CALIFORNIA COASTAL COMMISSION

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RECORD PACKET COPY

Item Th 8c

Filed:	February 23, 2004
49th Day:	April 12, 2004
180th Day:	August 21, 2004
Staff:	ALB/LB
Staff Report:	May 20, 2004
Hearing Date:	June 9-11, 2004
Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-03-121

APPLICANT: City of San Clemente

AGENTS: Dennis Roger Reed, Beaches, Parks & Recreation Manager
John Beck, Park Planner

PROJECT LOCATION: On the beach at 620 Avenida Del Mar, San Clemente, Orange County

PROJECT DESCRIPTION: Repairs and renovation of the Marine Safety Headquarters, including the installation of a new steel sheet pile wall inland of the existing sheet pile wall and application of a shotcrete surface extending from the outer sheet pile wall to the exposed foundation of the building. The project also involves interior modifications to the structure.

LOCAL APPROVALS RECEIVED:
Approval by the San Clemente City Council on August 21, 2002; Approval by the San Clemente Coastal Advisory Committee on July 11, 2002; and Approval-in-Concept from the San Clemente Community Development Department dated March 26, 2003.

SUBSTANTIVE FILE DOCUMENTS:
City of San Clemente Certified Land Use Plan, Policy for Protecting, Replacing or Relocating Existing Beach Facilities prepared by City of San Clemente Coastal Advisory Committee and Coastal Development Permits 5-98-187; 5-98-187-G; 5-01-147 and 5-00-333.

SUMMARY OF STAFF RECOMMENDATION:

The City of San Clemente is proposing to conduct a variety of repairs to the Marine Safety Building. The proposed work is located between the first public road and the sea on the beach upcoast of the San Clemente Municipal Pier. The major issues addressed in the staff report involve potential hazard from wave uprush, visual impacts, public access and water quality.

Staff recommends the Commission **APPROVE** the proposed development with five (5) special conditions which require 1) an agreement to assume the risk associated with the development; 2) notification that any future improvements to the structure will require a permit from the Commission; 3) submittal of a colorization and texturization plan; 4) timing of construction to be outside of peak beach use season; and 5) use of construction best management practices (BMPs).

LIST OF EXHIBITS:

1. Vicinity Map
2. Location Map
3. Project Plans
4. Memorandum from Commission's Coastal Engineer dated April 22, 2004

STAFF RECOMMENDATION:

The staff recommends that the Commission **APPROVE** the permit with special conditions.

MOTION:

I move that the Commission approve Coastal Development Permit No. 5-03-121 pursuant to the staff recommendation.

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

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

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

III. SPECIAL CONDITIONS

1. Assumption of Risk, Waiver of Liability, and Indemnity Agreement

A. By acceptance of this permit, the applicant acknowledges and agrees (i) that the subject site may be subject to hazards from waves, storm events, flooding, and erosion; (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 defiance of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

B. PRIOR TO ANY CONVEYANCE OF THE PROPERTY THAT IS THE SUBJECT OF THIS COASTAL DEVELOPMENT PERMIT, the applicant shall execute and record 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 (hereinafter referred to as the "Standard and Special Conditions"); and (2) imposing all Standard and Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The restriction shall include a legal description of the applicant's entire parcel or parcels. It shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the Standard and Special 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.

C. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit a written agreement in a form and content acceptable to he Executive Director, incorporating all of the above terms of this condition.

2. Future Improvements

This permit is only for the development described in Coastal Development Permit No. 5-03-121. Except as provided in Public Resources Code section 30610 and applicable regulations, any future development as defined in PRC section 30106, including, but not limited to, a change in the density or intensity of use land, shall require an amendment to Permit No. 5-03-121 from the California Coastal

Commission or shall require an additional coastal development permit from the California Coastal Commission or from the applicable certified local government.

3. Color and Texture Plan

A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the review and approval of the Executive Director, a plan demonstrating that the color and texture of the structure will be compatible with the adjacent sandy beach. The plan shall demonstrate that:

1. the proposed shotcrete surfacing of the shoreline protective device shall be constructed of shotcrete that has been colored with earth tones that are compatible with the adjacent bluff face;

2. white and black tones will not be used,

3. the color will be maintained through-out the life of the structure,

4. the structure will be textured to match the adjacent beach.

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

4. Timing of Construction and Public Access

By acceptance of this permit, the applicant agrees to minimize adverse impacts to public use of the adjacent beach areas resulting from construction activities as required below.

No construction shall occur during the "peak use" beach season, defined as the period starting the day before the Memorial Day weekend and ending the day after the Labor Day weekend of any year.

5. Storage of Construction Materials, Mechanized Equipment and Removal of Construction Debris

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

(a) No construction materials, debris, or waste shall be placed or stored where it may enter a storm drain or be subject to wave erosion and dispersion;

(b) Any and all debris resulting from construction activities shall be removed from the project site within 24 hours of completion of construction;

(c) Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of construction-related materials, and to contain sediment or contaminants associated with construction activity, shall be implemented prior to the on-set of such activity. BMPs and GHPs which shall be

implemented include, but are not limited to: stormdrain inlet protection with sandbags or berms, all stockpiles must be covered, and a pre-construction meeting shall be held to review procedural and BMP/GHP guidelines. Selected BMPs shall be maintained in a functional condition throughout the duration of the project.

(d) Construction debris and sediment shall be properly contained and secured on site with BMPs, to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking. Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Debris shall be disposed at a debris disposal site outside the coastal zone.

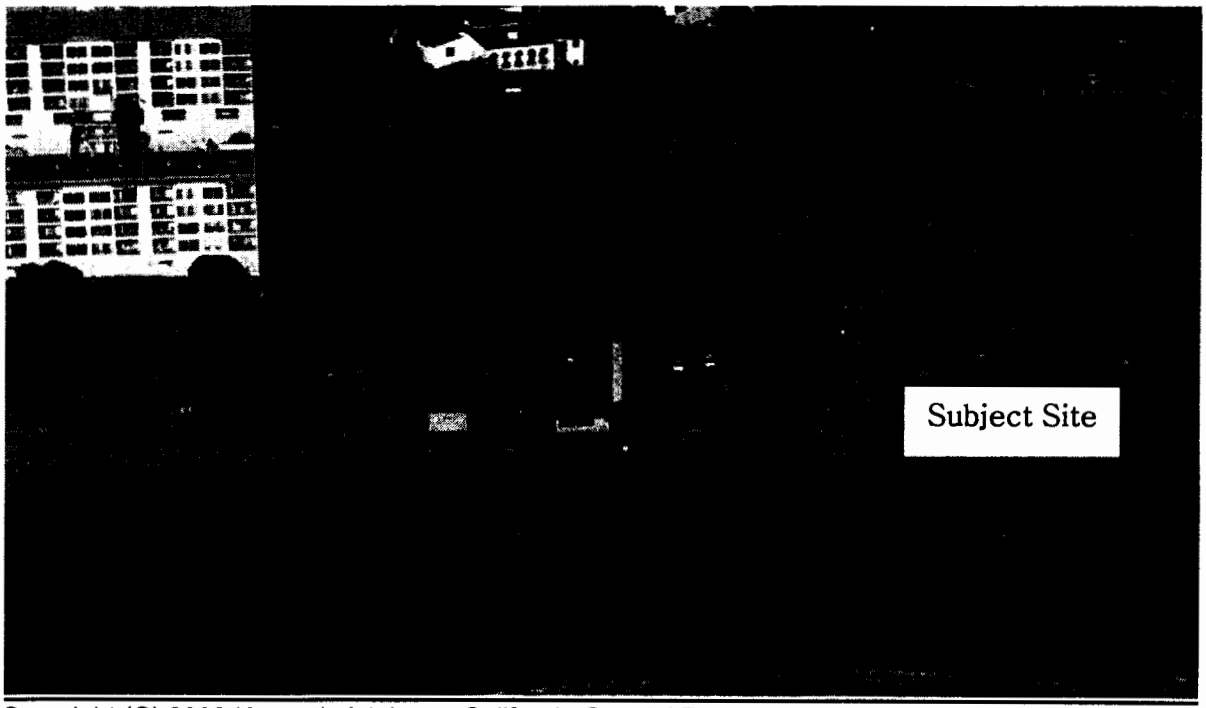
IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. Project Location, Description and Background

Project Location

The proposed project site is located on the sandy beach approximately 600 feet upcoast of the Municipal Pier in the City of San Clemente, Orange County (Exhibits 1 & 2). The Marine Safety Headquarters building houses the lifeguard operations and beach maintenance functions of the City of San Clemente. The building, constructed over 30 years ago, is located on City property. State Lands Commission review is not required because the building is not located beyond the mean high tide line. The nearest vertical public access to the shoreline is available via both an at-grade paved railroad crossing and a below-grade underpass at the base of the Pier. Lateral public access is located immediately seaward of the subject site, as shown below.



Project Description

The City is proposing repairs and renovation of the Marine Safety Headquarters, including the installation of a new steel sheet pile wall inland of the existing steel sheet pile wall and application of a shotcrete surface extending from the outer sheet pile wall to the exposed foundation of the building. The existing building is supported by caissons, which are currently 4-5 feet above the sand level. A steel sheet pile wall wraps around the seaward extent of the building perimeter. The existing wall will remain in place, but will be covered with a 6" thick cosmetic facing to improve the visual character of the wall and to protect the sheet pile from corrosion. The existing sheet pile wall is rusted and presents an adverse visual impact, as well as a safety hazard. The project also involves interior modifications to the structure, including electrical, plumbing and ADA improvements. Project plans are included as Exhibit 3. No additional square footage or height will be added to the existing structure.

Prior Commission Action at Subject Site

On October 13, 1998, the Commission approved 5-98-187 for the installation of a new 3/8 inch, 75-foot long sheet pile wall in front of the Marine Safety Building. The sheet pile wall was to be driven five feet into the beach. All new and exposed existing sheet pile was to be cut off at beach grade and capped with rubber at the sand line. The Commission imposed one special condition, which required the City to assume the risk of development. The Commission had previously approved an emergency permit for the work on June 5, 1998.

B. Hazards

The proposed project involves development on the sandy beach. The City is proposing structural and aesthetic improvements to the Marine Safety Headquarters, including repairs to the existing sheet pile wall, utility upgrades and interior modifications (Exhibit 3). The beach in the vicinity of the building is approximately 27' wide during summer months and substantially eroded during the winter. Due to its proximity to the Pacific Ocean, the building is regularly subject to wave up-rush ensuing from seasonal high tides and storm events. In the application submittal, City staff recognizes that there is significant potential for facility damage from large winter storms if current protective measures are not maintained. Development in such a location is inherently risky.

Section 30235 of the Coastal Act states that an existing structure can be protected when in danger from erosion provided that the protective structure is designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Specifically, it reads:

> *"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 states, in pertinent 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.

In this case, the Marine Safety facility is located on the sandy beach, seaward of the railroad tracks. As stated previously, the width of the beach at the subject site is approximately 27 feet during the summer season and virtually disappears in the winter. The building is located as landward as is currently possible at this location along the beach, given the fact that the OCTA railroad tracks constitute a barrier to moving the Marine Safety Building any further inland. Relocation would have to occur inland of the tracks to avoid wave activity. However, relocation may also present a hazard, as lifeguards would have to cross the railroad tracks to reach beach-goers. There is no designated railroad crossing at this location. The nearest crossings are at the Municipal Pier to the south and Linda Lane to the north.

Nonetheless, as currently sited, the existing structure is subject to hazard from wave uprush and flooding during the winter season. The applicant submitted multiple technical documents to evaluate the potential wave uprush hazard at the subject site and the need for repairs to the existing seawall. These include a *Coastal Engineering Analysis* and *Marine Safety Building Beach Profile Survey Results* prepared by Coastal Frontiers. Earthquake resistance and liquefaction potential were also evaluated by TM Engineers and Peter Borella, PHD. The technical studies conclude that the proposed repair is necessary to protect the existing structure from wave attack as the existing caissons are exposed and vulnerable to lateral loads. The new sheet pile wall and protective coating will protect the integrity of the building by preventing further erosion and stabilizing the foundation system. TM Engineers estimates that after these protective measures are implemented, the life expectancy of the building will be 30 years or more. The studies indicate that the potential for liquefaction is very low to nil, as the sheet piles will extend into competent bedrock a minimum of 3 feet.

The Commission's Senior Coastal Engineer has reviewed the material provided and has prepared an evaluation of the proposed project (Exhibit 4). The memorandum concludes, *"[t]he proposed reinforcement of the existing sheet pile wall is adequately engineered for the site conditions. These actions should extend the life of the existing sheet pile wall an additional 20 to 30 years, as anticipated by the applicant's engineer."* The staff memo affirms that the proposed sheet pile wall repairs will not add to any of the impacts that are occurring to the beach as a result of the existing structure, such as hindered sand transport or beach encroachment. There will be a very small increase in encroachment resulting from the 6" thick facing. All other effects to the beach area will remain the same. As stated in the memo, *"the repairs to the seawall will insure that it continues to function as designed, and that it continues to protect the Marine Safety Building in its current location."* Although the repairs are deemed necessary to protect the existing building, it is necessary to determine that the proposed project is the least damaging alternative.

The applicant submitted an alternatives analysis that considers beach nourishment and relocation of the existing building. Various design options for the protective device were also considered and dismissed due to their adverse impacts on the surrounding beach. The following is a brief summary of the alternatives considered:

Beach Nourishment: The City is actively pursuing sand replenishment as a long-term measure for the protection of existing facilities on the beach. It is their goal to obtain Federal and local support for sand replenishment projects, thus widening the beaches and providing "natural" protection for

all facilities, a well as increasing usable beach space for recreation. The US Army Corps of Engineers is currently conducting a Feasibility Study and the City is pursuing an opportunistic beach sand permit. However, the City asserts that these projects are in their initial stages and it may be years before anything substantial materializes.

Relocation: The City considered relocation of the building to the inland side of the railroad tracks. However, City staff believes that it is imperative for the Marine Safety Building to remain on the ocean side of the tracks in a central location due to the need for the building to be in close proximity to the beach for public safety reasons (impact of railroad on lifeguard response time, safety of crossing the tracks, and emergency access for the public seeking first aid treatment). Additionally, the City claims there are no alternative locations available on the inland side of the tracks within the central portion of the City.

Design Options: The City considered modifying the building foundation so that the structure would be elevated above the wave level. However, the following concerns were raised:

- Elevating the building would inhibit emergency and public access, especially for disabled persons. A ramp and/or stairway system would have to be constructed to enable lifeguards and others to gain access to the building from beach level. As such, emergency services would be less accessible and potentially compromised.
- A raised building height would obstruct protected public view corridors in the area.
- Although not a Coastal Act concern, the applicant claims that a raised foundation system would render the project economically infeasible. The applicant's consultant states that the cost of new caissons alone would be around $800,000. With the cost of specialty jacking, resetting, etc., the price to raise the building would be over half the worth of the building[1], which would mean it would have to be upgraded to meet new codes. As such, the city asserts that the cost of modifications would approach or exceed the cost to demolish and rebuild the structure.

Another design option involves the material used in the protective device. Instead of a sheet pile wall, the applicant could install riprap, which is used to protect the railroad tracks in the surrounding area. Riprap would require a larger footprint, thereby resulting in greater seaward encroachment and adverse impacts on public access.

Another form of vertical wall could also be used effectively at this location, such as a concrete panel wall. However, the type of vertical wall makes no difference for issues relating to coastal access and beach processes (i.e. encroachment, passive erosion, scour). Any type of vertical wall would have similar impacts on the beach at this location. As such, the proposed project is found to be the most feasible and least environmentally damaging alternative for protecting the existing Marine Safety Building.

For future improvements to the Marine Safety Building, the Commission encourages the City to consider siting all non-essential facilities to a more landward location to minimize the need for continued shoreline protection. The City should consider the feasibility of maintaining a smaller, perhaps temporary, structure on the seaward side of the railroad tracks to provide emergency response services.

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[1] Marine Safety Building estimated to be worth $1,418,750 currently.

Section 30253 of the Coastal Act states that new development shall minimize risks to life and property in areas of high geologic, flood, and fire hazard, and assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The proposed project involves repairs to a beachfront structure subject to wave uprush. Development at such a location is inherently risky.

To assure that the applicant is aware of the hazards and restrictions on the subject property, the Commission imposes two special conditions. Since the proposed development is taking place adjacent to the ocean in an area that is potentially subject to wave uprush, the Commission is imposing its standard waiver of liability special condition. The second special condition informs the applicant that any future improvements to the structure will require a permit from the Commission. Through these two special conditions, the applicant is notified that the project site is in an area that is potentially subject to flooding which could damage the proposed building. The applicant is also notified that the Commission is not liable for such damage as a result of approving the permit for development. In addition, these conditions insure that future owners of the property will be informed of the risks, the Commission's immunity from liability. Therefore, only as conditioned does the Commission find the proposed project consistent with Sections 30235 and 30253 of the Coastal Act.

C. Scenic Resources

Section 30251 of the Coastal Act pertains to visual resources. It states:

> *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas...*

The project is located on a beach lot north of the Municipal Pier. The site is located seaward of the OCTA railroad tracks and is highly visible from public vantage points. Because the proposed seawall repair will affect views inland from the shoreline and from a public access point, any adverse visual impacts must be minimized. Consequently, it is necessary to ensure that the development will be designed to protect views to and along the beach area and to minimize the alteration of existing landforms.

The project involves improvements to an existing shoreline protective device, including application of a shotcrete material on the face of a sheet pile wall. The material can be colorized and texturized to replicate the appearance of the surrounding beach material. However, the sample submitted by the applicant has not been colorized. As such, the shotcrete material appears obvious and unnatural.

To minimize the visual impacts of the shoreline protective device as repaired and enhanced, the Commission imposes Special Condition 3. Special Condition 3 requires the applicant to submit a plan, for the review and approval of the Executive Director, for a colorization and texturization scheme that will better camouflage the protective device. The exterior layer of the wall must be colored in earth tones to match the natural appearance of the surrounding beach.

As conditioned, the Commission finds the project consistent with the visual resource protection policies of Section 30251 of the Coastal Act.

D. Public Access and Recreation

Section 30212(a)(2) of the Coastal Act states, in pertinent part:

> *(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:*
>
> *(2) adequate access exists nearby*

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, including 30212 identified above. The proposed project site is located between the first public road and the sea, on the sandy beach seaward of the railroad tracks. As described previously, the proposed project consists of repairs to the Marine Safety headquarters that will serve residents as well as visitors to the Pier Bowl area and public beach.

Access to the shoreline in the area of the proposed project is currently available via the Municipal Pier access point, which provides both an at-grade paved railroad crossing and a below-grade underpass. Lateral access is provided directly seaward of the subject site.

Construction impacts, such as obstruction of lateral or vertical access to the shoreline with trucks and/or equipment, can affect the public's ability to access the beach and recreate on it. Construction related impacts can be partially alleviated by limiting construction work to the off-peak season (fall and winter) when beach use by the public is typically low. With this in mind, the City intends to initiate construction in the off-peak season. The City has also indicated that beach access will not be affected during construction, as alternative access will be provided during construction. Although the applicant intends to complete the project prior to peak beach use season and to maintain public access during construction, there is a possibility for delay and/or unexpected construction impacts. Therefore, to guarantee that public access is maintained during peak beach use season, the Commission imposes Special Condition No. 4. This special condition requires construction to occur prior to the Memorial Day weekend and/or following the Labor Day weekend.

After construction, the project will not result in any additional adverse impacts to public access beyond those which presently exist. The proposed protective device repair will not result in any substantial seaward encroachment and will not create new impacts to sand movement. Existing beach conditions will remain unchanged. Therefore, the proposed project will not change public access at the subject site.

As conditioned, the Commission finds the proposed development consistent with the public access policies of the Coastal Act.

E. Water Quality

Section 30230 of the Coastal Act states, in pertinent part:

Marine resources shall be maintained, enhanced, and where feasible, restored.

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 30232 of the Coastal Act states, in pertinent part:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials.

The City of San Clemente proposes to carry out repairs to the Marine Safety Headquarters located adjacent to coastal waters. The application of shotcrete to the existing sheet pile wall will not result in any adverse impacts to water quality. Although the proposed project will not have direct post-construction impacts on coastal waters, construction impacts have the potential to negatively affect water quality. Storage or placement of construction materials, debris, or waste in a location which may be discharged into coastal waters would result in adverse impacts upon the marine environment that would reduce the biological productivity of coastal waters. For instance, construction debris entering coastal waters may cover and displace soft bottom habitat. In addition, sediment discharged to coastal waters may cause turbidity which can shade and reduce the productivity of eelgrass beds and foraging avian and marine species ability to see food in the water column. In order to avoid adverse construction-related impacts upon marine resources, Special Condition No. 5 outlines construction-related requirements to provide for the safe storage of construction materials and the safe disposal of construction debris. This condition ensures that construction activities will not have a negative impact on coastal resources.

As discussed above, the proposed project will not result in post-construction impacts on water quality. During construction, special precautions will be followed to ensure that materials are stored properly and debris is disposed of at an appropriate location. Only as conditioned for appropriate construction practices does the Commission find that the proposed development is consistent with Sections 30230, 30231 and 30232 of the Coastal Act.

F. Local Coastal Program

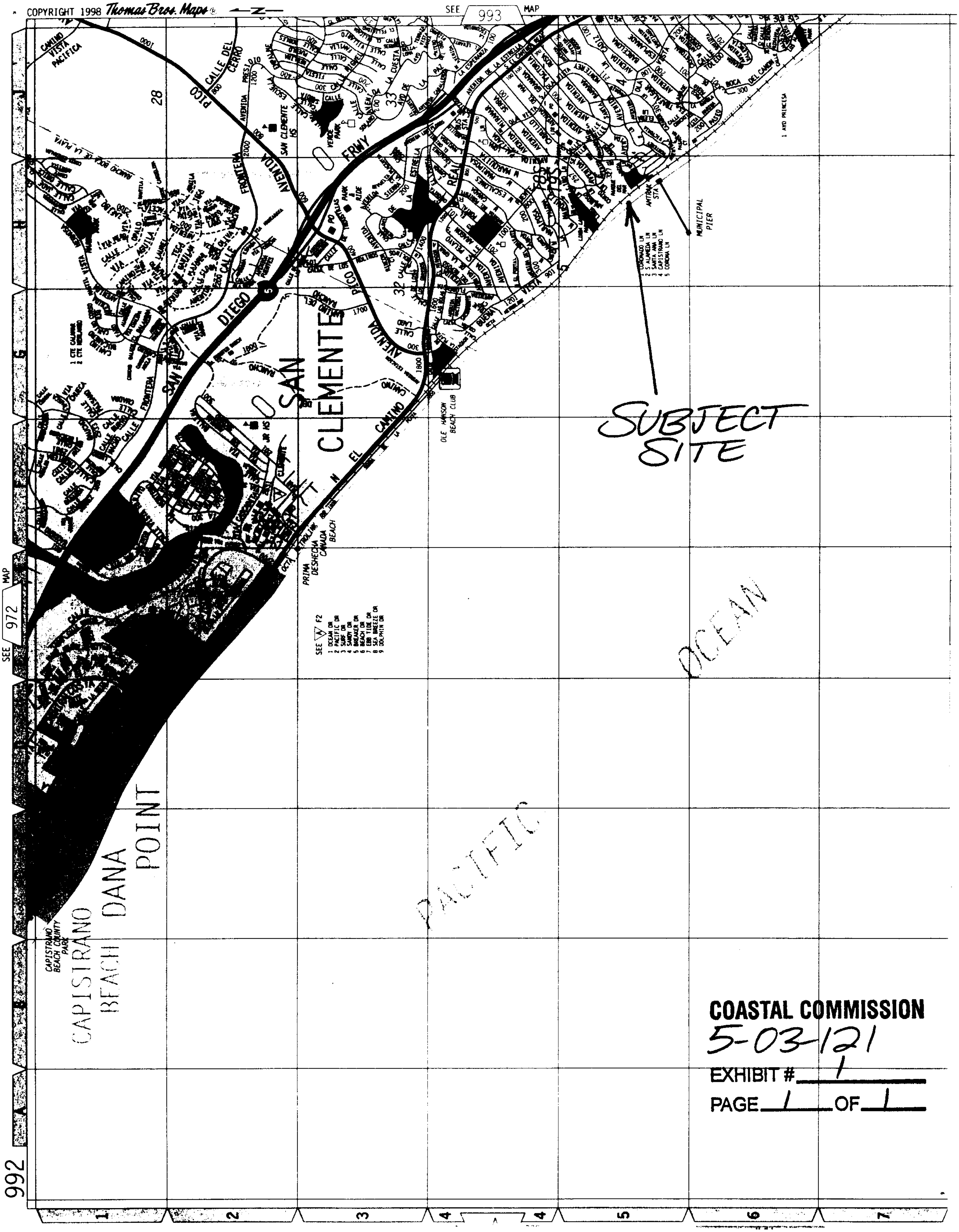
Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The Commission certified the Land Use Plan for the City of San Clemente on May 11, 1988, and certified an amendment approved in October 1995. On April 10, 1998, the Commission certified with suggested modifications the Implementation Plan portion of the Local Coastal Program. The suggested modifications expired on October 10, 1998. The City re-submitted on June 3, 1999, but withdrew the submittal on October 5, 2000.

The proposed development is consistent with the policies contained in the certified Land Use Plan. Moreover, as discussed herein, the development, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act. Therefore, approval of the proposed development will not prejudice the City's ability to prepare a Local Coastal Program for San Clemente that is consistent with the Chapter 3 policies of the Coastal Act as required by Section 30604(a).

G. Consistency with the California Environmental Quality Act (CEQA)

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project has been found to be consistent with the public access policies of the Coastal Act. Mitigation measures, in the form of special conditions, are imposed which require 1) an agreement to assume the risk associated with development; 2) notification that any future improvements to the structure will require a permit from the Commission; 3) submittal of a colorization and texturization plan; 4) timing of construction to be outside of peak beach use season; and 5) use of construction best management practices (BMPs). No further alternatives, or mitigation measures, beyond those imposed by this permit, would substantially lessen any significant adverse impacts which the development would 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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5-03-121

EXHIBIT # 1

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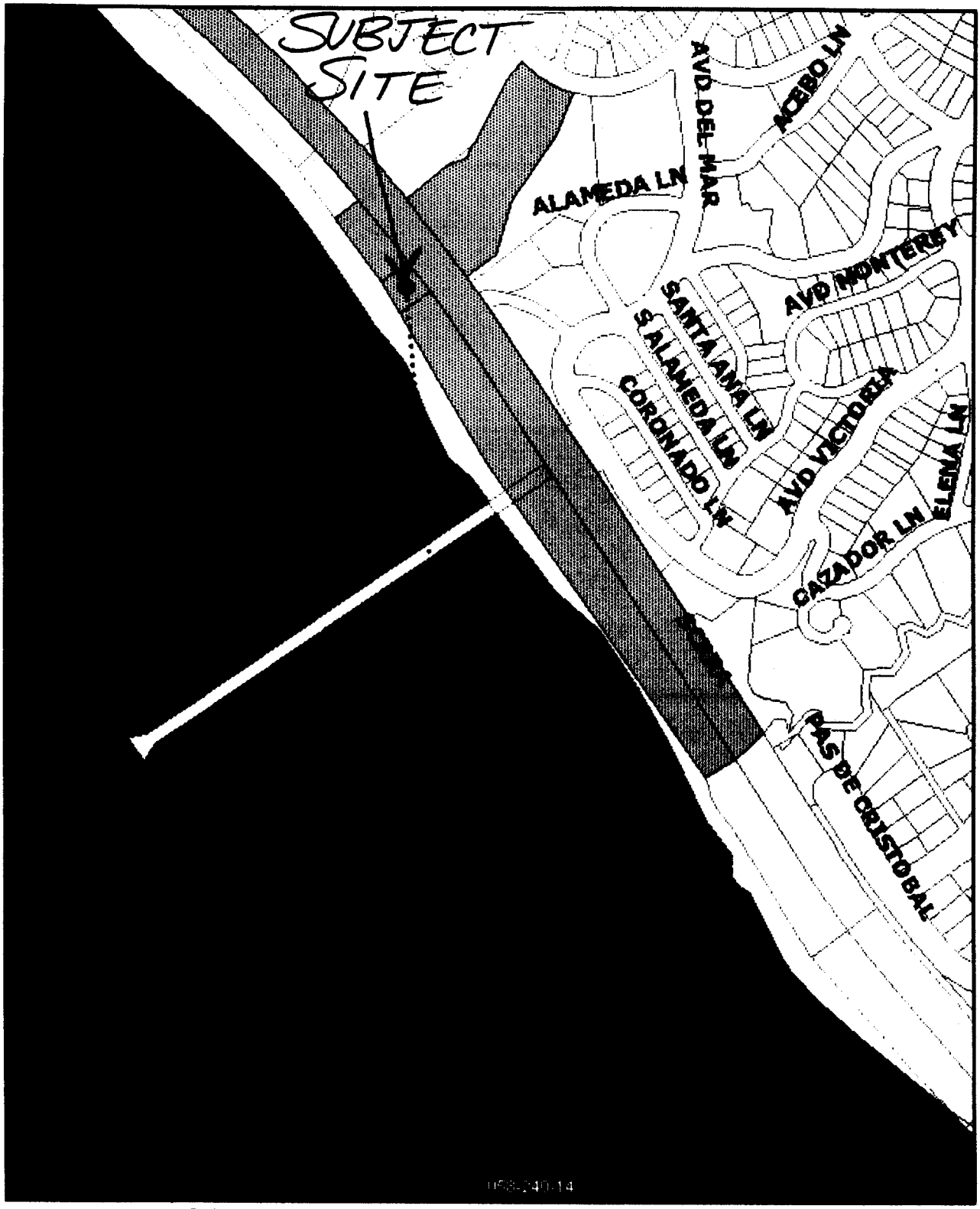

Marine Safety Building Repairs Project

100' Radius Notification Map

Scale: 1" = 329'

MARINE SAFETY BUILDING

CITY PROJECT #10004 & #13011

SAN CLEMENTE, CALIFORNIA

COASTAL COMMISSION
5-03-131
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GENERAL NOTES

GENERAL

1 CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE 1997 UNIFORM BUILDING CODE, AND ALL LOCAL CODES AND ORDINANCES

2 THE WORK UNDER THIS CONTRACT INCLUDES THE FURNISHING OF LABOR, MATERIALS, SERVICES AND TRANSPORTATION, THAT IS REQUIRED FOR THE COMPLETION OF THE PROJECT IN ACCORDANCE WITH THE PROVISIONS OF THE CONSTRUCTION DOCUMENTS

3 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH LOCAL STANDARDS, AND TO THE APPLICABLE PROVISIONS OF THE UNIFORM BUILDING CODE, 1997 EDITION, AND CALIFORNIA BUILDING CODE, 1998 EDITION

4 THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE UNLESS OTHERWISE SHOWN, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKERS, RESIDENTS AND OTHER PERSONS DURING DEMOLITION AND CONSTRUCTION THOSE MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING, SCAFFOLDING, PLANKING, FLAGMAN, ETC THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL ENGAGE PROPERLY QUALIFIED PERSONS TO DETERMINE WHERE AND HOW TEMPORARY PRECAUTIONARY MEASURES SHALL BE USED AND INSPECT SAME AT JOB SITE OBSERVATION VISITS TO THE SITE BY ENGINEER SHALL NOT INCLUDE INSPECTION OF SAFETY MEASURES OR SHORING

5 THE CONTRACTOR AND ALL HIS SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS, AND THE CONSTRUCTABILITY OF ALL DETAILS ANY VARIATIONS, OMISSIONS, ERRORS OR CONFLICTS IN THE CONTRACT DOCUMENTS SHALL NOT BE GROUNDS FOR FUTURE CHANGE ORDERS IF AN ERROR OR CONFLICT IS NOTED, IT MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER, IN WRITING, PRIOR TO SUBMISSION OF A BID, SO THAT CLARIFICATIONS AND CORRECTIONS CAN BE ISSUED TO ALL BIDDERS ANY VARIATIONS, OMISSIONS, ERRORS OR CONFLICTS NOT RESOLVED/ CLARIFIED PRIOR TO ACCEPTANCE OF THE BID SHALL BE CONSTRUCTED PER THE DISCRETION OF THE ENGINEER.

6 SUBMISSION OF A BID SHALL BE THE GENERAL CONTRACTOR'S, AND ALL HIS SUB-CONTRACTORS, ASSURANCE THAT HE CAN CONSTRUCT THE PROJECT AS INDICATED IN THE CONTRACT DOCUMENTS CONTRACTOR SHALL SUBMIT A LIST OF ALL SUBCONTRACTORS TO BE USED DURING THE PROJECT, INCLUDING REFERENCES AND QUALIFICATIONS, WHEN SUBMITTING A BID, FOR REVIEW BY ENGINEER CONTRACTOR SHALL VISIT THE SITE TO VERIFY EXISTING CONDITIONS AND PROPOSED REPAIRS PRIOR TO SUBMITTING A BID

7 PATCH AND REPAIR TO PRE-EXISTING CONDITION ALL EXISTING VISIBLE AND NON-VISIBLE ITEMS TO REMAIN WHICH ARE DAMAGED OR DISRUPTED DURING THE COURSE OF THE WORK NEW WORK INDICATED TO ABUT TO OR JOIN EXISTING WORK SHALL BE FINISHED AND/OR RE-FINISHED TOGETHER SO AS TO GIVE NO VISIBLE EVIDENCE OF THE JOINT

8 OCCUPATIONAL SAFETY AND HEALTH ACT REQUIREMENTS MAINTAIN CONDITIONS AT THE JOB SITE SO AS TO MEET THE REQUIREMENTS OF THE CALIFORNIA CODE OF REGULATIONS, TITLE 24 FOR ACCESSIBILITY AND ENERGY REQUIREMENTS, INDUSTRIAL RELATIONS, CHAPTER 4, DIVISION OF INDUSTRIAL SAFETY, SAFETY ORDERS CAL/OSHA

9 ACCESSIBILITY REQUIREMENTS CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE ADA ACCESSIBILITY GUIDELINES, AND THE UNIFORM BUILDING CODE, 1997 EDITION

10 SHORING AND BRACING DESIGN AND CONSTRUCT SHORING AND BRACING NECESSARY TO COMPLETE THIS PROJECT ALL BEARING SHORING MUST BE DESIGNED BY A CALIFORNIA LICENSED PROFESSIONAL ENGINEER COSTS FOR BRACING AND SHORING SHALL BE BORNE BY THE CONTRACTOR

11 NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER NOTES AND DETAILS ON THIS SHEET. DO NOT SCALE DRAWINGS

12 WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF WORK, THE DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK REQUESTS FOR CLARIFICATION OF DRAWINGS/DETAILS SHALL BE IN WRITING PRIOR TO THE COMMENCEMENT OF CONSTRUCTION RESPONSE FROM ENGINEER SHALL BE GIVEN WITHIN 10 WORKING DAYS.

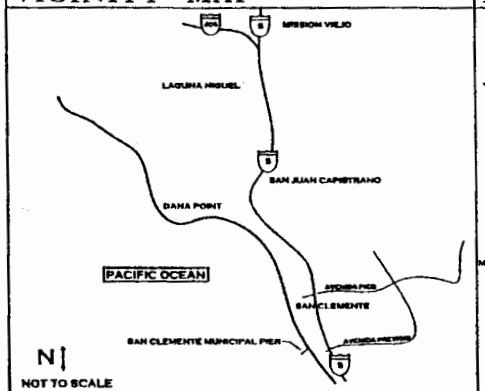
13 ANY DEVIATION FROM THE DETAILS, PRODUCTS, MATERIALS, TECHNIQUES, OR DESIGN REQUIREMENTS SHOWN ON THESE DRAWINGS SHALL REQUIRE WRITTEN APPROVAL BY THE ENGINEER. DO NOT SCALE DRAWINGS

14 UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED, BORED OR OTHERWISE WEAKENED WITHOUT THE PERMISSION OF THE ENGINEER, AND WITHOUT TAKING NECESSARY SAFETY MEASURES.

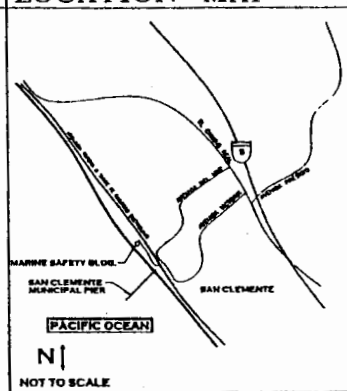
15 CONTRACTOR SHALL VERIFY ALL DIMENSIONS, PRODUCTS, MATERIALS, ETC PRIOR TO SUBMITTING A BID, MATERIAL OR PRODUCT SUBSTITUTIONS WILL BE CONSIDERED, PER THE SPECIFICATIONS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION

SHEET INDEX

VICINITY MAP



LOCATION MAP



ABBREVIATIONS AND SYMBOLS

AB	ANCHOR BOLT	EMBED	EMBEDMENT	MATL	MATERIAL	SECT	SECTION
ADDL	ADDITIONAL	EW	EDGE NAIL	MAX	MAXIMUM	SEP	SEPARATION
ALT	ALTERNATE	EQ	EQUAL	MB	MACHINE BOLT	SIM	SIMILAR
APA	AMERICAN PLYWOOD ASSN	ES	EACH SIDE	MECH	MECHANICAL	SOG	SLAB ON GRADE
ARCHL	ARCHITECTURAL	EW	EACH WAY	MFR	MANUFACTURER	SPEC	SPECIFICATION
BWPA	BOIS WOOD PRESERVE'S ASSN	EXT	EXTERIOR	MIN	MINIMUM	SQ	SQUARE
B	BOTTOM	FB	FLOOR BEAM	MISC	MISCELLANEOUS	SS&G	STAGGERED
BLKG	BLOCKING	FDN	FOUNDATION	MTL	METAL	STD	STANDARD
BM	BEAM	FF	FINISHED FLOOR	NIC	NOT IN CONTRACT	STGR	STAGGER
BN	BOUNDARY NAIL	FJ	FLOOR JOIST	NO	NUMBER	STIFF	STIFFENERS
BRG	BEARING	FOC	FACE OF CONCRETE	NS	NEAR SIDE	STR	STRUCTURAL
BTWN	BETWEEN	FOM	FACE OF MASONRY	NTS	NOT TO SCALE	STR 1	STRUCTURAL 1
BOT	BOTTOM	FRMG	FRAMING	OC	ON CENTER	T	TOP
CIP	CAST-IN-PLACE	FRT	FIRE RETARDANT TREATED	OD	OUTSIDE DIAMETER	T & B	TOP AND BOTTOM
CJ	CONSTRUCTION JOINT	FS	FAR SIDE	OF	OUTSIDE FACE	T & G	TONGUE AND GROOVE
CL/℄	CENTERLINE	FTG	FOOTING	OH	OPPOSITE HAND	THK	THICK
CLR	CLEAR	GA	GAUGE	OPNG	OPENING	THR	THREADED
COL	COLUMN	GALV	GALVANIZED	OPP	OPPOSITE	TR	TREAD
CONC	CONCRETE	GLB	GLUE LAMINATED BEAM	ORD	ORDINAL	TOF	TOP OF FOOTING
CONN	CONNECTION	GR	GRADE	OSB	ORIENTED STRAND BOARD	TOP	TOP OF PARAPET
CONSTR	CONSTRUCTION	H	HORIZONTAL	PL	PLATE	TOW	TOP OF WALL
CONT	CONTINUOUS	HDR	HEADER	PLCS	PLACES	TYP	TYPICAL
DBL	DOUBLE	HGR	HANGER	PLYWD	PLYWOOD	UBC	UNIFORM BUILDING CODE
DF	DOUGLAS FIR/LARCH	HSS	HOOKS ,	PT	PRESSURE/MINE TREATED	UNO	UNLESS NOTED OTHERWISE
DIA	DIAMETER	HORIZ	HORIZONTAL	PW	PLANE WASHER	V	VERTICAL
DIM	DIMENSION	HSN	HORIZONTALLY SLOTTED HOLES	R	RADIUS	VERT	VERTICAL
DO	DITTO (REPEAT)	ID	INSIDE DIAMETER	RB	ROOF BEAM	WD	WOOD
DWG	DRAWING	IF	INSIDE FACE	REF	REFERENCE	WP	WATERPROOF/WORK POINT
DWL	DOWEL	I JST	I JOIST	REINF	REINFORCEMENT	WPJ	WEAKENED PLANE JOINT
(E)	EXISTING	INT	INTERIOR	REQD	REQUIRED	WR	WRECKER
EA	EACH	JST	JOIST	RF	ROOF	WWF	WELDED WIRE FABRIC
EF	EACH FACE	JT	JOINT	SFT	SURFACE	WWM	WELDED WIRE MESH
EL	ELEVATION	LDER	LEDGER	SW	RETAINING WALL	W/	WITH
ELEC	ELECTRICAL	LTWT	LIGHTWEIGHT	SCHED	SCHEDULE	W/O	WITHOUT
ELEV	ELEVATOR						

(1/H) - DETAIL NUMBER - FOUND ON SHEET NUMBER

-AXIS YOU SYMBOL

PROJECT DIRECTORY

PROJECT ADDRESS:
SAN CLEMENTE MARINE SAFETY BUILDING
620 AVENIDA DEL MAR
SAN CLEMENTE, CALIFORNIA 92672

CITY OF SAN CLEMENTE CONTACT.
HEATH McMAHON, ASSOCIATE CIVIL ENGINEER
CITY OF SAN CLEMENTE, ENGINEERING DIVISION
910 CALLE NEGOCIO, SUITE 100
SAN CLEMENTE, CALIFORNIA 92672
TELEPHONE: (949) 361-6140
FAX. (949) 361-8316

ENGINEER OF RECORD:
TM ENGINEERS, INC
226 AVENIDA DEL MAR
SAN CLEMENTE, CA. 92672
(949) 361-0618

UNDERGROUND SERVICE ALERT
1-800-422-4133

PROJECT DATA

SITE DESCRIPTION: BEACHFRONT, PACIFIC OCEAN

LEGAL DESCRIPTION, IN THE CITY OF SAN CLEMENTE, COUNTY OF ORANGE, STATE OF CALIFORNIA, TRACT #779, BLOCK 34

OCCUPANCY B
CONSTRUCTION: TYPE V

CITY OF SAN CLEMENTE
APPROVAL
WILLIAM E. CAMERON
CITY ENGINEER
RCE 23764/EXP 12/31/04

APPLICABLE CODES
CALIFORNIA BUILDING CODE 2001
CALIFORNIA ELECTRICAL CODE 2001
CALIFORNIA PLUMBING CODE 2001
CALIFORNIA FIRE CODE 2001
CAC TITLE 24

100% SUBMITTAL
A.) 3-11-03
B.) 10-25-03

NOTE
THIS SET OF PLANS, PREPARED BY TM ENGINEERS, INC. IS FOR THE EXCLUSIVE USE OF THE ORIGINAL CLIENT WITH WHOM WE HAVE ENTERED INTO A CONTRACTUAL AGREEMENT. THIS SET OF PLANS IS VALID UNTIL 3-1-2008

REVISIONS

T.M. Engineers, Inc.
226 Avenida Del Mar
San Clemente, CA 92672
(949) 361-0618

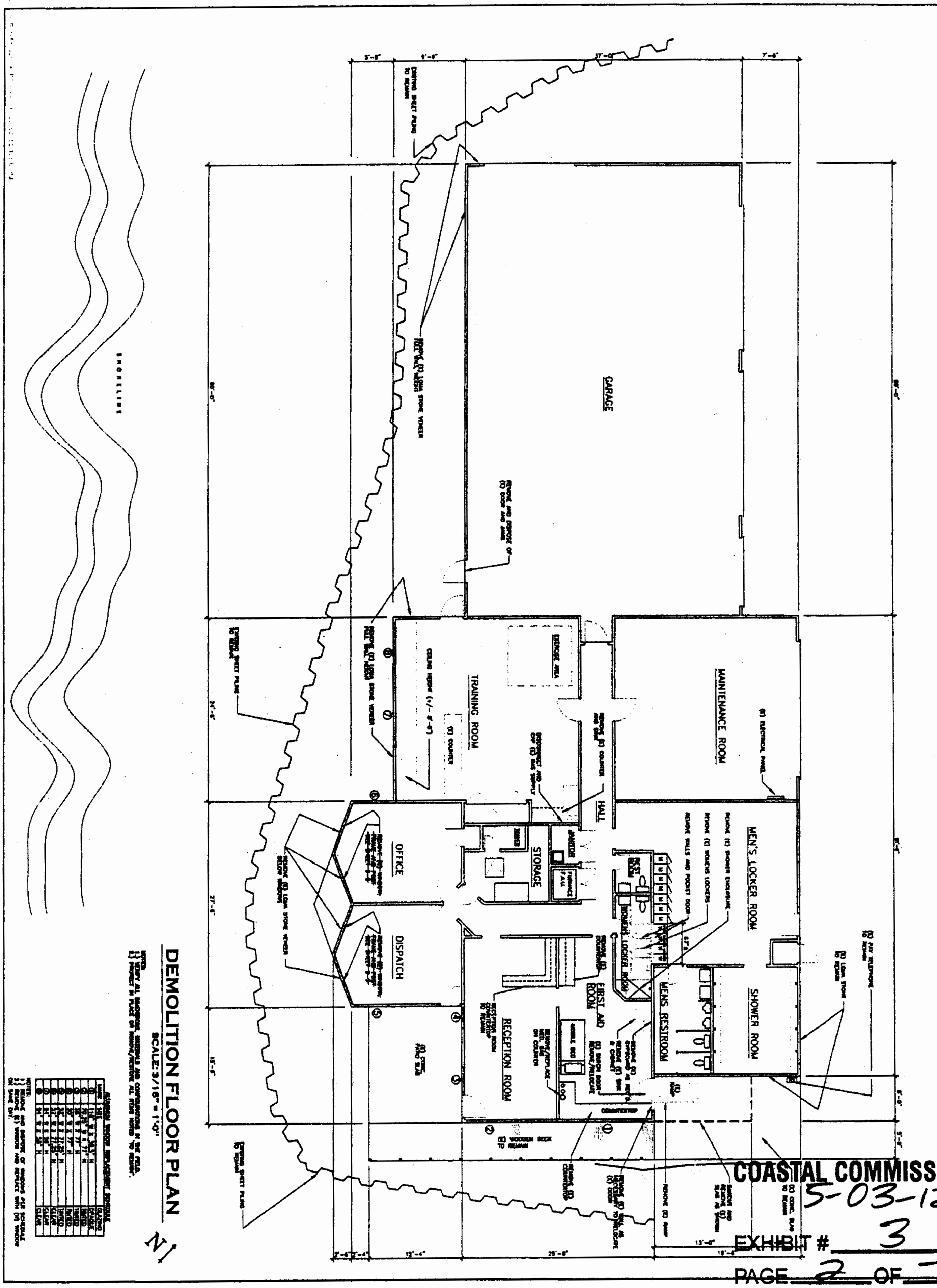
MARINE SAFETY BUILDING
SAN CLEMENTE, CALIFORNIA

CITY PROJECT
10004
13011

COVER SHEET
GENERAL NOTES

APR 20, 2001
GLENN McGRAW
AS SHOWN
2001-011

CS



COASTAL COMMISSION
5-03-121
EXHIBIT # 3
PAGE 2 OF 7

A-1

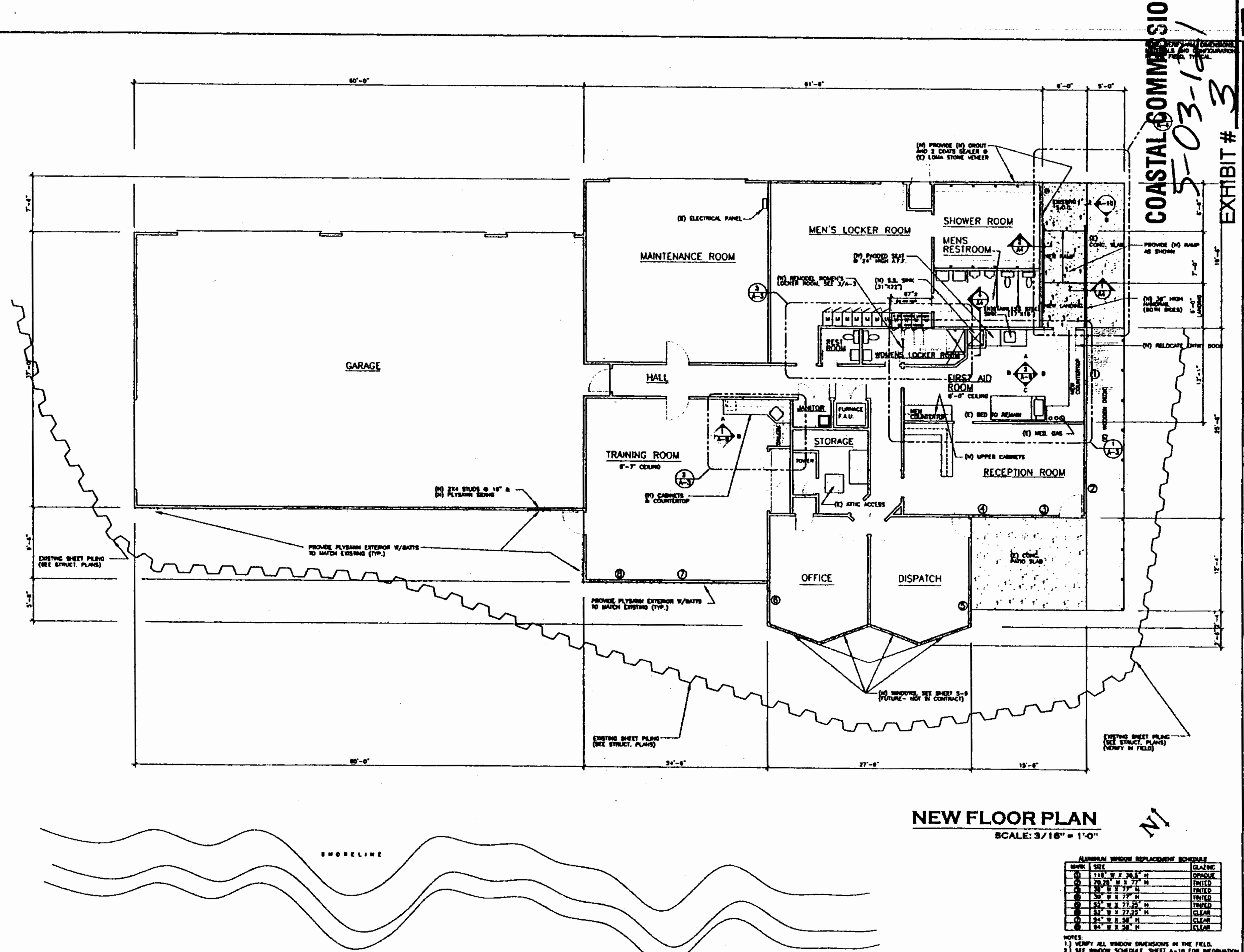
DEMOLITION FLOOR PLAN

CITY PROJECT 11004 11011

MARINE SAFETY BUILDING
SAN CLEMENTE, CALIFORNIA

T M Engineers, Inc.
228 Avenida Del Mar
San Clemente, CA 92672

REVISION



NEW FLOOR PLAN

SCALE: 3/16" = 1'-0"

ALUMINUM WINDOW REPLACEMENT SCHEDULE

MARK	SIZE	GLAZING
1	118" W x 36.5" H	OPAQUE
2	70.25" W x 77" H	TINTED
3	30" W x 77" H	TINTED
4	30" W x 77" H	TINTED
5	52" W x 77.25" H	TINTED
6	52" W x 77.25" H	CLEAR
7	94" W x 38" H	CLEAR
8	94" W x 38" H	CLEAR

NOTES:
1.) VERIFY ALL WINDOW DIMENSIONS IN THE FIELD.
2.) SEE WINDOW SCHEDULE, SHEET A-10 FOR INFORMATION.
3.) REMOVE/REPLACE WINDOWS IN SAME WORKING DAY.
4.) PROVIDE FRAME FINISH AND GLASS SAMPLES TO MARINE CAPTAIN FOR APPROVAL PRIOR TO ORDERING WINDOWS.

REVISIONS

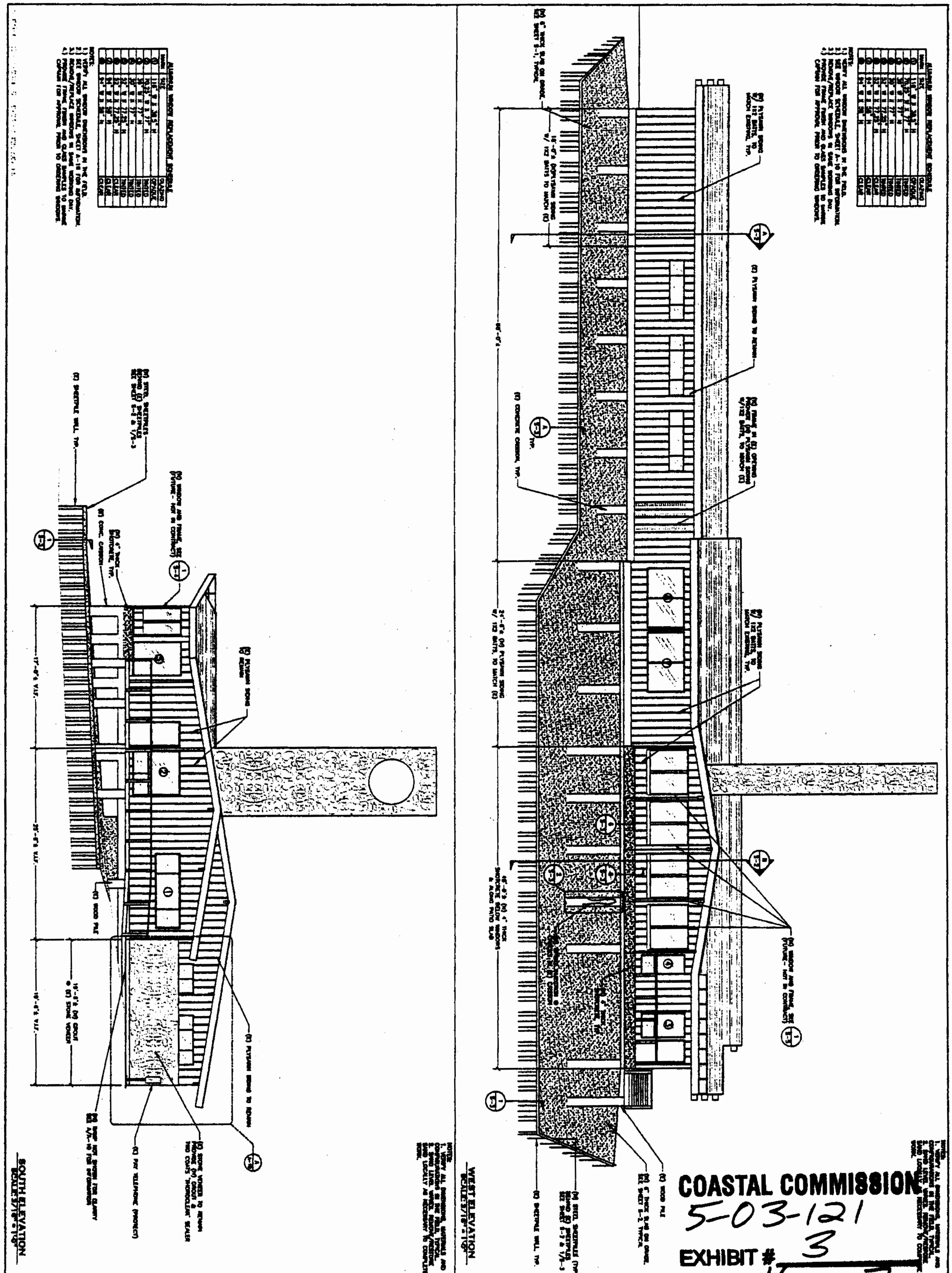
MARINE SAFETY BUILDING
SAN CLEMENTE, CALIFORNIA

CITY PROJECT 10004 13011

NEW FLOOR PLAN

APR. 20, 2001
GM
AS SHOWN
2001-011

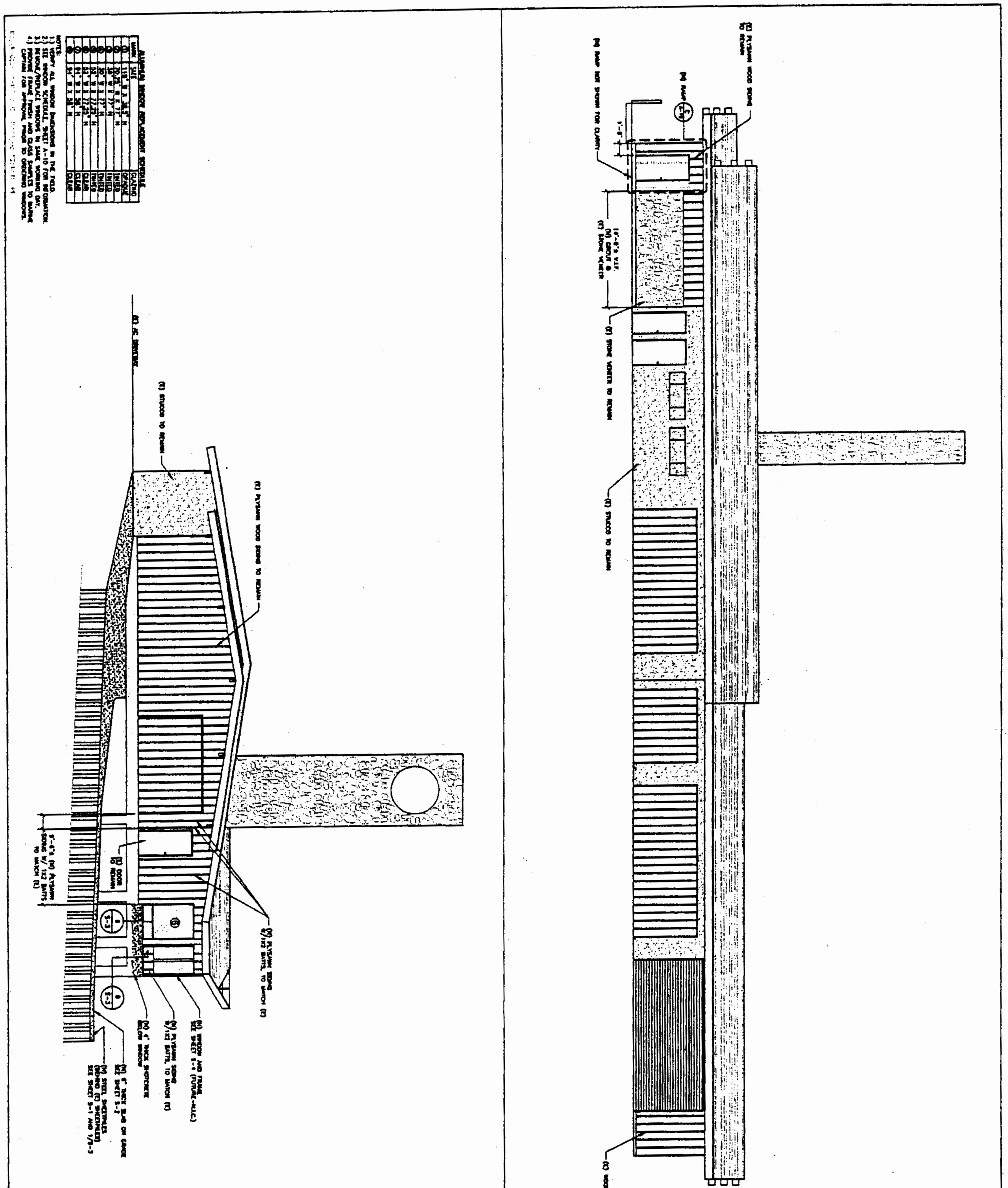
A-2



COASTAL COMMISSION
5-03-121
EXHIBIT # 3
PAGE 4 OF 7

A-7	APR. 20, 2001 3/16"=1'-0" 2001-009	NEW ELEVATIONS -WEST -SOUTH	CITY PROJECT	**MARINE SAFETY BUILDING** SAN CLEMENTE, CALIFORNIA	T M Engineers, Inc. 225 Avenida Del Mar San Clemente, CA 92672 (949) 361-0818

REVISIONS



NORTH ELEVATION
SCALE: 3/16" = 1'-0"

EAST ELEVATION
SCALE: 3/16" = 1'-0"

COASTAL COMMISSION
5-03-121
EXHIBIT # 3
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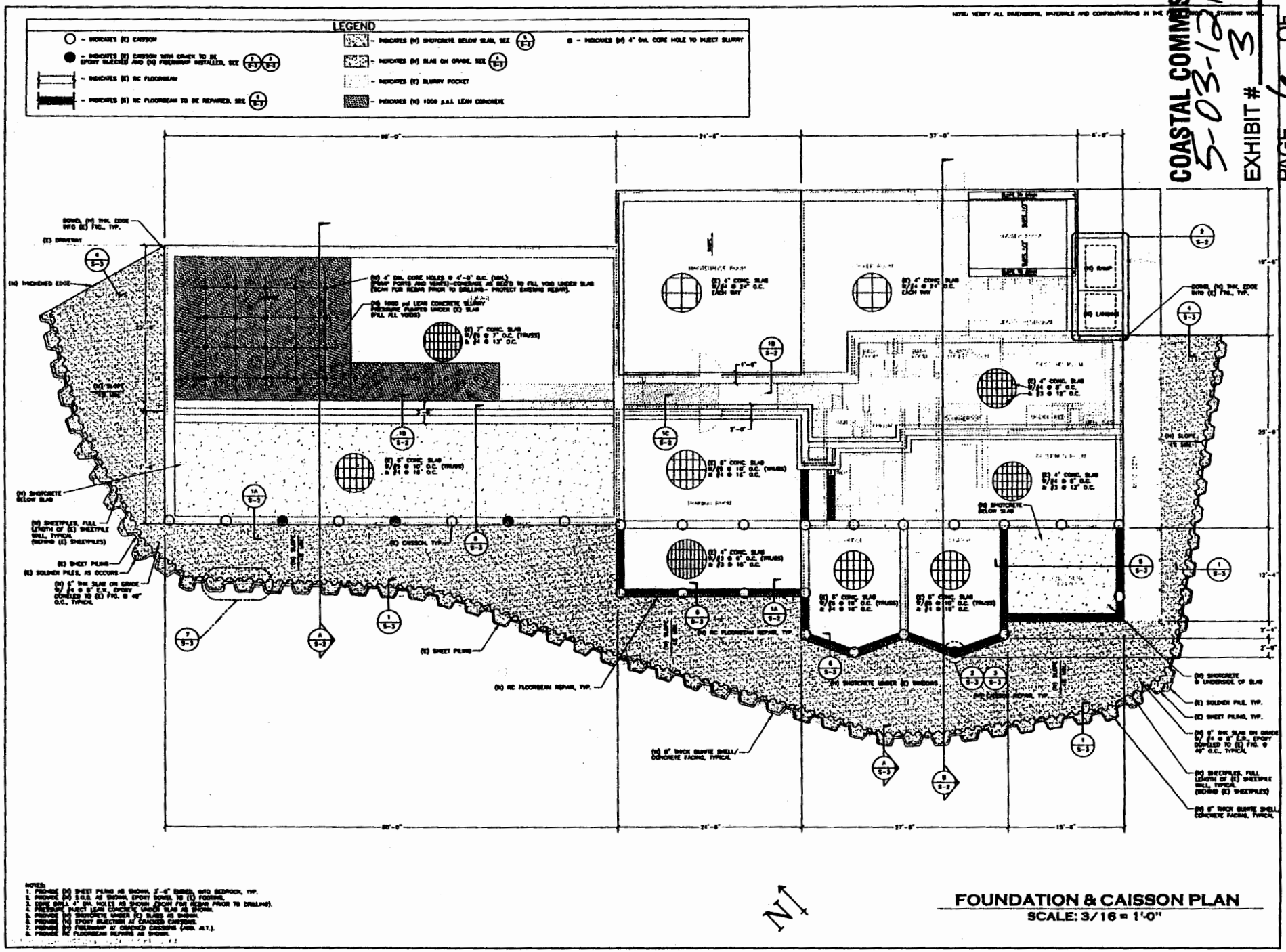
A-8	APR. 20, 2001 GLENN McGRAW 3/16"=1'-0" 2001-009	NEW ELEVATIONS -EAST -NORTH	CITY PROJECT 10004 13011	MARINE SAFETY OFFICE SAN CLEMENTE, CALIFORNIA	T M Engineers, Inc. 228 Avenida Del Mar San Clemente, CA 92672 (949) 361-0618

REVISIONS



NOTES:
1. PROVIDE (N) SHEET PILING AS SHOWN, 2'-0" EMBED. INTO BEDROCK, TYP.
2. PROVIDE (N) 2 C.I.S. AS SHOWN, EPOXY DOWEL TO (E) FOOTING.
3. CORE DRILL 4" DIA. HOLES AS SHOWN (BEAM FOR REBAR PRIOR TO DRILLING).
4. PRESSURE INJECT LEAN CONCRETE UNDER SLAB AS SHOWN.
5. PROVIDE (N) SHOTCRETE UNDER (E) SLABS AS SHOWN.
6. PROVIDE (N) EPOXY INJECTION AT CRACKED CAISSONS.
7. PROVIDE (N) FIBERWRAP AT CRACKED CAISSONS (ADD. ALT.).
8. PROVIDE RC FLOORBEAM REPAIRS AS SHOWN.

N

FOUNDATION & CAISSON PLAN
SCALE: 3/16 = 1'-0"

REVISIONS

MARINE SAFETY BUILDING
SAN CLEMENTE, CALIFORNIA

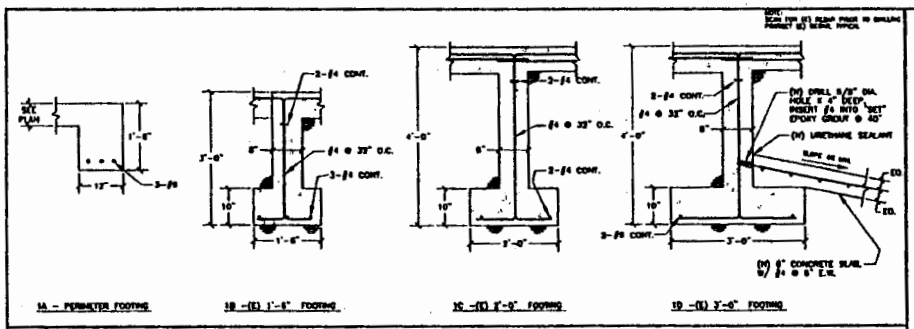
CITY PROJECT
10004
13011

CAISSON AND SLAB PLAN
SHEET PILING PLAN

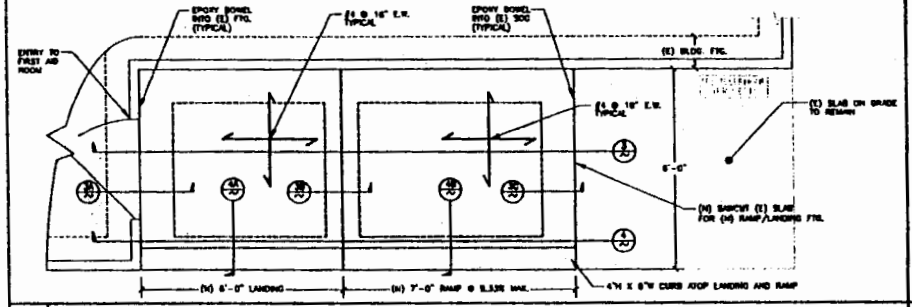
APR. 20, 2001
GLENN McGRAW
AS SHOWN
2001-011

S-1

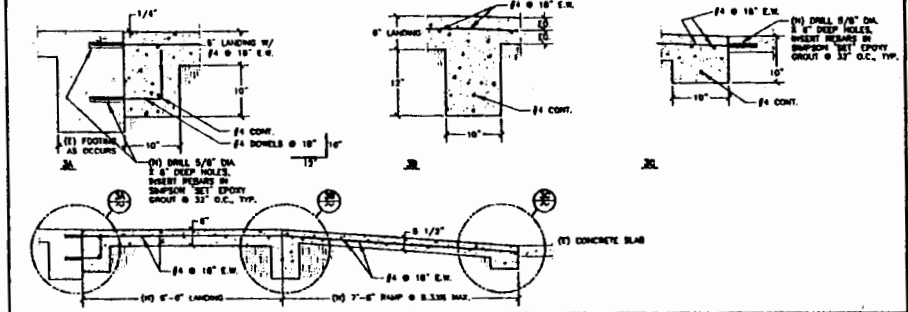
COASTAL COMMISSION
5-03-121
EXHIBIT # 3
PAGE 7 OF 7



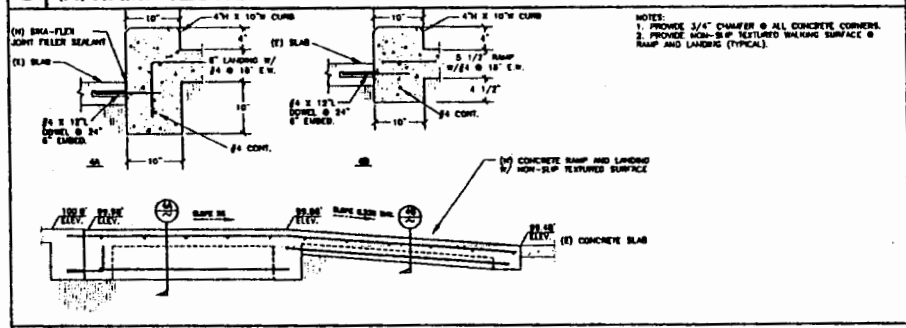
1 FOOTING SECTIONS



2 (N) RAMP FOUNDATION PLAN

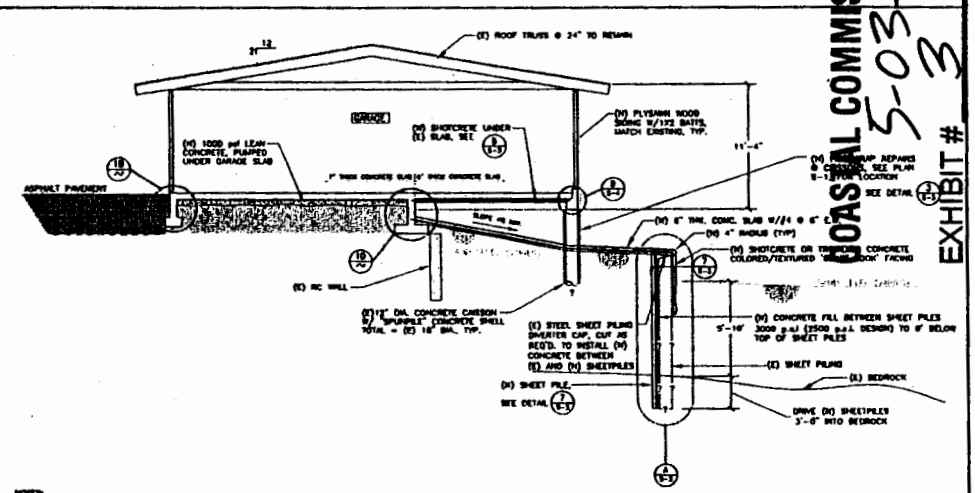


3 (N) RAMP SECTION



NOTES:
1. PROVIDE 3/4" CHAMFER @ ALL CONCRETE CORNERS.
2. PROVIDE MIN. 36" OF TEXTURED WALKING SURFACE @ RAMP AND LANDING (TYPICAL).

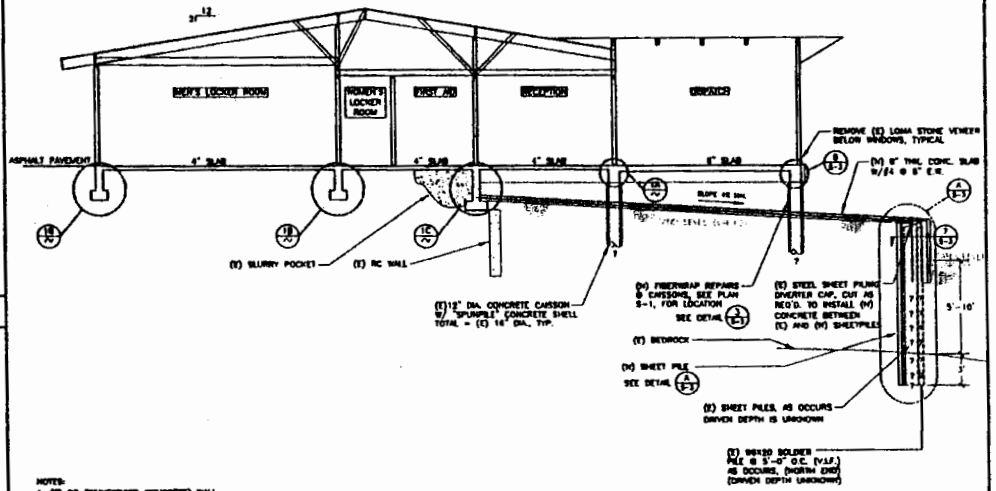
4 (N) RAMP SECTION @ FOOTING



NOTES:
1. (E) RC (REINFORCED CONCRETE) WALL WAS PLACED AS PART OF AN EMERGENCY SHORING MEASURE TO PREVENT UNDERMINING OF THE STRUCTURE BY WAVE FORCES (REBAR SIZE AND SPACING IS UNKNOWN)
2. EXACT DEPTH AND EXTENT OF VOID TO BE FILLED WITH LEAN CONCRETE UNDER (E) GARAGE SLAB IS UNKNOWN (FILL ENTIRE VOID).
3. DEPTH OF BEDROCK IS UNKNOWN. ASSUME BEDROCK DEPTH OF 5'-30" (VARIES) FOR BIDDING. VERIFY DEPTH PRIOR TO PILE DRIVING

A BUILDING SECTION

SCALE: 3/16" = 1'-0"



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3. DEPTH OF BEDROCK IS UNKNOWN. ASSUME BEDROCK DEPTH OF 5'-30" (VARIES) FOR BIDDING. VERIFY DEPTH PRIOR TO PILE DRIVING

B BUILDING SECTION

SCALE: 3/16" = 1'-0"

REVISION

MARINE SAFETY BUILDING
SAN CLEMENTE, CALIFORNIA

CITY PROJECT
19004
13011

SECTIONS
BUILDING SECTIONS
RAMP SECTIONS

APR. 20, 200
GLENN McGR
3/16"=1'-
2001-009

S-2

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *GOVERNOR*

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

April 22, 2004

TO: Anne Blemker

FROM: Lesley Ewing

SUBJECT: City of San Clemente, Marine Safety Building

I have reviewed the materials provided on the repairs proposed by the City of San Clemente for the existing Marine Safety Building. My comments are based on:

- May 2, 2003 letter from Anne Blemker, CCC, to John Beck, City of San Clemente, SUBJECT: Request for Additional Information
- June 30, 2003 letter report from Greg Hearon, P.E., Coastal Frontiers, to Captain Bill Humphreys, City of San Clemente, SUBJECT: Marine Safety Building Beach Profile Survey Results
- July 30, 2003 letter report from Peter Borella, Ph.D. to Heather McMahon, SUBJECT: Liquefaction Potential of Proposed Sheet Pile Installation, City Marine Safety Building
- August 3, 2003 letter report from Jan Ma to Heather McMahon, SUBJECT: Earthquake Resistance of the sheet pile wall for Marine Safety Building
- January 2004 Report from Coastal Frontiers, A Coastal Engineering Analysis, prepared for the City of San Clemente
- January 23, 2004 letter from Tshein Ma, SE, to Heather McMahon, City of San Clemente, SUBJECT: Request for Additional Information
- February 5, 2004 letter from John Beck to California Coastal Commission, SUBJECT: Request for Additional Information

The City of San Clemente proposes to undertake repairs to the Marine Safety Building. The existing building is on the beach and is protected from waves and undermining by a sheet pile wall that surrounds three sides of the building. As part of the repairs, the City is proposing to install a new sheet pile wall landward of the existing sheet pile wall, to connect the existing wall to the new wall, and to put a decorative facing on the upper part of the existing, more seaward wall.

The proposed sheet pile wall repair will have a minimal effect on the existing building footprint. The structural wall support will be installed landward of the existing wall. The existing wall will remain in place, but will be covered with a cosmetic facing 6" thick, to improve the visual character of the wall. These changes will not add to any of the impacts that are occurring to the beach from this structure. There will be a very small increase in encroachment resulting from the 6" thick facing. All other effects to the beach area will remain the same. The repairs to the

seawall will insure that it continues to function as designed, and that it continues to protect the Marine Safety Building in its current location.

The new/repaired wall should have a design life of 20 to 30 years. That is based upon the materials used in the wall and the expected life of the building. The wall has been designed to withstand a design storm event having about a 200-year recurrence. The embedment depth is adequate to protect against scour during a major storm event. The height of the wall will not increase beyond that of the existing wall. At this height, the wall will be high enough to protect the building from direct wave attack, however, during many storm events the wall would likely experience overtopping and, in the extreme, this could inundate parts of the Marine Safety Building.

The proposed reinforcement of the existing sheet pile wall is adequately engineered for the site conditions. These actions should extend the life of the existing sheet pile wall an additional 20 to 30 years, as anticipated by the applicant's engineer.

The submitted material does not discuss any alternatives, such as relocation of the marine safety building, modifying the building foundation so it is elevated above the waves and does not need a protective wall, soft protection such as beach or dune nourishment, etc. These alternatives may have been examined in material that was submitted earlier on the project; it is my recollection that we discussed some of these alternatives in 2002 when we had our site visit. Based on our site visit, it was my impression that this section of the coast is already quite narrow and it would not be a very good candidate for beach or dune nourishment. Furthermore, major modifications to the building foundation and building elevation may restrict access to and from the building by emergency equipment. But, while there may be major difficulties with these alternatives, to the extent that the applicant considered them, we should be provided with information on these alternatives and why they were not preferable to the proposed repair/remediation effort.