CALIFORNIA COASTAL COMMISSION

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STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-02-174

RECORD PACKET COPY

APPLICANT: Erik Anderson

AGENT: Charlie Williams, MSA

PROJECT LOCATION: 2204 and 2210 Channel, Newport Beach, Orange County

PROJECT DESCRIPTION: Demolition of two existing single family residences and construction of a new, two story, 6,881 square foot, 29 foot high at maximum point, single family residence with an attached four car, 887 square foot garage and a 391 square foot basement. In order to accommodate the proposed basement, 148 cubic yards of grading is proposed. Also proposed is a parcel map to combine the multiple existing lots on which the development described above will occur, into a single legal lot. In addition, replacement of the seawall directly in front of the subject property and extending approximately 30 feet onto the adjacent City owned property, is proposed.

Lot Area:	9,262 square feet
Building Coverage:	4,186 square feet
Pavement Coverage:	3,205 square feet
Landscape Coverage:	1,871 square feet
Parking Spaces:	4
Zoning:	R-1
Ht above final grade	29 feet

SUMMARY OF STAFF RECOMMENDATION:

Staff is recommending approval of the proposed project subject to ten special conditions which are necessary to assure that the project conforms with Sections 30230 and 30231 of the Coastal Act regarding the restoration of marine resources and water quality, and Section 30253 of the Coastal Act regarding hazard. Special condition No. 1requires that the bulkhead be redesigned such that it does not extend channelward beyond the property line (except for the minimum length necessary to tie into the existing neighboring bulkhead); Special 2 requires that the basement be designed and constructed consistent with the geotechnical consultant's recommendations. Special condition No. 3 requires that the applicant assume the risk of constructing below groundwater level on a waterfront lot; Special condition No. 4 requires conformance with the geotechnical recommendations. Special condition No. 5 requires pre- and post-construction eel grass surveys; Special 6 requires that the applicant carry out the eelgrass mitigation plan as proposed; Special Condition No. 7 requires a pre-construction Caulerpa Taxifolia survey; Special Condition No. 8 imposes construction responsibilities measures; Special Condition No. 9 notifies the applicant that if the location of the disposal site for the excess cut material and other construction debris is within the coastal zone, a coastal development permit or an amendment to this permit are required before disposal can take place. Special condition No. 10 requires the applicant to record a deed restriction against the property, referencing all of the special conditions contained in this staff report.

The applicant disagrees with the requirement to relocate the bulkhead back onto the property and so opposes Special Condition No. 1.

LOCAL APPROVALS RECEIVED: City of Newport Beach, Approval in Concept No. 0314-2002; City of Newport Beach Harbor Permit No. 108-2210.

SUBSTANTIVE FILE DOCUMENTS: Letter from AEC Associates, dated July 15, 2003; Letter from Haro, Kasunich and Associates, Inc., dated July 15, 2003; Geotechnical Investigation for Foundation Design, prepared by Geofirm, dated March 12, 2002; Engineer's Assessment of Bulkhead Replacement at 2204 and 2210 Channel Road, prepared by AEC Associates, dated April 8, 2003; Marine Resources Impact Assessment, prepared by Coastal Resources Management, dated March 24, 2003; City of Newport Beach certified Land Use Plan.

EXECUTIVE SUMMARY

Coastal development permit application 5-02-174 was deemed complete on December 5, 2002. The application, for a lot merger and the demolition and reconstruction of a single family residence, was scheduled for Commission hearing in March 2003. The hearing on the application was postponed at the request of the applicant in order to expand the scope of the project to include replacement of the bulkhead. Additional information was submitted and the application was again scheduled for Commission hearing in June 2003. The applicant requested a second postponement in order to prepare a response to the staff's recommendation, particularly the recommended special condition requiring that the bulkhead be reconstructed no further channelward than the applicant's property line. In response to staff's recommendation regarding the location of the bulkhead, the applicant has proposed a revision to the bulkhead portion of the project. The recently proposed bulkhead alternative includes leaving the existing bulkhead in place and constructing a minimum of eleven, 30-inch diameter caissons, a 103 foot long wall with a width of 10 to 12 inches, a new grade beam and tiebacks. The new tiebacks would be connected to the new grade beam, not the existing bulkhead. The existing bulkhead wall is 9 inches wide. The added material will be more than 30 inches wide. Although, the additional materials would be placed landward of the existing bulkhead, the added materials would also be channelward of the property line, on public land. Only conceptual plans including a typical section and a narrative, and partial documentation reflecting the currently proposed bulkhead alternative were received on July 16, 2003, just five working days prior to the mailing of this report. Commission staff advised the applicant that due to the lateness of the submittal of the revisions, the conceptual nature of the plans, the incomplete supporting studies, and the requirement to hear the application within the allotted 270 days, withdrawal and resubmittal of the application was a preferable course of action. The applicant has declined that option and chosen to proceed.

Typically, conceptual plans supported by incomplete studies would not be deemed complete and the coastal development permit application would not be filed. Such is the case with the applicant's most recent bulkhead proposal. Information such as the number and spacing of the caissons and the width of the reinforcing wall are not yet known. These details are expected to be known after studies that are currently in progress are completed. Nevertheless, enough of the project is known (such as the location of and the

minimum number of caissons, etc.) to determine that the most recent proposal would not be consistent with the Coastal Act. Thus, the staff recommendation includes discussion of the revised bulkhead proposal, but the actual proposal before the Commission remains the removal and replacement of the existing bulkhead in the same location which is up to 3 1/2 feet channelward of the property line.

The applicant's most recent bulkhead proposal is to leave the existing bulkhead in place and construct a caisson wall behind (landward of) it. Because the existing bulkhead would remain in place, the applicant is characterizing the revised project as repair rather than replacement. However, the scope of the revised bulkhead project (described above) is such that, in effect, it constitutes the equivalent of replacement while leaving the existing wall in place and the entire structure that would result from their proposal must be treated as new development.

The existing bulkhead does not meet current City standards in terms of width and depth below the mudline. Therefore, the City is requiring the applicant to bring the bulkhead up to code. In order to bring the bulkhead up to code, the applicant is now proposing extensive work channelward of the property line. The applicant's proposed revisions to the bulkhead portion of the project are inconsistent with Sections 30230 and 30231 of the Coastal Act which require that marine resources and biological productivity be restored where feasible. The existing bulkhead is located up to 3'6" channelward of the applicant's property line. Since the City is requiring that the bulkhead be brought up to code regarding width and depth, the bulkhead should also be modified to be consistent with the Coastal Act. A new bulkhead with proper width and depth should be constructed no further channelward than the property line, allowing restoration of approximately 300 square feet of marine habitat. The bulkhead project originally proposed by the applicant included removing the existing bulkhead and reconstruction in essentially the same location channelward of the bulkhead. The applicant has already demonstrated the feasibility of removing the existing bulkhead with the original proposal. If the bulkhead were allowed to remain in the channelward location, it would be inconsistent with Sections 30230 and 30231 of the Coastal Act because tidal area channelward of the property line would not be restored. Restoration of approximately 300 square feet of tidal area is feasible in this case, and so must be provided in order for the proposed development to be consistent with Sections 30230 and 30231 of the Coastal Act.

STAFF RECOMMENDATION:

Staff recommends that the Commission **APPROVE** the permit application as conditioned.

MOTION:

I move that the Commission approve CDP #5-02-174 pursuant to the staff recommendation.

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

The staff recommends that the Commission adopt the following resolution:

I. APPROVAL WITH CONDITIONS

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

II. STANDARD CONDITIONS:

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

2. Expiration. If development has not commenced, the permit will expire two years from the date 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. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. Inspections. The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.

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

III. SPECIAL CONDITIONS

1. Bulkhead Redesign

A. The bulkhead shall be constructed no further channelward than along the property line separating the 2204 and 2210 Channel Road lots from the tidelands held by the city in trust pursuant to the Tidelands Grant effectuated by Chapter 74 of the Statutes of 1977, with the exception that the applicant may choose one of the two options listed below:

1) The southernmost three feet of the bulkhead may extend channelward at a 45 degree angle, encroaching onto property held by the city in trust, as necessary to tie into the existing bulkhead to the south. The applicant shall submit an agreement that if that neighboring bulkhead immediately south of the site is moved landward so that it is in line with the main section of the bulkhead approved in this permit, the applicant will remove the encroachment at such time as the neighboring bulkhead is so redeveloped. The agreement shall be submitted **PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT** and shall be subject to the review and approval of the Executive Director.

OR

2) The entire bulkhead shall be located no further channelward than the property line and, additionally, a return wall, encroaching onto property held by the city in trust, shall be constructed at the southern end of the bulkhead at a 90 degree angle to the bulkhead and property line, as necessary to tie into the neighboring bulkhead. The return wall shall occupy the minimum area necessary to provide structural support and stability. The applicant shall submit an agreement that if that neighboring bulkhead immediately south of the site is moved landward so that it is in line with the main section of the bulkhead approved in this permit, the applicant will remove the encroachment at such time as the neighboring bulkhead is so redeveloped. The agreement shall be submitted **PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT** and shall be subject to the review and approval of the Executive Director.

B. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the review and approval of the Executive Director, revised plans reflecting the requirements of section A above.

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

2. Basement Design and Construction

A. Final design and construction plans for the basement shall be consistent with the geotechnical recommendation which requires that the basement will be designed to resist hydrostatic loading, to accommodate hydraulic uplift forces and to incorporate fail proof waterproofing. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the Executive Director's review and approval, evidence that an appropriately licensed professional has reviewed and approved all final design and construction plans for the basement and certified that each of those final plans is consistent with the requirement identified above.

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

3. Assumption of Risk, Waiver of Liability and Indemnity

By acceptance of this permit, the applicant acknowledge and agrees (i) that the site may be subject to hazards due to excavation below ground water level on a water front site; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

4. Conformance of Design and Construction Plans to Geotechnical Information

A. All final design and construction plans, including grading, foundations, site plans, elevation plans, and drainage plans, shall be consistent with all recommendations contained in the Geotechnical Investigation prepared by Geofirm, dated March 12, 2002. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the Executive Director's review and approval, evidence that the geotechnical consultant has reviewed and approved all final design and construction plans and certified that each of those final plans is consistent with all of the recommendations specified in the above-referenced geologic evaluation approved by the California Coastal Commission for the project site.

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

5. Pre- & Post-Construction Eelgrass Surveys

A. Pre Construction Eelgrass Survey. A valid pre-construction eelgrass (Zostera marina) survey shall be completed during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed prior to the beginning of construction and shall be valid until the next period of active growth. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" Revision 8 (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Game. The applicant shall submit the eelgrass survey for the review and approval of the Executive Director within five (5) business days of completion of each eelgrass survey and in any event no later than fifteen (15) business days prior to commencement of any development. If the eelgrass survey identifies any additional eelgrass beyond that identified in the Pre Construction Eel grass Survey prepared by Coastal Resources Management, dated March 24, 2003 within the project area which would be impacted by the proposed project, the development shall require an amendment to this permit from the Coastal Commission or a new coastal development permit.

B. Post Construction Eelgrass Survey. Within one month after the conclusion of construction, the applicants shall survey the project site to determine the extent of eelgrass that was adversely impacted. The survey shall be prepared in full compliance with the "Southern California Eelgrass Mitigation Policy" Revision 8 adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Game. The applicants shall submit the post-construction eelgrass survey for the review and approval of the Executive Director within thirty (30) days after completion of the survey. If additional impacts, beyond the anticipated 43 square feet, are identified, the applicant shall submit, for the review and approval of the executive director, a mitigation plan addressing the additional impacts. The mitigation plan shall reflect that the applicants shall replace all impacted eelgrass at a minimum 1.2:1 ratio on-site, or at another location, in accordance with the Southern California Eelgrass Mitigation Policy. The exceptions to the required 1.2:1 mitigation ratio found within SCEMP shall not apply.

6. Proposed Eelgrass Mitigation Plan

Consistent with the applicant's proposal, the applicant shall undertake the proposed Eelgrass Mitigation Plan, described in the Marine Resources Impact Assessment, prepared by Coastal Resources Management, dated March 24, 2003. Any proposed changes to the approved mitigation plan shall be reported to the Executive Director. No changes to the approved mitigation plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

7. Pre-construction *Caulerpa Taxifolia* Survey

A. Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any development authorized under this coastal development permit (the "project"), the applicants shall undertake a survey of the project area and a buffer area at least 10 meters beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate.

B. The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Game, and the National Marine Fisheries Service.

C. Within five (5) business days of completion of the survey, the applicants shall submit the survey:

i. for the review and approval of the Executive Director; and

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

D. If *Caulerpa taxifolia* is found within the project or buffer areas, the applicants shall not proceed with the project until 1) the applicants provide evidence to the Executive Director that all *C. taxifolia* discovered within the project area and all C. taxifolia discovered within the buffer area have been eliminated in a manner that complies with all applicable governmental approval requirements, including but not limited to those of the California Coastal Act, or 2) the applicants have revised the project to avoid any contact with *C. taxifolia*. No revisions to the project shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

8. CONSTRUCTION RESPONSIBILITIES AND DEBRIS REMOVAL

The permittee shall comply with the following construction-related requirements:

(a) No construction materials, equipment, debris, or waste shall be placed or stored where it may be subject to tidal and wave erosion and dispersion.
(b) Any and all debris resulting from construction activities shall be removed from the site within 10 days of completion of construction.
(c) Machinery or construction materials not essential for project improvements shall not be allowed at any time in the intertidal zone.
(d) Sand from the beach, cobbles, or shoreline rocks shall not be used for construction material.
(e) If turbid conditions are generated during construction a silt curtain shall be utilized to control turbidity.
(f) Measures shall be taken to ensure that barges do not ground and impact eelgrass sites.
(g) Floating booms shall be used to contain debris discharged into coastal waters and any debris discharged shall be removed as soon as possible but no later than the end of each day.
(h) Non-buoyant debris discharged into coastal waters shall be recovered by divers as soon as possible after loss.
(i) Reasonable and prudent measures shall be taken to prevent all discharge of fuel or oily waste from heavy machinery, pile drivers, or construction equipment or power tools into coastal waters. The applicant and applicant's contractors shall have adequate equipment available to contain any such spill immediately.
(j) All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil.
(k) All debris and trash shall be disposed of in the proper trash and recycling receptacles at the end of each construction day.
(l) The applicant shall use the least damaging alternative for the construction of pilings and any other activity that will disturb benthic sediments. The applicant shall limit, to the greatest extent practicable, the suspension of benthic sediments into the water column.

9. Location of Debris Disposal Site

The applicant shall dispose of all demolition and construction debris resulting from the proposed project at an appropriate location. If the disposal site is located within the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place.

10. Deed Restriction

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and approval documentation demonstrating that the landowner has executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. Project Description and Location

The applicant proposes to demolish two existing single family residences and construct a new, two story, 6,881 square foot, 29 foot high at maximum point, single family residence with an attached four car, 887 square foot garage and a 391 square foot basement. In order to accommodate the proposed basement, 148 cubic yards of grading is proposed. Also proposed is a parcel map to combine the multiple existing lots, on which development described above will occur, into a single legal lot.

In addition, replacement of the bulkhead directly in front of the subject property (2210 Channel Road) and extending approximately 30 feet onto the adjacent City owned property (2204 Channel Road), is proposed (see exhibit F). The bulkhead adjacent to the residential lot (2210 Channel Road) is approximately 103 feet in length. The existing bulkhead at 2210 Channel Road is located approximately 3 ½ feet channelward of the property line. It is proposed to be reconstructed in the same location. The existing bulkhead at 2204 Channel Road is located a maximum of approximately 2 feet beyond the property line. That bulkhead is proposed to be relocated landward, back to the property line with the exception of the four feet closest to the bulkhead at 2210 Channel Road. These last four feet curve channelward to join the adjacent bulkhead at 2210 Channel Road.

The existing bulkheads are proposed to be completely removed and replaced with a new bulkhead. The proposed bulkhead will be constructed with 12 inch thick concrete sheet piles. It will have a 1' 10" wide, 2' 6" high cap beam and will be supported at the top by tie-backs connected to a deadman. The top of the new cap beam will be at 8.20' Mean Sea Level (MSL).

Pre-construction Eelgrass and Caulerpa taxifolia Surveys were conducted at the subject site by Coastal Resources Management on March 24, 2003. Eelgrass was found at the subject site (976.5 square feet total), and 43 square feet is expected to be adversely impacted by the proposed project (see exhibit J). The applicant proposes to mitigate the loss, by transplanting eelgrass on-site. No Caulerpa was found at the project site.

The applicant indicates that the location of the disposal site for the excess cut material is "a certified County disposal site." A special condition is imposed that notifies the applicant that if the disposal site is located within the coastal zone, an amendment to this permit or a new coastal development permit is required.

The subject site fronts on Newport Harbor and is between the first public road and the sea. The nearest public access in the project vicinity is located approximately 100 feet north of the subject site at a small public sandy beach. Public access is also available approximately 2 blocks south of the subject site at the wide sandy public beach that runs the length of the Balboa Peninsula and at the Jetty View Park.

B. Applicant's Proposed Project Revisions

In response to staff's recommendation prepared for the Commission's June hearing, the applicant has proposed a revision to the bulkhead portion of the project. The applicant's recently proposed bulkhead alternative includes leaving the existing bulkhead in place and adding reinforcing material on the landward side. Only conceptual plans and partial documentation reflecting the currently proposed project were received on July 16, 2003, just five working days prior to the mailing of this report.

Typically, conceptual plans based on incomplete studies would not be deemed acceptable for coastal development permit review. Such is the case with the applicant's most recent bulkhead proposal. Information such as the number and spacing of the caissons and the width of the reinforcing wall are not yet known. These details are expected to be known after the studies that are currently in progress are completed. Nevertheless, enough of the project is known (such as the location of and the minimum number of caissons, etc.) to determine that the most recent proposal would not be consistent with the Coastal Act. Thus, the staff recommendation includes discussion of the revised bulkhead proposal, but the actual proposal before the Commission remains the removal and replacement of the existing bulkhead channelward of the property line.

C. Protective Structures

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.*

Section 30253 of the Coastal Act states in part:

> *New development shall:*
>
> *(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area…*

The existing bulkhead (seawall) was built in the 1950's. It is deteriorating and does not meet current City standards. An Engineering Assessment was prepared for the bulkhead

replacement portion of the proposed project by AEC Associates, dated April 8, 2003 (see exhibit G). The Engineering Assessment finds:

> *1. The height of the existing seawall is 13.5 feet and the pile penetration in to the soil is only 7.8 feet. The pile penetration to the wall height ratio is unusually low. Our calculations indicated that the safety factor (i.e. capacity/demand) for overturning, which is supposed to be over 1.75, is less than 1.0. The existing seawall is not safe as it is.*
>
> *2. The wall thickness is only 9 inches and the concrete does not appear to be in good condition. When the 9 inch thickness of the existing wall is compared with the required thickness of 12 inches for the new wall, the existing walls inadequacy becomes apparent.*

The existing bulkhead does not comply with current City codes regarding the strength and height requirements of the City of Newport Beach. Due to age, poor quality concrete, inadequate steel reinforcement, and/or deficient tieback systems, aging bulkheads in Newport Beach, such as the one at the subject site, are commonly replaced when redevelopment occurs on bayfront lots.

A bulkhead is required at the subject site to protect the structural integrity of the lots from tidal activity. In addition, the bulkhead is necessary to protect the adjacent residence from tidal activity. If the bulkhead were removed and not replaced, tidal activity would erode the project site and eventually the adjacent lots, destabilizing existing development at those sites which includes a single family residence. Therefore, the proposed bulkhead replacement is necessary to protect an existing structure. Because the proposed bulkhead replacement, as conditioned, will be similar in design and location, it will not create adverse impacts on shoreline sand supply. Thus, maintenance of a functional bulkhead is not only allowable under the Coastal Act, but Section 30235 requires the Commission to approve it. However, that does not resolve the question of the location of the bulkhead.

Section 30230 of the Coastal Act states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 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.*

Section 30230 of the Coastal Act requires that, where feasible, marine resources be restored. It also requires that use of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters. In addition, Section 30231 of the Coastal Act requires that the biological productivity and the quality of coastal waters appropriate to maintain optimum populations of marine organisms be maintained and, where feasible, restored. The proposed bulkhead replacement presents an opportunity to restore marine resources and the biological productivity of coastal waters at the project site.

The length of the bulkhead at the applicant's site is approximately 103 feet. The existing and proposed bulkhead location, according to the Engineering Assessment prepared for the project, encroaches "three feet six inches east of the property line, outside the property." Replacing the bulkhead back onto the property line would restore approximately 300 square feet of intertidal and subtidal habitat area. Intertidal areas support organisms such as barnacles, littorine snails, limpets, and bay mussels. Subtidal areas support species such as octopus, sand stars, walleye surfperch, and other types of fishes. In addition, water-oriented birds may use the area for foraging. Also, the fact that a patch of eelgrass developed immediately adjacent to the existing bulkhead is an indication that additional eelgrass could develop within the restored tidal area. Marine habitat has been lost to development through the years, due to major development as well as in incremental losses. In order to maximize the provision of tidal habitats, the Coastal Act requires that they be restored where feasible.

The existing bulkhead, on both the City's lot and on the applicant's lot, is located channelward of the property line. The proposed bulkhead replacement would relocate the bulkhead at the City's lot back to the property line with the exception of the approximately four southernmost feet, where it connects to the bulkhead at the applicant's lot. At that point the bulkhead is proposed to curve channelward to join with the bulkhead at the applicant's lot. The bulkhead at the applicant's lot is proposed to be reconstructed in the same location where it exists now, except that the northernmost approximately 10 feet will curve landward to tie into the bulkhead proposed at the City lot.

Since the bulkhead portion of the project was originally proposed, the applicant has revised the project. The applicant's recent revision to the bulkhead proposal would

relocate the entire bulkhead at the City's lot back to the property line. The applicant's bulkhead would remain in its existing location. The proposal to relocate the City's bulkhead back to the property line and leave the applicant's bulkhead in its channelward location would create a return wall at a 90-degree angle to the City's wall, extending 3 ½ feet channelward, at the point of connection of the two bulkheads. Rather than remove and replace the bulkhead at the applicant's site, the applicant's revised proposal would retain the existing bulkhead in place, and place 30-inch diameter caissons at the landward side of (behind) the existing bulkhead, construct a poured in place grade beam atop the new caissons and adjacent to the existing bulkhead, and construct a new poured in place concrete or shotcrete wall in the area between the caissons and the existing bulkhead wall and between the caissons themselves. The grade beam and wall will be reinforced with rebar. The area above the new grade beam and behind the existing bulkhead will be backfilled and used as back yard area by the applicant, as it currently is. In addition, new tiebacks will be installed and connected to the existing deadmen. The spacing of the caissons and the thickness of the shotcrete or poured in place wall will be determined by studies currently under way. Core testing of the existing concrete panels and a magnometer evaluation to determine steel content is ongoing to aid in the final structural design of the project. The applicant's engineer, in a letter report prepared by AEC Associates, dated July 15, 2003 (see exhibit K), describes the applicant's most recent bulkhead proposal as follows:

> *"First, caissons will be drilled with casings, then reinforced and concerted. After the concrete in caissons has gained its full strength, the soil behind the wall will be excavated and shotcrete will be applied on the existing wall. A bonding agent will be placed on the surface of the existing wall prior to application of shotcrete. Shotcrete will be connected to the existing wall and the caissons with epoxy anchors. Shotcrete application on the existing wall will be extended below the mud line as required by calculations. After shotcreting is completed, a cap beam will be constructed over the caissons, and it will be connected to the deadmen with tiebacks.*
>
> *In order to make sure that the water table difference between the back and the front of the wall does not exceed 3'-0" (our design criteria) weep holes will be drilled and a filter fabric preventing escape of the soil from the back of the wall will be installed.*
>
> *After the above described work is completed, the existing wall surface will be cleaned, and the existing wall and cap beam will be repaired by sealing cracks and patching the spalled areas by using sealants and epoxies."*

The object of both the original and revised proposals is to bring the existing bulkhead up to current standards and acceptable levels of safety. Because the existing bulkhead would remain in place, the applicant is characterizing the revised project as repair rather than replacement.

However, the scale of the revised bulkhead proposal is such that, in effect, it constitutes a complete new project. Although the actual number of caissons will depend on results of studies currently underway, the engineering consultant indicates, in a letter dated July 15,

2003: "At this point, it is reasonable to assume that the caissons will be 7'-0" to 9'-0" on center and shotcrete thickness will be 10 to 12 inches." If that is indeed the design standard necessary, that would result in, given the 103 foot length of the bulkhead, eleven, 30-inch diameter caissons and a 103 foot long wall with a width of 10 to 12 inches, as well as new grade beam and tiebacks. Further, the existing bulkhead wall is 9 inches wide. The additions to the wall would be more than 30 inches wide as the proposed width of the caissons is 30 inches. In addition to the caissons there would be 10 to 12 inches of shotcrete wall. Although some of the shotcrete wall width would overlap with the width of the caissons, it will extend beyond the 30 inch width of the caissons. Based on the width of the caissons alone, the proposed addition to the bulkhead will be more that three times the width of the existing bulkhead. In addition, the new tiebacks would be connected to the new grade beam, not the existing bulkhead. Thus, due to its scope, the applicant's most recent bulkhead proposal cannot be considered repair.

In addition, the engineering consultants conclude that the revised bulkhead proposal will provide "the same structural integrity of the previously proposed replacement." The proposed project is not identified as a structurally superior alternative, but as an equivalent alternative to relocating the bulkhead. Thus, relocation of the bulkhead remains a viable option.

The Commission sometimes allows existing non-conformities (such as the existing bulkhead's location) to remain, if there is a demonstrated need for the non-conforming structure to remain (such as protecting existing structures that would otherwise be jeopardized), and if it is physically extremely difficult or impossible to remove the non-conforming structure (such as access cannot be obtained without demolishing existing development or existing development would become threatened if the non-conformity were removed). None of these special circumstances apply in this case. As is demonstrated by the original proposal, relatively routine methods of removing the existing bulkhead without creating hazardous situations exist. In addition, the existing residential structures at the site are to be demolished, thereby creating the optimum opportunity to access the bulkhead free of structural barriers. Also, wit removal of the on-site residential structures, any potential concern of putting them in jeopardy is eliminated. Thus, there is no basis for allowing the bulkhead to remain in its current non-conforming location. In fact, the proposed development presents an optimum opportunity for correcting the non-conformity. Moreover, relocating the bulkhead to the property line is an economically viable option as it would not require the applicant to relinquish any privately owned property.

As described above, Section 30235 requires that a bulkhead be approved at the subject site. But in addition to Section 30235 of the Coastal Act, the project must also conform to Sections 30230 and 30231 which state that marine resources and biological productivity be restored where feasible. The appropriate location of the bulkhead will be determined, at least in part, by these requirements of 30230 and 30231. Intertidal area is a marine resource, the expansion of which increases biological productivity. In order to restore all intertidal area at the site, the bulkhead would need to be placed landward of the natural high tide line. No information has been provided regarding where the natural high tide line would fall if the bulkhead were to be permanently removed from the site. However, based on the configuration of the sandy public beach that exists on the other side of the City lot

that is part of this application, it is not unreasonable to assume it would be a minimum of 50 feet landward of the applicant's property line, half of the property's 100 foot depth. Locating the bulkhead in this vicinity would effectively halve the area of the lot. But Sections 30230 and 30231 of the Coastal Act only require restoration where feasible. Section 30108 of the Coastal Act defines feasible as follows: "*capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors.*"

Relocating the bulkhead inland of the natural high tide line would be feasible from an environmental standpoint, but not from an economic, social, and technical standpoint. The economic infeasibility flows from a number of factors. Among them are the fact that it would deprive the applicant of use of approximately half of his property in an area where residential use of the property is a legally recognized use of the site (as described in Section F of this staff report) and the legal use of the property has been accepted as residential for 50 years. The fill that created the lot occurred legally. Yard area is a use reasonably associated with residential uses. Depriving the applicant of the legally recognized use of the majority of his property in this context would strain the economic feasibility of the project.

Placing the bulkhead inland of the natural high tide line would also result in a social inequity, in that it would place a significantly greater burden on the applicant than is placed on his neighbors. The lots in the surrounding area are similar in size and use to the long time size and use of the applicant's property. The appropriate location of the bulkhead must take into consideration equity with the neighboring properties and with past legal use at the site.

In addition, if the Commission considered the appropriate location of bulkheads in the harbor generally, on a case by case basis without regard to existing, neighboring bulkheads in the vicinity, uniform bulkhead alignments would be lost. Uniform bulkhead alignments provide maximum tidal flushing which is necessary to promote biological productivity and help to prevent adverse impacts on local shoreline sand supply. Thus, relocating the bulkhead inland of the natural high tide line is not technologically feasible in a way that maximizes other critical Coastal Act goals. In the case of the subject site, locating the bulkhead inland of the high tide line would result in construction of a return wall approximately 50 feet long in order to tie into the neighboring residential property. In creating such a large jag in the wall, such an alignment could result in adverse impacts to shoreline sand supply and would not provide maximum tidal flushing. It may also put the neighboring residence in jeopardy during construction.

Although no one of these reasons standing alone would necessarily result in a finding of infeasibility, for all of these reasons, restoring all of the potential intertidal area at the subject site is not a feasible alternative. An alternative that maximizes the amount of intertidal area restored while recognizing that 30230 and 30231 require feasible restoration, not total restoration, must be developed. A feasible alternative lies somewhere between leaving the bulkhead in its existing location, which precludes any restoration, and, relocating the bulkhead landward of the natural high tide line, which would result in total restoration but, as described above, is not feasible.

In identifying the property line as the appropriate location for relocating the bulkhead, a number of factors were considered. The factors considered include the following. It meets the definition of feasible. It provides equity with existing development in the vicinity. It will not create major jags in the continuity of the bulkhead along this stretch of the harbor. And, it is consistent with the adjudicated bulkhead line.

It meets the definition of feasible in that removal and replacement of the bulkhead has been demonstrated to be feasible as that was the applicant's original proposal and it does not require the applicant to give up any privately owned property. In the 1920s a bulkhead line was adjudicated to define the boundary between public and private land in Newport Harbor. Although the bulkhead line cannot provide a basis for locating a bulkhead if such application results in inconsistencies with Coastal Act mandates, such as unallowable fill of coastal waters, it otherwise can provide a uniform and equitable bulkhead location throughout the harbor. Also, in this case it will apply equally to all the channel front homes along Channel Road, resulting in a uniform and continuous bulkhead across those lots.

The subject site is one of a number of a string of lots (approximately 10-15) along Channel Road with adjoining bulkheads. The bulkheads along these lots create, essentially, one long bulkhead. There is no record of Commission action on these bulkheads. Thus, the subject bulkhead is apparently the first to be brought up to current standards. The subject bulkhead is 50 years old. It is reasonable to assume that the adjoining bulkheads are of a similar age and in a similar stage of wear. Although, at this point, it is not certain that all of these bulkheads are similarly located beyond the property lines, it is a reasonable assumption given that this is true at the subject site and at the sites on either side of it. This assumption is supported by the following statements contained in a letter from the engineering consultant prepared by Haro, Kasunich and Associates, Inc., dated July 15, 2003 (see exhibit):

> *"The concrete panels* [of the original, exiting bulkhead] *were jetted in place, beyond the applicant's property line and in alignment with other adjacent properties fronting the Newport Harbor Channel."*
>
> *"The wall* [existing bulkhead] *appears plum at the subject property and along the up channel properties."*

Especially because this project appears to be the first in this stretch of connected bulkheads, it is important that the requirement to restore marine resources, where feasible, and eliminate existing non-conforming encroachment onto public land, be imposed. As the other adjoining bulkheads are likely to be of a similar age as the subject bulkhead and stage of wear, it is very probable that, as redevelopment occurs on those lots, those bulkheads too will need to be brought up to current standards. If the subject bulkhead is not relocated back to the property line, the opportunity to create a uniform bulkhead along all the adjoining properties is seriously jeopardized. In addition, creating a uniform bulkhead along the property line would restore a significant amount of tidal area. Based on 24 lots, approximately 30 feet wide, times an estimated encroachment of 3 feet, yields an estimate of 2,160 square feet of tidal area that potentially would be restored. Finally, as

discussed previously, the proposed demolition presents an optimum opportunity to feasibly remove the bulkhead and relocate it.

The applicant feels that the revised bulkhead proposal should be considered the best alternative because, he feels, there are public benefits associated with it. One benefit, identified by the applicant, associated with the project revision is that no harbor side disturbance would occur. The applicant asserts that if the existing bulkhead remains in place, the existing 43 square foot patch of eelgrass immediately adjacent to the bulkhead would not be lost. The previous proposal to remove and replace the bulkhead would result in the loss of that patch of eelgrass. However, the proposed revisions to the bulkhead project do not entirely eliminate the possibility that the eelgrass patch may be adversely impacted. Significant work will be occurring within 9 inches (width of existing wall) of the eelgrass. Work in such close proximity to the eelgrass could inadvertently impact the eelgrass if equipment, debris, concrete, epoxies, etc, accidentally fell or were deposited onto the eelgrass. In addition, the revised bulkhead proposal includes the following work (after construction of the shotcrete wall, caissons, grade beam, etc.): "the existing wall surface will be cleaned, and the existing wall and cap beam will be repaired by sealing cracks and patching the spalled areas by using sealants and epoxies." In addition, weep holes are proposed to be drilled into the existing bulkhead wall. Cleaning and patching the existing wall (bulkhead) would have to be performed on the harbor side of the bulkhead. The drilling of weep holes could possibly be conducted from the landward side, but even if it is, is could result in deposition onto the eelgrass. Thus all work on the harbor side of the existing development is not entirely eliminated by the revised bulkhead proposal. Although impacts to eelgrass are not anticipated, given the factors cited above, the possibility that impacts would still occur is not eliminated entirely with the revised bulkhead proposal. In addition, since eelgrass exists in this location now, we have every reason to believe that eelgrass could re-establish upon completion of construction of the new bulkhead.

The applicant has also identified the proposed replacement of the bulkhead at the City property as a public benefit. As proposed, the City's bulkhead would be replaced by the applicant. The reconstructed City bulkhead would be relocated onto the property line. The existing bulkhead at the City site also does not meet current safety standards.

The applicant asserts that the public benefits arising from the applicant's reconstruction of the City bulkhead include: 1) the cost of replacing the bulkhead will be borne by the applicant and not the City, 2) the replaced bulkhead protects a public beach and so preserves public access, and 3) the tidal area channelward of the City's bulkhead will be protected from adverse impacts from gradual sand migration from behind the existing bulkhead and from outright deposition should the bulkhead actually fail, and 4) the City bulkhead is proposed to be reconstructed back onto the property line which will restore approximately 40 square feet of tidal area.

However, the cost of rebuilding the bulkhead will be credited toward lease payments for the public area occupied by the applicant's bulkhead as proposed. Thus the cost of replacing the City's bulkhead would not be a gift from the applicant, but rather a payment for a benefit received (private development on public property). In addition, if the City's bulkhead remains as is, the applicant would need to construct a return wall along his side

property line which would involve a similar cost to the applicant. Therefore, the applicant's proposed assumption of the cost to reconstruct the City's bulkhead does not actually create a public benefit.

The City lot that is protected by the existing City bulkhead is a beach area with certain amenities such as barbeques, shade structures, and tables. However, this area is leased by the City to the Balboa peninsula area's homeowner's association for their exclusive use and so it is not available to the general public. Thus, replacing the City's bulkhead will not contribute to the provision of public access.

Replacing the City's bulkhead will protect existing, as well as restore approximately 40 square feet, of tidal habitat area. The Commission cannot require a property owner to undertake development when none is proposed. There may however, be other standards required by entities other than the Coastal Commission, which would require that hazards be abated (if the bulkhead reaches a state of immediate danger). Though abating any hazard resulting from the City's bulkhead's future deterioration would not be the applicant's responsibility. Replacing the bulkhead would stabilize not just the City's lot, but the applicant's as well. The fact that sand will no longer leak onto tidal area is an unavoidable (and desirable) consequence of replacement. However, whenever the City's bulkhead was proposed for replacement, the requirement to relocate it back to the property would appropriately be imposed regardless of who the applicant is. Thus, while there will be a public benefit in the amount of tidal area that will be protected/restored, the benefit would occur with any proposal to replace the bulkhead because the project could not be found to be consistent with the Coastal Act otherwise.

In order to maximize the area of tidal habitat restoration as required by Sections 30230 and 30231 of the Coastal Act, the bulkhead must be relocated back onto the property line. In order to assure that restoration occurs a special condition is imposed that requires that the bulkhead be relocated back to the property line for the entire length of the property line with the following exception.

As described previously, restoration of subtidal and intertidal habitat is feasible at the subject site. Sections 30230 and 30231 of the Coastal Act require that where the restoration is feasible, it shall occur. However, the Commission also recognizes that, to be structurally effective, the applicant's bulkhead must tie into the neighboring bulkhead to the south. Because the neighboring bulkhead to the south encroaches beyond the property line, the Commission recognizes that there must be some encroachment to provide a structurally sound tie in.

In order to minimize encroachment onto restorable public land, while still providing a structurally sound project, a special condition is imposed which requires that the applicant incorporate into the design of the bulkhead one of the following two options: either 1) the southernmost three feet of the bulkhead may extend channelward at a 45 degree angle as necessary to tie into the existing bulkhead to the south; or, 2) the entire bulkhead shall be located at the property line and, additionally, a return wall shall be constructed at the southern end of the bulkhead at a 90 degree angle to the bulkhead as necessary to tie into the neighboring bulkhead. In either case, the applicant shall agree to remove the

encroachment at such time as the neighboring bulkhead is proposed to be upgraded, repaired, and/or replaced.

The existing bulkhead does not meet current City standards and poses a risk to property because lot stability may be threatened by failure of the aging, deteriorating existing bulkhead. Substantial work on the existing bulkhead is required to make it structurally sound enough to protect lot stability and existing development. The amount of work necessary to accomplish the bulkhead revisions as proposed exceeds that which can reasonable be considered repair. Thus the existing, non-conformity must be corrected. As conditioned to minimize encroachment beyond the property line, the proposed development will protect and restore marine resources and biological productivity, as required by Sections 30230 and 30231 of the Coastal Act. In addition, as conditioned, the project will provide structural integrity as required by Section 30253 of the Coastal Act. Therefore, the Commission finds that the proposed development, only as conditioned, conforms with Sections 30230, 30231, 30235 and 30253 of the Coastal Act.

D. Marine Resources

Section 30230 of the Coastal Act states:

> *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 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.*

1. Water Quality

   a. Site Drainage

The project site fronts on Newport Harbor. Drainage from the site is proposed to be pumped back to the street. However, drainage from the street will enter the City's storm drain system which empties into Newport Harbor (Lower Newport Bay). Newport Bay is on the federal Clean Water Act 303(d) list of "impaired" water bodies. See 33 U.S.C. Section 1313(d). The designation as "impaired" means that water quality within the harbor

does not meet State and/or Federal water quality standards designed to meet the 1972 Federal Clean Water Act goal established for this 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. Further, 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. Sections 30230 and 30231 of the Coastal Act require the protection of biological productivity, public recreation, and marine resources.

Development adjacent to coastal waters has the potential to impact water quality and marine resources. The bay provides an opportunity for water oriented recreation and also serves as a home for marine habitat. The coastal recreational activities and the sensitivity of the bay habitat necessitate that water quality issues are addressed during the review of this project.

The proposed residential development has impervious surfaces, such as roofs where pollutants such as particulate matter may settle, as well as driveways where pollutants such as oil and grease from vehicles may drip. During storm events, the pollutants which have collected upon the roof and upon other impervious surfaces created by the proposed project may be discharged from the site into the storm water system and eventually into coastal waters which can become polluted from those discharges. Water pollution results in decreases in the biological productivity of coastal waters.

Typically, water quality impacts to coastal waters can be avoided or minimized by directing storm water discharges from roof areas and other impervious surfaces to landscaped areas where pollutants may settle out of the storm water. In addition, reducing the amount of impervious surface area and increasing pervious areas, allowing water to infiltrate, can improve water quality by decreasing the amount of run-off leaving the site. Also directing runoff to filtration devices such as trench drains when it cannot feasibly be directed to landscaped areas further increases water quality.

The applicant has submitted a grading plan depicting the site drainage. The grading/drainage plan indicates that most of the site drainage will be directed to landscaped areas to the maximum extent feasible. The remaining site drainage will be directed to a pump and pumped to the street. The drainage lines that lead to the pump will be perforated to allow water to permeate through the site as it travels to the pump. In addition, the pump will be connected via perforated pipe to a drainage pit, which will collect overflow, allowing it to permeate back into the site. Thus, as proposed the site drainage will permeate on site to the maximum extent feasible, and untreated runoff from the site will be minimized. Therefore the Commission finds that the project will protect coastal water quality and the related recreational activities, marine resources and biological productivity. Therefore, with regard to site drainage, the Commission finds that the proposed development is consistent with Sections 30230 and 30231 which require that coastal water quality be maintained and enhanced.

b. Basement Dewatering

The proposed development includes 148 cubic yards of excavation to accommodate a 375 square foot basement. A Geotechnical Investigation was prepared for the site by Geofirm and is dated March 12, 2002. The Geotechnical Investigation observed a maximum ground water depth of 8.8 feet below grade. The floor of the basement will be located approximately 10 feet below grade, below anticipated groundwater levels. Thus, de-watering will be necessary during construction of the basement. De-watering is not anticipated to be necessary once construction is complete.

Sections 30230 and 30231 of the Coastal Act require that adverse effects from the proposed de-watering on coastal waters and the marine environment be minimized. In order to assure that these adverse effects are minimized, best management practices (BMPs) must be incorporated into the project. BMPs are used for many reasons including to reduce the magnitude of pollutants introduced into coastal waters.

The proposed de-watering during construction will involve the following measures. The groundwater is proposed to be pumped from screened well points into a desilting tank where suspended solids will be allowed to settle out. From that point the water will gravity flow into an adjacent water storage tank, allowing further settling to occur. Water samples will be taken at that point. Clean water will be pumped either into the storm drain (which ultimately flows into Newport Harbor) or will be pumped directly into the harbor.

In addition, the proposed de-watering project has received approval from the California Regional Water Quality Control Board (RWQCB), Santa Ana Region (see exhibit D). Under the terms of Order No. 98-67, the de-watering project is required to be consistent with Monitoring and Reporting Program No. 98-67-144, which specifies the frequency of sampling and the constituents to be monitored.

The Geotechnical investigation prepared for the proposed project states:

> "*Groundwater is anticipated above the required construction excavations and the future basement level at all times. Thus dewatering of the site should be anticipated for basement construction and fail proof waterproofing of subgrade construction will be required. Retaining walls must be designed to resist partial hydrostatic loading and the foundation/basement slab will need to be designed to accommodate hydraulic uplift forces. A possible rise in ground water to elevation 8 feet, 6.5+/- feet above the anticipated basement floor elevation, should be considered in hydraulic uplift forces and hydrostatic loading on retaining walls.*"

If the proposed basement level is designed to resist hydrostatic loading and to accommodate hydraulic uplift forces and fail proof waterproofing is incorporated into the design, as recommended in the Geotechnical Investigation, the likelihood that de-watering may be needed after construction is substantially decreased. If de-watering does not need to occur after construction, the ground water will remain in place, eliminating the need for it to be pumped to the storm drain and ultimately to the ocean. Pumping ground water introduces the possibility of contact with contaminants during the pumping and discharge process. Such contaminants, along with any that may already exist in the ground water, are then discharged into coastal waters. Thus, if pumping is avoided, adverse impacts to coastal waters are minimized.

It appears to be the applicant's intent to construct the basement level as recommended by the geotechnical consultant. However, it is not explicitly stated in the application.

Therefore, in order to assure that the basement level is constructed in a manner that will minimize the need for extended de-watering, and thus minimize adverse impacts to coastal waters, a special condition is imposed which requires that the basement level be designed and constructed to resist hydrostatic loading, to accommodate hydraulic uplift forces, and to incorporate fail proof waterproofing, per the geotechnical recommendations. The applicant shall, as a condition of approval, submit evidence that the proposed project has been reviewed and approved by an appropriate licensed professional, indicating that the basement is designed to resist hydrostatic loading, to accommodate hydraulic uplift forces and to incorporate fail proof waterproofing.

Best management practices have been incorporated into the proposed project's de-watering component. These include directing the groundwater to settling tanks prior to discharge, and conformance with the sampling and monitoring requirements of the RWQCB. In addition to these measures, the project has been conditioned to assure that the basement level will be designed to resist hydrostatic loading, to accommodate hydraulic uplift forces, and to incorporate fail proof waterproofing. This special condition is necessary to minimize the likelihood of future de-watering and associated adverse water quality impacts. Therefore, the Commission finds, that as conditioned, the proposed development is consistent with Sections 30230 and 30231 which require that coastal water quality be maintained and enhanced.

c. Temporary Construction Related Impacts due to Bulkhead Replacement

The proposed project includes replacement of an existing bulkhead which will take place in the coastal waters and marine environment of Newport Harbor. The storage or placement of construction material, debris, or waste in a location where it could be discharged into coastal waters would result in an adverse effect on the marine environment. To reduce the potential for construction related impacts on water quality, the Commission imposes a special condition requiring, but not limited to, the appropriate storage and handling of construction equipment and materials to minimize the potential of pollutants to enter coastal waters. In order to avoid adverse construction-related impacts upon marine resources, Special Condition No. 8 outlines construction-related requirements to provide for appropriate construction methods as well as the safe storage of construction materials and the safe disposal of construction debris. The Commission imposes Special Condition No. 8 to reduce the potential for construction related impacts to water quality. As conditioned, the Commission finds that the development conforms with Sections 30230 and 32031 of the Coastal Act.

2. Eelgrass and other Sensitive Species Impacts

a) Eelgrass

Section 30230 of the Coastal Act requires that special protection be given to areas and species of special biological significance. Eelgrass is considered worthy of protection because it functions as important habitat for a variety of fish and other wildlife, according to the Southern California Eelgrass Mitigation Policy (SCEMP) adopted by the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (CDFG).

The applicant has submitted a Marine Resources Impact Assessment (Assessment), prepared by Coastal Resources Management, dated March 24, 2003, which includes an eelgrass survey. The eelgrass survey identifies the presence of 976.5 square feet of eelgrass in the project vicinity (see exhibit J). The Assessment found that the proposed project would result in the loss of 43 square feet of eelgrass vegetation. The loss is unavoidable because the 43 square feet of eelgrass is located immediately adjacent to the bulkhead. The remaining eelgrass is located further channelward and so not expected to be impacted by the project.

The proposed bulkhead replacement will be conducted from both the land and water sides of the project. Vessels are proposed to be used during construction, but the applicant's contractor has stated that anchoring will not be required. In addition, the existing bulkhead is proposed to be removed using a land-based crane. Thus with the exception of the loss of eelgrass immediately adjacent to the bulkhead, construction methods are not expected to adversely impact the remaining eelgrass.

To mitigate the loss of 43 square feet of eelgrass, the applicant has proposed an eelgrass mitigation plan that follows the guidelines contained in the Southern California Eelgrass Mitigation Policy (SCEMP) Guidelines by the National Marine Fisheries Service. Under the guidelines, for every one square meter of disturbance, 1.2 square meters of new suitable habitat vegetated with eelgrass must be created. In this case, the proposed mitigation will include: collecting donor material from the eelgrass patches that would have been destroyed during construction of the bulkhead; replanting of the donor eelgrass by divers within a 1 meter wide by 5 meter long area. The eelgrass is proposed to be replanted at the subject site approximately 35 feet channelward of the bulkhead project. The transplant total will consist of eighteen, 0.3 square meter eelgrass plugs, planted in five rows consisting of 3 plugs on 0.3 square meter centers. In all, a total of 51.6 (43 x 1.2 = 51.6) square feet of eelgrass is proposed to be transplanted. The Assessment expects the replanted eelgrass to do well, and states: "This site currently supports eelgrass, and the chances for eelgrass survival are high." Finally, the mitigation is proposed to include monitoring surveys at intervals of 3 months, 6 months, 12 months, 24 months, 36 months, 48 months, and 60 months following the completion of transplant. The monitoring program will assess eelgrass aeral cover, percent cover and shoot density. If yearly criteria are not met, a replant will be conducted. In order to assure that the eelgrass mitigation plan is carried out, special condition 6 is imposed which requires the applicant to conduct the mitigation plan as proposed.

The eelgrass survey in the proposed mitigation plan was conducted on March 24, 2003. Due to the ephemeral nature of eelgrass, however, an eelgrass certification is only valid for 120 days. A coastal development permit does not expire for two years and may be extended. Thus between the date of the eelgrass survey included in the Assessment, and commencement of construction, the amount of eelgrass present at the subject site could increase. In addition, even though the eelgrass inspection indicates that 933 square feet of on-site eelgrass will not be impacted by the proposed project, there is the potential that construction activity may result in greater impacts to eelgrass than anticipated. If additional, unanticipated impacts to eelgrass result from the proposed project, these additional adverse impacts would need to be mitigated. Therefore, measures to avoid or

minimize potential unanticipated impacts must be in place in order for the project to be found consistent with Section 30230 of the Coastal Act. Therefore, the Commission imposes Special Condition No. 5 which requires that a current pre-construction eelgrass survey be conducted during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed within 120 days prior to the beginning of construction and shall be valid until the next period of active growth. The pre-construction survey will identify whether any additional eelgrass has established since the time of the last survey. If the eelgrass survey identifies new eelgrass within the project area which could be impacted by the proposed project, the development shall require an amendment to this permit from the Coastal Commission or a new coastal development permit. An amendment or new permit is required in order to address any eelgrass impacts beyond the 43 square feet currently identified.

The survey shall be prepared in full compliance with the SCEMP adopted by the Marine Fisheries Service. This pre-construction survey will document the presence of any eelgrass in the project area. The applicant shall submit the updated eelgrass survey for the review and written approval of the Executive Director within five (5) working days of completion of the updated survey and no later than ten (10) working days prior to commencement of construction

Mitigation for impacts to eelgrass is necessary in order for the project to be consistent with Section 30230 of the Coastal Act. Therefore, the Commission imposes Special Condition 5, which requires that the eel grass mitigation plan be carried out as proposed.

b) Caulerpa taxifolia

Recently, a non-native and invasive aquatic plant species, *Caulerpa taxifolia* (herein C. taxifolia), has been discovered in parts of Huntington Harbor (Emergency Coastal Development Permits 5-00-403-G and 5-00-463-G). Huntington Harbor provides similar habitat to that found in Newport Harbor.

C. taxifolia is a tropical green marine alga that is popular in the aquarium trade because of its attractive appearance and hardy nature. In 1984, this seaweed was introduced into the northern Mediterranean. From an initial infestation of about 1 square yard it grew to cover about 2 acres by 1989, and by 1997 blanketed about 10,000 acres along the coasts of France and Italy. Genetic studies demonstrated that those populations were from the same clone, possibly originating from a single introduction. This seaweed spreads asexually from fragments and creates a dense monoculture displacing native plant and animal species. In the Mediterranean, it grows on sand, mud and rock surfaces from the very shallow subtidal to about 250 ft depth. Because of toxins in its tissues, C. taxifolia is not eaten by herbivores in areas where it has invaded. The infestation in the Mediterranean has had serious negative economic and social consequences because of impacts to tourism, recreational diving, and commercial fishing[1].

[1] References
Meinesz, A. (Translated by D. Simberloff) 1999. Killer Algae. University of Chicago Press

Because of the grave risk to native habitats, in 1999 C. taxifolia was designated a prohibited species in the United States under the Federal Noxious Weed Act. In addition, in September 2001 the Governor signed into law AB 1334 which made it illegal in California for any person to sell, possess, import, transport, transfer, release alive in the state, or give away without consideration various Caulerpa species including C. taxifolia.

In June 2000, C. taxifolia was discovered in Aqua Hedionda Lagoon in San Diego County, and in August of that year an infestation was discovered in Huntington Harbor in Orange County. Genetic studies show that this is the same clone as that released in the Mediterranean. Other infestations are likely. Although a tropical species, C. taxifolia has been shown to tolerate water temperatures down to at least 50°F. Although warmer southern California habitats are most vulnerable, until better information if available, it must be assumed that the whole California coast is at risk. All shallow marine habitats could be impacted.

In response to the threat that C. taxifolia poses to California's marine environment, the Southern California Caulerpa Action Team, SCCAT, was established to respond quickly and effectively to the discovery of C. taxifolia infestations in Southern California. The group consists of representatives from several state, federal, local and private entities. The goal of SCCAT is to completely eradicate all C. taxifolia infestations.

The applicant has submitted a Caulerpa Taxifolia survey dated March 24, 2003. The survey found that no Caulerpa was present in the project vicinity. A coastal development permit is valid for two years from the date of Commission action. In addition, the life of the permit may be extended beyond that. There is no guarantee that the project will commence immediately upon receipt of the coastal development permit. Caulerpa Taxifolia could establish within the project vicinity between the time of the last survey and commencement of construction. For this reason the Commission requires a survey to be conducted prior to commencement of construction.

Chisholm, J.R.M., M. Marchioretti, and J.M. Jaubert. Effect of low water temperature on metabolism and growth of a subtropical strain of Caulerpa taxifolia (Chlorophyta). Marine Ecology Progress Series 201:189-198

Ceccherelli, G. and F. Cinelli. 1999. The role of vegetative fragmentation in dispersal of the invasive alga Caulerpa taxifolia in the Mediterranean. Marine Ecology Progress Series 182:299-303

Smith C.M. and L.J. Walters. 1999. Fragmentation as a strategy for Caulerpa species: Fates of fragments and implications for management of an invasive weed. Marine Ecology 20:307-319.

Jousson, O., J. Pawlowski, L. Zaninetti, A. Meinesz, and C.F. Boudouresque. 1998. Molecular evidence for the aquarium origin of the green alga Caulerpa taxifolia introduced to the Mediterranean Sea. Marine Ecology Progress Series 172:275-280.

Komatsu, T. A. Meinesz, and D. Buckles. 1997. Temperature and light responses of the alga Caulerpa taxifolia introduced into the Mediterranean Sea. Marine Ecology Progress Series 146:145-153.

Gacia, E. C. Rodriquez-Prieto, O. Delgado, and E. Ballesteros. 1996. Seasonal light and temperature responses of Caulerpa taxifolia from the northwestern Mediterranean. Aquatic Botany 53:215-225.

Belsher, T. and A. Meinesz. 1995. Deep-water dispersal of the tropical alga Caulerpa taxifolia introduced into the Mediterranean. Aquatic Botany 51:163-169.

If C. taxifolia is present, any project that disturbs the bottom could cause its spread by dispersing viable tissue fragments. In order to assure that the proposed project does not cause the dispersal of C. taxifolia, the Commission imposes Special Condition No. 7. Special Condition No. 7 requires the applicant, prior to commencement of development, to survey the project area for the presence of C. taxifolia. If C. taxifolia is present in the project area, no work may commence and the applicants shall seek an amendment or a new permit to address impacts related to the presence of the C. taxifolia, unless the Executive Director determines that no amendment or new permit is required.

E. Hazard

Section 30253 of the Coastal Act states, in part:

> *New development shall:*
>
> *(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The subject site is a harbor front lot. The proposed project includes 148 cubic yards of cut to accommodate the proposed basement. Sub-grade excavation that extends below groundwater level on a waterfront lot creates the potential for instability at the site. Section 30253 of the Coastal Act requires that new development assure stability and structural integrity. A site specific Geotechnical Investigation was prepared for the proposed development by Geofirm, dated March 12, 2002. Preparation of the Geotechnical Investigation included review of pertinent geotechnical maps and literature; reconnaissance of the property and nearby areas; excavation and logging of two exploratory borings in order to determine the distribution and character of subsurface materials, the elevation of groundwater, and to obtain bulk soil samples for laboratory testing; and monitoring of groundwater levels to evaluate groundwater response in relation to tidal fluctuation.

The Geotechnical investigation prepared for the proposed project states:

> "*Groundwater is anticipated above the required construction excavations and the future basement level at all times. Thus dewatering of the site should be anticipated for basement construction and fail proof waterproofing of subgrade construction will be required. Retaining walls must be designed to resist partial hydrostatic loading and the foundation/basement slab will need to be designed to accommodate hydraulic uplift forces. A possible rise in ground water to elevation 8 feet, 6.5+/- feet above the anticipated basement floor elevation, should be considered in hydraulic uplift forces and hydrostatic loading on retaining walls.*"

Regarding the feasibility of the proposed project the Geotechnical Investigation concludes:

> "*Development of the property for proposed construction is considered geotechnically feasible and safe if the recommendations of this report are followed in design, construction, and long-term maintenance of the property.*"

The geotechnical consultant has found that the proposed development is feasible provided the recommendations contained in the Geotechnical Investigation prepared by the consultant are implemented in design and construction of the project. The geotechnical recommendations address grading, removal of existing improvements, compaction standards, acceptable construction slopes, structural design of foundations, structural design of retaining walls, monitoring, dewatering, concrete, seismic design, hardscape design, utility trench backfill, foundation plan review, observation and testing, and jobsite safety. In order to assure that risks are minimized, the geotechnical consultant's recommendations must be incorporated into the design of the project. As a condition of approval the applicant shall submit grading and foundation plans indicating that the recommendations contained in the Geotechnical Investigation prepared by Geofirm, dated March 12, 2002, have been incorporated into the design of the proposed project.

In addition, the Commission imposes a special condition which makes the applicant and any future owners aware of the inherent risk involved with excavation below ground water level on waterfront lots.

The Commission finds that only as conditioned as described above, can the proposed development be found to be consistent with Section 30253 of the Coastal Act. As conditioned, the Commission finds the proposed development is consistent with Section 30253 of the Coastal Act which requires that risks be minimized and geologic stability be assured.

F. Parcel Map

The proposed project includes lot consolidation and recordation of a new parcel map. The new parcel map is to be recorded to combine two existing lots (23 and 24), a third lot known as the northern half of Lot 22[2], and two other lots created out of lettered lot "M,"[3] all

---

[2] Lot 22 was divided into two separate lots when the northern half of the lot was sold off along with Lot 23, in 1925. However, the two portions were never renumbered. For convenience, this report continues the tradition of referring to the entire area that was originally created as Lot 22 (as part of a 1923 subdivision) as "Lot 22." The portion of Lot 22 subject to this permit is the same portion that was sold with Lot 23 in 1925, and which has technically continued to exist as a separate parcel ever since. Thus, it is its own, separate legal lot, but it is nevertheless referred to herein as the "northern half of Lot 22."

[3] Much in the same way that Lot 22 was divided in two in 1925 (see prior note), it is also true that the area referred to as "Lot M" throughout this report actually comprises multiple, separate lots. Originally, the entire "Lot M area" was created as a single lot, as part of the subdivision of a large parcel of land in the Newport Peninsula area in 1923. However, also as part of that subdivision, 24 separate lots were created adjacent to (and west of) Lot M, along Channel Road (numbered as Lots 2-25 in Block P of Tract 518 – see Exhibit E). As at least some of those lots within Block P were sold off, Lot M was divided up, and "that portion of Lot M" lying directly adjacent to any given numbered lot was sold off *with* the numbered lot. Consequently, the area

into a single legal lot. All of the lots underlie the proposed residential and associated development. Proposed development within the portion of Lot M to be consolidated includes hardscape, planters, and a portion of the pool. The lot consolidation is a routine requirement of the City when development crosses lot lines.

The City's certified Land Use Plan (LUP) maps indicate that Lot M, which is adjacent to the harbor, is designated Recreational and Environmental Open Space (REOS). Commission staff brought this to the attention of the applicant and questioned whether including Lot M in the lot consolidation and constructing residential and associated development on it was appropriate. The applicant responded by providing the history of the lots dating back to the 1920s. In addition, City staff provided information as to why they believe their land use map was altered such that the REOS designation was inadvertently and unintentionally shown as applying to Lot M.

In 1989 the Commission approved LUP amendment (LUPA) 1-89 to the City's certified LUP. LUPA 1-89 was a comprehensive update to the LUP, which was originally certified in 1982. As part of the comprehensive update, the amendment replaced the existing black and white LUP maps with new, larger scale, colored maps. The previously certified (prior to the 1989 LUP amendment) LUP maps do not identify Lot M as REOS. In the originally certified maps, there is no land use designation distinction between Lot M and the adjacent residential lots. City staff has indicated that the apparent change in land use designation for Lot M was a mistake caused by the City's new (in 1989) GIS system. Apparently, a small portion of Lot M that is technically a separate legal lot falls within Jetty View Park. The portion in Lot M that falls within the park was and is designated REOS. Perhaps because Lot M was not shown as the separate legal lots that it really is, in preparing the new colored maps, the GIS system did not differentiate between the portion of Lot M that was designated REOS because it was part of the park, and the remainder of Lot M, which was designated Low Density Residential. Instead, the GIS system simply showed the REOS designation as applying to the entire Lot M.

In addition to the background information provided by the City, the applicant has submitted a history of the subject lots dating back to the 1920s. As is explained in detail in footnote 2, the portion of Lot M that abuts residential lots (including the subject lots) was segmented and joined to the adjacent residential lots in approximately 1923. The Lot M segments have been in separate, private ownership since at least that time.

The staff report prepared for LUP Amendment 1-89 acknowledges that the LUP maps are being changed from black and white to larger scale, color maps. LUPA 1-89 did include land use designation changes that are specified in the City's submittal and discussed in

---

of Lot M adjacent to Lot 24, for example, has been a separate lot since it was sold off in 1928. The City, however, continues to refer to the entire area that made up Lot M, as it was created in 1923, as "Lot M," and, for convenience, this report does the same.

the Commission staff report. However, a land use designation change for Lot M is not identified or discussed.

Further, all the evidence appears to indicate that there is no history of public use along Lot M. Long time, existing development within the Lot M vicinity precludes public use. Such development includes bulkheads and private boat docks and ramps. Thus, there is no history of public use in the project vicinity.

Lot M was not identified in LUPA 1-89 as one of the sites subject to a land use designation change. In addition, prior to the 1989 LUP amendment, Lot M was certified as low density residential. Both of these facts support the argument that the change was made in error. As well, there is no history of public use at the site. For these reasons the Commission finds that the proposed lot consolidation of (among others), and residential development on, Lot M, is acceptable.

G. Public Access & Recreation

Section 30604(c) of the Coastal Act requires that every coastal development permit issued for any development between the nearest public road and the sea include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3.

The subject site fronts on Newport Harbor and is between the first public road and the sea. The nearest public access in the project vicinity is located approximately 100 feet north of the subject site at a small public sandy beach. Public access is also available approximately 2 blocks south of the subject site at the wide sandy public beach that runs the length of the Balboa Peninsula, and at Jetty View Park. The proposed development, as conditioned, will not result in any significant adverse impacts to existing public access or recreation in the area. Therefore the Commission finds that the project is consistent with the public access and recreations policies of the Coastal Act.

H. Deed Restriction

To ensure that any prospective future owners of the property are made aware of the applicability of the conditions of this permit, the Commission imposes one additional condition requiring that the property owner record a deed restriction against the property, referencing all of the above Special Conditions of this permit and imposing them as covenants, conditions and restrictions on the use and enjoyment of the Property. Thus, as conditioned, any prospective future owner will receive actual notice of the restrictions and/or obligations imposed on the use and enjoyment of the land including the risks of the development and/or hazards to which the site is subject, and the Commission's immunity from liability.

I. Local Coastal Program

Section 30604(a) of the Coastal Act provides for the issuance of coastal development permits directly by the Commission in regions where the local government having jurisdiction does not have a certified local coastal program. The permit may only be issued if the Commission finds that the proposed development will not prejudice the ability of the local government to prepare a Local Coastal Program which conforms with the Chapter 3 policies of the Coastal Act.

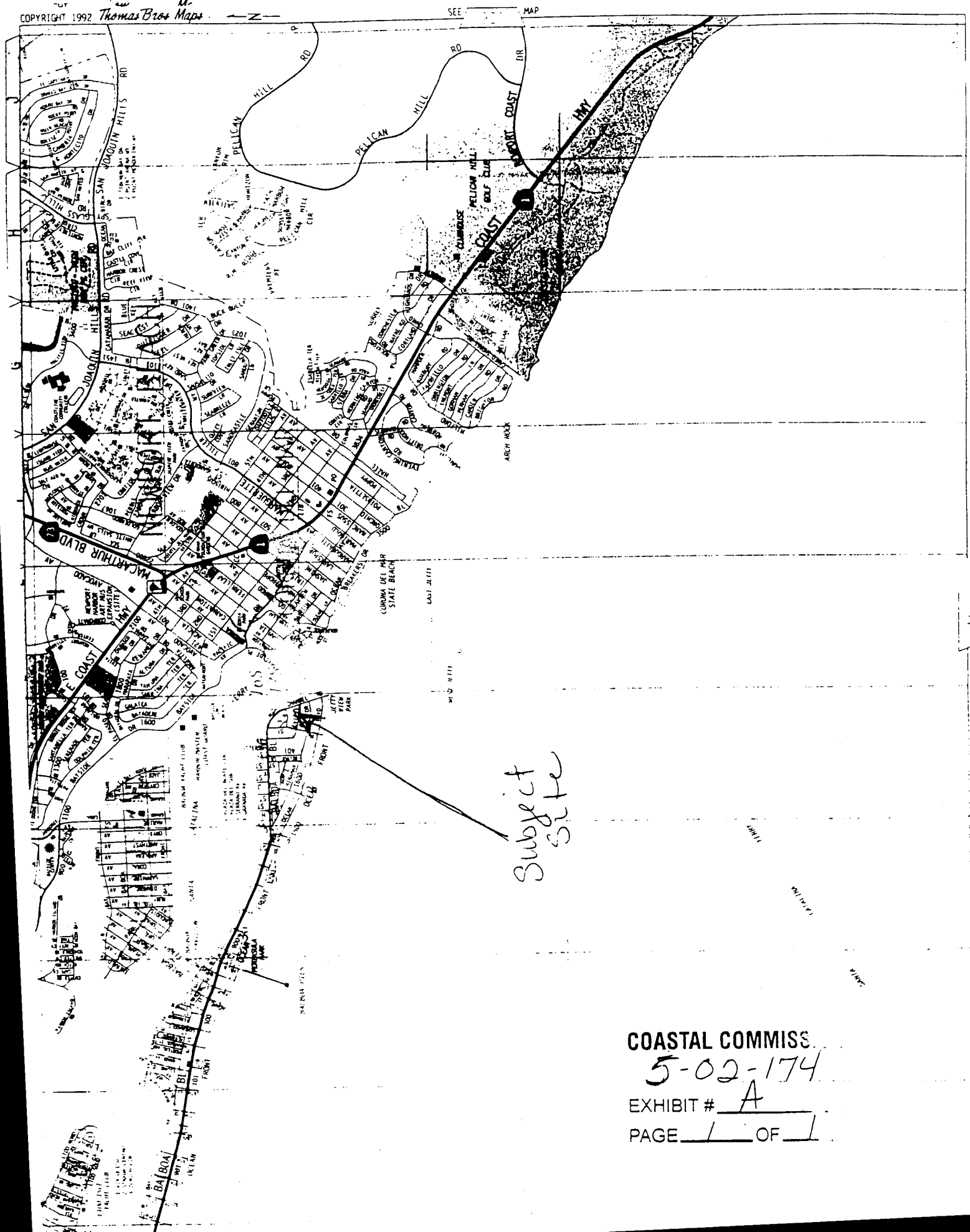
The Newport Beach Land Use Plan was effectively certified on May 19, 1982. The City currently has no certified Implementation Plan. Therefore, the Commission issues CDP's within the City based on the development's conformance with the Chapter 3 policies of the Coastal Act. The LUP policies may be used for guidance in evaluating a development's consistency with Chapter 3.

As conditioned the proposed development is consistent with Chapter 3 policies of the Coastal Act and with the LUP. Therefore, approval of the proposed development will not prejudice the City's ability to prepare a Local Coastal Program (Implementation Plan) for Newport Beach that is consistent with the Chapter 3 policies of the Coastal Act as required by Section 30604(a).

J. California Environmental Quality Act

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

The proposed project as conditioned has been found consistent with the water quality, public access, and hazard policies of the Coastal Act. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found consistent with the requirements of the Coastal Act to conform to CEQA.



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5-02-174
EXHIBIT # A
PAGE 1 OF 1

CITY OF NEWPORT BEACH

PLANNING DEPARTMENT
3300 NEWPORT BOULEVARD
NEWPORT BEACH, CA 92658
(949) 644-3200; FAX (949) 644-3229

July 31, 2002

California Coastal Commission
South Coast Area Office
200 Oceangate, 10th Floor, Suite 1000
Long Beach, California 90802
ATTN Meg Vaughn

Re: Application CDP 5-00-179 for Parcel Map No. NP2002-005
2210 Channel Road

The City of Newport Beach has approved in concept the plans for the project listed above. This project is in full compliance with the Zoning Code (Districting Map 12, Exhibit A), the Land Use Element of the General Plan (Exhibit B) and the Land Use Plan of the Local Coastal Program (see discussion below). This includes the approval of the lot line adjustment to combine existing lots that include Lot M of Tract 518.

Public Works Department has researched Lot M and found that the City has not established Lot M for any future easement or public right-of-way. As far as can be determined, there are no proposals to establish that lot for any City use and the City has no intention of acquiring any portion of Lot M for public use. Additionally, there are no deed restrictions or reservations for future dedication placed on any portion of Lot M to that effect.

Marina Marrelli of our office researched Metroscan (our interface w/Orange County Assessor) and it shows that portions of Lot M have all been included with the adjacent residential lots along Channel Road.

The Land Use Element of the City of Newport Beach General Plan and Title 20 of the Municipal Code (Zoning Code) show that the residential lots with attached portions of Lot M are all zoned and designated R-1 (Exhibit A). I have enclosed an aerial photo (Exhibit C) showing 2210 Channel.

It appears that the Local Coastal Program (LCP) Map Page I 10 and J-10 (Exhibits D and E) that you refer to is erroneous since it shows Lot M as Recreational and Environmental Open Space (REOS) and extends down the peninsula along the front of the residential lots at the water side. This is not consistent with the R-1 District designation on Districting Map 12 (Excerpt from the 1943 edition of the Zoning Ordinance, Map 12 Exhibit F) or the Land Use Element designation of single-family detached land use (Exhibit B).

The LCP Map Book was produced by our -at that time- fledgling GIS (Geographic Information Systems) Department. The information in the database that generated the maps was transcribed from hand colored Land Use Maps pages G-13 and H-12 (Exhibits G and H). These hand colored maps were the root of the LCP Maps.

However, the colored map H-12 was erroneous since it did not completely show Lot M as Zoned R-1, as established by Districting Map No. 12 (Excerpt of 1998 edition of the

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Zoning Code, Exhibit A). LCP Map G-13 shows the Lot M areas adjacent to R-1 lots as R-1 (colored yellow), consistent with Districting Map 12. However, LCP Map H-12, the adjacent map page (where 2210 Channel Road is located), does not show any color on the extension of Lot M and is not consistent with Districting Map 12. It should have been yellow to be consistent with Districting Map 12. It is obvious to me that the intent was to continue the yellow up to Peninsula Point Park that is zoned R-1 on Districting Map 12 and designated Open Space on the Land Use Element of the General Plan and the LCP Map J-10.

A small portion of Lot M is within the Peninsula Point Park, but the entire Lot M was somehow depicted as one lot. Therefore since the GIS system could not shade just a portion of a polygon, the entire polygon (Lot M) was shaded green instead of yellow adjacent to the R-1 lots south of Peninsula Point Park. In the preparation of the LCP Map Book adopted on October 24, 1988 containing 78 pages, that discrepancy was not caught. It is possible that there may be other sites that have the same problem but have not come to light.

It is the City's intent to rectify the discrepancy with the upcoming LCP certification. However, in the interest of preserving the intent of the Land Use Element and recognizing that the description on the LCP map is erroneous because it is not consistent with Districting Map 12, we ask that the Coastal Commission take this information into consideration in its review of the parcel map referenced above.

Sincerely,

Patricia L. Temple

Patricia Temple
Planning Director

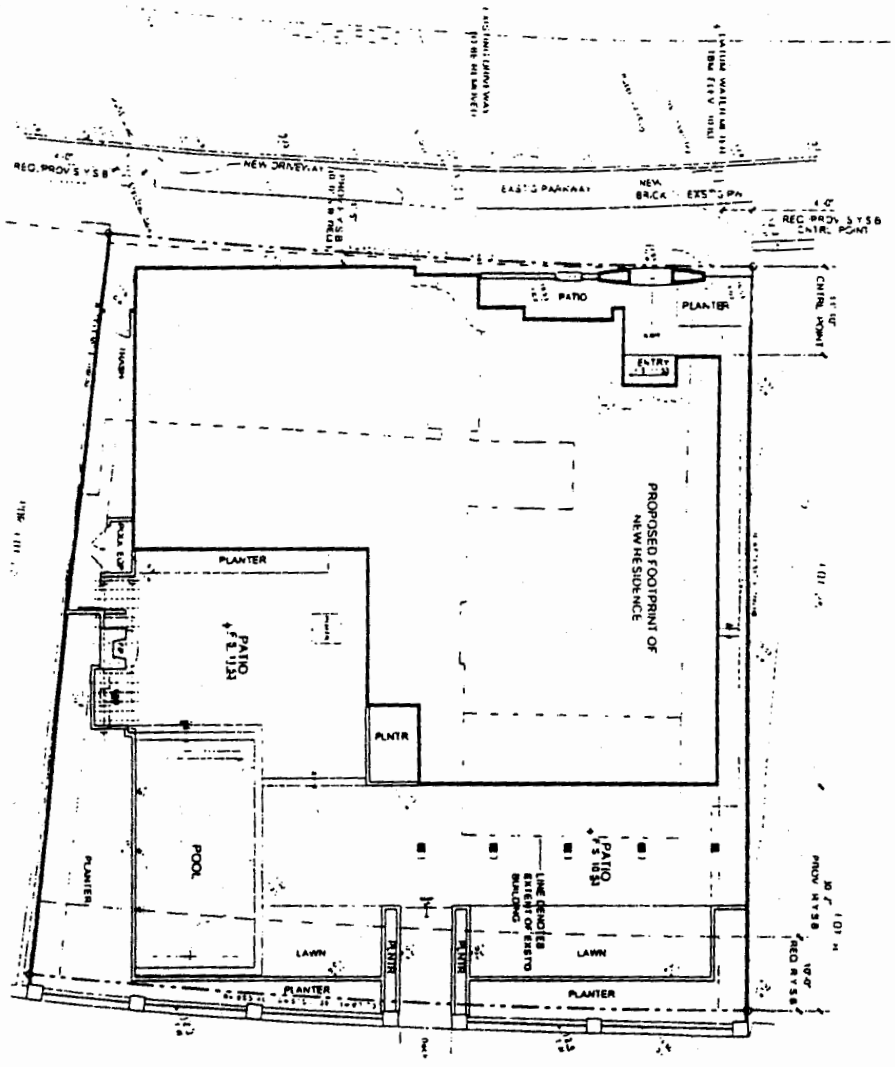
Enclosures:
Exhibit A, Current Districting Map-1998 Zoning Ordinance
Exhibit B, Land Use Element of the General Plan
Exhibit C, 2210 Channel Road aerial photo
Exhibit D, LCP Map Page No. I10
Exhibit E, LCP Map Page No. J10
Exhibit F, Districting Map 12-1943 Zoning Ordinance
Exhibit G, Land Use Map Page No. G-13
Exhibit H, Land Use Map Page No. H-12

cc: Charlie Williams
Morris Skendarian & Associates
2094 South Coast Highway, #3
Laguna Beach, CA 92651

F:\USERS\PLN\Shared\2LETTERS\2210 Channel-CCC.doc

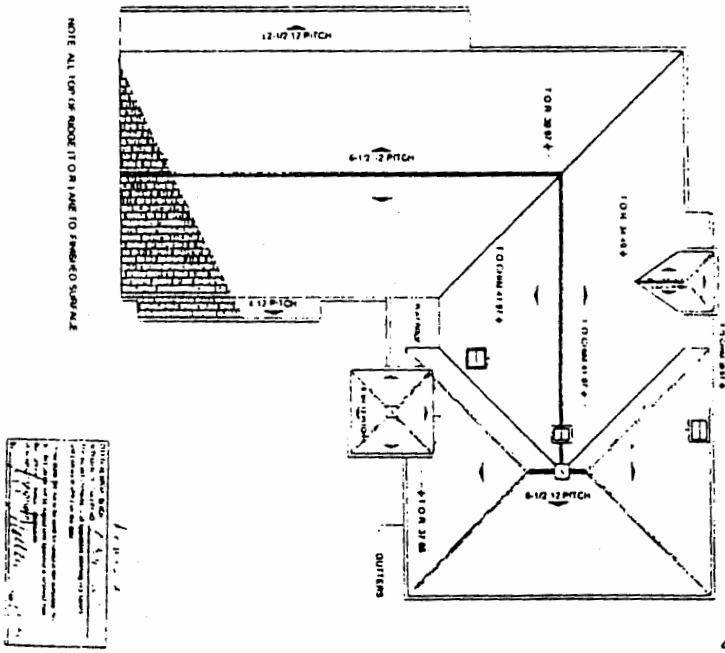
without enclosures
R2

TE PLAN



SCALE 1/8"=1'

ROOF PLAN



NOTE ALL TOP OF ROOF IT OR I ARE TO FINISHED SURFACE

SCALE 1/8"=1'

AREA LEGEND

PROPOSED FOOTPRINT

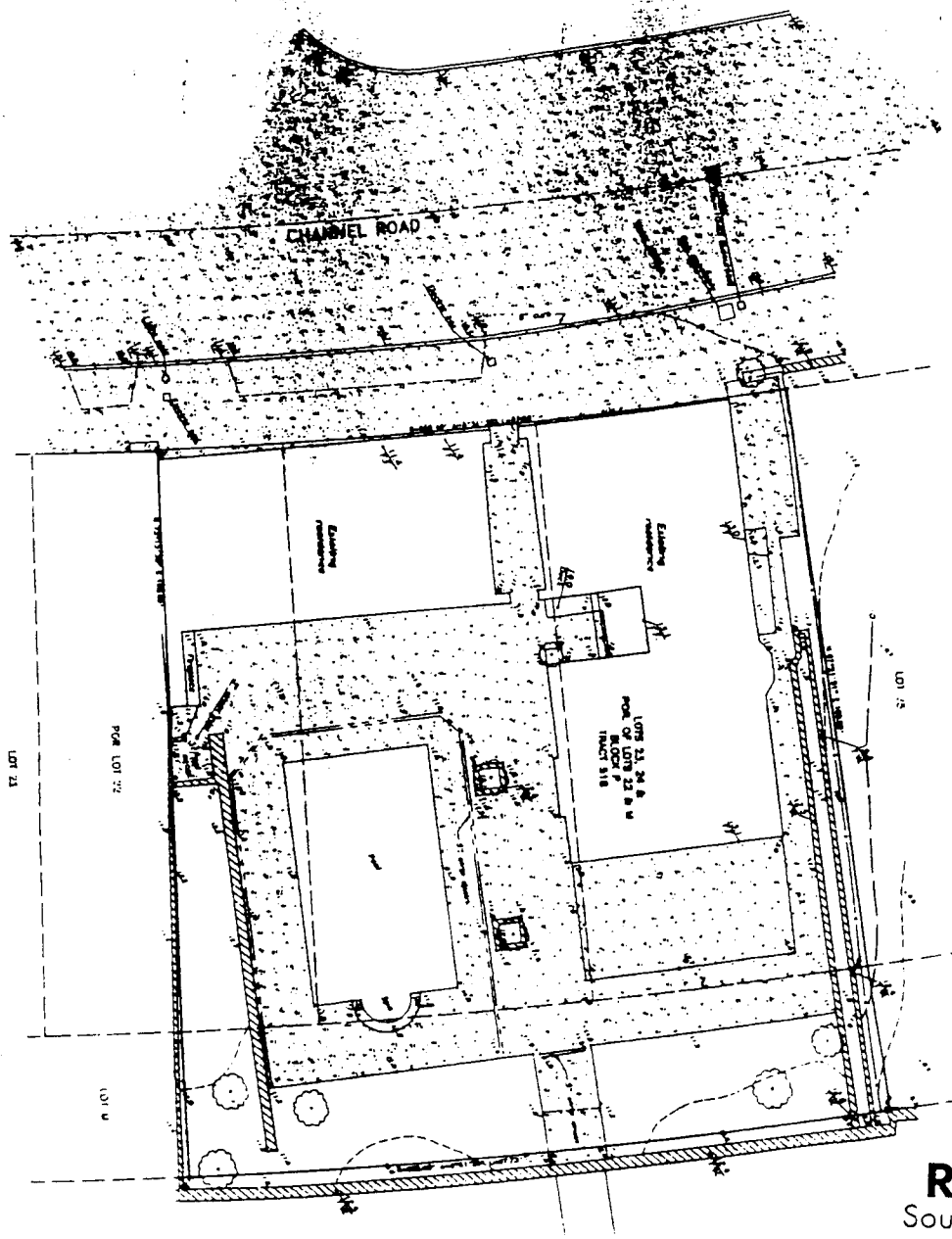
EXISTING FOOTPRINT

Project Plans

Site Plan

SP-1

ANDERSON RESIDENCE
2210 CHANNEL ROAD
NEWPORT BEACH, CA



Existing to be Demolished

TOAL ENGINEERING, INC.

TOPOGRAPHIC SURVEY

C3

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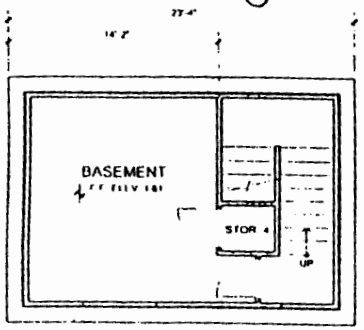
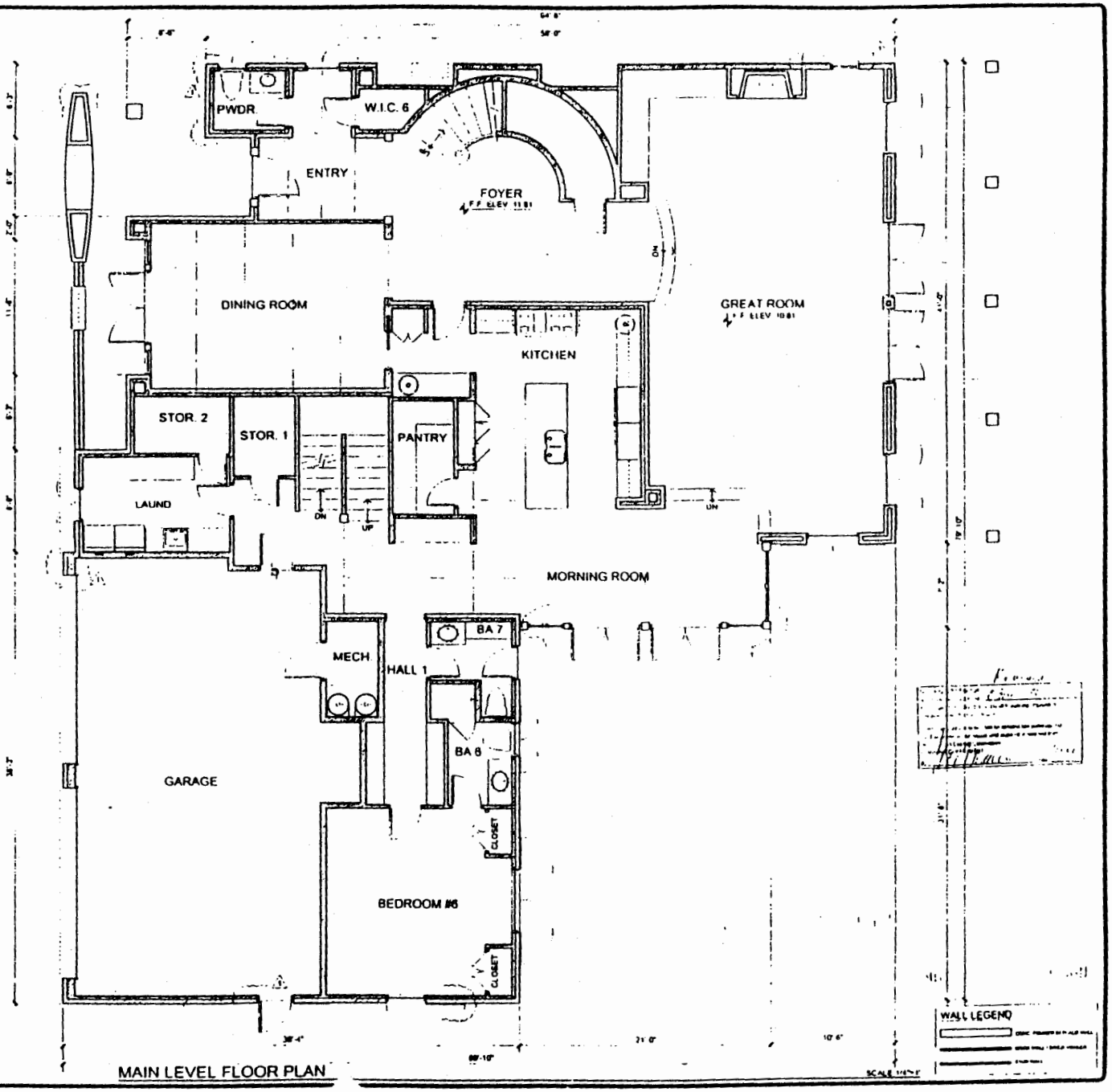


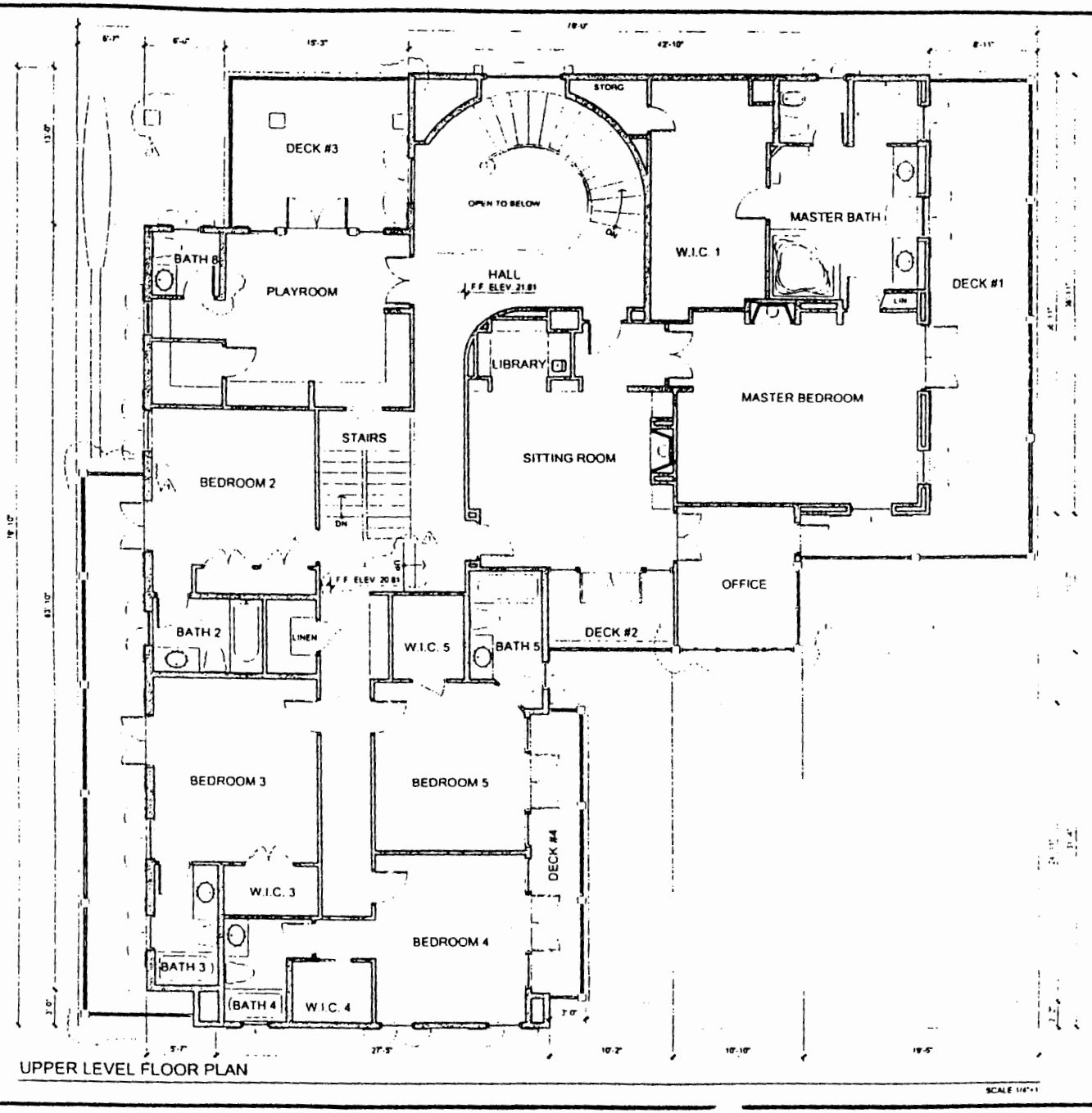
ASEMENT LEVEL FLOOR PLAN



MAIN LEVEL FLOOR PLAN

ANDERSON RESIDENCE
2210 CHANNEL ROAD
NEWPORT BEACH, CA

A-1



UPPER LEVEL FLOOR PLAN

SCALE 1/4"=1'

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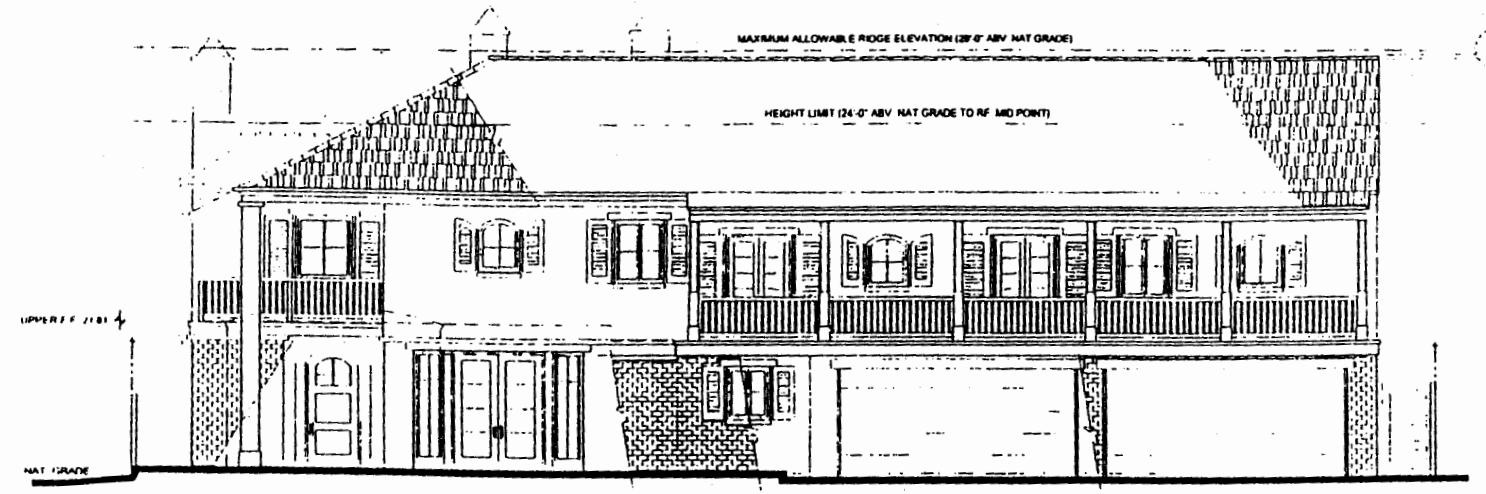
WALL LEGEND

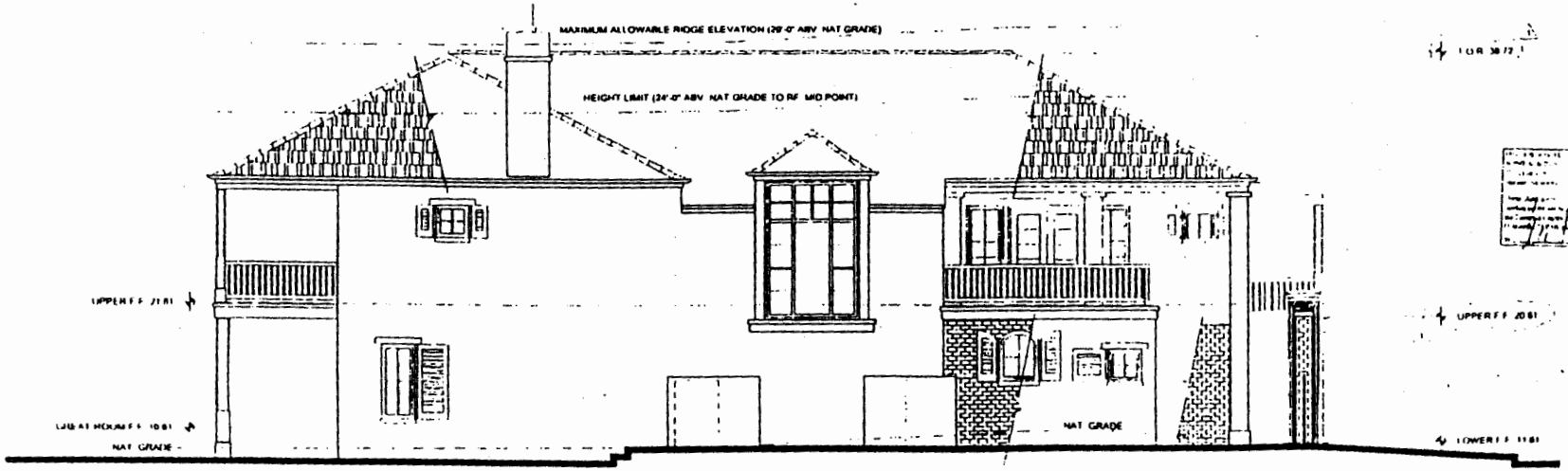
ANDERSON RESIDENCE
2210 CHANNEL ROAD
NEWPORT BEACH, CA

A-2

C5



NORTH ELEVATION (FRONT)



EAST ELEVATION (LEFT SIDE)

ANDERSON RESIDENCE
2210 CHANNEL ROAD
NEWPORT BEACH, CA

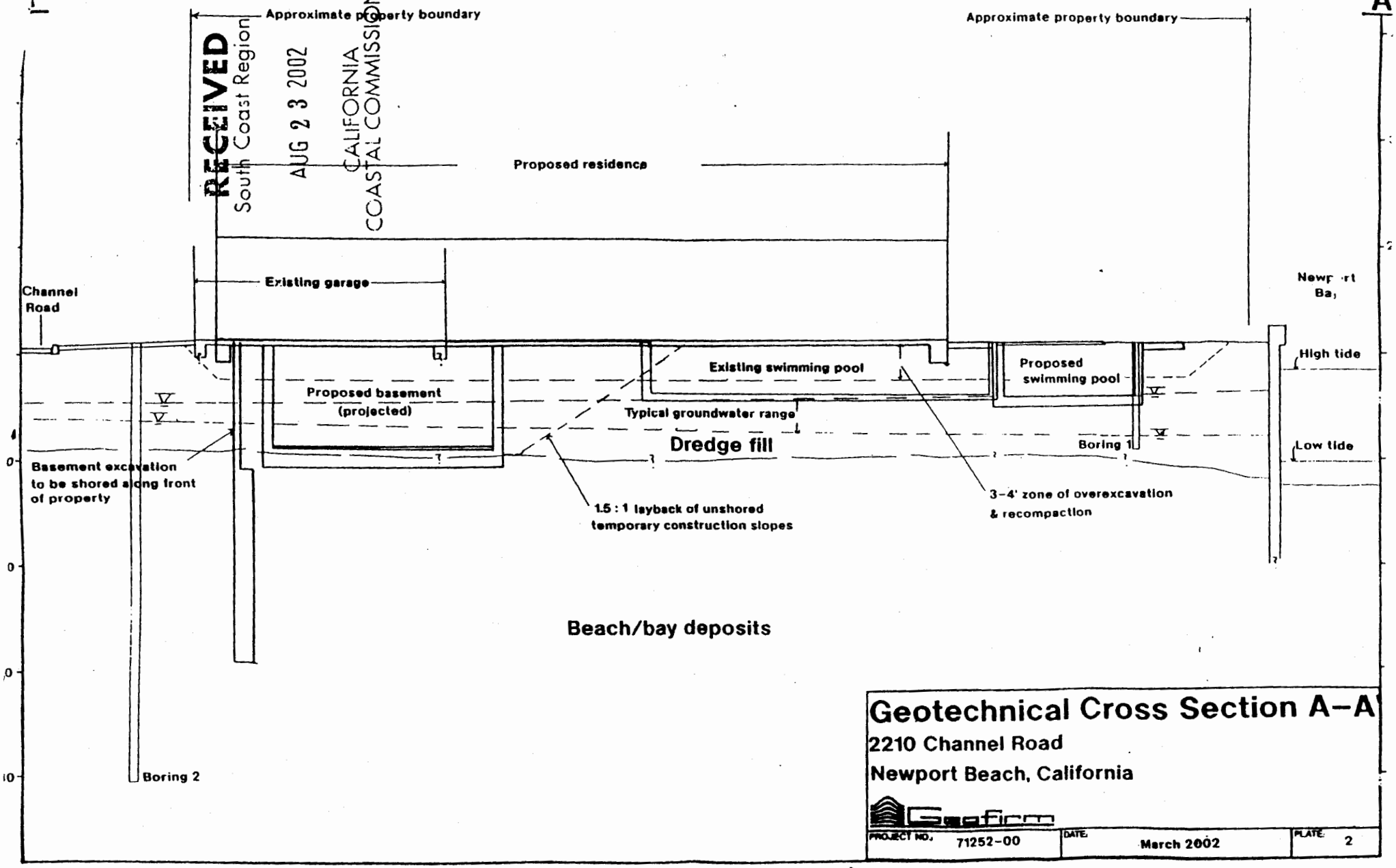
A-3

SOUTH ELEVATION (REAR)

WEST ELEVATION (RIGHT SIDE)

ANDERSON RESIDENCE
2210 CHANNEL ROAD
NEWPORT BEACH, CA

A-4



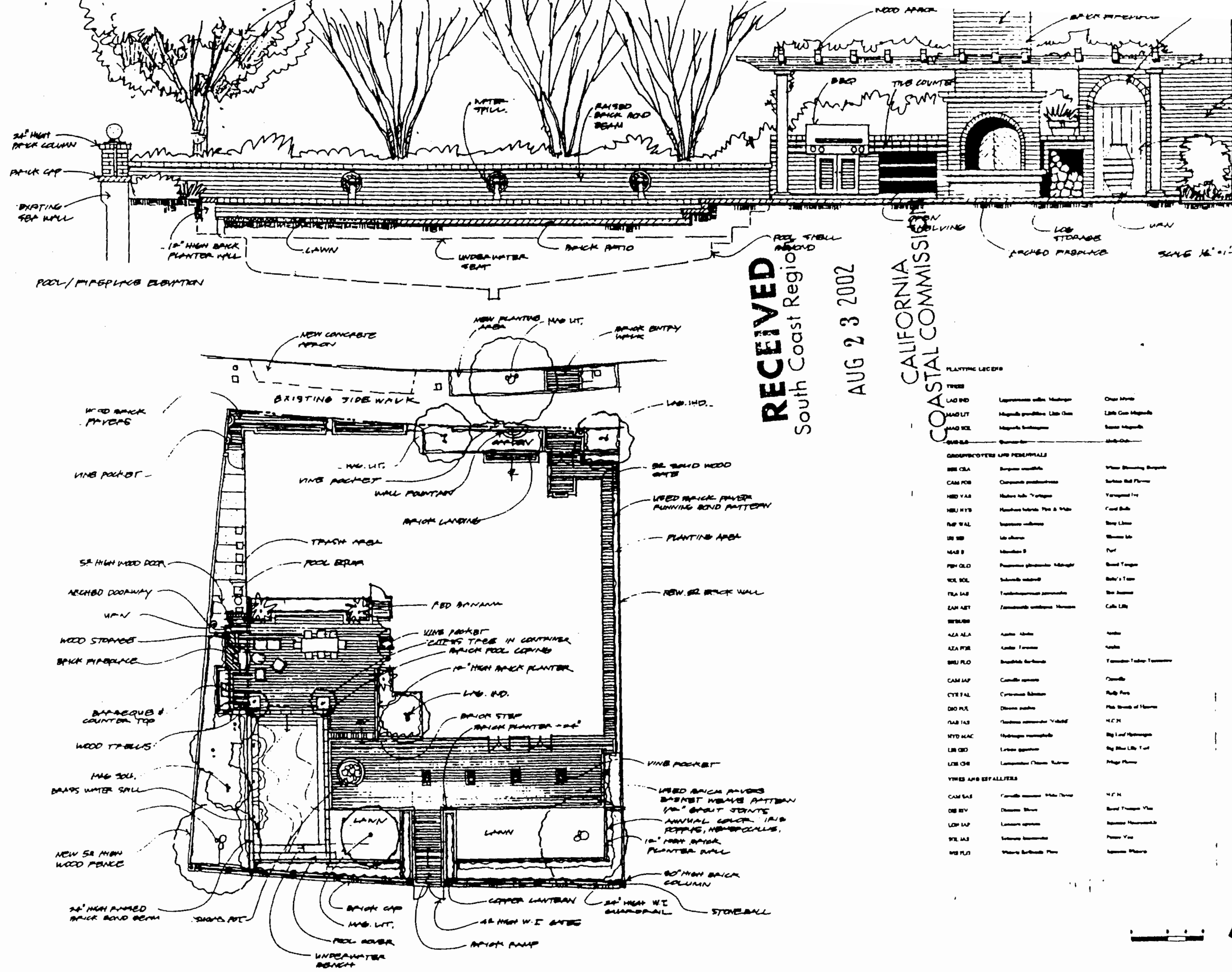
Geotechnical Cross Section A–A'

2210 Channel Road

Newport Beach, California

Geofirm

PROJECT NO.	DATE	PLATE
71252-00	March 2002	2



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ANDERSON RESIDENCE
2210 CHANNEL ROAD
NEWPORT BEACH, CA.

STUDIO

PRELIMINARY
LANDSCAPE
PLAN

L-1

California Regional Water Quality Control Board
Santa Ana Region

Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb8
3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (909) 782-4130 · FAX (909) 781-6288

Gray Davis
Governor

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.swrcb.ca.gov/rwqcb8.

September 18, 2002

Dale Scheffler. President
D. J. Scheffler, Inc.
2500 W. Pomona Blvd.
Pomona, CA 91768-3218

REVISED WASTE DISCHARGE REQUIREMENTS, ORDER NO. 98-67, NPDES NO. CAG998001 (DE MINIMUS DISCHARGES), DEWATERING AT VARIOUS LOCATIONS

Dear Mr. Scheffler:

On January 15, 2002, you were authorized to discharge wastewater from a construction site in Newport Beach under the terms and conditions of the Regional Board's general permit, Order No. 98-67. On September 16, 2002, you submitted a Notice of Intent to broaden this authorization to include discharges of construction dewatering wastes from various sites throughout the Region.

Effective immediately, you are authorized to discharge wastewater under the terms and conditions of Order No. 98-67. Enclosed is revised Monitoring and Reporting Program No. 98-67-144, which specifies the frequency of sampling and the constituents to be monitored. Please note that modifications to the sampling frequency and required constituents can be considered on a case-by-case basis.

Compliance with the terms of Order No. 98-67 does not relieve you of the responsibility to comply with local agency (county, city) requirements. To assure that you are aware of any County requirements for discharges in Orange County, you must contact Doug Witherspoon at (714) 834-2366 in advance of any discharges. For Riverside County projects, please call Mark Wills at (909) 955-1273, and for San Bernardino County projects, please call Naresh Varma at (909)387-7995. Furthermore, you must also make advance contact with the stormwater discharge coordinator(s) for the city(-ies) in which the discharge(s) are to occur.

Order No. 98-67 will expire on July 1, 2003. If you wish to terminate coverage under this general permit prior to that time, please notify us as soon as possible so that we can rescind this authorization and avoid billing you the annual fee.

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EXHIBIT # D
PAGE 1 OF 2

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Mr. Dale Scheffler

If you have any questions regarding the permit or the monitoring and reporting program, please contact Bill Norton at (909) 782-4381.

Sincerely,

Gerard J. Thibeault
Executive Officer

Enclosure: Revised Monitoring and Reporting Program No. 98-67-144

cc w/o enclosure: USEPA Permits Issuance Section (WTR-5) - Terry Oda
State Water Resources Control Board, Division of Water Quality – Jim Maughan
Orange Co. Facilities and Resources Dept., Flood Control - Herb Nakasone
Riverside Co. Flood Control Dept.– Mark Wills
San Bernardino Co. Dept. of Public Works, Flood Control Operations – Naresh Varma

GSR/SchefflerBeckerReauthVariousSites.ltr

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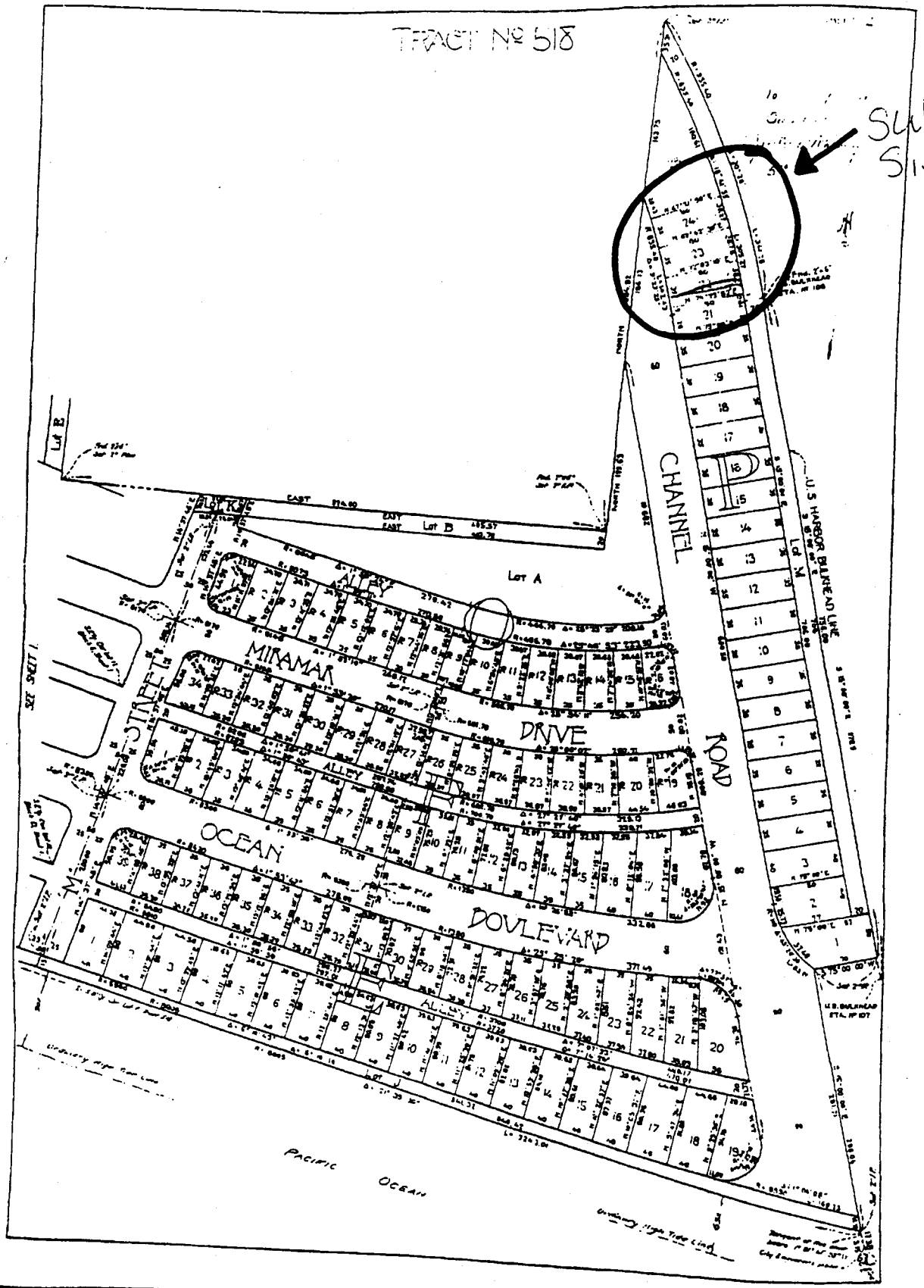

THIS MAP SHOULD BE USED FOR REFERENCE PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION AND BUILDING ORDINANCES.

COASTAL COMMISSION
5-02-174
EXHIBIT # E
PAGE 1 OF 1

COASTAL COMMISSION
5-02-174
EXHIBIT # F
PAGE 1 OF 4

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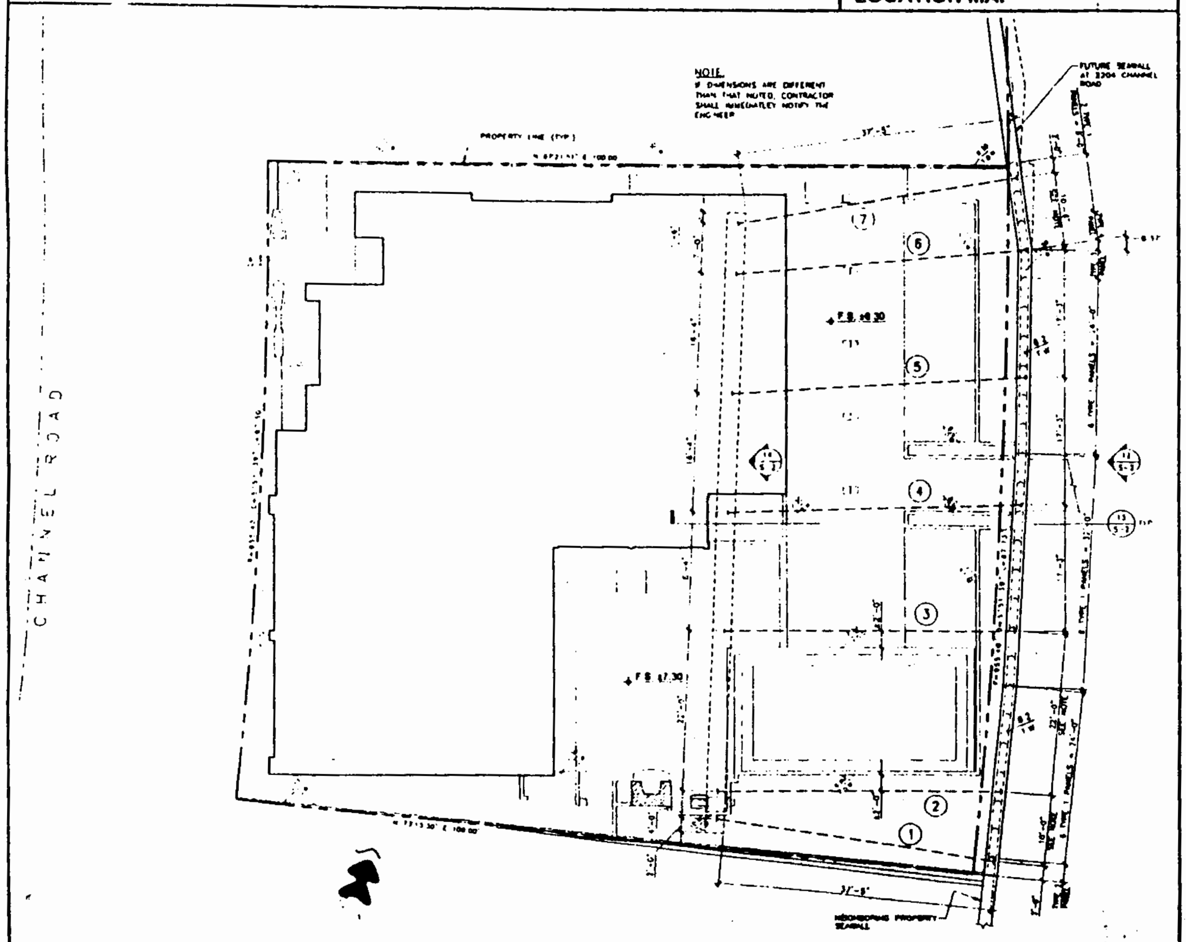
2210 Channel Road
Cuccia Lot



SEAWALL PLAN

LOCATION MAP

GENERAL NOTES

A. GENERAL

1. ALL WORK SHALL COMPLY WITH THE MINIMUM STANDARDS OF THE CALIFORNIA BUILDING CODE (CBC) 2001 EDITION AND ALL REQUIREMENTS OF THE CITY OF NEWPORT BEACH

2. ALL WORK SHALL BE DONE BY A LICENSED CONTRACTOR, EXPERIENCED IN THE CONSTRUCTION OF SEAWALLS

3. THE CONTRACTOR SHALL VERIFY ALL CONTRACT DOCUMENTS (INCLUDING DRAWINGS), CITY AND CODE REQUIREMENTS, SITE DIMENSIONS, ELEVATIONS, GRADES AND CONDITIONS PRIOR TO STARTING THE WORK AND NOTIFY THE ENGINEER OF ANY DISCREPANCY OR INCONSISTENCY

4. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON THE DRAWINGS

5. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS

6. THESE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO DEMOLISH, EXCAVATE, BUILD, MANUFACTURE, ERECT AND PROTECT THE STRUCTURE, ITS COMPONENTS, EMPLOYEES AND PUBLIC DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO BRACING, SHORING FOR LOADS DUE TO DEMOLITION, EXCAVATION, CONSTRUCTION, EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS

7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY IN THE PERFORMANCE OF HIS OWN WORK

8. ALL MANUFACTURED PRODUCTS SHALL BE INSTALLED, APPLIED OR USED STRICTLY IN COMPLIANCE WITH THE SPECIFICATIONS OF THE PRODUCT MANUFACTURER

9. ALL TESTING AND INSPECTION SHALL BE AS REQUIRED IN THE UBC CHAPTER 17

B. FOUNDATIONS AND EARTHWORK

1. ALL FOUNDATION, SEAWALL AND EARTHWORK CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY GEOFIRM DATED JULY 30, 2002, NUMBERED 02-6008 AND THEIR LETTERS DATED 2/20/2003

2. ALL BACKFILL SHALL BE COMPACTED UNDER THE SUPERVISION OF THE SOILS ENGINEER TO 90% OF THE MAXIMUM DENSITY UNLESS OTHERWISE REQUIRED BY THE SOILS ENGINEER. SPECIAL ATTENTION SHALL BE PAID TO THE COMPACTION OF BACKFILL AT THE VICINITY OF DEADMAN AND SEAWALL

3. DURING THE CONSTRUCTION THE GEOTECHNICAL ENGINEER SHALL PROVIDE FIELD OBSERVATIONS AND TESTING AS RECOMMENDED IN THE GEOTECHNICAL REPORT

C. REINFORCED CONCRETE

1. CONCRETE MIXTURES, CONCRETE TRANSPORTATION AND PLACEMENT SHALL BE IN CONFORMANCE WITH ACI 304 "GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE", ACI-305 "HOT WEATHER CONCRETING" AND ACI-308 "STANDARD PRACTICES FOR CURING CONCRETE"

2. ALL CONCRETE SHALL BE REGULAR WEIGHT (145 LB/CUFT) AND SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH IN 28 DAYS AS SCHEDULED BELOW

LOCATION	STRENGTH PSI
DEADMAN AND CAP BEAM	4 000
PRECAST SEAWALL PANELS	5 000

3. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY'S REGISTERED PROFESSIONAL ENGINEER

4. CEMENT SHALL CONFORM TO ASTM C-150 TYPE II

5. AGGREGATE SHALL CONFORM TO ASTM C-33. MAXIMUM AGGREGATE SIZE SHALL BE 1 1/2 INCH IN DEADMAN AND CAP BEAM

6. ALL CONCRETE SHALL BE DESIGNED FOR SALT WATER EXPOSURE. WATER/CEMENT RATIO OF CONCRETE SHALL NOT EXCEED 0.5 FOR CAP BEAMS AND DEADMAN AND 0.45 FOR PRECAST PANELS

7. REINFORCING STEEL OF #5 AND LARGER BARS SHALL CONFORM TO ASTM A-615, GRADE 60

8. REINFORCING STEEL OF #4 AND SMALLER BARS SHALL CONFORM TO ASTM A-615, GRADE 40

C. REINFORCED CONCRETE (cont)

9. READY MIXED CONCRETE SHALL CONFORM TO ASTM C-94

10. CONCRETE SLUMP SHALL NOT EXCEED 4 INCHES WHEN CONCRETE TEMPERATURE IS 80 DEGREES FAHRENHEIT OR LESS AND SHALL NOT EXCEED 3 1/2 INCHES WHEN CONCRETE TEMPERATURE IS BETWEEN 80 AND 90 DEGREES FAHRENHEIT. CONCRETE SHALL NOT BE PLACED IF TEMPERATURE EXCEEDS 95 DEGREES FAHRENHEIT

11. CLEAR COVERAGE ON CONCRETE SHALL BE AS SHOWN ON THE DRAWINGS

12. HORIZONTAL REINFORCEMENT IN DEADMAN AND CAP BEAM SHALL BE CONTACT LAP SPLICED IN 48 INCH LAP LENGTHS AND ADJACENT LAP LENGTHS SHALL BE STAGGERED A MINIMUM OF 4'-0"

13. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACEMENT OF CONCRETE

D. STRUOTURAL STEEL

1. ALL WORK SHALL CONFORM TO AISC MANUAL OF STEEL CONSTRUCTION NINTH EDITION

2. ALL STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO ASTM A36. THEY SHALL BE HOT DIP GALVANIZED

E. TIE-RODS

1. TIE-RODS SHALL BE ONE INCH NOMINAL DIAMETER ASTM A722 BARS MARKETED TOGETHER WITH THEIR NUTS AND PLATES BY DYWIDAG-SYSTEMS INTERNATIONAL INC. UNDER "THREADBAR" NAME. ANY OTHER PRODUCT PROPOSED BY THE CONTRACTOR SHALL BE SUBJECT TO THE ENGINEER'S REVIEW AND APPROVAL

2. TIE-RODS AND THEIR ACCESSORIES SHALL BE HOT DIP GALVANIZED

3. TIE-ROD DETAILS SHOWN ON THESE DRAWINGS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR CAN USE DIFFERENT DETAILS PROVIDING THAT THE SHOP DRAWINGS OF THOSE DETAILS ARE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO THE COMMENCEMENT OF THE CONSTRUCTION

F. FILTER FABRIC

1. FILTER FABRIC SHALL BE "MIRAFI 700X" MANUFACTURED BY MIRAFI CORPORATION. ANY OTHER PRODUCT PROPOSED BY THE CONTRACTOR SHALL BE SUBJECT TO THE ENGINEER'S REVIEW AND APPROVAL. FILTER FABRIC SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS AND AS RECOMMENDED BY THE MANUFACTURER. END LAPS OF THE FABRIC SHALL BE A MINIMUM OF 8 INCHES AND SHALL BE A MINIMUM OF 12 INCHES AWAY FROM PANEL JOINTS

G. CONSTRUCTION SEQUENCE

THE CONSTRUCTION OF THE SEAWALL SHALL BE IN THE FOLLOWING SEQUENCE

1. CONSTRUCTION OF DEADMAN WITH EMBEDDED TIE-ROD ANCHORS

2. JETTING DOWN SHEET PILING AND CONSTRUCTION OF CAP BEAM

3. INSTALLATION OF FILTER CLOTH

4. BACKFILLING AND INSTALLATION OF TIE-RODS

A. COMPLETION OF BACKFILL TO THE TIE-ROD LEVEL (A MINIMUM OF 7 DAYS AFTER THE PLACEMENT OF CONCRETE IN DEADMAN)

B. INSTALLATION OF TIE-RODS

C. COMPLETION OF THE BACKFILL TO THE TOP OF DEADMAN

D. TENSIONING TIE-RODS TO 1,000 LB (A MINIMUM OF 14 DAYS AFTER THE PLACEMENT OF CONCRETE IN DEADMAN AND CAP BEAM)

E. COMPLETION OF BACKFILL

G. TENSIONING TIE-RODS TO 4,000 LB A MINIMUM OF 21 DAYS AFTER THE PLACEMENT OF CONCRETE IN DEADMAN AND CAP BEAM. IN NO CASE TIE-RODS SHALL BE STRESSED OVER 4,000 LB

H. GROUTING THE SPACE BETWEEN THE TIE-ROD AND PVC PIPE (THE GROUT SHALL BE PREPARED BY USING "INTERPLAST N" MANUFACTURED BY SIKA CORPORATION)

H. TESTING AND INSPECTION

1. TESTING AND INSPECTION SHALL BE PER CBC CHAPTER 17

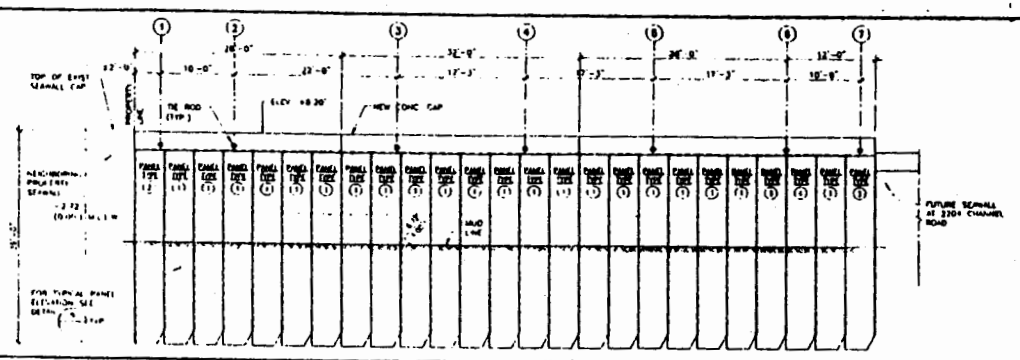
AEC Associates

ANDERSON RESIDENCE
SEAWALL CONSTRUCTION
2210 Channel Road

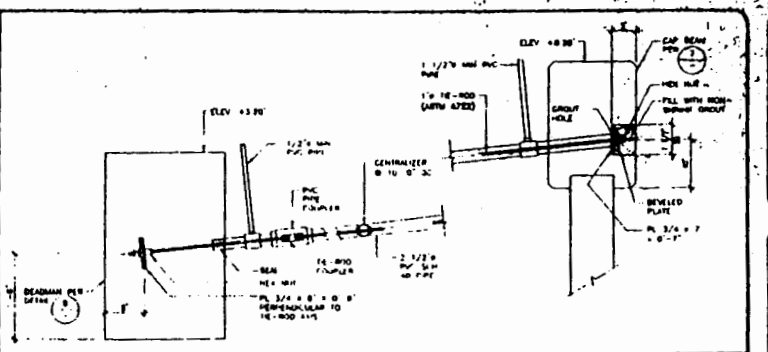
GENERAL NOTES & SEAWALL PLAN

S1

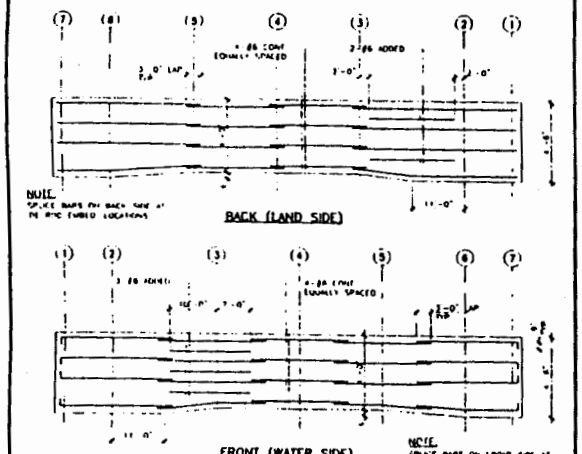
2210 Channel Road



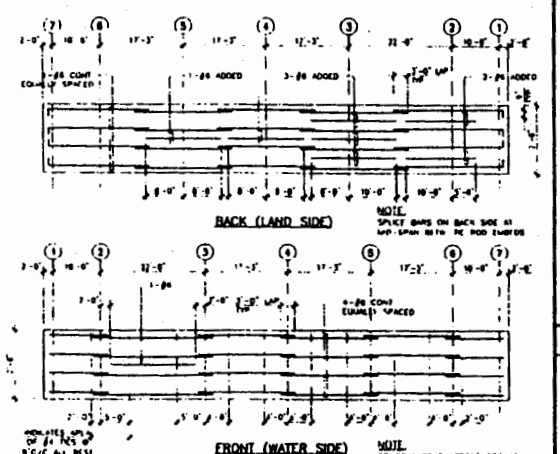
SEAWALL ELEVATION — SCALE 1/8" = 1'-0" — 12



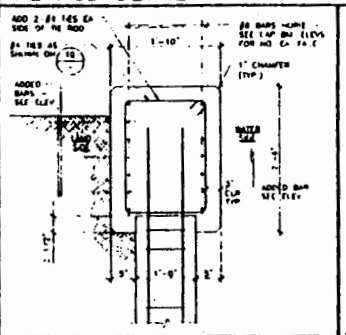
TIE ROD DETAIL — SCALE NONE — 4



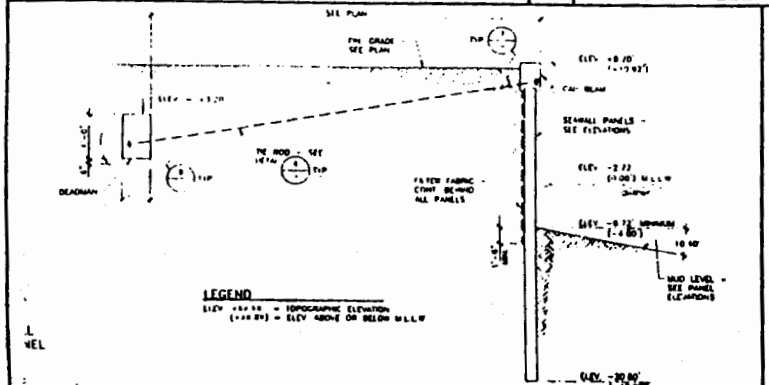
DEADMAN ELEVATIONS — SCALE NONE — 14

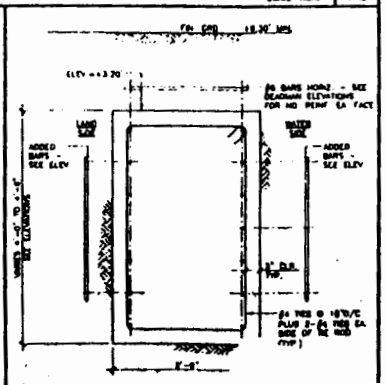


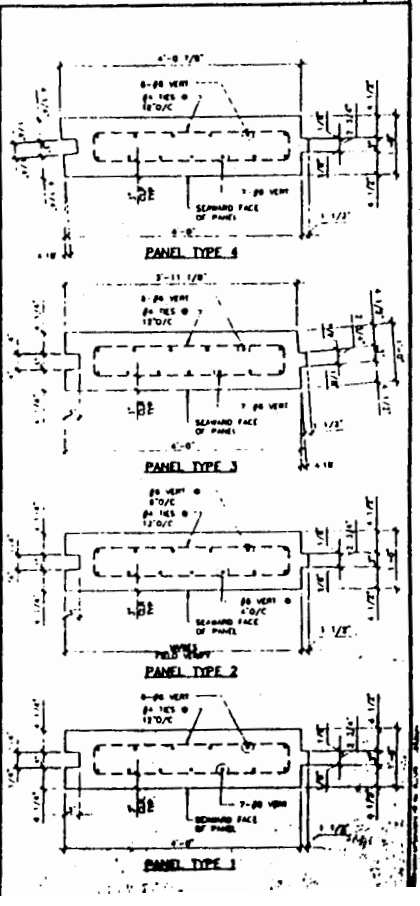
CAP BEAM ELEVATIONS — SCALE NONE — 10



CAP DETAIL — SCALE 1" = 1'-0" — 7







AEC Associates

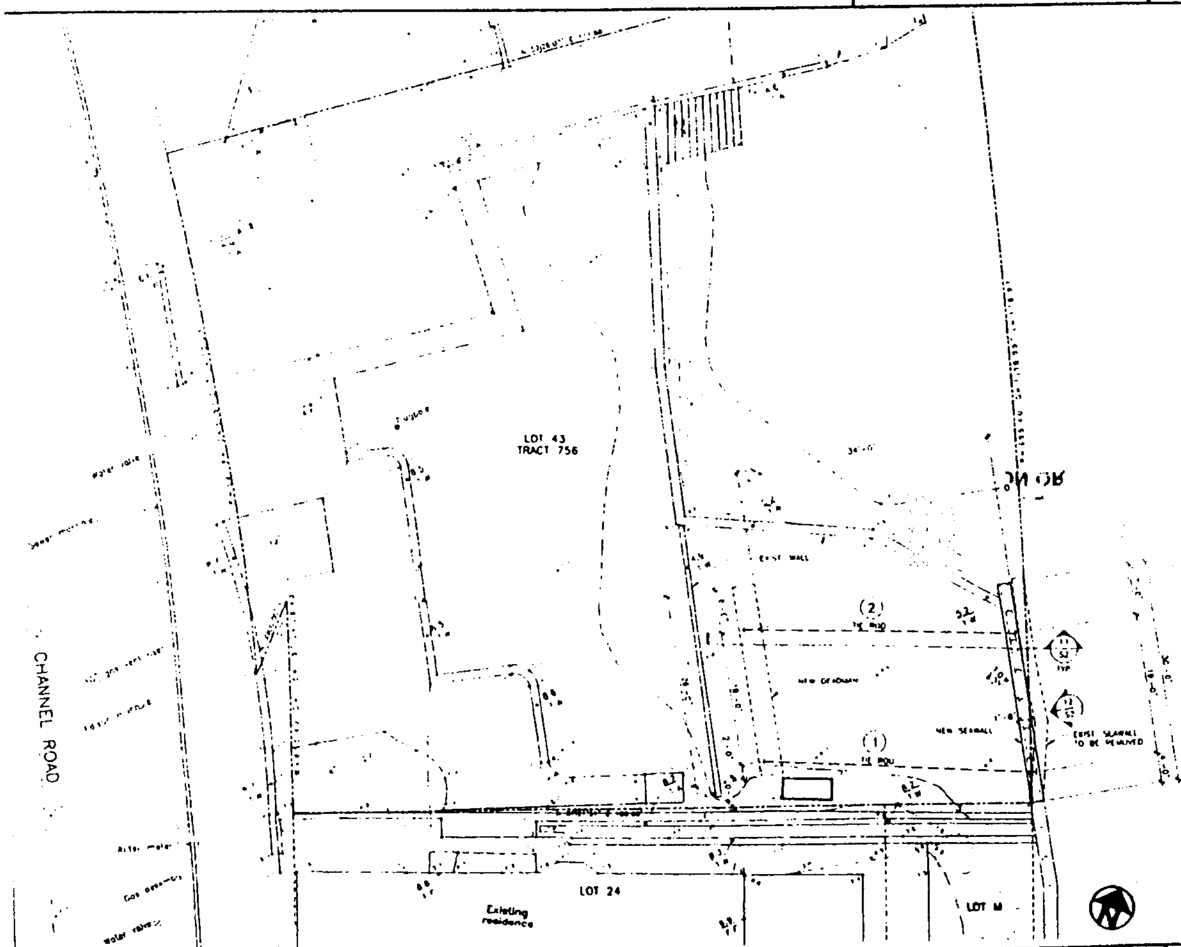
ANDERSON RESIDENCE
SEAWALL CONSTRUCTION
2210 Channel Road
Newport Beach, CA 92663

SECTIONS, DETAILS AND ELEVATIONS

2204 Channel Rd.
City Lot

F3

LOCATION MAP 3



SEAWALL PLAN 2

GENERAL NOTES 1

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1. CONSTRUCTION OF DEADMAN WITH EMBEDDED TIE-ROD ANCHORS.

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3. INSTALLATION OF FILTER CLOTH.

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B. INSTALLATION OF TIE-RODS.

C. COMPLETION OF THE BACKFILL TO THE TOP OF DEADMAN.

D. TENSIONING TIE RODS TO 1,000 LB (A MINIMUM OF 14 DAYS AFTER THE PLACEMENT OF CONCRETE IN DEADMAN AND CAP BEAM).

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H. GROUTING THE SPACE BETWEEN THE TIE-ROD AND PVC PIPE (THE GROUT SHALL BE PREPARED BY USING "INTRAPLAST N" MANUFACTURED BY SIKA CORPORATION).

H. TESTING AND INSPECTION

1. TESTING AND INSPECTION SHALL BE PER CBC CHAPTER 17.

REVISION
CITY SUBMITTAL

AEC Associates

CITY OF NEWPORT BEACH
SEAWALL CONSTRUCTION
2204 Channel Road
Newport Beach, CA 92663

OWNER: MR. ERIK K. ANDERSON

GENERAL NOTES
& SEAWALL PLAN

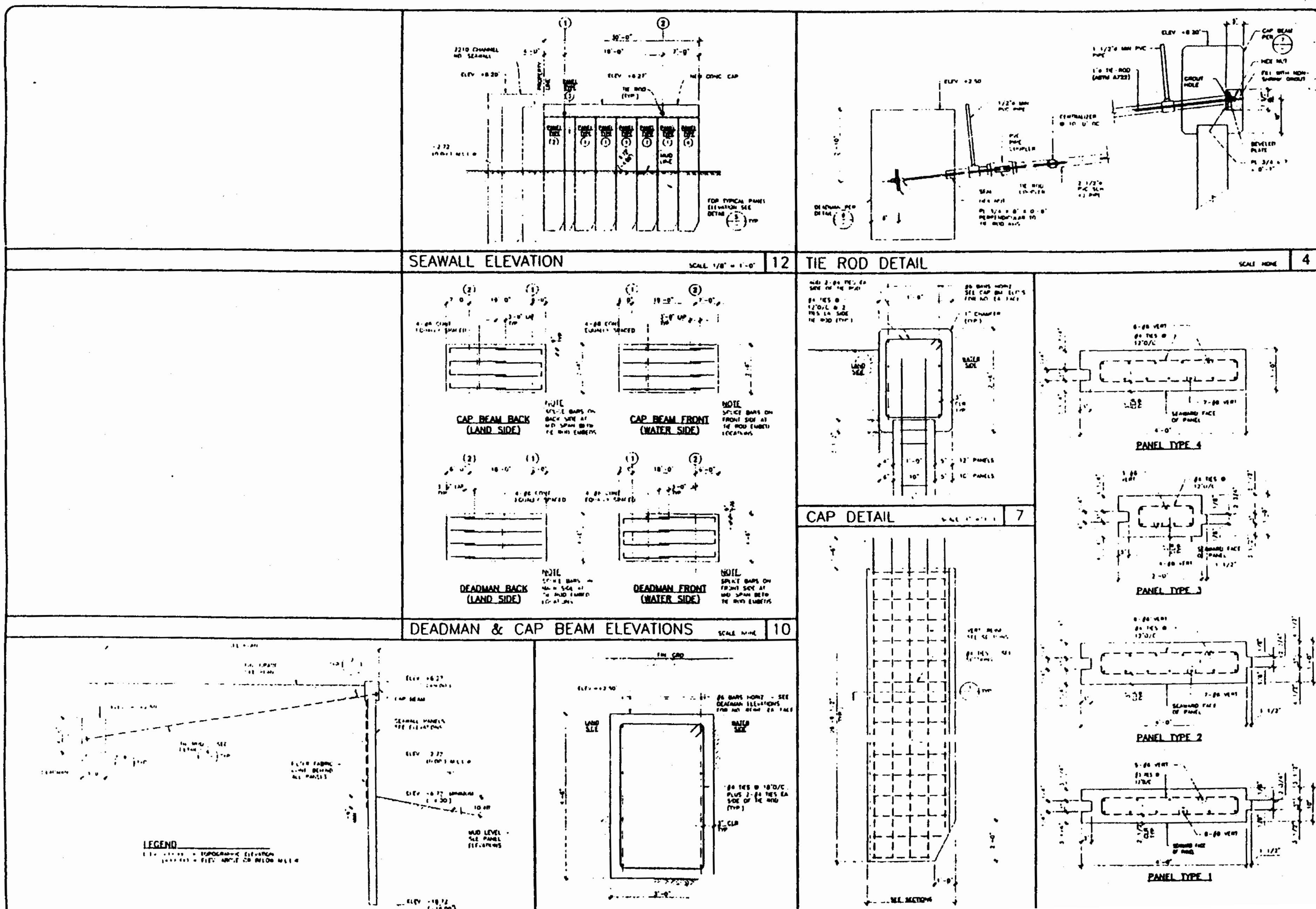
DESIGNED: JRM
CHECKED: E.K.
DATE: 4/03
SCALE: AS NOTED
JOB NO: 7134-03

S-1

4/8/03

2204 Channel Rd.

F4



SECTIONS, DETAILS AND ELEVATIONS

CITY OF NEWPORT BEACH
SEAWALL CONSTRUCTION
2204 Channel Road
Newport Beach, CA 92663

MR. ERIK K. ANDERSON

AEC Associates

JRM
E.K.
6/03
AS NOTED
7134-03

S-2

AEC Associates
Architecture Engineering Construction

2691 Richter Avenue, Suite 110, Irvine, CA 92606
E-mail aec-ca@msn.com
Telephone : 949/252 9188
Fax : 949/252 9198

April 8, 2003

California Coastal Commission
200 Oceangate, Suite 1000
Long Beach, CA 9802-4302

Attention: Meg Vaughn

Subject: Seawall Project
2210 Channel Road
Newport Beach, California

Dear Ms. Vaughn:

This report is prepared for submittal to you upon the request of Mr. Erick Anderson, the owner of the subject property. The purpose of the report is to address the concerns of the Coastal Commission. AEC Associates' investigations, findings, conclusions and design will be explained in detail in the sections below with titles relating to the Coastal Commission's various concerns.

Existing Seawall

The existing seawall (bulkhead) is located at the east of the subject property as shown on Attachment I, Seawall Plan. It is about three feet six inches east of the property line, outside the property. The top elevation of the cap beam is at 8.2 feet M.S.L. The south end of the subject wall butts into a similar concrete seawall at the adjacent privately owned property. At the north, the seawall ends at a steel sheet pile seawall of the neighboring City owned property. The face of the steel sheet pile wall is located about 24 inches west of the existing wall at 2210 Channel Road.

AEC Associates investigated the structural safety of the existing wall. We visually inspected the wall, and prepared a detailed testing and inspection program. Following were our observations, evaluations and recommendations.

1. The height of the existing seawall is 13.5 feet and the pile penetration in to the soil is only 7.8 feet. The pile penetration to the wall height ratio is unusually low. Our calculations indicated that the safety factor (i.e. capacity/demand) for overturning, which is supposed to be over 1.75, is less than 1.0. The existing seawall is not safe as it is.

2. The wall thickness is only 9 inches and the concrete does not appear to be in good condition. When the 9 inch thickness of the existing wall is compared with the required thickness of 12 inches for the new wall, the existing walls inadequacy becomes apparent.

Because of the above we determine that the existing wall needs either upgrading or replacement.

Engineering Assessment

Alternatives to Replacement

Upon Mr. Anderson's request various alternatives to replacement of the existing wall were considered and found unworkable because of the factors listed below:

- Placement of new longer wall panels behind the existing was considered. However, after discussing the matter with the pile-driving contractor, it was concluded that such an operation could not be possible without damaging the existing wall.

- Placement of new reinforcement sheet piles, to support the embedded part of the existing piles, in the bay a few feet in front of the wall was considered, but found environmentally unacceptable and probably legally impossible.

New Seawall Construction

The existing seawall will be completely removed and replaced with a new wall as shown on Attachments I and II. The new wall will be exactly at the same location of the existing wall, except for the north, which will extend 30'-0" into the adjacent City property. The north end of the wall is designed to align with the northerly seawall and will be offset approximately one foot towards the land side of the existing wall, as shown on Attachment I.

The new seawall will be constructed with 12 inch thick concrete sheet piles. It will have a 1'-10" wide 2'-6" high cap beam and will be supported at the top by tie-backs connected to a deadman. The top of the new cap beam will be at 8.20' M.S.L. (M.L.L.W 10.98') as the existing wall. All geometrical parameters of the new seawall, except for the depth and thickness of sheet piles, will be the same as for the existing seawall. Despite the proposed changes, the new seawall will be placed in the exact location or inland of the existing wall so not to encroach any further into the bay.

Since the new seawall is similar in design and will be placed in the exact location as the existing, no affect is anticipated on coastal process, including shoreline sand supply.

New Seawall Design

The new seawall design is based on the below listed criteria:

- The water table was assumed to be at the lowest estimated tide level –5.23 M.S.L. (-2.5 M.L.L.W.)

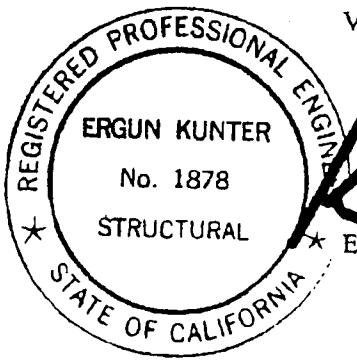
- It was assumed that, when the tide is at its lowest level, the water table behind the wall will be 3.00 ft above this level and there will be a 3.00 foot layer of saturated (not drained) soil above it.

- The final grade of the backfill behind the wall will be the same as the top of the cap beam. The load placed over the finish grade (surcharge load) was assumed to be 100 PSF.

The safety factor for the above design criteria was 1.75 for soil bearing pressure and overturning. An additional ultimate design load safety factor of 1.7 was used for the design of concrete and reinforcement.

If you have any question regarding this report, please call the undersigned.

Very truly yours.



Ergun (Ed) Kunter, S.E.

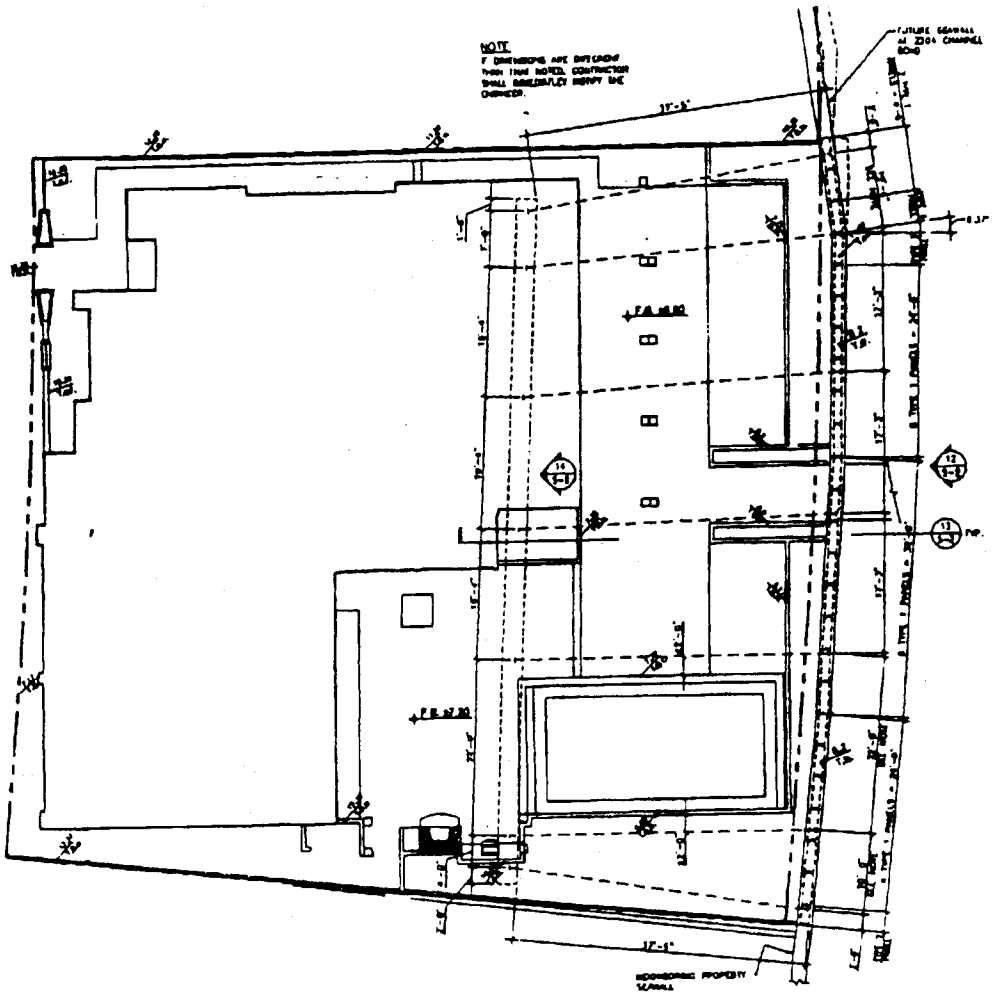
Enclosures

7134-02\L030408

G 3

AEC Associates

Seawall Project
2210 Channel Road
Newport Beach, California
Attachment I

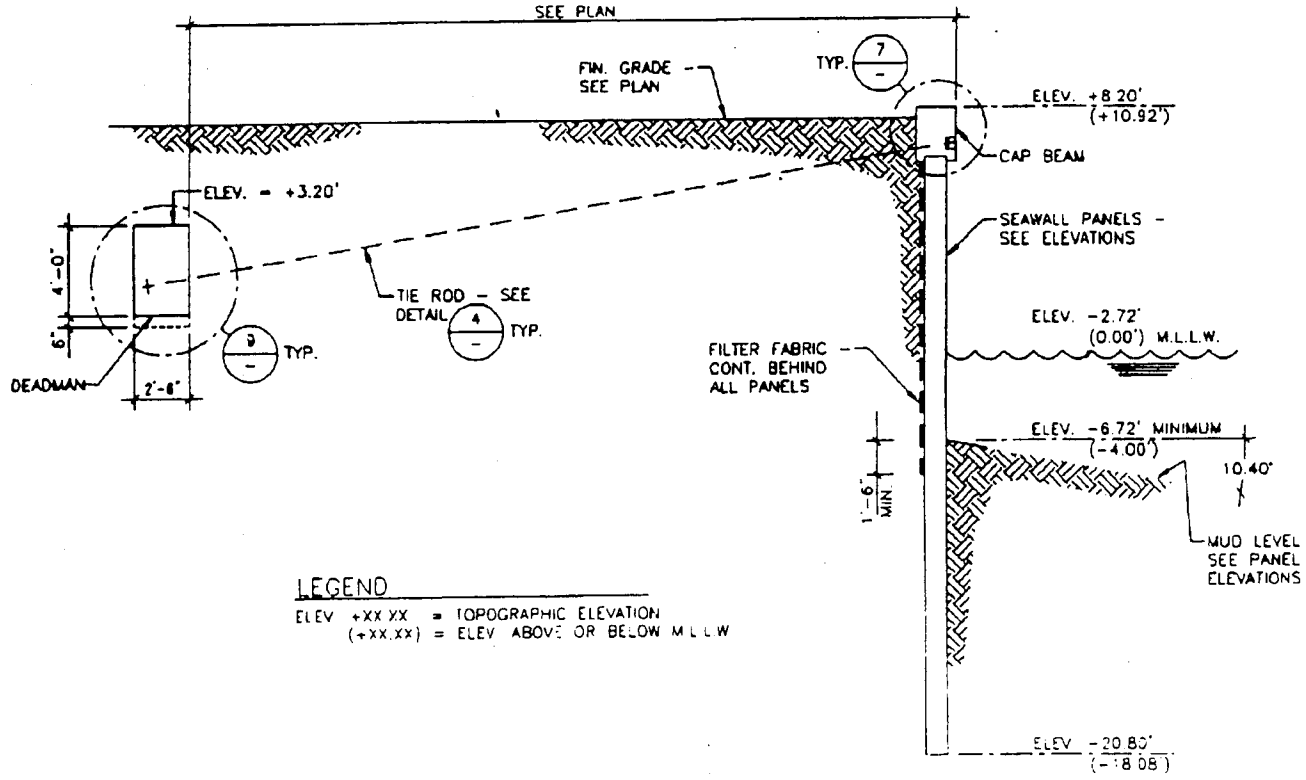


SEAWALL PLAN
NTS

G4

AEC Associates

Seawall Project
2210 Channel Road
Newport Beach, California
Attachment II



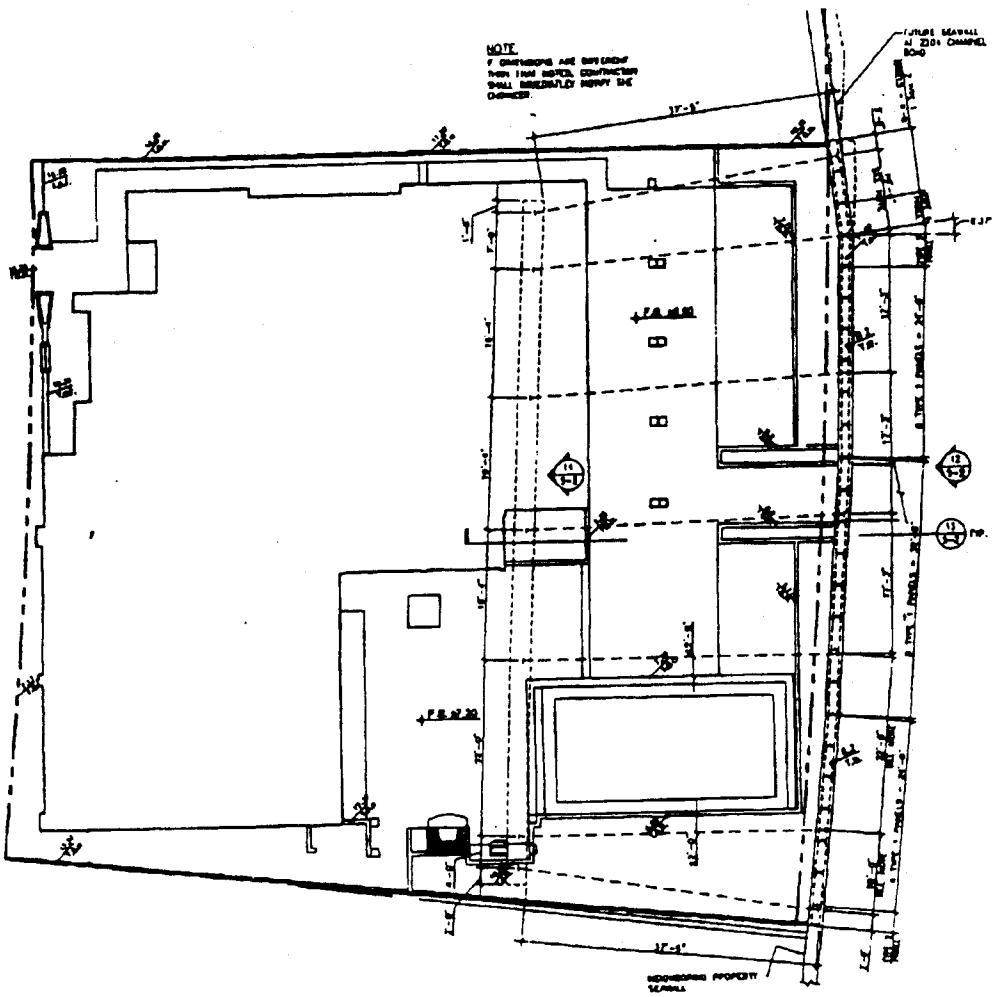
SEAWALL SECTION

NTS

G5

AEC Associates

Seawall Project
2210 Channel Road
Newport Beach, California
Attachment I



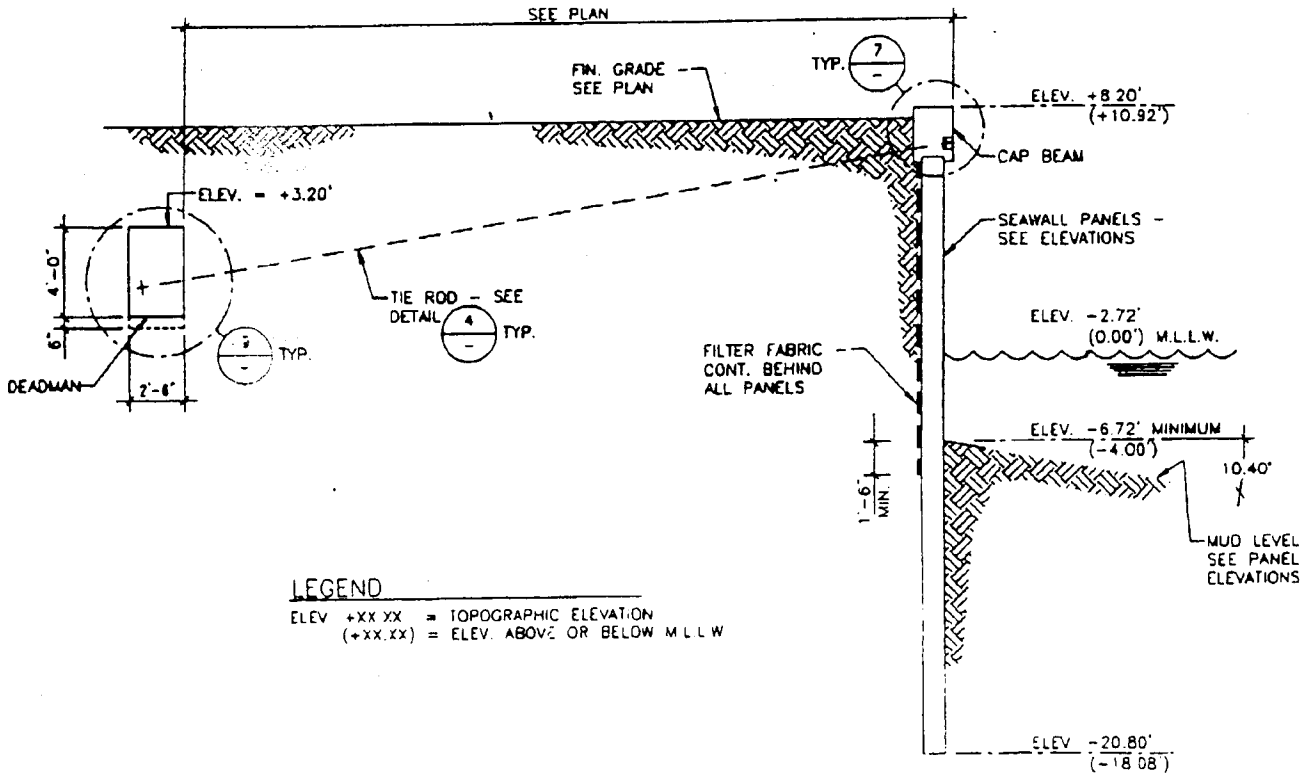
SEAWALL PLAN

NTS

G6

AEC Associates

Seawall Project
2210 Channel Road
Newport Beach, California
Attachment II



SEAWALL SECTION

NTS

G7

Construction Methods

4/9/03

The new seawall will be constructed within the footprint or landward of the existing seawall. Shellmaker, Inc provided the following narrative of construction techniques:

Construction will be conducted from both land and from the waterside of the project area. Vessels and/or barges used during the project will not require anchoring.

Following the demolition of the existing house and structures on the property, the area inshore of the existing seawall will be excavated to the offshore mud line excavation. This excavation will extend approximately 6 feet inshore from the alignment of the existing seawall and slope up to the present elevation of the lot on a 1.5 to 1 slope. All spoil material will be set inshore of the seawall and will not come in contact with bay waters.

The existing seawall will be removed using a land-based crane. The concrete in the existing wall will be sent to a recycler to be crushed for road base and the steel reinforcing recovered will be recycled.

A template will be setup on the alignment of the new wall and the new panels will be jetted into place. After the panels are jetted into place, the tongue and groove interlocking joints will be grouted with concrete to create a seal and the inshore side of the joints will be furthered sealed with filter cloth. The top of the wall is then formed and a concrete coping or bond beam is cast connecting all of the sheet pile panels.

Following the completion of these tasks, an excavation will be made approximately 30 feet inshore of the new seawall to cast a "dead-man" approximately 1.5 feet thick and 3 feet high, nearly the length of the wall. Steel tiebacks, encased in plastic pipe and grouted are then connected from the dead-man to the coping.

Finally, the excavation inshore of the new seawall and the area of the dead-man is backfilled and compacted. During the backfilling and compaction, the tiebacks are tensioned as required.

It is not anticipated that any barges will be used other than small work platforms to either catch debris or to hold equipment. When necessary, a silt curtain will be deployed to contain and turbidity.

-End of Narrative-

CITY OF NEWPORT BEACH

Harbor Resources Division
829 Harbor Island Drive
Newport Beach, CA 92660

May 8, 2003
California Coastal Commission
Attn.: Meg Vaughn, Staff Analyst
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302

Re.: Coastal Development Permit Application Number 5-02-174
Erik Anderson Residence
2210 Channel Road, Newport Beach, Orange County

Dear Ms. Vaughn,

The City of Newport Beach, Harbor Resources Division requested the City's Harbor Commission to consider a request from the homeowner at 2210 Channel Road to rebuild his bulkhead. After considering several options, the Harbor Commission approved on, February 12, 2003, issuance of an Approval in Concept for the project as presented to the Coastal Commission for further approval.

We recognize that the bulkhead will be built in its present location which is 3 and ½ feet bayward of the bulkhead line and which was previously permitted by the City of Newport Beach in the late 1950's. This position provides for alignment with adjacent bulkheads including a bulkhead on City property which is in poor condition. The homeowner has proposed to rebuild the bulkhead on the adjacent City parcel and the City has concurred with this proposal. The City is in the process of finalizing an Encroachment Agreement that will formalize this concurrence. A draft of the Encroachment Agreement is attached. The City is waiting to execute this agreement pending any special conditions that may be imposed by action of your Commission.

The City of Newport Beach concurs in moving forward with this project and prefers to coordinate the project with the property owner through the terms of the Encroachment Agreement rather than sign the Coastal Development Permit Application as co-applicant.

Thank you for your assistance in processing this Coastal Development Permit. If you have any questions, please call me at (949) 644-3041.

Sincerely,

Tom Rossmiller
Harbor Resources Manager

Attachment: Final Draft Encroachment Agreement
Cc: Charlie Williams, Morris Skenderian & Associates

COASTAL COMMISSION

5-02-174

EXHIBIT # J

PAGE 1 OF 1

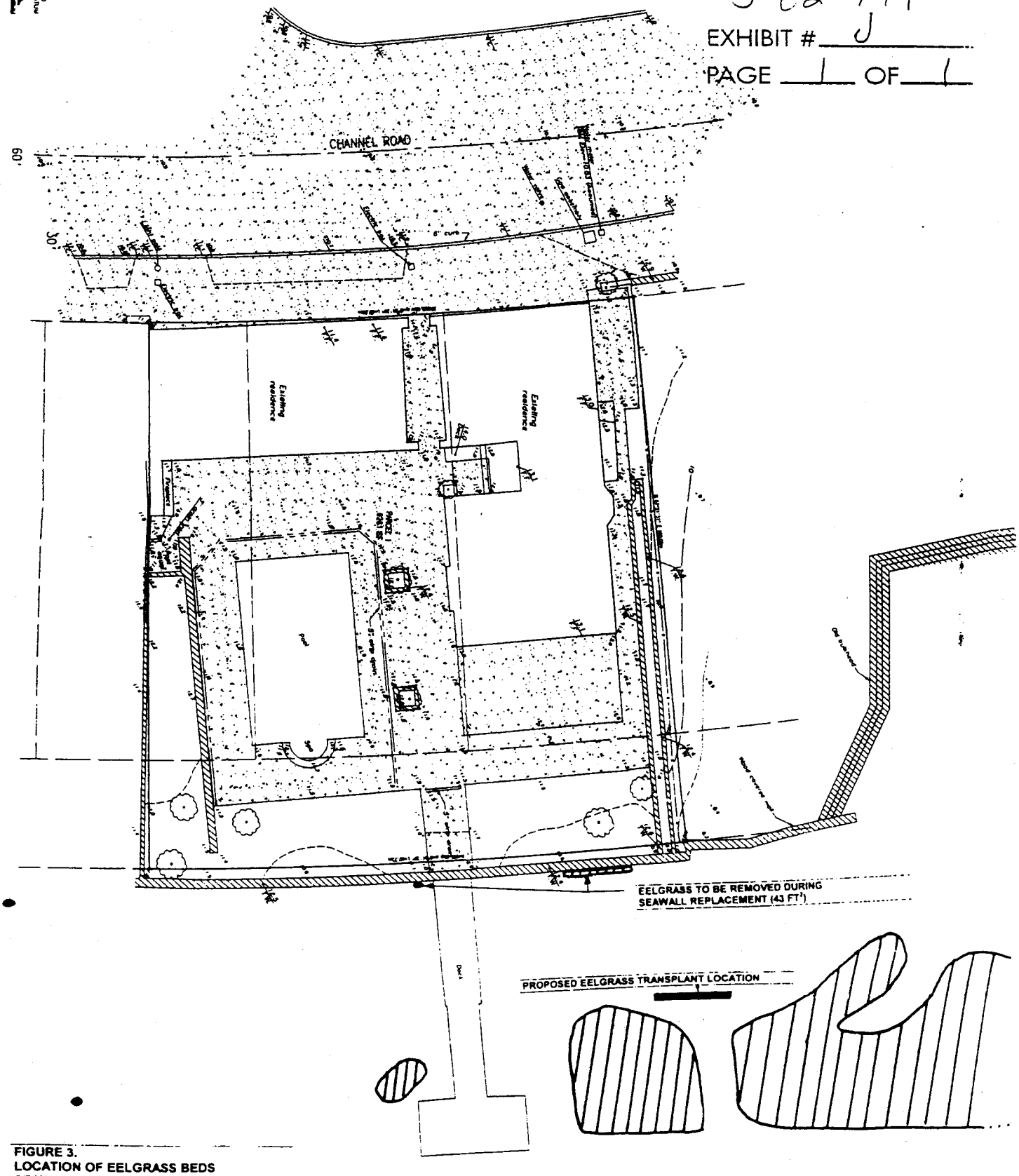


FIGURE 3.
LOCATION OF EELGRASS BEDS
SEAWALL REPLACEMENT PROJECT
2210 CHANNEL DRIVE
NEWPORT BEACH, CA

AEC Associates
Architecture Engineering Construction
2691 Richter Avenue, Suite 110, Irvine, CA 92606
E-mail aec-ca@msn.com
Telephone : 949/252 9188
Fax : 949/252 9198

July 15, 2003

California Coastal Commission
200 Oceangate, Suite 1000
Long Beach, CA 9802-4302

Attention: Meg Vaughn

Subject: Seawall Project
2210 Channel Road
Newport Beach, California

Dear Ms. Vaughn:

In our previous report dated April 8, 2003, we identified two deficiencies in the existing wall, embedded depth and wall thickness. After reconsidering repair options upon property owner Mr. Erik Anderson's request, we found a method which will adequately addresses these deficiencies using standard design and construction practices with a cost acceptable to the owner.

The repair will be done by placing 30 inch diameter caissons at the land side of the existing cap beam, placing reinforcing and applying shotcrete at the back (land side) of the existing wall and connecting them to each other. This work can be completed in a way that does not cause any damage to the existing seawall. This repair work will provide the same structural integrity of the previously proposed replacement seawall with the added benefit of no impact to the harbor side of the existing wall.

The caisson spacing and the shotcrete thickness will be determined by a feasibility study. This study will be based on the fact that, when spacing of the caissons increases, the thickness of the shotcrete and its reinforcing increase accordingly. At this point, it is reasonable to assume that the caissons will be 7"-0" to 9'-0" on center and shotcrete thickness will be 10 to 12 inches. The depth of caissons will be as computed by taking into account soil and water pressure at the front and back of the wall.

First, caissons will be drilled with casings, then, reinforced and concerted. After the concrete in caissons has gained its full strength, the soil behind the wall will be excavated and shotcrete will be applied on the existing wall. A bonding agent will be placed on the surface of the existing wall prior to application of shotcrete. Shotcrete will be connected to the existing wall and the caissons with epoxy anchors. Shotcrete application on the existing wall will be extended below the mud line as required by calculations. After shotcreting is completed, a cap beam will be constructed over the caissons, and it will be connected to the seawall with tie backs.

AEC Associates

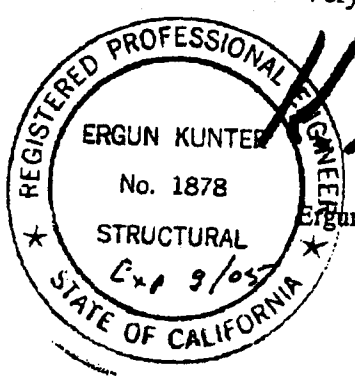
Seawall Project
2210 Channel Road
Newport Beach, California
July 15, 2003
Page Two of Two

In order to make sure that the water table difference between the back and the front of the wall does not exceed 3'-0" (our design criteria) weep holes will be drilled and a filter fabric preventing escape of the soil from the back of the wall will be installed.

After the above described work is completed, the existing wall surface will be cleaned, and the existing wall and cap beam will be repaired by sealing cracks and patching the spalled areas by using sealants and epoxies.

If you have any question regarding this report, please call the undersigned.

Very truly yours.



Ergun (Ed) Kunter, S.E.

7134-02\L030714

K2

HARO, KASUNICH AND ASSOCIATES, INC.
CONSULTING GEOTECHNICAL & COASTAL ENGINEERS

Project No. O8324
15 July 2003

MS. MEG VAUGHN
California Coastal Commission
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 9802-4302

Subject: Coastal and Geotechnical Feasibility of Bulkhead Repair

Reference: Anderson Residence
2210 Channel Road
Newport Beach, California
Permit No. 5-02-174

Dear Ms. Vaughn:

At the request of Access Pacific, LLC (Rusty Areias and Jared Ficker), we met with the project design and construction team to evaluate the existing bulkhead at the referenced site and to determine feasibility of repairing the bulkhead in place. Our firm, Haro, Kasunich, and Associates, is a coastal and geotechnical engineering firm that has considerable experience with bulkheads, seawalls, and other coastal projects that have been approved by the California Coastal Commission (CCC). This letter serves as a summary of our review and as follow-up to our brief conference call last week.

Originally constructed in the 1950s, an existing concrete panel bulkhead with a concrete cap borders the Newport Harbor Channel adjacent to the referenced property. The existing panel wall is approximately 23 feet high with 8 feet of it buried below the harbor mudline. The concrete panels were jetted in place, beyond the applicant's property line and in alignment with other adjacent properties fronting the Newport Harbor Channel. The existing wall configuration and base elevation has been field measured by Shellmaker, Inc (Project Contractor). The existing concrete panels are visually in good condition with no major cracking nor signs of corrosion along the face of the wall. Some minor cracking has occurred. The concrete cap which runs across the top of the wall does have some cracking that needs to be addressed. The wall appears plum at the subject property and along the up channel properties. A preliminary evaluation of the existing wall indicates the biggest deficiency is its buried depth (the depth from existing mudline to the bottom of the wall). The existing embedment is not sufficient for minimum factors of safety related to retaining wall stability. Repair becomes a viable alternative if the embedment could be supplemented thus improving the walls major deficiency and increasing the walls safety factor.

The performance of the wall historically has been good. Based on discussions with Shellmaker, Inc. and our experience with repair of bulkheads in the Moss Landing and Santa Cruz harbors, it is our professional opinion that repair/improvements to the existing wall can be accomplished. For the applicant's bulkhead, this work can be conducted on the inland side of the wall with no impacting activity required on the harbor side of the bulkhead. Temporary excavations can be made at the back of the wall for the purposes of inspections and replacement as needed. The temporary excavation will allow access to the back of the wall where a poured in place or shotcrete concrete covering can be secured to the back of the wall to improve its structural section, repair cracks, and connect the wall to new caissons that will deepen its foundation to proper support depth.

Access to the back of the wall and the adjacent beach property wall is sufficient. Room to construct temporary excavations that will remain stable exists. Tidal fluctuations can be controlled by scheduling work around high tide levels and flattening the temporary cut to achieve stability during fluctuations of water level.

The lack of large cracks, the absence of corrosion, and the age of the existing concrete which forms the bulkhead panels indicates the original concrete has enough strength to bond well and act as a backing to the proposed repair improvements. Core testing of the existing concrete panels and a magnometer evaluation to determine steel content is ongoing to aid in the final structural design of the repair plan. Discussions with Shellmaker, Inc. an experienced contractor in Newport Harbor, our experience with bulkhead repair, and the long term performance of the reference bulkhead indicate that standard design and construction practices can be utilized to repair the existing wall in its present alignment. All work necessary for repair can be performed on the inboard side of the structure.

Repair of the existing bulkhead becomes a viable alternative if the embedment could be supplemented, additional re-enforcement is done just behind the wall, and minor cracking on the wall and cap is addressed. Again, additional embedment is the critical factor. This remedies any structural deficiencies and therefore provides the same structural integrity of a replacement bulkhead. We have shared our assessment with AEC Associates (Project Structural Engineer) and Morris Skenderian & Associates (Project Architect) who have developed a repair design that ensures structural integrity.

With your concurrence, we contacted the CCC's coastal engineer, Leslie Ewing, and discussed the proposed repair option. She was familiar with the project and generally concurred in concept with the proposal to repair the bulkhead. She agreed that it was plausible to pursue the repair and achieve similar structural integrity with a replacement approach.

L2

I appreciate the opportunity to comment on this project. If you have any questions, please call our office.

Very truly yours,

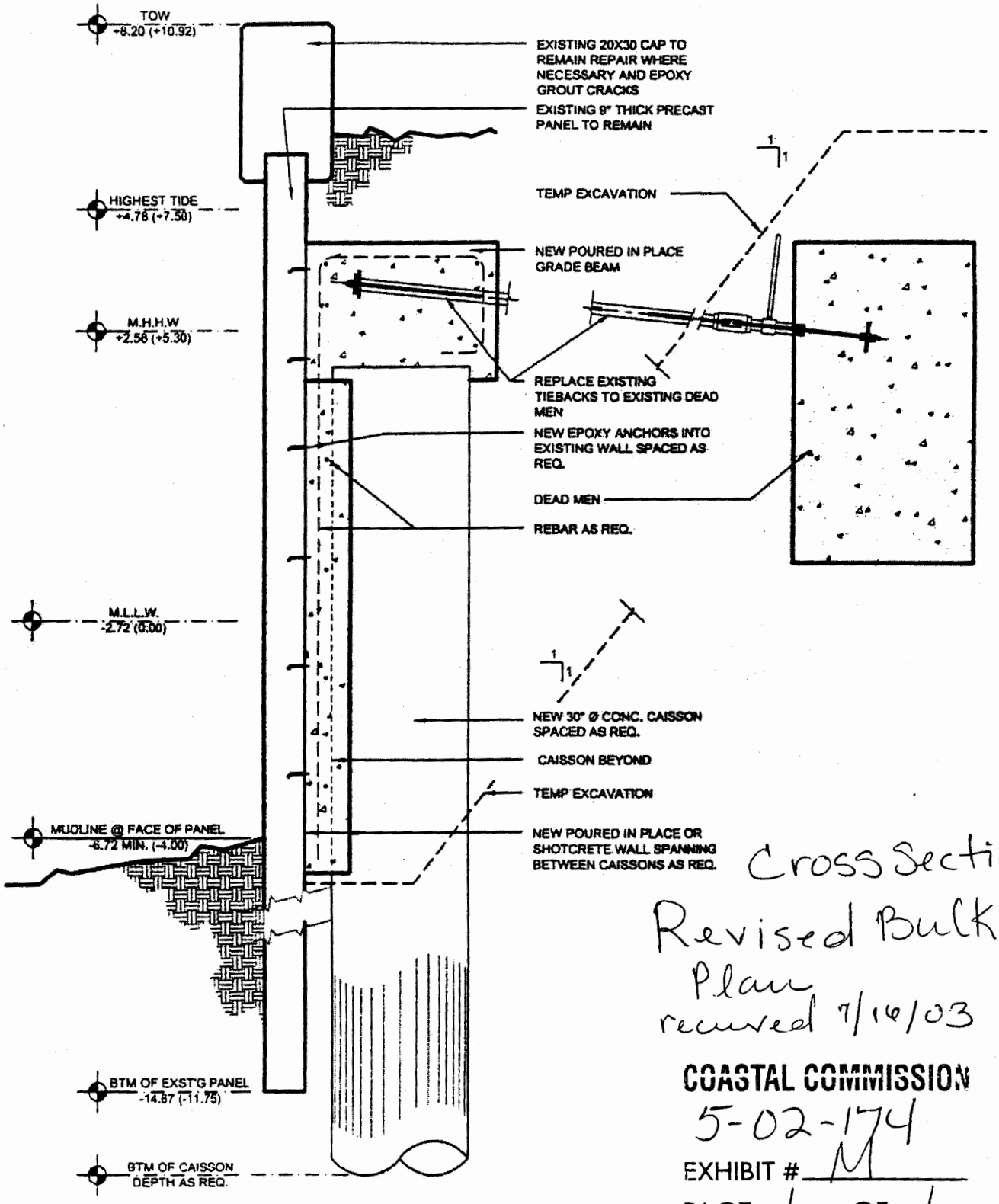
HARO, KASUNICH AND ASSOCIATES, INC.

John E. Kasunich
G.E. 455

JEK/dk

Copies: 3 to Addressee
1 to Ergun Kunter, S.E.
1 to Shellmaker Inc.
1 to Access Pacific, Attention: Jared Ficker

L 3



ELEVATION LEGEND

ELEV. +XX.XX = TOPOGRAPHIC ELEVATION

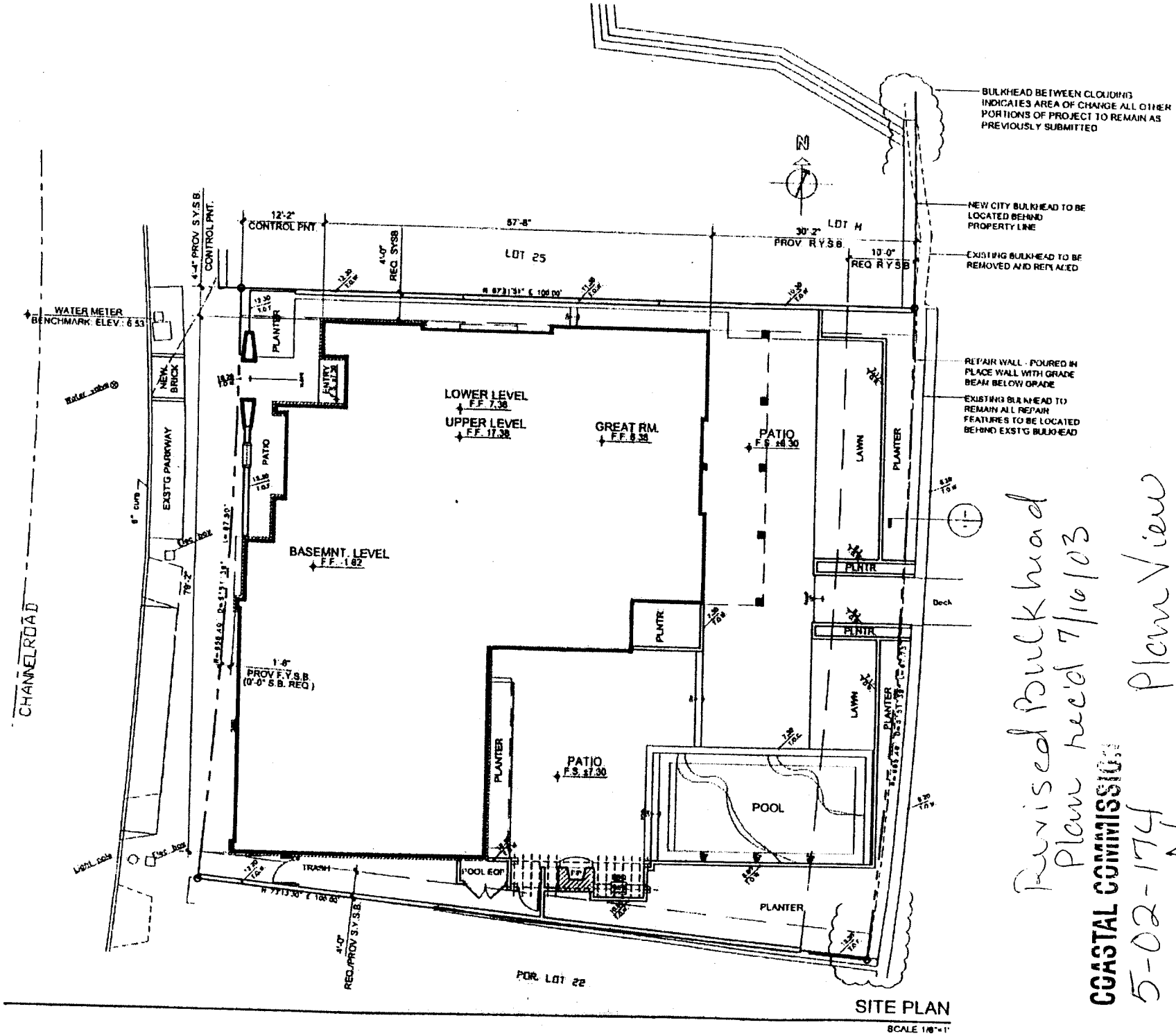
(+XX.XX) = ELEV. ABOVE OR BELOW M.L.L.W. PER CITY OF NEWPORT BEACH PUBLIC WORKS DATA

Cross Section
Revised Bulkhead
Plan
recvd 7/16/03

COASTAL COMMISSION
5-02-174
EXHIBIT # M
PAGE 1 OF 1

DETAIL 1: BULKHEAD PANEL

SCALE: NTS



Revised Bulkhead Plan rec'd 7/16/03

Plan View

COASTAL COMMISSION

5-02-174

EXHIBIT # N

PAGE 1 OF 1

State of California

Memorandum

To : Ms. Meg Vaughn
California Coastal Commission

Date : May 22, 2003

From : Mr. ERIC J. LARSON
Department of Fish and Game

Subject: Coastal Development No. 5-02-174

This memo is in response to a request from Mr. Rick Ware, Coastal Resources Management (CRM), concerning a proposed seawall replacement project at 2210 Channel Road, Newport Beach, Orange County, CA; Coastal Development Permit (CDP) No. 5-02-174. Mr. Ware provided the Department of Fish and Game (Department) staff with the project description and a marine resources impact assessment report. Our remarks are based on findings in the report.

The proposed project would construct a new seawall within the existing footprint or landward of the existing seawall. The existing house and structures on the property will be demolished while the existing seawall will be removed by a land-based crane. The new seawall panels will be jetted into place and sealed. The top of the wall will be formed with concrete. An excavation will be made 30 feet inshore of the new wall to cast a 1.5 feet-thick and 3.0 feet-high deadman which will run the length of the wall. The deadman will then be connected to the coping and the area will be backfilled and compacted. Construction will be conducted from both land and water. Vessels and barges used during construction are not expected to require anchoring. Best management practices (BMPs), including the use of a silt curtain, are recommended to reduce turbidity and other marine resource impacts. The project site has been surveyed for the presence of the invasive algae, *Caulerpa taxifolia*. Caulerpa was not found at the project site.

Because the seawall will be replaced either shoreward or within the existing footprint there are no permanent impacts to soft bottom habitat. However, the proposed project will result in a small loss of eelgrass habitat (*Zostera marina*) located directly next to the existing seawall. The size of the eelgrass habitat lost will be a total of 4.0 square meters. In concurrence with the Southern California Eelgrass Mitigation Policy, the loss of eelgrass will be mitigated by conducting an on-site transplant of 4.8 square meters to an area in front of 2210 Channel Road, north of the existing boat dock. This area currently supports eelgrass. Eelgrass next to the seawall (that would be destroyed by the project) will be salvaged for transplant prior to construction which is anticipated to commence during the late spring or summer of 2003.

The Department believes that the proposed project, as currently described, would not have a significant adverse effect on existing marine resources and habitats within the area, provided the discussed mitigation measures are implemented. We are particularly concerned with potential impacts to the adjacent eelgrass beds from construction vessels and project induced turbidity. We suggest you require the recommended BMPs in CRM's marine resources impact assessment as special conditions in your permit. Eelgrass bed boundaries should be marked prior to construction, vessels should avoid anchoring and/or maneuvering over eelgrass, silt curtains should be deployed around the project area, and a post-project eelgrass survey should be conducted to determine the actual amount of eelgrass affected by the project activities. With these inclusions, the Department would concur with the issuance of a CDP for the proposed project.

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.

cc:

Ms. Deborah Johnston
CDFG Marine Region- Monterey

Ms. Marilyn Fluharty
CDFG Marine Region -San Diego

Mr. Robert Hoffman
NOAA Fisheries
501 West Ocean Boulevard, Suite 4200
Long Beach, CA 90802-4213

Mr. Charlie Williams
Morris Skenderian & Associates
Laguna Beach