

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA

SOUTH CALIFORNIA ST., SUITE 200

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**STAFF REPORT: REGULAR CALENDAR****APPLICATION NO.:** 4-98-342**APPLICANT:** Robert and Marlene Baumgartner**PROJECT LOCATION:** 25164 Malibu Road, Malibu, Los Angeles County**PROJECT DESCRIPTION:** After-the-fact approval of a rock revetment installed during the 1978-1979 El Nino storm season to protect existing 4-unit apartment complex fronting Malibu Beach, and offer to dedicate lateral public access easement.**LOCAL APPROVALS RECEIVED:** City of Malibu: Planning Approval-In-Concept, dated December 16, 1998.**SUBSTANTIVE FILE DOCUMENTS:** Certified Malibu/Santa Monica Mountains Land Use Plan; U.S. Army Corps of Engineers, Los Angeles District, Reconnaissance Study of the Malibu Coast; California State Lands Commission letter of evaluation, dated November 24, 1998; Coastal Development Permits 4-98-085-G (Harris); 4-98-085 (Harris Family Trust); Wave Uprush Study for 25164 Malibu Road, prepared by John W. Starlin and Associates, dated February 25, 1998; Supplement to Wave Uprush Study dated May 11, 1999.**SUMMARY OF STAFF RECOMMENDATION**

Staff recommends approval of the proposed project with Special Conditions regarding: Assumption of Risk, Offer to Dedicate Lateral Public Access, Provisional Term for Shoreline Protective Structure: Deed Restriction, and Sign Restriction. The rock revetment proposed for after-the-fact approval protects an existing, older 4-unit apartment complex fronting Malibu Beach. The wooden caissons supporting the beachside units are constructed using forced placement to the point of resistance, and are not constructed to the foundational standards required today. Thus, although the rock revetment could be placed further landward for purposes of protecting the septic system only, the revetment is required in its present location to protect critical support caissons for the overlying apartments. Nevertheless, Malibu Beach is an eroding beach, and should the subject structures be upgraded in the future (caisson replacement or upgrade, etc.), the continued approval of the revetment would be subject to consideration by the Coastal Commission. In addition, there is some evidence (a definitive analysis has not been undertaken), according to the California State Lands Commission, that the rock revetment extends onto public trust lands. As such, the applicants have offered to dedicate a lateral public access easement as part of the project proposal.

8. **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, Waiver of Liability, and Indemnity

- A. By acceptance of this permit, the applicants acknowledge and agree (i) that the site may be subject to hazards from storm waves, erosion, or flooding; (ii) to assume the risks to the applicants and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.
- B. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicants shall execute and record a deed restriction, in a form and content acceptable to the Executive Director incorporating all of the above terms of this condition. The deed restriction shall include a legal description of the applicants' entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

2. Offer to Dedicate Lateral Public Access

In order to implement the applicants' proposal of an offer to dedicate an easement for lateral public access and passive recreational use along the shoreline as part of this project, the applicants agree to complete the following prior to issuance of the permit: The landowner shall execute and record a document, in a form and content acceptable to the Executive Director, irrevocably offering to dedicate to a public agency or private association approved by the Executive Director an easement for lateral public access and passive recreational use along the shoreline. The document shall provide that the offer of dedication shall not be used or construed to allow anyone, prior to acceptance of the offer, to interfere with any rights of public access acquired through use which may exist on the property. Such easement shall be located along the entire width of the property from the

1. Changes to the foundation of any structure on the subject site located landward of the subject shoreline protective structure authorized herein, such as repairs or replacement of support piles or caissons;
2. Upgrade, relocation or abandonment of the septic disposal system;
3. Remodel of the primary structure or residence on the subject site involving the demolition of more than 50 percent of exterior walls or an addition to the primary structure or residence resulting in an increase of more than 10 percent of structural size;
4. Construction of a new structure on the subject parcel;
5. Relocation and/or complete removal of any or all of the structures shown in Exhibit 7.

If an application for a new coastal development permit is required pursuant to this condition, and the Commission determines that the proposed project is not consistent with the Coastal Act, the Commission may deny the permit application or may take any other action authorized by law.

- B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicants shall execute and record a deed restriction in a form and content acceptable to the Executive Director, reflecting the above restrictions on development of the subject parcel. The deed restriction shall include both a legal description of the applicants' entire parcel, and an Exhibit drawn to scale depicting the existing development as of July 13, 1999 proposed for protection by the subject shoreline protective device, and the shoreline protective device itself. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without an amendment to this coastal development permit approved by the Coastal Commission.

4. Sign Restrictions

No signs shall be posted on the property subject to this permit (and/or on immediately adjacent properties) which (a) explicitly or implicitly indicate that the portion of the beach on Assessor's Parcel Number (APN) 4459-15-12 located seaward of the revetment approved by Coastal Development Permit 4-98-342 is private or (b) contain similar messages that attempt to prohibit public use of this portion of the beach. In no instance shall signs be posted which read "*Private Beach*" or "*Private Property*." To effectuate the above prohibitions, the permittee is required to submit to the Executive Director for review and approval prior to posting the content of any proposed signs.

IV. Findings and Declarations

The Commission hereby finds and declares:

in the relatively near future. At such time, the Commission may consider the potential to relocate the septic system and to install upgraded support structures capable of withstanding wave attack, thereby obviating the need for the continued presence of the rock revetment herein under consideration. Such potential remodeling of the aging apartment complex and or the support structures may, therefore, present an opportunity to reconsider the location and/or need for the continued existence of the as-built revetment. For these reasons, and as discussed in more detail below, the Commission in authorizing the present project proposal specifically addresses the possible removal or relocation landward of the subject shoreline protective structure in the future (see Special Condition 3 above and associated findings that follow below).

Shoreline Protective Devices

The applicants propose to construct a an approximately 50 ft. long, 14 ft. high (during periods of maximum beach scour) rock revetment¹ and two approximately 35 ft. long return walls. The toe of the as-built revetment is located approximately 107 feet seaward of Malibu Road (Exhibit 4). The as-built revetment is located beneath the beachfronting apartment units, and protects both the existing septic system and aging timber support caissons. The revetment will be approximately one foot higher than the summer sand elevation.

After identifying the applicable Coastal Act sections upon which the Commission relies as the standard of review of the proposed project, and the certified Malibu/Santa Monica Mountains Land Use Plan (LUP) policies upon which the Commission has relied as guidance in past permit decisions, the discussion of the impacts of the shoreline protective device will proceed in the following manner:

First, the staff report describes the physical characteristics of the Puerco Beach shoreline; second the report analyzes the dynamics of the Puerco Beach shoreline; and third, the report analyzes the location of the proposed shoreline protective device in relation to wave action. Finally, the report evaluates whether the proposed shoreline protective device is warranted, weighing the available evidence in light of the Coastal Act requirements and the past guidance of the LUP policies, and whether the proposed revetment will adversely impact the shoreline sand supply and shoreline processes.

Section 30235 of the Coastal Act states:

Section 30235.

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required

¹ The terms "revetment," "bulkhead," "seawall," and "shoreline protective device" are used interchangeably in this report to the extent that they are used to describe structures that provide physical armoring of the shoreline to protect existing development against wave attack.

1. Proposed Project and Site Shoreline Characteristics

The City of Malibu includes a narrow strip of coast that is some 27 miles long, backed inland of Pacific Coast Highway and frontage streets by the Santa Monica Mountains. The applicants' proposed project is located on Puerco Beach, a narrow sandy beach backed by bluffs inland of Malibu Road. The Puerco Beach area is heavily developed, and the parcels near the applicants' are small and generally built out with both single and multiple family residences. The applicants' 4-unit apartment complex was built in approximately 1955.

Puerco Beach is an Eroding Beach

Having defined Puerco Beach as a narrow, heavily developed beach, the next step is to consider the overall trend of sand supply on the beach. Evaluating whether or not a pattern of beach erosion exists is the key factor in determining the impact of the proposed seawall on the shoreline. Generally, beaches fit into one of three profile categories: 1) eroding; 2) equilibrium, or 3) accreting.

Puerco Beach has been identified as an eroding beach. The U.S. Army Corps of Engineers, Los Angeles District, identifies Puerco Beach as trending from stable to slowly eroding (Reconnaissance Study of the Malibu Coast, 1994). An earlier study, titled Shoreline Constraints Study, by Moffatt and Nichols (June 30, 1992) determined that Puerco Beach is retreating at a rate of one-fourth to three-fourths of a foot per year, and provides confirmation of the Army Corp analysis that the beach shows evidence of a long term erosional trend.

The applicants have submitted a wave uprush study and structural engineering analysis and supplement dated February 28, 1998 and May 11, 1999, respectively, prepared by John W. Starlin and Associates, Structural Engineering. The study and analysis conclude that the revetment is necessary because all nearby parcels are similarly armored in the face of significant beach erosion and significant potential for wave attack. Therefore, based on the preponderance of evidence of these studies, considered in conjunction with site-specific evidence of beach erosion, the Commission concludes that the site proposed for placement of a seawall is located on an eroding beach.

2. Location of the Proposed Shoreline Protective Device in Relation to the Mean High Tide Line and Wave Action.

The Commission notes that loss of beach is widely understood to occur when shoreline protective devices are placed on equilibrium or eroding beaches. To determine what the impacts of the proposed revetment on the shoreline are likely to be, the location of the proposed protective device in relationship to the expected wave runup as calculated by the Mean High Tide Line (MHTL) must be analyzed.

Based on the above discussion, the Commission finds that the proposed, as-built revetment, at its proposed location, has the potential to encroach into an area of the beach that is currently subject to wave action during storm and high tide events. As previously discussed, the Commission finds that Puerco Beach is a narrow, eroding beach and that the proposed revetment will, at times, be subject to wave action during storm and/or high tide events. Therefore, the following section evaluates the impacts of the proposed revetment on the beach based on the above information which identified the specific structural design, the location of the structure, and the shoreline geomorphology.

c. Effects of the Shoreline Protective Device on the Beach

The proposed 50 ft. long, 14. ft. high, as-built rock revetment is constructed on the sandy beach approximately 6.5 feet landward of the outermost support pilings supporting the beachfront, existing apartment units. This placement exceeds (by approximately 15 ft.) the minimum five-ft. distance, as measured from the landwardmost placement of the revetment footprint, necessary to protect the existing septic disposal system without compromising the clearance standards from septic systems imposed by the City's Environmental Health Department. However, as noted previously, the applicants' structural engineer has determined that the aging timber support pilings providing key support for the residential portion of the apartments (that is, not including the pilings supporting the decks only) must be protected by the revetment due to the fragile condition of the aging timber supports. Thus, the as-built footprint of the revetment is placed, in the opinion of the structural engineer, as far landward as is feasible consistent with the need to ensure the structural stability of the apartment foundations.

Although the precise impact of a structure on the beach is a persistent subject of debate within the discipline of coastal engineering, and particularly between coastal engineers and marine geologists, it is generally agreed that a shoreline protective device will affect the configuration of the shoreline and beach profile. Adverse impacts upon the shoreline may accrue as the result of beach scour, end scour (undermining of the beach areas at the ends of the seawall), the retention of potential beach material behind the wall, the fixing of the back beach and the interruption of alongshore processes. To evaluate these potential impacts relative to the proposed structure and its location at Puerco Beach, each of the identified effects will be evaluated below.

(1) Beach Scour

Scour is the removal of beach material from the base of a cliff, seawall or revetment due to wave action. The scouring of beaches caused by seawalls and revetments is a frequently-observed occurrence. When waves impact a hard surface such as a coastal bluff, rock revetment, or vertical bulkhead, some of the energy from the wave is absorbed, but much of the energy is reflected back seaward. This reflected wave

the waves striking the wall rapidly remove sand from the beach.⁴

Finally this observation was underscored more recently in 1987 by Robert G. Dean in "Coastal Sediment Processes: Toward Engineering Solutions":

Armoring can cause localized additional storm scour, both in front of and at the ends of the armoring...Under normal wave and tide conditions, armoring can contribute to the downdrift deficit of sediment through decreasing the supply on an eroding coast and interruption of supply if the armoring projects into the active littoral zone.⁵

Dr. Craig Everts found that on narrow beaches where the shoreline is not armored, the most important element of sustaining the beach width over a long period of time is the retreat of the back beach and the beach itself. He concludes that:

Seawalls inhibit erosion that naturally occurs and sustains the beach. The two most important aspects of beach behavior are changes in width and changes in the position of the beach. On narrow, natural beaches, the retreat of the back beach, and hence the beach itself, is the most important element in sustaining the width of the beach over a long time period. Narrow beaches, typical of most of the California coast, do not provide enough sacrificial sand during storms to provide protection against scour caused by breaking waves at the back beach line. This is the reason the back boundary of our beaches retreats during storms.⁶

Dr. Everts further concludes that armoring in the form of a seawall or revetment interrupts the natural process of beach retreat during a storm event and that:

...a beach with a fixed landward boundary is not maintained on a recessional coast because the beach can no longer retreat.⁷

The Commission has observed this phenomenon up and down California's coast where a seawall has successfully halted the retreat of the shoreline, but only at the cost of usurping the beach. For example, at La Conchita Beach in Ventura County, placement of a rock revetment to protect an existing roadway has caused narrowing of the existing beach. Likewise, at City of Encinitas beaches in San Diego County, construction of vertical seawalls along the base of the bluffs to protect existing residential development above, has resulted in preventing the bluffs' contribution of sand to the beaches, resulting in narrowing.

As set forth in earlier discussion, Puerco Beach is a narrow, receding beach. The

⁴ State Department of Boating and Waterways (formerly called Navigation and Ocean Development), Shore Protection in California (1976), page 30.

⁵ Coastal Sediments '87.

⁶ Letter Report dated March 14, 1994 to Coastal Commission staff civil engineer Lesley Ewing from Dr. Craig Everts, Moffatt and Nichol Engineers.

⁷ *ibid.*

revetment and is consistent with the applicable Coastal Act sections and with past Commission action. Public access is discussed in more detail below.

(2) End Effects

End scour effects involve the changes to the beach profile adjacent to the shoreline protection device at either end. One of the more common end effects comes from the way reflection of waves off of the shoreline protection device in such a way that they add to the wave energy which is impacting the unprotected coastal areas on either end. Coastal engineers have compared the end effects impacts between revetments and bulkheads. In the case of a revetment, the many angles and small surfaces of the revetment material reflect wave energy in a number of directions, effectively absorbing much of the incoming wave rather than reflecting it. Because of the way revetments modify incoming wave energy, there is often less problem with end effects or overtopping than that which occurs with a vertical bulkhead. In the case of a vertical bulkhead, return walls are typically constructed in concert with the seawall, and, thus, wave energy is also directed to the return walls causing end erosion effects.

In addition, the Commission notes that the literature on coastal engineering repeatedly warns that unprotected properties adjacent to any shoreline protective device may experience increased erosion. Field observations have validated this concern. Although it is difficult to quantify the exact loss of material due to end effects, Gerald G. Kuhn of the Scripps Institute of Oceanography concludes in a paper entitled, "Coastal Erosion along Oceanside Littoral Cell, San Diego County, California," (1981) that erosion on properties adjacent to a rock seawall is intensified when wave runup is high.

An extensive literature search on the interaction of seawalls and beaches was performed by Nicholas Kraus in which he found that seawalls have the same effects on narrow beaches or beaches eroded by storm activity as Dr. Kuhn observed in relation to rock seawalls. Dr Kraus' research indicated that the form of the erosional response to storms that occurs on beaches without seawalls that are adjacent to beaches with seawalls is manifested as more localized toe scour and end effects of flanking and impoundment at the seawall.⁸ Dr. Kraus' concluded that seawalls were a likely cause of retained sediment, increased local erosion and increased end erosion. Dr. Kraus states:

At the present time, three mechanisms can be firmly identified by which seawalls may contribute to erosion at the coast. The most obvious is retention of sediment behind the wall which would otherwise be released to the littoral system. The second mechanism, which would increase local erosion on downdrift beaches, is for the updrift side of the wall to act as a groin and impound sand. This effect appears to be primarily theoretical rather than actualized in the field, as a wall

⁸ "Effects of Seawalls on the Beach", published in the Journal of Coastal Research, Special Issue #4, 1988.

wave action and bluff retreat. In the case of Puerco Beach, which is located in the Santa Monica Littoral Cell, the back of the beach is fixed at Pacific Coast Highway. One of the main sources of sediment for beaches are the bluffs themselves, as well as the material that has eroded from inland sources and is carried to the beach by coastal streams. The protective device may be linked to increased loss of material in front of the wall. The net effect is documented in "Responding to Changes in Sea Level, Engineering Implications" which provides:

A common result of sea wall and bulkhead placement along the open coastline is the loss of beach fronting the structure. This phenomenon, however, is not well understood. It appears that during a storm the volume of sand eroded at the base of a sea wall is nearly equivalent to the volume of upland erosion prevented by the sea wall. Thus the offshore profile has a certain "demand" for sand and this is "satisfied" by erosion of the upland on a natural beach or as close as possible to the natural area of erosion on an armored shoreline...¹¹

As explained, the revetment protects the applicants' property from continued loss of sediment. However, the result of this protection, particularly on a narrow beach, is a loss of sediment on the sandy beach area that fronts the seawall. Furthermore, as explained previously, this loss of sediment from the active beach leads to a lower beach profile, seaward of the protective device, where the revetment will have greater exposure to wave attack.

In past permit actions, the Commission has required a lateral public access easement for new shoreline protection devices to mitigate adverse impacts to beach sand supply and public access. In the case of this project, to mitigate any possible adverse effects upon public access along the beach, the applicants propose to dedicate a new public lateral access easement along the beach. Special Condition 2 has been included to implement the applicants' offer to dedicate a new lateral public access easement. Therefore, as conditioned, the project will minimize the adverse impacts resulting from construction of the revetment and is consistent with the applicable Coastal Act sections and with past Commission action.

d. Past Commission Actions on Residential Shoreline Development

Many portions of the Malibu coastline, including Puerco Beach, are intensely developed with single family residences. Such development, and the shoreline protective devices installed to protect the residences prevent or greatly impair access to the coast, obstruct public views to and of the beach and water from Pacific Coast Highway and other scenic viewing areas, interrupt shoreline processes and impact the fragile biological resources in these areas.

¹¹ "Responding to Changes in Sea Level: Engineering Implications," National Academy of Sciences, National Academy Press, Washington, D.C., 1987 (at page 74).

To the maximum extent feasible, protective structures are required to tie into adjacent protective structures. Depending on past development that has occurred on developed beaches, requiring seawalls to form one contiguous line is not always possible. In addition, many of the protective devices that were constructed on these beaches were built under emergency situations where it is difficult to place the seawall under an existing structure

In the case of the proposed revetment, the rocks are placed in such a way as to form a continuum with the adjacent properties on either side of the subject parcel, in an area that is built out. Thus the revetment is considered to be a shoreline protective device protecting infill development and the placement is consistent with the adjacent revetments.

The Commission notes, however, that the existing apartment complex protected by the subject revetment was constructed in approximately 1955. As noted by the applicants' structural engineer, the apartments are supported by aging timber caissons constructed to standards and by means that would be considered inadequate by today's building codes and standards. Thus, the timber caissons may be nearing the end of their serviceable life and could be subject to repair or replacement in the near future. In addition, termite damage is common in timber of this vintage in the Malibu area. Therefore, significant renovation of the foundation of the existing apartments, and of the apartments themselves may become necessary. In addition, there is substantial interest at present in replacing beachfront septic systems with more modern sewage disposal methods, thus potentially offering the applicants the opportunity, and potentially the obligation, to retire the existing septic disposal system in the near future. Changes to the septic system, combined with improvements to the aging structural members of the existing apartment foundation and support system, may obviate the need for the placement of a revetment at the proposed location in the future.

Special Condition 3 acknowledges that such circumstances may arise in the future, and that mitigation of adverse effects of the presently proposed shoreline protective device may then be achieved by removing or relocating the subject revetment. Moreover, under such circumstances, the adverse effects of the shoreline protective device on shoreline processes and sand supply as discussed previously, would no longer be justified in light of new alternatives for removing or relocating the structure that may be posed by the changed circumstances. Therefore, the Commission finds that the imposition of Special Condition 3 is necessary to ensure that the authorization of the construction of such structure under Coastal Development Permit 4-98-342 terminates should changes to the existing structures it is designed to protect become necessary or possible in the future. Under such circumstances, the landowner/permittee at the time must either abandon and remove the revetment in concert with the other changes proposed on site or apply for, and obtain, a new Commission approval of the subject shoreline protective device. Thus, the Commission finds that as conditioned by Special Condition 3, the proposed development is consistent with Section 30235 of the Coastal Act.

the construction of the proposed revetment by ensuring that the structure is located as landward as possible and by including an offer to dedicate lateral public access in the project description. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30235, 30250, and 30253 of the Coastal Act.

B. Hazards and Geologic Stability

Coastal Act Section 30253 states in part:

Section 30253

New development shall:

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

Section 30253 of the Coastal Act mandates that new development provide for geologic stability and integrity and minimize risks to life and property in areas of high geologic, flood, and fire hazard. In addition to section 30253 of the Coastal Act, the certified Malibu/Santa Monica Mountains LUP contains several policies and standards regarding hazards and geologic stability. For example, Policy 147 suggests that development be evaluated for impacts on and from geologic hazards. Policy 153 suggests that no development should be sited less than 10 ft. landward of the mean high tide line. These policies have been certified as consistent with the Coastal Act and used as guidance by the Commission in numerous past permit actions in evaluating a project's consistency with section 30253 of the Coastal Act.

Storm, Wave and Flood Hazard

The Malibu coast has been subject to substantial damage as a result of storm and flood occurrences, geological failures and firestorms. The proposed project site is subject to flooding and/or wave damage from storm waves and storm surge conditions. Past occurrences have resulted in public costs (through low-interest loans for home repairs and/or rebuilding after disasters) in the millions of dollars in the Malibu area alone.

Along the Malibu coast, significant damage has also occurred to coastal areas from high waves, storm surge and high tides. In the winter of 1977-78, storms triggered numerous mudslides and landslides and caused significant damage along the coast. The "El Nino" storms in 1982-83 caused additional damage to the Malibu coast, when high tides over 7 feet combined with surf between 6 and 15 feet. These storms caused

address the stability of the apartment complex itself as it is pre-existing and not the subject of this coastal development permit application.

As set forth in Section 30253 of the Coastal Act, new development shall assure structural integrity and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area. The Commission finds, in keeping with the conclusions of the consulting structural engineer, that the proposed, as-built revetment is consistent with Section 30253 as constructed.

, that no machinery will be allowed in the intertidal zone at any time, and that all debris resulting from the construction period is promptly removed from the beach and seawall area.

In conclusion, the Commission finds that the proposed, as-built project is designed to minimize risks to life and property and assure stability and structural integrity. Therefore, the Commission finds for the reasons set forth above that as conditioned, the proposed development is consistent with section 30253 of the Coastal Act.

C. Public Access.

The Coastal Act mandates the provision of maximum public access and recreational opportunities along the coast. The Coastal Act contains several policies which address the issues of public access and recreation along the coast.

Coastal Act Section 30210, which states that:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Coastal Act Section 30211 which states that:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Coastal Act Section 30212(a) provides that in new shoreline development projects, access to the shoreline and along the coast shall be provided except in specified circumstances, where:

- (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources.
- (2) adequate access exists nearby, or,

results from reduced beach width, alter the usable area under public ownership. A beach that rests either temporarily or permanently at a steeper angle than under natural conditions will have less horizontal distance between the mean low water and mean high water lines. This reduces the actual area in which the public can pass on their own property. The second effect on access is through a progressive loss of sand as shore material is not available to nourish the bar. The lack of an effective bar can allow such high wave energy on the shoreline that materials may be lost far offshore where it is no longer available to nourish the beach. The effect of this on the public are again a loss of area between the mean high water line and the actual water. Third, shoreline protective devices such as revetments and bulkheads cumulatively affect public access by causing accelerated and increased erosion on adjacent public beaches. This effect may not become clear until such devices are constructed individually along a shoreline and they eventually affect the profile of a public beach. Fourth, if not sited landward in a location that insures that the revetment is only acted upon during severe storm events, beach scour during the winter season will be accelerated because there is less beach area to dissipate the wave' energy. Finally, revetments and bulkheads interfere directly with public access by their occupation of beach area that will not only be unavailable during high tide and severe storm events but also potentially throughout the winter season.

Due to the aforementioned adverse impacts of shoreline protective structures on public access, the proposes shoreline protection device must be judged against the public access and recreation policies of the State Constitution, Sections 30210, 30220, and 30211 of the Coastal Act. Along the California coast, the line between land and ocean is complex and constantly moving.

The State owns tidelands which are those lands below the Mean High Tide Line as it exists from time to time. By virtue of its admission into the Union, California became the owner of all tidelands and all lands lying beneath inland navigable waters. These lands are held in the State's sovereign capacity and are subject to the common law public trust. The public trust doctrine restricts uses of sovereign lands to public trust purposes, such as navigation, fisheries, commerce, public access, water oriented recreation, open space, and environmental protection. The public trust doctrine also severely limits the ability of the State to alienate these sovereign lands into private ownership and use free of the public trust. Consequently, the Commission must avoid decisions that improperly compromise public ownership and use of sovereign tidelands.

Where development is proposed that may impair public use and ownership of tidelands, the Commission must consider where the development will be located in relation to tidelands. The legal boundary between public tidelands and private uplands is relation to the ordinary high water mark. In California, where the shoreline has not been affected by fill or artificial accretion, the ordinary high water mark of tidelands is determined by locating the existing "mean high tide line." The mean high tide line is the intersection of the elevation of mean high tide with the shore profile. Where the

have offered a lateral public access easement, however, to mitigate any adverse effects on coastal access or recreation that the subject revetment may have.

The Commission must also consider whether a project affects any public right to use shorelands that exist independently of the public's ownership of tidelands. In addition to a development proposal's impact on tidelands and on public rights protected by the common law public trust doctrine, the Commission must consider whether the project will affect a public right to use beachfront property, independent of who owns the underlying land on which the public use takes place. Generally, there are three additional types of public uses identified as: (1) the public's recreational rights in navigable waters guaranteed to the public under the California Constitution and state common law, (2) any rights that the public might have acquired under the doctrine of implied dedication based on continuous public use over a five-year period; and (3) any additional rights that the public might have acquired through public purchase or offers to dedicate.

These use rights are implicated as the public walks the wet or dry sandy beach below the mean high tide plane. This area of use, in turn moves across the face of the beach as the beach changes in depth on a daily basis. The free movement of sand on the beach is an integral part of this process, and it is here that the effects of structures are of concern.

In this case, no evidence has been presented in connection with this application that the public may have acquired rights of use under the doctrine of implied dedication. Although the Commission notes that the subject revetment is located as landward as possible in relation to the support structures of the existing apartment complex, there is still evidence that the revetment will be subject to wave uprush which may result in some potential adverse individual and cumulative impacts on sand supply, beach profile, and ultimately, public access as a result of localized beach scour, retention of beach material and interruption of the alongshore and onshore sand transport process.

The beaches of Malibu are extensively used by visitors of both local and regional origin and most planning studies indicate that attendance of recreational sites will continue to increase significantly over the coming years. The public has a right to use the shoreline under the public trust doctrine, the California Constitution and California common law. The Commission must protect those public rights by assuring that any proposed shoreline development does not interfere with or will only minimally interfere with those rights. In the case of the proposed project, the potential for the permanent loss of sandy beach as a result of the change in the beach profile or steepening from potential scour effects, as well as the presence of a residential structure out over the sandy beach does exist.

In past permit actions, the Commission has required that new shoreline protective devices be located as landward as possible to reduce adverse impacts to the sand supply and public access resulting from development. In the case of the proposed

specific studies would be necessary. Although this level of analysis has not been submitted by the applicants, the applicants have proposed to offer a dedication of a public lateral access easement along the beach to mitigate any possible adverse impacts the proposed revetment may have on public access. The applicants' offer proposes the easement as measured 10 feet from the landwardmost edge of the rock revetment to the MHTL. The 10 ft. privacy buffer will be available for public use when no other dry areas of the beach are available for public access. Because the applicants have proposed, as part of the project, an offer to dedicate a new lateral access easement along the southern section of the lot, it has not been necessary for Commission staff to engage in an extensive analysis of the potential adverse effects to public access resulting from the proposed project. As such, Special Condition 2 has been included to implement the applicants' offer to dedicate a new lateral public access easement prior to the issuance of the coastal development permit.

The Commission further notes that chronic unauthorized postings of signs illegally attempting to limit, or erroneously noticing restrictions on, public access have occurred on beachfront private properties in the Malibu area. These signs have a chilling effect on the legitimate, protected access of the public to public trust lands. The Commission has determined, therefore, that to ensure that such postings are clearly understood by the applicants to be off limits until or unless a coastal development permit is obtained for such signage, it is necessary to impose Special Condition 4 to ensure that similar signs are not posted on or near the proposed revetment or existing apartment structures. The Commission finds that if implemented, Special Condition 4 will protect the public's right of access to the sandy beach below the MHTL.

In addition, the Commission notes that as proposed, the revetment will be almost invisible during the summer beach season and would not extend more than one foot above the summer sand elevation. The revetment will be almost entirely covered with sand during the peak summer beach use seasons and when exposed will be comprised of naturally colored, weathered rock with no posted signs. As such, the Commission finds that the proposed, as-built revetment will not significantly affect public views of the coast from the sandy beach.

For all of these reasons, therefore, the Commission finds that as conditioned, the proposed project is consistent with Sections 30210, 30211, 30212, 30220, and 30251 of the Coastal Act.

D. Local Coastal Program

Section 30604 of the Coastal Act states that:

- (a) Prior to certification of the local coastal program, a coastal development permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with Chapter 3 (commencing with Section 30200) and that the permitted development will not prejudice the ability of the local government to prepare

4459 15
SHEET 1
SCALE 1" = 80'

1992

Diagrammatic depicts approximate dimensions.

The assessment of units in the following Condominium Plans, includes all rights and interests in the common areas as set forth in deeds of record.

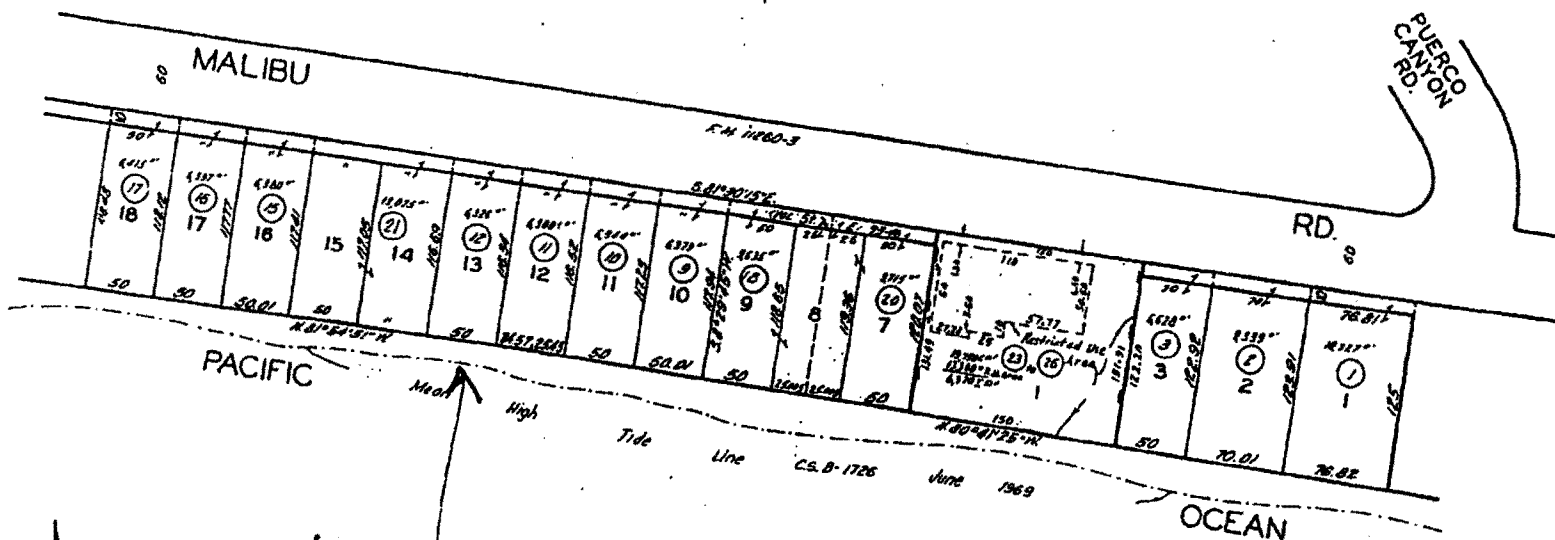
Condominium Plan Reference	Tract No.	Common Area	Subdivision of Airspace
7571927	P.M. 135-	Lots, Units	Sheet 2
7-6-81	33-34		

EXHIBIT NO. 2

APPLICATION NO.

4-98-342

Baumgartner



Subject Parcel

TRACT NO. 12939

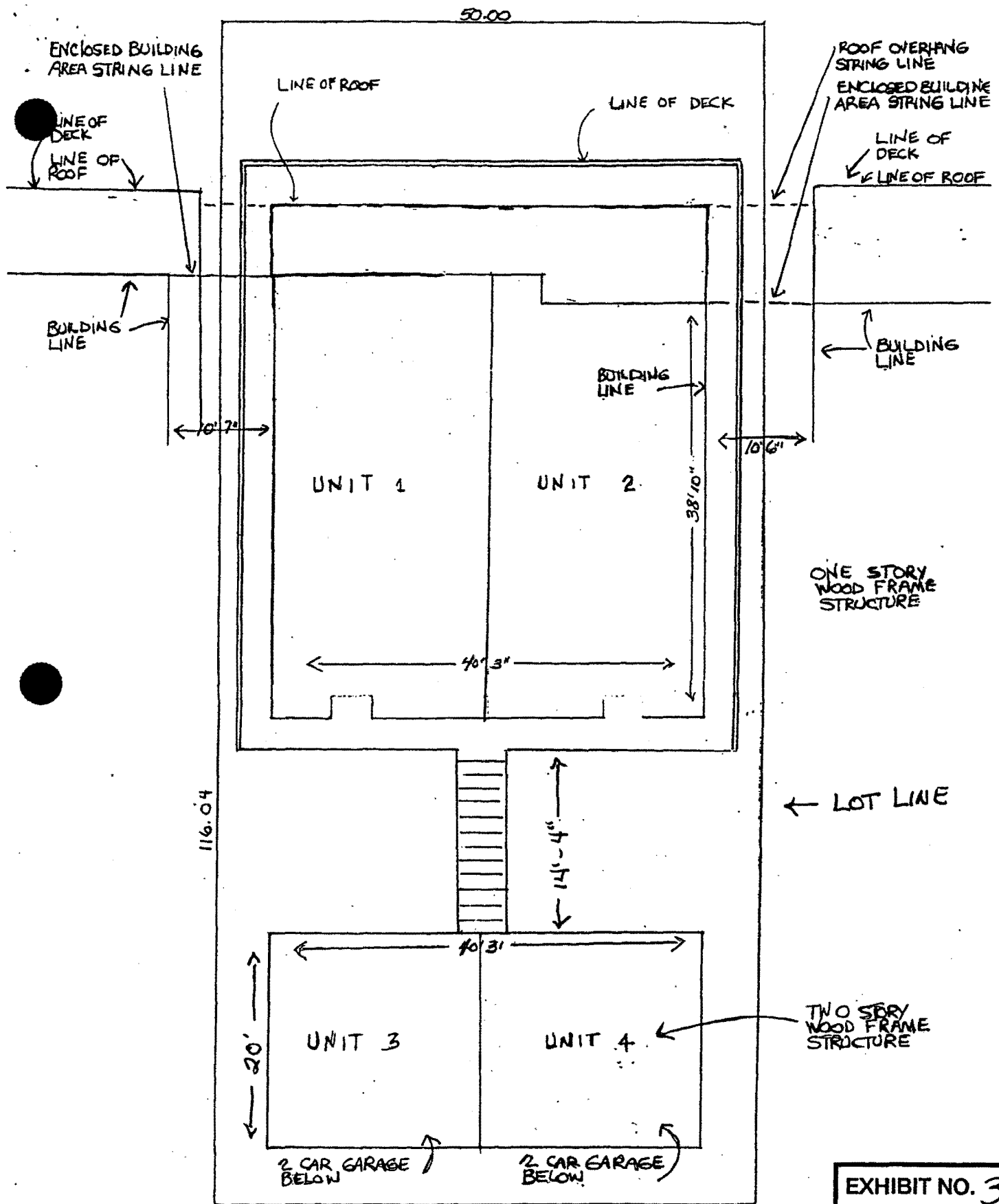
M. B. 263-39-40

CONDOMINIUM
PARCEL MAP
P.M. 135-33-34

CODE
10265

FOR PREV. ASSMT. SEE: 482-253

ASSESSOR'S MAP
COUNTY OF LOS ANGELES, CALIF.



ONE STORY
WOOD FRAME
STRUCTURE

TWO STORY
WOOD FRAME
STRUCTURE

MALIBU ROAD

PLOT PLAN $\frac{1}{8}" = 1.0'$

LEGAL : LOT 13 TRACT 12939
ADDRESS : 25164 MALIBU ROAD MALIBU

OWNER: MR & MRS. ROBERT BAUMGARTNER
25164 MALIBU ROAD

EXHIBIT NO. 3

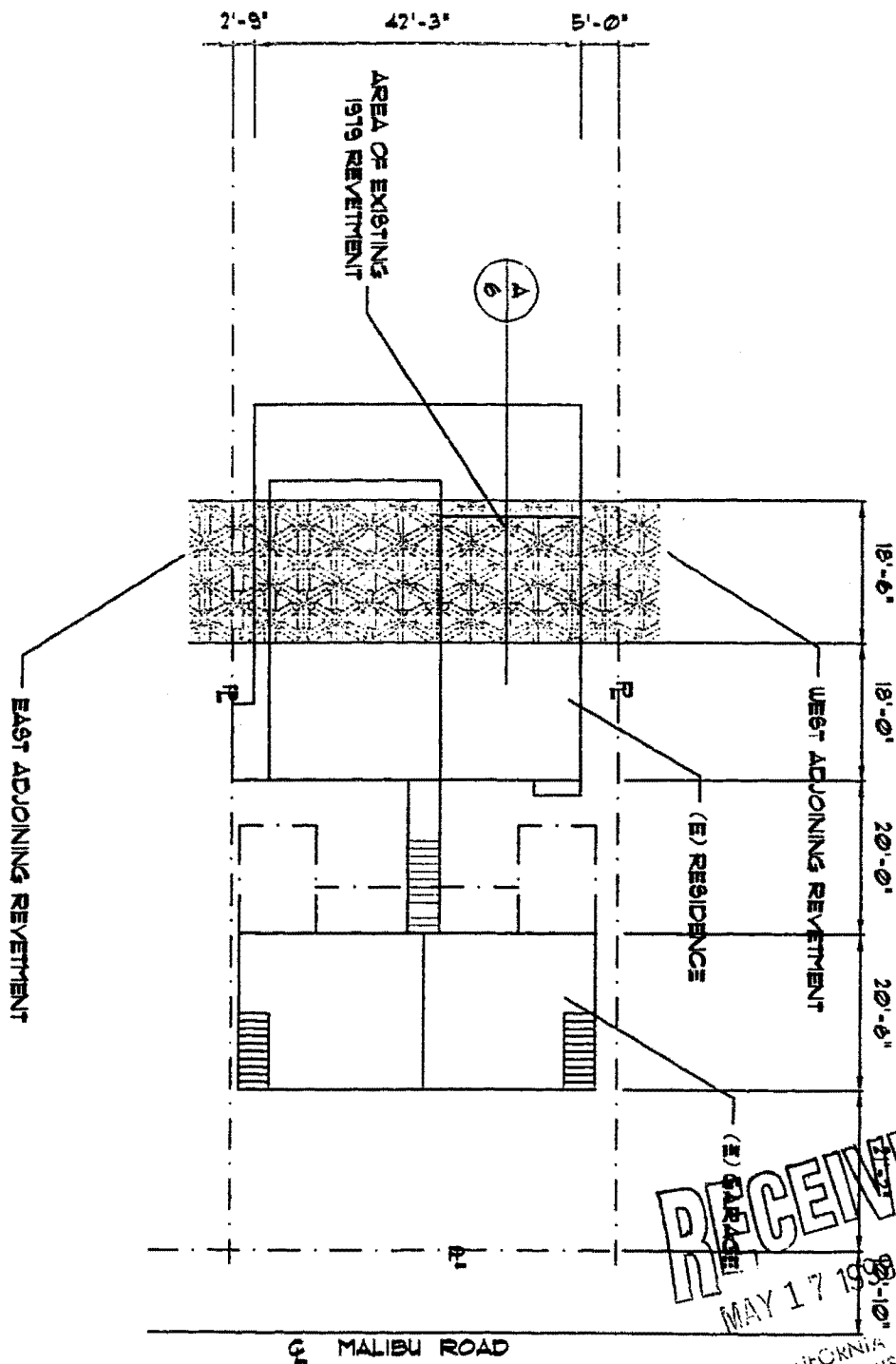
APPLICATION NO.

4-98-342

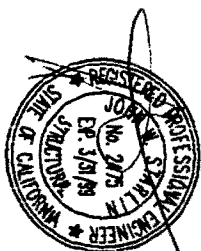
Baumgartner

PLOT PLAN

SCALE: 1" = 10' - 0"



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CALIFORNIA
COASTAL COMMISSION
SOUTH CENTRAL COAST DISTRICT



EXISTING REVETMENT

Baumgartner Residence
25164 Malibu Road
Malibu, CA 90265

John W. Starlin & Assoc.
Structural Engineering

P.O. Box 461675
Escondido, CA 92046-1675

Ph. (760) 461-6751
Fax (760) 461-6752
E-mail jstarlin@earthlink.net

EXHIBIT NO. 5
APPLICATION NO.

4-98-342

BAUMGARTNER
25164 MALIBU Rd
MALIBU CA

Rocks exposed
After storm

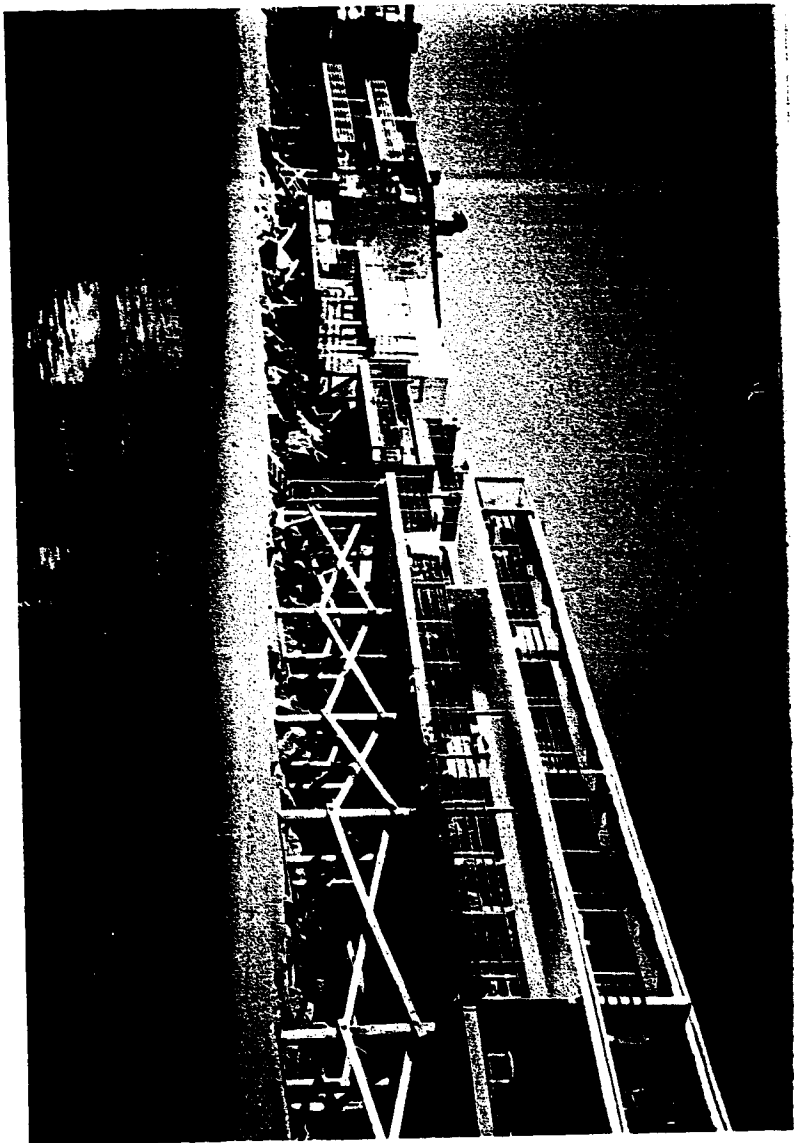
Building on West side

←
SUBJECT
PROPERTY
←

Building on
EAST side

EXHIBIT NO. 7
APPLICATION NO.

4-98-342



Properties on West side
of Property



1-21-99

EXHIBIT NO. 9
APPLICATION NO.
4-98-342
Baumgartner

Properties on East
Side of Property

