CALIFORNIA COASTAL COMMISSION

South Coast Area Office 200 Oceangate, Suite 1000 Long Beach, CA 90802-4302 (562) 590-5071



July 28, 2008

Th 11a

ADDENDUM

TO: Commissioners and Interested Persons

FROM: South Coast District Staff

SUBJECT: Amendment No. 5-98-307 A1 (Griswold), Item No. Th 11a, Scheduled for Hearing on Thursday, August 7, 2008 in Oceanside, CA.

Attached are two letters objecting to the proposed amendment.

1. The first letter objects to the amendment based on claims that the amendment's request to lower the grading pad will adversely affect the stability of the site and surrounding area, and specifically that the additional grading will adversely affect the previously approved landslide stabilization project that exists across four lots, including the subject site.

The letter states: "We believe that any consultant would agree that removing any quantity of compacted soil at the base of a stabilization wall decreases the existing factor of safety."

The letter also disputes the amount of grading that would be necessary to accomplish the proposed lower pad elevation. The amendment request indicates that 120 cubic yards of cut material will be required to achieve a pad elevation that is 1 $\frac{1}{2}$ feet lower than the proposed pad elevation (from 55 $\frac{1}{2}$ feet to 53 feet). The letter states that in order to lower the pad by 2 $\frac{1}{2}$ feet, a total of 191 cubic yards of cut material would need to be removed.

Finally, the letter indicates that additional independent geotechnical review should be required as a condition of approval of this amendment, as was required in approving the bluff stabilization project (5-97-371, Conrad).

In response to the concern regarding adverse affects on bluff stabilization, the proposed pad elevation of 53 feet is still higher than the pad elevation of the three other lots included in the stabilization project. Those lots range in elevation from 47 feet to 51 feet. Moreover, the bluff stabilization work extends well below the revised pad elevation of 53 feet. The bluff stabilization project was approved as a shoring wall system using concrete rakers, grade beams, and deadman piles (see attached approved stabilization project across four lots. The piles were approved "to be founded ten feet (10') into bedrock

5-98-307-A1 Griswold Addendum Page 2

below the projected failure plane (clay seam)." The grade beam shown on the approved plan is located approximately at elevation 25 feet and is connected to the deadman pile shoring wall by a raker. The grade beam is supported by concrete deadman piles. The pad elevation proposed in the amendment (53 feet elevation) is well above (28 feet above) the elevation depth of the grade beam and significantly well above the depth of the deadman piles of both the grade beam and the shoring wall. The adjacent homes were successfully constructed on pads at elevations lower than the proposed amendment pad elevation. Thus, staff believes that the concern raised in the letter of objection that the proposed lower pad elevation will result in destabilizing the site and surrounding area is not borne out by the facts.

With regard to whether the pad will be lowered by 1 ½ feet or 2 ½ feet is addressed in the staff report as follows:

With the subject amendment request, the applicants propose to modify the previously approved project by lowering the elevation of the building footprint pad by approximately 1 ½ feet, which in turn will lower the finished floor elevation of the residence from 55 ½ feet to 53 feet. To accomplish this, additional grading is proposed: cut material is proposed to be increased by 120 cubic yards.

The applicant's representative has furthered explained the 1 $\frac{1}{2}$ feet versus 2 $\frac{1}{2}$ feet change in pad elevation as follows:

"He is claiming that the description of the modification is inaccurate because the pad is shown to be lowered only 1.5 feet when the building is being lowered 2.5 feet. The description is actually accurate. When the landslide stabilization was completed, the pad was left lower than it would need to be so we would have a place to put the dirt from the caissons when they were drilled. The existing pad elevation will need to be lowered 1.5 feet from its current elevation."

The letter questions whether the amount of grading (120 cubic yards) necessary to accomplish the lowering of the pad grade is accurate, if the lowered pad is actually 2 $\frac{1}{2}$ feet lower, rather than the 1 $\frac{1}{2}$ feet indicated in the project description. Based on the discussion above, it appears that 1 $\frac{1}{2}$ feet is the correct figure for the change in pad elevation. However, even if the correct figure is 2 $\frac{1}{2}$ feet and the amount of excavated material is greater (191 cubic yards), it would not affect the underlying bluff stabilization structure, as that structure is still well below the revised pad elevation. Therefore, staff continues to recommend approval of the proposed amendment as reflected in the staff report.

With regard to the requirement for additional geotechnical review: while it is true that the Commission's approval of the bluff stabilization project did require conformance to the requirements of more than one geotechnical consultant as was appropriate for the more complex bluff stabilization project, the Commission did not impose such a requirement on the three other single family homes approved (and constructed) on the three other lots. On those permits (5-98-020, Conrad; 5-98-064, Barnes; and 5-98-178, McMullen) the Commission required conformance to the recommendations of a single geotechnical

5-98-307-A1 Griswold Addendum Page 3

consultant. The Geotechnical Consultant referenced in the special condition for the permits for the other three homes is the same consultant for the subject site and current amendment request. Moreover, the letter of objection has not provided any geotechnical information to support the claim that the proposed amendment would result in bluff instability. The applicant's geotechnical consultant is a qualified, licensed professional whose work the Commission has accepted in the past. Thus, staff believes that requiring that the project conform to the recommendations of the applicant's geotechnical consultant is adequate.

2. The second letter objects to the amendment due to issues related to drainage, safety and stability, and unpermitted development. The drainage issue referenced in the letter is the drainage associated with coastal development permit 5-97-371 for the bluff stabilization project. As discussed in the amendment staff report (beginning on page 8), "It appears that the bluff stabilization drainage system may not have been constructed as proposed and thus, appears to be inconsistent with the plans approved under 5-97-371." And as stated in the amendment staff report "The residence approved under coastal development permit 5-97-307 does not have a direct impact on the underlying groundwater drainage system approved under 5-97-371. If development has occurred inconsistent with approved coastal development permit 5-97-371, the matter would appropriately be addressed through an enforcement investigation, and does not provide a basis to deny this permit amendment."

The second letter also objects to the amendment based on concerns regarding the safety and stability of the shoring wall. This objection is addressed above, in response to the first letter of objection received.

The letter also objects to the amendment based on concerns regarding unpermitted development. The unpermitted development referenced appears to be "construction of caissons across the [shoring] wall" and "unpermitted drainage to the beach." Caissons were allowed as part of the construction of the bluff stabilization project approved under coastal development permit 5-97-371, so it is not clear what caissons are being referenced. The drainage to the beach referenced in the letter is also part of the bluff stabilization project. As stated above, it appears that the bluff stabilization drainage system may not have been installed as approved. However, both of these issues are related to a separate coastal development permit and not to the subject amendment or its underlying coastal development permit.

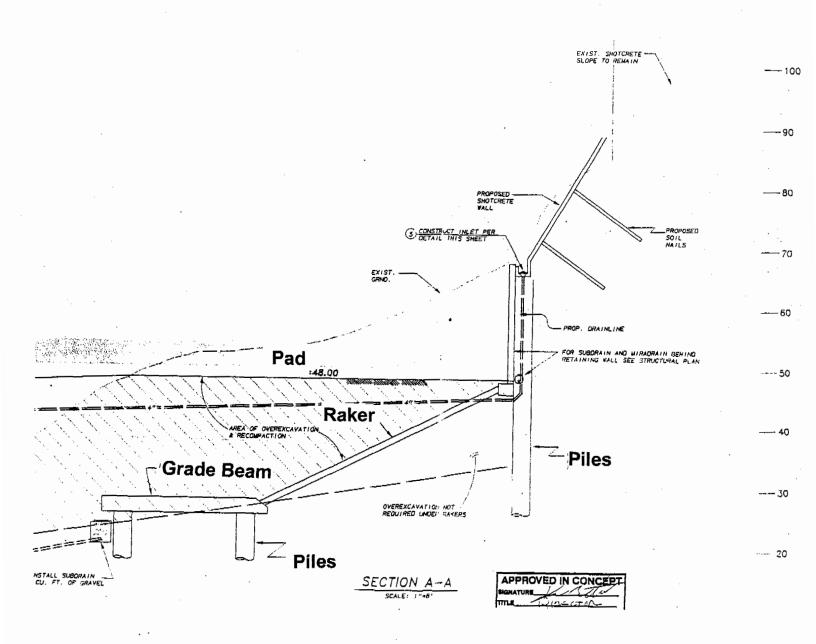
It is important to note that three of the four lots created as part of the bluff stabilization project have been successfully constructed and have been in place for nearly a decade. In addition, there is an approved and issued coastal development permit for a single family residence at the subject site. The proposed amendment only affects the elevation of the graded pad. A pad was already graded in conjunction with the bluff stabilization project. The proposed difference in grade is two feet lower than the originally approved pad elevation. Even at the 53 foot elevation, the pad will still be

5-98-307-A1 Griswold Addendum Page 4

higher than the other three lots that have been successfully developed with single family residences on the other three stabilized lots. Coastal development permit 5-98-307 and the current amendment request are separate actions from the previously approved bluff stabilization project approved under coastal development permit 5-97-371. Therefore, staff continues to recommend approval of the proposed amendment with one special condition requiring adherence to the geotechnical consultant's recommendations.

5-98-307A1 Griswold addendum 8.08 mv

Approved Bluff Stabilization Project 5-97-371 Cross Section at 25 Bay Drive (adjacent to subject site 29 Bay Drive) 25 Bay Drive Approved Pad Elevation = 48 feet 29 Bay Drive Approved Pad Elevation = 53 feet



5-98-307 Al Addendum

July 24, 2008

RECEIVED South Coast Region

JUL 2 8 2008

Agenda No: Th 11a Permit No: 5-98-307-A1 Name: Sid D. Danenhauer Position: NO

California Coastal Commission 200 Oceandate, Suite 1000 Long Beach, CA 90802

CALIFORNIA

Ref: CDP Amendment 5-98-307-A1 Griswold 29 Bay Drive, Laguna Beach

Dear Commissioners:

A Yes vote on this amendment is a vote to weaken a successful landslide stabilization project that was approved nine years ago (CDP 5-97-371).

This property is the middle 60' wide lot of six lots along a 280' oceanfront section of Bay Drive. Over the years before the landslide stabilization was permitted in 1999, four homes on four of these lots were destroyed by landslides. This is an area of extreme geological hazard.

Our home is directly across the street from 29 Bay Drive and we are worried that the development proposed in this amendment will endanger our home, neighboring homes and the adjoining road.

The amended plans show removal of 120 Cubic Yards of compacted soil from the upper building pad at the base, or toe, of the drilled pier and shotcrete wall which stabilizes the road and homes across the street. This clearly reduces the design factor of safety and can contribute to geological instability. Please note that the plans are not accurate. In lowering the finished floor there will be a removal of almost 200 Cubic Yards of compacted soil compared to the original approval:

(Elevation Change = 55.5 - 53 = 2.5') x (Bldg.Footprint = 2067SF) = 5168Cu.Ft. / 27 = 191Cu.Yds.

When the original site stabilization took place (CDP 5-97-371), the Coastal Commission required that developer James Conrad's design not only comply with his expert, Hetherington Engineering; but, that the revised plans also incorporate the recommendations contained in reports from three independent consultants: Ninyo & Moore, Geotechnical Consultants

- 2. Josephson Werdowatz & Associates, Consulting Engineers
- 3. Post, Buckley, Schuh & Jernigan, Civil Engineers

These independent recommendations were incorporated in the final design and the stabilization wall has safely functioned as intended for the past seven years. Now, we have a proposed amendment that removes compacted soil from the toe of a stabilization wall, without any consideration by the independent consultants, which effectively negates the value of their original review.

Mr. Conrad's consultant, Mr. Hetherington, may state that removal of "1.5-feet" of compacted soil "will not have an adverse effect on the stability of the ... stabilization wall;" but, we disagree as "2.5-feet" is being removed from the original design and his conclusion should be confirmed by independent consultants.

We believe that any consultant would agree that removing any quantity of compacted soil at the base of a stabilization wall decreases the existing factor of safety.

We do not believe that we should be exposed to a reduced factor of safety and the risk of geological instability by the Coastal Commission's approval of this amendment. We ask that the Commission delay approval of this amendment until there are accurate plans presented and independent confirmation that we and our property are not at increased risk of slope failure.

Thank you for your consideration.

Sincerely Sid D. Danelaner

Sid D. Danenhauer -5930 Bandini Blvd., Los Angeles, CA 90040 - Ph: 323/727-9800 Enc: Marked Up Hearing Notice, Conrad's Drawing G-1 Pg.14 Staff Report and Hetherington Letter Pg20 Staff Report

PBC/PO/Cnd

CALIFORNIA COASTAL COMMISSION

SQUTH COAST DISTRICT PO Box 1450 200 Oceangate, 10th Floor LONG BEACH, CA 90802-4416 (562) 590-5071 FAX (562) 590-5084





Page: <u>1</u> Date: July 22, 2008

IMPORTANT PUBLIC HEARING NOTICE

PERMIT AMENDMENT

PERMIT NUMBER: 5-98-307-A1

APPLICANT(S): Charles & Valerie Griswold

PROJECT DESCRIPTION

Modify project to lower the approved elevation of the building footprint pad by approximately 1 ½ feet, which in turn would lower the approved finished floor elevation of the residence from 55 ½ foote of feet. To acceptelish this, additional grading is proposed: cut material is proposed to be increased by 120 cubic yards. Fill material is proposed to be increased by 275 yards. Redesign of the roof line is proposed.

PROJECT LOCATION:

29 Bay Dr., South Laguna (Orange County) (APN(s) 0056-180-047)

HEARING DATE AND LOCATION:

DATE: TIME: PLACE: Thursday, August 7, 2008 Meeting begins at 8:00 AM City of Oceanside

ITEM NO: TH11a

NOT ACCURATE

300 North Coast Highway, Oceanside, CA

HEARING PROCEDURES:

This item has been scheduled for a public hearing and vote. People wishing to testify on this matter may appear at the hearing or may present their concerns by letter to the Commission on or before the hearing date. The Coastal Commission is not equipped to receive comments on any official business by electronic mail. Any information relating to official business should be sent to the appropriate Commission office using U.S. Mail or courier service.

AVAILABILITY OF STAFF REPORT

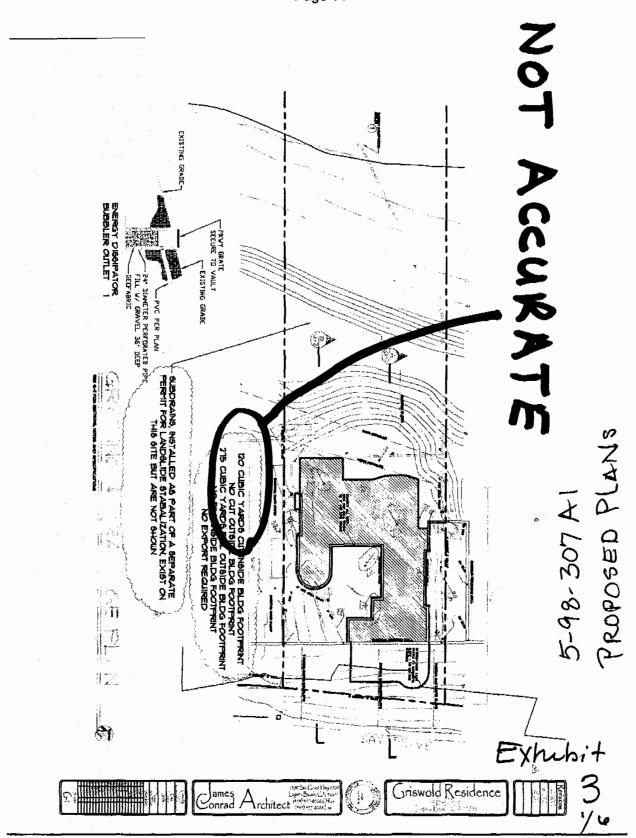
A copy of the staff report on this matter is available on the Coastal Commission's website at <u>http://www.coastal.ca.gov/mtgcurr.html</u>. Alternatively, you may request a paper copy of the report from Meg Vaughn, Coastal Program Analyst, at the South Coast District office.

SUBMISSION OF WRITTEN MATERIALS:

If you wish to submit written materials for review by the Commission, please observe the following suggestions:

• We request that you submit your materials to the Commission staff no later than three working days before the hearing (staff will then distribute your materials to the Commission).

• Mark the agenda number of your item, the application number, your name and your position in favor or opposition to the project on the upper right hand corner of the first page of your submission. If you do not know the agenda number, contact the Commission staff person listed on page 2.



HETHERINGTON ENGINEERING, INC.

SOIL & FOUNDATION ENGINEERING • ENGINEERING GEOLOGY • HYDROGEOLOGY

RECEIVED

South Coast Region

FEB 11 2008

February 4, 2008 Project No. 5709.1 Log No. 12294

COASTAL COMMISSION

5-98-307A1

CURATE

Mr. James Conrad 1550 South Coast Highway, Suite 20 FORSTAL COMMISSION Laguna Beach, California 92651

Subject:

GRADING AND DRAINAGE PLAN REVIEW Proposed Single-Family Residence 29 Bay Drive Three Arch Bay

Laguna Beach, California

References: Attached

Dear Mr. Conrad:

In accordance with your request, we have reviewed the revised "Grading and Drainage Plan..." (Reference 5) for the proposed development as well as various reports/plans from our previous work at the site (References 1 through 4). Based on our review, the following comments are provided:

 Our previous geotechnical investigative work and subsequent observation/testing services during rough grading at the site are described in References 1, 2, and 3. Updated geotechnical recommendations for the processed development at the site are provided in Reference 4 and remain applicable.

2) Review of the "Grading and Drainage Plan..." (Reference 5) for the proposed residence indicates that approximately 1.5-feet (naximum) of cut from the existing "upper" building pad grade is required to establish the proposed upper pad grade. No grading is indicated with the "lower" building pad. As the proposed grading for the residence is set back at least 20-feet from the top of the existing descending fill slope bounding the seaward side of the lower building pad, the proposed grading will not have an adverse effect on the stability of the existing seaward fill slope from a geotechnical standpoint.

3) The lowering of the "upper" building pad described in item 2 above will not have an adverse effect on the stability of the existing drilled pier and shotcrete stabilization wall from a geotechnical standpoint.

5205 Avenida Encinas, Suite A • Carlsbad, CA 92008-4369 • (760) 931-1917 • Fax (760) 931-0545 32242 Paseo Adelanto, Suite C • San Juan Capistrano, CA 92675-3610 • (949) 487-9060 • Fax (949) 487-9116 www.hetheringtonengineering.com 20 Bay Drive Laguna Beach, CA 92651 SeuthK-CoesRegion

July 28, 2008

California Coastal Commission South Coast District 200 Oceangate, 10th Floor Long Beach, CA 90802-4302 JUUL 3

CODASTAL CURRENT I

Ref: CDP 5-98-307-A (Item 11a, August 7, 2008)

Dear Commissioners:

The Griswold project at 29 Bay Drive has a sordid history of noncompliance with previously mandated conditions, unpermitted drainage onto the beach, mosquito-infested drainage runoff from the site, the safety and stability of the shoring wall, and unpermitted construction.

The architect has even admitted that the current drainage plan does not comply with the CCC conditions and previous approval. Per Mr. Conrad's own letter of May 28, 2008 to Ms Meg Vaughn: "We acknowledge that these drainage modifications were never submitted to or approved by the CCC." It is our understanding that the Coastal Act and the <u>CCC exists to prevent exactly this type of behavior</u>, but the Griswolds seem to do what they want regardless of the law.

The CCC now has an enforcement problem with the Griswold property, but their architect is about to create more – due to a lack of approved drainage plan. Why allow this project to proceed when it is about to create additional enforcement problems? Although the staff has indicated that certain conditions must be met, it makes more sense to insist that they comply <u>now</u> in order to preclude additional enforcement issues later.

In a previous letter to the CCC we expressed our concerns regarding the safety and stability of the shoring wall as it relates to the changed grade and the unpermitted construction of caissons across the wall, which have been exposed to the elements for the past five years. Now Mr. Conrad wants to grade the lot below/along the shoring wall.

In order to protect the neighboring property owners and to shield the CCC from potential future liability and the burden of likely enforcement issues, we are asking that: (1) CCC require the site drainage plan modifications be submitted and approved as part of the plan set <u>prior</u> to permit issuance and

(2) CCC require proof of Error and Omission insurance from the architect and require that he carry liability insurance for the life of the project prior to permit issuance and (3) CCC require the property owner to carry a bond in the amount of at least 10 million dollars to protect the integrity of the massive shoring wall, the street, our home, and all of the neighbors (the home next door to 29 Bay recently sold for over 12 million dollars).

Sincerely,

Cray n. Milles

Craig N. Miller

Kattleen Miller

Kathleen Miller

CALIFORNIA COASTAL COMMISSION

South Coast Area Office 200 Oceangate, Suite 1000 Long Beach, CA 90802-4302 (562) 590-5071

Th 11a

 Filed:
 3/20/08

 49th Day:
 5/8/08

 180th Day:
 9/16/08

 Staff:
 Meg Vaughn-LB

 Staff Report:
 7/17/08

 Hearing Date:
 8/6-8/08

 Commission Action:

STAFF REPORT: PERMIT AMENDMENT

AMENDMENT APPLICATION No.:	5-98-307-A1
APPLICANT:	Charles & Valerie Griswold
AGENT:	James Conrad, Architect
PROJECT LOCATION:	29 Bay Drive, (Three Arch Bay), Laguna Beach Orange County.

DESCRIPTION OF PROJECT PREVIOUSLY APPROVED: Construction of a 5,078 square foot, 5 level single family residence with an attached 750 square foot three-car garage and 1,278 square feet of deck area. The residence as approved would step down a vacant, reconstructed, beachfront, bluff lot. The previously approved project also included 12,250 cubic yards of grading.

DESCRIPTION OF AMENDMENT: Modify project to lower the approved elevation of the building footprint pad by approximately 1 ½ feet, which in turn would lower the approved finished floor elevation of the residence from 55 ½ feet to 53 feet. To accomplish this, additional grading is proposed: cut material is proposed to be increased by 120 cubic yards. Fill material is proposed to be increased by 275 yards. Redesign of the roof line is also proposed.

LOCAL APPROVALS RECEIVED: City of Laguna Beach Approval in Concept dated 6/2/08; City of Laguna Beach City Council Approval dated 8/7/07.

SUBSTANTIVE FILE DOCUMENTS: Coastal Development Permit Nos. 5-98-307 (Griswold); 5-97-371 (Conrad); Hetherington Engineering, Inc., letter dated 2/4/08; Geotechnical Update, Proposed Single-Family Residence, 29 Bay Drive, South Laguna Beach, California, by Hetherington Engineering, Inc., dated October 18, 2007; City of Laguna Beach certified Local Coastal Program.

SUMMARY OF STAFF RECOMMENDATION:

Staff is recommending approval of the proposed coastal development permit amendment with two special conditions. Special Condition No. 1 clarifies that all conditions of the previously approved permit remain in effect. Special Condition No. 2 requires that the applicant adhere to the updated geotechnical recommendations.



PROCEDURAL NOTE

The Commission's regulations provide for referral of permit amendment requests to the Commission if:

1) The Executive Director determines that the proposed amendment is a material change,

2) Objection is made to the Executive Director's determination of immateriality, or

3) The proposed amendment affects conditions required for the purpose of protecting a coastal resource or coastal access.

If the applicant or objector so requests, the Commission shall make an independent determination as to whether the proposed amendment is material. 14 Cal. Admin. Code 13166. The Executive Director has determined that the proposed amendment is a material change to the development previously approved, therefore, pursuant to Section 13166 of the Commission's regulations, the Executive Director is referring this application to the Commission.

I. <u>STAFF RECOMMENDATION</u>:

Staff recommends that the Commission adopt the following resolution:

MOTION: I move that the Commission approve the proposed amendment to Coastal Development Permit No. 5-98-307 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF APPROVAL:

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

RESOLUTION TO APPROVE A PERMIT AMENDMENT:

The Commission hereby approves the coastal development permit amendment on the ground that the development as amended and subject to conditions, 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 amendment 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 amended development on the environment, or 2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the amended development on the environment.

II. STANDARD CONDITIONS:

- 1. <u>Notice of Receipt and Acknowledgment.</u> 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. Conditions Imposed Under Original Permit

All regular and special conditions attached to Coastal Development Permit No. 5-98-307 shall remain in effect.

2. <u>Conformance with Geotechnical Recommendations</u>

A. All final design and construction plans, including foundations, grading and drainage plans, shall be consistent with all recommendations contained "Geotechnical Update, Proposed Single-Family Residence, 29 Bay Drive, South Laguna Beach, California," prepared by Hetherington Engineering, Inc., dated October 18, 2007.

B. PRIOR TO 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 the recommendations specified in the above-referenced Geotechnical Update report.

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 unless the Executive Director determines that no amendment is legally required.

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. <u>Previously Approved Project and Description of Proposed Amendment</u>

The subject site is located at 29 Bay Drive, Laguna Beach, Orange County, in the private gated community known as Three Arch Bay. The project originally approved by the Commission allowed construction of a 5,078 square foot, 5 level single family residence with an attached 750 square foot three-car garage and 1,278 square feet of deck area. The residence as approved would step down a vacant, reconstructed, beachfront, bluff face lot. Also included in the approval was 12,250 cubic yards of grading.

The original coastal development permit was approved subject to seven special conditions: 1) assumption of risk; 2) conformance to geotechnical recommendations; 3) conformance to the revised landscaping plan; 4) restrictions on staging and storage of construction materials and equipment; 5) identification of location of disposal site for landslide and construction debris; 6) submittal of and conformance with written plan to minimize water feature impacts; and, 7) requirement to direct site drainage to the street where feasible and where infeasible, direct site drainage to the beach in a non-erosive manner. The special conditions were met and the permit was been issued on October 5, 2004. Eight extension requests have been approved for the permit. Construction has not yet begun.

With the subject amendment request, the applicants propose to modify the previously approved project by lowering the elevation of the building footprint pad by approximately 1 1/2 feet, which in turn will lower the finished floor elevation of the residence from 55 1/2 feet to 53 feet. To accomplish this, additional grading is proposed: cut material is proposed to be increased by 120 cubic yards. Fill material is proposed to be increased by 275 yards. The area of increased fill is limited to the area outside the footprint. The proposed lower building pad will result in a reduction in the overall height of the main portion of the building. However, because the garage height is fixed (it is located at street level and the home cascades down from street level), the lowering of the pad elevation results in a slight increase (approximately two and a half feet) in overall building height (see exhibit 3, elevations). Redesign of the roof line is also proposed. The roof redesign is intended to improve views from nearby residences.

B. Location and Permit History

A related coastal development permit, 5-97-371 (Conrad), was approved by the Commission on August 13, 1998. Coastal Development Permit No. 5-97-371 allowed reconstruction of a slope that failed due to landsliding. The development approved

included construction of a shoring system, overexcavation and recompaction of slide debris to create buttress fill, a buried toe protection wall near the toe of the slope, and installation of drainage devices. Approval also resulted in four lots at the site where, previously, there had been five. The bluff stabilization project and lot reconfiguration has been completed. Three other coastal development permits have been approved for single family residences on three of the four lots (5-98-020, Conrad; 5-98-064, Barnes; 5-98-178, McMullen), all of which have been constructed. The current amendment request concerns the coastal development permit (5-98-307) for a single family residence on the fourth lot.

C. <u>Standard of Review</u>

The City of Laguna Beach Local Coastal Program ("LCP") is effectively certified. However, the subject area is located in an area known as Three Arch Bay, a gated private community located between the first public road (South Coast Highway) and the sea. Three Arch Bay is one of the areas within the City of Laguna Beach's coastal zone that was deferred certification due to public access issues. Therefore, pursuant to Section 30519 of the Coastal Act, the standard of review for the permit approval is the Chapter 3 policies of the Coastal Act. However, the certified LCP may be used for guidance in evaluating the proposed project for consistency with the Chapter 3 policies of the Coastal Act.

D. <u>Geology/Hazards</u>

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.

The subject site is a reconstructed, bluff face, beach front lot. As described earlier, the subject site was included as part of a larger bluff stabilization project (Coastal Development Permit 5-97-371, Conrad). Thus, the proposed changes must be evaluated for their potential to create geologic risk.

In approving the bluff stabilization project (5-97-371), the Commission found: "The proposed bluff repair needs to be carried out in a manner which meets the minimum factor of safety of 1.5 which is required by the City of Laguna Beach and Orange County, regardless of what types of homes, if any, are built on the site. The geotechnical consultant has determined that the proposed project is feasible from a geotechnical standpoint and is able to achieve a minimum factor of safety of 1.5. The proposed project

is beneficial since it reduces slide potential and stabilizes Bay Drive and the adjacent properties." In addition, in approving the underlying permit for the subject site (5-98-307), the Commission found that project, as conditioned (including the imposition of special conditions regarding drainage, landscaping, assumption of risk and conformance to the geotechnical recommendations), was consistent with Section 30253 of the Coastal Act which requires that risks be minimized. To address the proposed change to the approved project (slightly lower building pad grade elevation) the applicant has submitted an update letter from the project geotechnical consultant (Hetherington Engineering, Inc. letter of 2/4/08) which includes the following statements (see exhibit 4):

"Our previous geotechnical investigative work and subsequent observation/testing services during rough grading at the site are described in References 1, 2, and 3. Updated geotechnical recommendations for the proposed development at the site are provided in Reference 4 and remain applicable."

Reference 4 cited in the quote above is the "Geotechnical Update, Proposed Single-Family Residence, 29 Bay Drive, South Laguna Beach, California," by Hetherington Engineering, Inc., dated October 18, 2007 (see exhibit 5). The 10/18/07 Geotechnical Update includes the following conclusion:

"The proposed construction of a custom single-family residence is considered feasible from a geotechnical standpoint. Precise grading and foundation plans should take into account the appropriate geotechnical features of the site. The conclusions and recommendations provided in References 1 and 2 remain generally applicable with minor revisions and are included herein along with seismic parameters for structural design."

The site has previously been found to be suitable for development of the proposed single family residence with incorporation of the geotechnical recommendations. In the process of complying with the special conditions of the original permit, the applicants submitted evidence from the geotechnical consultant indicating that the recommendations contained in References 1 and 2 cited above had been incorporated into the design of the project. However, the 10/18/07 Geotechnical Update includes "minor revisions" to the previous recommendations and was prepared subsequent to issuance of Coastal Development Permit 5-98-307. The recommendations contained in the 10/18/07 Geotechnical Update address seismic parameters for structural design, precise grading, building foundations, retaining walls, trench and retaining wall backfill, concrete flatwork, soluable sulfate, and site drainage. In addition, the 10/18/07 Geotechnical Update recommends "precise grading and foundation plans should be reviewed by the Geotechnical Consultant to confirm conformance with the recommendations presented herein and to modify or provide additional recommendations as necessary."

The 2/4/07 letter from the geotechnical consultant continues:

"Review of the "Grading and Drainage Plan ... " (Reference 5) for the proposed residence indicates that approximately 1.5-feet (maximum) of the cut from the

existing "upper" building pad grade is required to establish the proposed upper pad grade. No grading is indicated within the "lower" building pad. As the proposed grading for the residence is set back at least 20-feet from the top of the existing descending fill slope bounding the seaward side of the lower building pad, the proposed grading will not have an adverse effect on the stability of the existing seaward fill slope from a geotechnical standpoint."

and

"The lowering of the "upper" building pad described in item 2 above will not have an adverse effect on the stability of the existing drilled pier and shotcrete stabilization wall from a geotechnical standpoint."

The geotechnical consultant has found that the proposed change to the approved project will not adversely affect the underlying bluff stabilization project or the stability of the area of the seaward slope, provided the recommendations contained in the geotechnical investigation prepared by the consultant are incorporated into the design and construction of the project. Adherence to the recommendations contained in the above-mentioned geotechnical investigation is necessary to ensure that the proposed project assures stability and structural integrity, and neither creates nor contributes significantly to erosion, geologic instability, or destruction of the site or surrounding area. Therefore, Special Condition 2 requires that the applicant conform to the geotechnical recommendations in the above mentioned Geotechnical Update (prepared by Hetherington Engineering, Inc. and dated 10/18/08). In addition, an assumption of risk deed restriction has already been recorded in conjunction with the original permit. Thus, the proposed change to the approved project, lowering the building pad elevation by 1 ¹/₂ feet is not expected to create significant new risks at the subject site. Therefore, the Commission finds that, as conditioned, the approved development as proposed to be amended can be found to be consistent with Section 30253 of the Coastal Act.

E. <u>Water Quality</u>

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.

1. Subject Site Drainage

In approving the original permit the Commission, found that "As conditioned, the proposed project is consistent with Section 30231 of the Coastal Act." In addition, in approving the original coastal development permit, the Commission imposed Special Condition No. 7 which required drainage to be pumped to the street where feasible and if not feasible that drainage "be appropriately collected and conveyed to the beach in a non-erosive manner and discharged at the base of the bluffs with an energy dissipater at the drain outlet." In complying with the special conditions of the underlying coastal development permit, the applicants submitted a drainage plan consistent with the requirements of Special Condition No. 7. That drainage plan was found to be acceptable and the permit was issued. No changes are proposed to the approved site drainage plan. Thus, the previously approved development was reviewed for the potential of discharge of polluted runoff from the project site. This review included potential impacts from site drainage on water quality and consistency with Section 30231 of the Coastal Act. The proposed amendment makes no changes to the approved drainage and thus the project remains consistent with the Commission's previous finding of consistency with Section 30231 of the Coastal Act regarding protection of water quality. Therefore, the Commission finds that the project as proposed to be amended is consistent with Section 30231 of the Coastal Act.

2. Bluff Stabilization Drainage

The drainage system permitted through coastal development permit 5-97-371 was designed to address drainage of upstream groundwater that runs beneath all four lots created by that permit. The bluff stabilization project included a drainage system to collect and direct the upstream groundwater across the subject site and the three additional lots in a manner intended to avoid future instability. It appears that the bluff stabilization drainage system may not have been constructed as proposed and thus, appears to be inconsistent with the plans approved under 5-97-371. The agent for the current applicant, who was himself the applicant for the underlying bluff stabilization project, has submitted the following response (via a letter dated May 28, 2008 from James Conrad) with regard to the status of the bluff stabilization drainage (see exhibit 6):

"The plan for stabilization of the four contiguous building sites on Bay Drive included a subterranean drainage system. The system was delineated on the landslide stabilization plans approved by the CCC in 1999. The construction was completed in 1999 and 2000. During the construction period, some modifications to the CCC approved drainage system were made. The revisions were requested by the Three Arch Bay Association's community services district (CSD) at the prompting of neighbors. The modifications included the diversion of some of the ground water being disbursed into an existing "creek" on the South end of the properties. Additionally, the drain lines that would have been located under the future homes were moved outside of the building footprints. These modifications were reviewed and approved by the CSD's consulting engineer prior to approval by the CDS." Thus, it appears that the bluff stabilization drain line across the subject site may not have been installed consistent with that approved permit. The above referenced letter continues:

"We acknowledge that these drainage modifications were never submitted to or approved by the CCC. We also understand that the CCC may require that the drainage system be restored to the originally approved design. The approval of the CDP for the Griswold residence and the construction of the Griswold residence will not prevent any future modification to the drainage system that may or may not be required.

The drainage system for the land stabilization system was installed completely outside of the footprint of the proposed Griswold residence. Additionally, the drainage proposed for the Griswold residence is consistent with the drainage approved under their house approval CDP. Any action in connection with the land stabilization permit will not be materially affected by the presence of the Griswold's home. We are requesting that the modifications to the existing CDP for the Griswold's be moved forward in a timely manner."

The residence approved under coastal development permit 5-97-307 does not have a direct impact on the underlying groundwater drainage system approved under 5-97-371. If development has occurred inconsistent with approved coastal development permit 5-97-371, the matter would appropriately be addressed through an enforcement investigation, and does not provide a basis to deny this permit amendment.

Finally, drainage due to runoff from the subject project (as opposed to the groundwater drainage system that was approved in permit 5-97-371) would be incorporated in construction of the subject project and is addressed through special conditions included in the subject permit. The proposed amendment will not alter the requirement of the applicant to conform with the drainage plan required under the previously approved permit. That special condition remains in effect.

F. <u>Visual Resources</u>

Section 30251 of the Coastal Act requires that scenic and visual qualities of coastal areas be considered and protected as a resource of public importance. The subject site is on a bluff face, beach front lot. It is also, however, located within a private, locked gate community. Thus, visual impacts would primarily be as viewed from the sea looking landward. In approving the bluff stabilization permit (5-97-371), the Commission imposed (via a deed restriction) a stringline setback for decks and a stringline setback for enclosed living area for future development on each of the four lots. In approving 5-98-307, the Commission imposed a special condition requiring revised plans indicating the development conforms to the required stringline setbacks. In the process of condition compliance, the applicants have submitted plans that conform to the required setback. The development approved under 5-98-307 is consistent with the approved stringline setbacks. The subject amendment does not propose any new development that would

conflict with the required setbacks. Therefore, the Commission finds that the proposed amendment is consistent with Section 30251 of the Coastal Act with regard to protection of public views.

G. <u>Public Access</u>

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 policies of Chapter 3.

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 on an existing residential lot will not affect the existing public access conditions. It is the locked gate community, not this home that impedes public access. As conditioned, the proposed development will not have any new adverse impact on public access to the coast or to nearby recreational facilities. Thus, as conditioned, the proposed development conforms with Sections 30210 through 30214, Sections 30220 through 30224, and 30252 of the Coastal Act.

H. Local Coastal Program

Section 30604(a) of the Coastal Act provides for the issuance of coastal development permits directly by the Commission in regions where the local government having jurisdiction does not have a certified local coastal program. The permit may only be issued if the Commission finds that the proposed development will not prejudice the ability of the local government to prepare a Local Coastal Program which conforms with 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.

I. <u>Unpermitted Development</u>

Development has occurred on site without benefit of the required coastal development permit. Unpermitted development on the site includes installation of landscaping inconsistent with the approved landscaping plan. The applicant is not proposing to retain the unpermitted landscaping.

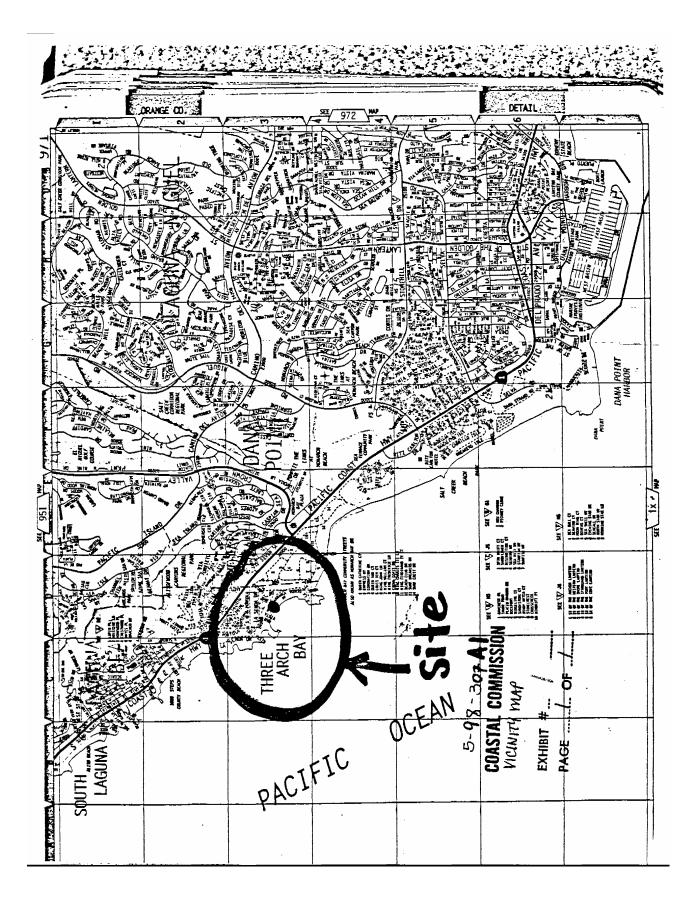
Although unpermitted development has taken place prior to submission of this permit application, consideration of the permit application by the Commission has been based solely on the consistency of the proposed development with the City of Laguna Beach's certified Local Coastal Program and the public access policies of the Coastal Act. Action on this coastal development permit application does not constitute a waiver of any legal action with regard to the alleged unpermitted development, nor does it imply any finding of legality of any development undertaken on the subject site without a coastal development permit.

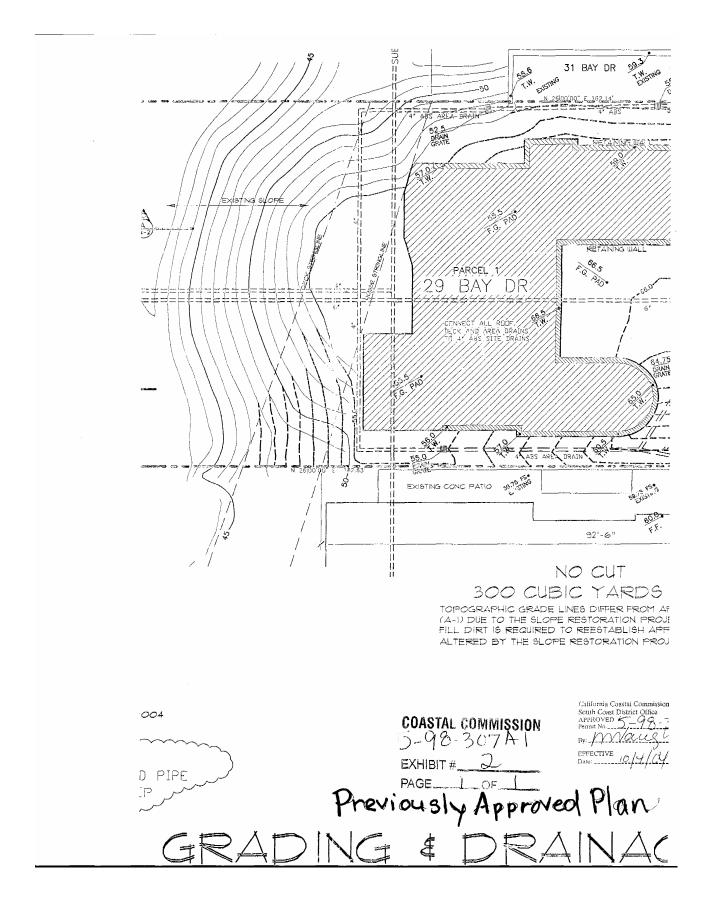
J. <u>California Environmental Quality Act</u>

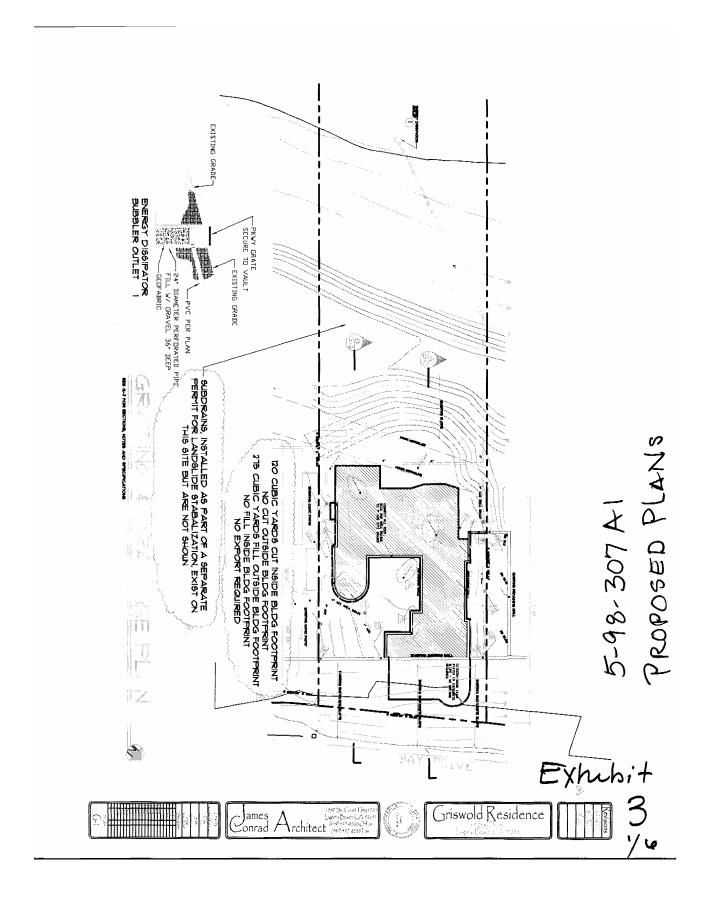
Section 13096 of the Commission's regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality 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.

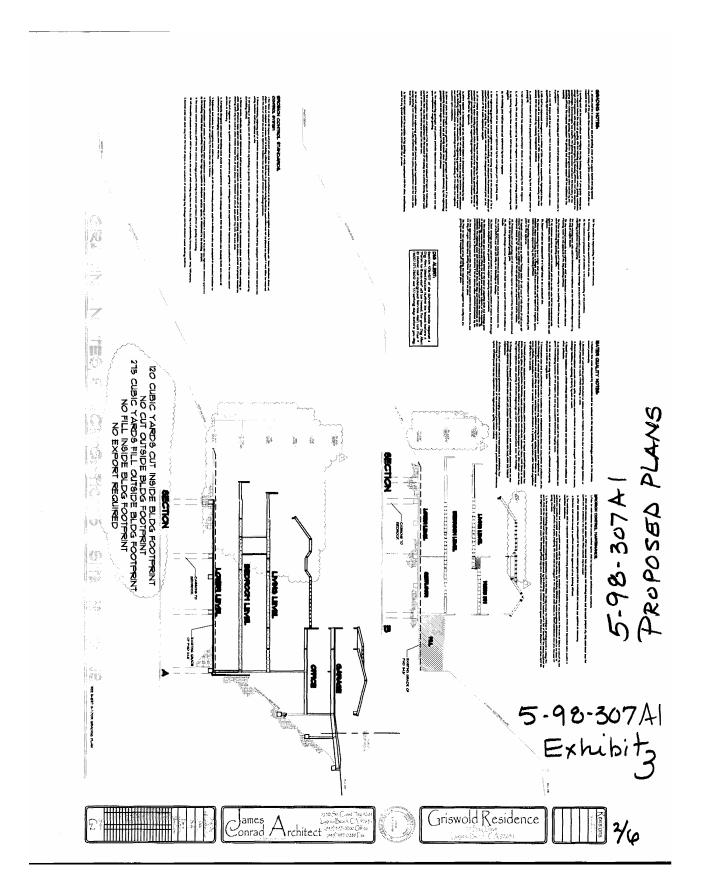
The proposed amendment, as conditioned, has been found consistent with the Chapter 3 policies of the Coastal Act. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on 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.

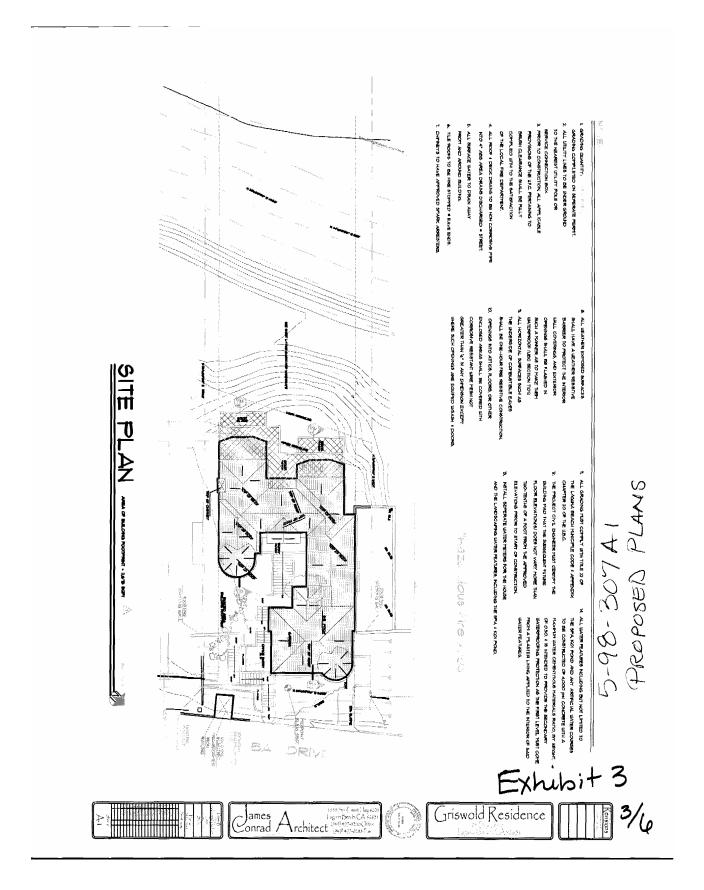
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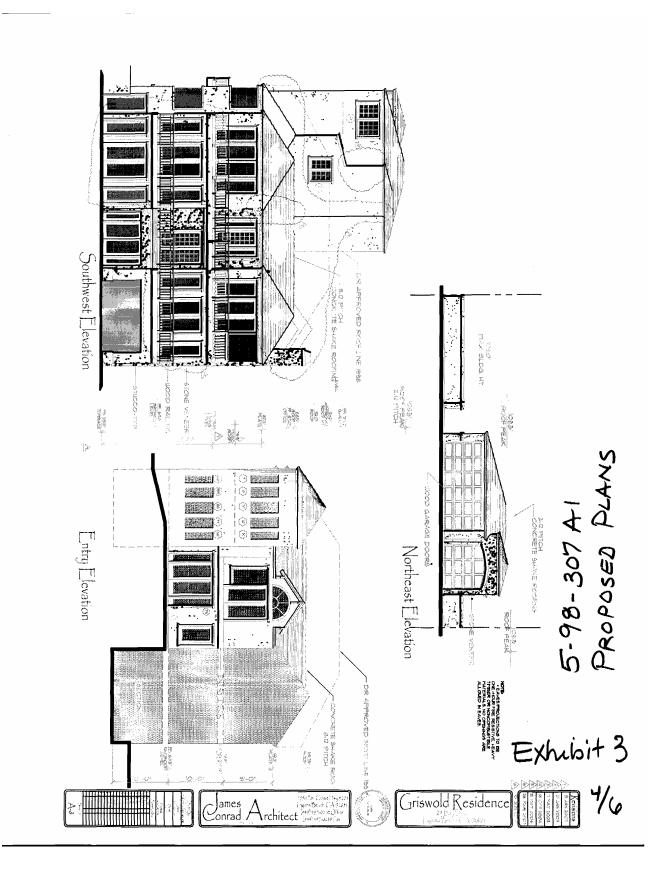


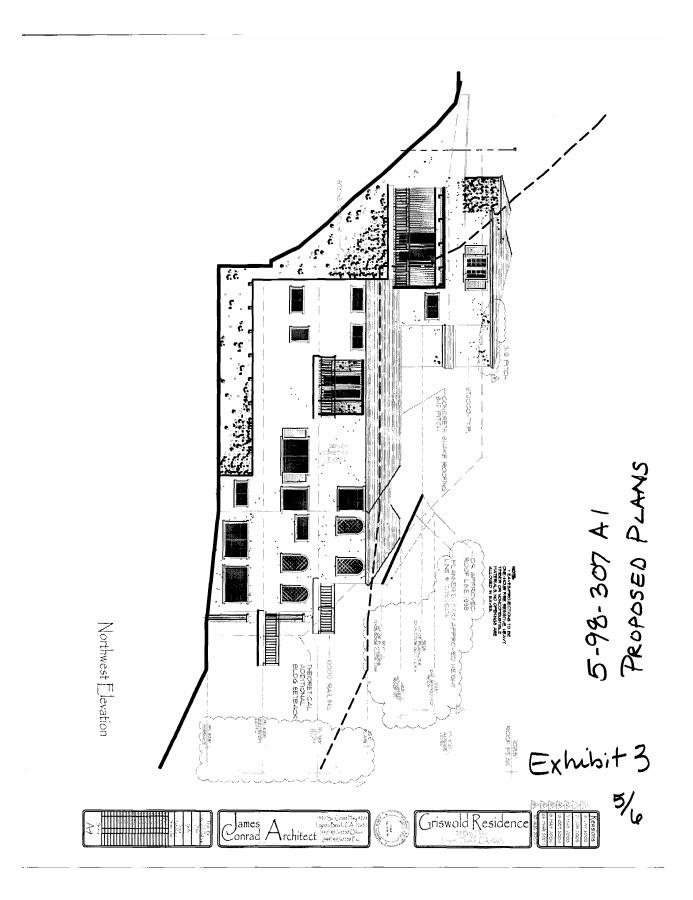


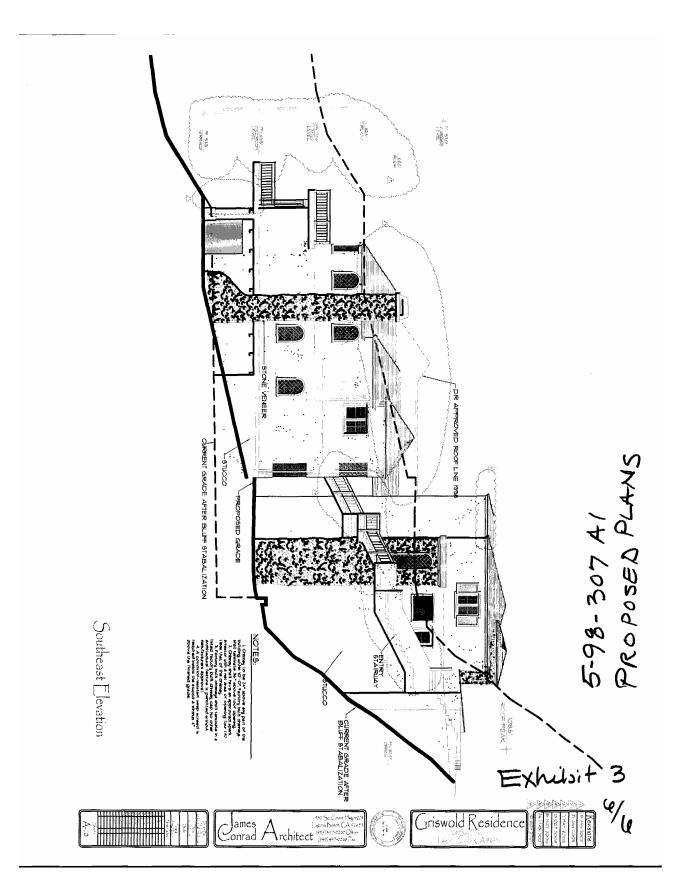












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South Coast Region

FEB 11 2008

February 4, 2008 Project No. 5709.1 Log No. 12294

Mr. James Conrad 1550 South Coast Highway, Suite 201 Laguna Beach, California 92651

Subject:

GRADING AND DRAINAGE PLAN REVIEW Proposed Single-Family Residence 29 Bay Drive Three Arch Bay Laguna Beach, California

COASTAL COMMISSION 5-98-307A EXHIBIT #____4 PAGE 13___OF_3__

References: Attached

Dear Mr. Conrad:

In accordance with your request, we have reviewed the revised "Grading and Drainage Plan..." (Reference 5) for the proposed development as well as various reports/plans from our previous work at the site (References 1 through 4). Based on our review, the following comments are provided:

- Our previous geotechnical investigative work and subsequent observation/testing services during rough grading at the site are described in References 1, 2, and 3. Updated geotechnical recommendations for the proposed development at the site are provided in Reference 4 and remain applicable.
- 2) Review of the "Grading and Drainage Plan..." (Reference 5) for the proposed residence indicates that approximately 1.5-feet (maximum) of cut from the existing "upper" building pad grade is required to establish the proposed upper pad grade. No grading is indicated within the "lower" building pad. As the proposed grading for the residence is set back at least 20-feet from the top of the existing descending fill slope bounding the seaward side of the lower building pad, the proposed grading will not have an adverse effect on the stability of the existing seaward fill slope from a geotechnical standpoint.
- 3) The lowering of the "upper" building pad described in item 2 above will not have an adverse effect on the stability of the existing drilled pier and shotcrete stabilization wall from a geotechnical standpoint.

5205 Avenida Encinas, Suite A • Carlsbad, CA 92008-4369 • (760) 931-1917 • Fax (760) 931-0545 32242 Paseo Adelanto, Suite C • San Juan Capistrano, CA 92675-3610 • (949) 487-9060 • Fax (949) 487-9116 www.hetheringtonengineering.com GRADING AN DDRAINAGE PLAN REVIEW Project No. 5709.1 Log No. 12294 February 4, 2008 Page 2

This opportunity to be of service is appreciated. If you have any questions, please contact our Carlsbad office.

Sincerely,

HETHERINGTON ENGINEERING, INC.

Mark D. Hetherington Registered Civil Engineer 30488

Registered Civil Engineer 30488 Geotechnical Engineer 397 (expires 03/31/08)



MDH/BB/dkw

Distribution: 2-Addressee

1-Ms. Meg Vaughn California Coastal Commission 200 Oceangate Long Beach, California 90802-4416

COASTAL COMMISSION 5-98-307AI EXHIBIT # PAGE 2 OF

REFERENCES

1. "Preliminary Geotechnical Investigation, Proposed Four Lot Residential Development, Lots 26, 27, 28 and 29 of Tract 970, Three Arch Bay, South Laguna Beach, California," by Hetherington Engineering, Inc., dated April 11, 1997.

 "Supplemental Geotechnical Investigation, Proposed Residential Development, Lots 26, 27, 28, 29 and 30 of Tract 970, Three Arch Bay, South Laguna Beach, California," by Hetherington Engineering, Inc., dated January 26, 1998.

 "As-Graded Geotechnical Report, Four Lot Residential Development, Lots 26 and 27 of Tract 970, and Parcels 1 and 2 of LL ADJ., Bay Drive, Three Arch Bay, South Laguna Beach, California," by Hetherington Engineering, Inc., dated January 12, 2001.

"Geotechnical Update, Proposed Single-Family Residence, 29 Bay Drive, South Laguna Beach, California," by Hetherington Engineering, Inc., dated October 18, 2007.

"Grading and Drainage Plan, Griswold Residence, 29 Bay Drive, Laguna Beach, CA," Sheets G-1 and G-2, by James Conrad, Architect, revision dated December 21, 2007.

E-mail Correspondence, "RE: Coastal Commission Approval," from Meg Vaughn to Jim Conrad, dated January 23, 2008.

6.

COASTAL COMMISSION 50 PAGE Log No. 12294 Project No. 5709.1

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South Coast Region

JUL 1 1 2008

October 18, 2007 Project No. 5709.1 Log No. 12043

Mr. James Conrad 1550 South Coast Highway, Suite 201 Laguna Beach, California 92651

Subject:

GEOTECHNICAL UPDATE Proposed Single-Family Residence 29 Bay Drive Three Arch Bay South Laguna Beach, California

COASTAL COMMISSION 5-99-307 AI EXHIBIT #___5

References: Attached

Dear Mr. Conrad:

In accordance with your request, we have performed a geotechnical update for the subject site. The scope of services for this geotechnical update included a site reconnaissance and review of the referenced documents. We have not been provided with recent architectural or structural plans for the project at this time. Our previous geotechnical investigative work and subsequent observation/testing services during rough grading at the site are described in References 1, 2, and 3.

SITE DESCRIPTION

The site is located at 29 Bay Drive, in the private community of Three Arch Bay, Laguna Beach, California, and is further identified as Parcel 1 of LL ADJ 97-7. The lot was previously rough graded in 1999 through 2000 (Reference 3) and consists of a split level building pad that is separated from Bay Drive by an approximate 45-feet high drilled pier/rock anchor supported shotcrete retaining wall and separated from the beach by an approximate 30 to 35-feet high seaward descending 2:1 (horizontal to vertical) fill slope and buried toe wall.

The lot is currently undeveloped but has been thoroughly landscaped with lawn and planter areas, and a variably high (approximate 11-feet high maximum) segmental retaining wall extends out from the southwest corner of the residence at 25 Bay Drive and approximately 15-feet onto 29 Bay Drive. Steel reinforcing associated with four drilled

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piers, previously constructed seaward of the curb of Bay Drive for support of a proposed driveway, exist along the northeast property boundary.

GEOLOGIC CONDITIONS

Geologic conditions beneath the subject lot have been described in the "As-Graded Geotechnical Report, Four Lot Residential Development..." (Reference 3). In general, the site is underlain by up to approximately 34-feet of compacted fill, which is in turn underlain by middle Miocene marine sedimentary bedrock assigned to the San Onofre Breccia. Subsequent to the preparation of References 1 and 2, the postulated San Joaquin Hills Blind Thrust fault (Model by Grant, et al, 1999), has been classified as a Type B active fault by the California Geological Survey, and reportedly extends from offshore to beneath the Laguna Beach area at a depth of approximately 3.7-miles (Reference 11).

As discussed in References 3 and 4, any improvements located seaward of a 2:1 (horizontal to vertical) projection extended up and into the property from the top of the "Buried Toe Wall" are considered to be in a non-structural fill area and may be subject to future loss of support without special geotechnical design.

PROPOSED DEVELOPMENT

We understand that a multi-level single-family residence is currently proposed for the site. We anticipate that wood/steel frame construction founded on a drilled pier/grade beam system will be utilized, and anticipate that building loads will be typical for this type of relatively light construction. Precise grading is expected to consist of relatively minor cut/fills along with retaining wall backfill.

CONCLUSIONS AND RECOMMENDATIONS

1. General

Our site reconnaissance performed on October 2, 2007 indicates that the property is in generally the same condition as at the conclusion of rough grading with the exception of the segmental wall constructed as part of 25 Bay Drive and the significant landscaping of the lot and seaward slope.

The proposed construction of a custom single-family residence is considered feasible from a geotechnical standpoint. Precise grading and foundation plans should take into account the appropriate geotechnical features of the site. The conclusions and recommendations provided in References 1 and 2 remain generally applicable with

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minor revisions and are included herein along with seismic parameters for structural design.

2. Seismic Parameters for Structural Design

Seismic considerations that should be used for structural design at the site include the following:

- a. <u>Ground Motion</u> The proposed structure should be designed and constructed to resist the effects of seismic ground motions as provided in Chapter 16, Division IV-Earthquake Design of the 2001 California Building Code (CBC). The basis for the design is dependent on and considers seismic zoning, site characteristics, occupancy, configuration, structural system and building height.
- b. <u>Soil Profile Type</u> In accordance with CBC Section 1629.3.1, Table 16-J, and the underlying geologic conditions, a site Soil Profile of Type S_D is considered appropriate for the subject property.
- c. <u>Seismic Zone</u> In accordance with CBC Section 1629.4.1 and Figure 16-2, the subject site is situated within Seismic Zone 4.
- d. <u>Seismic Zone Factor (z)</u> A Seismic Zone Factor of 0.40 is assigned based on CBC Table 16-I. Since the site is within Seismic Zone 4, CBC Section 1629.4.2 requires a Seismic Source Type and Near Source Factor.
- e. <u>Near-Source Factor (Na and Nv)</u> Based on the known active faults in the region and distance of the faults from the site, a Seismic Source Type of B per CBC Table 16-U, and Near Source Factors of Na = 1.2 per Table 16-S and Nv = 1.47 per Table 16-T are provided.
- f. <u>Seismic Coefficients (Ca and Cv)</u> Using the Soil Profile Type and Seismic Zone Factor along with CBC Tables 16-Q and 16-R, the Seismic Coefficients Ca = 0.44 (Na) and Cv = 0.64 (Nv) are provided, or Ca = 0.53 and Cv = 0.94.
- 3. Precise Grading

Prior to precise grading, the area of proposed development should be cleared of surface obstructions, vegetation and debris; and the materials should be disposed of offsite. Any loose or disturbed existing fill soils should be removed down to approved compacted fill and replaced as compacted fill.

Following overexcavation of unsuitable existing fill, the exposed compacted fill should be scarified to a depth of 6 to 8-inches, brought to near optimum moisture

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conditions, and compacted to at least 90-percent relative compaction (ASTM: D 1557-02).

All fill placed should be compacted to a minimum relative compaction of 90-percent of the maximum density based upon ASTM: D 1557-02. Fill should be compacted by mechanical means in horizontal, uniformly thick 6 to 8-inch lifts.

All grading should be observed and tested by the Geotechnical Consultant.

4. Building Foundation Recommendations

The proposed residential structure may be supported by drilled concrete piers extending through the compacted fill and founded at depth in the underlying bedrock. The Architect, Structural Engineer, and Contractor(s) should be aware of the numerous subdrain pipes, and foundation elements associated with the shotcrete wall, that exists at depth within the confines of the lot (see Reference 3). The compacted fill beneath the anticipated building portion of the lot is approximately 34-feet thick.

Drilled piers should extend at least 10-feet into bedrock and provide a minimum horizontal clearance of 30-feet from the face of the slope to the outer edge of the bearing surface. Drilled piers should have a minimum diameter of 24-inches. Drilled piers founded as recommended may be designed for a dead-plus-live-load end bearing capacity of 6000-pounds-per-square-foot. This value may be increased by one-third for wind and seismic forces. A skin friction value of 500-pounds-per-square-foot may be assumed between bedrock and concrete.

Lateral loads may be resisted by a passive pressure of 300-pounds-per-square-foot per foot of depth for compacted fill and 600-pounds-per-square-foot per foot of depth for bedrock to a maximum value of 6000-pounds-per-square-foot. The passive resistance may be calculated over two pier diameters. The point of fixity should be considered the fill/bedrock contact.

Drilled piers should be observed by the Geotechnical Consultant prior to placement of reinforcement and concrete.

Difficult drilling and localized groundwater seepage should be anticipated during the excavation for the drilled piers, with some coring in cemented bedrock possible. Drilled pier excavations made landward of the building and within the area of the shotcrete wall may also experience some caving conditions within the terrace

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Ex.54

deposits, with casing of the shafts possible. Placement of concrete in the drilled pier shafts using a tremie, where groundwater is present, should also be anticipated.

5. <u>Retaining Walls</u>

Retaining walls free to rotate (cantilevered walls) should be designed for an active pressure of 45-pounds-per-cubic-foot (equivalent fluid pressure), assuming level backfill consisting of on-site soils. Walls restrained from movement at the top should be designed for an additional uniform soils pressure of 8xH pounds per square foot where H is the height of the wall in feet. Any additional surcharge pressures behind the wall should be added to these values. Retaining wall footings should be designed in accordance with the previous building foundation recommendations. Retaining walls should be provided with adequate drainage to prevent buildup of hydrostatic pressure and should be adequately waterproofed. The subdrain system behind retaining walls should consist of at least a 4-inch diameter Schedule 40 (or equivalent) perforated (perforations "down") PVC pipe embedded in at least 1-cubicfoot of 3/4 inch crushed rock per lineal foot of pipe all wrapped in approved filter fabric. Other subdrain systems that may be contemplated for use behind the retaining walls due to the ultimate wall designs and construction methodology will be addressed on a case by case basis. Recommendations for wall waterproofing should be provided by the Project Architect and/or Structural Engineer.

6. Trench and Retaining Wall Backfill

All trench and retaining wall backfill should be compacted to at least 90 percent relative compaction and tested by the Geotechnical Consultant.

7. Concrete Flatwork

Concrete slab-on-grade patio areas or walkways should be at least 4-inches thick (actual), reinforced with No. 3 bars placed at 18-inches on center (both directions) and placed on chairs so that the reinforcement is in the center of the slab. Slab subgrade should be thoroughly moistened prior to placement of concrete. Contraction joints should be provided at 8 feet spacings (maximum).

8. Soluble Sulfate

Due to the close proximity of the site to the ocean, concrete in contact with the onsite soils should be considered to have a "moderate" sulfate exposure and should be

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designed in accordance with Table 19-A-4-Requirements for Concrete Exposed to Sulfate-Containing Solutions of the 2001 California Building Code.

9. Site Drainage

The following recommendations are intended to minimize the potential adverse effects of water on the structures and appurtenances. Surface drainage should be addressed by the project Architect and/or Civil Engineer.

- a) Consideration should be given to providing the structure with roof gutters and downspouts connected to tight line discharge systems.
- b) All site drainage should be directed away from the structure and slope areas. Surface drainage should not be allowed to saturate or flow over the slope, pond along the structure or pond behind retaining walls.
- c) No landscaping should be allowed against foundations. Moisture accumulation or watering adjacent to foundations can result in deterioration of wood/stucco and may affect footing performance.
- d) Irrigated areas should not be over-watered. Irrigation should be limited to that required to maintain the vegetation. Additionally, automatic systems should be seasonally adjusted to minimize over-saturation potential particularly in the winter (rainy) season.
- e) All slope, yard, and roof drains should be periodically checked to verify they are not blocked and flow properly.

10. Precise Grading and Foundation Plan Review

Precise grading and foundation plans should be reviewed by the Geotechnical Consultant to confirm conformance with the recommendations presented herein and to modify or provide additional recommendations as necessary.

5-98-307 AI Ex. 56

This opportunity to be of service is appreciated. If you have any questions, please contact our Carlsbad office.

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No. 397

OFCA

xp. Date

Sincerely,

HETHERINGTON ENGINEERING, INC.

randa G. B. ka FESSIONA Brandon A. Boka Registered Civil Engine

Professional Geologist 5913 Certified Engineering Geologist 1966 expires 03/31/08) NGINEERIN

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(expires 03/31/08)

Distribution: 4-Addresse

Mark D. Hetherington

Geotechnical Engineer 397

5-98-307A1 Ex. 5,

REFERENCES

- 1. "Preliminary Geotechnical Investigation, Proposed Four Lot Residential Development, Lots 26, 27, 28 and 29 of Tract 970, Three Arch Bay, South Laguna Beach, California," by Hetherington Engineering, Inc., dated April 11, 1997.
- "Supplemental Geotechnical Investigation, Proposed Residential Development, Lots 26, 27, 28, 29 and 30 of Tract 970, Three Arch Bay, South Laguna Beach, California," by Hetherington Engineering, Inc., dated January 26, 1998.
- "As-Graded Geotechnical Report, Four Lot Residential Development, Lots 26 and 27 of Tract 970, and Parcels 1 and 2 of LL ADJ., Bay Drive, Three Arch Bay, South Laguna Beach, California," by Hetherington Engineering, Inc., dated January 12, 2001.
- 4. "Sewer Connection Plan, 23, 25, 29, and 31 Bay Drive, Laguna Beach, California," by Hetherington Engineering, Inc., dated June 7, 2001.
- 5. "Storm Drain Connection Plan, 23, 25, 29, and 31 Bay Drive, Laguna Beach, California," by Hetherington Engineering, Inc., dated August 20, 2001.
- 6. "Proposed Segmental Retaining Wall, 25 Bay Drive, Laguna Beach, California," by Hetherington Engineering, Inc., dated February 7, 2002.
- 7. "Verdura 40 Wall, Joiner Residence, 29 Bay Drive, Laguna Beach, California," by Southern California Geotechnical, Inc., dated February 28, 2002.
- 8. "Proposed Segmental Retaining Wall, 25 Bay Drive, Laguna Beach, California," by Hetherington Engineering, Inc., dated March 25, 2002.
- 9. "Proposed Lawn and Landscape Area, Vacant Residential Lot 29 Bay Drive, Laguna Beach, California," by Hetherington Engineering, Inc., dated September 4, 2002.
- 10. "Seismic Hazard Zone Report for the Laguna Beach 7.5 Minute Quadrangle, Orange County, California," Seismic Hazard Zone Report 013, by California Division of Mines and Geology, Revision dated 2001.
- 11. "The Revised 2002 California Probabilistic Seismic Hazard Maps," by Cao, Tianqing, and Bryant, William A., et al., dated June 2003.

5-98-307AI

Ex. 5

HETHERINGTON ENGINEERING, INC.

Log No. 12043 Project No. 5709.1

James Conrad, Architects

1550 S. Coast Hwy. Suite 201 Laguna Beach, CA 92651 Phone (949) 497-0200 Fax (949) 497-0288 South Coast Region

UN _ 6 2008

May 28, 2008

Ms. Meg Vaughn California Coastal Commission 200 Oceangate, Suite 1000 Long Beach, CA 90802-4302

RE: The Griswold Residence located at 29 Bay Drive.

Dear Meg,

Thank you for meeting with us today to discuss the issues related to getting approval for the revisions to the Griswold residence. Per you request, I will address the drainage issue that has been raised by a neighbor at the CDP extension hearing for the Griswold's home.

Site Drainage

The plan for stabilization of the four contiguous building sites on Bay Drive included a subterranean drainage system. The system was delineated on the landslide stabilization plans approved by the CCC in 1999. The construction was completed in 1999 and 2000. During the construction period, some modifications to the CCC approved drainage system were made. The revisions were requested by the Three Arch Bay Association's community services district (CSD) at the prompting of neighbors. The modifications included the diversion of some of the ground water being disbursed into an existing "creek " on the South end of the properties. Additionally, the drain lines that would have been located under the future homes were moved outside of the building footprints. These modifications were reviewed and approved by the CSD's consulting engineer prior to approval by the CSD.

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We acknowledge that these drainage modifications were never submitted to or approved by the CCC. We also understand that the CCC may require that the drainage system be restored to the originally approved design. The approval of the CDP for the Griswold residence and the construction of the Griswold residence will not prevent any future modification to the drainage system that may or may not be required.

The drainage system for the land stabilization system was installed completely outside of the footprint of the proposed Griswold residence. Additionally, the drainage proposed for the griswold residence is consistent with the drainage approved under their house approval CDP. Any action in connection with the land stabilization permit will not be materially affected by the presence of the Griswold's home. We are requesting that the modifications to the existing CDP for the Griswold's be moved forward in a timely manner.

Thank you for your consideration.

Sincerely, James Conrad, Architect CC: Mr. Chuck Griswold

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