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

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Item Tu 10b

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Staff:	ALB-LB ALB
Staff Report:	November 21, 2002
Hearing Date:	December 10-13, 2002
Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-01-420

APPLICANT: Khosro Khaloghli

PROJECT LOCATION: 1203 Buena Vista, San Clemente, Orange County

PROJECT DESCRIPTION: Request for after-the-fact approval of improvements to a bluff stabilization system, waterproofing, drainage improvements and landscaping on a lot with a single-family residence.

LOCAL APPROVALS: City of San Clemente Approval-in-Concept

SUMMARY OF STAFF RECOMMENDATION:

The applicant is requesting after-the-fact approval for bluff face waterproofing activities carried out in Fall 2001 and for a larger bluff stabilization project carried out by a previous property owner in 1998. The Commission approved Coastal Development Permit 5-97-107 (Spruill) on October 7, 1997 for a bluff stabilization project subject to four special conditions. Not all of the special conditions were fulfilled, including one "prior-to-issuance" special condition. Therefore, although the project was approved, the permit was never issued and the work is regarded as unpermitted development. The current owner has incorporated that work into the current application.

Staff recommends the Commission **APPROVE** the proposed development subject to six (6) special conditions. The subject site is a coastal bluff lot located between the first public road and the sea in the City of San Clemente. The proposed repair work is necessary to protect an existing single-family residence built prior to passage of the Coastal Act. The primary issues addressed in the staff report are protection against geologic hazard and conformance with the scenic resource policies of the Coastal Act.

Special Condition 1 requires that the applicant assume the risk of development. Special Condition 2 requires proposals for future improvements be submitted to the Commission for a new permit or permit amendment. Special Condition 3 requires compliance with the drainage and runoff control plan. Special Condition 4 requires submittal of a revised landscape plan, which shows that only drought-tolerant native species will be used to screen the bluff protective device. Special Condition 5 requires submittal of a colorization plan to camouflage the bluff protective device. Special Condition 6 requires recordation of a deed restriction against the property, referencing all of the Special Conditions contained in this staff report.

SUBSTANTIVE FILE DOCUMENTS: City of San Clemente Certified Land Use Plan (LUP); Correspondence from P.A. & Associates, Inc. dated August 26, 2002; Correspondence from Foerstel Engineering dated May 29, 2002, November 1, 2001 and July 11, 2002; Geotechnical Report by Lotus Consulting Engineers, Inc. dated March, 5, 1997; Coastal Development Permit 5-97-107 (Spruill) and Emergency Permit 5-97-107-G (Spruill).

LIST OF EXHIBITS:

1. Vicinity Map
2. Assessor's Parcel Map
3. Coastal Access Points Map
4. Project Plans for 2001 work
5. Project Plans for 1997 work
6. Staff Report for 5-97-107
7. Site Photos (Aug. 2001)
8. Site Photos (Nov. 2002)

STAFF RECOMMENDATION:

Staff recommends that the Commission **APPROVE** the permit application with special conditions.

MOTION:

I move that the Commission approve CDP No. 5-01-420 pursuant to the staff recommendation.

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

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from geologic instability; (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.

2. Future Development

This permit is only for the development described in Coastal Development Permit No. 5-01-420. Pursuant to Title 14 California Code of Regulations Section 13253(b)(6), the exemptions otherwise provided in Public Resources Code Section 30610(b) shall not apply to the development governed by Coastal Development Permit No. 5-01-420. Accordingly, any future improvements to the structure authorized by this permit, including but not limited to, repair and maintenance identified as requiring a permit in Public Resources Section 30610(d) and Title 14 California Code of Regulations Sections 13252(a)-(b), shall require an amendment to Permit No. 5-01-420 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government.

3. Drainage and Run-Off Control Plan

A. By acceptance of this permit, the applicant agrees, on behalf of himself and all successors or assigns, to carry out the project in conformance with the drainage and runoff control plan submitted, which shows all roof drainage and runoff from impervious areas directed to the frontage street.

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 required.

4. Landscaping Plan

A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the review and approval of the Executive Director, a final plan for landscaping to screen the development from the golf course fairway. The plan shall be prepared by a licensed landscape architect.

1. The plan shall demonstrate that:

(a) all vegetation planted on the site will consist of drought-tolerant native plants,

(b) all planting will be completed within 60 days after completion of construction,

(c) all required plantings will be maintained in good growing conditions through-out the life of the project, and whenever necessary, shall be replaced with new plant materials to ensure continued compliance with the landscape plan, and

2. The plan shall include, at a minimum, the following components:

(a) a map showing the type, size, and location of all plant materials that will be on the developed site, the irrigation system, topography of the developed site, and all other landscape features, and

(b) a schedule for installation of plants.

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.

C. Five years from the date of issuance of Coastal Development Permit 5-01-420, the applicant shall submit for the review and approval of the Executive Director, a landscape monitoring report, prepared by a licensed landscape architect or qualified resource specialist that certifies the on-site landscaping is in conformance with the landscape plan approved pursuant to this special condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the landscape monitoring report indicates the landscaping is not in conformance with or has failed to meet the performance standards specified in the landscaping plan approved pursuant to this permit, the applicant, or successors in interest, shall submit a revised or supplemental landscape plan for the review and approval of the Executive Director. The revised landscaping plan must be prepared by a licensed landscape architect or a qualified resource specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

5. 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 bluff face. The plan shall demonstrate that:

1. the exterior layer of the bluff protective device affected by the waterproofing work will be 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 bluff face.

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.

6. Deed Restriction

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

II. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION AND LOCATION

1. Project Location

The project site is located at 1203 Buena Vista, a coastal blufftop lot between the first public road and the sea in the City of San Clemente, Orange County (Exhibits 1 and 2). As shown in the photograph below, the subject site is currently developed with a one-story single-family residence constructed prior to passage of the Coastal Act. The site is surrounded to the north and south by residential development, to the east by the frontage street (Buena Vista) and to the west by an approximately 90 foot high coastal bluff. The bluff slope descends to the Orange County Transportation Authority (OCTA) railroad and sandy beach below.

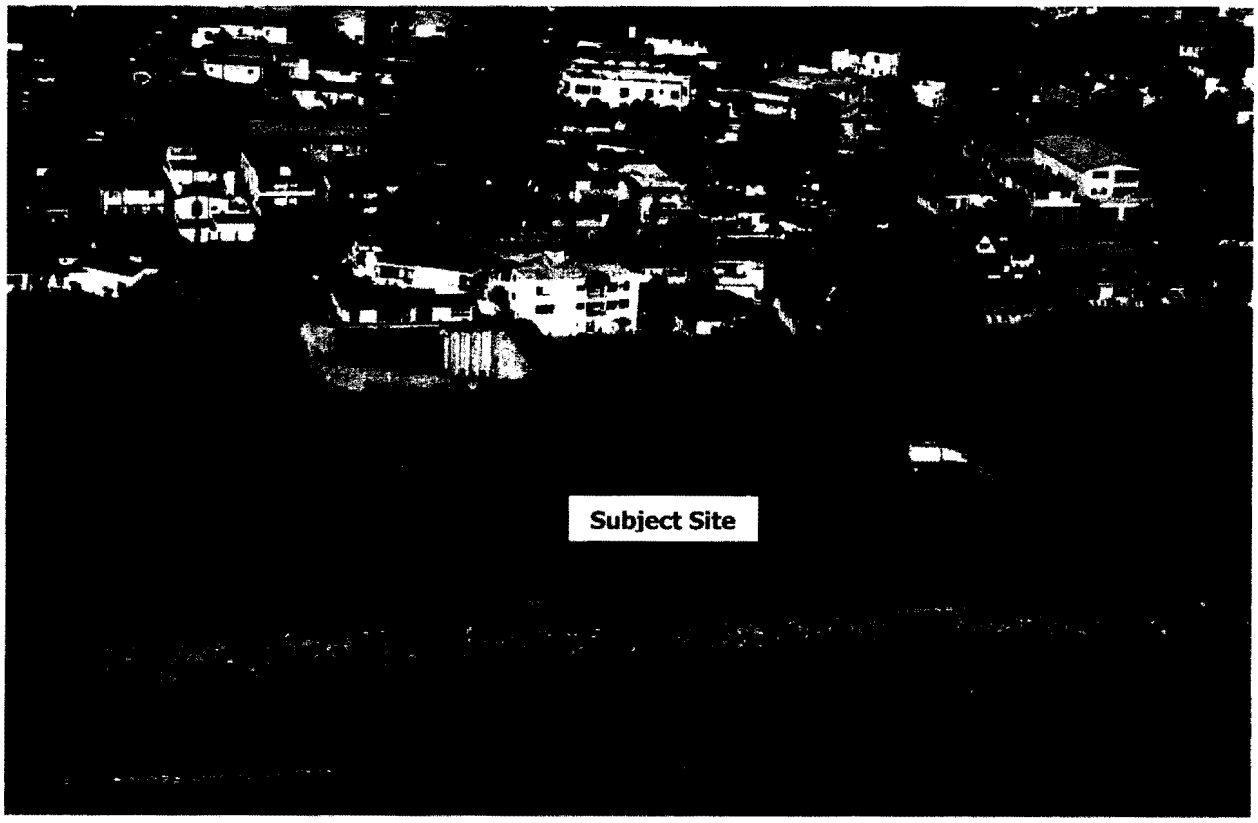


Image 5093 from California Coastal Records Project

The coastal bluffs in San Clemente are not subject to direct wave attack because they are separated from the beach by the railroad tracks and right-of-way. The railroad tracks have a rip-rap revetment which protects the tracks from erosion and wave overtopping. Though not subject to direct wave attack, the bluffs are subject to weathering caused by natural factors such as wind and rain, poorly structured bedding, soils conducive to erosion and rodent burrowing. Bluffs may also be subject to erosion from human activities, such as irrigation, improper site drainage and grading.

The nearest vertical coastal access is available approximately 100 feet downcoast of the subject site via a stairway at the El Portal public access point (Exhibit 3). Lateral public access is located seaward of the railroad right-of-way at the beach below the subject site.

2. Project Description

The work carried out by the current owner in Fall 2001 involved application of a stucco type mortar and "Theroseal" waterproofing to a free-standing rebar and mesh frame adjacent to the bluff face where a portion of the existing (pre-coastal) gunite/shotcrete wall had failed (Exhibit 4). The waterproofing material was textured and colorized in an effort to match the surrounding natural bluff. The project also included construction of a drainage device at the base of the gunite wall and the planting of drought-tolerant vegetation along the lower slope.

The work carried out by a prior owner in 1997-1998 (as proposed by CDP application 5-97-107) involved drilling of thirty (30) 12" diameter holes through the concrete slab adjacent to the seaward perimeter foundation of the residence and installation of thirty (30) 2" diameter (minimum) steel rod anchors (Exhibit 5). Nine of the thirty anchors were drilled and injected through a planter box at the bluff edge. The anchors were installed seven feet into bedrock (approximately 35 feet below the surface) and were encased in grout. A 36" steel reinforced concrete haunch was installed to underpin the ocean-fronting portion of the residence foundation. In addition, the project description of CDP 5-97-107 included work conducted without benefit of a coastal development permit in May 1996. That development consisted of the drilling of eleven (11) 3" holes and injection of 136.5 cubic feet of grout beneath the residence.

The project site is located on an eroding coastal bluff. The existing structure is protected by shotcrete along the entire bluff face and by five concrete caissons located at the southeastern portion of the bluff face. The site is subject to movement caused by sub-surface water eroding the soils from beneath the structure's foundation and patio area. According to geotechnical information submitted by the applicant, the drainage problem that caused the erosion has been corrected and the installation of the waterproofing system will *"protect the eroded slope from the potential for additional erosion."* Geologic stability and drainage will be discussed further in Section B (Geologic Stability) and Section C (Scenic Resources) of the current staff report.

The project also involves landscaping. A landscaping plan has been submitted which demonstrates that drought-tolerant shrubs and groundcover have been planted along the base of the bluff, below the gunite wall. Existing vegetation on the lower portion of the bluff slope will remain undisturbed. The plan notes that no permanent, in ground irrigation is to be installed. Temporary hand watering is proposed to establish plantings.

B. GEOLOGIC STABILITY

Blufftop development poses potential adverse impacts to the geologic stability of coastal bluffs, to the preservation of coastal visual resources, and to the stability of residential structures. Bluff stability has been an issue of historic concern throughout the City of San Clemente. Coastal bluffs in San Clemente are composed of fractured bedding which is subject to block toppling and unconsolidated surface soils which are subject to sloughing, creep, and landsliding. The Commission has traditionally followed a set of setback and stringline policies as a means of limiting the encroachment of development seaward to the bluff edges on unstable bluffs and preventing the need for construction of revetments and other engineered structures to protect new development on coastal bluffs, as per Section 30253 of the Coastal Act. However, the existing single-family residence and patio were constructed in 1951, prior to passage of the Coastal Act. The residence is located approximately 10 feet from the bluff edge and the patio extends to the bluff edge. The gunite wall and caissons located along the bluff face were also constructed prior to the Coastal Act. Section 30235 of the Coastal Act allows the construction of protective devices to protect existing structures when designed to mitigate adverse impacts. As such, the Commission approved repairs and improvements to the existing bluff stabilization system in 1997. The owner now requests to further improve the system.

1. Coastal Act and City of San Clemente Certified Land Use Plan (LUP) Policies

Section 30253 of the Coastal Act states:

> *New development shall:*
>
> *(l) 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.*

Section 30235 of the Coastal Act states, in relevant part:

> *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…*

The City of San Clemente Certified LUP contains policies limiting new development on coastal bluff faces to public staircases and policies establishing stringlines for purposes of limiting the seaward encroachment of development onto eroding coastal bluffs. Although the standard of review for projects in San Clemente is the Coastal Act, the policies of the Certified LUP are used as guidance. These policies include the following:

Policy VII.13:

> *Development shall be concentrated on level areas (except on ridgelines and hilltops) and hillside roads shall be designed to follow natural contours. Grading, cutting, or filling that will alter landforms (e.g.; bluffs, cliffs, ravines) shall be discouraged except for compelling reasons of public safety. Any landform alteration proposed for reasons of public safety shall be minimized to the maximum extent feasible.*

Policy VII.14 states:

> *Proposed development on blufftop lots shall be set back at least 25 feet from the bluff edge, or set back in accordance with a stringline drawn between the nearest corners of adjacent structures on either side of the development. This minimum setback may be altered to require greater setbacks when required or recommended as a result of a geotechnical review.*

Policy VII.16 states:

> *In a developed area where new construction is generally infill, no part of a proposed new structure, including decks, shall be built further onto a beachfront than a line drawn between the nearest adjacent corners of the adjacent structures. Enclosed living space in the new unit shall not extend further seaward than a second line drawn between the most seaward portions of the nearest corner of the enclosed living space of the adjacent structures.*

Policy VII.17 of the LUP also limits the type of development allowed on bluff faces. It states:

> *New permanent structures shall not be permitted on a bluff face, except for engineered staircases or accessways to provide public beach access where no feasible alternative means of public access exists.*

2. Bluff Stability and Erosion

This section includes a general discussion of the causes of bluff erosion in the southern California region, particularly San Clemente, and specific bluff erosion at the project site.

a. Generalized Findings on Bluff Erosion

In general, bluff erosion is caused by environmental factors and impacts caused by man. Environmental factors include seismicity, wave attack, drying and wetting of soils, wind erosion, salt spray erosion, rodent burrowing, percolation of rain water, poorly structured bedding, and soils conducive to erosion. Factors attributed to man include bluff oversteepening from cutting roads and railroad tracks, irrigation, over-watering, building too close to the bluff edge, improper site drainage, use of impermeable surfaces to increase runoff, use of water-dependent vegetation, pedestrian or vehicular movement across the bluff top and toe, and breaks in water or sewage lines. In addition to runoff percolating at the bluff top site, increased residential development inland also leads to increased water percolation through the bluff. Over-watering and improper irrigation often contribute to this increased water percolation.

There are numerous articles about seacliff retreat and bluff erosion in coastal literature. Much of this literature pertains to bluffs subject to wave attack and to large-scale landsliding. Antony R. Orme wrote a paper entitled *"Mass Movement and Seacliff Retreat along the Southern California Coast"* published in the Bulletin of the Southern Academy of Science in 1991. He states that there are other factors in bluff erosion besides wave attack, including weathering of coastal cliffs by salt spray evaporation. The coastal bluffs at the project location are subject to wind-borne salt spray from the ocean. In conclusion Orme states:

> *Seacliff retreat is a natural process which, if unheeded, threatens human life and livelihood, and which can be aggravated by human activity. It will continue to occur and therefore responsible coastal management must require that human activity be set back an appropriate distance from cliff tops and diverted from unstable and potentially unstable terrain.*

According to Orme, a major source of bluff instability in the Los Angeles area was the construction of the Pacific Coast Highway and the railroad. Like the bluffs in Los Angeles, the coastal bluffs in the City of San Clemente were disrupted by the construction of the Pacific Coast Highway and the railroad. Wherever the railroad tracks removed the toe of a coastal bluff, that coastal bluff became unstable. The bluff at the subject site is separated from the ocean by the railroad. However, the railroad construction activity happened early in the century, and although the coastal bluffs in San Clemente were impacted by the railroad construction, they are still natural coastal bluff landforms up to 100 feet high. These coastal bluffs would be eroding with or without the railroad construction. As stated in the focused EIR for Marblehead Bluffs (1991),

> *In the case of the Marblehead site, the geomorphic process responsible for bluff erosion is no longer wave action. El Camino Real has been constructed along the base of the bluff, with the AT&SF railroad and housing also having been built between the road and the shoreline. Instead of erosion by wave action, the bluffs continue to erode partly due to oversteepening that resulted from construction of the railroad and El Camino Real.*

The Marblehead bluffs are located approximately 0.75 miles north of the subject site, but the composition of the coastal bluffs in San Clemente is similar. There are railroad tracks located at the base of the coastal bluffs at the project location. The tracks contribute to coastal bluff erosion by not allowing talus and landslide materials to accumulate and by causing vibration in the bluffs due to passing trains.

There were two major coastal bluff stabilization projects in the City of San Clemente (La Ventana and Colony Cove) where residences on coastal bluffs have either been destroyed or endangered by bluff failure [CDPs 5-93-243 (San Clemente), A5-DPT-93-275 (Dana Point)]. Other residences on coastal bluffs in San Clemente have received permits to install caissons or other foundation protection measures (CDPs 5-00-034 (McKinley-Bass); 5-99-351 (McMurray); 5-93-181 (Driftwood Bluffs), 5-93-307 (Ackerly), and 5-93-143 (Mertz & Erwin)] because existing decks or residences were threatened by bluff erosion.

Landsliding of coastal bluffs below La Ventana Street in the City of Dana Point resulted in the destruction of five homes. Landsliding of the bluffs below Colony Cove resulted in the undermining of terrace walls and patio structures. The primary cause of the La Ventana landslide was water infiltration into the bluff along a deep seated slope failure line. The geotechnical report which evaluated the La Ventana slide states that water seepage onto the bluff face was longstanding and that landscaping on the rear yards of some bluff top homes may have contributed to the accumulation of water in the slopes.

Additionally, in a letter dated October 1, 1999 discussing a bluff repair project at 327 and 327 ½ Paseo De Cristobal [5-00-034 (McKinley-Bass)], Stoney-Miller Consultants made the following general observation regarding San Clemente: "*The failure was the result of seepage flows along the lithologic contact between the Terrace Deposit and Bedrock. This contact is a geologic feature that underlies the majority of the City of San Clemente east of the shoreline bluff to the Interstate 5 Freeway. Irrigation and rainfall throughout this area provides recharge to the perched water at this contact.*"

The Commission has received many application requests to resolve geotechnical problems and protect existing structures on coastal bluffs and coastal canyons in San Clemente which were caused by inadequate drainage systems, i.e., broken irrigation lines, overwatering, directing uncontrolled runoff to the bluff slopes, and differential settling due to improperly compacted fill.

An emergency permit was issued in 1990 for massive grading of unstable bluffs at the Marblehead site. Landsliding in 1990 had caused repeated closures of the Pacific Coast Highway at the base of the bluffs. Unlike the La Ventana and Colony Cove sites, there was no development on the Marblehead bluffs. The Marblehead Bluffs erosion problem was created in part by the construction of the railroad and the Pacific Coast Highway, which resulted in oversteepening of the bluffs. The Marblehead geological report by Zeiser Kling Consultants, Inc., discusses the process of bluff retreat:

> *The oversteepened bluffs fail due to erosion, such as wave action along the base of the bluff, and due to other environmental factors such as water saturation during periods of abundant rainfall. Fallen debris accumulates at the foot of the slopes where it forms an unstable talus pile. Secondary failures occur as the talus erodes. As more failures occur, the bluff retreats landward. In its mature state, the landform no longer has the appearance of a bluff. The talus pile grows into a large "apron" that buries the bluffs, but continues to fail intermittently as it seeks its angle of repose. The landform may become temporarily stable when the talus apron is large enough to cover the bluff face, protecting the otherwise steep slopes from exposure and possibly buttressing the base of the slopes.*

The Marblehead and other geotechnical reports state that the process of coastal bluff erosion can be slowed by landscaping, setting buildings back from the blufftop and constructing impact barriers at the base of the bluff, or by grading and terracing the slope.

The Colony Cove, La Ventana, and Marblehead bluff stabilization projects are located north of the project site. However, there are bluff stability problems along the entire stretch of San Clemente coastal bluffs as evidenced by applications for foundation support systems for residences on coastal bluffs and by foundation support systems built prior to passage of the

Coastal Act. Much of the development on coastal bluffs prior to the Coastal Act was constructed close to the bluff top edge and later required support systems for failing patios, decks and other improvements, as is the case with the current application.

In addition to documentation of the instability of coastal bluffs in San Clemente, Gerald G. Kuhn published an article entitled *"Greatly Accelerated Man-Induced Coastal Erosion and New Sources of Beach Sand, San Onofre State Park and Camp Pendleton, Northern San Diego County, California,"* in which it is noted that 80% of the cliffs between the San Onofre Nuclear Power Plant and Target Canyon have experienced landslides. Camp Pendleton is approximately three miles south of the project site.

b. Site Specific Geotechnical Data

As the discussion in the prior section indicates, development on Southern California coastal bluffs is inherently hazardous. To address the need to stabilize the slope in 1997, the applicant submitted a *Geotechnical Report* prepared by Lotus Consulting Engineers, Inc. dated March 5, 1997 and *Structural Calculations for Proposed Underpinning (Pile/Anchor) for Additional Support of Existing Rear Foundation of Spruill One-Story Residence*, prepared by Lotus Consulting Engineers, Inc dated May 15, 1997.

The report presents the results of the field investigation and laboratory testing and provides geotechnical recommendations to protect the existing structure at the top of the bluff. Commission staff reviewed the geotechnical report when considering the project proposed under application 5-97-107. The full staff report is provided as Exhibit 6. As described in the staff report,

> *"It is evident from the geotechnical report, that despite the extraordinary bluff face protection measures which have been in place for as much as 30 years, continuing measures need to be taken to protect the existing structure. The geotechnical report states that, in all probability, subsurface water flowing under the residence causes erosion to occur under the residence foundation, the patio concrete slab and behind the shotcrete bluff face, creating voids or empty spaces under the residence. In 1996, several hundreds cubic feet of grout were injected under the patio slab and foundation to fill voids, yet the foundation and patio slab continued to show lateral and vertical movement."*

The 1997 staff report describes the site and the danger presented if no measures were taken to support the foundation, stabilize the patio and residence, and prevent further slope movement. Based on the information presented by the applicant's consultants, the Commission approved the repairs necessary to protect the existing development. However, the consulting engineers offered no assurance that the site would remain stable and not require further repair.

In 2001, the northwestern portion of the gunite wall began to crumble, as shown in the photos attached as Exhibit 7. The cause of the failure has been attributed to runoff from a neighboring property, which has since been redirected. The subsurface water caused erosion of the soil behind the gunite wall and, over time, caused a portion of the wall to fail.

The applicant submitted correspondence from Michael Mullins, Contractor, Foerstel Engineering and Design and P.A. & Associates to address the need to correct the erosion issues and to waterproof the exposed bluff slope. The consultants recommended waterproofing of the slope to protect that section of the bluff from further erosion and failure. As described by the contractor, the waterproofing system is a stand-alone system with a footing that is not structurally connected to the existing gunite wall. The "Theroseal" waterproofing material was sprayed onto a freestanding mesh frame, which was installed directly in front of the gunite wall. The project also included construction of a drainage device at the base of the gunite wall and the

addition of rain gutters to the residence. Roof runoff is now directed in a non-erosive manner to the frontage street. The completed project is shown in the photos attached as Exhibit 8.

3. Conclusions and Determination of Consistency

The coastal bluff at the subject site is considered unstable. In years past, bluff instability and erosion have detrimentally affected the subject site due to soil saturation and high groundwater activity. The problems were exacerbated by poor drainage conditions, which have since been corrected.

Past slope stability problems at the site were addressed through engineering mechanisms. The shotcrete face and concrete caissons were constructed prior to the passage of the Coastal Act. In 1997, the Commission allowed the installation of steel rod anchors and a concrete haunch to underpin the ocean-fronting portion of the residence foundation. In 2001, the applicant constructed a waterproofing system to protect the bluff face. No further protective devices are proposed or anticipated at this time. According to the applicant's consultants, the wall (as recently repaired and enhanced) is functioning as designed to prevent further erosion of the bluff face. As required by Special Condition No. 3 of 5-97-107, the applicant was required to submit evidence of conformance with geologic recommendations. That condition was fulfilled by information received by Commission staff on December 3, 1997. Although repairs to the bluff protective device were deemed necessary to protect the existing structure, they must be designed and carried out in a manner that ensures structural stability and minimizes impacts to the natural landform.

In addition to being consistent with applicable geologic requirements, the proposed project must also demonstrate conformance with drainage recommendations included in the geotechnical reports, as updated. The reports suggest that drainage be directed to the frontage street to limit runoff on the bluff face. The applicant has submitted a drainage plan demonstrating that rooftop and surface runoff is now directed to the street. In addition, a subdrain was added to the base of the protective device.

Developments on blufftop lots in San Clemente are required to submit landscaping and irrigation plans, consisting primarily of native or drought-tolerant plants, for the review and approval of the Executive Director, in order to be found in conformance with Section 30253 of the Coastal Act. Review of landscaping plans is necessary to assure that appropriate plant species are selected and limited watering methods are applied. In addition, appropriate vegetation can help to stabilize slopes. Native, drought-tolerant plants common to coastal bluffs do not require watering after they become established, have deep root systems which tend to stabilize soils, are spreading plants and tend to minimize the erosive impact of rain, and provide habitat for native animals. Landscaping on blufftop lots that involves in-ground irrigation may lead to overwatering or sprinkler line breaks that can contribute to slope instability. Therefore, review and approval of final landscaping and irrigation plans is necessary prior to the issuance of a coastal development permit. In this case, the applicant has submitted a planting plan with drought-tolerant, non-native species. A revised plan, which includes solely native species, will be required. Monitoring of the vegetation will be necessary to ensure its effectiveness at erosion control and visual screening.

a. Special Conditions and Coastal Act Consistency

As discussed throughout the report, development on a coastal bluff is inherently hazardous. Past experience demonstrates that development at the subject site is particularly hazardous. Consequently, the Commission requires applicants on bluff lots to comply with certain specific special conditions to bring the project into compliance with the resource protection policies of the Coastal Act. In this case, the special conditions require 1) assumption of risk; 2) future improvements be submitted to the Commission for a new permit or permit amendment;

3) submittal of a revised landscape plan, which shows that only drought-tolerant native species will be used to screen the bluff slope protective device; 4) compliance with the drainage plan; 5) submittal of a revised colorization plan to camouflage the bluff protective device and 6) recordation of a deed restriction against the property, referencing all of the Special Conditions contained in this staff report.

Special Condition No. 1 requires assumption of risk. Although the repairs will prevent further bluff erosion for the time being, the risk is not eliminated entirely. Therefore, the standard waiver of liability condition has been attached through Special Condition No. 1. By this means, the applicant is notified that the development is built in an area that is potentially subject to bluff erosion that can damage the applicant's property. The applicant is also notified that the Commission is not liable for such damage as a result of approving the permit for development. Finally, the condition, as recorded through Special Condition 6, ensures that future owners of the property will be informed of the risks and the Commission's immunity for liability.

Special Condition No. 2 informs the applicant that any future improvements or additions on the property, including bluff protective device repairs, hardscape improvements, grading, landscaping, vegetation removal and structural improvements, require a coastal development permit or amendment to this permit from the Commission or its successor agency. This condition ensures that development on coastal bluffs which may affect the stability of the bluffs and residential structures or may require future bluff protective structures, require a coastal development permit.

Special Condition No. 3 requires the applicant to submit and implement a revised landscaping plan which consists of drought-tolerant native plants and prohibits in-ground irrigation. This special condition requires that the area at the base of the bluff protective device be planted with drought tolerant native plants to reduce the need for irrigation and stabilize the soils and the site as a whole. The condition also requires monitoring of the vegetation.

Special Condition No. 4 requires the applicant to conform to the runoff and drainage control plan submitted. In keeping with the geotechnical recommendations, this condition requires that on-site runoff be conveyed to the frontage street. The plan shows that surface waters are directed away from the building foundations, walls and sloping areas to prevent infiltration into the bluff.

Special Condition No. 5 requires the applicant to submit a color and texture plan to better camouflage the bluff protective device. This condition does not relate to the stability of the bluff, but to the aesthetics of the bluff. As such, the condition will be discussed further in the following section, Scenic Resources.

Special Condition No. 6 requires the applicant to record a deed restriction against the property, referencing all of the Special Conditions contained in this staff report. This condition puts future owners on notice of the restrictions placed on the use and enjoyment of the property, as well as of the risks of the development and/or hazards to which the site is subject. The condition also informs owners of the Commission's immunity from liability.

Only as conditioned does the Commission find the proposed development in conformance with Section 30253 and Section 30235 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 blufftop lot north of the Municipal Pier and south of North Beach. The site is located inland of the OCTA railroad tracks and is highly visible from the beach below and from the nearby El Portal public stairway (Exhibit 3). Because the proposed slope 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 a bluff protective device that includes the application of a "Thero-seal" waterproofing material. The material is colorized and texturized to replicate the appearance of the coastal bluffs in the subject area. However, as currently applied, the color is darker than the surrounding bluff material. As such, the waterproofing appears obvious and unnatural. Special Condition 4 (Landscaping) will mitigate the visual impacts of the project to an extent. However, the proposed vegetation will only serve to screen the lower portion of the bluff protective device. The upper portion will be entirely exposed as viewed from the beach below.

To minimize the visual impacts of the bluff protective device as recently repaired and enhanced, the Commission imposes Special Condition 5. Special Condition 5 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 bluffs.

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

D. PUBLIC ACCESS

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 conformance with the public access and recreation policies of Chapter 3 of the Coastal Act. The proposed development is located between the sea and the first public road.

Section 30212 of the Coastal Act states, in relevant 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.

Sections 30210, 30211 and 30212 of the Coastal Act require that new development provide maximum public access and recreation, not interfere with the public's right of acquired access, and provide public access from the nearest public roadway to the shoreline and along the coast except under certain circumstances.

The nearest public access to the coast exists at the El Portal accessway, approximately 100 feet south of the subject property (Exhibit 3). The proposed development, which consists of repairs to an existing bluff protective device, will not create new adverse impacts on coastal access and recreation. Therefore, the Commission finds that the proposed development does not pose significant adverse impacts to existing public access and recreation; there is adequate

public access in the vicinity and the project is therefore consistent with Section 30212 of the Coastal Act.

E. LOCAL COASTAL PROGRAM

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal permit here 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).

F. UNPERMITTED DEVELOPMENT

Development has occurred on site without benefit of the required coastal development permit, including slope stabilization work carried out in 1997-1998 and waterproofing carried out in 2001. Specifically, the work carried out by the current owner in Fall 2001 involved application of a stucco type mortar and "Theroseal" waterproofing to a free-standing rebar and mesh frame adjacent to the bluff face where a portion of the existing (pre-coastal) gunite/shotcrete wall had failed (Exhibit 4). The waterproofing material was textured and colorized in an effort to match the surrounding natural bluff. The project also included construction of a drainage device at the base of the gunite wall and the planting of drought-tolerant vegetation along the lower slope.

The work carried out by a prior owner in 1997-1998 (as proposed by CDP application 5-97-107) involved drilling of thirty (30) 12" diameter holes through the concrete slab adjacent to the seaward perimeter foundation of the residence and installation of thirty (30) 2" diameter (minimum) steel rod anchors (Exhibit 5). Nine of the thirty anchors were drilled and injected through a planter box at the bluff edge. The anchors were installed seven feet into bedrock (approximately 35 feet below the surface) and were encased in grout. A 36" steel reinforced concrete haunch was installed to underpin the ocean-fronting portion of the residence foundation. In addition, the project description of CDP 5-97-107 included work conducted without benefit of a coastal development permit in May 1996. That development consisted of the drilling of eleven (11) 3" holes and injection of 136.5 cubic feet of grout beneath the residence.

The Commission approved CDP 5-97-107 (Spruill) on October 7, 1997 for a bluff stabilization project subject to four special conditions. Not all of the special conditions were fulfilled, and at least one "prior to issuance" condition was not fulfilled. Therefore, although the project was approved, the permit was never issued and the work completed is appropriately regarded as unpermitted development. The current owner has incorporated that work into the current application. Consequently, all work that was undertaken constitutes development that requires a coastal development permit.

Although construction has taken place prior to submission of this permit application, consideration of the application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. The certified San Clemente Land Use Plan was used as guidance by the Commission in reaching its decision. Approval of this permit does not constitute a waiver

of any legal action with regard to the alleged unpermitted development, nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal development permit.

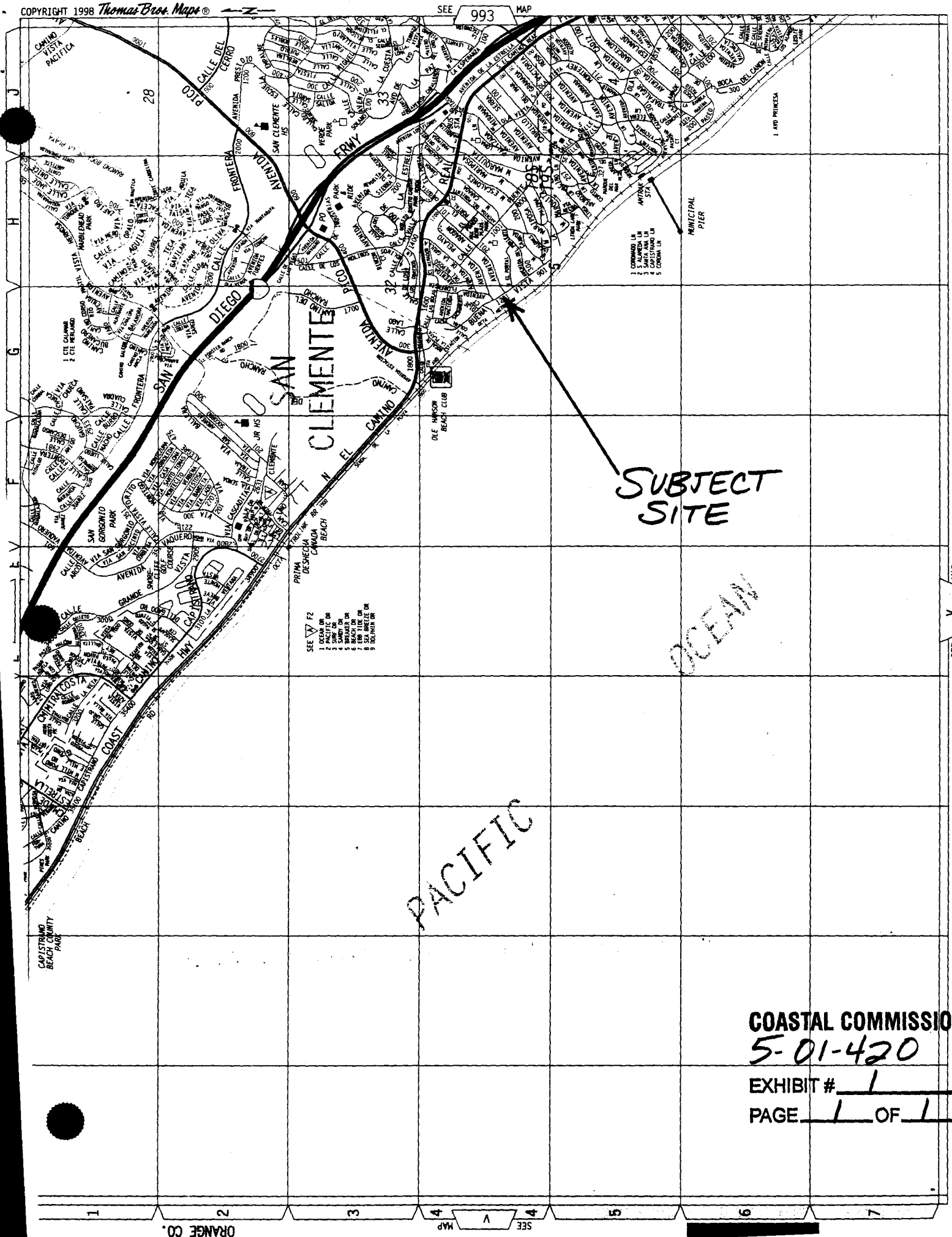
The certified San Clemente Land Use Plan was used as guidance by the Commission in reaching its decision. Approval of this permit does not constitute a waiver of any legal action with regard to the alleged unpermitted development, nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal development permit.

F. CONSISTENCY WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

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

The project is located within an existing residential neighborhood. Development already exists on the subject site. In addition, the proposed development has been conditioned, as follows, to assure the proposed project is consistent with policies of the Coastal Act: 1) assumption of risk; 2) future improvements must be submitted to the Commission for a new permit or permit amendment; 3) submittal of a landscape plan, which shows that only drought-tolerant native species will be used to screen the bluff protective device; 4) compliance with the drainage plan; 5) submittal of a colorization plan to camouflage the bluff protective device and 6) recordation of a deed restriction against the property, referencing all of the Special Conditions contained in this staff report.

As conditioned, no feasible alternatives or additional feasible mitigation measures are known, beyond those required, which would substantially lessen any identified significant effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with CEQA and the Coastal Act requirements that it conform to CEQA.



COASTAL COMMISSION
5-01-420
EXHIBIT # 1
PAGE 1 OF 1

TRACT NO. 794	M.M. 24-26,27
TRACT NO. 820	M.M. 24-42,43
TRACT NO. 821	M.M. 24-49,59
TRACT NO. 10399	M.M. 480-26,27
PARCEL MAP	P.M. 142-24

MARCH 1978

NOTE - ASSESSOR'S BLOCK & PARCEL NUMBERS SHOWN IN CIRCLES

ASSESSOR'S MAP
BOOK 692 PAGE 11
COUNTY OF ORANGE

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

COASTAL COMMISSION
5-01-420
EXHIBIT # 2
PAGE 1 OF 1

Description: Orange, CA Assessor Map 692.11 Page: 1 of 3
Order: 3 Comment: A

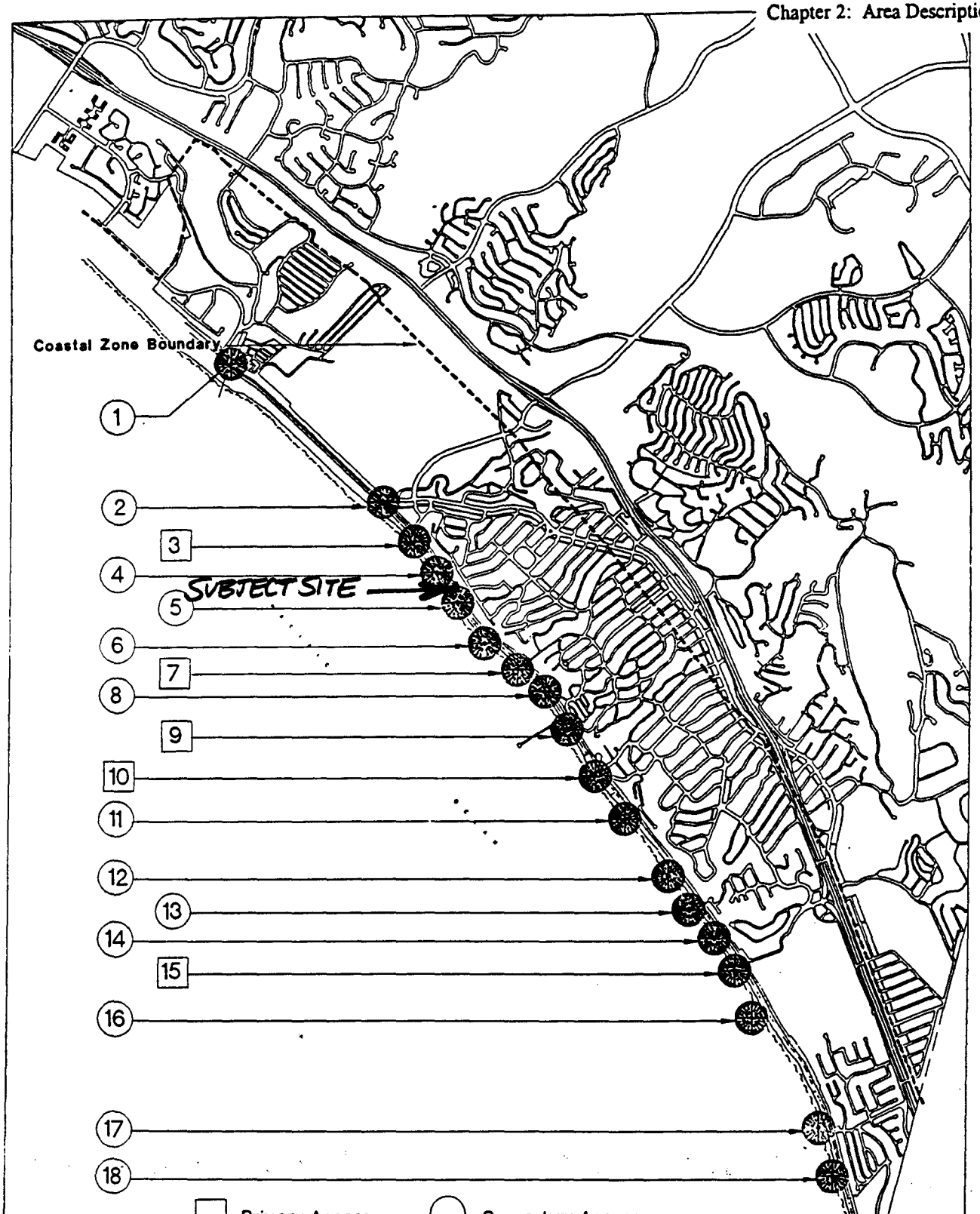


FIGURE 2-5

CITY OF SAN CLEMENTE
COASTAL ACCESS POINTS

Foerstel Engineering & Design
919 J Calle Amanecer
San Clemente, CA 92673
phone 949.492.5981
fax 949.498.3020

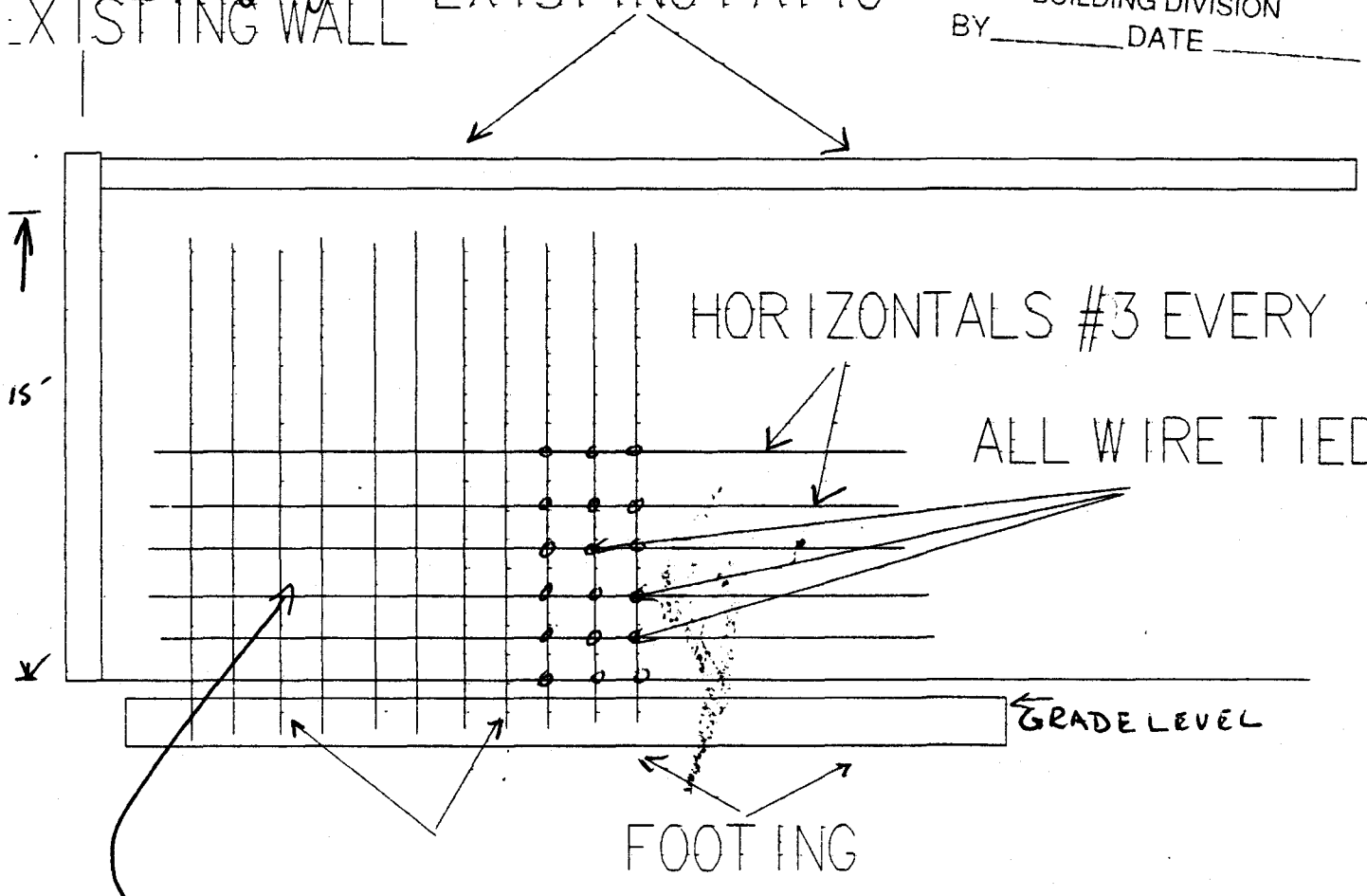
The development as proposed is approved by the City of San Clemente in concept. This is a preliminary approval and does not grant the recipient any development rights. When approved by the California Coastal Comission, the City will then process the plans for permits. Please check with other City departments and divisions to ensure full compliance with all City codes, standards and requirements.

City Planner

10-30-01
Date

RECEIVED
South Coast Region
OCT 31 2001
CALIFORNIA
COASTAL COMMISSION

APPROVED
CITY OF SAN CLEMENTE
BUILDING DIVISION
BY_____DATE_____



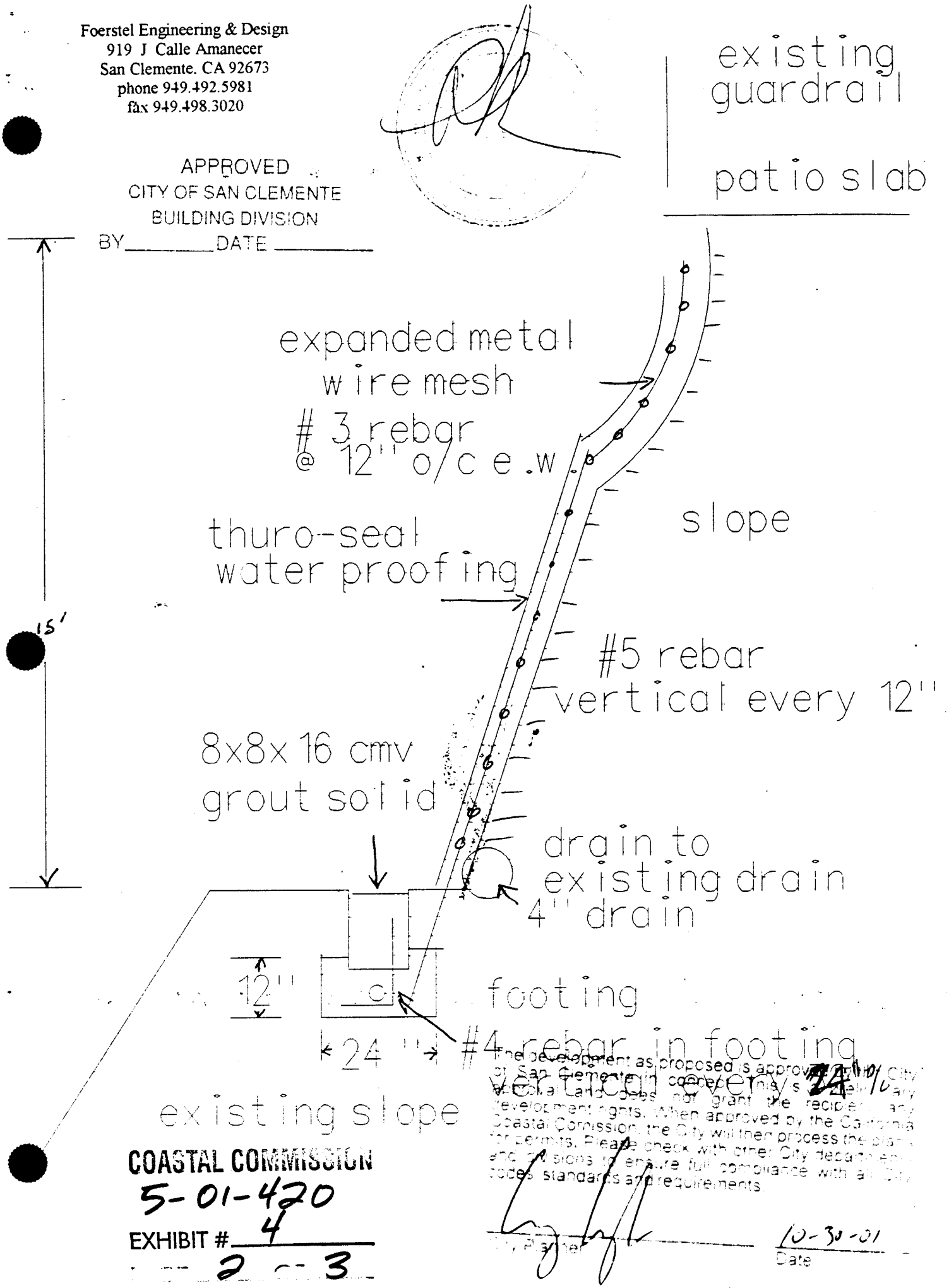
REBAR COVERED WITH WIRE MESH & WIRE TIED

WEST ELEVATION 1203 BUENA VISTA
ALL CONCRETE TO BE 4500 PSI, TYPE V CEMENT
WATER/CEMENT RATIO OF .45.

COASTAL COMMISSION
5-01-420
EXHIBIT # 4
PAGE 1 OF 3

Foerstel Engineering & Design
919 J Calle Amanecer
San Clemente. CA 92673
phone 949.492.5981
fax 949.498.3020

APPROVED
CITY OF SAN CLEMENTE
BUILDING DIVISION
BY_____DATE_____

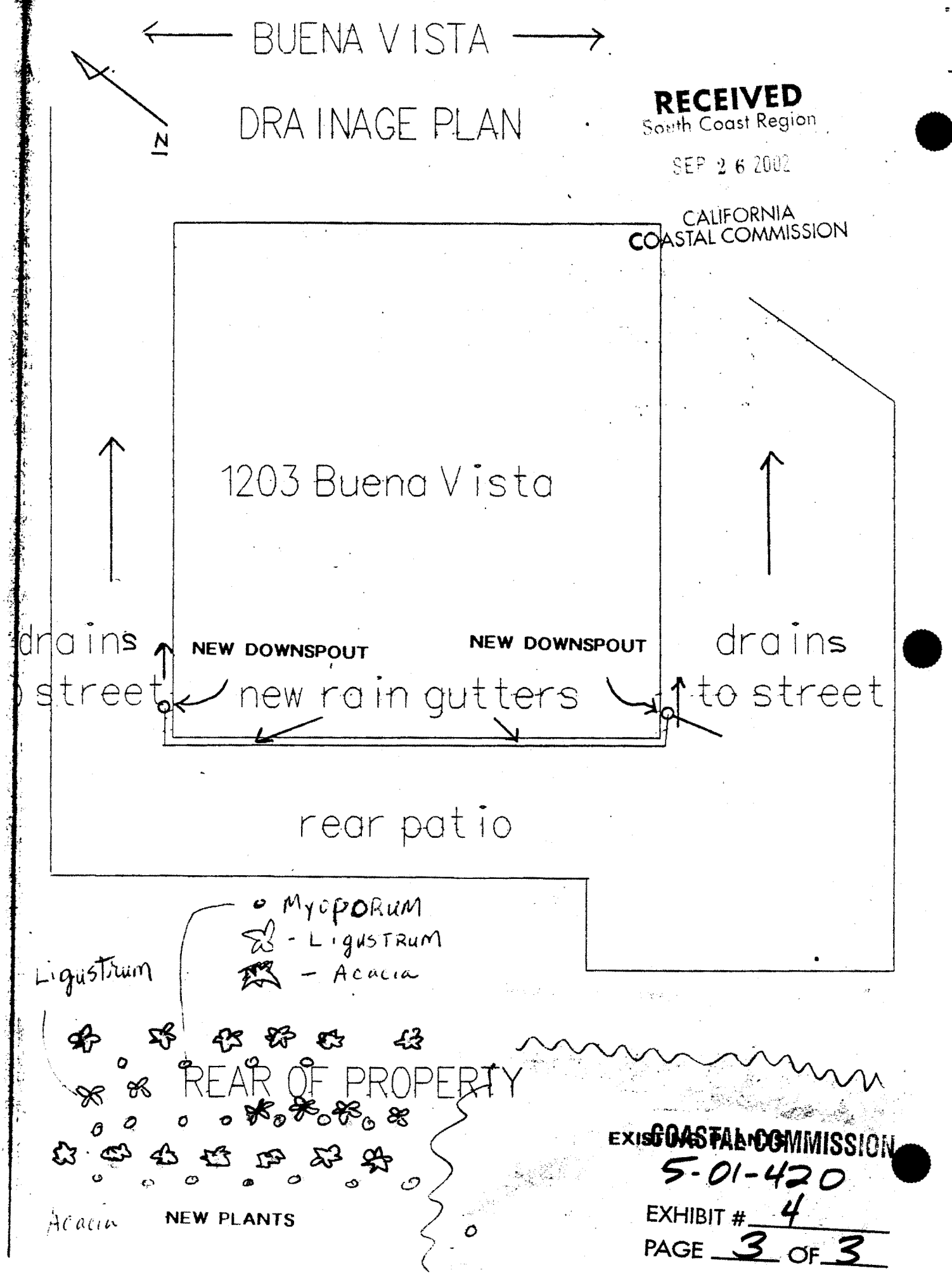


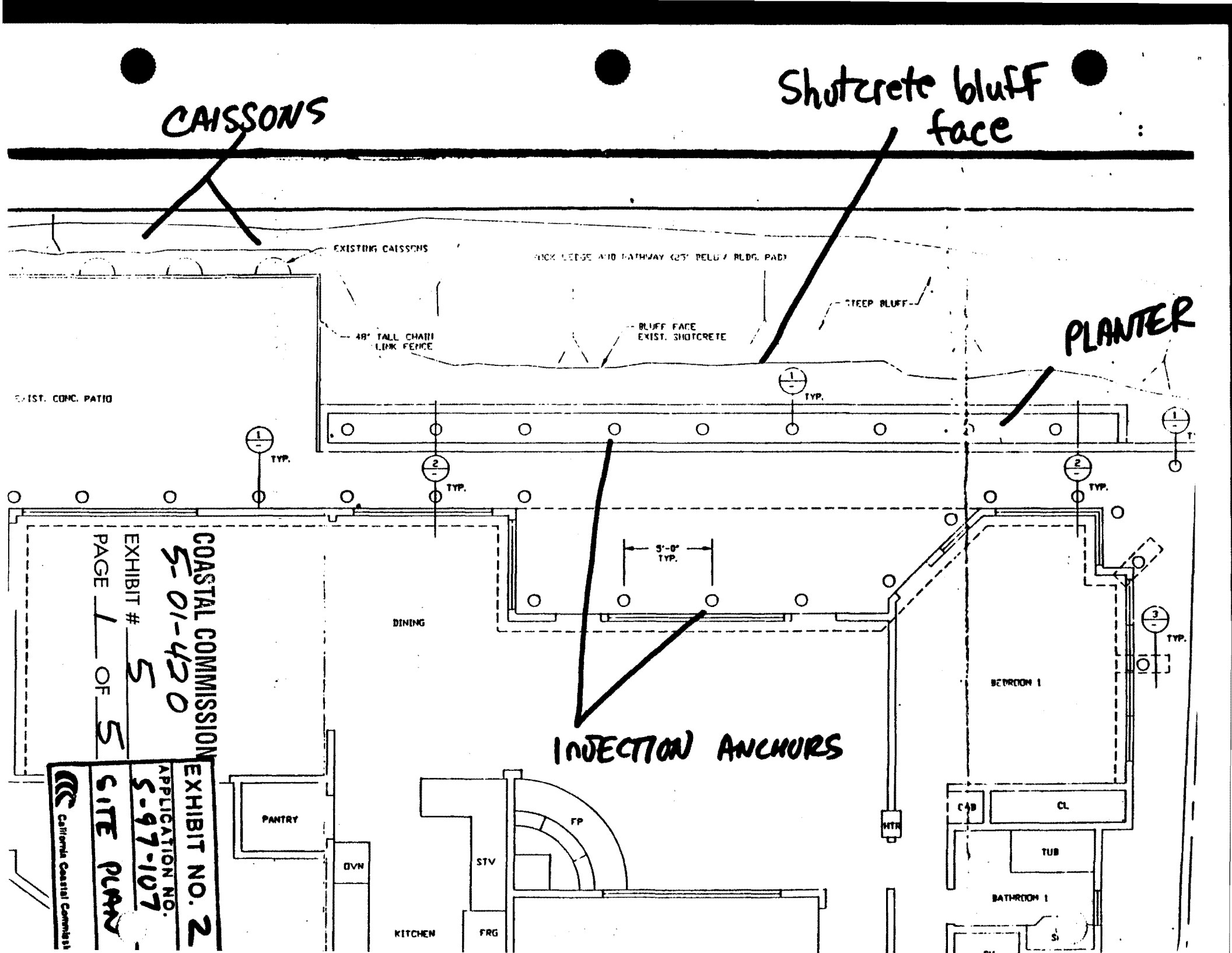
The development as proposed is approved by the City of San Clemente in concept only. It does not grant the recipient any development rights. When approved by the California Coastal Commission, the City will then process the plans for permits. Please check with other City departments and revisions to ensure full compliance with all City codes standards and requirements.

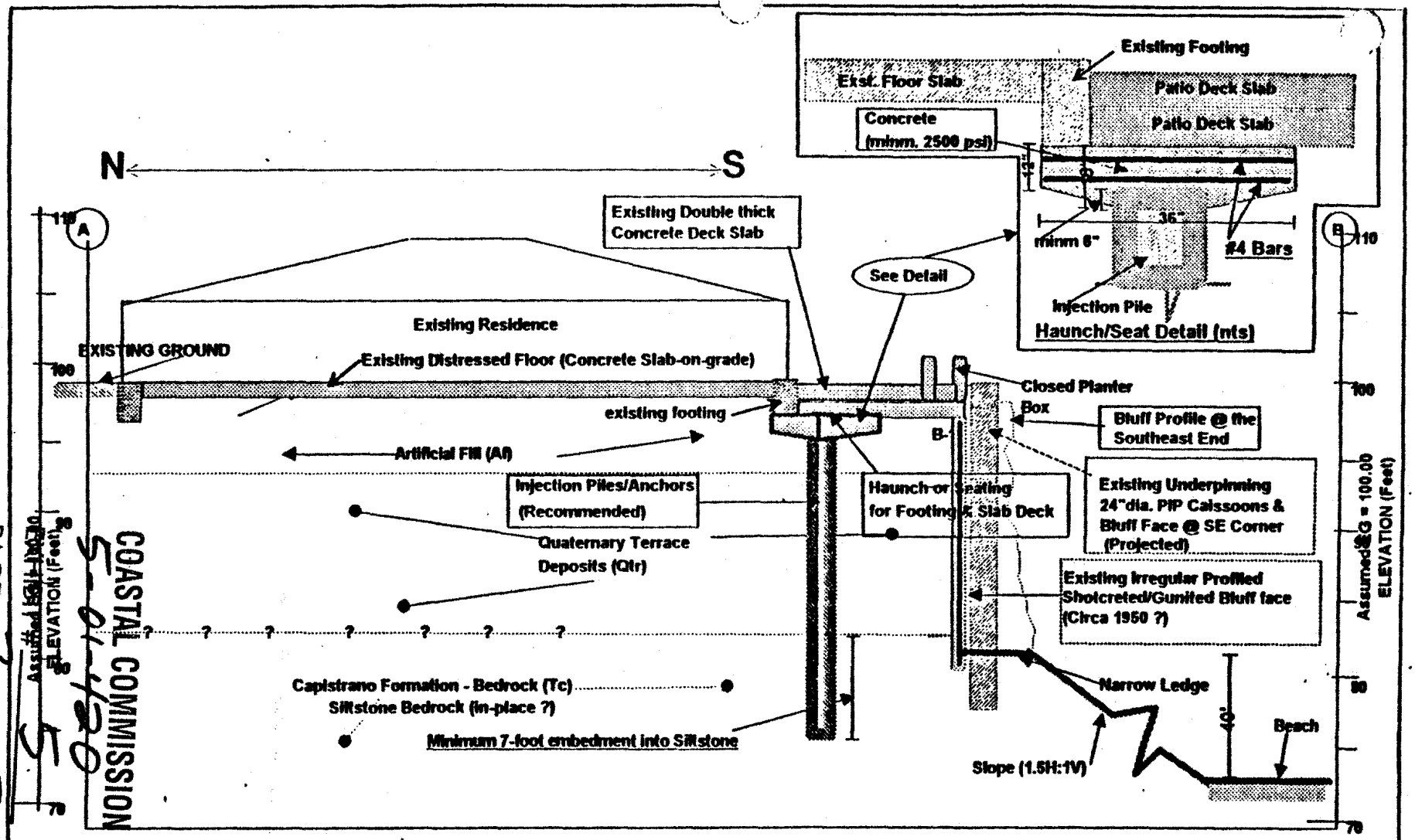
City Planner

10-30-01
Date

COASTAL COMMISSION
5-01-420
EXHIBIT # 4
PAGE 2 OF 3




CAISSONS
Shotcrete bluff face
EXISTING CAISSONS
ROCK LEDGE AND PATHWAY (25' BELOW BLDG. PAD)
STEEP BLUFF
48" TALL CHAIN LINK FENCE
BLUFF FACE EXIST. SHOTCRETE
PLANTER
EXIST. CONC. PATIO
TYP.
5'-0" TYP.
DINING
INJECTION ANCHORS
BEDROOM 1
PANTRY
OVN
STV
FP
KITCHEN
FRG
HTR
CAB
CL
TUB
BATHROOM 1
COASTAL COMMISSION
EXHIBIT NO. 2
APPLICATION NO. 5-97-107
EXHIBIT # 5
PAGE 1 OF 5
SITE PLAN
California Coastal Commission



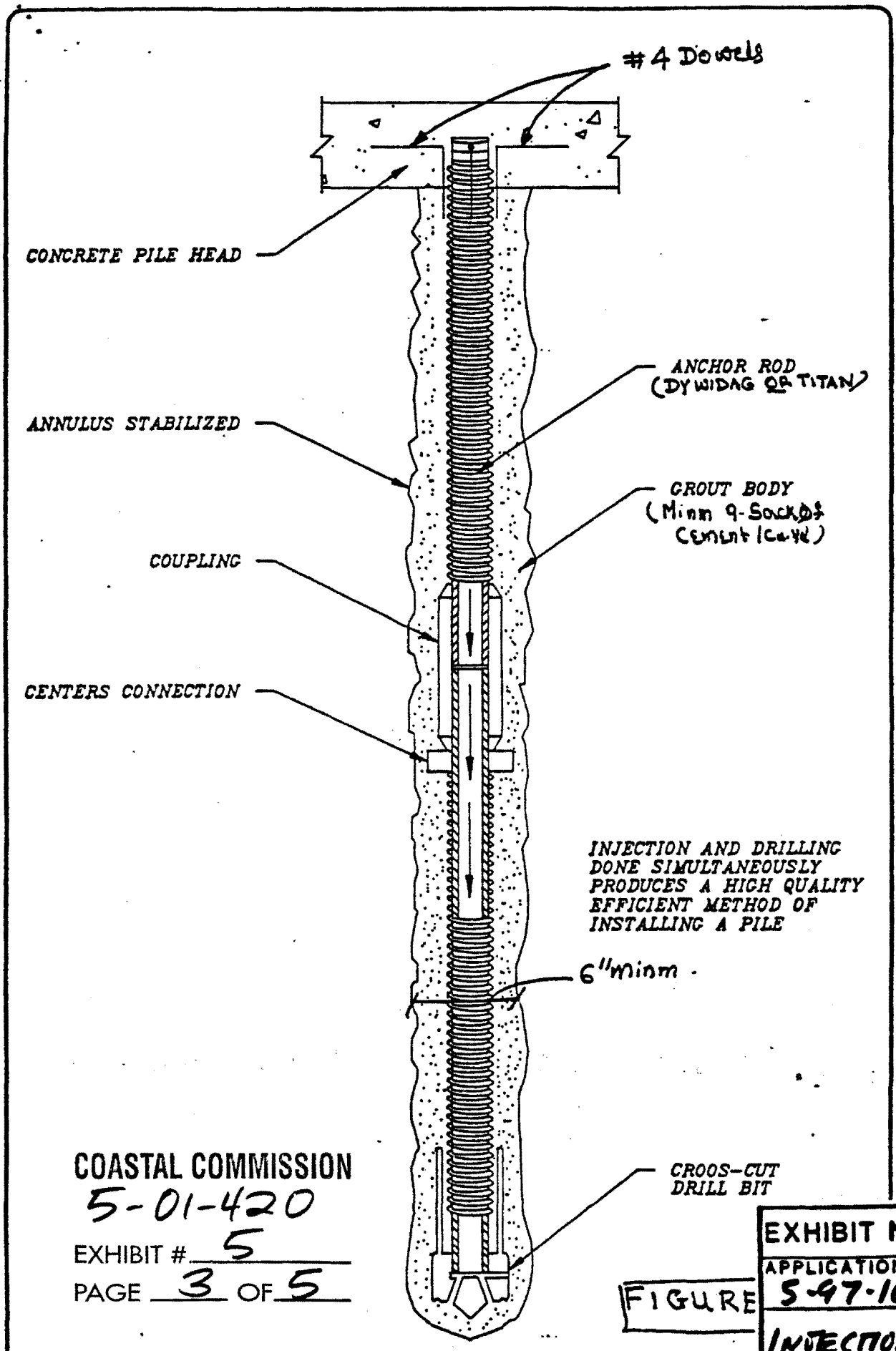
CONCEPTUAL GEOTECHNICAL SECTION A- B WITH INJECTION PILE SUPPORT

[Not To Scale]

...ulting Engrs. Inc. ...lde Dr., Suite D ...lls, California	Phone: 714-768-4466 Fax: 714-768-0735	Foundation/Rear Yard Distress Spruill Residence 1203 Buena Vista, San Clemente	Project: 97708 Figure: 3

COASTAL COMMISSION
5-97-107
EXHIBIT # 3
PAGE 2 OF 5

EXHIBIT NO. 3
APPLICATION NO.
5-97-107
SECTION
California Coastal Commission



REVISIONS

ULTIMO - GEOTECHNICAL CONSTRUCTION AND ENGINEERING
PHONE 1-714-496-7245 FAX 1-714-496-7060

INJ. ANCH'S MCRO PILES

DRAWN BY: DAVE

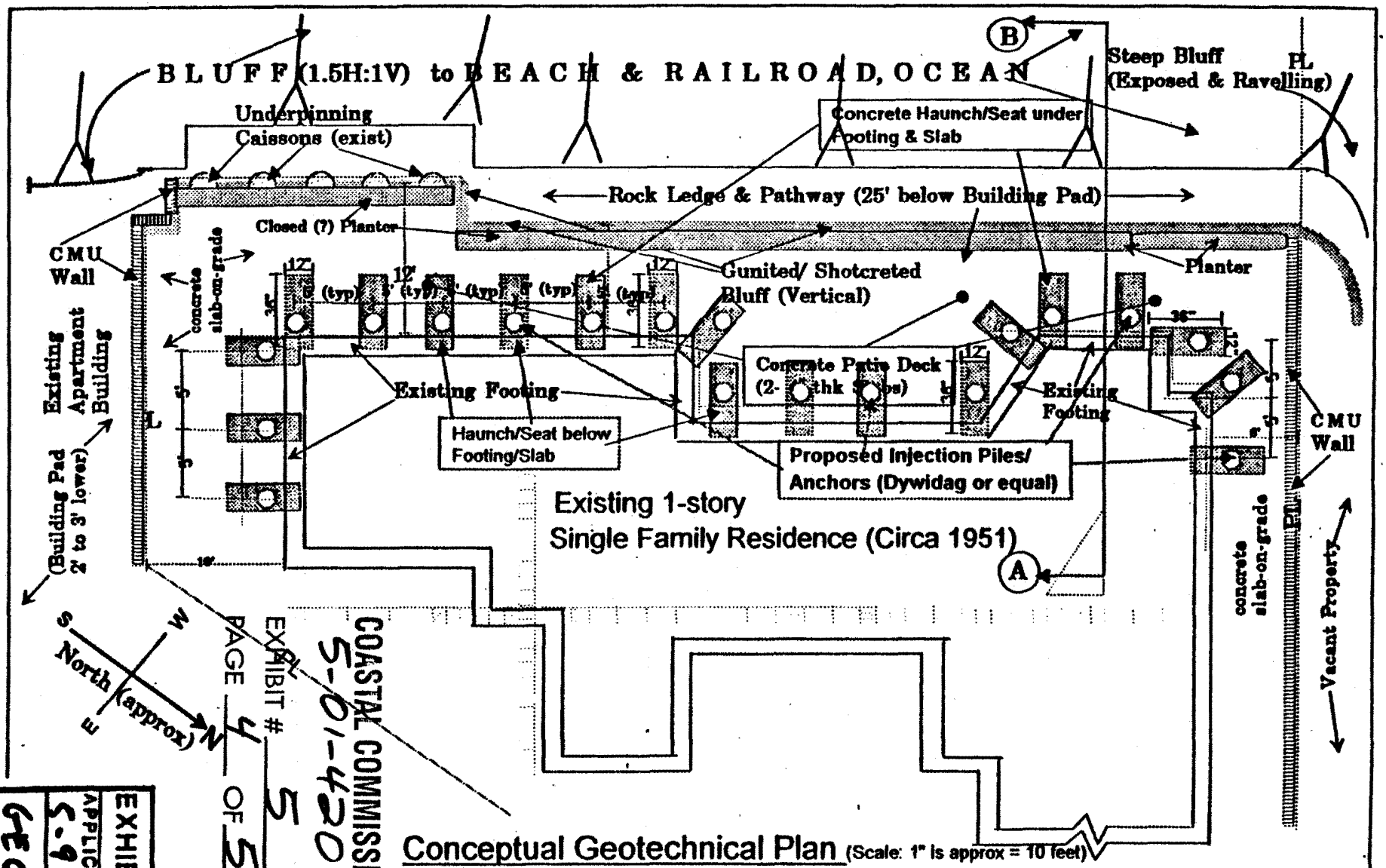
COASTAL COMMISSION
5-01-420
EXHIBIT # 5
PAGE 3 OF 5

FIGURE

EXHIBIT NO. 4
APPLICATION NO. 5-97-107
INJECTION PILE

California Coastal Commission

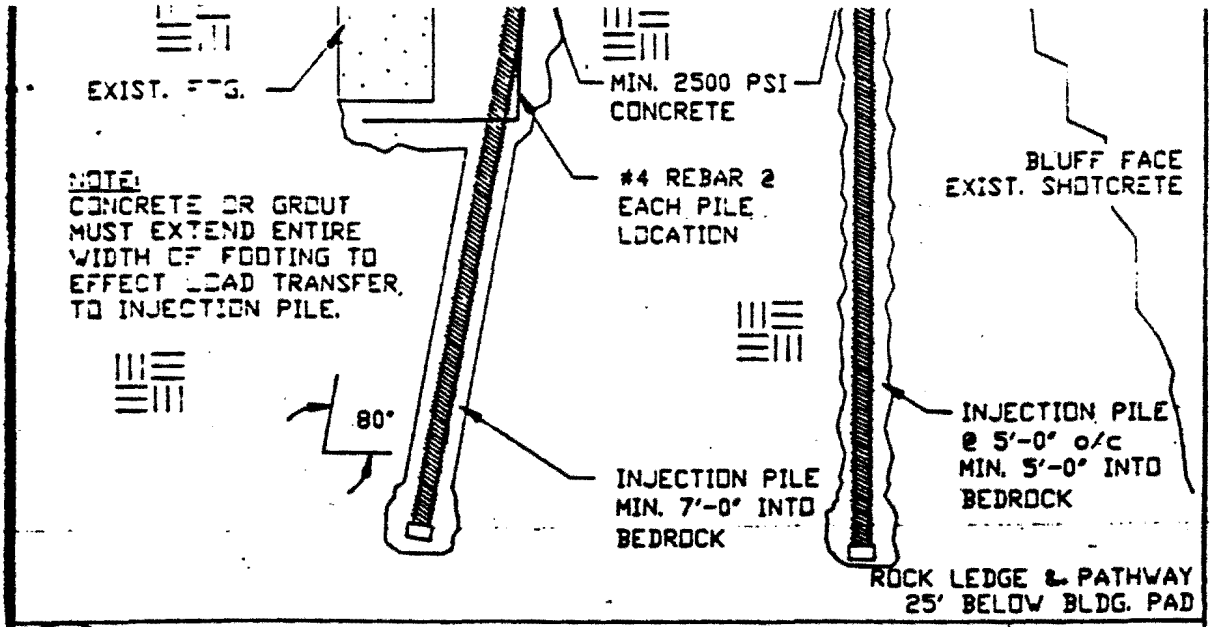
INJECTION PILE W/DRI



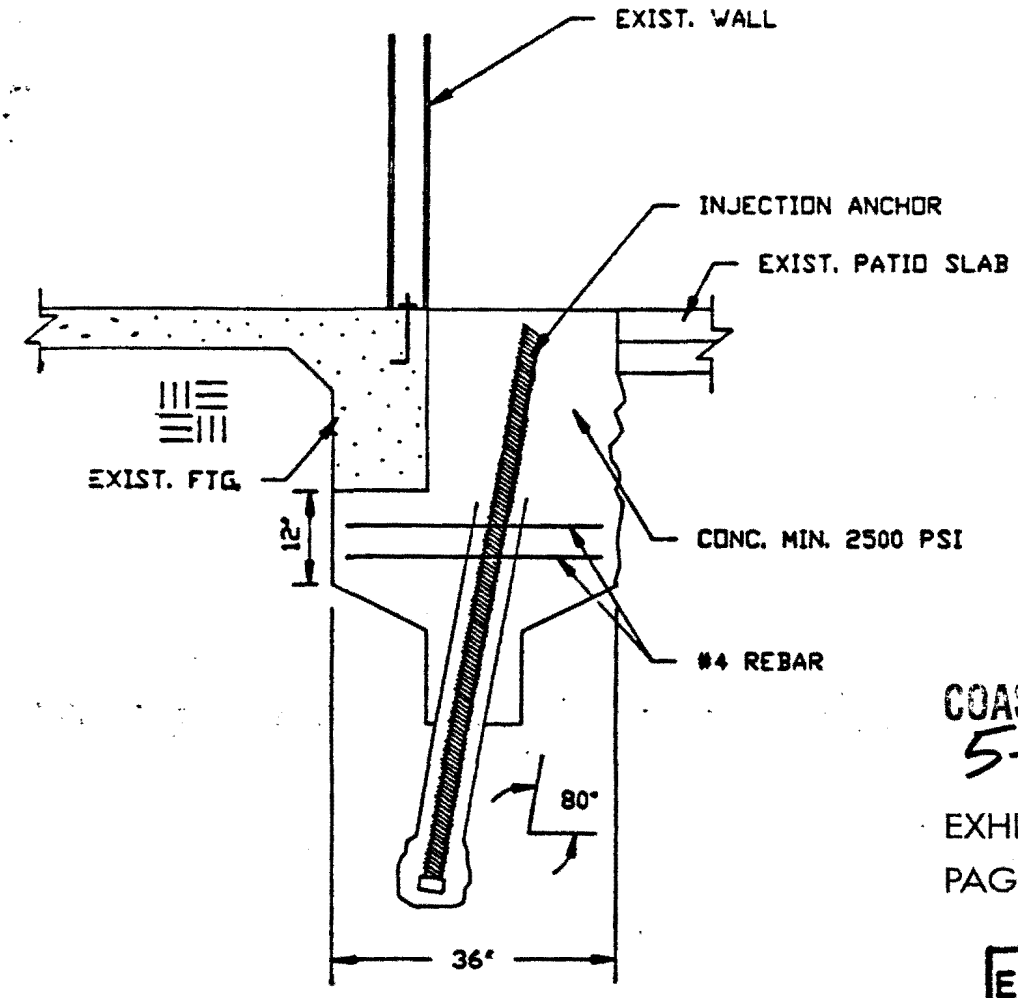
Conceptual Geotechnical Plan (Scale: 1" is approx = 10 feet)

sulting Engrs. Inc lde Dr., Suite D lls, California	Phone: 714-768-4466 Fax: 714-768-0735	Foundation/Rear Yard Distress Spruill Residence 1203 Buena Vista, San Clemente	Project: 97708 Figure: 2

EXHIBIT NO. 5
APPLICATION NO. 5-97-107
GEO PLAN



2 REAR YARD PROFILE OF INJECTION PILE INSTALATION — N.T.S.



3 HAUNCH SEAT DETAIL — N.

COASTAL COMMISSIO
5-01-420
EXHIBIT # 5
PAGE 5 OF 5

EXHIBIT NO.
APPLICATION NO.
5-97-107
UNDERANNIN

STATE OF CALIFORNIA - THE RESOURCES AGENCY

Jul 15a

PETE WILSON, Governor

CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, 10th Floor
Long Beach, CA 90802-4302
(562) 590-5071

Filed: 08-01-97
49th Day: 09-19-97
180th Day: 01-28-98
Staff: RMR-LB RMR
Staff Report: 09-17-97
Hearing Date: October 7-10, 1997
Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 5-97-107

APPLICANT: Ed Spruill AGENT: Ultimo Construction

PROJECT LOCATION: 1203 Buena Vista, San Clemente, Orange County

PROJECT DESCRIPTION: The bluff stabilization project consists of the drilling of thirty (30) twelve (12) inch in diameter holes through the concrete slab adjacent to the seaward perimeter foundation of the residence and in a planter box and installation of thirty (30) two (2) inch in diameter (minimum) steel rod anchors. The anchors will be installed seven feet into bedrock (approximately 35 feet from the surface) and will be encased in grout. A 36 inch steel reinforced concrete haunch shall underpin the residence foundation. The project also consists of the placement of 136+ cubic ~~yards~~ Feet of grout under the foundation and patio slab.

Lot area:	32,700 sq. ft.
Building coverage:	NA
Pavement coverage:	NA
Landscape coverage:	NA
Parking spaces:	NA
Zoning:	R1
Plan designation:	RM (15.0 units/gross ac.)
Project density:	NA
Ht abv fin grade:	NA

LOCAL APPROVALS RECEIVED: Approval in Concept from the City of San Clemente Community Development Department

SUBSTANTIVE FILE DOCUMENTS: City of San Clemente certified Land Use Plan, Geotechnical Report by Lotus Consulting Engineers, Inc. March 5, 1997, Emergency Permit 5-97-107G

SUMMARY OF UNRESOLVED ISSUES:

Staff has attempted to contact the applicant to determine if the applicant agrees or disagrees with the special conditions of this permit, particularly the assumption of risk deed restriction. This question aside, there are no known unresolved issues with respect to this coastal development permit.

COASTAL COMMISSION
5-01-420
EXHIBIT # 6
PAGE 1 OF 16

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends the Commission approve the proposed project with special conditions regarding assumption of risk, future improvement and conformance with geotechnical recommendations.

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution:

I. Approval with Conditions.

The Commission hereby grants a permit for the proposed development on the grounds that the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, 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 of the Coastal Act, is located between the sea and the first public road nearest the shoreline and in in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

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. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.

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

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

6. 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.

7. 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

Prior to the issuance of the coastal development permit, the applicant shall execute and record a deed restriction, in a form and content acceptable to the Executive Director, which shall provide: (a) that the applicant understands that the site may be subject to extraordinary hazard from landslide and soil erosion, and the applicant assumes the liability from such hazards and (b) the applicant unconditionally waives any claim of liability on the part of the Commission and agrees to indemnify and hold harmless the Commission, its offices, agents and employees for damages arising from the Commission's approval of the project. The document shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens.

2. Future Improvement

This coastal development permit 5-97-107 approves the project as described herein. Any future development, as defined in Section 30106 of the Coastal Act, shall require an amendment to this permit or a new coastal development permit from the Coastal Commission or its successor agency unless such development is exempt from permit requirements pursuant to the Coastal Act and implementing regulations.

3. Conformance with Geologic Recommendations

Prior to the issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, project plans signed by the geotechnical consultants. These plans shall include a signed statement by the geotechnical consultant certifying that these plans incorporate the recommendations contained in the geotechnical investigation prepared by Lotus Consulting Engineers, Inc. dated March 5, 1997, which state that "...the design, construction and follow-up maintenance conform to all recommendations and [sic] verified by the geotechnical consultants in the field."

The project shall be constructed in conformance with the plans approved by the Commission. Any deviation from the plans approved by the Commission shall be submitted to the Executive Director for a determination as to whether the changes are substantial. Any substantial deviations shall require an amendment to this permit or a new coastal development permit.

IV. Findings and Declarations.

The Commission hereby finds and declares:

A. Project Description

The development consists of the drilling of thirty (30) twelve (12) inch in diameter holes through the concrete slab adjacent to the seaward perimeter foundation of the residence and installation of thirty (30) two (2) inch in diameter (minimum) steel rod anchors (see Exhibits 2, 3 and 5). Nine of the thirty anchors will be drilled and injected through a planter box at the bluff edge. The anchors will be installed seven feet into bedrock (approximately 35 feet from the surface) and will be encased in grout (see Exhibit 4). A 36

inch steel reinforced concrete haunch shall underpin the ocean-fronting portion of the residence foundation (see Exhibit 6).

In addition, the project description of coastal development permit 5-97-107 also includes work conducted without a coastal development permit in May of 1996. This development consisted of the drilling of 11 three inch holes and injecting a total of 136.5 cubic yards of grout under the residence.

Coastal development permit 5-97-107 is the follow-up permit to Emergency Permit 5-97-107G, which was issued on April 22, 1997. The project description in the emergency permit called for 20 anchors, however the plans submitted by the applicant show that 30 anchors were installed with the emergency permit. Other than this discrepancy and the addition of the 1996 unpermitted work, the development proposed in this permit is the same as that approved by the issuance of the emergency permit. The development has been completed.

The project site is located on an eroding coastal bluff in the City of San Clemente. The existing structure is protected by shotcrete on the bluff face and by five concrete caissons on the bluff face. The site is subject to movement caused by sub-surface water eroding the soils from under the structure's foundation and patio area. The coastal bluffs in San Clemente are separated from the beach by railroad tracks, and therefore are not subject to wave attack. The single-family residence on the site was constructed in 1951. The bluff at the rear of the residence has been substantially altered prior to the passage of the Coastal Act and is covered with a gunite and caisson system.

The site is bordered by an apartment building and a vacant lot.

B. Geologic Safety

Section 30253 of the Coastal Act states in part:

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

The proposed development is located on a coastal bluff which is subject to erosion and landsliding. Bluff erosion is caused by environmental factors and impacts by man. Environmental factors include seismicity, wave attack, drying and wetting of bluff face soils, wind erosion, salt spray erosion, rodent burrowing and piping, percolation of rain water, poorly structured bedding, surface water runoff and poorly consolidated soils. Factors attributed to man include bluff oversteepening from cutting roads and railroad tracks, improper irrigation practices, building too close to the bluff edge, improper site drainage, use of impermeable surfaces to increase runoff, use of water-dependent vegetation, pedestrian or vehicular movement across the bluff top and toe, and breaks in water or sewer lines. In addition to runoff percolating through the bluff top, increased residential development inland

leads to increased water percolating beneath the surface and outletting on the bluff face, forming a potential slide plane.

In a 1991 article entitled "Mass Movement and Sea Retreat along the Southern California Coast" published in the Bulletin of the Southern Academy of Science, Antony Orme writes:

> Seacliff retreat is a natural process which, if unheeded, threatens human life and livelihood, and which can be aggravated by human activity. It will continue to occur and therefore responsible coastal management must require that human activity be set back an appropriate distance from cliff tops and diverted from unstable and potentially unstable terrain.

In San Clemente the coastal bluffs are not subject to wave attack. However, the bluffs were oversteepened due to the construction of the AT&SF railroad tracks at the base of the bluffs. There are several instances of massive bluff restructuring in the City of San Clemente, i.e., the La Ventana landslide, the Marblehead bluffs, and the Colony Cove bluff restructuring. In both the La Ventana and Colony Cove instances houses were either completely ruined or partially destroyed. There are numerous other instances where homeowners have installed caisson and grade beam systems to protect an existing residence (5-93-181, 5-93-307, and 5-93-143) from shallow slope failures.

In this instance the coastal bluff face has already been substantially altered prior to passage of the Coastal Act. The geologic reports do not indicate the reason for the previous bluff protection. However, one can reasonably conclude that the conditions which are causing problems today are the conditions which created the necessity for the original bluff face protection.

The applicant has submitted a geotechnical report dated March 5, 1997 by Lotus Consulting Engineers, Inc. The report states that the coastal bluff at the rear of the residence consists of a 30 foot vertical shotcrete-covered bluff face, a ledge, and then a 40 foot slope at a gradient of 1.5:1. At the toe of the bluff is the road right-of-way and then the beach and ocean.

The vertical portion of the bluff adjacent to and below the building pad has been gunited/shotcreted and has five 24 inch diameter poured in place caissons at the southern end of the lot. Figure 3 shows a cross-section of the residence and the various structural elements, including a double thick concrete deck slab, the concrete caissons, the gunited bluff face, and the remaining natural slope. Exhibit 5 is a site plan showing the various structural elements, including the injection anchors (piles), the rock ledge and pathway, and the five concrete caissons on the bluff face.

Exhibit 6 shows the details of the concrete underpinning (concrete haunch) of the foundation at the rear of the residence. The concrete underpinning is 36 inches at its widest and 51 inches deep. The existing perimeter footing extends 24 inches under the residence. Concrete for the continuous foundation underpinning is placed adjacent to the footing and wraps around under the footing for another 12 inches. The concrete beneath the footing is supported by two rows of 33 inch long #4 rebar. Encased in the concrete are the injection anchors (piles) which extend approximately seven feet into bedrock.

Nine injection anchors were installed through the planter box into bedrock. The planter box is located at the most seaward portion of the rear patio. Another 17 injection anchors were located every five feet adjacent to the seaward portion of the existing foundation footing and another four injection anchors were installed on the sides (see Exhibit 2).

The applicant was granted an emergency permit (5-97-107G) on April 22, 1997 to install 20 two inch in diameter steel rod anchors around the perimeter of the residence, as well as the foundation underpinning. The plans submitted with this application call for 30 anchors not 20. The project description for permit 5-97-107 is the same as for 5-97-107G, with the exception that grout which was injected under the residence in 1996 is included with this permit. In their request for an emergency permit, the applicant's agent stated that the work was necessary to stabilize the building foundation and protect the existing structure. The agent wrote a letter to Commission staff on April 15, 1997 stating:

> We have reason to be concerned because the owner has monitored the hardscape and building, revealing that recent movement has occurred. Furthermore, there is evidence of voids and flowing water behind the gunite slope protection.

The March 5 geotechnical report confirms movement:

> Floor slab movement of up to 1" high and patio slab movement of up to 0.35" high were documented during the grouting operations [1996 construction]. A total quantity of 136.5 cubic feet was utilized in the grouting operations (excluding grout quantity used to fill voids). It is our understanding that the residence and patio slabs continue to show lateral and vertical movements even after grouting completed last year.

The geotechnical report stated that work was previously done at the site in 1996 by Denver Grouting services. This work consisted of the injection of 136.5+ cubic yards of grout at two points beneath the living room. The 1996 work was not approved by the Coastal Commission and therefore is included with this coastal development permit.

It is evident from the geotechnical report that despite the extraordinary bluff face protection measures which have been in place for as much as 30 years, continuing measures need to be taken to protect the existing structure. The geotechnical report states that, in all probability, subsurface water flowing under the residence causes erosion to occur under the residence foundation, the patio concrete slab and behind the shotcrete bluff face, creating voids or empty spaces under the residence. In 1996 several hundred cubic yards of grout were injected under the patio slab and foundation to fill voids, yet the foundation and patio slab continued to show lateral and vertical movement.

Erosion under the residence is an ongoing situation and one which is not solved by the measures taken to support the existing residence foundation. The shotcrete facing and caissons are supported vertically and are not tied back or anchored inland of the bluff face. The shotcrete bluff facing adjacent to the five caissons is placed over wooden planks supported by rebar. The bluff face to the north and south are unprotected and unsupported.

The residence is supported by conventional shallow footings. The house is a minimum of 8 feet from the bluff top and a maximum of 12 feet from the bluff top. Although the consulting geotechnical engineers did not observe major distress in the shotcrete and caisson-supported bluff face, they did observe cracks at the top of the caissons and on the shotcreted bluff face.

The consulting engineers offer no guarantee of site stability and state in their report:

> The site's surface and subsurface features (i.e., proximity of improvements to the top of bluff, bluff steepness and height, subsurface erosion and subgrade soil loss including possibly behind the shotcreted face of the bluff) has affected and will continue to affect the site and its stability.

In this case there is clearly an underlying hazard and bluff stability problem, that of water percolating under the residence and eroding away supporting soils. The protective measures taken in this permit will address the symptoms but not the underlying cause. Therefore, the potential for some kind of bluff failure which would affect the residence remains. The geotechnical report states that the bluff protective measures have held up but that:

> How many more years the bluff protection will last is difficult to estimate.

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 (emphasis added).

In this case the protective devices, the shotcrete face and concrete caissons, are already in place. The proposed development consists of measures to support the foundation, stabilize the patio and residence and prevent further movement. The nature of the existing protective structures and the necessity for continuing measures to reinforce the bluff protective structures illustrate the instability of the site. In approving this permit the Commission, in its findings, is acknowledging that there is some risk to this development. However, the range of alternatives is limited by the nature of the existing development. Therefore, in these situations the Commission routinely requires the applicant to record a deed restriction stating that the applicant or successors understands that the site may be subject to extraordinary hazard, and acknowledges that the Commission is not liable for damages that might occur as a result of construction of the proposed development. In addition, because the applicant seeks to proceed with the project despite the risks, the applicant must indemnify the Commission against claims of damage brought by other parties.

In order to ensure that the specific recommendations of the consulting geotechnical experts are adhered to, the Commission requires that the applicant submit site plans signed and stamped by the geotechnical experts, along with an acknowledgement that the construction has been carried out in conformance with geotechnical recommendations.

Finally, development has taken place on the site without benefit of a coastal development permit. Because of the location of the site and the potential hazards involved in developing on a coastal bluff, the Commission finds that any future development on the site shall require a coastal development permit.

Only as conditioned does the Coastal Commission find that the proposed development conforms with Section 30253 of the Coastal Act.

C. Local Coastal Program

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal development 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. As conditioned, the proposed development is consistent with the policies contained in the certified Land Use Plan. 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).

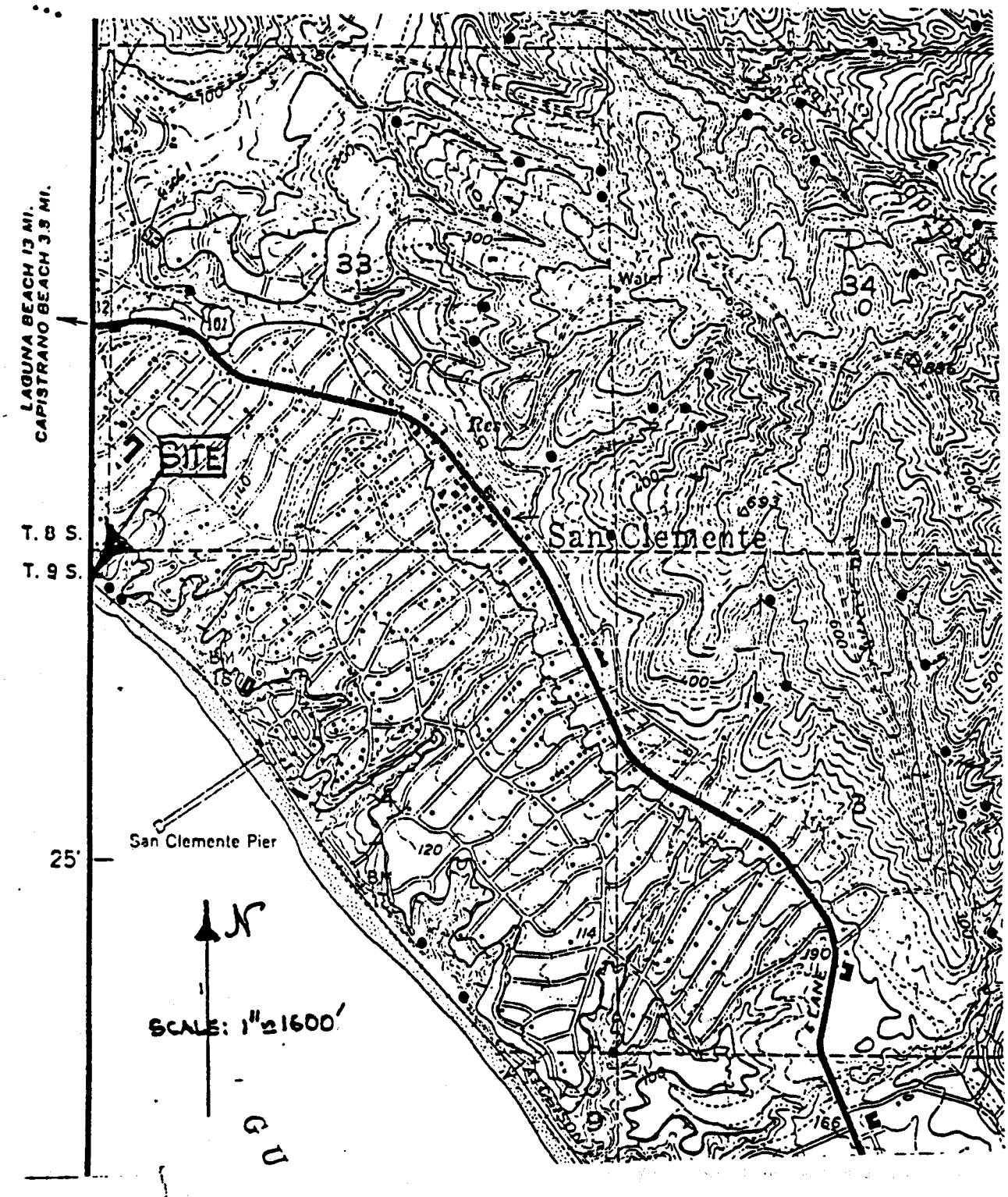
D. Consistency with the California Environmental Quality Act (CEQA)

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, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(i) 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 impact which the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with section 30253 of the Coastal Act. Mitigation measures requiring the applicant to submit a deed restrictionn, conform to geotechnical recommendations and comply with a future improvement special condition will minimize all adverse 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 can be found consistent with the requirements of the Coastal Act to conform to CEQA.

E. Unpermitted Development

Although development has taken place prior to submission of this permit application, consideration of the application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. Approval of the permit does not constitute a waiver of any legal action with regard to the alleged violation nor does it constitute an admission as to the legality of any development undertaken on the subject site without a Coastal permit.



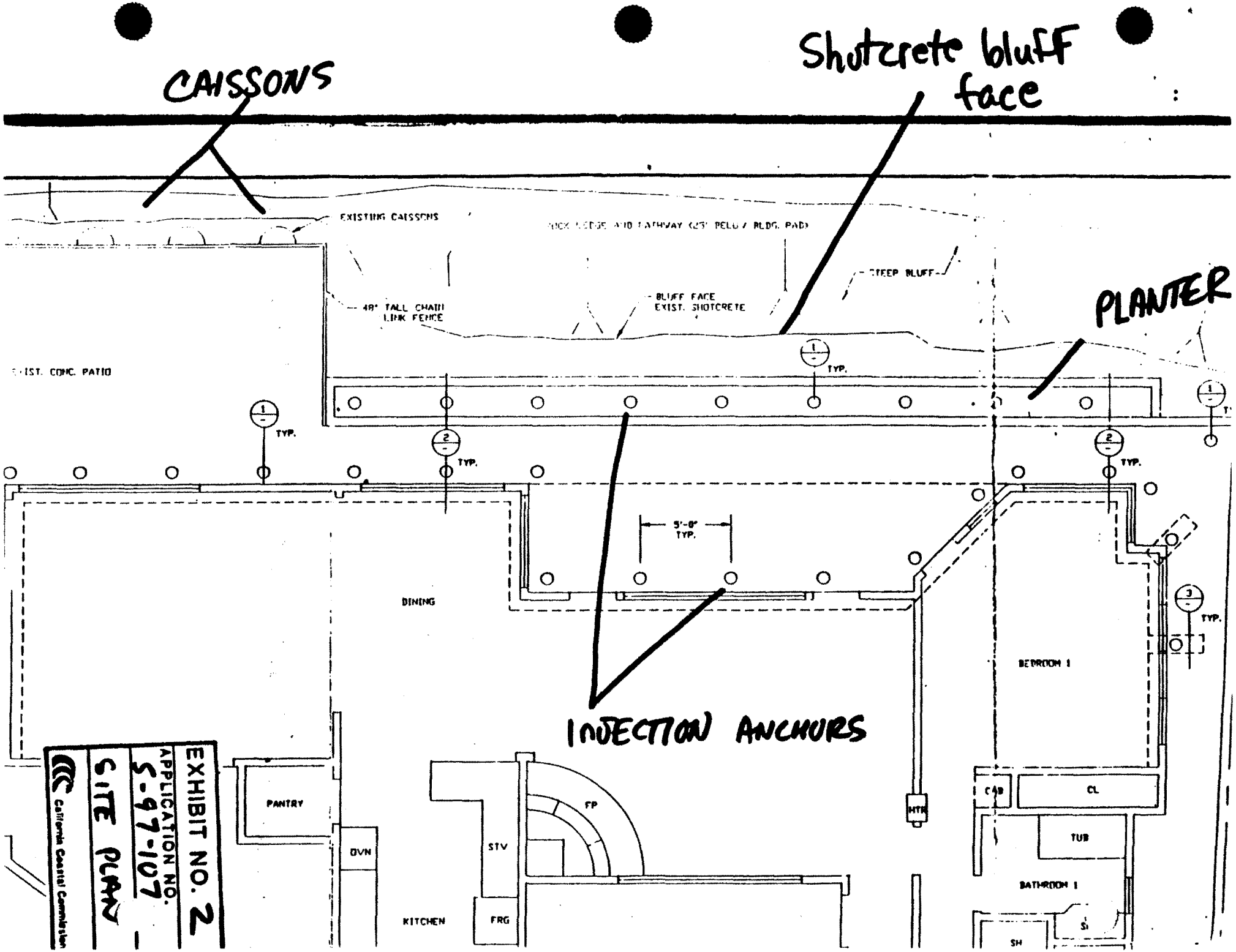
GEOLOGIC VICINITY MAP

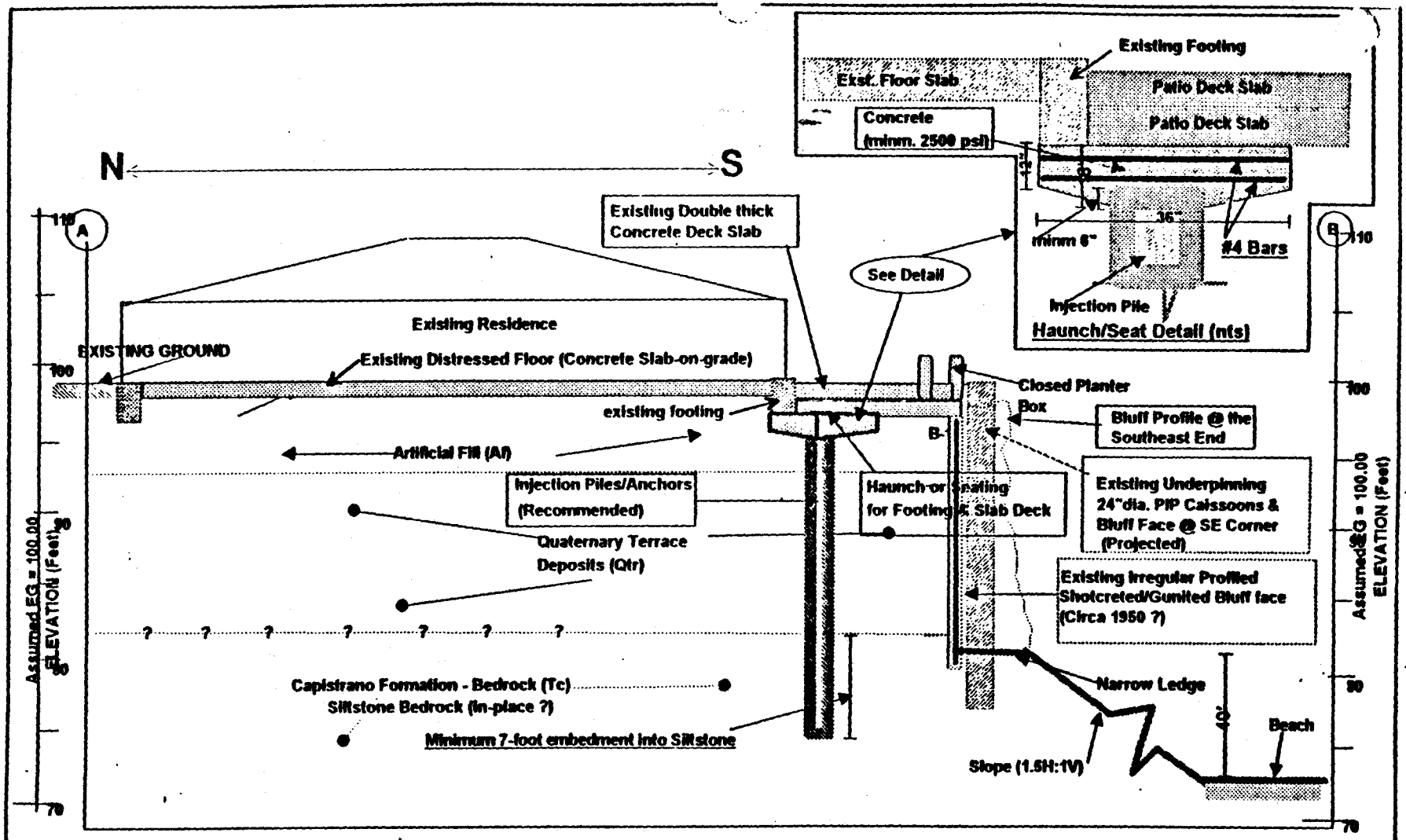
REF: CDMG, SR 98, 1968

LOTUS Consulting Engineers, Inc.
APPLIED EARTH SCIENCES
FOUNDATION ENGINEERING
ENGINEERING GEOLOGY
CIVIL ENGINEERING
23112 ALCALDE DRIVE, SUITE C, LAGUNA HILLS, CA 92653 (714) 768-4488

LIMITED GT EVALUATION
EXISTING SPRUILL RESIDENCE
1203 BUENA VISTA, SAN CLEMENTE, C

EXHIBIT NO. 1
APPLICATION NO. 5-97-107
VICINITY
California Coastal Commission


CAISSONS
Shotcrete bluff face
PLANTER
INJECTION ANCHORS
EXISTING CAISSONS
49" TALL CHAIN LINK FENCE
BLUFF FACE EXIST. SHOTCRETE
STEEP BLUFF
EXIST. CONC. PATIO
TYP.
5'-0" TYP.
DINING
BEDROOM 1
PANTRY
OVN
STV
FP
KITCHEN
FRG
CL
TUB
BATHROOM 1
SH
EXHIBIT NO. 2
APPLICATION NO. 5-97-107
SITE PLAN
California Coastal Commission

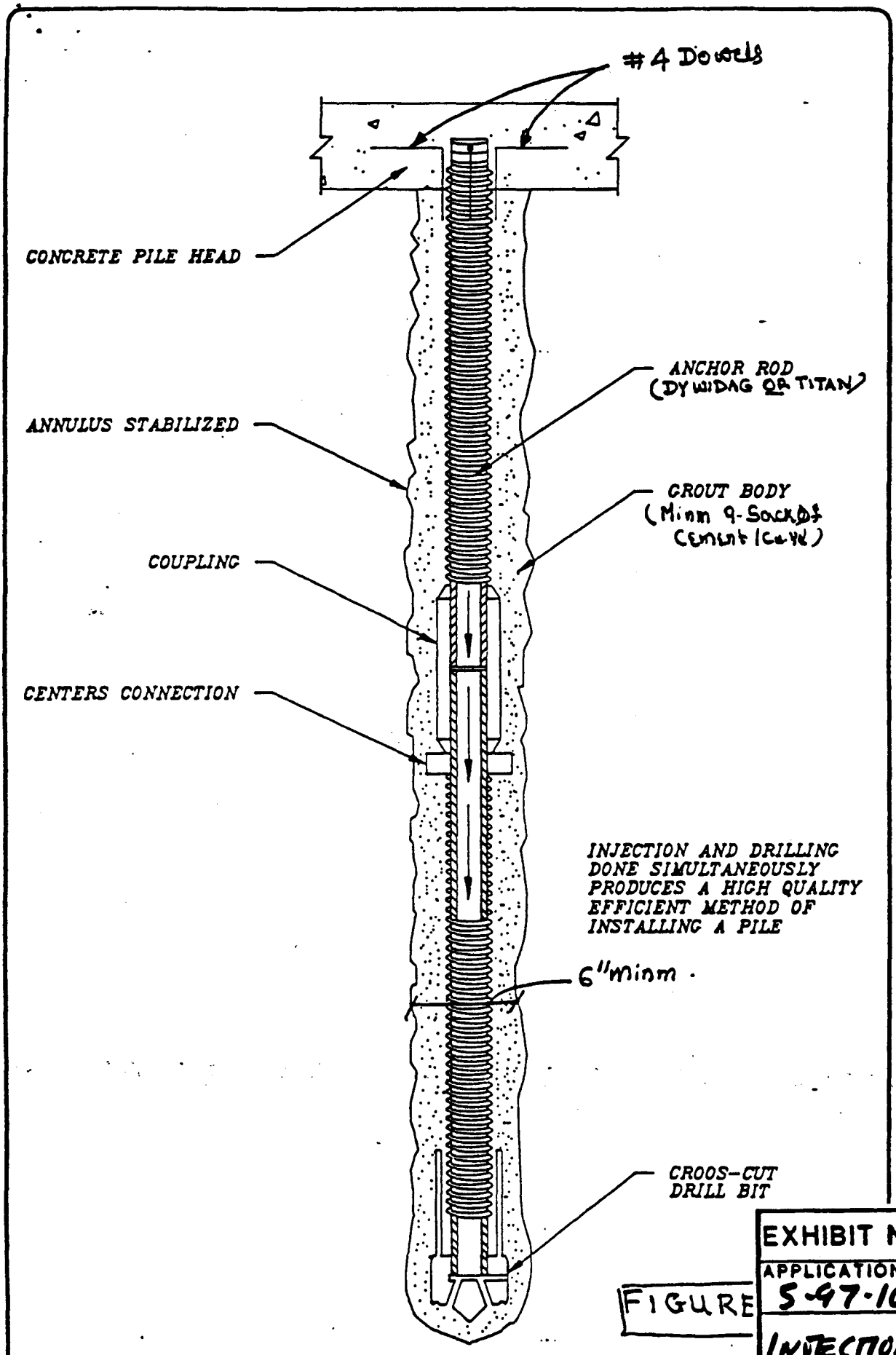


ONCEPTUAL GEOTECHNICAL SECTION A- B WITH INJECTION PILE SUPPORT

[Not To Scale]

sulting Engrs. Inc. lde Dr., Suite D lls, California	Phone: 714-768-4466 Fax: 714-768-0735	Foundation/Rear Yard Distress Spruill Residence 1203 Buena Vista, San Clemente	Project: 97708 Figure: 3

EXHIBIT NO. 3
APPLICATION NO. 5-97-107
SECTION
California Coastal Commission



REVISIONS

ULTIMO - GEOTECHNICAL
CONSTRUCTION AND ENGINEERING
PHONE 1-71 196-7245 FAX 1-714-496-7060

INJ. ANCH'S
MCRO PILES

DRAWN BY:
DAVE

EXHIBIT NO. 4

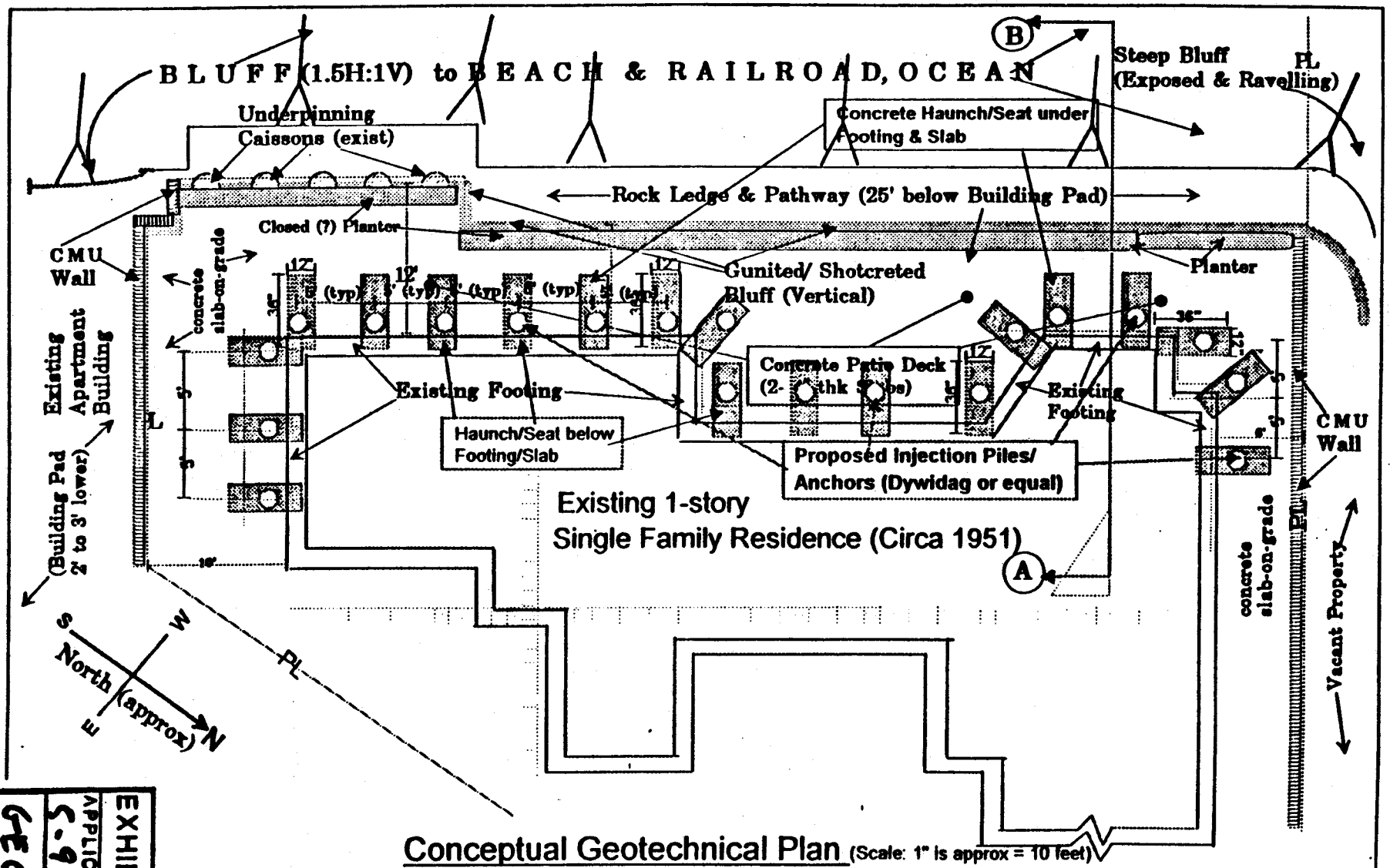
APPLICATION NO.
5-97-107

INJECTION PILE

California Coastal Commission

FIGURE

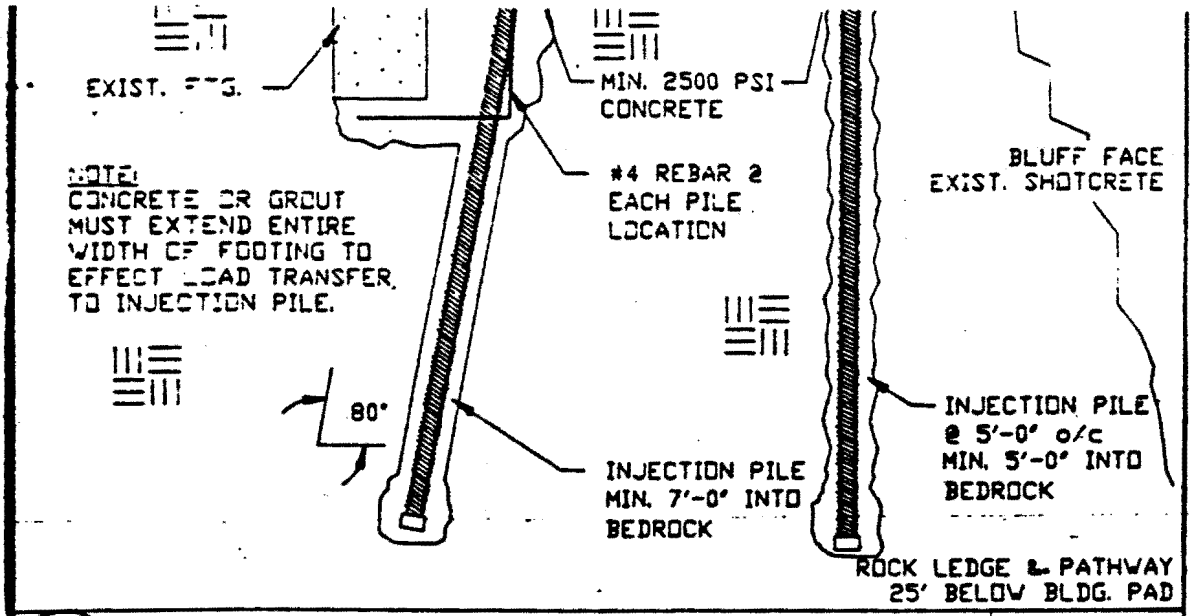
INJECTION PILE W/DRI



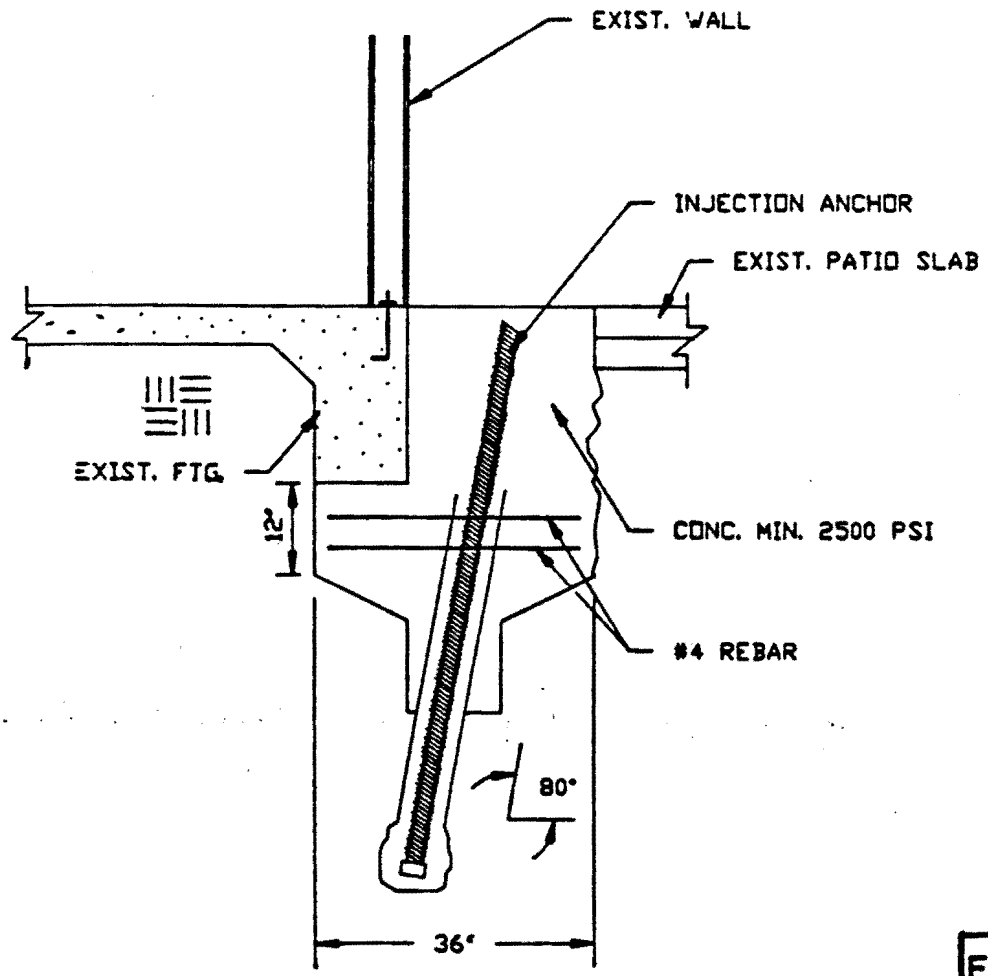
Conceptual Geotechnical Plan (Scale: 1" is approx = 10 feet)

sulting Engrs. Inc. alde Dr., Suite D ills, California	Phone: 714-768-4466 Fax: 714-768-0735	Foundation/Rear Yard Distress Spruill Residence 1203 Buena Vista, San Clemente	Project: 97708 Figure: 2

EXHIBIT NO. 5
APPLICATION NO. 5-97-107
GEO PLAN



2 REAR YARD PROFILE OF INJECTION PILE INSTALATION — N.T.S.



3 HAUNCH SEAT DETAIL — N.

EXHIBIT NO.
APPLICATION NO.
5-97-107
UNDERPINNING

STATE OF CALIFORNIA—THE RESOURCES AGENCY PETE WILSON, Governor

CALIFORNIA COASTAL COMMISSION
SOUTH COAST AREA
245 W. BROADWAY, STE. 380
P.O. BOX 1450
LONG BEACH, CA 90802-4416
(310) 590-5071

EMERGENCY PERMIT

TO: Mr. Edward Spruill
6704 West Ocean Front
Newport Beach, CA 92663

April 22, 1997
Date

5-97-107-G
(Emergency Permit No.)

1203 Buena Vista, San Clemente, Orange County
Location of Emergency Work

Drilling of twenty (20) twelve (12) inch in diameter holes through the concrete slab adjacent to the seaward perimeter foundation of the residence and installation of twenty (20) two (2) inch in diameter (minimum) steel rod anchors. The anchors shall be installed seven feet into bedrock (approximately 35 feet from the surface) and shall be encased in grout. A 36 inch steel reinforced concrete haunch shall underpin the residence foundation.
Work Proposed

This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from your information and our site inspection that an unexpected occurrence in the form of cracking and settlement requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director hereby finds that:

(a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of the permit;

(b) Public comment on the proposed emergency action has been reviewed if time allows; and

(c) As conditioned the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the conditions listed on the reverse.

Very Truly Yours,

Peter M. Douglas
Executive Director

By: Teresa Henry

Title: District Director

EXHIBIT NO. 7
APPLICATION NO. 5-97-107
Emergency Permit

CONDITIONS OF APPROVAL:

1. The enclosed form must be signed by the property owner and returned to our office within 15 days.

2. Only that work specifically described above and for the specific property listed above is authorized. Any additional work requires separate authorization from the Executive Director.

3. The work authorized by this permit must be completed within 30 days of the date of this permit.

4. Within 60 days of the date of this permit, the permittee shall apply for a regular Coastal Permit to have the emergency work be considered permanent. If no such application is received, the emergency work shall be removed in its entirety within 150 days of the date of this permit unless waived by the Director.

   The application for a coastal development permit shall include grout injection work which was conducted at the rear of the site in 1996.

5. In exercising this permit the applicant agrees to hold the California Coastal Commission harmless from any liabilities for damage to public or private properties or personal injury that may result from the project.

6. This permit does not obviate the need to obtain necessary authorizations and/or permits from other agencies.

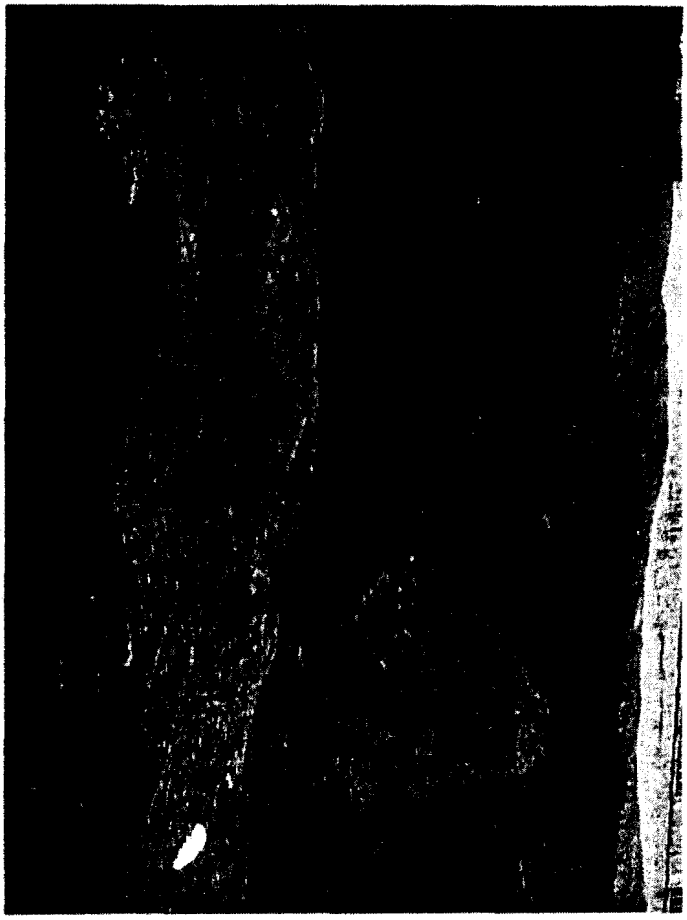
Condition #4 indicates that the emergency work is considered to be temporary work done in an emergency situation. If the property owner wishes to have the emergency work become a permanent development, a Coastal permit must be obtained. A regular permit would be subject to all of the provisions of the California Coastal Act and may be conditioned accordingly. These conditions may include provisions for public access (such as an offer to dedicate an easement) and/or a requirement that a deed restriction be placed on the property assuming liability for damages incurred from geologic hazards.

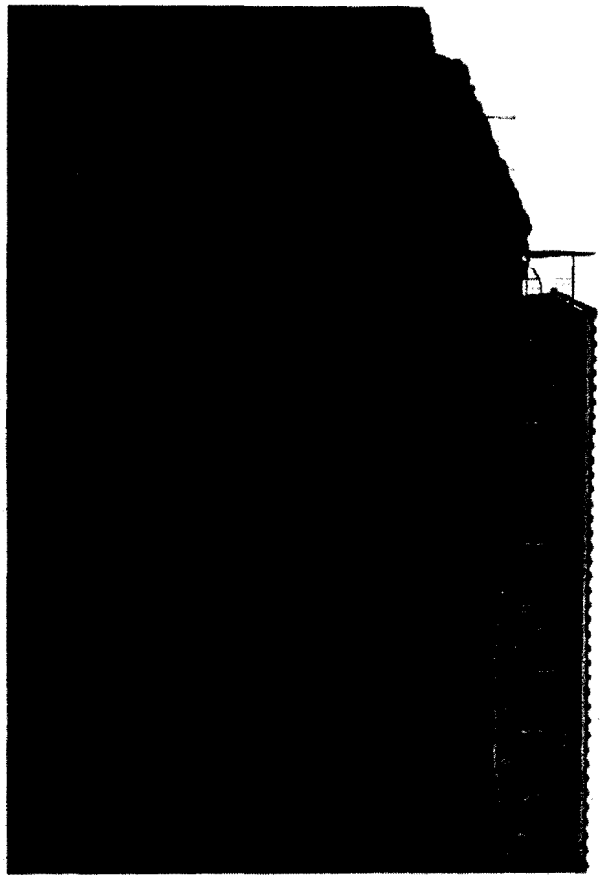
If you have any questions about the provisions of this emergency permit, please call the Commission Area office.

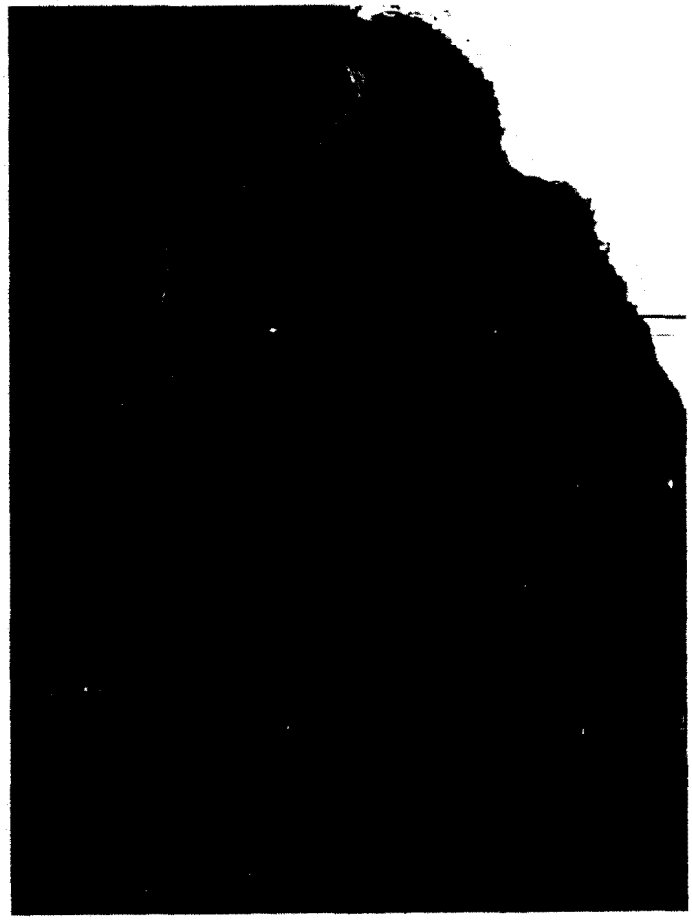
Enclosures: 1) Acceptance Form; 2) Regular Permit Application Form

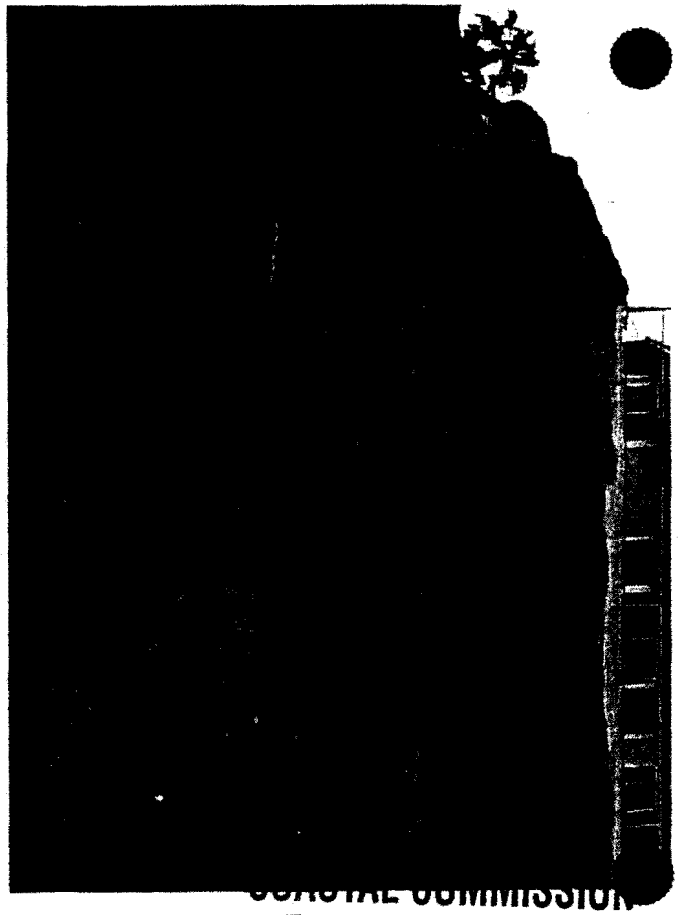
cc: Local Planning Department

8792F





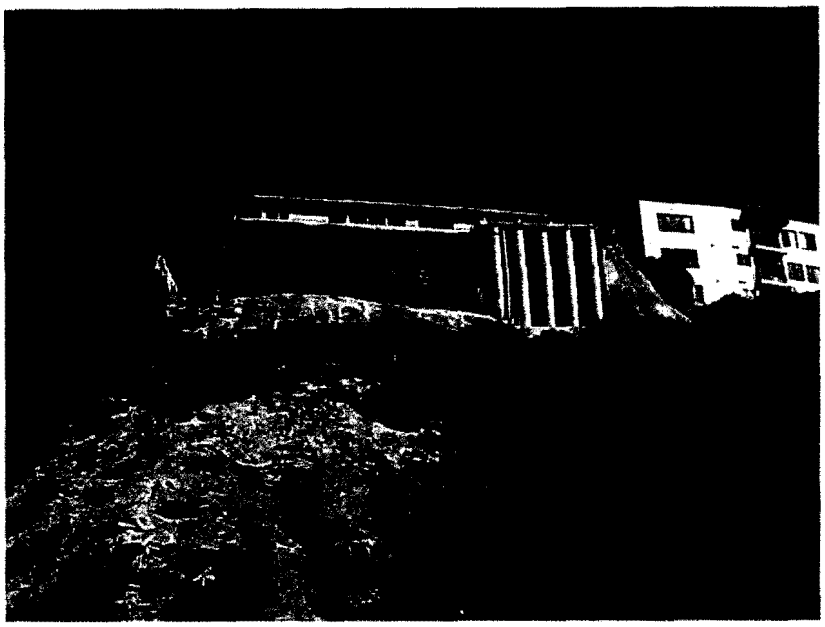


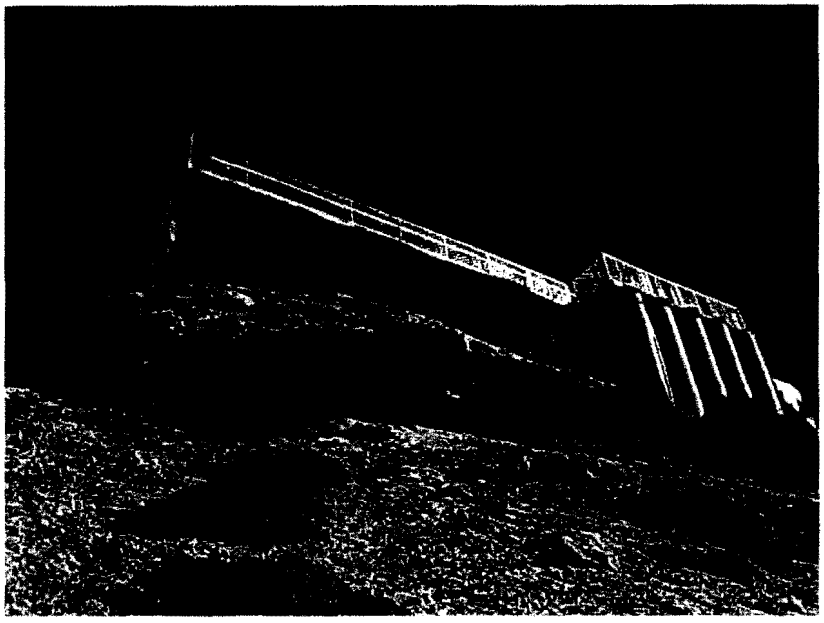


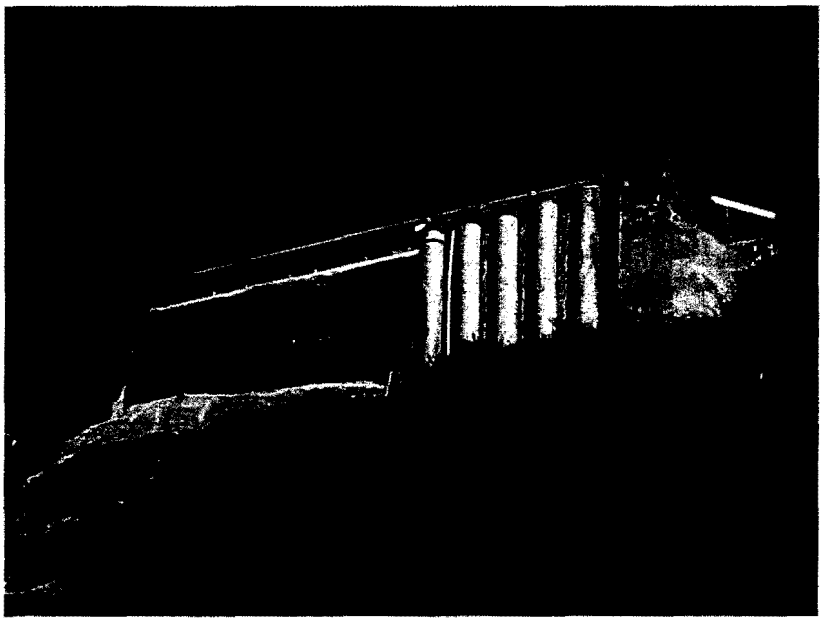
COASTAL COMMISSION
5-01-420

EXHIBIT # 7

PAGE 1 OF 1







5-01-420
Exhibit 8