

CALIFORNIA COASTAL COMMISSION

South Coast Area Office
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Long Beach, CA 90802-4302
(562) 590-5071

Filed: 03-03-98
49th Day: 04-21-98
180th Day: 08-30-98
Staff: RMR/LB **RMR**
Staff Report: April 17, 1998
Hearing Date: May 12-15, 1998
Commission Action:

STAFF REPORT: PERMIT AMENDMENT

APPLICATION NO.: 5-96-093-A1

APPLICANT: City of San Clemente

AGENT: Handan Cirit

PROJECT LOCATION: Trafalgar Canyon, South Ola Vista to 128 Trafalgar Lane

DESCRIPTION OF PROJECT PREVIOUSLY APPROVED: Construct an 800 foot long, 72 inch wide storm drain pipe to connect with existing storm drain improvements, place 20,000 cubic yards of fill over the pipe to a maximum height of 30 feet; grade, bench and revegetate the canyon fill slopes; and reconstruct Trafalgar Lane.

DESCRIPTION OF AMENDMENT: Construct a 460 foot long, 72 inch wide storm drain pipe, construct a concrete inlet structure and headwall, place 11,000 cubic yards of fill over the pipe, bench and revegetate the canyon fill slopes, construct a grade-beam system with 37 three feet in diameter pilings along Trafalgar Lane.

SUMMARY OF STAFF RECOMMENDATION:

The staff recommends that the Commission determine that the proposed development with the proposed amendment, subject to the conditions below, is consistent with the requirements of the Coastal Act.

PROCEDURAL NOTE: The Commission's regulations provide for referral of permit amendment requests to the Commission if:

- 1) The Executive Director determines that the proposed amendment is a material change,
- 2) Objection is made to the Executive Director's determination of immateriality, or
- 3) The proposed amendment affects conditions required for the purpose of protecting a coastal resource or coastal access.

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

SUBSTANTIVE FILE DOCUMENTS: City of San Clemente Certified Land Use Plan, Coastal Development Permit 5-96-093, Addendum Geotechnical Report, Trafalgar Lane Street Stabilization dated October 28, 1997

STAFF RECOMMENDATION

Staff recommends that the Commission adopt the following resolution:

I. APPROVAL WITH CONDITIONS

The Commission hereby approves the amendment to the coastal development permit, subject to the conditions below, on the grounds that the proposed amendment, as conditioned, is consistent with the requirements 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, and will not have any significant adverse effects on the environment within the meaning of the California Environmental Quality Act.

II. Special Conditions

Note: Special Condition #3 of this amendment revises special condition #3 of CDP 5-96-093 to include the recommendations regarding the grade-beam pile system along Trafalgar Lane. Special Condition #1 of this amendment revises Special Condition #1 of CDP 5-96-093. (language added is underlined and language deleted is struck out)

1. Evidence of permission to construct

Prior to the issuance of the Coastal Development Permit, the City shall provide evidence of its legal right to enter the property and construct the project, either by providing evidence of written permission from the homeowners at 259, 257, 255, 253, 251, 249, ~~247~~ Avenida Madrid, ~~245~~ 241 ~~243~~ 239 ~~237~~ 235 ~~233~~ 231 ~~Avenida Monterey~~ and at 154 Trafalgar Lane or evidence that it has original ownership of the property.

3. Conformance with Geological Recommendations

All recommendations contained in the Addendum Geotechnical Report, Trafalgar Lane Street Stabilization, prepared by Leighton and Associates, Inc. on October 28, 1997 and the Addendum Geotechnical Report dated October 28, 1997, shall be incorporated into all final design and construction plans, including drainage. Prior to the issuance of the Coastal Development Permit the applicant shall submit, for the review and approval of the Executive Director, final design and construction plans that incorporate the recommendations made in the referenced reports.

The final plans shall include a signed statement by a geotechnical consultant certifying that each of the recommendations have been incorporated into the final plans. Any substantial changes in the proposed development approved by the Commission which may be required by the consultant shall require an amendment to the permit or a new coastal development permit.

The biological report prepared by LSA Associates, Inc. indicated that there is no riparian or wetland vegetation in the stream channel. The stream channel is narrow, incised and scoured of vegetation. Vegetation on the southern slopes consists of a mixture of native, ornamental and ruderal plants. The original project would have resulted in the temporary removal of 1.7 acres of the mixed plant community and the permanent removal of 0.13 acres of streambed. The City would have revegetated 1.95 acres of regraded slopes with native chaparral plants particular to the San Clemente area. In addition, the 1601-1603 Streambed Alteration Agreement requires the City to record either a conservation easement or deed restriction over their property protecting the replanted slopes in perpetuity. The draft Streambed Alteration Agreement included language for a conservation easement.

The Coastal Act sections used to analyze the proposed development included 30253 (Geologic Safety), 30236 (substantial alteration of streams), and 30240(a) (ESHA).

2. Proposed Amendment

As a result of the homeowners at 243 and 245 Avenida Madrid and 229, 237, 239, and 241 Avenida Monterey not participating in the proposed development plan the City has reconfigured the project (see Exhibit 2). The City did obtain easements from ten property owners including 233, 235 and 231 Avenida Monterey, but without the participation of all the homeowners along Avenida Madrid and Avenida Monterey, the entire project was not feasible. From 249 Avenida Madrid west to Ola Vista the project remains the same. A concrete headwall and inlet structure will be constructed in the canyon bottom below 245 Avenida Madrid with some grading work below the property boundary of 243 and 241 Avenida Monterey. Upstream from this proposed headwall no construction is proposed in the stream channel or canyon slopes. The inlet structure consists of a concrete box inlet, concrete apron with rip-rap and 11 foot high side walls.

A grade and beam stabilization system containing 37 concrete pilings is proposed to be installed adjacent to Trafalgar Lane to stabilize the road adjacent to property where the City was unable to obtain construction easements from homeowners. As with CDP 5-96-093 a severely eroded slope area outside of the construction zone will be stabilized and replanted (see Exhibit 6).

C. Geologic Hazard and Flood Control

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 project amendment involves changes to that portion of Trafalgar Canyon from 245 Avenida Madrid eastward (see Exhibit 2). No fill is proposed eastward of the concrete inlet structure at the canyon bottom at 245 Avenida Madrid. The grade-beam piling system begins at the top of the canyon slope opposite 243 Avenida Madrid and extends eastward along Trafalgar Lane to opposite 229 Avenida Monterey. A total of 37 pilings will be installed at 10 foot intervals. The new elements of this development which require analysis and findings of consistency with the Coastal Act are the concrete inlet structure and the grade-beam piling system.

a. Grade and Beam Piling System

The City submitted an addendum Geotechnical Report prepared by Leighton and Associates, Inc. dated October 28, 1997. This addendum specifically addresses the changes proposed in this amendment and includes recommendations for the installation of the grade-beam pile system, including the depth of the piles, construction of drains, and placement of geogrid materials and subdrains in the roadbed adjacent to the piles.

The addendum documents that the slopes supporting Trafalgar Lane are composed of fill placed on colluvium and that these slopes are subject to soil creep and slope failure.

The City will remove the Trafalgar Lane asphalt surface and subsurface soils of the road and shoulder down to approximately four feet. Then the City shall excavate and install the pilings and reinforced concrete grade beams within 5 feet canyonward of the road. The geotechnical consultants propose that where slopes are steeper the piles be sunk 22 feet into substrate (first 25 pilings) and where the slopes are less steep the piles be sunk 15 feet into the substrate (last 12 pilings) (see Exhibit 5). Then the City will place geogrid material in the excavated roadbed to a height of 3 feet adjacent to the pilings and extending 10 feet out into the roadbed. A subdrain will be placed on top of the geogrid material along the boundary junction of the geogrid material and pilings which will collect percolating water and drain it on the slope. A section of the road and piling system is attached as Exhibit 5. A section of the typical grade-beam piling is included as Exhibit 5.

Finally, the City will reconstruct the road and shoulder and plant disturbed areas with native plants as per the landscaping special condition of CDP 5-96-093.

The geotechnical addendum concludes:

It is our opinion that the proposed grade-beam/caisson system significantly enhances the stability of the roadway edge and reduces the continued creep of this zone.

b. Concrete Inlet Structure

The second major change in the project is the construction of the concrete box inlet structure at the foot of lot 245 Avenida Madrid (see Exhibit 4). Without the consent of the property owners from 241 Avenida Monterey eastward (see Exhibit 6) the canyon bottom across these lots must remain in a natural condition. The concrete box inlet structure and concrete/rip-rap apron provides a non-erodible transition area between the natural canyon and the

The proposed project is located in Trafalgar Canyon, one of seven coastal canyons designated as environmentally sensitive habitat areas (ESHA) in the certified LUP. The coastal canyons are designated as ESHA because they contain remnants of coastal sage/chaparral and riparian communities.

The development proposed in the amendment involves 9,000 cubic yards less grading and will involve less impacts to coastal vegetation. Those canyon areas to be filled will be revegetated with native plants as specified in special condition #4 of CDP 5-96-093. In addition, this special condition requires that the applicant submit a landscaping and erosion control plan for the review and approval of the Executive Director for all graded areas. This special condition applies to any areas disturbed by the applicant in the installation of the grade-beam piling system along Trafalgar Lane.

The applicant has submitted a landscape plan showing that the city proposes to plant eight 24 inch box oak trees along the shoulder of Trafalgar Lane in the area where the grade-beam pile system will be constructed.

Therefore, the Commission finds that the proposed development as conditioned by special condition #4 of coastal development permit 5-96-093 as consistent with Section 30240(a) of the Coastal Act.

C. Local Coastal Program

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act.

The Commission certified the Land Use Plan for the City of San Clemente on May 11, 1988, and certified an amendment approved in October 1995. On April 10, 1998 the Commission certified with suggested modifications the IP portion of the Local Coastal Program. As conditioned, the proposed development is consistent with the policies contained in the certified Land Use Plan regarding enhancement of native vegetation, and geological stability. 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 by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with the geologic hazards and stream channelization policies of the Coastal Act. Mitigation measures; special conditions requiring conformance with geologic recommendations and evidence of permission to construct, will minimize all adverse effects. The landscaping special condition of the previous permit



Source: USGS Topographic Quadrangle, "San Clemente, Calif." Cotton No. 2, C.

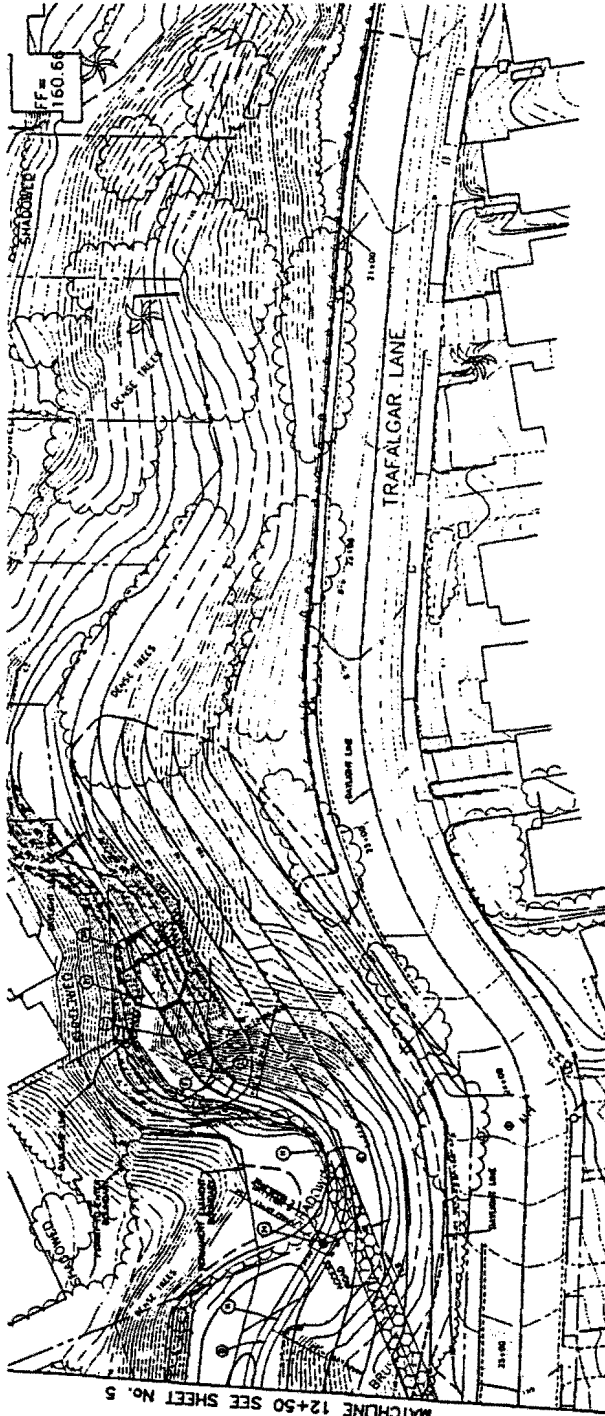
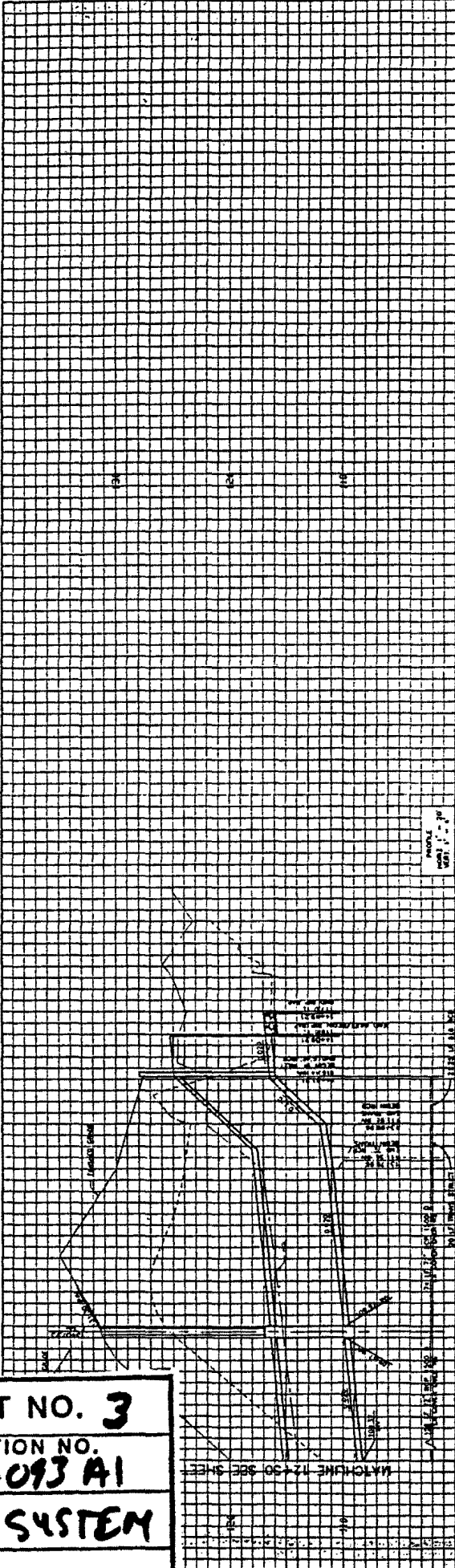
8/29/94(CSN401)

EXHIBIT NO. 1
APPLICATION NO. S-96-093A1
VICINITY
California Coastal Commission

Figure 2

LSA Scale in Feet
0 1000 2000

Project Vicinity



CONSTRUCTION NOTES

- ① INSTALL 3" RCP PIPES SHOWN IN PROFILE.
- ② CONSTRUCT 8' DEEP PER STRAINING TABLE ON SHEET 7.
- ③ CONSTRUCT APPROVED MALET STRUCTURE PER CALCULATED STD. PLAN NO. 004A AND DETAIL ON SHEET 7.
- ④ CONSTRUCT 6" RCP PER CALCULATED STD. PLAN NO. 311-4.
- ⑤ CONSTRUCT TRANSITION STRUCTURE PER ADOPTA STD. PLAN NO. 311-4.
- ⑥ CONSTRUCT ALL STRUCTURES TO BE 5' PER SECTION STD. PLAN 311-10B UNLESS NOTED OTHERWISE.



STORM DRAIN CURVE DATA

STATION	DEPTH (FT)	DIAMETER (IN)	MANHOLE
12+50	3.0	30	1
13+50	4.0	36	2
14+50	5.0	42	3
15+50	6.0	48	4
16+50	7.0	54	5
17+50	8.0	60	6



**STORM DRAIN PLAN
TRAFALGAR LANE
CITY OF SAN CLEMENTE**

PERFORMED UNDER THE SUPERVISION OF:

DATE	BY	CHECKED
7/2/97	W.A. [Name]	[Name]
DATE	BY	CHECKED
7/2/97	[Name]	[Name]

REFERENCES:

NO.	REFERENCE

REVISIONS:

NO.	DESCRIPTION

6

SHEET 6 OF 6

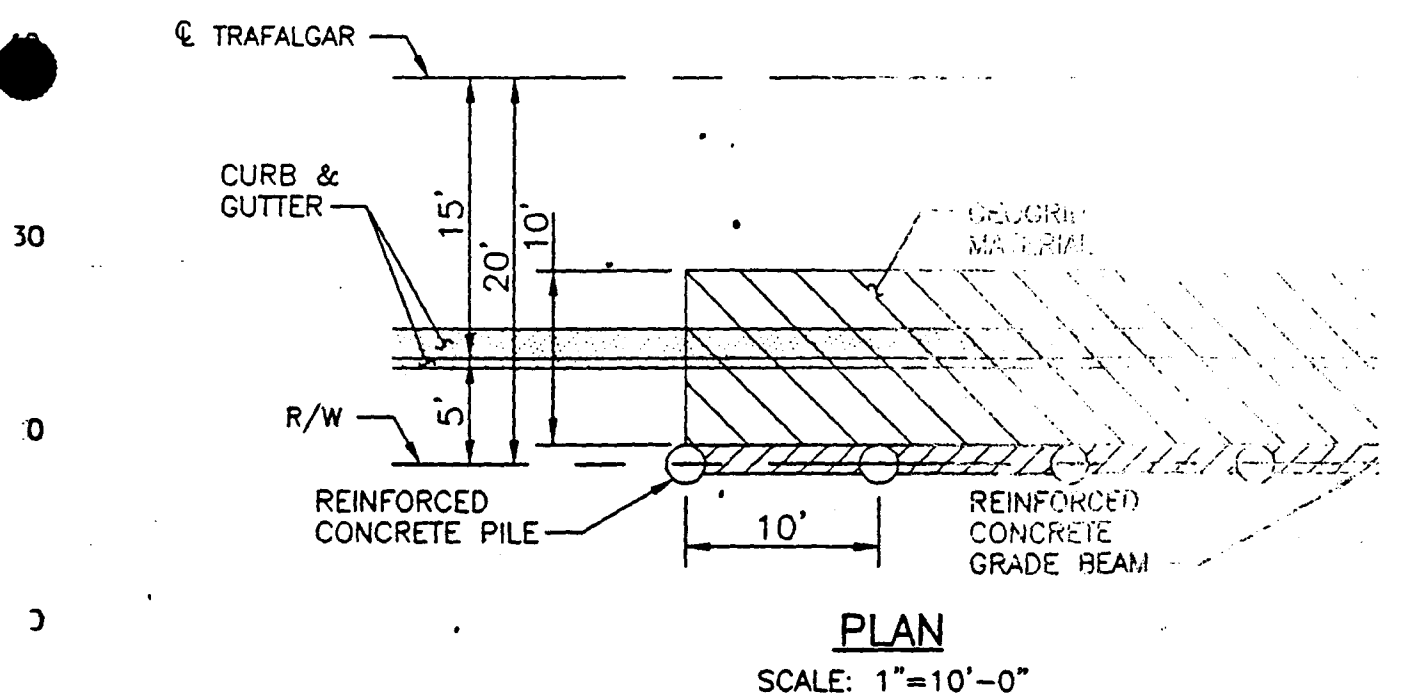
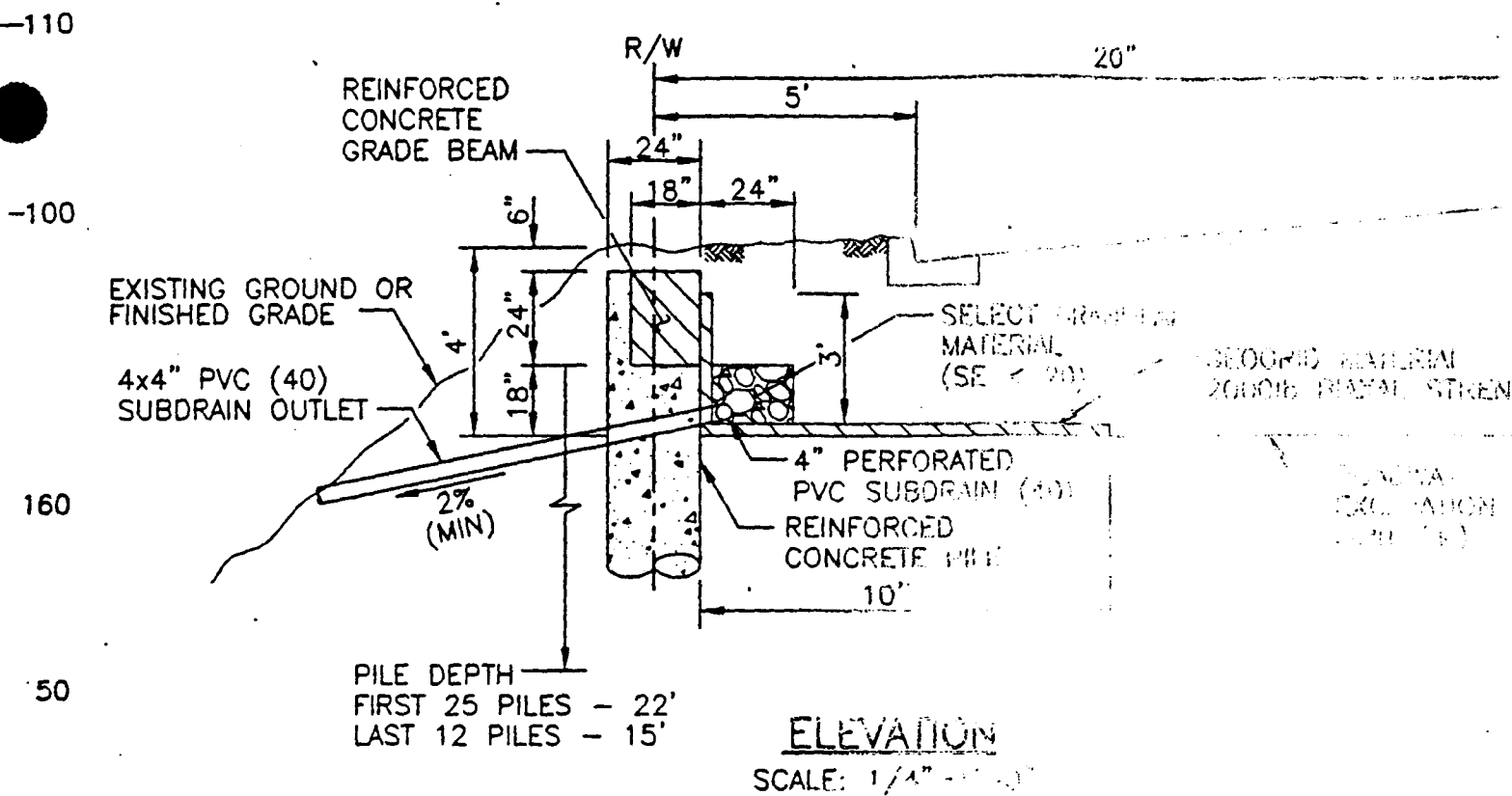
EXHIBIT NO. 3
APPLICATION NO.
5-96-093 A1
PILE SYSTEM
 California Coastal Commission

MATCHLINE 12+50 SEE SHEET

MATCHLINE 17+50 SEE SHEET NO. 5

TYPICAL SECTION ALONG OVEREXCAVATION AREA

N.T.S.



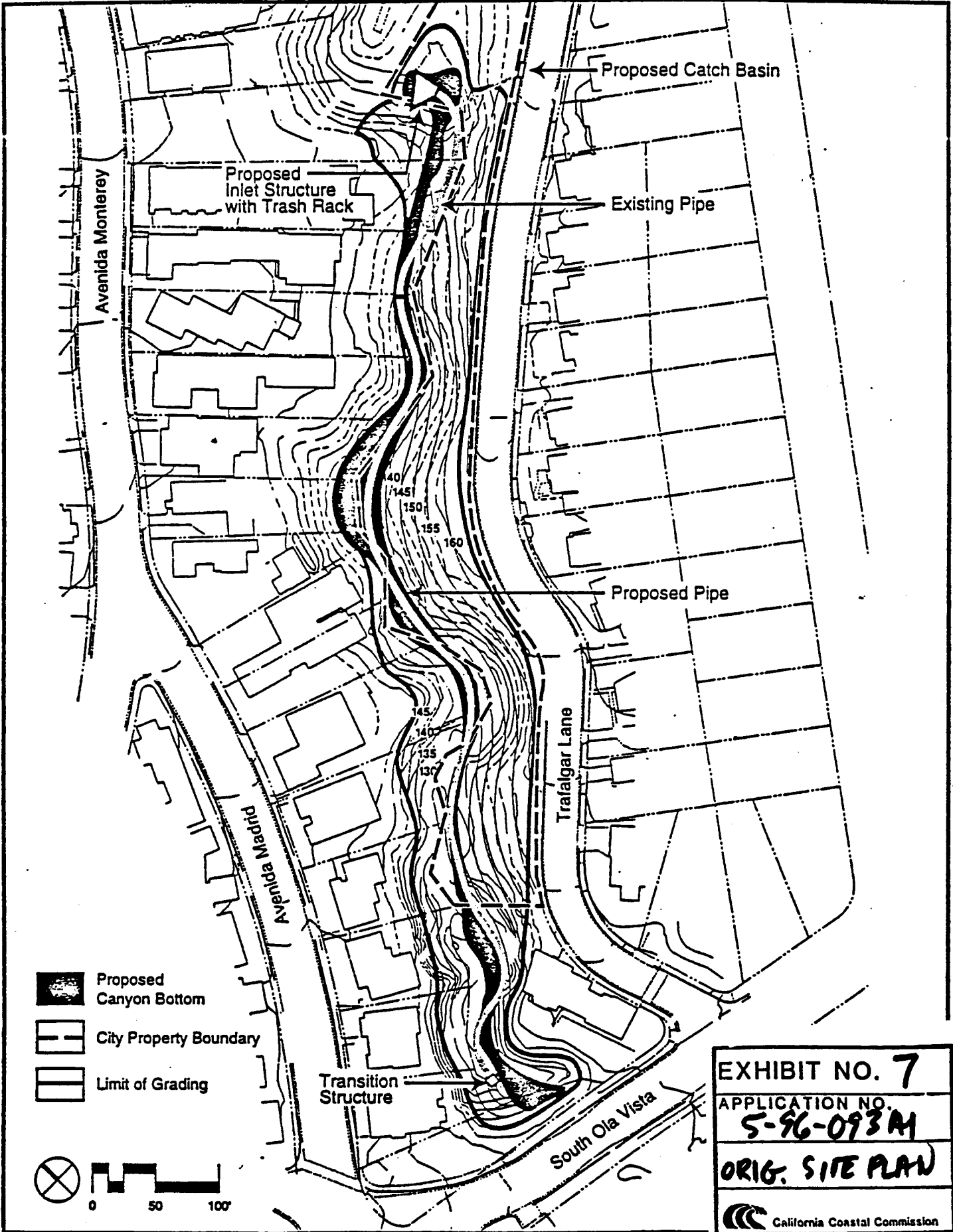
**TRAFALGAR ROADWAY PILE STABILIZATION
STA 19+60 TO STA 23+20**

**EXHIBIT NO. 5
APPLICATION NO.
5-96-093A
PILES - SECTION**

APPROVALS

California Coastal Commission
SEE RIGHT

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Source: Glenn Lukos Associates

EXHIBIT NO. 7
APPLICATION NO. 5-96-093M
ORIG. SITE PLAN
California Coastal Commission

Following the winter storms of January 1993 representatives of the City of San Clemente's engineering department took Coastal Commission staff on a guided tour of storm damage. One of the major areas of concern on that tour was Trafalgar Canyon. The residence at 154 Trafalgar Lane had suffered damage to the driveway and the City pointed to increased canyon slope oversteepening which had progressed to the foundations of some of the residences on the north side of the canyon. At that time the City began to consult with Coastal Commission staff concerning a comprehensive solution to the problems at Trafalgar canyon.

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There are three components to the project. The first part is to install the 72 inch storm drain in the existing canyon bottom. The second part is to fill the canyon and recontour and bench the canyon slopes for greater stability. The third part is to rebuild Trafalgar Lane which runs parallel to the canyon to the south and east. The City's major concern is to stabilize Trafalgar Lane, which is currently experiencing ongoing slumping, cracking and settlement caused by storm water erosion of supporting slopes and differential settlement of improperly compacted soils. Winter rain runoff has created erosion problems in the stream channel and surrounding slopes. The project will also benefit one homeowner on the southern side of the canyon and homeowners on the northern side of the canyon whose homes have already been damaged or are potentially threatened by storm water erosion and oversteepening of the canyon slopes. This project is designed as a comprehensive, long-term solution to both the road stabilization problem and threats to existing residential structures.

Exhibit 4 shows cross-sections of the existing topography and proposed topography. Exhibit 5 is a computer model of the existing topography and Exhibit 6 is a computer model of the proposed topography. As is shown in Exhibit 6, the proposed fill would have the effect of making existing oversteepened slopes more gentle.

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The proposed 72 inch storm drain pipe will connect the existing 6' X 5' reinforced concrete box downstream at Ola Vista Lane with the existing 72 inch reinforced concrete pipe culvert at the upstream terminus of the project (see Exhibit 3). The canyon upstream of the existing 72" culvert is not channelized for several hundred feet. The downstream stretch was piped and filled in the early 1970's. The proposed storm drain pipe is designed to handle a 100 year event. There will be no measurable increase in flow once the project is built.

The biological report prepared for the applicant by LSA Associates, Inc. indicates there is no riparian or wetland vegetation in the stream channel. The stream channel is narrow, incised and scoured of vegetation. Vegetation on the southern slopes consists of a mixture of native, ornamental, and ruderal plants. Implementation of the project will result in the temporary removal of 1.7 acres of the mixed plant community and the permanent removal of 0.13 acres of streambed. The City will revegetate 1.95 acres of regraded slopes with native chaparral plants particular to the San Clemente area. In addition, the Streambed Alteration Agreement requires the City to record either a conservation easement or deed restriction over their property protecting the replanted slopes in perpetuity. The 1601-1603 Streambed Alteration Agreement submitted with the application included a draft conservation easement, thereby indicating that the City chose to protect the resources with a conservation easement, not a deed restriction. This

72

flowing through Trafalgar Canyon. Finally, placement of the 20,000 cubic yards of fill is necessary to buttress the currently oversteepened canyon walls and prevent further damage to Trafalgar Lane and stabilize the slopes below existing residences.

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Subsections 1 and 2 (above) document the threats to Trafalgar Lane and existing residences posed by ongoing erosion of the canyon slopes caused by storm waters. This section will address the remaining tests of Section 30236, which are feasible alternatives and mitigation.

a. Alternatives

The proposed project is a comprehensive solution to erosion threats to both the roadway and existing residences along the canyon. One alternative considered by the City is the no project alternative. This alternative is unacceptable because maintaining the status quo would result in further damage to the existing road and existing homes.

The Mitigated Negative Declaration includes a discussion of alternatives, including the no project alternative. It states:

Under this alternative, repeated failures would occur periodically in association with high rates of storm flow and precipitation. Trafalgar Lane would continue to be undermined, with the road's substandard condition progressing from pavement distress to gross instability. The threat of failure on the adjacent canyon slope would eventually heighten the public safety hazard, leading to the road's closure.

Another alternative posed by the City is to take the minimal measures required to remediate the road problems only. Under this alternative the City would install a system of piles or caissons along the northern edge of Trafalgar Lane. However, as is stated in the Mitigated Negative Declaration:

While the alternative would mitigate lateral and downward movement of materials underlying the roadway, it would not address the undermining of Trafalgar Canyon's slopes due to high velocity runoff, oversteepened slopes, and dislodging of bedrock in the canyon. ... Because it does not address the undermining of Trafalgar Canyon's banks and potential mass instability, it does not achieve the project's objective, i.e., permanent stabilization of Trafalgar Lane.

This alternative would also not take into consideration problems facing existing homeowners. In the absence of a comprehensive solution and in the event of further slope destabilization, the City and the Commission will have to handle applications by multiple individual homeowners for foundation and other stabilization projects. And because of the loss of rear yards, stabilization of these homes would be extremely problematic and expensive.

As was stated in the June 13, 1996 letter from the City of San Clemente:

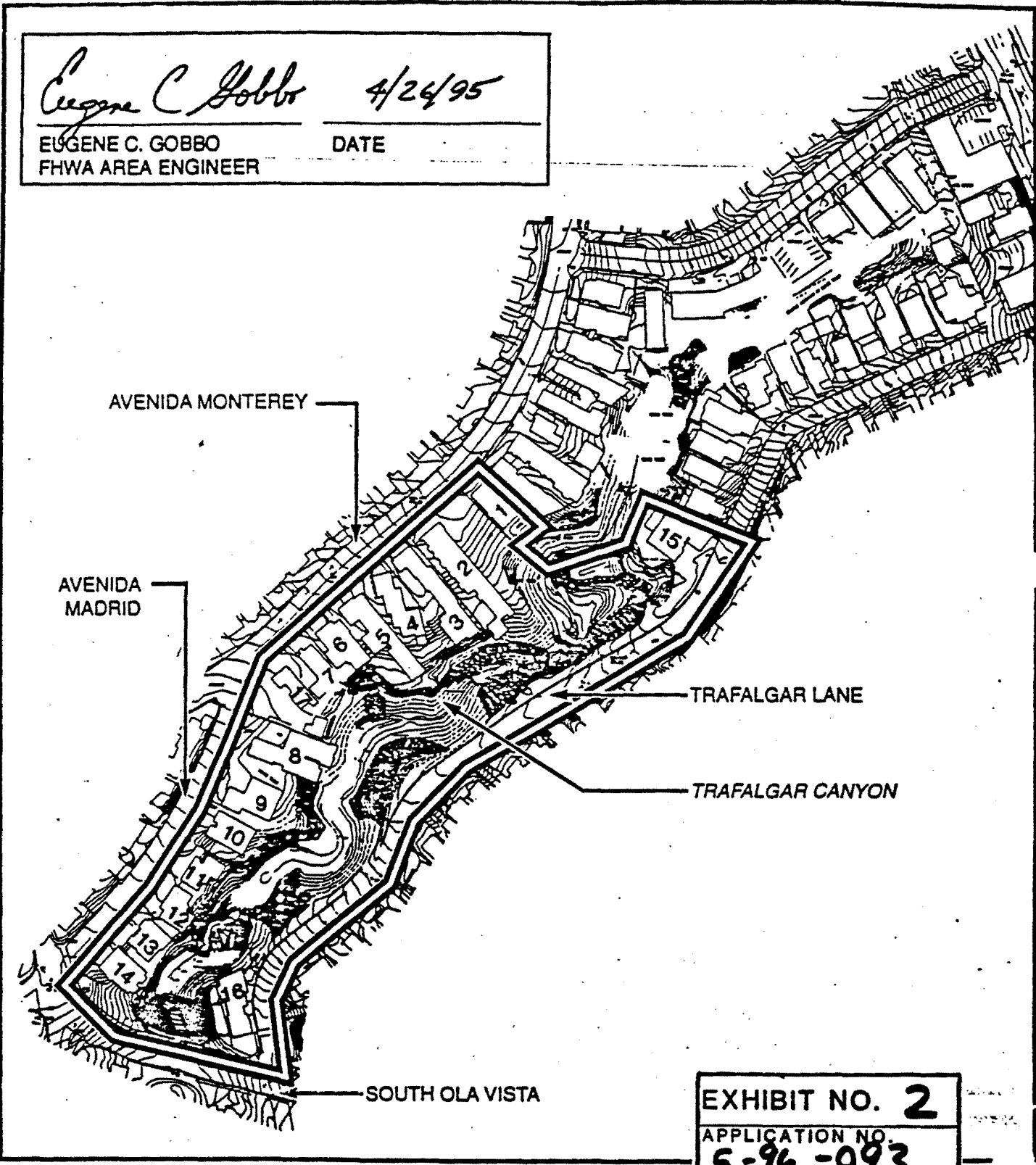
Without this project, each homeowner will need to take measures at their property to prevent gradual downcutting of the canyon bottom to prevent total foundation loss. Each homeowner will need to enter into the canyon to implement measures.

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conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

7017F

Eugene C. Gobbo 4/24/95
EUGENE C. GOBBO DATE
FHWA AREA ENGINEER



AVENIDA MONTEREY

AVENIDA MADRID

TRAFALGAR LANE

TRAFALGAR CANYON

SOUTH OLA VISTA

 APE


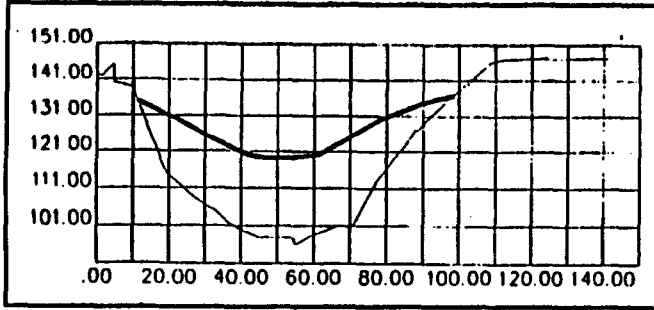
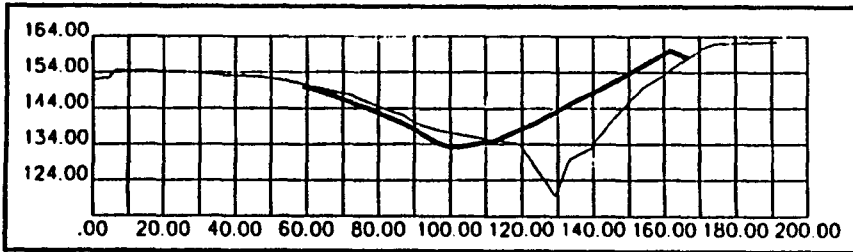
EXHIBIT NO. 2
APPLICATION NO.
5-96-093
SITE AREA
 California Coastal Commission



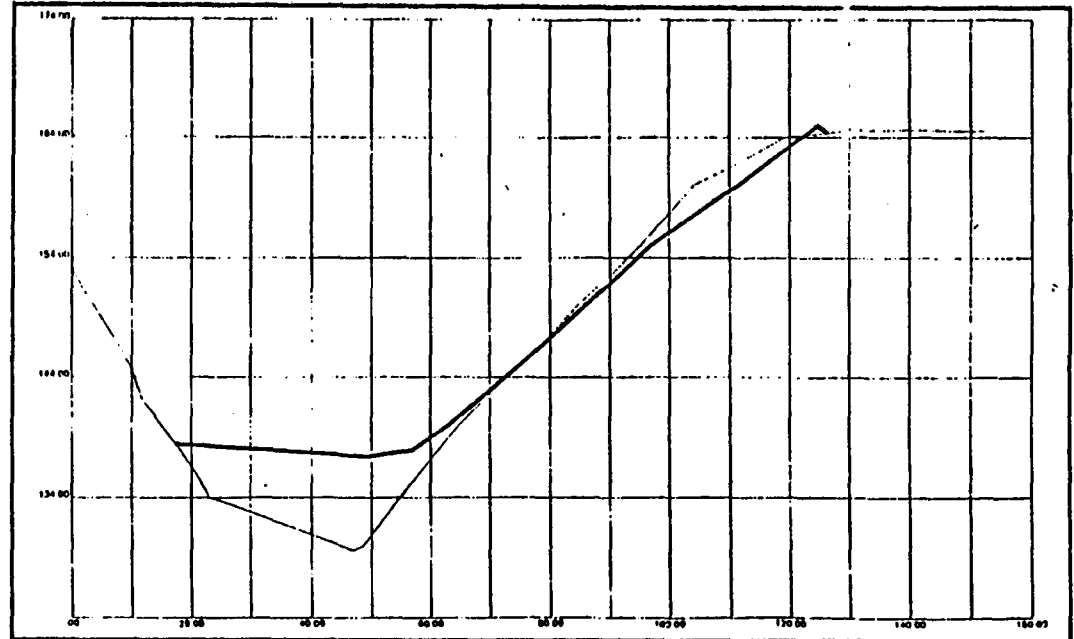
Figure 3
Area of Potential Effect



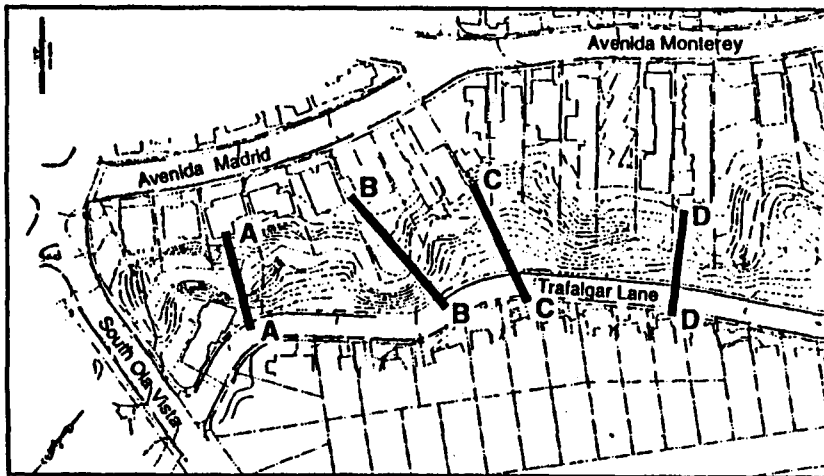
Section AA



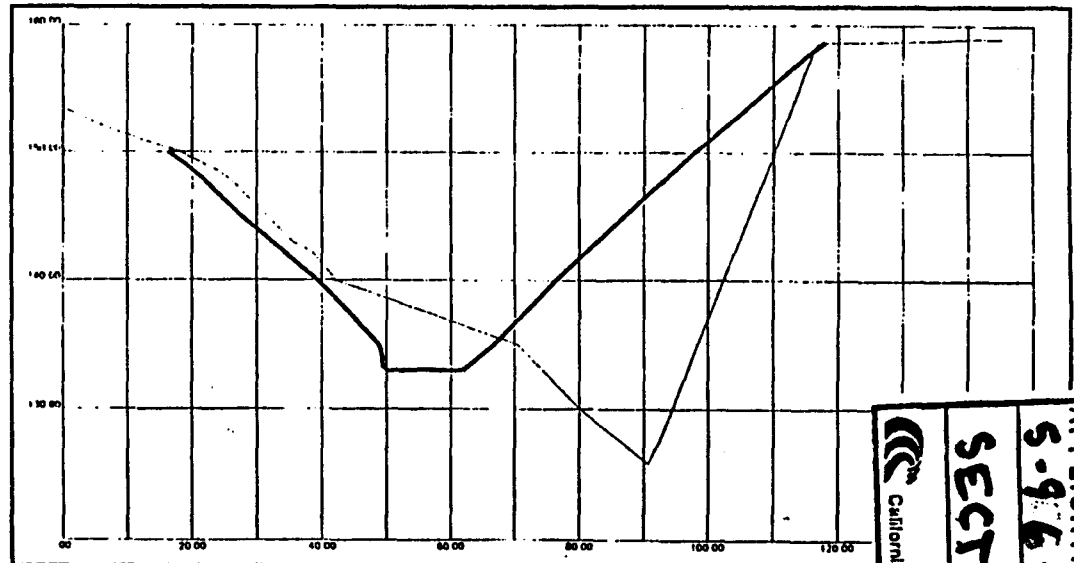
Section BB




Section CC



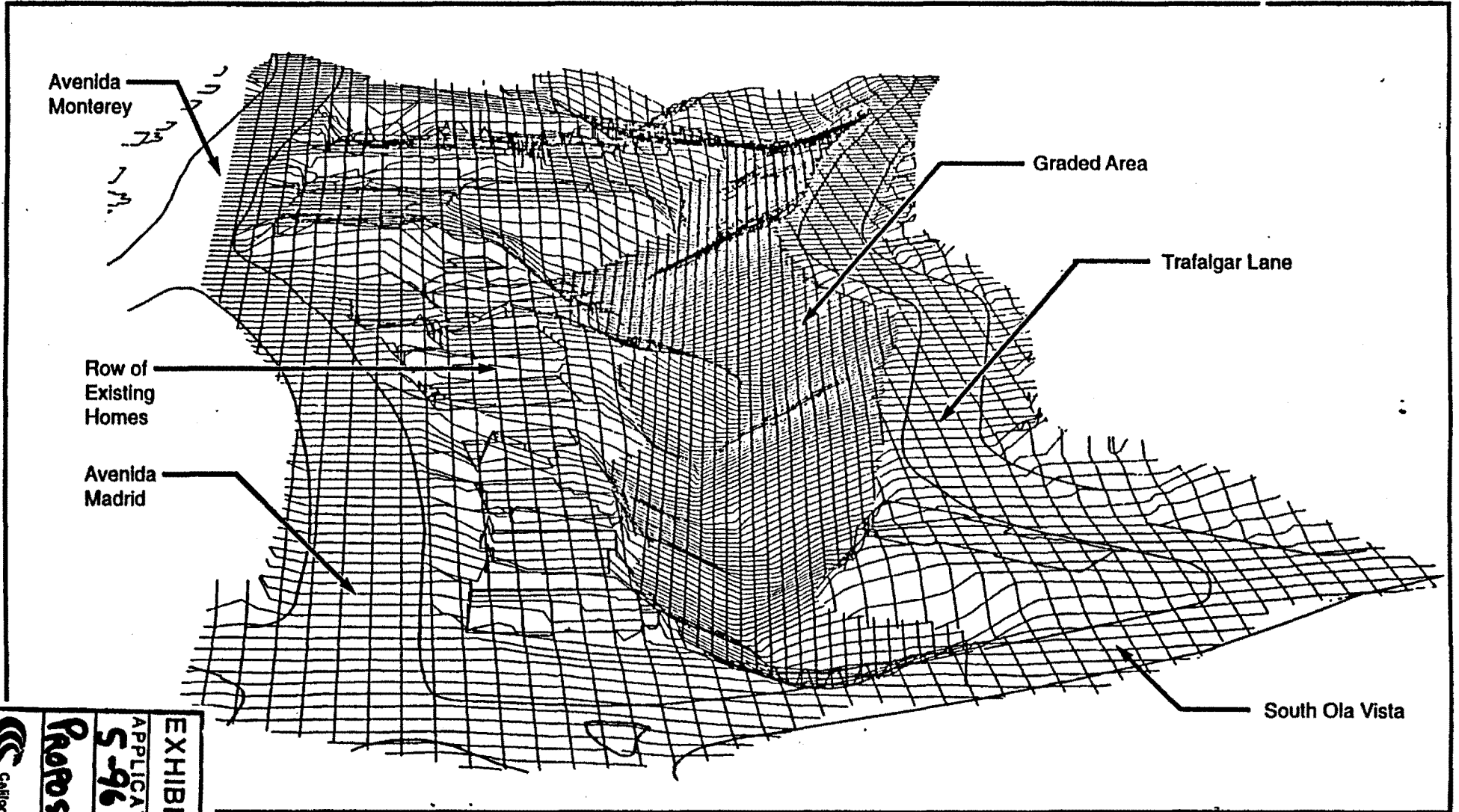
Key Map



Section DD


SECTIONS
 APPLICATION NO.
5-9-6-093
EXHIBIT NO. 4
 California Coastal Commission

Proposed




 California Coastal Commission	EXHIBIT NO. 6
	APPLICATION NO. 5-96-093
	PROPOSED TOPO

Exhibit 8b
**Graded Topography:
Trafalgar Canyon - Bird's Eye View**

STREAMBED ALTERATION CONDITIONS FOR NOTIFICATION NUMBER: 5-313-95

1. The following provisions constitute the limit of activities agreed to and resolved by this Agreement. The signing of this Agreement does not imply that the Operator is precluded from doing other activities at the site. However, activities not specifically agreed to and resolved by this Agreement shall be subject to separate notification pursuant to Fish and Game Code Sections 1600 et seq.

2. The Operator proposes to partially fill Trafalgar Canyon for a distance of 800 feet up to a maximum height of 30 feet in order to stabilize the almost vertical steep canyon banks to a 2:1 to 4:1 slopes. Approximately 20,000 cubic yards of fill would be placed in the canyon bottom in order to stabilize Trafalgar Lane on one side and provide slope failure protection to residential properties along the opposite bank. Currently about 150 feet of the drainage is within a reinforced concrete pipe, and the drainage off the newly constructed slopes would be directed towards South Ola Vista and collected into an inlet that would drain into the new RCP beneath Trafalgar Canyon. The total impacted area in the canyon up to a height of 30 feet would be 1.95 acres, including 0.13 acre of streambed. The canyon runs in a southwesterly direction and the drainage becomes increasingly incised and 50 feet deep towards South Ola Vista. There are no riparian species growing adjacent to or within the drainage course at the canyon bottom. Mitigation shall be revegetation of the recontoured slopes with native vegetation to enhance wildlife habitat.

3. The agreed work includes activities associated with No. 2 above. The project area is located parallel to Trafalgar Lane, roughly from its intersection with South Ola Vista to a point 800 feet to the northeast, approximately one-quarter mile from the Pacific Ocean and the San Clemente pier, in the City of San Clemente, Orange County. Specific work areas and mitigation measures are described on/in the plans and documents submitted by the Operator and shall be implemented as proposed unless directed differently by this agreement.

4. Mitigation for the loss of canyon bottom with permanent flows and loss of adjoining habitat shall be in accordance with the Conceptual Mitigation/Enhancement Plan prepared by Glenn Lukos Associates, Inc. dated June 29, 1995. A copy of the Final Revegetation and Monitoring Plan shall be submitted to the Department for approval within 90 days of signing of this Agreement.

5. Storm drains lines/culverts shall be adequately sized to carry peak storm flows for the drainage to one outfall structure. The storm drain lines/culverts and the outfall structure shall be properly aligned within the stream and otherwise engineered, installed and maintained, to assure resistance to washout, and to erosion of the stream bed, stream banks and/or fill. Water velocity shall be dissipated at the outfall, to reduce erosion.

STREAMBED ALTERATION CONDITIONS FOR NOTIFICATION NUMBER: 5-313-95

15. The Operator shall comply with all litter and pollution laws. All contractors, subcontractors and employees shall also obey these laws and it shall be the responsibility of the operator to ensure compliance.

16. The Operator shall provide a copy of this Agreement to all contractors, subcontractors, and the Operator's project supervisors. Copies of the Agreement shall be readily available at work sites at all times during periods of active work and must be presented to any Department personnel, or personnel from another agency upon demand.

17. The Operator shall notify the Department, in writing, at least five (5) days prior to initiation of construction (project) activities and at least five (5) days prior to completion of construction (project) activities. Notification shall be sent to the Department at 330 Golden Shore, Suite 50, Long Beach, CA 90802, Attn: ES.

18. The Department reserves the right to enter the project site at any time to ensure compliance with terms/conditions of this Agreement.

19. The Department reserves the right to suspend and/or revoke this Agreement if the Department determines that the circumstances warrant. The circumstances that could require a reevaluation include, but are not limited to, the following:

- a. Failure to comply with the terms/conditions of this Agreement.
- b. The information provided by the Operator in support of the Agreement/Notification is determined by the Department to be incomplete, or inaccurate.
- c. When new information becomes available to the Department representative(s) that was not known when preparing the original terms/conditions of this Agreement.
- d. The project as described in the Notification/Agreement has changed, or conditions affecting fish and wildlife resources change.

CONCURRENCE
City of San Clemente

(Operator's name)

California Dept. of Fish and Game

(signature)

3-6-96

(date)

(signature)

(date)

Mayor - Steve Apodaca
(title)

Environmental Specialist III
(title)

Attest:

Melina Ekwary
City Clerk of the City of
San Clemente, California