

CALIFORNIA COASTAL COMMISSION

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

**RECORD PACKET COPY**

Filed: January 6, 1999
49th Day: February 5, 1999
180th Day: July 5, 1999
Staff: SFR-LB
Staff Report: January 14, 1999
Hearing Date: February 2-5, 1999
Commission Action:

**STAFF REPORT: REGULAR CALENDAR**

APPLICATION NO.: 5-98-469

APPLICANT: Richard and Melody Ferber **AGENT:** Group Delta Consultants, Inc.

PROJECT LOCATION: 1454 Galaxy Drive, City of Newport Beach, County of Orange

PROJECT DESCRIPTION: Backyard slope repair and bluff stability improvements following a bluff failure by installing a seventy-five foot long subterranean grade beam wall and anchor system plus a seventy-five foot long by eighteen foot high retaining wall (at its highest point) within the eastern property line. Seven hundred cubic yards of grading is proposed (of which 300 cubic yards will be import) for purposes of re-establishing the backyard.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends approval of a modified project with nine special conditions. The major issue of this staff report is development on a bluff-top adjacent to an ecological reserve. The proposed development consists of slope stabilization and reconstruction of a backyard following a bluff failure. Staff recommends that the proposed retaining wall (for purposes of restoring the applicant's backyard) be deleted from the project as the retaining wall is not necessary for slope stabilization and would have an adverse impact on public views from the Upper Newport Bay Ecological Reserve. The grade beam wall provides the required slope stabilization. Though the proposed grade beam provides slope stabilization on the applicant's property it does not resolve the potential for future bluff failures. To develop a comprehensive solution the applicant and the Department of Fish and Game, the adjacent property owner, should initiate discussions to develop a comprehensive plan to fully repair and stabilize the slope damaged by this slide that took place on December 16, 1997.

Special conditions contained in this staff report concern: assumption of risk, conformance with the geological recommendations, elimination of the retaining wall, implementation of a landscaping plan, that the grade beam wall match the color and texture of the surrounding terrain, right of entry authorization, imposition of best management practices, that the applicant contact the Department of Fish and Game to develop a comprehensive slope repair and stabilization, and future development. The applicant has indicated general agreement with the special conditions, but may request revisions of the "prior to issuance" requirement at the public hearing.

LOCAL APPROVALS RECEIVED: Approval in Concept 2608-98 from the City of Newport Beach.

SUBSTANTIVE FILE DOCUMENTS: City of Newport Beach certified Land Use Plan. Geotechnical Investigation titled *"Geotechnical Report Restoration and Slope Repair, 1454 Galaxy Drive, Newport Beach, California"* by Group Delta Consultants, Inc. dated November 2, 1998, *"Report of Landslide Investigation, Rear Yard and Natural Bluff Below Lot 72 and Lot 73 1454 Galaxy Drive, Upper Back Bay Area, Newport Beach, California"* by Converse Consultants dated May 14, 1998, *"Draft Geotechnical Report of Bluff Slope Failure Investigation, 1448 Galaxy, Newport Beach, California"* by Zeiser Kling Consultants, Inc. dated November 2, 1998, Coastal Commission permits 5-85-062 (Braman), 5-93-308 (Pope Trust), 5-93-367 (Rushton), 5-98-188 (Lewis), Emergency Permit 4-98-497 Penfil and Emergency Permit 5-98-524 (Penfil), and CDP application 5-98-524 (Penfil)

STAFF RECOMMENDATION:

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, located between the nearest public roadway and the shoreline, will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976 including the public access and recreation policies of Chapter 3, 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 construction 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 construction has not commenced, the permit will expire two years from the date on which the Commission voted on the application, or in the case of administrative permits, the date on which the permit is reported to the Commission. Construction shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All construction must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director of the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. Special Conditions.

1. ASSUMPTION OF RISK DEED RESTRICTION

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 shall provide: (a) that the applicant understands that the site may be subject to extraordinary hazards from hillside instability and erosion and the applicant assumes the liability from such hazards; and b) the applicant unconditionally waives any claim of liability on the part of the Commission and agrees to indemnify and hold harmless the Commission, its officers, agents, and employees relative to the Commission's approval of the project for any damage

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

2. REVISED PLANS

Prior to issuance of the coastal development permit, the applicant shall submit for the review and approval of the Executive Director revised plans which show that the retaining wall and the footing for the retaining wall have been deleted from the project.

3. CONFORMANCE WITH GEOTECHNICAL RECOMMENDATIONS

Prior to issuance of the coastal development permit, the applicant shall submit for the review and approval of the Executive Director:

- a) final revised plans. These plans shall include the signed statement of the geotechnical consultant certifying that the project plans incorporate the geotechnical recommendations contained in the geotechnical investigation titled "*Geotechnical Report Restoration and Slope Repair, 1454 Galaxy Drive, Newport Beach, California*" (Project No. 1862-EC01) by Group Delta Consultants, Inc. dated November 2, 1998 into the final design as modified by special condition number 2 (above) for the proposed development.

The approved development shall be constructed in compliance with the final plans as approved by the Executive Director. Any deviations from the plans shall require a Coastal Commission approved amendment to this permit, or written concurrence from the Executive Director that the deviation is not substantial and therefore a permit amendment is not needed.

4. LANDSCAPING PLAN

Prior to issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, a landscaping plan which has been reviewed and signed by a licensed landscape architect. The landscaping plan shall incorporate the following criteria:

- a) The backyard area from the property line landward to the project daylight line as shown in the grading plan shall be planted and maintained for erosion control, screening, and visual enhancement. To minimize the need for irrigation and to reduce potential erosion and slope failure, the landscaping within this area shall consist of native plants similar to that found on existing hillsides in the vicinity or deep rooted non-native plants which are drought

tolerant and non-invasive. Invasive, non-indigenous plant species which tend to supplant native species shall not be used.

- b) All graded areas shall be stabilized with planting at the completion of the project. Planting shall follow accepted planting procedures adequate to provide 70% coverage within one year, and shall be repeated, if necessary, to provide such coverage.
- c) No permanent irrigation system shall be allowed within the backyard area from the property line landward to the project daylight line as shown in the grading plan. Temporary irrigation to allow the establishment of the plantings is allowed.
- d) The landscaping plan shall show all the existing backyard vegetation and any existing irrigation system.
- e) The applicant shall submit written evidence from the California Department of Fish and Game (Department) demonstrating that the Department has approved the landscaping plan.

The landscaping plan shall be carried out as approved by the Executive Director.

5. RIGHT OF ENTRY AUTHORIZATION

This coastal development permit 5-98-469 approves only the development within the property lines of 1454 Galaxy Drive in the City of Newport Beach. In the event that the applicant must utilize property located outside of his property lines for purposes of conducting work within his property lines, the applicant shall submit, for the review and approval, written confirmation from the affected landowner that the applicant has the legal right to enter the affected property before conducting any such work.

This permit does not authorize any development on the Upper Newport Bay Ecological Reserve. Should entry onto the Ecological Reserve result in any damage to the slope or the vegetation, the applicant shall expeditiously apply for a coastal development permit to undertake restoration.

6. BEST MANAGEMENT PRACTICES

The applicant shall implement best management practices, such as sandbags, during construction to control erosion and to minimize the potential for silt to be transported into the Ecological Reserve and wetland below the project site.

No debris shall be discarded anywhere on the Upper Newport Bay Ecological Reserve and all debris shall be removed from the project site upon completion of the project.

7. GRADE BEAM WALL DESIGN

Prior to issuance of the coastal development permit, the applicant shall submit for the review and approval of the Executive Director final plans for the grade beam wall. To minimize the visual impact of manmade structures on the natural bluff, the grade beam wall shall blend in with the color and texture of the surrounding terrain.

8. FUTURE DEVELOPMENT

This coastal development permit 5-98-469 approves only the development, as expressly described and conditioned herein, for the construction of a grade beam wall and anchor tieback system plus landscaping at 1454 Galaxy Drive. Any future development, including but not limited to rear yard landscaping, shall require a coastal development permit or an amendment to this permit from the Coastal Commission.

9. COMPREHENSIVE SLOPE STABILIZATION PLAN

Prior to issuance of this permit, the applicant shall submit for the review and approval of the Executive Director written evidence that he has contacted the California Department of Fish and Game to initiate planning for a comprehensive design to repair the slope damage adjacent to the project site.

V. Findings and Declarations.

The Commission hereby finds and declares as follows:

A. Project Description and Location

The proposed project is located at 1454 Galaxy Drive in the City of Newport Beach, County of Orange (Exhibits 1,2, & 3). Galaxy Drive is located on a bluff above Upper Newport Bay and the Upper Newport Bay Ecological Reserve. The residence is on the bayside side of Galaxy Drive, hence, the subject site is located between the nearest public roadway and the shoreline of Upper Newport Bay. The bluff is geotechnically active and has been prone to failure. The Commission has issued at least four coastal development permits for slope repairs on Galaxy Drive.

On December 16, 1997 a bluff failure occurred which affected the project site. The project proposes backyard slope repair and bluff stability improvements consisting of the installation of a seventy-five foot long subterranean grade beam wall and anchor system plus a seventy-five foot long by eighteen foot high retaining wall (at its highest point in the center) within the eastern property lines. Seven

hundred cubic yards of grading is proposed (of which 300 cubic yards will be import) for purposes of re-establishing the backyard (Exhibit 4).

The applicant also applied for an emergency permit. However, based on the information submitted by the geotechnical consultants, the Executive Director determined that the residence was not in immediate danger which required action more quickly than permitted by the procedures for regular permits. Therefore, an emergency permit was not issued (Exhibit 10).

B. Prior Commission Permits on Galaxy Drive

5-85-062 (Braman) at 1942 Galaxy Drive: This was an Administrative Permit issued by the Executive Director. The Commission concurred with the Executive Director's determination on March 13, 1985. The proposed project consisted of stabilization of earth and bluff beneath and immediately adjacent to a single family residence overlooking Upper Newport Bay. Special conditions included an assumption of risk deed restriction, requirements to control runoff and reduce erosion, the replanting of all graded areas with native plants, and conformance with the geotechnical recommendations.

5-93-308 (Pope Trust) at 1818 Galaxy Drive: The Commission approved this permit at its September 1993 hearing. The proposed project consisted of demolition of an existing damaged patio slab of approximately 1028 square feet, installation of eight caissons, and replacement with a new patio of approximately the same size in approximately the same location as the existing patio, construction of a drain down the bluff face and storm drain outlet, and a boundary line adjustment. Special conditions imposed included the submission of the final property boundary lines, permission from the Department of Fish and Game to perform development on the Ecological Reserve, Department of Fish and Game approval of the restoration plan to restore the vegetation impacted by the project, the removal of all debris following completion of the project, the requirement that mechanized equipment can not be used on the bluff face, and conformance with the geotechnical recommendations.

5-93-367 (Rushton) at 2000 Galaxy Drive: The Commission approved this permit at its March 1994 hearing. The proposed project consisted of bluff stabilization and repair including 528 cubic yards of grading, installation of 12 caissons and construction of a retaining wall. The retaining wall and caissons were originally proposed on the ecological reserve and not on the property owned by the applicant. However, the Commission required that the caissons and retaining wall be relocated onto the applicant's property. Special conditions imposed included the submission of a landscaping plan approved by the California Department of Fish and Game, and conformance with the geotechnical recommendations. One requirement of the

geotechnical recommendation was that the retaining wall could not be more than four feet above finished grade. The purpose of this requirement was to minimize the visual impact of a large retaining wall as seen from the Ecological Reserve. The landscaping plan applies to the bluff face.

5-94-288 (Lewis) at 1730 Galaxy Drive: The Commission approved this permit at its February 1995 hearing. The proposed project consisted of the installation of ten caisson for purposes of bluff stabilization with a three foot high wrought iron fence on top of the bluff and a six inch high concrete curb along the bluffward edge of an existing patio. One special condition was imposed requiring that an amendment or a new permit be obtained for any future development.

5-98-240-G (Patton) at 1472 Galaxy Drive: The Executive Director issued this emergency permit on July 21, 1998. This emergency permit was reported to the Commission at its August 1998 Commission meeting. The project under this emergency permit was for the installation of a blufftop stabilization system consisting of 17 pilings with 30 foot long tieback anchors located under the building pad. A retaining wall was not proposed under the emergency permit. The follow-up regular coastal development permit has not yet been received pending the completion of the construction drawings (Exhibit 3).

5-98-497-G and 5-98-524-G (Penfil) at 1448 Galaxy Drive: The Executive Director issued these two emergency permits in December 1998. The property under these two emergency permits is next to this project site (Exhibit 3). These emergency permits were reported to the Commission at its January 1999 Commission meeting. The project under these emergency permits consists of the installation of caissons within and the applicants property along the eastern property line and the removal of an existing gazebo that encroaches onto the Ecological Reserve. Special conditions imposed required the use of best management practices to minimize the migration of silt into the Ecological Reserve, that the caisson be approved by the geotechnical consultant in their new location, that the caissons would not have off-site impacts, and that any disturbed areas be revegetated with non-invasive, primarily native, drought tolerant plants. The follow-up regular coastal development permit application was received on December 30, 1998. When the staff recommendation and report has been prepared it will be submitted for Commission action.

The applicant also applied for an emergency permit. Though emergency permits were issued to the Penfil (the next door neighbor to the applicant), an emergency permit was not granted to the applicant. The Executive Director issued emergency permits because the residence at 1448 Galaxy Drive was in immediate danger. The thrust of the slide is towards the Penfil residence. The geotechnical consultants noted that *"slow but ongoing movement affecting the rear yard as evidenced by*

damaged flatwork and subsidence of lawn area, it is our opinion that the failure is an immediate threat to the Penfil property and residence." (Zeiser Kling Consultants, Inc. letter of December 23, 1998). Furthermore, the City of Newport Beach had red-tagged the residence at 1448 Galaxy stating in a letter of December 22, 1998 to Commission staff that: *"we have declared it unsafe for occupancy, which certainly indicates the possibility of collapse should future slope deterioration occur"* (Exhibit 12).

C. Geologic Hazards

The subject site is developed with a single family residence and is on a coastal bluff overlooking Upper Newport Bay. Consequently the bluff on which the lot is located is subject to failure due to water induced erosion from rainfall, irrigation, and tidal action. According to the geotechnical report prepared by Converse the landslide was the result of unsupported bedding planes, over-steepened portions of the bluff below the Ferber's property, ongoing erosion along the lower portion of the bluff, and infiltration of direct rainfall into the soils mantling the slope.

Concerning bluff stability in the general vicinity of the project site; in 1978 Commission staff noted through a working paper for the San Diego County Regional Coastal Wetlands Workshop (July 20 and 21, 1978) that: *"The slopes of the western shore of Newport are slumping into the bay quite rapidly. The main cause of this is the irrigation of lawns in urban areas on the bluffs above Upper Bay. This irrigation has altered the water table which in turn has decreased the stability of the bluffs."*

The Commission has issued at least four coastal development permits for slope repair or stabilization along Galaxy Drive. The number of permit applications for bluff stabilization and bluff repairs on Galaxy Drive demonstrates that this bluff overlooking Upper Newport Bay is geotechnically active. Development of coastal bluffs is inherently risky, Section 30253 of the Coastal Act states, in relevant part:

New development shall:

- (1) *Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (2) *Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The proposed development was subject to two site specific geotechnical investigations. The first report was prepared by Converse Consultants and is dated

May 14, 1998. The second report was prepared by Group Delta and is dated November 2, 1998. Group Delta in summarizing the cause of the landslide generally agrees with **the Converse** findings that the slide resulted from: unsupported bedding planes, **over-steepened** portion of the bluff below the Ferber property, ongoing erosion **along the lower portion** of the bluff, and infiltration of direct rainfall onto the **soils mantling the slope**. Further, the Group Delta report noted that the current **slope failure** included a cross-bedding failure at the toe, and that the eastern face of the **slope** would continue to erode, which would lead to recurring landslides in the future. Group Delta, though they are in general agreement with the conclusions and opinions of Converse, believe that the factor of safety is currently less than 1.5. To improve the factor of safety, Group Delta proposes a tied-back anchor system to stabilize the bluff at the applicant's eastern property line. Group Delta concluded that **the proposed slope repair and restoration** would restore the slope to an equal or greater factor of safety than that which existed prior to the failure.

Though the Group Delta report concludes that the project can be undertaken, the geotechnical consultants have made recommendations which must be complied with by the applicant to assure that the project will minimize risks to life and property, and will assure structural integrity. Recommendations made by the geotechnical consultants relate to: 1) reducing water infiltration, 2) landscaping, 3) the installation of a tied-back anchor and retaining wall system, and 4) managing surface drainage.

The geotechnical report prepared by Group Delta recommends that landscaping be installed to mitigate potential erosion and that it be consistent with the existing landscaping. A landscaping plan has not been submitted which implements this geological recommendation. Therefore, the Commission finds it necessary to impose a special condition to require that a landscaping plan be submitted for the review and approval of the Executive Director. The landscaping, to minimize the potential for future bluff failure, shall be prepared by a licensed landscape architect and shall incorporate the following criteria: 1) to minimize the introduction of water into the slope, no irrigation shall be allowed from the eastern property line landward to the daylight line shown in the grading plan, temporary irrigation to establish the plantings may be allowed; and 2) landscaping shall consist of native or deep rooted drought tolerant non-native plants which are non-invasive. Invasive, non-indigenous plant species which tend to supplant native species shall not be used. The landscaping plan shall also show the existing backyard plants and irrigation system. Through this special condition, one of the contributing factors to bluff failure, the introduction of ground water, will be minimized.

Although adherence to the geological consultant's recommendations will minimize the risk of damage, the risk is not eliminated entirely. The geotechnical report

prepared by Group Delta concludes: *"The likelihood of future failures at the subject site is primarily a function of slope saturation and off-site stability. The proposed slope repair does not address the current stability of the non-repaired slopes off the project site."* Therefore the standard waiver of liability condition has also been attached as a special condition. By this means, the applicant is notified that the lot is in an area that is potentially subject to slope failure which could damage the applicant's property. The applicant is also notified that the Commission is not liable for such damage as a result of approving the permit for development. In addition, the condition insures that future owners of the property will be informed of the risks and the Commission's immunity of liability. This special condition was imposed on development located at 1492 Galaxy Drive under coastal development permit 5-85-062 (Braman).

As noted above, the proposed slope repair does not address the current stability of the non-repaired slope off the project site. The geotechnical report prepared by Group Delta goes on to state that: *"The majority of the landslide area is located within the California Department of Fish and Game's property in the Upper Newport Bay Ecological Reserve."* Converse in their geotechnical evaluation stated that: *"The eastern face of the slope, in our opinion will continue to erode leading to recurring landslides in the future."* The Commission's engineer has reviewed the plans and found that: *"The anchored wall will provide stability for the current slope conditions. If there is continued failure in the future, the anchored portion may have to be continued down the face of the bluff. There is nothing in the current design of the anchored wall that would prevent further extension of the anchoring in the future. Also, there is nothing in the design that would prevent continued failures of the bluff. The bulk of the slide is on Fish and Game Property and full slope stabilization would require some work at the base of the slide (a buttress fill, a retaining system, etc.) to prevent continued movement"* Consequently, the proposed project will stabilize the applicant's property, but it will not provide a comprehensive solution since the landslide is also contained on the adjacent bluff face.

To provide effective slope repair and stabilization through a comprehensive solution the Commission finds that the applicant and the Department of Fish and Game should work together. First, if a comprehensive solution is not developed, continued slope failures will again threaten the residence and ecological damage will continue to the Upper Newport Bay Ecological Reserve. Therefore, the Commission is imposing a special condition which requires that prior to issuance of this permit that the applicant contact the California Department of Fish and Game to initiate the process for developing a comprehensive solution to repair the off-site slide and to stabilize the slope.

Second, the proposed retaining wall is not a necessary component for stabilizing the slope. Slope stability is provided by the grade beam wall. The purpose of the retaining wall is to approximately restore the applicant's rear yard to its condition preceding the slide. Since a comprehensive solution including the off-site slide has not been proposed, it is unknown at this time, if a retaining wall would be compatible with such a solution. Alternatives to a retaining wall exist. If the off-site slide is repaired it would be possible to cover the grade beam wall with soil and reestablish vegetation on the slope so that it is restored approximately to its natural condition. Further, if a retaining wall is permitted at this time, and the slope failure expands an even larger, more visually obtrusive, retaining wall may have to be constructed in the future. Therefore, the Commission finds, through the imposition of a special condition, that the proposed retaining wall shall be deleted from the project and that revised final plans be submitted for the review and approval of the Executive Director.

Since the coastal bluffs adjacent to Galaxy Drive are active, future development adjacent to the bluffs could have an adverse impact on bluff stability if not properly evaluated. For this reason, the Commission is imposing a special condition which states that any future development or additions on the property, including but not limited to hardscape improvements, grading, landscaping, vegetation removal and structural improvements, requires a coastal development permit from the Commission or its successor agency. This condition ensures that any future development on coastal bluffs which may affect the stability of the bluff and residential structures receives review by the Commission. The Commission imposed an informational future improvements special condition for development occurring at 1730 Galaxy Drive under coastal development permit 5-94-288 (Lewis).

The plans submitted with the application have been prepared by the geotechnical consulting firm. The plans, however, have not been certified as incorporating the recommendations of the geotechnical report prepared by Group Delta Consultants dated November 2, 1998 (Project Number 1862-EC01). Furthermore, the Commission has required, through a special condition, that the retaining wall be deleted from the project. Consequently, the design of the proposed structures must be reviewed by a geotechnical firm to assure that the project will incorporate all the recommendations contained in the geotechnical report prepared by Group Delta and the Commission's deletion of the retaining wall to assure that the project minimizes risks to life and property. To ensure that the geotechnical consultants' recommendations are instituted and the retaining wall is deleted, it is necessary to impose a special condition requiring compliance of the project plans as modified by the Commission with the recommendations made by the geotechnical consultants. Accordingly, the applicant must submit, for the review and approval of the Executive Director, plans (grading, drainage, and foundation) signed by a certified

geotechnical engineer which incorporates the recommendations made by Group Delta in their November 2, 1998 geotechnical investigation and which eliminate the retaining wall.

Therefore, the Commission finds that the proposed project, as conditioned, for: an assumption of risk deed restriction, future improvements, elimination of the retaining wall, the implementation of a landscaping plan, that the applicant initiate discussions with the California Department of Fish and Game to develop a comprehensive solution, and conformance with the geotechnical recommendations would be consistent with Section 30253 of the Coastal Act regarding hazards.

D. Environmentally Sensitive Habitat Areas

The project site is immediately adjacent to the Upper Newport Bay Ecological Reserve managed by the California Department of Fish and Game. The Ecological reserve is a 752 acre wetland habitat sanctuary. In 1968 the California State Legislature authorized the Fish and Game Commission to establish ecological reserves for the purpose of protecting rare and endangered wildlife, aquatic organisms, and critical habitat. Upper Newport Bay was established for the principal purpose of preserving and enhancing a saltwater marsh ecosystem. Section 30240 of the Coastal Act states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Upper Newport Bay (Bay) is one of the last major estuarine habitats remaining in a near natural condition in southern California. The Department of Fish and Game notes that the Bay is ecologically valuable due to the fact that it supports many resident and migratory birds; many species of plants and animals; and that the Bay is a nursery for numerous marine organisms. The Upper Newport Bay Regional Park, Existing Conditions Report (May 30, 1990) identifies a total of 22 natural communities within Upper Newport Bay. Furthermore, the Bay is an important recreation area and supports nature study, bird watching, and fishing. According to the Los Angeles Times (Monday, July 22, 1996) over two million persons per year visit the Ecological Reserve. Thus, the Ecological Reserve is an important coastal visitor destination because of its ecological value and for its recreational benefits such as open space, and bird watching. Human activity, in the form of increasing urban development adjacent to the Ecological Reserve has had significant adverse

effects on the Bay. Major adverse effects include increased sediment flowing into the Bay, the elimination of natural vegetation, and the elimination of habitat adjoining the Bay.

Concerning ESHA degradation, Commission staff noted in a working paper for the San Diego County Regional Coastal Wetlands Workshop (July 20 and 21, 1978) that: *"Excessive sedimentation is probably the biggest problem facing Upper Newport. The lack of proper watershed management and in particular poor grading practices have accelerated erosion and sediment transport. This process is endangering ecological habitats."* As re-emphasis of sedimentation as a problem, the Los Angeles Times (April 6, 1992) wrote that urban development adjacent to Upper Newport Bay has caused silt to flow into the Bay. The Bay is dredged on an on-going basis to remove accumulated sediments (coastal development permit 5-97-071 (County of Orange)).

Maintaining the Bay's biological productivity and ESHA values is a critical concern since estuaries are one of the most productive areas of the world. Tidal action allows acres of saltwater, spreading over mudflats to reach sunlight and air. This stimulates the growth of algae and plankton that begins the food chain essential to wildlife and commercial ocean fishing. Coastal mudflats support seventy percent of the birds using the Pacific Flyway. Birds known to frequent the Ecological Reserve include the light-footed clapper rail and Beldings Savannah sparrow, Brown Pelican, California least tern. The intertidal mud flats support cordgrass, pickleweed, jaumea and the endangered salt marsh bird's beak. Some ocean dwelling fish such as the California halibut and barred sandbass use Upper Newport Bay for spawning and as a nursery.

Vegetation patterns in the watershed has been altered considerably by human activity. These changes have resulted from agricultural use, increasing urbanization, commercial development, and industrial development. Undeveloped areas still contain arid scrub vegetation that is typical of southern California. According the Upper Newport Bay Regional Park, Existing Conditions Report (May 30, 1990) exotic species, both plant and animal have invaded Upper Newport Bay. These include non-native grassland species which are infiltrating native habitat such as wild oats, barely, fennel, and artichoke thistle. Introduced birds include English sparrows and rock doves. Introduced mammals include the house mouse and Virginia opossum.

To assure that development on property adjacent to Ecological Reserve is consistent with Section 30240 of the Coastal Act, the Commission finds that the applicant shall prepare a landscaping plan which shall be submitted for the review and approval of the Executive Director. To minimize the potential for the introduction of non-native invasive species and to minimize the potential for future

bluff failure, a landscaping plan shall be prepared by a licensed landscape architect and shall incorporate the following criteria: 1) to minimize the introduction of water into the slope, no irrigation shall be allowed from the eastern property line landward to the daylight line shown in the grading plan, temporary irrigation to establish the plantings may be allowed; and 2) landscaping shall consist of native or deep rooted drought tolerant non-native plants which are non-invasive. Invasive, non-indigenous plant species which tend to supplant native species shall not be used. The landscaping plan shall also show the existing backyard plants and irrigation system. Through this special condition the Commission finds that the project is consistent with Section 30240 of the Coastal Act which requires that development adjoining environmentally sensitive habitat areas and parks and recreation areas shall be designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas.

E. Visual Impacts

The proposed development consists the construction of a retaining wall on a failed coastal bluff. The retaining wall, as proposed, would be approximately 18 feet high in its center (highest point) and would be approximately 75' long. The portions of the retaining wall that would be exposed would adversely change the visual character of the natural bluff through the introduction of a manmade structure when viewed by the public from the Ecological Reserve. Section 30251 of the Coastal Act states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, 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.

Upper Newport Bay and the bluffs surrounding it constitute a scenic coastal area. As proposed the project will significantly adversely impact the scenic coastal views from the Ecological Reserve. The geotechnical section of this staff report also notes that the proposed project as submitted will not prevent future slides and that the future slides may result in an even larger manmade structure on the bluff face in the future. The proposed retaining wall would not be compatible with the character of the surrounding area as the bluff as part of the Ecological Reserve is meant to be preserved in its natural form and the project with a highly visible retaining wall would not restore the bluff to its pre-existing condition.

Therefore, the Commissions finds that, as proposed, the project with an 18 foot high retaining wall is not consistent with Section 30251 of the Coastal Act since it will not protect public views from the Ecological Reserve and would be a significant landform alteration not compatible with the character of the surrounding area.

However, if the project is modified to require that the proposed grade beam wall be screened through vegetation and textured and colorized to match the surrounding terrain the project can be found consistent with Section 30251 of the Coastal Act regarding the protection of scenic resources and compatibility with the character of the surrounding area. The grade beam wall will be laid back into the slope and can be screened thereby minimizing its adverse visual impacts. Therefore, the Commission is imposing a special condition (number 7) to require that the applicant submit plans, for the review and approval of the Executive Director, for the colorization and texturization of the grade beam wall.

The special condition shall require that the applicant submit, for the review and approval of the Executive Director, a landscaping plan (special condition number 4) which shall screen the proposed grade beam wall. The landscaping plan, shall consist of either native plants commonly found on the coastal bluff, or deep rooted drought tolerant non-native plants that are non-invasive. The landscaping plan shall be prepared by a licensed landscape architect and shall meet with the approval of the Department of Fish and Game. The grade beam wall, to minimize, visual impacts shall be colorized to match the existing terrain. Therefore, as conditioned, to submit a landscaping plan to screen the wall and to colorize the grade beam wall, the Commission finds that the project is consistent with Section 30251 of the Coastal Act regarding the protection of public views.

F. Public Access

The project site is on the seaward side of Galaxy Drive which is the first public road immediately inland of Newport Bay. 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 development is located between the sea and the nearest public road.

The proposed development is located on a lot with an existing single family dwelling. The proposed development will not change the use nor intensity of use of the site. Public access opportunities exist through Galaxy View Park which overlooks the Bay and North Star Beach. The proposed development, as conditioned, will not result in any 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.

G. Local Coastal Program

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

The Newport Beach Land Use Plan was certified on May 19, 1982. The project as conditioned is consistent with the Chapter 3 policies of the Coastal Act. The proposed development will not prejudice the City's ability to prepare a Local Coastal Program for Newport Beach that is consistent with the Chapter 3 policies of the Coastal Act as required by Section 30604(a).

H. California Environmental Quality Act

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

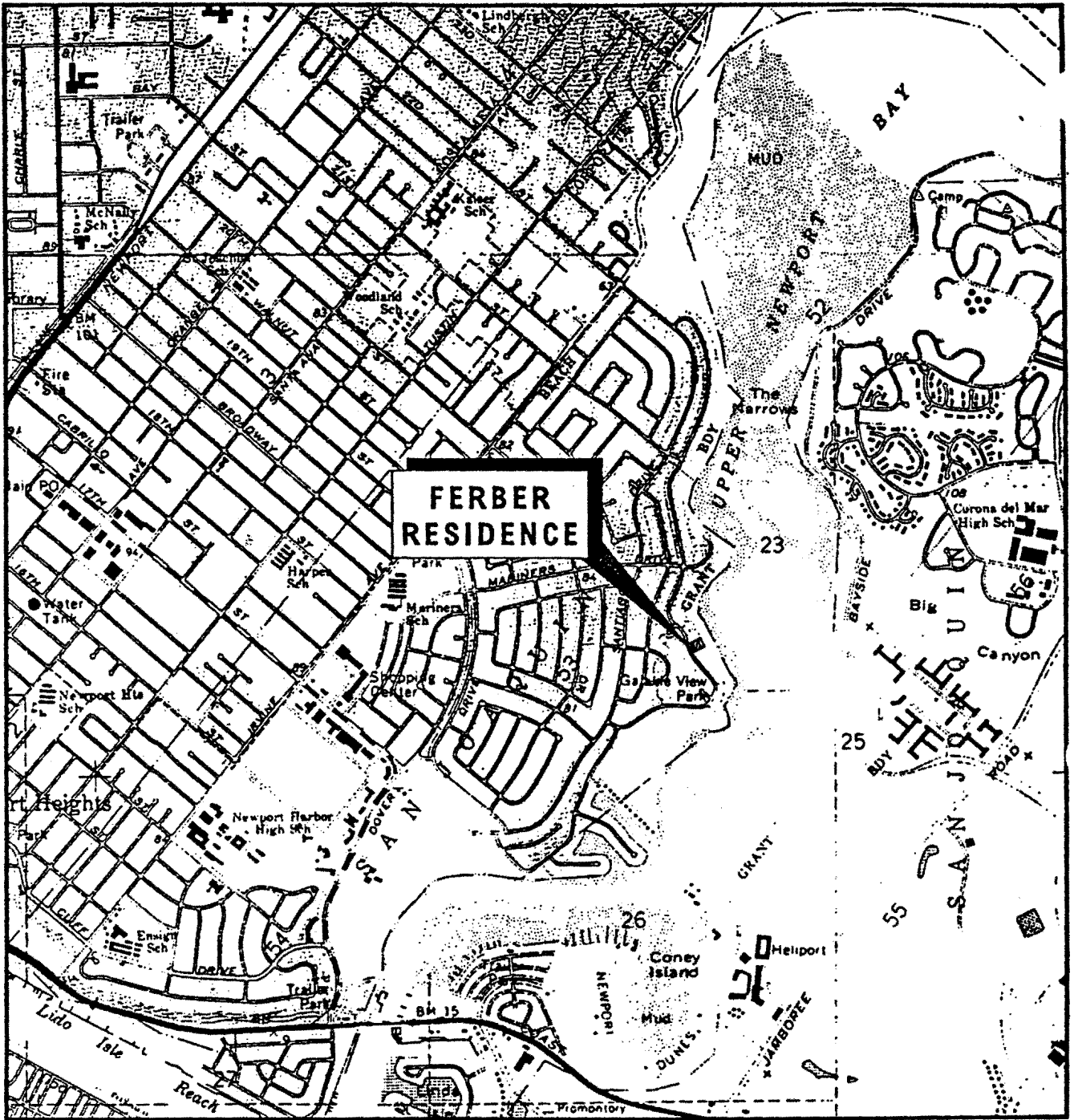
The project is located in an existing urbanized area. The proposed development has been conditioned to assure that the project will not have a significant adverse impact on coastal resources and has been conditioned to: provide an assumption of risk deed restriction, for conformance with the geotechnical recommendations, to implement a landscaping plan, right of entry authorization, to reduce the visual impacts of the grade beam wall, to implement best management practices, that the applicant and the Department of Fish and Game initiate planning for a comprehensive solution, and that future improvements require either an amendment or a new coastal development permit. The proposed development, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act. The project as proposed is the least environmentally damaging alternative. Therefore, the Commission finds that the proposed project is consistent with CEQA and the policies of the Coastal Act.



VICINITY MAP

EXHIBIT No. 1
Application Number: 5-98-469
Vicinity Map
California Coastal Commission

Project Name: 1454 Galaxy Drive Slope Repair



Reference: U.S.G.S. Topographic Map, 7.5 Minute Series, Newport Beach, California Quadrangle, Photorevised 1972.



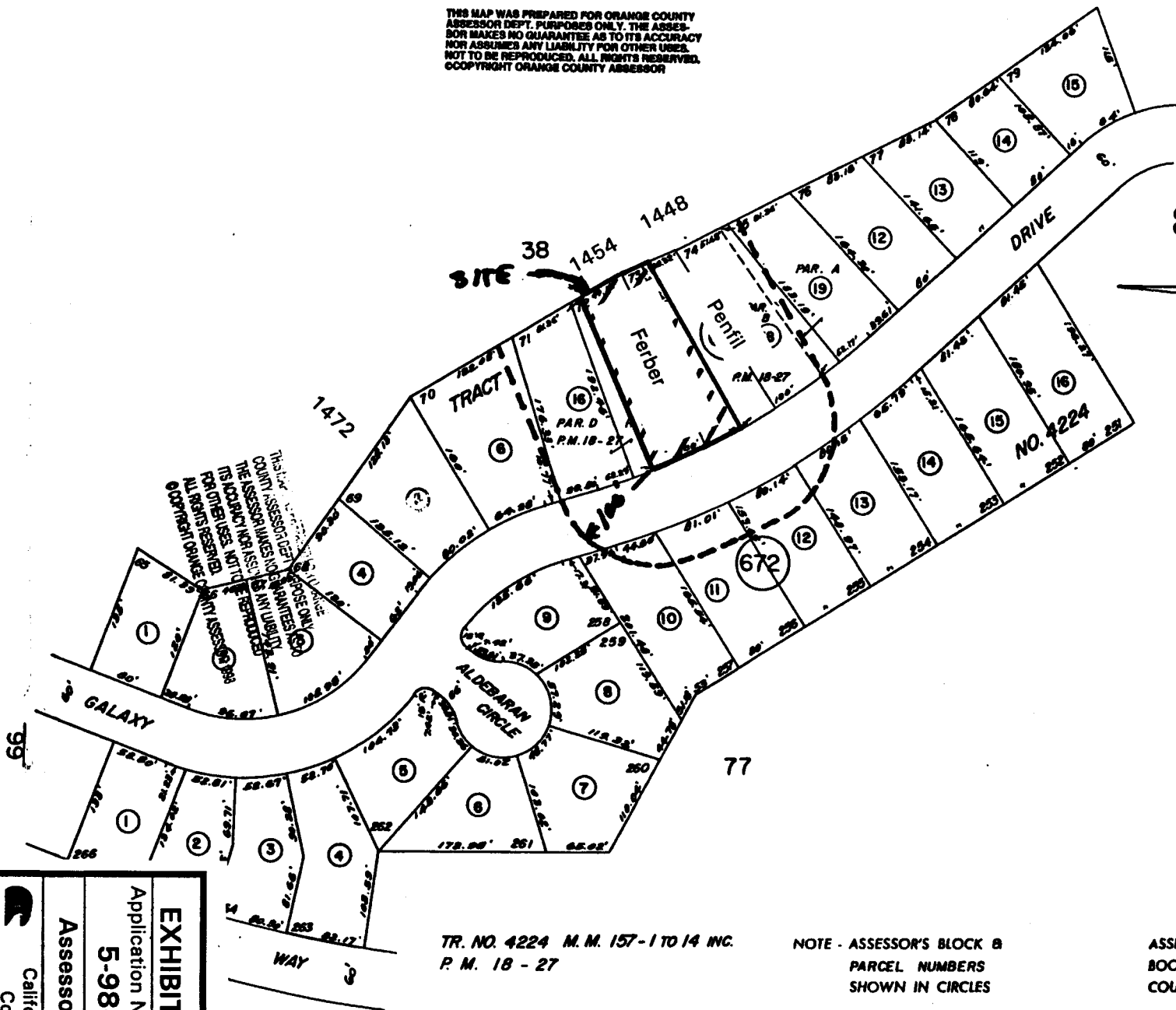
SITE LOCATION MAP

FERBER RESIDENCE
 1454 Galaxy Drive
 Newport Beach, California

EXHIBIT No. 2
Application Number: 5-98-469
Site Location
California Coastal Commission

THIS MAP WAS PREPARED FOR ORANGE COUNTY ASSESSOR DEPT. PURPOSES ONLY. THE ASSESSOR MAKES NO GUARANTEE AS TO ITS ACCURACY NOR ASSUMES ANY LIABILITY FOR OTHER USES. NOT TO BE REPRODUCED. ALL RIGHTS RESERVED. COPYRIGHT ORANGE COUNTY ASSESSOR

117-67



THIS MAP WAS PREPARED FOR ORANGE COUNTY ASSESSOR DEPT. PURPOSES ONLY. THE ASSESSOR MAKES NO GUARANTEE AS TO ITS ACCURACY NOR ASSUMES ANY LIABILITY FOR OTHER USES. NOT TO BE REPRODUCED. ALL RIGHTS RESERVED. COPYRIGHT ORANGE COUNTY ASSESSOR

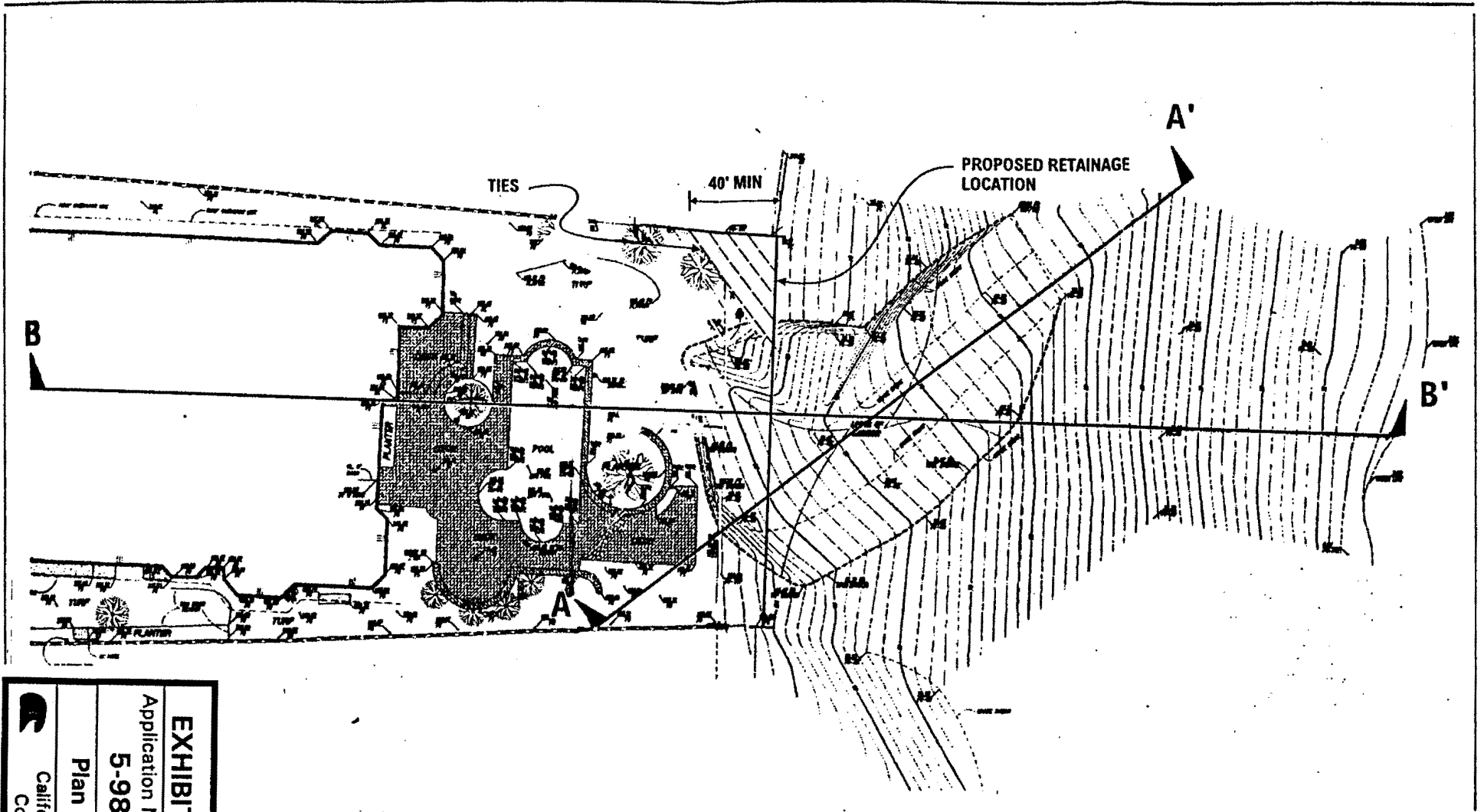
EXHIBIT No. 3
 Application Number:
5-98-469
 Assessor's Map
 California Coastal
 Commission

TR. NO. 4224 M. M. 157-1 TO 14 INC.
 P. M. 18 - 27

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

ASSESSOR'S MAP
 BOOK 117 PAGE 67
 COUNTY OF ORANGE

1-7-98



PLAN VIEW SHOWING RETAINAGE


FERBER RESIDENCE
 1454 Galaxy Drive
 Newport Beach, California

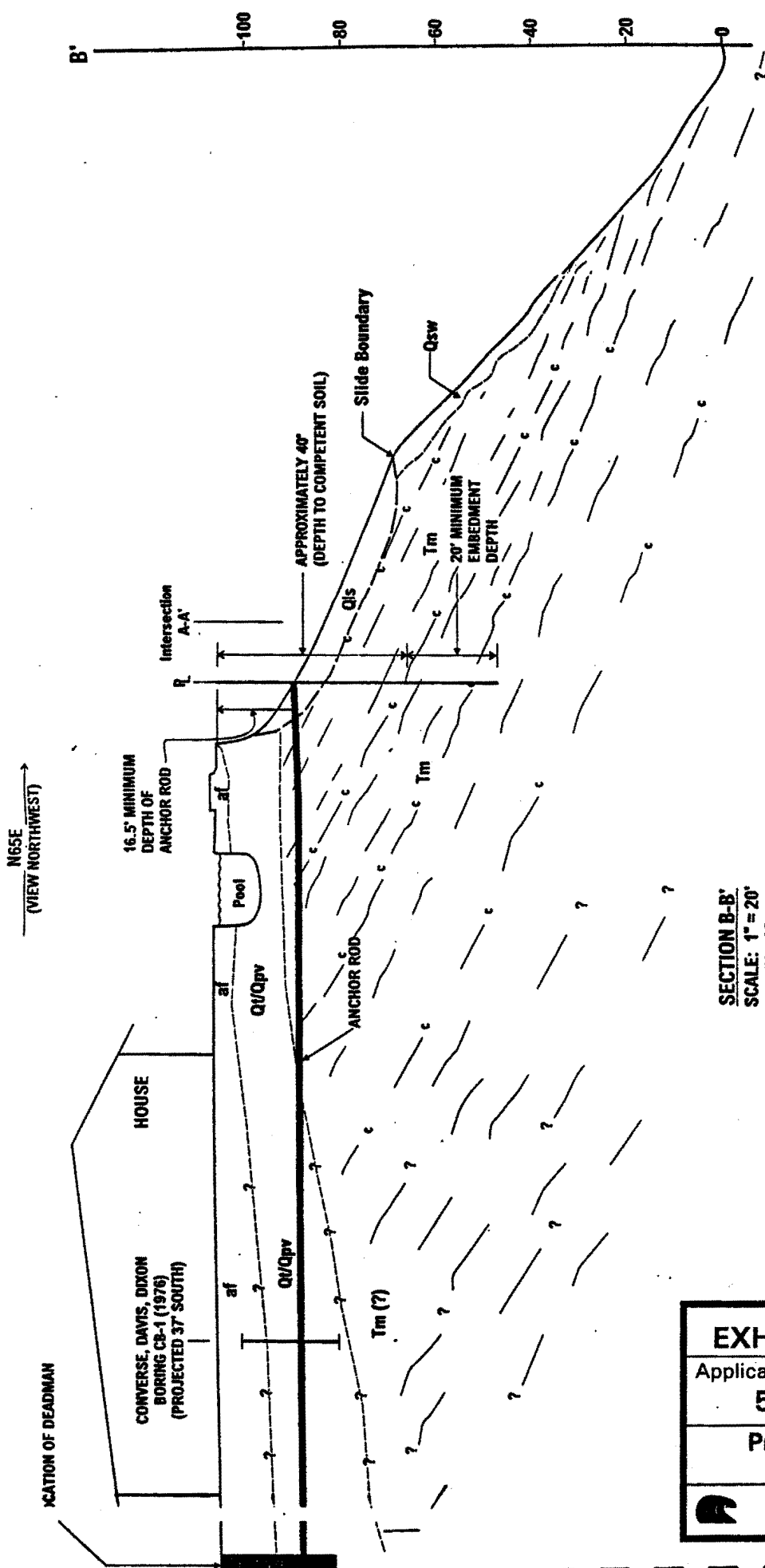
Scale	1" = 40'	Project No.	
Date	5-14-98	Drawing No.	97-32619-01
Prepared By	KLF		
Checked By	RR		
Approved By			



Converse Consultants

Geotechnical Engineering
 and Applied Sciences

 California Coastal Commission	EXHIBIT No. 4
	Application Number: 5-98-469
	Plan View



NG5E
(VIEW NORTHWEST)

16.5' MINIMUM
DEPTH OF
ANCHOR ROD

HOUSE

CONVERSE, DAVIS, DIXON
BORING CB-1 (1976)
(PROJECTED 37' SOUTH)

LOCATION OF DEADMAN

Intersection
A-A'

APPROXIMATELY 40'
(DEPTH TO COMPETENT SOIL)

Slide Boundary

Qsw

Qm

Qm

Qm (?)

Qm (?)

Qm (?)

Qm (?)

Qm (?)

Qm (?)

Qm (?)

Qm (?)

Qm (?)

20' MINIMUM
EMBEDMENT
DEPTH

Qis

Qm

Qm

Qm (?)

Qm (?)

Qm (?)

Qm (?)

Qm (?)

Qm (?)

Qm (?)

Qm (?)

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

af

SECTION B-B'
SCALE: 1" = 20'
(H = V)

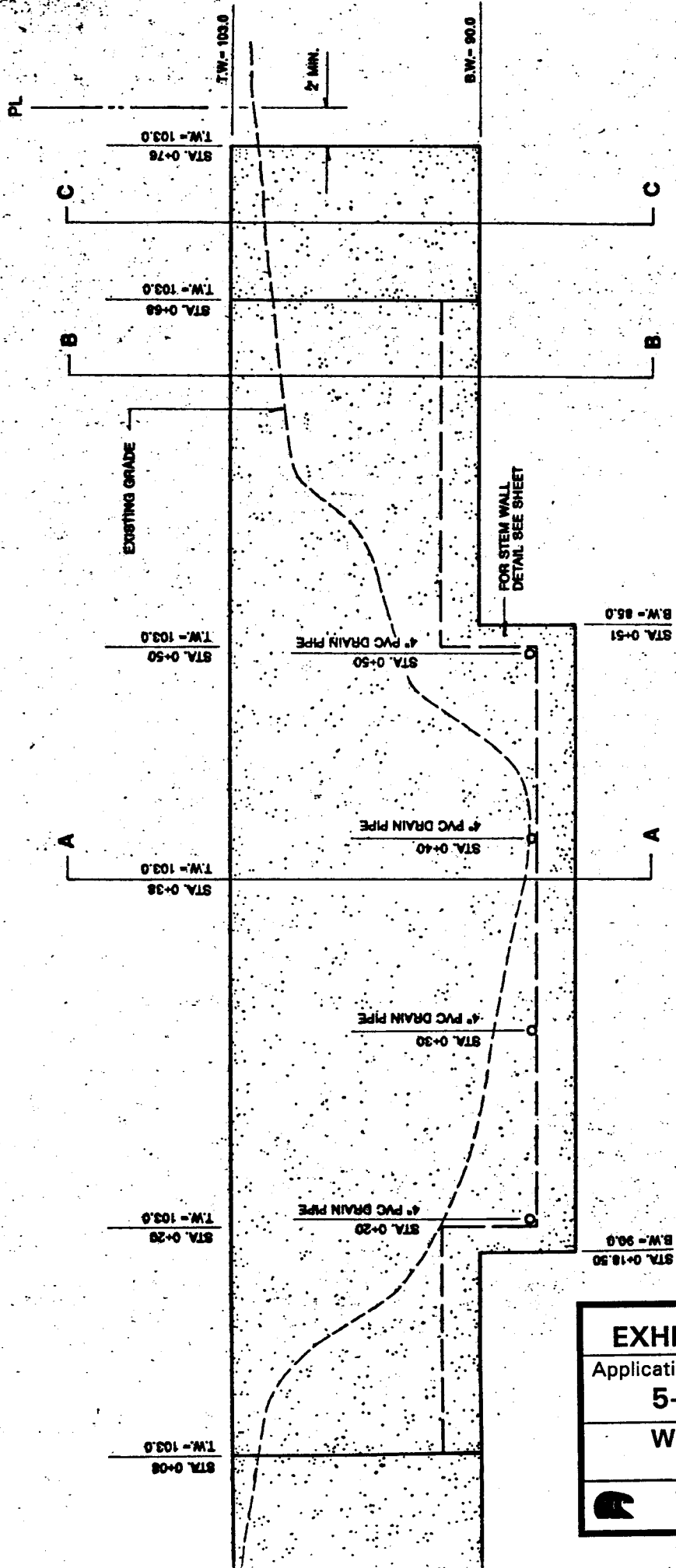
EXHIBIT No. 5
Application Number: 5-98-469
Profile View
California Coastal Commission

PROFILE SHOWING RETAINAGE AND DEADMAN
 Project No. _____
 Date 1" = 20"
 Rev. 5-14-98 97-32819
 Prepared by BLF
 Checked by RR
 Drawn by DSM

FERBER RESIDENCE
 1454 Galaxy Drive
 Newport Beach, California

Converse Consultants
 Geotechnical Engineering
 and Applied Sciences

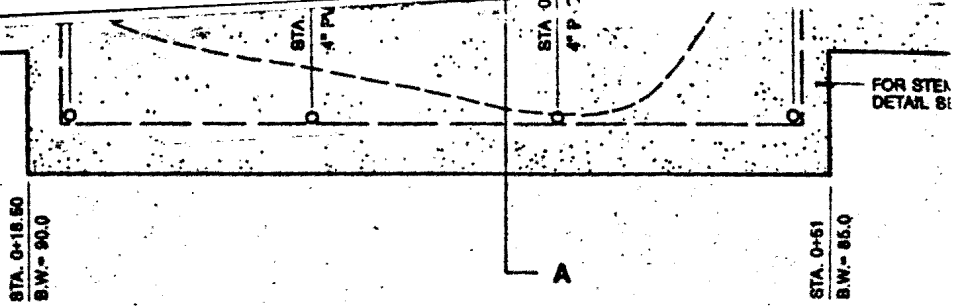
3



RETAINING WALL PROFILE

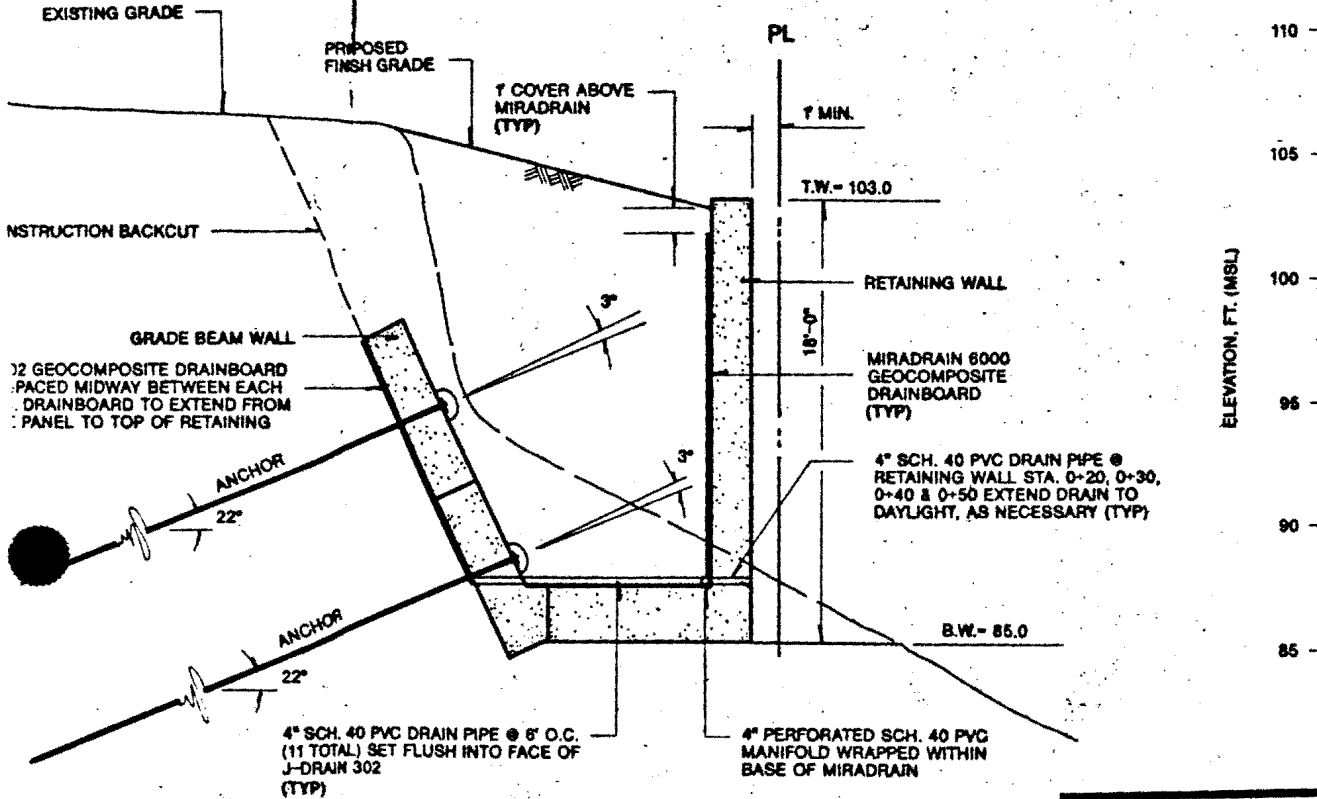
PROFILE SCALE: HORIZ. & VERT. 1" = 5'

EXHIBIT No. 7	
Application Number: 5-98-469	
Wall Profile	
	California Coastal Commission



RETAINING WALL PROFILE

PROFILE SCALE: HORIZ. & VERT. 1" = 5'



SECTION A-A

STA. 0+20 TO 0+50
PROFILE SCALE: HORIZ. & VERT. 1" = 5'

EXHIBIT No. 8

Application Number:

5-98-469

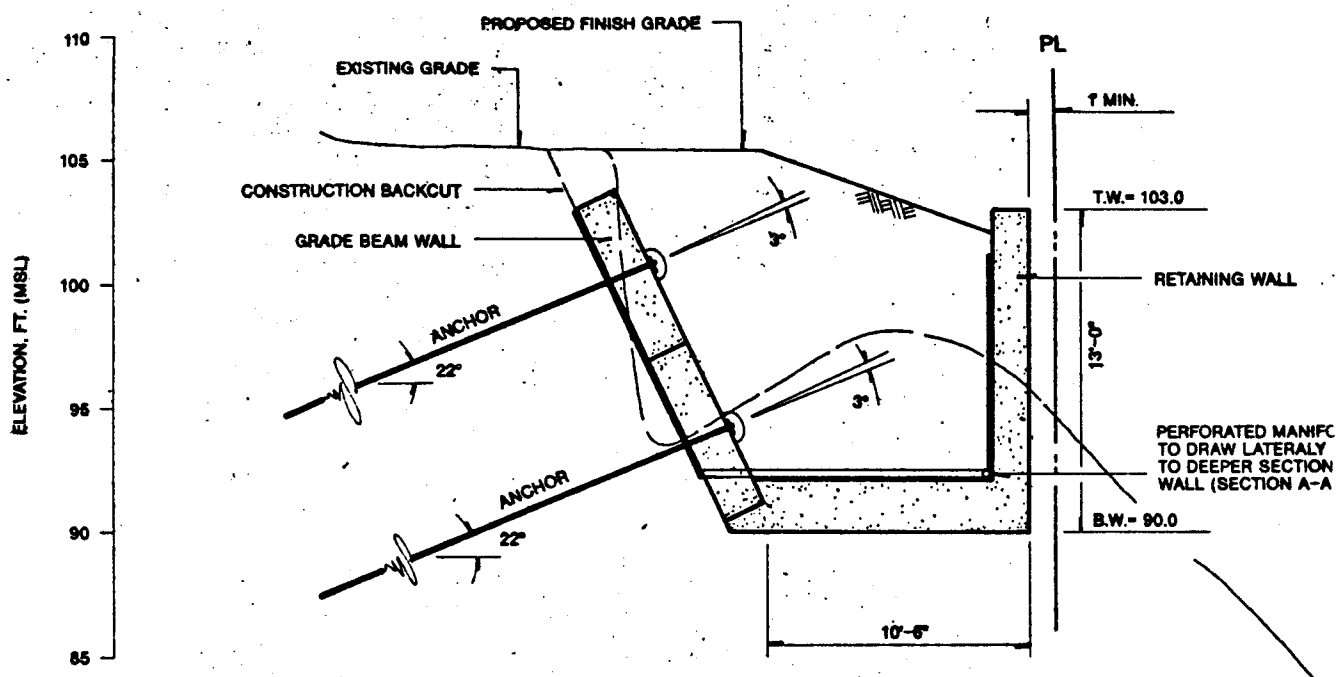
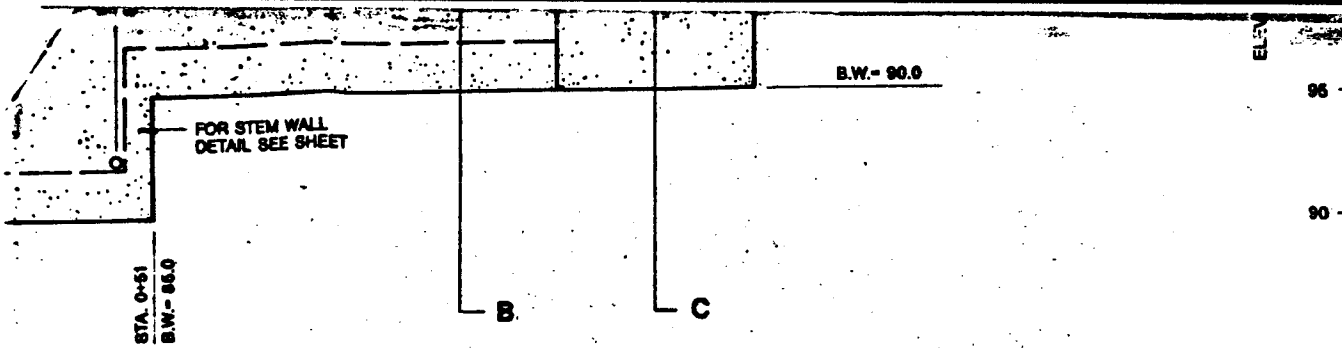
Section A



California Coastal
Commission

**GROUP DELTA CONSULTANTS,
ENGINEERS & GEOLOGISTS**

4455 MURPHY CANYON ROAD, SUITE 100
SAN DIEGO, CALIFORNIA 92123
(619) 573-1777



SECTION B-B

STA. 0+08 TO 0+20, STA. 0+50 TO 0+68
PROFILE SCALE: HORIZ. & VERT. 1" = 5'

EXHIBIT No. 9

Application Number:

5-98-469

Section B

California Coastal Commission

ELTA CONSULTANTS, INC.
ENGINEERS & GEOLOGISTS

URPHY CANYON ROAD, SUITE 100
SAN DIEGO, CALIFORNIA 92123
(619) 573-1777

PLAN PREPARED UNDER THE SUPERVISION OF:

MATTHEW W. ECKERT 11/2/98
NAME DATE

ORIGINAL SCALE IN INCHES
FOR REDUCED PLANS



CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION:

UNDERGROUND SERVICE ALERT
[USA] 1-800-422-4133



CALIFORNIA COASTAL COMMISSION

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

**EXHIBIT No. 10**

Application Number:

5-98-469**Commission Letter**California Coastal
Commission

November 24, 1998

Walter F. Crampton
Delta Consultants Group
3347 Michelson Drive, Suite 390
Irvine, CA 92123-4379

Subject: Emergency Permit Application 5-98-469-G; slope repair at 1454
Galaxy Drive, City of Newport Beach.

Dear Mr. Crampton:

On November 20, 1998 Commission staff received your request for an emergency permit to initiate slope repair work at 1454 Galaxy Drive within the City of Newport Beach. The proposed work consists of grading and a retaining wall which is approximately 13 feet high by 75 feet long with an anchor system. The proposed work will on the applicant's property but within several feet of the Upper Newport Bay Ecological Reserve managed by the California Department of Fish and Game. Commission staff has reviewed the request for an Emergency Permit and determined that an emergency permit can not be issued at this time for the reasons reviewed below.

Section 13009 of the California Code of Regulations defines an emergency, with respect to Coastal Act emergency permits, as follows:

...a sudden unexpected occurrence demanding immediate action to prevent or mitigate loss or damage to life, health, property or essential public services.

Further, Section 13142 of the California Code of Regulations, as one of the criteria for issuing an Emergency Permit, states:

An emergency exists and requires action more quickly than permitted by the procedures for administrative permits, or for ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of the permit.

Information submitted with your application demonstrates that the slope failure occurred "during this past Winter's El Nino storm season". Ample time has elapsed since the slope failure occurred to have initiated the process for obtaining an

- ◆ Please submit copies of any geology reports that may have been produced.
- ◆ Provide two sets of detailed project plans for the minimal work necessary to stabilize the situation and to identify the structures at risk.
- ◆ Please provide documentation of ownership for the site (such as a copy of a current tax bill) and a letter from the landowner authorizing Delta Consultants to act as an agent on behalf of the applicant. Further, any work which is done outside of the applicant's property must have the approval of the affected landowner. The possibility exists that some ancillary construction impacts (such as equipment access and grading) could occur to the Ecological Reserve. Please confirm in writing if any work will be done outside of the property lines for 1454 Galaxy Drive.

Please do not limit your submittal to the above mentioned items. You may also submit any additional information which you feel may help Commission staff gain a clear understanding of the scope of your project. Upon receipt of the requested information we will proceed with determining if an emergency permit is warranted and determining the completeness of your application. Enclosed is an application package for a regular coastal development permit which must be submitted. We look forward to working with you. Should you have any questions, you may contact me at 565-590-5071.

Sincerely,



Stephen Rynas, AICP
Orange County Area Supervisor

Cc: Jay Garcia, City of Newport Beach
Jay Elbettar, City of Newport Beach
\\HAMMERHEAD\srynas\$\Staffreports\incomplete\198469G.doc



Certified DBE/MBE

Geotechnical Engineering

Geology

Hydrogeology

Coastal Engineering

Irrigation

Hydraulics

Environmental
Engineering

Project No. 1862-EC01
December 17, 1998

Mr. Steve Rynas
CALIFORNIA COASTAL COMMISSION
200 Oceangate, Suite 1000
Long Beach, California 90802-4302

RESPONSE TO REVIEW COMMENTS
EMERGENCY PERMIT APPLICATION
FOR BLUFF STABILIZATION
1454 GALAXY DRIVE
(FERBER RESIDENCE)
NEWPORT BEACH, CALIFORNIA

CCDP NO. 5-98-469-G

RECEIVED
South Coast Region

JAN 14 1999

CALIFORNIA
COASTAL COMMISSION

EXHIBIT No. 11

Application Number:

5-98-469

Group Delta Letter



California Coastal
Commission

Dear Mr. Rynas:

In response to your letter of November 24, 1998, we are providing additional background information to assist you in your review of the above-referenced emergency permit application. The responses to questions are provided in the order in which they were asked in your November 24 letter.

As indicated in our Emergency Permit application request for the subject project, dated November 19, 1998, although the subject bluff-top failure occurred during last winter's El Niño storms, the City deems the existing condition to be extremely unsafe and has filed two Code Violation Notices demanding repairs be completed by the 1998-99 winter storm season. Please recognize that several neighbors have also sustained slope failures and the neighbor to the south has sued the Ferber's for loss of subadjacent

lateral support and diminution of property values. As an aside, this property (1448 Galaxy Drive - Dr. Penfil) has also sustained a series of bluff-top failures with ongoing visible slope deformation sufficient to cause the City of Newport Beach to red-tag the residence as unsafe for human occupancy for fear of additional bluff-top failures undermining and damaging the structure (Photo 1).

The City of Newport Beach does, in fact, consider the subject slope failure to be an emergency, consisting of a geologic hazard, which affects the safety of the structure on the subject property. The City correctly recognizes the emergency to be of a geologic nature, with the threat associated with the upcoming winter storm season, which, if not mitigated, can and will (given sufficient rainfall) trigger additional slope failures.

The CEQA definition of emergency (Section 15359 of the California Environmental Quality Act) "means a sudden, unexpected occurrence, involving a clear and imminent danger demanding immediate action to prevent or mitigate loss of, or damage to life, health, property, or essential public services. Emergency includes such occurrences as fire, flood, earthquake, or other **soil or geologic movements** . . . (emphases added)." CEQA goes on to acknowledge that certain emergency projects are exempt from the requirements of CEQA, including "specific actions necessary to prevent or mitigate an emergency" (Section 15269 of CEQA).

Undeniably, the sudden and unexpected occurrence occurred during last winter's El Niño storm season; however, the real emergency at this point is the threat of additional soil or geologic movement, triggered by additional rainfall this winter, which requires action more quickly than permitted by the procedures for ordinary permits processed through the California Coastal Commission.

The project has been approved by the City of Newport Beach in recognition of this emergency, and they have threatened the Ferbers with legal action.



An evaluation from a registered geotechnical engineer that a structure, such as a home (not hardscape) is in eminent [sic] danger and that corrective work requires action more quickly than permitted by the procedures for regular Coastal Development permits.

Group Delta Consultants is a geotechnical engineering firm and the undersigned is a registered geotechnical engineer in the State of California. To help illustrate the extent and magnitude of the problem, we have prepared a Site Plan (Figure 1) showing both the subject residence and the adjacent residences to both the north and south. Also shown on the Site Plan is the extent and geometry of this past winter's slope failure, with the basal slip surface shown on the plans being the adverse clay seam on which the failure occurred. As indicated on the Site Plan, bedding dips to the northeast (N28E) at approximately 30 to 34 degrees, making the slope highly unstable. These highly dipping beds (30 to 34 degrees) are extremely unstable and highly sensitive to any increase in subsurface moisture.

As indicated on Figures 1 and 2, and as reported in the landslide investigation report by Converse Consultants dated May 14, 1998, the dip of the bedding compared to the slope geometry of the bluff results in an actual out-of-slope dip of 23 degrees, or somewhat flatter than the actual bedding, with the geometry of the slope providing a certain amount of natural buttressing. However, with the past year's failure, the cross slope bedding is no longer buttressed by the adjacent coastal bluff, and progressive failures are likely, given any increase in subsurface moisture.

GDC provided a geotechnical report dated November 2, 1998, in support of our proposed slope repair project. We have conducted slope stability analyses based primarily on the Converse data in developing the lateral restraint necessary to stabilize the upper bluff, along with the general design requirements for both the tied-back anchors and the concrete reaction necessary for restraining the bluff. Figure 3 provides the typical hypothetical failure geometry used in our analyses for sizing the tied-back bluff restraint system, with the following significant observations:

- 1) Face of bluff is comprised of unstable blocks (computed factor of safety near 1) of formational material that are controlled by adversely dipping clay beds and seams.



- 2) Stability of blocks are influenced by infiltration into the vertical joints generally located along the interface between the Monterey Formation and the Marine Terrace.
- 3) Failures of blocks are progressive in nature.
- 4) Largest potential failure block is defined by toe-of-slope.
- 5) Tieback loads based on stability of the largest block.

In summary, 1454 Galaxy Drive is at risk and, assuming any level of rainfall during this winter, is in imminent danger, requiring corrective work more quickly than can be permitted by the procedures for regular Coastal Development Permits. This is likely the fundamental reason why the City of Newport Beach is demanding that repairs be completed prior to this winter's storm season.

The registered geotechnical engineer must also provide an alternatives analysis to establish the minimal amount of work necessary to stabilize this situation.

As indicated in the previous response, the fundamental threat is from rainfall during this upcoming winter's storm season, increasing soil moisture and hence reducing soil strengths and increasing driving forces (due both to hydrostatic forces and increased soil weight).

Although arguably, the temporary erosion control measures suggested by the City (October 28, 1998, letter) may preclude a small amount of rainfall infiltration on the site, it should be noted that the Ferber's property, being one of the most recently developed properties, is one of the few lots that actually drains to the street, with no over-bluff drainage, as is typical throughout the development, including the adjacent property to the south. Moreover, the subject residence has considerable flatwork with ample drainage to the street, further discouraging infiltration of surface waters into the subsurface. It should also be noted that the Ferbers have covered all exposed soil within their backyard and extending downslope a short distance onto the Fish and Game property to essentially eliminate this source of water infiltration.



Conversely, the residence to the south (1448 Galaxy Drive) does, in fact, drain over the slope and almost by design encourages infiltration of surface waters into the near-surface, creating significant risk of additional failures on the Ferber property, ultimately propagating into the Penfil property. Photo 2 is a photograph looking south standing at the northeast corner of the Penfil property, where progressive slope failures have caused the edge of the slope to pull away, with a series of failures extending down the east-facing bluff. Photo 3 is taken near the southeasterly edge of the Penfil property, showing the reverse slope near the edge of the rear yard to a topographic low adjacent the house, where water drains into a series of area drains that are in turn piped to the east, discharging over the face of the bluff. Also indicated on Photo 3 is the northerly rear yard perimeter concrete walkway, which is separated approximately 3½ inches due to progressive slope deformation/instability, which may have separated joints in the easterly-draining discharge pipes, further exacerbating subsurface infiltration. It should be noted that roof drainage also discharges into the rear yard and over the face of the bluff, again through discharge pipes that have likely separated, emitting yet additional subsurface water.

Photo 4 shows one of the discharge pipes on the Penfil property exiting onto the slope face near the southeast corner of the property, where rear yard improvements have appeared to encroach onto the adjacent Fish and Game property.

Photo 5, again taken near the northeast corner of the Penfil property, this time looking to the north, shows the failure on the Ferber property in close proximity to the side yard fence separating the two properties.

There is no convenient way, much less legal way, for the Ferbers to correct the serious drainage deficiencies of their neighbor to the south, and the presence of the failure on the Ferber property has now predisposed the property additional failures. Moreover, it could be argued that the drainage deficiencies on the Penfil property actually caused the Ferber failure; however, at this juncture, there are no temporary short-term solutions to mitigate the significant geologic hazard that exists, which will fail this winter, damaging the Penfil residence, given any reasonable level of rainfall.

Although Coastal Staff have noted that the City's letters do not explicitly mandate that the applicant construct a full slope repair, including the proposed retaining wall, to mitigate the problem, the fundamental reality is that the tieback anchors and interior grade beam wall is necessary at this time to preclude any significant additional failures that can occur this winter. In our discussions with City Staff, they do in fact desire this level of effort to stabilize the coastal bluff prior to this winter's storms. Arguably, the reconstruction/reclamation of the Ferber rear yard slope can be deferred at this time, as this additional remedial work does not improve the overall stability of the coastal bluff.

Please submit copies of any geologic reports that may have been produced.

GDC's geotechnical report dated November 2, 1998, and Converse Consultants' report of landslide investigation dated May 14, 1998, have been appended to the Coastal Development Permit application, submitted concurrently with this Emergency Permit request.

Provide two sets of detailed project plans for the minimal work necessary to stabilize this situation and to identify the structures at risk.

As indicated on Figure 1, the residence at 1448 Galaxy Drive (Penfil) is currently at significant risk, with the Ferber residence and adjacent residence and to the north exposed to a very real, but lower, level of risk due to progressive slope failures. Two sets of project plans, approved by the City of Newport Beach, have been submitted as part of this application package. Arguably, the minimal work necessary for stabilization of this geologic hazard would include the construction of the tiebacks and the grade beam wall (the individual concrete anchor panels shown on the Phase I work on Sheet 2 of the construction drawings). The Phase II build out and rear yard reclamation can be deferred at this time, if that is the desire of Coastal Staff.

On behalf of Mr. and Mrs. Ferber, their neighbors, and the City of Newport Beach, we thank you for your assistance in this delicate situation, and again request your consideration in approving an emergency permit to initiate repairs to the east-facing bluff, enabling



Mr. Steve Rynas
CALIFORNIA COASTAL COMMISSION
Project No. 1862-EC01

December 17, 1998
Page 7

compliance with the City's rather specific requests and the protection of both the Ferber's and their neighbor's properties. If you have any questions or require additional information, please give us a call.

Very truly yours,

GROUP DELTA CONSULTANTS, INC.



Walter F. Crampton, Principal Engineer
R.C.E. 23792, R.G.E. 245

WFC/jc

Enclosures: Photos 1 through 5
 Figure 1 - Site Plan
 Figure 2 - Geologic Section
 Figure 3 - Typical Hypothetical Failure Geometry

cc: Richard & Melody Ferber
 Mr. Jay Elbettar, City of Newport Beach
 Mr. Jay Garcia, City of Newport Beach



DANGER

**BUILDING UNSAFE
DO NOT ENTER OR OCCUPY**

WARNING! THIS STRUCTURE IS DECLARED UNSAFE FOR HUMAN OCCUPANCY OR USE BY THE CITY OF NEWPORT BEACH BUILDING DEPARTMENT. ENTRY MAY RESULT IN DEATH OR INJURY.

ADDRESS: *1448 GALAXY* DATE: *10-5-98*

POSTED BY: *CITY OF NEWPORT BEACH* TIME: *10 AM*
BUILDING INSPECTOR'S MINE DENIED

TYPE OF PUBLIC HAZARD: *SLOPE FAILURE MAY CAUSE*
DAMAGE TO STRUCTURE

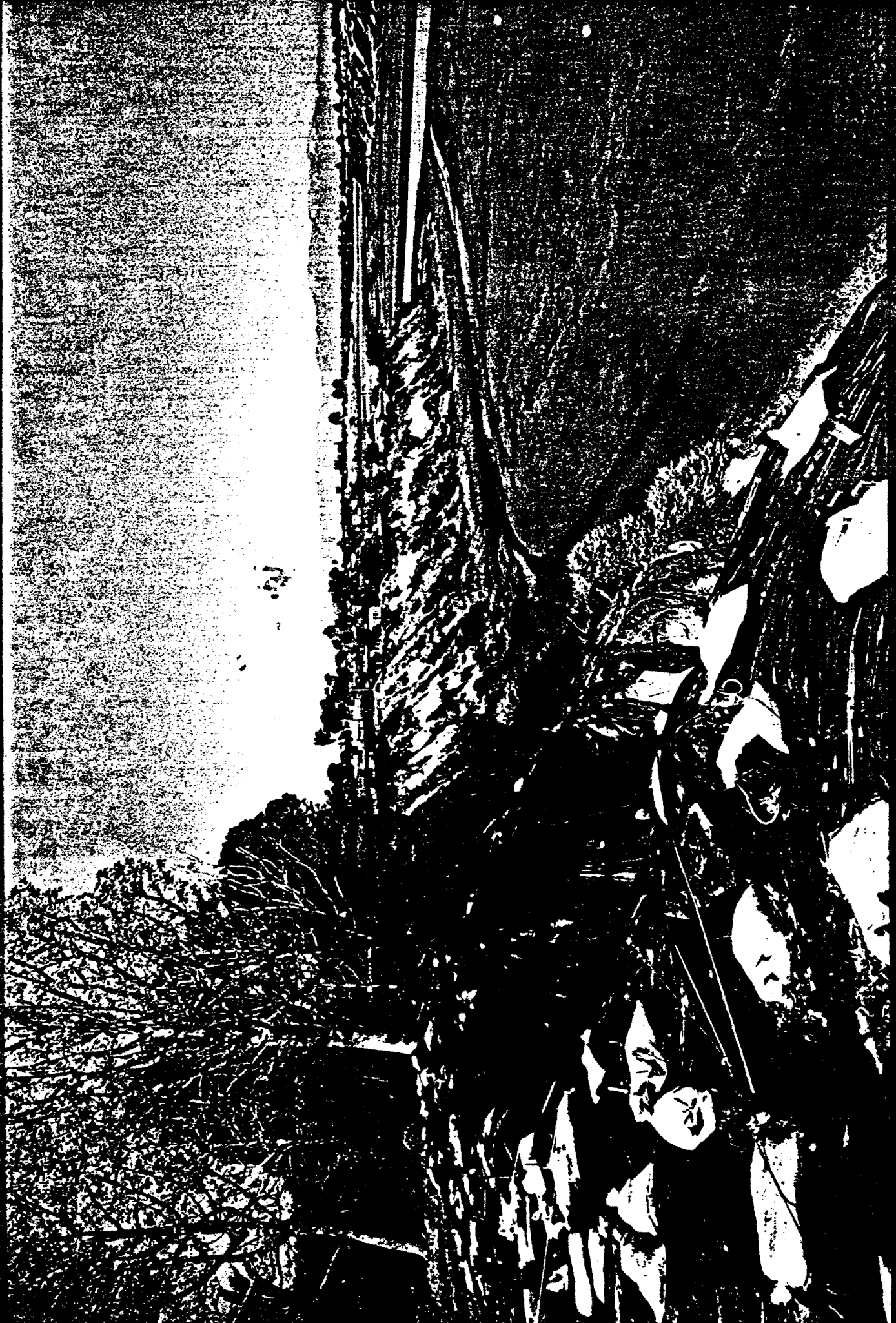
AUTHORIZED BY SEC. 803 OF THE UNIFORM BUILDING CODE. FOR INFORMATION CALL: *644-3267*

DO NOT REMOVE UNLESS AUTHORIZED BY THE BUILDING OFFICIAL

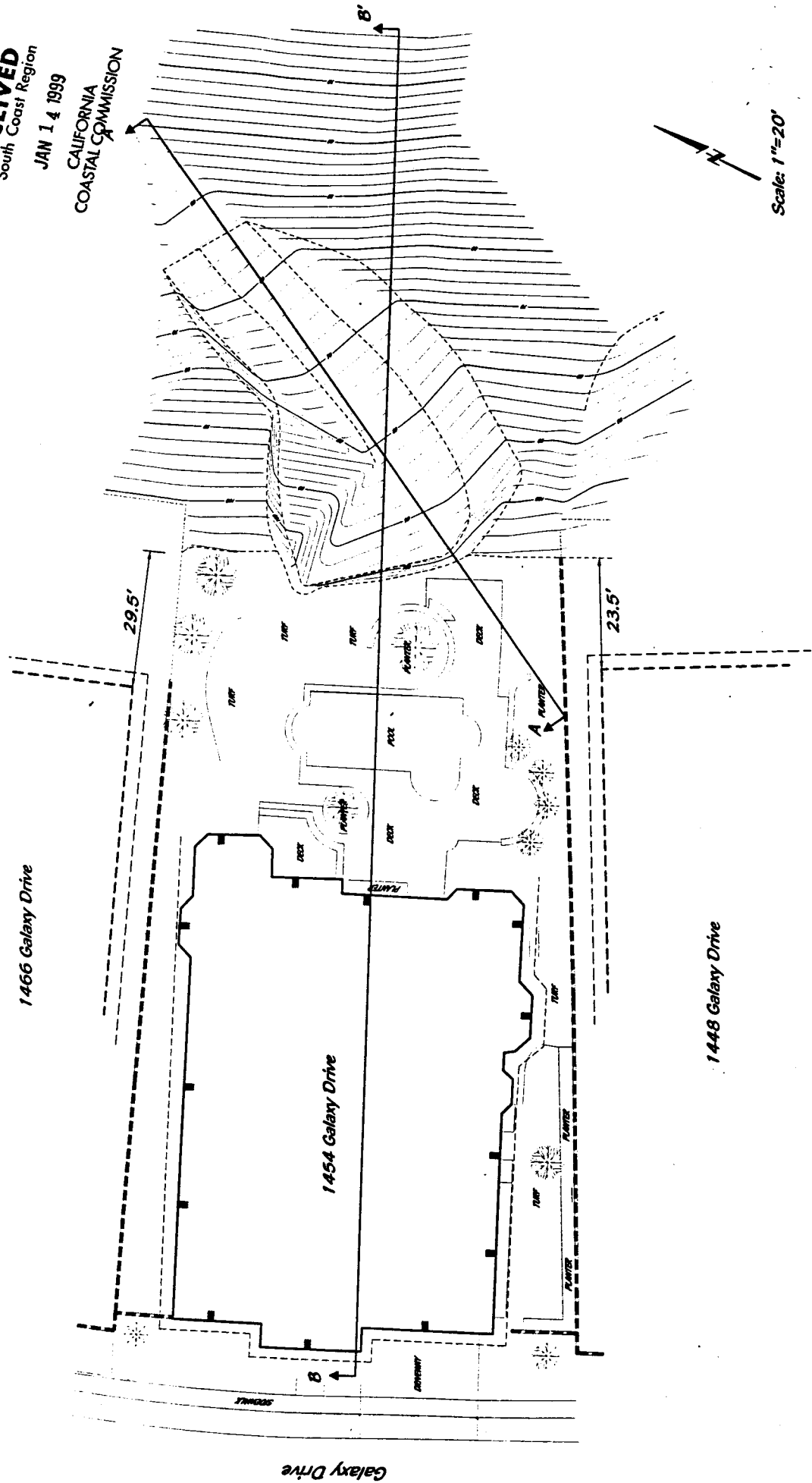








RECEIVED
South Coast Region
JAN 14 1999
CALIFORNIA
COASTAL COMMISSION



Scale: 1"=20'

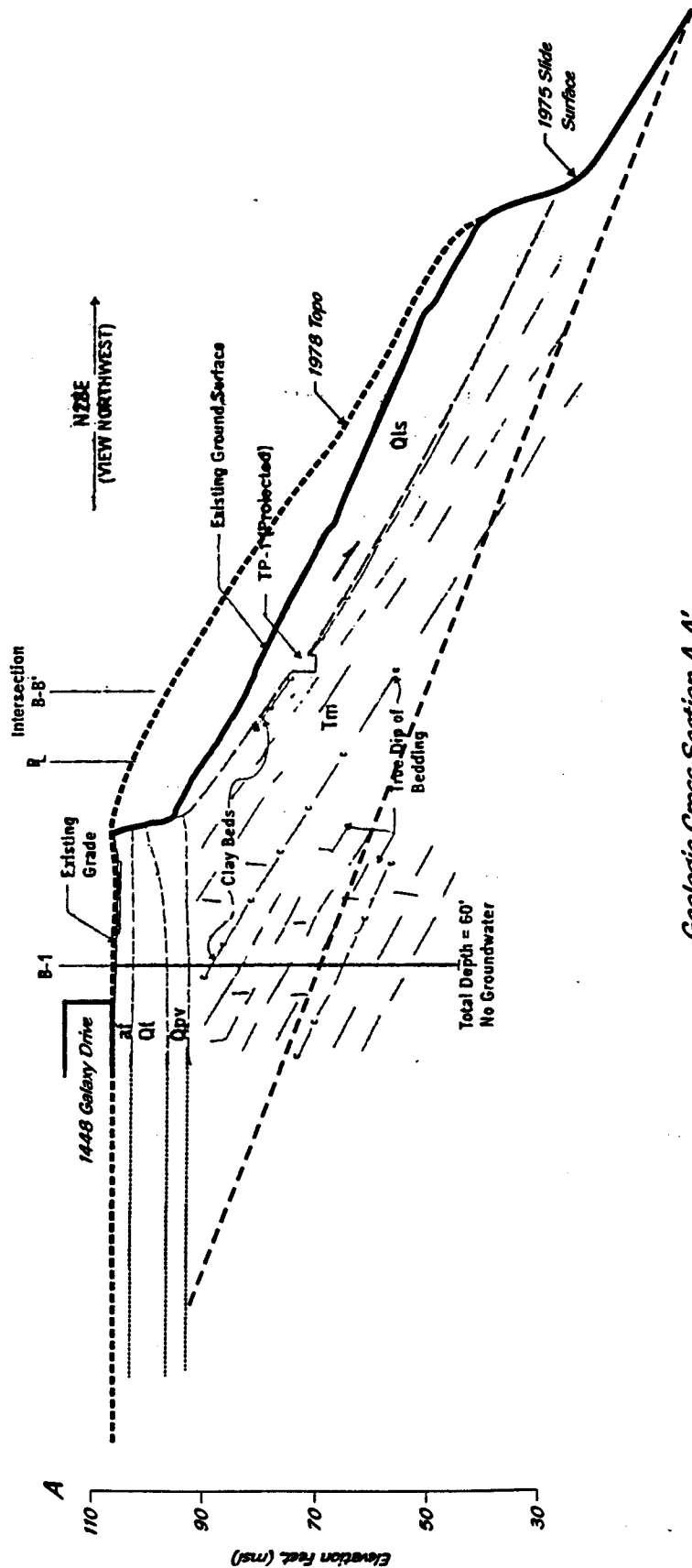
Site Plan

Scale: 1"=20'

Project Name: Galaxy Slope Repair

Project Number: 2

Fig. Number: 1



Geologic Cross Section A-A'
 Scale: 1"=20' (horiz.,vert.)

NOTE:
 Reproduced from Drawing No. 1 - By Converse Consultants
 (5-14-98)



CITY OF NEWPORT BEACH

P.O. BOX 1768, NEWPORT BEACH, CA 92658-8915

December 24, 1998

RECEIVED
South Coast Region

DEC 28 1998

CALIFORNIA
COASTAL COMMISSION

Mr. Stephen Rynas, AICP
Orange County Area Supervisor
California Coastal Commission
200 Oceangate, Suite 100
Long Beach, CA 90802-4302

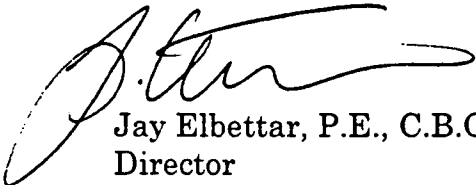
**SUBJECT: Emergency Permit Applications 5-98-4976 at 1448 Galaxy Drive,
and 5-98-469-6 at 1454 Galaxy Drive**

Dear Mr. Rynas:

This letter is a follow-up to our telephone conversation yesterday and to clarify our concern further. It is our opinion that the subject properties are in imminent danger of collapse or further damage should the slope failure expand or additional ground movements occur. We have been fortunate to have a dry season so far; however, future sustained rains would certainly contribute to these events.

If you have any questions, please contact me at (949) 644-3282.

Very truly yours,
BUILDING DEPARTMENT



Jay Elbettar, P.E., C.B.O.
Director

JE:mg

C: Sharon Wood
Patricia Temple
Faisal Jurdi

EXHIBIT No. 12
Application Number: 5-98-469
Newport City Letter
 California Coastal Commission

Mr. Richard Ferber, 1454 Galaxy Drive, Newport Beach, CA 92660
Ms. Doreen Penfil, 907 Muirfield, Newport Beach, CA 92660



CITY OF NEWPORT BEACH


P.O. BOX 1768, NEWPORT BEACH, CA 92658-8915

RECEIVED
South Coast Region

DEC 28 1998

CALIFORNIA
COASTAL COMMISSION

December 22, 1998

EXHIBIT No. 13
Application Number: 5-98-469
Newport City Letter
 California Coastal Commission

Mr. Stephen Rynas, AICP
Orange County Area Supervisor
California Coastal Commission
200 Oceangate, Suite 100
Long Beach, CA 90802-4302

**SUBJECT: Emergency Permit Applications 5-98-4976 at 1448 Galaxy Drive,
and 5-98-469-6 at 1454 Galaxy Drive**

Dear Mr. Rynas:

The slope failures at Galaxy Drive have been a major concern to the City of Newport Beach's Building Department. We have worked with property owners on repair and mitigation schemes by conducting site visits and expediting our review and analysis of their submittals. We consider Galaxy Drive slope repairs as one of our highest priorities.

I am concerned of your denial of the emergency repairs requested. Although you raised valid issues regarding the application completeness, which demonstrates your thorough review and effort. I would like to offer the following information:

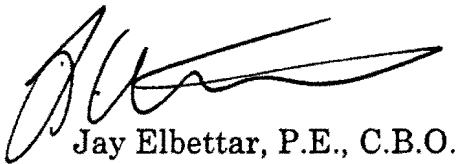
- A. Soil investigations of this nature cannot be conducted during the rainy season. It is a complex matter that requires considerable time to complete. Developing and designing the structural system also requires time and in these days of heavy construction activities, it is difficult to retain consultants who will begin the project immediately. These factors should be considered when judging the submittal's timelines.
- B. The severity of the slope failures does not lend itself to interim solutions of sandbagging and plastic covering. Considerable expense would be incurred if other temporary solutions were used in lieu of a permanent solution, even if they are determined to be technically feasible. Furthermore, we will not support such solutions since it may disturb the slope.

Mr. Stephen Rynas, AICP
Page Two
December 22, 1998

- C. As for the structure stability at 1448 Galaxy Drive, we have declared it unsafe for occupancy, which certainly indicates the possibility of collapse should future slope deterioration occur.

This letter offers our opinions and concerns. It is not solicited by the property owners and is not meant to request a waiver of any requirements stated in the denial letters. However, I would like to suggest that you examine this input and hope that you reconsider your decision.

Very truly yours,
BUILDING DEPARTMENT



Jay Elbettar, P.E., C.B.O.
Director

JE:mg

- C: Sharon Wood
Patricia Temple
Faisal Jurdi

Mr. Richard Ferber, 1454 Galaxy Drive, Newport Beach, CA 92660
Ms. Doreen Penfil, 907 Muirfield, Newport Beach, CA 92660

CALIFORNIA COASTAL COMMISSION

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

**EMERGENCY PERMIT**

DATE: DECEMBER 23, 1998

EMERGENCY PERMIT: 5-98-497-G

APPLICANT: Dr. and Mrs. Penfil


LOCATION: 1448 Galaxy Drive, Newport Beach, County of Orange

EMERGENCY WORK PROPOSED: The installation of eight (8) subterranean piles within the property lines of 1448 Galaxy Drive on the northeast corner of the lot. The installation of the seven (7) pilings by the gazebo in the southeastern portion of the lot are NOT authorized at this time.

This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from your information that an unexpected occurrence in the form of a landslide requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director hereby finds that:

- (a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of the permit;
- (b) Public comment on the proposed emergency action has been reviewed if time allows; and
- (c) As conditioned the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the attached conditions.

EXHIBIT No. 14	
Application Number:	
5-98-469	
Emergency Permit	
	California Coastal Commission

Very Truly Yours,

Peter M. Douglas
 Executive Director

By: 

Title: Los Angeles Area Supervisor

CALIFORNIA COASTAL COMMISSION

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

**EMERGENCY PERMIT**

DATE: DECEMBER 31, 1998

EMERGENCY PERMIT: 5-98-524-G

APPLICANT: Richard and Doreen Penfil

LOCATION: 1448 Galaxy Drive, Newport Beach, Orange County

EMERGENCY WORK PROPOSED: Demolition of a gazebo and pad at the southeastern corner bayward of the property line and construction of seven (7), 36 inch diameter, maximum 39 foot long caissons within and along the rear property line.

This letter constitutes approval of the emergency work you or your representative has requested to be done at the location listed above. I understand from your information that an unexpected occurrence in the form of a recent landslide and evidence of ongoing movement requires immediate action to prevent or mitigate loss or damage to life, health, property or essential public services. 14 Cal. Admin. Code Section 13009. The Executive Director hereby finds that:


- (a) An emergency exists which requires action more quickly than permitted by the procedures for administrative or ordinary permits and the development can and will be completed within 30 days unless otherwise specified by the terms of the permit;
- (b) Public comment on the proposed emergency action has been reviewed if time allows; and
- (c) As conditioned the work proposed would be consistent with the requirements of the California Coastal Act of 1976.

The work is hereby approved, subject to the attached conditions.

Very Truly Yours,

Peter M. Douglas
 Executive Director

By: *Teresa Henry*
 Title: District Manager

EXHIBIT No. 15
Application Number: 5-98-469
Emergency Permit
 California Coastal Commission

CALIFORNIA COASTAL COMMISSION

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



Filed: January 6, 1999
49th Day: February 5, 1999
180th Day: July 5, 1999
Staff: SFR-LB
Staff Report: January 13, 1999
Hearing Date: February 2-5, 1999
Commission Action:

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 5-98-469

APPLICANT: Richard and Melody Ferber **AGENT:** Group Delta Consultants, Inc.

PROJECT LOCATION: 1454 Galaxy Drive, City of Newport Beach, County of Orange

PROJECT DESCRIPTION: Backyard slope repair and bluff stability improvements following a bluff failure by installing a seventy-five foot long subterranean grade beam wall and anchor system plus a plus a seventy-five foot long by eighteen foot high retaining wall (at its highest point) within the eastern property line. Seven hundred cubic yards of grading is proposed (of which 300 cubic yards will be import) for purposes of re-establishing the backyard.

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends approval of a modified project with eight special conditions. The major issue of this staff report is development on a bluff-top adjacent to an ecological reserve. The proposed development consists of slope stabilization and reconstruction of a backyard following a bluff failure. Staff recommends that the proposed retaining wall (for purposes of restoring the applicant's backyard) be deleted from the project as the retaining wall is not necessary for slope stabilization. The grade beam wall provides the required slope stabilization. Furthermore the proposed slope stabilization is an interim solution since it does not resolve the potential for future bluff failures. To develop a comprehensive solution the applicant and the Department of Fish and Game should initiate discussions to develop a comprehensive plan to fully repair and stabilize the slope damaged by the slide of December 16, 1997.

Special conditions contained in this staff report concern: assumption of risk, conformance with the geological recommendations, elimination of the retaining

wall, implementation of a landscaping plan, right of entry authorization, imposition of best management practices, that the applicant contact the Department of Fish and Game to develop a comprehensive slope repair and stabilization, and future development. The applicant's agent has indicated that he (the agent) is in agreement with the special conditions.

LOCAL APPROVALS RECEIVED: Approval in Concept 2608-98 from the City of Newport Beach.

SUBSTANTIVE FILE DOCUMENTS: City of Newport Beach certified Land Use Plan. Geotechnical Investigation titled *"Geotechnical Report Restoration and Slope Repair, 1454 Galaxy Drive, Newport Beach, California"* by Group Delta Consultants, Inc. dated November 2, 1998, *"Report of Landslide Investigation, Rear Yard and Natural Bluff Below Lot 72 and Lot 73 1454 Galaxy Drive, Upper Back Bay Area, Newport Beach, California"* by Converse Consultants dated May 14, 1998, *"Draft Geotechnical Report of Bluff Slope Failure Investigation, 1448 Galaxy, Newport Beach, California"* by Zeiser Kling Consultants, Inc. dated November 2, 1998, Coastal Commission permits 5-85-062 (Braman), 5-93-308 (Pope Trust), .5-93-367 (Rushton), 5-98-188 (Lewis), Emergency Permit 4-98-497 Penfil and Emergency Permit 5-98-524 (Penfil), and CDP application 5-98-524 (Penfil)

STAFF RECOMMENDATION:

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, located between the nearest public roadway and the shoreline, will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976 including the public access and recreation policies of Chapter 3, 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 construction 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 construction has not commenced, the permit will expire two years from the date on which the Commission voted on the application, or in the case of administrative permits, the date on which the permit is reported to the Commission. Construction shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All construction must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director of the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. Special Conditions.

1. ASSUMPTION OF RISK DEED RESTRICTION

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 shall provide: (a) that the applicant understands that the site may be subject to extraordinary hazards from hillside instability and erosion and the applicant assumes the liability from such hazards; and b) the applicant unconditionally waives any claim of liability on the part of the Commission and agrees to indemnify and hold harmless the Commission, its officers, agents, and employees relative to the Commission's approval of the project for any damage resulting from such hazards. The document shall run with the land, binding all

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

2. CONFORMANCE WITH GEOTECHNICAL RECOMMENDATIONS

Prior to issuance of the coastal development permit, the applicant shall submit for the review and approval of the Executive Director:

- a) final revised plans which do not contain the retaining wall and footing for the retaining wall. These plans shall include the signed statement of the geotechnical consultant certifying that the project plans incorporate the geotechnical recommendations contained in the geotechnical investigation titled "*Geotechnical Report Restoration and Slope Repair, 1454 Galaxy Drive, Newport Beach, California*" (Project No. 1862-EC01) by Group Delta Consultants, Inc. dated November 2, 1998 into the final design of the proposed development.

The approved development shall be constructed in compliance with the final plans as approved by the Executive Director. Any deviations from the plans shall require a Coastal Commission approved amendment to this permit, or written concurrence from the Executive Director that the deviation is not substantial and therefore a permit amendment is not needed.

3. LANDSCAPING PLAN

Prior to issuance of the coastal development permit, the applicant shall submit, for the review and approval of the Executive Director, a landscaping plan which has been reviewed and signed by a licensed landscape architect. The landscaping plan shall incorporate the following criteria:

- a) The backyard area from the property line landward to the project daylight line as shown in the grading plan shall be planted and maintained for erosion control, screening, and visual enhancement. To minimize the need for irrigation and to reduce potential erosion and slope failure, the landscaping within this area shall consist of native plants similar to that found on existing hillsides in the vicinity or deep rooted non-native plants which are drought tolerant and non-invasive. Invasive, non-indigenous plant species which tend to supplant native species shall not be used.
- b) All graded areas shall be stabilized with planting at the completion of the project. Planting shall follow accepted planting procedures adequate to provide 70% coverage within one year, and shall be repeated, if necessary, to provide such coverage.
- c) No permanent irrigation system shall be allowed within the backyard area from the property line landward to the project daylight line as shown in the

**5-98-469
(Mr. And Mrs. Ferber)**

grading plan. Temporary irrigation to allow the establishment of the plantings is allowed.

- d) The landscaping plan shall show all the existing backyard vegetation and any irrigation system in the backyard in conjunction with the proposed landscaping.
- e) the applicant shall submit written evidence from the California Department of Fish and Game (Department) demonstrating that the Department has approved the landscaping plan.

The landscaping plan shall be carried out as approved by the Executive Director.

4. RIGHT OF ENTRY AUTHORIZATION

This coastal development permit 5-98-469 approves only the development within the property lines of 1454 Galaxy Drive in the City of Newport Beach. In the event that the applicant must utilize property located outside of his property lines for purposes of conducting work within his property lines, the applicant shall submit, for the review and approval, written confirmation from the affected landowner that the applicant has the legal right to enter the affected property before conducting any such work.

This permit does not authorize any development on the Upper Newport Bay Ecological Reserve. Should entry onto the Ecological Reserve result in any damage that has to be repaired, the applicant shall apply for a coastal development permit to undertake restoration.

5. BEST MANAGEMENT PRACTICES

The applicant shall implement best management practices, such as sandbags, during construction to control erosion and to minimize the potential for silt to be transported into the Ecological Reserve and wetland below the project site.

No debris shall be discarded anywhere on the Upper Newport Bay Ecological Reserve and all debris shall be removed from the project site upon completion of the project.

6. COLORIZATION OF GRADE BEAM WALL

To minimize the visual impact of manmade structures on the natural bluff, the grade beam wall shall match the color of the surrounding terrain.

7. FUTURE DEVELOPMENT

This coastal development permit 5-98-469 approves only the development, as expressly described and conditioned herein, for the construction of a grade beam wall and anchor tieback system plus landscaping at 1454 Galaxy

Drive. Any future development shall require a coastal development permit or an amendment to this permit from the Coastal Commission.

8. COMPRHENSIVE PLAN

Prior to issuance of this permit, the applicant shall document in writing that he has contacted the California Department of Fish and Game to initiate planning for a comprehensive design to repair the damage caused by the slide of December 16, 1997 and to stabilize the entire slope affected by the slide of December 16, 1997.

V. Findings and Declarations.

The Commission hereby finds and declares as follows:

A. Project Description and Location

The proposed project is located at 1454 Galaxy Drive in the City of Newport Beach, County of Orange (Exhibits 1,2, & 3). Galaxy Drive is located on a bluff above Upper Newport Bay. The residence is on the bayside side of Galaxy Drive, hence, the subject site is located between the nearest public roadway and the shoreline of Upper Newport Bay. The bluff is geotechnically active and has been prone to failure. The Commission has issued at least four coastal development permits for slope repairs on Galaxy Drive.

On December 16, 1997 a bluff failure occurred at the project site. The project proposes backyard slope repair and bluff stability improvements consisting of the installation of a seventy-five foot long subterranean grade beam wall and anchor system plus a plus a seventy-five foot long by eighteen foot high retaining wall (at its highest point in the center) within the eastern property lines. Seven hundred cubic yards of grading is proposed (of which 300 cubic yards will be import) for purposes of re-establishing the backyard (Exhibit 4).

The applicant also applied for an emergency permit. However, based on the information submitted by the geotechnical consultants, the Executive Director determined that the residence was not in immediate danger which required action more quickly than permitted by the procedures for regular permits. Therefore, an emergency permit was not issued (Exhibit 10).

As a consequence of this slide, the next door neighbor (to the south) at 1448 Galaxy Drive (Exhibit 3) applied for and received two emergency permits (5-98-497 (Penfil) and 5-98-524 (Penfil)) from the Executive Director (Exhibits 14 & 15). These permits were for the installation of subterranean caissons along the eastern

