CALIFORNIA COASTAL COMMISSION

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Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-99-204

APPLICANT: John and Nida Brown

AGENT: Frank Montesinos

PROJECT LOCATION: 2020 Calle De Los Alamos, San Clemente, Orange County

PROJECT DESCRIPTION: Demolition of an existing single family residence and construction of a 4,365 square foot, two story, 25 foot high single family residence on a coastal bluff top lot.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends the Commission **APPROVE** the proposed development with special conditions regarding revised plans requiring provision of a 25 foot setback, recordation of deed restrictions regarding future development, setback requirements, no future protective works and assumption-of-risk, conformance with geologic recommendations, and submittal of landscape, drainage and irrigation plans.

The Commission has historically been concerned about five issues in San Clemente: beach access, blufftop development, coastal canyon development, visitor serving facilities, and beach parking.

Issues regarding blufftop development include: minimizing water percolation into the bluff, bluff erosion, requiring native, drought-tolerant landscaping, limiting in-ground irrigation, blufftop setbacks, preservation of natural landforms and view protection.

The known issues of controversy with this application is the applicant's objection to conformance with either a 25 foot setback or a stringline drawn between the nearest corners of the adjacent structures. The applicant contends that the development should be allowed to conform with an 8 foot setback that is consistent with a stringline drawn from the seaward-most corners of the adjacent structures and not the nearest corners.

PROJECT SPECIFICS:		
	Lot Area:	13,773.6 sq. ft.
	Building Coverage:	2,970 sq. ft.
	Pavement Coverage:	500 sq. ft.
	Landscape Coverage:	2,200 sq. ft.
	Unimproved:	8,103 sq. ft.
	Parking Spaces:	2
	Zoning:	RL
	Land Use Designation:	RL
	Ht above final grade:	25 feet

LOCAL APPROVALS RECEIVED: City of San Clemente approval-in-concept dated May 12, 1999.

SUBSTANTIVE FILE DOCUMENTS: City of San Clemente Certified Land Use Plan; *Staff Recommendation on Major Amendment 1-95 San Clemente Land Use Plan (For Public Hearing and Possible Final Action at the Coastal Commission Hearing of October 11, 1995*; Coastal Development Permits: 5-99-231 (Smith); 5-98-508 (Desert Cities Properties); 5-98-469 (Ferber); 5-98-300 (Loughnane); 5-98-273-G (McKinley & Bass); 5-98-178 (McMullen); 5-98-082 (Westberg); 5-98-064 (Barnes); 5-98-020 (Conrad); 5-97-371 (Conrad); 5-97-185 (Schaeffer); 5-97-107 (Spruill); 5-95-069 (Westberg); 5-94-256 (Colony Cove); 5-94-243 (Gilmour), 5-94-213; 5-94-199 (Westberg); 5-93-307 (Ackerly); 5-93-304 (Rosenstein); A5-DPT-93-275 (La Ventana); 5-93-243 (La Ventana); 5-93-143 (Mertz & Erwin); 5-93-254-G (Arnold); 5-93-181 (Driftwood Bluffs); 5-91-170 (Grace); 5-89-381 (McMurray); 5-88-177 (Arnold); 5-86-751; 5-85-527; 6-93-020; 6-98-20A; 5-85-642 (Grace); 5-85-527 (Watt); 5-85-391 (Miller); EME-79-5208 (Harvey); P3967 (Cypress West); Coastal development permit application 5-99-351 (McMurray); Engineering geologic report by C. Michael Scullin of Canoga Park, California titled *Engineering Geological Feasibility of Design for a Single Family Residence, Lot 35, Tract 897, 2014 Calle de Los Alamos, San Clemente, California* (Project #79149) dated July 22, 1979; Draft Environmental Impact Report Elmore Ranch, 1978, Final Soil Engineering and Engineering Geologic Grading Report P3967; "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; "High-Quality, Unbiased Data are Urgently Needed on Rates of Coastal Erosion" by Wendell Gayman.

STAFF RECOMMENDATION:

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

MOTION

I move that the Commission approve CDP #5-99-204 pursuant to the staff recommendation.

Staff recommends a YES vote. This will result in adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION

I. APPROVAL WITH CONDITIONS

The Commission hereby **GRANTS** a permit, subject to the conditions below, for the proposed development on the grounds that the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, is located between the sea and the 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.

II. STANDARD CONDITIONS:

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

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

3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.

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

5. Inspections. The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.

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

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

III. SPECIAL CONDITIONS

1. **Revised Plans to Conform to Bluff Edge Setback**

A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit revised plans to the Executive Director for review and approval. The revised plans shall show the following changes to the project:

1. SITE PLAN REVISIONS

(a) The development governed by CDP 5-99-204 shall be sited at least 25 feet from the "bluff edge" as defined in Section 13577 of Title 14 of the California Code of Regulations and generally depicted in Exhibit 3 of the Coastal Commission staff report dated November 18, 1999 for coastal development permit application 5-99-204.

B. The revised plans shall, prior to submittal to the Executive Director, be reviewed and certified by a qualified professional to ensure that they are consistent with the Commission's approval and with the recommendations of Engineering Geologic Report titled *Preliminary Geotechnical Investigation for Construction of New House to Replace the Existing House, 2020 Calle de Los Alamos, Lot 38 of Tract 897, San Clemente*, dated May 19, 1999, prepared by Peter and Associates of San Clemente, California.

C. 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 or a new coastal development permit unless the Executive Director determines that no amendment or new coastal development permit is required.

2. **Future Development Deed Restriction**

A. This permit is only for the development described in coastal development permit No. 5-99-204. Pursuant to Title 14 California Code of Regulations section 13253(b)(6), the exemptions otherwise provided in Public Resources Code section 30610 (b) shall not apply to the entire parcel. Accordingly, any future improvements to the permitted structure, including but not limited to repair and maintenance identified as requiring a permit in Public Resources section 30610(d) and Title 14 California Code of Regulations sections 13252(a)-(b), which are proposed within the restricted area shall require an amendment to Permit No. 5-99-204 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government.

B. **PRIOR TO 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, reflecting the above restrictions on development within the parcel. The deed restriction shall include legal descriptions of the applicant's entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

3. **No Future Protective Devices**

No bluff protective devices shall be constructed, now or in the future, for the purpose of protecting the residential development approved pursuant to coastal development permit 5-99-204 including, but not limited to, the residence or foundations in the event these structures are threatened with imminent damage or destruction from waves, erosion, storm conditions, or other natural hazards in the future. By acceptance of this permit, the applicant hereby waives, on behalf of itself and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235.

PRIOR TO 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 reflecting the above restrictions on development within the parcel. The deed restriction shall include legal descriptions of the applicant's entire parcel. 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.

4. **Conformance of Design and Construction Plans to Geotechnical Report Geologic Hazard**

A. All final design and construction plans, including foundations, grading and drainage plans, shall be consistent with all recommendations contained in the *Conclusions and Recommendations* section of the Engineering Geologic Report titled *Preliminary Geotechnical Investigation for Construction of New House to Replace the Existing House, 2020 Calle de Los Alamos, Lot 38 of Tract 897, San Clemente,* dated May 19, 1999, prepared by Peter and Associates of San Clemente, California. **PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the Executive Director's review and approval, evidence that an appropriate licensed professional has reviewed and approved all final design and construction plans and certified that each of those final plans is consistent with all of the recommendations specified in the above-referenced geologic evaluation approved by the California Coastal Commission for the project site.

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

5. **Assumption of Risk, Waiver of Liability and Indemnity**

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

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

6. **Landscape Plan**

A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the review and approval of the Executive Director, a plan for landscaping to reduce adverse visual and geologic impacts due to erosion and adverse impacts to environmentally sensitive habitat areas through the spread of non-native invasive plant species. The plan shall be prepared by a licensed landscape architect.

1. The plan shall demonstrate that:

(a) all planting shall provide 70 percent coverage within 1 year;
(b) all required plantings will be maintained in good growing conditions through-out the life of the project, and whenever necessary, shall be replaced with new plant materials to ensure continued compliance with the landscape plan;
(c) Landscaped areas in the rear yard not occupied by hardscape 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;
(d) Landscaped areas in the front and side yards can include ornamental or native, drought-tolerant plants. Vegetation installed in the ground shall consist of native, drought tolerant plants. Other vegetation which is placed in above ground pots or planters or boxes may be non-invasive, non-native ornamental plants. Sod or non-native ground covers which require watering shall not be placed on the site;
(e) No in-ground irrigation systems shall be installed on the site. Temporary above ground irrigation is allowed to establish plantings.

2. The plan shall include, at a minimum, the following components:

(a) a map showing the type, size, and location of all plant materials that will be on the developed site, the irrigation system, topography of the developed site, and all other landscape features, and

(b) a schedule for installation of plants.

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

7. **Drainage and Irrigation Plan**

PRIOR TO THE ISSUANCE OF A COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and approval of the Executive Director, drainage and irrigation plans. The approved drainage plans shall show that rainwater runoff from the roof and residence is taken to the street.

No in-ground irrigation systems shall be allowed on the rear yard (bluff top area). Temporary above ground irrigation for the purpose of establishing vegetation is allowed.

The approved development shall be constructed in compliance with the final plans approved by the Executive Director. 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.

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION

The proposed project consists of the demolition of an existing single story, single family residence (see Exhibit 1, page 4, and Exhibit 2 page 1) and construction of a 25 foot high, 4,365 square foot, two-story, single-family residence with a two car garage on a slab-on-grade foundation (Exhibit 2). No caissons or grading are proposed. The project is located at 2020 Calle De Los Alamos, City of San Clemente, County of Orange, on a coastal bluff between the first public road and the sea (Exhibit 1). Lobos Marinos Canyon and San Clemente State Beach are located south of the project site (see Exhibit 1). The subject site is a roughly rectangular lot that has a flat bluff top area (elevation = 100 feet) where the proposed development will occur, and a sloping bluff face (approximately 1.5(h):1(v) slope), which descends from the 100 foot elevation line to approximately the 35 foot elevation line. There is no existing or proposed development on the bluff face. The top of bluff occurs at approximately the 97 foot to 98 foot contour line. The applicant is proposing an 8 foot enclosed living space setback from the top of bluff. There is no proposed hardscape seaward of the proposed residence.

The proposed project is located within an existing residential development. There are existing residences flanking both sides of the subject property. Landward of the subject site is Calle de Los Alamos and other single family residences. Public beach access is available approximately 420 feet north of the site at the Los Winds Beach Stairway, located near the intersection of Calle Lasuen and Calle de Los Alamos (Exhibit 1, page 3). Seaward of the subject site, the bluff slope continues to descend toward the railroad and the sandy beach.

The proposed development is located on a coastal bluff in the southern portion of the City of San Clemente. The coastal bluffs in San Clemente are not subject to wave attack

because they are separated from the beach by the Orange County Transportation Authority railroad tracks and right of way. The railroad tracks have a rip-rap revetment which protects the tracks from erosion and wave overtopping.

Prior Commission actions in the vicinity include Coastal Development Permits 5-85-642 and 5-91-170 (2022 Calle de Los Alamos), 5-94-199, 5-95-069, and 5-98-082 (2016 Calle de Los Alamos), 5-89-381 and 5-99-351 (2012 Calle de Los Alamos), 5-85-527 (3818 Vista Blanca), 5-86-751 (3812 Vista Blanca), 5-87-758 Administrative Calendar (Glover, 3826 Vista Blanca), 5-88-177 Administrative Calendar & G-5-93-254 (Arnold, 3820 Vista Blanca), 5-89-032 Administrative Calendar (Weeda, 3830 Vista Blanca), 5-94-243 Regular Calendar (Gilmour) and 5-98-300 Regular Calendar (Loughnane) (Exhibit 1, page 1).

The special conditions of this staff report are similar to the special conditions required of CDPs 5-94-243, 5-97-371, 5-98-082, 5-98-300, 5-98-508, 5-99-231.

B. BLUFFTOP STABILITY

New blufftop development poses potential adverse impacts to the geologic stability of coastal bluffs, to the preservation of coastal visual resources, and to the stability of existing residential structures, both the applicant's and adjoining structures. Coastal bluffs in the City of San Clemente are composed of fractured bedding which is subject to block toppling and unconsolidated surface soils which are subject to sloughing, creep, and landsliding. The setback and stringline policies of the Commission were instituted as a means of limiting the encroachment of development seaward to the bluff edges on unstable bluffs and preventing the need for construction of revetments and other engineered structures to protect development on coastal bluffs, as per Section 30253 of the Coastal Act.

1. Coastal Act and City of San Clemente Certified Land Use Plan (LUP) Policies

Section 30253 of the Coastal Act states:

> *New development shall:*
>
> *(l) 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.*

Section 30235 of the Coastal Act states, in relevant part:

> *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...*

The Orange County Interpretive Guidelines adopted by the Commission contain the stringline policy and bluff top development policy, which state:

Stringline

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.

Bluff Top Development

Proposed development should be set back at least 25 feet from the edge of any coastal bluff. (30251, 30253)

The City of San Clemente Certified LUP contains policies limiting new development on coastal bluff faces to public staircases and policies establishing stringlines for purposes of limiting the seaward encroachment of development onto eroding coastal bluffs. Although the standard of review for projects in San Clemente is the Coastal Act, the policies of the Certified LUP are used as guidance. These policies include the following:

Policy VII.13:

Development shall be concentrated on level areas (except on ridgelines and hilltops) and hillside roads shall be designed to follow natural contours. Grading, cutting, or filling that will alter landforms (e.g.; bluffs, cliffs, ravines) shall be discouraged except for compelling reasons of public safety. Any landform alteration proposed for reasons of public safety shall be minimized to the maximum extent feasible. ...

Policy VII.14 states:

Proposed development on blufftop lots shall be set back at least 25 feet from the bluff edge, or set back in accordance with a stringline drawn between the nearest corners of adjacent structures on either side of the development. This minimum setback may be altered to require greater setbacks when required or recommended as a result of a geotechnical review.

Policy VII.17 of the LUP also limits the type of development allowed on bluff faces. It states:

New permanent structures shall not be permitted on a bluff face, except for engineered staircases or accessways to provide public beach access where no feasible alternative means of public access exists.

Both the stringline policy and the 25 foot bluff setback policy could apply in this situation because the applicant is proposing new infill development between existing single-family residences (see Exhibit 1, page 4). As outlined in section B.2.c., Commission staff are recommending adherence to a 25 foot setback. However, as also outlined in section B.2.c., if the stringline were to applied in this case, a stringline modified to conform with the San Clemente certified land use plan policy would be more appropriate for the site. Briefly, the plans submitted by the applicant (Exhibit 2, page 1 and Exhibit 3) show that the applicant is proposing an 8 foot setback for the proposed residence. There is no proposed hardscape patio area seaward of the proposed residence. According to the applicant, the proposed development conforms with a stringline, as shown on the plans, drawn between the seaward-most corners of adjacent structures, but not the nearest corner of adjacent structures. This application of the stringline is not consistent with the Commission's stringline policy. As will be discussed in section B.2.c., Commission staff disagree with the applicant's delineation of the stringline. While Commission staff are recommending a 25 foot setback rather than conformance with the stringline, should the stringline be applied, Commission staff have recommended a more landward stringline drawn between the nearest corners of the enclosed living space of adjacent structures. Commission staff's recommended stringline is consistent with the certified land use plan stringline policy.

2. Bluff Stability and Erosion

This section includes a general discussion of the causes of bluff erosion in the Southern California region, particularly San Clemente, and specific bluff erosion at the project site.

a. Generalized Findings on Bluff Erosion

In general, bluff erosion is caused by environmental factors and impacts caused by man. Environmental factors include seismicity, wave attack, drying and wetting of soils, wind erosion, salt spray erosion, rodent burrowing, percolation of rain water, poorly structured bedding, and soils conducive to erosion. Factors attributed to man include bluff over-steepening from cutting roads and railroad tracks, irrigation, over-watering, building too close to the bluff edge, improper site drainage, use of impermeable surfaces to increase runoff, use of water-dependent vegetation, pedestrian or vehicular movement across the bluff top and toe, and breaks in water or sewage lines. In addition to runoff percolating at the bluff top site, increased residential development inland also leads to increased water percolation through the bluff.

There are numerous articles about seacliff retreat and bluff erosion in coastal literature. Much of this literature pertains to bluffs subject to wave attack and to large-scale landsliding. Antony R. Orme wrote a paper entitled "Mass Movement and Seacliff Retreat along the Southern California Coast" published in the Bulletin of the Southern Academy of Science in 1991. He states that there are other factors in bluff erosion besides wave attack, including weathering of coastal cliffs by salt spray evaporation. The coastal bluffs at the project location are subject to wind-borne salt spray from the ocean.

In conclusion, Orme states:

> *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.

According to Orme, a major source of bluff instability in the Los Angeles area was the construction of the Pacific Coast Highway and the railroad. Like Los Angeles, the coastal bluffs in the City of San Clemente were disrupted by the construction of the Pacific Coast Highway and the railroad. Wherever the railroad tracks removed the toe of a coastal bluff, that coastal bluff became unstable. The bluffs at the subject site are separated from the ocean by the railroad. However, the railroad construction activity happened early in the century and although the coastal bluffs in San Clemente were impacted by the railroad construction, they are still natural coastal bluff landforms up to 100 feet high. These coastal bluffs would be eroding with or without the railroad construction.

The coastal bluffs are natural landforms and have been removed from wave attack since the early 1900's, when the railroad was constructed. The Marblehead focused EIR states:

In the case of the Marblehead site, the geomorphic process responsible for bluff erosion is no longer wave action. El Camino Real has been constructed along the base of the bluff, with the AT&SF railroad and housing also having been built between the road and the shoreline. Instead of erosion by wave action, the bluffs continue to erode partly due to oversteepening that resulted from construction of the railroad and El Camino Real.

The Marblehead bluffs are located in the northern part of San Clemente but the composition of the coastal bluffs in San Clemente is similar. There are railroad tracks located at the base of the coastal bluffs at the project location. The tracks contribute to coastal bluff erosion by not allowing talus and landslide materials to accumulate and by causing vibration in the bluffs due to passing trains.

There are two recent, major coastal bluff stabilization projects in the City of San Clemente (La Ventana and Colony Cove) where residences on coastal bluffs have either been destroyed or endangered by bluff failure [CDPs 5-93-243 (San Clemente), A5-DPT-93-275 (Dana Point)]. Other residences on coastal bluffs in San Clemente have received permits to install caissons or other foundation protection measures (CDPs 5-93-181 (Driftwood Bluffs), 5-93-307 (Ackerly), and 5-93-143 (Mertz & Erwin) because existing structures were threatened by bluff erosion (Exhibit 1, page 1).

Landsliding of coastal bluffs below La Ventana St. in the City of Dana Point resulted in the destruction of five homes. Landsliding of the bluffs below Colony Cove resulted in the undermining of terrace walls and patio structures. Drainage is discussed on page 9 of the La Ventana geotechnical report. The primary cause of the La Ventana Landslide was water infiltration into the bluff along a deep seated slope failure line. The report states that water seepage onto the bluff face was longstanding and that landscaping on the rear yards of some bluff top homes may have contributed to the accumulation of water in the slopes.

The Commission has received many application requests to resolve geotechnical problems and protect existing structures on coastal bluffs and coastal canyons in San Clemente (CDPs 5-93-181 (Driftwood Bluffs) and 5-93-143 (Mertz & Erwin) among others) which

were caused by inadequate drainage systems, i.e., broken irrigation lines, over-watering, directing uncontrolled runoff to the bluff slopes, and differential settling due to improperly compacted fill.

An emergency permit was issued in 1990 for massive grading of unstable bluffs at the Marblehead site. Landsliding in 1990 had caused repeated closures of the Pacific Coast Highway at the base of the bluffs. Unlike the La Ventana and Colony Cove sites, there was no development on the Marblehead bluffs. The Marblehead Bluffs erosion problem was created in part by the construction of the railroad and the Pacific Coast Highway which resulted in oversteepening of the bluffs. The Marblehead geological report by Zeiser Kling Consultants, Inc., discusses the process of bluff retreat:

> *The oversteepened bluffs fail due to erosion, such as wave action along the base of the bluff, and due to other environmental factors such as water saturation during periods of abundant rainfall. Fallen debris accumulates at the foot of the slopes where it forms an unstable talus pile. Secondary failures occur as the talus erodes. As more failures occur, the bluff retreats landward. In its mature state, the landform no longer has the appearance of a bluff. The talus pile grows into a large "apron" that buries the bluffs, but continues to fail intermittently as it seeks its angle of repose. The landform may become temporarily stable when the talus apron is large enough to cover the bluff face, protecting the otherwise steep slopes from exposure and possibly buttressing the base of the slopes.*

The bluffs at the project site on Calle de Los Alamos do not have adequate space at the toe of the slope to allow for talus deposition because of the close proximity of the railroad tracks, which must be periodically cleared of debris to ensure the safe passage of trains. This process has been going on since the construction of the railroad in the early part of the century, long before houses were contemplated at this site.

The Marblehead and other geotechnical reports state that the process of coastal bluff erosion can be slowed by landscaping, setting buildings back from the blufftop and constructing impact barriers at the base of the bluff, or by grading and terracing the slope.

The Colony Cove, La Ventana, and Marblehead bluff stabilization projects are located several miles from the project site. However, there are bluff stability problems along the entire stretch of San Clemente coastal bluffs as evidenced by applications for foundation support systems for residences on coastal bluffs and by foundation support systems built previous to the Coastal Act. Much of the development on coastal bluffs prior to the Coastal Act was constructed close to the bluff top edge and later required support systems for failing patios, decks and other improvements.

In addition to documentation of the instability of coastal bluffs in San Clemente, Gerald G. Kuhn published an article entitled "Greatly Accelerated Man-Induced Coastal Erosion and New Sources of Beach Sand, San Onofre State Park and Camp Pendleton, Northern San Diego County, California" in which it is noted that 80% of the cliffs between the San Onofre Nuclear Power Plan and Target Canyon have experienced landslides. Camp Pendleton is located approximately two miles south of the project site.

b. Site Specific Geotechnical Data

The applicant has submitted a geotechnical report titled *Preliminary Geotechnical Investigation for Construction of a New House to Replace the Existing House, 2020 Calle de Los Alamos, Lot 38 of Tract 897, San Clemente (JN99G9010)* by Peter and Associates of San Clemente, California. The geotechnical report concludes that geologic conditions are advantageous for development at the site and that the subject site is suitable for the proposed development.

According to the geotechnical report, the subject site consists of terrace deposits, approximately 4 feet thick, which overlay Capistrano Formation sedimentary bedrock. The geologist states that the bedrock has favorable bedding dips ranging from a few degrees to 30-45 degrees into the slope, therefore, the potential for a failure along the bedding planes is considered to be very low. In addition, the geologist performed a slope stability analysis. The results of the slope stability analysis indicate that the static factor of safety at the site is 2.13 to 2.34 and the pseudo-static factor of safety of the site is 1.67 to 1.78. These factors of safety exceed the commonly accepted factor of safety of 1.5. Finally, the geologist performed a slope creep analysis to determine the potential for impact of slope creep upon the proposed development. The slope creep analysis concluded that there is a 4 foot creep zone. Therefore, slope creep may result in the erosion of 4 additional feet of the bluff top, compared with existing conditions.

Based upon the analyses performed, the geologist states, as follows, that an 8 foot structural setback from the bluff will be adequate:

> *...from a soil engineering and geologic viewpoint, an eight foot setback from the top of the rear slope should be applied.*

The applicant also submitted a letter dated July 23, 1999, prepared by the geologist, Peter and Associates of San Clemente, California titled *Statement Regarding Geotechnical Setback from Bluff, Proposed Brown Residence, 2020 Calle de Los Alamos, San Clemente, CA (JN99G9010-002)* (Exhibit 4). The letter states, as follows, that no future protective structures will be required if the proposed development is constructed with an 8 foot setback and proper surface drainage is implemented and maintained:

> *It is our professional opinion that the proposed setback is adequate to provide stability for the life of the proposed structure without the need for construction of additional protective structures in the future.*

In summary, the geologist states that an 8 foot structural setback from the bluff will be adequate to protect the proposed development over the life of the structure without the need for future protective devices. The setback was determined adequate by the geologist because 1) advantageous bedding planes of the bedrock strata angle into the bluff face; 2) slope stability analysis shows a factor of safety greater than 1.5; and 3) there is a maximum potential of a 4 foot erosion due to slope creep into the proposed 8 foot setback.

There are several coastal development permits issued for projects on coastal bluffs in the immediate vicinity (Exhibit 1, page 1 and 3). Coastal development permits 5-85-642 (Grace) and 5-91-170 (Grace) were issued for 2022 Calle de Los Alamos which is the

property south of and adjacent to the subject site. These coastal development permits were for additions to an existing, pre-Coastal Act residence, which did not result in the seaward encroachment of the existing footprint of the residence. Coastal development permits 5-94-199 (Westberg) and 5-95-069 (Westberg) for 2016 Calle de Los Alamos located two lots north of the subject site were also for additions to a pre-Coastal Act residence which did not result in the seaward encroachment of the existing dwelling.

Coastal development permit 5-98-082 (Westberg), also at 2016 Calle de Los Alamos, approved the repair and replacement of a rear yard patio, steps, landing, and walkway and denied the placement of a railroad tie revetment on a coastal bluff face. The rear yard patio, steps, landing, and walkway required repair due to bluff top erosion. These elements of the project were approved. However, the Commission found that the proposed railroad tie revetment resulted in a seaward encroachment that would change the established stringline in the area and result in adverse impacts upon a coastal bluff, therefore this element of the project was denied. The Commission imposed several conditions including a deed restriction informing the applicant and future owners that future protective structures may not be allowed unless there are no other feasible alternatives.

Coastal development permit 5-85-391 (Miller) was for a new single family residence on a vacant lot at 2014 Calle de Los Alamos, three lots to the north of the subject site. In this case, the proposed development was approved as it conformed with a stringline which provided at least an 18 foot setback from the bluff edge. It should be noted that the edge of the bluff is roughly linear at this location, whereas the bluff edge is not linear at the subject site. The applicant submitted geotechnical information prepared by C. Michael Scullin of Canoga Park, California titled *Engineering Geological Feasibility of Design for a Single Family Residence, Lot 35, Tract 897, 2014 Calle de Los Alamos, San Clemente, California* (Project #79149) dated July 22, 1979. The geotechnical report identifies unfavorable engineering geologic conditions including surficial slumping with slabing and failure along joint and shear planes along the lower areas of the bluff slope, as well as seepage percolating out of the terrace deposits along the bluff. The geotechnical report concludes that such slumping will continue. Therefore, a caisson foundation deepened between 23 feet and 32 feet below grade was recommended. The geotechnical report also recommended minimizing or eliminating all infiltration of surface water into the subsurface and conducting all such surface water to the street.

Emergency Coastal Development Permit EME-79-5208 (Harvey) was issued for emergency remedial measures to stabilize bluff top areas at 2008 Calle de Los Alamos. In this case, caissons and grade beams were required to elevate and stabilize sliding portions of the existing single family residence. In addition, patio areas were removed and replaced.

Coastal development permit waiver 5-89-381 (McMurray) was for an enclosed living space addition on the inland side of an existing, pre-Coastal Act residence located at 2012 Calle de Los Alamos, which is four lots north of the subject site. Commission staff have also received coastal development permit application 5-99-351 (McMurray) for a grade beam and caissons to protect existing development from the hazards of an unstable bluff at this same site. Commission action is pending on application 5-99-351.

Geotechnical information submitted for Coastal Development Permits (5-85-391) have previously identified adverse geologic conditions along the bluffs at Calle de Los Alamos.

In addition, emergency protective works have been required at 2008 Calle de Los Alamos (EME-79-5208). Other repairs and protective works have been required due to bluff erosion at 2016 Calle de Los Alamos (5-98-082). Finally, a recent application (5-99-351) has been submitted for bluff top protective works at 2012 Calle de Los Alamos. The information provided in these permit actions and applications suggests that development in the vicinity of 2020 Calle de Los Alamos is threatened by damage due to erosion of the bluffs. The Commission has sought to avoid the type of damage experienced by other structures along Calle de Los Alamos from bluff erosion at 2014 Calle de Los Alamos by requiring the development to be setback an adequate distance. In the case of 5-85-391, use of a stringline resulted in an 18 foot to 26 foot setback from the bluff.

There are other examples nearby where protective works have been required to protect bluff top development. For example, emergency Coastal Development Permit 5-93-254-G was for bluff top protective works at 3820 Vista Blanca. In this case, development previously approved by the Commission under Coastal Development Permit 5-88-177 required protection from bluff top erosion, despite geotechnical information submitted with the application for 5-88-177 which suggested that no such protection would be required if the development conformed to a 25 foot bluff top set back. Accordingly, there is evidence that the geologic hazards of bluff top sites may escape disclosure even when a geologic investigation is performed. More recently, the Executive Director issued emergency Coastal Development Permit 5-98-273-G (McKinley & Bass) for the construction of a retaining wall on Paseo de Cristobal which was required to protect a residence on a coastal bluff. The Commission has notified owners and future occupants of such sites through the placement of deed restrictions regarding assumption-of-risk and limitations on future bluff top protective works. Examples of permits with such conditions include Coastal Development Permit 5-98-082 (Westberg) on Calle de Los Alamos and 5-94-243 (Gilmour), 5-98-300 (Loughnane), and 5-98-508 (Klien) on Vista Blanca.

c. Alternatives and Recommended Conditions

As noted previously, Policy VII.14 of the San Clemente certified land use plan establishes a blufftop setback of either 25 feet from the bluff edge or a stringline drawn between the nearest corners of adjacent structures. One purpose of these setbacks is to control impacts related to bluff top hazards and resultant visual impacts from obtrusive stabilization structures which may be necessary to protect structures constructed too close to the bluff edge. In 1995, Commission staff recommended the Commission deny San Clemente land use plan amendment 1-95 as submitted and approve the amendment with suggested modifications. Commission staff recommended that Policy VII.14 be modified to require the most restrictive of either a 25 foot setback or stringline. The purpose of the modification was to ensure that new infill development, such as that being proposed, next to older, pre-coastal development built near the bluff edge would be set back an adequate distance. However, at that time, the Commission did not adopt this suggested modification based on the City's prevailing argument that the language of Policy VII.14 gave the discretion to impose either the 25 foot setback or the stringline, as appropriate. In addition, a greater setback could be recommended provided that the setback was supported by geotechnical information.

In this case, there is ample evidence of unstable geologic conditions at nearby sites (CDP files EME-79-5208, 5-85-391, 5-98-082, 5-99-351) to substantiate a strict interpretation

and application of the blufftop setback policy. In contrast, the applicant is proposing conformance with a stringline drawn between the seaward-most corners of the adjacent structures (Exhibit 2, page 1 and Exhibit 3). However, Commission staff recommend adherence to a 25 foot setback, rather than the stringline in this case. The bluffs in this area are not linear. The residences flanking either side of the subject site occur on undulations of the bluff which extend further seaward than the bluff at the subject site. In addition, the residences flanking the subject site were constructed prior to the Coastal Act and are built closer to the bluff than modern standards might allow. These are the conditions in which the City of San Clemente previously argued that discretion in the language of San Clemente LUP Policy VII.14 would allow for adherence to a 25 foot setback, rather than the stringline. Use of the stringline in this area would result in substantial seaward movement of new development in an area where blufftop instability has historically been a problem. Furthermore, while the applicant's geologist has stated the proposed setback is appropriate, the record of coastal development permit applications has shown that predictions of site stability based upon the geologic sciences is inexact. Conditions such as groundwater saturation and seismic activity change the condition of geologic stability along bluffs. The combination of known geologic instability in the vicinity of the subject site and the Commission's experience that the predictions of the geologic sciences is inexact warrants implementation of a setback larger than the proposed setback. Therefore, using the policies of the certified land use plan as guidance, a 25 foot setback to avoid potential geologic hazards and the future necessity of visually obtrusive protective works is appropriate.

It should be noted that adherence to a 25 foot setback would not result in a case of inequitable allowable development in the area. The existing residence that is proposed to be demolished is setback at least 20 feet from the bluff edge. Commission staff reviewed Orange County Assessors Office records regarding the sizes of residences in the area. The residences along the subject stretch of Calle de Los Alamos are reported to range in size from approximately 1,100 square feet to 2,900 square feet of living space. The applicant is proposing a 4,365 square foot residence. As proposed, this residence will be approximately 50% larger than the largest reported residence along the subject stretch of Calle de Los Alamos. While modifications to the project to require a 25 foot setback may require a reduction in the overall size of the residence, such modifications would result in a residence more consistent with the existing pattern of development.

A second alternative in this case would be to require conformance with the stringline. While Commission staff are not recommending use of the stringline in this case, the issues related to application of this policy are presented. As stated previously, the applicant is proposing adherence to a stringline drawn between the seaward-most corners of the adjacent structures. This proposed stringline would result in a minimum 8 foot setback. However, as clearly stated in Policy VII.14 of the certified land use plan, when the stringline policy is applied, the stringline is to be drawn between the nearest corners of adjacent structures not the seaward-most corners of adjacent structures. Allowing the proposed development to move forward to the proposed stringline would substantially alter the nature of the stringline in the area. Finally, although geologic information submitted by the applicant states than an 8 foot setback from the bluff will be adequate to protect the proposed development from adverse geologic impacts, the geologic information also suggests that slope creep may cause erosion of 4 feet of the proposed 8 foot setback. Therefore, if the stringline policy were to be applied in this case, the stringline should be

drawn between the nearest corners of the adjacent structures. A modified stringline would: 1) be consistent with the stringline policy of the certified land use plan; 2) minimize adverse changes to the nature of the stringline in the area; 3) provide a minimum 12 foot setback from the bluff edge as opposed to a minimum 8 foot setback ;and 4) ensure that there is at least a minimum 8 foot setback over the life of the structure, even with the loss of 4 feet due to slope creep. As stated above, Commission staff are recommending a 25 foot setback, not a setback in accordance with a stringline. However, if the stringline were to be applied in this case, the applicant should be required to conform with a modified stringline as described and not the proposed stringline.

Therefore, Commission staff recommend the Commission impose Special Condition 1 which requires the applicant to submit revised plans to the Executive Director for review and approval which show that the proposed development conforms with a 25 foot setback from the edge of the bluff. The applicant shall construct the proposed development in conformance with the revised and approved plans. No deviation from the plans may occur without obtaining an amendment to the coastal development permit or a new coastal development permit.

Special Condition 2 is a future development deed restriction which states that any future improvements or additions on the property, including hardscape improvements, grading, landscaping, vegetation removal and structural improvements, require a coastal development permit from the Commission or its successor agency. This condition ensures that the property owner and any successors in interest are notified that development on coastal bluffs requires a coastal development permit.

Section 30253 of the Coastal Act requires that new development shall not require construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The proposed development cold not be approved as being consistent with Section 30253 of the Coastal Act if projected bluff retreat would affect the proposed development and necessitate construction of a protective device. In addition, the Commission has generally interpreted Section 30235 of the Coastal Act to require the Commission to approve shoreline protection for residential development only for existing principal structures. The construction of a shoreline protective device to protect new residential development would not be required by Section 30235 of the Coastal Act. In addition, the construction of a protective device to protect new residential development would conflict with Section 30251 of the Coastal Act which states that permitted development shall minimize the alteration of natural land forms, including coastal bluffs which would be subject to increased erosion from such a device.

The applicant is proposing to extend the usable life of development on the subject site by demolishing the existing structure and constructing a new structure. The new development can only be found consistent with Sections 30251 and 30253 of the Coastal Act if a bluff protective device will not be needed in the future. The applicant has submitted information from a geologist who performed an investigation at the subject site which states that the proposed development will not require any devices in the future to protect the proposed development from erosion or other hazards.

There is evidence that development along Calle de Los Alamos and elsewhere within the City of San Clemente are subject to bluff erosion which can be hazardous to development.

The construction of new structures too close to the bluff could require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs inconsistent with Sections 30251 and 30253 of the Coastal Act.

The Commission is requiring the proposed development to maintain a 25 foot setback from the bluff to avoid the impacts presented by erosion of the bluffs. Based upon a geologic investigation, the applicant maintains that the subject site is safe for development. If not for the information provided by the applicant that the site is safe for development and the Commission imposing Special Condition 1 requiring a 25 foot setback, the Commission could not conclude that the proposed development will not in any way "require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs."

However, as discussed above, the record of coastal development permit applications and Commission actions has shown that geologic conditions change over time and that predictions regarding site stability based upon the geologic sciences are inexact. Even though there is evidence that geologic conditions change, the Commission must rely upon, and hold the applicant to their information which states that the site is safe for development without the need for construction of the kinds of protective devices inconsistent with Sections 30251 and 30253 of the Coastal Act. Therefore, the Commission imposes Special Condition 3 which requires the applicant to record a deed restriction against the property placing the applicant and their successors in interest on notice that no protective devices shall be permitted to protect the proposed development and that the applicant waives, on behalf of itself and all successors and assigns, any rights to construct protective devices that may exist under Public Resources Code Section 30235. This condition is similar to that imposed by the Commission in Coastal Development Permit 5-99-231 (Smith).

In order to avoid adverse geologic impacts upon the proposed development, the applicant's geologist has provided several recommendations in the report titled *Preliminary Geotechnical Investigation for Construction of a New House to Replace the Existing House, 2020 Calle de Los Alamos, Lot 38 of Tract 897, San Clemente (JN99G9010).* These recommendations include setting the proposed development back at least 8 feet from the top of the bluff, foundation design guidelines, soil compaction guidelines and yard landscaping and drainage guidelines. These recommendations must be implemented in order to assure that the proposed development will assure stability and structural integrity and not contribute to erosion, geologic instability, or impacts upon the surrounding area. Therefore, the Commission imposes Special Condition 4 which requires the applicant to submit foundation plans, reviewed, signed and stamped by a geotechnical consultant. Only as conditioned does the Commission find that the proposed development conforms with Section 30253 of the Coastal Act.

The coastal bluffs at this location are eroding. Site photographs show evidence of erosion on those parts of the bluff that are not vegetated. Also, the AT&SF railroad tracks are located at the base of the bluffs, indicating that there is little room for the coastal bluffs to establish talus cones, which is the natural way for the bluff to stabilize itself. In addition, there have been at least three instances on Calle de Los Alamos (2008, 2012 and 2016 Calle de Los Alamos) where replacement of damaged structures has been required, and requests for protective devices have been made, due to bluff top erosion. These

residences are within 60 to 320 feet of the subject site. Finally, there is evidence regionally that coastal bluffs in San Clemente are subject to ongoing erosion and that geologic impacts are not always predictable based upon a geologic investigation. Although adherence to the required bluff top setback, as required in Special Condition 1, will minimize the risk of damage from erosion, the risk is not eliminated entirely. Therefore, the Commission imposes a standard waiver of liability condition through Special Condition number 5. By this means, the applicant is notified that the residence is being built in an area that is potentially subject to bluff erosion that can damage the applicant's property. The applicant is also notified that the Commission is not liable for such damage as a result of approving the permit for development. Finally, recordation of the condition ensures that future owners of the property will be informed of the risks and the Commission's immunity for liability.

As was stated in the section on generalized bluff erosion, there is ample evidence in the City of San Clemente that the bluffs are adversely impacted by human development. Specifically, the installation of lawns, in-ground irrigation systems, inadequate drainage, and watering in general are common factors precipitating accelerated bluff erosion, landsliding and sloughing, necessitating protective devices. Local examples where adverse geologic impacts related to landscaping, drainage, and irrigation include damage experienced at 2012 and 2016 Calle de Los Alamos. The geologic report submitted with this application (5-99-204) generally include recommendations for landscaping but unlike other engineering specifications, these recommendations are typically not reviewed and implemented by the consulting geologist/engineer. For instance, Peter and Associates recommends:

> *To minimize differential earth movement (such as heaving and shrinkage due to the change in moisture content of subgrade soils) which may cause distress to a structural object such as a house wall or an exterior slab, moisture content of the soils surrounding the structure should be kept as relatively constant as possible. Unlined flower beds, planters, and lawn should not be constructed against, or within 5 feet of, the perimeter of a structure. If such landscaping (within 5 feet of the perimeter of the structure) is planned, it should be properly drained and provided with an adequate underground moisture barrier in order to prevent water from seeping into foundation areas or beneath slabs.*
>
> *Irrigation of yard landscaping should be kept to a minimum required to support plant life.*
>
> *Water should not be allowed to pond in pad areas or overtop and flow down slope. An earthen berm, or equivalent, should be built along the top of slope.*
>
> *In general, the site should be graded to ensure surface water flows away from all improvement structures, away from the top of the rear slope, and into a drainage system for outletting into the street in front.*

Developments on blufftop lots in San Clemente are required to submit landscape plans, consisting primarily of native plants, for the review and approval of the Executive Director, in order to be found in conformance with Section 30253 of the Coastal Act. In this instance, the applicant has not submitted a drainage, irrigation and landscape plan.

Therefore, the Commission imposes Special Condition 6 which requires the applicant to submit a landscaping plan consisting primarily of native, drought-tolerant plants and no in-ground irrigation systems. Special Condition 6 requires that areas not occupied by hardscape be planted primarily with native, drought tolerant plants indigenous to the area. The condition distinguishes between the types of plants allowed in the rear, side and front yards. Non-native ornamental plants are allowed in the front and side yards only if they are kept in containers. Rear yard, bluff top plantings consist entirely of native, drought-tolerant plants. Native, drought-tolerant plants common to coastal bluffs serve the following functions: require watering originally (1-3 years) but not after they become established, drought-tolerant plants have deep root systems which tend to stabilize soils, are spreading plants and tend to minimize the erosive impact of rain, and provide habitat for native animals. The condition allows for the placement of non-drought-tolerant, water-dependent plants in containers, i.e., boxes and planters, along the side and front yards. Bluff-top plants shall consist entirely of native, drought-tolerant plants.

Also, the Commission imposes Special Condition 7 which requires the applicant to submit a drainage and irrigation plan for the review and approval of the Executive Director. In keeping with the geotechnical recommendations, this condition requires that all drainage be taken to the street and that irrigation be minimized. In recent actions on unstable bluffs (Ferber 5-98-469), the Commission has required that no in-ground irrigation systems be installed on bluff-top lots. This special condition conforms with the previous actions of the Commission regarding in-ground irrigation systems. The condition does acknowledge that temporary above ground watering is allowed for plant establishment and growth.

Only as conditioned for conformance with a larger bluff edge setback, future improvements notification, no future protective works notification, conformance with geotechnical recommendations, assumption-of-risk notification, landscaping, drainage and irrigation requirements does the Commission find the proposed development in conformance with Section 30253 of the Coastal Act.

C. SCENIC RESOURCES

Section 30251 of the Coastal Act pertains to visual resources. It states:

> *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...*

The proposed project is located on a blufftop lot above a public beach accessible via San Clemente State Beach and the Los Winds Beach Stairway. The certified LUP states that San Clemente State Beach is "one of the most heavily utilized facilities in the State Parks system, generating two million visitors annually. The facilities at San Clemente State Beach include 210 parking spaces, 157 camping sites, 72 hookups for campers, bathrooms and showers. In addition, the LUP notes that a 7.5 acre lot to the south of the State Beach which was given to the State Parks as a condition of a subdivision permit is rugged canyon terrain and will be kept in its natural state.

The project is located adjacent to San Clemente State Beach, a highly scenic popular beach area. Consequently, it is necessary to ensure that the development will be sited to protect views to and along the beach area and minimize the alteration of landforms.

In order to ensure that the visual appearance of the bluff is protected, the applicant is being conditioned to comply with a 25 foot enclosed living space setback, future development deed restriction, no future protective works notification, and landscape condition. The future development deed restriction and setback requirements ensure that improvements are not made at the blufftop which could affect the visual appearance of the coastal bluff or affect the stability of the bluff. The no future protective works special condition ensures that no future protective works, such as caissons which would be visually intrusive to the public beach area, is allowed. The landscape condition requires that the applicant install native, drought-tolerant plants along the bluff-top and rear yard and that only temporary irrigation to establish the plants is permitted. These native plants will be compatible with the native plants already in existence on bluff faces in San Clemente.

Therefore, the Commission finds that as conditioned for the landscaping condition, future development deed restriction and the future bluff protective works deed restriction, the project is consistent with the visual resource protection policies of Section 30251 of the Coastal Act.

D. ACCESS AND RECREATION

Section 30212(a)(2) of the Coastal Act states:

> *(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:*
>
> *(l) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,*
>
> *(2) adequate access exists nearby, or,*
>
> *(3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.*

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. Vertical public beach access is available approximately 420 feet north of the site at the Los Winds Beach Stairway, located near the intersection of Calle Lasuen and Calle de Los Alamos. Lateral access to the Pacific Ocean and sandy beach is immediately adjacent to the proposed development via San Clemente State Beach. The proposed single-family residence is infill development. Situated at the toe of the coastal bluff is the railroad right-of-way. The project site does not provide access to the ocean.

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, 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 project site will remain a single-family residential use and will not result in an intensification of use. 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 finds that the proposed development is consistent with Section 30212 of the Coastal Act.

E. LOCAL COASTAL PROGRAM

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The Commission certified the Land Use Plan for the City of San Clemente on May 11, 1988, and certified an amendment approved in October 1995. On April 10, 1998, the Commission certified with suggested modifications the IP portion of the Local Coastal Program. The suggested modifications expired on October 10, 1998. As conditioned, the proposed development is consistent with the policies contained in the certified Land Use Plan regarding public access. Therefore, approval of the proposed development will not prejudice the City's ability to prepare a Local Coastal Program for San Clemente that is consistent with the Chapter 3 policies of the Coastal Act as required by Section 30604(a).

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 and visual resource protection policies of the Coastal Act. Mitigation measures include special conditions requiring, conformance with a 25 foot setback, conformance with deed restrictions regarding future development and no future protective works, conformance with geotechnical recommendations, assumption-of-risk deed restriction, and requirements regarding drainage, irrigation, and landscaping will minimize all adverse effects. The proposed development, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act. There are no feasible alternatives or mitigation measures available which will lessen any significant adverse impact the activity would have on the environment. Therefore, the Commission finds that the proposed project is consistent with CEQA and the policies of the Coastal Act.

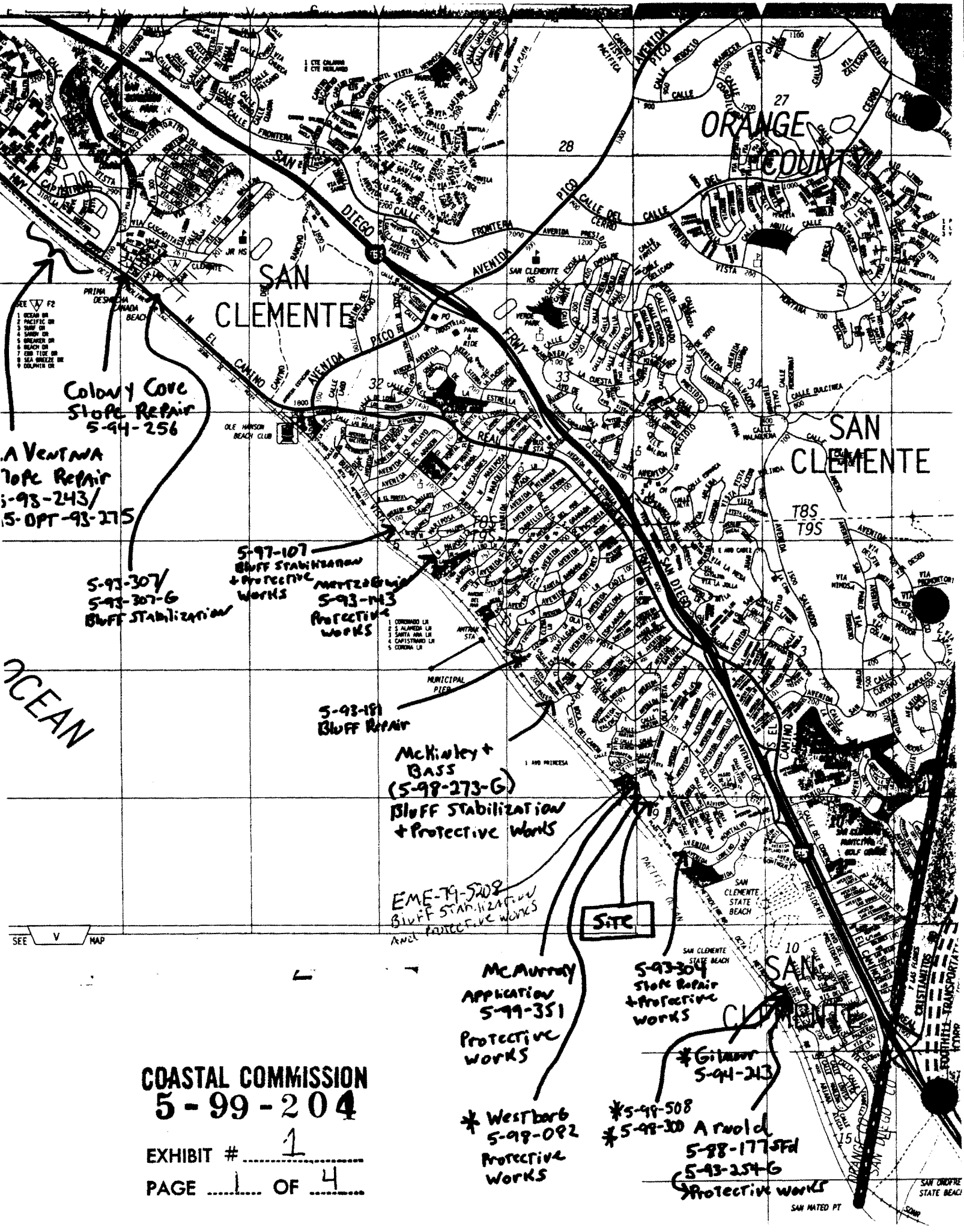

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EXHIBIT # 1

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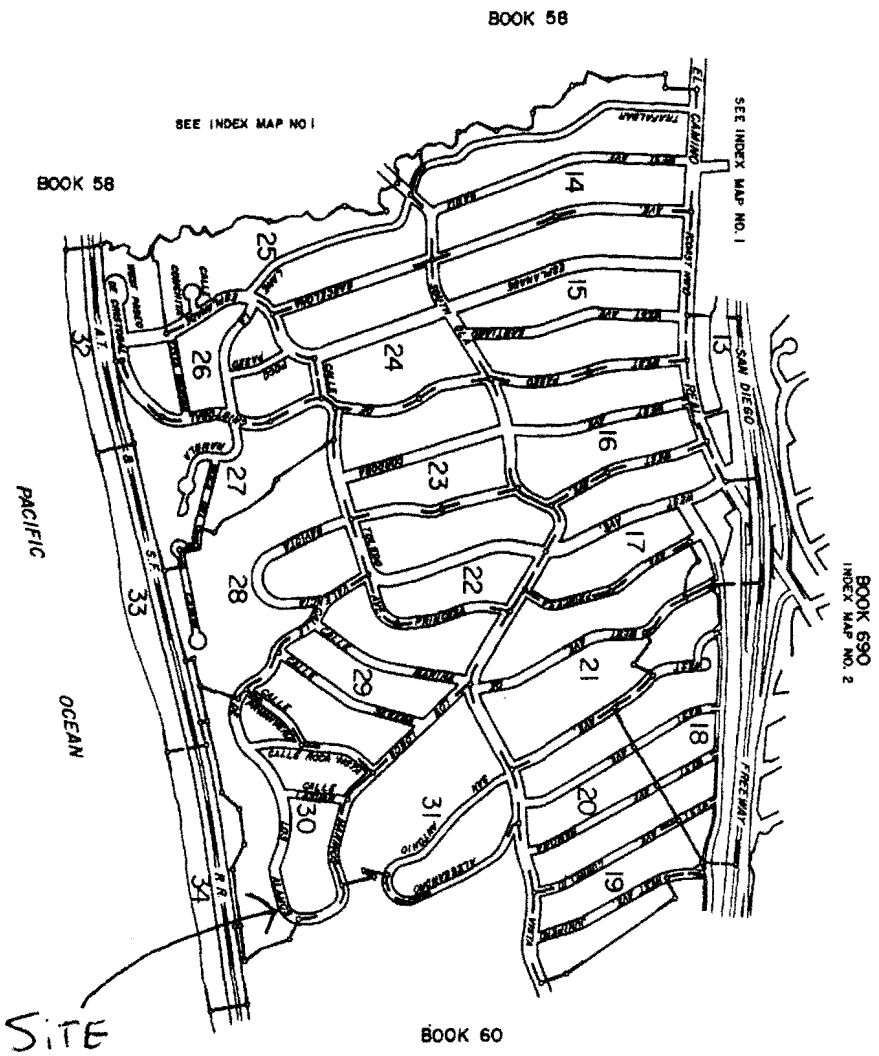

INDEX MAP NO. 2
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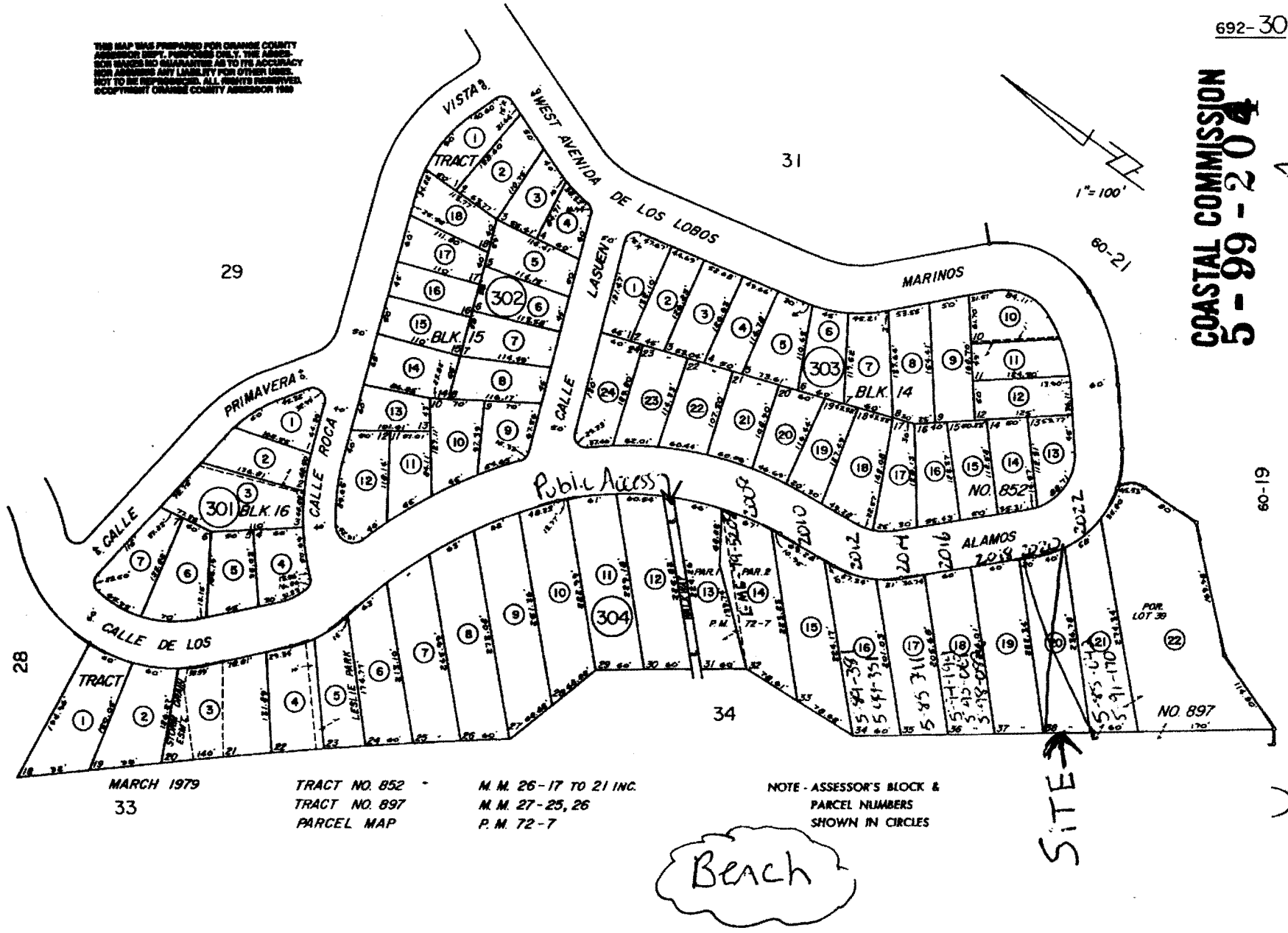

MARCH 1979

TRACT NO. 852 - M.M. 26-17 TO 21 INC.
TRACT NO. 897 M.M. 27-25, 26
PARCEL MAP P.M. 72-7

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

TOPOGRAPHIC MAP

SITE (Location of Existing Residence)
2020 CALLE DE LOS ALAMOS
MR. & MRS. JOHN BROWN

TIE TO SHEET G-1

RECEIVED
AUG 27 1999
CALIFORNIA COASTAL COMMISSION

EXISTING

EXISTING

EXISTING

Calle de los Alamos

SANTA FE AND TOPEKA R.R.

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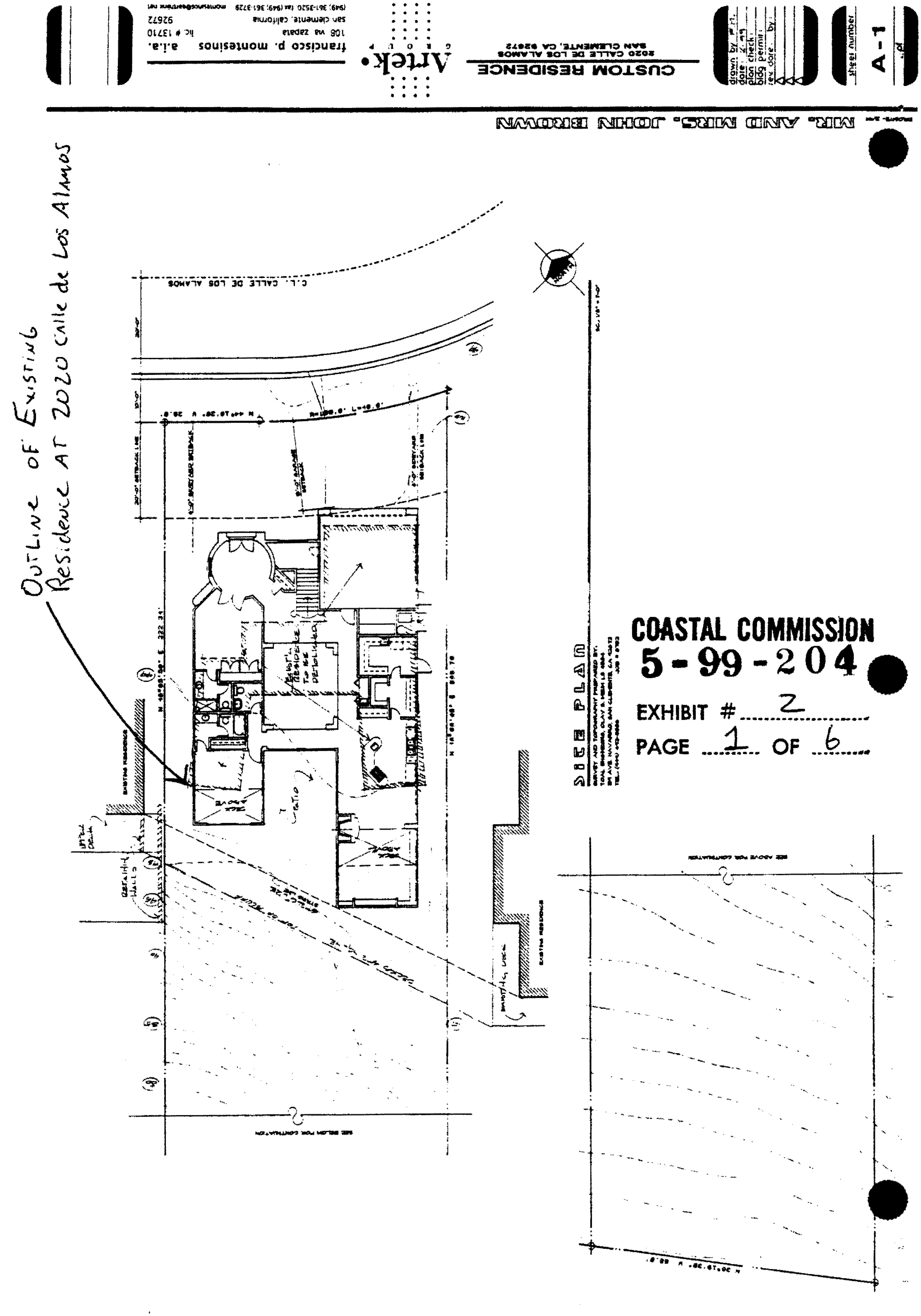

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5-99-204

EXHIBIT # 2

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MR. AND MRS. JOHN BROWN

CUSTOM RESIDENCE
2020 CALLE DE LOS ALAMOS
SAN CLEMENTE, CA 92672

drawn by:
date: 2-99
plan check:
bldg permit:
rev date: by:

sheet number A-2 of

Artek
c a l i f o r n i a

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LOWER LEVEL FLOOR PLAN

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Artek

CUSTOM RESIDENCE
2020 CALLE DE LOS ALAMOS
SAN CLEMENTE, CA 92672

drawn by: F.M.
date: 2-99
plan check:
bldg permit:
rev date: by:

sheet number: A-3

MR. AND MRS. JOHN BROWN

UPPER LEVEL FLOOR PLAN

COASTAL COMMISSION
5-99-204

EXHIBIT # 2

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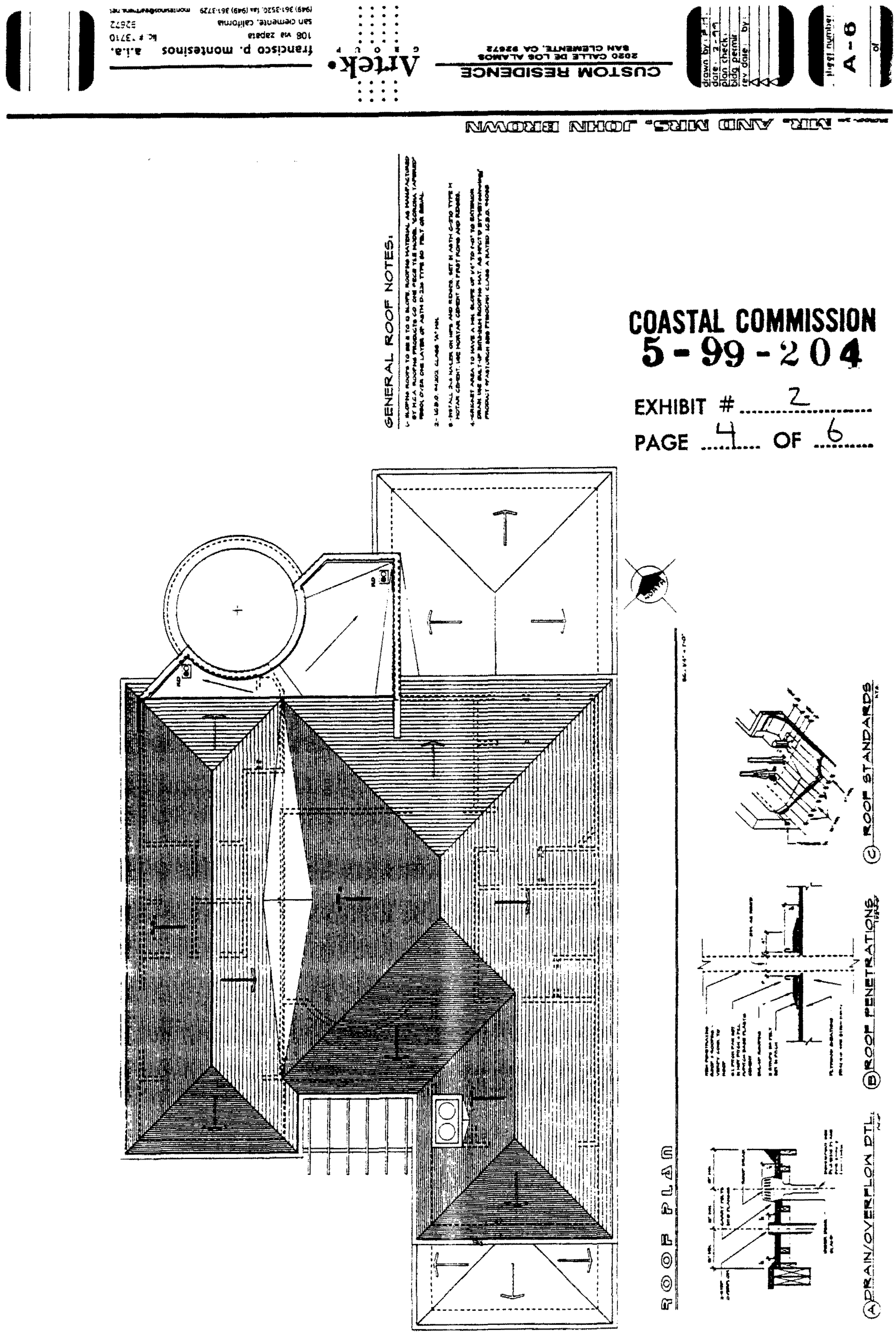

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EXHIBIT # 2

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CUSTOM RESIDENCE
2920 CALLE DE LOS ALAMOS
SAN CLEMENTE, CA 92672

sheet number A-7

FRONT ELEVATION

REAR ELEVATION

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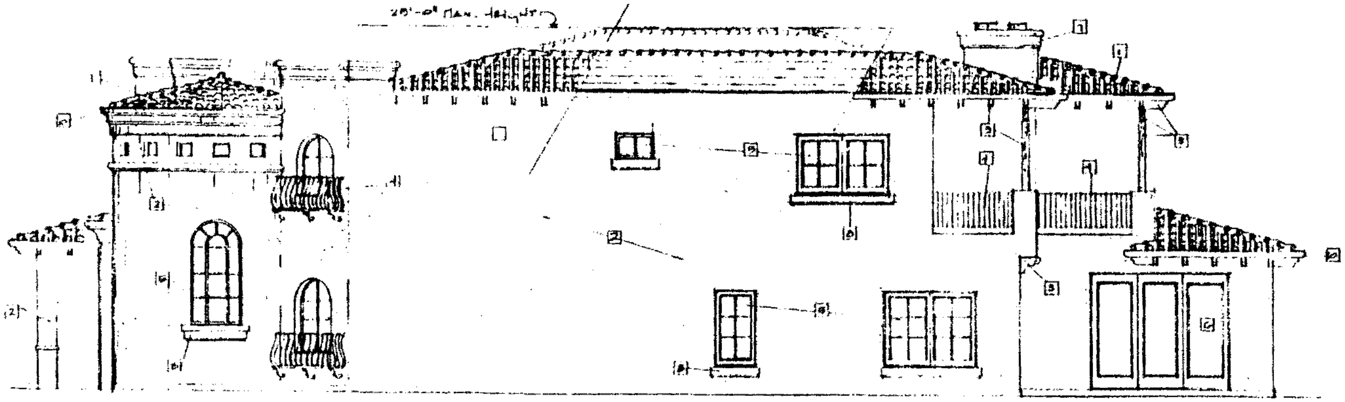
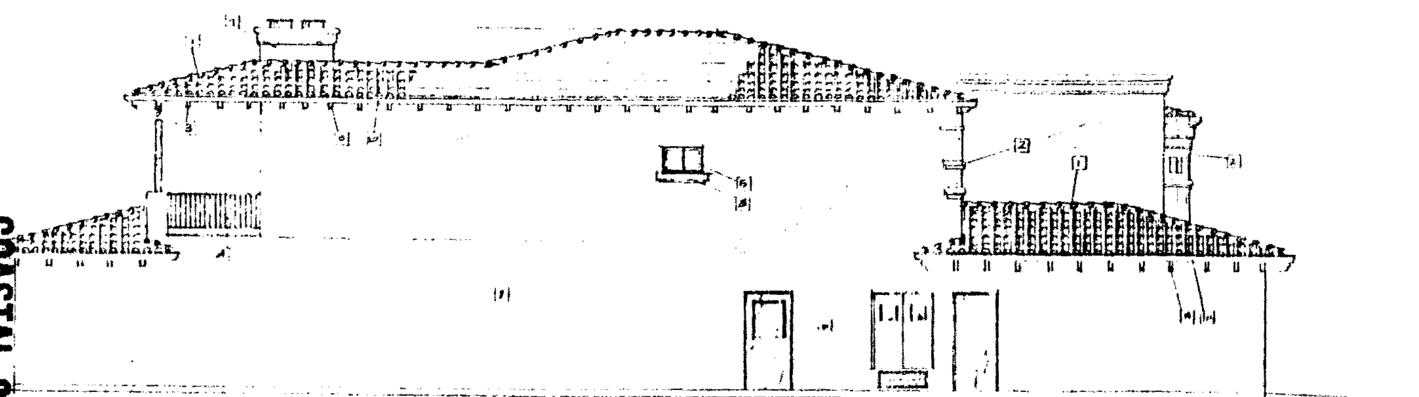


RIGHT SIDE ELEVATION 1/4"=1'-0"



LEFT SIDE ELEVATION 1/4"=1'-0"

1. TWO PIECE BARREL SPANISH CLAY TILE ROOFING, 3 TO 12 SLOPE, TERRACOTTA COLOR (I.C.B.O. #4002) RIDGES AND FIRST ROW TO BE GROUTED, AS MANUFACTURED BY M.C.A. ROOFING PRODUCTS CO., "CORONA TAPERED" #8301, FIRE RATED BY A.S.T.M. E08 TEST CLASS A MIN. OVER TWO LAYERS 15# FELT HOT MOPPED AND 5/8" PLYWOOD SHEATHING.
2. 7/8" EXTERIOR PLASTER ON MTL. LATH, SAND FINISH, BULLNOSED EXTERIOR CORNERS. COLOR AS MANUFACTURED BY "OMEGA PRODUCTS CORP." 10 OMEGA WHITE, AND AS APPROVED BY THE ARCHITECT. PROVIDE 2 LAYERS OF GRADE "D" PAPER (FELT) OVER PLYWOOD AT SHEAR WALLS.
3. 4x10 EXPOSED RAFTER TAILS AND ANY EXPOSED LUMBER TO BE S.S. WITH SOLID STAINED "OLYMPIC 908", DARK BROWN OAK, OR APPROVED EQUAL.
4. W.I. RAILINGS, POTHOLDERS, GRILLS, ETC. TO BE PAINTED SOLID BLACK.
5. TRUE DIVIDED LIGHTS WOOD WINDOWS, AS SELECTED BY OWNER. SOLID STAINED. SEE WINDOW SCHEDULE FOR REQUIREMENTS.
6. WOOD DOORS WITH TRUE DIVIDED LIGHT PANELS. STAIN TO MATCH WINDOWS.
7. CHIMNEY STACK, 2x FRAMED WITH STUCCO FINISH AS NOTE #1. ANY OPENINGS TO BE NOT LESS THAN 2'-0" VERT. AND 10'-0" HORIZ. FROM ANY ROOF COMPONENTS. PROVIDE SPARK ARRESTORS FOR ALL FLUES.
8. 2x4 OVER 2x6 TRIM STUCCOED AT ALL WINDOW SILLS
9. STUCCOED OVERFLOW GUTTERS
10. G.I. RAIN GUTTERS
11. LIGHT FIXTURE
12. HOUSE ADDRESS

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Artek• GROUP

CUSTOM RESIDENCE
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SAN CLEMENTE, CA 92672

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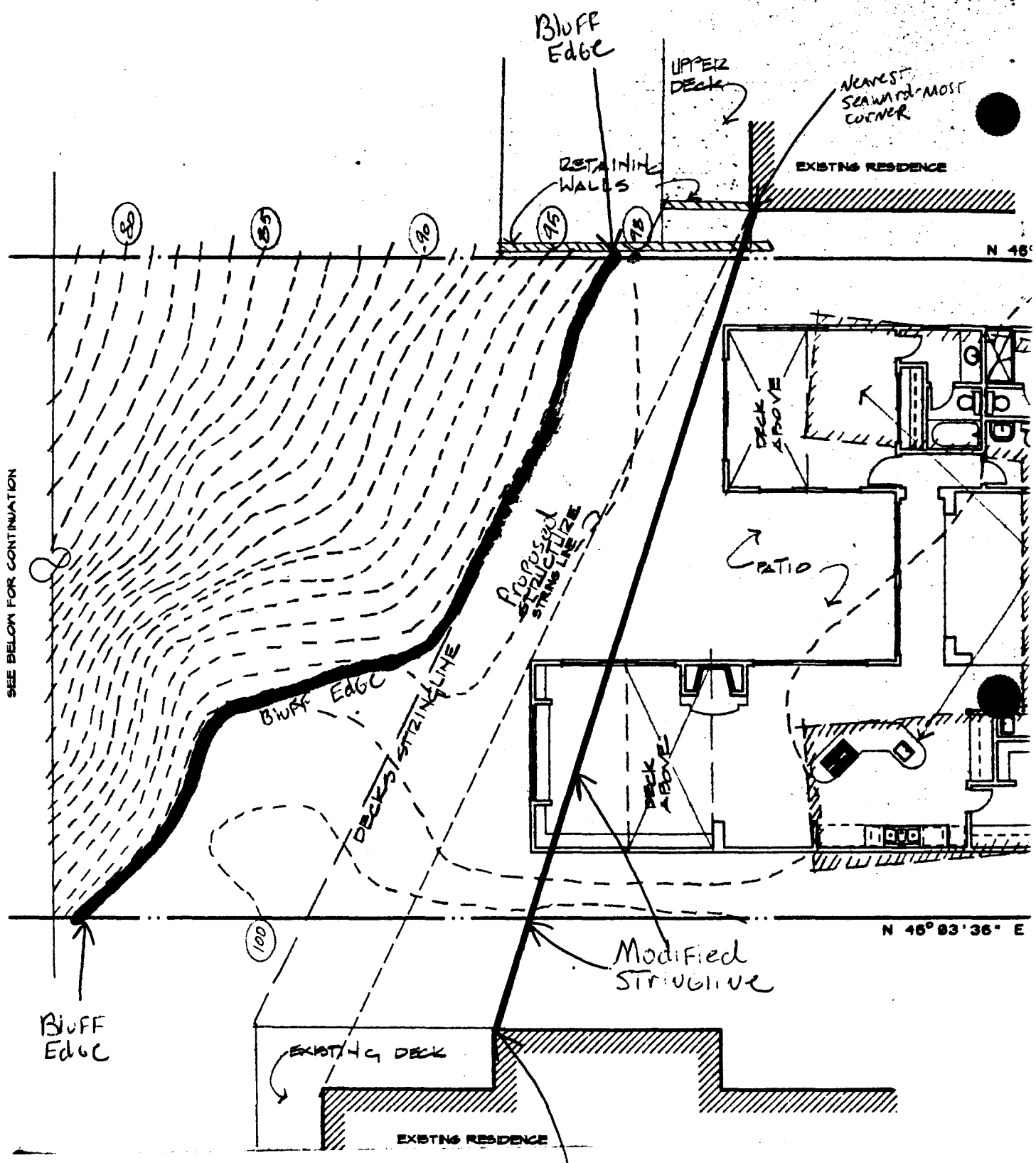
EXHIBIT # 2
PAGE 6 OF 6



Bluff Edge and Stringline Exhibit

COASTAL COMMISSION
5-99-204

EXHIBIT # 3

PAGE 1 OF 1

Peter and Associates

Engineers, Geologists, Surveyors, Inc.
Civil, Municipal, Mining
Geological, Foundations

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July 23, 1999

John and Nida Brown
1811 Niodrara Drive
Glendale, CA 91208

SUBJECT: Statement Regarding Geotechnical Setback from Bluff; Proposed Brown Residence, 2020 Calle de Los Alamos, San Clemente, California
JN99G9010-002

References: Peter and Associates, Inc. 1999, "Preliminary Geotechnical Investigation for Construction of a New House to Replace the Existing House, 2020 Calle de Los Alamos, Lot 38 of Tract 897, San Clemente", JN99G9010, dated 5/19/99.

California Coastal Commission, 1999, "Follow Up to Letter Dated July 7, 1999; Coastal Development Permit Application 5-99-204. Site: 2020 Calle De Los Alamos, San Clemente, Orange County; Applicant: Mr. and Mrs. Brown, dated 7/13/99.

Dear Mr. and Mrs. Brown:

It is our professional opinion that the proposed setback is adequate to provide stability for the life of the proposed structure without the need for construction of additional protective structures in the future.

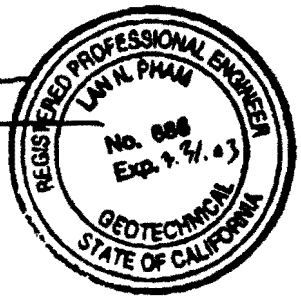
The above statement is based on the assumption that proper surface drainage at the site be provided and maintained throughout the life of the structure, as recommended in our referenced report. Vegetation covering the bluff must also be properly maintained.

As explained in our referenced report, under section "Slope Stability Analysis/Structural Setback from Rear Slope" (page 4), the conventional bluff setback is based on a 1.5:1 plane (as for other near vertical bluff portions in the vicinity). The existing bluff at the site has gradients varying from approximately 1.5:1 to approximately 1.9:1. If applying the conventional 1.5:1 plane setback, there would be no setback at all. (The 1.5:1 plane starting from the toe of the bluff will not meet/cut the flat/horizontal building pad.) Therefore, as a conservative approach, the conventional 1.5:1 setback does not apply

for the site. In other words, instead of zero-foot setback from the top of the bluff (when applying the conventional 1.5:1 setback), an 8-foot setback from the top of the bluff was recommended.

If you have any questions or require clarification, please contact this office. This opportunity to be of service is sincerely appreciated.

Very truly yours,



Lan N. Pham, Director
Geotechnical Engineering
RGE 686, Exp. 3/31/03

COASTAL COMMISSION
5-99-204
EXHIBIT # 4
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