

CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA

7575 METROPOLITAN DRIVE, SUITE 103

SAN DIEGO, CA 92108-4402

(619) 767-2370

RECORD PACKET COPY

**Tue 10b**Staff: LRO-SD
Staff Report: 6/11/02
Hearing Date: 7/8-12/02

AMENDMENT REQUEST
STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-81-67-A17-A

Applicant: Rick Nolan

Agent: David Skelly

Original

Description: Construction of a variety of upper and lower cliff stabilization measures and public accessways in six segments extending from Narragansett Avenue to Spalding Park in the Ocean Beach area of the City of San Diego.

Proposed

Amendment: Repairs to a portion of an existing masonry retaining wall/seawall that has failed including rebuilding of upper portion of wall using steel reinforced concrete and tie back construction to connect the upper wall to the existing lower wall. Also proposed is the resurfacing of the wall with colored concrete sculpted to resemble the natural bluff and installation of a horizontal drain with weep holes.

Site: 1476-80 Pescadero Avenue, Ocean Beach, San Diego, San Diego County.**Substantive File Documents:** Certified Ocean Beach Precise Plan; City of San Diego Certified LCP; CDP #F9620; 6-81-67 (A9)

STAFF NOTES:**Summary of Staff's Preliminary Recommendation:**

Staff is recommending approval of the subject project with special conditions. The proposed development consists of the repair of an existing seawall which has partially collapsed and left the bluff face exposed. The proposal will not result in an increase in height or to the footprint of the existing wall.

I. PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

MOTION: *I move that the Commission approve the proposed amendment to Coastal Development Permit No. 6-81-67-A17 pursuant to the staff recommendation.*

STAFF RECOMMENDATION OF APPROVAL:

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

RESOLUTION TO APPROVE A PERMIT AMENDMENT:

The Commission hereby approves the coastal development permit amendment on the ground that the development as amended and subject to conditions, will be in conformity with the policies of the certified LCP and the public access and recreation policies of the Coastal Act. Approval of the permit amendment 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 amended development on the environment, or 2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse

II. Special Conditions.

The permit is subject to the following conditions:

1. Assumption of Risk.

A. By acceptance of this permit, the applicant, on behalf of himself and his successors and assigns, acknowledges and agrees (i) that the site may be subject to hazards from erosion and wave uprush; (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.

B. The applicant shall execute and record a deed restriction, in a form and content acceptable to the Executive Director incorporating all of the above terms of this condition. The deed restriction shall include a legal description of the applicant's entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

2. Future Maintenance/Debris Removal. Within 15 days of completion of construction of the seawall repairs the permittees shall remove all debris deposited on the beach or in the water as a result of the construction. The permittees shall also be responsible for the removal of debris resulting from failure of, or damage to, the shoreline protective device in the future. In addition, the permittees shall maintain the seawall in its approved state. Any change in the design of the project or future additions/reinforcement of the seawall beyond exempt maintenance as defined in Section 13252 of the California Code of Regulations, will require a coastal development permit. **However, in all cases, if after inspection, it is apparent that repair and maintenance is necessary, the permittees shall contact the Commission office to determine whether permits are legally required, and, if required, shall subsequently apply for a coastal development permit for the necessary maintenance.**

3. Construction Activities. If during construction, site conditions warrant changes to the approved plans (e.g., , damage to or failure of existing seawall), the San Diego District office of the Coastal Commission shall be contacted immediately, prior to any changes to the project in the field.

4. As-Built Plans. Within 60 days following completion of the project, the permittees shall submit as-built plans of the approved seawall modifications. In addition, within 60 days following completion of the project, the permittees shall submit certification by a registered civil engineer, acceptable to the Executive Director, verifying that the seawall repairs and drainage improvements behind it have been constructed in conformance with the approved plans for the project.

5. Storage and Staging Areas/Access Corridors. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and written approval, final plans indicating the location of access corridors to the construction site and staging areas. The final plans shall indicate that:

- a. No overnight storage of equipment or materials shall occur on sandy beach or public parking spaces. During the construction stages of the project, the permittee shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the intertidal zone at any time, except for the minimum necessary to construct the seawall. Construction equipment shall not be washed on the beach.
- b. Access corridors shall be located in a manner that has the least impact on public access to and along the shoreline.
- c. No work shall occur on the beach on weekends or holidays between Memorial Day weekend and Labor Day of any year.

- d. The applicant shall submit evidence that the approved plans/notes have been incorporated into construction bid documents. The staging site shall be removed and/or restored immediately following completion of the development.

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

III. Findings and Declarations.

The Commission finds and declares as follows:

1. Project History/Amendment Description. The applicant is requesting to repair the upper portion of an approximately 16-foot high, 77-foot long, concrete masonry unit (CMU) seawall on a coastal bluff that has partially collapsed. Proposed is the rebuilding of the portion of the wall using steel reinforced concrete and tie back construction to connect the upper wall to the existing lower wall. Also proposed is the resurfacing of the wall with colored concrete sculpted to resemble the natural bluff and installation of a horizontal drain that will weep through PVC drains within the wall. The subject wall is at the base of a coastal bluff, seaward of an existing two-story, approximately 4,334 sq.ft., four-unit apartment building on a 4,800 sq.ft. site.

In 1981, the Regional Commission approved CDP application #F9655 for the construction of a variety of upper and lower cliff stabilization measures and public accessways in six segments extending from Narrangansett Avenue south to Osprey Street in the community of Ocean Beach in the City of San Diego. The project was a comprehensive project proposed by the City of San Diego for upper and lower cliff stabilization along an approximately one mile length of Sunset Cliffs as a solution to the immediate erosional dangers and prevention of future bluff instability which could threaten existing structures. Also constructed was a rip rap revetment along the toe of the coastal bluffs in this area. The rip rap is still existing and is proposed to remain. This particular segment of wall was subsequently amended (6-81-67-A9) for the construction of 100 feet of 8-foot high masonry block wall to replace the 8 to 28-foot high tie back wall that was previously approved, and associated foundations. Only approximately 75 linear feet of this latter segment of wall is on the subject property. The seawall is located on public property.

Because the applicant is proposing an amendment to a Coastal Commission-issued CDP, the Commission has jurisdiction over the proposed amendment. The standard of review is the certified local coastal program, which at this location consists of the Ocean Beach Precise Plan and the applicable sections of the City of San Diego's certified Land Development Code.

2. Seawall/Shoreline Protective Devices/Geologic Hazards. The certified LCP (Land Development Code) contains specific policies addressing development on coastal bluffs. The following policies are applicable to the proposed development:

Section 143.0143 Development Regulations for Sensitive Coastal Bluffs

Coastal development on premises containing sensitive coastal bluffs, as identified on Map Drawing No. C-713, filed in the office of the City Clerk under Document No. 00-17062 or that does not qualify for an exemption pursuant to Section 143.0110(c) is subject to the following regulations and the Coastal Bluffs and Beaches Guidelines in the Land Development Manual.

(2)(g) Coastal bluff repair and erosion control measures may occur on the bluff face only if they comply with the following:

- (1) Coastal bluff repair and erosion control measures may be allowed on the coastal bluff face only if determined to be the only feasible means of erosion control and when necessary, to protect the existing primary structures or to protect public improvements that cannot feasibly be relocated.
- (2) Coastal bluff repair and erosion control measures shall not cause significant alteration of the natural character of the bluff face.

[...]

(4) Air-placed concrete, including gunite or shotcrete, retaining walls, fills or other similar erosion control measures shall be designed and implemented in accordance with generally accepted engineering standards and specifications and shall also incorporate existing and adjacent landform characteristics including color coating, texturing, landscape, and topographical features.

(h)(i) All development occurring on sensitive coastal bluffs shall be in conformance with the Coastal Bluffs and Beaches Guidelines in the Land Development Manual.

[...]

In addition, Section 143.0144 of the certified LDC also contains the following provision:

Section 143.0144 Development Regulations for Coastal Beaches

[...]

(g) Air-placed concrete, including gunite or shotcrete, retaining walls, seawalls, fills or other similar erosion-control measures shall be permitted only when necessary to protect an existing primary structure and when determined to be the least environmentally damaging feasible alternative pursuant to the California Environmental Quality Act. Mitigation for impacts to local shoreline sand supply shall be required.

The Commission has traditionally been concerned with the siting of new development directly along the shoreline in terms of both its encroachment onto public sandy beach as well as visual impacts. It is acknowledged that seawalls, revetments, cliff retaining walls, groins and other such structural or "hard" solutions alter natural shoreline processes. Thus, such devices are required to be approved only when necessary to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local sand supply. The certified LCP requires that bluff and erosion control measures be permitted only if determined to be the only feasible means of erosion control and when necessary, to protect the existing primary structures and that such measures not cause significant alteration of the natural character of the bluff face.

In the case of the proposed development, the applicant is requesting to repair a portion of an existing masonry seawall that partially collapsed. The proposed repairs consist of rebuilding approximately 7-feet of the upper portion of the wall. The existing concrete vertical seawall is approximately 75 feet long (ranging in height from +26.1 ft. MSL). The repairs will not result in changes to the height or footprint of the existing seawall. Specifically, the applicant proposes to repair the failed portion (7 feet high) and install tiebacks for long-term stability. In addition, the lower wall will be connected to the upper wall as it existed prior to its partial collapse. Also proposed are drainage improvements and use of colored concrete and sculpting to make the wall resemble the natural surrounding coastal bluffs. The original wall was built in 1981 pursuant to CDP #F9620 and subsequently amended pursuant to CDP #6-81-67-A9.

The purpose of the proposed repairs is to prevent wave overtopping that has occurred on the site which the applicant has indicated has subjected the existing multi-family structure to threat from erosion. The overtopping water adds weight bearing on the back of the wall where there currently are no drains. In addition, the steel reinforcing the wall is inadequate. The applicant's engineer has suggested that when the wall was originally constructed, the contractors left out some steel in the upper five feet of the wall. It is not known why this occurred. In any case, this caused a failure along one horizontal course of blocks in the wall. About 61 linear feet of the upper 7 feet of the wall has failed with the remainder of the upper portion remaining. The failures to the seawall prompted the subject amendment request.

A portion of the wall failed in January 2001 followed by a more substantial collapse of the wall in December, 2001. The City lifeguards initially roped off the area to prevent injuries to the members of the public from falling debris who use the area for gaining access to the ocean (i.e. surfers). According to the applicant's engineer, the proposed tiebacks will convert the existing cantilever-type wall to a fixed-pinned type wall. The

tiebacks will take up almost of all of the earth forces in the upper portion of the wall. The tiebacks will be connected across the face and form into a small reentrant feature to further reduce the overtopping. The engineer further states that the base of the wall is well above maximum wave forces at about +10.0 ft. MSL. The new shotcrete will incorporate welded wire mesh to tie the whole wall together both mechanically and visually. The mesh will be connected into the existing footing by dowels using rebar.

As noted, the engineer has submitted photographs that illustrate the failed seawall and scouring in the rear yard of the subject site and other overtopping damage to the back yard. In addition, repairs to the wall drainage system need to also be performed to address inadequate drainage behind the wall that could eventually lead to failure of the wall. This includes the addition of a horizontal drain behind the top portion of the wall that will weep through PVC drains within the wall. The applicant also proposes to remove all non-natural debris at the base of the wall, including the failed CMU blocks and other materials which are located at the toe of the wall at about +10.0 ft. MSL. There is also an existing quarry stone revetment at the base of the bluff which is the primary form of shoreline protection at this site. The applicant's engineer has indicated that the revetment is in good condition and is not in need of any maintenance at this time.

The Commission's coastal engineer has reviewed the proposed project and has concurred that the proposed repair work is necessary and that it is also the minimal amount of work necessary to correct the problem and protect the existing apartment building. Although the repair to the seawall is required to protect the existing structure on the site, the certified LCP requires that the shoreline protection be designed to eliminate or mitigate adverse impacts on local shoreline sand supply. There are a number of adverse impacts to public resources associated with the construction of shoreline structures. The natural shoreline processes such as the formation and retention of sandy beaches, may be altered by construction of a seawall, since bluff retreat is one of several ways that beach area and beach quality sand is added to the shoreline. This retreat is a natural process resulting from many different factors such as erosion by wave action causing cave formation, enlargement and eventual collapse, saturation of the bluff soil from ground water causing the bluff to slough off and natural bluff deterioration. When a seawall is constructed on the beach at the toe of the bluff, it directly impedes these natural processes.

Many of the effects of a structure on the beach are temporary or difficult to distinguish from all the other actions which modify the shoreline. Nevertheless, some of the effects which a structure may have on natural shoreline processes can be quantified. Three of the effects from a shoreline protective device which can be quantified are: 1) loss of the beach area on which the structure is located; 2) the long-term loss of beach which will result when the back beach location is fixed on an eroding shoreline; and 3) the amount of material which would have been supplied to the beach if the back beach or bluff were to erode naturally. The Commission has typically applied a beach sand mitigation fee when a new seawall is constructed in order to mitigate for its impacts on sand supply.

Although the project represents the repair to an existing seawall as opposed to the construction of a new seawall altogether, the question of whether or not the proposed

repairs will result in impacts to sand supply must be addressed. Based on review of the proposed seawall repair, the Commission finds that this particular project is unique and would not result in any impacts on shoreline sand supply and the imposition of a sand mitigation fee is not required. Specifically, this particular shoreline consists of a bedrock beach shelf and the subject seawall is built on this shelf beginning at elevation +10 ft. MSL. In addition, behind the existing wall is approximately 20 feet of fill. The bluff is not a natural bluff and has been previously altered. The entire bluff failed in the 1980's and the entire bluff was rebuilt with infill and installation of concrete seawalls. Furthermore, in this particular case, the proposed repairs will not result in an expansion to the project footprint, will not result in any seaward encroachment (as the repairs are only to the upper middle portion of the concrete seawall) and will not result in an increase in height to the seawall. In this particular case, the applicant proposes to put the seawall back in the same location and to rebuild it and strengthen it without any encroachment whatsoever beyond the toe of the existing seawall. As a result of these repairs, there would not be any change in the contribution to sand supply from the wall repair and thus, no further mitigation is required. The repair will result in the continuance of the existing impact, however, the repair is consistent with the type of routine work for this type of seawall and does not extend the design life of the wall.

Furthermore, the proposed repairs to the seawall will be consistent with the requirements of the certified LCP which require that such devices not result in significant alteration of the natural character of the bluff face and that measures such as air-placed concrete incorporate generally accepted engineering standards. The proposed seawall repair will incorporate these measures as the seawall is proposed to be colored and sculpted to resemble natural coastal bluffs.

As noted above, the Commission finds that the repairs of the seawall is necessary to protect the existing multi-family residential structure. Although the Commission finds that the proposed seawall has been designed to minimize the risks associated with its implementation, the Commission also recognizes the inherent risk of shoreline development. The seawall will be subject to wave action. Thus, there is a risk of damage to the seawall or damage to property as a result of wave action. Given that the applicant has chosen to repair the seawall despite these risks, the applicant must assume the risks. Accordingly, Special Condition #1 requires the applicant to record a deed restriction acknowledging the risks associated with this development, waiving any claims against the Commission for injury or damage that may result from such hazards, and agreeing to and indemnify the Commission against claims for damages that may be brought by third parties against the Commission as a result of its approval of this permit. In addition, Special Condition #2 requires that within 15 days of completion of construction of the seawall repairs, that the applicant remove all debris deposited on the beach or in the water as a result of the construction. The condition further specifies that the applicant is also responsible for the removal of debris resulting from either the failure or damage of the seawall in the future. In addition, the condition further requires that any change in the design of the project or future additions/reinforcement of the seawall beyond repair and maintenance activities that are exempt will require a coastal development permit. Special Condition #3 requires that if during the construction any damage or failure to the wall

occurs, all construction work must cease and the applicant must contact the Commission to determine if additional permits are legally required for repairs of any damage. Special Condition #4 requires the applicant to submit as-built plans within 60 days of construction of the proposed development to assure that the repair of the seawall and the proposed drainage improvements have been constructed according to the approved plans.

In summary, the Commission finds that the applicant has demonstrated that the existing multi-family structure is subject to threat from wave overtopping and erosion. Therefore, the Commission finds that since the proposed modification to the existing seawall is necessary to protect an existing residential structure, the project, as conditioned, is consistent with the certified LCP. Additionally, the proposed development will not increase the impact of the structure on shoreline sand supply to any greater degree than the existing seawall that was originally constructed.

3. Public Views. The certified Ocean Beach Precise Plan contains the following policies and provisions regarding protection of public views:

“Preserve the natural features and beauty of the coastline adjacent to the beach.”

“...development should not be permitted to interfere with the traditional public use of the coastline and should not be permitted to obliterate the public’s view of the ocean.”

Due to the presence of the existing apartment building, there are presently no ocean horizon views looking across the site. The subject site is not located within a designated public view corridor nor are views across the subject site visible from any major public roadway looking west. The site is situated at the atop a coastal bluff and is land-locked between other parcels to the north and south. The site is not located at a streetend or near a streetend where ocean views are most typical for this shoreline area. The proposed development consisting of repairing a failed portion of an existing concrete vertical seawall, will not impact public views adjacent to or along, the public beach. Public views towards the ocean and north and south along the shoreline at the various streetends in the area will remain unimpeded by the proposed development. As such, the proposed repair of the seawall will not have any adverse impact on public views at this location.

In addition, in order to mitigate for the adverse visual impacts associated with seawalls, the Commission has typically required that any new shoreline protection device or improvements to existing structures located on the coastal bluffs or sandy beach areas use colored concrete and texturing to blend in with the natural surrounding area, consistent with Section 30251 of the Act and similar LCP policies. However, in this particular case, the applicant is proposing both measures as part of the amendment request. Specifically, the applicant will resurface the wall with colored concrete about 4 to 6-inches thick and sculpt it to look like the natural bluff. Because the wall now appears as a concrete masonry wall along the coastal bluff, the coloring and sculpting of the wall to resemble the nature bluffs in the area will be a significant improvement in its appearance and will

greatly enhance visual quality along the shoreline. Therefore, the proposed development is consistent with the public view protection policies of the certified LCP.

4. Public Access/Recreation. Both the certified LCP and the Coastal Act contain policies protecting physical access to the beach and ocean. Specifically, the Coastal Act states the following:

Section 30211

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

Section 30212

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

(1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,

(2) adequate access exists nearby, or,

(3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway....

Section 30221

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

In addition, the certified Ocean Beach Precise Plan states the following plan recommendations:

- That all beaches be easily accessible to the general public.
- That public access to the beaches and shoreline be protected....

The subject site is located between the first public roadway and the sea. The beach area located west of the site is difficult to access due to the terrain of the area. There is rip rap at the toe of the existing seawall. The majority of the area is armored with similar

seawalls and upper bluff retaining walls/seawalls. Seaward of the rip rap at low tide conditions there is both sandy beach area as well as sandstone shelves.

Section 30604(c) of the Act requires that specific access findings be made for any project located between the first coastal roadway and the sea. The project site is located between the ocean and the first coastal roadway (Sunset Cliffs Boulevard). Public access to the shoreline is limited along this area due to the nature of the steep coastal bluffs. There is an existing vertical access point at the terminus of Pescadero Avenue just two lots to the north of the site. However, inasmuch as the proposed development involves improvements to an existing seawall without any expansion to its footprint or seaward encroachment onto the public beach, the proposed project will not result in any adverse impacts to physical public access.

Special Condition #5 has been attached addressing staging and access requirements that specify include that no overnight storage of equipment or materials shall occur on sandy beach or public parking spaces, that access corridors shall be located in a manner that has the least impact on public access to and along the shoreline, and that no work shall occur on the beach on weekends or holidays between Memorial Day weekend and Labor Day of any year.

In summary, given that the proposed repair of the seawall and the proposed drainage improvements behind it will not result in an increase in the footprint or the seawall or further encroachment seaward, the proposed improvements will not result in any adverse impacts on coastal access at this location. As such, the proposed project, as conditioned, is consistent with the certified LCP.

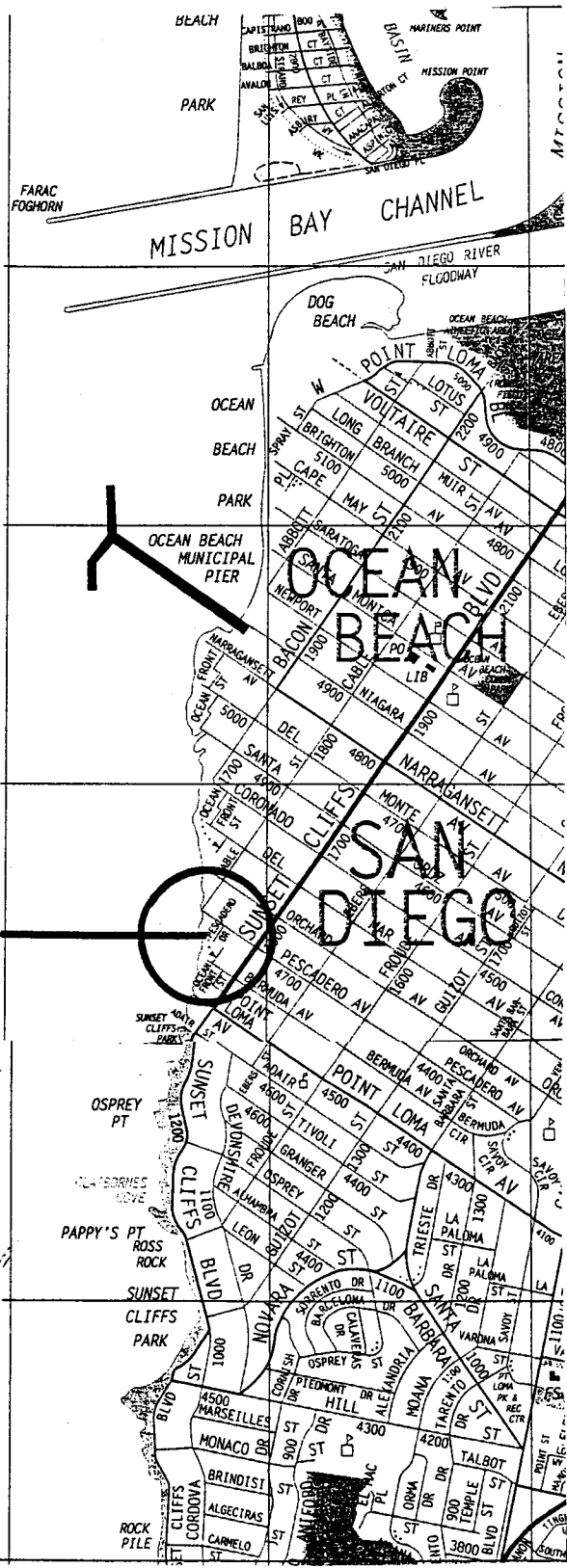
5. Local Coastal Planning. Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding can be made.

The subject site is zoned R-175 and is designated for multi-family residential use. The proposed modifications to an existing seawall will not affect the project's continued consistency with that zone and designation. Since the proposed repair to the existing seawall will not result in any further encroachment onto the beach and the seawall represents pre-existing shoreline protection, the proposed development is consistent with the certified Ocean Beach Precise Plan with all public access policies of the Coastal Act. The Commission finds that project approval, as conditioned, will not prejudice the ability of the City of San Diego to continue to implement its certified LCP for the Ocean Beach area.

6. California Environmental Quality Act (CEQA). Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality

Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposal to repair an existing seawall has been conditioned in order to be found consistent with the shoreline hazard policies of the Coastal Act. The proposed conditions addressing future maintenance will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.



SITE

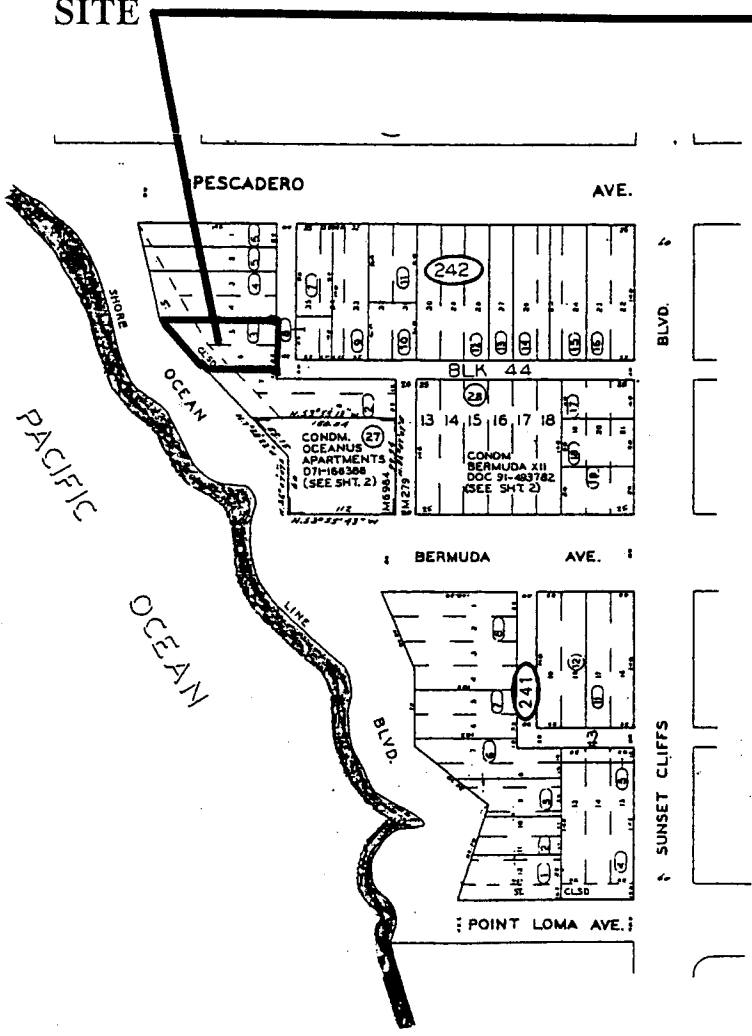


EXHIBIT NO. 1
APPLICATION NO.
6-81-67-A17
Location Map

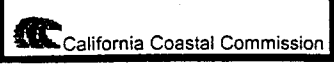


EXHIBIT NO. _____
 APPLICATION NO. **6-81-67-A17**
 Site Plan
 California Coastal Commission

and site conditions
 latest notified, in writing.
 tions, or details on the
 the configuration,
 or shall coordinate and
 and other information
 provide for a
 ion of these drawings.
 ts of the drawings
 of, and resolved with,
 ved.
 the details shall be the
 requirements of the
 g Code, with
 sponsibility for job site
 roject, including safety of
 y continuously and not be
 oll defend, indemnify,
 demands and all liability,
 work on this project,
 the engineer. 6.
 design time, and Building
 d information and cost
 for fee amount. Submit
 or the work.

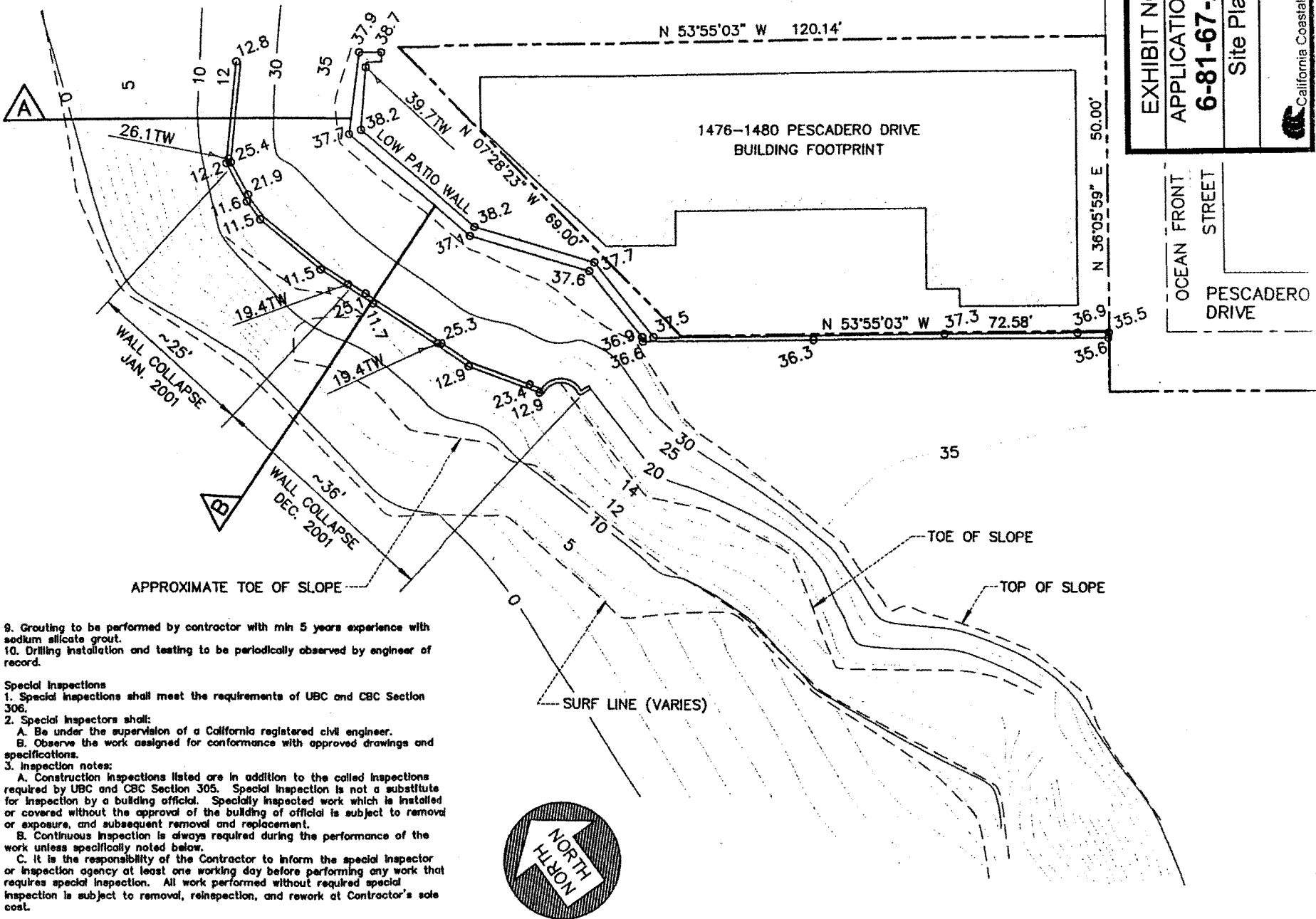
m to ASTM C 33.
 se with ASTM C 94.
 ACI 301, "Specifications
 fied by these notes.
 th at 28 days as follows:

l of the engineer.
 a type that increases the
 e the specified minimum
 ore fabrication and
 e DCI" corrosion inhibitor
 irements of ASTM C 494,
 roved by the Coastal

W A 775.
 s follows:

oll be in accordance with
 andard Practice", latest
 g amounts of cover for
 in.
 rts shall be well-secured

0 ksi strands can be
 rate.



9. Grouting to be performed by contractor with min 5 years experience with sodium silicate grout.
 10. Drilling installation and testing to be periodically observed by engineer of record.

Special Inspections
 1. Special inspections shall meet the requirements of UBC and CBC Section 306.
 2. Special inspectors shall:
 A. Be under the supervision of a California registered civil engineer.
 B. Observe the work assigned for conformance with approved drawings and specifications.
 3. Inspection notes:
 A. Construction inspections listed are in addition to the called inspections required by UBC and CBC Section 305. Special inspection is not a substitute for inspection by a building official. Specially inspected work which is installed or covered without the approval of the building official is subject to removal or exposure, and subsequent removal and replacement.
 B. Continuous inspection is always required during the performance of the work unless specifically noted below.
 C. It is the responsibility of the Contractor to inform the special inspector or inspection agency at least one working day before performing any work that requires special inspection. All work performed without required special inspection is subject to removal, reinspection, and rework at Contractor's sole cost.

SEAWALL REPAIRS

1476-1480 PESCADERO DRIVE



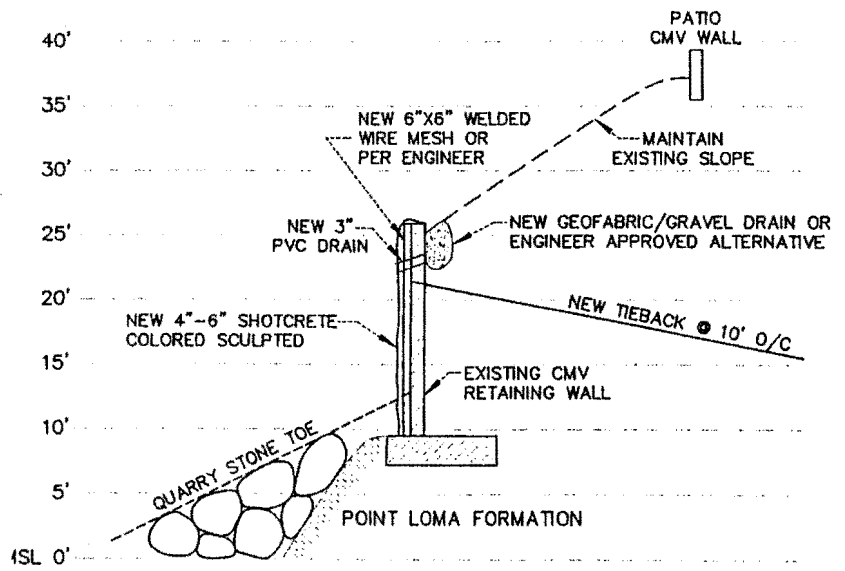
SE SKELLY ENGINEERING
 David W. Skelly MS, PE
 Coastal Engineer
 (760) 942-8379 PHONE/FAX

TITLE: PLAN VIEW	
DRAWN: 4/8/02	SIGNED:
REV.	
REV.	
REV.	
SIZE:	

EXHIBIT NO. 3
 APPLICATION NO.
6-81-67-A17
 Cross-Sections

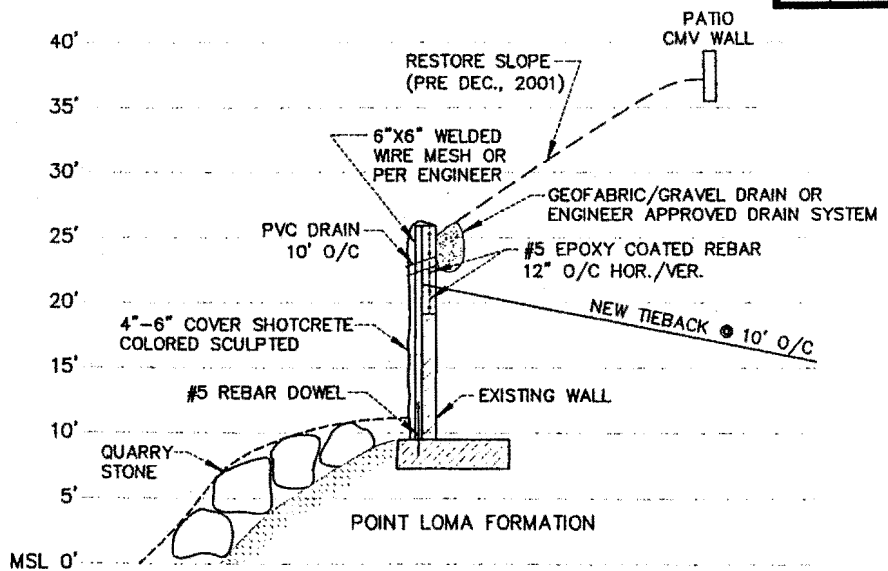


SECTION A



SECTION ELEVATION FROM
 TOAL ENGINEERING SURVEY 3-31-01

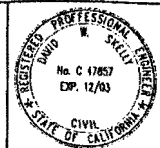
SECTION B



SECTION ELEVATION FROM
 TOAL ENGINEERING SURVEY 3-31-01

CONSULTING
 HL 78

SEAWALL REPAIRS
 1476-1480 PESCADERO DRIVE



SE SKELLY ENGINEERING
 David W. Skelly MS, PE
 Coastal Engineer
 (760) 942-8379 PHONE/FAX

FILED: Sections A & B	
DATE: 4/8/02	SIGNED:
REV:	
REV:	
REV:	
REV:	
SIZE: B	NO SCALE
	SHEET 2 OF 2

