

CALIFORNIA COASTAL COMMISSION

South Coast Area Office
3000 Ocean Gate, 10th Floor
Long Beach, CA 90802-4302
(562) 590-5071

Filed: 05-07-98
49th Day: 06-25-98
180th Day: 11-03-98
Staff: RMR-LB **RMR**
Staff Report: June 16, 1998
Hearing Date: July 7-10, 1998
Commission Action:

**STAFF REPORT: REGULAR CALENDAR**

APPLICATION NO.: 5-98-084

APPLICANT: Glen & Jane O'Hara Justice

AGENT: Evans Environments

PROJECT LOCATION: 210 Hazel Drive, Newport Beach, Orange County

PROJECT DESCRIPTION: Demolition of a 3,200 square foot, one-story residence with detached garage. Construction of a 24 foot high, three-story (including basement), 6,739 square foot single-family residence with a 527 square foot garage. Grading consists of 650 cubic yards of cut and 50 cubic yards of fill.

Lot Area	8,495	sq. ft.
Building Coverage	2,825	sq. ft.
Pavement Coverage	2,743	sq. ft.
Landscape Coverage	2,927	sq. ft.
Parking Spaces	2	
Zoning	R1	
Plan Designation	R1	
Ht abv fin grade	24	feet

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends the Commission approve the proposed development with special conditions regarding conformance with geologic recommendations, provision of a landscaping plan and notification of the location of the disposal site for the excess cut dirt. There are no known issues of controversy or unresolved issues.

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution:

I. Approval with Conditions

The Commission hereby grants, subject to the conditions below, a permit for the proposed development on the grounds that the development, as conditioned, will be in conformity with the provisions of Chapter 3 of the California

Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, is located between the sea and first public road nearest the shoreline and is in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

LOCAL APPROVALS RECEIVED: Approval in Concept from the City of Newport Beach Planning/Building Department

SUBSTANTIVE FILE DOCUMENTS: City of Newport Beach certified Land Use Plan, Geotechnical Investigation by PETRA dated May 7, 1998

II. Standard Conditions

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. Special Conditions

1. Conformance with Geotechnical Recommendations

Prior to the issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, grading, foundation and basement plans. The approved foundation plans shall include plans for the foundation, retaining walls, subdrains and footings. These plans shall include the signed statement of the geotechnical consultant certifying that these plans incorporate the recommendations contained in the geotechnical investigation prepared by PETRA on May 7, 1998.

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

2. Disposal of Cut Dirt

Prior to the issuance of the coastal development permit the applicant shall submit, for the review and approval of the Executive Director, a letter stating where the applicant intends to dispose the excess cut dirt. If the disposal site is in the coastal zone, a coastal development permit may be required.

3. Landscaping Plan

Prior to the issuance of the Coastal Development Permit the applicant shall submit, for the review and approval of the Executive Director, landscaping plans for the rear yard area. The plans shall incorporate the following criteria:

- (a) Any graded areas in the rear yard area of the property shall be planted and maintained for erosion control and enhancement of native coastal bluff vegetation. To minimize the need for irrigation and reduce potential erosion and slope failure, landscaping shall consist of native, drought-tolerant or fire resistant plants. Invasive, non-indigenous plant species which tend to supplant native species shall not be used.
- (b) All graded areas shall be stabilized with planting at the completion of the project. Planting shall be of native plant species indigenous to the area using accepted planting procedures, adequate to provide 70% coverage within one year, and shall be repeated, if necessary, to provide such coverage.

The landscape plan shall be carried out as approved by the Executive Director.

IV. Findings and Declarations

A. Project Description

Demolition of a 3,200 square foot, one-story residence with detached garage. Construction of a 24 foot high, three-story (including basement), 6,739 square foot single-family residence with a 527 square foot garage. Grading consists of 650 cubic yards of cut and 50 cubic yards of fill. The proposed development will not encroach seaward of the existing residence. The site occupied by the current residence is series of level terraces with a five foot high slope at the rear which descends at a gradient of 4:1 to 5:1 to a 10 foot wide walkway. Beyond the walkway is a 60 foot high vertical cliff.

The proposed development is located in the community of Corona del Mar, which is within the jurisdiction of the City of Newport Beach. The subject site is located on Hazel Drive adjacent to Poppy Ave. and Ocean Boulevard. Ocean Boulevard terminates at the intersection of Poppy Dr. The assessor's parcel map shows that there is a public park and walkway at the terminus of Ocean Boulevard. The walkway descends down to Little Corona Beach. The applicant's lot is situated between Hazel Drive and the public walkway to the beach.

There are single-family residences to the east and west, Hazel Drive to the north and the 10 foot wide public walkway to the south. The residence is located on a southwest facing-slope overlooking Buck Gully and Little Corona Beach. The proposed development is located on a coastal bluff and is situated between the sea and the first public road but is inland of the beach. The property is 50 feet inland of the bluff edge and at least 100 feet from the flowline of the stream. The property alignment is towards the coast, not towards Buck Gully. The property boundary does not include the bluff edge or toe and therefore is not subject to wave attack. The property does not include slope area adjacent to Buck Gully and therefore is not subject to erosion from runoff waters contained in Buck Gully. The public walkway adjacent to the southern property boundary provides public access to the beach.

B. Geology

Section 30253 of the Coastal Act states in part:

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The proposed development is located on a coastal bluff and hillside adjacent to Buck Gully, a natural ravine. The property is aligned towards the coast (southwest) and not towards Buck Gully. The site occupied by the current residence is series of level terraces with a five foot high slope at the rear which descends at a gradient of 4:1 to 5:1 to a 10 foot wide walkway. Beyond the walkway is a 60 foot high vertical cliff.

During the winter storms of 1997 and 1998 Buck Gully experienced severe erosion, downcutting and widening of the drainage channel. In addition, a concrete outlet structure at the beach was destroyed along with the lower section of the walkway at the beach level. However, the development site is situated above the drainage and is not subject to runoff erosion in the ravine. The site is situated on a coastal bluff but is separated from the beach and coastal bluff edge by a public walkway and open space (see Exhibits 2 and 4). Therefore, the subject site is not exposed to wave attack. The proposed residence will be a minimum of 40 feet from the 10 foot wide walkway. At a minimum, therefore, the proposed residence will be at least 50 feet from the bluff edge.

1. General Findings on Bluff Erosion

The proposed development is situated adjacent to a coastal canyon and on a coastal bluff. The coastal bluff toe is subject to wave attack, although the applicant's property is not. Coastal bluffs in California are located at the intersection of land and ocean and are exposed to the severe weathering forces of nature. Coastal bluffs in southern California are composed of relatively recent uplifted geologic materials and by virtue of their location and composition, these coastal bluffs are in a continual state of erosion.

Coastal bluff erosion is caused by a combination of inherent environmental factors and erosion caused by man. Environmental factors include gravity, seismicity, wave attack, wetting and drying of bluff face soils, wind erosion, salt spray erosion, rodent burrowing and piping, percolation of rain water, poorly structured bedding, surface water runoff and poorly consolidated soils.

Factors attributed to man include bluff oversteepening from cutting roads and railroads, improper irrigation practices, building too close to the bluff edge, improper site drainage, use of impermeable surfaces which increase runoff, use of water-dependent vegetation, pedestrian or vehicular movement across the bluff top, face and toe, and breaks in irrigation lines, water or sewer lines. In addition to irrigation water or runoff at the bluff top, increased residential development inland leads to increased water percolating beneath the surface soils and potentially outletting on the bluff face along fracture lines in the bluff or points of contact of different geologic formations, forming a potential slide plane.

There is a wealth of information in technical periodicals and books concerning coastal bluff erosion. Selected portions of relevant articles by experts in the field are included in this staff report to support the Commission's findings and special conditions.

F.B. Leighton wrote a chapter on "Landslides and Urban Development" in Engineering Geology in Southern California, 1969. In this chapter Leighton writes:

Landsliding is responsible for the bulk of the material moved from valley sides and from sea cliffs in southern California. Its importance as a sculpturing process exceeds that of direct erosion of these areas by running water and the waves.

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

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

Ernest R. Artim, in an article entitled "Erosion and Threat of Sea Cliffs, San Diego County, California," discusses the factors leading to bluff retreat. He states:

Man has introduced into the coastal region a series of erosion accelerating agents, such as uncontrolled foot traffic and irrigation. Uncontrolled runoff from structures built on top of cliffs often results in channeling and erosion.

The toe of the coastal bluff, on which the property is situated, is subject to wave attack and erosion caused by the other environmental factors mentioned above.

2. Site Specific Geologic Data

A preliminary geotechnical investigation was performed by Allwest Geoscience and another geotechnical report was prepared by PETRA on March 12, 1998. The Allwest report did not include subsurface tests but did include a discussion on bluff retreat. Using an average bluff retreat rate of 6 inches per year, based upon studies conducted in other regions of California, the consultants estimated that it would take over 200 years for the bluff edge to reach the southwesterly property line. The bluff edge and toe is under the jurisdiction of the County of Orange and contains an important public walkway. Preservation and protection of the public access at this location is vital. The County is currently taking steps to repair and strengthen the base of the walkway at the beach level which was damaged during the winter storms of 1998. In addition to the access policies of Chapter 3 of the Coastal Act, Section 30235 allows structures that alter natural shoreline processes to serve coastal-dependent uses or to protect existing structures. The public walkway qualifies as both a coastal-dependent use and an existing structure.

A more comprehensive geotechnical investigation was conducted by PETRA and concluded on May 7, 1998. The PETRA investigation included subsurface exploration, evaluation of surface and subsurface soils, and concluding recommendations for construction. The laboratory testing of soils included tests for determination of maximum dry density, expansion potential, soluble sulfate content and shear strength characteristics.

The underlying soil structure consists of thin layers of topsoil underlain by terrace deposits and hard, thinly bedded siltstone and shale bedrock. Bedrock materials were observed to dip towards the northeast, a favorable situation. The report notes that the site is located 1.5 miles northeast of the Newport-Inglewood Fault Zone, does not contain landslides, is not located on an active fault zone and the soils have a very low expansion potential.

The PETRA report concludes that the site is suitable for the proposed development and will not adversely affect the stability of adjacent properties, provided the construction is done in accordance with the recommendations contained in the geotechnical report concerning grading, excavation, shoring, drainage and installation of the foundation and slabs.

3. Conclusions and Special Conditions

In his article "Some Techniques for Reducing Landslide Hazards", William Kockelman, U.S. Geological Survey, discusses several ways to minimize landslide hazards, including:

1. Require a permit prior to scraping, excavating, filling, or cutting any lands.
2. Prohibit, minimize, or carefully regulate the excavating, cutting and filling activities in landslide areas.
3. Provide for the proper design, construction, and periodic inspection and maintenance of weeps, drains, and drainage ways, including culverts, ditches, gutters, and diversions.
4. Regulate the disruption of vegetation and drainage patterns.
5. Provide for proper engineering design, placement, and drainage of fills, including periodic inspection and maintenance.

Kockelman also discusses the option of disclosure of hazards to potential buyers by the recordation of hazards in public documents. The recordation of hazards via the assumption of risk is one means the Commission utilizes to inform existing and future buyers of property of the potential threat from soil erosion and slope failure (landslide) hazards. Several of these recommendations are routinely required by local government, including requiring permits for grading, minimizing grading, and requirements for proper engineering design.

The Commission has incorporated many of these same recommendations, including requiring the consulting geologist to review foundation and drainage plans, minimizing grading, and requiring applicants to provide landscape and drainage plans which provide for native drought-tolerant plants. In fact, although the consulting geologists routinely make recommendations concerning landscaping and site drainage, geologists do not review landscaping plans. In this respect the Commission fills an important role in minimizing landsliding and erosion and also ensuring the continuance of native plants.

Because of the fragile nature of coastal bluffs and their susceptibility to erosion, the Commission requires a special condition regarding the types of vegetation to be planted.

Ordinarily, the Commission requires an assumption of risk special condition for development on coastal bluffs. However, as the geotechnical reports have indicated, the site does not incorporate the bluff edge, the bluff is public property, an important public walkway is located between the site and the bluff edge, and the site is geologically stable. The County is currently taking steps to repair and fortify the base of the walkway which was washed out during the winter storms of 1998. The public agencies have a vested interest in protecting the walkway from bluff erosion. In any event, the Allwest geotechnical report states that the property is not in danger from bluff erosion for the economic life of the property.

The findings in the staff report regarding the general causes of bluff erosion and the site specific geologic information confirm that the that some coastal bluff erosion is occurring. Given the development's location on an eroding coastal bluff landform measures to minimize bluff erosion are necessary. The following special conditions will help mitigate the impacts of the proposed development on bluff erosion and instability.

b. Landscaping Special Condition

In approving development on a coastal bluff the Commission must condition the applicant to minimize potential erosion or, as it is stated in Section 30253 "...to neither create nor contribute significantly to erosion...".

Artim, see page 6, discusses the impact of man on coastal bluffs and the adverse impact of non-native vegetation. He states:

Man often replaces native vegetation on the cliff surface with exotic vegetation. This creates an environment more conducive to rodents, depletes the existing natural, fragile cementation, and, when coupled with uncontrolled runoff, produces a greater erosive agent than existed naturally. Exotic vegetation often competes with the natural growth and tends to kill the native plants which have, in the past, adapted to and partially stabilized the bluff surfaces.

Griggs, Pepper and Jordan wrote a paper, "California's Coastal Hazards Policies: A Critique" which was presented at the California Coastal Zone Experience, 1991. In this paper they discuss the role of irrigation water in landsliding.

Along the urbanized seacliffs of southern California, geologic instability has been increased through the addition of large volumes of irrigation water required to maintain lawns and non-native vegetation in the yards of cliff top homes. Landscape irrigation alone is estimated to add the equivalent of 50 to 60 inches of additional rainfall each year to garden and lawn areas. This irrigation has led to a slow, steady rise in the water table that has progressively weakened cliff material and lubricated joint and fracture surfaces in the rock along which slides and block falls are initiated. In addition to these effects, surface runoff discharged through culverts at the top or along the face of the bluffs leads to gullyng or failure of weakened surficial materials.

The role of water/percolation in association with water-dependent vegetation is documented in this staff report. The Commission has also acted on many coastal development permits in which an applicant has applied for bluff protective measures following the failure of irrigation lines, water or sewer lines which then cause slope failure. It is extremely difficult to discover breaks in in-ground irrigation lines until after a certain period of time passes and plants start to die. By then the slope may have become saturated. It is also difficult to assess the longterm damage caused by the accumulation of water on bluff top soils due to watering of lawns and other water intensive vegetation. It is estimated that watering a lawn on a regular basis is the equivalent of 60 inches of rainfall a year. The average rainfall in southern California is 12 to 20 inches per year.

The existing rear yard adjacent to the public walkway consists of a grassy area. The applicant has not indicated whether he will keep or remove this grassy area. Submittal of a landscape plan will clarify what, if any, graded areas in the rear yard are proposed for landscaping. Therefore, in order to ensure that landscaping does not increase the potential for site erosion, the Commission is requiring that the applicant submit a landscaping plan for any graded areas in the rear yard for the review and approval of the Executive Director. The special condition requires that all proposed landscaping be of native, drought-tolerant plants similar to that found on existing coastal bluffs in the site area.

d. Conformance with Geologic Recommendations

The geotechnical consultant has found that the proposed development is feasible provided the recommendations contained in the geotechnical report prepared by the consultant are implemented as regards the design and construction of the project. The geotechnical recommendations address foundations, excavation, retaining walls, and footings. In order to insure that risks of development are minimized, as per Section 30253, the geotechnical consultant's recommendations should be incorporated into the design of the project. As a condition of approval the applicant shall submit foundation plans reviewed and signed by a consulting geologist.

e. Findings of Coastal Act Consistency

The Commission has attached several special conditions which are required to bring the proposed development into conformance with Section 30253 of the Coastal Act. These special conditions include: conformance with geologic recommendations, and landscaping. Only as conditioned to comply with the provisions of these special conditions does the Commission find that the proposed development conforms with Section 30253 of the Coastal Act.

C. Visual Resources

The visual resource protection policies of the Coastal Act are found in Section 30251 of Chapter 3.

Section 30251

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

In addition, the certified LUP contains policies pertaining to protection of specific view areas in the City of Newport Beach, including views along Ocean Boulevard. On page 28 of the LUP it states:

Where coastal views from existing roadways exist, any development on private property within the sight lines from the roadway shall be sited and designed to maximize protection of the coastal view. This policy is not intended to prohibit development on any site.

The proposed development is located inland of the public park located at the terminus of Ocean Boulevard. The walkway at this park goes from Ocean Boulevard down to Little Corona beach, a small pocket beach at the terminus of Buck Gully. Further north along Ocean Boulevard (several hundred feet) is Corona del Mar State Park Beach, a large, popular beach destination point.

The proposed development site is not located in the viewshed of either public parks and development of a single-family residence will not have an adverse impact on coastal visual resources. However, the proposed development involves 650 cubic yards of cut and 50 cubic yards of fill. In order to ensure that this dirt is removed and not placed elsewhere in the coastal zone where it may have adverse impacts on coastal resources, the Commission finds that the applicant shall submit a letter for the review and approval of the Executive Director indicating the disposal location of the excess dirt.

Only as conditioned does the Commission find that the proposed development conforms with Section 30251 of the Coastal Act and the view protection policies of the certified LUP.

D. 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 includes a specific finding that the development is in conformance with the public access and recreation policies of Chapter 3 of the Coastal Act. The proposed development is located between the sea and the first public road.

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

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

The proposed development is situated adjacent to and inland of a public walkway from Ocean Boulevard to the beach. Access is to Little Corona beach is provided by a trail at the terminus of Ocean Boulevard. To the west is Corona del Mar State Beach which also provides beach access and recreation opportunities.

The property line of the proposed development is located north of the 10 foot wide public walkway. Development proposed in this permit application will not interfere in any way with the public's ability to use the walkway. Therefore, the Commission finds that adequate public access exists in proximity to the proposed development and that the proposed development does not pose significant adverse impacts on public access and recreation and is consistent with Section 30212 of the Coastal Act.

F. 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 the Chapter 3 policies of the Coastal Act.

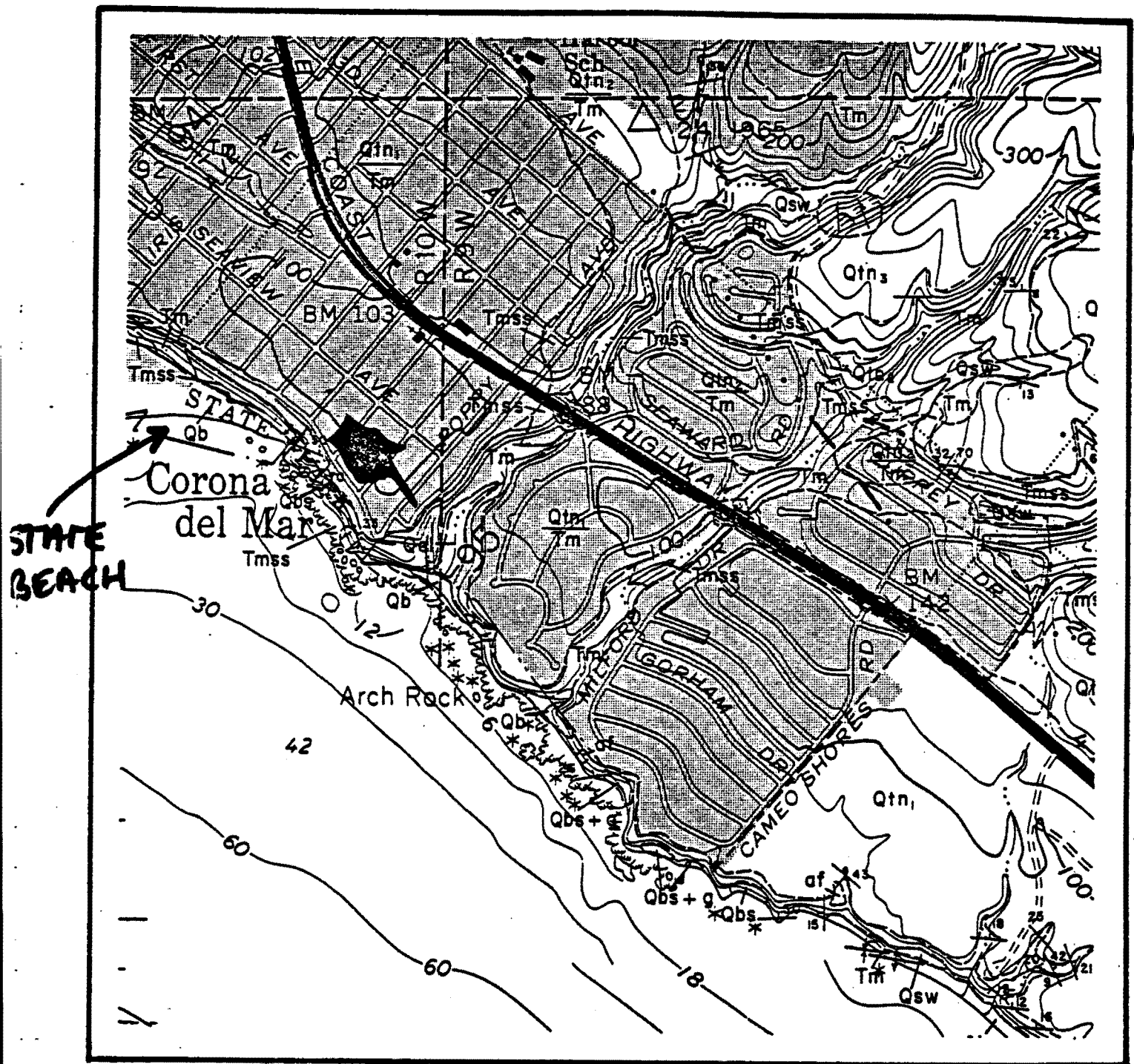
The Newport Beach Land Use Plan was certified on May 19, 1982. As conditioned, the proposed development is consistent with the policies contained in the certified Land Use Plan. Therefore, approval of the proposed development will not prejudice the ability of the City of Newport Beach to prepare a Local Coastal Program [Implementation Plan] that is consistent with the Chapter 3 policies of the Coastal Act as required by Section 30604(a).

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

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with the geologic hazard policies of the Coastal Act. Mitigation measures include special conditions requiring conformance with geologic recommendations, location of excess cut dirt, and landscaping plan, will minimize all adverse effects. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified effects, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

0796G



GEOLOGIC INDEX MAP

Scale: 1"=1000'
Reference No.

EXHIBIT NO. 1

APPLICATION NO.

5-98-084

VICINITY



California Coastal Commission

ALLWEST GEOSCIENCE

JOB NO.

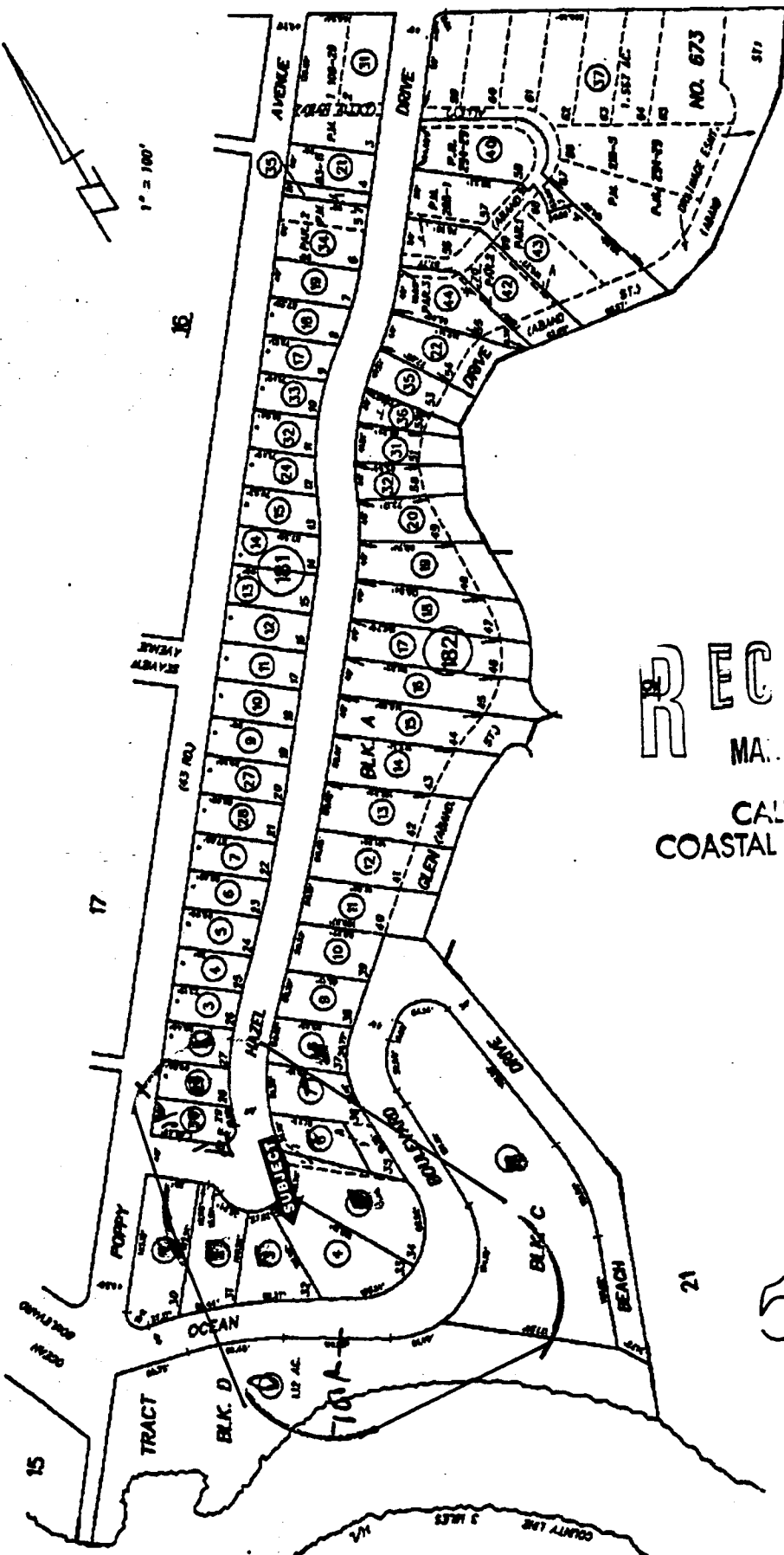
2124961

DATE

March 1998

DWG NO.

1



1997

ASSESSOR'S MAP
BOOK 052 PAGE 185
COUNTY OF ORANGE

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

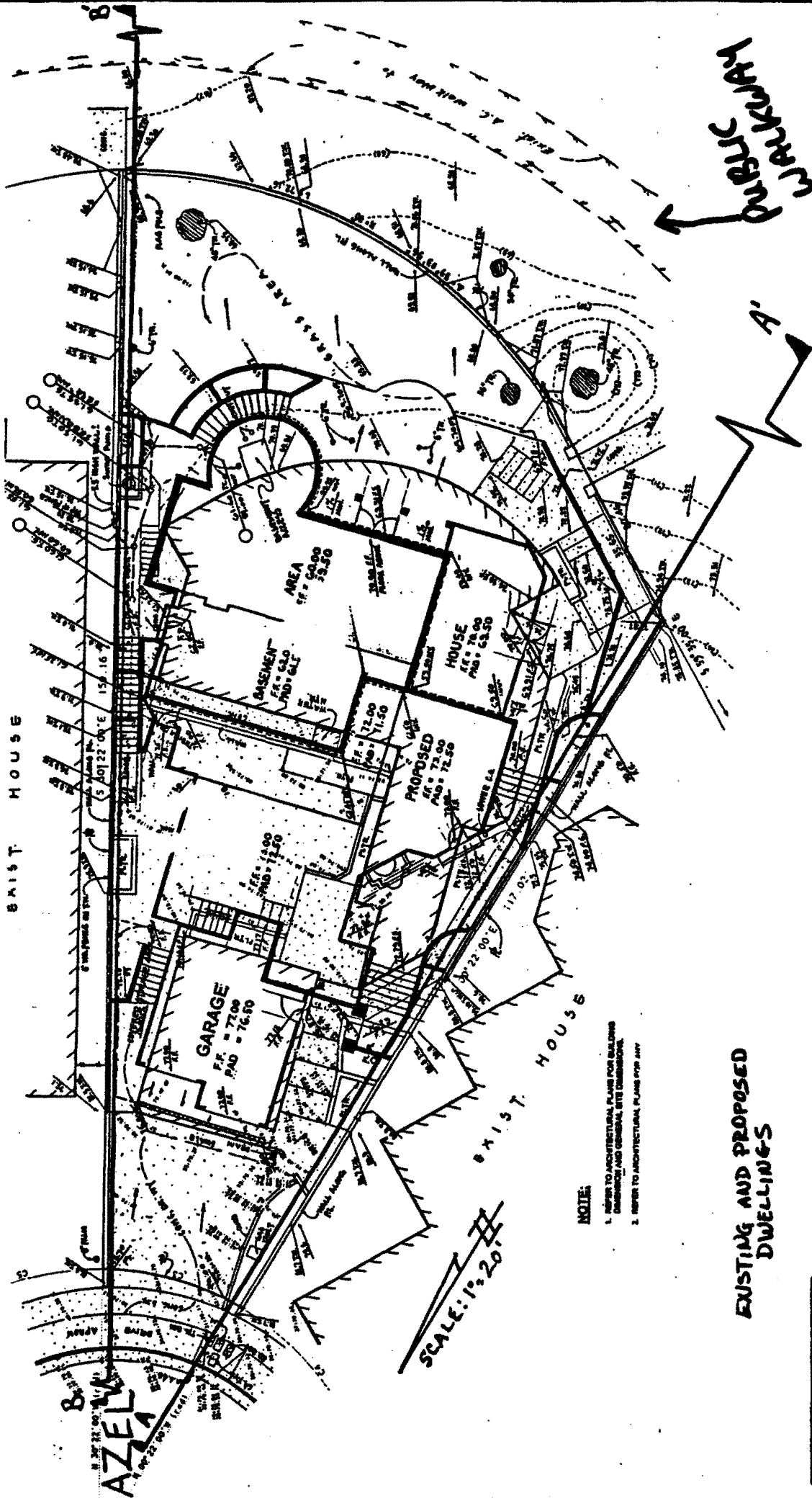
RECEIVED
MAR. 3 1999

CALIFORNIA
COASTAL COMMISSION

TRACT NO. 673
PARCEL MAP
M.M. 20-12, 1997
P.M. 83-11

5-98-084

EXHIBIT NO. 2
APPLICATION NO. 5-98-084
ASSESSOR'S MAP
California Coastal Commission



ALLWEST GEOSCIENCE

JOB NO. 2124961	DATE March 1998	DWG NO. 3
--------------------	--------------------	--------------

EXISTING AND PROPOSED DWELLINGS

EXHIBIT NO. 3
APPLICATION NO. 5-98-084
SITE PLAN
California Coastal Commission

N10E

A'

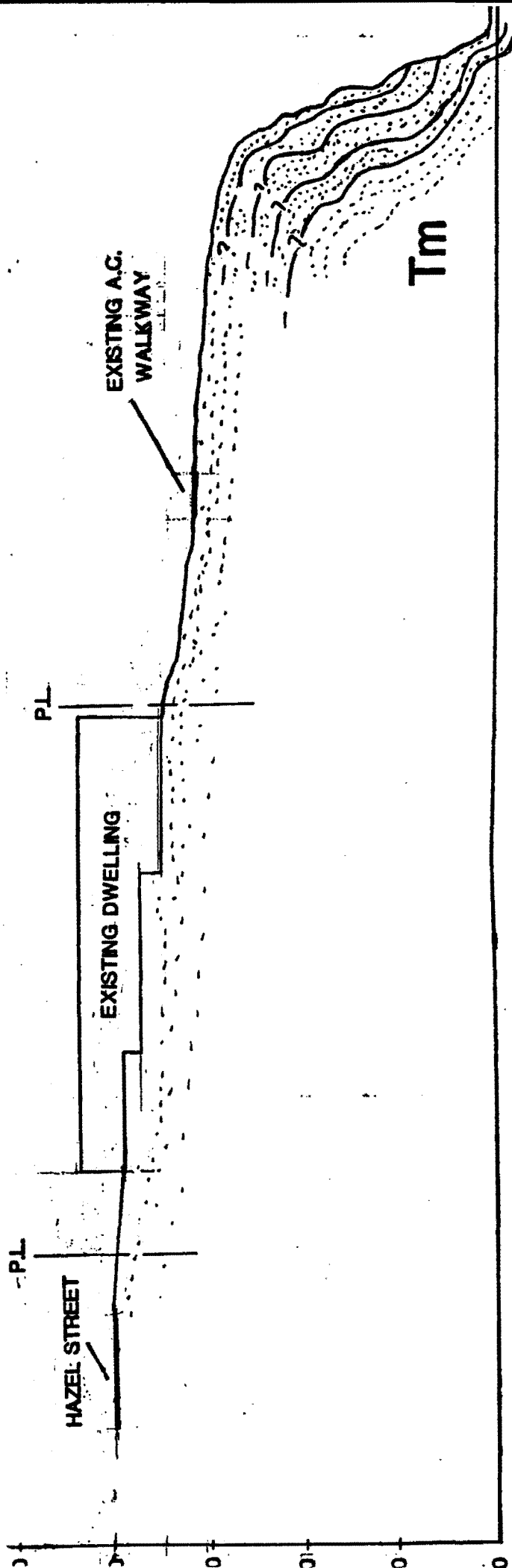


EXHIBIT NO. 4
APPLICATION NO. 5-98-084
SECTION
 California Coastal Commission

