CALIFORNIA COASTAL COMMISSION

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Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: **5-01-240**

RECORD PACKET COPY

APPLICANT: **William & Robin De La Pena**

AGENT: **Charlie Williams, Morris Skendarian & Associates**

PROJECT LOCATION: 6 So. La Senda, Laguna Beach, Orange County

PROJECT DESCRIPTION: Partial demolition and reconstruction of an existing single family home resulting in a 3,098 square foot two story, 19 foot high above existing grade, single family residence with an attached two car garage. A pool is proposed on the landward side of the residence. Also proposed is 110 cubic yards of cut and 49 cubic yards of fill. The subject site is an ocean front bluff top lot.

Lot Area:	8,184 square feet
Building Coverage:	2,649 square feet
Pavement Coverage:	2,950 square feet
Landscape Coverage:	1,037 square feet
Parking Spaces:	4 spaces
Zoning:	TAB (Three Arch Bay)
Ht above final grade:	23 feet

LOCAL APPROVALS RECEIVED: City of Laguna Beach Approval in Concept/Design Review approval; Three Arch Bay Architectural Review Board approval; Community Services District approval.

SUBSTANTIVE FILE DOCUMENTS: City of Laguna Beach certified Local Coastal Program (except areas of deferred certification including subject Three Arch Bay); Preliminary Geotechnical Investigation prepared by Geofirm and dated March 23, 2001.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends approval of the proposed project subject to seven (7) special conditions: 1) Confirmation of the extent of the demolition; 2) submittal of a termite inspection report; 3) recordation of an Assumption of Risk deed restriction; 4) recordation of a deed restriction prohibiting future shoreline/bluff protection devices; 5) conformance with the geotechnical recommendations; 6) identification of the location of the disposal site for construction debris; and 7) submittal of a revised landscape plan. The special conditions are necessary to assure stability and structural integrity as required by Coastal Act Section 30253 and minimize alteration of landforms as required by Coastal Act Section 30251.

STAFF RECOMMENDATION:

The staff recommends that the Commission **APPROVE** the permit application with special conditions.

MOTION:

I move that the Commission approve CDP #5-01-240 pursuant to the staff recommendation.

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

The staff recommends that the Commission adopt the following resolution:

I. APPROVAL WITH CONDITIONS

The Commission hereby **GRANTS** a permit, subject to the conditions below, for the proposed development on the grounds that the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and will not have any significant adverse effects on the environment within the meaning of the California Environmental Quality Act.

II. STANDARD CONDITIONS:

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

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

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

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

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

III. SPECIAL CONDITIONS

1. Confirmation of the Extent of Demolition

After demolition has been completed, and the framing of the walls to remain is exposed pursuant to the demolition plan approved in this permit, but **prior to any new construction**, the applicant shall submit to Executive Director, via bonded messenger from the City of Laguna Beach Building Department, for the review and approval of the Executive Director, a certified copy of the City building inspector's report which indicates whether any demolition beyond the amount shown on the demolition plan approved by this permit has occurred or would be necessary in order to meet building and safety codes.

If the building inspector's report, accepted by the Executive Director, indicates additional demolition has already occurred or must occur due to the deteriorated state of the walls which were proposed by the applicant to remain, the applicant shall submit a complete amendment request application or a complete application for a new coastal development permit. The application shall address the issue of revisions to the project due to the need for additional demolition. Whether an amendment or a new application is submitted shall be determined by the Executive Director.

No further development may occur until either:

a) The Executive Director determines, pursuant to the City building inspector's report, that all walls identified as walls to remain are intact and structurally sound; or

b) the applicant submits an amendment request application if so directed by the Executive Director and the amendment request is subsequently approved by the Coastal Commission and issued by the Executive Director; or

c) the applicant submits a new coastal development permit application if so directed by the Executive Director and the coastal development permit is approved by the Coastal Commission and issued by the Executive Director.

2. Termite Inspection

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and approval of the Executive Director, a termite inspection report, prepared by a licensed professional, indicating the degree, if any, of termite damage that exists within the existing residential structure that is the subject of the permit.

The termite inspection report shall also be submitted to the City of Laguna Beach Building Department.

If the termite inspection report indicates that additional demolition will be necessary in order for the structure to meet building and safety standards, the applicant shall submit a complete amendment request application or a complete application for a new coastal development permit. Whether an amendment or permit application is submitted shall be determined by the Executive Director. The application shall address the issue of revisions to the project due to the need for additional demolition.

No development may proceed if an amendment or new coastal development permit application pursuant to the special conditions of this permit is pending.

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 from bluff and slope instability 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 Shoreline/Bluff Protective Device**

A(1). By acceptance of this permit, the applicant agrees, on behalf of him/herself and all other successors and assigns, that no shoreline protective device(s) shall ever be constructed to protect the expansion of development at the subject site approved pursuant to Coastal Development Permit No. 5-01-240 including future improvements, in the event that the property is threatened with damage or destruction from bluff and slope instability, erosion, landslides or other natural hazards in the future. By acceptance of this permit, the applicant hereby waives, on behalf of him/herself and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235.

A(2). By acceptance of this permit, the applicant further agrees, on behalf of him/herself and all successors and assigns, that the landowner shall remove the development authorized by this permit, including the expansion of the single family residence and patio area, and swimming pool, if any government agency has ordered that the structure is not to be occupied due to any of the hazards identified above. In the event that any portion of the development is destroyed, the permittee shall remove all recoverable debris associated with the development from the beach and ocean and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit.

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. **Conformance of Design and Construction Plans to Geotechnical Engineering Investigation**

A. All final design and construction plans, including grading, foundations, site plans, elevation plans, and drainage plans, shall be consistent with all recommendations contained in the Preliminary Geotechnical Investigation prepared by Geofirm, dated March 23, 2001.

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.

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.

6. **Identification the Location of Construction Debris Disposal Site**

PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and approval of the Executive Director, a letter identifying the location of the disposal site of the demolition and construction debris resulting from the project. Disposal shall occur at the approved disposal site. If the disposal site is in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place.

7. **Landscape Plan**

A. The applicant shall submit a revised landscape plan which shall comply with the following provisions:

(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 planting plan;

(c) Landscaped areas in the rear yard (bluff-facing) area shall be planted and maintained for erosion control and native habitat enhancement purposes. To minimize the need for irrigation, all landscaping adjacent to bluff 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 can include ornamental or native, drought-tolerant plants. Vegetation installed in the ground shall consist of native, drought tolerant plants. Vegetation which is placed in above-ground pots or planters or boxes may be non-invasive, non-native ornamental plants;

(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

The applicant is proposing substantial demolition and reconstruction of an existing single family home resulting in a 3,098 square foot two story, 19 foot high above existing grade, single family residence with an attached two car garage. A swimming pool is proposed on the landward side of the residence. Also proposed is 110 cubic yards of cut and 49 cubic yards of fill. The subject site is an ocean front bluff top lot.

The existing structure includes two levels, one at street grade and one below grade. The lower level currently includes an approximately 315 square foot room and uninhabitable under floor crawl space. A portion of the seawardmost wall of the lower level area is proposed to be relocated landward. The lower level room will be expanded on the landward side to accommodate a new master bedroom and master bath and laundry room. The proposed lower level will provide 872 square feet of living area. The 110 cubic yards of cut are proposed, in part, to accommodate the proposed lower level expansion.

The seawardmost wall at the upper level of the existing residence is proposed to be retained in place except for an approximately seventeen (17) foot long segment which is proposed to be relocated approximately five (5) feet landward of its existing location. Additional revisions are proposed on the upper level, as depicted on Exhibit C6. The upper level living area is proposed to be reduced from 2396 square feet to 2179 square feet.

An existing non-conforming (it encroaches into the City's required front yard (street side) setback), 462 square foot, detached garage is also proposed to be demolished. The proposed 430 square foot, two car garage will be attached to the residence.

The remainder of the grading is proposed to accommodate a revised rear yard (bluff side) patio. The proposed patio will be relocated approximately five (5) feet landward of the existing patio and will conform to the City's bluff top setback of 10 feet from the bluff edge for patio development. An existing low garden wall is proposed to be removed from the bluff top setback area. Native

vegetation (Rhus integrifolia [Lemonade Berry] and Ceanothus "Yankee Point") is proposed to be planted in the area between the bluff edge and the proposed patio. In addition, the area nearest the bluff edge is proposed to be graded in order to re-direct drainage back to the street, rather than over the bluff face as it currently does.

The subject site is located within the locked gate community of Three Arch Bay in the City of Laguna Beach. Laguna Beach has a certified Local Coastal Program (LCP) except for the four areas of deferred certification: Irvine Cove, Blue Lagoon, Hobo Canyon, and Three Arch Bay. Certification of the Three Arch Bay area was deferred due to access issues arising from the locked gate nature of the community. The proposed development needs a coastal development permit from the Coastal Commission because it is located in the Three Arch Bay area of deferred certification.

Because the site is located within a locked gate community, no public access exists in the immediate vicinity. The nearest public access exists at 1000 Steps County Beach approximately one half mile upcoast of the site.

B. Demolition vs Remodel

The issue of whether a project constitutes demolition and new construction rather than a remodel of an existing structure becomes significant when an existing non-conformity is proposed to be retained. In the case of the proposed project, the existing residence extends beyond the bluff top setback the Commission would normally impose. On bluff top lots the Commission routinely imposes a bluff top setback of either 25 feet from the bluff edge or a setback determined by a stringline. A stringline is determined by drawing a line from the nearest adjacent corners of the adjacent structures. The existing structure at the subject site extends beyond both types of bluff top setback. The depth of the intrusion into the 25 foot setback varies from zero feet up to approximately 10 feet. The depth of the intrusion into the stringline varies from approximately 5 feet to approximately 17 feet. When a demolition and new construction project is reviewed by the Commission, an appropriate bluff top setback imposed. The bluff top setback is used to address Coastal Act issues including hazard, public views, minimizing the potential need for shoreline and bluff protection devices, and public access. In this case, a bluff top setback would be used to address the Coastal Act issues of hazard and minimizing the potential need for shoreline and bluff protection devices.

The applicant has submitted detailed information about the amount of demolition that would occur with the proposed project. Typically, the Commission has quantified demolition by tabulating the extent of exterior linear walls to be removed compared to the total overall amount of exterior linear walls existing prior to the proposed development. The walls proposed to remain must retain their structural components such as studs. Cosmetic portions of the wall, such as exterior stucco and interior drywall, may be removed.

In the case of the proposed project, the total existing linear footage is 434.42 linear feet (this includes 340.42 linear feet at the upper level and 94 linear feet at the lower level). Of that amount, 208.58 linear feet are proposed to be removed. Staff has verified these figures using the plans submitted by the applicant. The applicant, then, is proposing to demolish 48% of the exterior, linear footage of the existing walls (208.58/434.42 = .480 x 100 = 48%). The Commission has generally found that if less than 50% of the linear feet of the existing exterior walls are removed, the project can be reviewed as a remodel rather than new construction. The significance of this distinction is that existing non-conformities, such as existing development within the setback area, may remain if no work is proposed to occur on them.

However, it must be noted that the amount of proposed demolition is within 2% of the amount that would trigger the requirement to remove existing development within the bluff top setback area. The 2% figure translates into only 9 linear feet of existing wall area (2% of 434.2 is 8.68). The amount of demolition could easily exceed the critical 50% point once demolition is begun, either by accident or for other reasons. For example, an additional 9 feet of wall could be accidentally knocked down unwittingly by a contractor. Or it may appear prudent to the contractor to remove and rebuild a section of existing wall to facilitate construction. Further, it is not uncommon to discover structural problems such as termites or dry rot within walls that were proposed to remain once they are exposed to the studs. This issue often arises especially in older homes such as the existing structure on-site, which is believed to have been constructed sometime in the 1940s. When this happens the wall must be taken down to meet building safety standards. Once a new wall is erected in the same location, it is virtually impossible to determine that the wall replacement has occurred. This leads to the situation where a remodel project really constitutes demolition and new development, and would have been required to meet the appropriate bluff top setback. This issue has arisen with previously approved coastal development permits including 5-98-251 (Boehringer) which is located on the bluff top in the same community as the subject site.

The Commission finds that application of the 50% demolition threshold provides a consistent and equitable method of dealing with existing non-conformities associated with extensive remodel projects. Therefore, the Commission finds that because the proposed project does not exceed the 50% threshold, it does not constitute demolition and new construction and so the existing non-conforming bluff top setback may remain. However, contingencies must be in place once the demolition is under way to assure that the critical threshold is not exceeded, or if it is exceeded, to establish an avenue which allows the project to be re-assessed based on the revised demolition figure.

As stated above, a frequent reason additional demolition becomes necessary is the discovery of termites and termite damage within the walls proposed to remain. In order to minimize the chances of this issue arising after demolition has begun, a special condition is being imposed which requires the applicant to submit a termite inspection report prior to issuance of the coastal development permit. If the report indicates that the walls proposed to remain are damaged, the applicant is required to submit an amendment application or an application for a new coastal development permit. Whether an amendment or new permit application is appropriate would be determined by the Executive Director. Once a complete application is received, the project would be evaluated based on the newly discovered information.

In addition, another special condition is being imposed which requires that the applicant submit a copy of the City building inspector's report done after the proposed demolition is complete and the framing of the walls to remain is exposed, but before any new construction has commenced. The inspector's report would verify the extent of demolition and the condition of the walls remaining. If the inspector's report indicates that more demolition has occurred than was approved or that the walls originally proposed to remain are not structurally sound, the applicant is required to submit an amendment application or an application for a new coastal development permit. Again, whether an amendment or new permit application is appropriate would be determined by the Executive Director. Once a complete application is received, the project would then be evaluated based on the newly discovered information.

These special conditions are necessary to assure that development is carried out as proposed and that the development is consistent with the Chapter 3 policies of the Coastal Act. The proposed project's consistency with specific Sections of the Coastal Act is discussed below.

C. Hazard

Section 30253 of the Coastal Act states:

New development shall:

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

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

Section 30251 of the Coastal Act states that:

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

The subject site is an oceanfront bluff top lot. The height of the bluff is approximately 80 feet. Rocky shoreline exists at the base of the bluff. The existing and proposed development is/will be located on the gently sloping marine terrace portion of the site. The bluff consists of a moderately sloping upper bluff developed in marine terrace deposits, about 20 feet in height with a slope ratio near 1.25:1(horizontal:vertical) and bedrock lower bluff that is steeper and locally vertical.

A Preliminary Geotechnical Investigation was prepared for the proposed development by Geofirm and is dated March 23, 2001. The Geotechnical Investigation was augmented by a letter dated August 15, 2001 responding to questions from Commission staff. In addition, the Commission's staff geologist reviewed the information submitted by the applicant's geotechnical consultant and visited the subject site, and prepared Geotechnical Review Memorandums dated November 30, 2001 and December 18, 2001. The applicant submitted a Bluff Slope Stability Analysis and Quantitative Bluff Erosion Assessment prepared by Stoney-Miller Consultants, dated December 14, 2001 in response to questions posed by the Commission's staff geologist. The Geotechnical Investigation included literature review, reconnaissance of the property and surrounding areas and geologic mapping, excavation and logging of exploratory borings, topographic and geologic profile construction, descriptions of Earth materials, geologic structures, groundwater, surficial runoff, cliff erosion and stability, seismic considerations, and conclusions.

Setback

The Commission's staff geologist has concluded from the information submitted that the bluff is relatively stable and a minimal setback is adequate. This setback is to ensure stability given the inherent uncertainty in predicting geologic processes in the future, and to allow for potential changes in bluff erosion as a result of rising sea level. The Commission's staff geologist recommends that a minimal bluff top setback of 25 feet be imposed on new development at this site. As described previously, the proposed project has been determined to be a remodel rather than demolition and new construction. As such, the Commission does not require the project to be redesigned to conform to a new bluff top setback.

However, it should be noted that the applicant's geotechnical consultant has recommended the following structural setback: "The bottom of all footings and caissons should be set back a minimum of 5 and 10 feet, respectively, from the structural setback plane as depicted on Plates 2 and 3." The proposed project conforms to the consultant's setback (see exhibits G and H).

Geotechnical Recommendations

Regarding the feasibility of the proposed project the geotechnical consultant states:

> "Proposed development of the subject site is considered feasible and safe from a geotechnical viewpoint providing the recommendations herein are integrated into design and construction. Proposed construction will not adversely affect adjacent properties if appropriate precautions are implemented during construction."

Specifically regarding bluff slope stability the geotechnical consultant concludes, in the Bluff Slope Stability Analysis and Quantitative Bluff Erosion Assessment:

> "Erosion of the bluff below the site and nearby is episodically and locally active as sloughing of terrace deposits in the upper bluff slope and localized rock block failure of jointed bedrock exposed in the upper cliff below. Although it appears little or no bluff retreat has occurred since 1939, the presence of the upper bluff scarp in the 1939 photographs suggest that shallow slumping along the upper bluff is possible and may adversely impact existing or proposed improvements adjacent to the bluff edge unless supported by deepened foundations as recommended in the referenced report. Significant erosion along the base of the cliff at shoreline level is unlikely due to the very hard cemented character of rock.
>
> Because no measurable bluff edge erosion could be obtained from the photographs reviewed, an estimation of the long term bluff retreat could not be established with meaningful accuracy. Given the episodic nature of bluff erosion as verified by review of the aerial photographs, an estimation of bluff retreat which is based upon the character of bluff erosion processes may be considered more useful in designing setback criteria. The structural setback plane devised for the site recognizes a possible 10 feet of bedrock seacliff retreat and subsequent gradual layback of the terrace deposits, resulting in a bluff slope near 2:1 (horizontal:vertical). The photographs document erosion events consistent with these processes. The limited erosion below the site over the past 62 years suggests the setback criteria is conservative for an assumed 75 year life span of the proposed development."

In response to the information submitted by the applicant's geotechnical consultant, the Commission's staff geologist states, in the Memorandum dated December 18, 2001:

> "In summary, this bluff appears to be grossly stable and to have been marked by a rather low bluff retreat rate for the past 60 years; a maximum value may be 0.32 feet per year, but it is quite likely that this value is too high. Nonetheless, minor surficial slumping and erosion, especially of the upper bluff, is to be expected, and will result in gradual retreat of the upper bluff. This may be reduced somewhat if drainage is collected and conveyed away from the bluff edge, as I understand is proposed for this project. Further, the large catastrophic landslides that have occurred approximately ¼ mile to the east indicate that undetected zones of weakness within the bluff could result in the collapse of even this seemingly stable bluff. It would have been very difficult to predict a safe setback zone in the case of the landslides to the east, which affected nearly the entire width of the affected lots. For this site, there are no reasons to predict a similar type of failure, although the possibility cannot be eliminated.
>
> Given the information in the reports referenced in my 30 November memo and this memo, I feel that minimal setback is appropriate at this site. Generally, the smallest setback appropriate for a dynamic coastal bluff is on the order of 25 feet. This value allows for uncertainty in the prediction of geologic processes into the future, especially in light of sea level rise. I note that the existing structure lies well within 25 feet of the bluff edge."

The geotechnical consultant has found that the proposed development is geotechnically feasible provided the recommendations contained in the Geotechnical Investigation prepared by the consultant are implemented in design and construction of the project. The Commission's staff geologist has found that, while asserting that the possibility of bluff failure cannot be eliminated, the bluff appears to be grossly stable and to have been marked by a rather low bluff retreat rate for the past 60 years.

The recommendations contained in the Geotechnical Investigation address site preparation and grading, soil parameters for foundation design, structural setback requirement, existing footings, structural design of retaining walls, slabs-on-grade, concrete, hardscape design and construction, structural design of swimming pool, seismic structure design, utility trench backfill, finished grade and surface drainage, foundation plan review, and observation and testing. In order to assure that risks are minimized, the geotechnical consultant's recommendation should be incorporated into the design of the project. As a condition of approval the applicant shall submit grading and foundation plans indicating that the recommendations contained in the Preliminary Geotechnical Investigation prepared for the proposed development by Geofirm, and dated March 23, 2001 have been incorporated into the design of the proposed project. Therefore, the Commission imposes special condition 5.

Future Protective Device

The subject site is a bluff top ocean front lot. In general, bluff top lots are inherently hazardous. It is the nature of bluffs to erode. Bluff failure can be episodic, and bluffs that seem stable now may not be so in the future. Even when a thorough professional geotechnical analysis of a site has concluded that a proposed development is expected to be safe from bluff retreat hazards for the life of the project, it has been the experience of the Commission that in some instances, unexpected bluff retreat episodes that threaten development during the life of a structure sometimes do occur (e.g. coastal development permit files 5-99-332 A1 (Frahm); P-80-7431

(Kinard); 5-93-254-G (Arnold); 5-88-177(Arnold)). In the Commission's experience, geologists cannot predict with absolute certainty if or when bluff failure on a particular site may take place, and cannot predict if or when a residence or property may be come endangered.

Section 30253 of the Coastal Act requires that new development shall not require construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The proposed development could not be approved as being consistent with Section 30253 of the Coastal Act if projected bluff retreat would affect the proposed development and necessitate construction of a protection device. A protective device may be a seawall at the base of the bluff or it could also be a caisson system. Although caissons are placed below grade and so may not initially alter natural landforms along bluffs and cliffs nor alter shoreline processes, the bluff could erode to a point were a caisson system is exposed. If that becomes the case, the landform and shoreline processes could be dramatically altered by the presence of the caisson protective system.

The Coastal Act limits construction of these protective devices because they have a variety of negative impacts on coastal resources including adverse affects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach. Under Coastal Act Section 30235, a shoreline protective structure must be approved if: (1) there is an existing principal structure in imminent danger from erosion; (2) shoreline altering construction is required to protect the existing threatened structure; and (3) the required protection is designed to eliminate or mitigate the adverse impacts on shoreline sand supply.

The Commission has generally interpreted Section 30235 to require the Commission to approve shoreline protection for residential development only for existing principal structures. The construction of a shoreline protective device to protect a new residential development would not be required by Section 30235 of the Coastal Act. In addition, the construction of a shoreline protective device to protect new residential development would conflict with Section 30251 of the Coastal Act which states that permitted development shall minimize the alteration of natural land forms, including coastal bluffs which would be subject to increased erosion from such a device.

No shoreline protection device is proposed. No caisson system is proposed either. The applicant is proposing a deepened footings foundation system. Regarding shoreline protection, the Preliminary Geotechnical Investigation prepared for the subject development states:

> "Proposed improvements along the bluff top should not be affected by the expected slow progressive retreat of the present bluff top assuming appropriate foundation design as recommended herein. Shoreline protection of the sea cliff is therefore not anticipated during the life span of proposed improvements."

The proposed development includes partial demolition and new expansion of the portion of the structure to remain. The proposed new expansion area constitutes new development for the purposes of Sections 30235 and 30253. Because the proposed project includes new development, it can only be found consistent with Section 30253 of the Coastal Act if a shoreline/bluff protective device is not expected to be needed in the future. The applicant's geotechnical consultant has indicated that the site is stable, that the project should be safe for the life of the project (75 years), and that no shoreline protection devices will be needed. If not for the information provided by the applicant that the site is safe for development, the Commission could not conclude that the proposed development will not in any way "require the construction of

protective devices that would substantially alter natural landforms along bluffs and cliffs." However, as stated above, the record of coastal development permit applications and Commission actions has also shown that geologic conditions change over time and that predictions based upon the geologic sciences are inexact. Even though there is evidence that geologic conditions change, the Commission must rely upon, and hold the applicant to their information which states that the site is safe for development without the need for protective devices. Therefore, the Commission imposes special condition 4 which requires the applicant to record a deed restriction against the property placing the applicant and their successors in interest on notice that no protective devices shall be permitted to protect the proposed development and that the applicant waives, on behalf of itself and all successors and assigns, any right to construct protective devices for that portion of the expansion area that may exist under 30235.

Assumption of Risk

Although adherence to the geotechnical consultant's recommendations will minimize the risk of damage from erosion, the risk is not eliminated entirely. The site is an ocean front, bluff top lot, which is inherently hazardous. Given that the applicant has chosen to implement the project despite potential risks from bluff erosion and landslide, the applicant must assume the risks. Therefore, the Commission imposes special condition 3 for an assumption-of-risk deed restriction. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for development. The condition also requires the applicant to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand the hazards. In addition, the condition ensures that future owners of the property will be informed of the risks and the Commission's immunity from liability. As conditioned, the Commission finds the proposed project is consistent with Section 30253 of the Coastal Act.

Drainage and Landscaping

Another factor that can minimize the hazards inherent to bluff development is limiting the amount of water introduced to the bluff top area. In order to maximize bluff stability the amount of water introduced to the site should be minimized. Water on site can be reduced by proper drainage and by limiting landscaping which requires irrigation. The applicant has submitted a drainage plan which indicates that all drainage will be directed to the street via a pump system. The proposed drainage plan concept is adequate to assure proper site drainage.

Regarding landscaping and irrigation of the site, the geotechnical consultant states: "It is recommended that deep-rooted, low water need plants be selected for general landscaping purposes to minimize irrigation requirements and consequent saturation of underlying soils. Irrigation of the rear bluff slope and bluff top areas should be avoided." The applicant has submitted a landscape plan. The landscape plan, as proposed, incorporates only low water use, drought tolerant, native vegetation in the area seaward of the residence. The plants proposed in the area seaward of the residence are Lemonade Berry (Rhus integrifolia) and Ceanothus 'Yankee Point'. As proposed, all landscape areas are proposed to be irrigated with low precipitation heads or drip system with automatic controller and backflow device. However, as stated by the applicant's geotechnical consultant above, irrigation of the rear bluff slope and bluff top areas should be avoided. Further, due to the relatively small lot area, irrigation anywhere on the site would be detrimental to bluff stability. Consequently, irrigation must be limited to temporary irrigation only as needed to establish plants. Therefore, as a condition of approval, the applicant shall submit, for the review and approval of the Executive Director, a revised landscaping plan

indicating that no permanent irrigation will be installed and that only temporary irrigation will be used. Because no sensitive habitat is currently known to exist within the project vicinity, a landscape monitoring plan is not required.

Low water use, drought tolerant, native plants require less water than other types of vegetation, thereby minimizing the amount of water introduced into the bluff top. Drought resistant plantings and minimal irrigation encourage root penetration which increases bluff stability. Low water use plants reduce the need for irrigation. The landscaping plan as conditioned will reduce the amount of water introduced into the bluff top area and so would not contribute to instability of the bluff. Thus as conditioned the landscape plan is consistent with Section 30253 of the Coastal Act.

A drainage plan has been submitted by the applicant. The proposed drainage plan indicates that the site drainage will be collected on site and then be pumped to the street. From there it will enter the existing storm drain system. The site drainage will not infiltrate the site, minimizing saturation of underlying soils which could lead to bluff instability. Thus the proposed drainage plan is consistent with Section 30253 of the Coastal Act.

Conclusion

The Commission finds that only as conditioned as described above, can the proposed development be found to be consistent with Sections 30251 and 30253 of the Coastal Act. As conditioned, the Commission finds the proposed development is consistent with Sections 30251 and 30253 of the Coastal Act which requires that landform alteration be minimized and geologic stability be assured.

D. Water Quality

Section 30231 of the Coastal Act states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

The proposed residential development has impervious surfaces, such as roofs where pollutants such as particulate matter may settle, as well as driveways where pollutants such as oil and grease from vehicles may drip. In addition, landscaped areas may contain fertilizers and pesticides. During storm events, the pollutants which have collected upon the roof and upon other impervious surfaces created by the proposed project may be discharged from the site into the storm water system and eventually into coastal waters which can become polluted from those discharges. Water pollution results in decreases in the biological productivity of coastal waters.

Typically, water quality impacts to coastal waters can be avoided or minimized by directing storm water discharges from roof areas and other impervious surfaces to landscaped areas where pollutants may settle out of the storm water. In addition, reducing the quantity of impervious surfaces and increasing pervious water infiltration areas can improve water quality.

However, these common techniques of addressing water quality problems, by design, result in increased infiltration of water into the ground. However, as noted in the hazard section of these findings, the infiltration of water into the bluff is the primary potential source of bluff instability at the project site. Therefore, decreasing the amount of impervious surfaces, increasing the quantity of pervious areas, and encouraging water infiltration for water quality purposes could have adverse impacts upon bluff stability.

Due to the potential for increased hazards in bluff top areas which could be caused by encouraging water infiltration for water quality purposes, water quality issues are more appropriately handled at a community-wide level within Three Arch Bay. As with other new development in Three Arch Bay along the bluffs, the proposed project includes a drainage system that is designed to capture discharges from roof areas, walkways, and driveways and to discharge run-off to the street and the storm drain system. Accordingly, water quality issues can be addressed by implementing appropriate water quality treatment features in the storm drain system, through which discharges from the individual sites flow. Since Three Arch Bay is a private community, the storm drain system is owned and maintained by the Three Arch Bay Community Services District.

Therefore, the Commission finds that the proposed project is consistent with Section 30231 of the Coastal Act.

E. Public Access & Recreation

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

The proposed project is located within an existing locked gate community located between the sea and the first public road paralleling the sea. Public access through this community does not currently exist. The proposed development, partial demolition and remodel of a single family residence on an existing residential lot, will not effect the existing public access conditions. It is the locked gate community, not this home, that impedes public access. The proposed development, as conditioned, will not result in any significant adverse impacts to existing public access or recreation in the area. Therefore the Commission finds that the project is consistent with the public access and recreation policies of the Coastal Act.

F. Local Coastal Program

Section 30604 of the Coastal Act provides that a coastal development permit shall be issued only if the proposed development would not prejudice the ability of the local government having jurisdiction to prepare a local coastal program (LCP) which conforms with, and is adequate to carry out, the Chapter 3 policies of the Coastal Act.

The City of Laguna Beach Local Coastal Program was certified with suggested modifications, except for the areas of deferred certification, in July 1992. In February 1993 the Commission concurred with the Executive Director's determination that the suggested modification had been properly accepted and the City assumed permit issuing authority at that time.

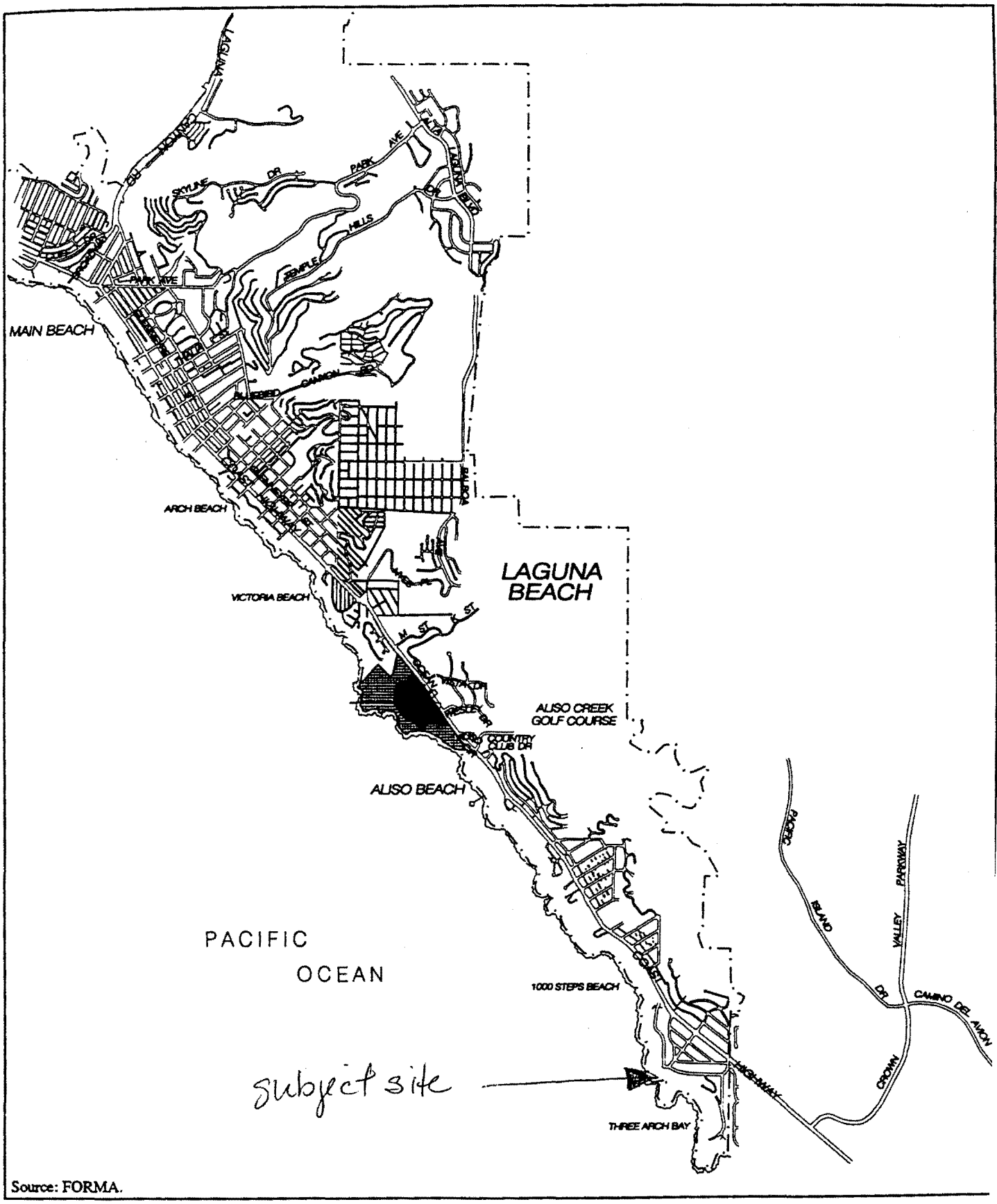
The subject site is located within the Three Arch Bay area of deferred certification. Certification in this area was deferred due to issues of public access arising from the locked gate nature of the

community. However, as discussed above, the proposed development will not further decrease or impact public access within the existing locked gate community. Therefore the Commission finds that approval of this project, as conditioned, will not prevent the City of Laguna Beach from preparing a total Local Coastal Program for the areas of deferred certification that conforms with and is adequate to carry out the Chapter 3 policies of the Coastal Act.

G. California Environmental Quality Act

Section 13096 of the Commission's 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 proposed project has been conditioned in order to be found consistent with the geologic hazards and water quality policies of the Coastal Act. Mitigation measures, in the form of special conditions, require 1) conformance with geologic recommendations and submittal of a final foundation plan; 2) submittal of a revised landscaping plan; 4) recordation of a deed restriction regarding assumption of risk; and 5) recordation of a no future shoreline/blufftop protective device deed restriction. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found consistent with the requirements of the Coastal Act to conform to CEQA.



Source: FORMA.

6/9/97(LAB730)

N

Scale in Feet

0 2000 4000

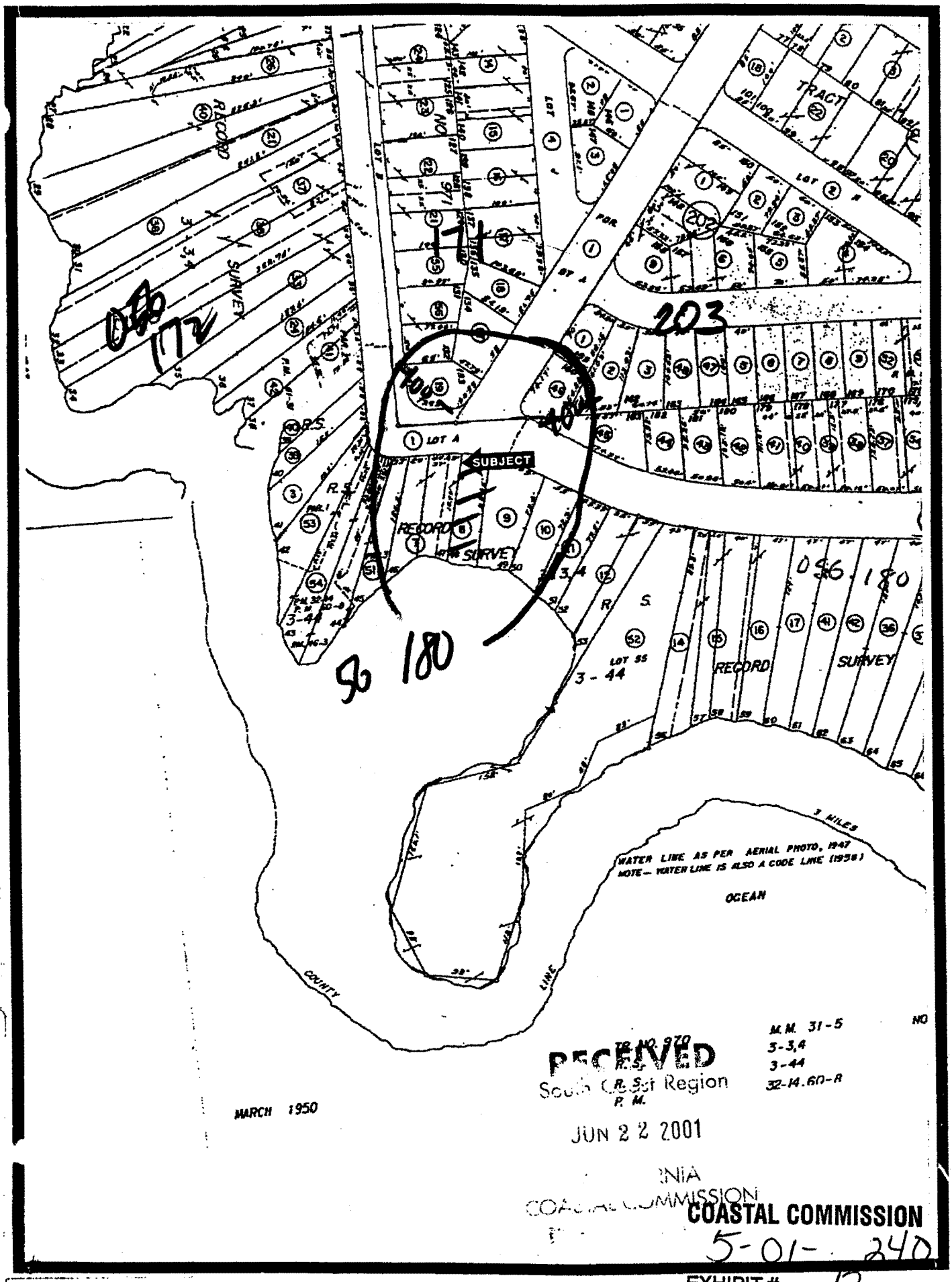
COASTAL COMMISSION

5-01-240

EXHIBIT # A

PAGE 1 OF 1

Vicinity Ma



Ownership Map

COASTAL COMMISSION
5-01-240

EXHIBIT # 13

PAGE 1 OF 1

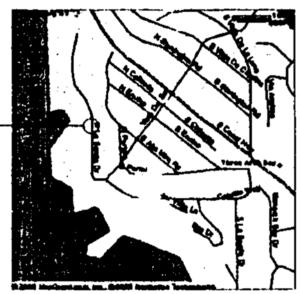
Project Plans

PROJECT NAME

DE LA PEÑA RESIDENCE

VICINITY MAP

SITE



PROJECT DATA

PROJECT ADDRESS:
6 LA SENDA
LAGUNA BEACH, CA 92651

LEGAL DESCRIPTION:
LOT 48 & POR. 47
BLOCK
TRACT THREE ARCH PAL. #1
A. P. 056-180-08

APPLICABLE CODES:
U. B. C. 1997
U. M. C. 1997
U. P. C. 1997
N. E. C. 1996
OTHER T-24

ZONE:
TAB

OCCUPANCY:
R-3 & U-1

TYPE OF CONSTRUCTION:
V-N

AREA CALCULATIONS:

	EXISTING	ADDITION/REMOVAL	TOTAL
MAIN LEVEL HABITABLE	[illegible] S.F.	-317 S.F.	[illegible] S.F.
LOWER LEVEL HABITABLE	316 S.F.	[illegible] S.F.	[illegible] S.F.
TOTAL HAB.	2711 S.F.	[illegible] S.F.	[illegible] S.F. ([illegible]% INC.)
MECH	0 S.F.	+47 S.F.	47 S.F.
GARAGE	[illegible] S.F.	[illegible] S.F.	430 S.F.
TOTAL AREA	3173 S.F.	[illegible] S.F.	[illegible] S.F.
DECKS	[illegible] S.F.	[illegible] S.F.	133 S.F.

LOT AREA CALCULATIONS:
LOT AREA [illegible] S.F. / [illegible] S.F. NET LOT SIZE
ALLW'BL. FLOOR AREA [illegible] S.F. ([illegible] X [illegible] SF X 1.0) + [illegible] SF * PROPOSED
ALLW'BL. LOT COVERAGE [illegible] S.F. ([illegible]% OF NET LOT SIZE)
EXISTING LOT COVERAGE [illegible] S.F. ([illegible]%)
PROPOSED LOT COVERAGE [illegible] S.F. ([illegible]%) = EXISTING LOT COVERAGE

SETBACKS:
REQUIRED SETBACKS:
FRONT YARD SETBACK 20'-0"
SIDE YARD SETBACKS 5'-0" MIN.
REAR YARD SETBACK 25'-0" (BLUFF TOP)
PROVIDED SETBACKS:
FRONT YARD SETBACK 20'-0"
SIDE YARD SETBACKS
SOUTH SIDE [illegible] (EXISTING TO REMAIN)
NORTH SIDE [illegible] (EXISTING TO REMAIN)
REAR YARD SETBACK [illegible] (EXISTING TO REMAIN)

ALLOWABLE HEIGHT LIMITS:
TYPE OF LOT COASTAL, REAR LOT LINE BELOW STREET
LOT SLOPE [illegible]%
MAXIMUM ALLOWABLE HEIGHT [illegible] ([illegible] ABOVE FRONT PROP. LINE @ [illegible])
MAXIMUM PROPOSED HEIGHT [illegible]

CONSULTANTS / CONTACTS

OWNER:
WILLIAM AND ROBIN DE LA PENA
[illegible] LA SIERRA AVE.
WHITTIER, CA [illegible]
TEL.: 562-[illegible]

ARCHITECT:
MORRIS SKENDERIAN & ASSOC.
CONTACT: RAND HUGHES
2094 SOUTH COAST HWY. #[illegible]
LAGUNA BEACH, CA 92651
TEL.: 949-497-[illegible]
FAX: 949-497-[illegible]

GEOLOGY:
GEOFIRM
CONTACT: MIKE CHILDS
801 GLENNEYRE, SUITE F
LAGUNA BEACH, CA 92651
TEL.: 949-494-2122
FAX: 949-497-0210

LANDSCAPE ARCHITECT:
LA STUDIO
CONTACT: LARRY STEINLE
2094 SOUTH COAST HWY. #[illegible]
LAGUNA BEACH, CA 92651
TEL.: 949-494-[illegible]
FAX: 949-494-[illegible]

ABBREVIATIONS

[illegible]

MATERIALS / SYMBOLS LEGEND

- WOOD, FINISH
- WOOD, ROUGH
- WOOD, ROUGH
- PLYWOOD
- INSULATION, BATT
- INSULATION, RIGID
- MASONRY
- TILE
- CONCRETE, SAND OR STUCCO / PLASTER
- CONCRETE
- ROCK OR GRAVEL FILL
- EARTH
- COMPACTED SOIL
- BEDROCK
- ASPHALTIC CONCRETE
- METAL
- ACOUSTICAL TILE OR BOARD
- ROOM IDENTIFICATION
- PLAN / ELEVATION KEYNOTES
- DOOR SYMBOL
- WINDOW SYMBOL
- PROPERTY LINE
- EXISTING CONTOUR LINE
- NEW CONTOUR LINE
- PROPERTY LINE CORNER
- SPOT ELEVATION
- WORK, CONTROL, DATUM OR ELEVATION POINT
- MATCH LINE
- COLUMN LINE COORDINATE
- FLOOR MATERIAL CHANGE
- DETAIL
- SECTION
- REVISION SYMBOL

REVISIONS

NUMBER	REVISION	SUBMITTAL / COMPLETION DATE	BY
1	COASTAL COMM. COMMENTS	8/10/01	CW
2			
3			
4			
5			

NOTES

1) T-24 SUBMITTAL TO BE PROVIDED DURING WORKING DRAWINGS
2) ALL COMMUNICATION LINES TO BE PLACED UNDERGROUND TO THE NEAREST UTILITY POLE.

SHEET INDEX

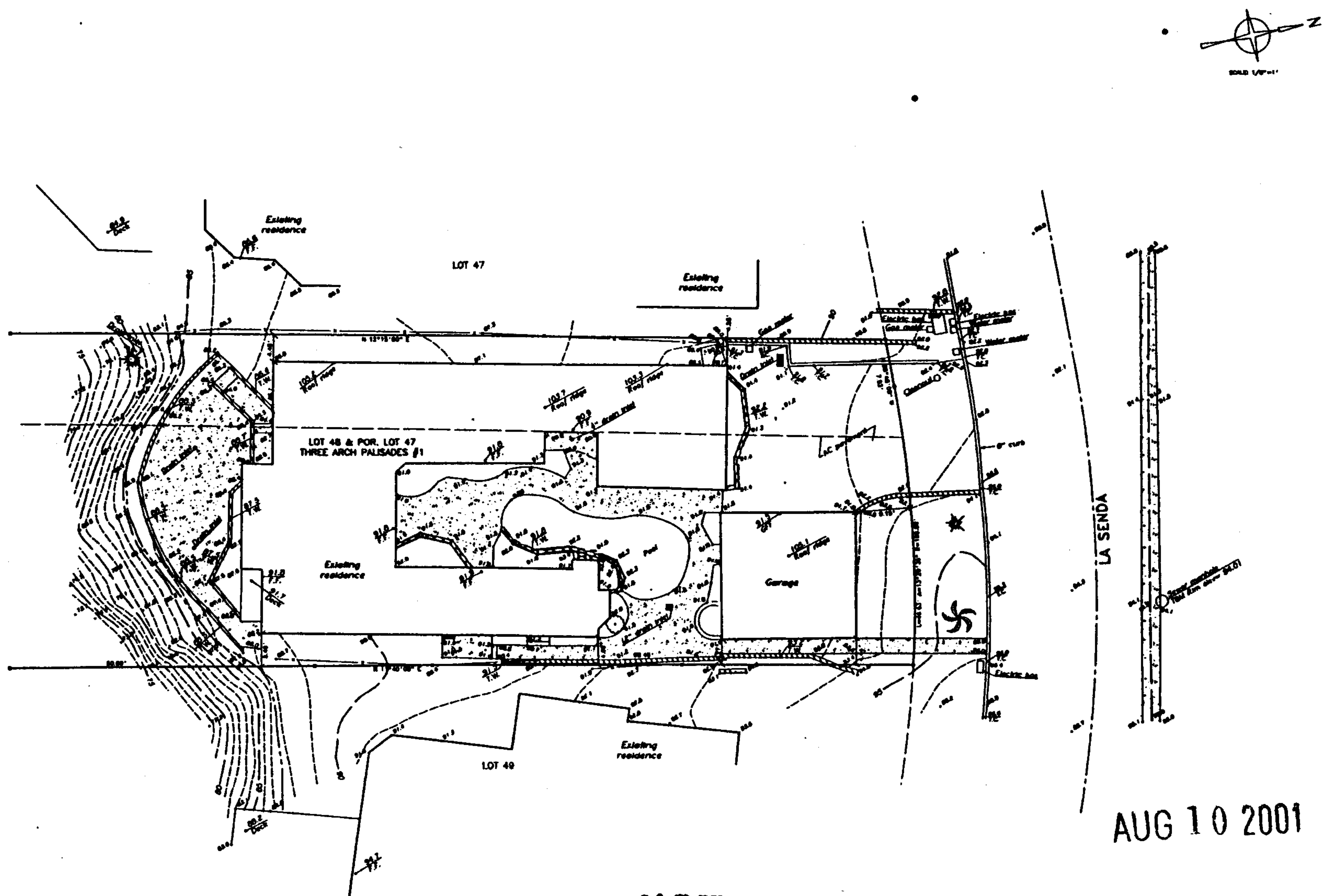
REVISIONS	BY
1 CSTL. COMM. 8/10/01	CW

MSA

[illegible]

DE LA PENA RESIDENCE
#6 SOUTH LA SENDA
LAGUNA BEACH, CA

DRAWN: CW
DATE: 2/28/01
SCALE: AS NOTED
JOB NO.: 4424
SHEET: C-1
OF



AUG 10 2001

NOT FOR CONSTRUCTION

Olav S. Meum LS 4384

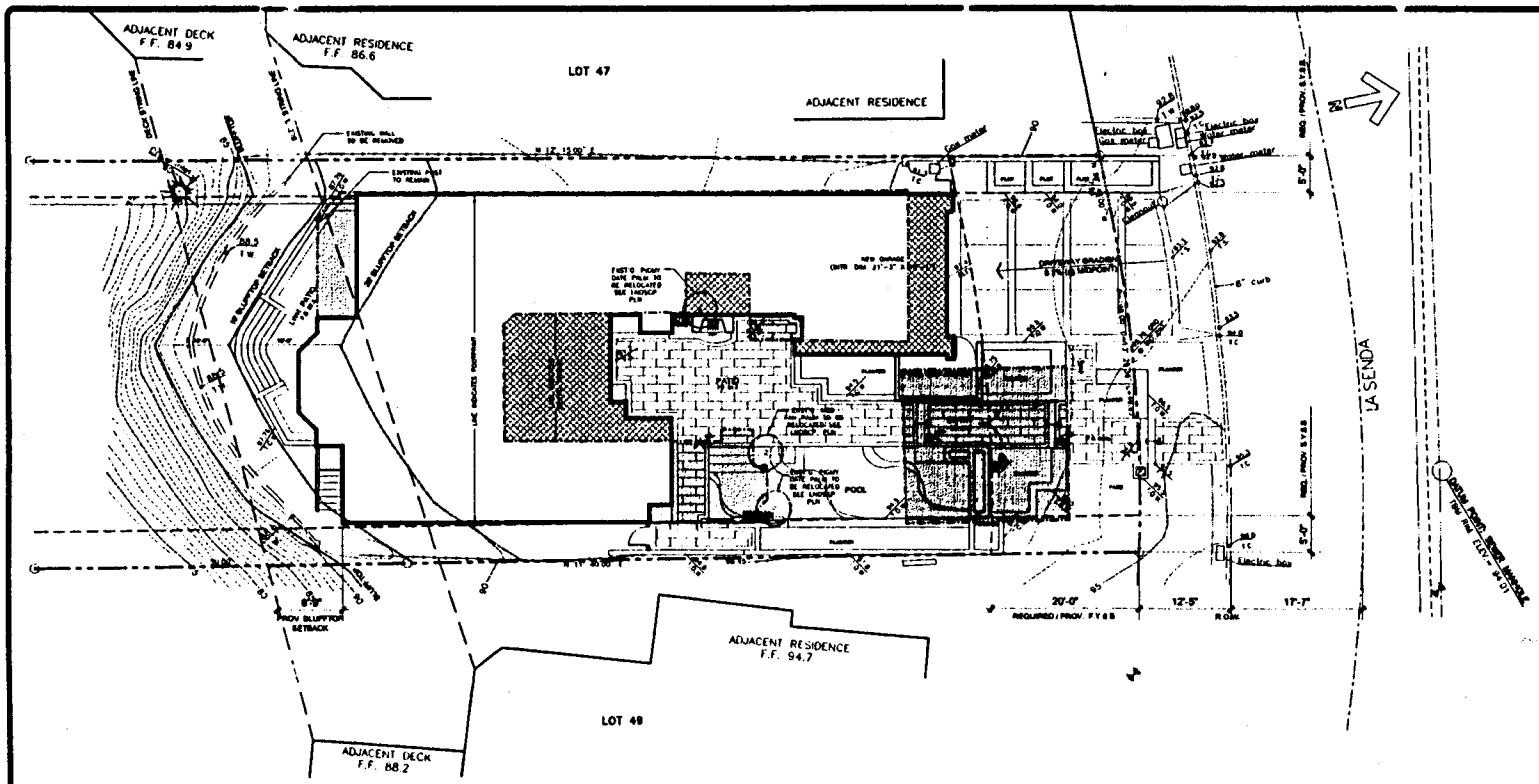
TOAL ENGINEERING, INC.
Civil Engineers, Land Planners, Land Surveyors
130 Avenida Navarro
San Clemente, Calif. 92672
Ph.(949) 492-8586 Fax.(949) 498-8625 E-mail "toalengtoal.com"

Sheet 1 of 1
Job No. 9279

TOPOGRAPHIC SURVEY
LOT 48 & POR. LOT 47, THREE ARCH PALISADES #1
LAGUNA BEACH, CALIFORNIA
Prepared for BROCK LYSTER

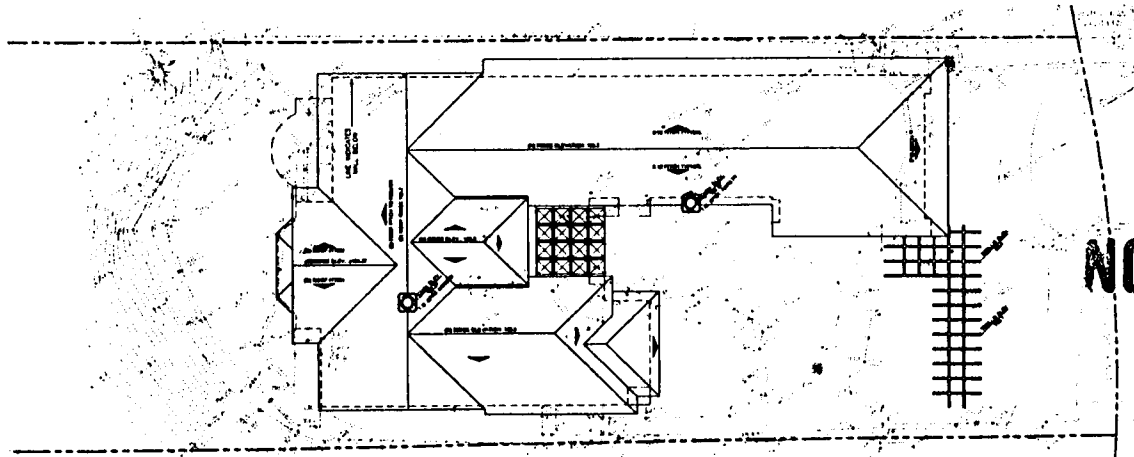
C2

C3



SITE PLAN

SCALE 1/8"=1'



ROOF PLAN (C ISTING SITE SURVEY)

SCALE 1/8"=1'

AUG 10 2001

NOT FOR CONSTRUCTION

AREA LEGEND:

INDICATES EXISTING FOOTPRINT AREA TO BE REMOVED

INDICATES EXISTING FOOTPRINT AREA TO BE

DE LA PENA RESIDENCE
#6 SOUTH LA SENDA
LAGUNA BEACH, CA

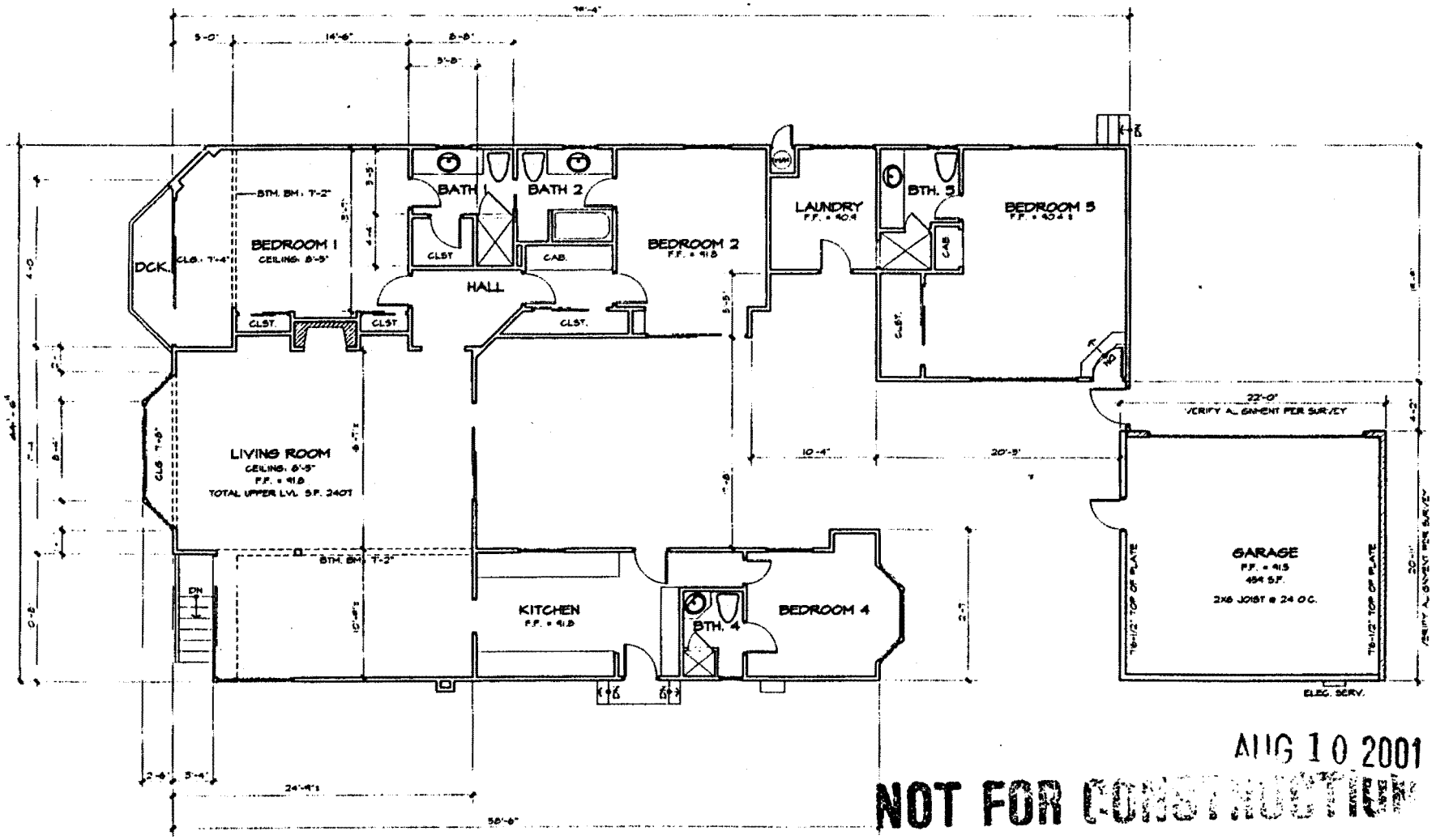
CM

2/28/01

SCALE 1/8"=1'

SP-1

C4



AUG 10 2001

NOT FOR CONSTRUCTION

RECORD UPPER LEVEL FLOOR PLAN

ALL DIMENSIONS ARE TO ROUGH FRAMING / FIELD VERIFY ALL DIMENSIONS

SCALE 1/4"=1'

AISA

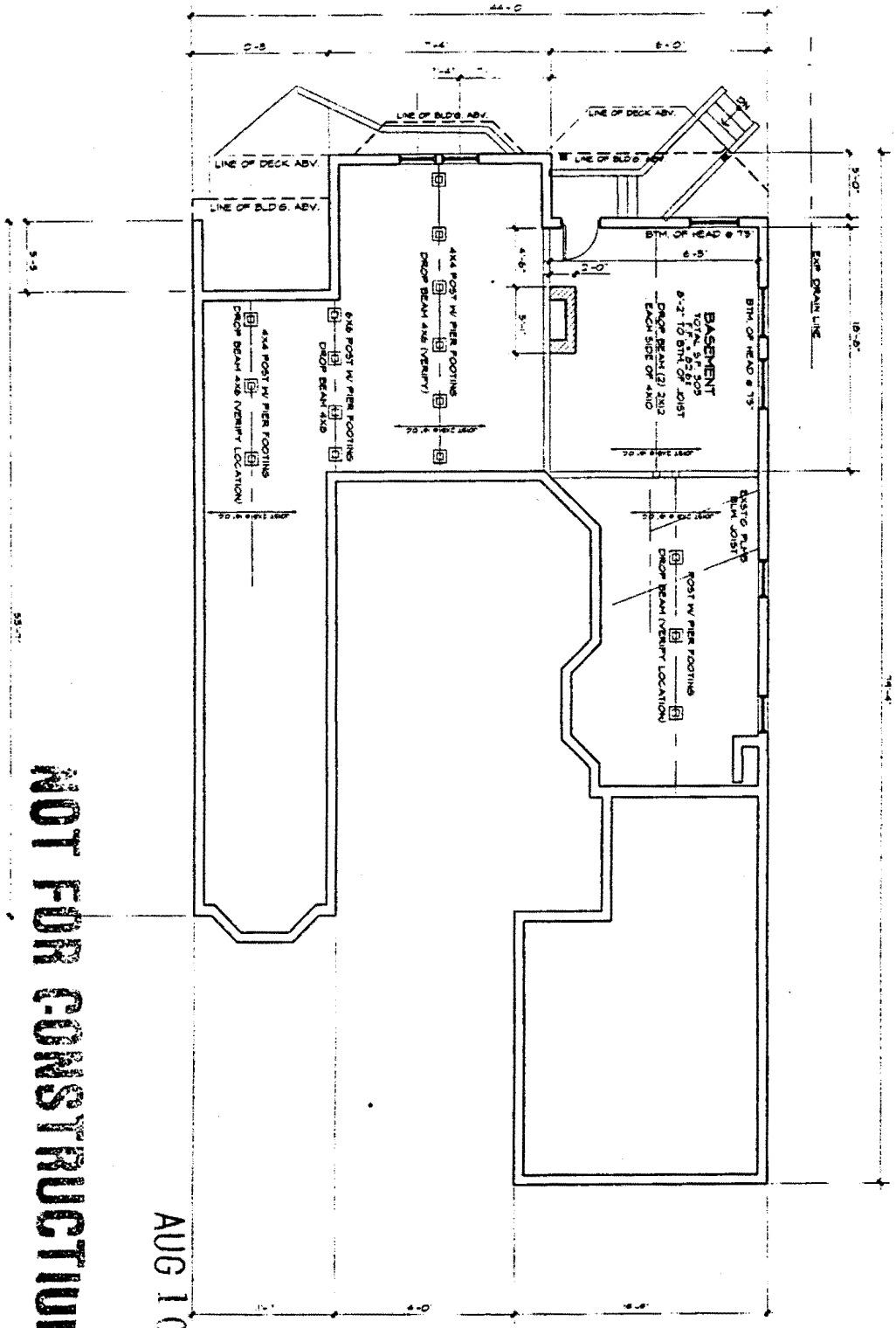
DE LA PENA RESIDENCE
#6 SOUTH LA SENDA
LAGUNA BEACH, CA

1.5.00

SCALE 1/4"=1'

A-0.1

RECORD LOWER LEVEL FLOOR PLAN



NOT FOR CONSTRUCTION

AUG 10 2001

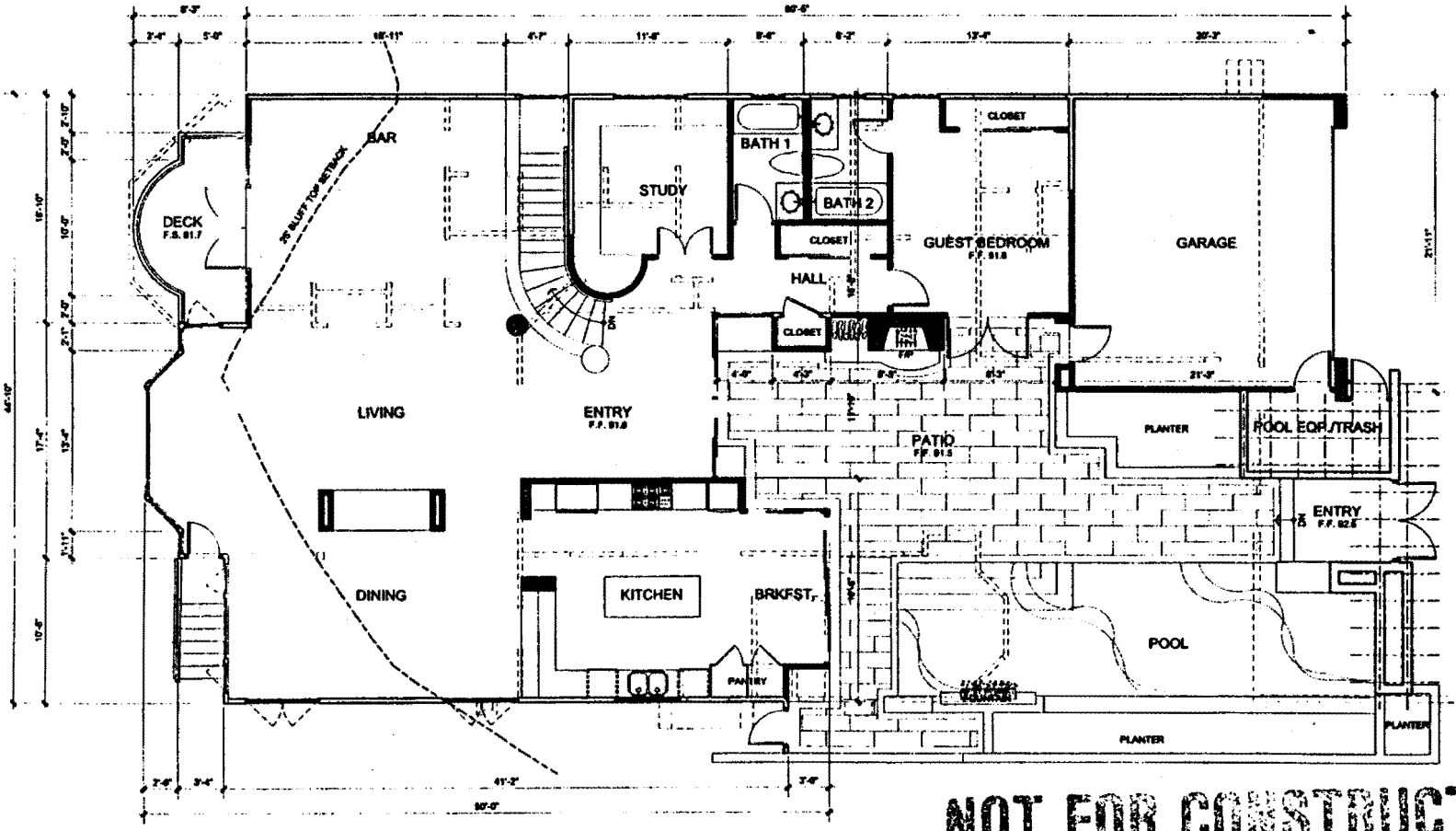
ALL DIMENSION ARE TO ROUGH FRAMING

SCALE 1/4"=1'

C5

A-0.2

DE LA PENA RESIDENCE
#6 SOUTH LA SENDA
LAGUNA BEACH, CA



AUG 10 2001

NOT FOR CONSTRUCTION

MAIN LEVEL FLOOR PLAN

SCALE 1/4"=1'

WALL LEGEND:

EXISTING TO REMAIN

EXISTING TO BE REMOVED

NEW WALLS

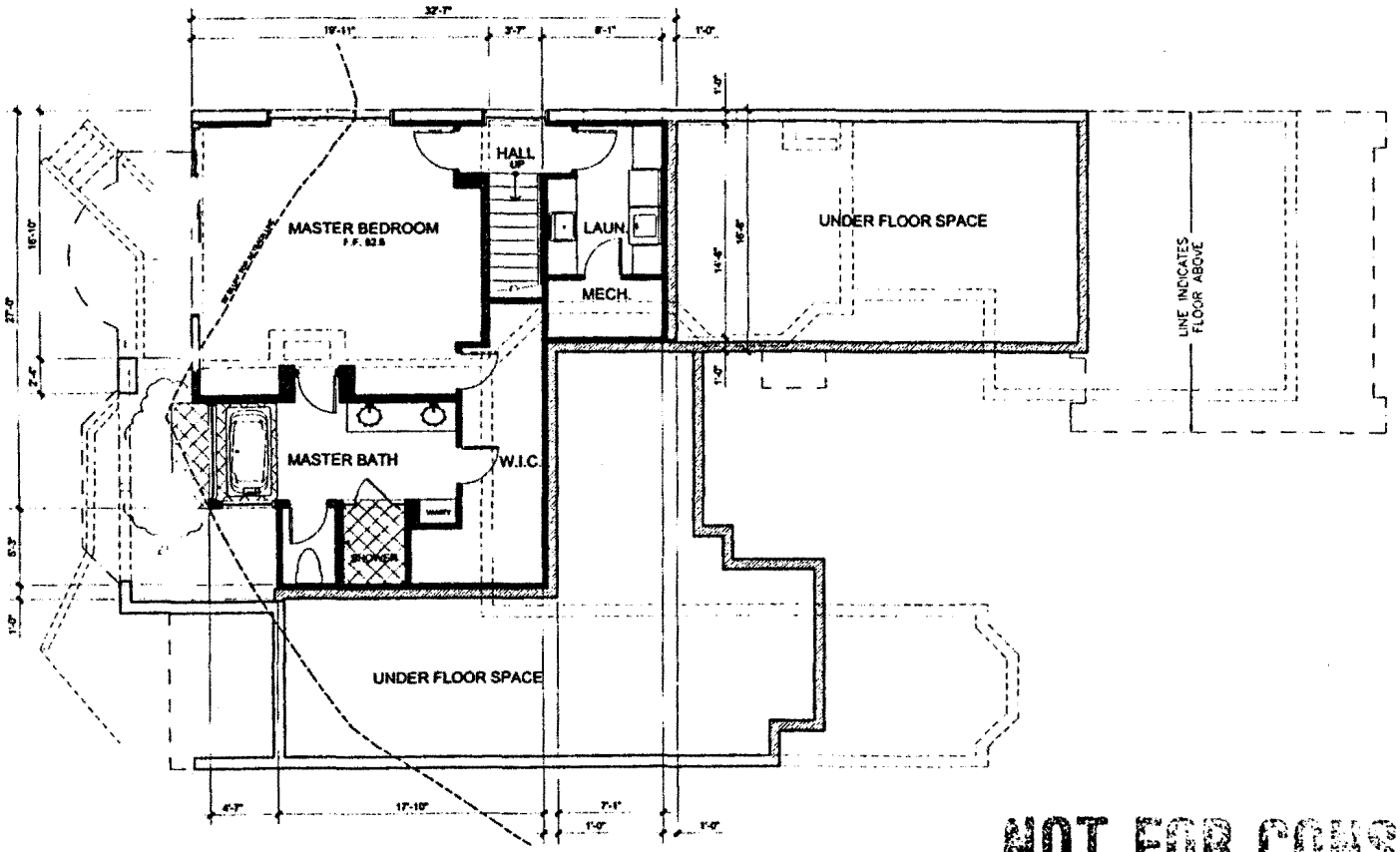
DE LA PENA RESIDENCE
#6 SOUTH LA SENDA
LAGUNA BEACH, CA

2/28/01

SCALE 1/4"=1'

A-1

C7



AUG 10 2001

NOT FOR CONSTRUCTION

LOWER LEVEL FLOOR PLAN

SCALE 1/4"=1'

WALL LEGEND:

EXISTING TO REMAIN

EXISTING TO BE REMOVED

NEW WALLS

DE LA PENA RESIDENCE
#6 SOUTH LA SENDA
LAGUNA BEACH, CA

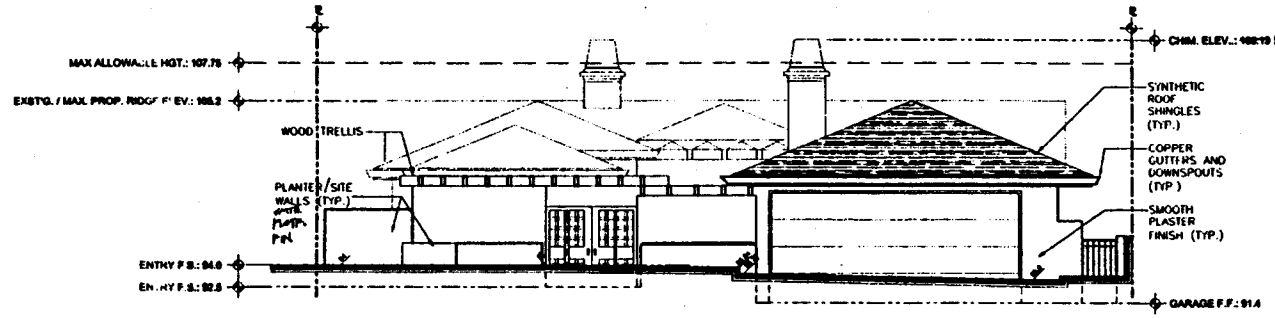
CM

2/28/01

SCALE 1/4"=1'

A-2

C 80



NORTH ELEVATION

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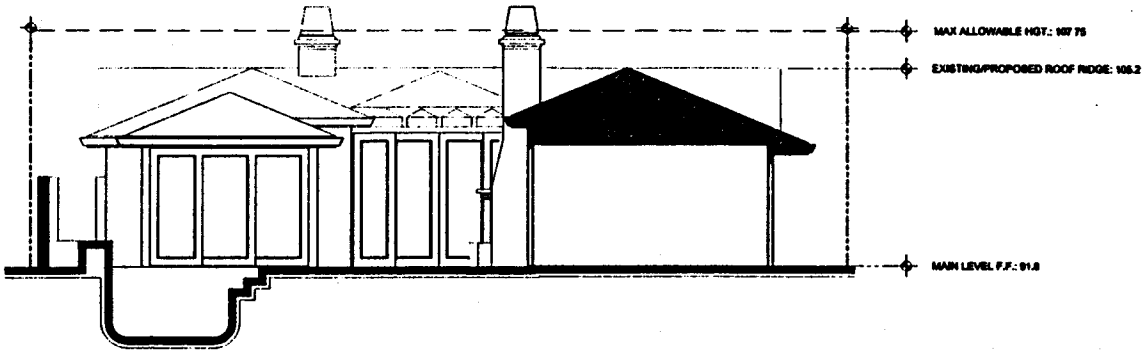
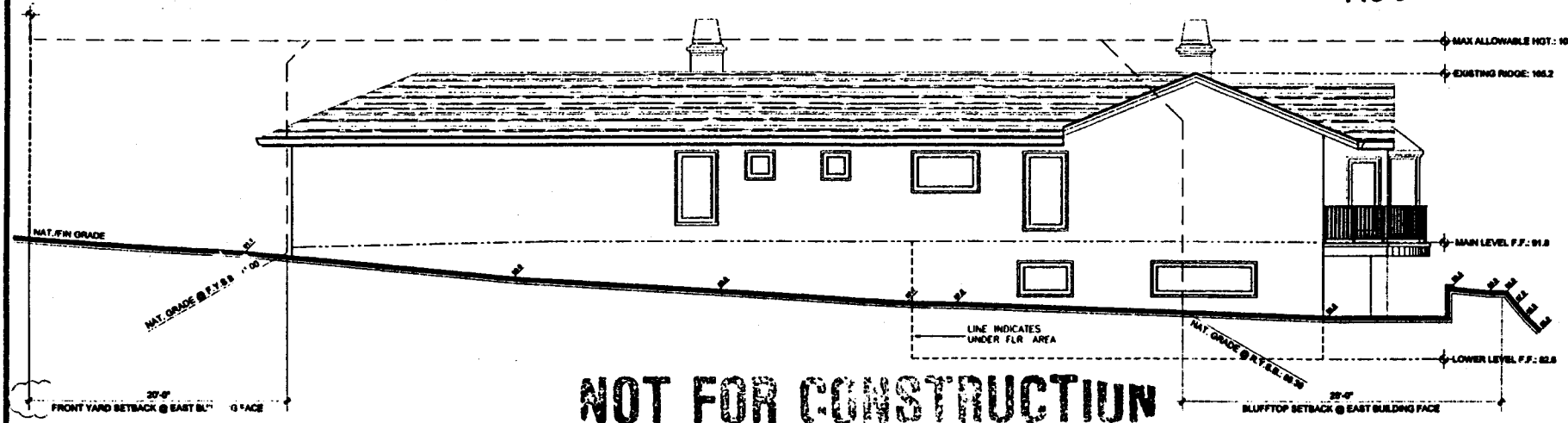


PATIO ELEVATION

SCALE 1/4"=1'

AUG 1 0 2001



EAST ELEVATION

SCALE 1/4"=1'

NOT FOR CONSTRUCTION

REVISIONS	BY

MSA

DE LA PENA RESIDENCE
#6 LA SENDA
LAGUNA BEACH, CA

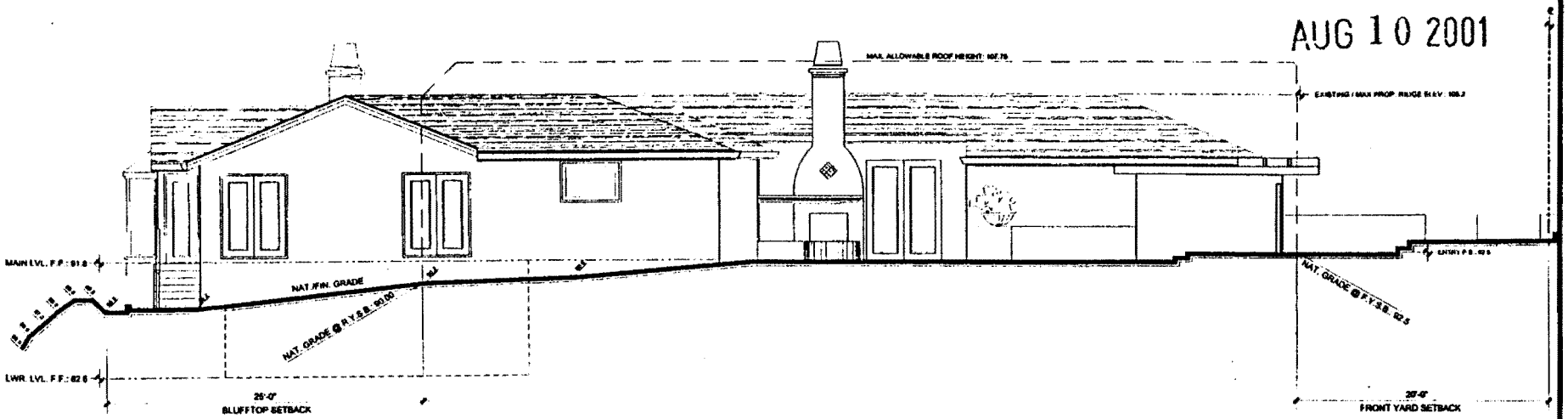
CSY	
DRAWN	
DATE	2/28/01
SCALE	1/4"=1'
JOB NO.	4424
SHEET	A-3

5

SOUTH ELEVATION

SCALE 1/4"=1'

AUG 10 2001



WEST ELEVATION

SCALE 1/4"=1'

NOT FOR CONSTRUCTION

REVISIONS	BY

AMSA

DE LA PENA RESIDENCE
#6 SOUTH LA SENDA
LAGUNA BEACH, CA

DRAWN: GH
CHECKED:
DATE: 2/28/01
SCALE: 1/4"=1'
JOB NO.: 4024
SHEET: A-4

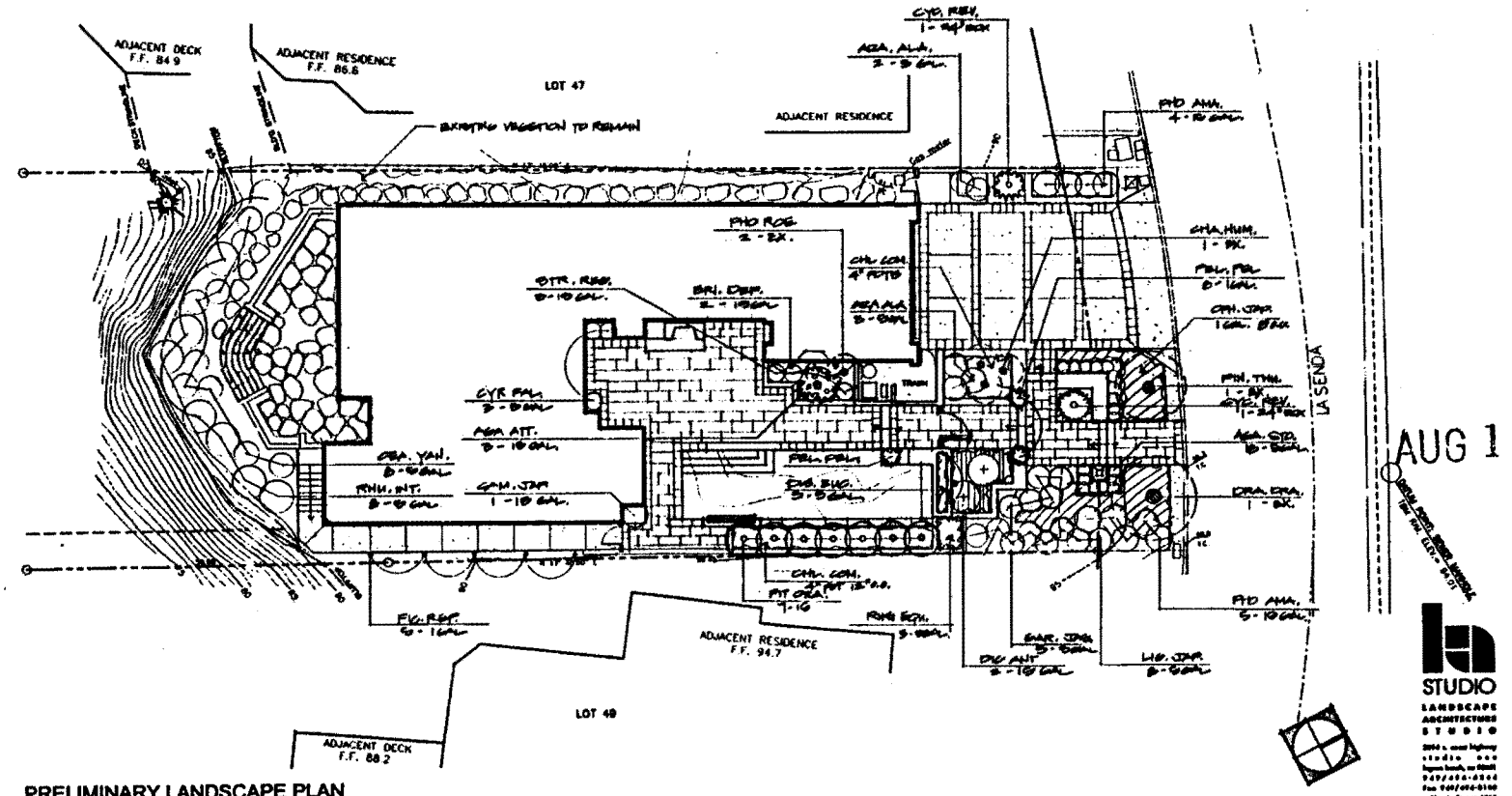
C 10

PLANTING LEGEND

TREES			
CHA HUM	Chamaerops humilis	Mediterranean Fan Palm	Existing to be relocated
DRA DRA	Dracaena draco	Dragon Tree	Existing to remain
PHO ROE	Phoenix roebelenii	Pigmy Date Palm	Existing to be relocated
PIN THU	Pinus Thunbergiana	Japanese Black Pine	Existing to remain
PIT CRA	Pittosporum crassifolium	N.C.N.	6'Wx25'H

SHRUBS			
AGA ATT	Agave attenuata	Soft Agave	3'Wx3'H
AZA ALA	Azalea 'Alaska'	Azalea	3'Wx3'H
CAM JAP	Camellia japonica	Camellia	4'Wx6'H
CYC REV	Cycas revoluta	Sago Palm	4'Wx5'H
CYR FAL	Cyrtomium falcatum	Holly Fern	3'Wx3'H
DIC ANT	Dicksonia antarctica	New Zealand Tree Fern	4'Wx6'H
GAR JAS	Gardenia jasminoides 'Veitchii'	Gardenia	4'Wx4'H
LIG TEX	Ligustrum 'Texanum'	Texas Privet	4'Wx4'H
PHO DAZ	Phormium 'Amazing Red	Hybrid Flax	3'Wx4'H
RHU INT	Rhus integrifolia	Lemonade Berry	
STR REG	Strelitzia reginae	Bird of Paradise	3'Wx3'H

PERENNIALS & GROUNDCOVERS			
AGA STO	Agapanthus 'Storm Cloud'	Lily-of-the-Nile	2'Wx2'H
CEA YAN	Ceanothus 'Yankee Point'	N.C.N.	3'Wx6'W
CHL COM	Chlorophytum Comosum	Spider Plant	6'Wx6'H
LIR BIL	Liriope 'Silvery Sunproof'	Variegated Liriope	1'Wx1'H
OPH JAP	Ophiopogon japonicus	Mondo Grass	6'Wx6"H
PEL PEL	Pelargonium peltatum 'Balcon Lavender'	Ivy Geranium	
RUS EQU	Russelia equisetiformis	Coral Fountain	4'Wx2'H
VINES & ESPALLIERS			
FIC REP	Ficus repens	Creeping Fig	
DIS BUC	Distictus buccinatoria	Blood-Red Trumpet Vine	
ERI DEF	Eriobotrya deflexa 'Copper Tone'	Coppertone	6'Wx6'H
POD GRA	Podocarpus gracilior	Fern Pine	6'Wx6'W



PRELIMINARY LANDSCAPE PLAN

AUG 10 2001

IRRIGATION NOTE:

ALL LANDSCAPE AREAS TO BE IRRIGATED WITH LOW PRECIPITATION HEADS OR DRIP SYSTEM WITH AUTOMATIC CONTROLLER & BACKFLOW DEVICE PER CITY CODES.

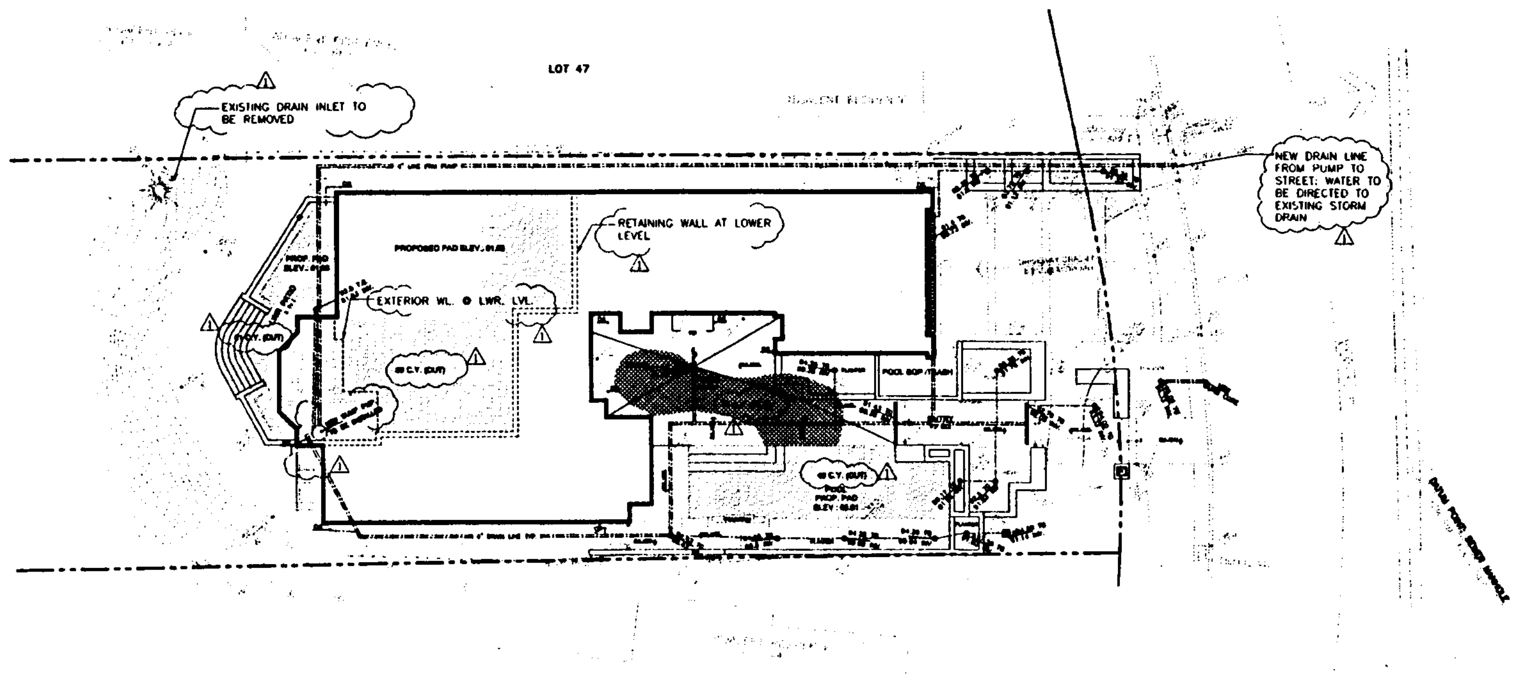
NOT FOR CONSTRUCTION

STUDIO LANDSCAPE ARCHITECTURE STUDIO

DE LA PENA RESIDENCE
#6 SOUTH LA SENDA
LAGUNA BEACH, CA

SCALE 1/8"=1'

L-1



AUG 10 2001

PRELIMINARY GRADING/DRAINAGE PLAN

SCALE: 1/8" = 1'

GRADING LEGEND/NOTES:

AREAS OF GRADING (CUT)

AREAS OF GRADING (FILL)

EXTERIOR EXCAVATION: 110 CUBIC YARDS
INTERIOR EXCAVATION: 69 CUBIC YARDS
TOTAL AMOUNT OF EXCAVATION: 179 CUBIC YARDS
TOTAL AMOUNT OF FILL: 40 CUBIC YARDS

NOTE: EXCESS SOIL THAT CANNOT BE F
USED ON THE SITE SHALL BE EXPORTE
CERTIFIED COUNTY DISPOSAL SITE

NOT FOR CONSTRUCTION

REVISIONS	BY
1 CNTL COMM 8/10/01	CM

MSA

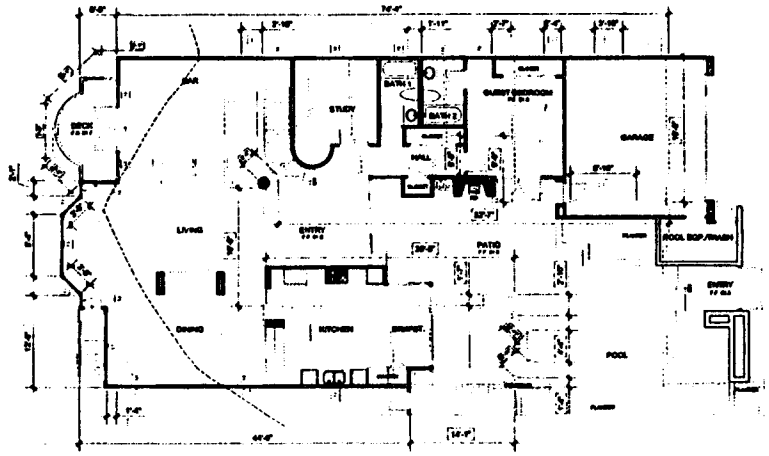
DE LA PENA RESIDENCE
#6 SOUTH LA SENDA
LAGUNA BEACH, CA

DRAWN: CM
DATE: 2/28/01
SCALE: 1/8"=1'
JOB NO. 4424
SHEET
D-1

C11

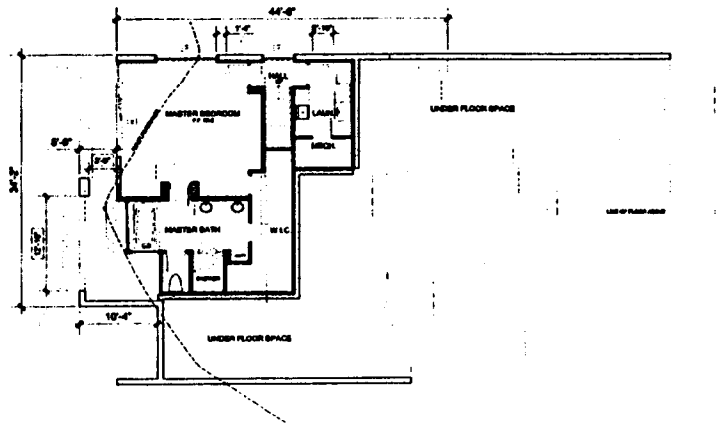
COASTAL COMMISSION
5-01-240
EXHIBIT # D-1
PAGE 1 OF 1

Demo Plan



MAIN LEVEL PROPOSED DEMO PLAN

SCALE 1/8"=1'



LOWER LEVEL PROPOSED DEMO PLAN

SCALE 1/8"=1'

EXISTING LINEAR FOOTAGE @ UPPER LEVEL:	349.42 L.F.
EXISTING LINEAR FOOTAGE @ LOWER LEVEL (EXPOSED WALL):	84.99 L.F.
TOTAL EXISTING LINEAR FOOTAGE (EXCLUDING DETACHED GARAGE):	434.42 L.F.
LINEAR FOOTAGE TO BE REMOVED @ UPPER LEVEL:	192.09 L.F.
LINEAR FOOTAGE TO BE REMOVED @ LOWER LEVEL:	16.50 L.F.
TOTAL LINEAR FOOTAGE TO BE REMOVED (EXCLUDING DETACHED GARAGE):	208.59 L.F.
LINEAR FOOTAGE TO REMAIN @ UPPER LEVEL:	149.42 L.F.
LINEAR FOOTAGE TO BE REMAIN @ LOWER LEVEL:	77.42 L.F.
TOTAL LINEAR FOOTAGE TO BE REMAIN (EXCLUDING DETACHED GARAGE):	226.84 L.F.

PERCENTAGE OF EXTERIOR WALLS TO BE DEMOLISHED: 48% (208.88 /434.42)

PERCENTAGE OF EXTERIOR WALLS TO REMAIN: 52% (226.84/434.42)

KEYNOTE LEGEND:

1. EXISTING OPENING TO BE INFILLED
2. EXISTING OPENING TO BE MAINTAINED
3. NEW OPENING IN EXISTING WALL

DIMENSION LEGEND:

X'-X" DIMENSION OF WALL TO REMAIN

X'-X" DIMENSION OF WALL TO BE REMOVED

WALL LEGEND:

EXISTING TO REMAIN

EXISTING TO BE REMOVED

NEW WALLS

AUG 10 2001

NOT FOR CONSTRUCTION

DE LA PENA RESIDENCE
#6 SOUTH LA SENDA
LAGUNA BEACH, CA

DM-1

COASTAL COMMISSION
5-01-249
EXHIBIT # 1
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Demo Calculations

EXTERIOR WALL LINEAR FOOTAGE CALCULATIONS (INCLUDING DETACHED GARAGE):

EXISTING LINEAR FOOTAGE @ UPPER LEVEL:	340.42 L.F.
EXISTING LINEAR FOOTAGE @ LOWER LEVEL (EXPOSED WALL):	94.00 L.F.
EXISTING LINEAR FOOTAGE @ DETACHED GARAGE:	86.83 L.F.
TOTAL EXISTING LINEAR FOOTAGE (EXCLUDING DETACHED GARAGE):	520.25 L.F.
LINEAR FOOTAGE TO BE REMOVED @ UPPER LEVEL:	192.00 L.F.
LINEAR FOOTAGE TO BE REMOVED @ LOWER LEVEL:	16.58 L.F.
LINEAR FOOTAGE TO BE REMOVED @ DETACHED GARAGE:	85.75 L.F.
TOTAL LINEAR FOOTAGE TO BE REMOVED (EXCLUDING DETACHED GARAGE):	294.33 L.F.

PERCENTAGE OF EXTERIOR WALLS TO BE DEMOLISHED: 57% (294.33 /520.25)

LINEAR FOOTAGE TO REMAIN @ UPPER LEVEL:	148.42 L.F.
LINEAR FOOTAGE TO BE REMAIN @ LOWER LEVEL:	77.42 L.F.
LINEAR FOOTAGE TO BE REMAIN @ GARAGE:	0 L.F.
TOTAL LINEAR FOOTAGE TO BE REMAIN (EXCLUDING DETACHED GARAGE):	225.84 L.F.

PERCENTAGE OF EXTERIOR WALLS TO REMAIN: 43% (225.84/520.25)

EXTERIOR WALL LINEAR FOOTAGE CALCULATIONS (EXCLUDING DETACHED GARAGE):

EXISTING LINEAR FOOTAGE @ UPPER LEVEL:	340.42 L.F.
EXISTING LINEAR FOOTAGE @ LOWER LEVEL (EXPOSED WALL):	94.00 L.F.
TOTAL EXISTING LINEAR FOOTAGE (EXCLUDING DETACHED GARAGE):	434.42 L.F.
LINEAR FOOTAGE TO BE REMOVED @ UPPER LEVEL:	192.00 L.F.
LINEAR FOOTAGE TO BE REMOVED @ LOWER LEVEL:	16.58 L.F.
TOTAL LINEAR FOOTAGE TO BE REMOVED (EXCLUDING DETACHED GARAGE):	208.58 L.F.

PERCENTAGE OF EXTERIOR WALLS TO BE DEMOLISHED: 48% (208.58 /434.42)

LINEAR FOOTAGE TO REMAIN @ UPPER LEVEL:	148.42 L.F.
LINEAR FOOTAGE TO BE REMAIN @ LOWER LEVEL:	77.42 L.F.
TOTAL LINEAR FOOTAGE TO BE REMAIN (EXCLUDING DETACHED GARAGE):	225.84 L.F.

PERCENTAGE OF EXTERIOR WALLS TO REMAIN: 52% (225.84/434.42)

REVISED LINEAR FOOTAGE CLACULATIONS:

MORRIS SKENDERIAN & ASSOCIATES
DE LA PENA RESIDENCE - 96 SOUTH LA SENDA, LAGUNA BEACH
OCTOBER 10, 2001

STATE OF CALIFORNIA—THE RESOURCES AGENCY GRAY DAVIS, *GOVERNOR*

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
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FAX (415) 904- 5400

18 December 2001

GEOTECHNICAL REVIEW MEMORANDUM

To: Meg Vaughn, Coastal Program Analyst
From: Mark Johnsson, Senior Geologist
Re: De La Pena CDP (5-01-240)

In reference to the above application, I have reviewed the following document:

1) Stoney-Miller Consultants, Inc. 2001, "Bluff slope stability analysis and quantitative bluff erosion assessment, 6 La Senda, South Laguna, California, Coastal Development Permit 5-01-240", 3 p. geotechnical letter report dated 14 December 2001 and signed by M. B. Childs (CEG 1664) and H. H. Richter (GE 717).

This report was written in response to questions I raised during my 14 November 2001 visit of the site, and elaborated upon in my memo to you dated 30 November 2001. Since then, I have had additional telephone conversations with Mike Childs, geotechnical consultant for the applicant, who helped clarify some questions I had regarding the manner in which the calculations in reference (1) were prepared.

The slope stability analyses in reference (1) indicate that the bluff is globally stable under both static and seismic conditions. Further, by superimposing an estimated 75-years of erosion, affecting primarily the upper bluff, the analysis shows that the bluff profile to be expected at the end of that period is stable as well. I do note, however, that the high factors of safety quoted in these reports are partly due to an unusually high friction angle reported for the cemented breccias of the lower bluff. The value comes from a test of a rock core collected nearby in Three Arch Bay, reported in an 8 August 1990 letter from the Smith-Emery Company, included in reference (1) as an appendix. It is difficult for me to evaluate the validity of this high friction angle as no shear test diagram is included in the report. Nevertheless, the relatively high compressive strengths that are well documented, together with my knowledge of the San Onofre Breccia in general, and my field observations at this site, in particular, lead me to believe that the bluff at this site is made up of material that is quite strong and for which a high friction angle might be expected.

The aerial photograph analysis conducted as part of a bluff retreat analysis is consistent with this interpretation. Four photos spanning the time period from 1939 to 1970 were analyzed, and La Senda Drive is used as an erosional reference feature. Although several minor slumps were noted, no measurable bluff retreat apparently occurred. The report indicates that in each photo examined "the measured distance from the bluffward edge of La Senda to the bluff edge is 130± feet." Although the analysis did not include the period from 1970 to the present, a period of increased storminess and markedly increased erosion rates on much of the California coast, the bluff edge, as measured from the architectural plans referenced in my memo of 30 November 2001, currently lies between 120 and 140 feet from the bluffward edge of La Senda. Accordingly, the maximum bluff retreat during that period 1970-2001 is 10 feet in 31 years, or 0.32 feet per year. It seems likely that the actual bluff retreat is less

5-01-240 Exhibit F, 1

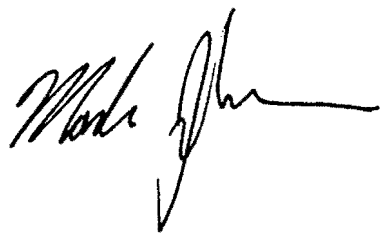
than this, and that the putative 10 feet of erosion in reality is only a discrepancy in the point on the bluff edge used to measure the distance to La Senda.

In summary, this bluff appears to be grossly stable and to have been marked by a rather low bluff retreat rate for the past 60 years; a maximum value may be 0.32 feet per year, but it is quite likely that this value is too high. Nonetheless, minor surficial slumping and erosion, especially of the upper bluff, is to be expected, and will result in gradual retreat of the upper bluff. This may be reduced somewhat if drainage is collected and conveyed away from the bluff edge, as I understand is proposed for this project. Further, the large catastrophic landslides that have occurred approximately ¼ mile to the east indicate that undetected zones of weakness within the bluff could result in the collapse of even this seemingly stable bluff. It would have been very difficult to predict a safe setback zone in the case of the landslides to the east, which affected nearly the entire width of the affected lots. For this site, there are no reasons to predict a similar type of failure, although the possibility cannot be eliminated.

Given the information in the reports referenced in my 30 November memo and this memo, I feel that a minimal setback is appropriate at this site. Generally, the smallest setback appropriate for a dynamic coastal bluff is on the order of 25 feet. This value allows for uncertainty in the prediction of geologic processes into the future, especially in light of sea level rise. I note that the existing structure lies well within 25 feet of the bluff edge.

I hope that this review is useful. Please do not hesitate to contact me if you have any additional questions.

Sincerely,



Mark Johnsson, Ph.D., CEG

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STATE OF CALIFORNIA—THE RESOURCES AGENCY GRAY DAVIS, *GOVERNOR*

CALIFORNIA COASTAL COMMISSION
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415) 904-5400

30 November 2001

GEOTECHNICAL REVIEW MEMORANDUM

To: Meg Vaughn, Coastal Program Analyst
From: Mark Johnsson, Senior Geologist
Re: De La Pena CDP (5-01-240)

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

1) Geofirm 2001, "Preliminary geotechnical investigation for remodel and additions to existing residence, 6 South La Senda, South Laguna, California", 16 p. preliminary geotechnical report dated 23 March 2001 and signed by M. B. Childs (CEG 1664) and H. H. Richter (GE 717).

2) Morris Skendarian and Associates 2001, "De La Pena residence, #6 South La Senda, Laguna Beach, California", 5 p. architectural drawings dated 10 August 2001 and unsigned.

In addition, I visited the site on 14 November 2001 and had the opportunity to discuss the project with Morris Skendarian, project architecht, and Mike Childs, geotechnical consultant for the applicant.

The site is located at the top of a coastal bluff. The existing structure has very little setback. Reference (2) shows a bluff top line that is approximately correct under both the bluff edge definitions of the City of Laguna Beach LCP, and the regulations governing the Coastal Act (CCR Title 14, §13577 (h) (2)). The existing residence extends to within approximately 10 feet of the bluff edge, and ancillary development (patio and railing) extend nearly to the bluff edge. It is my understanding that the proposed residence would maintain the same building footprint in the immediate vicinity (25 feet) of the bluff edge, but will include a new sunken patio in the immediate vicinity of the bluff edge, set back 10 feet from the bluff edge. Proposed grade changes will require excavation and the construction of new retaining walls approximately 7 feet high beneath the structure

Reference (1) provides a useful reconnaissance report of the site and adequately characterizes the geologic materials making up the site. It provides information on geologic setting, seismic environment, soil characteristics and bearing capacity. Recommendations are made that address potential increases in runoff that might occur as a result of a development. Presently, runoff is over the bluff face and might be expected to lead to erosion of the bluff face.

Reference (1) does not, however, contain sufficient information to fully characterize the stability of the coastal bluff, which consists of a seacliff subject to wave attack and an upper bluff susceptible to subaerial erosion. In order to fully assess whether the development would be consistent with section 30253 of the Coastal Act, the following would be helpful:

1) A quantitative slope stability analysis assessing both global and surficial stability of the site under both static and earthquake-loading conditions. While at the site, I discussed an

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