

**CALIFORNIA COASTAL COMMISSION**

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Commission Action:

**STAFF REPORT: REGULAR CALENDAR**

APPLICATION NO.: 5-98-353

APPLICANT: Peter and Dorothy Spataro

AGENT: Brion Jeannette &amp; Assoc.

PROJECT LOCATION: 3619 Ocean Blvd., Newport Beach, Orange County

PROJECT DESCRIPTION: The applicant is proposing to construct a five level 6,691 square foot single-family residence with a 666 square foot three-car garage on a vacant lot. Grading consists of 2,260 cubic yards of cut. No seawall is proposed.

Lot Area	7,500 sq. ft.
Building Coverage	1,866 sq. ft.
Pavement Coverage	1,773 sq. ft.
Landscape Coverage	350 sq. ft.
Parking Spaces	3
Zoning	R1
Plan Designation	R1
Ht abv fin grade	22 feet from centerline

**SUMMARY OF STAFF RECOMMENDATION:**

Staff recommends the Commission approve the proposed development with special conditions regarding assumption of risk, future development, landscaping and erosion control, submittal of revised plans and conformance with geotechnical recommendations.

**STAFF NOTE:**

There are no issues of controversy regarding staff's recommendation. Staff met with the applicant's agent on November 9, 1998 and discussed the issue of whether a seawall would be required to protect the spa and rear deck foundation. At this meeting applicant's agent agreed to submit revised plans moving the spa and supporting foundation inland to conform with the deck stringline.

**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, Coastal Development Permits 5-93-024 (Parker, 3619 Ocean Blvd.), 5-89-1086 (3619 Ocean Blvd.) 5-95-146 (Parker, 3619 ocean Blvd.), 5-98-135 (Slack, 3729 Ocean Blvd.), City of Newport Beach Planning Commission Minutes August 6, 1998, Preliminary Geotechnical Investigation for New Single Family Residence at 3619 Ocean Blvd. dated September 9, 1998 by Geofirm, Letter by Geofirm dated September 30, 1998m, "Mass Movement and Seacliff Retreat along the Southern California Coast" by Antony R. Orme in Bull. Southern California Acad. Sci. 1991, "Greatly Accelerated Man-Induced Coastal Erosion and New Sources of Beach Sand, San Onofre State Park and Camp Pendleton, Northern San Diego County, California" by Gerald G. Kuhn in Shore and Beach, 1980,

**II. Standard Conditions**

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

5. Inspections. The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

### III. Special Conditions

#### 1. Assumption of Risk

Prior to the issuance of the coastal development permit, the applicant shall execute and record a deed restriction, in a form and content acceptable to the Executive Director, which shall provide: (a) that the applicant understands that the site may be subject to extraordinary hazards from landsliding and coastal bluff erosion and the applicant assumes the liability from such hazards; and (b) that the applicant unconditionally waives any claim of liability on the part of the Commission and agrees to indemnify and hold harmless the Commission, its officers, agents, and employees relative to the Commission's approval of the project for any damage due to natural hazards.

The document 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 Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

#### 2. Future Development

Prior to the issuance of the coastal development permit, the applicant shall record a deed restriction, in a form and content acceptable to the Executive Director, which provides that Coastal Development Permit 5-98-353 is for the approved development only and that any future improvements or additions on the property, including, but not limited to, installation of hardscape improvements, grading, vegetation removal, landscaping and structural improvements not permitted in this permit or allowed in special condition 5, shall require a coastal development permit or permit amendment from the Coastal Commission or its successor agency.

The document shall run with the land, binding all successors and assigns, and shall be recorded free of prior lines that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

3. 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 Geofirm on September 9, 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.

4. Revised Site Plan

Prior to the issuance of the Coastal Development Permit the applicant shall submit, for the review and approval of the Executive Director, revised site plans demonstrating that the spa and associated improvements and the caissons supporting the spa have been pulled back landward behind the deck stringline (see Exhibit 3). The development shall be constructed in substantial conformance with the plans approved by the Commission.

5. Landscaping and Erosion Control Plan

Prior to issuance of the permit, the applicant shall submit landscaping and erosion control plans prepared for review and approval by the Executive Director. The plans shall incorporate the following criteria:

- (a) All graded areas on the subject site shall be planted and maintained for erosion control and visual enhancement purposes. To minimize the need for irrigation and to screen or soften the visual impact of development all landscaping shall consist of native, drought resistant plants. Invasive, non-indigenous plant species which tend to supplant native species shall not be used.
- (b) All graded slope areas adjacent to the patio and foundation at the rear yard shall be stabilized with planting at the completion of the project. Planting should be of native plant species indigenous to the area using accepted planting procedures, consistent with fire safety requirements. Such planting shall be adequate to provide 70 percent coverage within 1 year and shall be repeated, if necessary, to provide such coverage.
- (c) Should grading take place during the rainy season (November 1 - March 31), sediment basins (including debris basins, desilting basins, or silt traps) shall be required on the project site prior to or concurrent with the initial grading operations and maintained through the development process to minimize sediment from runoff waters during construction. All sediment should be retained on-site unless removed to an appropriate approved dumping location.
- (d) No permanent irrigation system shall be installed on the bluff face. Temporary irrigation is allowed for the purpose of establishing plantings. The landscape plan shall be implemented as approved by the Executive Director.

#### IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

##### A. Project Description

The proposed development consists of the construction of a five level 6,691 square foot single-family residence with a 666 square foot three-car garage. Grading consists of 2,260 cubic yards of cut.

The proposed single-family residence is infill development on a vacant lot situated on the seaward side of Ocean Blvd. between Poinsettia and Orchid streets in the community of Corona del Mar. Ocean Blvd. terminates at a city park overlooking Little Corona Beach/Buck Gully to the South and a vista viewpoint to Corona del Mar State Beach to the north.

The residential development along the southern portion of Ocean Blvd. is located on the coastal bluff face. These bluff lots have garages at the ocean Blvd. street level and the residences are stepped down the bluff face.

The Commission has approved three coastal development permits at this site, 5-89-1086, 5-93-024 and 5-95-146. These CDPs were approved but the special conditions were never met and the Commission approvals expired. CDP 5-89-1086 (Parker) was approved for a 4,085 square foot single-family residence with a 496 square foot garage. CDP 5-93-024 (Parker) was approved on the consent calendar for the construction of a 4,085 square foot single-family residence with a three-car garage and 1,000 cubic yards of grading. CDP 5-93-024 was approved with special conditions regarding conformance with geologic recommendations, drainage/erosion control plan, and assumption of risk. CDP 5-95-146 (Parker) was approved on the Regular Calendar for the construction of a 4,340 square foot four-story single-family residence with a 605 square foot garage and 499 total cubic yards of grading. CDP 5-95-146 (Parker) was approved with special conditions regarding geotechnical recommendations, assumption of risk, revegetation and evidence of ability to undertake development.

There are single-family residences on either side of the development site. The lot to the north has a seawall on the beach. An emergency permit (5-83-89G, Rennekamp) was issued by the Executive Director on February 10, 1983 for a four (4) foot high, 68 foot long concrete seawall at 3611 Ocean Blvd. (Exhibits 3 and 5). The development to the south is located higher up on the bluff face and is not subject to wave attack. The toe of the bluff at the proposed project site is subject to wave attack. Development along the seaward side of Ocean Blvd. is subject to a residence and deck stringline. The development as proposed does not conform with the deck stringline and the applicant is being conditioned to submit revised plans showing that the seaward development conforms with the deck stringline.

The beach at the site is composed of thick, resistant and cemented sandstone outcrops with favorably dipping strata. In addition, the development is located in a bay which is protected from storm waves by a headland to the south and a jetty to the north.

Public access to the beach is not provided across the site, however, public access is provided via the public park north of the site, by the beach access at Buck Gully and at

Corona del Mar State Beach (see Exhibit 1).

On-site vegetation is a mixture of native and non-native plants.

B. Geological Hazard

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 findings in this section of the staff report include generalized findings regarding the susceptibility of coastal bluffs to erosion and site specific findings from the geological report.

1. General Findings on Bluff Erosion

The proposed development is located on a coastal bluff which is subject to wave attack and erosion. Coastal bluffs in California are located at the intersection of land and ocean, are composed of relatively recent uplifted geologic materials and are exposed to severe weathering forces.

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: improper irrigation practices; building too close to the bluff edge; improper site drainage; use of impermeable surfaces which concentrate 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 an increasing amount 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, as well as site specific geotechnical information, 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 bluffs at the proposed development site are subject to wave attack and erosion caused by the environmental and human factors mentioned above. However, the geotechnical report notes that the rate of erosion is slow because the bedrock is composed primarily of resistant cemented sandstone. Although the underlying bedrock may be resistant, the surface materials are generally unconsolidated and subject to slippage and landsliding. The site is eroding and the rate of erosion can be accelerated by heavy rainfall, storm surges, and poor landscaping, irrigation and maintenance practices.

Artim 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 gullying or failure of weakened surficial materials.

## 2. Certified LUP Hazard Policies

The City of Newport Beach certified Land Use Plan includes policies regarding the development on coastal bluffs. Pages 25-27 of the LUP contain policies regarding definition of a bluff, grading, provision of geologic reports, setbacks and building in hazardous areas.

The site is a coastal bluff according to the definition which requires that a landform have an average slope of 26.6 degrees (50%) or greater, with a vertical rise of 25 feet or greater. The policy on grading requires that the alteration of natural coastal landforms be minimized and that waivers of liability are required in areas of geologic hazard. Another LUP requirement is the submittal of a site specific geologic report to assess areas of potential geologic instability.

The certified LUP includes a discussion of hazard areas, which it defines as areas where natural processes can pose a threat to the public health, safety, and welfare. It further defines specific geologic hazards as earthquake faults, existing or potential landslides, areas with expansive or collapsible soil, excessive settlement and subsidence, flood hazard areas, and areas subject to potential erosion and siltation. Coastal bluffs qualify as areas of geologic hazard and areas subject to erosion.

The certified LUP also contains a discussion of bluff top setbacks. However, the setback policies pertain only to all new tracts and subdivisions, residential developments greater than four residences, and commercial development. This policy states:

As a general guideline, the property line setback from the edge of a bluff should be no closer to the edge of the bluff than the point at which the top of the bluff is intersected by a line drawn from the solid toe of the bluff at an angle of 26.6 degrees to the horizontal.

The intent of this policy section, as stated in the certified LUP, is to require setbacks in new subdivision development for public access purposes. Because the proposed development is a single-family residence it is exempt from this policy. Therefore, there are no specific LUP policies which would provide guidance as to bluff setbacks in this instance.

## 3. Stringline Policy

The policies which guide bluff top and beach level development are found in the "Regional Interpretive Guidelines, South Coast Region, Orange County," which was approved by the Coastal Commission in 1980. The bluff top development policy states:

Proposed development should be set back at least 25 feet from the edge of any coastal bluff.

The stringline policy states:

In a developed area where new construction is generally infilling and is otherwise



consistent with Coastal Act policies, no part of a proposed new structure, including decks, should be built further onto a beach front than a line drawn between the nearest adjacent corners of the adjacent structures. Enclosed living space in the new unit should not extend farther seaward than a second line drawn between the most seaward portions of the nearest corner of the enclosed living space of the adjacent structure.

The development site is located entirely on a coastal bluff face. Therefore, the 25 foot set back policy is not applicable to this project. The stringline policy, however, is. This policy applies to infilling development and the establishment of two separate stringlines, an enclosed living space stringline and a deck stringline.

In prior approvals at this site the Commission has applied the stringline policy. The proposed development conforms with the enclosed living space stringline. However, the plans submitted by the applicant show that there are accessory improvements (spa and landscaping) located seaward of the deck stringline. Therefore, the plans submitted by the applicant are not in conformance with the Coastal Commission's stringline policy.

#### 4. Site Specific Bluff Information

The applicant submitted a geotechnical report prepared by Geofirm on September 9, 1998. The applicant also submitted a letter, dated September 30, 1998, in direct response to staff's concerns about a potential future seawall (see Exhibit 7).

The vacant property includes 60 feet of frontage along Ocean Blvd. and the lot extends 115 to 135 feet down the bluff face to the rear property line at the shore. The proposed residence consists of five levels, a driveway/garage level and four residential levels. The residence will be stepped down 85 linear feet of the coastal bluff from approximately contour elevation 90 to elevation 30. Grading for the main residential portion of the house will involve a 35 foot deep cut and a 40 foot lateral cut. Both the driveway and main residence will be supported by retaining walls and caissons. Exhibit 8 shows that the caissons supporting the landward cut of the residence will be 55 feet deep and the caissons supporting the driveway will be 45 feet deep.

The Assessment and Atlas of Shoreline Erosion along the California Coast describes the coastline at the site as having:

Narrow sandy pocket beaches confined by rock protrusions with rock reef and offshore rocks with arches backed by wave cut low cliffs with frequent sea caves and extreme undercutting.

The assessment characterizes development in this area as potentially dangerous. The applicant submitted a geotechnical investigation prepared by Geofirm on September 9, 1998. The scope of the investigation included: a review of geotechnical literature, reconnaissance of the property, geologic mapping of the sea cliff at the rear of the property, laboratory testing of site materials, preparation of cross-sections and analysis of subsurface conditions.

The geotechnical report states that the soils on the site consists of marine terrace deposits, slopewash, and Monterey Formation. The bedrock Monterey Formation consists of firm,

interbedded diatomaceous and siliceous siltstone and sandstone, with thick resistant and cemented sandstone bed outcrops along the shoreline and lower sea cliff. Above the bedrock are the marine terrace deposits which consist of dense quartzofeldspathic sand. The slopewash deposits are loose and unconsolidated surface deposits of silty sand and rock fragments.

In 1983 the Executive Director issued an emergency permit (5-83-89) for a seawall at 3611 Ocean Blvd. Exhibit 5 is a reproduction of a site photograph showing the vacant lot, adjacent residences, and the seawall. Therefore, staff was concerned that the applicant's development plan which includes a spa and caissons seaward of the deck stringline might also require a seawall in the future. In CDPs 5-98-165 (Danninger & Tassin), 5-97-371 (Conrad), 5-98-020 (Conrad), 5-98-064 (Barnes) and 5-98-178 (McMuller) the Commission found that accessory development could not be approved if it would require, in the future, shoreline protective devices. Section 30235 of the Coastal Act requires that shore protection structures be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches.

There are three issues associated with the spa and rear yard deck. First, would a seawall be required at some point in the future to protect the accessory development? Second, will the foundation support system for the rear yard deck act as a de facto seawall? Third, as submitted, the rear yard improvements (spa) do not conform with the existing deck stringline.

Exhibit 3 shows the site plan with the toe of bluff, patio improvements, and stringlines. The toe of bluff is indicated on the site plan as elevation 10. The spa is situated at elevation 15-20, however, landscaping and boulders are shown placed between the spa and the toe of slope. The toe of slope is subject to wave attack at this location. The deck stringline on the subject site extends from elevation 15 on the north to elevation 45 on the south.

The geotechnical report prepared by Geofirm on September 9, 1998 addresses the slope stability issue. On page 4 of the geotechnical report there is the following statement:

Shoreline protection along the rear of the property is not anticipated during the life span of the development providing proper foundation design as recommended herein.

In addition page 6 of the geotechnical report includes conclusions and recommendations. One conclusion was:

The bedrock materials backing southwesterly facing portions of the bluff are anticipated to remain grossly stable, but are subject to very slow retreat. ... A deepened foundation along the rear perimeter of the proposed residence which is designed to isolate proposed improvement from potential erosion and instability of the sea bluff is recommended herein. The exterior deck/patio should also be supported on a deepened foundation.

However, foundation plans were not submitted with the application. Therefore, staff was unable to assess whether the foundation plans for the seaward portion of the development were acceptable or whether the foundation was a de facto seawall. Staff was also concerned that the landscaping improvements supporting the spa might require a seawall in

the future.

The geologic report addresses the subject of slope stability. The report notes that the sea cliff is composed of resistant cemented sandstone which has largely favorable bedding. The toe of the sea cliff is protected by offshore rocks and the jetties at Newport Harbor to the northwest. The primary mechanism of erosion and bluff retreat is piecemeal rock toppling caused by erosion at the base of the sea cliff. The report also notes that the thick mantle of slopewash deposits at the shore means that significant wave erosion has not occurred recently. The report also notes that there is minor instability of the marine terrace deposits which mantle the bedrock.

In the September 30, 1998 letter Geofirm states:

We conclude that wave erosion at the base of the bluff will not be significant and that no shoreline protection will be required assuming appropriate foundation design.

...

A regional average rate of bluff retreat is considered to be 1 inch per year. However, because the site is protected from westerly swells and wind waves by the Newport Harbor jetties and because of protection provided by offshore rocks, the rate of bluff toe erosion at the site is considered to be much less. This prognosis is supported by the presence of highly erodable slopewash deposits located just above the toe of the bluff which appear to have persisted for many years.

The Commission, established through previous approvals at this site (5-93-024 and 5-95-146), that the stringline is the appropriate policy to apply on development in this area. Therefore, staff advised the applicant's agent that any and all development extending beyond the deck stringline would be conditioned to be withdrawn. The applicant's agent agreed to move the spa back behind the stringline and also to move the patio foundation system landward. This would take the development 20 feet inland in distance from the toe of the bluff and locate it at between elevations 20 and 40. At this time staff has not received those plans and has conditioned the applicant to submit revised plans showing that the development seaward of the deck stringline has been pulled back.

The report concludes that the proposed development is considered feasible and safe from a geotechnical viewpoint provided the recommendations of the report are followed regarding design, construction and maintenance. The report also notes that construction of the proposed development will not have an adverse impact on adjoining development. The geotechnical report includes recommendations regarding grading, construction of retaining walls, shoring, footings, caissons and drainage.

##### 5. 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. The findings in the staff report regarding the general causes of bluff erosion and the specific findings from the geotechnical report and photographs confirm that the coastal bluff at this location is eroding and that measures to minimize bluff erosion are necessary. The following special conditions will mitigate the impacts of the proposed development on bluff erosion and instability, and prevent the necessity for bluff protective structures, as required by Section 30253 of the Coastal Act.

a. Future Development

Special condition 2 of the permit requires the applicant to record a deed restriction on the property placing the applicant and their successors in interest on notice that any development on the rear yard bluff face, including grading, vegetation removal, structural improvements, accessory structures, or bluff protective measures, requires a coastal development permit from the California Coastal Commission.

The future development deed restriction ensures that future development which occurs on the bluff is subject to geotechnical review and Coastal Commission staff review regarding the protection of Coastal Act resources identified in Chapter 3 of the Coastal Act, primarily geotechnical and visual issues. Therefore, the applicant is being conditioned to conform with the future development deed restriction.

b. Assumption of Risk

Coastal bluffs in southern California are recently emergent landforms in tectonically active environment. Any development on an eroding coastal bluff involves some risk to development.

Although adherence to the geotechnical consultant's recommendations will minimize the risk of damage from erosion, the risk is not entirely eliminated. The coastal bluff is subject to wave attack and is undergoing erosion and sloughing on the southwestern portion of the

site. The findings in sections 1-4 above, including site specific geologic information, support the contention that development on coastal bluffs involves risks and that structural engineering can minimize some of the risk but cannot eliminate it entirely. Therefore, the standard waiver of liability condition has been attached via special condition number 1.

By this means, the applicant and future buyers are notified that the proposed development is located in an area that is potentially subject to bluff erosion that can damage the applicant's property. In addition, the condition insures that the Commission does not incur damages as a result of its approval of the Coastal Development Permit. Finally, recordation of the condition insures that future owners of the property will be informed of the risks and the Commission's immunity for liability.

c. 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 for the review and approval of the Executive Director foundation plans reviewed and signed by a consulting geologist.

d. Revised Plans

The findings in previous Commission approvals for development at this site (5-95-146 and 5-93-024) indicate that the appropriate form of setback is the stringline. Using a 25 foot setback from the edge of the bluff to assure geologic stability would render the site unbuildable. Since homes on the immediately adjacent lots have been built on the bluff face, the stringline method is a more appropriate setback to apply in this situation.

The project site plans show that a spa and landscaping improvements will be situated seaward of the rear yard deck stringline (see Exhibit 3). At a November 9, 1998 meeting with the applicant's agent staff discussed the stringline and seawall issues. At this meeting the applicant agreed to set the development back behind the deck stringline. The plans submitted with the application do not reflect the revised rear yard development site plan. Therefore, the applicant is being conditioned to supply revised site plans showing that the rear yard accessory improvements conform with the deck stringline. Setting this development back inland will eliminate the need for a future seawall at this location.

e. 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...".

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. 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.

The applicant has not submitted a landscaping plan detailing what these landscaping improvements involve. 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 the review and approval of the Executive Director. This landscaping plan shall detail proposed landscaping for view improvements and indicate where vegetation is proposed for removal, whether that vegetation is native or non-native, and what new landscaping is proposed. 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 and that permanent, in-ground irrigation systems are not allowed.

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 or removed and also requires a special condition that future development, including grading and vegetation removal, requires a coastal development permit.

f. Conclusion

The Commission has required several special conditions which are intended to bring the proposed development into conformance with Section 30253 of the Coastal Act. These special conditions include: assumption of risk, future development, submittal of a landscaping plan, submittal of revised plans and conformance with geologic recommendations. 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. The proposed development is located on Ocean Blvd. which is located in the vicinity of two vista bluff overlooks and a popular State Beach.

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.

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 on the seaward side of Ocean Boulevard in Corona del Mar. Exhibit 6 shows that the top of the residence will be situated below Ocean Blvd. and, therefore, will not interfere with existing views from Ocean Blvd. as per the LUP policy, above. There is a small public park adjacent to the end of Ocean Boulevard (see Exhibits 1 and 2). 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. Exhibit 2 shows the site in relation to the adjacent park and the park further north overlooking Corona del Mar State Beach. The two parks have different viewsheds. The park north of the site is a north and west viewing overlook. The park south of the site has a viewshed out to the ocean and south.

The proposed project is infill development in an existing residential area. There is development on either side of the development site, which is currently vacant. The applicable bluff setback policy is the stringline policy which is designed to limit the seaward encroachment of residences and adversely impact coastal views. Although the development of the site will result in its change from a vacant lot to a developed lot, the proposed development is visually consistent with the existing pattern of residential development.

The proposed development will not interfere with the views from either park. Therefore, the Commission finds that the proposed development conforms with Section 30251 of the Coastal Act and the view 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.

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.



Section 30604(C) of the Coastal Act requires that permit applications between the nearest public road and the shoreline of any body of water within the coastal zone shall include a public access and recreation finding. The proposed development is located between the sea and the first public road. Access to the Pacific Ocean and sandy beach is provided at Corona del Mar State Beach and at the public park and accessway leading down to Buck Gully. There is also a public park area north of the project site which includes a public stairway to the beach. These public access points are shown on Exhibits 1 and 2. The proposed single-family residence is infill development on a coastal bluff face. There is no public access to the coastal bluffs at this site.

A public access dedication can be required pursuant to section 30212 only if it can be shown that the development either individually or cumulatively directly impacts physical public access, i.e., impacts historic public use, or impacts or precludes use of Public Trust Lands. In this situation, the development is located between the sea and the first public road, however, it does not impact access either directly or indirectly to the ocean.

The development will not create adverse impacts, either individually or cumulatively on public access and will not block public access from the first public road to the shore. Therefore, the Commission also finds that adequate access exists nearby and the proposed development is consistent with Section 30212(a)(2) of the Coastal Act.

E. Local Coastal Program

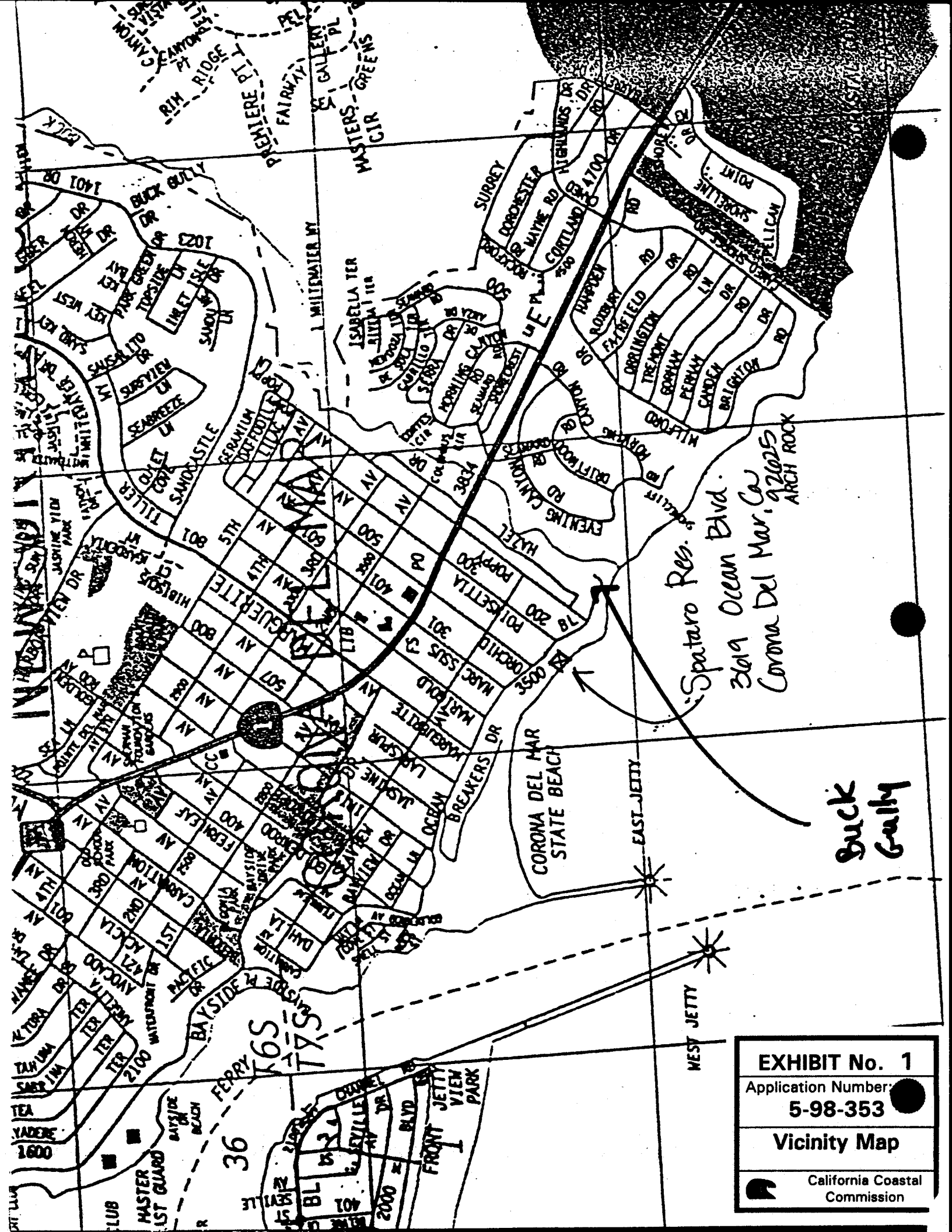
Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal Development Permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with the Chapter 3 policies of the Coastal Act.

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).

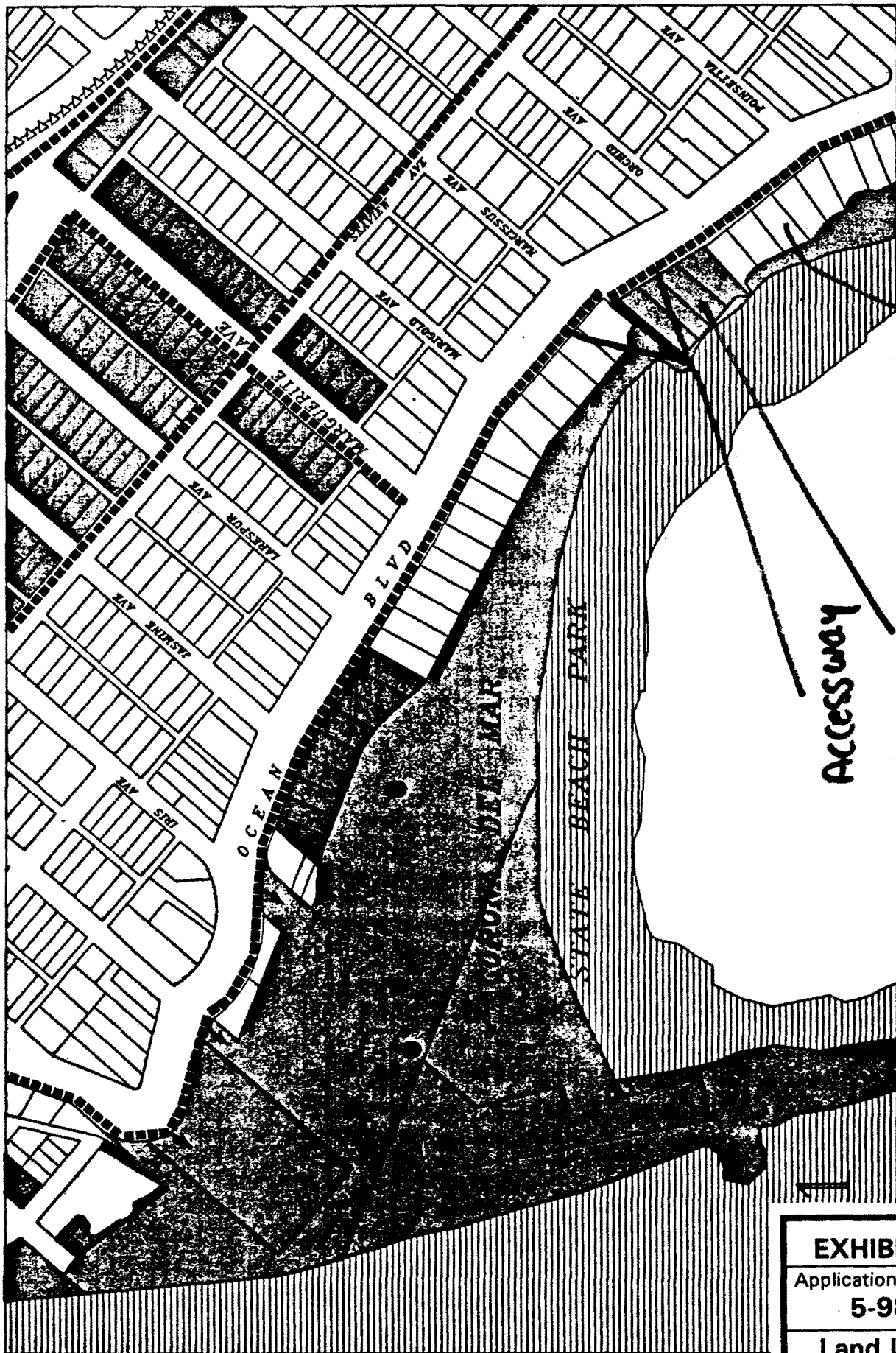
F. Consistency with the California Environmental Quality Act (CEQA).

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

The proposed project has been conditioned in order to be found consistent with the geologic hazards policies of the Coastal Act. Mitigation measures; special conditions requiring conformance with geologic recommendations, submittal of an assumption of risk deed restriction, future improvements deed restriction, 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



<b>EXHIBIT No. 1</b>
Application Number: <b>5-98-353</b>
<b>Vicinity Map</b>
California Coastal Commission



SITE

PARK

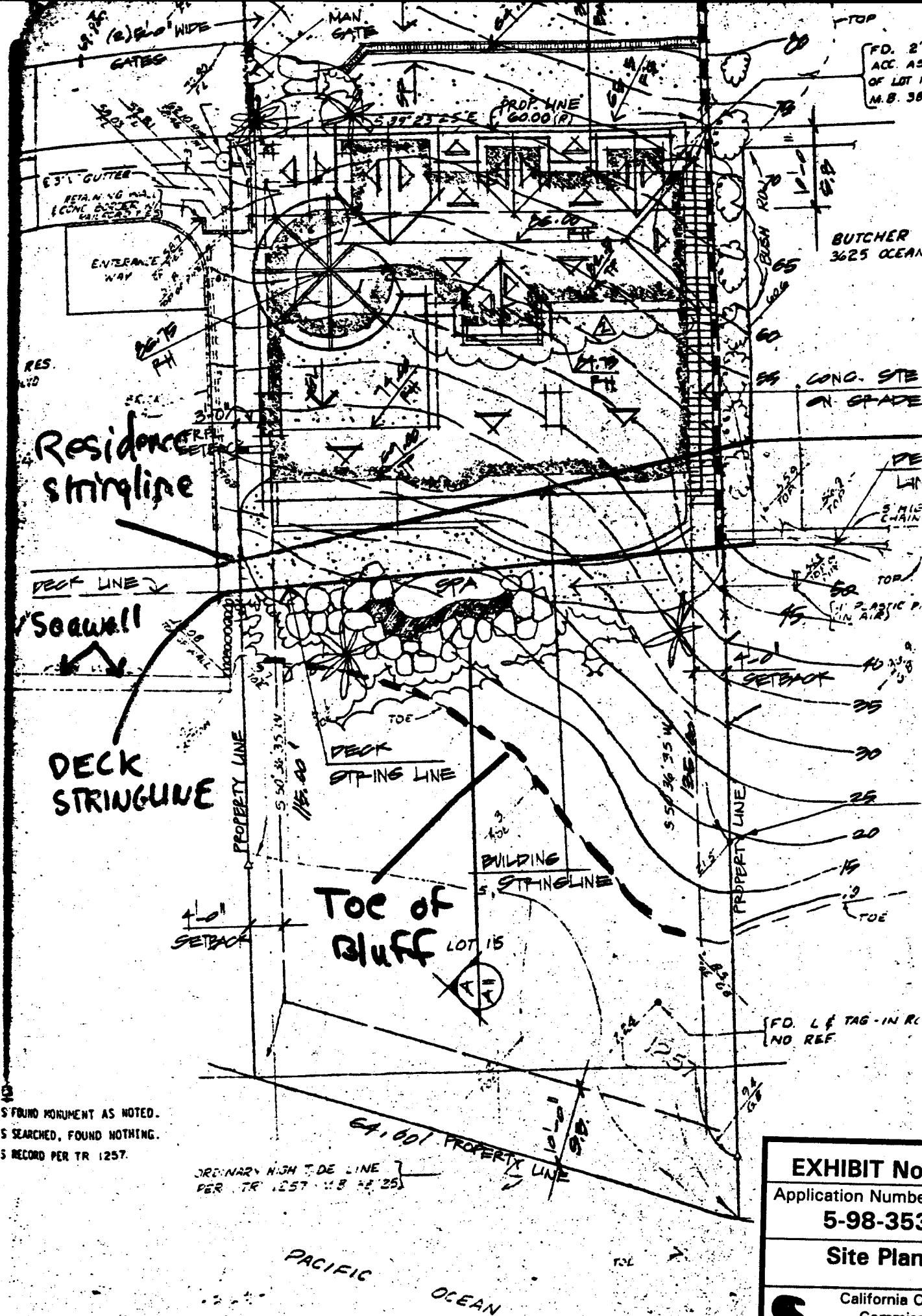
**EXHIBIT No. 2**

Application Number:  
**5-98-353**

**Land Use Map**



California Coastal  
Commission



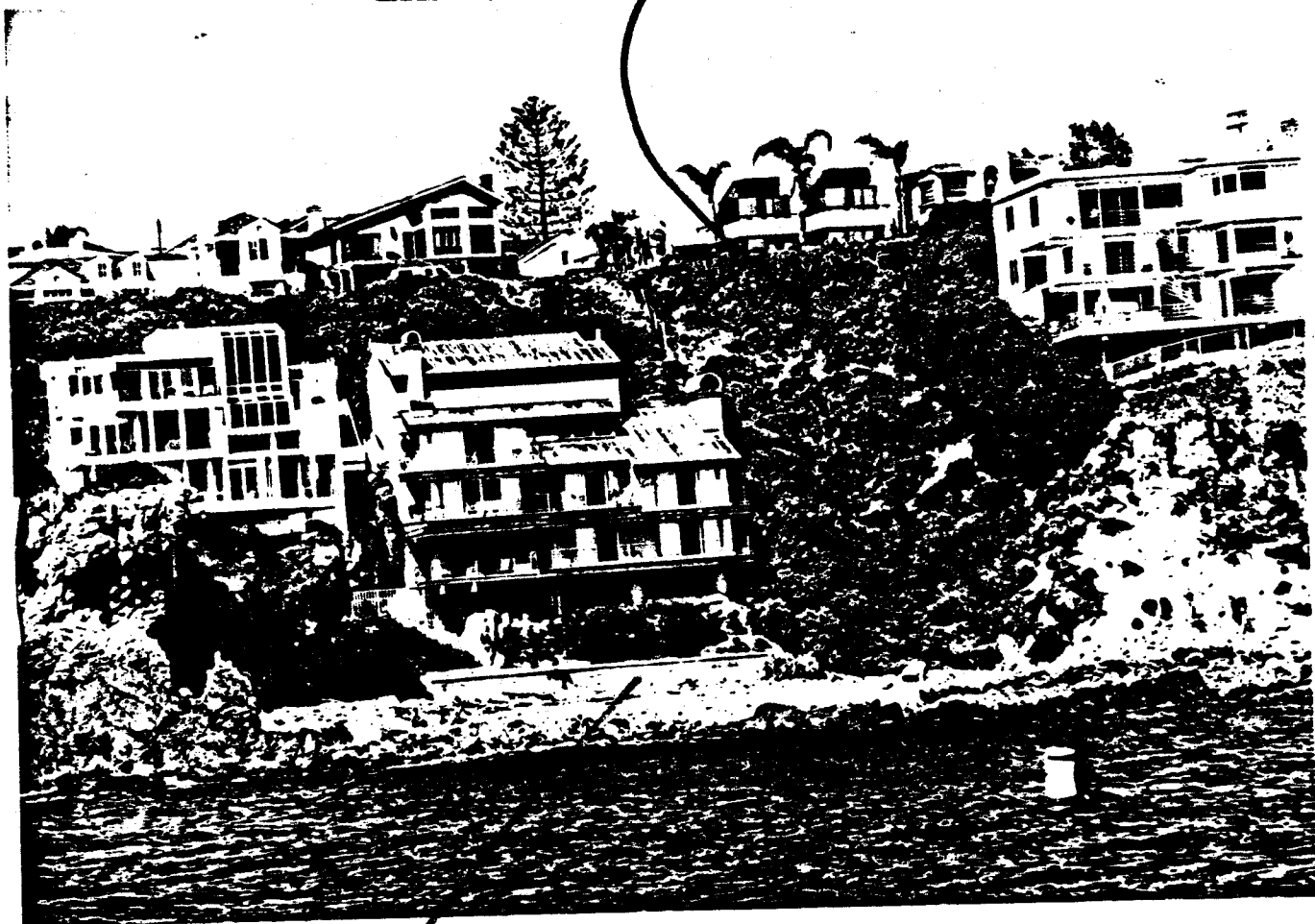
S FOUND MONUMENT AS NOTED.  
 S SEARCHED, FOUND NOTHING.  
 S RECORD PER TR 1257.

ORDINARY HIGH TIDE LINE  
 PER TR 1257 - 11.8 12.25

<b>EXHIBIT No. 3</b>
Application Number: <b>5-98-353</b>
<b>Site Plan</b>
California Coastal Commission



SITE



Seawall

**EXHIBIT No. 5**

Application Number:

**5-98-353**

**Site Photo**



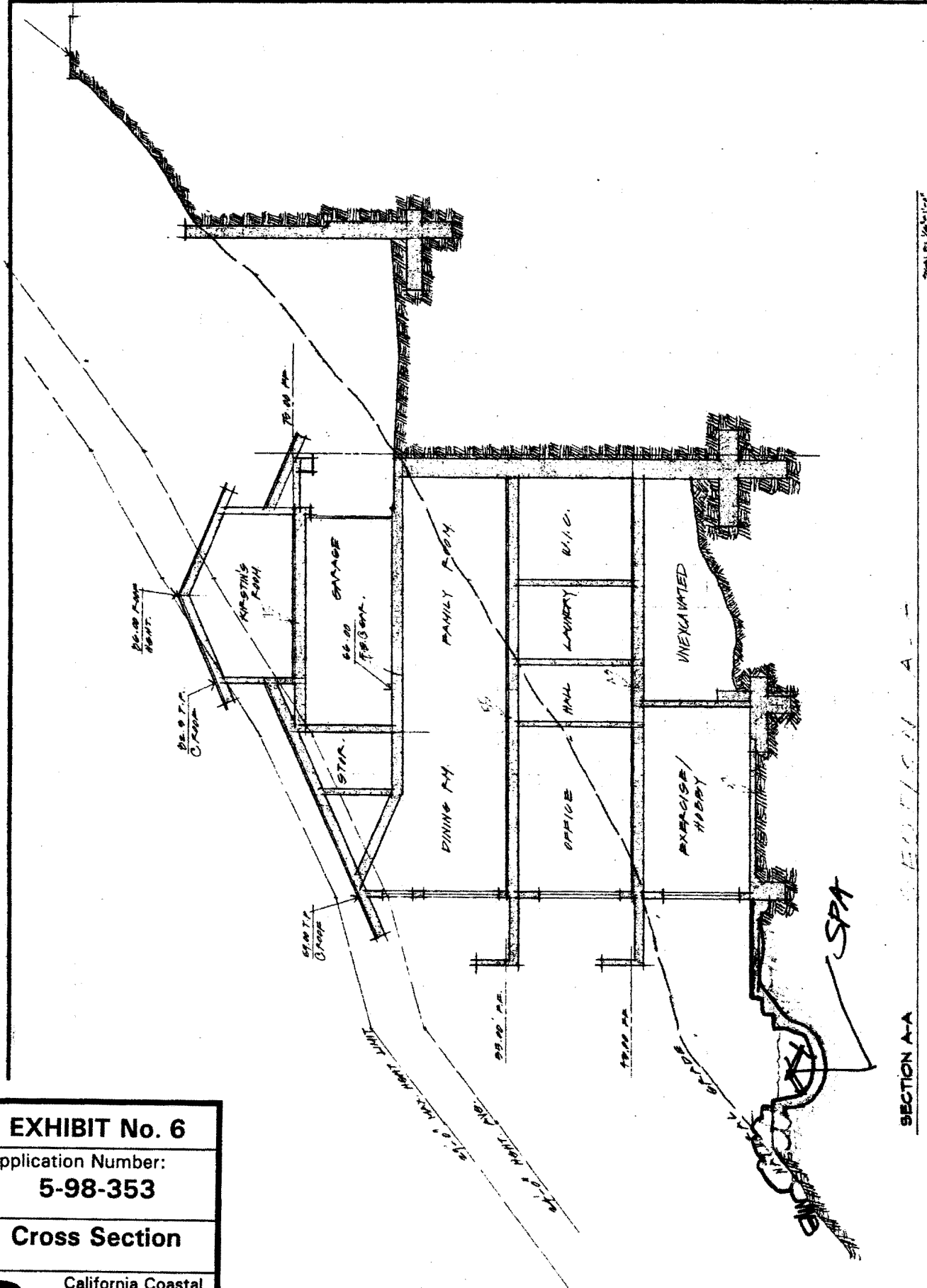
California Coastal  
Commission

SPATARO RESIDENCE  
 3879/3880 BLVD  
 CORONA DEL MAR, CA

SECTION A-A

Owner:	
Architect:	
Engineer:	
Interior Designer:	
Contractor:	
Builder:	
Inspector:	
City:	
County:	
State:	

A-11



SECTION A-A

**EXHIBIT No. 6**

Application Number:  
**5-98-353**

**Cross Section**

California Coastal  
Commission

**RECEIVED**  
OCT 8 1998

September 30, 1998

**CALIFORNIA  
COASTAL COMMISSION**

Mr. Peter Spataro  
c/o Brion S. Jeannette & Associates  
470 Old Newport Boulevard  
Newport Beach, CA 92663

Project No: 70916-01  
Report No: 8-2936

**Subject:** Response to California Coastal Commission  
3619 Ocean Boulevard  
Corona del Mar, California  
Coastal Development Permit Application No. 5-98-353

**Reference:** "Preliminary Geotechnical Investigation for New Single Family Residence, 3619 Ocean Boulevard, Corona del Mar, California", prepared by Geofirm, dated September 9, 1998, Project No: 70916-00, Report No: 8-2898.

Dear Mr. Spataro;

This letter presents a response to California Coastal Commission comments dated September 25, 1998 regarding review of information submitted for a coastal development permit for the subject site. It is our understanding that the referenced geotechnical report was not included in the submittal package at the time of their review. Response to comments are provided below and refer to the geotechnical report where applicable.

- 1a) Specific foundation plans are presently unavailable. A description of the conceptual foundation system and geotechnical recommendations for foundation design are presented in the project geotechnical report.
- 1b) A discussion of bluff erosion is presented on page 4 of our report. We conclude that wave erosion at the base of the bluff will not be significant and that no shoreline protection will be required assuming appropriate foundation design.
- 1c) Page 4 Bluff Stability, Paragraph 1, "Shoreline protection along the rear of the property is not anticipated during the life span of the development providing proper foundation design as recommended herein". Analysis of wave runup and requirements for protection from wave runup is referred to a marine engineering consultant.

**EXHIBIT No. 7**

Application Number:

**5-98-353****Geo Letter** California Coastal  
Commission



September 30, 1998

Project No: 70916-01

Report No: 8-2936

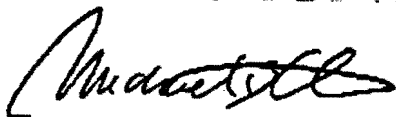
Page No: 2

- 1d) The adjacent property to the northwest has a seawall which is depicted in the base map of Plate 1 of our report. It consists of a  $4.5\pm$  feet high reinforced concrete wall constructed seaward of the toe of the bluff. The three-story residence appears to be supported by caissons and deepened footings. Rear portions of the residence are constructed above grade, with a mechanical and storage access constructed into the crawl space below the residence. The residence to the southeast is constructed along the upper bluff above a  $50\pm$  feet high seacliff.
- 1e) The "ordinary high tide line" is depicted on the site plan utilized as the base map of Plate 1 of our report. The top and toe of the bluff are also depicted.
- 1f) A caisson foundation is recommended along the rear of the residence to provide support into competent bedrock which occurs at depth at this location.
- 1g) A regional average rate of bluff retreat is considered to be 1 inch per year. However, because the site is protected from westerly swells and wind waves by the Newport Harbor jetties and because of protection provided by offshore rocks, the rate of bluff toe erosion at the site is considered to be much less. This prognosis is supported by the presence of highly erodible slope wash deposits located just above the toe of the bluff which appear to have persisted for many years.

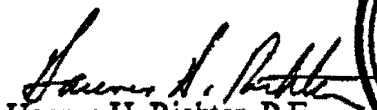
Please call this office if you have any questions.

Sincerely,

GEOFIRM



Michael B. Childs, C.E.G. 1664  
Engineering Geologist  
Registration Expires 3-31-00



Hannes H. Richter, P.E.  
Geotechnical Engineer, G.E. 717  
Registration Expires 3-31-00



MBC/HHR:kaa

Distribution: Addressee (5)

Attachment: California Coastal Commission letter of incompleteness dated September 25, 1998

