CALIFORNIA COASTAL COMMISSION
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Staff: MS/LB
Staff Report: February 12, 2002
Hearing Date: March 5-8, 2002
Commission Action:

STAFF REPORT: REVISED FINDINGS

APPLICATION NUMBER: 5-01-409

APPLICANT: Robert and Nancy Conger

AGENT: GWC Architects, Attn: Gerald Compton

PROJECT LOCATION: 501 Paseo de la Playa, City of Torrance, Los Angeles Co.

DESCRIPTION OF PROJECT PREVIOUSLY APPROVED: Interior remodel and construction of a 591 square foot, 12.5-foot high first story addition at the rear of an existing 3,152 square foot, two-story single family residence on the bluff top, and construction of three retaining walls, a 404 square foot patio area with spa and stairs, and a 281 square foot wood deck located 12 inches above existing grade on the bluff top in the rear yard of a 27,780 square foot, R-1 zoned bluff lot. A total of 8.9 cubic yards of excavation and fill would be required to install the spa, and 34.8 cubic yards of excavation and fill would be required for the proposed patio, stairs and footings.

DATE OF COMMISSION ACTION: November 13, 2001

COMMISSIONERS ON PREVAILING SIDE: Commissioners Dettloff, Allgood, Lee, McCoy, Orr, Rose & Chairman Wan

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SUMMARY OF STAFF RECOMMENDATION:

Staff recommends that the Commission adopt the following revised findings in support of the Commission's action of November 13, 2001 approving the construction of a first story addition, patio area with spa and stairs and wood deck located on bluff top seaward of existing single family residence. All development was approved subject to 10 special conditions. In approving the project, the Commission revised Special Condition #6 to also include that landscaping be monitored and a report submitted at the end of five years on the current conditions (Special Condition 6b – Page 6). The findings have been revised on **page 12** (first paragraph following quote) to reflect the addition to Special Condition number six.

PROJECT SPECIFICS:

Lot Area:	27,780 sq. ft.
Building Coverage:	2,802 sq. ft.
Pavement Coverage:	1,890 sq. ft.
Landscape Coverage:	1,788 sq. ft.
Parking Spaces:	2
Land Use Designation:	R-1, Low Density Residential
Ht above final grade:	12.5 feet (addition only)

LOCAL APPROVALS RECEIVED: Approval in concept from the City of Torrance, 12/13/99.

SUBSTANTIVE FILE DOCUMENTS:

1. City of Torrance Land Use Plan, certified with suggested modifications 1981.
2. Regional Interpretive Guidelines for Los Angeles County, adopted October 14, 1980.
3. Coastal Development Permits P-4-20-77-716 (Warren); A-79-4879 (McGraw); 5-83-618 (Fire); 5-84-187 & amendment (Briles); 5-85-183 (Hall); 5-85-755 (Briles); 5-90-506 (Stamegna); 5-90-868 (Schreiber); 5-90-1041 & amendments (Campbell); 5-90-1079 & 5-91-697 (Wright); 5-96-167 (Lichter); 5-97-050 (Kreag); and 5-99-456 (Conger), 4-99-211 (Lever), 5-00-228 (Hopkins)
4. Emergency permits: 5-98-524-G (Penfil), 5-99-419-G (Lynn), 5-99-351-G (McMurray), 5-99-230-G (Ocean Trails),
5. *Wave Impact Study, 501 Paseo de la Playa, Torrance, CA* prepared by Skelly Engineering dated March 2001.
6. *Geological Investigation for Proposed Residential Improvements, 501 Paseo de la Playa, Torrance, California* (Project No. 4705-00) prepared by Keith W. Ehlert, Consulting Engineering Geologist dated July 11, 2000.
7. *Geotechnical Engineering Investigation Report – Proposed Spa, Deck and Exterior of House, 501 Paseo de la Playa, Redondo Beach, California* (Project No. 1601C-070) prepared by Coastline Geotechnical Consultants, Inc. dated August 8, 2000.
8. Mark Johnsson, Senior Geologist, California Coastal Commission: Geologic Review Memorandum Re: Conger CDP application (5-01-409), July 12, 2001
9. Jon Allen, Staff Ecologist, Memorandum: "El Segundo Blue Butterflies on Conger Property;" July 23, 2001
10. Gail Kobetich and Chris Nagano, United Stated Fish and Wildlife Service, "Endangered El Segundo Blue Butterfly and Restoration Program at 433 Paseo de la Playa, Torrance," October, 5, 1995
11. *Supplemental Geotechnical Engineering Report for Proposed Spa, Deck and Exterior of House, 501 Paseo de la Playa, Redondo Beach, California* (Project No. 1601C-071) prepared by Coastline Geotechnical Consultants, Inc. dated August 21, 2001.
12. *Original Topography Report – Soils Investigation & Slope Stability Analysis for 501 Paseo de la Playa, Redondo Beach, California* prepared by Keith W. Ehlert, Consulting Engineering Geologist dated September 14, 2001.
13. Mark Johnsson, Senior Geologist, California Coastal Commission: Geologic Review Memorandum Re: Conger CDP application (5-01-409), dated September 18, 2001.

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following motion and resolution:

MOTION: ***"I move that the Commission adopt the revised findings in support of the Commission's action of November 13, 2001 in approving coastal development permit application 5-01-409 with conditions."***

Staff recommends a **YES** vote on the motion. Passage of this motion will result in the adoption of revised findings as set forth in this staff report. The motion requires a majority vote of the members from the prevailing side present at the November 13, 2001 hearing, with at least three of the

prevailing members voting. Only those Commissioners on the prevailing side of the Commission's action are eligible to vote on the revised findings.

RESOLUTION:

The staff recommends that the Commission adopt the following resolution:

The Commission hereby adopts the findings set forth below for coastal development permit application 5-01-409 on the grounds that the findings support the Commission's decision made on November 13, 2001, and accurately reflect the reasons for it.

II. Standard Conditions

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. Expiration. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

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

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

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

III. Special Conditions

1. Extent of Approved Development

Coastal Development Permit 5-01-409 permits the construction of a 591 square foot, 12.5-foot high first-story addition at the rear of an existing 3,152 square foot, two-story single family residence on the bluff top, and construction of three retaining walls, a 404 square foot patio area with spa and stairs, and a 281 square foot wood deck located 12 inches above the existing grade on the bluff top in the rear yard of a 27,780 square foot, R-1 zoned bluff lot. The proposed deck is cantilevered over the existing swale. Accordingly, no bluff face path or any other development seaward of the existing swale shall occur.

The permittee shall construct and maintain the proposed project consistent with the approved plans. Any proposed change in use or other deviation from the approved plans shall be submitted for review by the Executive Director to determine whether an amendment to this coastal development permit is necessary pursuant to the requirements of the Coastal Act and the California Code of Regulations. If the Executive Director determines that an amendment is

necessary, no changes shall be made until the permit is amended by the Commission and issued by the Executive Director.

2. 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 landslide, bluff retreat, erosion and/or earth movement, (ii) to assume the risks to 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 obtain recordation by the property owner of 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 applicants' 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.

3. No Future Protective Device

A) By acceptance of this permit, the applicants agree, on behalf of themselves and all successors and assigns, that no bluff or shoreline protective device(s) shall ever be constructed to protect the subject property approved pursuant to Coastal Development Permit 5-01-409, including future improvements, in the event that the property is threatened with damage or destruction from erosion, landslide, waves, storm conditions or other natural hazards in the future. By acceptance of this permit, the applicants hereby waive, on behalf of themselves and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235.

B) **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicants shall obtain recordation by the property owner of a deed restriction, in a form and content acceptable to the Executive Director, which reflects the above restriction on development. The deed restriction shall include a legal description of the applicants' 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 Plans to Recommendations and Requirements

A) All final design and construction plans shall meet or exceed all recommendations and requirements contained in Geological Investigation Report No. 4705-00 prepared by Keith W. Ehlert, Consulting Engineering Geologist, dated July 11, 2000, Geotechnical Engineering Investigation Report No. 1601C-070 prepared by Coastline Geotechnical Consultants, Inc. dated August 8, 2000, Wave Impact Study prepared by Skelly Engineering dated March 2000 and the

requirements of the City of Torrance, Department of Building and Safety, to the extent that they are consistent with the conditions imposed by the Commission.

B) The permittees 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 of this coastal development permit unless the Executive Director determines that no amendment is required.

5. Future Improvements

A) This permit is only for the development approved in Coastal Development Permit 5-01-409. Pursuant to Title 14 California Code of Regulations, section 13250(b)(6), the exemptions otherwise provided in Public Resources Code Section 30610(a) shall not apply. Accordingly, any future improvements located on the subject portion of the parcel, except for a property line fence, and landscaping installed pursuant to a landscaping plan approved pursuant to condition 6 below, but otherwise including, but not limited to repair and maintenance and/or the installation or removal of ground cover or landscaping identified as not requiring a permit in Public Resources section 30610(d) and Title 14 California Code of Regulations sections 13252(a)-(b), which are proposed within the restricted area shall require an amendment to Permit 5-01-409 from the Commission or shall require an additional coastal development permit from the Commission.

B) **Prior to Issuance of the Coastal Development Permit**, the applicant shall obtain recordation by the property owner of 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.

6. Landscape Plan

A) **Prior to issuance of a Coastal Development Permit**, the applicant shall submit a landscaping plan prepared by a professionally licensed landscape architect or resource specialist, for review and approval by the Executive Director. The plan shall include, at a minimum, the following components: a map showing the type, size, and location of all plant materials that will be installed on the previously disturbed portions of the site: the areas around the house and the area between the house and the drainage swale.

(a) On the portion of the lot disturbed by the approved construction, the applicant shall employ only low water use plants. The applicant shall not install invasive plants listed by the California Native Plant Society, Santa Monica Mountains Chapter, in their document entitled Recommended List of Plants for Landscaping in the Santa Monica Mountains, dated January 20, 1992, those listed in the "Ocean Trails Invasive Plants list" and those plants identified by the United States Fish and Wildlife Service as having potentially negative effects on the Malaga Cove habitat (notably *Eriogonum fasiculatum.*)

(b) The applicants shall not direct drainage or irrigation from the addition onto the bluff face, or stockpile or store equipment on the bluff face or beach.

(c) No irrigation, planting or excavation shall occur on the bluff face without an amendment to this coastal development permit.

B) Five years from the date of issuance of Coastal Development Permit No. 5-01 409, the applicant shall submit for the review and approval of the Executive Director, a monitoring report, prepared by a licensed biologist, landscape architect or qualified resource specialist, that certifies the on-site landscaping is in conformance with the landscaping plan approved pursuant to this special condition. The monitoring report shall include photographic documentation of plant species, plant coverage and an evaluation of the conformance of the resultant landscaping with the requirements of this special condition.

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

C) 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.

7. Erosion and Drainage Control

A) **Prior to Issuance of the Coastal Development Permit,** the applicant shall submit, for review and approval of the Executive Director, a plan for erosion and drainage control.

1) Erosion and Drainage Control Plan

(a) The erosion and drainage control plan shall demonstrate that:

- *During construction, erosion on the site shall be controlled to avoid adverse impacts on adjacent properties, the beach, and the bluff face.*
- The following temporary erosion control measures shall be used during construction: temporary sediment basins (including debris basins, desilting basins or silt traps), temporary drains and swales, sand bag barriers, silt fencing, stabilize any stockpiled fill with geofabric covers or other appropriate cover, install geotextiles or mats on all cut or fill slopes, and close and stabilize open trenches as soon as possible.
- Permanent erosion and drainage control measures shall be installed to ensure the stability of the site, adjacent properties, and public streets.
- The erosion and drainage control plans shall show all roof drainage from the addition.

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

- 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.
- A site plan showing the location of all temporary erosion control measures.

- A schedule for installation and removal of the temporary erosion control measures.
- A written review and approval of all erosion and drainage control measures by the applicant's engineer and/or geologist.
- A written agreement indicating where all excavated material will be disposed and acknowledgement that any construction debris disposed within the coastal zone requires a separate coastal development permit.

(c) The permanent site drainage control plan shall demonstrate that:

- Run-off from the project shall not increase the sediment or pollutant load in the storm drain system above pre-development levels.
- All run-off from all roofs, patios, driveways and other impervious surfaces on the site shall be collected and discharged to the street to avoid ponding and/or erosion either on or off the site.
- Run-off from spa maintenance shall be directed with a pump to the street.

(d) The drainage control plan shall include, at a minimum, the following components:

- The location, types and capacity of pipes, drains and/or filters proposed.
- A schedule for installation and maintenance of the devices.
- A site plan showing finished grades at two-foot contour intervals and drainage improvements.

(e) These erosion and drainage control measures shall be required to be in place and operational on the project site prior to or concurrent with the initial grading operations and maintained throughout the development process to minimize erosion and sediment from the runoff waters during construction. All sediment shall be retained on-site unless removed to an appropriately approved dumping location either outside the coastal zone or to a site within the coastal zone permitted to receive fill.

(f) The plan shall also include temporary erosion control measures should grading or site preparation cease for a period of more than 30 days, including but not limited to: stabilization of all stockpiled fill, access roads, disturbed soils, and cut and fill slopes with geotextiles and/or mats, sand bag barriers, and/or silt fencing; and include temporary drains and swales and sediment basins. These temporary erosion control measures shall be monitored and maintained until grading or construction operations resume.

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.

8. Swale Access and Maintenance Plan

A) **Prior to Issuance of the Coastal Development Permit,** the applicant shall submit, for review and approval of the Executive Director, a plan to show the ability to access the existing concrete swale located on the lower bench for the purpose of maintaining the swale and its function. The plan shall show either hinges or other demountable features to allow lifting of the deck or a

written explanation of the measures intended for removing debris from the swale if the deck is not designed to be lifted.

B) The applicant shall construct and maintain the deck consistent 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.

9. Notification of property owner of pending application for a coastal development permit.

PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall provide evidence to the Executive Director that he/she has notified the property owner pursuant to Article three, Section 13054 of the Coastal Act that the applicant has applied for a coastal development permit for an addition to a single family residence on tract 18379, lot 167 and a spa, patio and deck as further described in this application.

10. Property Owner Approval for Proposed Development

PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall provide to the Executive Director written notice from the property owner or its representative that it does not object to the proposed development.

V. Findings and Declarations

The Commission hereby finds and declares:

A. Project Description and Location

The project site is located within an existing residential area at 501 Paseo de la Playa, City of Torrance, Los Angeles County (Exhibit #1). The site is one of 28 lots on the bluff top between the first public road, Paseo de la Playa, and the sea. The adjacent blufftop lots have all been developed with single family residences. Torrance Beach, the beach seaward of the toe of the bluff is public. Vertical public access to this beach is available to pedestrians via public parking lots and footpaths located at the Los Angeles County Beaches and Harbors' "Torrance Beach Park" approximately one-quarter to one-half mile north of the project site (Exhibit #1).

The 27,780 square foot lot extends from the street down 120 feet in elevation to the 200-foot wide public beach (Exhibit #2). The top portion of the lot is approximately 60 feet wide, flat, and developed with an existing two-story single family residence. The flat part of the lot extends approximately 100 feet from the street to the top edge of the bluff, which is located approximately 30 feet seaward of the edge of the existing single family residence (Exhibit # 5, p.3).

The applicants are proposing to build a 591 square foot addition to the living room and family room at the rear of the existing single family residence, extending that portion of the house nine feet six inches seaward. The applicants also propose to extend the present patio and build a new 404 square foot patio area at the same level as the house, supported with cement footings. A six-foot high retaining wall will support the patio. Slightly below this, also supported by a backfilled four-foot high retaining wall, the applicants propose to construct a spa. They also propose to construct stairs leading down to a new 281 square foot wood deck shown as 12 inches above existing grade,

cantilevered over the concrete swale. All of this development is located inland of the top of bluff (Exhibit #5). Three retaining walls are proposed to support the building pad for the house extension and the patio, deck and spa, forming a three-tiered rear yard (Exhibit #11). A planter would be located inland of the second retaining wall and the lower patio and spa would be located inland of the third (seawardmost) retaining wall (4 foot high). A 36-inch high glass wall would stand above the seawardmost retaining wall. The retaining walls are part of the project design and would support the house, decks and spa. Grading is proposed for installation of the spa (8.9 cubic yards), patio, stairs and footings (34.8 cubic yards). The applicant contends that the spa drainage will be directed into the street. A site plan that was received on March 30, 2001 notes that sublevel drain lines at base of spa will be provided with a collector perimeter pipe that connects directly to existing swale and all drainage from existing home and proposed addition will be directed to the street (Exhibit #3). The applicant does not propose any encroachment onto the bluff face. No encroachment into City property is proposed.

The applicants do not propose any development below the lower deck and propose to leave the bluff face undisturbed. The applicants note that the United States Fish and Wildlife Service (USFWS) has identified habitat for the rare and endangered El Segundo Blue butterfly (*Euphilotes bernardino allyni*) on the face of the lower slope. The applicants also contend that the proposed development is set well back from the habitat and will not disturb it.

B. Seaward Extent of Development

In view of the cumulative effect on safety, public views and bluff habitat statewide, the Commission has determined in many instances that the policy most protective of resources is to require that development be setback from bluff edges and prevent development from extending on to the face of the bluff.

In the case of the Torrance bluffs, the Commission, in many instances in the past, most recently in 1997, has required the residences to be set back landward of a safe building line, which is approximately at the top of the bluff. However, it has permitted applicants to construct pools and decks, extending to either the string line or to a man-made drainage channel or swale located below the pads. In part that practice was a reflection of the existing pattern of development on the northernmost lots, and in part, from an idea that the lower bench represented the top of the bluff. In some older permits, and in the 1981 LUP, the channel is noted as demarcating a former sewer line. With these cases, two involving unpermitted emergency repairs, and two located adjacent to the public beach, applicants have been allowed to grade and construct retaining walls even lower on the bluffs. Most recently, the Commission has approved pools and decks extending either to a string line, to the City's "safe building line", or to the "swale". Three of these are located to the south of the subject parcel, between this lot and Palos Verdes Estates. Most recently the Commission approved a deck on the seaward side of the house at 511 Paseo de la Playa (5-85–183 Exhibit 14 p.1), the residence three lots to the south. That deck, which is located upslope and inland of the proposed deck and addition, was required to be landward of the "safe building line". Applicants have been required to record assumptions of risk, and have also been required to refrain from vegetation removal on the lower reaches of the bluff, where in 1985, the United States Fish and Wildlife Service identified habitat for the El Segundo Blue butterfly, an endangered species.

Bluff collapses or failures and emergency permits have led the Commission to change its views on bluff encroachments through out the coast. Since 1997, the Commission has witnessed a number of serious failures on bluffs that had not been expected to fail. A number of them were associated with grading and/or excess moisture from human–induced water sources. Secondly the Commission has noted cumulative pressure on bluff faces for stairways and other improvements.

The Commission has observed that cumulatively, such development obscures the public's view of the natural landforms of bluffs and cliffs.

In this case, all development proposed is located inland of the bluff top. The latest geological investigation reports determine the bluff edge to be located seaward of the existing concrete swale which is located approximately 25 feet seaward of the existing home. The Commission senior staff geologist concurs with these determinations (Exhibit #6 p.1-3). Applicants have been required to record assumptions of risk, and have also been required to refrain from vegetation removal on the lower reaches of the bluff, where in 1985, the United States Fish and Wildlife Service identified habitat for the El Segundo Blue butterfly, an endangered species, unless a subsequent coastal development permit or an amendment to this coastal development permit is obtained (Condition 5A). There is no proposed development or proposed vegetation removal on the bluff face.

The City of Torrance has designated a "safe building line" in its Land Use Plan. However, the "safe building line" falls short, south of the subject parcel. The "safe building line" is a city setback based on geologic concerns. However, the Commission is also concerned about the bluff edge setback based on visual impacts and cumulative impacts, as well as geologic safety. The "string line" concept is one means of controlling development along coastal bluffs. If a string line is used, two types of string lines are applied to evaluate a proposed project—a structural string line and a deck string line. A structural string line refers to the line drawn from the *nearest* adjacent corners of adjacent structures. Similarly, a deck string line refers to the line drawn from the nearest adjacent corners of adjacent decks. Setbacks and string lines are applied to limit new development from being built any further seaward than existing adjacent development. If not properly regulated the continued seaward encroachment of development can have a significant cumulative adverse impact on coastal resources. In this case, the use of "string line" to determine seaward development does not apply because the homes adjacent to the north and south do not appear to have any decks, which precludes establishment of a deck string line.

The 28 existing homes are situated in a pattern that reflect the contours of the bluff top and its elevation. Beginning with the most northern lot, 413 down to lot 445, the existing homes are situated much lower than the remaining lots. From lot 449 to lot 531, the existing homes are situated higher. From the edge of the bluff to the line of homes is predominantly fill. Some of the lots have patios, decks and other accessory development and some do not. The Commission has approved 17 coastal development permits (including amendments) for residential development on 10 of the 28 bluff lots on Paseo de la Playa in Torrance (Exhibit #2). The Commission approved three rear yard pools. Of the 10 lots, 5 are located north of (near Redondo Beach, Exhibit #14 p.3, 4)) and 5 are located south of (near Palos Verdes Peninsula) the subject site). The development included remodels of and additions to existing houses, construction of decks, swimming pools, spas, jacuzzis and retaining walls, and implementation of landscape, irrigation, erosion control and habitat restoration plans.

The Commission's senior geologist concurs with the applicant's geologist who determined the top of bluff on the subject lot to be approximately 30 feet seaward of the rear side of the existing house, at the seaward edge of the bench containing the concrete swale. As described in the project description, the rear yard area was graded prior to enactment of the Coastal Act. The grading resulted in a 2:1 fill slope descending from the back of the house and a flat bench seaward of this manufactured slope. Geologic investigations submitted by the applicant confirm that this slope consists largely of fill, not native materials. Thus, the bench containing the concrete swale lies at the top of the bluff; and is not a bench cut into the bluff face. Accordingly, the bluff edge is found to be at the seaward edge of this bench.

The existing concrete swale is inland of the bluff top (Exhibits 12). The existing swale is evident in the 2001 aerial photos, and other accessory development along the bluff top is along the general line of the swale including the applicant's proposed project.
There is no proposed in-ground development beyond the existing swale. Condition 1 requires that no other future development including any paths to the beach or lower bluff area be permitted unless an amendment to this coastal development permit or a subsequent coastal development permit is obtained.

1. Habitat Impacts

The host plant for the El Segundo blue butterfly (*Euphilotes bernardino allyni*), an endangered species, is located in patches throughout the bluff face on many of the lots along Paseo de la Playa, especially seaward of the lower edge of cut slope. The United States Fish and Wildlife Service (USFWS) provided the Commission written notice of this discovery in 1995 (Letter, Gail Kobetich, 1995). Recently, according to the applicants and since confirmed by the USFWS and the Commission staff ecologist Jon Allen, both the host plant and the butterfly were identified on the lower levels of the applicants' lot.

In response to the applicants' report of the presence of the habitat on the lot, Jon Allen, the staff ecologist visited the site accompanied by the habitat restoration specialist employed by the USFWS. The butterfly and the host plant were confirmed to exist on the lower levels of the bluff face. The staff ecologist stated:

> To follow up on our site visit to the Conger Property at Torrance Beach, I am sending a picture of *Eriogonum parvifolium*, dune buckwheat, the host plant of the El Segundo blue butterfly (ESB), *Euphilotes battoides allyni*. There are two fairly good pictures of the butterfly itself (on the Conger property), one on the invasive iceplant, *Carpobrotus edulis* and one on its normal host plant, *Eriogonum parvifolium* (Figure 1). The El Segundo blue butterfly is in the family Lycaenidae and has been listed as federally endangered since 1976. The ESB is restricted to the sand dune habitat in the Los Angeles metropolitan area where urbanization has destroyed approximately 99% of its required sand dune habitat (Arnold and Goins 1987). The ESB is univoltine (i.e. has one generation per year) and the adult butterflies emerge at the time of flowering of its dune buckwheat host plant (June to September). In many lepidopterous species, the adult butterflies will feed on nectar from many different kinds of flowers even though the larvae may require a particular host plant, but in the ESB both the larvae and the adults are obligate on *Eriogonum parvifolium*, dune buckwheat. This makes the ESB particularly sensitive to disruption of its host plant since both adults and larvae require it. The more common *Eriogonum fasiculatum*, (California buckwheat) is not a suitable host for ESB, and in fact supports numerous competing Lepidopterous species (Longcore et al 1997). We are grateful to Travis Longcore for this information and for pointing out the ESB and its host plant at the site in accordance with our request.
>
> The ESB apparently requires a distribution of age classes of its buckwheat host plant. Juveniles and older plants do not produce as many flowers as middle-aged plants. Field observations suggest that buckwheat plants less than about five years of age do not produce enough flowers for ESB larvae to effectively utilize them (Arnold 1983). So survival of ESB is dependent upon 'middle-aged' buckwheat plants plus steady recruitment of younger plants into the middle age group as they senesce. This continual 'conveyor belt' of dune buckwheat age groups is indicative of a healthy dune ecosystem, and hence the butterfly is good indicator species for the health of this system.
>
> According to Arnold and Goins (1987) dune buckwheat is very susceptible to displacement by non-native invasive species that have invaded its dune habitat (e.g. *Carpobrotus* (ice plant) and non-native grasses). In the presence of invasive competitors, recruitment of juveniles is greatly reduced and the age distribution of buckwheat shifts to older plants which do not produce enough flowers to adequately support ESB. Therefore any attempts at restoration should have elimination of non-natives as a first priority.

> In summary it is my opinion that the *Eriogonum parvifolium* at the Conger property is both rare and performing an Important ecological function (supporting a population of federally endangered El Segundo blue butterflies). It is easily disturbed by human activities, and because of this it fits the definition of environmentally sensitive habitat under the Coastal Act, Section 30107.5 and must be protected under Section 30240. (Jon Allen, July 2001 entire report attached Exhibit 14.)

It is clear that development and conventional landscaping and other forms of disturbance need to be kept back from the habitat area. The applicants plan their deck to be set back from the habitat area, and no landscaping is planned at the bench level. Since all of the applicants' proposed development is situated inland of the top of the bluff in an area that was previously modified and contains ornamentals; it would not directly impact the El Segundo Blue butterfly or its habitat. Moving the development seaward, however, brings development and associated human activity closer to existing habitat. Conditions 5 and 6 (No future improvements and landscape plan) reflect the applicant's intent to leave the bluff face undisturbed. Moreover, Condition 6 prevents installation of invasive plants that may displace *Eriogonum parvifolium,* a food plant of the endangered butterfly. Special Condition 6 also requires the applicant to submit a 5-year landscape monitoring report for review and approval by the Executive Director. The purpose of the report is to certify the on-site landscaping is in conformance with the landscaping plan approved pursuant to this special condition. As conditioned, the development is consistent with Section 30240 of the Coastal Act.

A potential impact to habitat, as a result of any construction, is siltation of ocean waters due to unrestricted runoff and erosion. To prevent this and to assure protection of offshore waters and the bluff face vegetation, the Commission has imposed conditions to prevent erosion during construction and discharge of excess water over the face of the bluff or onto the beach and offshore waters. Any construction, path vegetation removal, bluff face vegetation removal or repair of the drainpipe on the bluff face will require an amendment to this permit or a new permit as required by Special Condition 5, Future Improvements. The reason for the condition is to assure that grading for drain repair will only be done if the proposed activities are first reviewed for possible impacts to habitat. The Commission requires, as has the City, that the applicant direct run off away from the bluff face and beach. As conditioned, the development is consistent with Sections 30230 and 30240 of the Coastal Act.

The applicant contends that the proposed project will improve drainage, directing water that is now running to the swale (then discharged down the slope through their neighbor's slope drainpipe to the beach) to the street.

2. Geologic Hazards

Development on a coastal bluff is inherently risky. To evaluate the feasibility of future residential development at the subject site, the applicants commissioned a geological investigation by Keith W. Ehlert (Consulting Engineering Geologist), a geotechnical investigation by Coastline Geotechnical Consultants Inc., and a wave impact study by Skelly Engineering.

The scope of the geological investigation involved review of published and unpublished reports and maps pertaining to the geologic conditions on the site and in surrounding areas, aerial photographs, geologic mapping in the site area and on the bluff below the site, analysis and evaluation of data, and test excavations. According to the report, '[t]he purpose of the investigation was to obtain sufficient information to evaluate geologic conditions within the site with respect to construction of additions to the rear portion of the existing house" (Exhibit #7).

The geotechnical engineering investigation involved "geotechnical observations, subsurface explorations and sampling, field and laboratory testing, calculations and analyses" (Exhibit #8 p.1-8). The consultant reviewed "Reconnaissance Seismic Hazard" maps prepared by the State of California,

Division of Mines and Geology dated March 25, 1999 (Exhibit #8, p.2), excavation, laboratory tests, and slope stability analyses to develop recommendations pertaining to use of the site, bluff stability and grading. The report includes conclusions and recommendations regarding liquefaction potential, foundations on terrace deposits, lateral loads and spread footings, cast-in-place friction piles, lateral loads and piles, creep, retaining walls, temporary excavation slopes, drainage, floor slabs-on-grade, grading and inspection. The wave impact study involved the review of historical and annual aerial photographs and calculations of wave runup and overtopping to determine if the proposed development will be subject to wave runup or wave attack over the typical life (100 years) of the development.

Geological and Geotechnical Engineering Investigation Reports

The July 12, 2000 geological investigation reports concluded that (1) the site is underlain by bedrock of the Miocene Monterey Formation mantled by relatively thick terrace deposits, (2) maps provided no indication of active faults or landslides at the site, (3) no features were observed which indicate the site is undergoing or has undergone any gross instability problems, and (4) considerable damage could occur to the site from earthquakes generated on any of several faults in southern California. The report recommends that the project soils engineer perform appropriate stability analysis.

In the supplemental geotechnical engineering report (August 21, 2001), new borings were performed in order to determine the extent of the artificial fill underlying the slope immediately seaward of the residence at the site (Exhibit #4). These borings found 3 to 8 feet of fill overlying natural soils and marine terrace deposits. The Commission's senior geologist confirms the applicant's contention that the slope immediately seaward of the residence is primarily built up from artificial fill. As described above, this establishes that this fill slope is not part of the bluff face, but is a manufactured slope built on the bluff top near the bluff edge.

Several conclusions, requirements and recommendations were made in the geotechnical engineering investigation report. The City of Torrance requires a foundation slope setback for the placement of structures on, or adjacent to, slopes steeper than 3:1 (horizontal to vertical) to provide protection from water, mudflow, loose slope debris and shallow slope failures. The setback is the horizontal clearance from the face of the foundations to the lower edge of cut slope, which is the top of the steeper than 3:1 slope. The report refers to and includes a copy of the City's information sheet for slope setback requirements (Exhibit #8, p.3). For the proposed project, the information is used to determine the required setback for footings and spas from the descending slope surface, which is the lower edge of cut slope.

The "Reconnaissance Seismic Hazard" maps indicate the site is not in an area that may contain liquefiable materials. The report concludes that due to the depth of groundwater being in excess of 50 feet, liquefaction is considered unlikely. It establishes standards for construction of the spa and the house and the footings. It requires site drainage to be dispersed by non-erosive devices to preclude concentrated run-off and erosion over the site, water to not be allowed to pond or drain down the slope in a concentrated and uncontrolled manner, and water to be conducted to Paseo de la Playa. Refer to Exhibit #8, p.6-7 for the numerous grading specifications named in the report. The report states that inspection by the geotechnical engineer or the engineering geologist is required during construction. The project geologist established a setback for the footings from the face of the cut slope based on the height of the slope (Exhibits 8). The City accepted the calculations.

The lot on which development is proposed is a 2:1 sloped parcel with an approximate angle of 26 degrees. The vertical distance from the beach to the lower edge of cut slope is 115 feet (page 1 of the Wave Impact Study report) (Exhibit #10, p.1). Basing its requirements on the height of the bluff, the City requires a 38-foot 4-inch setback for the footings from the lower edge of cut slope. The City

allows spas to be set back to a less rigorous standard—the spa setback is one-half the building footing setback distance required above or 19-foot 2-inch setback for the spa from the lower edge of cut slope.

The Commission's senior geologist reviewed the geology report, the geotechnical engineering reports and wave impact study report prepared for the site. Based on these reports, he commented that the minimum setbacks for the house footings and the spa that are required by the City are adequate to ensure stability of the bluff under current conditions and he concurs that the site is grossly stable. However, he points out that uncontrolled drainage could change these conditions-continued surficial creep could occur and instability could increase markedly if the erosion caused by the defective storm drain that is located on the bluff face is not repaired. More importantly he points out that the applicant's geologist has not established a safe building line.

> References (4) and (5) together address other geologic hazards at the site, as well as provide criteria for foundation design. The lower slope is underlain by the Monterey Formation, which is known to be subject to landsliding, but in this area the bedding dips to the north, nearly at right angles to the trend of the bluff, so bedding planes are not exposed on the bluff face. The upper slope is underlain by marine terrace deposits. A quantitative slope stability analysis in reference (5) demonstrates that the slope is globally stable (factor of safety of 1.8 static, 1.2 pseudostatic) with respect to sliding. The report does not show the location of the hypothetical failure surface corresponding to this factor of safety, so there is no way of identifying the way to establish setbacks behind a line corresponding to a particular factor of safety. Reference (5) also reports a 1.6 factor of safety against surficial sliding, using the method of infinite slopes. Nevertheless, it is acknowledged that slope is "partially unstable," and is subject to creep. Significant erosion is occurring on the lower third of the slope due to leakage from a corroding storm water drain. I concur with the assessments of references (4) and (5) that the slope is currently grossly stable, but that continued surficial creep, slumps, and gulleying are to be expected. Instability could increase markedly if the erosion caused by the defective storm water drain is not repaired. ...

The applicant contends that the drainpipe referred to by Mark Johnsson, staff senior geologist is not on the property of the proposed development. The applicant's response to the issue with the existing drainpipe on the bluff slope is:

> *the defective storm drain is on the neighbor's lot and we are encouraging them to repair the pipe that has been in the current condition for at least a dozen years.*[1]

The Commission notes that the applicants' geologist recommends controlling the discharge of water over the bluff face and correcting uncontrolled drainage that exists. In addition to requiring the applicant to assume the risk of the development and to develop in conformance with the engineered plans in conformance with the geology report, the Commission in Condition 6 requires that drainage be directed away from the bluff face, and not discharged on the bluff face.

The applicant proposes to build a deck cantilevered over the existing concrete swale located on the lower bench. The Commission is requiring in Condition 8 that the applicant provide a plan showing that he will be able to access the swale for clean out and maintenance purposes.

Assumption of Risk, Waiver of Liability and Indemnity

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.

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[1] Electronic mail message from Robert Conger to Melissa Stickney (September 2, 2001) with attached letter (Exhibit 15, p.3, #11)

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/her property.

The existing single family residence lies on a sloping coastal blufftop lot. The geological and geotechnical engineering investigation reports and wave impact report state that the subject property is well suited for the proposed development. Although the wave impact report states a conservative estimate of bluff retreat of one-half foot per year, this speed is highly unlikely. The Commission's senior geologist agrees with the project engineer's assessment of bluff retreat.

The applicants, however, commissioned these reports, and ultimately the conclusion of the report and the decision to construct the project relying on the report is the responsibility of the applicants. The proposed project, even as conditioned, may still be subject to natural hazards such as slope failure and erosion. The geological and geotechnical evaluations do not guarantee that future erosion, landslide activity, or land movement will not affect the stability of the proposed project. Because of the inherent risks to development situated on a coastal bluff, the Commission cannot absolutely acknowledge that the design of the addition to the single family residence and other improvements will protect the subject property during future storms, erosion, and/or landslides. Therefore, the Commission finds that the proposed project is subject to risk from erosion and that the applicants shall 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.

In case an unexpected event occurs on the subject property, the Commission attaches Special Condition 2, which requires the applicant to obtain recordation by the property owner of a deed restriction whereby the owners and any future owners assume the risk of extraordinary erosion and/or geologic hazards of the property and accepts sole responsibility for the removal of any structural or other debris resulting from landslides, slope failures, or erosion on and from the site. A deed restriction is required to be executed by the property owner in order to assure that the restriction will be recorded on the property and run with the land. Because the applicants are leasing the property, they will need to secure the property owner's concurrence and agreement to record the applicable restrictions. The deed restriction will provide notice of potential hazards of the property and help eliminate false expectations on the part of potential future lessees of the property, lending institutions, and insurance agencies that the property is safe for an indefinite period of time and for further development indefinitely in the future.

Therefore, prior to issuance of the coastal development permit, the applicants shall obtain recordation by the property owner of a deed restriction in a form and content acceptable to the Executive Director, which reflects the above restriction on development. The deed restriction shall include a legal description of the applicants' 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.

The applicant, who is owner of the existing home but is lessee of the property, is required by lease agreement to notify owner of any improvements made to the existing residence. Special Conditions 9 and 10 require the applicant to submit evidence of notification and permission for the proposed development from the property owner.

Conformance of Plans to Recommendations and Requirements

Recommendations regarding the design and installation of the addition to the single family home, patio area, spa, deck and grading have been provided in several reports submitted by the applicants. Adherence to the recommendations and requirements contained in these reports and named by the City of Torrance Department of Building and Safety is necessary to ensure assure the stability of the permitted development. As conditioned, the development will 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 requires the construction of protective devices that would substantially alter natural landforms. Therefore, adherence to the recommendations and requirements, to the extent that they are consistent with the conditions imposed by the Commission, is necessary to ensure that the developments are consistent with Section 30253 of the Coastal Act.

Special Condition 4 requires the applicants to conform to the geological recommendations in Report No. 4705-00, the geotechnical requirements and recommendations in Report No. 1601C-070 and the recommendations in the wave impact report prepared for the site. According to Special Condition 4, the applicants shall also comply with the recommendations and requirements of the City of Torrance Department of Building and Safety that are not in conflict with this permit and the Commission's conditions.

Wave Impact Report

Section 30253 (1) states that new development shall minimize risks to life and property in areas of high geologic, flood, and fire hazard. Since coastal bluffs may be subject to flooding and wave attack, the Commission requires wave impact studies for blufftop development to assess the potential hazard from wave attack, flooding and erosion. The wave runup, flooding, and erosion hazard analyses should anticipate wave and sea level conditions (and associated wave runup, flooding, and erosion hazards) through the life of the development. For a 100 year structural life, that would be taking the 1982/83 storm conditions (or 1988 conditions) and adding in 2 to 3 feet of sea level rise. The purpose of this analysis is to determine how high any future storm damage may be so the hazards can be anticipated and so that mitigation measures can be incorporated into the project design.

The applicants have provided a Wave Runup Study for the subject property, as is consistently required by the Commission for shoreline development in southern Los Angeles County and Orange County. The Wave Impact Study for the subject property was prepared by Skelly Engineering and is dated March 2001.

According to the consultant, the site is on coastal bluff located at the southern terminus of the Santa Monica Littoral Cell. The Wave Runup Study states:

> *"The net sand movement along this section of shoreline is to the north towards King Harbor. A groin is located about 1.5 miles to the north of the site and the Malaga Cove headland (Flat Rock Point) is located immediately to the south of the site. A review of aerial photographs shows little if any overall shoreline retreat. The shoreline is stabilized by the natural headland to the south, and the groin and harbor to the north. For the purpose of this analysis a very conservative estimate of the shoreline retreat rate is 0.5 feet per year"* (Exhibit #10, p.1).

The Wave Impact Study concludes that the proposed development and the base of the bluff will not be subject to hazards from flooding and wave runup during the life of the development (Exhibit #10, p.2). According to the report, the approximately 200-foot wide sandy beach provides adequate protection for the base of the bluff at the seaward property line of the site (Exhibit #10, p.1). The report states:

> *"Over the vast majority of time wave runup will not reach the base of the bluff and will absolutely not reach the improvements on the property over the next 100 years...In conclusion, wave runup will not impact this property over the life of the proposed improvement. The proposed development will neither create nor contribute to erosion, geologic instability, or destruction of the site or adjacent area. There are no recommendations necessary for wave runup protection. The proposed project minimizes risks from flooding"*

The Commission's senior geologist reviewed the report and does not expect that wave impact would result in erosion at the toe of the bluff to an extent that would put the development at risk during its lifetime (75 years). Although the toe of the bluff is not expected to be subject to wave damage.

No Future Protective Device

The Coastal Act limits construction of protective devices because they increase beach erosion and negatively affect views. Under Coastal Act Section 30235, a protective device, such as a cliff retaining wall or seawall, must be approved if: (1) there is an existing principal structure in imminent danger from erosion; (2) shoreline altering construction is required to protect the existing threatened structure; and (3) the required protection is designed to eliminate or mitigate the adverse impacts on shoreline sand supply.

The Commission has generally interpreted Section 30235 to require the Commission to approve protection of development only for existing principal structures. The construction of a protective device to protect new development would not be required by Section 30235 of the Coastal Act. The proposed project involves the construction of a new living room and family room addition, patio area, spa, retaining walls, stairs and wood deck. These are all new development. In addition, allowing the construction of a protective device to protect new development would conflict with Section 30253 of the Coastal Act, which states that permitted development shall not require the construction of protective devices that would substantially alter natural landforms along bluffs.

The applicants do not propose the construction of any protective device to protect the proposed development. The applicants propose three retaining walls as part of the design of the project as foundations for the elements of the proposed development, and to allow the creation of a flat area for the construction of the spa.

It is not possible to completely predict what conditions the proposed structure may be subject to in the future. The proposed development could require a protective device as a result of increased erosion of the bluff face or by continued leakage from the existing storm drain. Consequently, it is conceivable the proposed structure may be subject to erosion hazards that could lead to a request for a protective device, such as a retaining wall, to support the development. The construction of such devices would represent a conflict with Section 30251, which protect the integrity of natural landforms.

The development is not subject to wave runup and flooding. Based on the information provided by the applicants, no mitigation measures, such as a seawall, are anticipated to be needed in the future. The coastal processes and physical conditions are such at this site that the project is not expected to engender the need for a seawall to protect the proposed development. There currently is a wide sandy beach in front of the proposed development that provides substantial protection of the toe of

the bluff from wave activity. The proposed development would be located on top of the approximately 115-foot high bluff and would not be subject to wave runup or flooding hazards.

To further ensure that the proposed project is consistent with Sections 30251 and 30253 of the Coastal Act, and to ensure that the proposed project does not result in future increased bluff erosion and adverse effects to coastal processes, the Commission imposes Special Condition 3. Special Condition 3 requires the applicants to obtain recordation by the property owner of a deed restriction that would prohibit the applicants, or future landowner, from constructing a protective device for the purpose of protecting any of the development approved as part of this application. This condition is necessary because it is impossible to completely predict what conditions the proposed structure may be subject to in the future.

By requiring recordation of a deed restriction agreeing that no protective devices, including retaining walls, shall ever be constructed to protect the development approved by this permit, the Commission makes it clear that it's approval is based on the understanding the proposed development will be safe from potential erosion and wave runup damage. Based on Special Condition 3, the Commission also requires that the applicants remove the structures if any government agency orders that the structures be removed due to erosion, wave runup or other hazards.

Section 30235 states:

> *Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.*

Seawalls have impacts on the sand supply of beaches, exacerbating erosional situations by increasing the rate of sand loss. Only as conditioned to require that no future protective devices will be installed can the Commission find that the development is consistent with Sections 30253 and 30235 of the Coastal Act. As conditioned, the Commission finds that the proposed project is consistent with Section 30251 of the Coastal Act, which requires that permitted development shall minimize the alteration of natural landforms, and Section 30253, which requires that geologic and flood hazards be minimized, and that stability and structural integrity be assured.

Conclusion

Only as conditioned to: (1) submit evidence that the applicants have obtained recordation by the property owner assumption of risk deed restriction on the development; (2) submit evidence that the applicants have obtained recordation by the property owner future protective devices deed restriction on the development; and (3) incorporate the recommendations by Keith W. Ehlert, Consulting Engineering Geologist, Coastline Geotechnical Consultants, Inc., and Skelly Engineering and any requirements of the City of Torrance Department of Building and Safety that are not in conflict with the conditions of this permit, can the Commission find that the proposed development is consistent with Sections 30240, 30251, 30253 and 30235 of the Coastal Act.

C. Public Access and Recreation

Section 30604(c) of the Coastal Act requires that every coastal development permit issued for any development between the nearest public road and the sea include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3. The proposed development is located between the sea and the nearest public road.

Section 30212 of the Coastal Act states, in relevant part:

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

The proposed development is located within an existing fully developed residential community partially located between the sea and the first public road paralleling the sea. Torrance Beach, the beach seaward of the toe of the bluff is public. Public access through the privately owned residential lots in this community does not currently exist. However, adequate public access to Torrance Beach is available via public parking lots and footpaths at Redondo Beach located approximately one-half mile north of the project site. The proposed development will not result in any adverse impacts to existing public access or recreation in the area. Therefore, the Commission finds that the project is consistent with the public access and recreation policies of the Coastal Act.

D. Local Coastal Program

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

> (a) *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). A denial of a Coastal Development Permit on grounds it would 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) shall be accompanied by a specific finding which sets forth the basis for such conclusion.*

On June 18, 1981, the Commission approved with suggested modifications the City of Torrance Land Use Plan (LUP). The City did not accept the modifications and the certified LUP, which was valid for six months, has lapsed. The major issues raised in the LUP were affordable housing, blufftop development and beach parking.

Based upon the findings presented in the preceding section, the Commission finds that the proposed development, as conditioned, will not create adverse impacts on coastal resources. In addition, the Commission finds that approval of the proposed project will not prejudice the City's ability to prepare a Local Coastal Program consistent with the Chapter 3 policies of the Coastal Act, as required by Section 30604(a).

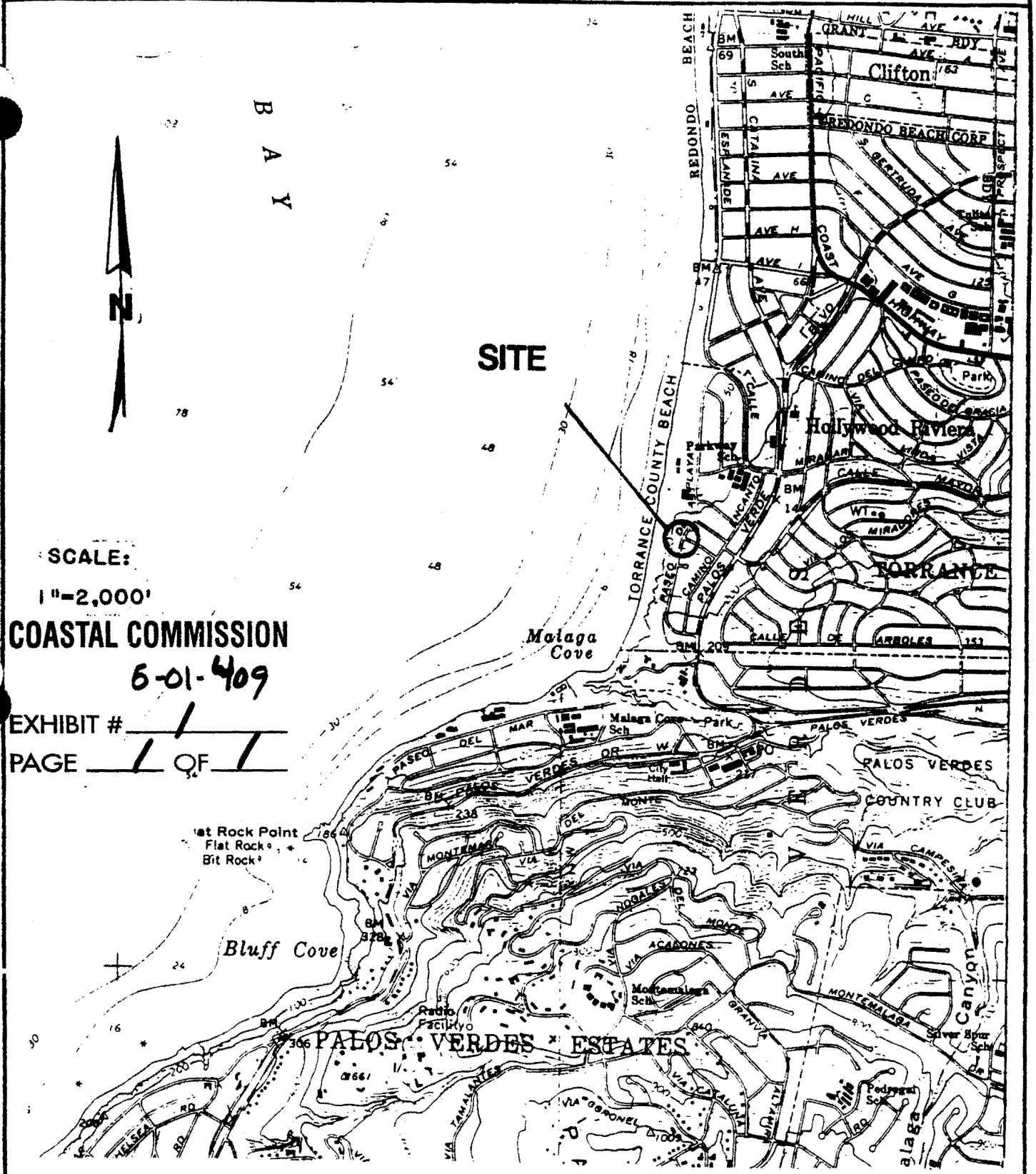
E. California Environmental Quality Act

Section 13096 Title 14 of the California Code of Regulations requires Commission approval of a coastal development permit application 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 that the activity may have on the environment.

The project, as conditioned, minimizes impacts to the bluff top. The project, as conditioned, allows all proposed development, which is inland of the top of bluff.

The proposed project, as conditioned, has been found consistent with the visual resource, environmentally sensitive habitat and natural hazard policies of Chapter 3 of the Coastal Act. All adverse impacts have been minimized and there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found consistent with the requirements of the Coastal Act to conform to CEQA.

VICINITY MAP

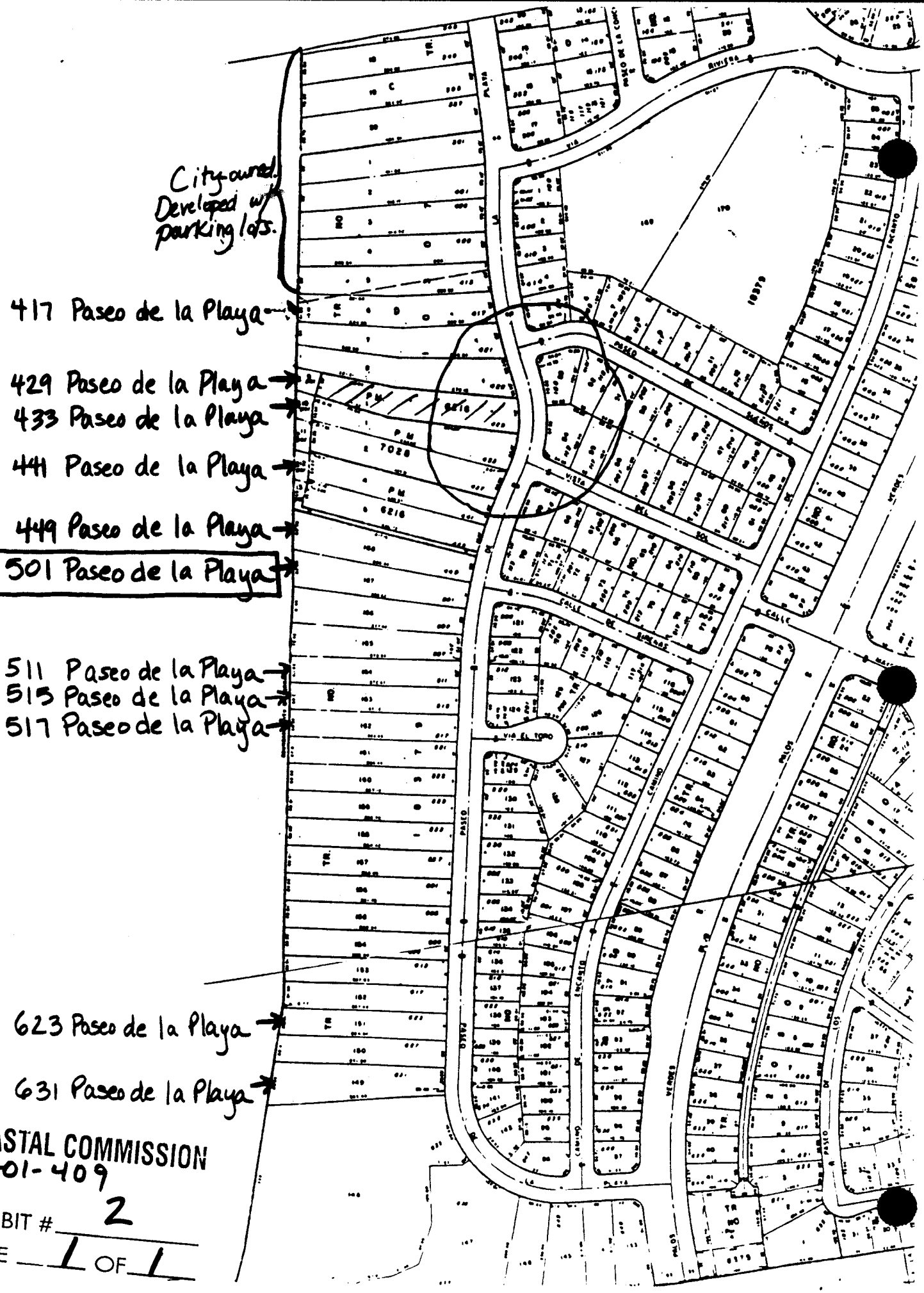


501 Paseo de la Playa,
Torrance, California

PROJ # 1601C-070

PLATE 1

COASTLINE GEOTECHNICAL CONSULTANTS



COASTAL COMMISSION
5-01-409

EXHIBIT # 2

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South Coast Region
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COASTAL COMMISSION
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ELECTRICAL

SUMMARY

SITE PLAN & ROOF PLAN

DRAINAGE NOTES:
PROVIDE SUB LEVEL DRAIN LINES AT BASE OF SPA W/ COLLECTOR PERIMETER PIPE DIRECTLY TO EXISTING CONC SWALE. - ALL DRAINAGE FROM EXISTING HOUSE & PROPOSED ADDITION TO GO TO STREET.

ISSUANCE

REVISION
1 F/C
COASTAL COMM SUBMITTAL 2-10-01
COASTAL REVIS 3-10-01

SITE PLAN / GENERAL NOTES - DRAINAGE

CONGER RESIDENCE
601 PASEO DE LA PLAYA, TORRANCE, CA

GERALD M. CONGER, M.D.

GWC ARCHITECTS

A-1

COASTLINE GEOTECHNICAL CONSULTANTS, INC.

CONSULTING GEOTECHNICAL ENGINEERS

S W. 178TH STREET
ADENA, CALIFORNIA 90248-3202

Tel. (310) 217-1504
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August 21, 2001

Project No. 1601C-071

Mr. and Mrs. Robert Conger
501 Paseo de la Playa
Torrance, CA 90501

Subject: Supplemental Geotechnical Engineering Report
Proposed Spa, Deck and Exterior of House
501 Paseo de la Playa
Torrance, California

X Reference: Geotechnical Engineering Investigation Report
Proposed Spa, Deck and Exterior of House
501 Paseo de la Playa
prepared by Coastline Geotechnical Consultants, Inc.
dated August 8, 2000

Dear Mr. and Mrs. Conger:

At your request, a representative of this office further inspected the property, and excavated two borings and one test pit at the above mentioned site on August 1 and 3, 2001. The purpose of this study was to determine natural grade and depths of fill, and to determine the estimated limits of cuts and fills needed to create the existing property, and to update our previous geotechnical report.

Description of Site

The subject site is a rectangularly shaped parcel, measuring approximately 50 to 75 feet wide by 390 to 400 feet deep, situated on the west side of Paseo de la Playa in the City of Torrance. The property is occupied by a single family, two story residence. A level building pad has been created on the bluff which naturally descends to the north and west. Beyond the west (rear) concrete patio, a combination fill over cut slope descends at 26° for a height of about 10 feet, to a gunite drainage swale and bench.

Minor to moderate amount of fill was placed to create a level building pad, and a cut west of the pad was made to construct the drainage swale, and for equipment access.

Proposed Development

It is understood that the proposed construction will consist of the extension of the existing residence, a deck and spa.

No grading is anticipated.

Conclusions

Based on the recent findings from our active test pit and two borings to determine natural topography and depths of fill, it is concluded that the lot has been cut from its pre-existing natural grade, and filled with a minor to moderate amount of silty sand. This gives the site a "terraced" look from the southern residences toward its northern residences. Please refer to Plate 1 for test excavation locations and Plates 2 through 4 for a description and depth of existing material.

Remarks

This update and findings of a prior investigation were made in accordance with generally accepted engineering procedures and included such observations and document review considered necessary given the circumstances. In the opinion of the undersigned, the accompanying report has been substantiated by mathematical data in conformity with generally accepted engineering principles and presents fairly the information requested. No other warranty expressed or implied is made as to the professional advice included in this report.

Respectfully submitted,

COASTLINE GEOTECHNICAL CONSULTANTS, INC.

Adam F. Dia

Richard A. Martin, RGE 563

REGISTERED PROFESSIONAL ENGINEER
RICHARD A. MARTIN
No. 563
Exp. 9-30-01
GEOTECHNICAL
STATE OF CALIFORNIA

RAM/AFD/jm

(3) Addressee

SUMMARY OF TEST PIT NO. 5

Date:8/1/01 Elevation: 128

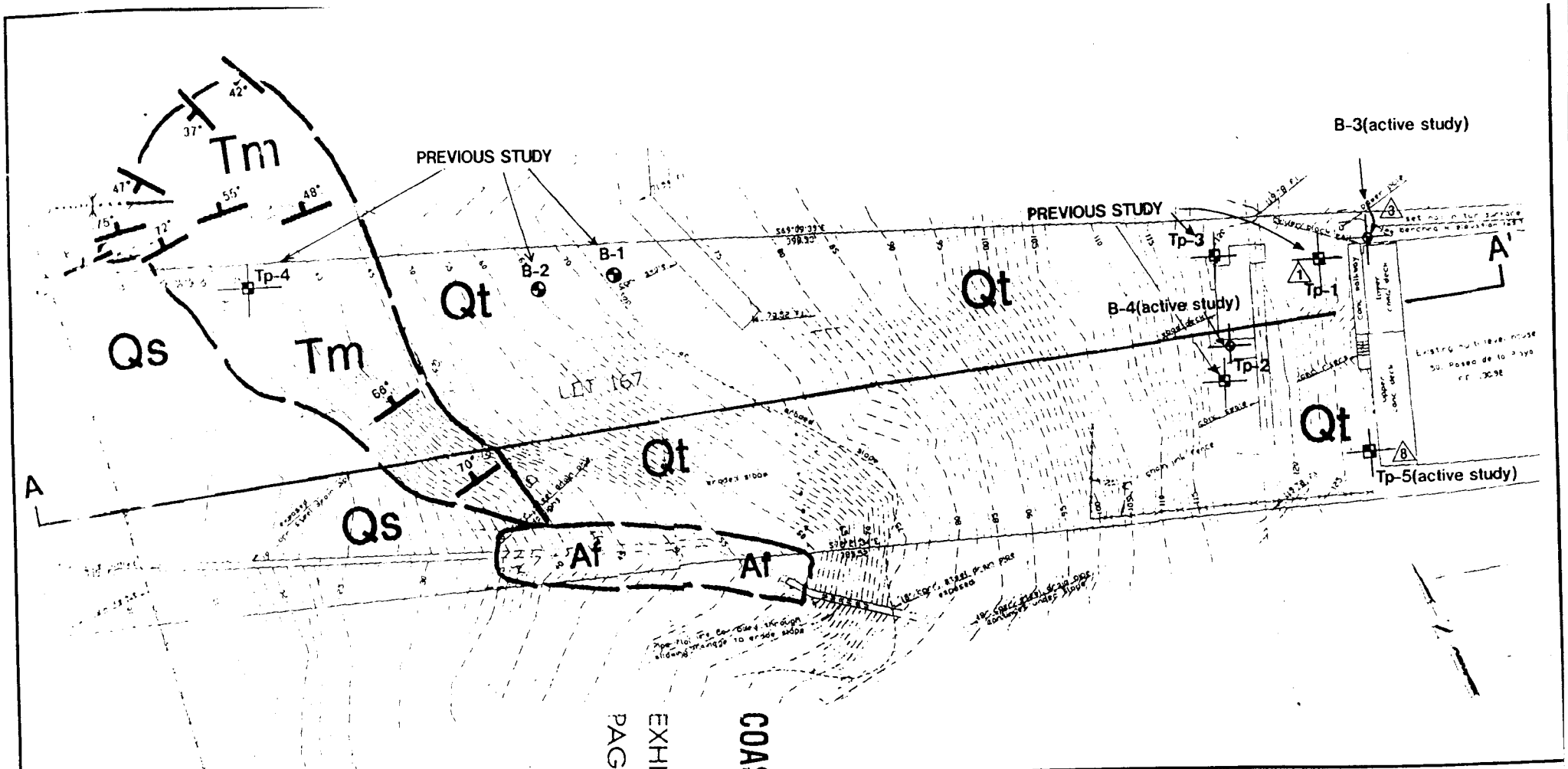
Dry Density (Pcf)	Moisture (% Dry Wt.)	Samples U	Samples B	Depth (Ft.)	Description	Color	Consistency
				5	FILL: SAND-slightly silty, slightly moist, f-c grain, porous, upper 1.0' roots-roots	Dark Brown	Dense
					hand auger started		
				10	NATURAL SOIL: SAND-slightly silty, damp, f-m grain, slighlty porous	Brown	Dense-Very Dense
					SAND, damp	Tan	
					SAND-slighlty silty	Dark Brown-Brown	
					DUNE SAND(Qt): SAND-slightly silty, m-c grain, porous, weathered	Moderately Tan-Tan	Very Dense
				15	Total Depth 13.5 Feet No Caving No Groundwater Hand Auger Administered @ 6.0 Feet		

Geotechnical Engineering Investigation
501 Paseo de la Playa
Torrance, California

Project No. 1601C-071

Plate 2

COASTLINE GEOTECHNICAL CONSULTANTS



EXPLANATION

Qs - Beach Sand
Tm - Malaga Mudstone
Qt - Terrace Deposits
Af - Fill
- location of test pits
- location of borings
- geologic contact
- strike and dip of bedding(Tm)
- apparent fold
A A' - geologic cross section
6 - depths of fill

SOILS INVESTIGATION
501 PASEO DE LA PLAYA,
TORRANCE, CA

SCALE: 1" = 20'	APPROVED BY:	DRAWN BY AFD
DATE: JUL 00		REVISED AFD

COASTLINE GEOTECHNICAL CONSULTANTS

PROJECT NO. 1601C-071 | DRAWING NUMBER 1

5-01-409

EXHIBIT # 4
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COASTAL COMMISSION

SUMMARY OF BORING NO. 3

Date: 8/3/01 Elevation: 126

Drive Energy (Kip-Ft.)	Dry Density (Pcf)	Moisture (% Dry Wt.)	Samples C	Samples B	Depth (Ft.)	Description	Color	Consistency
						FILL: SAND-slightly silty, slightly moist, f-c grain, porous, upper 1.0' roots-rootlets	Dark Brown	Dense
					5	NATURAL SOIL: SAND-slightly silty, damp-slightly moist, f-m grain, porous	Brown	Dense
							Tan-Brown	Very Dense
						DUNE SAND(Qt): SAND, damp, f-c grain, porous, slightly weathered	Tan	Dense
					10	Total Depth 9.5 Feet No Caving No Groundwater		
					15			
					20			

COASTAL COMMISSION

EXHIBIT # 4

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Geotechnical Engineering Investigation
501 Paseo de la Playa
Torrance, California

Project No. 1601C-071

Plate 3

COASTLINE GEOTECHNICAL CONSULTANTS

SUMMARY OF BORING NO. 4

Date: 8/3/01

Elevation: 120

Drive Energy (Kip-Ft.)	Dry Density (Pcf)	Moisture (% Dry Wt.)	Samples C	Samples B	Depth (Ft.)	Description	Color	Consistency
						NATURAL SOIL: SAND-slightly silty, damp, m-c grain, rootlets	Dark Brown-Brown	Dense
						DUNE SAND(Qt): SAND, damp, f-c grain, porous	Tan	Very Dense
					5	Total Depth 5.0 Feet No Caving No Groundwater		
					10			
					15			
					20			

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EXHIBIT # 4

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Geotechnical Engineering Investigation
501 Paseo de la Playa
Torrance, California

Project No. 1601C-071

Plate 4

COASTLINE GEOTECHNICAL CONSULTANTS

KEITH W. EHLERT
Consulting Engineering Geologist

September 14, 2001

Mr. and Mrs. Robert Conger
501 Paseo de la Playa
Torrance, CA 90501

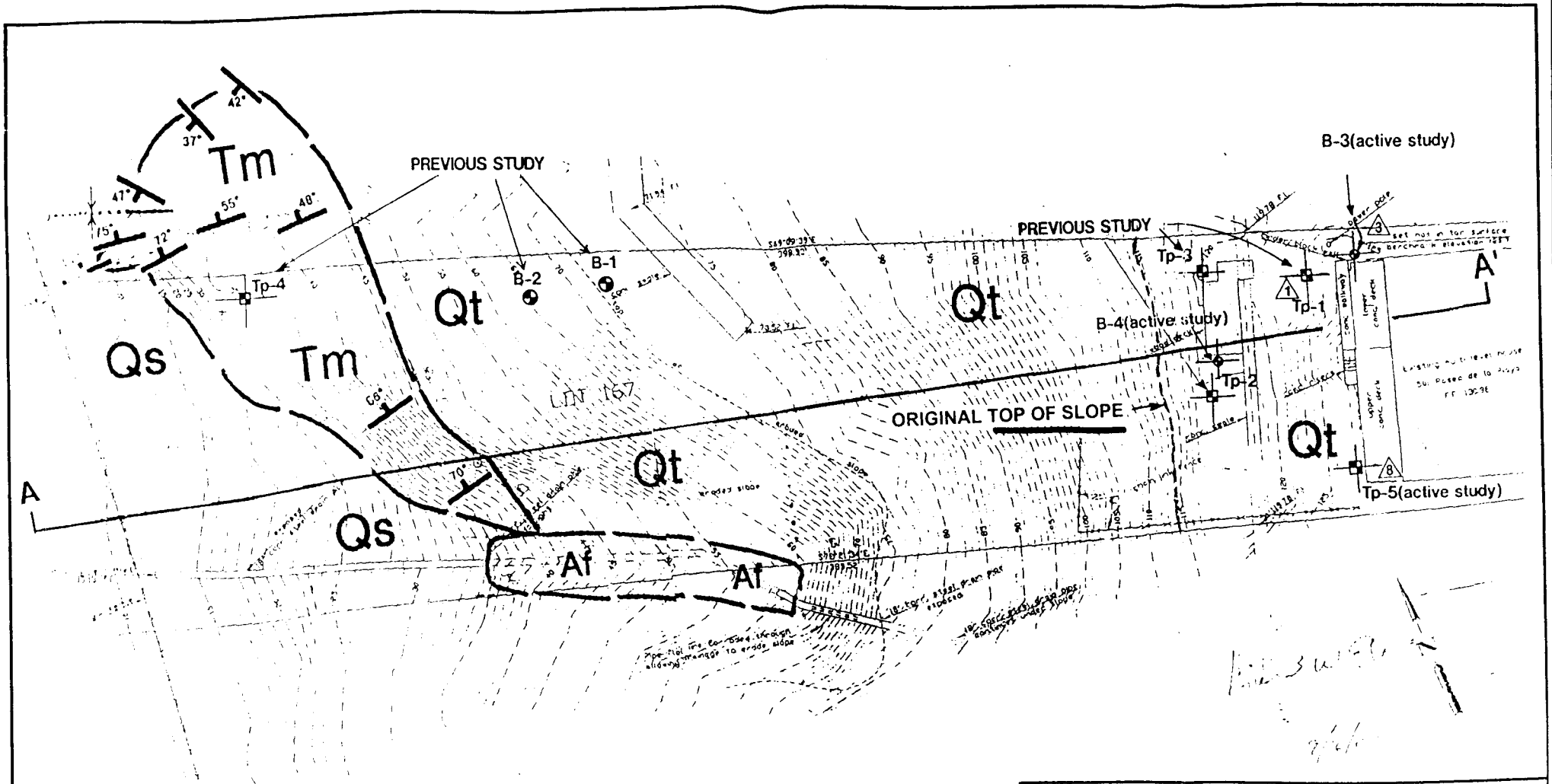
SUBJECT: ORIGINAL TOPOGRAPHY
501 Paseo de la Playa
Torrance, CA 90501

Attached are a map and cross section showing existing topography and our interpretation of topography as it existed prior to development of the site. This interpretation is based on subsurface data obtained from test pits and borings. Based on the data obtained, it is our opinion that the original "top of slope" prior to development of the site was located as indicated on Figures 1 and 2 (attached).

Respectfully submitted

Keith W. Ehlert
Certified Engineering Geologist 1242

927 Deep Valley Drive, # 15 • Rolling Hills Estates, CA 90274
(310) 544-7686 • Fax (310) 544-9332



EXPLANATION

Qs - Beach Sand
Tm - Malaga Mudstone
Qt - Terrace Deposits
Af - Fill
- location of test pits
- location of borings
- geologic contact
- strike and dip of bedding(Tm)
- apparent fold
A A' - geologic cross section
6 - depths of fill

SOILS INVESTIGATION 501 PASEO DE LA PLAYA, TORRANCE, CA		
SCALE: 1" = 20'	APPROVED BY:	DRAWN BY AFD
DATE: JUL 00		REVISED AFD
COASTLINE GEOTECHNICAL CONSULTANTS		
PROJECT NO. 1601C-071		FIGURE 1

COASTAL COMMIS

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PAGE 2 OF 3

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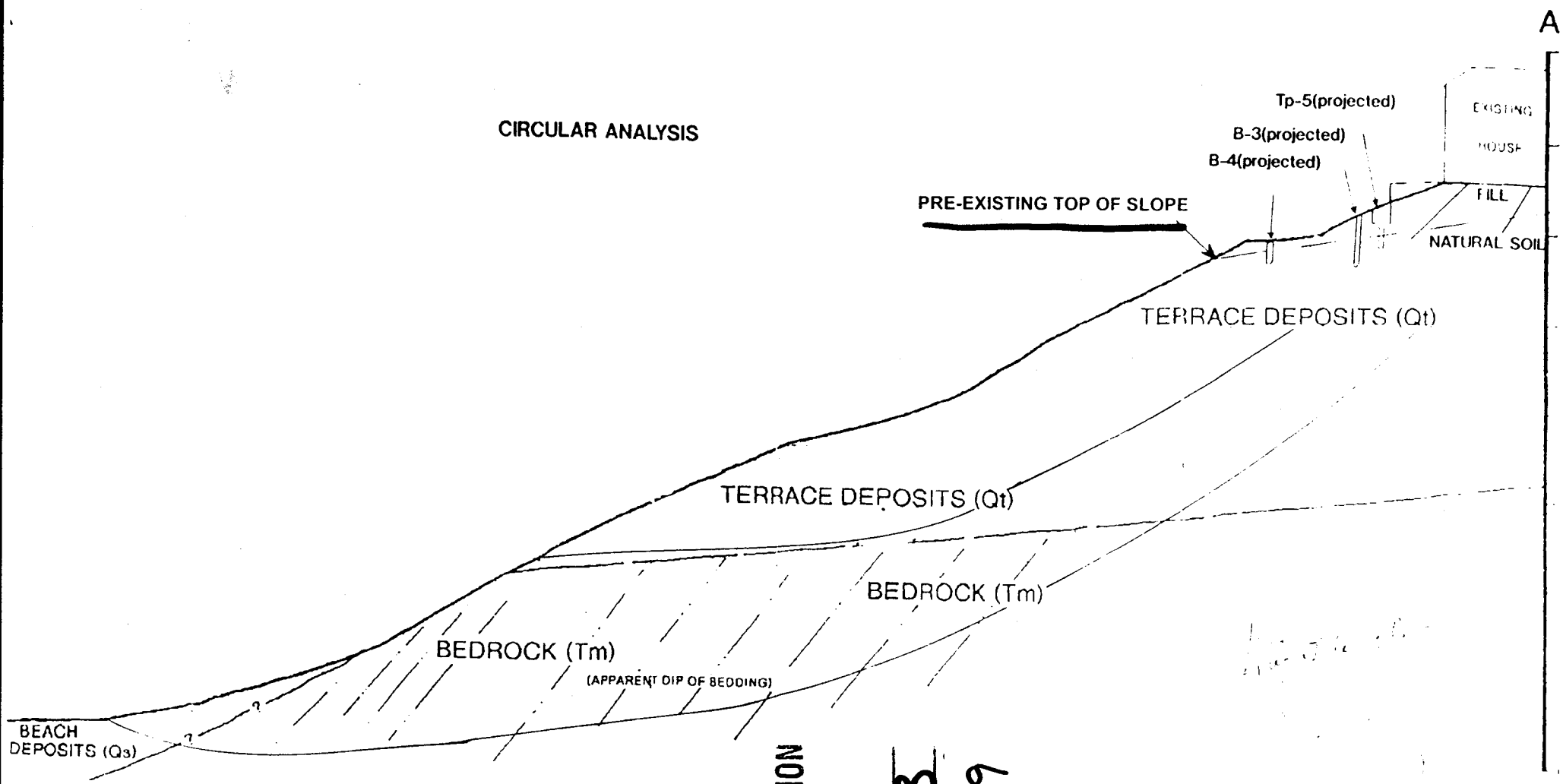

SLOPE STABILITY ANALYSIS
501 PASEO DE LA PLAYA,
TORRANCE, CA

SCALE: 1" = 20'	APPROVED BY:	DRAWN BY: AFD
DATE: JULY 00		REVISED: AFD

COASTLINE GEOTECHNICAL CONSULTANTS

PROJECT NO. 1601C-071 | FIGURE 2

COASTAL COMMISSION
EXHIBIT # 5
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5-01-409

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

18 September 2001

GEOTECHNICAL REVIEW MEMORANDUM

To: Melissa Stickney, Coastal Program Analyst
From: Mark Johnsson, Senior Geologist
Re: Conger Reconsideration (5-01-018)

In reference to the above application, I have reviewed the following documents in addition to those reviewed in my previous memorandum (of 12 July 2001):

1) Coastline Geotechnical Consultants, Inc, 2001, "Supplemental geotechnical engineering report, proposed spa, deck, and exterior of house, 501 Paseo de la Playa, Torrance, California," 2 page geotechnical letter report dated 21 August 2001 and signed by Adam Dia and Richard A. Martin (GE 563).

2) Keith W. Ehlert, Consulting Engineering Geologist, 2001, "Original topography, 501 Paseo de la Playa, Torrance, California 90501," 1 page geotechnical letter report dated 14 September 2001 and signed by Keith W. Ehlert (CEG 1242)

In addition, I have spoken with Mr. Dia several times via telephone, and have discussed with him the configuration of natural soils and artificial fills at the top of the bluff at the subject residence. I have visited the site, but have not directly observed the top of the bluff.

Reference (1) reports on three new borings that were performed in order to determine the extent of the artificial fill underlying the slope immediately seaward of the residence at the site. Two borings found 3 to 8 feet of fill overlying natural soils and marine terrace deposits. From these data, a geologic cross section was constructed and presented in reference (2). This cross section is not entirely consistent with the boring data: in particular, boring B-4 encountered no fill, but is shown as intersecting several feet of fill in the interpretive cross section. Nevertheless, the data in reference (1) do confirm the applicant's contention that the slope immediately seaward of the residence is primarily built up from artificial fill. There may well have been some cut involved at the top of the slope, but it is fair to say that the slope in question should be considered substantially a fill slope.

Accordingly, the "step-like feature" at the top of the coastal bluff was largely created by the placement of artificial fill, not by cutting into the natural bluff. I note that this is

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PAGE 1 OF 3
5-01-409

counter to the interpretation that I drew in my 15 July 2001 memorandum, which was based on statements in the Ehlert Consultant report dated 11 July 2000. The conclusion in my earlier memorandum that the edge of the coastal bluff lay at the top of the slope, essentially coincident with the wall of the residence was incorrect, based as it was on data that are shown by the new boring data to be incorrect. The actual bluff edge, then, should be taken as the break in the *natural* slope, beyond which the gradient increases more or less continuously until it reaches the general gradient of the sea cliff (point indicated on the attached exhibit).

Please note that this interpretation of the edge of bluff is based entirely on the present topography and on the geologic materials making up the slopes. The historic bluff line identified on documents submitted by the applicant is not germane to an identification of the present bluff edge. Bluff edges change over time as the result of both natural and human processes.

All of the proposed development is landward of this point. The development lying between the residence and the bluff edge consists of a wooden deck and a spa; it is not uncommon for the Commission to approve such development adjacent to the bluff edge, within the structural setback zone for larger structures such as a residence.

I note that the previous geotechnical investigations, cited in my 12 July 2001 memorandum, did indicate that there is some surficial instability of the slope, largely associated with a defective storm drain that crosses the slope. Further, a steep coastal bluff such as this can be expected to be subject to soil creep. Accordingly, continued erosion of the bluff is to be expected. Therefore, I recommend that the permit be conditioned such that all of the approved development shall be removed if it becomes threatened by erosion. That is, no future bluff face or bluff top protective devices, such as retaining walls, should be permitted to protect the development.

I hope that this review has been helpful. Please do not hesitate to contact me if you have further questions.

Sincerely,

Mark Johnsson, Ph.D., CEG

COASTAL COMMISSION

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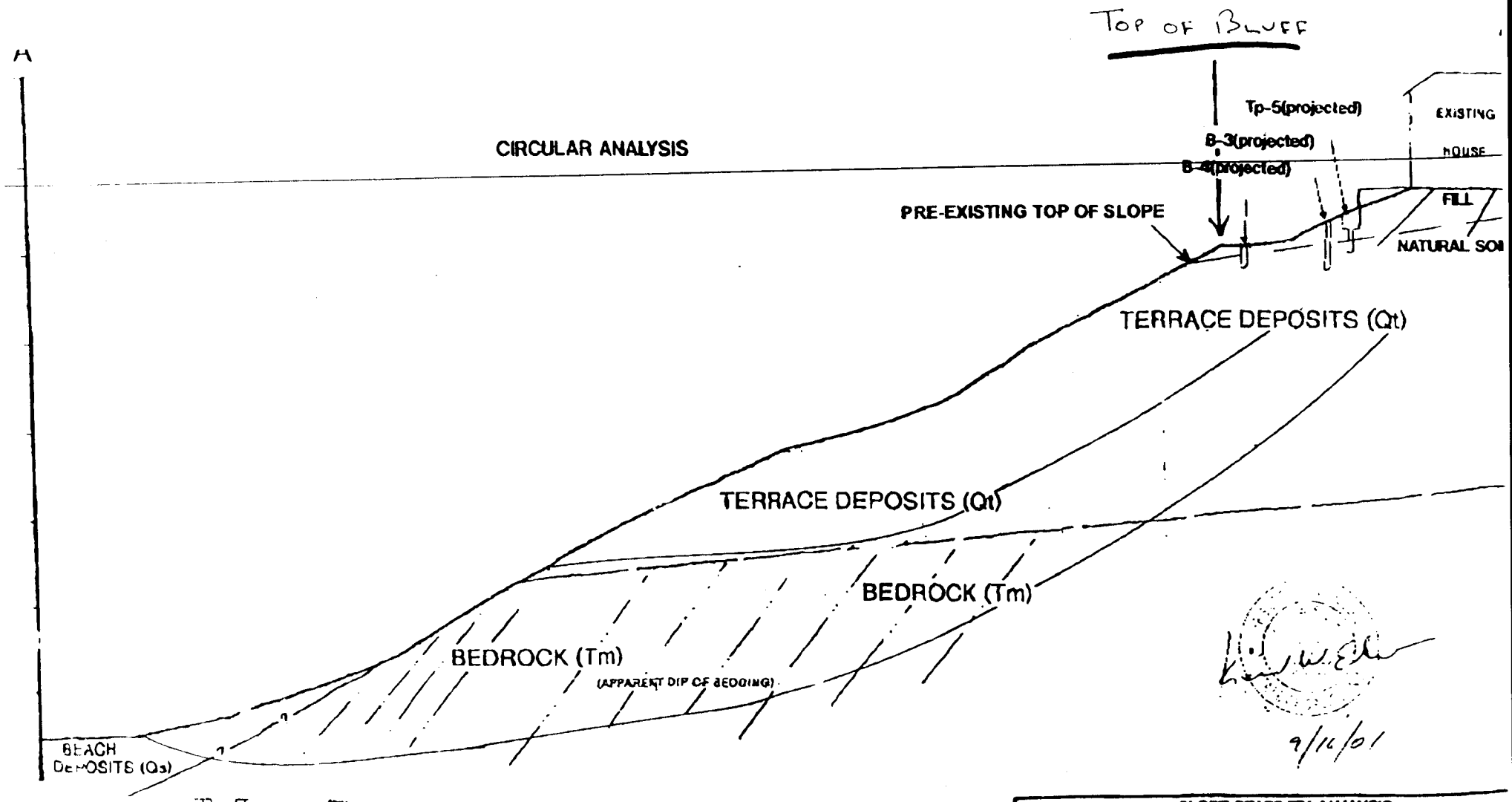

SLOPE STABILITY ANALYSIS 501 PASEO DE LA PLAYA, TORRANCE, CA		
SCALE: 1" = 20'	APPROVED BY:	DRAWN BY: AFD
DATE: JULY 00		REVISED: AFD
COASTLINE GEOTECHNICAL CONSULTANTS		
PROJECT NO. 1601C-071		FIGURE

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5-01-409

INTRODUCTION

PURPOSE AND PROPOSED IMPROVEMENTS

The purpose of this investigation was to obtain sufficient information to evaluate geologic conditions within the site with respect to construction of additions to the rear portion of the existing house.

REFERENCES

Items utilized during preparation of this geologic report include the following:

- Geology of Southern California: California Division of Mines and Geology Bulletin 170, 1954.
- Geology and Paleontology of the Palos Verdes Hills, California, by W. P. Woodring, M. N. Bramlette, and W. S. W. Kew, 1946, U.S.G.S. Professional Paper 207.
- Geologic Map of the Palos Verdes Peninsula, by Thomas W. Dibblee, dated May 1999.

SCOPE OF WORK

The scope of work performed for this investigation included the following items:

- Gathering and review of published and unpublished reports and maps pertaining to the geologic conditions on the site and in the surrounding area.
- Review of aerial photographs of the site area.
- Geologic mapping in the site area and on the bluff below the site.
- Analysis and evaluation of data.
- Preparation of this report with maps and other graphics to present the findings and recommendations

CONSULTING GEOTECHNICAL ENGINEERS
1446 W. 178 TH STREET
GARDENA, CALIFORNIA 90248-3202
Tel. (310) 217-15
Fax (310) 217-19

August 8, 2000

Project No. 1601C-070

Mr. and Mrs. Robert Conger
501 Paseo de la Playa
Redondo Beach, CA 90277

Project Reference: Geotechnical Engineering Investigation
Proposed Spa, Deck and Exterior of House
501 Paseo de la Playa
Redondo Beach, California

X Reference: Geological Investigation for
Proposed Residential Improvements
501 Paseo de la Playa
Torrance, California
prepared by Keith W. Ehlert
dated July 11, 2000

Dear Mr. and Mrs. Conger:

Submitted herewith is a report of a geotechnical engineering investigation for the referenced project. This investigation was made for the purpose of obtaining information on subsurface soils and bedrock on which to base recommendations for a suitable foundation design for the proposed spa, deck and exterior of the house. This investigation was coordinated with a geologic investigation by Keith Ehlert, consulting engineering geologist.

Location of the site, relative to general topography, streets, and landmarks, is shown on the attached Vicinity Map, Plate 1.

As outlined in the proposal of March 30, 2000, our work consisted of geotechnical observations, subsurface explorations and sampling, field and laboratory testing, calculations and analyses, and the preparation of this report.

Surficial Stability Analysis

Surficial stability analysis was performed on the steepest slope found on the property. The result of the analysis, as shown on Plate 15, indicates the factor of safety is in excess of the normally accepted minimum for stable slopes.

DISCUSSION AND GENERAL COMMENTS

Development of the property, as contemplated, is believed feasible from the soils engineering standpoint, provided adherence is given to the recommendations of this report, and provided that the designs, construction, and grading are adequately and properly executed.

CONCLUSIONS AND RECOMMENDATIONS

The foundation slope setback, required by the City of Torrance, is for the placement of buildings and structures on, or adjacent to, slopes steeper than 3:1 (horizontal to vertical) to provide protection from water, mudflow, loose slope debris, and shallow slope failures. This setback, shown on Plate A, is the horizontal clearance from the face of the foundations to the slope face.

Liquefaction Potential

During earthquakes, major damage of various types of structures have occurred due to the creation of fissures, abnormal and/or unequal movement, and loss of strength or stiffness of ground. The loss of strength or stiffness of the ground results in the settlement of buildings, failure of earth dams, landslides and other hazards. The process by which soil looses strength is called liquefaction. The phenomenon of soil liquefaction is primarily associated with medium to fine grained, saturated cohesionless soil (sand and silts).

The State of California, Division of Mines and Geology, have prepared "Reconnaissance Seismic Hazard" maps, dated March 25, 1999, which indicates the site is not in an area that may contain liquefiable materials. Due to the depth of groundwater being in excess of 50 feet, liquefaction is considered unlikely.

Foundations on Terrace Deposits

An allowable bearing value of 2000 pounds per square foot, for square footings, and 2000 pounds per square foot for continuous footings, is recommended for foundations placed at a depth of at least 24 inches below the lowest adjacent final grade (top of slab exterior footings) bearing 12 inches into the Terrace deposits. This value may be increased

1. SCOPE (1806.4.1) - The placement of buildings and structures on or adjacent to slopes steeper than 3 horizontal to 1 vertical (33 3°• slope) shall be in accordance with this section. The provisions are intended to provide protection to the building from water from natural sources, mudflow, loose slope debris, shallow slope failures, and foundation movement.

2. BUILDING CLEARANCE FROM ASCENDING SLOPES (1806.4.2) - In general, buildings below slopes shall be set a sufficient distance from the slope to provide protection from slope drainage, erosion, and shallow failures. Except as provided for in this section, the following criteria will be assumed to provide this protection. Buildings shall be set back from the toe of slopes a distance equal to one-half the vertical height of the slope above the top of the foundation with a minimum clearance of 3 feet and a maximum clearance of 15 feet. A detached one-story accessory building not used for living purposes which does not exceed 600 square feet in area may extend to within 3 feet of the toe of a slope. Where the existing slope is steeper than one horizontal to one vertical, the toe of the slope shall be assumed to be at the intersection of a horizontal plane drawn from the top of the foundation and a plane drown tangent to the slope to an angle of 45 degrees to the horizontal. where a retaining wall is constructed at the toe of the slope, the height of the slope shall be measured from the top of the wall to the top of the slope.

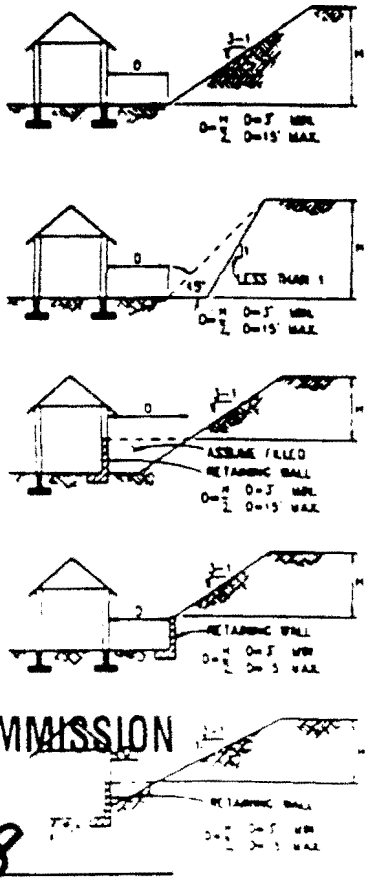
3. FOOTING SETBACK FROM DESCENDING SLOPE SURFACE (1806.4.3) - Footing on or adjacent to slope surfaces shall be founded in firm material with an embedment and setback from the slope surface sufficient to provide vertical and lateral support for the footing without detrimental settlement. Except as provided for in this section, the following setback is deemed adequate to meet the criteria. Footings shall be placed into firm material and located a distance of one-third the vertical height of the slope with a minimum of 5 feet and a maximum of 40 feet measured horizontally from the slope surface to the lower edge of the footing. Where the slope is steeper than one vertical to one horizontal, the required setback shall be measured from an imaginary plane 45 degrees to the horizontal, projected upward from the toe of the slope.

4. POOLS (1806.4.4) - The setback between pools regulated by this Code and slopes shall be equal to one-half the building footing setback distance required by this section. That portion of the pool wall within a horizontal distance of 7 feet from the top of the slope shall be capable of supporting the water in the pool without soil support.

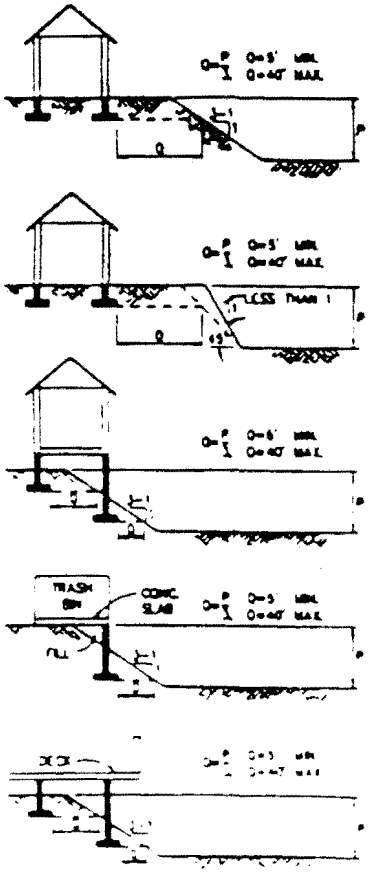
5. FOUNDATION ELEVATION (1806.4.5) - On graded sites, the top of any exterior foundation shall extend above the elevation of the street gutter at point of discharge or the inlet of an approved drainage device a minimum of 12 inches plus 2 percent of the distance from the foundation to the gutter or drainage device. The building official may approve alternate elevations providing it can be demonstrated that required drainage to the point of discharge and away from the structure is provided at all locations on the site.

6. ALTERNATE SETBACK AND CLEARANCE (1806.4.6) - The building official may approve alternate setbacks and clearances when the intent of this section is demonstrated by an investigation and recommendations of a soil engineer and/or an engineering geologist. Such an investigation shall include consideration of type of material, height of slope, slope-gradient, load intensity, and erosion characteristics of slope material. Where adverse geological soil and drainage conditions exist, the building official may require increased setbacks and clearances.

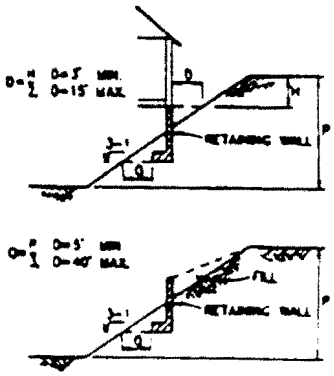
Sec. 1806.4.2



Sec. 1806.4.3



Sec. 1806.4.2, .3



Sec. 1806.4.4

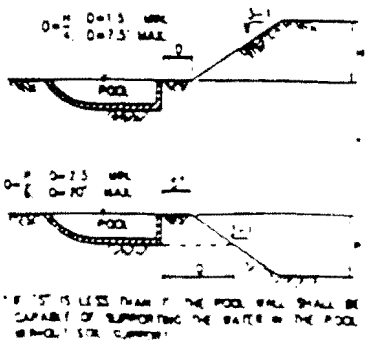


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EXHIBIT # 8

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by 500 pounds per square foot, for each additional foot in depth over 2 feet, and 250 pounds per square foot for each additional foot in width over 1 foot, to a maximum of 4000 pounds per square foot. For detailed calculations of these recommended bearing values see Plate 17.

All foundation excavations shall be formed to prevent caving which is expected to occur in the present on-site soils.

Settlement of footings up to 2.5 feet wide continuous and 5 feet square is not expected to exceed 1/2 inch under the recommended fully applied bearing pressure. Differential settlement between footings is expected to be on the order of 1/4 inch.

The bearing capacities given are net allowable bearing values, and the weight of the concrete foundations can be ignored. The bearing value is for dead plus live load, and may be increased by one third for momentary wind or seismic loads.

The maximum edge pressure of any eccentrically loaded footing should not exceed the values recommended for either permanent or momentary loads.

Lateral Loads - Spread Footings

An allowable lateral bearing value against the sides of footings of 250 pounds per square foot, per foot of depth, to a maximum of 3000 pounds per square foot may be used, provided there is positive contact between the vertical bearing surface and the Terrace deposit. Friction between the base of the footings and/or floor slabs and the underlying material may be assumed as 0.4 times the dead load. Friction and lateral pressure may be combined, provided either value is limited to two-thirds of the allowable. The above values may be increased by one-third for short durations of seismic and wind forces.

Cast-in-Place Friction Piles

Recommended bearing and uplift capacities for drilled, cast-in-place piles are given on Plate B. It is recommended that the minimum depth of penetration below the present ground surface into firm Terrace deposits be at least 10 feet. The existing fill and porous portion of the residual soils shall not be used for any foundation support. The weight of the concrete in the piles may be neglected in considering bearing pressure.

Drilling holes should be filled with concrete as soon as possible after excavation. All pile excavations should be inspected and approved by the foundation engineer.

Settlement of single piles, or groups of up to 3 piles, is estimated to be less than 1/2 inch. Most of the estimated settlement will take place rapidly with the first application of load

Lateral Loads - Piles

An allowable lateral bearing value against the sides of isolated piles (poles) of 500 pounds per square foot, per foot of depth, to a maximum of 5000 pounds per square foot may be used, provided there is positive contact between the vertical bearing surface and the Terrace deposit.

Creep

Piers or piles placed on a slope steeper than 5:1 (horizontal to vertical), in contact with Terrace deposits, shall be designed for creep loads. For design purposes, the lateral creep pressures may e assumed as one kip per foot of depth, to a depth of four (4) feet, for foundations in contact with the creeping soils.

Retaining Walls

Walls retaining drained earth may be designed for the following:

Surface Slope of Retained Material Horizontal to Vertical	Equivalent Fluid Pressure Pounds per Cubic Foot
Level	30
5 to 1	32
4 to 1	35
3 to 1	38
2 to 1	43

Backfill should consist of clean sand and gravel. While all backfills should be compacted to the required degree, extra care should be taken working close to walls to prevent excessive pressure.

A proper drainage system should be utilized to prevent hydrostatic pressures behind the retaining wall. It is therefore recommended that either weep holes or a drainage pipe be installed. A four inch perforated pipe (holes down) surrounded by at least 12 inches of 3/4 inch gravel enveloped in a drainage fabric, such as Mirafi 140N or equivalent, should be placed at the base of the footing at the wall. If weep holes are chosen, these openings should be four feet on center, and also situated at the base of the wall with a gravel and drainage fabric backdrain.

Temporary Excavation Slopes

Temporary excavation slopes in the existing surface soil may be made vertical for cuts of less than five (5) feet. For deeper cuts, temporary excavation slopes shall be made no steeper than 1:1 (horizontal to vertical). In areas where soils with little or no binder are encountered, shoring or flatter excavation slopes shall be made.

Your attention is directed to the fact that caving was encountered in the test excavations and it is likely that a trench or excavation will react in a similar manner.

All excavations shall be made in accordance with the regulations of the State of California, Division of Industrial Safety. These recommended temporary excavation slopes do not preclude local raveling and sloughing.

Drainage

Site drainage should be dispersed by non-erosive devices in accordance with the grading regulations of controlling agencies to preclude concentrated run-off and erosion over the site. In no case shall water be allowed to pond or drain down the slope in a concentrated and uncontrolled manner. Water shall be conducted to Paseo de la Playa.

Floor Slabs-on-Grade

The surface soils are granular in nature and non-expansive. Slabs-on-grade may be used without special design consideration for expansive soils.

A moisture barrier beneath the slabs-on-grade, preferably consisting of at least four inches of rock, with a waterproof vapor barrier, such as a plastic membrane of at least six mils in thickness, covered with two inches of clean sand, is recommended in areas where slab moisture would be detrimental.

Grading

The following general specifications are recommended:

1. Areas to be graded or paved shall be grubbed and stripped of all vegetation, debris and other deleterious material. All loose soil disturbed by the removal of trees, and existing fill shall be removed.

2. In all cases where the ground slope is steeper than 5 (horizontal) to 1 (vertical), the existing ground shall be benched, as the fill thereon is brought up in layers.

existing ground which slopes flatter than 5 to 1 may also require benching, if the foundation engineer considers such to be necessary.

3. All new fill shall be brought to near optimum moisture content, placed in layers not exceeding six (6) inches thick and compacted to at least 90 percent.

4. The existing subgrade loose soils within the building and paved areas shall be compacted prior to construction of floor slabs and paving to secure uniform support and to minimize differential settlement. It is recommended the degree of compaction within the upper 8 inches be at least 90 percent.

5. All other fills and backfills shall be compacted to at least 90 percent.

6. The compaction characteristics of all fill soils shall be determined by ASTM D-1557-97. The field density and degree of compaction shall be determined by ASTM D-1556, or by other acceptable ASTM standard methods which are acceptable to the governing public agency.

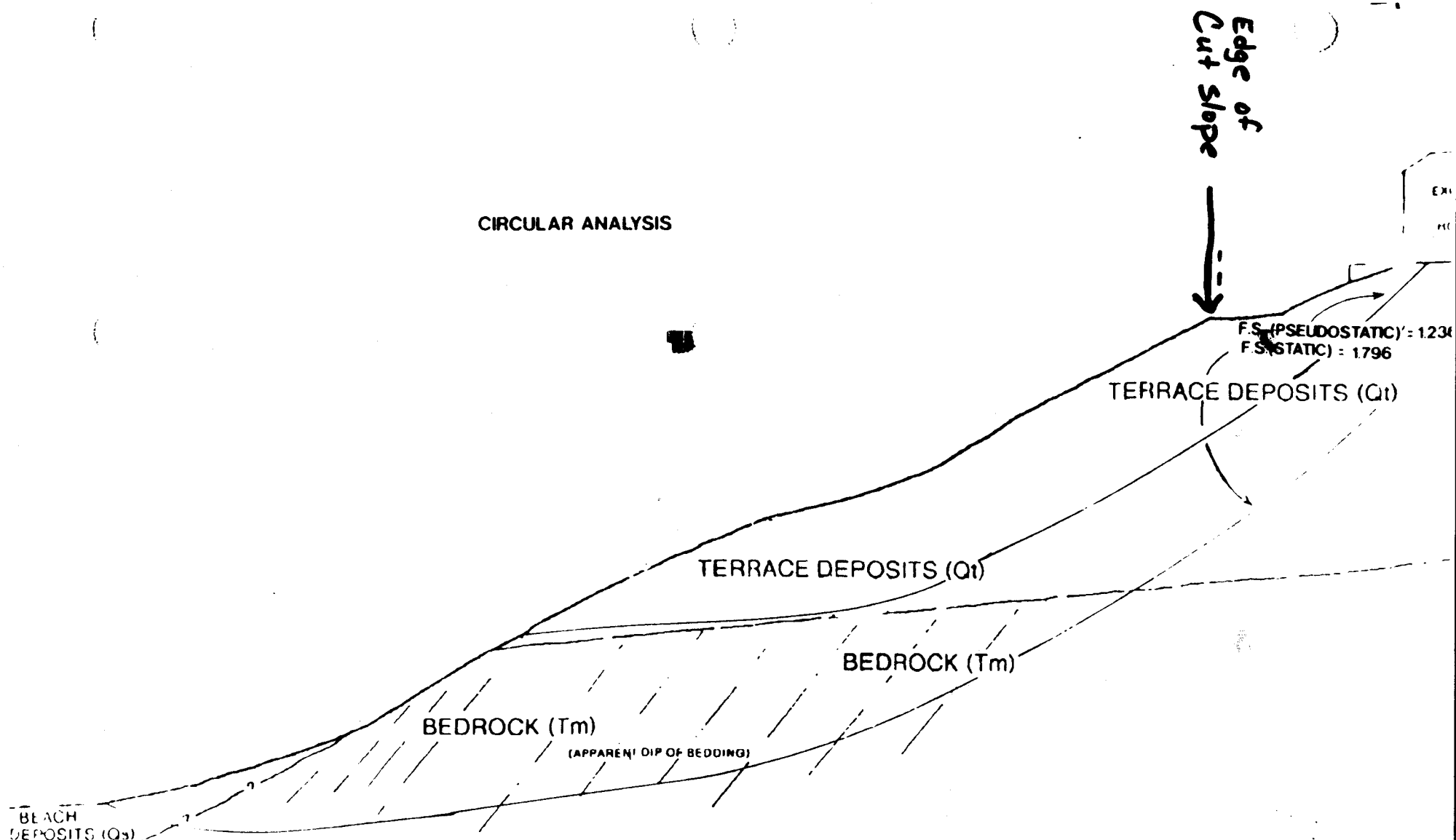
7. All new fill shall consist of clean, granular, non-expansive soil, free of vegetation and other debris, and shall be placed in layers not exceeding six (6) inches at near optimum moisture content. No rocks over three (3) inches in greatest dimension shall be used. No soil shall be imported to the site without prior approval by the geotechnical engineer. The surface soils found on the project would be suitable for use in compacted fills.

8. No jetting or water tamping of fill soils shall be permitted.

9. Care shall be exercised during rough grading so that areas involved will drain properly. Water shall be prevented from running over slopes by temporary berms.

10. At all times, the contractor shall have a responsible field superintendent on the project, in full charge of the work, with authority to make decisions. He shall cooperate fully with the foundation engineer in carrying out the work.

11. No fill shall be placed, spread or rolled during unfavorable weather. When the work is interrupted by rain, operations shall not be resumed until field tests by the foundation engineer indicate that conditions will permit satisfactory results.



SLOPE STABILITY ANALYSIS
501 PASEO DE LA PLAYA,
TORRANCE, CA

SCALE 1" = 20'	APPROVED BY	DRAWN BY
DATE JULY 00		REVISED

COASTLINE GEOTECHNICAL CONSULTAN

PROJECT NO. 1601C-070 | DRAWING N 16

COASTAL COMMISSION
5-01-409
EXHIBIT # 8
PAGE 8 OF 8

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

12 July 2001

GEOLOGIC REVIEW MEMORANDUM

To: Pam Emerson, Los Angeles Area Supervisor
From: Mark Johnsson, Senior Geologist
Re: Conger CDP application (5-01-018)

In reference to the above application I have reviewed the following documents:

1) Charles E. DuBois 1961, "A residence for Carcon Builders", 5 p. architectural drawings dated 8 June 1961 and signed by C. E. DuBois.

2) GWC Architects undated, "Site plan, Conger Residence, 501 Paseo de la Playa, Torrance, California", 6 p. undated architectural drawings signed by G. W. Compton.

3) Bolton Engineering Corporation 2000, "Topographic survey, Lot 167, Tract No. 18379, M.B. 563-9-14", 1 p. topographic map dated 24 May 2000 and signed by R. N. Bolton (PE 26120).

4) Keith W. Ehlert 2000, "Geological investigation for proposed residential improvements, 501 Paseo de la Playa, Torrance, California", 9 p. geologic report dated 11 July 2000 and signed by K. W. Ehlert (CEG 1242).

5) Coastline Geotechnical Consultants 2000, "Geotechnical engineering investigation report, proposed spa, deck and exterior of house, 501 Paseo de la Playa, Redondo Beach, California", 11 p. geotechnical engineering report dated 8 August 2000 and signed by A. F. Dia and R. A. Martin (GE 563).

6) Skelly Engineering 2001, "Wave impact study, 501 Paseo de la Playa, Torrance, California", p. wave impact study dated March 2001 and signed by D. W. Skelley (RCE 47857)

In addition, I have viewed the coastal bluff at the site from the beach during a visit to Torrance on 5 July 2001.

The proposed development, which consists of two decks connected by staircases, a spa, and windscreens, would cascade down a cut slope in the upper portion of the coastal bluff at the site to a bench cut into the bluff

Reference (6) addresses the issue of wave runup at the subject property, primarily through aerial photograph analysis. The photos span the interval from the early 1960's to 1999, a time span that includes the severe El Nino winters of 1982-83 and 1997-98. The report concludes that there is very little if any overall shoreline retreat over this interval, and that over the vast majority of time wave runup will not reach the base of the bluff. I concur with this assessment, and with the conclusion that the beach may erode over the useful economic lifespan of the development (generally assumed by the Commission to be 75 years for remodels of single family homes), but that the development, to be situated above approximately 115 feet elevation, will not be subject to wave runup.

References (4) and (5) together address other geologic hazards at the site, as well as provide criteria for foundation design. The lower slope is underlain by the Monterey Formation, which is known to be subject to landsliding, but in this area the bedding dips to the north, nearly at right angles to the trend of the bluff, so bedding planes are not exposed on the bluff face. The upper slope is underlain by marine terrace deposits. A quantitative slope stability analysis in reference (5) demonstrates that the slope is globally stable (factor of safety of 1.8 static, 1.2 pseudostatic) with respect to sliding. The report does not show the location of the hypothetical failure surface corresponding to this factor of safety, so there is no way of identifying the way to establish setbacks behind a line corresponding to a particular factor of safety. Reference (5) also reports a 1.6 factor of safety against surficial sliding, using the method of infinite slopes. Nevertheless, it is acknowledged that slope is "partially unstable," and is subject to creep. Significant erosion is occurring on the lower third of the slope due to leakage from a corroding storm water drain. I concur with the assessments of references (4) and (5) that the slope is currently grossly stable, but that continued surficial creep, slumps, and gulleying are to be expected. Instability could increase markedly if the erosion caused by the defective storm water drain is not repaired.

Due to its proximity to several active faults, including the Newport-Inglewood fault and the Palos Verdes Fault, the site can be expected to experience severe ground shaking during the economic life of the development. The slope stability analyses indicate, however, that the slope will be grossly stable even during such shaking. Nevertheless, minor surficial slumps or ground cracking may occur. Due to its elevation above the presumed ground water table, and the density and grain size of the terrace deposits directly underlying the proposed development, the liquefaction hazard is low.

As indicated in reference (2), the proposed development is to occur on the face of a coastal bluff. I understand that the applicant disagrees with this assessment. The applicant maintains that the upper portion of the slope, which extends to the very edge of the principal residence on the site, is a cut slope which modified the natural bluff. The cut slope is approximately 12 feet in height, as indicated on the topographic survey (reference 3), and descends to a sloping bench approximately ten feet wide, which contains a concrete-lined swale for drainage purposes. A wooden deck currently occupies part of this bench. Below the bench, the slope descends to the beach. One intervening bench occurs at approximately mid-slope, also containing a concrete-lined swale.

The applicant has submitted a set of architectural drawings dated 1961 (reference 1) [illegible] COMMISSION line labeled "irregular top of cliff" that is approximately 30 feet seaward (measure horizontally)

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of the residence at the site. The applicant feels that any setbacks from the top of bluff should use this line as point of reference, as the top of the slope cut into the top of the bluff is not a natural feature. There are no topographic data on reference (1) with which to evaluate whether this was an accurate bluff edge determination at the time, it is my opinion that it is certainly not an accurate depiction of the current bluff edge.

In order to determine the location of the current bluff edge, I have reviewed the topographic map in reference (3) and the cross-sections provided in reference (6) against the standard set forth in §13577, paragraph (h), of Title 14 of the California Code of Regulations, in which the top of bluff is defined. It provides in relevant part:

> Bluff line or edge shall be defined as the upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge.

Nothing in the Coastal Act or its regulations stipulates that a coastal bluff need be unmodified by human activities to preserve its status as a coastal bluff. If the morphology of a bluff has been changed by prior grading, the only standard by which to establish the current bluff edge is as defined in the regulation. By this definition, the bluff edge (in this case, the landward edge of the topmost riser) is approximately at the edge of the residence itself. Any development seaward of the edge of the house would be on the bluff face.

The Commission has denied applications for bluff face development in the past due to, among other things, problems associated with geologic instability. In so doing, the Commission has relied on § 30253 of the Coastal Act. In this case, the proposed development does raise geological stability issues. Ongoing erosion associated with a corroded storm water discharge pipe is occurring and increasingly places development on the bluff face at risk. However, even if this pipe were repaired, the bluff would continue to be subject to shallow failures and to creep, as acknowledged in references (5) and (6). Indeed, because of the uncertainty associated with predicting geologic processes into the future, I would recommend that development be set back from the bluff edge to assure stability. Accordingly, I recommend that the Commission find that the proposed development on the bluff face does not assure stability, and is therefore not consistent with the requirements of section 30253 of the Coastal Act.

I hope that this review has been helpful. Please do not hesitate to contact me with any further questions

Sincerely,

Mark Johnsson
Senior Geologist

I. INTRODUCTION

The purpose of this wave runup study is to determine if the proposed development will be subject to wave runup or wave attack over the typical life (100 years) of the development. If the property will be subject to wave runup or wave attack the analysis will discuss how frequently it will occur, what the predicted water volume and water height will be on the property, and how, if necessary, to manage the overtopping waters. The analysis will also determine if the property will be subject to direct wave attack of the project life. If the property is subject to wave attack then the analysis will include design parameters for wave forces. The analysis uses design storm conditions typical of the January 1988 and winter of 1982-83 type storm waves and beach conditions.

The subject property, 501 Paseo de la Playa, is an approximately rectangular lot 50' to 86' wide by 385' to 398' long. The lot varies in elevation from +125' MSL to about +10' MSL and is fronted by a sandy beach (approximately 200 feet wide) and the Pacific Ocean. This shoreline is located at the southern end of the Santa Monica Littoral Cell. A littoral cell is a coastal compartment that contains a complete cycle of littoral sedimentation including sources, transport pathways and sediment sinks. The Santa Monica Littoral Cell extends from Point Dume to Palos Verdes Point, a distance of 40 miles. Most of the shoreline in this littoral cell has been essentially stabilized by man. The local beaches were primarily made by man through nourishment as a result of major shoreline civil works projects (Hyperion Treatment Plant, Marina Del Rey, King Harbor, etc.). The up-coast and down-coast movement of sand along the shoreline is mostly controlled by groins, breakwaters, and jetties and is generally to the south. A major sink for the beach sands is the Redondo Submarine Canyon located at the entrance to King Harbor.

The subject site is located at the southern terminus of the Santa Monica Littoral Cell. The net sand movement along this section of shoreline is to the north towards King Harbor. A groin is located about 1.5 miles to the north of the site and the Malaga Cove headland (Flat Rock Point) is located immediately to the south of the site. A review of aerial photographs shows little if any overall shoreline retreat. The shoreline is stabilized by the natural headland to the south, and the groin and harbor to the north. For the purpose of this analysis a very conservative estimate of the shoreline retreat rate is 0.5 feet per year. The wide sandy beach in front of the site is normally 200 feet wide and provides adequate protection for the base of the bluff at the seaward property line of the site. Over the vast majority of time wave runup will not reach the base of the bluff and will absolutely not reach the improvements on the property over the next 100 years. However, the beach in this area is subject to seasonal eros due to extreme event storm events which may erode the beach back to near the bluff base within the 100 year li et me of the new development.

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VI. CONCLUSIONS AND RECOMMENDATIONS

Prediction of runup on a beach and bluff during extreme storm events is a very complex problem. The calculations made herein use state of the art methods, yet they are based on several simplifying assumptions (see Chapter 7 of SPM). There are several facts that indicate that wave runup will not reach the property or adversely impact the property over the life of the structure.

- There is a relatively stable beach sandy beach in front of the property 99.9% of the time. The conservative (extreme) erosion rate is small (0.5 ft/yr) and would only reduce the beach width about 50 feet in 100 years.
- A review of aerial photographs over the last four decades shows little overall shoreline retreat in general and a sand beach even at times when the beach is seasonally at its narrowest.
- The base of the bluff is a bedrock material, Miocene Monterey Formation, which is resistant to erosion. Using a extreme bluff erosion rate of 0.5 ft/year, the bluff would retreat only 50 feet. The structure is over 280 feet from the bluff toe.
- The property has not been subject to wave runup attack in the past.
- The runup analysis shows that the 100 year wave runup event will not reach the improvements on the property.

In conclusion, wave runup will not impact this property over the life of the proposed improvement. The proposed development will neither create nor contribute to erosion, geologic instability, or destruction of the site or adjacent area. There are no recommendations necessary for wave runup protection. The proposed project minimizes risks from flooding.

VII. CERTIFICATION

This report is prepared in accordance with accepted standards of engineering practice, based on the site conditions, the materials observed and historical data reported. No warranty is expressed or implied.

VIII. REFERENCES

Coastal Construction Manual 1986 FEMA (Federal Emergency Management Agency) Ref.

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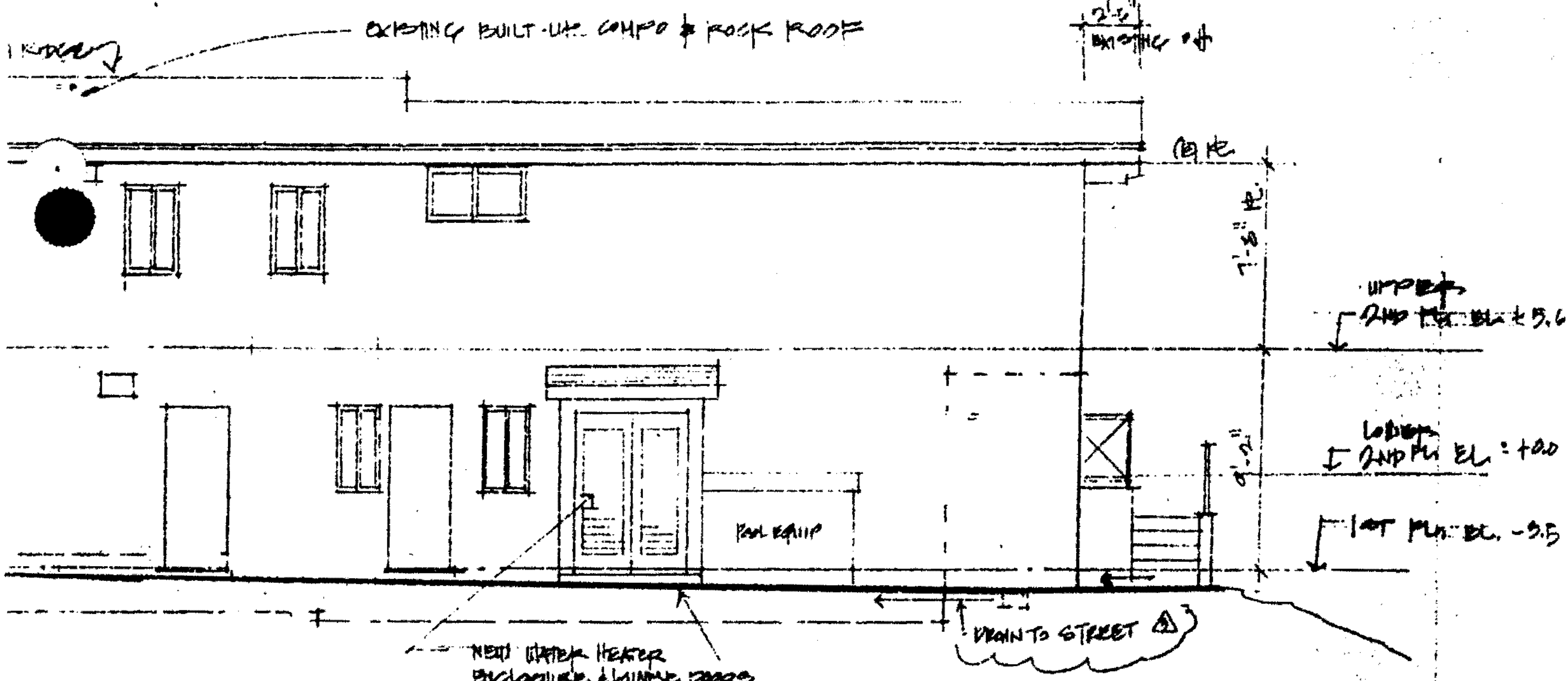
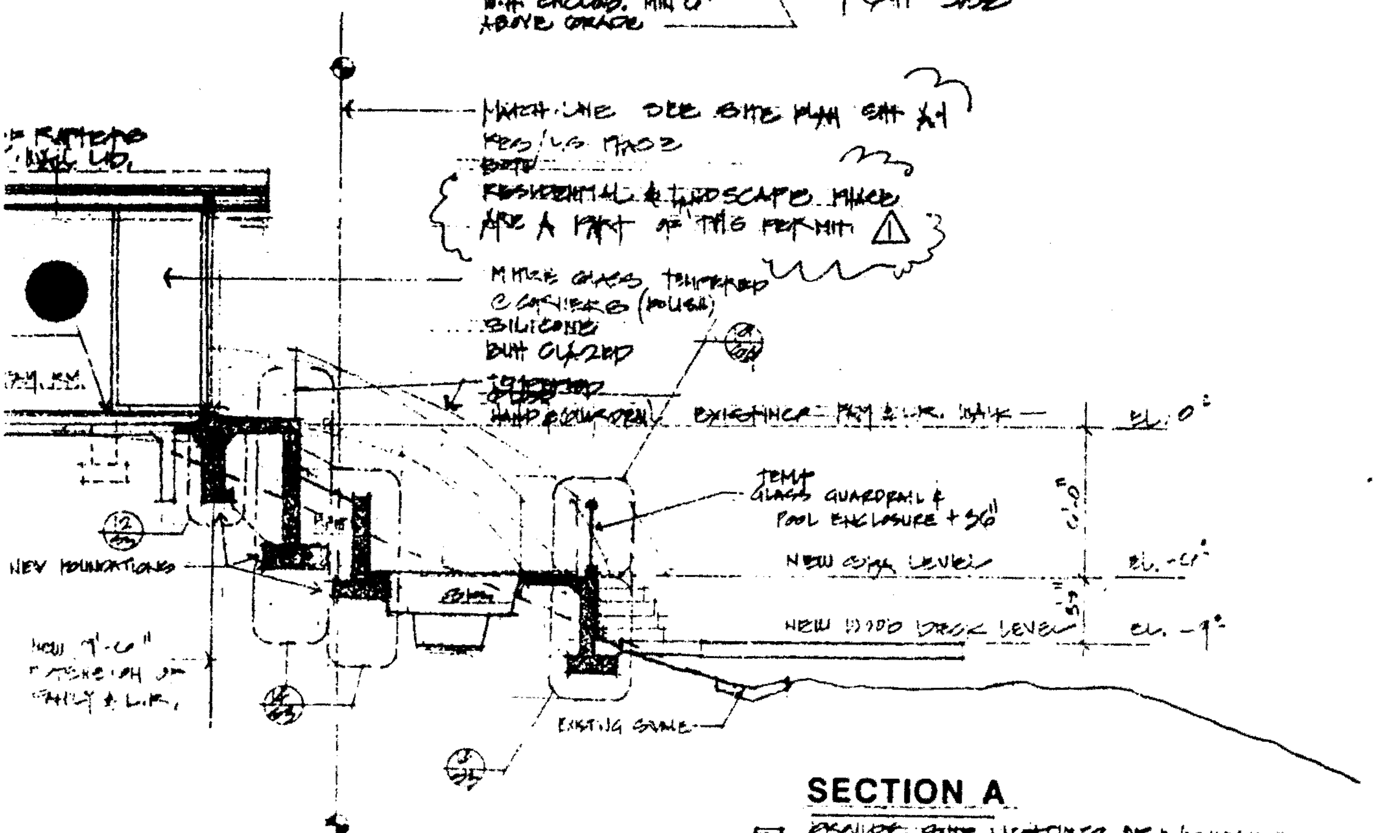


NORTH ELEVATION



SECTION A

COASTAL COMMISSION

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CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 641 - 0142

Memorandum

To: Pam Emerson

From: Jon Allen, Staff Ecologist

Subject: El Segundo Blue Butterflies on Conger Property

Date: 7/23/2001

To follow up on our site visit to the Conger Property at Torrance Beach, I am sending a picture of *Eriogonum parvifolium*, dune buckwheat, the host plant of the El Segundo blue butterfly (ESB), *Euphilotes battoides allyni*. There are two fairly good pictures of the butterfly itself (on the Conger property), one on the invasive iceplant, *Carpobrotis edulis* and one on its normal host plant, *Eriogonum parvifolium* (Figure 1). The El Segundo blue butterfly is in the family Lycaenidae and has been listed as federally endangered since 1976. The ESB is restricted to the sand dune habitat in the Los Angeles metropolitan area where urbanization has destroyed approximately 99% of its required sand dune habitat (Arnold and Goins 1987). The ESB is univoltine (i.e. has one generation per year) and the adult butterflies emerge at the time of flowering of its dune buckwheat host plant (June to September). In many lepidopterous species, the adult butterflies will feed on nectar from many different kinds of flowers even though the larvae may require a particular host plant, but in the ESB both the larvae and the adults are obligate on *Eriogonum parvifolium*, dune buckwheat. This makes the ESB particularly sensitive to disruption of its host plant since both adults and larvae require it. The more common *Eriogonum fasiculatum*, (California buckwheat) is not a suitable host for ESB, and in fact supports numerous competing Lepidopterous species (Longcore et al 1997). We are grateful to Travis Longcore for this information and for pointing out the ESB and its host plant at the site in accordance with our request.

The ESB apparently requires a distribution of age classes of its buckwheat host plant. Juveniles and older plants do not produce as many flowers as middle-aged plants. Field observations suggest that buckwheat plants less than about five years of age do not produce enough flowers for ESB larvae to effectively utilize them (Arnold 1983). So survival of ESB is dependent upon 'middle-aged' buckwheat plants plus steady recruitment of younger plants into the middle age group as they senesce. This continual 'conveyor belt' of dune buckwheat age groups is indicative of a healthy dune ecosystem, and hence the butterfly is good indicator species for the health of this system.

According to Arnold and Goins (1987) dune buckwheat is very susceptible to displacement by non-native invasive species that have invaded its dune habitat (e.g. *Carpobrotus* (ice plant) and non-native grasses). In the presence of invasive competitors, recruitment of juveniles is greatly reduced and the age distribution

buckwheat shifts to older plants which do not produce enough flowers to adequately support ESB. Therefore any attempts at restoration should have elimination of non-natives as a first priority.

In summary it is my opinion that the *Eriogonum parvifolium* at the Conger property is both rare and performing an important ecological function (supporting a population of federally endangered El Segundo blue butterflies). It is easily disturbed by human activities, and because of this it fits the definition of environmentally sensitive habitat under the Coastal Act, Section 30107.5 and must be protected under Section 30240.

References:

Arnold, R.A., 1983. Ecological studies of six endangered butterflies (Lepidoptera: Lycaenidae): Island biogeography, patch dynamics, and design of habitat preserves. University of California Publications in Entomology 99: 1-161.

Arnold, R. A, and A. E. Goins. 1987. Habitat enhancement techniques for the El Segundo blue butterfly: An urban endangered species. (p. 173-181) *In*: Integrating Man and Nature in the Metropolitan Environment, Proc. Natl. Symp. On Urban Wildlife, Chevy Chase, MD., Novermber 1986, L. W. Adams and D. L. Leedy, eds. Published by Natl. Inst. For Urban Wildl., 10921 Trotting Ridge Way, Columbia, MD. 21044.

Longcore, T., R. Mattoni, G. Pratt and C. Rich. 1997. On the perils of ecological restoration: Lessons from the El Segundo blue butterfly. 2nd Interface Between Ecology and Development in California. J. E. Keeley, Coordinator. Occidental College April 18-19, 1997.

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SOUTH OF PROJECT SITE.

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Robert and Nancy Conger
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Office (310) 726-4100

September 2, 2001

California Coastal Commission
South Coast Area
200 Oceangate, 10th Floor
Long Beach, CA 90802
Tel: (562) 590-5071
Fax: (562) 590-5084

Permit Number: 5-01-018

Attention: Melissa Stickney,

Per my discussion with Pam Emerson, I am forwarding this letter relative to errors in the last staff report of July 27, 2001. I realize that many of the misinformation and errors carried over from the staff report of May 30, 2001, but I would like to correct them again so they do not reappear.

You have received the Supplemental Geotechnical Engineering Report that substantiates that the "Historical Top of Bluff" is correctly defined and that our project is all inland of this line. I had also forwarded an illustration depicting the views so that the report, comments and photos previously supplied are easier for you and Pam to visualize. I have heard that your Geologist Mark Johnsson has contacted my geotechnical engineer and they have stated that my illustration does represent the data they have supplied. They of course can not stamp my illustration as theirs since I drew this as an illustration, not a detailed engineering drawing, and Mark does have their report of the detailed data.

As I have previously indicated, the Torrance Building Department has a designated "build line" on the properties south of us, starting three properties further south. According to the city, there is no build line on our property and none continuing northward as the bluff becomes more of a hillside.

I have sent letters on June 7, June 30, July 21, and August 22, 2001 all relating to the project and the past staff report information that was in error. Since we finally saw Mark's definition, we have now supplied him with the information that by his definition places the top of the bluff at the historic line and thereby places all of our project inland of the top of the bluff as we have previously asserted, and not in any manner touching the bluff slope.

Our project places retaining walls, spa and patio on the existing fill then places a useable wood deck on the flat area inland of the top of the slope, leaving the existing swale as is. The deck provides for useful yet protected area on the flat area.

As I discussed with Pam, the following items in the staff report are either incorrect, or no longer valid:

1. Pg1 Description includes only 350 sq. feet of addition on the rear of the house, with the balance on the street side including the conversion of 100sq feet of existing storage space into habitat living space. The other parts of the description when corrected will have the entire project inland of the top of the bluff.

Once rewritten, the new staff report should not require any of the conditions, since none of the project is on the bluff slope. The various exhibits with staff notes added to redefine the top of slope at the immediate rear of our house need to be corrected to place the top of the bluff back seaward to the correct location.

2. Pg4 Item 2. Assumption of Risk etc. should not apply. There is no additional risk then set by the Torrance Building and Safety Department for building on any hillside, including all of the Hollywood Rivera Section.

3. Pg5 Items 3, 4, and 5 again change with the correction of the top of bluff. Further, Torrance Building and Safety Department requires that all permit for the bluff home receive a Coastal Permit before issuing a building permit.

4. Pg6 We [illegible]educing plantings on the fill portion and not performing any planting on the bluff slope.

5. Pg7 The project is removing fill dirt and drainage has been incorporated into the plans. There is no erosion during construction or upon completion.

6. Pg8 IV.A. Project Description There are 28 lots, not 27 on the top of the bluff. Beach access is nine lots North of our project. Our lot is .64 acres (27,780 sq. feet) with the top portion 60 feet wide. The lot runs approximately 100 feet from the street to the top of the bluff. The balance of the description should be corrected relative to the projects location inland of the top of the bluff. Further, the swale is located approximately 25 feet inland of the top of the bluff

7. Pg10 B. Top of Bluff The project is located inland of the top of bluff. There has been no safety or other activity on our lot or any to the north or even the three lots to the south. The only activity has been on the cliff further south that are much steeper. For this lot there is not a Safe Building Line as this lot, along with all those to the north, are treated as being on hillside, not cliffs. The build line starts on lot 164 and runs south. We have not located any information relative to an old sewer line, only the water drainage pipe located on an adjacent property in the 1960s.

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8. Pg11 All of Mark Johnsson's comments have been addressed and the correct definition of the top of slope and its location have been satisfied since the house and project is on fill.

9. Pg13 C. Bluff Face Development All of our proposed project is inland of the top of the bluff. Thus most of the comments are relative to our project are changed. On page 14, 2nd par., six of the nine lots north of us have stairs and improvements on the bluff face. In the same paragraph, a comment made relative to the lot next to us on the north that the lot "was extensively graded in response to erosion". That is in error, as the lot was graded to improve the view. Subsequently, the owner was required to perform additional work after his next door neighbor complained.

In the 4th paragraph a comment is made that we will have a cantilevered wood deck – that is in error, as our deck will all be inland of the top of bluff and sit up 12 inches off the flat area. Virtually none of our project will be visible from the beach, as the wood deck is approximately12 feet wide before the patio starts and the retaining walls for the patio and house are further behind that. There are a number of comments that are incidental to the issues, that will not be relevant since the top of the bluff is now correctly defined and all of our project is now correctly set as inland of the top of the bluff.

10. Pg16 2. Habitat Impacts We had given written permission for the State Fish and Wildlife Service to come on to our property to survey for the El Segundo Blue Butterfly. Our project has no impact on the habitat as all of butterfly habitat is at the lower edge of our property next to the beach. Any disturbance to their habitat would come from people on the beach. The USFWS staff, in prior discussions with us and others on the bluff, have stated that if we would assist them in the future to repopulate some of the buckwheat plants there would be nothing to inhibit us from future improvements on the slope. This would of course be some future plan they are attempting to work with the homeowners and the Coastal Commission. Bottom line is that our project has no impact on habitat.

In addition, per page 17, 3rd paragraph, our project will improve the drainage as the patio will have any water running to the street per our plans, where now any water runs to the swale, then is discharged lower down the slope through the neighbors slope drain pipe to the beach.

11. Pg17 Geologic Hazard Our project has no more "risk" than any hillside lot. As covered in our engineers reports and approved by the Torrance Building and Safety Department, our lot is "grossly stable" and all aspects have been approved in conformance with the engineering in the plan. The comment on page 19 3rd paragraph on the defective storm drain is on the neighbor's lot and we are encouraging them to repair the pipe that has been in the current condition for at least a dozen years.

Page 20-24 Assumption of Risk, -------- We are not in an area of "high geologic, flood and fire hazard or high risk to life and property. Our lot is a typical hillside that homes are built on everyday. Further, there have been no geologic issues with this property

since it was built in the mid-60s. Thus, there are no needs for further "Waivers or Indemnity since the City of Torrance has approved the project relative to all the standard compliance of Building and Safety.

12. Pg25 D. Previous Commission Actions in Project Area Missing from the list and discussion in the bluff activity completed earlier this year on Lot 169 that included a small patio and glass wind screen as well as stairs down the slope to the beach. Also again, the error in description of the lot adjacent to ours that was graded for view purposes then required modifying the grading on the slope by the Commission.

Should you require any further information or discussion please do not hesitate to contact me. As you know, this project has been in progress since 1999.

Sincerely,

Robert Conger