

CALIFORNIA COASTAL COMMISSION

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 Staff: PE-LB
 Staff Report: 1/26/2000
 Hearing Date: 2/15-18/2000
 Commission Action:

STAFF REPORT: REGULAR CALENDAR**APPLICATION NUMBER:** 5-99-405**APPLICANT:** Louis and Wendy Magur**PROJECT LOCATION:** 15245 De Pauw St., Pacific Palisades, Los Angeles County**PROJECT DESCRIPTION:** Construct a 3,839 Sq. Ft., 27 ft. above CFR single family house and garage, with 667 c.y. fill and a fenced yard.

Lot Area	7,500 Sq. ft.
Building Coverage	2,000 sq. ft.
Pavement Coverage	1,000 sq. ft.
Landscape Coverage	4,500 sq. ft.
Parking Spaces	2
Zoning	R-1-1
Ht above finished grade	25 ft.

SUMMARY OF STAFF RECOMMENDATION:

Staff is recommending approval with conditions requiring the applicants to (a) provide revised plans that set back all proposed pilings no less than ten feet from the contact between natural soils and nonstructural fill, (b) provide a review of the final structural and drainage plans assuring that the plans conform to the recommendations of the geology and soils consultant and the City of Los Angeles Department of Building and Safety, (c) install no permanent irrigation system, (d) record a deed restriction assuming the risk of the development, and (e) record a deed restriction requiring a coastal development permit for any future improvement on the lot located between the west wall of the house approved in this action and the Canyon. Staff also recommends that the applicants provide a landscaping plan that allows only temporary irrigation, employs only coastal sage scrub vegetation on the fill slope and avoids the use of invasive, introduced plants that might invade the restored riparian area in the adjacent Potrero Canyon Park. Finally, the staff recommends that the applicants employ Best Management Practices appropriate to the site to limit the discharge of pollutants from the roofs and the driveway to the storm drain system.

LOCAL APPROVALS RECEIVED: AIC City of Los Angeles #1999-2099, 10/20/99

SUBSTANTIVE FILE DOCUMENTS:

1. Grover and Hollingsworth, Assoc. Inc, *Geologic and Engineering Exploration Proposed Single Family Residence; Lot 15, block 19, tract 9300; 1525 de Pauw Street, Pacific Palisades, California, April 8, 1998.* Report 8179G
2. City of Los Angeles, Department of Bulding and SAFETY, Geologic review letter log # 24218 Soils/Geology file; tract 9300, lot 15, 15245 De Pauw Street, May 7, 1998.
3. 5-91-286 (City of Los Angeles Department of Recreation and Parks) as amended; 5-86-958 (City of Los Angeles)
4. FEIR Potrero Canyon Park Development project, City of Los Angeles, Department of Recreation and Parks, June 1985
5. Kovacs Byer Associates, Geologic and Soils Engineering Exploration Potrero Canyon Park: assorted geotechnical reports dated 6/3/86; 5/27/87/ 7/1/87; 8/12/87; 3/14/87; 4/27/88; 5/23/88; 8/8/88
6. Potrero Canyon Engineering Feasibility report, SCS Engineers-Leighton and Associates October, 1984
7. BCA civil engineers, status report May 16,1991 Potrero canyon
8. William Conn (sp.), 1/21/91 Grading plan and vegetation map, Potrero canyon stage 3
9. John E Vigil co. undated plan view grading plan; Potrero canyon
10. Geologic investigation of lot 29 block 1tract 9377 Pacific Palisades
11. J Vigil Potrero Canyon Engineering Drawings, undated sheets 3-6

STAFF NOTE:

This is one of the first proposals to build a structure on lots that are on the rim of Potrero Canyon in Pacific Palisades since the extensive canyon stabilization project undertaken by the City. In the late 1970's and early 1980's, nine major slides occurred along the walls of Potrero Canyon as a result of erosion from the stream that is located in the bottom of the canyon. As a result of the slides a number of residential structures were damaged and demolished by their owners. The City of Los Angeles was forced to acquire twenty-one houses on the canyon rim, some of which it later demolished. In 1984, the City determined that the only way to protect the houses that were still intact on the rim of the Canyon was to fill the canyon. The Coastal Commission approved the project in three phases, subject to conditions (5-86-958 and 5-91-286, City of Los Angeles.) The third phase of the fill extended about 75 feet above the flow line of the stream. Above that level, the City placed buttress fills extending twenty -five to fifty feet up the canyon sides. These buttress fills were designed to slow down the incremental failure of the lots but were not designed to support structures. As a result of the canyon fill, the area of the lots that is safe from slides can be calculated from the canyon fill rather than from the bottom of the canyon. The Commission approved the fill with conditions that required the City to re-create an artificial stream on top of the fill, build a public park in the canyon, and revegetate the upper canyon sides and buttress fills with coastal sage scrub.

The City has made substantial progress on the fill project, but the project is not yet complete. Additional fill is still approved near the southerly end of the canyon, south of this lot. In addition, the City has not yet installed the artificial stream and a jogging path that is a permit requirement. The reason that these amenities are not yet installed is that the earthmoving is not yet complete.

The lot subject to this application was damaged by slide 3, the "De Pauw slide," on the western rim of the canyon. By 1991, the City or the owners had demolished six slide-damaged homes on lots at the head of slide three. While the City purchased four of the lots, two of the lots, including this one, remain in private hands. As part of the slide repair, the City constructed a buttress fill extending from the top of the canyon fill in the general location of the slide. City contractors remove much of the slide material to construct the buttress. The top of the buttress fill extends from the main canyon fill (75 feet above the flow line of the former stream) to almost the center of this lot. Three hydraugers in the buttress fill drain the fill and the remaining slide materials at its base.

The applicants propose to extend their house over the buttress fill constructed as part of the City landslide mitigation project. The portion of the house that is over the buttress fill would be supported on twenty-four inch reinforced concrete pilings, supported by grade beams, that are proposed to extend beneath the fill into the natural sedimentary rock. The applicants' geologist and the City Department of Building and Safety have approved this foundation design.

The staff recommends approval of a single-family house on this parcel only if the project can be redesigned to set back the foundation from the buttress fill. This could be accomplished either by means of a cantilever or by redesigning the house so that it is entirely located on the natural soils. With such a redesign, the house would no longer be subject to possible disaster if the buttress fill settled or if it moved along the contact with the natural soils. The applicant does not agree with this recommendation.

STAFF RECOMMENDATION:

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

MOTION

I move that the Commission approve CDP #5-99-405 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 the Commissioners present.

RESOLUTION

I. APPROVAL WITH CONDITIONS

The Commission hereby **GRANTS** a permit, subject to the conditions below, 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, and will not have any significant adverse effects 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. REVISED PLANS

A. Prior to issuance of the permit the applicants shall submit revised plans for the review and approval of the Executive Director. The plans shall depict the location of the surface expression of the "non-structural fill" as generally depicted in exhibit 4, and all proposed development. No rigid structures, including concrete decks, shall be placed on or over the non-structural fill, except that the applicant may place fencing, where appropriate, for safety and privacy. The pilings that are proposed to support the house shall be located outside the nonstructural fill, no closer than 10 feet from the surface expression of the contact between the "nonstructural fill " and the native soils. All development on the subject parcel shall be constructed in accordance with the revised plans unless authorized by an amendment to this permit.

B. The permittee shall undertake development in accordance with the approved final plans. 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.

2. FUTURE DEVELOPMENT DEED RESTRICTION

A. This permit is only for the development described in coastal development permit No. 5-99-405. Pursuant to Title 14 California Code of Regulations, section 13250(b)(6), the exemptions otherwise provided in Public Resources Code section 30610 (b) shall not apply to the portions of the parcel located between from the surface expression of the contact between the natural soils and the nonstructural fill and the Canyon (easterly) property line, as shown in Exhibit 3. Accordingly, any future improvements to the permitted structure, 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) or (b), which are proposed within the restricted area, shall require an amendment to Permit No.5-99-405 from the Commission or shall require an additional coastal development permit from the Commission or from the City of Los Angeles.

B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall execute and record a deed restriction in a form and content acceptable to the Executive Director, reflecting the above restrictions on development in the restricted area. The deed restriction shall include legal descriptions of both the applicant's entire parcel and the restricted area. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

3. ASSUMPTION OF RISK, WAIVER OF LIABILITY AND INDEMNITY

A. By acceptance of this permit, the applicants acknowledge and agree (i) that the site may be subject to hazards from wildland fire, settlement of "nonstructural fill", landslide, or earth movement, (ii) to assume the risks to the and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

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

4. CONFORMANCE OF DESIGN AND CONSTRUCTION PLANS TO GEOTECHNICAL REPORT GEOLOGIC HAZARD

A. All final design and construction plans, with the exception of the revised location of the foundations required in condition one, grading and drainage plans, shall be consistent with all recommendations contained in the *Section* of the Engineering Geologic Report prepared by **Grover and Hollingsworth, Assoc., Inc** and dated **April 8, 1998**, and the requirements of the **City Geologic Review Letter 24218 dated May 7 1998. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicants shall submit, for the Executive Director's review and approval, evidence that an appropriate licensed professional has reviewed and approved all final design and construction plans and certified that each of those final plans is consistent with all of the recommendations specified in the above-referenced geologic evaluation approved by the California Coastal Commission for the project site.

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

5. WINTERIZATION/EROSION CONTROL PLAN

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit, for review and approval of the Executive Director, a plan for erosion and run-off control.

1. EROSION CONTROL PLAN

(a) The erosion control plan shall demonstrate that:

(1) During construction, erosion on the site shall be controlled to avoid adverse impacts on adjacent properties, and the alley behind the site.

(2) The following temporary erosion control measures shall be used during construction: sand bags, a desilting basin and silt fences.

(3) Following construction, erosion on the site shall be controlled to avoid adverse impacts on adjacent properties and public streets.

(4) The following permanent erosion control measures shall be installed: a drain to direct roof and front yard runoff to the street; no drainage shall be directed to rear yard slope; no drainage shall be retained in front yard.

(b) The plan shall include, at a minimum, the following components:

(1) A narrative report describing all temporary run-off and erosion control measures to be used during construction and all permanent erosion control measures to be installed for permanent erosion control.

(2) A site plan showing the location of all temporary erosion control measures.

(3) A schedule for installation and removal of the temporary erosion control measures.

(4) A site plan showing the location of all permanent erosion control measures.

(5) A schedule for installation and maintenance of the permanent erosion control measures.

2. RUN-OFF CONTROL PLAN

(a) The run-off control plan shall demonstrate that:

(1) Run-off from the project shall not increase the sediment or pollutant load in the storm drain system.

(2) Run-off from all roofs, patios, driveways and other impervious surfaces on the site shall be collected, filtered and discharged to avoid ponding or erosion either on or off the site.

- (3) Run-off from roofs, and driveways shall be directed through filters designed to remove chemicals and particulates, at least for low flow conditions, (as defined as a one-year storm or as defined by the Regional Water Quality Control Board.)
- (b) The plan shall include, at a minimum, the following components:
 - (1) The location, types and capacity of pipes drains and/or filters proposed.
 - (2) A schedule for installation and maintenance of the devices.
 - (3) A site plan showing finished grades at (two foot contour intervals) and drainage improvements.

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

6. FUEL MODIFICATION PLAN

Prior to issuance of the permit, the applicants shall provide for the review and approval of the Executive Director, a fuel modification and fire safety plan for the development. The plan shall minimize impacts to natural vegetation and public views and must have been reviewed and approved by the Los Angeles City Fire Department. If the Fuel Modification/Fire Safety plan anticipates any vegetation removal, including thinning, on City Department of Recreation and Parks lands, the applicants shall provide a signed agreement with the City Department of Recreation and Parks acknowledging that the property is adjacent to the Potrero Canyon Park. The agreement shall specify the location and methods of fuel modification (if any) on City of Los Angeles Department of Recreation and Parks land, and shall specify the amount of any fees or indemnification required for the use of City Property for such fire buffer. If the fuel modification plans show vegetation removal or alteration of City Park Land more than 100 feet from the proposed residential structure, an amendment to this permit shall be required.

6. LANDSCAPE PLAN

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall submit, for the review and written approval of the Executive Director, a plan for landscaping to assure compatibility with the revegetation measures required in cdp 5-91-286A2 and A3. The plan shall be prepared by a licensed landscape architect.

1. The plan shall demonstrate that

- (a) To minimize the need for irrigation, all vegetation planted on the site will consist of drought-tolerant plants,
- (b) The applicants shall not employ invasive; non-indigenous plant species, which tend to supplant native species. Such plants are listed in Exhibit 17.
- (c) All vegetation placed on the canyon side face of the berm approved in 5-91-286 shall consist of native/drought and fire resistant plants of the coastal sage scrub community.
- (d) All planting will be completed within 60 days after completion of construction,
- (e) 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
- (f) No permanent irrigation system shall be allowed within the property. Temporary above-ground irrigation to allow the establishment of the plantings is allowed.

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, 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 required.

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. Project Description and Location

The applicants propose to construct a two-story over garage, a driveway, and a 3,839 square foot single family house. The house will extend 25 feet above finished grade, twenty-seven feet above the centerline of the De Pauw Street. The house will include a basement. The lot is now presently vacant and is located on the canyon rim of Potrero Canyon; a coastal canyon trending north and south from Pacific Coast Highway to the Palisades Branch Public Library. The house will be supported by 24-inch reinforced concrete pilings supported by grade beams. A portion of the structure will extend over a

nonstructural buttress fill constructed by the City of Los Angeles landslide mitigation project (5-91-286 as amended.) The applicant proposes to support this portion of the house on two 24-inch pilings that will extend through the fill into natural soils.

B. History.

In 1984, and again in 1991, the Commission approved a proposal to fill Potrero Canyon to in order to stop continuing damage that was occurring to houses that were constructed on the rim of the canyon. The stream in the bottom of the canyon had undermined the canyon walls. By early 1980's, nine major slides and a number of "blowouts" occurred. As a result of the slides a number of residential structures were damaged and demolished by their owners. In 1984, the City determined that the only way to protect the houses that were still intact on the rim of the Canyon was to fill the canyon and install a subdrain to reduce saturation of the sediments. (5-86-958 and 5-91-286, City of Los Angeles.) By 1986, the City of Los Angeles had acquired 20 houses on the canyon rim, some of which it later demolished. In 1986, the Commission approved a project with 25 feet of fill and a subdrain. The slides continued. By 1991 the City had acquired one additional lot and was considering the acquisition of 7 additional lots on the west canyon rim. The applicant has provided a newspaper clipping that indicates that a total of 31 lots were eventually acquired.

In 1991, after the expiration of its original action, the Commission re-approved an expanded project in three phases, subject to conditions (5-91-286.) In its approval of the revised project, the Commission reviewed evidence that the headscarps were moving inland, potentially threatening additional houses along at least three streets that were parallel to the rim: De Pauw, Friends Street, and Alma Real. The third phase of the fill of the revised project extended about 75 feet above the flow line of the stream. Above that level, the City proposed to place buttress fills extending twenty-five to fifty feet up the canyon sides, in some instances such as this one onto privately owned residential lots. These buttress fills were designed to slow down the incremental failure of the lots but were not designed to support structures. The material would be compacted to 90% but the City intended to use five-inch diameter rock in the fill, which would prevent the fill from supporting structures. As a result of the canyon fill, the plane that is safe from slides can be calculated from the top of the level canyon fill rather than from the bottom of the canyon. The Commission approved the fill with conditions that required the City to (1) create an artificial stream on top of the fill, (2) build a public park and trails in the canyon, (3) revegetate the upper canyon sides and buttress fills with coastal sage scrub, and (4) submit final stamped engineered drawings of the proposed buttress fills before constructing them. The trails, riparian areas and other proposed mitigation measures are not yet complete although some landscaping is installed.

The lot subject to this application was impacted by slide three, which caused the demolition of six houses, including the house formerly located on this lot. The City purchased four of the lots above slide three including the lots on each side of the present lot, and demolished the houses. The City did not purchase this lot. Almost half of this lot is mapped as landslide in maps and aerial photos provided by the City in 1991 (Exhibits

12, 13, 14 and 15.) The filling this part of the canyon (the northern part) has been completed up to 75 feet above the former flow line of the stream. The City is still at work on the southern part of the canyon.

The City has completed the De Pauw buttress fill, which extends from the top of the canyon fill to the pad of the lot subject to this application. This compacted "nonstructural" fill occupies a significant portion of this 150-foot deep lot. On the north (inland) side of the lot, the fill extends to within 65 feet of the street side lot line. On the south side of the lot, the fill extends to within 76 feet of the street-side lot line. The applicant's geologist and the City's geologist and geological engineer have approved the applicant's proposed house.

The underlying canyon repair project was approved in part on an emergency basis. Plans for certain features of the project, including the De Pauw buttress fill, were prepared after the permit and its amendments issued. The Commission required, however, that the City submit final stamped detail engineering plans of the buttress fills before construction. The City supplied such plans. However the plans did not include cross sections or construction details such as the location of benches under the fill and the depth of excavation. The City representatives indicate that such information could not have been prepared until the excavation was complete, because the type of soils encountered during construction determined the depth of the excavation. The City consultant has now provided a cross-section of the buttress fill at the location of the lot (Exhibits 8 and 9.) In evaluating this project the staff has relied on the as-built cross sections provided by the City consultant Jack Vigil and the geotechnical report prepared by the applicant's geologic consultant Grover Hollingsworth.

C. ACCESS AND RECREATION.

The Coastal Act protects public access and encourages the use of private lands for recreation. In this project, the lot itself has been a private, subdivided residential lot for many years. The lot has not been used for recreation. However, this lot is now suitable for building because the City filled the adjacent canyon. In approving the project that protects this lot from landslides, the Commission required that the City construct and maintain a public park in the canyon adjacent to this lot. The park includes a 7.9 acre reconstructed riparian habitat and additional acreage of coastal sage scrub (CSS.) The City proposed and the Commission approved a public trail to link the Pacific Palisades recreation center with the coastline. The recreational experience proposed by the City is a mountain trail along an artificial mountain stream, with the slopes and the stream revegetated with local native (CSS) vegetation.

The use of this lot for residential purposes is consistent with that approval. However, as will be noted in the environmentally sensitive habitat section below, if the private owners adjacent to the project use incompatible or invasive plants, their actions could jeopardize the City's efforts to create a replacement for the stream, and to create a mountain hiking

experience in the park. Therefore, as further conditioned herein, the applicant is required to install no plants that would invade the restored habitat or jeopardize its survival.

As conditioned to assure that the domestic landscaping is consistent with the park approved in permit 5-91-286; the project is consistent with the access and recreation policies of the Coastal Act.

D. ENVIRONMENTALLY SENSITIVE HABITAT AREAS.

The Coastal Act requires that development adjacent to environmentally sensitive habitat areas and public parks be developed in a manner that is consistent with the protection of the habitat and the habitat in the parks. Section 30240 of the Coastal Act states:

Section 30240.

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The Commission approved grading and fill in this canyon in order to protect this and other residential lots along the canyon rim. Before grading for the fill occurred, the canyon sides supported coastal sage scrub and the stream supported willows and other streambed plants. As a result of construction, this habitat was extirpated. The Commission approved the fill of a stream and the grading subject to a number of special conditions. These included the reconstruction of the stream and its associated riparian habitat at a 2:1 ratio—the City proposed construction of a 7.9 acre riparian area and stream-- as well as interim mitigation in a nearby state park. In addition, the City proposed and the Commission approved a plan to revegetate the buttress fill slopes with coastal sage scrub, a sensitive assemblage of plants that is threatened with loss statewide.

The fill in this end of the canyon is complete, but the park and trail system is not yet installed. During the first month of its installation and thereafter artificially constructed systems can be easily overwhelmed by introduced plants. Such plants include pepper trees and honeysuckle, plumbago, morning glories, German ivy, eucalyptus, ornamental grasses and other plants that are attracted to moisture and which can overtake a natural stream and associated upland. The California Native Plant Society has prepared a list of invasive plants. In recent years, the Commission has referenced the list, Recommended List of Plants for Landscaping in the Wildland Corridors of the Santa Monica Mountains, 1994, in its conditions, because it gave guidance to applicants. In one project, A-5-RPV-93-005 (Ocean Trails), the Commission required the use of the list in a condition, and the applicant used the list in its Habitat Conservation Plan. The Habitat Conservation Plan

was developed under the supervision of the Department of Fish and Game and the Fish and Wildlife Service. As a result of the Resources Agencies' comments, an expanded list was prepared. That list is referred to in Condition 6 and attached as Exhibit 17. The list includes all invasive plants listed by the California Native Plant society and additional plants that, in the view of the Resources Agencies might jeopardize an attempt to revegetate with coastal sage scrub (CSS).

The Commission found that the revegetation would mitigate for the loss of the habitat. However introduced plants from the houses on the rim could invade these revegetated areas and undermine the City's efforts. It is quite clear that the owners of the residential lots benefited from the project—in fact the project was approved in order to protect existing residential structures from collapse and to allow the subject lot to be developed at all. Because the stabilization work undertaken to stabilize these lots resulted in damage, which must be mitigated, the redevelopment of the residential lots on the canyon rim must be conditioned to assure that the landscaping of these lots is compatible with the adjacent revegetation effort. To be consistent with the revegetation, the development must establish coastal sage scrub on the slopes and avoid invasive plants on the remainder of the lot. As conditioned, the redevelopment of this house is consistent with the Commission action on 5-91-286 as amended and with section 30240(b) of the Coastal Act.

E. HAZARDS TO DEVELOPMENT.

As noted above, Potrero Canyon is the site of nine extensive and disastrous landslides that have destroyed many houses. The City filled the canyon to an average 75 feet above the flow line on, and in several locations, placed an additional buttress next to the canyon walls. The City's project is nearing completion, and this present application is one of a growing number in which owners are now proposing to rebuild on the canyon rim. The present applicant has provided a geology report from the firm of Grover Hollingsworth and a geologic approval from the City of Los Angeles Grading Division indicating that the development will be safe, if carried out according to their recommendations. The applicants propose to construct their house in part on a lot that has been stabilized with a nonstructural buttress fill, and also over this buttress fill. The applicant does not propose to depend on the stability of the fill, which its geologist acknowledges may settle. Instead the applicant proposes to penetrate the fill with pilings which will be seated in terrace materials below.

Section 30253 states in part:

Section 30253.

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 main canyon fill was designed to slow down the failure of the material on the canyon walls and to prevent the slides from expanding. The main canyon fill is 50 to 60 feet below the level of the lots. If one were to draw a theoretical 2:1 slope from the top of the canyon fill though the lots on the canyon rim, the line would extend though the middle of the flat areas of many of them. Because the portion of the lots adjacent to the canyon walls may still be subject to creep or sloughing, individual owners are required to demonstrate that their development is sited and designed so that settlement of the main canyon fill or sloughing of the walls will not damage the structures. In locations where major slides occurred, such as this slide three, the City constructed a buttress fill extending from the top of the main canyon fill to the level of the pads of the lots.

As noted above, a former house on this lot was destroyed by one of the slides. The slide extended over about half the lot (Exhibits 11, 12, 13,14, 15.) The land adjacent to the lot and about 46% of this lot is now filled to prevent additional sliding. (Exhibits 3, 6, 8 and 9.) The "nonstructural fill " in the canyon extends from the main canyon fill to the level of the pad, and onto about 70 feet of this lot. The applicant's geology report distinguishes between the street side of the lot, which is underlain by what the geologist identifies a "stable terrace deposits", and the canyon side of the lot, where there is non-structural fill. The geologist has indicated that a house built on this lot will be safe. However, in the buttress fill area, the house will only be safe if 24 inch reinforced friction piles extending a minimum of ten feet into the terrace deposits are provided. (Exhibit 20) The City of Los Angeles Department of Building and Safety approved the proposed plan, with conditions requiring pilings and drainage control as recommended by the applicant's geologists.

The geology report makes the following statements:

Friction piles may be used to support any portion of the residence which extends beyond the contact between the alluvial terrace and the certified compacted, non-structural fill. The piles should be a minimum of 24 inches in diameter, a minimum of 10 feet into the terrace, and a minimum of 10 horizontal feet to the contact between the terrace and the compacted non- structural fill. (Page 15)

Piles may be assumed fixed at 4 feet into terrace. The piles may be designed for a skin friction 400 pounds per square foot for that portion of the pile in contact with the terrace. All piles should be tied in two horizontal directions with grade beams. (Page 15)

...Broken, leaking or plugged sprinklers or irrigation lines should be repaired immediately. Frequent inspection of irrigation systems should be performed. (page 24)

Exploration was performed only on a portion of the site.

The City provided as-built cross sections. (Exhibits.8 and 9.) These cross sections show that the terrace material is benched to accommodate the fill. However, the geology reports also shows that underneath the buttress, there is still some landslide material that was not removed. The City geological consultant is quoted by the applicant's consultant as describing this material as well consolidated landslide debris. (See also Exhibits 6 and 7, Geology report, sections and boring logs.)

This case was referred to the Commission staff geologist. His comment is the following:

5-99 405

The natural geologic materials on the western portion of the site appear to be suitable for support of a residential structure. The engineered fill that will cover the eastern part of the site is not, however, intended to be load bearing, and the proposed structure cannot be supported by this material. The proposed design is to support the eastern part of the structure with pilings sunk through both the non-structural fill and any remaining underlying landslide material. These pilings will be subject to strong lateral forces as both the fill and any remaining landslide material can be expected to creep downward to the east due to the reduced, but still significant, descending slope at the site. Further, the discontinuity between the terrace deposits/bedrock and the landslide deposits/engineered fill should be regarded as a potential failure surface due both to its steep slope (graded 1:1) and to the likelihood that it will be lubricated by percolating waters traveling along the discontinuity due to a permeability contrast between these materials. A failure along this discontinuity could damage the structural members as currently designed.

The Commission finds that the applicant has not demonstrated safety of this development as proposed. The material in the buttress fill could push laterally against the pilings, and cause the house to fail. When informed of this analysis, the applicant stated that the drainage devices in the fill would collect water from the fill and prevent this occurrence. In fact the engineering maps and drawings show three hydraugers in the buttress fill. These hydraugers are supposed to collect nuisance water to supply the riparian area in the canyon. These maps were reviewed by the staff geologist who still concluded that sufficient information had not been provided to remove doubts about the future safety of a house depending on pilings extending through the nonstructural fill.

The Commission finds that it can approve a residential unit at this location. However, based on the applicant's geology report, the Commission can approve this house only if the foundation system is redesigned so that the pilings are located outside the non-structural fill area and are set back a minimum of ten feet from the contact between the fill and the natural soils. The house could cantilever from that location. As an alternative, the height limit in this area is 30 feet. This house is 25 feet in height as now planned. A

redesign of the levels of the house and the roof pitch is a possibility that could result in additional square footage while still setting the house back from unstable areas. The Commission finds, however, that drainage control measures recommended by the applicant's consultant should be followed. The Commission also finds that to reduce the chance of failure due to broken irrigation lines or over watering, no permanent irrigation should be installed on the lot. Even with the proposed design changes, the conclusion that this lot can be safely developed is based on information and an analysis that are the applicant's responsibility.

Therefore, as a special condition of approval, the applicant must submit evidence that: 1) the house has been redesigned, 2) all other recommendations contained in the soils report have been incorporated into the project's final design, 3) no permanent irrigation be installed in the lot, and 4) that the final plans have incorporated all requirements of the Grading Division of the City of Los Angeles Department of Building and Safety.

The development is surrounded by coastal sage scrub on several sides, some of which is located on public property. Another risk that the applicant assumes in building in such a location is the risk of fire. The City of Los Angeles requires owners to clear to fifty feet of the structure to mineral soil or and to modify the fuel loads of plants from 50 to 200 feet of the property line. Even with the set back as proposed by staff, the project will be subject to hazard from wildland fire. A wildfire can sweep over a carefully designed, fire resistant structure and destroy it in minutes, depending on the wind, the heat of the fire and the fuel around the structure. There is a potential conflict between the needs of a homeowner for fire safety and the responsibility of the park agency, which owns the adjacent canyon, to maintain watershed cover and habitat on parkland. In building in this location, the applicants are acknowledging that the site may be subject to the risk of fire and the responsibility of constructing in the location is their own.

Under Section 30253 of the Coastal Act new development in areas of high geologic, flood, and fire hazard may occur so long as risks to life and property are minimized and the other policies of Chapter 3 are met. The Coastal Act recognizes that new development may involve the taking of some risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual's right to use his property.

The Commission notes that the applicants have no control over off-site or on-site conditions that may change and adversely affect the slope on the property, the house and the appurtenant structures. Because of the inherent risks to development situated on the lip of a canyon, the Commission cannot absolutely acknowledge that the foundation design will protect the proposed residence during all-future storms and/or slides. Therefore, the Commission finds that the proposed project is subject to risk from fire, erosion and/or slope failure and that the applicants should assume the liability of such risk.

The applicants may decide that the economic benefits of development outweigh the risk of harm, which may occur from the identified hazards. However, neither the Commission nor any other public agency that permits development should be held liable for the applicants'

decision to develop. Therefore, the applicants are required to expressly waive any potential claim of liability against the Commission for any damage or economic harm suffered as a result of the decision to develop. The assumption of risk, when recorded against the property as a deed restriction, will show that the applicants are aware of and appreciate the nature of the hazards which may exist on the site and which may adversely affect the stability or safety of the proposed development. Only as conditioned, to submit evidence that 1) the design has been changed to set back the development's foundations from the nonstructural fill, 2) the proposed plans otherwise conform with the recommendations of the City geologist and the consultant, 3) that there is a pre-construction agreement with the adjacent canyon's owner concerning fuel modification, 4) that the applicant has recorded a statement that assumes all risks of the development, 5) that future development between the contact of the fill with the terrace soils and the easterly property require a coastal development permit or an amendment to this permit, and 6) that no permanent onsite irrigation is installed, can the Commission find that the proposed development is consistent with Section 30253 of the Coastal Act.

F. VISUAL IMPACTS OF DEVELOPMENT.

The Coastal Act protects public views. In this case the public views are the views from the trails and the roads in Potrero Canyon Park.

The project is set back from the canyon and conforms to the height limits of this portion of the Pacific Palisades, which is thirty feet above finished grade. As proposed and as conditioned to set the house further back and to require an amendment for any development between the line of the house and the canyon property line, the project is consistent with section 30251, is in scale with the neighborhood and with previous Commission approvals.

G. LOCAL COASTAL PROGRAM

Section 30604 (a) of the Coastal Act states:

Prior to certification of the Local Coastal Program, a Coastal Development Permit shall be issued if the issuing agency, or the Commission on appeal, finds that the proposed development is in conformity with the provisions of Chapter 3 (commencing with Section 30200) of this division and that the permitted development will not prejudice the ability of the local government to prepare a local coastal program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200).

In 1978, the Commission approved a work program for the preparation of Local Coastal Programs in a number of distinct neighborhoods (segments) in the City of Los Angeles. In the Pacific Palisades, issues identified included public recreation, preservation of mountain and hillside lands, and grading and geologic stability.

The City has submitted five Land Use Plans for Commission review and the Commission has certified two (Playa Vista and San Pedro). However, the City has not prepared a Land Use Plan for Pacific Palisades. In the early seventies, a general plan update for the Pacific Palisades had just been completed. When the City began the LUP process, in 1978, with the exception of two tracts (a 1200-acre tract of land and an adjacent approximately 300-acre tract) which were then undergoing subdivision approval, all private lands in the community were subdivided and built out. The Commission's approval of those tracts in 1980 meant that no major planning decision remained in the Pacific Palisades. The tracts were A-381-78 (Headlands) and A-390-78 (AMH). Consequently, the City concentrated its efforts on communities that were rapidly changing and subject to development pressure and controversy, such as Venice, Airport Dunes, Playa Vista, San Pedro, and Playa del Rey.

As conditioned, to address the interface between parkland and the developed areas and geologic stability, approval of the proposed development will not prejudice the City's ability to prepare a Local Coastal Program in conformity with Chapter 3 of the Coastal Act. The Commission, therefore, finds that the proposed project is consistent with the provisions of Section 30604 (a) of the Coastal Act.

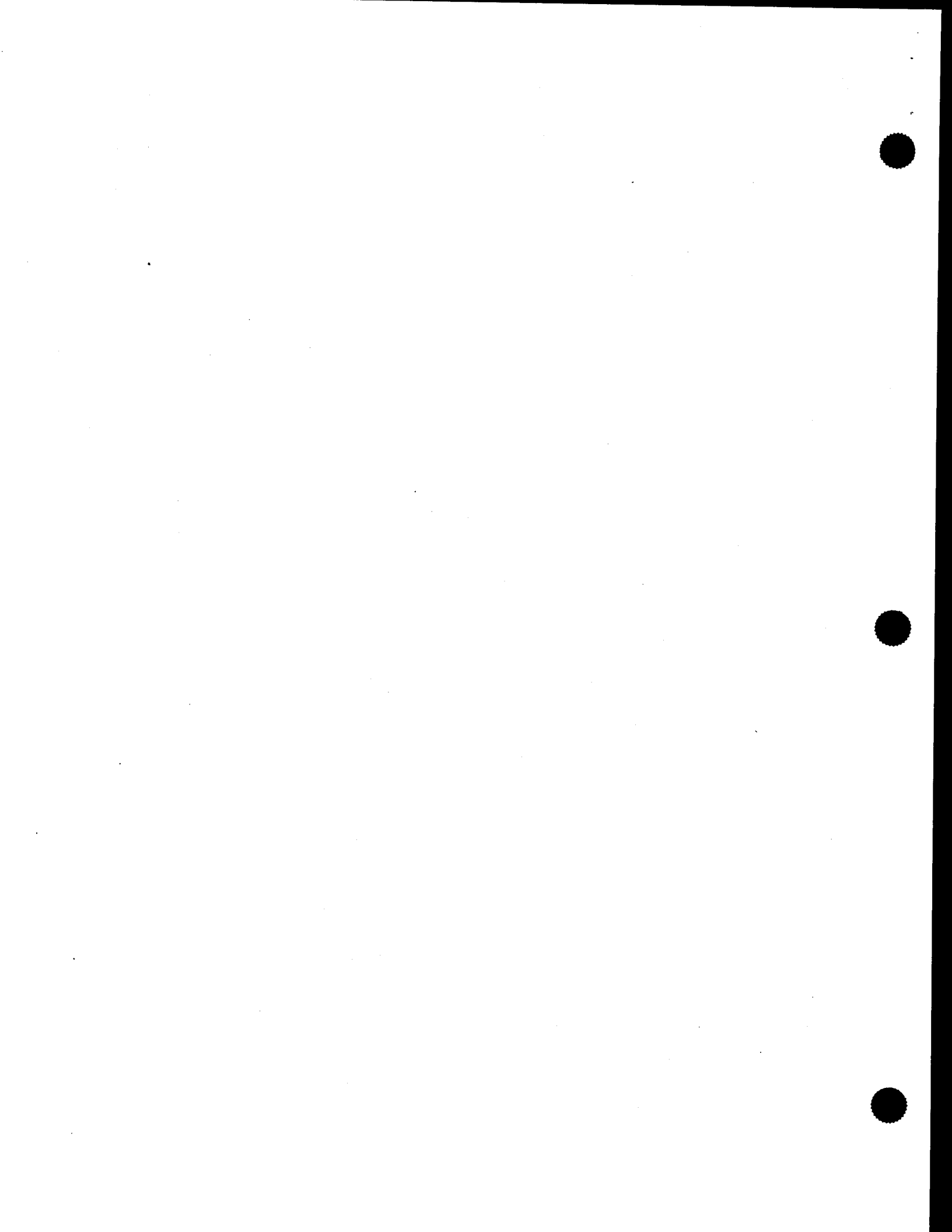
H. CALIFORNIA ENVIRONMENTAL QUALITY ACT

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

The first alternative is to allow the house to be constructed as proposed. As indicated above, this alternative has not been supported because the applicant's geologist has not demonstrated that the fill would not fail along the contact, pulling the house and its pilings with it. As second alternative is to build a three-level house with a flat roof, and locate the house entirely on the native soils portion of the lot. The applicant proposes a 3,839 Sq. Ft., single family house, a driveway and a garage. A smaller house is feasible and a reasonable use of the property. The lot is a 50 by 150-foot lot. There are five-foot side set backs and a 25-foot front yard set back. The area of natural soils extends 67 feet from the front property line. This results in buildable area that is 42 feet deep and 40 feet wide. This area would accommodate a 1680 square foot one level house or a three-level, 5,000 square foot house with a flat roof. The theoretical three level box exceeds the square footage currently proposed by the applicants.

The Commission finds that it can approve a residential unit at this location. However, based on the applicant's geology report the Commission can approve this house only if the foundation system is redesigned so that the pilings are located outside the non-structural fill area and are set back a minimum of ten feet from the contact between the fill and the natural soils. The house could cantilever from that location. As an alternative, the height limit in this area is 30 feet. This house is 27 feet in height as now planned. A redesign of the levels of the house and the roof pitch is a possibility that could result in additional square footage while still setting the house back from unstable areas. If the foundations of the house are set back no less than 10 feet from the fill slope, the construction of a single family comparable to other existing houses in the market area is feasible. Moreover, with the proposed setbacks, this house would not be subject to possible disaster if the buttress settled, pulling the pilings away from the house.

As conditioned, there are no other feasible alternatives or mitigation measures available, which will lessen any significant adverse impact the activity, would have on the environment. Therefore, as conditioned, the Commission finds that the proposed project is consistent with CEQA and the policies of the Coastal Act.



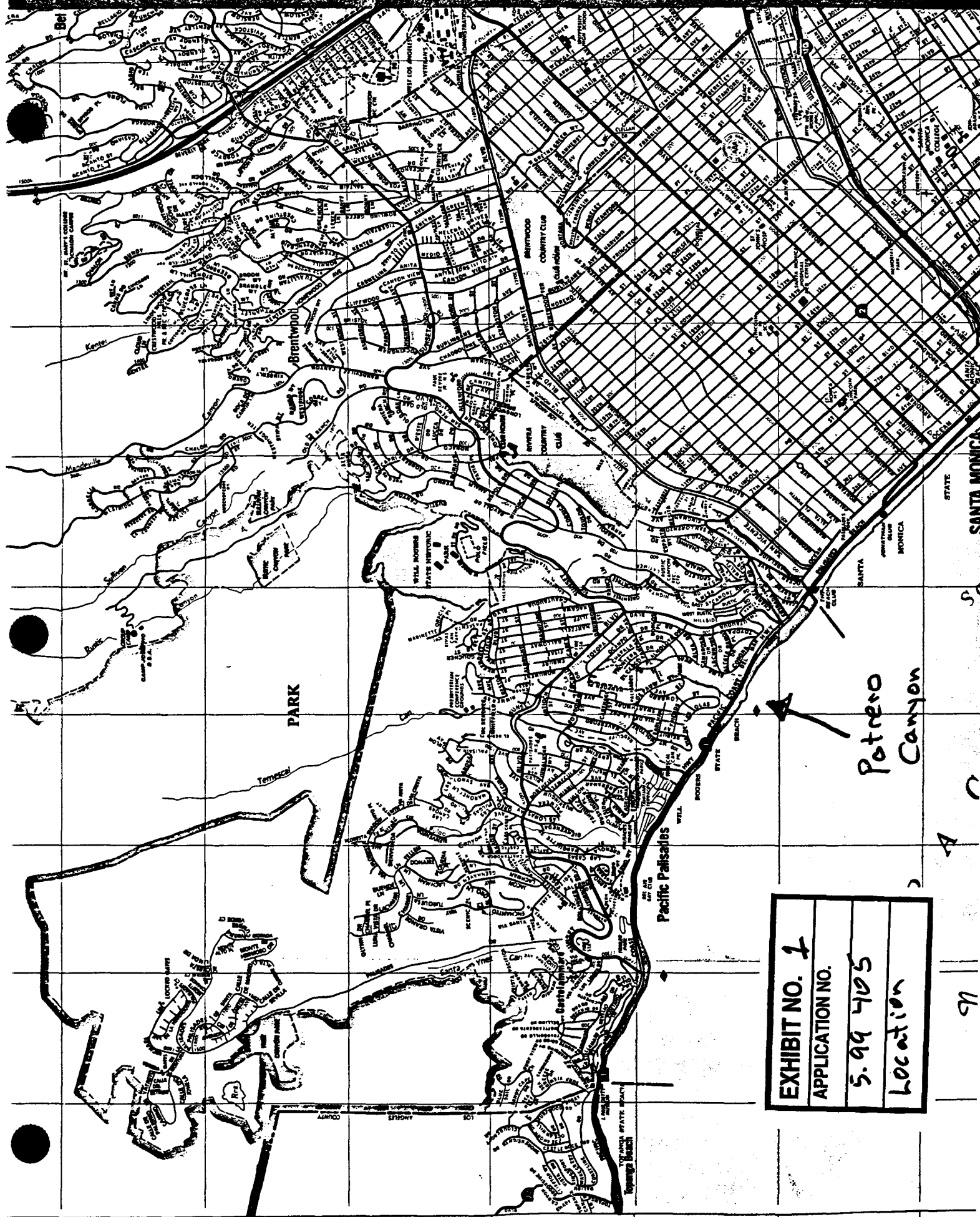


EXHIBIT NO. 1
APPLICATION NO.
5.99 405
Location

Petrero Canyon

A C

SEE INSET MAP BELOW

Grover-Hollingsworth and Associates, Inc.

Geotechnical Consultants

BY SMW DATE 4/98

CLIENT MAGUR

REF. LOS ANGELES COUNTY

GH 8179-S

THOMAS GUIDE PAGE 631

SUBJECT VICINITY MAP

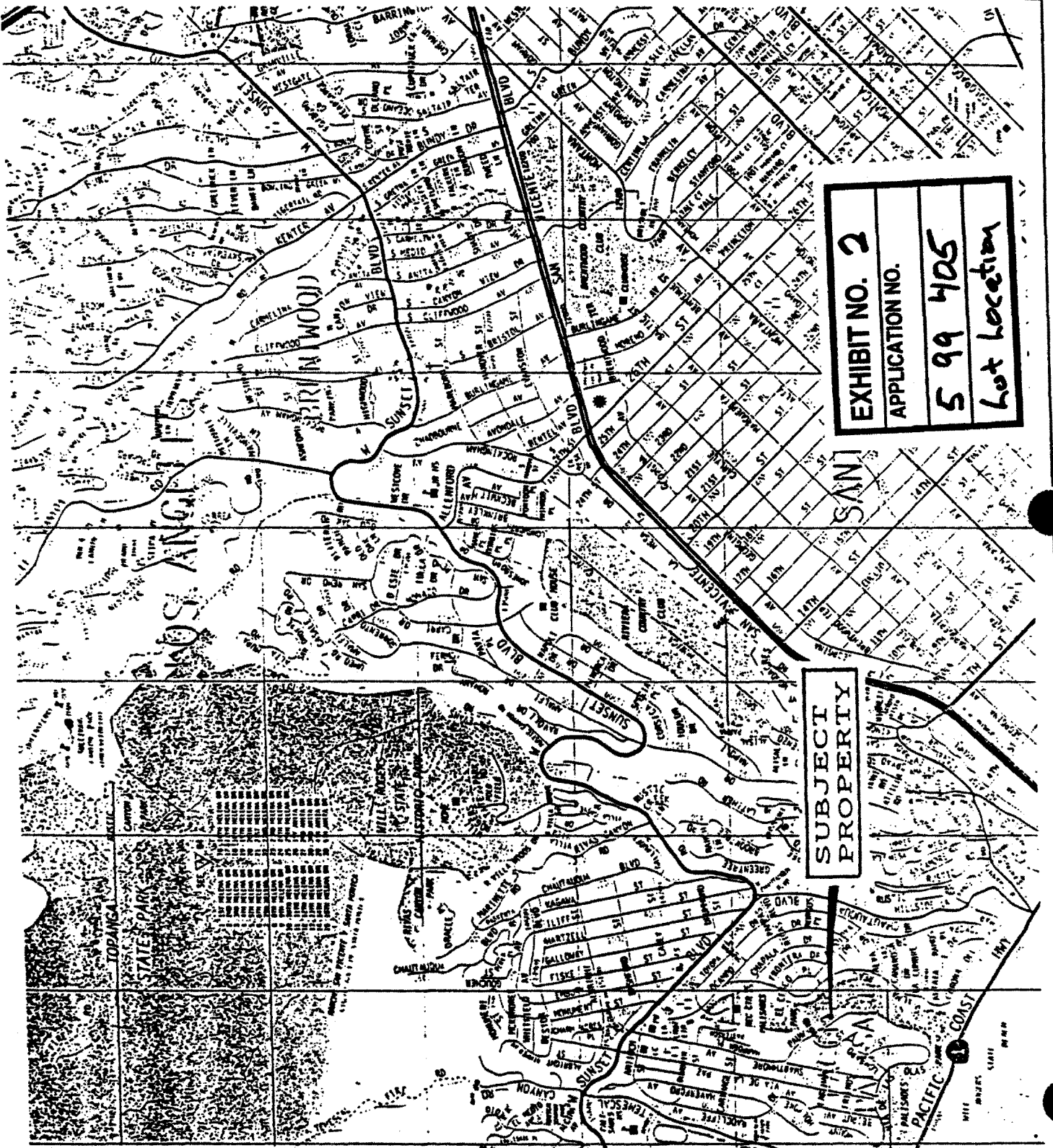


EXHIBIT NO. 2
APPLICATION NO.
599405
Lot location

SUBJECT
PROPERTY

"Reproduced with permission granted by THOMAS BROS. MAPS. This map is copyrighted by THOMAS BROS. MAPS. It is unlawful to copy or reproduce all or any part thereof, whether for personal use or resale, without permission."

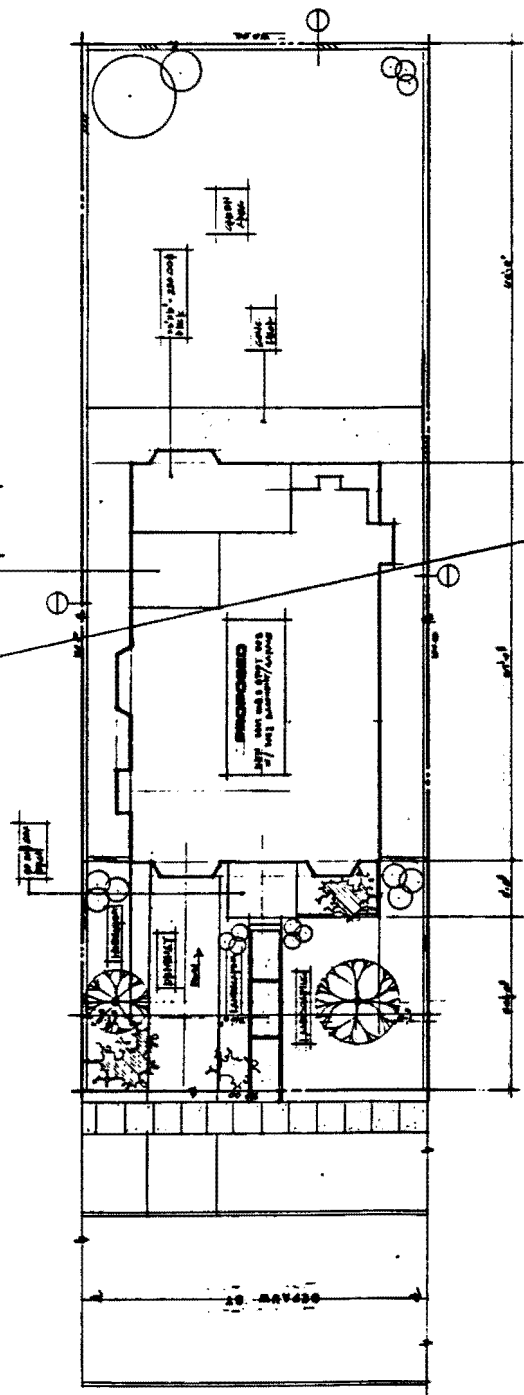
RECEIVED
 JAN 5 2000

CALIFORNIA
 COASTAL COMMISSION

BUILDING DATA

Project Name: _____
 Address: _____
 City: _____
 State: _____
 Zip: _____
 Date: _____
 Scale: _____
 Drawing No: _____

CONTACT BETWEEN TERRACE & NON-STRUCTURAL FILL



ADDRESS 18165 DEPAW ST. PACIFIC PALISADE
 OWNER LOUIS BAGUE
 LOERA • DESIGNS

EXHIBIT NO. 3
 APPLICATION NO.
 599 405
 Site Plan

BUILDING DATA	
Project Address:	1640 17th St. S.W. Seattle, Wash.
Client:	Mr. J. H. Smith
Architect:	Mr. J. H. Smith
Contract No.:	100-1000
Sheet No.:	100-1000
Date:	10-10-50
Scale:	1/4" = 1'-0"
Notes:	See notes on page 100-1000

CONTACT BETWEEN TERRACE & NON-STRUCTURAL FILL

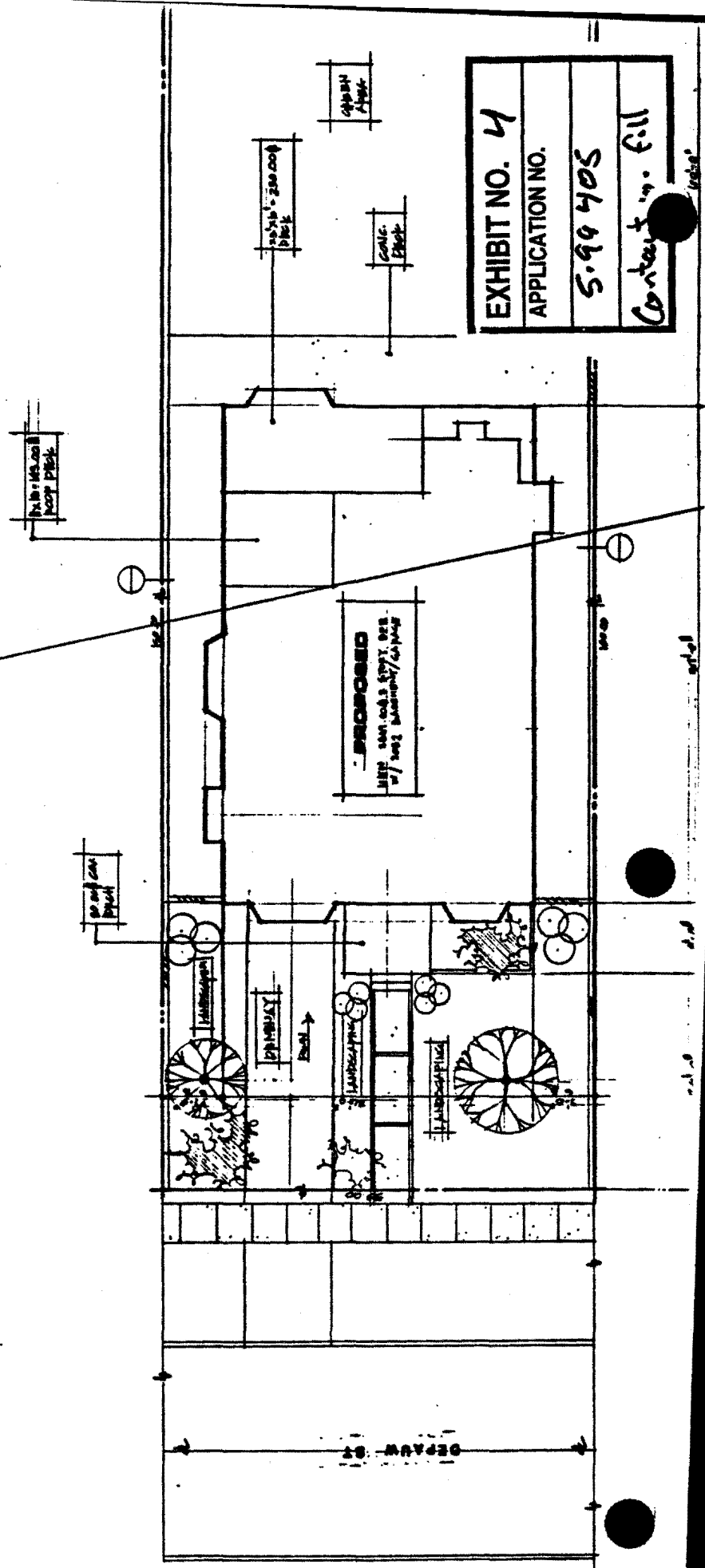
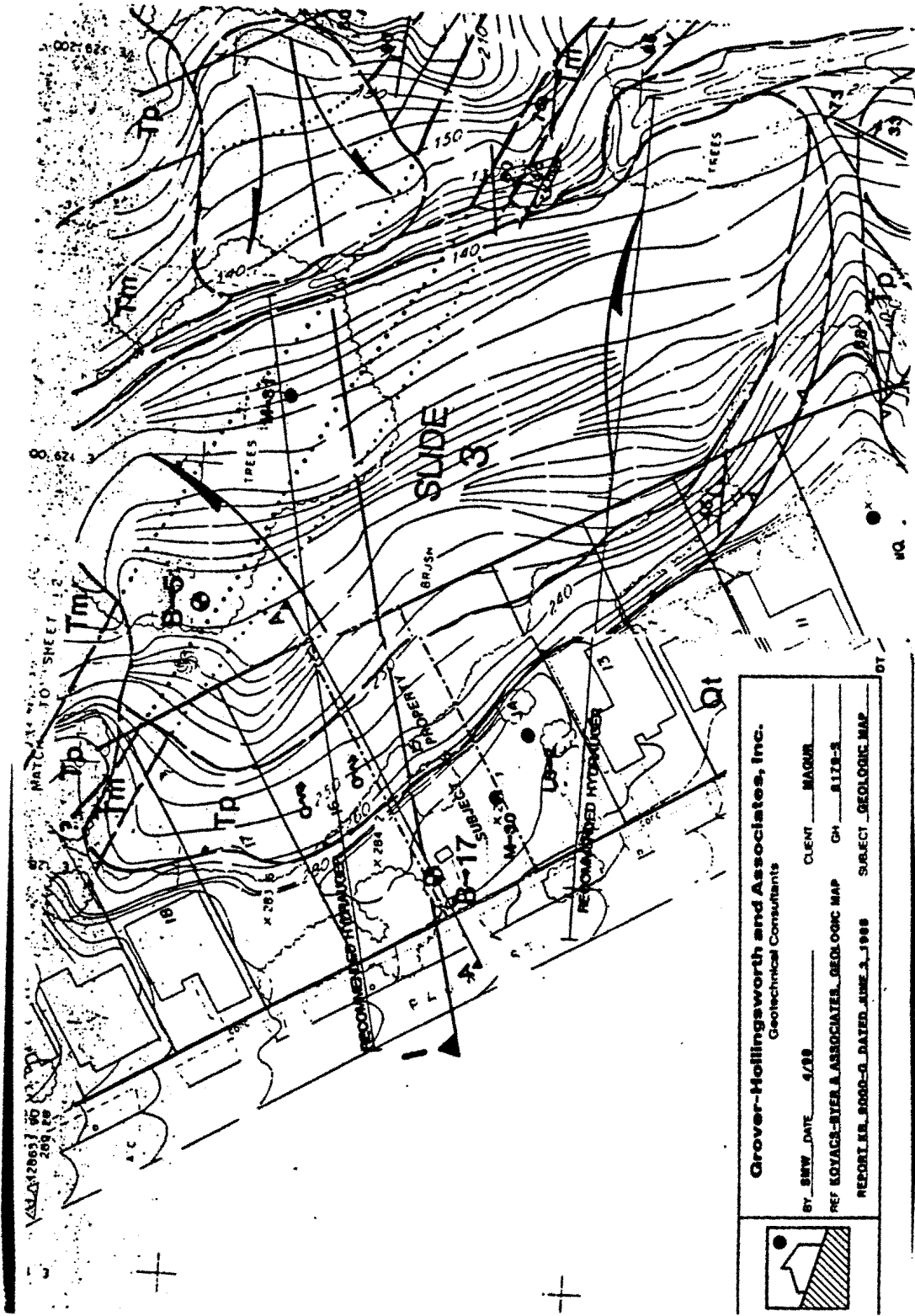


EXHIBIT NO. 4
 APPLICATION NO.
 5-99405
 Contacting fill

R

CC



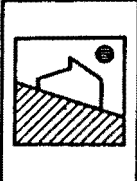
VALLEY 28651 85 X 100
288 28

MATCH TO SHEET 12

00.624

	Grover-Hollingsworth and Associates, Inc. Geotechnical Consultants		
	BY: <u>SEW</u> DATE: <u>4/88</u>	CLIENT: <u>MAGUM</u>	
	REF: <u>KOYACK-NEER & ASSOCIATES, GEOLOGIC MAP</u>	GH: <u>8178-3</u>	
	REPORT NO. <u>8000-G</u> DATED <u>JUNE 3, 1988</u>	SUBJECT: <u>GEOLOGIC MAP</u>	

EXHIBIT NO. 5
 APPLICATION NO.
 599.405
 Geologic Map



Grover-Hollingsworth and Associates, Inc.
Geotechnical Consultants

BY: SMW DATE: 4/88

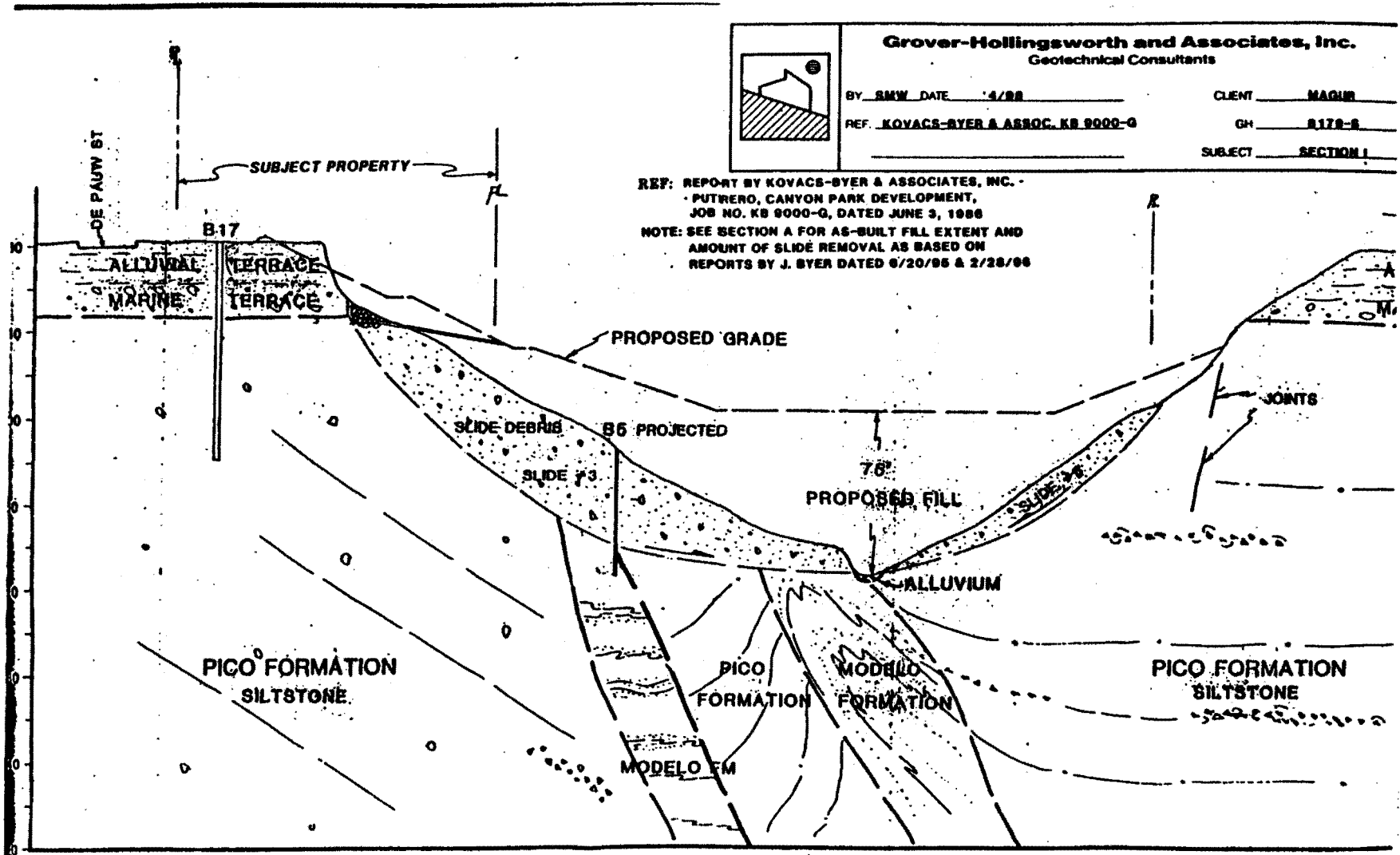
CLIENT: MAGUIR

REF: KOVACS-BYER & ASSOC. KB 9000-G

GH: R17R-S

SUBJECT: SECTION I

REF: REPORT BY KOVACS-BYER & ASSOCIATES, INC.
PUTRERO, CANYON PARK DEVELOPMENT,
JOB NO. KB 9000-G, DATED JUNE 3, 1988
NOTE: SEE SECTION A FOR AS-BUILT FILL EXTENT AND
AMOUNT OF SLIDE REMOVAL AS BASED ON
REPORTS BY J. BYER DATED 6/20/86 & 2/28/88



SECTION I-I

EXHIBIT NO. 6
APPLICATION NO.
594405
Geologic Section

BORING LOG NUMBER 5

Drilling Date 1/16/86

Elevation _____

Project KB 9000-G LOS ANGELES RECREATION & PARKS - POTRERO CANYON

Sample Depth ft.	Blows per ft.	Moisture Content %	Dry Unit Weight p.c.f.	Depth in feet	Graphic Log	Description
				1		<p>LANDSLIDE DEBRIS (ALLUVIAL TERRACE) Sandy Gravel, light red-brown, medium dense to dense</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>EXHIBIT NO. <i>7a</i></p> <p>APPLICATION NO.</p> <p><i>Boring logs</i></p> <p><i>5-99-405</i></p> </div>
				5		
10	36	11.1	113.9	10	---	

				15		<p>Gravelly Sand, light red-brown, medium dense, slightly moist</p> <p>Silty Clay, brown to red-brown, stiff, slightly moist</p>
15	28	10.0	102.3	15	---	<p>Gravelly Clay, red-brown, stiff, slightly moist, porous</p>
20	12	16.1	105.8	20		<p>LANDSLIDE DEBRIS (MARINE TERRACE) Silty Sand, red-brown, medium dense, moist</p>
25	62	20.5	100.5	25		<p>Pico Formation, Siltstone and Sandstone fragments in Silty Sand matrix, light gray to dark gray, slightly moist, moderately hard, dense</p>

(Continued)

BORING LOG NUMBER 5 (Continued)

Drilling Date _____

Elevation _____

Project KB 9000-G LOS ANGELES RECREATION & PARKS - POTRERO CANYON

Sample Depth ft.	Blows per ft.	Moisture Content %	Dry Unit Weight p.c.f.	Depth in feet	Graphic Log	Description	
						Surface Conditions	
				26		LANDSLIDE DEBRIS continues	
				30		Siltstone, dark gray, moderately hard, massive	
30	56	21.1	105.2	30			
				35		Siltstone fragments, light gray to dark gray, very moist, sheared	
35	35	23.0	98.3	35			
				40		Siltstone and Sandstone fragments, light gray to dark gray, soft to moderately hard, moist	
40	32	29.3	95.0	40			
				45		Siltstone and Sandstone, light gray to dark gray, soft to hard, approximately vertical bedding, water on fracture surfaces	
45	74	21.5	104.0	45			
				50		BEDROCK: Modelo Formation, Siltstone and Sandstone light gray to dark gray, moderately hard to hard, slightly moist	
50	64	23.4	97.9	50		thinly bedded, bedding approximately vertical	

EXHIBIT NO. 7b

APPLICATION NO.

5-99 4105

Boring log

EXHIBIT NO. 8

APPLICATION NO.

5-99 405

finish grade

591266A3

CONST 66 LP OF 18" RCP
SET PROFILE "C" ON SHT
NO. 6

LINE AND ACCESS
TICAL SECTION

ACCESS

NO. 18
BLOCK

9300

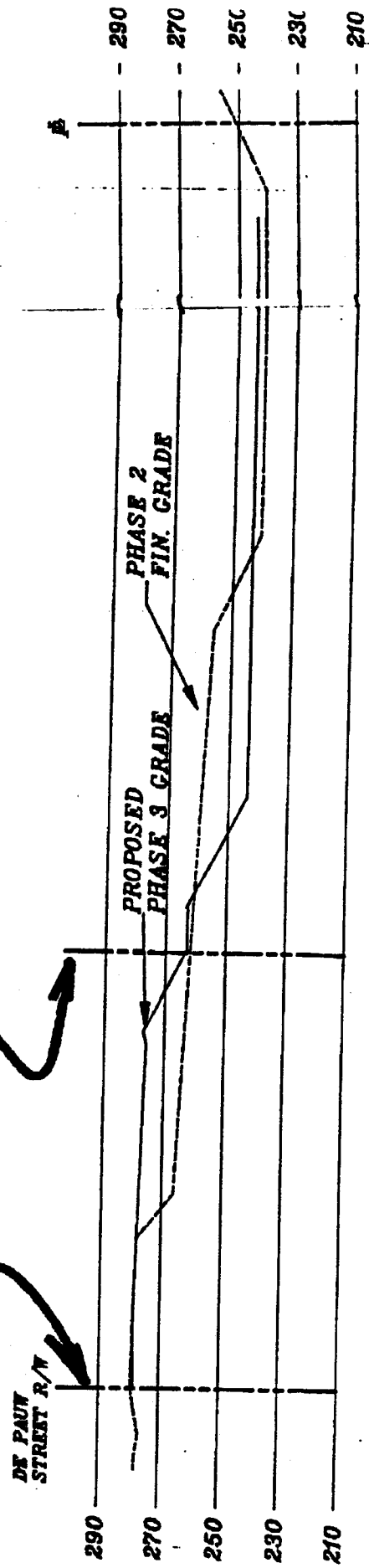
Subject lot

JUG: Section 1

Lot 15 is subject

property

Lot 15



SECTION 4

SCALES HORIZ = VERT
1" = 40'

J Vigil Section
of lot 15 and canyon

EXHIBIT NO. 9a
APPLICATION NO. 5-99-405
finish section

5-91286A3

UN SHI. No. 7

CONST 55 LF OF 18" RCP
SEE PROFILE "C" ON SHT.
NO. 8

2:1 MAX.

250

260

ACCESS

AND

2.4%

5%

270
G.B.

268

266

265
G.B.

255

260

270

270

280

2:1 MAX.

4

4

4

4

4

4

4

4

3

3

3

3

3

3

3

3

3

5

5

5

5

5

5

5

5

5

NO.

2% MIN
TYP.

BLOCK

282

280

278

2% TYP.

277

275

273

(287.5)

(284.0)

(284.0)

284

2% MIN
TYP.

R 18

R 17

R 16

R 15

2% TYP.

R 14

R 13

R 12

9300

4
9

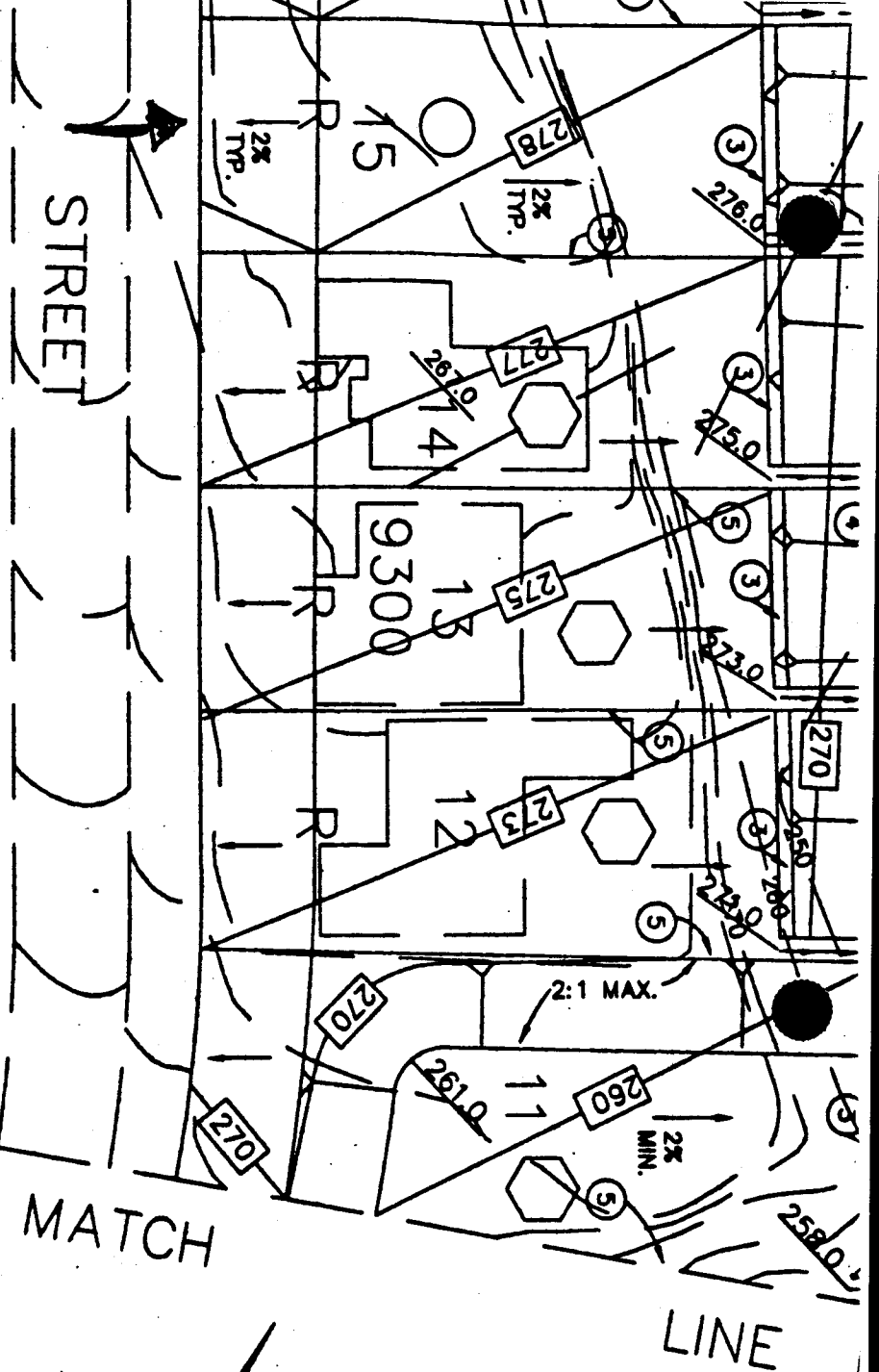
Subject
Property
STREET

De Pauw

EXHIBIT NO. 10a
APPLICATION NO.
final grading
599-405

J Vigil finish grading plan

Subject
Property



MATCH

LINE

J. Vigil Finish

Grading
Plan

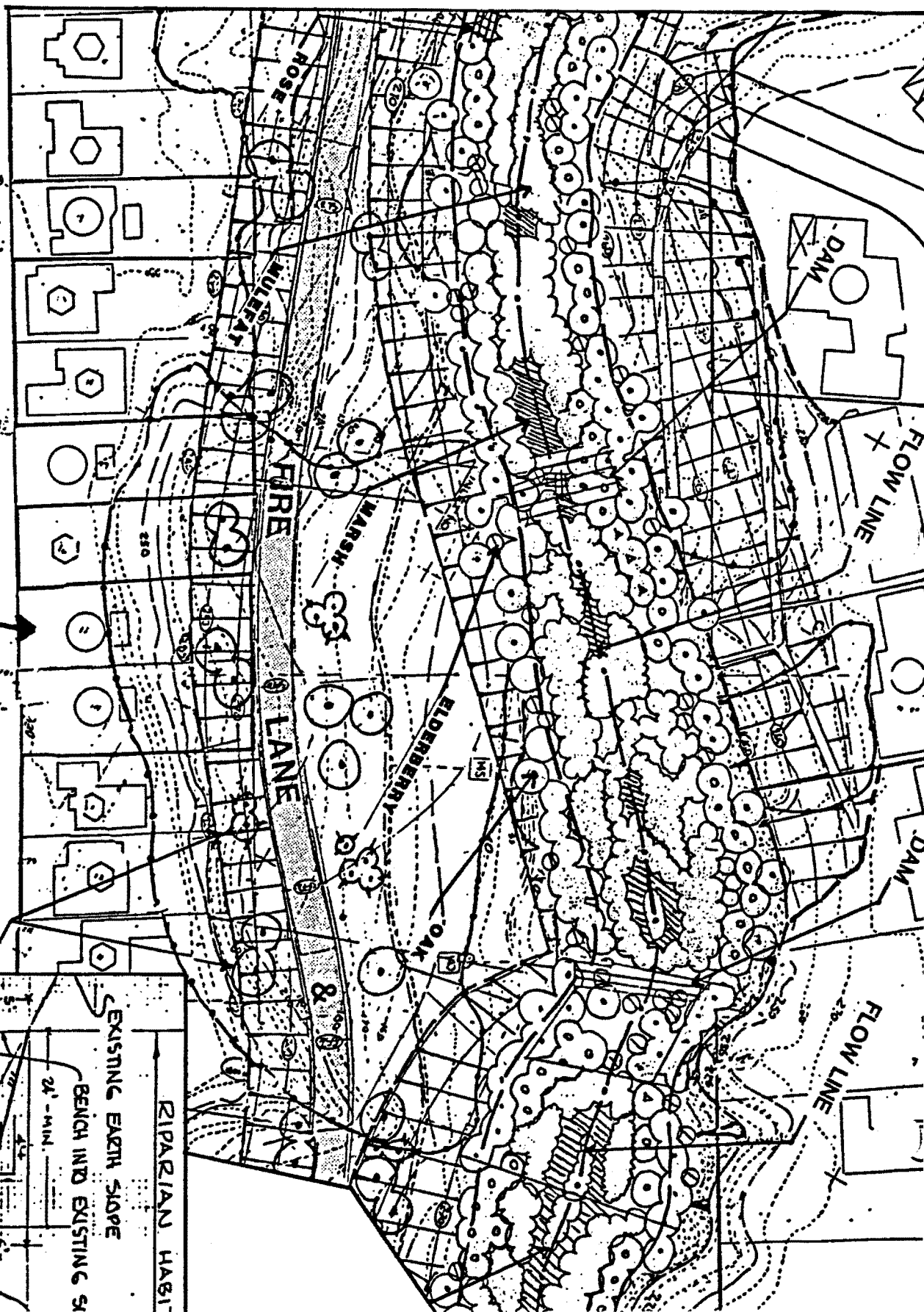
EXHIBIT NO. 106
APPLICATION NO.
Patrow & Sons
599.405

SCALE: 1" = 40'

SEE

2:1 MAX.

EXHIBIT NO. 11
APPLICATION NO.
5-99-405
Landscaping



required in 5-91-286A

Subject property

City
Revegetation plan

DE PAUL ST.

FIRE LANE

MARSH

ELDERBERRY

OAK

DAM

FLOW LINE

DAM

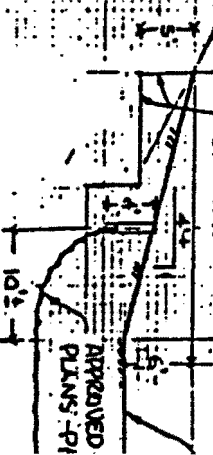
FLOW LINE

RIPARIAN HABITAT

EXISTING EARTH SLOPE

BENCH INTO EXISTING SLOPE

24' - MIN



TYPICAL SEC

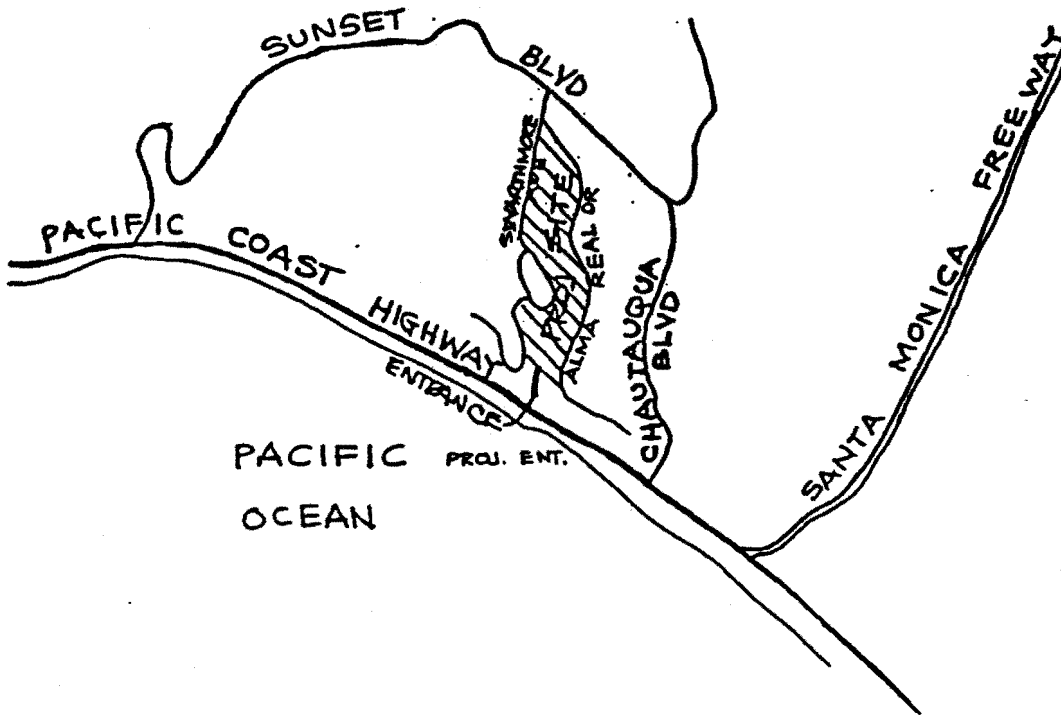
SCA

POTRERO CANYON RESTORATION

RECEIVED

AUG 9 1991

CALIFORNIA
COASTAL COMMISSION
SOUTH COAST DISTRICT



KEY MAP

L A THOMAS GUIDE

PAGE NO 40 - GRID - D4 & D5

EXHIBIT NO. 12^{pl}

APPLICATION NO.

5.99.405

Potrero plan

B

CIVIL ENGINEERS

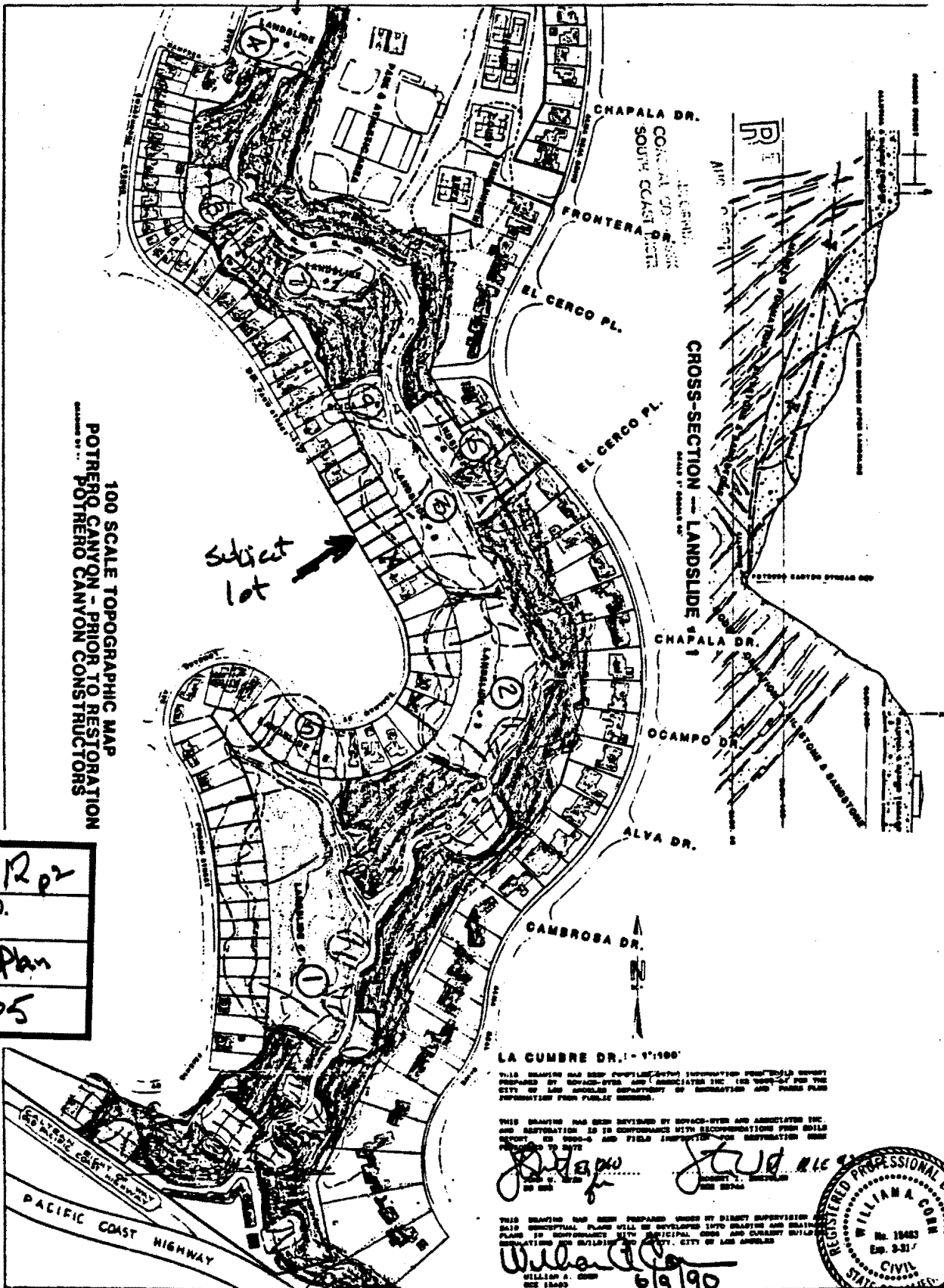
C

ENGINEERING CONSULTANT & CONSTRUCTION MANAGEMENT.

A

21822 SHERMAN WAY STE 102 CANOGA PARK, CA 91303

PHONE (818) 713 1050.



100 SCALE TOPOGRAPHIC MAP
 POTRERO CANYON - PRIOR TO RESTORATION
 DRAWN BY ... POTRERO CANYON CONSTRUCTORS

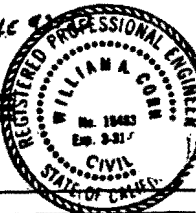
Subject lot

EXHIBIT NO. R₂
 APPLICATION NO.
 Potrero Plan
 599 4105

LA CUMBRE DR. 1" = 100'
 THIS DRAWING HAS BEEN COMPILED FROM INFORMATION PROVIDED BY THE CITY OF LOS ANGELES DEPARTMENT OF RECREATION AND PARKS AND FROM FIELD SURVEYS.

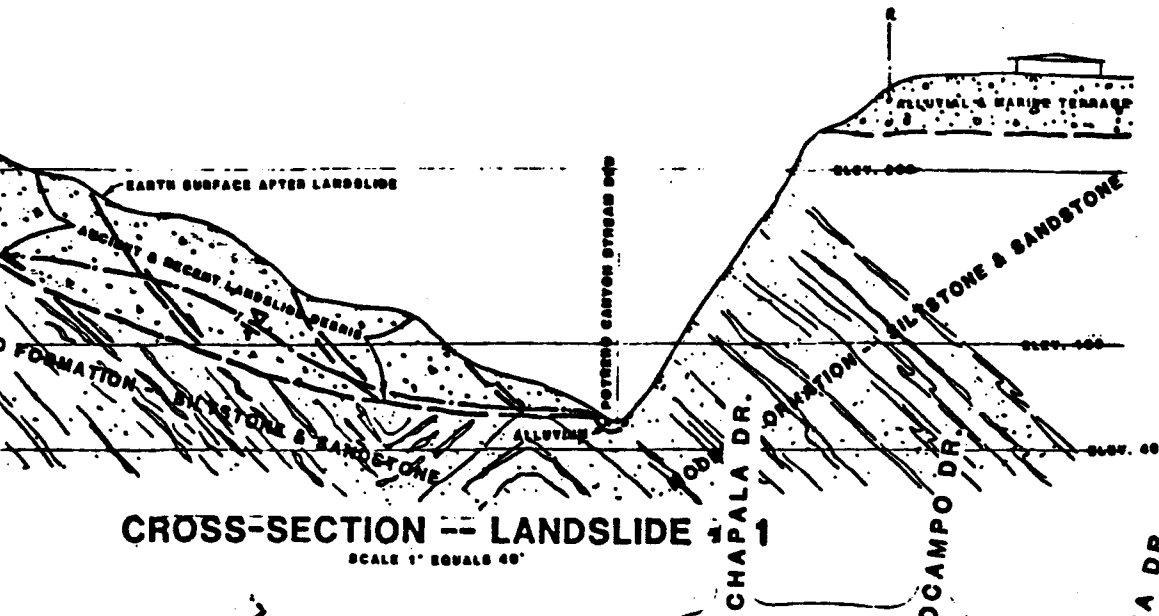
THIS DRAWING HAS BEEN REVIEWED BY ROYCE-DEYER AND ASSOCIATES INC. AND APPROVED AS TO ACCURACY AND FIELD SURVEY INFORMATION FOR THE CITY OF LOS ANGELES DEPARTMENT OF RECREATION AND PARKS.

THIS DRAWING HAS BEEN PREPARED UNDER THE DIRECT SUPERVISION OF WILLIAM A. COON AND IS SUBJECT TO THE CITY OF LOS ANGELES DEPARTMENT OF RECREATION AND PARKS.

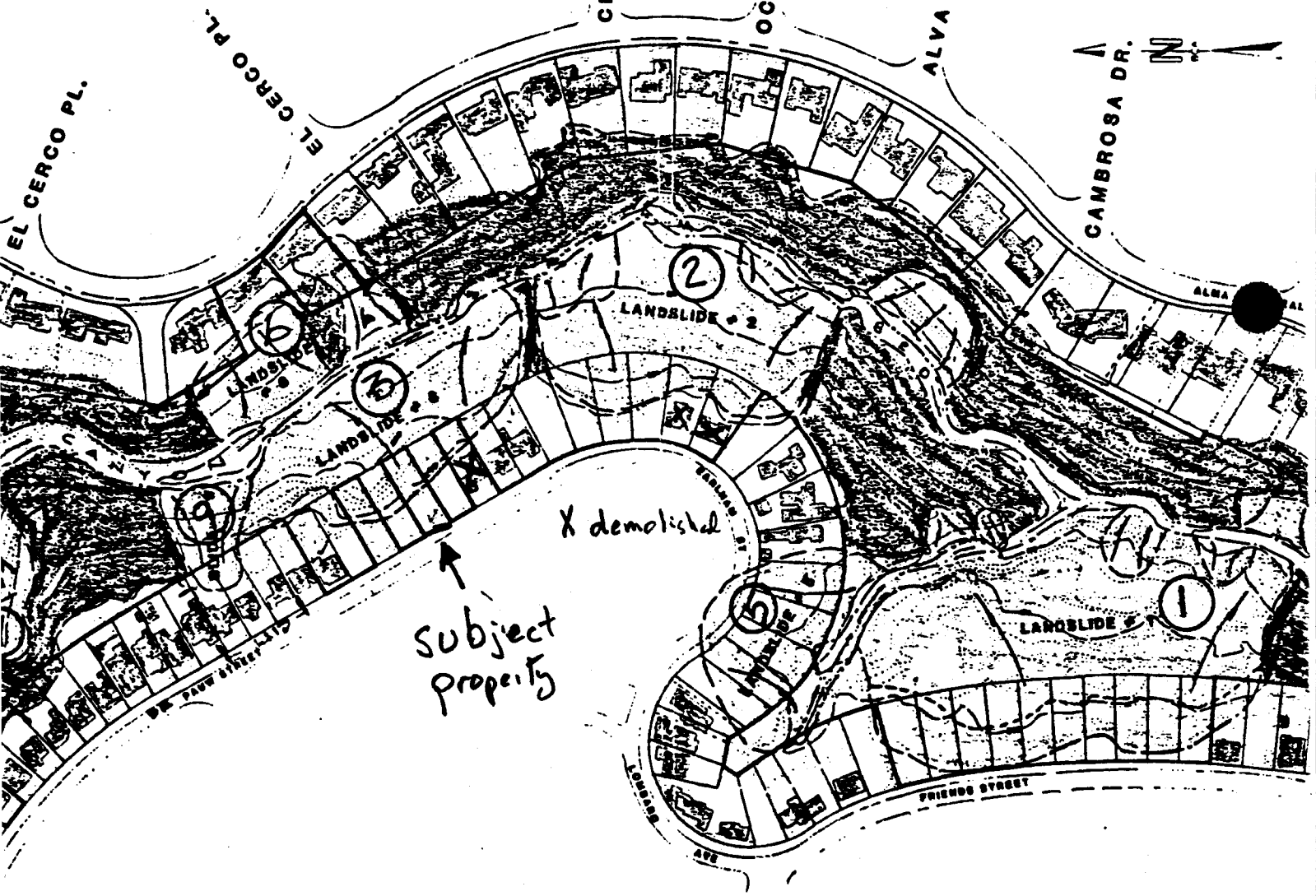


DATE	SCALE	PROJECT	CITY OF LOS ANGELES DEPARTMENT OF RECREATION AND PARKS	REGISTERED PROFESSIONAL ENGINEER WILLIAM A. COON No. 18483 Exp. 3-31-71 CIVIL STATE OF CALIF.
		GRADING AND DRAINAGE POTRERO CANYON PARK - BEFORE REPAIR		BCA CIVIL ENGINEERS 11022 BUSHWAY WAY, STE 102 CANOGA PARK, CA 91304 818-712-1000

LAYOUT FOR IDENTIFICATION OF LANDSLIDE FOR AERIAL PHOTOS



CROSS-SECTION -- LANDSLIDE #1
SCALE 1" EQUALS 40'



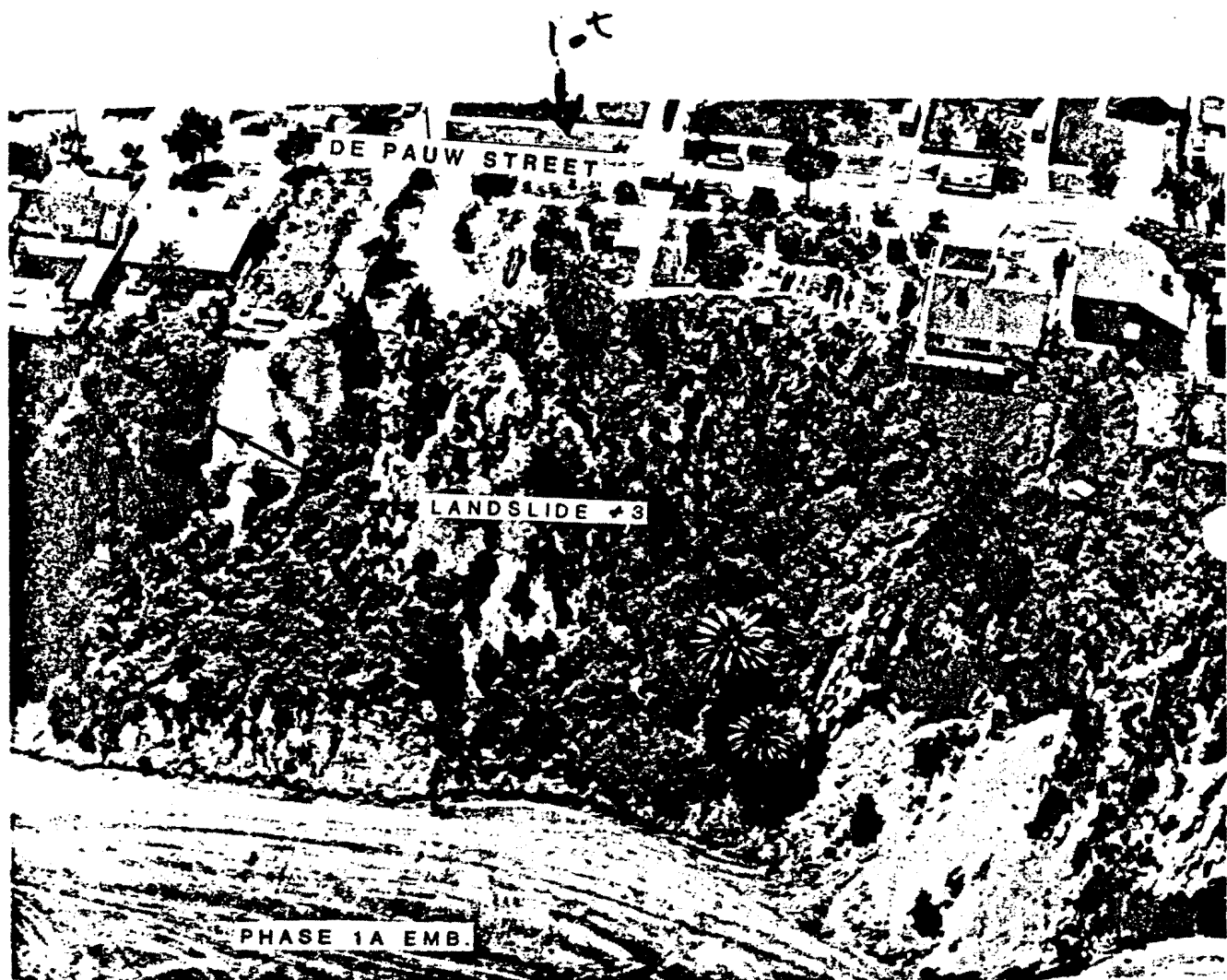
100 SCALE TOPOGRAPHIC MAP
POTRERO CANYON - PRIOR TO RESTORATION
GRADING BY -- **POTRERO CANYON CONSTRUCTORS**

EXHIBIT NO. 13
APPLICATION NO.
5-99 405
Potrero slides

BCA - CIVIL ENGINEERS

AERIAL PHOTOS - POTRERO CANYON - 5/16/60

FULL VIEW CLOSE-UP - LANDSLIDE No. 3.



NOTE THAT LANDSLIDE No. 3 HAS BEEN RESPONSIBLE FOR THE DEMOLITION OF SIX RESIDENCES, AND THE SLIDE IS VERY CLOSE TO RESIDENCES AT THE NORTH AND SOUTH END OF THE LANDSLIDE. FOUR OF THE SIX RESIDENTIAL LOTS WHERE THE HOMES WERE DEMOLISHED, HAVE BEEN PURCHASED BY THE CITY OF LOS ANGELES.

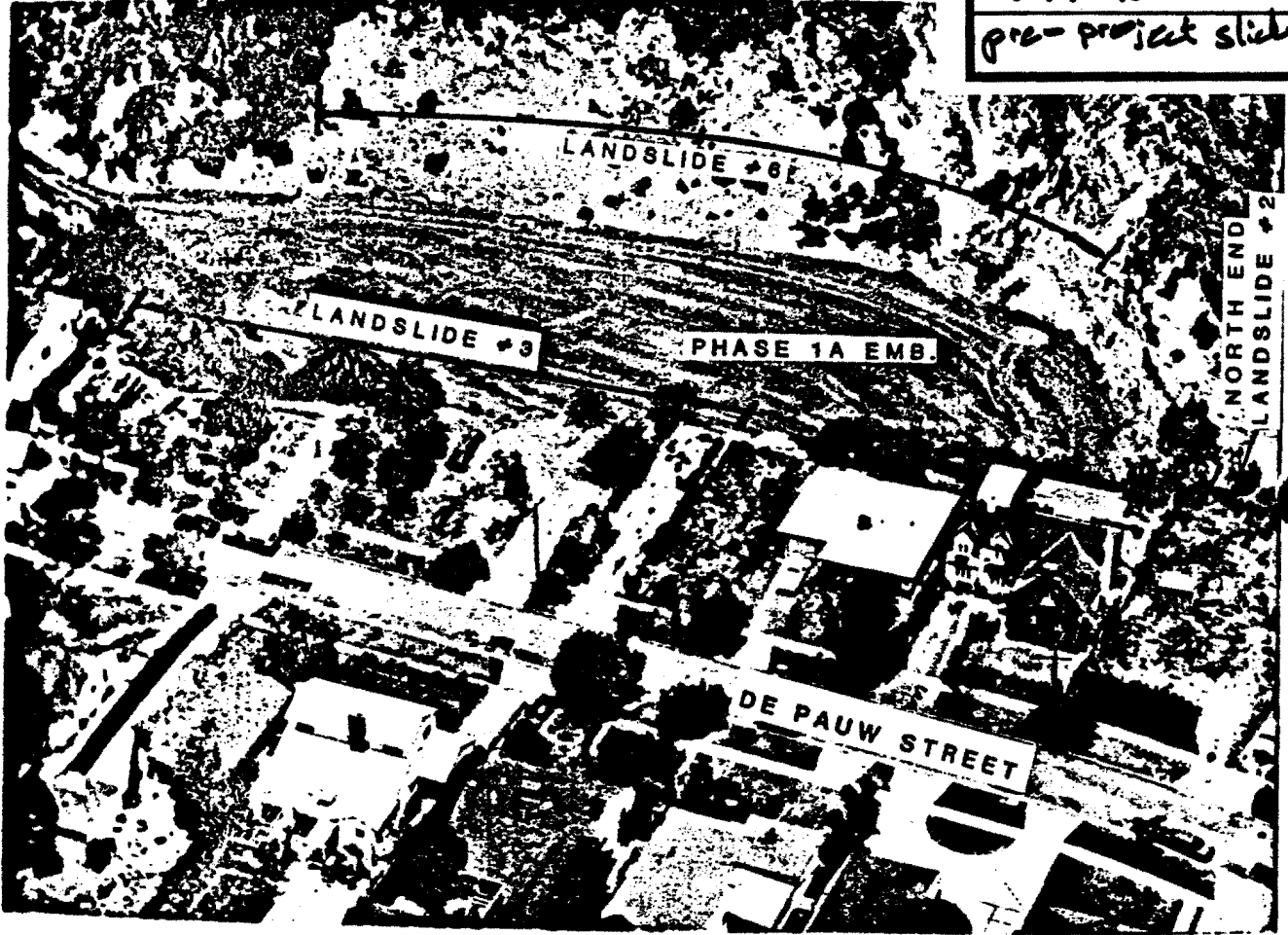
EXHIBIT NO. 17
APPLICATION NO.
599.405

BCA - CIVIL ENGINEERS

AERIAL PHOTOS - POTRERO CANYON - 5/16/91

LANDSLIDE No. 3, LOOKING EAST, AT THE TOP WHERE SIX RESIDENCES HAVE BEEN DEMOLISHED.

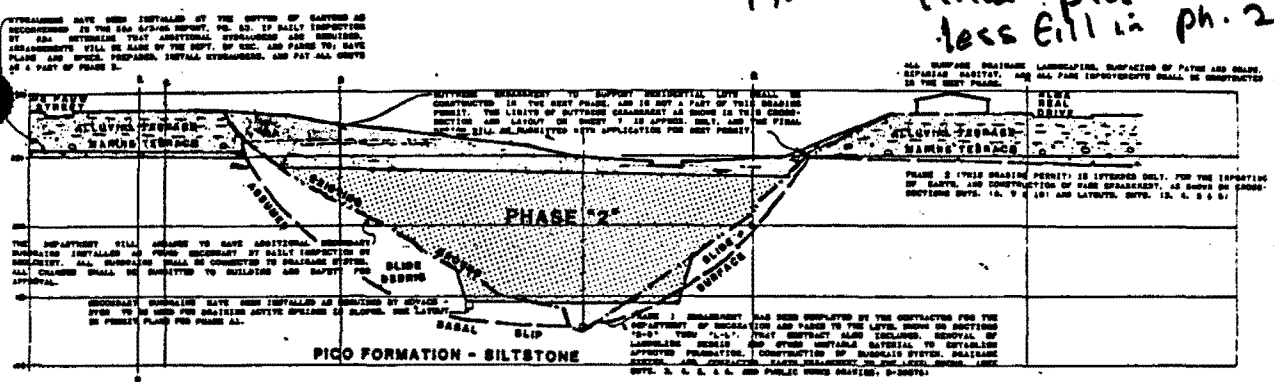
EXHIBIT NO. 15
APPLICATION NO.
5-99 405
pre-project slide



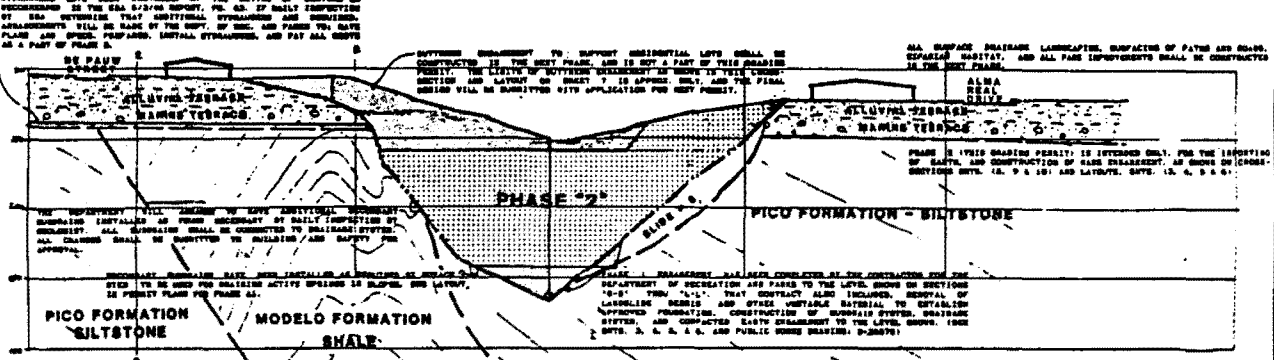
NOTE: THE NORTH END OF LANDSLIDE No. 2 IS EXTREMELY CLOSE TO THE EXISTING RESIDENCE.

PHASE 2 WHICH IS THE FOUNDATION FOR BUTTRESS AND EMBANKMENT FOR 2:1 BUTTRESSING OF LANDSLIDE No. 6 IS FIRST ORDER CONSTRUCTION TO SETTLE LAWSUIT, AND STABILIZE EXISTING HOMES.

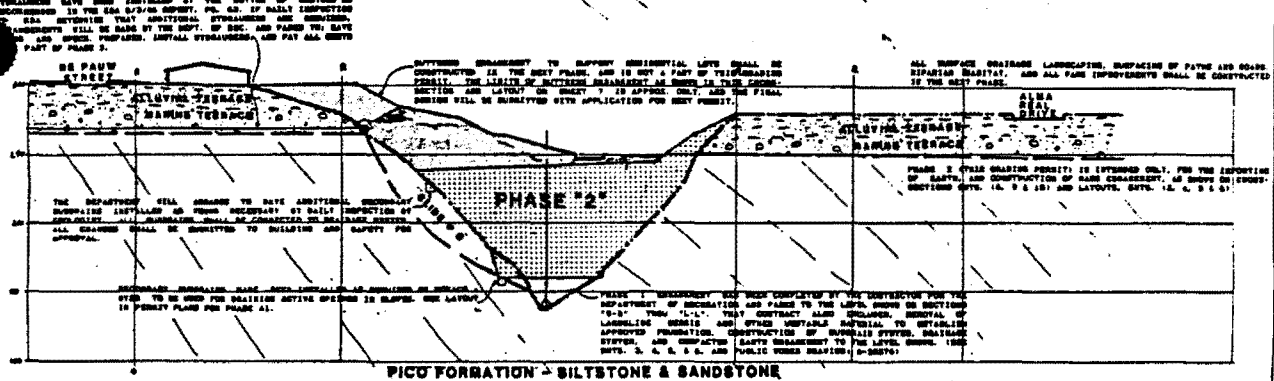
Note: final plan used less fill in ph. 2



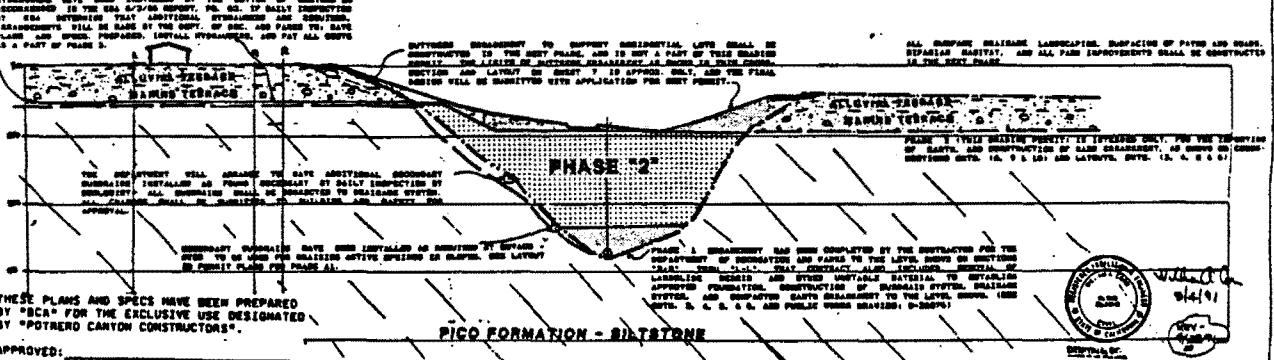
POTRERO CANYON STABILIZATION - SECTION "I-I"



POTRERO CANYON STABILIZATION - SECTION "J-J"



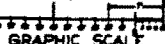
POTRERO CANYON STABILIZATION - SECTION "K-K"



POTRERO CANYON STABILIZATION - SECTION "L-L"

THESE PLANS AND SPECS HAVE BEEN PREPARED BY "BCA" FOR THE EXCLUSIVE USE DESIGNATED BY "POTRERO CANYON CONSTRUCTORS".

APPROVED:
 POTRERO CANYON CONSTRUCTORS
 GERRY CIBBS PROJECT MANAGER
 BRUCE - WILLARD L. BOSS GRAPHER - GERRY CIBBS
 CIVIL ENGINEERS
 CONTRACTING CONSULTANT & CONSTRUCTION MANAGEMENT
 4700 WILSON WAY STE 100 SAN DIEGO, CA 92108
 PHONE 619 594 1000



CITY OF LOS ANGELES, DEPARTMENT OF RECREATION AND PARKS, 200 NORTH MAIN STREET, ROOM 12	
PROJECT TITLE	POTRERO CANYON PARK DEVELOPMENT PHASE 2 MASS CONSTRUCTION OF EMBANKMENT & IMPROVEMENT
GENERAL MANAGER	DEPARTMENT OF RECREATION AND PARKS
DESIGNER	BRUCE - WILLARD L. BOSS GRAPHER - GERRY CIBBS
DATE	10/10/00
PROJECT ADDRESS	16100 PACIFIC COAST HIGHWAY



EXHIBIT NO. 16

APPLICATION NO.

599405

Potrero repair direct plan

**OCEAN TRAILS
PROHIBITED INVASIVE ORNAMENTAL PLANTS**

The species listed below are prohibited from use in landscaping on residential lots, parks, at the golf course clubhouse, and within the golf course proper. In addition to this list, all commercially available seed mixes are prohibited from use at Ocean Trails (variously called "grass mix", "turf mix", "wildflower mix", "meadow seed mix", and "pasture seed mix" mixes). Whenever a prohibited species is detected, the responsible party will be required to immediately remove the plant(s) and take appropriate measures to ensure non-recurrence of the plant species.

SCIENTIFIC NAME

COMMON NAME

<i>Acacia</i> sp. (all species)	Acacia
<i>Acacia cyclops</i>	Acacia
<i>Acacia dealbata</i>	Acacia
<i>Acacia decurrens</i>	Green Wattle
<i>Acacia longifolia</i>	Sidney Golden Wattle
<i>Acacia melanoxylon</i>	Blackwood Acacia
<i>Acacia redolens</i>	a.k.a. <i>A. Ongerup</i>
<i>Achillea millefolium</i> var. <i>millefolium</i>	Common Yarrow
<i>Agave americana</i>	Century plant
<i>Ailanthus altissima</i>	Tree of Heaven
<i>Aptenia cordifolia</i>	Red Apple
<i>Arctotheca calendula</i>	Cape Weed
<i>Arctotis</i> sp. (all species & hybrids)	African daisy
<i>Arundo donax</i>	Giant Reed or Arundo Grass
<i>Asphodelus fistulosus</i>	Asphodie
<i>Atriplex glauca</i>	White Saltbush
<i>Atriplex semibaccata</i>	Australian Saltbush
<i>Carpobrotus chilensis</i>	Ice Plant
<i>Carpobrotus edulis</i>	Hottentot Fig
<i>Centranthus ruber</i>	Red Valerian
<i>Chenopodium album</i>	Pigweed, Lamb's Quarters
<i>Chrysanthemum coronarium</i>	Annual chrysanthemum
<i>Cistus</i> sp. (all species)	Rockrose
<i>Cortaderia jubata</i> [<i>C. Atacamensis</i>]	Atacama Pampas Grass
<i>Cortaderia dioica</i> [<i>C. sellowana</i>]	Selloa Pampas Grass
<i>Cotoneaster</i> sp. (all species)	Cotoneaster
<i>Cynodon dactylon</i>	Bermuda Grass
<i>Cytisus</i> sp. (all species)	Broom
<i>Delosperma</i> 'Alba'	White Trailing Ice Plant
<i>Dimorphotheca</i> sp. (all species)	African daisy, Cape marigold, Freeway daisy
<i>Drosanthemum floribundum</i>	Rosea Ice Plant
<i>Drosanthemum hispidum</i>	Purple Ice Plant
<i>Eucalyptus</i> (all species)	Eucalyptus
<i>Eupatorium coelestinum</i> [<i>Ageratina</i> sp.]	Mist Flower
<i>Foeniculum vulgare</i>	Sweet Fennel
<i>Gazania</i> sp. (all species & hybrids)	Gazania
<i>Genista</i> sp. (all species)	Broom
<i>Hedera canariensis</i>	Algerian Ivy
<i>Hedera helix</i>	English Ivy

EXHIBIT NO. 17, p1
APPLICATION NO.
5-99 405
Invasive Plant List

<i>Ipomoea acuminata</i>	Blue dawn flower,
	Mexican morning glory
<i>Lampranthus spectabilis</i>	Trailing Ice Plant
<i>Lantana camara</i>	Common garden lantana
<i>Limonium perezii</i>	Sea Lavender
<i>Linaria bipartita</i>	Toadflax
<i>Lobularia maritima</i>	Sweet Alyssum
<i>Lonicera japonica</i> 'Halliana'	Hall's Honeysuckle
<i>Lotus corniculatus</i>	Birdsfoot trefoil
<i>Lupinus</i> sp. (all non-native species)	Lupine
<i>Lupinus arboreus</i>	Yellow bush lupine
<i>Lupinus texanus</i>	Texas blue bonnets
<i>Malephora crocea</i>	Ice Plant
<i>Malephora luteola</i>	Ice Plant
<i>Mesembryanthemum crystallinum</i>	Crystal Ice Plant
<i>Mesembryanthemum nodiflorum</i>	Little Ice Plant
<i>Myoporum laetum</i>	Myoporum
<i>Nicotiana glauca</i>	Tree Tobacco
<i>Oenothera berlandieri</i>	Mexican Evening Primrose
<i>Olea europea</i>	Olive tree
<i>Opuntia ficus-indica</i>	Indian fig
<i>Osteospermum</i> sp. (all species)	Trailing African daisy, African daisy,
	Cape marigold, Freeway daisy
<i>Oxalis pes-caprae</i>	Bermuda Buttercup
<i>Pennisetum clandestinum</i>	Kikuyu Grass
<i>Pennisetum setaceum</i>	Fountain Grass
<i>Phoenix canariensis</i>	Canary Island date palm
<i>Phoenix dactylifera</i>	Date palm
<i>Plumbago auriculata</i>	Cape leadwort
<i>Ricinus communis</i>	Castorbean
<i>Rubus procerus</i>	Himalayan blackberry
<i>Schinus molle</i>	California Pepper Tree
<i>Schinus terebinthifolius</i>	Florida Pepper Tree
<i>Senecio mikanioides</i>	German Ivy
<i>Spartium junceum</i>	Spanish Broom
<i>Tamarix chinensis</i>	Tamarisk
<i>Trifolium fragiferum</i>	Strawberry clover
<i>Tropaelolum majus</i>	Nasturtium
<i>Ulex europaeus</i>	Prickley Broom
<i>Vinca major</i>	Periwinkle

EXHIBIT NO. 17 _{p2}
APPLICATION NO.
5-99 405
Invasive Plants

EXHIBIT NO. 18
APPLICATION NO.
5-294DS
geo report pb

April 8, 1998
GH8179-G
Page 6

An interim compaction report for Potrero Canyon Park Stabilization Fill Project No. 1012B was prepared by the J. Byer Group, Inc., Job No. JB15600-B, dated June 20, 1995. This report summarizes the results of compaction testing and field observation during grading in a portion of the canyon. The purpose of the compaction testing was to determine that grading specifications on the plan and the requirements of the City of Los Angeles Building Code were met. The compacted fill was placed to stabilize portions of canyon slopes and landslides within Potrero Canyon. The grading covered in this report consisted of fill placement in the vicinity of slides 2 and 3. Slide 3 is the landslide located beneath the subject property.

Byer reports that the first bottom of Slide 3 was observed by their geologist on September 23, 1993, and that the bottom was approximately 180 feet by 30 feet. The bottom was identified as bedrock by the geologist. A second bottom was established at an elevation of 206 feet and was approved on June 2, 1994. This second bottom primarily exposed previously compacted fill. A subdrain was noted as being placed at the daylight line of the bottom of Slide 3. The subdrain was reportedly trenched into bedrock and firm slide debris. This suggests that some slide debris remains beneath the fill in Slide Area 3. The subdrain pipe was covered with a 3/4-inch crushed-rock blanket as directed by the geologist. The subdrain was then connected into an existing subdrain system. The subdrain was observed and approved by a representative of the J. Byer Group.

A City of Los Angeles review letter, dated August 4, 1995, was issued regarding the June 20, 1995, report by the J. Byer Group. Approval was granted for the fill as a non-structural fill which was not to be used for support of structures.

EXHIBIT NO. 19
APPLICATION NO.
5-99 405
Geo report p 10

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firm to firm. The compacted fill below the surface layer consists of sand which is light brown, slightly moist, and contains minor pebbles and cobbles. The thickness of the compacted fill increases rapidly to the east toward the canyon. The contact between the compacted fill and terrace/bedrock is slightly steeper than 1:1, based on our review of available data. John Byer reported to the undersigned that the backcut gradient was approximately 1:1.

Soil

A thin soil veneer is located near the ground surface on the western portion of the property. This soil is blanketed by the thin uncompacted fill. The soil consists of clayey silt which is brown to dull red-brown, moist, and medium firm to firm. The thickness of the soil encountered ranges from 1 to 2 feet.

Landslide Debris

Some landslide debris apparently remains beneath the compacted fill placed for the Potrero Canyon Park Stabilization. The landslide debris, as described in Boring 5 excavated by Kovacs-Byer and Associates during their 1986 investigation for the stabilization fill, consists of a mixture of silty sand, disturbed terrace deposits, and bedrock. The depth of the slide debris as encountered in Boring 5 was 47 feet. The majority of the slide debris was removed as part of fill placement. We are not certain whether the landslide debris which remains is located below the fill on the subject property or below the fill within the park boundaries. KBA reported that the deeper landslide debris was well consolidated.

EXHIBIT NO. 20
APPLICATION NO.
5-94 405
Geo report #15

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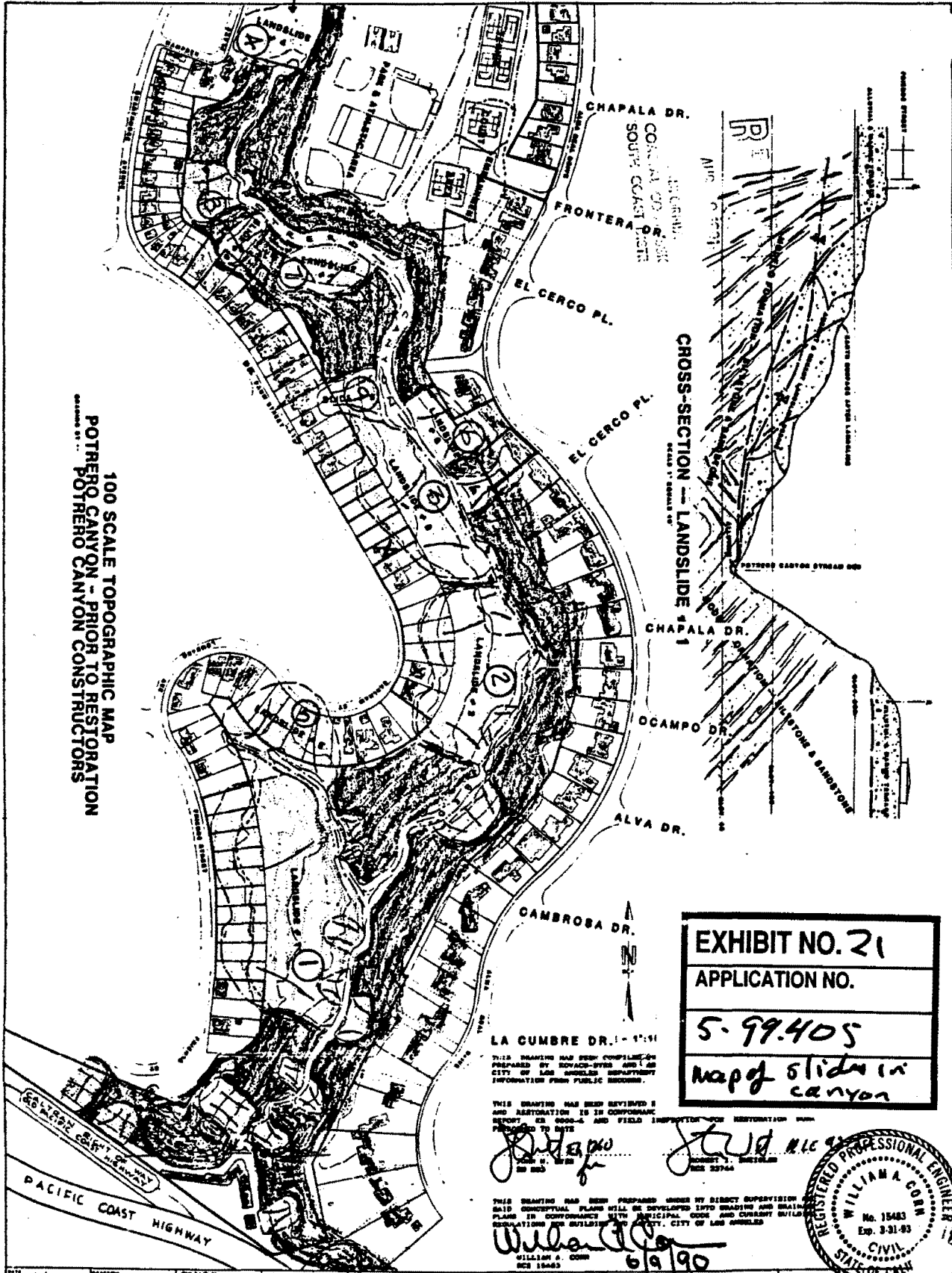
All continuous footings should be reinforced with four #4 steel bars, two placed near the top and two placed near the bottom of the footings. Footings greater than 3 feet in depth should be provided with vertical reinforcement consisting of #4 steel bars spaced 24 inches on center. Continuous footings should not exceed a total depth of 5 feet. Footings should be cleaned of all loose material, moistened, and free of shrinkage cracks prior to placing concrete. Footing spoils should not be cast over the face of the descending slope.

The footing trenches should be pre-saturated to a minimum of 120 percent of optimum moisture to a depth of 18 inches prior to pouring concrete.

Deepened Foundations - Friction Piles

Friction piles may be used to support any portion of the residence which extends beyond the contact between the alluvial terrace and the certified compacted, non-structural fill. The piles should be a minimum of 24 inches in diameter, a minimum of 10 feet into terrace, and a minimum of 10 horizontal feet to the contact between the terrace and the compacted, non-structural fill.

Piles may be assumed fixed at 4 feet into terrace. The piles may be designed for a skin friction 400 pounds per square foot for that portion of pile in contact with the terrace. All piles should be tied in two horizontal directions with grade beams. Spoils from pile excavations should not be cast over the face of the descending slope.



100 SCALE TOPOGRAPHIC MAP
 POTRERO CANYON - PRIOR TO RESTORATION
 POTRERO CANYON CONSTRUCTORS

EXHIBIT NO. 21
APPLICATION NO.
5-99405
 Map of slides in
 canyon

LA CUMBRE DR. - 1941
 THIS DRAWING HAS BEEN COMPILED OR
 PREPARED BY EDWARD STEIN AND IS
 NOT TO BE USED FOR ANY PURPOSES
 WITHOUT THE WRITTEN PERMISSION OF
 THE CITY OF LOS ANGELES.

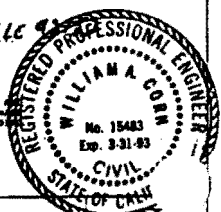
THIS DRAWING HAS BEEN REVISED AND
 RESTORATION IS IN CONFORMANCE
 WITH THE CITY OF LOS ANGELES
 ORDINANCES AND FIELD INSPECTION
 REPORTS TO DATE.

John H. Stein
 JOHN H. STEIN
 1941

William A. Comp
 WILLIAM A. COMP
 1941

THIS DRAWING HAS BEEN PREPARED UNDER MY DIRECT SUPERVISION
 AND CONCEPTUAL PLANS WILL BE DEVELOPED INTO GRADING AND DRAINAGE
 PLANS IN CONFORMANCE WITH ORIGINAL CODE AND CURRENT BUILDING
 REGULATIONS AND BUILDING DEPARTMENT, CITY OF LOS ANGELES.

William A. Comp
 WILLIAM A. COMP
 6/9/90
 15483



DATE	10/10/90	PROJECT	GRADING AND DRAINAGE POTRERO CANYON PARK - BEFORE REPAIR	FOR	CITY OF LOS ANGELES DEPARTMENT OF RECREATION AND PARKS	BY	BCA CIVIL ENGINEERS
ENGINEERING CONSULTANTS 11222 SHORREN WAY - STE 102 CANOGA PARK, CA 91301 818-712-1020							

LAYOUT FOR IDENTIFICATION OF LANDSLIDE FOR AERIAL PHOTOS

EXHIBIT NO. 20
APPLICATION NO.
5-99 405
Geo report p 15

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Page 15

All continuous footings should be reinforced with four #4 steel bars, two placed near the top and two placed near the bottom of the footings. Footings greater than 3 feet in depth should be provided with vertical reinforcement consisting of #4 steel bars spaced 24 inches on center. Continuous footings should not exceed a total depth of 5 feet. Footings should be cleaned of all loose material, moistened, and free of shrinkage cracks prior to placing concrete. Footing spoils should not be cast over the face of the descending slope.

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100 SCALE TOPOGRAPHIC MAP
 POTRERO CANYON - PRIOR TO RESTORATION
 DRAWING BY POTRERO CANYON CONSTRUCTORS

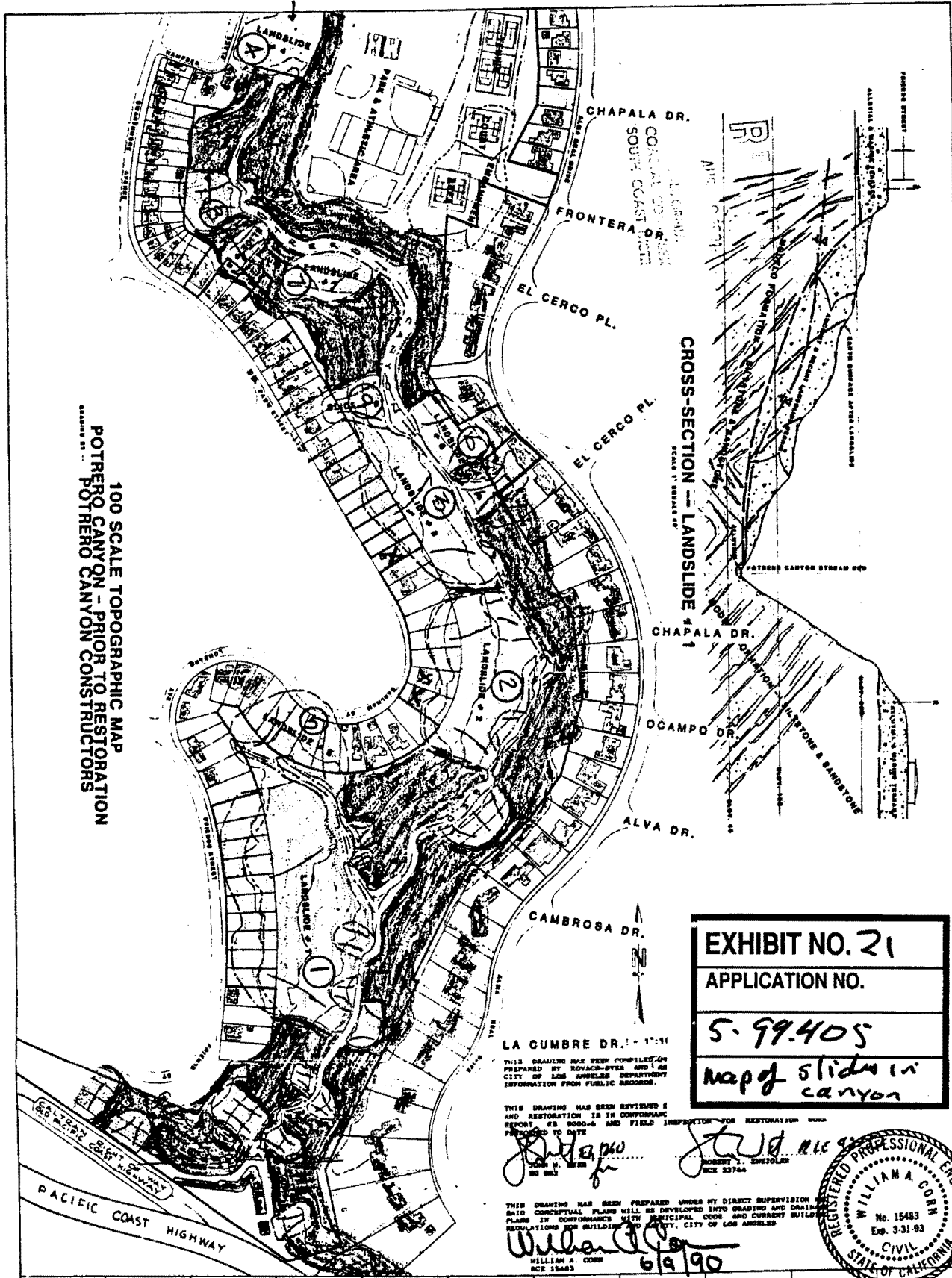
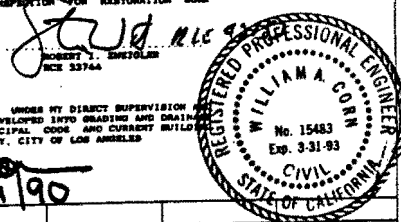


EXHIBIT NO. 21
 APPLICATION NO.
 5-99405
 Map of slides in canyon

THIS DRAWING HAS BEEN COMPILED OR PREPARED BY SURVEYORS AND LAND SURVEYORS OF THE CITY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS INFORMATION FROM PUBLIC RECORDS.

THIS DRAWING HAS BEEN REVIEWED AND RESTORATION IS IN CONFORMANCE WITH REPORT 88 0000-6 AND FIELD INSPECTION FOR RESTORATION WORK PREPARED TO DATE

[Signature]
 WILLIAM A. CORN
 NCE 15483



THIS DRAWING HAS BEEN PREPARED UNDER MY DIRECT SUPERVISION AND CONCEPTUAL PLANS WILL BE DEVELOPED INTO GRADING AND DRAINAGE PLANS IN CONFORMANCE WITH MUNICIPAL CODE AND CURRENT BUILDING REGULATIONS FOR BUILDING AND CITY OF LOS ANGELES

[Signature]
 WILLIAM A. CORN
 NCE 15483
 6/9/90

DATE	PROJECT	DISTRICT	SECTION	NO.	DATE	BY	SCALE
	GRADING AND DRAINAGE POTRERO CANYON PARK - BEFORE REPAIR						
CITY OF LOS ANGELES DEPARTMENT OF RECREATION AND PARKS				BCA CIVIL ENGINEERS			
				CONSTRUCTION MANAGEMENT 11555 SHERMAN WAY - STE 107 CAROLINA PARK, CA 91302, TEL. 715-1059			

LAYOUT FOR IDENTIFICATION OF LANDSLIDE FOR AERIAL PHOTOS

