142 GRAY DAVIS, Governor

# CALIFORNIA COASTAL COMMISSION

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# RECORD PACKET COPY

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 Hearing Date:
 August 8-11, 2000

 Commission Action:
 1000

#### STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-00-086

APPLICANT: Gary Wells

AGENT: Richard S. Kolbu

**PROJECT LOCATION:** 302 The Strand, City of Hermosa Beach, Los Angeles County.

**PROJECT DESCRIPTION:** Demolition of the existing three-unit dwelling and construction of a three-floor, 30 foot high, 3,914 square foot single family residence with an attached two-car garage and one open guest parking space, on a 2,544 square foot lot.

Lot Area	2,544 square feet
Building Coverage	1,650 square feet
Pavement Coverage	852 square feet
Landscape Coverage	40 square feet
Parking Spaces	3
Zoning	R-3
Plan Designation	High Density Residential
Ht above final grade	30 feet

**LOCAL APPROVAL:** City of Hermosa Beach, Approval in Concept, 3/2/2000.

#### SUMMARY OF STAFF RECOMMENDATION

Staff is recommending that the Commission grant a coastal development permit for the proposed development with special conditions relating to assumption-of-risk deed restriction, a deed restriction prohibiting any future shoreline protective devises, building height, and parking. The applicant agrees with the staff recommendation.



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#### **STAFF RECOMMENDATION:**

The staff recommends that the Commission approve the following resolution with special conditions.

#### Motion:

I move that the Commission approve CDP No. 5-00-086 pursuant to the staff recommendation.

Staff Recommends a <u>YES</u> vote. Passage of this motion will result in adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

#### I. Approval with Conditions

The Commission hereby grants, subject to the conditions below, a permit for the proposed development on the grounds that the development, as conditioned, will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, is located between the sea and first public road nearest the shoreline and is in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

#### II. Standard Conditions

- 1. <u>Notice of Receipt and Acknowledgment</u>. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. <u>Expiration</u>. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. <u>Interpretation</u>. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

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- 4. <u>Assignment</u>. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 5. <u>Terms and Conditions Run with the Land</u>. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions

#### III. Special Conditions

#### **1.** No Future Shoreline Protective Device

- A. By acceptance of this permit, the applicant agrees, on behalf of himself and all other successors and assigns, that no shoreline protective device(s) shall ever be constructed to protect the subject property approved pursuant to Coastal Development Permit No. 5-00-086, including future improvements, in the event that the property is threatened with damage or destruction from waves, erosion, storm conditions or other natural hazards in the future. By acceptance of this permit, the applicant hereby waives, on behalf of himself and all successors and assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235.
- B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall execute and record a deed restriction in a form and content acceptable to the Executive Director, which reflects the above restriction on development. The deed restriction shall include a legal description of the applicant's entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

## 2. Assumption of Risk

A. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to wave up-rush and flooding; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of

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such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall execute and record a deed restriction in a form and content acceptable to the Executive Director, which reflects the above restriction on development. The deed restriction shall include a legal description of the applicant's entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

#### 3. <u>Height</u>

No portion of the proposed structure shall exceed 30 feet in elevation above the existing grade.

#### 4. Parking

A minimum of three parking spaces shall be provided and maintained on the site to serve the approved single family residence.

#### IV. Findings and Declarations

The Commission hereby finds and declares:

#### A. Project Description

The applicant proposes to demolish an existing three-unit dwelling and construct a threelevel, 30 foot high, 3,914 square foot single family residence on a beachfront lot in Hermosa Beach (See Exhibits). The 2,544 square foot lot is located on the inland side of The Strand, an improved public pedestrian right-of-way that separates the residential development from the public beach (Exhibit #1). The Strand is used by both residents and visitors for recreation activities and access to the shoreline. It extends for approximately 10 miles, from 45<sup>th</sup> Street (the border between El Segundo and Manhattan Beach) to Herondo Street (the border between Hermosa Beach and Redondo Beach) (Exhibit #2). On-site parking for the proposed single family residence will be provided by a two-car garage located on the ground floor and an open guest parking space on the driveway apron, with vehicular access from Beach Drive (Exhibit #3). The 3<sup>rd</sup> Street right-of-way, situated approximately 22 feet north of the site, has been improved as a pedestrian only beach access way (Exhibit #4).

## B. HAZARDS

Section 30253 of the Coastal Act states, in 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.

#### Section 30251 of the Coastal Act states that:

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

#### 1. Wave Up-rush and Flooding Hazards

The subject property is located at the southern portion of Hermosa Beach. The lot is fronted by The Strand, a coastal walkway adjacent to a wide, sandy beach (approximately 400 feet wide). The width of the beach provides this area a measure of protection from wave hazards, however beach erosion is seasonal and is subject to extreme storm events that may expose the project to wave up-rush and subsequent wave damage.

The especially heavy wave action generated during the 1982-83 El Nino winter storms and again in 1988 caused extensive beach erosion throughout Southern California. In both years Hermosa Beach was significantly eroded but wave action and water did not reach the subject property.

The applicant has submitted a wave run-up analysis study dated May 8, 2000, prepared by Pacific Engineering Group. The analysis examined the impact of wave run-up and flooding upon the subject site. The report determined that the subject site is located on a wide sandy beach. The study looked at the effect of large wave and flooding events

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such as those which occurred in January 1983 and January 1988. The report concluded that the subject property would not be subject to wave run-up by using a method that includes seven critical design waves, criteria for beach scour, design tide criteria, and probability analysis. A 100 year projection of sea level rise was included in the analysis. Using the most extreme cases for the above mentioned criteria, "the maximum wave uprush at the subject site and on the scoured design beach profile will occur approximately 92 feet seaward of the subject property right-of-way line at elevation 12.4 feet" (Exhibit #5). The study continues:

The proposed single family development is landward of the wave uprush limit line as calculated in this report. The proposed development of this single family residence will not have an adverse effect on the coastal and littoral processes since it is well landward of the uprush limit. No protective seawall is require for the proposed residence (Exhibit #5).

Beach areas are dynamic environments, which may be subject to unforeseen changes. Such changes may affect beach processes, including sand regimes. The mechanisms of sand replenishment are complex and may change over time, especially as beach process altering structures, such as jetties, are modified, either through damage or deliberate design. Therefore, the presence of a wide sandy beach at this time does not preclude wave up-rush damage and flooding from occurring at the subject site in the future. The width of the beach may change, perhaps in combination with a strong storm event like those which occurred in 1983, 1988 and 1998, resulting in future wave and flood damage to the proposed development.

The subject site may be subject to significant wave hazards if conditions change. Therefore, Special Condition #2 requires the recordation of an assumption-of-risk deed restriction by the applicant. With this standard waiver of liability condition, the applicant is notified that the lot and improvements are located in an area that is potentially subject to flooding and wave run-up hazards that 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 and lessors of the property will be informed of the risks and the Commission's immunity of liability.

**PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall execute and record a deed restriction in a form and content acceptable to the Executive Director, which reflects the above restriction on development. The deed restriction shall include a legal description of the applicant's entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

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As conditioned, the Commission finds that the proposed project is consistent with Section 30253 of the Coastal Act which requires that geologic and flood hazards be minimized, and that stability and structural integrity be assured.

#### 2. No Future Shoreline Protective Device

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

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

In the case of the current project, the applicant does not propose the construction of any shoreline protective device to protect the proposed development. It is not possible to completely predict what conditions the proposed structure may be subject to in the future. Consequently, it is conceivable the proposed structure may be subject to wave run-up hazards that could lead to a request for a protective device.

Section 30253 (2) of the Coastal Act states that new development shall neither create nor contribute to erosion or geologic instability of the project site or surrounding area. Therefore, if the proposed structure requires a protective device in the future it would be inconsistent with Section 30253 of the Coastal Act because such devices contribute to beach erosion.

In addition, the construction of a shoreline protective device to protect new development would also conflict with Section 30251 of the Coastal Act which states that permitted development shall minimize the alteration of natural land forms, including sandy beach areas which would be subject to increased erosion from shoreline protective devices. The development is not subject to wave run-up and flooding. Based on the information provided by the applicant, no mitigation measures, such as a seawall, are anticipated to be needed in the future. The coastal processes and physical conditions are such at this site that the project is not expected to engender the need for a seawall to protect the

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proposed development. There is currently a wide sandy beach in front of the proposed development that currently provides substantial protection from wave activity.

To further ensure that the proposed project is consistent with Sections 30251 and 30253 of the Coastal Act, and to ensure that the proposed project does not result in future adverse effects to coastal processes, the Commission imposes Special Condition #1 which requires the applicant to record a deed restriction that would prohibit the applicant, or future land owner, from constructing a shoreline protective device for the purpose of protecting any of the development proposed as part of this application.

**PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall execute and record a deed restriction in a form and content acceptable to the Executive Director, which reflects the above restriction on development. The deed restriction shall include a legal description of the applicant's entire parcel. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

Therefore, to ensure that the proposed project is consistent with Sections 30251 and 30253 of the Coastal Act, and to ensure that the proposed project does not result in future adverse effects to coastal processes, Special Conditions #2 requires the applicant to record an Assumption-of-Risk deed restriction and Special Condition #1 requires the applicant to record a No Future Shoreline Protective Device deed restriction. As conditioned, the Commission finds that the proposed project is consistent with Coastal Act Sections 30251 and 30253.

#### B. Community Character/Visual Quality

Section 3025I 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....

This section of The Strand includes one, two, and three floor single family residences and some older duplexes. The Strand is a heavily used pedestrian path used for biking and strolling. The moderate heights have been found by the Commission and the City to enhance the recreational experience. The majority of these structures do not exceed 30 feet in height. Allowing building heights above the 30-foot limit would serve to negatively impact coastal views and the character of the surrounding community. In order to protect community character and visual quality, Special Condition #3 limits the

development at a maximum of 30 feet above the existing grade. This height is consistent with the general height of the area.

The proposed project has a roof height of 30 feet above the existing grade (Exhibit #6-8). Therefore, the proposed single family residence complies with the 30-foot height limit in the City of Hermosa Beach proposed revision to the Certified LCP and previous Commission approvals. The scenic and visual qualities of the area will not be negatively impacted. In order to ensure that the proposed project is constructed as approved, the approval is conditioned to limit the roof height to 30 feet. No portion of the structure shall exceed 30 feet in elevation above the existing grade unless approved by an amendment to this coastal development permit. Only as conditioned is the proposed project consistent with the Coastal Act's visual resource policies.

#### C. Public Access/Parking

As described above, The Strand and the adjacent beaches are a public recreational resource. The walkways provide an urban recreational experience popular throughout the Los Angeles area. The Commission has imposed Special Condition #4 to protect the quality of that recreational experience. The Commission has consistently found that a direct relationship exist between residential density, the provision of adequate parking, and the availability of public access to the coast.

Section 30252 of the Coastal Act states, in part:

The location and amount of new development should maintain and enhance public acces to the coast by... (4) providing adequate parking facilities....

Many of the older developments in Hermosa Beach do not provide adequate on-site parking. As a result, many residents and guests park on the surrounding streets, where there is a parking shortage, and has negatively impacted public access to the beach. Visitors to the beach use these streets for parking. Residents of the area and their guests are using the small amount of parking that may be available for the general public on the surrounding streets.

To mitigate this problem, Special Condition #4 is imposed to provide for three onsite parking spaces. In this case, the proposed project provides a two-car garage and a nine-foot rear setback for guest parking on the driveway apron (Exhibit #3). Therefore, the proposed project provides an adequate parking supply for the proposed single family residence. The proposed project is consistent with prior Commission decisions for Hermosa Beach that required two parking spaces per residential unit and provisions for guest parking. The Commission finds that only as conditioned to maintain the proposed three on-site parking spaces, is the proposed project consistent with section 30252 of the Coastal Act.

#### D. 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 Chapter 3 policies of the Coastal Act:

(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 the provisions of Chapter 3 (commencing with Section 30200) of this division and that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200). A denial of a Coastal Development Permit on grounds it would prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200). A denial of a Coastal Development Permit on grounds it would prejudice the ability of the local government to prepare a Local Coastal Program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200) shall be accompanied by a specific finding which sets forth the basis for such conclusion.

On August 20, 1981 the Commission staff denied the City of Hermosa Beach Land Use Plan (LUP) as submitted and certified it with suggested modifications on April 21, 1982. The modifications were accepted and the LUP is fully certified. The City has prepared a final draft of its zoning and implementation ordinances (LIP) and a revision to their LUP. Therefore the standard of review for development in Hermosa Beach is still the Coastal Act.

The proposed development as conditioned is consistent with the public access, recreation, and community character policies of Chapter Three of the Coastal Act. The proposed development as conditioned by the City and the Commission addresses the LUP's concern with respect to the scale of development and the preservation of street parking for public use. The development is consistent with the parking management, density, and land use provisions of the certified LUP and its proposed revisions. Therefore, the Commission finds that approval of the proposed development, as conditioned, will not prejudice the City's ability to prepare a Local Coastal Program consistent with the policies of Chapter 3 of the Coastal Act, as required by Section 30604(a).

#### E. California Environmental Quality Act

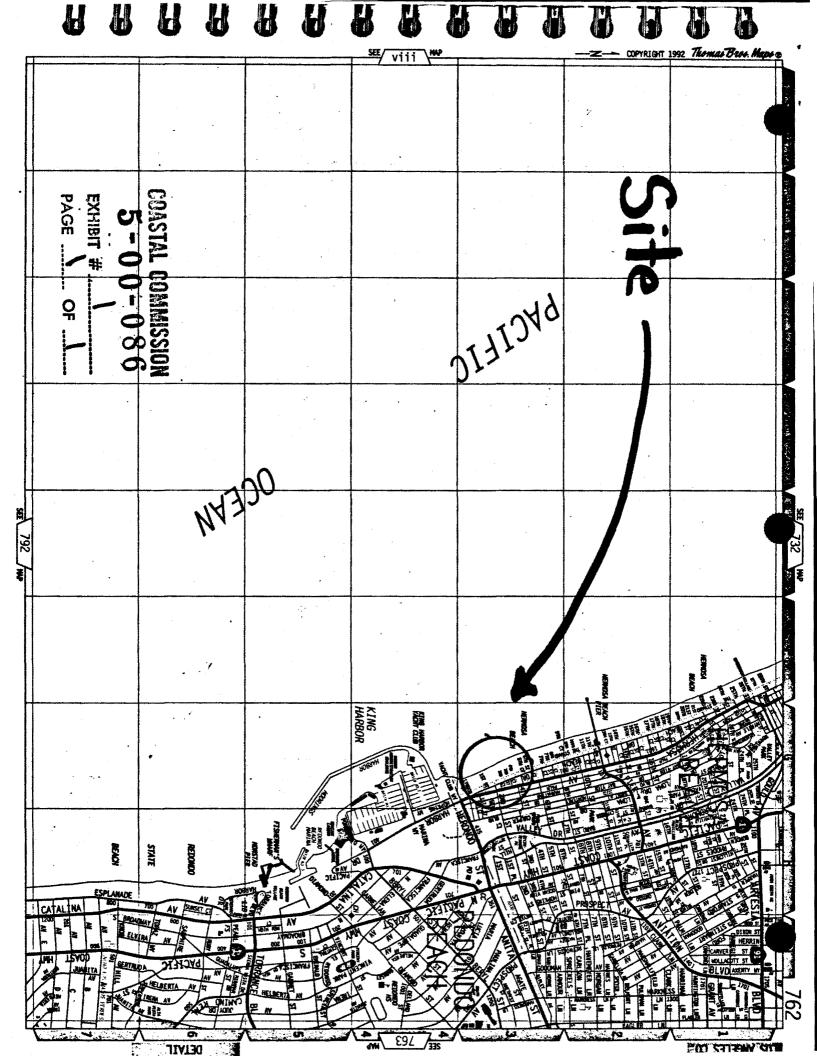
Section 13096 Title 14 of the California Code of Regulations requires Commission approval of a coastal development permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California 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

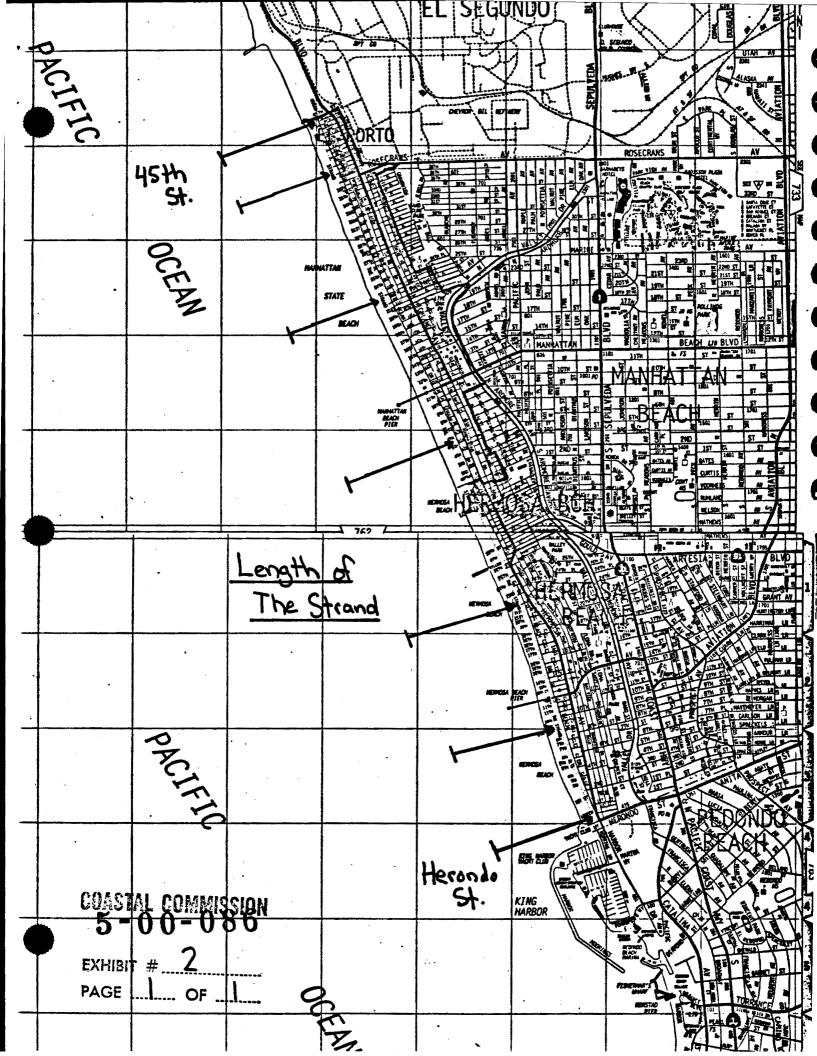
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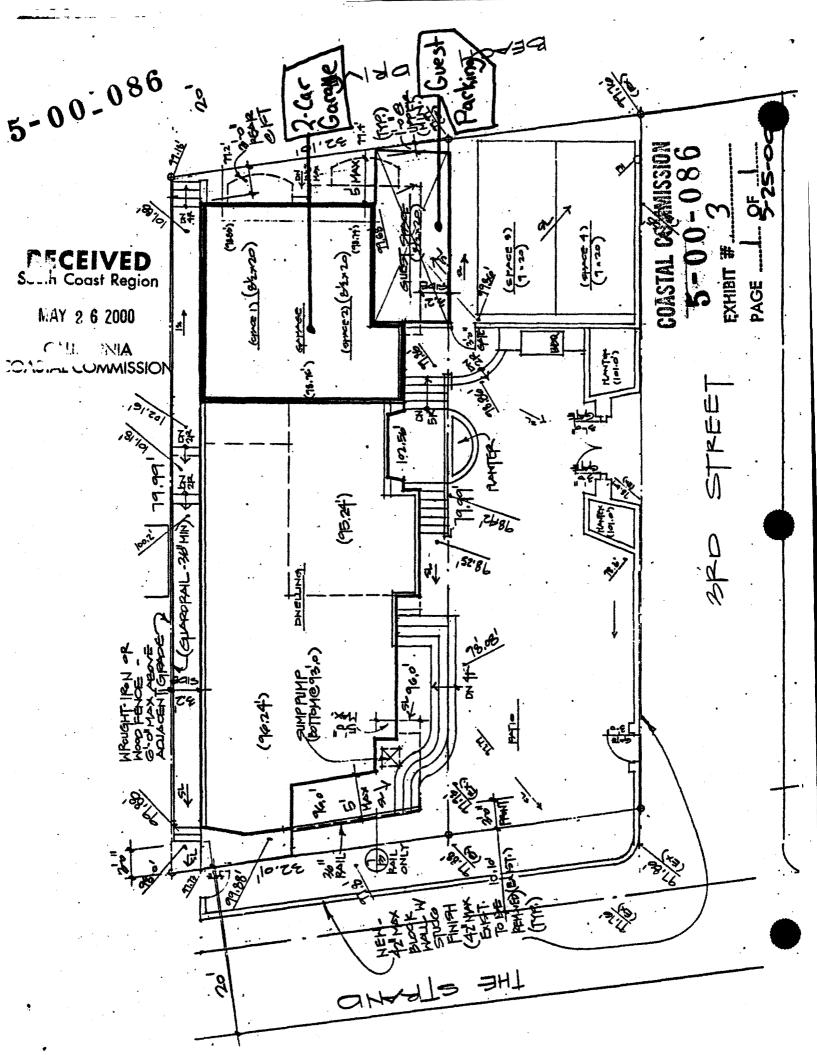
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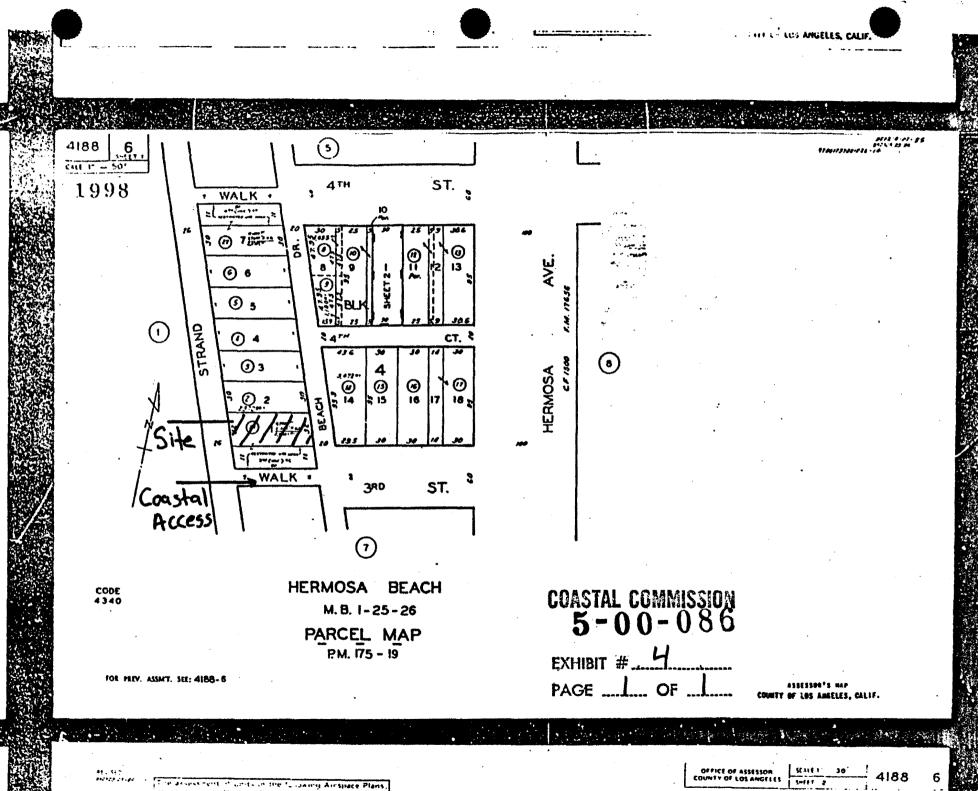
would substantially lessen any significant adverse effect that the activity may have on the environment.

The proposed project, as conditioned, has been found consistent with the Chapter 3 policies of the Coastal Act. All adverse impacts have been minimized and there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found consistent with the requirements of the Coastal Act to conform to CEQA.









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beaches south of the Marina Del Rey jetties.

COASTAL COMMISSION 5 - 00 - 086EXHIBIT # 5

The above method is used as a guide, and site reconnaissance is also used in determining an accurate design beach profile.

#### 4.0 Wave Uprush Results

#### 4.1 Wave Uprush Limit

The design waves used have been analyzed with a direction that is normal to the shoreline and foreshore slope topography. Such an approach direction resulted in the highest uprush limit, greatest wave force, and deepest scoured condition, since the diminishing effects of bottom drag and refraction of the waves are minimized. The maximum wave uprush at the subject site and on the scoured design beach profile will occur approximately 92 feet seaward of the subject property right-of-way line at elevation +12.4 Ft. M.S.L. - NGVD datum. This uprush is produced by the 18-second period wave outlined in section 2.2, approaching normal to the shoreline.

4.2 The following is this study's uprush results for the 7 waves investigated:

Wave	Uprush Location in Feet Seaward from Property Line	Uprush Elevation MSL
1	92	12.4
2	124	10.2
3	126	10.4
4	120	9.8
5	146	7.8
6	155	7.0
7	160	6.5

#### 5.0 Conclusions and Recommendations

5.1 The proposed single family development is landward of the wave uprush limit line as calculated in this report. The proposed development of this single family residence will <u>not have an adverse effect</u> on the coastal and littoral processes since it is well landward of the uprush limit. No protective seawall is required for the proposed residence.

5.2 The proposed residence is to be serviced by the municipal sewer system. Since the residence requires no septic system on the beach, no protective bulkhead is needed or required. No bulkhead will be constructed.

5.3 All new structural concrete used for the new foundation should have a <u>minimum</u> 28-day compression strength of 4000 PSI, have 3% to 5% air-entrainment, type V cement, and be properly vibrated into place. This must be clearly specified on the general notes and the foundation plans. Concrete placed in excavations with standing water shall have a 28-day compressive strength 1000 PSI greater than the designed compressive strength

5.4 All structural steel exposed to the marine atmosphere should have a minimum thickness of 3/8 inches for the webs and flanges, and be hot dipped galvanized. Structural steel completely enclosed by framing should have adequate corrosion protection approved by the project structural engineer. It is anticipated that structural steel completely enclosed by standard framing, stucco, plaster, etc. will corrode over time unless proper corrosion protection is applied to the steel.

5.5 All elevations called on all the architectural and structural plans and surveys must be referenced to the <u>1929 NGVD (MSL) datum</u>. The architect should notify the project surveyor and contractor to adjust (where required) the LA County 1998 elevations from the 1988 NAVD datum to the 1929 NGVD datum for construction purposes.

5.6 The architect should be concerned with the accelerated rate of corrosion of non-structural metal elements such as door hinges, handles, handrails, and metal flashing. The architect should specify special coatings or materials to prevent those items from corroding.

5.7 Pacific Engineering Group must review the plans for the new residence for conformance to this report prior to building department approval.

## 6.0 Coastal Engineering Impacts and Review

As required by the California Coastal Commission in their December 13, 1993 Memo, this office's coastal engineering opinion regarding the potential impacts to the shoreline processes due to the proposed residence remodel are discussed in the sections below.

# The proposed residence as presented to this office for this study will have no effect on shoreline processes and requires no protective structure.

6.1 The subject site is located landward of "The Strand" promenade on Hermosa Beach in the City of Hermosa Beach. The Corps of Engineers considers this beach an oscillating beach with a seasonal foreshore slope movement that can be as much as 100 feet. Currently the beach in the study area is a stable beach. Past accretional trends are due to the construction of the Redondo Breakwater, beach nourishment provided by the Hyperion Plant construction in the mid 1940's, the on-going sand bypassing of the Marina Del Rey jetties by the Corps of Engineers, and periodic beach nourishment by the local municipalities. Since 1935 the beach in the study area has accreted approximately 242 feet. Present trend for the beach in the study area is stable provided that the Corps of Engineers continues their sand-bypassing program around the Marina Del Rey jetties.

6.2 Based on the evidence and data presented in the available studies to date, the subject beach should remain stable <u>provided that the sources of sediment supply are not changed</u>. The proposed beach structures will have no effect on the shoreline position compared to fluvial sediment sources. Future construction of debris basins by government agencies in the creeks and canyons along the coastline of this littoral cell could reduce the sediment supply to the beach leading to a future shoreward but limited retreat of the shoreline. The study beach is dependent on fluvial sediment sources that must be bypassed around the Marina Del Rey jetties. It is expected that the average width of the study beach will react over time directly in proportion to the amount of sand bypassing around the Marina Del Rey jetties. COASTAL COMMISSION 5-00-0866

EXHIBIT # 5 PAGE 2 OF 3 The profiles and mean high tide lines conclude that the subject beach is presently a <u>stable beach</u> that oscillates seasonally between summer and winter profiles with periodic storm scouring of the beach profile during extratropical storm events that are coincidental with high winter tides.

6.3 The construction of the proposed residence on the subject property would not effect the normal coastal and littoral processes. The majority of littoral drift of sediment occurs from the mean high tide line seaward to the location of the developing sand bar, normally 500-700 feet offshore. This accounts for 100 % of the littoral drift not effected by the structure during scoured and non-scoured beach conditions. Scouring of the beach at the design beach profile shown sheet BP1 represents the most landward 1-% of all profiles. The scoured profile would remain at that location for only a few hours over the course of 5 to 10 years.

6.4 The Los Angeles County Beach Control Line shown on sheet BP1 is used as the property benchmark. This control line was developed and surveyed by the Los Angeles County Engineer for just that purpose. This benchmark allows for collection of measurements and data to determine site specific and locally coastal specific beach sedimentation rates and littoral processes.

6.5 The estimated usable structural life of the proposed residence would be 30 years (normally the economic life of the residence) and realistically 50 years provided that the recommendations of this report are properly implemented by the structural engineer, architect and contractor. Provided the contractor/builder uses the materials specified in this report, and that they are installed properly, maintenance of the structural elements for the residence would be minimal during this usable life.

6.6 The most landward mean high tide line on the subject property that this office has on record (February 1940) was located approximately <u>146 feet</u> seaward of the subject property right-of-way line and seaward of the promenade.

6.7 The following is in response to the Coastal Commission memo of December 13, 1993:

A. Design wave height and constraints with methodology	Section 3
B. Maximum expect wave height	Section 3.2
C. Frequency of overtoppingno protective str	ucture is warranted
D. Tidal Ranges	Section 2
E. Erosion rate	not applicable
F. Effect of protective structures	not applicable
G. Scour potential	not applicable
H. Design life	Section 6.5
I. Sand loss quantification	Section 6.1
J. Alternatives to protective structure	not applicable
K. Public Access	Section 1.3
L. Staging areas	subject property
M. Monitoring	Section 6.4

#### 7.0 Limitations

The owner should realize that there will always be certain risks associated with building or living on the COASTAL COMMISSION

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EXHIBIT #

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