CALIFORNIA COASTAL COMMISSION

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Staff Report: Hearing Date: ALK-LB April 19, 2001 May 7-11, 2001

Commission Action:

Item M 13d

STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER:

5-00-501

RECORD PACKET COPY

APPLICANT:

Rod & Susan Brue

AGENT:

Robert Linnaus

PROJECT LOCATION:

255 La Paloma, San Clemente, Orange County

PROJECT DESCRIPTION: Demolition of an existing single-family residence and construction of a new 7204 square foot, three-story, three-unit apartment complex with a 3732 square foot, eight-car subterranean parking

garage, patios and landscaping on a coastal blufftop lot.

LOCAL APPROVALS RECEIVED: City of San Clemente Approval-in-Concept dated

December 18, 2000 and Cultural Heritage Permit 00-173

approved by the City of San Clemente Planning

Commission on October 30, 2000.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends the Commission APPROVE the proposed development with seven (7) special conditions. The subject site is a coastal blufftop lot located between the first public road and the sea in San Clemente. The proposed apartment complex and subterranean parking garage conforms to the blufftop setback policies in the certified LUP, as the new structure will be set back in accordance with the required 25-foot structural setback. However, the applicant is also proposing to construct a subterranean bluff stabilization structure that encroaches into the 25-foot setback by 8 feet. The primary issue addressed in the staff report is assurance that the proposed development is appropriately set back from the bluff edge to be consistent with the geologic hazard and visual resource policies of the Coastal Act.

Special Condition 1 requires the applicant to submit revised plans showing that all development. including the subterranean stabilization system, conforms to the 25-foot structural setback. Special Condition 2 requires the applicant to submit final plans that show evidence of conformance with geotechnical recommendations, including those regarding site preparation, foundation design, and drainage. Special Condition 3 requires the recordation of an assumption of risk deed restriction. Special Condition 4 requires the recordation of a no future blufftop protective device deed restriction. Special Condition 5 requires the applicant to record a deed restriction, which ensures that the applicant and future landowners are aware that future development requires a new coastal development permit or an amendment to this permit. Special Condition 6 requires the submittal of a final drainage and run-off control plan which demonstrates that all on-site run-off will be taken to the street. Lastly, Special Condition 7 requires submission of a final landscaping plan which shows that only drought-tolerant natives will exist in the rear yard area and restricts any in-ground irrigation.

SUBSTANTIVE FILE DOCUMENTS:

City of San Clemente Certified Land Use Plan (LUP); Geotechnical Investigation, Proposed Multi-Unit Blufftop Condominium, 255 La Paloma, San Clemente, California prepared by Petra Geotechnical, Inc. dated December 27, 2000; letter from Petra Geotechnical, Inc. dated March 14, 2001; letter from Petra Geotechnical, Inc. dated April 12, 2001.

Coastal Development Permits: 5-00-424 (Spriggs); 5-00-081 (Cramer); 5-00-034 (McKinley-Bass); 5-99-351 (McMurray); 5-99-231 (Smith); 5-99-204 (Brown)—application withdrawn; 5-98-508 (Desert Cities Properties); 5-98-469 (Ferber); 5-98-300 (Loughnane); 5-98-273-G (McKinley & Bass); 5-98-210 (Nelson); 5-98-178 (McMullen); 5-98-082 (Westberg); 5-98-064 (Barnes); 5-98-020 (Conrad); 5-97-371 (Conrad); 5-97-270 (Noah); 5-97-269 (Noah); 5-97-256 (Noah); 5-97-185 (Schaeffer); 5-97-107 (Spruill); 5-95-121 (Watson); 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); P-3967 (Cypress West); Engineering geologic report by C. Michael Scullin, 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.

LIST OF EXHIBITS:

- 1. Vicinity Map
- 2. Assessor's Parcel Map
- 3. Coastal Access Points Map
- 4. Project Plans
- 5. Partial Plate 2 from Geotechnical Investigation
- 6. Letter from Petra Geotechnical, Inc. dated March 14, 2001
- Letter from Lesley Ewing, Senior Coastal Engineer, dated March 16, 2001
- 8. Letter from Rod Brue, applicant, dated March 29, 2001
- Letter from Petra Geotechnical, Inc. dated April 12, 2001

STAFF RECOMMENDATION:

Staff recommends that the Commission <u>APPROVE</u> the permit application with special conditions.

MOTION:

I move that the Commission approve CDP #5-00-501 pursuant to the staff recommendation.

Staff recommends a <u>YES</u> 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:

APPROVAL WITH CONDITIONS

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and 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. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

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. <u>Expiration</u>. 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. <u>Interpretation.</u> Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- 4. <u>Assignment.</u> The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 5. <u>Terms and Conditions Run with the Land.</u> 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. Submittal of Revised Plans

A. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the Executive Director's review and approval, two (2) full size sets of revised project plans that demonstrate conformance with the following blufftop setback:

No structural development (i.e. any portion of the apartment complex, parking garage or subterranean stabilization system) shall occur nearer than 25 feet from the designated "top of bluff," as generally depicted on Sheet 1 of Exhibit 4 attached in the staff report for Coastal Development Permit No. 5-00-501.

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.

2. Conformance of Design and Construction Plans to Geotechnical Report

- A. All final design and construction plans, including foundations, grading and drainage plans, shall be consistent with all recommendations contained in the Geotechnical Investigation, Proposed Multi-Unit Blufftop Condominium, 255 La Paloma, San Clemente, California prepared by Petra Geotechnical, Inc. dated December 27, 2000, as supplemented by the response letter dated April 12, 2001 (attached as Exhibit 9).
- B. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the Executive Director's review and approval, evidence that an appropriately 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.
- 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 unless the Executive Director determines that no amendment is required.

3. 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 such as 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.

4. No Future Blufftop Protective Device

A. By acceptance of this permit, the applicant agrees, on behalf of himself and all other successors and assigns, that no blufftop protective device(s) shall ever be constructed to protect the development approved pursuant to Coastal

Development Permit No. 5-00-501, including the patios and any future improvements, in the event that the property is threatened with damage or destruction from bluff failure in the future. By acceptance of this permit, the applicant hereby waives, on behalf of himself and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235.

B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall execute and record a deed restriction in a form and content acceptable to the Executive Director, which reflects the above restriction on development. The deed restriction shall include a legal description of the 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.

5. Future Development Deed Restriction

- A. This permit is only for the development described in Coastal Development Permit No. 5-00-501. 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 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), shall require an amendment to Permit No.5-00-501 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.

6. Submittal of Final Drainage and Runoff Control Plan

- A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for review and approval of the Executive Director, a drainage and runoff control plan. The drainage and runoff control plan shall show that all roof drainage, including roof gutters, collection drains, and sub-drain systems for all landscape and hardscape improvements for the residence and all yard areas, shall be collected on site for discharge to the street through piping without allowing water to percolate into the ground. The applicant shall maintain the functionality of the approved drainage and runoff control plan to assure that water is collected and discharged to the street without percolating into the ground.
- 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

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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. Submittal of Final Landscaping and Irrigation Plan

- A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a final landscaping and irrigation plan prepared by an appropriately licensed professional which demonstrates the following:
 - (a) All planting shall provide 90 percent coverage within 90 days and shall be repeated if necessary to provide such coverage;
 - (b) All plantings shall be maintained in good growing condition throughout 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 area (bluff-facing) not occupied by hardscape shall be planted and maintained for erosion control and native habitat enhancement purposes. To minimize the need for irrigation and minimize encroachment of non-native plant species into adjacent existing native plant areas, all landscaping shall consist of native, drought resistant plants. Invasive, non-indigenous plant species that tend to supplant native species shall not be used;
 - (d) Landscaped areas in the front yard area (street-facing) may include ornamental or native, drought-tolerant plants. Vegetation installed in the ground in the rear yard area (bluff-facing) and side yards 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; and
 - (e) No permanent in-ground irrigation systems shall be installed on site. Temporary above ground irrigation is allowed to establish plantings.
- B. The permittee shall undertake development in accordance with the approved plan. Any proposed changes to the approved final plan 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.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION AND LOCATION

1. Project Location

The project site is located at 255 La Paloma, a coastal blufftop lot between the first public road and the sea in the City of San Clemente, County of Orange (Exhibits 1 and 2).

The subject site is a pentagonal-shaped lot on an elevated marine platform overlooking the Pacific Ocean. The site is bordered to the north by La Paloma, to the east and west by existing residences and to the south by an approximately 85-foot high coastal bluff. The bluff slope

descends to the Orange County Transportation Authority (OCTA) railroad tracks and sandy beach below.

The coastal bluffs in San Clemente are not subject to direct wave attack because they are separated from the beach by the OCTA railroad tracks and right-of-way. The railroad tracks have a rip-rap revetment which protects the tracks from erosion and wave overtopping. Though not subject to direct wave attack, the bluffs are subject to weathering caused by natural factors such as wind and rain, poorly structured bedding, soils conducive to erosion and rodent burrowing. Bluffs may also be subject to erosion from human activities, such as irrigation, improper site drainage and grading. Based on a review of aerial photography carried out by the geotechnical consultant for the years 1952 to 1997, the subject site has experienced "little to no beach or bluff retreat."

The nearest vertical coastal access is available approximately 100' west (upcoast) of the subject site via a concrete walkway down to an at-grade railroad crossing at the Mariposa public access point (Exhibit 3). Lateral public access is located seaward of the railroad right-of-way at the beach below the subject site.

2. Project Description

The proposed project involves the demolition of an existing 2928 square foot, single-story, single-family residence and construction of a new 7204 square foot, three-story, 25' 6" high, three-unit apartment complex with a 3732 square foot, eight-car subterranean parking garage (Exhibit 4). The existing "pre-coastal" (constructed prior to passage of the Coastal Act) residence is a split-level structure with a partially subterranean two-car garage. The proposed project also involves the removal of an existing concrete slab patio encompassing the entire rear yard and construction of two smaller concrete patios and landscaping on the rear pad area. Approximately 1382 cubic yards of grading (all export) is required for site preparation and parking garage excavation. Excavated material will be disposed of at the San Juan Capistrano Landfill, a site outside of the coastal zone.

The proposed project will be set back from the existing bluff edge in conformance with the 25 foot setback specified in the City's certified LUP. This reflects a greater structural setback than was previously applied at this site, as the existing single-family residence is located approximately 17 feet from the bluff edge at its closest point. The proposed rear yard patios will be located approximately 10 feet from the bluff edge, consistent with the typical deck and hardscape setback in this area. The existing patio extends to the bluff edge.

The 25-foot setback (rather than the stringline setback) is applied in this situation due to the configuration of the subject lot. The subject site is located at the end of a cul-de-sac where the bluff edge protrudes southwesterly along the seaward portion of the property. While the lot to the west (upcoast) continues in the same general bluff edge pattern, the lot to the east (downcoast) curves inland (Exhibit 2).

As recommended by the geotechnical consultant and proposed by the applicant, the stabilization system for the proposed development would consist of a single row of eight (8) cast-in-place concrete caissons connected to a gradebeam placed parallel to (and seaward of) the building line. As proposed, the row of caissons would encroach into the required 25-foot blufftop setback by 8 feet. After discussions with Commission staff, the applicant has agreed to consider an alternative that removes the caissons from within the 25-foot setback. As recommended by staff, the project would involve the placement of a row of caissons directly in line with the structure at the 25-foot setback line. The geotechnical consultant has reviewed the alternative proposal and determined that the project would still meet all blufftop stability and safety requirements. Blufftop stability and appropriate setbacks will be discussed further in Section B (Blufftop Stability) and Section C (Scenic Resources) of the current staff report.

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The project also involves the removal of an existing concrete slab patio, the installation of two smaller patios and landscaping of the rear yard area. A preliminary landscaping plan has been submitted which includes a mix of primarily non-native and ornamental plants in the front, side and rear yard areas. Existing native vegetation on the face of the bluff will remain undisturbed. The landscaping plan submitted does not incorporate irrigation, but the applicant has indicated that a temporary drip irrigation system will be used to establish plantings. As will be discussed on page 18, staff recommends the use of native, drought-tolerant species in the rear yard area (bluff-facing) and a prohibition on in-ground permanent irrigation throughout the entire lot.

There is an existing wooden stairway that traverses the southeast corner of the subject lot. The stairway leads down the bluff face, crossing multiple properties. The stairway is determined to be "pre-coastal" based on personal accounts from a neighbor and confirmed by Commission staff's review of oblique aerial photographs taken in June 1972.

3. Prior Commission Actions in Subject Area / Similar Special Conditions

Many of the homes in the immediate vicinity were constructed prior to passage of the Coastal Act. As such, there are few examples of Commission actions on new residential development along this stretch of La Paloma. However, as discussed below, there have been several coastal development permits issued for multi-unit projects on coastal blufftop lots north and south of the subject site.

Projects in Subject Area

911 Buena Vista

On March 12, 2001, the Commission approved Coastal Development Permit 5-00-424 (Spriggs) for demolition of an existing duplex and construction of a new 8,920 square foot three-unit apartment complex with partially subterranean parking garage, side yard retaining walls and rear yard patios on a coastal blufftop lot at 911 Buena Vista, approximately one quarter mile north of the subject site. A stringline setback was applied in this instance. The Commission imposed special conditions regarding conformance with geotechnical recommendations, assumption of risk, no future blufftop protective device, future improvements, submittal of a drainage and runoff control plan showing roof runoff directed toward the street, and submittal of revised landscaping plans to show use of native plants in the rear yard area.

1509 and 1513 Buena Vista

On December 10, 1997, the Commission approved Coastal Development Permits No. 5-97-269 and No. 5-97-270. CDP No. 5-97-269 allowed the construction of a 30-ft. high, three-story, 6906 square foot four-unit apartment building with a 2079 square foot garage with nine parking spaces at 1509 Buena Vista, less than one mile north of the subject site. The project also included 752 cubic yards of grading and landscaping. CDP No. 5-97-270 allowed the construction of a 30-ft. high, three-story, 6672 square foot four unit apartment building with a 2533 square foot garage with nine parking spaces at 1513 Buena Vista, approximately one mile north of the subject site. The project also included 807 cubic yards of grading and landscaping. In these instances, a 25-foot blufftop setback was applied. On both of these permits, the Commission imposed special conditions regarding assumption of risk, conformance with geotechnical recommendations, submittal of revised landscaping plans to show use of native plants, temporary structures in the setback area and future improvements.

1511 Buena Vista

On November 20, 1997, the Commission approved Coastal Development Permit No. 5-97-256 for construction of a 25' high, three-story, 7082 square foot, four-unit apartment building with 1991 square foot garage at 1511 Buena Vista, approximately one mile north of the subject site. The project also included 798 cubic yards of grading and landscaping. In this instance, a 25-foot blufftop setback was applied. The Commission imposed special conditions regarding

assumption of risk, conformance with geotechnical recommendations, submittal of revised landscaping plans to show use of native plants, temporary structures in the setback area and future improvements.

B. BLUFFTOP STABILITY

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 residential structures. Blufftop stability has been an issue of historic concern throughout the City of San Clemente. Coastal bluffs in 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:

- (I) 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 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.16 states:

In a developed area where new construction is generally infill, no part of a proposed new structure, including decks, shall be built further onto a beachfront than a line drawn between the nearest adjacent corners of the adjacent structures. Enclosed living space in the new unit shall not extend further seaward than a second line drawn between the most seaward portions of the nearest corner of the enclosed living space of the adjacent structures.

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 be applied in this situation because the applicant is proposing infill development between existing structures on a blufftop lot; however, the configuration of the lot is such that a stringline setback would be inappropriate. As described previously, the subject site is located at the end of a cul-de-sac where the bluff edge protrudes southwesterly along the seaward edge of the property. The plans submitted by the applicant show that the apartment complex and garage portions of the project conform to the 25-foot setback from the bluff edge, but the subterranean stabilization system encroaches 8 feet into the setback zone (Exhibit 4). Hardscape development in the rear yard will be set back 10 feet from the bluff edge. The Commission has previously found that a 10-foot setback for hardscape setbacks is appropriate for coastal bluffs in San Clemente, although the hardscape stringline may sometimes be appropriate. The Commission has imposed the 25-foot structural setback and the 10-foot hardscape setback on projects in the vicinity, including 5-97-269, 5-97-270 and 5-97-256 discussed previously.

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 oversteepening 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. Over-watering and improper irrigation often contribute to this increased water percolation.

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. Anthony 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

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by salt spray evaporation. The coastal bluff at the project location is subject to wind-borne salt spray from the ocean. 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.

There have been two 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 5-00-034 (McKinley-Bass); 5-99-351 (McMurray); 5-93-181 (Driftwood Bluffs), 5-93-307 (Ackerly), and 5-93-143 (Mertz & Erwin) because existing decks or residences were threatened by bluff erosion.

Landsliding of coastal bluffs below La Ventana Street 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. 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.

Additionally, in a letter dated October 1, 1999 discussing a bluff repair project at 327 and 327 ½ Paseo De Cristobal [5-00-034 (McKinley-Bass)], Stoney-Miller Consultants made the following general observation regarding San Clemente: "The failure was the result of seepage flows along the lithologic contact between the Terrace Deposit and Bedrock. This contact is a geologic feature that underlies the majority of the City of San Clemente east of the shoreline bluff to the Interstate 5 Freeway. Irrigation and rainfall throughout this area provides recharge to the perched water at this contact."

The Commission has received many application requests to resolve geotechnical problems and protect existing structures on coastal bluffs and coastal canyons in San Clemente which were caused by inadequate drainage systems, i.e., broken irrigation lines, overwatering, 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 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 only a few miles north of 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 prior to passage of 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 approximately six miles south of the project site.

b. Site Specific Geotechnical Date

To address the feasibility of constructing the project in this potentially hazardous area, the applicant submitted a report entitled *Geotechnical Investigation, Proposed Multi-Unit Bluff-top Condominium, 255 La Paloma, San Clemente, California* prepared by Petra Geotechnical, Inc. (J.N. 115-00) dated December 27, 2000. This report was later supplemented by response letters dated March 14, 2001 and April 12, 2001.

The Petra report presents the results of their geotechnical investigation of the subject property to "determine the nature of surface and subsurface soil conditions, evaluate their in-place characteristics, and then provide preliminary geotechnical recommendations with respect to site grading, and for design and construction of building foundations." The scope of the investigation included the following: (1) a review of available aerial photographs for the years 1952 through 1997; (2) a field exploration consisting of a site reconnaissance, field mapping, and the drilling of two exploratory borings with the collection of relatively undisturbed and bulk earth materials; (3) laboratory testing of collected samples; and (4) a stability analysis of the existing bluff based on the proposed construction.

The geotechnical report states that the subject site is located on an elevated coastal marine terrace. This elevated terrace extends along the majority of the San Clemente coastline and is characterized by an upper surface that slopes very gently from the base of the Santa Ana Mountains southwest to the sea cliffs along the Pacific Coast. The local geology is characterized primarily by terrace deposits overlying bedrock materials of the Tertiary-age Capistrano Formation. The report states that the seaward portion of the site consists of "an approximately 85-foot high coastal bluff comprised of resistant bedrock capped with approximately 34 to 35 feet of terrace deposits."

Regarding the subject site and slope stability, the geotechnical consultant found that the slope along the bluff-facing side of the property is not considered to be grossly stable and free from mass movement and excessive erosion in its present configuration, but will be made stable as a result of the proposed development. As stated in the report,

"Bedrock materials underlying the terrace deposits exhibit favorable structure; however, the terrace deposits form the steeper portion of the slope and are poorly vegetated. Due to the steepness of the upper portion of the bluff face, this portion of the slope may experience a certain amount of erosion due to the effects of rainfall, weathering, and

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infiltration of irrigation water. Minor block failures may occasionally occur within the exposed bedrock materials along the steeply inclined joints. However, this erosion and occasional minor block failures are not expected to have any adverse impact on the proposed structure provided that the recommendations of this report are incorporated into the design and construction of the proposed development."

The geotechnical report identifies factors that will contribute to the long-term stability of the site. These include the absence of adverse bedding conditions; the relatively thick vegetation that covers the lower portion of the slope face; considerable protection from wave erosion by the railroad rip-rap; lack of significant recession of the sea bluff between 1952 and 1997; improvement of drainage facilities to control runoff and prevent drainage from running over the top of the bluff; and low probability of a seismic event. The factors that could contribute to the progressive recession of the bluff include erosion of the bluff during periods of heavy rainfall and minor block failures along steeply inclined joints. The geotechnical report notes that these erosional factors have been affecting the coastal bluff for a long time and their evaluation has indicated that "appreciable coastal recession has not occurred in this area over the last 46 years in spite of several exceptionally intense storms that have occurred at the site during past rainy seasons."

The consultant finds that the erosional processes occurring at the site should decrease following the implementation of the applicable recommendations presented in the geotechnical report. The report recommends the construction of cast-in-place caisson-grade beam stabilization within the rear yard of the proposed development. The purposes of the stabilization system are to improve the factor of safety against gross instability at the site to an accepted level, and to protect the proposed development in the event of significant erosion. The report presents design methods and construction recommendations for the caisson-grade beam stabilization system. The proposed stabilization method was developed based on stability analyses of the existing site and slope conditions.

In the December 2000 report, the consultant recommends the use of a row of eight (8) caissons (minimum 24" diameter) parallel to the building line (page 15 of Exhibit 4). As proposed by the applicant, the building will be set back 25-feet from the bluff edge. For greater rigidity, the caissons would be attached at the top with a grade beam. The caissons would extend a minimum of 15 feet into the underlying bedrock. The consulting geologist asserts that this proposed row of caissons would provide "stability against potential deep-seated failures maintaining a long-term factor of safety of 1.50." The consultant also concludes that the 25' foot setback would be sufficient to provide adequate protection of the proposed development over the life of the development (estimated life expectancy of 75 years).

Commission staff expressed concern regarding the placement of the caissons and grade beam system within the 25-foot setback area and asked for additional analyses by the geotechnical consultant. Specifically, staff inquired if the design of the subterranean parking garage necessitated the proposed caisson and grade beam stabilization system seaward of the building line. According to the consultant in their March 14, 2001 letter, the proposed subterranean garage "will require further removal of terrace deposits near the blufftop, thereby reducing the driving force form behind the bluff. The subterranean garage does not necessitate the use of caissons; the caissons are intended to enhance the long-term global stability of the proposed development and any portions of the bluff lying beyond the row of caissons (away from the ocean)."

Staff also asked for a review of alternatives to the proposed project which evaluates the minimization of development and associated landform alteration at the subject site. The consultant responded that other alternatives were considered, including caissons below the subterranean garage, caissons closer to the bluff top and bluff face walls and tiebacks. As stated in the letter, "the proposed development, including the proposed caissons located within

the 25-foot setback zone, provides optimum minimization of risk to life and property wile maintaining the structural integrity of the structure without altering the natural bluff in any way. The proposed caissons and grade beam will be entirely below grade, well back form the bluff top with no exposure to the view from below." Additionally, the applicant submitted a letter dated March 29, 2001 supporting the allowance of the caissons within the 25-foot setback area and justifying the application of the 25-foot setback, rather than the stringline (Exhibit 8).

After further discussions with staff, the applicant agreed to reevaluate the project alternative involving the placement of caissons beneath the structure and outside of the 25-foot setback area. The applicant submitted a supplemental response prepared by Petra Geotechnical dated April 12, 2001 (Exhibit 9). The response by Petra revisits the site stability issues and revises their calculations by incorporating the proposed row of caisson immediately outside of the 25-foot setback zone. As stated in their letter, "our analyses indicate that, with this new caisson layout, the proposed improvements outside the 25-foot setback zone will still satisfy the minimum factors or safety required for long-term global stability." The caisson design parameters outlined in the December 2000 geotechnical report will remain unchanged. However, the design and specific construction methods of the southerly basement (garage) wall have been modified accordingly. This alternative meets the structural setback requirement of the certified LUP. Consequently, the second alternative presents a project consistent with past Commission actions in the subject area.

As proposed by the applicant, the subterranean stabilization system will encroach into the 25-foot structural setback area by 8 feet. The apartment complex, parking garage and patios are consistent with the setback requirements specified in the certified LUP. As discussed previously, the City of San Clemente LUP requires proposed development on blufftop lots to be set back at least 25 feet from the bluff edge. The stabilization system is considered a structural feature of the proposed development. The Commission has typically imposed a minimum 25-foot setback on new blufftop developments in San Clemente. As such, application of the 25-foot setback in this instance is consistent with past Commission action and will provide for adequate protection from potential hazard resulting from bluff failure.

The geotechnical report and supplemental response letters conclude that from a soils engineering and engineering geologic point of view, the subject site is considered suitable for the proposed development and construction provided certain recommendations are incorporated into the design criteria and project specifications. Recommendations include those related to grading, site preparation, site drainage, structural design of foundations and slabs and hardscape design and construction. With either alternative (caissons sited 8 feet seaward of the structure or caissons directly beneath the structure), the geotechnical consultant finds that a greater than 25-foot setback is not necessary. As stated in their report, "the minimum building setback of the City of San Clemente and the Coastal Act and the minimum footing setback of the UBC are considered sufficient to provide adequate protection of the proposed condominium building and other structures during the lifetime of the project."

3. Conclusions and Determination of Consistency

With implementation of the proposed project, the coastal bluff at the subject site is considered grossly stable. However, in years past, bluff instability and erosion have detrimentally affected nearby properties along Buena Vista due to soil saturation and high groundwater activity correlating to heavy rainfall. The problems were exacerbated by poor drainage conditions. The geotechnical consultant concludes that the subject development will not be subject to the same instability issues if the recommended design measures are adhered to. Additionally, staff has conducted a site visit and observed that the middle and lower bluff face supports a moderate amount of vegetation, which indicates that less surface area is open to erosion from the wind, salt spray, exposure to the sun, and wetting and drying. The vegetation also means that there

are root systems adding cohesion to the soils. The steep upper bluff face is devoid of vegetation.

As discussed previously, the proposed development is inconsistent with the applicable structural setback. The proposed stabilization system will encroach 8 feet into the required 25-foot setback from the bluff edge. As has been noted in this staff report, bluff failures have occurred within the subject area and throughout San Clemente. Failures in the subject area have been attributed to over-watering, broken irrigation lines, broken water lines, and inadequate drainage systems. These types of failures in some instances have created the need for blufftop protective devices, such as large retaining walls or caisson and grade beam systems to protect existing structures. The seaward portion of the proposed project will be supported by a caisson and grade beam system. If a bluff failure were to occur, the caissons may become exposed, posing a threat to the safety of the residence as well as the entire site. As such, while the site is expected to be stable with implementation of the proposed development, all portions of the proposed structure must be adequately setback from the designated "top of bluff" to assure stability over the life of the structure.

To meet the requirements of the Coastal Act, bluff and cliff developments must be sited and designed to assure stability and structural integrity for their expected economic lifespans while minimizing alteration of natural landforms. Consistent with the LUP, the Commission typically requires that structures be setback at least 25 feet from the bluff edge and hardscape features (including decks and patios) be setback at least 10 feet from the bluff edge to minimize the potential that the development will contribute to slope instability. Bluff and cliff developments (including related storm runoff, foot traffic, site preparation, construction activity, irrigation, waste water disposal and other activities and facilities accompanying such development) must not be allowed to create or contribute significantly to problems of erosion or geologic instability on the site or on surrounding geologically hazardous areas which would then require stabilization measures such as caissons, pilings or bluff re-structuring.

Geologic reports for blufftop development recommend setbacks for fixed residential structures and recommendations for other blufftop improvements. 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.

In this case, the applicant has provided geotechnical data to support the siting of the structure in its proposed configuration in conformance with the 25-foot setback. The applicant's preferred alternative is for the structure to be supported by a subterranean stabilization system (a row of caissons connected by a grade beam) located 17 feet from the bluff edge. A second alternative has also been evaluated which involves the placement of the caissons directly beneath the structure, 25 feet from the bluff edge. The geotechnical consultant states that the proposed structure will be sufficiently set back from the bluff edge to assure stability over the life of the development with implementation of either stabilization system. As such, the proposed project will not be subject to geologic hazard or adversely affect the preservation of scenic resources. Given the characteristics of the subject site and its surrounding area, it is appropriate to apply the 25-foot structural setback in this instance. Foundation systems must also comply with this setback requirement. The project alternative involving inland relocation of the subterranean stabilization system is considered superior as it reduces the chance of future foundation exposure in case of an unexpected bluff failure.

The Commission's Senior Coastal Engineer has reviewed the project and addressed the proposed stabilization system within the 25-foot setback. As stated in a memo of March 16, 2001 (Exhibit 7),

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"The basic concern with this project is that the caissons are part of the new development. The caissons are important to the overall stability of the new development and the caissons are being placed within the 25' setback zone. The applicant has not provided any site condition or geologic constraint that would necessitate the placement of this development within the 25' setback zone."

Based on the information provided, the staff engineer concludes that there is no constraint to relocating the caissons further inland. The required 25-foot setback for all structural development, including the stabilization system, will provide adequate setback to assure development stability and no additional setback would be needed. The Commission's Senior Geologist has also reviewed the calculations of the slope stability analyses and determined that they have been appropriately carried out by the geotechnical consultant. Consequently, the proposed development is found to be consistent with the certified LUP and Section 30253 of the Coastal Act, so long as the subterranean stabilization system is relocated to conform to the 25-foot structural setback requirement.

In addition to being consistent with applicable setback requirements, the proposed project must also demonstrate conformance with grading, drainage and landscaping recommendations included in the geotechnical report. The preliminary grading plan submitted by the applicant indicates that positive drainage measures consisting of sloping flatwork, top-of-slope earth berms, and area drains will be provided within the site and around the structure to collect and direct all surface waters away from the rear yard slope, as well as to prevent ponding. Petra recommends that roof gutters with downspouts connected to an onsite area drainage system be considered to "mitigate discharge of roof drainage toward the top of the rear yard slope, as well as to prevent a rapid buildup of roof drainage in planter and lawn area adjacent to building walls and foundations." The consultant also recommends that area drains be extended into all planters that are located within five feet of building walls, foundations and landscape walls to minimize excessive infiltration of water into the adjacent foundation soils.

Geologic reports generally include recommendations for landscaping and irrigation, but unlike other engineering specifications, these recommendations are not reviewed and implemented by the consulting geologist/engineer. For instance, Petra recommends that drip irrigation systems be used to prevent overwatering and subsequent saturation of the adjacent foundation soils. Recommendations are also given for appropriate sealing of planter bottoms. No recommendations are given for specific plant types along the bluff edge or face. Additionally, it is unclear if irrigation is recommended throughout the entire lot. Due to potentially adverse affects on site stability, irrigation and landscaping are closely evaluated on blufftop lots.

Developments on blufftop lots in San Clemente are required to submit landscaping and irrigation 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. Review of landscaping plans is necessary to assure that appropriate plant species are selected and limited watering methods are applied. Appropriate vegetation can help to stabilize slopes. Native, drought-tolerant plants common to coastal bluffs do not require watering after they become established, 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. Landscaping on blufftop lots that involves in-ground irrigation may lead to overwatering or sprinkler line breaks that can contribute to slope instability. Therefore, review and approval of final landscaping and irrigation plans is necessary prior to the issuance of a coastal development permit.

The applicant must also submit drainage and runoff control plans to demonstrate that geotechnical recommendations have been incorporated accordingly. These may include recommendations for appropriate conveyance of rooftop and hardscape runoff, and avoidance of ponding or sheet flow that would contribute to slope instability. In this instance, the applicant

has submitted a preliminary landscaping plan and a preliminary grading plan, which shows drainage and runoff control measures.

a. Special Conditions and Coastal Act Consistency

Development on a coastal bluff is inherently hazardous. Consequently, the Commission requires applicants on blufftop lots to comply with certain specific special conditions to bring the project into compliance with the resource protection policies of the Coastal Act. In this case, the special conditions include relocation of the subterranean stabilization system; conformance with geotechnical recommendations; recordation of an assumption of risk deed restriction; no future bluff protective device deed restriction; future development deed restriction; and submittal of final drainage, irrigation, and landscaping plans.

Special Condition No. 1 requires the applicant to submit revised project plans that demonstrate conformance with the 25-foot structural setback. The "top of bluff" has been delineated by the geotechnical consultant and depicted on Exhibits 4 and 5. As proposed, the stabilization system encroaches into the required setback approximately 8 feet. To ensure that the proposed project is not subject to hazard resulting from site instability and/or bluff failure over the life of the development, these features must be sited further inland, at least 25 feet from the blufftop edge.

Special Condition No. 2 requires the applicant to submit foundation plans, which have been reviewed, signed and stamped by a geotechnical consultant. The geotechnical report includes specific recommendations for foundations, footings, drainage, etc. which will ensure the stability of the proposed residential structure. Only as conditioned for relocation of subterranean development and conformance with geotechnical recommendations does the Commission find that the proposed development conforms with Section 30253 of the Coastal Act.

Special Condition No. 3 requires the recordation of an assumption of risk deed restriction. Although adherence to the required bluff top setback will minimize the risk of damage from erosion, the risk is not eliminated entirely. Therefore, the standard waiver of liability condition has been attached through Special Condition No. 3. 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.

Special Condition No. 4 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 no bluff protective devices shall be permitted to protect the structure, patios or future improvements if threatened by bluff failure. The development could not be approved if it included provision for a bluff protective device. Instead, the Commission would require the applicant to set the development further landward. The condition states that in the event any bluff protective work is proposed in the future, the applicant acknowledges that as a condition of filing an application for a coastal development permit, the applicant must provide the Commission or its successor agency with sufficient evidence enabling it to consider all alternatives to bluff protective works, including consideration of relocation of portions of the residence that are threatened, structural underpinning, or other remedial measures identified to stabilize the residence that do not include bluff or shoreline stabilization devices.

Whereas Special Condition No. 4 applies to bluff protective measures, Special Condition No. 5 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 development on coastal bluffs which may affect

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the stability of the bluffs and residential structures or may require future bluff protective structures, require a coastal development permit.

Special Condition No. 6 requires the applicant to submit a final drainage and run-off control plan for the review and approval of the Executive Director. In keeping with the geotechnical recommendations, this condition requires that the drainage system reduces water infiltration into the subgrade soils and directs surface waters away from the building foundations, walls and sloping areas. In addition, the condition requires that all rooftop drainage be taken to the street to minimize infiltration.

Special Condition No. 7 requires that the applicant submit a final landscaping plan which consists primarily of native, drought-tolerant plants and prohibits in-ground irrigation throughout the entire lot. This special condition 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 must consist entirely of native, drought-tolerant plants. This 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.

In recent actions on unstable bluffs [5-00-034 (McKinley-Bass), 5-98-469 (Ferber)], the Commission has required that no in-ground irrigation systems be installed on blufftop 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.

Section 30253 of the Coastal Act states that new development shall minimize risks to life and property in areas of high geologic, flood, and fire hazard, and 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.

Only as conditioned for inland relocation of the stabilization system; conformance with geotechnical recommendations; assumption of risk; no future blufftop protective devices; no future improvements; submittal of a final drainage and irrigation plan; and submittal of a final landscaping plan, 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 project is located on a blufftop lot approximately one-quarter mile north of Linda Lane Park. The site is located inland of the OCTA railroad tracks and is highly visible when traveling along the beach below. Because the new apartment complex will affect views inland from the shoreline, any adverse impacts must be minimized. 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 existing landforms.

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As proposed, the project consists of a three-story Spanish style apartment complex with decks, patios and landscaping. The project is designed to be compatible with development in the surrounding area, including designated historic structures, and will not have an adverse affect on visual resources. Additionally, the proposed project will not result in significant landform alteration, as the grading necessary for the proposed parking garage excavation will not be visible from the beach below.

The seaward portion of the proposed development will be supported by a caisson and grade beam system. As stated previously, if a bluff failure were to occur, the caissons may become exposed. Not only would this create a hazardous condition, but it would also present an adverse visual impact. Therefore, although the site will be stabilized as a result of the proposed project, the development must be appropriately sited to prevent such an occurrence in the future.

The Commission has typically required structural development in this area to be sited at least 25 feet from the bluff edge and hardscape features to be sited at least 10 feet from the bluff edge. The applicant's preferred alternative involves placement of the stabilization system (caissons and grade beam) within the 25-foot setback area, 8 feet bluffward of the proposed structure. Hardscape features will be located 10 feet from the bluff edge. The second alternative involves relocation of the caissons in line with the proposed structure, inland of the required 25-foot setback area.

In order to ensure that adverse visual impacts to the bluff are minimized, the applicant is being conditioned to set back the subterranean stabilization system and comply with a future development deed restriction and landscaping condition. A greater setback will reduce the potential for visibility of the subterranean stabilization system from the shoreline below if a bluff failure were to occur. In addition, the future development deed restriction will 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 landscaping 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. No work on the existing wooden stairway is proposed.

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

D. PUBLIC ACCESS AND RECREATION

Section 30212(a)(2) of the Coastal Act states, in pertinent 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

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 at 255 La Paloma. The nearest vertical coastal access is available approximately 100' west (upcoast) of the subject site via a concrete walkway down to an at-grade railroad crossing at the Mariposa public access point (Exhibit 3). Lateral public access is located seaward of the railroad right-of-way at the beach below the subject 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, 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 is currently developed with a single-family residence and construction of a three-unit apartment complex will result in only a minor 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 Implementation Plan portion of the Local Coastal Program. The suggested modifications expired on October 10, 1998. The City re-submitted on June 3, 1999, but withdrew the submittal on October 5, 2000.

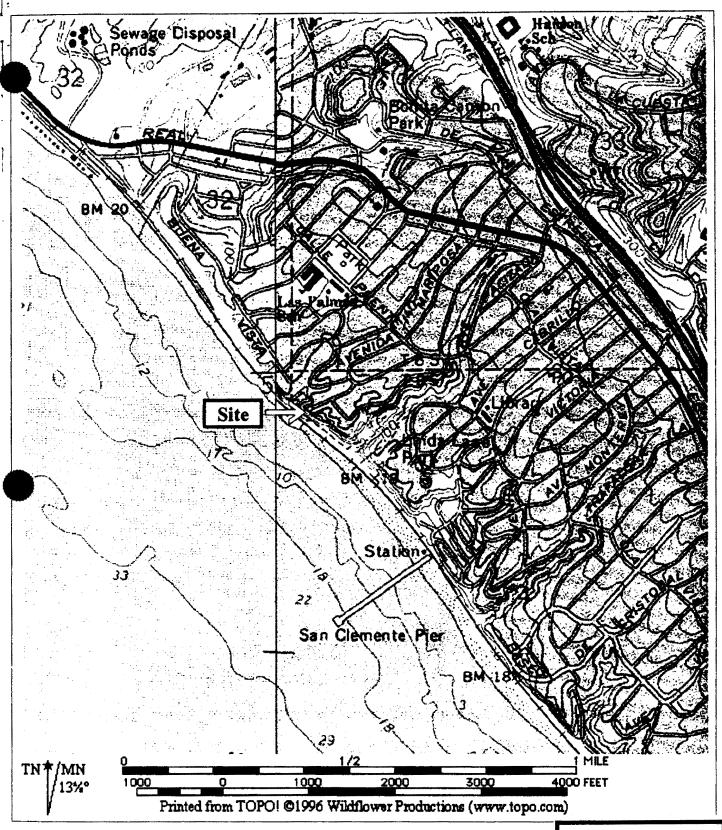
The proposed development is consistent with the policies contained in the certified Land Use Plan. Moreover, as discussed herein, the development, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act. Therefore, approval of the proposed development will not prejudice the City's 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(a) of the Commission's administrative regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The project is located within an existing residential neighborhood. Development already exists on the subject site. In addition, the proposed development has been conditioned, as follows, to assure the proposed project is consistent with policies of the Coastal Act: 1) submittal of revised plans showing inland relocation of the subterranean stabilization system; 2) submittal of final plans showing evidence of conformance with geotechnical recommendations; 3) recordation of an assumption of risk deed restriction; 4) recordation of a no future blufftop protective device deed restriction; 5) recordation of a deed restriction, which ensures that the applicant and future landowners are aware that future development requires a new coastal development permit or an amendment to this permit; 6) submittal of a drainage and run-off control plan which demonstrates that rooftop run-off will be taken to the street; and 7) submittal of a final landscaping plan which shows that only drought-tolerant natives will exist in the rear yard area and restricts any in-ground irrigation.

As conditioned, no feasible alternatives or feasible mitigation measures are known, beyond those required, which would substantially lessen any identified significant effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with CEQA.



LOCATION MAP

Ref: Portion of U. S. G. S. Topographical Map SAN CLEMENTE QUADRANGLE 7.5 Minute Series, 1968, Photo Revised 1975

PETRA GEOTECHNICAL, INC. IN 115-00 April 2000

EXHIBIT No. 1

Application Number: 5-00-501 (Brue)

Vicinity Map



California Coastal Commission

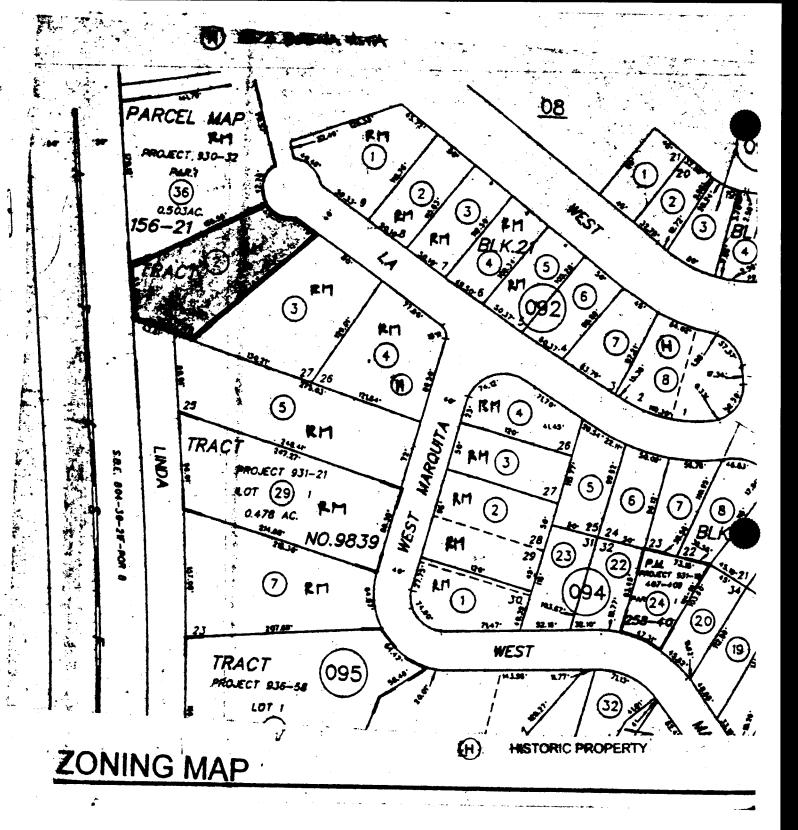
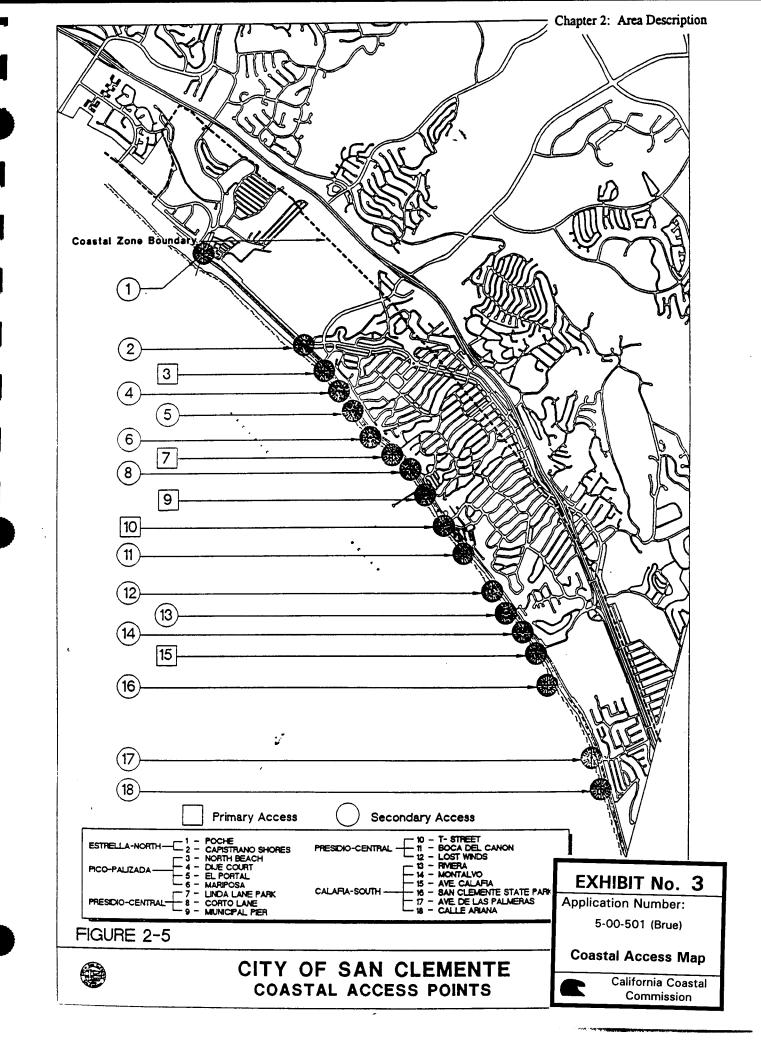


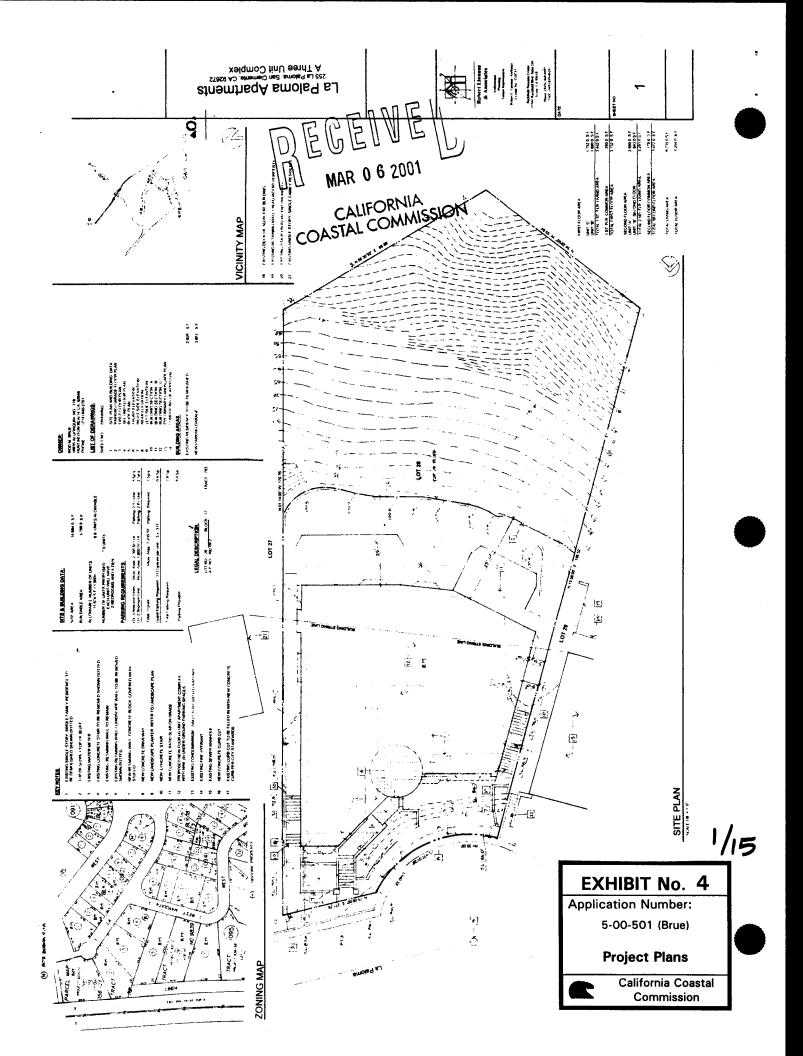
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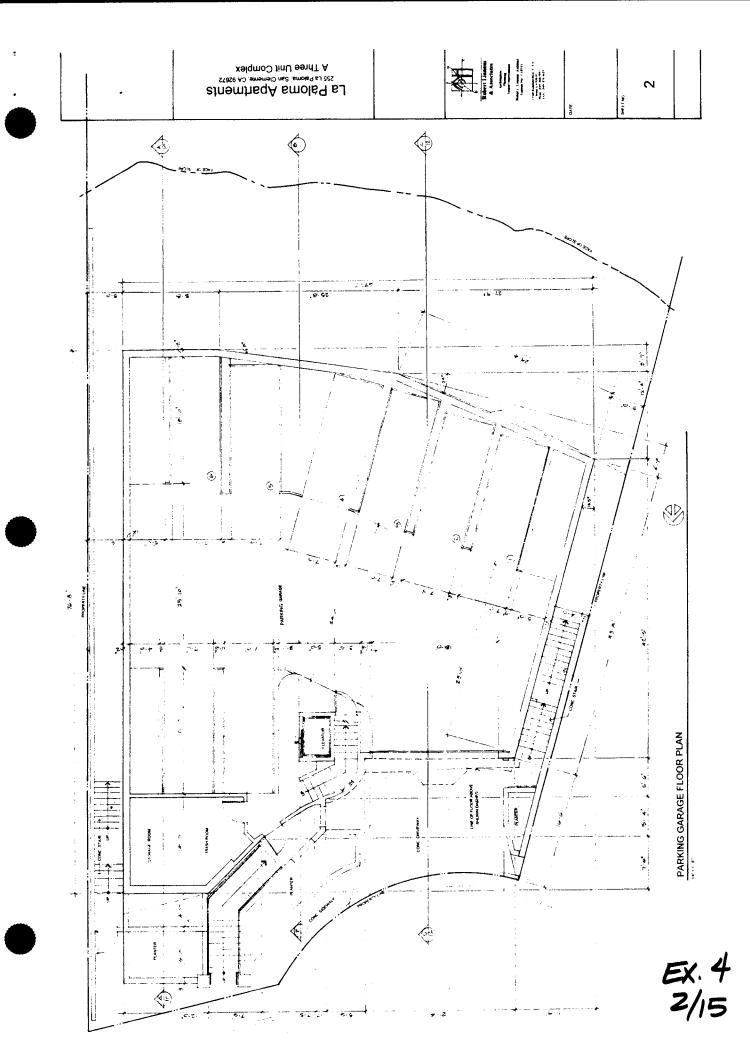
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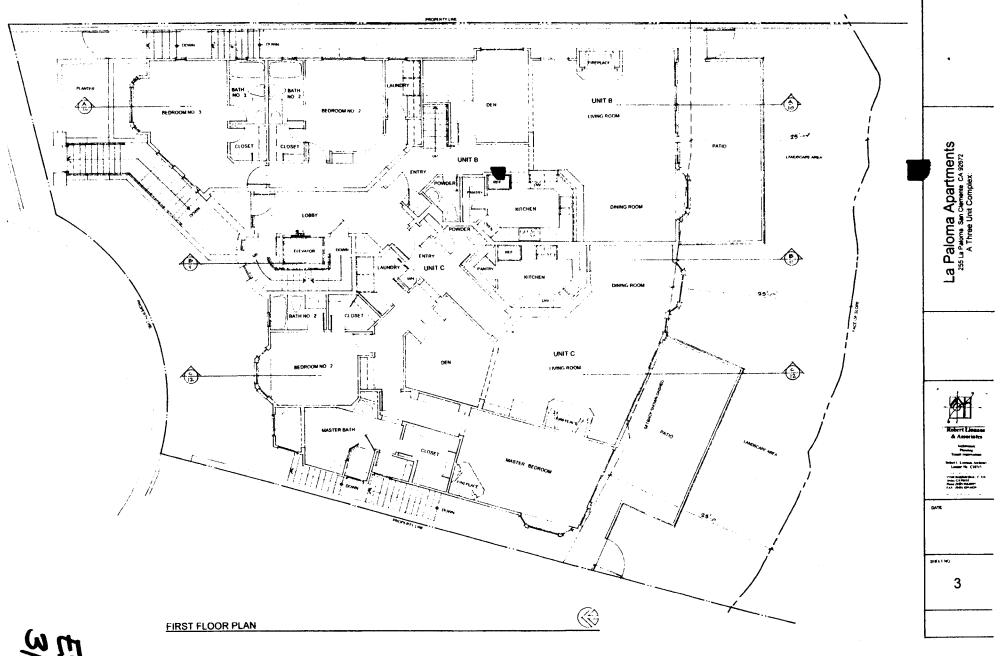
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California Coastal
Commission

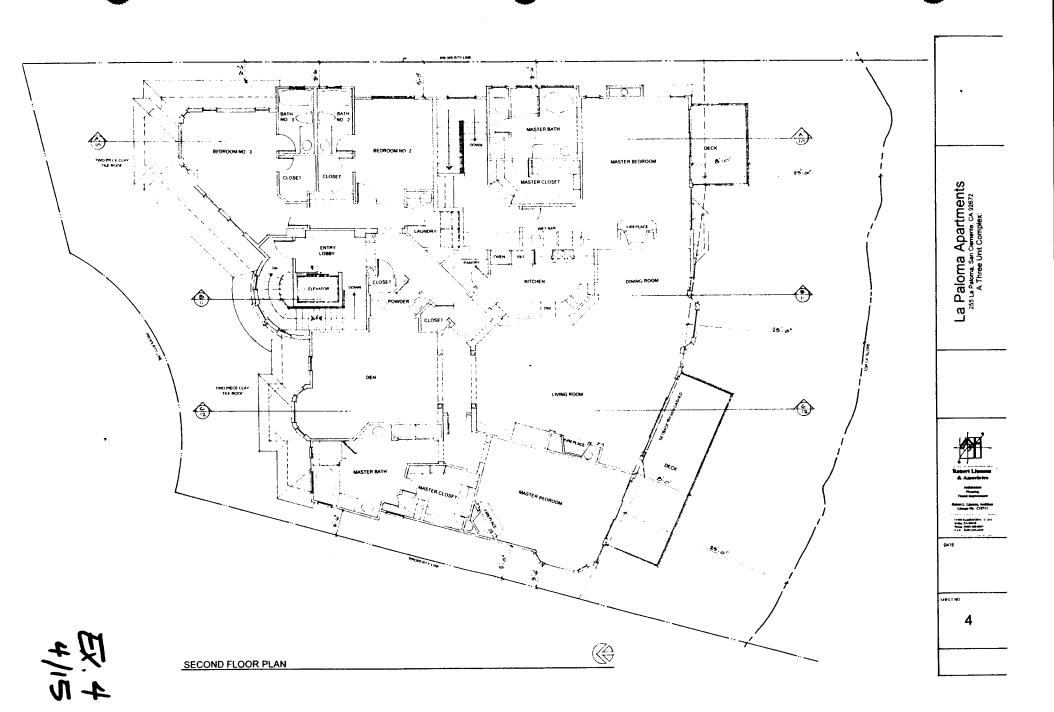


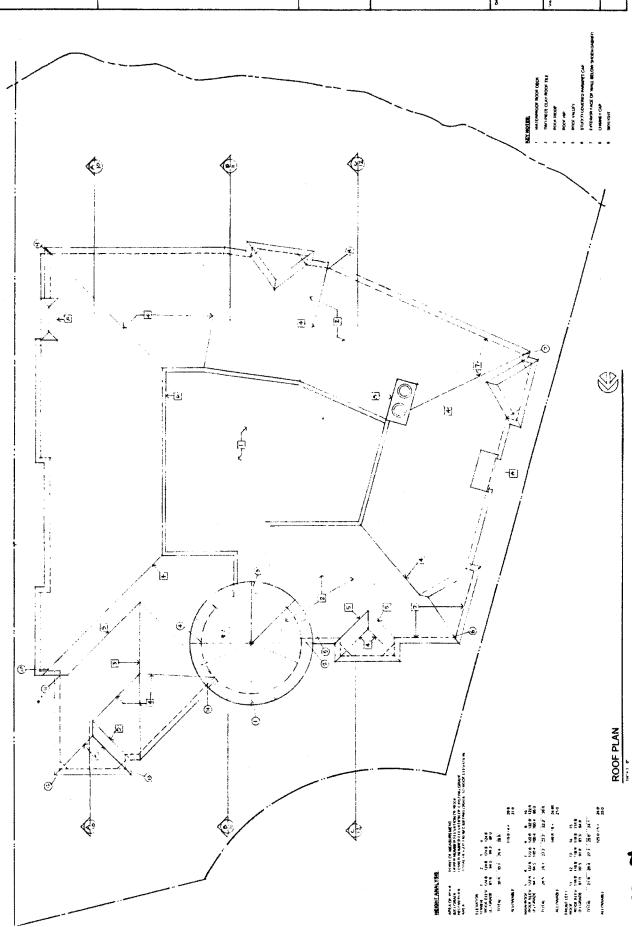






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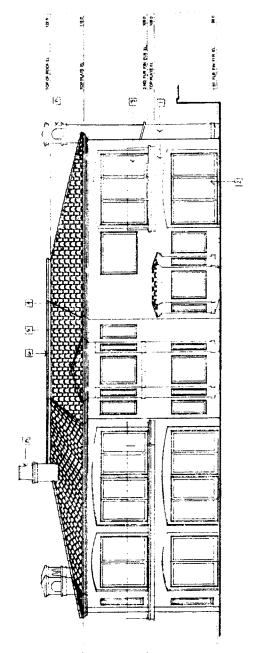
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La Paloma Apartments 255 La Paioma San Clemente, CA 92672 A Three Unit Complex

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EX.4 9/15 La Paloma Apartments

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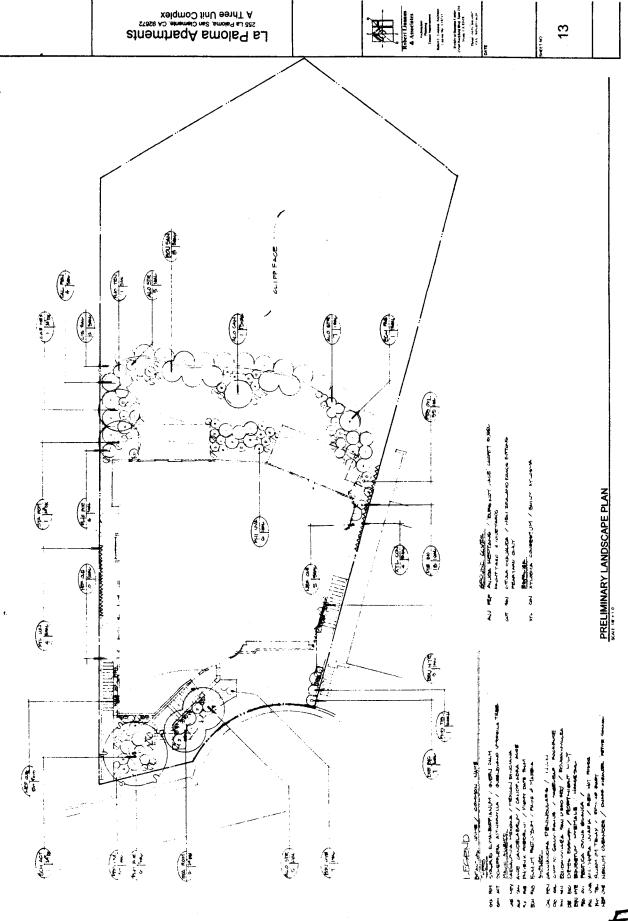
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Ex.4 12/15



La Paloma Apartments 255 La Paioma, San Clemente, CA 92672 A Three Unit Complex

EX.4 13/15

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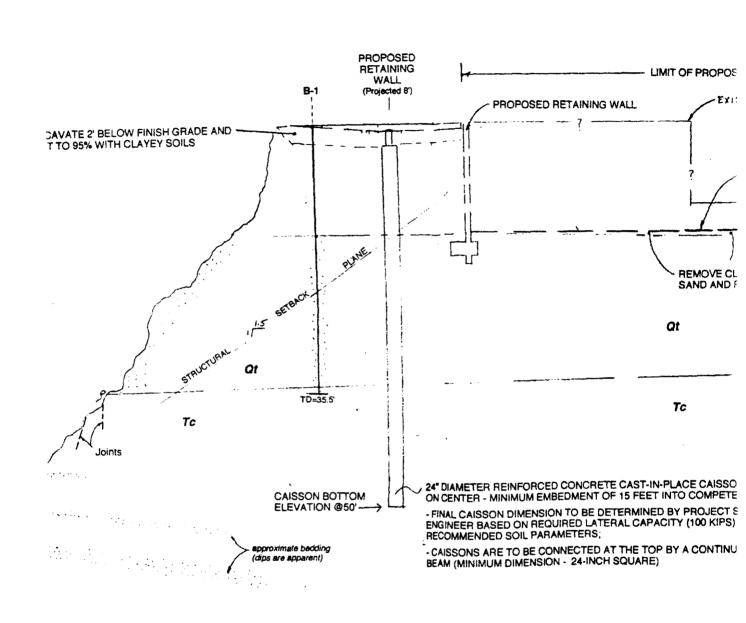
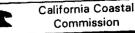


EXHIBIT No. 5

Application Number:

5-00-501 (Brue)

Partial Plate 2 from Geotechnical Report





March 14, 2001 J.N. 115-00

R.M. BRUE, BUILDING CONTRACTOR 16835 Algonquin Huntington Beach, CA 92649

Subject:

Response to California Coastal Commission Review Letter dated January 29, 2001, Proposed Multi-Unit Bluff-Top Condominium, 255 La Paloma, San Clemente, California (Coastal Development Permit Application No. 5-00-501).

Reference:

Geotechnical Investigation, Proposed Multi-Unit, Bluff-Top Condominium, 255 La Paloma, San Clemente, California; report by Petra Geotechnical, Inc., dated December 27, 2000.

Gentlemen:

At your request, Petra Geotechnical, Inc., is pleased to provide the following additional comments in response to items 1 through 5 of paragraph 5 of page 2 of the above referenced review letter (copy attached).

Item 1: Provide a slope stability analysis under current conditions.

Response: Static and pseudostatic stability analyses of the existing slope configuration are presented in Appendix C (pages C-i through C-viii) of the

referenced report.

Item 2: Provide a slope stability analysis of the proposed project with caissons.

Response: Static and pseudostatic stability analyses of the proposed slope configuration (post-construction) are presented in Appendix C (pages C-1 through C-9) of the referenced report. The caissons incorporated in these analyses provide long-term global stability to the project against potential

deep-seated failures.

PETRA GEOTECHNICAL INC. 3185 - A Airway Avenue Costa Mesa, CA 92626 Tel: (714) 549-8921 Fax: (714) 549-1438 petracm@ibm.net EXHIBIT No. 6

Application Number: 5-00-501 (Brue)

Letter from Petra dated March 14, 2001 Item 3: Provide a slope stability analysis of the proposed project without caissons (does the subterranean garage necessitate the use of caissons?).

Response: This analysis would be essentially the same as that for the existing site (Appendix C, pages C-i through C-viii) except that the factors of safety would be slightly higher because construction of the proposed subterranean garage will require further removal of terrace deposits near the bluff-top thereby reducing the driving force from behind the bluff. The subterranean garage does not necessitate the use of caissons; the caissons are intended to enhance the long-term global stability of the proposed development and any portions of the bluff lying beyond the row of caissons (away from the ocean).

<u>Item 4</u>: Provide a review of alternatives to the proposed project which evaluates the minimization of development and associated landform alteration at the subject site.

Response: During our geotechnical analysis of the subject project, other alternatives to the proposed development and slope stability enhancement including caissons below the subterranean garage, caissons closer to the bluff-top and bluff face walls and tiebacks were considered. In our opinion, and based on the stability calculations performed by this office, the proposed development, including the proposed caissons located within the 25-foot setback zone, provides the optimal minimization of risk to life and property while maintaining the structural integrity of the structure without altering the natural bluff in any way. The proposed caissons and grade beam will be entirely below grade, well back from the bluff top with no exposure to the view from below.

Item 5: Provide an evaluation of the bluff erosion rate with a conclusion that no bluff top protective device will be required for the life of the development (approximately 75 years).

Response: Such an evaluation was performed during our investigation and presented in the referenced report (paragraph 2, page 20). Based on our conclusion that the potential for bluff top retreat at the site is low, it is our opinion that a bluff-top protective device would not be required during the expected 75-year life of the project.

We hope that the above comments sufficiently clarify and respond to the geotechnical issues raised by the California Coastal Commission. Please call if you have any questions.

Respectfully submitted,

PETRA GEOTECHNICAL, INC.

← Michael Putt

Senior Staff Geologist

Allen Bell

Director of Operations

MP/SG/AB/nls

cc: 2001\100\115-00A.RSP

for Soumitra Guha; PhD 502024

Project Engineer RCE 58967



EX. 6 3/3



CALIFORNIA COASTAL COMMISSION

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



March 16, 2001

TO:

Anne Kramer

FROM:

Lesley Ewing

SUBJECT:

255 La Paloma, San Clemente

Thank you for sending me a copy of the applicant's March 14, 2001, letter responding to your January 29, 2001 letter. The basic concern with this project is that the caissons are part of the new development. The caissons are important to the overall stability of the new development and the caissons are being placed within the 25' setback zone. The applicant has not provided any site condition or geologic constraint that would necessitate the placement of this development within the 25' setback zone. The applicant may need to modify the proposed development to redesign the project to relocate all new development out of the 25' setback zone. As I stated previously, there are no identified inherent site limitations that would prevent this redesign.

The railroad right-of-way runs at the base of this bluff. Due to the armoring that has been installed to protect the railroad from erosion, this site should not experience significant bluff erosion over the useful life of the development. The required 25' setback will provide adequate setback to assure development stability. No additional setback would be needed.

Please feel free to contact me if you have any questions about this memo.



Application Number:

5-00-501 (Brue)

Letter from Staff Engineer dated March 16, 2001



California Coastal Commission March 29, 2001

page: 1

California Coastal Commission South Coast Area Office 200 Oceangate, Suite 1000 Long Basch, CA 90802-4302

Attn.: Ms. Anne Kramer, Coastal Program Analyst

Ra:

Coastal Development Permit Application No.; 5-00-501 255 La Paloma, San Clemente (Orange County) Justification for 25'-0" bluff edge setback

Dear Ms. Kramer.

In response to our March 27, 2001 telephone conversation, I am writing this letter to justify the proposed 25'-0', rear yard, bluff edge setback for the La Paloma Apartments, at 255 La Paloma, San Clemente, Coastal Development Permit Application Number: 5-00-501.

The first reason that the 25°-0" bluff edge setback should be used instead of an adjacent building string line setback is because of the edsting site topography. The building site is at the out-de-sec end of La Paloma. The bluff forms a point, similar in shape to a peninsule, at this location. A building string line setback may be appropriate along a more strait bluff edge or along a coastal canyon; however due to the 180 degree turn that the bluff takes from the project site through the adjacent property a building string line setback is much grater for this site, when compared to a site with a more strait bluff or canyon edge. A building string line setback would be a hardship for this site when compared to a more typical strait canyon.

The second reason for the proposed 25'-0" bluff edge setback is that the proposed underground parking structure will reduce the soil pressure on the bluff face and will also place the live and dead loads from the proposed structure at a much greater depth when compared to a structure that is built on grade. To construct the under ground parking area, soil will be removed to a depth of ten to twelve feet up to the 25'-0" bluff edge setback. By removing soil we will be reducing the soil pressure on the bluff face. The greater the amount of soil removed then the more soil pressure will be relieved from the bluff face, which increases the bluff stability. The proposed parking structure also sets the proposed building structural loads at a greater depth which also reduces pressure on the bluff face.

Robert Linnaus & Associates

15560 Rockfield Blvd., Building "C" Suite 216

Irvine, California 92656 Phone: (949) 460-0997 FAX: (949) 859-4629

EXHIBIT No. 8

Application Number: 5-00-501 (Brue)

Letter from Applicant dated March 29, 2001



California Coastal Commission Merch 29, 2001 (letter continued)

page: 2

The proposed project also calls for a row of calasons to be set 17'-0" back from the bluff edge, which is with in the 25'-0" bluff edge setback. The proposed calesons will increase the stability of the bluff and provide a greater degree of safety for the proposed project, as reccommended by the project geologist, see response to item 4 in the March 14, 2001 letter from Petra to the California Coastal Commission Staff for Coastal Development Permit Number 5-00-501.

Due to the topography of the site and due to proposed under ground parking structure we feel that the standard 25'-0" bluff edge setback is appropriate and safe for this site.

Sincerely,

Robert L. Linneus

CC: Mr. Rod Brue

Robert Linnaus & Associates

15560 Rockfield Blvd., Building "C" Suite 215

Invine, California 92556 Phone: (949) 460-0997 FAX: (949) 859-4629



COSTA MESA + SAN DILGO + TEMECULA + 1.05 ANGELES

April 12, 2001 J.N. 115-00

R.M. BRUE, BUILDING CONTRACTOR 16835 Algonquin Huntington Beach, CA 92649

Subject:

Supplemental Response to California Coastal Commission Review Letter dated January 29, 2001, Proposed Multi-Unit Bluff-Top Condominium, 255 La Paloma, San Clemente, California (Coastal Development Permit Application No. 5-00-501).

References:

- 1) Response to California Coastal Commission Review Letter dated January 29, 2001, Proposed Multi-Unit, Bluff-Top Condominium, 255 La Paloma, San Clemente, California (Coastal Development Permit Application No. 5-00-501); letter by Petra Geotechnical, Inc., dated March 14, 2001.
- 2) Geotechnical Investigation, Proposed Multi-Unit, Bluff-Top Condominium, 255 La Paloma, San Clemente, California; report by Petra Geotechnical, Inc., dated December 27, 2000.

Dear Mr. Bruc:

Based on our recent conversations with you, it is our understanding that the California Coastal Commission further requested you to specifically address the stability of the proposed bluff-top improvements beyond the required 25-foot setback zone. The design recommendations presented in our geotechnical investigation report (Reference No. 2) called for a single row of cast-in-place concrete caissons at approximately 17 feet (measured on geologic cross-section A-A', Reference No. 2) from the top edge of the bluff. Since the principal objective of these caissons was to provide long-term stability (e.g., factors of safety of 1.5 and 1.1 under static and pseudostatic conditions, respectively) against potential deep-seated failures, these caissons were designed to act as structural elements that would provide lateral stability to the bluff as well as the proposed improvements beyond (i.e., away from the bluff) the caissons. However, it is our understanding that in order to comply with the stipulations of the California

PETRA GEOTFCI NICAL INC. 3185 - A Anway Avenue Costa Mass CA 92676 Fet; (714) 549-8921 Fax: (714) 549-8138 petracmilitations



Application Number: 5-00-501 (Brue)

Letter from Petra dated April 12, 2001



1/E

R.M. BRUE, BUILDING CONTRACTOR

April 12, 2001 J.N. 115-00 Page 2

Coastal Commission, the proposed caissons need to be moved outside the 25-foot setback zone. In that effort, we have revisited the site stability issues, and revised our calculations by incorporating the proposed row of caissons immediately outside the 25foot setback zone. Stability calculations for the area immediately north of the caissons are presented on pages 1 through 8 of the Attachment; whereas, calculations for the area within the 25-foot setback zone are presented on pages 9 through 16 in the Attachment.

Our analyses indicate that, with this new caisson layout, the proposed improvements outside the 25-foot setback zone will still satisfy the minimum factors of safety required for long-term global stability. The caisson capacities (vertical as well as lateral), size, spacing, depth of embedment, and other related design parameters presented in Reference No. 2 will remain unchanged.

Please note that due to the proposed location of the southerly basement wall and the revised caisson layout presented herein, the southerly basement wall will probably need to be built as a caisson-grade-beam retaining system in a manner similar to the conventional soldier-pile-lagging retaining walls. Since the basement wall will be a permanent structure, wood laggings should not be allowed; reinforced shotcrete panels or precast concrete laggings may instead be considered.

The caissons would have to be installed prior to any excavations for the southerly basement walls." We anticipate that terrace deposits will be exposed between the adjacent caissons for the entire depth of cuts at the southerly basement wall location. The maximum height of temporary cuts should not exceed 5 feet at any given time. A representative of the project geotechnical consultant should be present on-site during





R.M. BRUE, BUILDING CONTRACTOR

April 12, 2001 J.N. 115-00 Page 3

P. 04

such excavations, and should be observed for any potential for localized instability or "sloughing." In the event that such "sloughing" occurs, revised construction recommendations should be developed by the project geotechnical consultant.

We hope the calculations and recommendations provided herein adequately address the site stability concerns expressed by the California Coastal Commission. Please call if you have any questions.

Respectfully submitted,

PETRA GEOTECHNICAL, INC.

Michael Putt

Semor Staff Geologist

Project Engineer

RCE 58967

Smil Rlat CEG 1972

Director of Operations

CEG 936

MP/SG/AB/nls

Attachment:

Supplemental Stability Evaluation

Distribution:

(2) Addressee

(3) Anne L. Kramer, California Coastal Commission

cc: 2001\100\115-00B.RRP

EX. 7

