In addition to the requirement that a proposed fill of coastal waters be an allowable use under Section 30233 (and the City's LUP), both of those rules require that, in order to receive approval, projects involving the fill of wetlands and open coastal waters must also demonstrate that there is no feasible less environmentally damaging alternative and that all feasible mitigation has been provided. The applicant has proposed to mitigate the fill resulting from the proposed project and during the course of the Commission hearing, it was determined that the project's amount of fill is the least environmentally damaging alternative while maintaining the existing depths of the existing navigational channels, thus the project meets all the requirements of Section 30233, which are that the project must be an allowable use, be the least environmentally damaging alternative and provide adequate mitigation. The Commission at the hearing also determined that the applicant had provided information documenting that the erosion that is occurring poses an imminent threat to the existing structures from erosion and that a bulkhead was necessary to provide protection of the existing d velopment from erosion, therefore consistent with Section 30235 of the Coastal Act and the City's LUP.

3. Conclusion

Section 30235 of the Coastal Act requires the Commission to approve bulkheads when necessary to protect an existing structure or beaches in danger from erosion and when designed to eliminate adverse impacts on shoreline sand supply. Even though the proposed bulkhead, from an engineering perspective, accomplishes its intended use, the standard of review for determining its approvability is its consistency with the Coastal Act, such as Section 30235. At the hearing, the Commission concluded that the applicant has demonstrated that the erosion affecting the adjacent boundary walls, patio slabs, building slabs and the building's foundation is occurring at a rate which demands attention or that any existing structure is in danger and can only be protected via the construction of the proposed bulkhead. Therefore, the Commission finds that the proposed development is approvable pursuant to Section 30235 of the Coastal Act.

D. Water Quality and the Marine Environment

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.

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Section 30231 of the Coastal Act states:

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.

The proposed project is located in the coastal waters of Lower Newport Bay. Lower Newport Bay is a critical coastal water body on the federal Clean Water Act 303(d) list of "impaired" water bodies. The designation as "impaired" means that water quality within the water body does not meet State and Federal water quality standards designed to meet the 1972 Federal Clean Water Act goal of "fishable, swimmable" waters. In Newport Harbor, the listing cites elevated concentrations of metals, pathogens, nutrients, pesticides, and toxic organic compounds from a variety of sources including urban runoff, boatyards, contaminated sediments, and other unknown non-point sources as the reason for listing the harbor as an "impaired" water body. The listing is made by the California Regional Water Quality Control Board, Santa Ana Region (RWQCB), and the State Water Resources Control Board (SWRCB), and confirmed by the U.S. Environmental Protection Agency (EPA). The RWQCB has targeted the Newport Bay watershed, which would include Newport Harbor, for increased scrutiny as a higher priority watershed under its Watershed Initiative. The standard of review for development proposed in coastal waters is the Chapter 3 policies of the Coastal Act, including the following water quality policies. Sections 30230 and 30231 of the Coastal Act require the protection of biological productivity and water quality.

The construction of the bulkhead will occur in the water. Construction of any kind adjacent to or in coastal waters has the potential to impact marine environment. The Bay provides an opportunity for water oriented recreational activities and also serves as a home for marine habitat. Because of the coastal recreational activities and the sensitivity of the Bay habitat, water quality issues are essential in review of this project

Storage or placement of construction materials, debris, or waste in a location subject to erosion and dispersion or which may be discharged into coastal water via rain, surf, or wind would result in adverse impacts upon the marine environment that would reduce the biological productivity of coastal waters. For instance, construction debris entering coastal waters may cover and displace soft bottom habitat. In addition, the use of machinery in coastal waters not designed for such use may result in the release of lubricants or oils that are toxic to marine life. Sediment discharged into coastal waters may cause turbidity, which can shade and reduce the productivity of foraging avian and marine species ability to see food in the water column. In order to avoid adverse construction-related impacts upon marine resources, **Special Condition No. 1** outlines construction-related requirements to provide for the safe storage of construction materials and the safe disposal of construction debris. This condition requires the applicants to incorporate silt curtains and/or floating booms when necessary to control turbidity and debris discharge. Divers shall remove any non-floatable debris not contained in such structures that sink to the ocean bottom as soon as possible.

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To minimize the adverse impacts upon the marine environment and avoid fill of coastal waters, One (1) Special Condition has been imposed. Special Condition No. 1 outlines construction-related requirements to provide for the safe storage of construction materials and the safe disposal of construction debris to protect coastal water quality and the biological productivity thereof. Therefore, the Commission finds that, as conditioned, the proposed project is consistent with Sections 30230 and 30231 of the Coastal Act.

E. 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 City of Newport Beach was effectively certified on May 19, 1982. The certified LUP was updated on January 9 1990. As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act and with the certified Land Use Plan for the area. 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.

F. California Environmental Quality Act

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, 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.

As described above, the proposed project would not have significant adverse environmental impacts, as conditioned. As conditioned, the proposed project has been found consistent with the policies of Chapter 3 of the Coastal Act. Mitigation measures include Special Conditions requiring the applicant to adhere to construction responsibilities and debris removal and submittal of evidence that funding has been submitted to for the proposed mitigation.

As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect, which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, can be found consistent with the requirements of CEQA.

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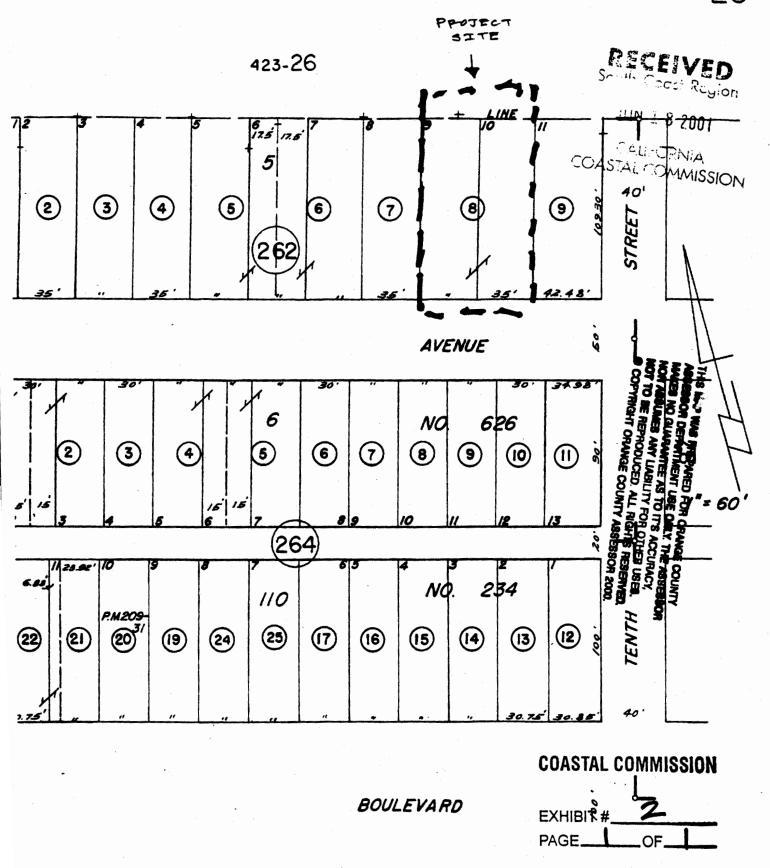
Johnson Residence Vicinity Map Map Title 2

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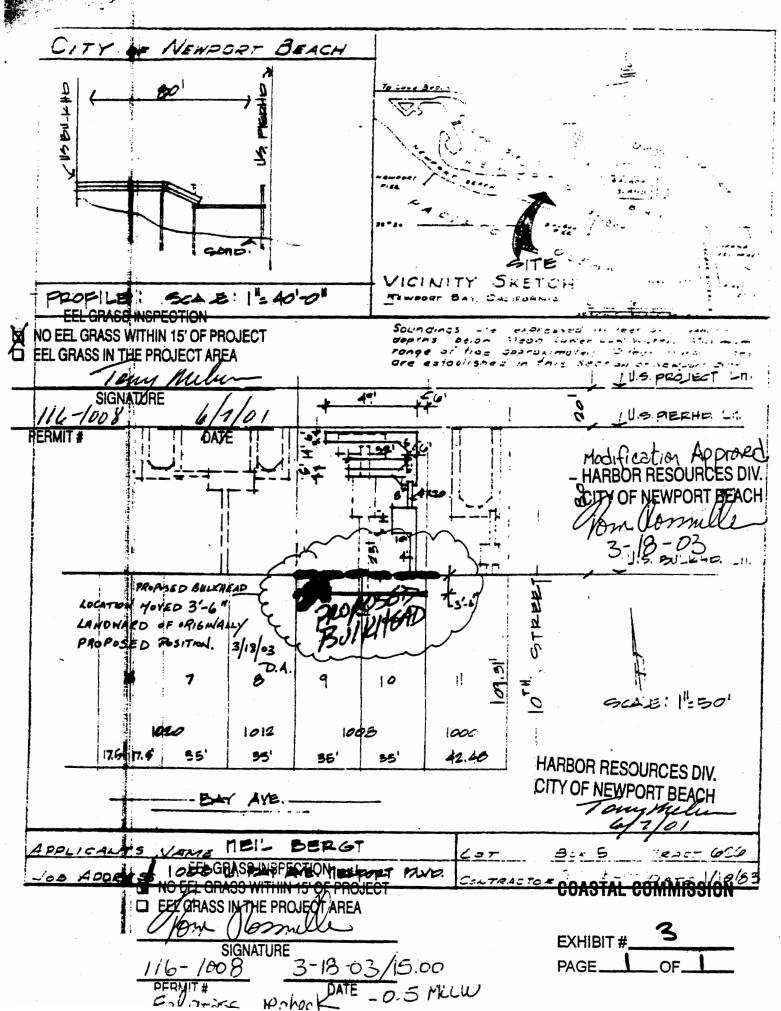
COASTAL COMMISSION



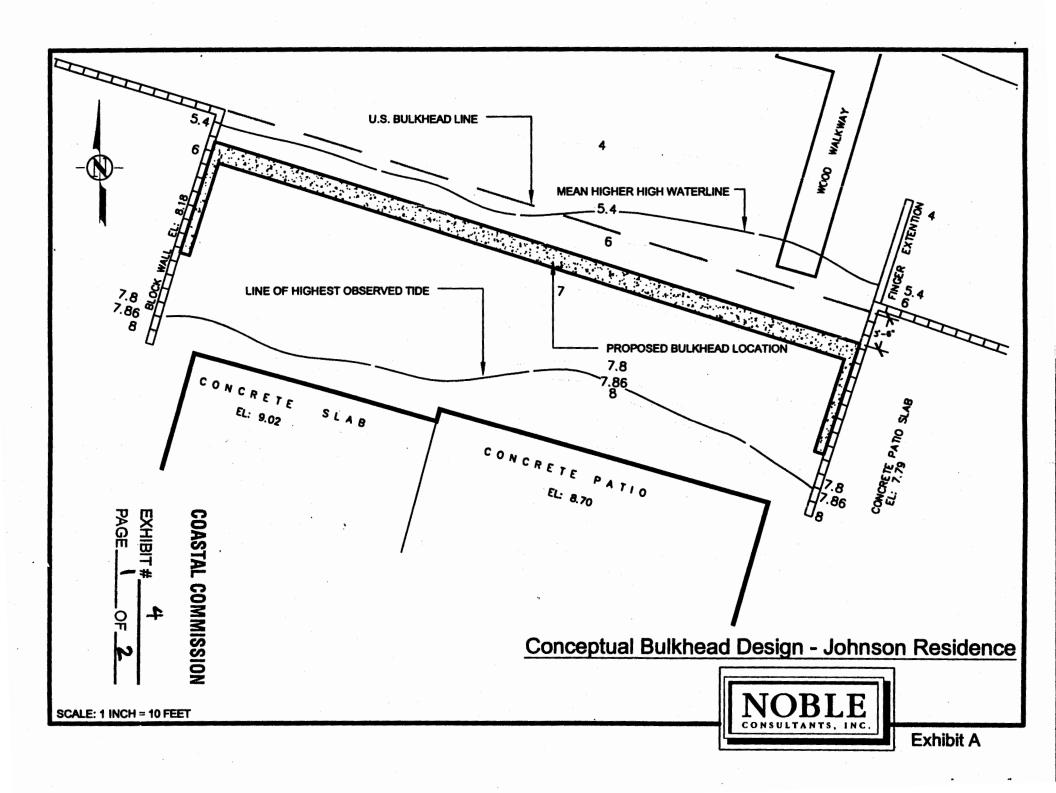
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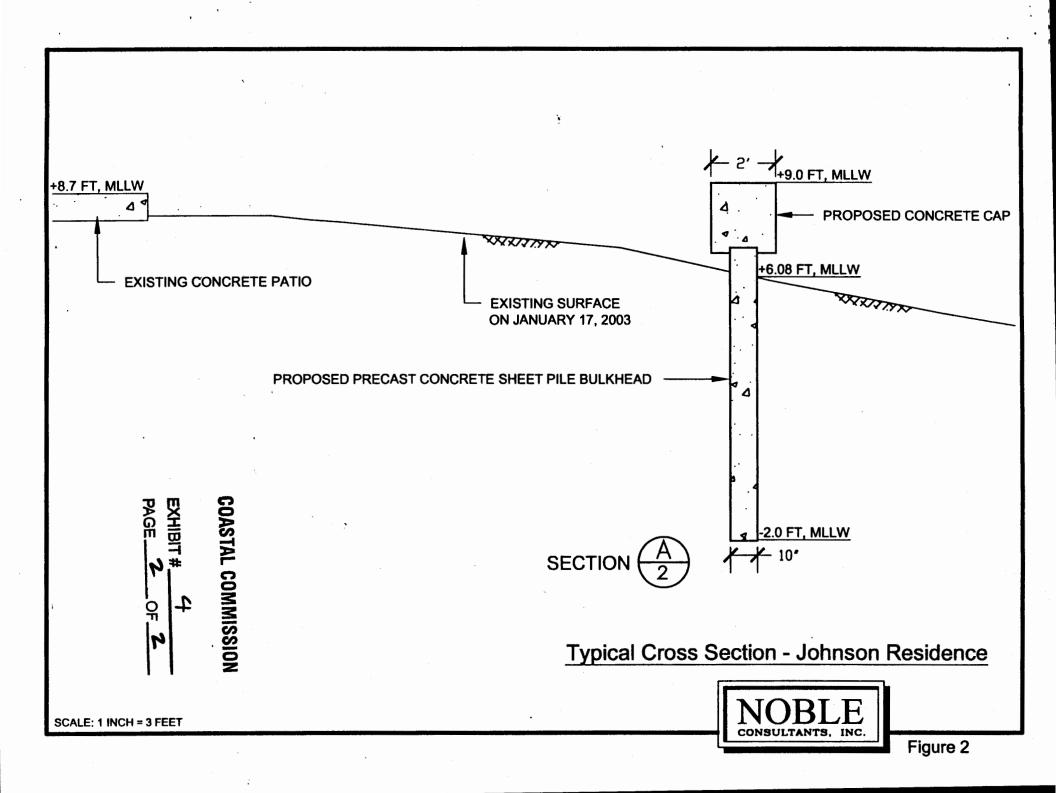
ASSESSOR'S MAP BOOK 47 PAGE 26 COUNTY OF ORANGE





SALES CONTRACTOR





DEPARTMENT OF FISH AND GAME

MARINE REGION 20 LOWER RAGSDALE DRIVE, SUITE 100 MONTEREY, CA 93940 (831) 649-2870



November 6, 2001



NOV 9 2001

CALIFORNIA COASTAL COMMISSION

Mr. Fernie Sy California Coastal Commission South Coast Area 200 Oceangate Ave., 10th Floor Long Beach, California 90802-4325

Dear Mr. Sy:

7.

Department of Fish and Game (Department) staff have reviewed the project description for the William Johnson single-family residence project located at 1008 West Bay Avenue, City of Newport Beach, California. The subject property is comprised of two lots, Lot 9 and Lot 10, and is approximately 70-foot by 110-foot, bordered on the north by Newport Bay. The owner wishes to remove the existing two residences and garages, and construct a new two-story single-family residence with an attached garage. Additionally, there will be exterior walkways, planters, patios, and a new seawall located seaward of the existing seawall and wooden patio. This letter addresses the proposed seawall.

Based on the engineering drawings, the proposed seawall would be more than 15 feet seaward from the existing seawall in Lot 9 and approximately 7 to 20 feet seaward of an "L" shaped existing wooden patio in Lot 10 (there does not appear to be an existing concrete seawall in Lot 10 on the drawing). The applicant is proposing to place the new seawall in the mid-intertidal zone and fill behind it, resulting in a loss of marine intertidal habitat. It is the Department's position to recommend that seawall/bulkhead projects be constructed in such a manner to be least environmentally damaging, with minimal impacts to marine habitats. The loss of marine intertidal habitat associated with the proposed seawall does not appear to be necessary for the continued protection of the property. Therefore, we recommend that the seawall proposal be modified to eliminate any loss of intertidal habitat.

Thank you for the opportunity to review this proposal. As always, Department personnel are available to discuss our comments, concerns, and recommendations in greater detail. To

COASTAL COMMISSION

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arrange for a discussion, please contact Ms. Marilyn Fluharty, Environmental Scientist, California Department of Fish and Game, 4949 Viewridge Avenue, San Diego, CA 92123, telephone (858) 467-4231.

Sincerely,

Robert N. Tasto, Supervisor

Project Review and Water Quality Program

Marine Region

cc: Ms. Marilyn Fluharty
Department of Fish and Game
San Diego, California

Mr. Robert Hoffman National Marine Fisheries Service Long Beach, California

Mr. Marshall Steele Marshall Steele Marine Construction and Consulting 2149 Orange Avenue Costa Mesa, California

COASTAL COMMISSION

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State of California - The Resources Agency

DEPARTMENT OF FISH AND GAME

http://www.dfg.ca.gov Marine Region 20 Lower Ragsdale Drive, Suite #100 Monterey, CA 93940 (831) 649-2870





August 1, 2002

U.S. Army Corps of Engineers, Los Angeles District

Regulatory Branch

ATTN: CESPL-CO-R-200101390-DPS

P.O. Box 532711

Los Angeles CA 90053-2325 Attention: Mr. Dan Swenson

Dear Mr. Swenson:

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COASTAL COMMUNICA

Department of Fish and Game (Department) staff have reviewed the Public Notice (PN) No. 200101390-DPS for the William Johnson bulkhead project located at 1008 West Bay Avenue, City of Newport Beach, California. The subject property is comprised of two lots, Lot 9 and Lot 10, and is approximately 70-foot by 110-foot, bordered on the north by Newport Bay. The PN concerns the temporary removal of a pier and floating dock and construction of a new bulkhead.

The Department became aware of this project in October 2001 when staff visited the project site with Mr. Marshall Steele (Marshall Steele Marine Construction and Consulting) and were presented with the site plans. We were asked to provide our assessment to the California Coastal Commission (Commission) for the project's coastal development permit (CDP). The construction of the bulkhead is one element of the CDP. The owner of the property also wishes to remove the existing two residences and garages, and construct a new two-story single-family residence with an attached garage, exterior walkways, planters, and patios. At the time, the bulkhead was proposed to be aligned with the existing bulkheads at the two adjacent properties. This approach would place the new bulkhead in the intertidal zone (defined as +7.5 to -2.5 Mean Lower Low Water, MLLW), which would be backfilled, resulting in a loss of marine intertidal habitat. It is the Department's position to recommend that bulkhead/seawall project be constructed in such a manner as to be the least environmentally damaging alternative, with minimal impacts to marine habitats. Because the loss of marine intertidal habitat associated with the proposed bulkhead did not appear to be necessary for the continued protection of the property, we recommended that the bulkhead proposal be modified to eliminate loss of intertidal habitat, e.g. place the bulkhead further shoreward.

We sent a letter to Commission in November 2001 recommending that the bulkhead proposal be modified to eliminate loss of intertidal habitat. In January 2002, another consultant. The Arthur Valdes Co., Inc., sent us modified drawings and stated that COASTAL COMMISSION relocated to a point fully south of the U.S. Bulkhead Line as the original alignment (with the

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However, this was a slight modification and the bulkhead was still proposed within the intertidal zone.

The current proposal in the PN continues to place the bulkhead within the intertidal zone, with a loss of 0.01 acres of intertidal habitat, at a minimum elevation of +5.23 MLLW (however, a note at the bottom of Figure 3 indicates the elevation needs to be verified). The PN also provides alternatives to the proposed project including a rip-rap berm, and beach nourishment. However, differing bulkhead designs are not presented. The PN also states that the loss of 0.01 acre or 435 square feet of unvegetated soft-bottom habitat is not considered significant. However, the loss of intertidal bay habitat associated with this project, although small, is of concern to the Department because of cumulative impacts from this kind of activity. Impacts to intertidal habitat are considered significant because these areas are utilized by shorebirds, wading birds, and marine fish and invertebrates.

Accordingly, we recommend to the Corps that the applicant not be granted a permit until the project is modified to eliminate the further loss of intertidal habitat. To accomplish this goal, the seawall could be placed shoreward so that its in tallation results in no loss or reduced loss of intertidal habitat. If this approach is deemed infeasible, the applicant should be required to mitigate for the loss of intertidal habitat and a mitigation plan submitted prior to any construction. The mitigation plan would need to contain the following elements: baseline information for the project impact zone and mitigation site; environmental goals/objectives that describe the mitigation project purpose; a detailed work plan that includes written specifications and description of mitigation techniques, construction sequencing, and site diagrams; performance standards, specific criteria to either verify fulfillment of environmental goals of to trigger initiation of remedial action or contingency measures; a monitoring program with post-project assessment requirements, survey or sampling methods and provisions for interagency review; a contingency plan for courses of action or corrective measures to be implemented in the event performance standards are not met; and a performance bond to ensure fulfillment of mitigation and/or contingency measures. The mitigation plan should be required as a special condition in the Corps permit prior to any construction.

Thank you for the opportunity to review and comment on this PN. As always, Department personnel are available to discuss our comments, concerns, and recommendations in greater detail. To arrange for a discussion, please contact Ms. Marilyn Fluharty, Environmental Scientist, California Department of Fish and Game, 4949 Viewridge Avenue, San Diego, CA 92123, telephone (858) 467-4231.

Sincerely,

COPY ORIGINAL SIGNED BY

Robert N. Tasto, Supervisor Environmental Services Program Marine Region COASTAL COMMISSION

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PAGE 2 OF 2



United States Department of the Interior

FISH AND WILDLIFE SERVICE **Ecological Services** Carlsbad Fish and Wildlife Office South Court Carlsbad, California 92008





In Reply Refer To: FWS-OR-3018.1

CALIFORNIA TASTAL COMINION

5 2002 AUG

Mark Sudol, Chief U.S. Army Corps of Engineers Regulatory Branch, Los Angeles District P.O. Box 532711 Los Angeles, California 90053-2325

Daniel P. Swenson, Regulatory Branch (No.200101390-DPS)

Re: New Bulkhead Construction Project for Tract 626, Lots 9 and 10, in Newport Bay,

Newport Beach, Orange County California

Dear Mr. Sudol:

We have reviewed Public Notice 200101390-DPS (PN) for the proposed New-Bulkhead Construction Project for Tract 626, Lots 9 and 10, in Newport Bay, Newport Beach, Orange County, California. These comments have been prepared under the authority of, and in accordance with, the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the Endangered Species Act of 1973, as amended (Act), and other authorities mandating Department of the Interior concern for environmental values.

According to the PN, the proposed project is construction of a new bulkhead, two retaining walls and two buried concrete dead-mans tied into the bulkhead that would require discharge of approximately 107 cubic yards of fill into 0.01 acre of tidal waters of the U.S. Currently, bulkheads and retaining walls exist on both adjacent properties and erosion has occurred within the project site that has led to cracking of the adjacent retaining walls due to lack of lateral support. The Corps has determined that the purpose of the proposed project is to construct a bulkhead to protect private property from further erosion. No mitigation is proposed in the PN to offset the loss of 0.01 acre of tidal waters of the U.S.

We are concerned for the loss of biological resources associated with the proposed fill into waters of the U.S. As discussed in the PN, the intertidal soft bottom areas that would be filled provide habitat for burrowing and epibenthic invertebrates and can be used for foraging by invertebrates, fish and birds including the federally listed California least tern (Sterna antillarum browni). Such projects could cause significant cumulative impacts to these important biological resources in Newport Bay. Given the small amount of proposed fill, it appedastal commission minor changes in the bulkhead design would allow the project to avoid any fill into waters of the

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U.S. Therefore, the practicability of alternative bulkhead designs that would avoid fill into waters of the U.S. should be evaluated.

If avoidance of fill into waters of the U.S. is determined to be impracticable, the applicant should mitigate for the loss of any intertidal habitat by creating and preserving a minimum of 0.01 acre of intertidal habitat within Newport Bay. Any Corps permit issued for the project should require that a mitigation plan be submitted to the Corps and Carlsbad Fish and Wildlife Office for review and approval prior to initiating construction.

We are available to meet with the Corps and applicant to discuss our concerns and comments regarding the proposed project. If you have any questions regarding these comments or would like to set up a meeting to discuss our concerns, please contact Mr. Zoutendyk of my staff at (760) 431-9440.

Sincerely,

Karen A. Evans

Assistant Field Supervisor

cc: Marilyn Fluharty, California Department of Fish and Game, San Diego, CA
Stephen John, Environmental Protection Agency, c/o Corps Los Angeles District, CA
Bob Hoffman, National Marine Fisheries Service, Long Beach, CA
Steven Rynas, California Coastal Commission, Long Beach, CA

COASTAL COMMISSION

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PAGE 1 OF 2



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

AUG - 6 2002

F/SWR4:RSH

Colonel Richard G. Thompson
District Engineer
Los Angeles District
U.S. Army Corps of Engineers
P.O. Box 532711
Los Angeles, California 90053-2325

CALIFORNIA COASTAL COMMASSION

Dear Colonel Thompson:

Thank you for the opportunity to review Public Notice No. 200101390-DPS for the construction of a new bulkhead in Newport Bay. This letter is provided in accordance with the Fish and Wildlife Coordination Act and PL 94-265 - the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA).

The proposed project is located in an area identified as Essential Fish Habitat (EFH) for fish species federally managed under the Pacific Groundfish Fishery Management Plan and Coastal Pelagic Fishery Management Plan. While we do concur with your assessment that the impacts associated with this individual project are insignificant, the cumulative impacts of many such projects are significant. Given the history of many similar small projects being implemented in Newport Bay, we believe the impacts of this project must be considered to be significant in a cumulative context.

In addition, it is not clear from the information supplied in the Public Notice what the distance is between the existing Mean High Water (MHW) mark and the proposed location of the new bulkhead. Regardless of what distance this may be, we disagree with your conclusion that this bulkhead work is water dependant. It appears that the applicant is simply attempting to gain additional property at the expense of existing marine habitats. The location of adjacent property bulkheads is not justification for further loss of aquatic habitats.

To ensure the conservation and enhancement of EFH and associated fishery resources, the National Marine Fisheries Service (NOAA Fisheries) recommends that the following provisions be incorporated into the project:

COASTAL COMMISSION

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PAGE OF 2



EFH Conservation Recommendations

- 1) The construction of any bulkhead only occur at or above the MHW elevation.
- 2) Should the need for the construction of the bulkhead below the Mean High Water Level be clearly demonstrated, mitigation satisfactory to NOAA Fisheries to offset the loss of any marine habitat will be agreed to prior to the issuance of a permit.
- 3) Any required mitigation will be completed prior to or concurrent with the construction of the bulkhead.

Please be advised that regulations (50 CFR Sections 600.920) to implement the EFH provisions of the MSFCMA require your office to provide a written response to this letter within 30 days of its receipt and at least 10 days prior to final approval of the action. A preliminary response is acceptable if final action cannot be completed within 30 days. Your final response must include a description of measures to be required to avoid, mitigate, or offset the adverse impacts of the activity. If your response is inconsistent with our EFH Conservation Recommendations, you must provide an explanation of the reasons for not implementing those recommendations.

Thank you for your consideration of our recommendations. Should you have any questions, please contact me at 562-980-4043 or via email at: bob.hoffman@noaa.gov.

Sincerely,

Robert S. Hoffman

Acting Assistant Regional Administrator

for Habitat Conservation

CC:

USFWS - Carlsbad (David Zoutendyk) CDFG - San Diego (Marilyn Fluharty)

COASTAL COMMISSION

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PAGE 2 OF 2

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000 SAN FRANCISCO, CA 94105-2219 VOICE AND TDD (415) 904-5200 FAX (415) 904-5400



October 14, 2002

TO:

Fernie Sy, Coastal Program Analyst

FROM:

Lesley Ewing, Coastal Engineer

SUBJECT:

CDP Application #5-01-229; 1008 West Bay Avenue, Newport Beach (Johnson)

I have received and reviewed the following material relating to the above mentioned project:

Skelly Engineering, Letter Report dated November 27, 2001, 8 pages.

William Simpson & Associates, Inc. "Structural Calculations for A New Seawall and Turned Retaining Walls" January 16, 2002.

William Simpson & Associates, Inc. "Structural Calculations for Fill Volume behind the proposed Seawall" January 29, 2002.

William F. Carr, Site Plan/Topographic Survey, Johnson Residence Seawall, 1/25/2002.

The Arthur Valdes Company, Inc. Site Plan, Johnson Residence, 11/08/2001; revised 1/24/2002.

William Simpson & Associates, Inc. Proposed Seawall for Mr. William Johnson's Residence; Structural General Notes Vicinity Map & Details, 1/28/02.

The provided material is for a bulkhead/seawall at the existing residence located at 1008 West Bay Avenue, Newport Beach, CA. As noted in the material above, the applicants' experts call this proposed structure both a seawall and a bulkhead. The letter report discusses the main differences between a seawall and a bulkhead, but even with this discussion there may be some disagreement over what the applicants want to call this proposed structure. The exact term for the structure is less important than its purpose and its impacts.

The proposed structure has been designed well and should provide the intended function. As noted in the material from Skelly Engineering, "The site is subject to soil sliding, which the proposed bulkhead will mitigate." As noted later in the Skelly Engineering report, the bulkhead will fill in a section of shoreline that is now not armored, and it will fix the geometry of the Newport Bay channels. The proposed bulkhead/seawall would reduce sedimentation of Newport Bay and thus, the need for future dredging. In addition to this main function, the bulkhead/seawall will halt the landward migration of the shoreline, will prevent further undermining of the applicants' patio and will prevent further damage to the neighbors' boundary walls. As further identification of the need for this proposed bulkhead/seawall there commission

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photographs in the Skelly Engineering report that show some of the cracking and separation that has occurred on site, without the proposed bulkhead/seawall.

The proposed bulkhead/seawall will address all the concerns raised by the applicants' experts. It will retain sediment and prevent further erosion from this site into Newport Bay. There has been no quantification of the amount of sediment that would be added to Newport Bay if this site remains unarmored; however, it is unlikely that this property alone would be responsible for enough sedimentation into the bay that this one proposed bulkhead/seawall would eliminate the need for future dredging of the bay. There are cumulative effects, both positive and negative, from erosion into the bay and from fixing the bay boundary. This proposed structure would contribute to both, albeit in a small way.

The proposed bulkhead/seawall will support the soils beneath the existing patio and boundary walls and greatly reduce the potential for further cracking. The submitted material does not provide any information about the main residential structure, but it does not appear that the proposed bulkhead/seawall is needed to protect the main structure at this location. Thus, while it will provide several positive benefits to the existing property owner and the adjacent neighbors, it does not seem that this proposed bulkhead/seawall is needed to protect the existing structure from erosion. As such, the proposed bulkhead/seawall should be considered for its impacts to the coastal resources, for fill in open coastal waters, and for its compliance with sections of the Coastal Act other than Section 30235.

Please feel free to contact me if you have questions about this memo or wish to discuss this project further.

COASTAL COMMISSION

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PAGE **Z** OF **2**

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000 SAN FRANCISCO, CA 94105-2219 VOICE AND TDD (415) 904-5200 FAX (415) 904-5400



March 16, 2004

TO:

Fernie Sy, Coastal Program Analyst

FROM:

Lesley Ewing, Sr. Coastal Engineer

SUBJECT:

Revised Permit Application, CDP-5-03-491

I have reviewed the staff report prepared for CDP #5-02-378 and the April 3, 2003 letter from Noble Consultants that provided a modification to the bulkhead project reviewed and considered by the initial staff report. The project modification would relocate the proposed bulkhead 3 to 3.5 feet landward of the initial location. The provided cross-section indicates that this relocation would place the bulkhead at about the elevation of +6.08' MLLW, based on the property conditions as surveyed January 17, 2003 (the initial bulkhead was to be located at +5.23' MLLW).

The potential impacts and benefits that were noted in my earlier comment letter would still apply to this modified bulkhead location. The bulkhead would provide a barrier between the Johnson property and the Bay, preventing the sloughage of soil from the Johnson property into the Bay. Also, the bulkhead would help address several concerns relating to seawater intrusion and salt spray. However, the bulkhead is not necessary to protect the existing residence from erosion. Also, there are other ways to address the concerns relating to seawater and salt spray that would not require a bulkhead (improved foundation design, a moisture barrier around the foundation, plantings or screens to minimize salt spray, etc.). In addition, while the modified bulkhead would encroach 3' to 3.5' less into the area identified as "high intertidal" than was proposed with the initial bulkhead submittal, this modified bulkhead would not eliminate encroachment. The basic conclusions from my earlier review still apply.

COASTAL COMMISSION

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PAGE 1 OF 1



April 4, 2003

California Coastal Commission, South Coast Area Office 200 Oceangate, Suite 1000 Long Beach, CA 90802-4302

Attn:

Mr. Fernie Sy

RECEIVED
South Coast Region

NOV 2 0 2003

RE:

William R. Johnson Residence

1008 West Bay Avenue, Newport Beach, CA

Coastal Development Permit Application No. 5-02-378

CALIFORNIA COASTAL COMMISSION

Dear Mr. Sy:

Noble Consultants, Inc. (NCI) is pleased to submit this project modification notice on behalf of Mr. William R. Johnson, owner of the residence located at 1008 West Bay Avenue in Newport Beach, California (CDP Application No. 5-02-378). As a result of concerns raised by various regulatory agencies and interested parties, the originally proposed project has been modified to adequately address environmental impact concerns associated with the location of the proposed bulkhead.

Consequently, the proposed bulkhead, designed to protect the residence located at 1008 West Bay Avenue from tidal and storm-induced damages, has been modified such that the environmental impacts resulting from the new construction may be deemed to be negligible.

MODIFIED BULKHEAD LOCATION

Noble Consultants, Inc. performed a detailed topographic and hydrographic survey of the site on January 17, 2003. A full size topographic map clearly illustrating the location of the elevation contours, referenced to the Mean Lower Low Water (MLLW) vertical datum, bayward of the subject residence has been attached to this submittal.

Based on the elevations generated by the January 17, 2003 survey and in order to fully comply with the mandates set forth by several regulatory agencies, the proposed bulkhead has been relocated such that it is fully landward of the Mean Higher High Waterline (MHHW) located at +5.4 feet, Mean Lower Low Water (MLLW). This corresponds to a bulkhead position that is 3.5 feet landward of the U.S. Bulkhead Line, the originally proposed location of the bulkhead. The

COASTAL COMMISSION

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	SUITE 620, IRVINE, CA 92612/7509			
	RNE RD SANTEE CA 920*1-2314			

Mr. Fernie Sy Coastal Development Permit Application No. 5-02-378 April 4, 2003 Page 2 of 3

new bulkhead position transitions between approximately the +6.0 and +7.0-foot MLLW elevation contours located along the western and eastern portions of the structure, respectively. Figure 1 and Figure 2 clearly illustrates the bulkhead location modification in plan view and cross-section, respectively.

Since the highest observed water level within Newport Harbor was measured to be +7.86 feet, MLLW during a storm event on January 28, 1983, the new position of the structure is within the footprint of the highest ever observed water level. However, it should be noted that based on the return frequency analysis performed by the Army Corps of Engineers, Los Angeles District, during the Coast of California Storm and Tidal Wave Study for Orange County (1995), an extreme high tide of this magnitude within Newport Harbor occurs approximately twice every 100 years.

PROJECT PURPOSE

In addition to the bulkhead location modification notice, NCI would like to clearly emphasize the need and importance of a properly designed and constructed retaining structure located bayward of the subject residence at this time.

There are several intended purposes of the proposed bulkhead construction project. The main function of the bulkhead is to retain sand in the lee of the structure; thereby, protecting the residence from seawater exposure. At this time, no such structure exists. As a result, sand bayward of the residence is free to migrate into the vessel berthing area, which can effectively lower the design grade elevations adjacent to the residence's foundation. Over time the exposure of the residence's support system to seawater will weaken the footings putting the stability of the residence under increased risk. In addition, from an environmental and maintenance standpoint, it is extremely undesirable to have seawater impinging upon the subject residence. The harsh marine environment will act to deteriorate the exposed sections of the residence at an accelerated rate and the bayward migration of the design grade sediment could potentially undermine the existing structural foundation of the residence. Moreover, since bulkheads span across each neighboring property, the erosion of the fill material from the subject residence could act to undermine the retaining structures at both adjacent properties.

Furthermore, the subject parcel is a natural collection point for debris, trash and other undesirable detritus since it is the only developed lot in the neighboring community that is not protected by some form of retaining structure. Finally, as the sediment continues to migrate into the channel, boating safety concerns increase as the vessel berthing area shoals above the design basin depth.

COASTAL COMMISSION

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Mr. Fernie Sy Coastal Development Permit Application No. 5-02-378 April 4, 2003 Page 3 of 3

In addition to the relevant attachments that have been included with this letter, previous submittals and reports that were prepared during the entire application process may be utilized to provide pertinent background information as well. If you should require any further clarification upon reviewing the attached submittals, please do not hesitate to contact us in our Irvine office.

Thank you and we appreciate your continued time and effort in this matter.

Sincerely,

NOBLE CONSULTANTS, INC.

David Altman, M.S. Project Engineer

DA/da

cc:

Ms. Lesley Ewing, California Coastal Commission

Mr. Dave Neish, Jr., Culbertson, Adams & Associates

Mr. William R. Johnson

Attachments:

Figure 1. Revised Johnson Residence Bulkhead Placement Location

Figure 2. Typical Cross Section – Johnson Residence

City of Newport Beach Modification Approval dated March 18, 2003 City of Newport Beach Letter of Endorsement dated November 1, 2001

Full Size Sheet - Topographic Survey performed by NCI on January 17, 2003

COASTAL COMMISSION

EXHIBIT # 11
PAGE 3 OF 3

MAR 2 8 2002

CATTORNIA COASTAL COMMISSION November 27, 2001

SKELLY ENGINEERING South Coast Region

FFR 2 6 2002

Mr. William Johnson C/O Paul Weinberg 18201 Von Karmen Ave. Suite 1160 Irvine. CA 92612-1005

CALIFORNIA COASTAL COMMISSION

SUBJECT: 1008 West Bay Ave. Coastal Development Permit Application #5-01-229

Dear Mr. Johnson:

At your request we are pleased to present the following letter report providing additional information to support your application to the California Coastal Commission. In particular this letter is intended to provide responses to the questions raised by Coastal Commission analyst Fernie Sy in a letter dated July 16, 2001. For ease of additional review by the Commission the analyst's question is provided first in italics, followed by the response.

Why must the proposed seawall be constructed?

The applicant is requesting to construct a bulkhead which is not exactly a seawall. A bulkhead's primary purpose is to retain or prevent the sliding of land (into the water), with a secondary purpose of protecting the upland area against damage from wave action (USACOE 1984). In slight contrast to a bulkhead, a seawall is primarily designed to prevent erosion due to wave action (USACOE 1984). The site is not subject to significant waves and wave erosion. The site is subject to soil sliding, which the proposed bulkhead will mitigate.

There are three primary reasons, from a coastal engineering point of view, for the need to construct the missing bulkhead segment at the subject property. The first reason is to provide continuity of the bulkhead which is supposed to be in place along the approved bulkhead line. The bulkhead's primary function is to fix the geometry of the Newport Bay channels. Without the bulkhead system in place the circulation within the bay would change as erosion and accretion takes place over time. Because of the docks, pier and wharfs within the bay, the sediment transport within the bay needs to be in quasi equilibrium. Erosion and accretion can adversely impact the berthing facilities which can only be mitigated by dredging. Filling in this gap in the bulkhead line will contribute to the continued proper functioning of the bay system and possibly help to reduce the need for dredging.

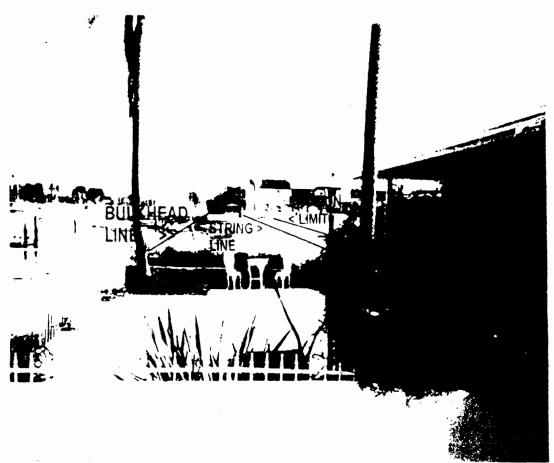
COASTAL COMMISSION

619 S. VULCAN AVE, #214B, ENCINITAS, CA 92024 PHONE 760 942-8379 fax 924-3686

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PAGE	OF

MOA 30 5001

The second reason is to prevent movement of land into the water (erosion of the shoreline). The site has been subject to problems due to soil movement and erosion over time, and will be subject to continued erosion. This potential for soil movement is evidenced by the erosion that has taken place on the nearby public bay-side beach. Photograph 1, taken from the subject site, shows the bulkhead line, the string line, and the extent of shoreline erosion. The landward extend of sediment movement (erosion) is seen about 15 feet landward of the building string line. Photograph 2 shows the damage to the patio slab (cracks) as a result of having unconfined soils on the site. The bulkhead would confine the soils and prevent damage to the patio and building slabs on the site.



Photograph 1 Adjacent public beach showing the bulkhead line, the string line, and the extend of soil movement (erosion limit) landward of the string line in the beach area not confined by a bulkhead.

COASTAL COMMISSION

619 S. VULCAN AVE, #214B, ENCINITAS, CA 92024 PHONE 760.942-812 fax 924-3686



Photograph 2 showing location of cracks in wall and slab.

The third reason is to elir inate damage to the neighboring boundary walls. The damage is primarily cracking of the masonry due to soil movement from lack of lateral support of the soil, and erosion on one side of the boundary wall. Some of the damage to a boundary wall is shown in Photograph 3. The ends of the bulkheads on the adjacent property are returned back down the property lines by garden walls. These boundary walls as not as deep or as structurally competent as the bulkhead.



Photograph 3. Boundary wall cracks.

COASTAL COMMISSION

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How will the proposed seawall mitigate the circumstances, which requires the seawall to be constructed?

The proposed bulkhead will mitigate all three of the oceanographic reasons for the construction of the bulkhead. The bulkhead will "fill the gap" in the present bulkhead. It will become part of the design bulkhead system for proper bay circulation. The bulkhead will prevent the sliding of soils into the bay system. The bulkhead will retain the soils providing lateral support for the patio and house slabs. Finally the bulkhead will eliminate the damage to the adjacent boundary walls by providing lateral support to the walls.

How will the proposed seawall affect coastal processes, including impact on shoreline sand supply?

The physical coastal processes that occur within the Newport Bay system are driven by tides and winds. The proposed project will not alter the winds or the tides. The bay sediment transport system can be characterized as a closed system in that sediment is not added or removed from the system. While sediment is transported within the system, any significant movement of sediment that changes the design configuration is mitigated by dredging. The construction of a bulkhead at the subject site will not significantly change the circulation within the bay and will not impact coastal processes.

Also, will the proposed seawall be connected to any existing seawalls located adjacent to the project site?

Because the actual condition and strength of the adjacent bulkheads is unknown it is not recommended that the new bulkhead be mechanically connected to the adjacent bulkheads. Failure of the adjacent bulkhead could result in damage to the proposed new bulkhead. The new bulkhead should butt up to the adjacent bulkheads. A filter fabric or other suitable joint material can be used to prevent any soils from piping out the butt joint.

Alternatives to the proposed project

Do nothing.

PAGE 4 OF 7

The do nothing alternative would not address the need for the bulkhead and would not mitigate the soil movement/sloughing from the site and the resulting in damage to the adjacent boundary walls patio slabs and building slabs

2. Quarry stone revetment

A quarry stone revetment could be constructed that would prevent movement of the site soils. However, the revetment is not the best choice because it has a large footprint which would encroach into the intertidal and sub-tidal areas, and because a bulkhead is already the chosen method in the area for sediment stabilization.

3. Soil nourishment

The continual addition of soil would prevent the over all net loss of soil at the site. However, the additional of soil/sand would not mitigate for the lack of lateral support for the soils. It is this movement of soils that has resulted in the damage to the boundary walls and the slab(s). So the nourishment alternative would not mitigate the need to prevent additional damage to the boundary walls and slab(s).

Information Requested in California Coastal Commission Memo Dated December 13, 1993.

The following information is intended to supplement the geotechnical report that has been prepared for the site. The information is provided in the order requested in the above referenced Coastal Commission memo.

Design wave height and maximum expected wave height.

Because the proposed bulkhead is within Newport Bay no significant surface gravity waves (long swell) will be present. The two sources of waves are winds and wakes. The water area adjacent to the site has a very limited fetch so no significant wind waves can develop (waves over 1 foot). In addition, the speed of boats in the area is closely regulated and wakes are usually under 6 inches in height. Wave energy from wakes or wind driven waves will be insignificant and need not be considered in the design of the bulkhead

Frequency of overtopping.

Because the proposed bulkhead will not be subject to any significant waves no overtopping is anticipated. The bulkhead will be the same height as nearby bulkheads. Neither of the adjacent bulkheads have been overtopped in the past.

COASTAL COMMISSION

Skelly engineering

Normal and maximum tidal ranges.

The National Oceanographic and Atmospheric National Ocean Survey tidal data station closest to the site is the Newport Beach Newport Bay Entrance station (NOAA 1999). The elevations in meters are as follows:

HIGHEST OBSERVED WATER LEVEL (01/28/1983) = 2.395
MEAN HIGHER HIGH WATER (MHHW) = 1.643
MEAN HIGH WATER (MHW) = 1.416
MEAN TIDE LEVEL (MTL) = 0.849
MEAN SEA LEVEL (MSL) = 0.841
MEAN LOW WATER (MLW) = 0.283
NORTH AMERICAN VERTICAL DATUM-1988 (NAVD) = 0.113
MEAN LOWER LOW WATER (MLLW) = 0.000
LOWEST OBSERVED WATER LEVEL (01/20/1988) = -0.659
(Elevations in meters)

Erosion Rate with and without the bulkhead.

The erosion rate with the bulkhead is essentially zero. The bulkhead fixes the location of the land relative to the water and thereby prevents erosion. The bulkhead prevents the sloughing of soils at the site. The erosion rate without the bulkhead is difficult to quantify but it can be discussed in a conceptual way. Without the bulkhead the boundary between the land and the water is mobile, horizontally. The tidal driven water weakens the soils beneath the adjacent slab(s) and adjacent wall because the soils are unconfined. These soils/sands can then move away to other areas within the bay system.

Effects of the bulkhead on adjoining properties.

Because the proposed bulkhead will be part of a continuous bulkhead system continuing on the adjacent properties, the new bulkhead will have no adverse effects on the adjacent property. The new bulkhead will provide lateral support for the boundary walls on the adjacent properties.

CUASTAL DOMNISSION

Potential for and the effect of scour at the base

Due to the weak tidal and wind driven circulation of the harbor and the site specific geometry: there is little sediment transport adjacent to the bulkhead. The existing grade seaward of the adjacent bulkhead is about +2.5 MSL. This is landward

Skelly engineering

of the Mean High Tide Line (+1.86' MSL). Scour at the based is not expected below Mean Sea Level. The panel design also incorporates a factor of safety which would allow for additional scour depth without bulkhead failure. However, there is no reason to anticipate this additional scouring

Design life and maintenance.

The design life should be in excess of 25 years. It is recommended that the bulkhead be inspected every few years. The inspection should assess the condition of the wall and the need for maintenance. Maintenance could include repair of damaged concrete cap and replacement of damaged tiebacks.

Quantification of loss of sand to the beach because of the amount of armoring of the bluff.

No bluff armoring is proposed.

Effects of the project upon public access to and along adjacent public tidelands.

The proposed bulkhead will not impact public access along the shoreline. The bulkhead is located above (landward of) the mean high tide line and along the approved US Bulkhead Line. There is a public beach about 70 feet from the site that provides excellent access to the shoreline. It is important to point out that lateral access along the tidelands is difficult due to the docking structures and piers in the area. The space between the bottom of the piers and to top of the intertidal sand is small and requires one to duck or crawl beneath the structure. There is no lateral access at high tide along this section of shoreline.

The information provided herein is intended to provide the necessary coastal processes and oceanographic information for the Coastal Commission Coastal Development Application. If you have any questions or require additional information please contact me at the number below.

Sincerely 1

CORET LAMMISSION

David W. Skelly MS.PE RCE#47857

EXHIBIT # 12 PAGE _ **7** OF _ **7**