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STATE OF CALIFORNIA—THE RESOURCES AGENCY

Filed: 10/4/95

PETE WILSON, Governor

CALIFORNIA COASTAL COMMISSION

SOUTH COAST AREA
245 W. BROADWAY, STE. 380
P.O. BOX 1450
LONG BEACH, CA 90802-4416
(714) 509-3071

49th Day: 11/22/95
180th Day: 4/1/96
Staff: A. Padilla
Staff Report: 10/23/95
Hearing Date: 11/14-17/95
Commission Action:



STAFF REPORT: PERMIT AMENDMENT

APPLICATION NO.: 5-90-1041A2

APPLICANT: Hawthorne Savings

AGENT: Bruce Lewis

PROJECT LOCATION: 433 Paseo De La Playa, Torrance

DESCRIPTION OF PROJECT PREVIOUSLY APPROVED: Construct a 2-story, 7,334 sq. ft. single-family residence on a vacant 0.62 acre blufftop lot.

DESCRIPTION OF FIRST AMENDMENT APPROVED: Decrease the building footprint by 250 sq. ft., increase the blufftop setback 3 ft. inland and add an additional 400 sq. ft. on second floor (no change in height).

DESCRIPTION OF PROPOSED AMENDMENT: Installation of drainline, concrete stairway, chain-link fencing and gate, irrigation system, erosion control and restoration of habitat on bluff face.

LOCAL APPROVALS RECEIVED: Approval In Concept

SUBSTANTIVE FILE DOCUMENTS:

1. City of Torrance Adopted Local Coastal Program.
2. Coastal Development Permit No. 5-84-187 (Briles).
3. Coastal Development Permit No. 5-85-755 (Briles).
4. Letter from U.S. Fish and Wildlife Service, dated October 5, 1995.

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

- 1) The Executive Director determines that the proposed amendment is a material change,
- 2) Objection is made to the Executive Director's determination of immateriality, or
- 3) the proposed amendment affects conditions required for the purpose of protecting a coastal resource or coastal access.

If the applicant or objector so requests, the Commission shall make an independent determination as to whether the proposed amendment is material. 14 Cal. Admin. Code 13166.

SUMMARY OF STAFF RECOMMENDATION:

The staff recommends that the Commission determine that the proposed development with the proposed amendment, subject to the conditions below, is consistent with the requirements of the Coastal Act.

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution:

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. Special Conditions.

1. Restoration Maintenance and Monitoring Program

Prior to the issuance of the coastal development permit the applicant/landowner shall submit to the Executive Director for review and approval, a restoration maintenance and monitoring program consistent with Exhibit #4, revised restoration plan, and Exhibit #5, Habitat Enhancement and Erosion Control Plan, by Rudi Mattoni, as specified below and using plant material as indicated in Exhibit #3, applicant's plant list. By accepting this permit the applicant/landowner agrees to carry out this plan.

- a) The plan shall clearly indicate the following habitat objectives of each area, as stated below:

Zone A, as shown in Exhibit #4. In this area the objective is habitat restoration and temporary cover to protect the slope from erosion and reestablishment of sufficient Eriogonum Parvifolium (Coastal Buckwheat) to provide support for reproduction of El Segundo blue butterfly. In this area native plantings shall follow the plant list as shown in exhibit #5. During the establishment period, the applicant/landowner shall install temporary irrigation, and jute matting. After one year, artificial irrigation shall cease except as necessary to establish replacement plants. While Carpobrotus Edulis (iceplant) is permitted to be planted in the first year, at the end of one year, no new Carpobrotus Edulis shall be installed. In addition to Eriogonum Parvifolium and Carpobrotus Edulis as indicated in Exhibit #4, the applicant/landowner shall install no fewer than four five-gallon deep rooted native plants of the coastal dune community identified in Exhibit #5. In this area the applicant/landowner may maintain Carpobrotus Edulis, planted during the first year, as long as none is allowed to escape into Zone B and as long as Carpobrotus Edulis plants are cleared around all Eriogonum Parvifolium in Zone A. No plants other than those specified above shall be employed.

Zone B, as shown in Exhibit #4. This area shall be maintained in native annuals and perennials of the sea bluff succulent communities. In this area, the applicant/landowner shall remove all Carpobrotus Edulis (ice plant), introduced weeds and grasses, and plant this area according to the applicant's plant list in Exhibit #3 for Zone B area only. After one

year, artificial irrigation shall cease except as necessary to establish replacement plants. All introduced plants, grasses, Carpobrotus Edulis, and any other invasive plants shall be removed as they appear.

Zone C, as shown in Exhibit #4. This area shall be maintained for erosion control. In this area, with the exception of Carpobrotus Edulis (iceplant), the applicant/landowner shall plant no fewer than four five-gallon deep rooted large shrub cover California native plants from the list in Exhibit #5. After one year, irrigation shall cease in this area in order to reduce erosion and control the iceplant.

b) Monitoring

Applicant/landowner shall provide evidence on an annual basis of the success or failure of the plantings for a period of five years and indicate necessary measures and corrective actions to assure the objectives outlined in section 1.a above. Pursuant to this requirement, after one year, the applicant/landowner shall provide a monitoring report prepared by a qualified biologist, ecologist or monitoring resource specialist who has knowledge of the various habitats associated with coastal bluffs. The report shall indicate and provide a clear work program for the following year necessary to assure 1) safety from erosion, 2) protection of habitat of native species, 3) maintenance of significant stand of Eriogonum Parvifolium and other seabuff succulent and coastal strand plants native to California.

In subsequent years, applicant/landowner shall be responsible to assure the continued viability of these plants according to the objectives listed in section 1.a above. The applicant/landowner is also responsible for the control of introduced plants including Carpobrotus Edulis. At the end of five years, a "viable community" of Eriogonum Parvifolium, no fewer than 140 plants, shall exist in this this area.

If at any time, the annual reports, or other information indicates that the revegetation efforts are not successful based on the above criteria, the applicant/landowner shall replant in accordance with the specifications of Section 1.a above. If the revegetation remains unsuccessful after replanting, the applicant/landowner shall submit a revised or supplemental program to compensate for those portions of the original program which were not successful. The revised or supplemental restoration program shall be processed as an amendment to this coastal development permit.

2. Implementation and Completion of the Restoration Plan

The applicant/landowner shall implement and complete the restoration plan within 90 days of the issuance of the permit. The applicant/landowner shall comply with all provisions of the restoration plan, including the revised planting plan and the monitoring program required in special condition no. 1.

3. Assumption of Risk:

Prior to the issuance of the coastal development permit, the applicant [landowner] shall execute and record a deed restriction, in a form and content acceptable to the Executive Director, which shall provide: (a) that the applicant/landowner understands that the site may be subject to extraordinary hazard from landslide and soil erosion, and the (b) applicant/landowner hereby waives any future claims of liability against the Commission or its successors

in interest for damage from such hazards. The document shall run with the land, binding all successors and assigns, and shall be recorded free and clear of all prior liens and encumbrances the Executive Director determines to affect said interest and shall run with the land binding all successors and assigns.

4. Approval of Erosion Control Plans

Prior to the issuance of the coastal development permit the applicant/landowner shall submit to the Executive Director for review and approval, written evidence from a licensed engineer that the stairway and other development will not contribute to further erosion of the site.

5. Completion of Planting

All restoration and erosion control described in the conditions of this permit shall be completed by June 1, 1996. Failure to comply, with such additional time as may be granted by the Executive Director for good cause, will result in the nullification of this permit approval.

6. Condition Compliance

The requirements specified in the foregoing special conditions that the applicant/landowner is required to satisfy as a prerequisite to the issuance of this permit must be fulfilled within 30 days of Commission action. Failure to comply, with such additional time as may be granted by the Executive Director for good cause, will result in the nullification of this permit approval.

Note: Unless specifically changed by the above conditions all previous conditions on the underlying permit remain in effect.

IV. Findings and Declarations.

The Commission hereby finds and declares as follows:

A. Project Description and Background

This is a request for a second amendment to Coastal Permit 5-89-1041 for the installation of drainline, concrete stairway, chain-link fencing and gate at the toe of the bluff, irrigation system, erosion control, restoration of habitat on bluff face on a vacant lot previously approved for the construction of a 7,805 square foot single-family residence.

The proposed property is located on a blufftop lot above Torrance Beach, in the City of Torrance. The upper portion of the lot has been graded as approved under CDP 5-89-1041A. After grading the building pad, development stopped. In 1995 development not permitted under 5-89-1041A occurred on the bluff face. The bluff face development consisted of construction of a drainline along the northern portion of the property and the placement of minor amount of fill and sandbags for erosion control purposes. The placement of the on-site fill, which was placed in response to erosion, has adversely impacted the federally listed endangered El Segundo Blue Butterfly's natural habitat found on the bluff face.

The erosion that has occurred on-site can be attributed to a number of factors such as: initial grading of the building pad, the property being vacant, heavy rains during the past couple of years, unchecked street runoff entering the property, and the construction of a block wall [Coastal Development Permit 5-85-755 (Briles)] along the site's northern property line, which channelized the runoff down the bluff face.

The United States Department of Interior Fish and Wildlife Service reported the erosion problem to Commission staff and informed Commission staff of the adverse impact the erosion had caused to the habitat of the federally listed endangered El Segundo Blue Butterfly. The Fish and Wildlife Service has found the El Segundo Blue Butterfly on this property and other areas of these coastal bluffs.

The present applicant, Hawthorn Savings, is in the process of transferring ownership to a third party. The new owner will assume the responsibility of caring out the project and its conditions. This has been included in the new owners escrow agreement.

B. Environmentally Sensitive Habitat

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 such resources shall be allowed within such 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 such areas, and shall be compatible with the continuance of such habitat areas.

The development proposed by the applicant/landowner is located on the natural bluff face. Vegetation on the bluff face consists of native and introduced plants. One of the native plant species found on this bluff face is Eriogonum Parvifolium (Coastal Buckwheat). Eriogonum Parvifolium is the host plant for the El Segundo Blue Butterfly, a federally listed endangered species. The United States Department of Interior Fish and Wildlife Service monitored the site and observed the presence of the El Segundo Blue Butterfly.

Due to on-site erosion along the northern boundary, which broadens along the lower reaches of the bluff, the applicant/landowner in an attempt to prevent further erosion installed a subterranean drain line, minor amount of fill and sandbags. The erosion, however, created a large erosional gully, which removed top soil and native vegetation including the El Segundo Blue Butterfly's host plant-- Coastal Buckwheat. Efforts to repair the erosional damage threatened the habitat value of the bluff face through the burying of the native plant species located on the bluff.

To mitigate the loss of the El Segundo Blue host plant and to minimize future erosion the applicant/landowner is proposing to restore the site through regrading the area where erosion has occurred, and replanting the bluff face with native plantings, including Eriogonum Parvifolium, and non-native iceplant, Carpobrotus Edulis (see Exhibit 2 and 3). The proposed restoration plan has been prepared by the applicant/landowner in consultation with Dr.

Rudi Mattoni (Resource Specialist involved with the restoration of the El Segundo Dunes habitat area) and with the United States Department of the Interior Fish and Wildlife Service. The restoration plan divides the site into two areas: Zone A--upper and middle slopes and Zone B--located along the lower flatter portions (toe) of the bluff. The applicant/landowner proposes to plant Zone B with a mixture of native plant species. Zone A will be planted with Coastal Buckwheat (200 plantings) and iceplant, planted at 36 inches on center, to cover the remaining bare areas. Temporary irrigation will be installed to augment natural rainfall and extend the growing season to establish revegetation of the slope for erosion control.

Although the restoration plan has been reviewed and approved by the Fish and Wildlife Service, the Commission is concerned with the use of non-native iceplant. Iceplant is an invasive plant which over time will eventually supplant areas planted with native plants. Once this occurs the El Segundo Blue's habitat could be seriously degraded or entirely eliminated from this site. However, in this particular case, approximately 50% of the bluff face (mostly upper portion of the bluff face, Zone C in Exhibit 4) is currently heavily covered with iceplant (iceplant is prevalent throughout this coastal bluff area).

Zone A, as depicted in Exhibit #4, the area disturbed by the erosion and unpermitted development, is located along the northern and lower western portion of the property. This disturbed area will be replanted with 200 plantings of Coastal Buckwheat, to restore and enhance the native habitat value of the site. The proposed plan also allows iceplant to be planted throughout Zone A to minimize soil erosion. Zone B is at the toe of the bluff and is planned to be planted with only native annuals and perennials.

In most cases native planting would be preferred to revegetate natural areas, such as this coastal bluff face, to protect the existing native plant communities. The planting of iceplant within areas with native vegetation tends to supplant the native vegetation. However, the existing iceplant is so prevalent on this site and the adjoining site that planting native plants within the iceplant area would be futile since the surrounding iceplant would eventually overrun and push out the native plantings. The existing iceplant could be systematically removed from the site and replaced with native vegetation, but this would also be ineffective unless a comprehensive plan, which would require the systematic removal of all iceplant from the bluffs and replanting with native plants, was implemented for all properties located along the bluffs.

To ensure that the native plants have a greater chance to establish themselves on the bluff face and provide a viable native habitat for the El Segundo Blue Butterfly and to provide an adequate measure of erosion control the Commission finds that if the restoration plan is modified to limit the use of iceplant as a temporary measure and require clearing of iceplant that encroaches into areas of Coastal Buckwheat planted in Zone A and the native plant area (Zone B) the restoration plan will be adequate to restore and enhance the habitat area that was disturbed and will minimize on-site erosion consistent with Section 30240 of the Coastal Act.

While the Commission can agree to the use of invasive plants the use of such plants require control measures and monitoring so that native plants are not supplanted by the invasive plants. To ensure that the planting proposed in the plan establishes itself a monitoring program is necessary. The

Commission's experience with biological resource restoration has indicated that such efforts cannot be assumed to be successful in advance. Only an effective monitoring program, with reports and requirements for additional restoration activity if the initial efforts are not successful, can insure that appropriate measures are taken if the initial efforts fail. For this reason Special Condition 1(b) includes a monitoring program. This condition requires the submittal of a detailed monitoring program for the proposed restoration. The condition provides for monitoring of the restoration site for a five-year period and that an annual report be submitted to determine whether the condition of the restored site appears to be adequate to support the revegetation of slope. If the final report indicates any portion of the restoration has been unsuccessful, the Commission will require additional remedial measures to assure the goal of full restoration. Any additional restoration measures will be processed as an amendment to this permit.

The Commission finds that only as conditioned will the proposed amendment restore and protect the habitat values of the site and be consistent with Section 30240 of the Coastal Act.

C. Natural Hazards

Section 30253 of the Coastal Act states:

New development shall:

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

The proposed development is located in an area which is subject to natural hazards. Natural hazards common to this area include landslides, erosion, flooding and slumping. The Commission in previous actions on development in this area has found that there are certain risks associated with blufftop development that can never be entirely eliminated. Blufftop lots are subject to potential hazards not found in conventional flatland developments. In approving the underlying permit the Commission required that the property owner record a deed restriction stating that the property owner understands the hazards of building on a bluff top and assumes all associated risks. This amendment is being similarly conditioned in order to cover the new development proposed under this amendment. The Commission finds, therefore, that in order to be consistent with section 30253 of the Coastal Act, the applicant/landowner must record a deed restriction assuming the risk of developing in this hazardous area, and waiving the Commission's liability for damage that may occur as a result of such natural hazards.

D. Scenic and Visual Resources/Landform Alteration

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...."

The primary concern under this section of the Act is the preservation and enhancement of ocean and coastal views from public areas, such as highways, beaches and parks. The coastal bluff on which the applicant's/landowner's house is located forms the back drop to the beach in this area, and is highly visible to the public using the beach. Section 30251 requires that alteration of the bluff face be minimized so as to protect the scenic and visual qualities of the bluff and beach areas.

The applicant/landowner is also proposing a 5 foot wide concrete stairway down the bluff face along the northern boundary line and a 4 foot high concrete property wall along the western boundary. The stairway will be adjacent to the existing concrete property line wall that was constructed by the adjoining property owner under permit no. 5-85-755 (Briles). The stairway will be located within the area of the erosion gully. The applicant/landowner proposes to refill the erosional gully to a grade consistent with the surrounding site grades and place the stairway atop the fill. The stairway will be designed with drains to drain all future runoff to prevent further erosion and channelization caused by the existing adjoining wall.

The lots to the north of this lot contain stairways leading down to the bottom of the bluff. All of the stairways, except for one, consists of wooden planks set into the slope. The one exception is on the lot immediately adjacent and north of the project site. This stairway is a concrete serpentine path leading from the bluff top deck down the slope to a deck area located at the toe of the bluff. This stairway was approved by the Commission under permit #5-85-755 (Briles).

The proposed stairway will not contribute further to bluff erosion since it will be located adjacent to the existing concrete block wall (#5-85-77) and will be designed to channel runoff into runoff drains. The proposed stairway is consistent with the stairway approved on the adjoining property. Moreover, the proposed site is located within the northern end of this coastal bluff range where slopes are more gradual than the southern area. The bluffs in the northern area are also shorter in height. The proposed site is the approximate transitional area between the more gradual sloping bluffs and the steeper taller bluffs. Because the proposed site is located within the bluff area where the slopes are more gradual and shorter than the slopes to the south, and the stairway will be located adjacent to an existing block wall, the construction of a stairway down this bluff face will not significantly degrade or contribute to the erosion of the bluff. However, to ensure that the stairway is properly engineered to prevent further bluff erosion, the applicant/landowner shall submit written evidence from a licensed engineer stating that the stairway is designed so as not to contribute to further bluff erosion. Therefore, the Commission finds that, as conditioned, the proposed development will not significantly alter the natural bluff landforms, and the scenic and visual quality of Torrance Beach will be protected, consistent with Section 30251 of the Coastal Act.

E. Previously Approved Project

The written description of the project approved by the Commission in the original permit #5-90-1041, stated that the square footage of the proposed single-family residence was 7,334 square feet. Subsequently, the applicant/landowner amended the project by reducing the footprint by 250 square feet and adding 400 square feet. Based on these square footage changes the approved plans showed a total of 7,805 square feet. Although the original square footage plus the changes made in the amendment do not add up to 7,805 square feet the written permit should have been consistent with the square footage listed on the plans that were reviewed and approved by the Commission.

The revised square footage is consistent with the Commission's intent in approving the original permit and subsequent amendment.

F. Unpermitted Development

Prior to the submittal of this application, the applicant/landowner installed a drainage line and temporary erosion control measures along the bluff face. This development was not consistent with the Commission development approved under 5-90-1041 or its subsequent amendment.

Although unpermitted development may have taken place elsewhere on the property prior to submission of this permit application, consideration of the application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. Approval of the permit does not constitute a waiver of any legal action with regard to the alleged violation nor does it constitute an admission as to the legality of any development undertaken on the subject site without a Coastal permit.

G. Local Coastal Program

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal 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 the 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).

On June 18, 1981, the Commission approved the City of Torrance Land Use Plan (LUP) with Suggested Modifications. The City did not accept the modifications and the certified LUP, which was valid for six months, has lapsed. The major issues raised in the LUP were affordable housing, blufftop development and beach parking.

Based upon the findings presented in the preceding section, the Commission finds that the proposed development, as conditioned, will not create adverse

impacts on coastal resources and is therefore consistent with applicable policies contained in the adopted City of Torrance LUP. In addition, the Commission finds that approval of the proposed project 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).

H. CEQA

Section 13096 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)(i) 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 impact which the activity may have on the environment.

The proposed project has been conditioned to be found consistent with the environmentally sensitive habitat, natural hazards and visual resources policies of the Coastal Act. Mitigation measures will minimize all adverse impacts. There are no feasible alternatives or mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the proposed amendment is found consistent with CEQA and the policies of the Coastal Act.

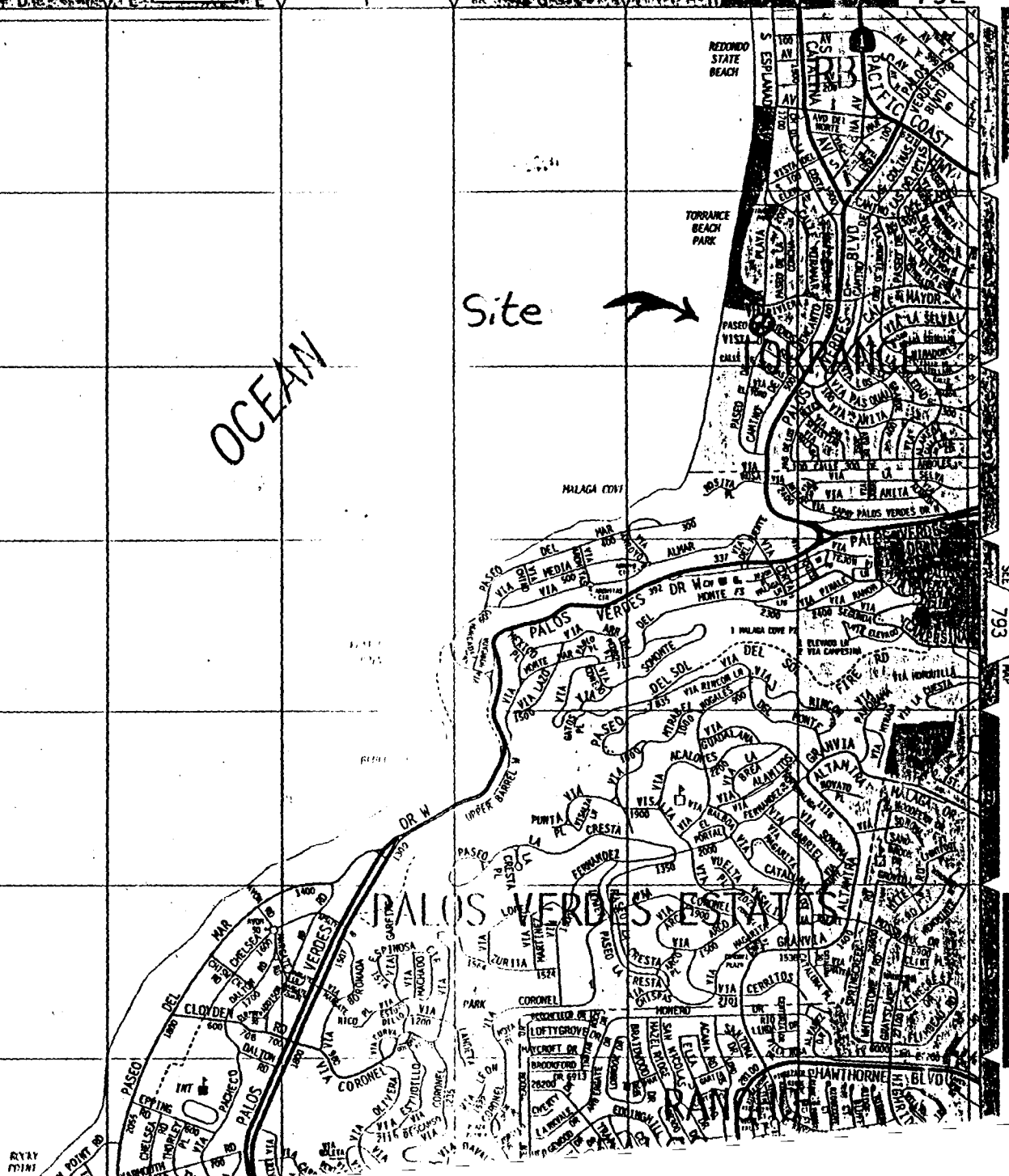
5580F

OCEAN

PACIFIC

Site

EXHIBIT NO. 1
APPLICATION NO.
5-90-1041A2
Vicinity Map



LEGEND

ZONE A

HAND PLANT THIS ZONE WITH THE FOLLOWING:


- (200) ERIOGONUM PARVIFOLIUM - COASTAL BUCKWHEAT
(GROWN IN DEEPPOTS AND PLANT WITH OSMOCOTE SLOW RELE FERTILIZER 5-10 PELLETS PER PLANT)
- CARPOBROTUS EDULIS - ICEPLANT (PLANT FROM FLATS AT 36" TO COVER ENTIRE ZONE)

ZONE B

HAND SEED THIS ZONE WITH THE SEED MIX, AS FOLLOWS:

<u>LB/ACRE</u>	<u>SPECIES</u>	<u>MINIMUM PURITY/GERMI</u>
4	AMBROSIA CHAMISSONIA	85/50
2	AMBROSIA PSILASTACHYA	2/15
2	ARTEMISIA CALIFORNICA	15/50
2	BACCHARIS PILULARIA CONSANGUINEA	2/40
1	CAMISSONIA CHEIRANTHIFOLIA	98/75
2	CROTON CALIFORNICA	90/20
8	ENCELIA CALIFORNICA	40/60
15	ERIOGONUM PARVIFOLUM	30/60
1	ESCHSCHOLZIA CALIFORNICA	98/75
1	GALIUM ANGUSTIFOLIA	80/30
2	GNAPHALIUM BICOLOR	2/35
8	HAPLOPAPPUS ERIOCOIDES	6/25
2	LOTUS PURSHIANUS	98/70
3	LUPINUS BICOLOR	98/80
2	LUPINUS CHAMISSONIS	98/80
1	OPUNTIA LITTORALIS	98/30
2	PHACELIA CIRCUTARIA	90/60
2	PHACELIA RAMOSISSIMA	90/70
4	LOTUS SCOPARIUS	90/60
2	SALIVA MELLIFERA	70/50
6	VULPIA MICROSTACYS	90/60

SEED MIXTURE IS AVAILABLE FROM S AND S SEEDS -
PHONE: (805) 684-0436

EXHIBIT NO. 3
APPLICATION NO. 5-90-1041 A2
Plant List (As submitted)
 California Coastal Commission

Habitat Enhancement and Erosion Control Plan

433 Paseo de la Playa
Torrance, California


prepared for

Hawthorne Savings

by

Rudi Mattoni, PhD

Department of Geography
University of California, Los Angeles
CA 90095-1524
310-825-3019

EXHIBIT NO. 5
APPLICATION NO. 5-90-1041A2
Habitat Enhancement Plan by Dr. Mattoni
 California Coastal Commission

10 pages

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Project Location. The project is a vacant lot located at 433 Paseo de la Playa in the city of Torrance just south of the boundary of Redondo Beach. The lot is situated atop the west facing bluff of the Palos Verdes marine terrace and extends from the street to the public beach boundary (Plot map attached).

Site. The project site lies across a bluff which rises abruptly from an elevation of 14 feet, slightly above the public beach to the west, to the daylight line at about 90 feet elevation. This bluff face is about 220 feet in length, measured from the beach to the daylight line. The site width varies slightly from an average of 50 feet back. The slope varies from about 3:1 to 4:1 depending on localized conditions, generally being steeper on the upper reach. The existing substrate is mostly pure free flowing coarse sand perched on weakly consolidated sandstone from pre-Flandrian deposits. Serious erosion occurred during heavy rains in 1995 along the northerly property line as a consequence of construction associated with installation of a drainage conduit and trampling by public use of the zone for beach access. Localized grade in this eroded zone approaches near vertical in short reaches where the weak sandstone is now exposed. The open access of the site now is been subject to human traffic which appears to have exacerbated erosion potential.

Background. The Malaga dunes represent the fragmented southernmost extension of the massive El Segundo dunes system. They were formed by sand drift across the lifted sedimentary deposits that form the north thrusting Palos Verdes marine terrace. A substantial data base exists for understanding the historic ecosystem of these dunes and their windward strand (Mattoni, 1992. The endangered El Segundo blue butterfly, Jr. Res. Lepid. 29:277-304 and references). Although the Malaga dunes and bluff face are now highly degraded, the presence of some residual native elements can provide the framework for a habitat enhancement program. The degree of ecological collapse has progressed to a point wherein preservation and natural succession will not resurrect the natural ecosystem without active management.

Coastal sand dunes represent a vanishing habitat in California. For the land area they cover, coastal dunes have a very high concentration of endemic species. On a statewide average, coastal dunes have been reduced to less than 25% of the area they originally occupied (Powell, 1981). In the following discussion, sand dunes refer to landforms comprised of free flowing sand. For the most part these dunes are of recent geological origin, having been formed within the past 10-12000 years, and are called Flandrian dunes. In many areas, including this site, older pre-Flandrian dunes form a base beneath the newer dunes. The pre-Flandrian dunes are wholly comprised of cemented sands of various hardness (sandstone) which clearly have physicochemical properties presenting quite different adaptive requirements to the plants and animals that utilize them for habitat.

One irreplaceable value of these dunes is their function as a refugium for many sand obligate species and as the sole significant reservoir for carrying these species into the future. Sand obligate species are species which require free flowing sand for persistence, a determination based largely on distributional and not functional information. Further, specialized herbivores and their specialized predators and parasitoids in turn are sand obligate if they depend on a sand obligate plant or plants.

A review of the geological history of the El Segundo sand dunes has been given by Cooper (1967), who described the status of the dune system in some detail, including the thesis work of local geology students. Although Cooper has been widely quoted regarding the historical extent of the dunes, most cited references of his work unfortunately were based on an early misinterpretation of Cooper's analysis with subsequent authors propagating the error. The actual Flandrian El Segundo sand dunes covered about 1165 ha (4.5 mi² or 2880 ac) instead of 18,100 ha or 36 mi² (*sic*) erroneously reported.

Prior to the arrival of European man, the active Flandrian dunes extended about 15 kilometers (9 miles) along the coast from the Playa del Rey bluffs to the Palos Verdes marine terraces, and reached an average of about 0.8 kilometers (0.5 miles) inland. To the north the dunes were limited by the Playa del Rey bluffs, a gradual transition still visible in a 1924 aerial photograph. At the foot of the bluffs, a dunes segment bordered both sides of Ballona Creek and extended north as low hummocks into what today is Ocean Park. To the east the large deflation plain of the pre-Flandrian dunes and the Torrance plain, with their largely forb meadow flora, formed the remaining boundary of the El Segundo sand dunes and enclosed them to the south in the vicinity of the Palos Verdes terraces at south Redondo Beach.

Habitat values.

Present

The present vegetation of the dune slope is depauperate. On the site, only 4 species of native plants were seen: coastal buckwheat (*Eriogonum parvifolium*), California sunflower *Encelia californica*, California croton (*Croton californica*), deerweed (*Lotus scoparius*), beach primrose (*Camissonia chieranthefolia*), and burweed (*Ambrosia acanthicarpa*). Only the latter two species are providing new recruitment. Several additional species in the list below were observed on adjacent property to the south (marked M) with a still richer flora known from the Palos Verdes bluffs further south (marked P). Altogether these records (marked P) show only 20% of the following minimum list of species which would be expected from the area prior to disturbance.

Native plants now cover less than 2% of the site. The most abundant exotics species of the site are poor quality iceplant (*Carpobrotus edulis*), and actively expanding European chrysanthemum (*Chrysanthemum coronatum*), sea rocket (*Cakile maritima*), and ripgut brome (*Bromus diandrus*).

Native animals have not been surveyed, but the fauna appears depauperate. The endangered El Segundo blue butterfly has been seen on the site as recently as 1994 (Morton, pers. comm. Audubon 4th July butterfly count). Few harvest ant colonies are active, few side blotch lizards were noted with some active digging by gophers.

Historical

The following is an exhaustive listing of all plant species found or likely Malaga Bluffs native plant species. The plan will involve restocking the few existing species and reintroduce the majority of species accounting for original floral diversity.

Perennials - Large shrub cover

Eriogonum parvifolium
Lupinus chamissonis
Rhus integrifolia
Isomeris arboria
Encelia californica
Haplopappus ericoides
Opuntia littoralis
Phacelia ramosissima
Datura wrightii
Baccharis pilularis
Lotus scoparius
Salvia mellifera

Subshrub cover

Erysimum suffrutescens
Dudleya lanceolata
Ambrosia chamissonia
Distichlis spicata
Abronia umbellatum
Camissonia chieranthifolia
Eremocarpus setigerus
Artemisia californica
Corethrogyne filaginifolia
Gnaphalium bicolor
Heterotheca grandiflora
Cuscuta californica
Curcubita foetidissima
Croton californica
Marah macrocarpa
Eschscholtzia californica
Dichlostemma pulchella
Galium angustifolium
Ambrosia psilostachya

Senecio douglasii
Artemisia dracunculus
Astragalus leucopsis
Calystegia macrostegia
Cardionema ramosissima
Mirabilis laevis
Solanum douglasii

Annuals

Festuca megalura
Dithyrea maritima
Plantago erecta
Calandrinia maritima
Phacelia cicutaria hispida
Chaenactis glabriuscula
Descurainaea pinnata
Lepidium lasiocarpum
Cryptantha clevelandii
Lotus purshianus
Lotus strigosus
Calyptridium monandrum
Lupinus bicolor
L. truncatus
C. micrantha
Linaria canadensis
Heterotheca grandiflora
Crassula erecta
Stephanomeria virgata
Malacothrix saxatile
Camissonia lewisii
C. micrantha
Microseris heterocarpa
Rafinesquia californica
Senecio californicus

Enhancement

Given the theoretical impossibility of restoring an ecosystem approximating that historically found in the area, a more limited objective of revegetation will be adopted. This includes re-introducing all plant species (listed above) known to occur across the sand substrate and topoclimate of the site. The enhancement will include restocking the few existing species plus reintroducing those extirpated from the site and for which stock is available. These will be planted and maintained for a period of one growing season, at which time the maturity of the perennial species and re-seeding potential of the annuals should provide clues to persistence and the degree of care this

landscape will require. Our extensive experience with the El Segundo sand dunes and several sites across the Ballona Lagoon upland indicates the native flora is resistant to invasion by exotic species, thereby ever diminishing the necessity of weeding.

The most important ingredient of a successful program will be utilizing genetic stock that derives from close localities. The only exceptions may be those few species that no longer occur nearby or the widespread annuals that are needed in bulk for immediate erosion control implementation.

A tentative vegetation plan is attached.

Methods.

Grading. The site will be graded according to a plan attached. It is assumed that the substrate is clean/screened sand moved from the beachfront zone of wash down. Prior to grading, a biologist will inspect the area and mark all native shrubs that must not be disturbed and transfer any significant terrestrial animals present to safe sites.

Site preparation. At least one period of intensive watering will be followed by hand removal of all weed species. In the event of very high weed density, a single application of 1% Roundup will be made only on local patches. Hand weeding has the deleterious effect of soil disturbance, although the presence of high soil moisture by periodic overhead irrigation should minimize this impact. All weeded material will be removed from the site. A trained person familiar with all plant species will be perform all weeding.

Erosion control. Any locally steep banks above the will be covered with jute matting that is securely stapled into position according to accepted procedures. Stabilization will require rapid establishment of annual plants to minimize soil erosion from rain and wind. *Festuca megalura*, in conjunction with several other native species of annuals from this area will serve to bind the soil. When water is withdrawn, these annuals will die back and provide a mulch for the interplanted perennials. The latter will be planted in a manner to aid in the erosion control process.

Irrigation. A simple, temporary system of low flow gear driven sprinkler heads will be used. This system is cheap, easily replaced or repaired when vandalized, and provides gentle, slow water delivery. The system will be used to augment natural rainfall and extend the growing season to rapidly establish the perennial shrubs and bring up the annual seed bank for erosion control. The system will be useful in times of drought for future management.

Post-planting weed control. Post planting weed control will involve inspection and hand removal. This will be implemented regularly following winter germination to control the seed banks of exotic species. Once the cover of native perennial species is well established and large seed banks of the re-established annuals have built up, weedy species will virtually disappear. This has been observed in all projects we have designed, where, in spite of dense stands of tumbleweed, cheeseweed, and European chrysanthemum

immediately adjacent to the plot, virtually no individuals of these exotics survive in the native stands.

Plant species resources. All stock used will be derived from sources of the immediate vicinity or from environmentally similar situations. Certain of the seed sources for annuals, e.g. *Festuca*, may be obtained from commercial suppliers since sufficient quantities are not available. A few species are so rare (e.g. the listed endangered *Dithyrea maritima*) that local stock is currently unavailable.

Plant installation. Perennial seedling stock will be supplied in deepots or other containers with a high depth to width ratio to assure rapid root establishment into a low soil profile. These are indicated in the plant inventory control chart that follows. Planting holes larger and deeper than the containers will be dug, twice filled with water, 5-10 prills of Osmocote slow release fertilizer added and covered, and the plant installed and backfilled. Basins about one foot in diameter will be formed and topped with a 2 inch mulch and the plants well watered. Additional fertilizer is deleterious to natural systems.

Seed will be hand scattered as individual species and not in mixes. With seed broadcast during the early winter period following, but not during, the first rains, no preparation will be required except prior weeding. Seed will be lightly raked in and Seed beds will be immediately watered, . Seedbeds will not be fertilized or mulched.

Plant distribution plan. The plant list is given on the census charts and positions of keystone shrub plantings indicated on the attached plan. Variation in placement will be made to accommodate local topographic features which remain unknown until grading is completed.

Although the site will be overplanted, once natural hydrologic conditions are re-established, selection will maintain the fittest members of the community. One annual cycle will be required for plantings to establish. Thereafter irrigation will be restricted to times of prolonged drought.

Fencing. The existing fence separating the site from the public beach should be heightened to preclude vandalism and an access gate installed for service.

Signs. At least one sign will be erected on the fence, indicating the nature of the project and asking for public awareness and support.

Schedule. The optimal time for installation is from September through December. Germination of most annuals is only successful during this window. Furthermore some of the perennials (*Isomeris*, Bush Lupine) suffer less transplant shock in fall and early winter even though most perennials can be installed year-round given appropriate irrigation. We urge every effort be made to ensure site preparation can begin in early fall to provide time for regulating the alien species seed banks prior to planting.

Maintenance.

Once plantings are established and seed broadcast, it will be necessary to water depending on weather conditions and weeding. The latter was discussed above, and weeding will be provided over a one year period. Irrigation will depend on how long it is desired to extend the blooming season for certain of the perennial plants, such as the poppy, wallflower, and primroses, all of which will bloom into summer if watered. It must be recognized that prolonged watering increases weed establishment.

Monitoring

Plants. A record will be maintained of all planting dates and distributions, with all losses of perennial species noted. Over the one year maintenance period, replacement planting will be made at discretion, depending on the time of loss and the relative degree of lost to total cover.

Animals. Although there is no provision for monitoring animal populations, there would be value in providing information on the community of arthropods, particularly the El Segundo blue butterfly and ground-dwelling insects, as these will probably change over time with the transition of the site from an exotic weed patch to a native community. A large data base has been gathered for similar terrestrial communities at several Palos Verdes sites and at the El Segundo sand dunes (Mattoni and Novotny, unpublished). Because of variation in habitat size and history, a parallel program would be of scientific interest. There is no funding currently available for such monitoring, but the option should be kept in mind as a future research objective. Such monitoring is beyond the current program scope.

PLANTING RECORD AND CENSUS

Clearing started primary completed

Weed control

Species found on adjacent property to the south marked M, with those from the Palos Verdes bluffs marked P. Species restricted to the strand marked ST. Others known from El Segundo dunes.

	Present	Planting	1996	1997	1998
<u>Extant plants-sustaining</u>					
Ambrosia acanthicarpa					
<u>Extant perennials-restock</u>					
Dpot seed Eriogonum parvifolium	200				
Enoelia californica	20				
Seed broadcast: Camissonia chieranthifolia	2 oz				
.Lotus scoparius	1 lb				
<u>Extirpated perennials/reintroduce</u>					
Dpot seed: Isomeris arboria P	20				
Senecio douglasii P	20				
Mirabilis laevis P	40				
Haplopappus ericoides P	20				
Galium angustifolium P	20				
Artemisia dracunculus P	10				
C. soldanella ST	20				
Abronia maritima ST	40				
Gal seed: Rhus integrifolia P					
Band seed: Dudleya lanceolata P	70				
Corethrogyne filaginifolia P	70				
Calystegia macrostegia P	35				
Cardionema ramosissima	35				
Astragalus leucopsis P	70				
Ambrosia chamissonis M	35				
Abronia umbellatum M	70				
Phacelia ramosissima P	35				
Dpot cutting: Artemisia californica M					
Band cutting: Distichlis spicata M ST		36			
Direct cutting: Opuntia littoralis M		2 clumps			
Cuscuta californica M		25 clumps			
Seed planting: Croton californica M	100				
Marah macrocarpus M	20				
Datura wrightii M	5				
Cucurbita foetidissima P	20				
Seed broadcast: Lupinus chamissonis	6 oz				
Erysimum suffrutescens	2 oz				
Gnaphalium bicolor M	4 oz				
Eschscholtzia californica M	2 oz				
???Pholisma paniculatum					

	Present	Planting	1996	1997	1998
<u>Extant annuals -restock Broadcast</u>					
<i>Festuca megalura</i>	5 lb				
<u>Extirpated annuals to be re-introduced</u>					
Seed band: <i>Dithyrea maritima</i>	70				
Seed broadcast: <i>Plantago erecta</i>	2 oz				
<i>Calandrinia maritima</i> P	1 oz				
<i>Phacelia cicutaria hispida</i> P	.5 lb				
<i>Chaenactis glabriuscula</i> P	3 oz				
<i>Descurainea pinnata</i> P	2 oz				
<i>Lepidium lasiocarpum</i> P	2 oz				
<i>Cryptantha clevelandii</i> P	4 oz				
<i>Lotus purshianus</i> P	1 oz				
<i>Lotus strigosus</i> P	2 oz				
<i>Calyptidium monandrum</i> P	1 oz				
<i>Lupinus bicolor</i> P	1 lb				
<i>L. truncatus</i> P	2 oz				
<i>C. micrantha</i> P	.5 oz				
<i>Linaria canadensis</i> P	.5 oz				
<i>Heterotheca grandiflora</i>	2 oz				
<i>Crassula erecta</i> P	6 oz				
<i>Stephanomeria virgata</i> M	2 oz				
<u>Invasive perennials to be removed</u>					
<i>Carpobrotus</i> sp. sq. ft.					
<i>Acacia</i> spp					
<u>Invasive annuals to be regulated</u>					
<i>Erodium</i> spp					
<i>Salsola iberica</i>					
<i>Bromus diandrus</i>					
<i>Brassica</i> spp					
<i>Cakile maritima</i>					
<i>Raphanus sativus</i>					
<i>Sonchus oleracea</i>					
<i>Picris echioides</i>					
<i>Chrysanthemum coronarium</i>					
<i>Cenchrus echinatus</i>					
<i>Hordeum leporinum</i>					
<i>Malva parviflora</i>					
<i>Conyza</i> spp					

CALIFORNIA COASTAL COMMISSION

45 FINEMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94104-0200
VOICE AND TDD (415) 884-6200



**NOTIFICATION OF SUBSTITUTION OF APPLICANT FOR COASTAL PERMIT AND
AFFIDAVIT OF SUBSTITUTED APPLICANT**

Any person who has applied for a Coastal Development Permit may transfer that application to another person by submitting the following to the District Office:

- An affidavit, executed by the substituted applicant, attesting to the substituted applicant's agreement to comply with any legal requirements associated with the application (see Section III, over);
- Evidence of the substituted applicant's legal interest in the real property involved and legal capacity to undertake the development as applied for in the application;
- The original applicant's request to transfer all rights to obtain a permit for the development to the substituted applicant (see Section II, over); and
- A copy of the original application showing that it is still pending before the California Coastal Commission. The applicant for substitution shall submit the above documents to the District Office together with a completed notification form. The substitution shall be effective upon the District Director's receipt of the documentation submitted, subject to any specified condition precedent to the substitution. The completed notification form and supporting documentation shall become a part of the project file maintained by the Commission.

SECTION ONE

1. Name, address, and telephone number of original applicant:

HAWTHORNE SAVINGS, F.S.B. (BRUCE LEWIS VICE PRES)
2381 ROBERTSON AVENUE EL SEGUNDO CA 90245 (310) 725-5723

2. Index number of application:

5-90-1041

3. Location and description of development applied for:

433 PASEO DE LA PLAYA TORRANCE CA
CONSTRUCT 2-STORY 7,805 SQUARE FOOT SINGLE FAMILY RESIDENCE

4. Conditions precedent to substitution (close of escrow, etc.), if any:

CLOSE OF ESCROW

5. Name, address and telephone number of substituted applicant:

WILLIAM CAMPBELL & MICHELLE CAMPBELL
1700 NELSON MANHATTAN BEACH, CA 90266

EXHIBIT NO. 5

APPLICATION NO.

5-90-1041A2

Notification of
Substitution of

Applicant
California Coastal Commission

SIGN
HERE

SECTION TWO

AFFIDAVIT OF ORIGINAL APPLICANT

I hereby request that the above-identified person(s) be substituted as applicant for Permit Application No. 5-90-1041 A2, and I further declare that the foregoing is true and correct to the best of my knowledge.

Nov. 27 1995
Date

Bruce H. Lewis, VICE PRESIDENT
Applicant HAWTHORNE JUNIOR F.S.B.

SECTION THREE

AFFIDAVIT OF SUBSTITUTED APPLICANT

I have read Coastal Development Permit No. 5-90-1041 and CDP Application No. 5-90-1041 A2 which was designed as a proposed remedy to correct Coastal Act Violation No. 5-95-003 of the original permit (5-90-1041) and fully understand the contents and conditions imposed. I understand that any modifications to approved plans or amendments to existing permits require additional approval and I hereby consent to all conditions and assume all obligations imposed by the original permit, any future requirements to correct violations of the Coastal Act as well as requirements of subsequent and future permits or additional requirements of the Coastal Commission.

Date

[Signature]
Substituted Applicant

**SIGN
HERE**