CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
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Filed:	9/27/07
49th Day:	11/15/07
180th Day:	3/25/08
Staff:	D. Christensen
Staff Report:	1/17/08
Hearing Date:	2/7/08
Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION No.: 4-06-092 and 4-06-093

APPLICANT: Hillel Laks **AGENT**: Michael Barsocchini

PROJECT LOCATION: 3533 & 3535 Encinal Canyon Road, Santa Monica Mountains, Los Angeles County

PROJECT DESCRIPTIONS: These applications are for proposed development on two separate, contiguous parcels owned by the applicant. Access is proposed to be provided to each parcel along the same private access road from Encinal Canyon Road.

CDP Application 4-06-092 (3535 Encinal Canyon Road)
The applicant is proposing to construct a two-story, 5,281 sq. ft. single-family residence with attached 672 sq. ft. garage, septic system, water well, 10,000-gallon water tank, driveway, turnaround, retaining walls, removal of two small structures and box culvert, 3,230 cu. yds. of grading (1,299 cu. yds. cut; 1,931 cu. yds. fill; 632 cu. yds. import), and to record an offer-to-dedicate an open space conservation easement. The applicant also proposes to extend and improve an existing off-site access road, including retaining walls, 2,686 cu. yds. of grading (1,557 cu. yds. cut; 1,129 cu. yds. fill; 428 cu. yds. export), encroachment within the protected zones of eleven oak trees, and replacement of an existing Arizona-type stream crossing with a bridged stream crossing.

CDP Application 4-06-093 (3533 Encinal Canyon Road)
The applicant is proposing to construct a two-story, 4,577 sq. ft. single-family residence with attached 702 sq. ft. garage, septic system, driveway, turnaround, retaining walls, 4,418 cu. yds. of grading (4,292 cu. yds. cut; 126 cu. yds. fill; 4,166 cu. yds. export), and to record an offer-to-dedicate an open space conservation easement.

	CDP 4-06-092:	CDP 4-06-093:
Lot Area:	7.7 acres	11.1 acres
Building Coverage:	3,500 sq. ft.	2,700 sq. ft.
Paved Area:	6,200 sq. ft.	5,473 sq. ft.
Landscaped Area:	6,500 sq. ft.	3,400 sq. ft.
Ht. Abv. Fin. Grade:	35 ft.	35 ft.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval of CDP 4-06-092** with **sixteen (16) special conditions** relating to plans conforming to geotechnical engineer's recommendations, assumption of risk, drainage and polluted runoff control, lighting restriction, removal of natural vegetation, habitat impact mitigation, future development restriction, deed restriction, open space conservation easement, removal of structures, landscaping and erosion control, stream crossing removal and replacement, riparian habitat revegetation, construction responsibilities and timing, oak and sycamore tree protection and mitigation, and nesting bird protection. Staff also recommends **approval of CDP 4-06-093** with **twelve (12) special conditions** relating to plans conforming to geotechnical engineer's recommendations, assumption of risk, drainage and polluted runoff control, lighting restriction, removal of natural vegetation, habitat impact mitigation, future development restriction, deed restriction, open space conservation easement, removal of excavated material, required approval, and landscaping and erosion control. The standard of review for the project is the Chapter 3 policies of the Coastal Act. In addition, the policies of the certified Malibu–Santa Monica Mountains Land Use Plan (LUP) serve as guidance. As conditioned, the proposed project will be consistent with the applicable policies of the Coastal Act.

The applicant proposes to construct two single-family residences on two separate, contiguous parcels (hereafter referred to as Lots 2 and 3) located within a small residential enclave off Encinal Canyon Road in the western Santa Monica Mountains. Due to the related nature of the two coastal permit applications, proposed development on both parcels has been addressed in one staff report. The proposed project sites are situated near stream corridors that are delineated as Environmentally Sensitive Habitat Areas (ESHA) on Malibu/Santa Monica Mountains Land Use Plan resource maps. In addition, the associated hillside slopes in the vicinity of the proposed projects contain relatively undisturbed, large contiguous areas of coastal sage scrub, mixed chaparral vegetation, and oak woodland that is also considered ESHA.

On Lot 2 (**CDP 4-06-092**), the applicant is proposing to construct a two-story, 5,281 sq. ft. single-family residence with attached 672 sq. ft. garage, septic system, water well, 10,000-gallon water tank, driveway, turnaround, retaining walls, removal of two small structures and box culvert, recordation of an offer-to-dedicate an open space conservation easement, and 3,230 cu. yds. of grading (1,299 cu. yds. cut; 1,931 cu. yds. fill; 632 cu. yds. import). In order to provide access to the subject parcel, the applicant is also proposing to extend, improve, and widen an existing off-site access road, involving retaining walls and 2,686 cu. yds. of grading (1,557 cu. yds. cut; 1,129 cu. yds. fill; 428 cu. yds. export). A significant portion of the existing access road is situated within the riparian woodland corridor of the east fork of Encinal Canyon Creek. The proposed access road improvements will significantly encroach upon the protected zones of eleven (11) oak trees within the oak-riparian ESHA canopy. Lastly, the applicant proposes to replace the existing corrugated metal pipe culvert/Arizona-type stream crossing (where the access road crosses the east fork of Encinal Canyon Creek) with a 24-ft. wide, 24-ft. long, pre-fabricated single span bridge with concrete footings. On Lot 3 (**CDP 4-06-093**), the applicant is proposing to construct a two-story, 4,577 sq. ft. single-family residence with attached 702 sq. ft. garage, septic system, driveway, turnaround, retaining walls, 4,418 cu. yds. of grading (4,292 cu. yds. cut; 126 cu. yds. fill; 4,166 cu. yds. export), and recordation of an offer-to-dedicate an open space conservation easement. The applicant proposes to utilize the access road proposed in CDP application No. 4-06-092 discussed above.

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The applicant also owns a third parcel (hereafter referred to as Lot 1) that is contiguous with Lots 2 and 3, although it is not a part of the subject permit applications. In considering the

subject permit applications, it is important to note the facts pertaining to Lot 1 and the unpermitted lot line adjustment described below, because the access road proposed to facilitate access to subject Lots 2 and 3 extends across Lot 1.

The applicant of the subject permit applications had previously proposed a single-family residence on each of the three contiguous parcels under his ownership (Lots 1, 2 and 3) under separate permit applications (4-04-074, 4-04-075, and 4-04-076). In review of these applications, Commission staff discovered that Lot 1 had been reconfigured through a lot line adjustment ("LLA") that was approved by the County of Los Angeles in 1982, but the Commission never approved that LLA or even had the opportunity to review it. In June 2006, the application for residential development on Lot 1 (4-04-075) was withdrawn by the applicant because the applicant wanted to first resolve the illegal parcel configuration issue through a separate CDP application. However, at that time, the applicant wished to proceed with the permit applications for development on Lots 2 and 3 (4-04-074 and 4-04-076), which were scheduled for Commission action at the July 2006 Commission hearing. Staff had recommended denial of application 4-04-074 and 4-04-076 in its June 28, 2006 staff report because the access road to serve the properties was proposed across Lot 1, an illegally configured parcel, and approval of the road in that location would foreclose options for reconfiguring Lot 1 to minimize impacts to Environmentally Sensitive Habitat Area (ESHA). The day before the scheduled July 2006 Commission hearing, the applicant withdrew the permit applications. Since that time, the applicant has submitted the subject permit applications (4-06-092 and 4-06-093) for proposed development on Lots 2 and 3, which included additional analysis and modifications from what was previously proposed. In addition, the applicant has submitted a new permit application (No. 4-06-133) for a lot line adjustment between Lot 1 and the impacted adjacent parcel (-032) that would minimize impacts to ESHA, however this application is currently incomplete. Although the LLA permit application has not yet been considered by the Commission, the applicant has identified future development sites for the LLA parcels of application 4-06-133 that are sited in a clustered fashion at least 100 feet from Encinal Canyon Creek and outside the protected zone of any oak trees. In addition, the applicant has demonstrated that the proposed access road across Lot 1 will avoid impacts to oak trees and be complimentary to the identified future development sites proposed in the LLA permit application. Therefore, staff has determined that the proposed access road across Lot 1 will no longer limit the range of alternatives that can be considered for siting future development on Lot 1 and Parcel –032 and resolving the LLA.

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LOCAL APPROVALS RECEIVED: Los Angeles County Department of Regional Planning Approval-in-Concept, including Conditional Use Permit and Oak Tree Permit No. 96-150-(3) for 3533, 3535, and 3575 Encinal Canyon Road; Los Angeles County Environmental Review Board evaluation; Los Angeles County Fire Department approval of access and turnaround areas; Los Angeles County Fire Department approval of Preliminary Fuel Modification Plans; Los Angeles County Department of Health Services, Conceptual Approvals for Private Septic Systems.

SUBSTANTIVE FILE DOCUMENTS: Malibu/Santa Monica Mountains Land Use Plan (LUP); California Department Fish & Game letter, dated November 15, 2007, stating Streambed Alteration Agreement not required; "Biological Resources Report for 3533, 3535, and 3575 Encinal Canyon Road" prepared by Rachel Tierney Consulting, dated June 22, 2005; "Oak Tree Report" by L. Newman Design Group Inc., dated May 14, 2007; "Preliminary Soils and Engineering Geologic Investigation Report" prepared by California Geosystems Inc., dated December 27, 1988; "Geologic and Geotechnical Engineering Update Report" by RJR Engineering Group, dated July 10, 1996; "Geotechnical Update Report" prepared by RJR Engineering Group, dated July 11, 2004; "Supporting Geology Report for On-site Sewage Disposal Systems" prepared by RJR Engineering Group, dated September 4, 2002.

I. STAFF RECOMMENDATIONS

A. Approval with Conditions CDP No. 4-06-092 (Lot 2; 3535 Encinal Canyon Rd.)

MOTION I: ***I move that the Commission approve Coastal Development Permit No. 4-06-092 pursuant to the staff recommendation.***

STAFF RECOMMENDATION OF APPROVAL:

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

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially

lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

B. Approval with Conditions CDP No. 4-06-093 (Lot 3; 3533 Encinal Canyon Rd.)

MOTION II: ***I move that the Commission approve Coastal Development Permit No. 4-06-093 pursuant to the staff recommendation.***

STAFF RECOMMENDATION OF APPROVAL:

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

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

(Note: These Standard Conditions are applicable to both Coastal Development Permit Nos. 4-06-092 and 4-06-093)

1. Notice of Receipt and Acknowledgment. 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. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. 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. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. 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

A. SPECIAL CONDITIONS FOR CDP 4-06-092 (Lot 2; 3535 Encinal Canyon Rd.)

(Note: These Special Conditions are applicable to Coastal Development Permit No. 4-06-092)

1. Plans Conforming to Geotechnical Engineer's Recommendations

By acceptance of this permit, the applicant agrees to comply with the recommendations contained in the "Geologic and Geotechnical Engineering Update Report" by RJR Engineering Group, dated July 10, 1996 and the "Geotechnical Update Report" prepared by RJR Engineering Group, dated July 11, 2004. These recommendations, including recommendations concerning foundations, grading, and drainage, shall be incorporated into all final design and construction plans, which must be reviewed and approved by the consultant prior to commencement of development.

The final plans approved by the consultant shall be in substantial conformance with the plans approved by the Commission relative to construction, grading, and drainage. Any substantial changes in the proposed development approved by the Commission that may be required by the consultant shall require amendment(s) to the permit(s) or new Coastal Development Permit(s).

2. Assumption of Risk

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from wildfire; (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 such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

3. <u>Drainage and Polluted Runoff Control Plan</u>

A. ***Prior to issuance of the Coastal Development Permit***, the applicant shall submit for the review and approval of the Executive Director, final drainage and runoff control plans, including supporting calculations. The plan shall be prepared by a licensed engineer and shall incorporate structural and non-structural Best Management Practices (BMPs) designed to control the volume, velocity and pollutant load of stormwater leaving the developed site. The plan shall be reviewed and approved by the consulting engineering geologist to ensure the plan is in conformance with geologist's recommendations. In addition to the specifications above, the plan shall be in substantial conformance with the following requirements:

(a) Selected BMPs (or suites of BMPs) shall be designed to treat, infiltrate or filter the amount of stormwater runoff produced by all storms up to and including the 85th percentile, 24-hour runoff event for volume-based BMPs, and/or the 85th percentile, 1-hour runoff event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs.
(b) Runoff shall be conveyed off site in a non-erosive manner.
(c) Energy dissipating measures shall be installed at the terminus of outflow drains.
(d) The plan shall include provisions for maintaining the drainage system, including structural BMPs, in a functional condition throughout the life of the approved development. Such maintenance shall include the following: (1) BMPs shall be inspected, cleaned and repaired when necessary prior to the onset of the storm season, no later than September 30th each year and (2) should any of the project's surface or subsurface drainage/filtration structures or other BMPs fail or result in increased erosion, the applicant/landowner or successor-in-interest shall be responsible for any necessary repairs to the drainage/filtration system or BMPs and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the applicant shall submit a repair and restoration plan to the Executive Director to determine if an amendment or new coastal development permit is required to authorize such work.
(e) The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

B. The Permittee shall undertake development in accordance with the final approved plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Coastal Commission- approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

4. <u>Lighting Restriction</u>

A. The only outdoor night lighting allowed on the subject parcel is limited to the following:

1. The minimum necessary to light walkways used for entry and exit to the structures, including parking areas on the site. This lighting shall be limited to fixtures that do not exceed two feet in height above finished grade, are directed downward and generate the same or less lumens equivalent to those generated by a 60 watt incandescent bulb, unless a greater number of lumens is authorized by the Executive Director.

2. Security lighting attached to the residence and garage shall be controlled by motion detectors and is limited to same or less lumens equivalent to those generated by a 60 watt incandescent bulb.

3. The minimum necessary to light the entry area to the driveway with the same or less lumens equivalent to those generated by a 60 watt incandescent bulb.

B. No lighting around the perimeter of the site and no lighting for aesthetic purposes is allowed.

5. Removal of Natural Vegetation

Removal of natural vegetation for the purpose of fuel modification within the 50 foot zone surrounding the proposed structure(s) shall not commence until the local government has issued a building or grading permit for the development approved pursuant to this permit. Vegetation thinning within the 50-200 foot fuel modification zone shall not occur until commencement of construction of the structure(s) approved pursuant to this permit.

6. Habitat Impact Mitigation

Prior to issuance of the Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, a map delineating all areas of chaparral and coastal sage scrub habitat (ESHA) that will be disturbed by the proposed development, including fuel modification and brush clearance requirements on the project site and adjacent property. The chaparral and coastal sage scrub ESHA areas on the site and adjacent property shall be delineated on a detailed map, to scale, illustrating the subject parcel boundaries and, if the fuel modification/brush clearance zones extend onto adjacent property, adjacent parcel boundaries. The delineation map shall indicate the total acreage for all chaparral and coastal sage scrub ESHA, both on and offsite, that will be impacted by the proposed development, including the fuel modification/brush clearance areas. A 200-foot clearance zone from the proposed structures shall be used to determine the extent of off-site brush clearance for fire protection purposes. The delineation shall be prepared by a qualified resource specialist or biologist familiar with the ecology of the Santa Monica Mountains

Mitigation shall be provided for impacts to the chaparral ESHA from the proposed development and fuel modification/brush clearance requirements by one of the three following habitat mitigation methods:

a) Habitat Restoration

1) Habitat Restoration Plan

Prior to the issuance of the coastal development permit, the applicant shall submit a habitat restoration plan, for the review and approval of the Executive Director, for an area of degraded chaparral habitat equivalent to the area of chaparral ESHA impacted by the proposed development and fuel modification/brush clearance area. The habitat restoration area may either be onsite or offsite within the coastal zone either in the City of Malibu or elsewhere in the Santa Monica Mountains. The habitat restoration area shall be delineated on a detailed site plan, to scale, that illustrates the parcel boundaries and topographic contours of the site. The habitat restoration plan shall be prepared by a qualified resource specialist or biologist familiar with the ecology of the Santa Monica Mountains and shall be designed to restore the area in question for habitat function, species diversity and vegetation cover. The restoration plan shall include a statement of goals and performance standards, revegetation and restoration methodology, and maintenance and monitoring provisions. If the restoration site is offsite, the applicant shall submit written evidence to the Executive Director that the property owner has irrevocably agreed to allow the restoration work, maintenance and monitoring required by this condition and not to disturb any native vegetation in the restoration area.

The applicant shall submit, on an annual basis for five years, a written report, for the review and approval of the Executive Director, prepared by a qualified resource specialist, evaluating compliance with the performance standards outlined in the restoration plan and describing the revegetation, maintenance and monitoring that was conducted during the prior year. The annual report shall include recommendations for mid-course corrective measures. At the end of the five-year period, a final detailed report shall be submitted for the review and approval of the Executive Director. If this report indicates that the restoration project has been, in part or in whole, unsuccessful, based on the approved goals and performance standards, the applicant shall submit a revised or supplemental restoration plan with maintenance and monitoring provisions, for the review and approval of the Executive Director, to compensate for those portions of the original restoration plan that were not successful. Should supplemental restoration be required, the applicant shall submit, on an annual basis for five years, a written report, for the review and approval of the Executive Director, prepared by a qualified resource specialist, evaluating the supplemental restoration areas. At the end of the five-year period, a final report shall be submitted evaluating whether the supplemental restoration plan has achieved compliance with the goals and performance standards for the restoration area. If

the goals and performance standards are not met within 10 years, the applicant shall submit an application for an amendment to the coastal development permit for an alternative mitigation program and shall implement whatever alternative mitigation program the Commission approves, as approved.

The habitat restoration work approved in the restoration plan shall be carried out prior to occupancy of the residence.

2) Open Space Deed Restriction

No development, as defined in section 30106 of the Coastal Act, shall occur in the habitat restoration area, as shown on the habitat restoration site plan required pursuant to (A)(1) above.

Prior to the issuance of the coastal development permit, the applicant shall submit evidence that the applicant has executed and recorded a deed restriction (if the applicant is not the owner, then the applicant shall submit evidence that the owner has executed and recorded the deed restriction), in a form and content acceptable to the Executive Director, reflecting the above restriction on development and designating the habitat restoration area as open space. The deed restriction shall include a graphic depiction and narrative legal descriptions of both the parcel on which the restoration area lies and the open space area/habitat restoration area. 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) Performance Bond

Prior to the issuance of the permit, the applicant shall post performance bonds to guarantee implementation of the restoration plan as follows: a) one equal to the value of the labor and materials; and b) one equal to the value of the maintenance and monitoring for a period of 5 years. Each performance bond shall be released upon satisfactory completion of items (a) and (b) above. If the applicant fails to either restore or maintain and monitor according to the approved plans, the Coastal Commission may collect the security and complete the work on the property.

b) <u>Habitat Conservation</u>

Prior to the issuance of the coastal development permit, the applicant shall (or, if the applicant is not the owner of the habitat conservation site, then the owner of the habitat conservation site shall) execute and record an open space deed restriction in a form and content acceptable to the Executive Director, over the entirety of a legal parcel or parcels containing chaparral ESHA. The chaparral

ESHA located on the mitigation parcel or parcels must be of equal or greater area than the ESHA area impacted by the proposed development, including the fuel modification/brush clearance areas. No development, as defined in section 30106 of the Coastal Act, shall occur on the mitigation parcel(s) and the parcel(s) shall be preserved as permanent open space. The deed restriction shall include a graphic depiction and narrative legal descriptions of the parcel or parcels. 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.

Prior to occupancy of the residence, the applicant shall submit evidence, for the review and approval of the Executive Director, that the recorded documents have been reflected in the Los Angeles County Tax Assessor Records.

If the mitigation parcel(s) is/are larger in size than the impacted habitat area, the excess acreage may be used to provide habitat impact mitigation for other development projects that impact like ESHA.

c) <u>Habitat Impact Mitigation Fund</u>

Prior to the issuance of the coastal development permit, the applicant shall submit evidence, for the review and approval of the Executive Director, that compensatory mitigation, in the form of an in-lieu fee, has been paid to the Mountains Recreation and Conservation Authority to mitigate adverse impacts to chaparral and coastal sage scrub habitat ESHA. The fee shall be calculated as follows:

1. Development Area, Irrigated Fuel Modification Zones, Off-site Brush Clearance

The in-lieu fee for these areas shall be $12,000 per acre within the development area and any required irrigated fuel modification zones. The total acreage shall be based on the map delineating these areas required by this condition.

2. Non-irrigated Fuel Modification Zones

The in-lieu fee for non-irrigated fuel modification areas shall be $3,000 per acre. The total acreage shall be based on the map delineating these areas required by this condition.

Prior to the payment of any in-lieu fee to the Mountains Recreation and Conservation Authority, the applicant shall submit, for the review and approval of the Executive Director, the calculation of the in-lieu fee required to mitigate adverse impacts to chaparral habitat ESHA, in accordance with this condition. After review and approval of the fee calculation, the fee shall be paid to the Mountains Recreation and Conservation Authority's Coastal Habitat Impact Mitigation Fund for the acquisition, permanent preservation or restoration of chaparral habitat in the Santa Monica Mountains coastal zone. The fee may not be used to restore areas where development occurred in violation of the Coastal Act's permit requirements.

7. Future Development Restriction

This permit is only for the development described in Coastal Development Permit No. 4-06-092. Pursuant to Title 14 California Code of Regulations Section 13250(b)(6), the exemptions otherwise provided in Public Resources Code Section 30610(a) shall not apply to any future development on any portion of the parcel. Accordingly, any future improvements to any portion of the property, including but not limited to the residence, garage, septic system, landscaping, and removal of vegetation or grading other than as provided for in the approved fuel modification/landscape plan prepared pursuant to Special Condition 11, shall require an amendment to Coastal Development Permit No. 4-06-092 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government.

8. Deed Restriction

Prior to issuance of the Coastal Development Permit, the applicant shall submit to the Executive Director, for review and approval, documentation demonstrating that the applicant has executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

9. Open Space Conservation Easement

No development, as defined in Section 30106 of the Coastal Act, grazing, or agricultural activities shall occur outside of the approved development area, within the portion of the property identified as the "open space conservation easement area", as shown in **Exhibit 10** except for:

1. Fuel modification required by the Los Angeles County Fire Department undertaken in accordance with the final approved fuel modification plan approved pursuant to Special Condition No. 11 or other fuel modification plans required and approved by the Commission pursuant to a different CDP(s) issued by the Commission;
2. Drainage and polluted runoff control activities required and approved pursuant to:
    a. The drainage and runoff control plans approved pursuant to Special Condition No. 3 of this permit; and

b. The landscaping and erosion control plans approved pursuant to Special Condition No. 11 of this permit;

3. Planting of native vegetation or other restoration activities approved pursuant to Special Condition Nos. 10, 12, and 13 of this permit;
4. If approved by the Commission as an amendment to this coastal development permit or a new coastal development permit,
   a. construction and maintenance of public hiking trails; and
   b. construction and maintenance of roads, trails, and utilities consistent with existing easements, if approved by the Commission.

Prior to issuance of the Coastal Development Permit, the applicant shall execute and record a document in a form and content acceptable to the Executive Director, granting to the Mountains Recreation and Conservation Authority ("MRCA") on behalf of the people of the State of California an open space conservation easement over the "open space conservation easement area" described above, for the purpose of habitat protection. The recorded easement document shall include a formal legal description of the entire property; and a metes and bounds legal description and graphic depiction, prepared by a licensed surveyor, of the open space conservation easement area, as generally shown on **Exhibit 10**. The recorded document shall reflect that no development shall occur within the open space conservation easement area except as otherwise set forth in this permit condition. The grant of easement shall be recorded free of prior liens and encumbrances (other than existing easements for roads, trails, and utilities) which the Executive Director determines may affect the interest being conveyed, and shall run with the land in favor of the MRCA on behalf of the people of the State of California, binding all successors and assigns.

10. Removal of Structures

By acceptance of this permit, the applicant agrees to remove the existing on-site storage shed and the dilapidated miniature house structure that are adjacent to Encinal Canyon Creek, prior to the receipt of the Certificate of Occupancy for the residence. The materials from these structures shall be disposed of properly.

11. Landscaping and Erosion Control Plans

Prior to issuance of the coastal development permit, the applicant shall submit final landscaping, erosion control, and fuel modification plans, prepared by a licensed landscape architect or a qualified resource specialist, for review and approval by the Executive Director. The plans shall incorporate the criteria set forth below. All development shall conform to the approved landscaping, erosion control, and fuel modification plans.

A. Landscaping Plan

1) All graded & disturbed areas on the subject site shall be planted and maintained for erosion control purposes within (60) days of receipt of the certificate of

occupancy for the residence. To minimize the need for irrigation all landscaping shall consist primarily of native/drought resistant plants as listed by the California Native Plant Society, Santa Monica Mountains Chapter, in their document entitled Recommended List of Plants for Landscaping in the Santa Monica Mountains, dated February 5, 1996. All native plant species shall be of local genetic stock. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Exotic Pest Plant Council, or by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized within the property.

2) All cut and fill slopes shall be stabilized with planting at the completion of final grading. Planting shall be primarily of native plant species indigenous to the Santa Monica Mountains using accepted planting procedures, consistent with fire safety requirements. All native plant species shall be of local genetic stock. Such planting shall be adequate to provide 90 percent coverage within two (2) years, and this requirement shall apply to all disturbed soils.

3) Plantings will be maintained in good growing condition throughout the life of the project and, whenever necessary, shall be replaced with new plant materials to ensure continued compliance with applicable landscape requirements.

4) No permanent irrigation is permitted within the protected zone (defined as a five foot radius outside the dripline, or 15 feet from the trunk, whichever is greater) of any oak tree on or adjacent to the project site, and landscaping within the oak tree protected zones shall be limited to native oak tree understory plant species.

5) Fencing of the entire property is prohibited. Fencing shall extend no further than Zone A of the final fuel modification plan approved by the Los Angeles County Fire Department pursuant to part C below. The fencing type and location shall be illustrated on the landscape plan.

6) Rodenticides containing any anticoagulant compounds (including, but not limited to, Warfarin, Brodifacoum, Bromadiolone or Diphacinone) shall not be used.

The Permittee shall undertake development in accordance with the final approved plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Coastal Commission - approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

B. Interim Erosion Control Plan

1) The plan shall delineate the areas to be disturbed by grading or construction activities and shall include any temporary access roads, staging areas and

stockpile areas. The natural areas on the site shall be clearly delineated on the project site with fencing or survey flags.

2) The plan shall specify that grading shall take place only during the dry season (April 1 – October 31). This period may be extended for a limited period of time if the situation warrants such a limited extension, if approved by the Executive Director. The applicant shall install or construct temporary sediment basins (including debris basins, desilting basins, or silt traps), temporary drains and swales, sand bag barriers, silt fencing, and shall stabilize any stockpiled fill with geofabric covers or other appropriate cover, install geotextiles or mats on all cut or fill slopes, and close and stabilize open trenches as soon as possible. These erosion control measures shall be required on the project site prior to or concurrent with the initial grading operations and maintained throughout the development process to minimize erosion and sediment from runoff waters during construction. All sediment should be retained on-site, unless removed to an appropriate, approved dumping location either outside of the coastal zone or within the coastal zone to a site permitted to receive fill.

3) The plan shall also include temporary erosion control measures should grading or site preparation cease for a period of more than 30 days, including but not limited to: stabilization of all stockpiled fill, access roads, disturbed soils and cut and fill slopes with geotextiles and/or mats, sand bag barriers, silt fencing, temporary drains and swales and sediment basins. The plans shall also specify that all disturbed areas shall be seeded with native grass species and include the technical specifications for seeding the disturbed areas. These temporary erosion control measures shall be monitored and maintained until grading or construction operations resume.

C. Fuel Modification Plans

Vegetation within 30 feet of the proposed house may be removed to mineral earth, vegetation within a 200-foot radius of the main structure may be selectively thinned in order to reduce fire hazard. However, such thinning shall only occur in accordance with an approved long-term fuel modification plan submitted pursuant to this special condition. The fuel modification plan shall include details regarding the types, sizes and location of plant materials to be removed, and how often thinning is to occur. In addition, the applicant shall submit evidence that the fuel modification plan has been reviewed and approved by the Forestry Department of Los Angeles County. Irrigated lawn, turf and ground cover planted within the thirty foot radius of the proposed house shall be selected from the most drought tolerant species or subspecies, or varieties suited to the Mediterranean climate of the Santa Monica Mountains.

D. Monitoring

Five years from the date of the receipt of the Certificate of Occupancy for the residence the applicants shall submit for the review and approval of the Executive

Director, a landscape monitoring report, prepared by a licensed Landscape Architect or qualified Resource Specialist, that certifies whether the on-site landscaping is in conformance with the landscape plan approved pursuant to this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the landscape monitoring report indicates the landscaping is not in conformance with or has failed to meet the performance standards specified in the landscaping plan approved pursuant to this permit, the applicants, or successors in interest, shall submit a revised or supplemental landscape plan for the review and approval of the Executive Director. The revised landscaping plan must be prepared by a licensed Landscape Architect or a qualified Resource Specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

12. Stream Crossing Removal and Replacement

By acceptance of this permit, the applicant agrees to 1) replace the existing Arizona stream crossing with the proposed bridged stream crossing where the proposed access road crosses the east fork of Encinal Canyon Creek, and 2) remove the existing box culvert stream crossing on the west fork of Encinal Canyon Creek on the subject parcel, prior to the receipt of the Certificate of Occupancy for the residence.

13. Riparian Habitat Revegetation Plan

Prior to issuance of the Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, a detailed Riparian Habitat Revegetation Plan, prepared by a biologist or environmental resource specialist with qualifications acceptable to the Executive Director, for 1) the area of the access road stream crossing replacement, and 2) the area of the box culvert and structure removal on the subject parcel, where riparian vegetation will be temporarily disturbed or removed due to construction and/or demolition activities using native plant species that are appropriate for a riparian/oak woodland habitat area. All invasive and non-native plant species shall be removed from the stream channel/riparian vegetation corridor within the revegetation area. The plan shall further include details regarding the types, sizes, and location of plants to be placed within the revegetation area. Only native plant species appropriate for a riparian/oak woodland and which are endemic to the Santa Monica Mountains shall be used, as listed by the California Native Plant Society - Santa Monica Mountains Chapter in their document entitled Recommended List of Plants for Landscaping in the Santa Monica Mountains dated February 5, 1996. All plant species shall be of local genetic stock. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized or maintained within the property. Successful site restoration shall be determined if the revegetation of native plant species on site is adequate to provide 90% coverage by the end of the five (5) year monitoring period and

is able to survive without additional outside inputs, such as supplemental irrigation. The plan shall also include a detailed description of the process, materials, and methods to be used to meet the approved goals and performance standards and specify the preferable time of year to carry out restoration activities and describe the interim supplemental watering requirements that will be necessary.

Monitoring Program

A monitoring program shall be implemented to monitor the riparian habitat restoration/revegetation for compliance with the specified guidelines and performance standards. The applicant shall submit, upon completion of the initial planting, a written report prepared by a qualified resource specialist, for the review and approval of the Executive Director, documenting the completion of the initial planting/revegetation work. This report shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) documenting the completion of the initial planting/revegetation work.

Five years from the date of issuance of this coastal development permit, the applicant shall submit for the review and approval of the Executive Director, a Riparian Habitat Revegetation Monitoring Report, prepared by a qualified biologist or Resource Specialist, that certifies the on-site revegetation is in conformance with the plan approved pursuant to this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the monitoring report indicates the revegetation is not in conformance with or has failed to meet the performance standards specified in the plan approved pursuant to this permit, the applicant, or successors in interest, shall submit a revised or supplemental restoration plan for the review and approval of the Executive Director. The revised restoration plan must be prepared by a qualified biologist or Resource Specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

14. Construction Responsibilities and Timing

The permittee shall comply with the following work-related requirements:

(a) Excavation and grading shall take place only during the dry season (April 1 – October 31). This period may be extended for a limited period of time if the situation warrants such a limited extension, if approved by the Executive Director.

(b) Prior to commencement of any work approved by this permit, the work area shall be flagged to identify limits of construction and identify natural areas off limits to construction traffic. All temporary flagging, staking, and fencing shall be removed upon completion of the project.

(c) No construction materials, debris, or waste shall be placed or stored where it may be subject to erosion and dispersion or encroach into a habitat area or drainage.

(d) Construction materials, chemicals, debris, and sediment shall be properly contained and secured on-site to prevent the unintended transport of material, chemicals, debris, and sediment into habitat areas and coastal waters by wind, rain, or tracking. Best Management Practices and Good Housekeeping Practices, designed to prevent spillage and/or runoff of construction-related materials and to contain sediment and contaminants associated with the construction activity, shall be implemented prior to the on-set of such activity.

(e) Debris and excavated material shall be appropriately disposed at a legal disposal site. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit, shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is required.

(f) Debris and excavated material shall be removed from the project area as necessary to prevent the accumulation of sediment and other debris which may be discharged into habitat areas and coastal waters.

(g) Any and all debris resulting from construction activities shall be removed from the project site within 7 days of completion of construction.

15. <u>Oak and Sycamore Tree Protection, Mitigation, and Monitoring</u>

Prior to issuance of the Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, an oak tree replacement planting program, which specifies replacement tree locations, tree or seedling size planting specifications, and a ten-year monitoring program with specific performance standards to ensure that the replacement planting program is successful. At least one hundred and ten (110) replacement seedlings, less than one year old, grown from acorns collected in the area, shall be planted in appropriate oak woodland habitat areas on the subject parcel, or on one of the two other sites owned by the applicant in the vicinity, as mitigation for impacts to eleven (11) oak trees as a result of proposed access road improvements (oak tree #s 1, 4, 5, 7-10, 17, 20-22 of Exhibit 6). The applicant shall commence implementation of the approved oak tree replacement planting program concurrently with the commencement of construction on the project site. An annual monitoring report on the oak tree replacement area shall be submitted for the review and approval of the Executive Director for each of the 10 years. If monitoring indicates the oak trees are not in conformance with or has failed to meet the performance standards specified in the monitoring program approved pursuant to this permit, the applicant, or successors in interest, shall submit a revised or supplemental planting plan for the review and approval of the Executive Director. The revised planting plan shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

To ensure that all other oak and sycamore trees located on the subject parcel and along the proposed access road are protected during construction activities, temporary protective barrier fencing shall be installed around the protected zones (5 feet beyond dripline or 15 feet from the trunk, whichever is greater) of all oak and sycamore trees

and retained during all construction operations. If required construction operations cannot feasibly be carried out in any location with the protective barrier fencing in place, then flagging shall be installed on trees to be protected. The permittee shall also follow the oak tree preservation recommendations that are enumerated in the "Oak Tree Report" by L. Newman Design Group Inc. dated May 14, 2007.

A biological consultant, arborist, or other resource specialist shall be present on-site during construction operations of the access road and bridged stream crossing and shall be directed to immediately notify the Executive Director if unpermitted activities occur or if any oak or sycamore trees are damaged, removed, or impacted beyond the scope of the work allowed by Coastal Development Permit 4-06-092. This monitor shall have the authority to require the applicant to cease work should any breach in permit compliance occur, or if any unforeseen sensitive habitat issues arise. Should any of the oak or sycamore trees in the area of the drainage, besides those noted above, be damaged or removed as a result of construction activities, at least ten replacement plants shall be planted on the project site as mitigation. In that case, the applicant shall submit, for the review and approval of the Executive Director, a supplemental oak/sycamore tree replacement planting program, prepared by a qualified biologist, arborist, or other qualified resource specialist, which specifies replacement tree locations, planting specifications, and a monitoring program to ensure that the replacement planting program is successful. An annual monitoring report on the supplemental oak/sycamore tree replacement area shall be submitted for the review and approval of the Executive Director for each of the 10 years. Upon submittal of the replacement planting program, the Executive Director shall determine if an amendment to Permit No. 4-06-092, or an additional coastal development permit, from the Commission is required.

16. <u>Nesting Bird Protection Measures</u>

A qualified biologist, with experience in conducting bird surveys, shall conduct bird surveys 30 days prior to construction activities to detect any active bird nests in the vegetation to be removed and any other such habitat within 500 feet of the construction area. The last survey should be conducted 3 days prior to the initiation of clearance/construction. If an active songbird nest is located, clearing/construction within 300 feet shall be postponed until the nest(s) is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. If an active raptor, rare, threatened, endangered, or species of concern nest is found, clearing/construction within 500 feet shall be postponed until the nest(s) is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest shall be established in the field with flagging and stakes or construction fencing. Construction personnel shall be instructed on the sensitivity of the area. The project biologist shall record the results of the recommended protective measures described above to document compliance with applicable State and Federal laws pertaining to protection of nesting birds.

B. SPECIAL CONDITIONS FOR CDP 4-06-093 (Lot 3; 3533 Encinal Canyon Rd.)

(Note: These Special Conditions are applicable to Coastal Development Permit No. 4-06-093)

1. Plans Conforming to Geotechnical Engineer's Recommendations

By acceptance of this permit, the applicant agrees to comply with the recommendations contained in the "Geologic and Geotechnical Engineering Update Report" by RJR Engineering Group, dated July 10, 1996 and the "Geotechnical Update Report" prepared by RJR Engineering Group, dated July 11, 2004. These recommendations, including recommendations concerning foundations, grading, and drainage, shall be incorporated into all final design and construction plans, which must be reviewed and approved by the consultant prior to commencement of development.

The final plans approved by the consultant shall be in substantial conformance with the plans approved by the Commission relative to construction, grading, and drainage. Any substantial changes in the proposed development approved by the Commission that may be required by the consultant shall require amendment(s) to the permit(s) or new Coastal Development Permit(s).

2. Assumption of Risk

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from wildfire; (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 such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

3. Drainage and Polluted Runoff Control Plan

A. ***Prior to issuance of the Coastal Development Permit***, the applicant shall submit for the review and approval of the Executive Director, final drainage and runoff control plans, including supporting calculations. The plan shall be prepared by a licensed engineer and shall incorporate structural and non-structural Best Management Practices (BMPs) designed to control the volume, velocity and pollutant load of stormwater leaving the developed site. The plan shall be reviewed and approved by the consulting engineering geologist to ensure the plan is in conformance with geologist's recommendations. In addition to the specifications above, the plan shall be in substantial conformance with the following requirements:

(a) Selected BMPs (or suites of BMPs) shall be designed to treat, infiltrate or filter the amount of stormwater runoff produced by all storms up to and including the 85th percentile, 24-hour runoff event for volume-based BMPs, and/or the 85th percentile, 1-hour runoff event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs.
(b) Runoff shall be conveyed off site in a non-erosive manner.
(c) Energy dissipating measures shall be installed at the terminus of outflow drains.
(d) The plan shall include provisions for maintaining the drainage system, including structural BMPs, in a functional condition throughout the life of the approved development. Such maintenance shall include the following: (1) BMPs shall be inspected, cleaned and repaired when necessary prior to the onset of the storm season, no later than September 30th each year and (2) should any of the project's surface or subsurface drainage/filtration structures or other BMPs fail or result in increased erosion, the applicant/landowner or successor-in-interest shall be responsible for any necessary repairs to the drainage/filtration system or BMPs and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the applicant shall submit a repair and restoration plan to the Executive Director to determine if an amendment or new coastal development permit is required to authorize such work.
(e) The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

B. The Permittee shall undertake development in accordance with the final approved plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Coastal Commission- approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

4. <u>Lighting Restriction</u>

A. The only outdoor night lighting allowed on the subject parcel is limited to the following:

1. The minimum necessary to light walkways used for entry and exit to the structures, including parking areas on the site. This lighting shall be limited to fixtures that do not exceed two feet in height above finished grade, are directed downward and generate the same or less lumens equivalent to those generated by a 60 watt incandescent bulb, unless a greater number of lumens is authorized by the Executive Director.
2. Security lighting attached to the residence and garage shall be controlled by motion detectors and is limited to same or less lumens equivalent to those generated by a 60 watt incandescent bulb.

3. The minimum necessary to light the entry area to the driveway with the same or less lumens equivalent to those generated by a 60 watt incandescent bulb.

C. No lighting around the perimeter of the site and no lighting for aesthetic purposes is allowed.

5. Removal of Natural Vegetation

Removal of natural vegetation for the purpose of fuel modification within the 50 foot zone surrounding the proposed structure(s) shall not commence until the local government has issued a building or grading permit for the development approved pursuant to this permit. Vegetation thinning within the 50-200 foot fuel modification zone shall not occur until commencement of construction of the structure(s) approved pursuant to this permit.

6. Habitat Impact Mitigation

Prior to issuance of the Coastal Development Permit, the applicant shall submit, for the review and approval of the Executive Director, a map delineating all areas of chaparral and coastal sage scrub habitat (ESHA) that will be disturbed by the proposed development, including fuel modification and brush clearance requirements on the project site and adjacent property. The chaparral and coastal sage scrub ESHA areas on the site and adjacent property shall be delineated on a detailed map, to scale, illustrating the subject parcel boundaries and, if the fuel modification/brush clearance zones extend onto adjacent property, adjacent parcel boundaries. The delineation map shall indicate the total acreage for all chaparral and coastal sage scrub ESHA, both on and offsite, that will be impacted by the proposed development, including the fuel modification/brush clearance areas. A 200-foot clearance zone from the proposed structures shall be used to determine the extent of off-site brush clearance for fire protection purposes. The delineation shall be prepared by a qualified resource specialist or biologist familiar with the ecology of the Santa Monica Mountains

Mitigation shall be provided for impacts to the chaparral ESHA from the proposed development and fuel modification/brush clearance requirements by one of the three following habitat mitigation methods:

a) Habitat Restoration

1) Habitat Restoration Plan

Prior to the issuance of the coastal development permit, the applicant shall submit a habitat restoration plan, for the review and approval of the Executive Director, for an area of degraded chaparral habitat equivalent to the area of chaparral ESHA impacted by the proposed development and fuel modification/brush clearance area. The habitat restoration area may either be onsite or offsite within the coastal zone either in the City of Malibu or elsewhere in the Santa Monica

Mountains. The habitat restoration area shall be delineated on a detailed site plan, to scale, that illustrates the parcel boundaries and topographic contours of the site. The habitat restoration plan shall be prepared by a qualified resource specialist or biologist familiar with the ecology of the Santa Monica Mountains and shall be designed to restore the area in question for habitat function, species diversity and vegetation cover. The restoration plan shall include a statement of goals and performance standards, revegetation and restoration methodology, and maintenance and monitoring provisions. If the restoration site is offsite, the applicant shall submit written evidence to the Executive Director that the property owner has irrevocably agreed to allow the restoration work, maintenance and monitoring required by this condition and not to disturb any native vegetation in the restoration area.

The applicant shall submit, on an annual basis for five years, a written report, for the review and approval of the Executive Director, prepared by a qualified resource specialist, evaluating compliance with the performance standards outlined in the restoration plan and describing the revegetation, maintenance and monitoring that was conducted during the prior year. The annual report shall include recommendations for mid-course corrective measures. At the end of the five-year period, a final detailed report shall be submitted for the review and approval of the Executive Director. If this report indicates that the restoration project has been, in part or in whole, unsuccessful, based on the approved goals and performance standards, the applicant shall submit a revised or supplemental restoration plan with maintenance and monitoring provisions, for the review and approval of the Executive Director, to compensate for those portions of the original restoration plan that were not successful. Should supplemental restoration be required, the applicant shall submit, on an annual basis for five years, a written report, for the review and approval of the Executive Director, prepared by a qualified resource specialist, evaluating the supplemental restoration areas. At the end of the five-year period, a final report shall be submitted evaluating whether the supplemental restoration plan has achieved compliance with the goals and performance standards for the restoration area. If the goals and performance standards are not met within 10 years, the applicant shall submit an application for an amendment to the coastal development permit for an alternative mitigation program and shall implement whatever alternative mitigation program the Commission approves, as approved.

The habitat restoration work approved in the restoration plan shall be carried out prior to occupancy of the residence.

2) Open Space Deed Restriction

No development, as defined in section 30106 of the Coastal Act, shall occur in the habitat restoration area, as shown on the habitat restoration site plan required pursuant to (A)(1) above.

Prior to the issuance of the coastal development permit, the applicant shall submit evidence that the applicant has executed and recorded a deed restriction (if the applicant is not the owner, then the applicant shall submit evidence that the owner has executed and recorded the deed restriction), in a form and content acceptable to the Executive Director, reflecting the above restriction on development and designating the habitat restoration area as open space. The deed restriction shall include a graphic depiction and narrative legal descriptions of both the parcel on which the restoration area lies and the open space area/habitat restoration area. 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) Performance Bond

Prior to the issuance of the permit, the applicant shall post performance bonds to guarantee implementation of the restoration plan as follows: a) one equal to the value of the labor and materials; and b) one equal to the value of the maintenance and monitoring for a period of 5 years. Each performance bond shall be released upon satisfactory completion of items (a) and (b) above. If the applicant fails to either restore or maintain and monitor according to the approved plans, the Coastal Commission may collect the security and complete the work on the property.

b) Habitat Conservation

Prior to the issuance of the coastal development permit, the applicant shall (or, if the applicant is not the owner of the habitat conservation site, then the owner of the habitat conservation site shall) execute and record an open space deed restriction in a form and content acceptable to the Executive Director, over the entirety of a legal parcel or parcels containing chaparral ESHA. The chaparral ESHA located on the mitigation parcel or parcels must be of equal or greater area than the ESHA area impacted by the proposed development, including the fuel modification/brush clearance areas. No development, as defined in section 30106 of the Coastal Act, shall occur on the mitigation parcel(s) and the parcel(s) shall be preserved as permanent open space. The deed restriction shall include a graphic depiction and narrative legal descriptions of the parcel or parcels. 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.

Prior to occupancy of the residence, the applicant shall submit evidence, for the review and approval of the Executive Director, that the recorded documents have been reflected in the Los Angeles County Tax Assessor Records.

If the mitigation parcel(s) is/are larger in size than the impacted habitat area, the excess acreage may be used to provide habitat impact mitigation for other development projects that impact like ESHA.

c) Habitat Impact Mitigation Fund

Prior to the issuance of the coastal development permit, the applicant shall submit evidence, for the review and approval of the Executive Director, that compensatory mitigation, in the form of an in-lieu fee, has been paid to the Mountains Recreation and Conservation Authority to mitigate adverse impacts to chaparral and coastal sage scrub habitat ESHA. The fee shall be calculated as follows:

1. Development Area, Irrigated Fuel Modification Zones, Off-site Brush Clearance

The in-lieu fee for these areas shall be $12,000 per acre within the development area and any required irrigated fuel modification zones. The total acreage shall be based on the map delineating these areas required by this condition.

2. Non-irrigated Fuel Modification Zones

The in-lieu fee for non-irrigated fuel modification areas shall be $3,000 per acre. The total acreage shall be based on the map delineating these areas required by this condition.

Prior to the payment of any in-lieu fee to the Mountains Recreation and Conservation Authority, the applicant shall submit, for the review and approval of the Executive Director, the calculation of the in-lieu fee required to mitigate adverse impacts to chaparral habitat ESHA, in accordance with this condition. After review and approval of the fee calculation, the fee shall be paid to the Mountains Recreation and Conservation Authority's Coastal Habitat Impact Mitigation Fund for the acquisition, permanent preservation or restoration of chaparral habitat in the Santa Monica Mountains coastal zone. The fee may not be used to restore areas where development occurred in violation of the Coastal Act's permit requirements.

7. <u>Future Development Restriction</u>

This permit is only for the development described in Coastal Development Permit No. 4-06-093. Pursuant to Title 14 California Code of Regulations Section 13250(b)(6), the exemptions otherwise provided in Public Resources Code Section 30610(a) shall not apply to any future development on any portion of the parcel. Accordingly, any future improvements to any portion of the property, including but not limited to the residence, garage, septic system, landscaping, and removal of vegetation or grading other than as provided for in the approved fuel modification/landscape plan prepared pursuant to Special Condition 11, shall require an amendment to Coastal Development Permit No. 4-06-093 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government.

8. Deed Restriction

Prior to issuance of the Coastal Development Permit, the applicant shall submit to the Executive Director, for review and approval, documentation demonstrating that the applicant has executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

9. Open Space Conservation Easement

No development, as defined in Section 30106 of the Coastal Act, grazing, or agricultural activities shall occur outside of the approved development area, within the portion of the property identified as the "open space conservation easement area", as shown in **Exhibit 13** except for:

1. Fuel modification required by the Los Angeles County Fire Department undertaken in accordance with the final approved fuel modification plan approved pursuant to Special Condition No. 11 or other fuel modification plans required and approved by the Commission pursuant to a different CDP(s) issued by the Commission;
2. Drainage and polluted runoff control activities required and approved pursuant to:
    a. The drainage and runoff control plans approved pursuant to Special Condition No. 3 of this permit; and
    b. The landscaping and erosion control plans approved pursuant to Special Condition No. 11 of this permit;

3. If approved by the Commission as an amendment to this coastal development permit or a new coastal development permit,
    a. construction and maintenance of public hiking trails; and
    b. construction and maintenance of roads, trails, and utilities consistent with existing easements, if approved by the Commission.

Prior to issuance of the Coastal Development Permit, the applicant shall execute and record a document in a form and content acceptable to the Executive Director, granting to the Mountains Recreation and Conservation Authority ("MRCA") on behalf of the people of the State of California an open space conservation easement over the

"open space conservation easement area" described above, for the purpose of habitat protection. The recorded easement document shall include a formal legal description of the entire property; and a metes and bounds legal description and graphic depiction, prepared by a licensed surveyor, of the open space conservation easement area, as generally shown on **Exhibit 13**. The recorded document shall reflect that no development shall occur within the open space conservation easement area except as otherwise set forth in this permit condition. The grant of easement shall be recorded free of prior liens and encumbrances (other than existing easements for roads, trails, and utilities) which the Executive Director determines may affect the interest being conveyed, and shall run with the land in favor of the MRCA on behalf of the people of the State of California, binding all successors and assigns.

10. Required Approval

Prior to issuance of the Coastal Development Permit, the applicant shall provide evidence of the issuance of Coastal Development Permit No. 4-06-092.

11. Landscaping and Erosion Control Plans

Prior to issuance of the coastal development permit, the applicant shall submit final landscaping, erosion control, and fuel modification plans, prepared by a licensed landscape architect or a qualified resource specialist, for review and approval by the Executive Director. The plans shall incorporate the criteria set forth below. All development shall conform to the approved landscaping, erosion control, and fuel modification plans.

A. Landscaping Plan

1) All graded & disturbed areas on the subject site shall be planted and maintained for erosion control purposes within (60) days of receipt of the certificate of occupancy for the residence. To minimize the need for irrigation all landscaping shall consist primarily of native/drought resistant plants as listed by the California Native Plant Society, Santa Monica Mountains Chapter, in their document entitled Recommended List of Plants for Landscaping in the Santa Monica Mountains, dated February 5, 1996. All native plant species shall be of local genetic stock. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Exotic Pest Plant Council, or by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized within the property.

2) All cut and fill slopes shall be stabilized with planting at the completion of final grading. Planting shall be primarily of native plant species indigenous to the Santa Monica Mountains using accepted planting procedures, consistent with fire safety requirements. All native plant species shall be of local genetic stock. Such

planting shall be adequate to provide 90 percent coverage within two (2) years, and this requirement shall apply to all disturbed soils.

3) Plantings will be maintained in good growing condition throughout the life of the project and, whenever necessary, shall be replaced with new plant materials to ensure continued compliance with applicable landscape requirements.

4) No permanent irrigation is permitted within the protected zone (defined as a five foot radius outside the dripline, or 15 feet from the trunk, whichever is greater) of any oak tree on or adjacent to the project site, and landscaping within the oak tree protected zones shall be limited to native oak tree understory plant species.

5) Fencing of the entire property is prohibited. Fencing shall extend no further than Zone A of the final fuel modification plan approved by the Los Angeles County Fire Department pursuant to part C below. The fencing type and location shall be illustrated on the landscape plan.

6) Rodenticides containing any anticoagulant compounds (including, but not limited to, Warfarin, Brodifacoum, Bromadiolone or Diphacinone) shall not be used.

The Permittee shall undertake development in accordance with the final approved plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a Coastal Commission - approved amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

B. Interim Erosion Control Plan

1) The plan shall delineate the areas to be disturbed by grading or construction activities and shall include any temporary access roads, staging areas and stockpile areas. The natural areas on the site shall be clearly delineated on the project site with fencing or survey flags.

2) The plan shall specify that grading shall take place only during the dry season (April 1 – October 31). This period may be extended for a limited period of time if the situation warrants such a limited extension, if approved by the Executive Director. The applicant shall install or construct temporary sediment basins (including debris basins, desilting basins, or silt traps), temporary drains and swales, sand bag barriers, silt fencing, and shall stabilize any stockpiled fill with geofabric covers or other appropriate cover, install geotextiles or mats on all cut or fill slopes, and close and stabilize open trenches as soon as possible. These erosion control measures shall be required on the project site prior to or concurrent with the initial grading operations and maintained throughout the development process to minimize erosion and sediment from runoff waters during construction. All sediment should be retained on-site, unless removed to

an appropriate, approved dumping location either outside of the coastal zone or within the coastal zone to a site permitted to receive fill.

3) The plan shall also include temporary erosion control measures should grading or site preparation cease for a period of more than 30 days, including but not limited to: stabilization of all stockpiled fill, access roads, disturbed soils and cut and fill slopes with geotextiles and/or mats, sand bag barriers, silt fencing, temporary drains and swales and sediment basins. The plans shall also specify that all disturbed areas shall be seeded with native grass species and include the technical specifications for seeding the disturbed areas. These temporary erosion control measures shall be monitored and maintained until grading or construction operations resume.

C. Fuel Modification Plans

Vegetation within 30 feet of the proposed house may be removed to mineral earth, vegetation within a 200-foot radius of the main structure may be selectively thinned in order to reduce fire hazard. However, such thinning shall only occur in accordance with an approved long-term fuel modification plan submitted pursuant to this special condition. The fuel modification plan shall include details regarding the types, sizes and location of plant materials to be removed, and how often thinning is to occur. In addition, the applicant shall submit evidence that the fuel modification plan has been reviewed and approved by the Forestry Department of Los Angeles County. Irrigated lawn, turf and ground cover planted within the thirty foot radius of the proposed house shall be selected from the most drought tolerant species or subspecies, or varieties suited to the Mediterranean climate of the Santa Monica Mountains.

D. Monitoring

Five years from the date of the receipt of the Certificate of Occupancy for the residence the applicants shall submit for the review and approval of the Executive Director, a landscape monitoring report, prepared by a licensed Landscape Architect or qualified Resource Specialist, that certifies whether the on-site landscaping is in conformance with the landscape plan approved pursuant to this Special Condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the landscape monitoring report indicates the landscaping is not in conformance with or has failed to meet the performance standards specified in the landscaping plan approved pursuant to this permit, the applicants, or successors in interest, shall submit a revised or supplemental landscape plan for the review and approval of the Executive Director. The revised landscaping plan must be prepared by a licensed Landscape Architect or a qualified Resource Specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan.

12. Removal of Excavated Material

Prior to issuance of the Coastal Development Permit, the applicant shall provide evidence to the Executive Director of the location of the disposal site for all excess excavated material from the site. If the disposal site is located in the Coastal Zone, the disposal site must have a valid coastal development permit for the disposal of fill material. If the disposal site does not have a coastal permit, such a permit will be required prior to the disposal of material.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. Project Description and Background

The applicant proposes to construct two single-family residences on two separate, contiguous parcels located within a small residential enclave off Encinal Canyon Road in the western Santa Monica Mountains, approximately 1.2 miles north of the Pacific Ocean (**Exhibits 1-3**). For ease of reference, these parcels are referred to as Lots 2 and 3 hereafter. Due to the related nature of the two coastal permit applications, proposed development on each parcel will be addressed in one staff report. It is important to note that the applicant also owns a third parcel (hereafter referred to as Lot 1) that is contiguous with Lots 2 and 3, although not a part of the subject permit applications.

The two properties in which the applicant proposes to construct two residences on as part of the subject permit applications (Lots 2 and 3) are situated between two ridges within the Encinal Canyon watershed. Site elevations range from 900 to 1170 feet above sea level. The proposed development areas are located on the eastern-most portion of the parcels and on the west trending hillside slope of a small ridge. The west fork of Encinal Canyon Creek, a U.S. Geological Survey (USGS) blue-line stream, bisects both parcels and is situated downslope to the west of the proposed building sites. The east fork of Encinal Canyon Creek is located downslope to the east of the subject parcels. These streams are lined by riparian and oak woodland vegetation that is delineated as Environmentally Sensitive Habitat Area (ESHA) on Malibu/Santa Monica Mountains Land Use Plan (LUP) resource maps (**Exhibits 3 and 7**).

The proposed development sites are located downslope of a small ridge and the residences would not be visible from any public roads or viewing areas. Charmlee Wilderness Park, public park land managed by the City of Malibu, lies on the other side of the ridge west of the subject parcels. The proposed development sites are not visible from Charmlee park or associated public trails. Vacant land and three large-lot single family residences are located in the vicinity of the project sites. The three neighboring residences lie to the south and east of the subject parcels, two of which share an existing, 15 to 20-foot wide, paved private access road that meanders west from Encinal Canyon Road through the east fork of Encinal Creek (**Exhibit 4**).

To clearly address what is proposed on each parcel, the project descriptions and environmental setting are provided below for each separate application.

CDP APPLICATION NO. 4-06-092 (Lot 2; 3535 Encinal Canyon Road)

The applicant is proposing to construct a two-story, 5,281 sq. ft. single-family residence with attached 672 sq. ft. garage, septic system, water well, 10,000-gallon water tank, driveway, turnaround, retaining walls, removal of two small structures and box culvert, offer-to-dedicate an open space conservation easement, and 3,230 cu. yds. of grading (1,299 cu. yds. cut; 1,931 cu. yds. fill; 632 cu. yds. import) (**Exhibits 3, 8-10**). The applicant proposes a development area (not including the access road or driveway) of 9,006 sq. ft. In order to provide access to the subject parcel, the applicant is also proposing to extend, improve, and widen an existing off-site access road, including retaining walls and 2,686 cu. yds. of grading (1,557 cu. yds. cut; 1,129 cu. yds. fill; 428 cu. yds. export) (**Exhibit 4**). A significant portion of the existing access road is situated among the riparian woodland corridor of the east fork of Encinal Canyon Creek. There are 37 oak trees in the area of the access road. The proposed access road improvements will significantly encroach upon the protected zones of eleven (11) oak trees within the oak-riparian ESHA canopy (oak tree #s 1, 4, 5, 7-10, 17, 20-22 of **Exhibit 6**). Lastly, the applicant proposes to replace the existing corrugated metal pipe culvert/Arizona-type stream crossing (where the access road crosses the east fork of Encinal Canyon Creek) with a 24-ft. wide, 24-ft. long, pre-fabricated single span bridge with concrete footings (**Exhibit 5**).

The west fork of Encinal Canyon Creek bisects the property approximately 200 feet west of the proposed building site (**Exhibit 7**). Vegetation on the west side of the stream consists of undisturbed mixed chaparral/oak woodland. However, vegetation on the east side of the stream consists of highly disturbed mixed chaparral/oak woodland that has been largely displaced by an approximately 0.5-acre terraced orchard containing avocado, lemon, macadamia, and ornamental trees. Mature oak trees, as well as native western sycamore trees, are interspersed among the orchard vegetation. Staff review of 1977 aerial photographs indicate that the subject site east of Encinal Canyon Creek was disturbed by vegetation removal, orchard terracing, and grading that pre-date the Coastal Act. In addition to the existing terraced orchard, the site currently contains a water well, 10,000-gallon water tank, small tool shed, and a 675 sq. ft. dilapidated miniature house structure. The applicant proposes to remove the small tool shed and 675 sq. ft. dilapidated miniature house structure from adjacent to Encinal Creek on-site. The applicant proposes to retain the existing terraced orchard, water well, and water tank. The water well and tank are situated adjacent to the proposed driveway and building pad. The existing terraced orchard is located within fuel modification zone B of the applicant's approved preliminary fuel modification plan and maintains a 100 foot setback from Encinal Creek. A concrete box culvert stream crossing, of an approximately 3-ft. span, 5-ft. height, and 6-ft. length, exists in a portion of the streambed on the property. The applicant also proposes to remove this structure as part of the proposed project.

The new stream crossing (bridge) portion of the proposed project requires a Streambed Alteration Agreement from the California Department Fish & Game (DFG). However, in a letter dated November 15, 2007, DFG notified the applicant to complete the project without a Streambed Alteration Agreement because DFG was unable to provide the applicant with a draft agreement before the agency's statutory deadline.

CDP APPLICATION NO. 4-06-093 (Lot 3; 3533 Encinal Canyon Road)

The applicant is proposing to construct a two-story, 4,577 sq. ft. single-family residence with attached 702 sq. ft. garage, septic system, driveway, turnaround, retaining walls, 4,418 cu. yds. of grading (4,292 cu. yds. cut; 126 cu. yds. fill; 4,166 cu. yds. export), and an offer-to-dedicate an open space conservation easement (**Exhibits 3 and 11-13**). This project includes a development area of 7,361 sq. ft. The applicant proposes to utilize the access road proposed in CDP application No. 4-06-092 discussed above.

The subject parcel, Lot 3, lies immediately north of Lot 2. The proposed building site is situated in the far southeast corner of the parcel approximately 50 feet from the proposed residence on Lot 2. The proposed building site has been previously disturbed according to 1977 aerial photographs, and currently contains fringe coast sage scrub vegetation interspersed with non-native grasses and eucalyptus trees. A few oak trees lie just east of the subject parcel boundary near the proposed development area. The remainder of the subject parcel contains mixed chaparral and coast sage scrub vegetation that is considered to be part of a large, undisturbed block of habitat. The west fork of Encinal Canyon Creek bisects the property and is situated downslope approximately 400 feet to the west of the proposed building site (**Exhibit 7**).

Proposed Access Road

In the vicinity of the project area there is an existing, paved private access road that originates at Encinal Canyon Road east of the subject parcels and meanders approximately 0.2 miles in a western direction, then crosses the east fork of Encinal Canyon Creek, and climbs a small ridge to a fork at the southern property line of Lot 1 (**Exhibit 7**). The west road fork continues westerly approximately 400 feet to an existing residence. From the fork north is a rough, unpaved, gravel pathway that follows the ridgeline north, to a terminus on Lot 1. As described previously in this report, the applicant proposes to provide access to the subject parcels by widening and improving the paved, existing portions of the access road, as well as extend the road north through Lot 1 (**Exhibit 4**). The road widening is required by the Los Angeles County Fire Department in order to provide its standard width for fire truck and emergency vehicle access to the project sites. The existing 15- to 20-ft. wide access road extends through the oak riparian woodland alongside the east fork of Encinal Creek. The road improvement plan includes widening sections of the road to 24 feet and the construction of retaining walls that will encroach into the protected zone of several oak trees. According to the applicant's oak tree report by L. Newman Design Group, Inc., dated May 14, 2007, the proposed new access road improvements will substantially encroach

upon the protected zones of eleven (11) oak trees within the oak-riparian corridor (#s 1, 4, 5, 7-10, 17, 20-22 of **Exhibit 6**). In addition, the applicant proposes to replace the existing Arizona-type stream crossing along the access road with a bridged stream crossing.

The applicant has provided easement information that indicates that five properties, including Lot 1, have easement rights to the access road, through documents recorded in 1975. This includes those properties between Encinal Canyon Road and the northern property line of Lot 1 (**Exhibit 14**). Additionally, the applicant's agent has provided information that the applicant granted an easement from Lot 1 to Lots 2 and 3 (all owned by the applicant) in 2005. Given the pattern of development in the vicinity and the location of the access road terminus on Lot 1, no other property owners besides the applicant utilize the access road or easement across Lot 1.

As proposed access road improvements cross neighboring properties within the applicant's easement, all affected property owners of record were notified on March 16, 2006 by staff and invited to join as co-applicants pursuant to Coastal Act Section 30601.5. No requests were received. However, telephone calls from two affected property owners were received by staff in response to the invitation. Both property owners requested additional information regarding proposed improvements and expressed concern regarding the environmental impacts of proposed access road improvements in the oak woodland and riparian areas.

Unpermitted Lot Line Adjustment Involving Adjacent Lot 1

In consideration of the subject permit applications, it is important to note the facts pertaining to Lot 1 and the unpermitted lot line adjustment described below, as an access road extension across Lot 1 is proposed to facilitate access to subject Lots 2 and 3.

On May 5, 1982, the Los Angeles County Department of Regional Planning approved Tentative Parcel Map No. 14831 for a lot line adjustment, subject to conditions, that reconfigured the vacant Lot 1 and three vacant neighboring parcels under separate ownership (**Exhibit 15**). The subject parcels (Lots 2 and 3) were not involved. Subsequently, the Tentative Parcel Map and a Certificate of Compliance (with final parcel map requirements waived) was granted and recorded in 1983. The parcel reconfiguration can be outlined and quantified as follows.

Pre-LLA APN and Area	**Post-LLA APN and Area**	**Approximate Area Change**
4472-028-027 2.4 acres	4472-028-031 (Lot 1) 3.9 acres	+ 1.4 acres
4472-028-018 5.0 acres	4472-028-032 4.0 acres	- 1.0 acres
4472-028-020 3.2 acres	4472-028-033 2.0 acres	- 1.2 acres

4472-028-025 4.8 acres	4472-028-034 5.6 acres	+ 0.8 acres

Parcels -031 and -034 increased in size by the addition of portions of the adjoining parcels (-032 and -033). Lot 1, owned by the subject applicant and over which an access road is proposed, acquired a 1.4-acre portion of adjoining parcel -018 (now -032). As conditions of approval of the LLA by the County, flood hazard and slope easement areas were delineated on the recorded parcel map. As such, two 100-foot wide flood hazard areas associated with Encinal Canyon Creek bisect parcels -032, -033, and -034. In addition, a 50-foot slope easement is situated along the eastern-most edge of parcels -032 and -033 next to Encinal Canyon Road. The parcels involved in the LLA remain vacant, except for parcel -034, which contains a single family residence approved by the Commission in 1983. Lot line adjustments are considered a form of land division that constitute development under the Coastal Act and require a coastal development permit. The owners of the four LLA parcels did not secure a coastal development permit prior to the recordation of the LLA, or since. Now, each of the four parcels is under new, separate ownership. Unfortunately, as a result of the LLA, the vacant parcel adjoining Lot 1 (Parcel -032) appears to have been left with a future development area that would result in significant adverse impacts to ESHA, given the location of Encinal Canyon Creek ESHA and other site constraints. Parcel -032 is bisected by both an existing access road and Encinal Canyon Creek and appears to only contain one small potentially feasible development area located between a designated flood hazard area along Encinal Creek and a slope easement along Encinal Road (**Exhibit 7**). All other areas of the parcel contain steep slopes and dense oak woodland riparian vegetation considered ESHA. As such, the unpermitted lot configuration does not minimize impacts to ESHA, inconsistent with the Coastal Act.

Prior Related Permit Applications

The applicant of the subject permit applications had previously proposed a single-family residence on each of the three contiguous parcels under his ownership (Lots 1, 2 and 3) under separate permit applications (4-04-074, 4-04-075, and 4-04-076). In review of these applications, Commission staff discovered that Lot 1 had been reconfigured through the unpermitted LLA. In June 2006, the application for residential development on Lot 1 (4-04-075) was withdrawn by the applicant because the applicant wanted to first resolve the illegal parcel configuration issue through a separate CDP application. However, at that time, the applicant wished to proceed with the permit applications for development on Lots 2 and 3 (4-04-074 and 4-04-076), which were scheduled for Commission action at the July 2006 Commission hearing. Staff had recommended denial of application 4-04-074 and 4-04-076 in its June 28, 2006 staff report because the access road to serve the properties was proposed across Lot 1, an illegally configured parcel, and approval of the road in that location would foreclose options for reconfiguring Lot 1 to minimize impacts to Environmentally Sensitive Habitat Area (ESHA) as discussed above. The day before the scheduled July 2006 Commission hearing, the applicant withdrew the permit applications. Since that time, the applicant has submitted the subject permit applications (4-06-092 and 4-06-093) for proposed development on Lots 2 and 3, which included additional analysis and

modifications from what was previously proposed. In addition, the applicant has submitted a new permit application (No. 4-06-133) for a lot line adjustment between Lot 1 and the impacted adjacent parcel (-032) that would minimize impacts to ESHA, however this application is currently incomplete. Although the LLA permit application has not yet been considered by the Commission, the applicant has identified future development sites for the LLA parcels of application 4-06-133 that are sited in a clustered fashion at least 100 feet from Encinal Canyon Creek and outside the protected zone of any oak trees (**Exhibits 16, 17**). In addition, the applicant has demonstrated that the proposed access road across Lot 1 will avoid impacts to oak trees and be complimentary to the identified future development sites proposed in the LLA permit application. Therefore, staff has determined that the proposed access road across Lot 1 will no longer limit the range of alternatives that can be considered for siting future development on Lot 1 and Parcel –032 and resolving the LLA.

Past Commission Actions

The Commission has approved residential development on an adjacent parcel to the south. In 1983, the Commission approved CDP 5-83-515 (Ropella) for a single family residence with septic system, water well, private access road, brush clearance, grading terraces, and construction of bridges at 3565 Encinal Canyon Road (Parcel -034) subject to special conditions regarding revised plans, hillside revegetation, and open space easement. The permit was issued December 16, 1983. The CDP application was reviewed and approved after the parcel was reconfigured by the LLA described above, although the LLA was not addressed in the CDP staff report. It does appear, based on staff's review of the lot line adjustment map, aerial photos, and site visit, that the reconfigured Parcel –034 resulted in a development area that minimized ESHA impacts. In that case, the development area is located on the east side of the west fork of Encinal Creek, so it was not necessary for the access driveway to cross that stream, and the development was located further away from the riparian canopy.

B. Hazards and Geologic Stability

The proposed development is located in the Malibu/Santa Monica Mountains area, an area that is generally considered to be subject to an unusually high amount of natural hazards. Geologic hazards common to the Santa Monica Mountains area include landslides, erosion, and flooding. In addition, fire is an inherent threat to the indigenous chaparral community of the coastal mountains. Wildfires often denude hillsides in the Santa Monica Mountains of all existing vegetation, thereby contributing to an increased potential for erosion and landslides on property.

Section 30253 of the Coastal Act states, in pertinent part, that 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, 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.

Geology

The subject properties are situated between two ridges within the Encinal Canyon watershed. Site elevations range from 900 to 1170 feet above sea level. The proposed development areas are located on the eastern-most portion of the parcels and on the west trending hillside slope of a small ridge. The west fork of Encinal Canyon Creek, a U.S. Geological Survey (USGS) blue-line stream, bisects both parcels and is situated downslope to the west of the proposed building sites. The applicant has submitted a "Geologic and Geotechnical Engineering Update Report" dated July 10, 1996, and a "Geotechnical Update Report" dated July 11, 2004, both prepared by RJR Engineering Group, which address the geologic conditions on the subject properties. The geologic consultant has found the geology of the proposed project sites to be suitable for the construction of the proposed residential developments. They have identified no landslides or other geologic hazards on the sites. The report states that:

> "It is our opinion that the proposed development will be safe against hazards from landslide, settlement, or slippage, and the proposed development will not have an adverse effect on the geologic stability of the property outside the building site, as long as the recommendations of this report are incorporated into the design and construction of the project."

The geologic and geotechnical engineering consultant concludes that the proposed development is feasible and will be free from geologic hazard provided their recommendations are incorporated into the proposed development. The geotechnical reports contains several recommendations to be incorporated into the project including grading, foundations, retaining walls, drainage, and sewage disposal. To ensure that the recommendations of the consultant have been incorporated into all proposed development, the Commission, as specified in **Special Condition No. One (1) of CDPs 4-06-092 and 4-06-093**, requires the applicant to incorporate the recommendations cited in the geotechnical reports into all final design and construction plans. Final plans approved by the consultant shall be in substantial conformance with the plans approved by the Commission. Any substantial changes to the proposed developments, as approved by the Commission, which may be recommended by the applicant's consultant shall require an amendment to the permit or a new coastal development permit.

The Commission finds that controlling and diverting run-off in a non-erosive manner from the proposed structures, impervious surfaces, and building pads will also add to the geologic stability of the project sites. Therefore, in order to minimize erosion and ensure stability of the project sites, and to ensure that adequate drainage and erosion control is included in the proposed developments, the Commission requires the applicant to submit final drainage and erosion control plans certified by the geotechnical engineer, as specified in **Special Conditions Three (3) of CDPs 4-06-092 and 4-06-093 and Special Condition Eleven (11) of CDPs 4-06-092 and 4-06-093**.

In addition, the applicant of CDP 4-06-092 is proposing approximately 3,230 cu. yds. of grading (1,299 cu. yds. of cut, 1,931 cu. yds. of fill, and 632 cu. yds. import) for construction of the proposed residence on Lot 2, and 2,686 cu. yds. of grading (1,557 cu. yds. cut, 1,129 cu. yds. fill, and 428 cu. yds. export) to extend, widen, and improve the existing access road. The applicant of CDP 4-06-093 is proposing 4,418 cu. yds. of grading (4,292 cu. yds. of cut, 126 cu. yds. of fill, and 4,166 cu. yds. export) for construction of the proposed project on Lot 3. To ensure that the excess excavated material of Lot 3 is moved off site so as not to contribute to unnecessary landform alteration and to minimize erosion and sedimentation from stockpiled excavated soil, the Commission finds it necessary to require the applicant to dispose of the excess excavated material at an appropriate disposal site or to a site that has been approved to accept fill material, as specified in **Special Condition No. Twelve (12) of CDP 4-06-093**. The Commission also finds that landscaping of graded and disturbed areas on the subject sites will serve to stabilize disturbed soils, reduce erosion and thus enhance and maintain the geologic stability of the site. Therefore, **Special Condition Eleven (11) of CDPs 4-06-092 and 4-06-093** requires the applicant to utilize and maintain native and non-invasive plant species compatible with the surrounding area for landscaping the project site. Invasive and non-native plant species are generally characterized as having a shallow root structure in comparison with their high surface/foliage weight. The Commission notes that non-native and invasive plant species with high surface/foliage weight and shallow root structures do not serve to stabilize slopes and that such vegetation results in potential adverse effects to the stability of the project sites. Native species, alternatively, tend to have a deeper root structure than non-native and invasive species, and once established aid in preventing erosion. Therefore, the Commission finds that in order to ensure site stability, all slopes and disturbed and graded areas of the site shall be landscaped with appropriate native plant species, as specified in Special Condition Eleven (11) of CDPs 4-06-092 and 4-06-093.

Furthermore, in order to ensure that vegetation clearance for fire protection purposes does not occur prior to commencement of grading or construction of the proposed structures, the Commission finds that it is necessary to impose a restriction on the removal of natural vegetation as specified in **Special Condition No. Five (5) of CDPs 4-06-092 and 4-06-093**. This restriction specifies that natural vegetation shall not be removed until grading or building permits have been secured and construction of the permitted structures has commenced. The limitation imposed by Special Condition Five (5) avoids loss of natural vegetation coverage resulting in unnecessary erosion in the absence of adequately constructed drainage and run-off control devices and implementation of the landscape and interim erosion control plans.

Special Condition No. Eight (8) of CDPs 4-06-092 and 4-06-093 requires the applicant to record a deed restriction that imposes the terms and conditions of this permit as a restriction on the use and enjoyment of the property and provides any prospective purchaser of the site with recorded notice that the restrictions are imposed on the subject property.

The Commission finds that the proposed development, as conditioned, will minimize potential geologic hazards on the project site and adjacent properties, as required by Section 30253 of the Coastal Act.

Wild Fire

The proposed project is located in the Santa Monica Mountains, an area subject to an extraordinary potential for damage or destruction from wild fire. Typical vegetation in the Santa Monica Mountains consists mostly of coastal sage scrub and chaparral. Many plant species common to these communities produce and store terpenes, which are highly flammable substances (Mooney in Barbour, Terrestrial Vegetation of California, 1988). Chaparral and sage scrub communities have evolved in concert with, and continue to produce the potential for, frequent wild fires. The typical warm, dry summer conditions of the Mediterranean climate combine with the natural characteristics of the native vegetation to pose a risk of wild fire damage to development that cannot be completely avoided or mitigated.

Due to the fact that the proposed projects are located in an area subject to an extraordinary potential for damage or destruction from wild fire, the Commission can only approve the project if the applicant assumes the liability from these associated risks. Through **Special Condition No. Two (2) of CDPs 4-06-092 and 4-06-093**, the assumption of risk, the applicant acknowledges the nature of the fire hazard which exists on the site and which may affect the safety of the proposed development. Moreover, through acceptance of Special Condition No. Two (2), the applicant also agrees to indemnify the Commission, its officers, agents and employees against any and all expenses or liability arising out of the acquisition, design, construction, operation, maintenance, existence, or failure of the permitted project.

For the reasons set forth above, the Commission finds that, as conditioned, the proposed development is consistent with Section 30253 of the Coastal Act.

C. Environmentally Sensitive Habitat

Section 30240 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.***

Section 30107.5 of the Coastal Act, defines an environmentally sensitive area as:

> ***"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.***

Section 30250(a) of the Coastal Act states:

> ***New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of the surrounding parcels.***

Section 30240 of the Coastal Act states that environmentally sensitive habitat areas ("ESHAs") must be protected against significant disruption of habitat values. Section 30250 of the Coastal Act requires that development be located and designed to ensure that significant adverse impacts, both individual and cumulative, be avoided.

Pursuant to Section 30107.5, in order to determine whether an area constitutes an ESHA, and is therefore subject to the protections of Section 30240, the Commission must ask four questions:

1) What is the area of analysis?
2) Is there a rare habitat or species in the subject area?
3) Is there an especially valuable habitat or species in the area, based on:
    a) Does any habitat or species present have a special nature?
    b) Does any habitat or species present have a special role in the ecosystem?
4) Is any habitat or species that has met test 2 or 3 (i.e., that is rare or especially valuable) easily disturbed or degraded by human activities and developments?

The two subject properties (Lots 2 and 3) are situated between two ridges within the Encinal Canyon watershed of the Santa Monica Mountains. The proposed development areas are located on the eastern-most portion of the parcels and on the west trending hillside slope of a small ridge. The west fork of Encinal Canyon Creek, a U.S. Geological Survey (USGS) blue-line stream, bisects the center of both parcels in a north-south direction (**Exhibit 3**). This stream is lined by riparian and oak woodland vegetation that is delineated as Environmentally Sensitive Habitat Area (ESHA) on the Malibu/Santa Monica Mountains Land Use Plan (LUP) resource map.

Lot 2 (CDP 4-06-092) is 7.7 acres in size and bisected by the west fork of Encinal Canyon Creek approximately 200 feet west of the proposed building site (**Exhibits 3, 7**).

The applicant has submitted a biological assessment report for the property, prepared by Rachel Tierney in June 2005. In the report, the biological consultant describes Lot 2 as composed of undisturbed mixed chaparral vegetation on the west side of the stream and terraced orchard/ornamental vegetation on the east side of the stream. However, several mature oak trees, as well as native western sycamore trees, are interspersed among the orchard vegetation. Staff review of 1977 aerial photographs indicate that the subject site east of Encinal Canyon Creek was disturbed by vegetation removal, orchard terracing, and grading that pre-date the effective date of the Coastal Act.

Lot 3 (CDP 4-06-093) is approximately 11 acres in size and lies immediately north of Lot 2 (**Exhibits 3, 7**). The proposed residence site is situated in the far southeast corner of the parcel approximately 50 feet from the proposed residence on Lot 2. The west fork of Encinal Canyon Creek bisects the property and is situated downslope approximately 400 feet to the west of the proposed development site. The proposed development site has been previously disturbed according to 1977 aerial photographs, and currently contains fringe coast sage scrub vegetation interspersed with non-native grasses and eucalyptus trees. The remainder of the subject parcel contains undisturbed mixed chaparral and coastal sage scrub vegetation according to the June 2005 biological assessment report by Rachel Tierney. A few off-site oak trees lie east of the proposed development area.

1. Ecosystem Context of the Habitats of the Santa Monica Mountains

The Santa Monica Mountains comprise the largest, most pristine, and ecologically complex example of a Mediterranean ecosystem in coastal southern California. California's coastal sage scrub, chaparral, oak woodlands, and associated riparian areas have analogues in just a few areas of the world with similar climate. Mediterranean ecosystems with their wet winters and warm dry summers are only found in five localities (the Mediterranean coast, California, Chile, South Africa, and south and southwest Australia). Throughout the world, this ecosystem with its specially adapted vegetation and wildlife has suffered severe loss and degradation from human development. Worldwide, only 18 percent of the Mediterranean community type remains undisturbed[1]. However, within the Santa Monica Mountains, this ecosystem is remarkably intact despite the fact that it is closely surrounded by some 17 million people. For example, the 150,000 acres of the Santa Monica Mountains National Recreation Area, which encompasses most of the Santa Monica Mountains, was estimated to be 90 percent free of development in 2000[2]. Therefore, this relatively pristine area is both large and mostly unfragmented, which fulfills a fundamental tenet of conservation biology[3]. The need for large contiguous areas of natural habitat in order to

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[1] National Park Service. 2000. Draft general management plan & environmental impact statement. Santa Monica Mountains National Recreation Area – California.
[2] Ibid.
[3] Harris, L. D. 1988. Edge effects and conservation of biotic diversity. Conserv. Biol. 330-332. Soule, M. E, D. T. Bolger, A. C. Alberts, J. Wright, M. Sorice and S. Hill. 1988. Reconstructed dynamics of rapid extinctions of chaparral-requiring birds in urban habitat islands. Conserv. Biol. 2: 75-92. Yahner, R. H. 1988. Changes in wildlife communities near edges. Conserv. Biol. 2:333-339. Murphy, D. D. 1989.

maintain critical ecological processes has been emphasized by many conservation biologists[4].

In addition to being a large single expanse of land, the Santa Monica Mountains ecosystem is still connected, albeit somewhat tenuously, to adjacent, more inland ecosystems[5]. Connectivity among habitats within an ecosystem and connectivity among ecosystems is very important for the preservation of species and ecosystem integrity. In a recent statewide report, the California Resources Agency[6] identified wildlife corridors and habitat connectivity as the top conservation priority. In a letter to Governor Gray Davis, sixty leading environmental scientists have endorsed the conclusions of that report[7]. The chief of natural resources at the California Department of Parks and Recreation has identified the Santa Monica Mountains as an area where maintaining connectivity is particularly important[8].

The species most directly affected by large scale connectivity are those that require large areas or a variety of habitats, e.g., gray fox, cougar, bobcat, badger, steelhead trout, and mule deer[9]. Large terrestrial predators are particularly good indicators of habitat connectivity and of the general health of the ecosystem[10]. Recent studies show that the mountain lion, or cougar, is the most sensitive indicator species of habitat fragmentation, followed by the spotted skunk and the bobcat[11]. Sightings of cougars in

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Conservation and confusion: Wrong species, wrong scale, wrong conclusions. Conservation Biol. 3:82-84.

[4] Crooks, K. 2000. Mammalian carnivores as target species for conservation in Southern California. p. 105-112 *in*: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2nd Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Sauvajot, R. M., E. C. York, T. K. Fuller, H. Sharon Kim, D. A. Kamradt and R. K. Wayne. 2000. Distribution and status of carnivores in the Santa Monica Mountains, California: Preliminary results from radio telemetry and remote camera surveys. p 113-123 *in*: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2nd Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Beier, P. and R. F. Noss. 1998. Do habitat corridors provide connectivity? Conserv. Biol. 12:1241-1252. Beier, P. 1996. Metapopulation models, tenacious tracking and cougar conservation. *In*: Metapopulations and Wildlife Conservation, ed. D. R. McCullough. Island Press, Covelo, California, 429p.

[5] The SMM area is linked to larger natural inland areas to the north through two narrow corridors: 1) the Conejo Grade connection at the west end of the Mountains and 2) the Simi Hills connection in the central region of the SMM (from Malibu Creek State Park to the Santa Susanna Mountains).

[6] California Resources Agency. 2001. Missing Linkages: Restoring Connectivity to the California Landscape. California Wilderness Coalition, Calif. Dept of Parks & Recreation, USGS, San Diego Zoo and The Nature Conservancy. Available at: http://www.calwild.org/pubs/reports/linkages/index.htm

[7] Letters received and included in the September 2002 staff report for the Malibu LCP.

[8] Schoch, D. 2001. Survey lists 300 pathways as vital to state wildlife. Los Angeles Times. August 7, 2001.

[9] Martin, G. 2001. Linking habitat areas called vital for survival of state's wildlife Scientists map main migration corridors. San Francisco Chronicle, August 7, 2001.

[10] Noss, R. F., H. B. Quigley, M. G. Hornocker, T. Merrill and P. C. Paquet. 1996. Conservation biology and carnivore conservation in the Rocky Mountains. Conerv. Biol. 10: 949-963. Noss, R. F. 1995. Maintaining ecological integrity in representative reserve networks. World Wildlife Fund Canada.

[11] Sauvajot, R. M., E. C. York, T. K. Fuller, H. Sharon Kim, D. A. Kamradt and R. K. Wayne. 2000. Distribution and status of carnivores in the Santa Monica Mountains, California: Preliminary results from radio telemetry and remote camera surveys. p 113-123 in: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2nd Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Beier, P. 1996. Metapopulation models, tenacious tracking

both inland and coastal areas of the Santa Monica Mountains[12] demonstrate their continued presence. Like the "canary in the mineshaft," an indicator species like this is good evidence that habitat connectivity and large scale ecological function remains in the Santa Monica Mountains ecosystem.

The habitat integrity and connectivity that is still evident within the Santa Monica Mountains is extremely important to maintain, because both theory and experiments over 75 years in ecology confirm that large spatially connected habitats tend to be more stable and have less frequent extinctions than habitats without extended spatial structure[13]. Beyond simply destabilizing the ecosystem, fragmentation and disturbance can even cause unexpected and irreversible changes to new and completely different kinds of ecosystems (habitat conversion)[14].

As a result of the pristine nature of large areas of the Santa Monica Mountains and the existence of large, unfragmented and interconnected blocks of habitat, this ecosystem continues to support an extremely diverse flora and fauna. The observed diversity is probably a function of the diversity of physical habitats. The Santa Monica Mountains have the greatest geological diversity of all major mountain ranges within the transverse range province. According to the National Park Service, the Santa Monica Mountains contain 40 separate watersheds and over 170 major streams with 49 coastal outlets[15]. These streams are somewhat unique along the California coast because of their topographic setting. As a "transverse" range, the Santa Monica Mountains are oriented in an east-west direction. As a result, the south-facing riparian habitats have more variable sun exposure than the east-west riparian corridors of other sections of the coast. This creates a more diverse moisture environment and contributes to the higher biodiversity of the region. The many different physical habitats of the Santa Monica Mountains support at least 17 native vegetation types[16] including the following habitats considered sensitive by the California Department of Fish and Game: native perennial

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and cougar conservation. In: Metapopulations and Wildlife Conservation, ed. D. R. McCullough. Island Press, Covelo, California, 429p.

[12] Recent sightings of mountain lions include: Temescal Canyon (pers. com., Peter Brown, Facilities Manager, Calvary Church), Topanga Canyon (pers. com., Marti Witter, NPS), Encinal and Trancas Canyons (pers. com., Pat Healy), Stump Ranch Research Center (pers. com., Dr. Robert Wayne, Dept. of Biology, UCLA). In May of 2002, the NPS *photographed* a mountain lion at a trip camera on the Back Bone Trail near Castro Crest – Seth Riley, Eric York and Dr. Ray Sauvajot, National Park Service, SMMNRA.

[13] Gause, G. F. 1934. The struggle for existence. Balitmore, William and Wilkins 163 p. (also reprinted by Hafner, N.Y. 1964). Gause, G. F., N. P. Smaragdova and A. A. Witt. 1936. Further studies of interaction between predators and their prey. J. Anim. Ecol. 5:1-18. Huffaker, C. B. 1958. Experimental studies on predation: dispersion factors and predator-prey oscillations. Hilgardia 27:343-383. Luckinbill, L. S. 1973. Coexistence in laboratory populations of *Paramecium aurelia* and its predator *Didinium nasutum*. Ecology 54:1320-1327. Allen, J. C., C. C. Brewster and D. H. Slone. 2001. Spatially explicit ecological models: A spatial convolution approach. Chaos, Solitons and Fractals. 12:333-347.

[14] Scheffer, M., S. Carpenter, J. A. Foley, C. Folke and B. Walker. 2001. Catastrophic shifts in ecosystems. Nature 413:591-596.

[15] NPS. 2000. op.cit.

[16] From the NPS report (2000 op. cit.) that is based on the older Holland system of subjective classification. The data-driven system of Sawyer and Keeler-Wolf results in a much larger number of distinct "alliances" or vegetation types.

grassland, coastal sage scrub, red-shank chaparral, valley oak woodland, walnut woodland, southern willow scrub, southern cottonwood-willow riparian forest, sycamore-alder woodland, oak riparian forest, coastal salt marsh, and freshwater marsh. Over 400 species of birds, 35 species of reptiles and amphibians, and more than 40 species of mammals have been documented in this diverse ecosystem. More than 80 sensitive species of plants and animals (listed, proposed for listing, or species of concern) are known to occur or have the potential to occur within the Santa Monica Mountains Mediterranean ecosystem.

The Santa Monica Mountains are also important in a larger regional context. Several recent studies have concluded that the area of southern California that includes the Santa Monica Mountains is among the most sensitive in the world in terms of the number of rare endemic species, endangered species and habitat loss. These studies have designated the area to be a local hot-spot of endangerment in need of special protection[17].

Therefore, the Commission finds that the Santa Monica Mountains ecosystem is itself rare and especially valuable because of its special nature as the largest, most pristine, physically complex, and biologically diverse example of a Mediterranean ecosystem in coastal southern California. The Commission further finds that because of the rare and special nature of the Santa Monica Mountains ecosystem, the ecosystem roles of substantially intact areas of the constituent plant communities discussed below are "especially valuable" under the Coastal Act.

2. Major Habitats within the Santa Monica Mountains

The most recent vegetation map that is available for the Santa Monica Mountains is the map that was produced for the National Park Service in the mid-1990s using 1993 satellite imagery supplemented with color and color infrared aerial imagery from 1984, 1988, and 1994 and field review[18]. The minimum mapping unit was 5 acres. For that map, the vegetation was mapped in very broad categories, generally following a vegetation classification scheme developed by Holland[19]. Because of the mapping methods used the degree of plant community complexity in the landscape is not represented. For example, the various types of "ceanothus chaparral" that have been documented were lumped under one vegetation type referred to as "northern mixed chaparral." Dr. Todd Keeler-Wolf of the California Department of Fish and Game is

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[17] Myers, N. 1990. The biodiversity challenge: Expanded hot-spots analysis. Environmentalist 10:243-256. Myers, N., R. A. Mittermeier, C. G. Mittermeier, G. A. B. da Fonseca and J. A. Kent. 2000. Biodiversity hot-spots for conservation priorities. Nature 403:853-858. Dobson, A. P., J. P. Rodriguez, W. M. Roberts and D. S. Wilcove. 1997. Geographic distribution of endangered species in the United States. Science 275:550-553.

[18] Franklin, J. 1997. Forest Service Southern California Mapping Project, Santa Monica Mountains National Recreation Area, Task 11 Description and Results, Final Report. June 13, 1997, Dept. of Geography, San Diego State University, USFS Contract No. 53-91S8-3-TM45.

[19] Holland R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, Dept. of Fish and Game, Natural Heritage Division, Sacramento, CA. 95814.

currently conducting a more detailed, quantitative vegetation survey of the Santa Monica Mountains.

The National Park Service map can be used to characterize broadly the types of plant communities present. The main generic plant communities present in the Santa Monica Mountains[20] are: coastal sage scrub, chaparral, riparian woodland, coast live oak woodland, and grasslands.

a. Coastal Sage Scrub and Chaparral

Coastal sage scrub and chaparral are often lumped together as "shrublands" because of their roughly similar appearance and occurrence in similar and often adjacent physical habitats. In earlier literature, these vegetation associations were often called soft chaparral and hard chaparral, respectively. "Soft" and "hard" refers to differences in their foliage associated with different adaptations to summer drought. Coastal sage scrub is dominated by soft-leaved, generally low-growing aromatic shrubs that die back and drop their leaves in response to drought. Chaparral is dominated by taller, deeper-rooted evergreen shrubs with hard, waxy leaves that minimize water loss during drought.

The two vegetation types are often found interspersed with each other. Under some circumstances, coastal sage scrub may even be successional to chaparral, meaning that after disturbance, a site may first be covered by coastal sage scrub, which is then replaced with chaparral over long periods of time.[21] The existing mosaic of coastal sage scrub and chaparral is the result of a dynamic process that is a function of fire history, recent climatic conditions, soil differences, slope, aspect and moisture regime, and the two habitats should not be thought of as completely separate and unrelated entities but as different phases of the same process[22]. The spatial pattern of these vegetation stands at any given time thus depends on both local site conditions and on history (e.g., fire), and is influenced by both natural and human factors.

In lower elevation areas with high fire frequency, chaparral and coastal sage scrub may be in a state of flux, leading one researcher to describe the mix as a "coastal sage-chaparral subclimax."[23] Several other researchers have noted the replacement of chaparral by coastal sage scrub, or coastal sage scrub by chaparral depending on fire

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[20] National Park Service. 2000. Draft: General Management Plan & Environmental Impact Statement, Santa Monica Mountains National Recreation Area, US Dept. of Interior, National Park Service, December 2000. (Fig. 11 in this document.)

[21] Cooper, W.S. 1922. The broad-sclerophyll vegetation of California. Carnegie Institution of Washington Publication 319. 124 pp.

[22] Longcore, T and C. Rich. 2002. Protection of environmentally sensitive habitat areas in proposed local coastal plan for the Santa Monica Mountains. The Urban Wildlands Group, Inc., P.O. Box 24020 Los Angeles, CA 90024. (See attached comment document in Appendix).

[23] Hanes, T.L. 1965. Ecological studies on two closely related chaparral shrubs in southern California. Ecological Monographs 41:27-52.

history.[24] In transitional and other settings, the mosaic of chaparral and coastal sage scrub enriches the seasonal plant resource base and provides additional habitat variability and seasonality for the many species that inhabit the area.

b. Relationships Among Coastal Sage Scrub, Chaparral and Riparian Communities

Although the constituent communities of the Santa Monica Mountains Mediterranean ecosystem can be defined and distinguished based on species composition, growth habits, and the physical habitats they characteristically occupy, they are not independent entities ecologically. Many species of plants, such as black sage, and laurel sumac, occur in more than one plant community and many animals rely on the predictable mix of communities found in undisturbed Mediterranean ecosystems to sustain them through the seasons and during different portions of their life histories.

Strong evidence for the interconnectedness between chaparral, coastal scrub and other habitats is provided by "opportunistic foragers" (animals that follow the growth and flowering cycles across these habitats). Coastal scrub and chaparral flowering and growth cycles differ in a complimentary and sequential way that many animals have evolved to exploit. Whereas coastal sage scrub is shallow-rooted and responds quickly to seasonal rains, chaparral plants are typically deep-rooted having most of their flowering and growth later in the rainy season after the deeper soil layers have been saturated[25]. New growth of chaparral evergreen shrubs takes place about four months later than coastal sage scrub plants and it continues later into the summer[26]. For example, in coastal sage scrub, California sagebrush flowers and grows from August to February and coyote bush flowers from August to November[27]. In contrast, chamise chaparral and bigpod ceanothus flower from April to June, buck brush ceanothus flowers from February to April, and hoaryleaf ceanothus flowers from March to April.

Many groups of animals exploit these seasonal differences in growth and blooming period. The opportunistic foraging insect community (e.g., honeybees, butterflies and moths) tends to follow these cycles of flowering and new growth, moving from coastal sage scrub in the early rainy season to chaparral in the spring[28]. The insects in turn are followed by insectivorous birds such as the blue-gray gnatcatcher[29], bushtit, cactus wren, Bewick's wren and California towhee. At night bats take over the role of daytime

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[24] Gray, K.L. 1983. Competition for light and dynamic boundary between chaparral and coastal sage scrub. Madrono 30(1):43-49. Zedler, P.H., C.R. Gautier and G.S. McMaster. 1983. Vegetation change in response to extreme events: The effect of a short interval between fires in California chaparral and coastal sage scrub. Ecology 64(4): 809-818.

[25] DeSimone, S. 2000. California's coastal sage scrub. Fremontia 23(4):3-8. Mooney, H.A. 1988. Southern coastal scrub. Chap. 13 *in* Barbour, M.G. and J. Majors; Eds. 1988. Terrestrial vegetation of California, 2nd Edition. Calif. Native Plant Soc. Spec. Publ. #9.

[26] Schoenherr, A. A. 1992. A natural history of California. University of California Press, Berkeley. 772p.

[27] Dale, N. 2000. Flowering plants of the Santa Monica Mountains. California Native Plant Society, 1722 J Street, Suite 17, Sacramento, CA 95814.

[28] Ballmer, G. R. 1995. What's bugging coastal sage scrub. Fremontia 23(4):17-26.

[29] Root, R. B. 1967. The niche exploitation pattern of the blue-gray gnatcatcher. Ecol. Monog.37:317-350.

insectivores. At least 12 species of bats (all of which are considered sensitive) occur in the Santa Monica Mountains[30]. Five species of hummingbirds also follow the flowering cycle[31].

Many species of 'opportunistic foragers', which utilize several different community types, perform important ecological roles during their seasonal movements. The scrub jay is a good example of such a species. The scrub jay is an omnivore and forages in coastal sage scrub, chaparral, and oak woodlands for insects, berries and notably acorns. Its foraging behavior includes the habit of burying acorns, usually at sites away from the parent tree canopy. Buried acorns have a much better chance of successful germination (about two-fold) than exposed acorns because they are protected from desiccation and predators. One scrub jay will bury approximately 5000 acorns in a year. The scrub jay therefore performs the function of greatly increasing recruitment and regeneration of oak woodland, a valuable and sensitive habitat type[32].

Like the scrub jay, most of the species of birds that inhabit the Mediterranean ecosystem in the Santa Monica Mountains require more than one community type in order to flourish. Many species include several community types in their daily activities. Other species tend to move from one community to another seasonally. The importance of maintaining the integrity of the multi-community ecosystem is clear in the following observations of Dr. Hartmut Walter of the University of California at Los Angeles:

> "Bird diversity is directly related to the habitat mosaic and topographic diversity of the Santa Monicas. Most bird species in this bio-landscape require more than one habitat for survival and reproduction." "A significant proportion of the avifauna breeds in the wooded canyons of the Santa Monicas. Most of the canyon breeders forage every day in the brush- and grass-covered slopes, ridges and mesas. They would not breed in the canyons in the absence of the surrounding shrublands. Hawks, owls, falcons, orioles, flycatchers, woodpeckers, warblers, hummingbirds, etc. belong to this group. Conversely, some of the characteristic chaparral birds such as thrashers, quails, and wrentits need the canyons for access to shelter, protection from fire, and water. The regular and massive movement of birds between riparian corridors and adjacent shrublands has been demonstrated by qualitative and quantitative observations by several UCLA students[33]."

Thus, the Mediterranean ecosystem of the Santa Monica Mountains is a mosaic of vegetation types linked together ecologically. The high biodiversity of the area results

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[30] Letter from Dr. Marti Witter, NPS, dated Sept. 13, 2001, in letters received and included in the September 2002 staff report for the Malibu LCP.
[31] National Park Service. 1993. A checklist of the birds of the Santa Monica Mountains National Recreation Area. Southwest Parks and Monuments Assoc., 221 N. Court, Tucson, AZ. 85701
[32] Borchert, M. I., F. W. Davis, J. Michaelsen and L. D. Oyler. 1989. Interactions of factors affecting seedling recruitment of blue oak (*Quercus douglasii*) in California. Ecology 70:389-404. Bossema, I. 1979. Jays and oaks: An eco-ethological study of a symbiosis. Behavior 70:1-118. Schoenherr, A. A. 1992. A natural history of California. University of California Press, Berkeley. 772p.
[33] Walter, Hartmut. Bird use of Mediterranean habitats in the Santa Monica Mountains, Coastal Commission Workshop on the Significance of Native Habitats in the Santa Monica Mountains. CCC Hearing, June 13, 2002, Queen Mary Hotel.

from both the diversity and the interconnected nature of this mosaic. Most raptor species, for example, require large areas and will often require different habitats for perching, nesting and foraging. Fourteen species of raptors (13 of which are considered sensitive) are reported from the Santa Monica Mountains. These species utilize a variety of habitats including rock outcrops, oak woodlands, riparian areas, grasslands, chaparral, coastal sage scrub, estuaries and freshwater lakes[34].

When the community mosaic is disrupted and fragmented by development, many chaparral-associated native bird species are impacted. In a study of landscape-level fragmentation in the Santa Monica Mountains, Stralberg[35] found that the ash-throated flycatcher, Bewick's wren, wrentit, blue-gray gnatcatcher, California thrasher, orange-crowned warbler, rufous-crowned sparrow, spotted towhee, and California towhee all decreased in numbers as a result of urbanization. Soule[36] observed similar effects of fragmentation on chaparral and coastal sage scrub birds in the San Diego area.

In summary, all of the vegetation types in this ecosystem are strongly linked by animal movement and foraging. Whereas classification and mapping of vegetation types may suggest a snapshot view of the system, the seasonal movements and foraging of animals across these habitats illustrates the dynamic nature and vital connections that are crucial to the survival of this ecosystem.

c. Chaparral

Another shrub community in the Santa Monica Mountain Mediterranean ecosystem is chaparral. Like "coastal sage scrub," this is a generic category of vegetation. Chaparral species have deep roots (tens of feet) and hard waxy leaves, adaptations to drought that increase water supply and decrease water loss at the leaf surface. Some chaparral species cope more effectively with drought conditions than do desert plants[37]. Chaparral plants vary from about one to four meters tall and form dense, intertwining stands with nearly 100 percent ground cover. As a result, there are few herbaceous species present in mature stands. Chaparral is well adapted to fire. Many species regenerate mainly by crown sprouting; others rely on seeds which are stimulated to germinate by the heat and ash from fires. Over 100 evergreen shrubs may be found in chaparral[38]. On average, chaparral is found in wetter habitats than coastal sage scrub, being more common at higher elevations and on north facing slopes.

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[34] National Park Service. 1993. A checklist of the birds of the Santa Monica Mountains National Recreation Area. Southwest Parks and Monuments Assoc., 221 N. Court, Tucson, AZ. 85701. *and* Letter from Dr. Marti Witter, NPS, Dated Sept. 13, 2001, in letters received and included in the September 2002 staff report for the Malibu LCP.

[35] Stralberg, D. 2000. Landscape-level urbanization effects on chaparral birds: A Santa Monica Mountains case study. p 125-136 *in*: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2nd Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62.

[36] Soule, M. E, D. T. Bolger, A. C. Alberts, J. Wright, M. Sorice and S. Hill. 1988. Reconstructed dynamics of rapid extinctions of chaparral-requiring birds in urban habitat islands. Conserv. Biol. 2: 75-92.

[37] Dr. Stephen Davis, Pepperdine University. Presentation at the CCC workshop on the significance of native habitats in the Santa Monica Mountains. June 13, 2002.

[38] Keely, J.E. and S.C. Keeley. Chaparral. Pages 166-207 in M.G. Barbour and W.D. Billings, eds. North American Terrestrial Vegetation. New York, Cambridge University Press.

The broad category "northern mixed chaparral" is the major type of chaparral shown in the National Park Service map of the Santa Monica Mountains. However, northern mixed chaparral can be variously dominated by chamise, scrub oak or one of several species of manzanita or by ceanothus. In addition, it commonly contains woody vines and large shrubs such as mountain mahogany, toyon, hollyleaf redberry, and sugarbush[39]. The rare red shank chaparral plant community also occurs in the Santa Monica Mountains. Although included within the category "northern mixed chaparral" in the vegetation map, several types of ceanothus chaparral are reported in the Santa Monica Mountains. Ceanothus chaparral occurs on stable slopes and ridges, and may be dominated by bigpod ceanothus, buck brush ceanothus, hoaryleaf ceanothus, or greenbark ceanothus. In addition to ceanothus, other species that are usually present in varying amounts are chamise, black sage, holly-leaf redberry, sugarbush, and coast golden bush[40].

Several sensitive plant species that occur in the chaparral of the Santa Monica Mountains area are: Santa Susana tarplant, Lyon's pentachaeta, marcescent dudleya, Santa Monica Mountains dudleya, Braunton's milk vetch and salt spring checkerbloom[41]. Several occurring or potentially occurring sensitive animal species in chaparral from the area are: Santa Monica shieldback katydid, western spadefoot toad, silvery legless lizard, San Bernardino ring-neck snake, San Diego mountain kingsnake, coast patch-nosed snake, sharp-shinned hawk, southern California rufous-crowned sparrow, Bell's sparrow, yellow warbler, pallid bat, long-legged myotis bat, western mastiff bat, and San Diego desert woodrat.[42]

Coastal sage scrub and chaparral are the predominant generic community types of the Santa Monica Mountains and provide the living matrix within which rarer habitats like riparian woodlands exist. These two shrub communities share many important ecosystem roles. Like coastal sage scrub, chaparral within the Santa Monica Mountains provides critical linkages among riparian corridors, provides essential habitat for species that require several habitat types during the course of their life histories, provides essential habitat for sensitive species, and stabilizes steep slopes and reduces erosion, thereby protecting the water quality of coastal streams.

Many species of animals in Mediterranean habitats characteristically move among several plant communities during their daily activities, and many are reliant on different communities either seasonally or during different stages of their life cycle. The importance of an intact mosaic of coastal sage scrub, chaparral, and riparian community types is perhaps most critical for birds. However, the same principles apply to other taxonomic groups. For example, whereas coastal sage scrub supports a higher

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[39] Ibid.
[40] Ibid.
[41] Biological Resources Assessment of the Proposed Santa Monica Mountains Significant Ecological Area. Nov. 2000. Los Angeles Co., Dept. of Regional Planning, 320 West Temple St., Rm. 1383, Los Angeles, CA 90012.
[42] Ibid.

diversity of native ant species than chaparral, chaparral habitat is necessary for the coast horned lizard, an ant specialist[43]. Additional examples of the importance of an interconnected communities, or habitats, were provided in the discussion of coastal sage scrub above. This is an extremely important ecosystem role of chaparral in the Santa Monica Mountains.

Chaparral is also remarkably adapted to control erosion, especially on steep slopes. The root systems of chaparral plants are very deep, extending far below the surface and penetrating the bedrock below[44], so chaparral literally holds the hillsides together and prevents slippage.[45] In addition, the direct soil erosion from precipitation is also greatly reduced by 1) water interception on the leaves and above ground foliage and plant structures, and 2) slowing the runoff of water across the soil surface and providing greater soil infiltration. Chaparral plants are extremely resistant to drought, which enables them to persist on steep slopes even during long periods of adverse conditions. Many other species die under such conditions, leaving the slopes unprotected when rains return. Since chaparral plants recover rapidly from fire, they quickly re-exert their ground stabilizing influence following burns. The effectiveness of chaparral for erosion control after fire increases rapidly with time[46]. Thus, the erosion from a 2-inch rain-day event drops from 5 yd^3/acre of soil one year after a fire to 1 yd^3/acre after 4 years.[47]

Therefore, because of its important roles in the functioning of the Santa Monica Mountains Mediterranean ecosystem, and its extreme vulnerability to development, chaparral within the Santa Monica Mountains meets the definition of ESHA under the Coastal Act.

d. Riparian Woodland

Riparian woodlands occur along both perennial and intermittent streams and drainages in nutrient-rich soils. Partly because of its multi-layered vegetation, the riparian community contains the greatest overall biodiversity of all the plant communities in the area. Riparian communities are the most species-rich to be found in the Santa Monica Mountains. As a result of their multi-layered vegetation, available water supply, vegetative cover and adjacency to shrubland habitats, they are attractive to many native

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[43] A.V. Suarez. Ants and lizards in coastal sage scrub and chaparral. A presentation at the CCC workshop on the significance of native habitats in the Santa Monica Mountains. June 13, 2002.
[44] Helmers, H., J.S. Horton, G. Juhren and J. O'Keefe. 1955. Root systems of some chaparral plants in southern California. Ecology 36(4):667-678. Kummerow, J. and W. Jow. 1977. Root systems of chaparral shrubs. Oecologia 29:163-177.
[45] Radtke, K. 1983. *Living more safely in the chaparral-urban interface*. General Technical Report PSW-67. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Berkeley, California. 51 pp.
[46] Kittredge, J. 1973. Forest influences — the effects of woody vegetation on climate, water, and soil. Dover Publications, New York. 394 pp. Longcore, T and C. Rich. 2002. Protection of environmentally sensitive habitat areas in proposed local coastal plan for the Santa Monica Mountains. (Table 1). The Urban Wildlands Group, Inc., P.O. Box 24020 Los Angeles, CA 90024. Vicars, M. (ed.) 1999. FireSmart: protecting your community from wildfire. Partners in Protection, Edmonton, Alberta.
[47] Ibid.

wildlife species, and provide essential functions in their lifecycles[48]. During the long dry summers in this Mediterranean climate, these communities are an essential refuge and oasis for much of the areas' wildlife.

Riparian habitats and their associated streams or drainage channels form important connecting links in the Santa Monica Mountains. These habitats connect all of the biological communities from the highest elevation chaparral to the sea with a unidirectional flowing water system, one function of which is to carry nutrients through the ecosystem to the benefit of many different species along the way.

The streams themselves provide refuge for sensitive species including: the coast range newt, the Pacific pond turtle, and the steelhead trout. The coast range newt and the Pacific pond turtle are California Species of Special Concern and are proposed for federal listing[49], and the steelhead trout is federally endangered. The health of the streams is dependent on the ecological functions provided by the associated riparian woodlands. These functions include the provision of large woody debris for habitat, shading that controls water temperature, and input of leaves that provide the foundation of the stream-based trophic structure.

The importance of the connectivity between riparian areas and adjacent habitats is illustrated by the Pacific pond turtle and the coast range newt, both of which are sensitive and both of which require this connectivity for their survival. The life history of the Pacific pond turtle demonstrates the importance of riparian areas and their associated watersheds for this species. These turtles require the stream habitat during the wet season. However, recent radio tracking work[50] has found that although the Pacific pond turtle spends the wet season in streams, it also requires upland habitat for refuge during the dry season. Thus, in coastal southern California, the Pacific pond turtle requires both streams and intact adjacent upland habitats such as coastal sage scrub, woodlands or chaparral as part of their normal life cycle. The turtles spend about four months of the year in upland refuge sites located an average distance of 50 m (but up to 280 m) from the edge of the creek bed. Similarly, nesting sites where the females lay eggs are also located in upland habitats an average of 30 m (but up to 170 m) from the creek. Occasionally, these turtles move up to 2 miles across upland habitat[51]. Like many species, the pond turtle requires both stream habitats and the upland habitats of the watershed to complete its normal annual cycle of behavior. Similarly, the coast range newt has been observed to travel hundreds of meters into upland habitat and

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[48] Walter, Hartmut. Bird use of Mediterranean habitats in the Santa Monica Mountains, Coastal Commission Workshop on the Significance of Native Habitats in the Santa Monica Mountains. CCC Hearing, June 13, 2002, Queen Mary Hotel.

[49] USFWS. 1989. Endangered and threatened wildlife and plants; animal notice of review. Fed. Reg. 54:554-579. USFWS. 1993. Endangered and threatened wildlife and plants; notice of 1-year petition finding on the western pond turtle. Fed. Reg. 58:42717-42718.

[50] Rathbun, G.B., N.J. Scott and T.G. Murphy. 2002. Terrestrial habitat use by Pacific pond turtle in a Mediterranean climate. Southwestern Naturalist. (*in Press*).

[51] Testimony by R. Dagit, Resource Conservation District of the Santa Monica Mountains at the CCC Habitat Workshop on June 13, 2002.

spend about ten months of the year far from the riparian streambed[52]. They return to the stream to breed in the wet season, and they are therefore another species that requires both riparian habitat and adjacent uplands for their survival.

Riparian habitats in California have suffered serious losses and such habitats in southern California are currently very rare and seriously threatened. In 1989, Faber estimated that 95-97% of riparian habitat in southern California was already lost[53]. Writing at the same time as Faber, Bowler asserted that, *"[t]here is no question that riparian habitat in southern California is endangered."*[54] In the intervening 13 years, there have been continuing losses of the small amount of riparian woodlands that remain. Today these habitats are, along with native grasslands and wetlands, among the most threatened in California.

In addition to direct habitat loss, streams and riparian areas have been degraded by the effects of development. For example, the coast range newt, a California Species of Special Concern has suffered a variety of impacts from human-related disturbances[55]. Human-caused increased fire frequency has resulted in increased sedimentation rates, which exacerbates the cannibalistic predation of adult newts on the larval stages.[56] In addition impacts from non-native species of crayfish and mosquito fish have also been documented. When these non-native predators are introduced, native prey organisms are exposed to new mortality pressures for which they are not adapted. Coast range newts that breed in the Santa Monica Mountain streams do not appear to have adaptations that permit co-occurrence with introduced mosquito fish and crayfish[57]. These introduced predators have eliminated the newts from streams where they previously occurred by both direct predation and suppression of breeding.

Therefore, because of the essential role that riparian plant communities play in maintaining the biodiversity of the Santa Monica Mountains, because of the historical losses and current rarity of these habitats in southern California, and because of their extreme sensitivity to disturbance, the native riparian habitats in the Santa Monica Mountains meet the definition of ESHA under the Coastal Act.

3. Oak Trees

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[52] Dr, Lee Kats, Pepperdine University, personal communication to Dr J. Allen, CCC.
[53] Faber, P.A., E, Keller, A. Sands and B.M. Massey. 1989. The ecology of riparian habitats of the southern California coastal region: a community profile. U.S. Fish and Wildlife Service Biological Report 85(7.27) 152pp.
[54] Bowler, P.A. 1989. Riparian woodland: An endangered habitat in southern California. Pp 80-97 *in* Schoenherr, A.A. (ed.) Endangered plant communities of southern California. Botanists Special Publication No. 3.
[55] Gamradt, S.C., L.B. Kats and C.B. Anzalone. 1997. Aggression by non-native crayfish deters breeding in California newts. Conservation Biology 11(3):793-796.
[56] Kerby, L.J., and L.B. Kats. 1998. Modified interactions between salamander life stages caused by wildfire-induced sedimentation. Ecology 79(2):740-745.
[57] Gamradt, S.C. and L.B. Kats. 1996. Effect of introduced crayfish and mosquitofish on California newts. Conservation Biology 10(4):1155-1162.

In addition to the riparian and chaparral habitats on the project site, there are also oak trees. These oaks are interspersed with chaparral on the subject site. Even when oak trees do not form a woodland, the Commission has considered the individual trees to be a significant resource deserving of protection. In this case, the oak trees are located within chaparral and riparian vegetation areas. Native trees prevent the erosion of hillsides and stream banks, moderate water temperatures in streams through shading, provide food and habitat, including nesting, roosting, and burrowing to a wide variety of wildlife. Native trees that are not part of a larger, intact woodland or are interspersed with another habitat type nonetheless provide nesting or roosting habitat for raptors and other birds that are rare, threatened, endangered, fully protected, or species of special concern. Furthermore, individual oak trees such as those on the subject site do provide habitat for a wide variety of wildlife species and are considered to be an important part of the character and scenic quality of the area.

According to Oaks of California, "Coast live oak is unique among the California oaks in its ability to thrive along the coast…Proximity to the ocean provides a milder climate for coast live oak, with warmer winters (seldom encountering frost or snow) and less sweltering summers than found inland. Fog is common, providing additional relief from heat and drought…Inland, it can be found at elevations up to 5,000 feet with groves that spread across valleys, on steep hillsides, in rocky canyons, and along streams and intermittent watercourses" (Pavlik, Muick, Johnson, and Popper, 1991). The coast live oak is a large, evergreen tree with a dense, round crown and large limbs. Its trunk divides into either erect limbs or, more commonly, into crooked, wide-spreading limbs that sometimes touch or trail the ground. They can grow to 30 to 70 feet high and 35 to 80 feet wide.

Oaks are easily damaged and are very sensitive to disturbances that occur to the tree or the surrounding environment. Their root system is extensive, but surprisingly shallow, radiating out as much as 50 feet beyond the spread of the tree leaves, or canopy. The ground area at the outside edge of the canopy, referred to as the dripline, is especially important: the tree obtains most of its surface water and nutrients here, as well as conducts an important exchange of air and other gases (Los Angeles County Regional Planning Oak Tree Ordinance).

Oak trees are a part of the California native plant community and need special attention to maintain and protect their health. Oak trees in developed areas often suffer decline and early death due to conditions that are preventable. Damage can often take years to become evident and by the time the tree shows obvious signs of disease it is usually too late to restore the health of the tree. Oak trees provide important habitat and shading for other animal species, such as deer and bees. Oak trees are very long lived, some up to 250 years old, relatively slow growing, becoming large trees between 30 to 70 feet high, and are sensitive to surrounding land uses, grading or excavation at or near the roots and irrigation of the root area particularly during the summer dormancy. Improper watering, especially during the hot summer months when the tree is dormant and disturbance to root areas are the most common causes of tree loss.

Encroachments into the protected zone of an oak tree can result in significant adverse impacts. The article entitled "Oak Trees: Care and Maintenance" prepared by the Forestry Department of the County of Los Angeles states:

> ***Oaks are easily damaged and very sensitive to disturbances that occur to the tree or in the surrounding environment. The root system is extensive but surprisingly shallow, radiating out as much as 50 feet beyond the spread of the tree leaves, or canopy. The ground area at the outside edge of the canopy, referred to as the dripline, is especially important: the tree obtains most of its surface water and nutrients here, as well as conducts an important exchange of air and other gases.***

This publication goes on to state:

> ***Any change in the level of soil around an oak tree can have a negative impact. The most critical area lies within 6' to 10' of the trunk: no soil should be added or scraped away. . . . Construction activities outside the protected zone can have damaging impacts on existing trees. . . . Digging of trenches in the root zone should be avoided. Roots may be cut or severely damaged, and the tree can be killed. . . . Any roots exposed during this work should be covered with wet burlap and kept moist until the soil can be replaced. The roots depend on an important exchange of both water <u>and</u> air through the soil within the protected zone. Any kind of activity which compacts the soil in this area blocks this exchange and can have serious long term negative effects on the trees. If paving material must be used, some recommended surfaces include brick paving with sand joints, or ground coverings such as wood chips . . .***

Application of the Section 30240 ESHA Protection Policy

As previously mentioned, the subject parcels contain mixed chaparral and coastal sage scrub habitat over a significant portion of the sites, which is presently intact and undisturbed, and part of a larger, contiguous block of similar habitat. However, both parcels also contain disturbance in the area of the proposed building sites that pre-dates the Coastal Act. The applicant proposes to cluster the residences on the existing disturbed portion of the properties and as far as possible from the on-site native chaparral and riparian habitat areas. The fuel modification required for the proposed residences will be the only development to extend into undisturbed chaparral/coastal sage scrub habitat. No feasible alternative building locations exist on the parcel to reduce this impact. Due to the important ecosystem role of chaparral in the Santa Monica Mountains, and the fact that the subject parcels contain relatively undisturbed chaparral and coastal sage scrub vegetation (with the exception of the disturbed building sites and orchard), and is part of a large, unfragmented block of habitat, the Commission finds that the chaparral/coastal sage scrub habitat on and surrounding the subject sites meets the definition of an environmentally sensitive habitat area (ESHA) pursuant to Section 30107.5 of the Coastal Act.

In addition, the east and west forks of Encinal Canyon Creek, designated blue-line streams, and their associated riparian corridors are designated as an Environmentally Sensitive Habitat Area (ESHA) in the Malibu/Santa Monica Mountains Land Use Plan (LUP). The project proposed in CDP 4-06-092 involves improving an existing access road and replacing a stream crossing within the east fork riparian corridor off-site, and removing structures within the west fork riparian corridor on Lot 2. Although previously disturbed to some degree by pre-Coastal Act development, there is still an intact riparian woodland along these stream reaches that meets the definition of ESHA pursuant to Section 30107.5 of the Coastal Act.

Section 30240 of the Coastal Act requires that "environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." Section 30240 restricts development on the subject parcels to only those uses that are dependent on the resource. The applicant proposes to construct single-family residences on a disturbed portion of the parcels that is not considered ESHA. However, the applicant's proposed project will require the removal of native chaparral ESHA as a result of fuel modification required for fire protection of the proposed residence. As single-family residences do not have to be located within ESHAs to function, the Commission does not consider single-family residences to be a use dependent on ESHA resources. Application of Section 30240, by itself, would require denial of the projects, because the projects would result in significant disruption of habitat values and is not a use dependent on those sensitive habitat resources.

However, the Commission must also consider Section 30010, and the Supreme Court's Takings jurisprudence from decisions such as *Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1003, 112 S.Ct. 2886. Section 30010 of the Coastal Act provides that the Coastal Act shall not be construed as authorizing the Commission to exercise its power to grant or deny a permit in a manner which will take private property for public use. Application of Section 30010 may overcome the presumption of denial in some instances. The subject of what sort of governmental action may result in a "taking" was addressed by the U.S. Supreme Court in *Lucas v. South Carolina Coastal Council*. In *Lucas*, the Court identified several factors that should be considered in determining whether a proposed government action would result in a taking. For instance, the Court held that where a permit applicant has demonstrated that he or she has a sufficient real property interest in the property to allow him or her to undertake the proposed project, and that project denial would deprive that applicant of <u>all</u> economically viable use of the property, then denial of the project by a regulatory agency might result in a taking of the property for public use unless the proposed project would constitute a nuisance under State law. Other Supreme Court precedent establishes that another factor that should be considered is the extent to which a project denial would interfere with the property owner's reasonable investment-backed expectations regarding the ability to develop the property.

The Commission interprets Section 30010, together with the *Lucas* decision, to mean that if Commission denial of the project would deprive an applicant of all reasonable

economic use of his or her property, the Commission may be required to allow some development even where a Coastal Act policy would otherwise prohibit it, unless the proposed project would constitute a nuisance under state law. In other words, Section 30240 of the Coastal Act cannot be read to deny all economically beneficial or productive use of land because Section 30010 clarifies that Section 30240 cannot be interpreted to require the Commission to act in an unconstitutional manner.

In the subject case, the applicant obtained the properties in 1991. The Los Angeles County Land Use Plan designation for these properties is Rural Land II, which allows residential development at a maximum density of 1 dwelling unit per 5 acres of land. Residential development has previously been approved by the Commission on other similarly zoned parcels in the immediate area. In addition, the project sites are located near existing roads, services, and residences. At the time the applicant purchased the parcels, the County's certified LUP did not designate the chaparral vegetation on the site as ESHA, only the riparian stream corridor that bisects the parcels. Based on these facts, the applicant had reason to believe that they had purchased parcels on which it would be possible to build a residence.

The Commission finds that in this particular case, other uses for the subject sites that might be allowable under Section 30240 and 30231, such as a recreational park or a nature preserve, are not feasible and would not provide the owner of any economic return on his/her investment. The parcels are 7.7 (Lot 2) and 11 (Lot 3) acres in size, and there are other residential developments in the same area. There is currently no offer to purchase the property from any public park agency. The Commission thus concludes that in this particular case there is no viable alternative use for the site other than residential development. The Commission finds, therefore, that outright denial of all residential use on the project sites would interfere with reasonable investment-backed expectations and deprive the properties of all reasonable economic use.

Next the Commission turns to the question of nuisance. There is no evidence that construction of a residence on the project sites would create a nuisance under California law. Other houses have been constructed in similar situations in chaparral habitat in Los Angeles County, apparently without the creation of nuisances. The County's Health Department has not reported evidence of septic system failures. In addition, the County has reviewed and approved the applicant's proposed septic system and water well, ensuring that the system will not create public health problems. Furthermore, the use that is proposed is residential, rather than, for example, industrial, which might create noise or odors or otherwise create a public nuisance. In conclusion, the Commission finds that a residential project on the subject properties can be allowed to permit the applicant a reasonable economic use of his/her properties consistent with Section 30010 of the Coastal Act.

While the applicant is entitled under Section 30010 to an assurance that the Commission will not construe or implement the Coastal Act in such a way as to take his/her property, this section does not authorize the Commission to avoid application of the policies of the Coastal Act, including Section 30240, altogether. Instead, the

Commission is only directed to avoid construing these policies in a way that would take property. Aside from this instruction, the Commission is still otherwise directed to enforce the requirements of the Act. Therefore, in this situation, the Commission must still ensure compliance with Section 30240 by avoiding impacts that would disrupt and/or degrade environmentally sensitive habitat, to the extent this can be done without taking the property.

For the reasons discussed above, the proposed developments will be approved within ESHA in order to provide an economically viable use. Siting and design alternatives have been considered in order to identify the alternative that can avoid and minimize impacts to ESHA to the greatest extent feasible consistent with the allowance for an economically viable residential use. In this case, the applicant designed the proposed projects to occupy a development area of less than 10,000 sq. ft. in which all development is situated nearest existing disturbed areas, clustered, and utilizing a common access route. In addition, the applicant's proposed development on Lot 3 is situated 400 feet from the west fork of Encinal Creek, a USGS-designated blue-line stream and LUP-designated environmentally sensitive habitat area. The applicant's proposed residence on Lot 2 is situated 200 feet from the west fork of Encinal Creek, and the existing orchard proposed to be retained in CDP 4-06-092 maintains a 100-foot setback from the stream. The proposed building sites are also located on the flattest portion of the properties that has been disturbed prior to the Coastal Act and does not contain ESHA. Any other alternative location on the sites would require more grading, the removal of more native vegetation, and encroachment into on-site riparian and/or chaparral ESHA. The proposed building pads conform to the maximum development area of 10,000 sq. ft. that the Commission has typically allowed in similar situations on sites containing ESHA. All proposed structures are located within this building pad. The proposed building sites on the parcels are located as close as feasible to existing roads, services, and existing residential development. However, given the location of ESHA on the sites, there will still be significant, unavoidable impacts to ESHA resulting from the required fuel modification area around the proposed structures. No alternatives exist that would avoid all impacts to ESHA. The following discussion of ESHA impacts from new development and fuel modification is based on the findings of the Malibu LCP[58].

Fuel modification is the removal or modification of combustible native or ornamental vegetation. It may include replacement with drought tolerant, fire resistant plants. The amount and location of required fuel modification would vary according to the fire history of the area, the amount and type of plant species on the site, topography, weather patterns, construction design, and siting of structures. There are typically three fuel modification zones applied by the Fire Department:

> Zone A (Setback Zone) is required to extend from the edge of the protected structures to a minimum of 20 feet beyond those edges. In this area native vegetation is cleared and only ground cover, green lawn, and a limited number of ornamental plant species are allowed. This zone must be irrigated to maintain a high moisture content.

[58] Revised Findings for the City of Malibu Local Coastal Program (as adopted on September 13, 2002) adopted on February 6, 2003.

> Zone B (Irrigated Zone) is required to extend from the outermost edge of Zone A to a maximum of 80 feet. In this area ground covers may not extend over 18 inches in height. Some native vegetation may remain in this zone if they are adequately spaced, maintained free of dead wood and individual plants are thinned. This zone must be irrigated to maintain a high moisture content.
>
> Zone C (Thinning Zone) is required to extend from the outermost edge of Zone B up to 100 feet. This zone would primarily retain existing native vegetation, with the exception of high fuel species such as chamise, red shank, California sagebrush, common buckwheat and sage. Dead or dying vegetation must be removed and the fuel in existing vegetation reduced by thinning individual plants.

Thus, the combined required fuel modification area around structures can extend up to a maximum of 200 feet. If there is not adequate area on the project site to provide the required fuel modification for structures, then brush clearance may also be required on adjacent parcels.

Notwithstanding the need to protect structures from the risk of wildfire, fuel modification results in significant adverse impacts that are in excess of those directly related to the development itself. Within the area next to approved structures (Zone A), all native vegetation must be removed and ornamental, low-fuel plants substituted. In Zone B, most native vegetation will be removed or widely spaced. Finally, in Zone C, native vegetation may be retained if thinned, although particular high-fuel plant species must be removed (Several of the high fuel species are important components of the chaparral community). In this way, for a large area around any permitted structures, native vegetation will be cleared, selectively removed to provide wider spacing, and thinned.

Obviously, native vegetation that is cleared and replaced with ornamental species, or substantially removed and widely spaced will be lost as habitat and watershed cover. Additionally, thinned areas will be greatly reduced in habitat value. Even where complete clearance of vegetation is not required, the natural habitat can be significantly impacted, and ultimately lost, particularly if such areas are subjected to supplemental water through irrigation. In coastal sage scrub habitat, the natural soil coverage of the canopies of individual plants provides shading and reduced soil temperatures. When these plants are thinned, the microclimate of the area will be affected, increasing soil temperatures, which can lead to loss of individual plants and the eventual conversion of the area to a dominance of different non-native plant species. The areas created by thinning between shrubs can be invaded by non-native grasses that can over time out-compete native species.

For example, undisturbed coastal sage scrub and chaparral vegetation typical of coastal canyon slopes, and the downslope riparian corridors of the canyon bottoms, ordinarily contains a variety of tree and shrub species with established root systems. Depending on the canopy coverage, these species may be accompanied by understory species of lower profile. The established vegetative cover, including the leaf detritus and other mulch contributed by the native plants, slows rainfall runoff from canyon slopes and staunches silt flows that result from ordinary erosional processes. The native

vegetation thereby limits the intrusion of sediments into downslope creeks. Accordingly, disturbed slopes where vegetation is either cleared or thinned are more directly exposed to rainfall runoff that can therefore wash canyon soils into down-gradient creeks. The resultant erosion reduces topsoil and steepens slopes, making revegetation increasingly difficult or creating ideal conditions for colonization by invasive, non-native species that supplant the native populations.

The cumulative loss of habitat cover also reduces the value of the sensitive resource areas as a refuge for birds and animals, for example by making them—or their nests and burrows—more readily apparent to predators. The impacts of fuel clearance on bird communities was studied by Stralberg who identified three ecological categories of birds in the Santa Monica Mountains: 1) local and long distance migrators (ash-throated flycatcher, Pacific-slope flycatcher, phainopepla, black-headed grosbeak), 2) chaparral-associated species (Bewick's wren, wrentit, blue-gray gnatcatcher, California thrasher, orange-crowned warbler, rufous-crowned sparrow, spotted towhee, California towhee) and 3) urban-associated species (mourning dove, American crow, Western scrub-jay, Northern mockingbird)[59]. It was found in this study that the number of migrators and chaparral-associated species decreased due to habitat fragmentation while the abundance of urban-associated species increased. The impact of fuel clearance is to greatly increase this edge-effect of fragmentation by expanding the amount of cleared area and "edge" many-fold. Similar results of decreases in fragmentation-sensitive bird species are reported from the work of Bolger et al. in southern California chaparral[60].

Fuel clearance and habitat modification may also disrupt native arthropod communities, and this can have surprising effects far beyond the cleared area on species seemingly unrelated to the direct impacts. A particularly interesting and well-documented example with ants and lizards illustrates this point. When non-native landscaping with intensive irrigation is introduced, the area becomes favorable for the invasive and non-native Argentine ant. This ant forms "super colonies" that can forage more than 650 feet out into the surrounding native chaparral or coastal sage scrub around the landscaped area[61]. The Argentine ant competes with native harvester ants and carpenter ants displacing them from the habitat[62]. These native ants are the primary food resource for the native coast horned lizard, a California "Species of Special Concern." As a result of Argentine ant invasion, the coast horned lizard and its native ant food resources are diminished in areas near landscaped and irrigated developments[63]. In addition to

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[59] Stralberg, D. 2000. Landscape-level urbanization effects on chaparral birds: a Santa Monica Mountains case study. Pp. 125–136 *in* Keeley, J.E., M. Baer-Keeley, and C.J. Fotheringham (eds.). *2nd interface between ecology and land development in California*. U.S. Geological Survey, Sacramento, California.

[60] Bolger, D. T., T. A. Scott and J. T. Rotenberry. 1997. Breeding bird abundance in an urbanizing landscape in coastal Southern California. Conserv. Biol. 11:406-421.

[61] Suarez, A.V., D.T. Bolger and T.J. Case. 1998. Effects of fragmentation and invasion on native ant communities in coastal southern California. Ecology 79(6):2041-2056.

[62] Holway, D.A. 1995. The distribution of the Argentine ant (*Linepithema humile*) in central California: a twenty-year record of invasion. Conservation Biology 9:1634-1637. Human, K.G. and D.M. Gordon. 1996. Exploitation and interference competition between the invasive Argentine ant, (*Linepithema humile*), and native ant species. Oecologia 105:405-412.

[63] Fisher, R.N., A.V. Suarez and T.J. Case. 2002. Spatial patterns in the abundance of the coastal horned lizard. Conservation Biology 16(1):205-215. Suarez, A.V. J.Q. Richmond and T.J. Case. 2000. Prey

specific effects on the coast horned lizard, there are other Mediterranean habitat ecosystem processes that are impacted by Argentine ant invasion through impacts on long-evolved native ant-plant mutualisms[64]. The composition of the whole arthropod community changes and biodiversity decreases when habitats are subjected to fuel modification. In coastal sage scrub disturbed by fuel modification, fewer arthropod predator species are seen and more exotic arthropod species are present than in undisturbed habitats[65].

Studies in the Mediterranean vegetation of South Africa (equivalent to California shrubland with similar plant species) have shown how the invasive Argentine ant can disrupt the whole ecosystem.[66] In South Africa the Argentine ant displaces native ants as they do in California. Because the native ants are no longer present to collect and bury seeds, the seeds of the native plants are exposed to predation, and consumed by seed eating insects, birds and mammals. When this habitat burns after Argentine ant invasion the large-seeded plants that were protected by the native ants all but disappear. So the invasion of a non-native ant species drives out native ants, and this can cause a dramatic change in the species composition of the plant community by disrupting long-established seed dispersal mutualisms. In California, some insect eggs are adapted to being buried by native ants in a manner similar to plant seeds[67].

While these impacts resulting from fuel modification can be reduced through siting and designing alternatives for new development, they cannot be completely avoided, given the high fire risk and the location of ESHA on and around the project site. The Commission finds that the loss of chaparral ESHA resulting from the removal, conversion, or modification of natural habitat for new development including the building site area and fuel modification must be mitigated. The acreage of habitat that is impacted must be determined based on the size of the required fuel modification area on the project area.

In this case, the applicant's preliminary fuel modification plan (approved by the Los Angeles County Fire Department) shows the use of the three zones of vegetation modification that extend a total of 200 feet from the proposed structures. Zones "A" (setback zone) and "B" (irrigation zone) are shown extending in a radius of approximately 100 feet from the proposed structures. A "C" Zone (thinning zone) is provided for a distance of 100 feet beyond the "A" and "B" zone (**Exhibits 10, 13**).

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selection in horned lizards following the invasion of Argentine ants in southern California. Ecological Applications 10(3):711-725.

[64] Suarez, A.V., D.T. Bolger and T.J. Case. 1998. Effects of fragmentation and invasion on native ant communities in coastal southern California. Ecology 79(6):2041-2056. Bond, W. and P. Slingsby. Collapse of an Ant-Plant Mutualism: The Argentine Ant (*Iridomyrmex humilis*) and Myrmecochorous Proteaceae. Ecology 65(4):1031-1037.

[65] Longcore, T.R. 1999. Terrestrial arthropods as indicators of restoration success in coastal sage scrub. Ph.D. Dissertation, University of California, Los Angeles.

[66] Christian, C. 2001. Consequences of a biological invasion reveal the importance of mutualism for plant communities. Nature 413:635-639.

[67] Hughes, L. and M. Westoby. 1992. Capitula on stick insect eggs and elaiosomes on seeds: convergent adaptations for burial by ants. Functional Ecology 6:642-648.

The ESHA area affected by the proposed development does not include the proposed building pads or orchard area since those areas appear to have been previously disturbed prior to the effective date of the Coastal Act. As such, the ESHA areas that will be impacted by the proposed project are the areas of native, intact chaparral and coastal sage scrub vegetation beyond the edges of the disturbed areas. The precise area of chaparral and coastal sage scrub ESHA that will be impacted by the proposed developments has not been calculated. Therefore, the Commission finds that it is necessary to require the applicant to delineate the ESHA on the site that will be impacted by fuel modification and brushing activities (based on the final fuel modification plan approved by the Los Angeles County Fire Department), as required by **Special Condition No. Six (6) of CDPs 4-06-092 and 4-06-093**.

The Commission has identified three methods for providing mitigation for the unavoidable loss of ESHA resulting from development, including habitat restoration, habitat conservation, and an in-lieu fee for habitat conservation. The Commission finds that these measures are appropriate in this case to mitigate the loss of chaparral habitat as a result of the project. These three mitigation methods are provided as three available options for compliance with **Special Condition No. Six (6) of CDPs 4-06-092 and 4-06-093**. The first method is to provide mitigation through the restoration of an area of degraded habitat (either on the project site, or at an off-site location) that is equivalent in size to the area of habitat impacted by the development. A restoration plan must be prepared by a biologist or qualified resource specialist and must provide performance standards, and provisions for maintenance and monitoring. The restored habitat must be permanently preserved through the recordation of an open space easement. This mitigation method is provided for in Special Condition No. 6, subpart A.

The second habitat impact mitigation method is habitat conservation. This includes the conservation of an area of intact habitat equivalent to the area of the impacted habitat. The parcel containing the habitat conservation area must be restricted from future development and permanently preserved. If the mitigation parcel is larger in size than the impacted habitat area, the excess acreage could be used to provide habitat impact mitigation for other development projects that impact chaparral ESHA. This mitigation method is provided for in Special Condition No. 6, subpart B.

The third habitat impact mitigation option is an in-lieu fee for habitat conservation. The fee is based on the habitat types in question, the cost per acre to restore or create the comparable habitat types, and the acreage of habitat affected by the project. In order to determine an appropriate fee for the restoration or creation of chaparral and coastal sage scrub habitat, the Commission's biologist contacted several consulting companies that have considerable experience carrying out restoration projects. Overall estimates varied widely among the companies, because of differences in the strategies employed in planning the restoration (for instance, determining the appropriate number of plants or amount of seeds used per acre) as well as whether all of the restoration planting, monitoring and maintenance was carried out by the consultant or portions are subcontracted. Additionally, the range of cost estimates reflect differences in restoration

site characteristics including topography (steeper is harder), proximity to the coast (minimal or no irrigation required at coastal sites), types of plants (some plants are rare or difficult to cultivate), density of planting, severity of weed problem, condition of soil, etc. Larger projects may realize some economy of scale.

Staff determined the appropriate mitigation for loss of coastal sage scrub or chaparral ESHA should be based on the actual installation of replacement plantings on a disturbed site, including the cost of acquiring the plants (seed mix and container stock) and installing them on the site (hydroseeding and planting). Three cost estimates were obtained for the installation of plants and seeds for one-acre of restoration. These estimates were $9,541, $12,820, and $13,907 per acre of plant installation. The Commission finds it appropriate to average the three estimates of plant installation to arrive at the reasonable in-lieu fee to mitigate for the loss of ESHA associated with the approval of development within an ESHA. Based on this averaging, the required in-lieu fee for habitat mitigation is $12, 000 (rounded down from the average figure of $12,089 to simplify administration) per acre of habitat.

The Commission finds that the in-lieu fee of $12,000 per acre is appropriate to provide mitigation for the habitat impacts to ESHA areas where all native vegetation will be removed (building site and the “A” zone required for fuel modification), and where vegetation will be significantly removed and any remaining vegetation will be subjected to supplemental irrigation (the “B” zone or any other irrigated zone required for fuel modification). In these areas, complete removal or significant removal of ESHA, along with irrigation completely alters the habitat and eliminates its value to the native plant and animal community.

ESHA modified for the “C” zone that is thinned but non-irrigated (required for fuel modification) is certainly diminished in habitat value, but unlike the building site, “A” zone, “B” zone, and any other irrigated zone, habitat values are not completely destroyed. Native vegetation in the “C” zone is typically required to be thinned, and shrubs must be maintained at a certain size to minimize the spread of fire between the individual plants. This area is not typically required to be irrigated. As such, the Commission finds that it is not appropriate to require the same level of in-lieu fee mitigation for impacts to ESHA within a non-irrigated “C” zone required for fuel modification. Although the habitat value in the “C” zone (or any other non-irrigated zone) is greatly reduced, it is not possible to precisely quantify the reduction. The Commission’s biologist believes that the habitat value of non-irrigated fuel modification zones is reduced by at least 25 percent (and possibly more) due to the direct loss of vegetation, the increased risk of weed invasion, and the proximity of disturbance. The Commission finds that it is also less costly difficult to restore chaparral habitat when some of the native vegetation remains, rather than when all of the native habitat is removed. Because of the uncertainty and the inability to precisely quantify the reduction in habitat value, the Commission concludes that it is warranted to impose a mitigation fee of $3,000 per acre (one quarter of the cost of full restoration) for the “C” zone or other non-irrigated fuel modification zone.

In this case, the applicant's approved fuel modification plan (approved by the Los Angeles County Fire Department) shows the use of the standard three zones of vegetation modification. Zones "A" (setback zone) and "B" (irrigation zone) are shown extending in a radius of approximately 100 feet from the proposed structures. A "C" Zone (thinning zone) is provided for a distance of 100 feet beyond the "A" and "B" zones. As discussed above, the ESHA areas affected by the proposed developments does not include the areas previously disturbed prior to the effective date of the Coastal Act. As such, the ESHA areas that will be impacted by the proposed project are the required fuel modification areas on the slopes beyond the proposed pad on Lot 3 and beyond the proposed pad and existing orchard on Lot 2. The appropriate in-lieu fee calculation would then be based on $12,000 per acre for any irrigated fuel modification area (the "A" and "B" Zones) and $3,000 per acre of un-irrigated fuel modification area (zone "C").

Should the applicant choose the in-lieu fee mitigation method, the fee shall be provided to the Mountains Recreation and Conservation Authority for the acquisition or permanent preservation of natural habitat areas within the coastal zone. This mitigation method is provided for in Special Condition No. 6, subpart C.

The Commission has determined that in conjunction with siting new development to minimize impacts to ESHA, additional actions can be taken to minimize adverse impacts to ESHA. In order to ensure that ESHA is protected against significant disruption of habitat values to the maximum extent feasible, consistent with Section 30240 of the Coastal Act, the remaining ESHA on the property must be preserved. The most effective way to preserve the remaining ESHA on the site is through an open space conservation easement held by the Mountains Recreation and Conservation Authority that prohibits development on the remainder of the site now and in the future. As part of both CDP 4-06-092 and 4-06-093, the applicant has offered to grant an open space conservation easement across the remainder of each parcel that is beyond fuel modification Zone B of the required fuel modification plans (**Exhibits 10, 13**). In order to ensure that the applicants' proposal to grant an open space conservation easement is implemented to permanently guarantee that no further development occurs outside the area that would be designated as fuel modification Zone B of the proposed building sites, the Commission finds it necessary to require **Special Condition Nine (9) of CDPs 4-06-092 and 4-06-093**, which requires a direct grant of the open space and conservation easements to the MRCA. As detailed in Special Condition 9, the open space and conservation easements will run with the land and will prohibit all development, with the exception of fuel modification, drainage control activities carried out in accordance with Special Condition Three (3), and construction and maintenance of public hiking trails. The easement will further ensure that any potential buyers are aware of the restriction on further development before they purchase the property. Special Condition 9 allows planting of native vegetation and other restoration activities, if approved by the Coastal Commission as an amendment to this coastal development permit or through a new coastal development permit. Existing easements for roads, trails, and utilities will be excluded from the open space restriction area. Any future easements associated with the establishment of public trails shall also be permitted in

the open space conservation easement area. The governing board of the Mountains Recreation and Conservation Authority (MRCA) has agreed to accept all open space easements required by the Commission for properties within the Santa Monica Mountains National Recreation Area.

Under the terms of **Special Condition Nine (9) of CDPs 4-06-092 and 4-06-093** an open space and conservation easement over the open space area (shown in Exhibits 10 and 13) will be granted by the applicant to the Mountains Recreation and Conservation Authority ("MRCA"), a joint powers authority. The MRCA is a partnership between the Santa Monica Mountains Conservancy, the Conejo Recreation and Park District, and the Rancho Simi Recreation and Park District. The MRCA is dedicated to the preservation and management of open space, parkland, watershed lands, trails, and wildlife habitat. The MRCA manages and provides ranger services for almost 50,000 acres of public lands and parks that it owns or are owned by the Santa Monica Mountains Conservancy. The governing board of the MRCA has agreed to accept all open space easements required by the Commission for properties within the Santa Monica Mountains National Recreation Area.

The Commission finds that requiring an open space and conservation easement held by the MRCA is the most effective way to preserve the remaining ESHA on the property. The MRCA is a public agency that has park rangers and other staff active in the Santa Monica Mountains area to monitor open space areas to ensure that the restrictions are followed. The MRCA acquires and manages properties for recreation and conservation purposes in the Santa Monica Mountains. MRCA staff and park rangers routinely monitor properties under MRCA management in the Santa Monica Mountains and enforce State law and local ordinances. Therefore, the MRCA is better able to monitor open space and conservation easements than Commission staff. Further, an easement will be recorded against the title to the property and thus provide notice to future owners of the limitations that apply to the open space conservation area, reducing the risk of a future irreparable violation of the restriction.

It is important that the property owner record an easement to MRCA rather than simply record an open space deed restriction. Although a deed restriction should notify future owners of the restriction in the same manner that a recorded easement would, it would not be as effective in preserving the remaining ESHA for two reasons, as explained below. First, a deed restriction is not as reliable because a property owner can record another document purporting to rescind the deed restriction. Although any attempt to rescind a deed restriction required by a coastal development permit ("CDP") without an amendment to that CDP authorizing such a rescission would constitute a violation of the CDP and the Coastal Act, the County Recorder's office is likely to allow recordation of a rescission without the required Coastal Commission authorization. Indeed, the Commission has experienced the phenomenon of property owners recording documents purporting to modify deed restrictions recorded pursuant to CDP requirements. *See*, *e.g.*, Commission findings for CDP Amendment F7453-A2 (Stephenson), approved March, 2005, and Violation File V-6-04-010 (Del Mar Estates). On the other hand, because an easement necessarily involves more than one person,

the County Recorder would not likely record a document purporting to rescind an easement unless the easement holder were also to sign the document. Thus, a condition requiring a deed restriction is much easier to violate, and therefore much less protective, than a condition requiring an easement.

Second, the Legislature has recently adopted new provisions to the Government Code specifically sanctioning the use of conservation easements for this purpose and changing procedures to ensure that they are prominent in searching title to property. In 2001, the Legislature adopted a new requirement that County Recorders keep a separate and "comprehensive index of conservation easements." *See* Cal. Gov't Code § 27255(a).

As such, the Commission finds that the requirement of an open space and conservation easement is the most effective method of ensuring that the remaining ESHA on the subject parcels will be conserved in the future. In addition, the Commission concludes that an open space easement that allows only the easement holder and no other entity to enter the property for inspection purposes does not interfere with the fee title owner's right to exclude the general public. It therefore does not constitute a significant invasion of the fee title owner's property interest.

The Commission finds that the use of non-native and/or invasive plant species for residential landscaping results in both direct and indirect adverse effects to native plants species indigenous to the Malibu/Santa Monica Mountains area. Adverse effects from such landscaping result from the direct occupation or displacement of native plant communities by new development and associated non-native landscaping. Indirect adverse effects include offsite migration and colonization of native plant habitat by non-native/invasive plant species (which tend to outcompete native species) adjacent to new development. The Commission notes that the use of exotic plant species for residential landscaping has already resulted in significant adverse effects to native plant communities in the Malibu/Santa Monica Mountains area. Therefore, in order to minimize adverse effects to the indigenous plant communities of the Malibu/Santa Monica Mountains area, **Special Condition No. Eleven (11) of CDPs 4-06-092 and 4-06-093** requires that landscaping consist primarily of native plant species and that invasive plant species shall not be used.

The Commission notes that the use of rodenticides containing anticoagulant compounds have been linked to the death of sensitive predator species, including mountain lions and raptors, in the Santa Monica Mountains. These species are a key component of chaparral and coastal sage scrub communities in the Santa Monica Mountains considered ESHA. Therefore, in order to avoid adverse impacts to sensitive predator species, **Special Condition No. Eleven (11) of CDPs 4-06-092 and 4-06-093**, disallows the use of rodenticides containing any anticoagulant compounds on the subject properties.

Furthermore, in order to ensure that vegetation clearance for fire protection purposes does not occur prior to commencement of grading or construction of the proposed

structures, the Commission finds that it is necessary to impose a restriction on the removal of natural vegetation as specified in **Special Condition No. Five (5) of CDPs 4-06-092 and 4-06-093**. This restriction specifies that natural vegetation shall not be removed until grading or building permits have been secured and construction of the permitted structures has commenced. The limitation imposed by Special Condition 5 avoids loss of natural vegetative coverage resulting in unnecessary erosion in the absence of adequately constructed drainage and run-off control devices and implementation of the landscape and interim erosion control plans.

In addition, the Commission has found that night lighting may alter or disrupt feeding, nesting, and roosting activities of native wildlife species. The subject properties contain environmentally sensitive habitat. Therefore, **Special Condition No. Four (4) of CDPs 4-06-092 and 4-06-093** limits night lighting of the sites in general; limits lighting to the developed area of the sites; and specifies that lighting be shielded downward. The restriction on lighting will assist in minimizing the disruption of wildlife traversing this area at night that are commonly found in this rural and relatively undisturbed area. Thus, the lighting restrictions will attenuate the impacts of unnatural light sources and reduce impacts to sensitive wildlife species.

Furthermore, fencing of the sites would adversely impact the movement of wildlife through the chaparral and coastal sage scrub ESHA on these parcels. Therefore, the Commission finds it is necessary to limit fencing on each site to only that area within Zone B of the applicant's Fire Department-approved preliminary fuel modification plan (100 feet from structures), as required in **Special Condition Eleven (11) of CDPs 4-06-092 and 4-06-093**.

The Commission finds that the amount and location of any new development that may be proposed in the future on the subject sites is significantly limited by the unique nature of the sites and the environmental constraints discussed above. Therefore, to ensure that any future structures, additions, change in landscaping or intensity of use at the project sites, that may otherwise be exempt from coastal permit requirements, are reviewed by the Commission for consistency with the resource protection policies of the Coastal Act, **Special Condition No. Seven (7) of CDPs 4-06-092 and 4-06-093**, the future development restriction, has been required. **Special Condition No. Eight (8) of CDPs 4-06-092 and 4-06-093** requires the applicant to record a deed restriction that imposes the terms and conditions of the permit as restrictions on use and enjoyment of the property and provides any prospective purchaser of the site with recorded notice that the restrictions are imposed on the subject property.

Further, as discussed above, there are several oak trees near the proposed development areas. However, no development is proposed within the dripline or protected zone of any on-site oak tree. Through past permit actions on residential development in the Santa Monica Mountains the Commission and has found that native oak trees are an important coastal resource. Native trees prevent the erosion of hillsides and stream banks, moderate water temperatures in streams through shading, provide food and habitat, including nesting, roosting, and burrowing to a wide variety of

wildlife species, contribute nutrients to watersheds, and are important scenic elements in the landscape. The oak trees on the site do provide some habitat for a wide variety of wildlife species and are considered to be an important part of the character and scenic quality of the area. The applicant has submitted landscape plans for each property that maps the drip lines of on-site oak trees (and off-site oak trees that are in close proximity) in relation to proposed development. The applicant does not propose removal or encroachment of any oak tree on Lot 2 or Lot 3. However, to ensure the oak trees are not adversely affected by irrigation or inappropriate landscaping, **Special Condition No. Eleven (11) of CDPs 4-06-092 and 4-06-093** includes a provision that prohibits permanent irrigation within the dripline or within the five-foot protected zone of oak trees and limits landscaping within the dripline and protected zone to native oak tree understory plant species. To ensure that the oak and sycamore trees on Lot 2 are protected during grading and construction activities, **Special Condition Fifteen (15) of CDP 4-06-092** also requires the applicant to install protective barrier fencing around the dripline of on-site oak and sycamore trees during construction operations.

Given the importance of oak woodlands and individual oak trees, even those that have been disturbed or fragmented by development, the Commission has consistently required, through past permit actions, that new development avoid the removal of oak trees, unless there is no feasible alternative for siting or designing the development. Further, given the sensitivity of oak trees to disturbance or encroachment of development into the root zone, the Commission has required that encroachments within the protected zone (5 feet beyond the dripline, or 15 feet from the trunk, whichever is greater) be avoided unless there is no feasible alternative for the siting of development. The Commission has determined that in cases where the removal of oak trees is unavoidable, the planting of replacement trees is necessary as mitigation, at a ratio of at least ten seedlings for every tree impacted. If there is suitable area on the project site, replacement trees should be provided on-site. The Commission has found, through permit actions, based on the recommendations of resource specialists studying oak restoration that oak trees are most successfully established when planted as acorns collected in the local area or seedlings grown from such acorns. Many factors, over the life of the restoration, can result in the death of the replacement trees. In order to ensure that adequate replacement is eventually reached, it is necessary to provide a replacement ratio of at least ten replacement trees for every tree removed or impacted to account for the mortality of some of the replacement trees.

As discussed previously, a significant portion of the existing access road is situated within the riparian/oak woodland corridor of the east fork of Encinal Canyon Creek. There are 37 oak trees in the area of the access road, as well as a few sycamore trees. The existing access road to serve both parcels has existed prior to the effective date of the Coastal Act and is currently being utilized by two existing residences in the vicinity. In the case of the proposed access road improvements associated with CDP 4-06-092, proposed road widening and retaining walls will substantially encroach upon the protected zones of eleven (11) oak trees (#s 1, 4, 5, 7-10, 17, 20-22 of **Exhibit 6**). No oak trees are proposed to be removed, but in the case of the eleven oak trees that will have significant encroachments, it is likely that these trees will be lost or suffer reduced

health and vigor as a result. In addition, the drip line and protected zone of twenty (20) other oak trees will be in very close proximity to the proposed access road improvements. With protective measures in place during construction, as discussed below, impacts to these twenty trees will be minimized. The applicant has worked with the Fire Department to minimize those sections of the access road that require widening to 24 feet. Given the location and density of oak trees in this area, staff has concluded that it is not feasible to site or design the access road in any other way that would avoid or reduce the encroachment of the eleven oak trees. No alternative access routes exist. The Commission agrees with staff's assessment.

In order to mitigate the impacts from the significant encroachments to eleven (11) oak trees, a total of one hundred and ten (110) replacement trees must be planted. In order to provide this mitigation, the Commission finds it necessary to require the applicant to plant one hundred and ten replacement trees, as detailed in **Special Condition Fifteen (15) of CDP 4-06-092**. Special Condition Fifteen (15) requires the applicant to plant at least one hundred and ten (110) replacement seedlings, less than one year old, grown from acorns collected in the area. The replacement seedlings shall be planted in appropriate oak woodland habitat areas on the subject parcel, or on the applicant's other properties (Lots 1 or 3) in the vicinity. Special Condition Fifteen (15) also requires the applicant to submit an oak tree replacement planting program, which specifies replacement tree locations, tree or seedling size planting specifications, and a ten-year monitoring program to ensure that the replacement planting program is successful. The applicant shall commence implementation of the approved oak tree replacement planting program concurrently with the commencement of construction on the project site.

To ensure that no impacts outside the scope of work allowed by CDP 4-06-092 occur to the oak and sycamore trees in the area of the proposed access road, **Special Condition No. Fifteen (15) of CDP 4-06-092** requires the applicant to retain the services of a qualified biologist or arborist who shall be present on site during construction operations of the access road and bridged stream crossing. The consultant shall immediately notify the Executive Director if unpermitted activities occur. Should any damage, removal, or impact occur to any oak or sycamore trees, the applicant is required to mitigate the impacts to the oaks at a ratio of 10:1. Special Condition 15 also requires the applicant to install protective barrier fencing around the dripline of oak and sycamore trees near the construction site and to implement all oak tree preservation measures enumerated in the submitted Oak Tree Report.

In addition to the impacts discussed above, other impacts to Encinal Canyon Creek and its oak-sycamore woodland habitat can result from the construction phase of the project. Construction activities could disturb bird species if they are nesting within or close to the project site. In order to minimize any construction impacts to nesting birds, the Commission finds it necessary to require the applicant to survey the area within 500 feet of the construction zone to detect the nests of any bird species, 30 days prior to the commencement of construction. If any such nests are found, measures must be taken

to avoid impacts. These requirements are set forth in **Special Condition No. Sixteen (16) of CDP 4-06-092**.

The applicant of CDP 4-06-092 proposes to replace the existing corrugated metal pipe culvert/Arizona-type stream crossing where the proposed access road crosses the east fork of Encinal Canyon Creek with a 24-ft. wide, 24-ft. long, pre-fabricated single span bridge with concrete footings. The abutments will be located outside of the stream banks. In addition, the applicant of CDP 4-06-092 proposes to remove an existing concrete box culvert stream crossing from the west fork of Encinal Creek on Lot 2, as well as remove an existing small tool shed and a 675 sq. ft. dilapidated miniature house structure adjacent to Encinal Creek on Lot 2.

Removal of the box culvert stream crossing and existing structures, and replacement of the Arizona-type stream crossing with a bridged crossing will reduce impacts to the streams and their associated riparian habitat. The Commission has consistently required road crossings of streams to be accomplished through bridging, where feasible. Currently, the existing stream crossing on the east fork of Encinal Creek (along access road) is impacting a 400 sq. ft. area of stream, and the existing stream crossing on the west fork of Encinal Creek (Lot 2) is impacting an approximately 100 sq. ft. area of stream. The proposed project will eliminate these permanent impacts to stream habitat. While the improvements will ultimately improve stream flow and riparian habitat value, there will still be temporary impacts to the stream's riparian vegetation from the removal of the existing structures and then construction of the bridge on the east fork. A total of about 50 sq. ft. surrounding each creek crossing will be temporarily impacted during crossing removal and construction of the bridge on the east fork. In addition, proposed removal of the existing small tool shed and miniature house structure adjacent to Encinal Creek on Lot 2 will result in a temporary impact to the riparian ESHA corridor. Therefore, in order to ensure that adverse effects to riparian habitat and water quality from increased erosion and sedimentation are minimized to the maximum extent feasible, the Commission finds that **Special Condition No. Thirteen (13) of CDP 4-06-092**, Riparian Habitat Revegetation, is necessary. Specifically, Special Condition 13 requires that prior to issuance of the permit, the applicant shall submit, for the review and approval of the Executive Director, a detailed Riparian Habitat Revegetation Plan, prepared by a biologist or environmental resource specialist with qualifications acceptable to the Executive Director, for 1) the area of the access road stream crossing replacement, and 2) the area of the box culvert and structure removal on the subject parcel, where riparian vegetation will be temporarily disturbed or removed due to construction and/or demolition activities using native plant species that are appropriate for a riparian/oak woodland habitat area. All invasive and non-native plant species shall be removed from the stream channel/riparian vegetation corridor within the Revegetation Plan area. In addition, Special Condition 13 also requires the applicant to implement a five year monitoring program to ensure the success of the replanting.

To ensure that the access road improvements proposed as part of CDP 4-06-092 receives final approval prior to permit issuance of CDP 4-06-093 for residential development on Lot 3, the Commission requires issuance of CDP No. 4-06-092 prior to

issuance of permit application 4-06-093, as specified in **Special Condition No. Eleven (11) of CDP 4-06-093**.

To ensure that the proposed structure removal and stream crossing removal and replacement are implemented in accordance with the applicants' proposal, **Special Condition No. Ten (10) and Twelve (12) of CDP 4-06-092** has been required. Special Condition No. Ten (10) and Twelve (12) of CDP 4-06-092 specifies that prior to receipt of the Certificate of Occupancy for the residence, the applicant agrees to remove the existing on-site storage shed and the dilapidated miniature house structure from adjacent to Encinal Canyon Creek, replace the existing Arizona stream crossing with the proposed bridged stream crossing where the proposed access road crosses the east fork of Encinal Canyon Creek, and remove the existing box culvert stream crossing on the west fork of Encinal Canyon Creek on the subject parcel.

In conclusion, as discussed in detail above, the proposed development will be approved within ESHA in order to provide an economic use of the property. Siting and design alternatives have been considered in order to identify the alternative that can avoid and minimize impacts to ESHA to the greatest extent feasible. The proposed development is the alternative that will minimize impacts. In addition, measures have been incorporated into the projects and conditions have been required, as described in detail above, that will further reduce or mitigate impacts to ESHA. The Commission therefore finds that the project, as conditioned, will protect ESHA against any significant disruption of habitat values, consistent with Section 30240 of the Coastal Act. Further, the Commission finds that the development, as conditioned, has been sited and designed to minimize impacts, both individual and cumulative, on coastal resources, consistent with Section 30250 of the Coastal Act.

D. Water Quality

The Commission recognizes that new development in the Santa Monica Mountains has the potential to adversely impact coastal water quality through the removal of native vegetation, increase of impervious surfaces, increase of runoff, erosion, and sedimentation, and introduction of pollutants such as petroleum, cleaning products, pesticides, and other pollutant sources, as well as effluent from septic systems.

Section 30231 of the Coastal Act states:

> ***The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, minimizing alteration of natural streams.***

Section 30231 of the Coastal Act provides that the quality of coastal waters and streams shall be maintained and restored whenever feasible through means such as: controlling runoff, preventing interference with surface water flows and alteration of natural streams, and by maintaining natural vegetation buffer areas. In past permit actions the Commission has found that new development adjacent to or upslope of coastal streams and natural drainages results in potential adverse impacts to riparian habitat and marine resources from increased erosion, contaminated storm runoff, introduction of non-native and invasive plant species, disturbance of wildlife, and loss of riparian plant and animal habitat.

The applicant proposes to construct two single-family residences on two separate, contiguous parcels located within a small residential enclave off Encinal Canyon Road in the western Santa Monica Mountains. The two properties are situated between two ridges within the Encinal Canyon watershed. The west fork of Encinal Canyon Creek, a U.S. Geological Survey (USGS) blue-line stream, bisects both parcels and is situated downslope to the west of the proposed building sites. The east fork of Encinal Canyon Creek is located adjacent to the existing access road that is proposed to be improved, which is downslope to the east of the subject parcels. These streams are lined by riparian and oak woodland vegetation that is delineated as Environmentally Sensitive Habitat Area (ESHA) on Malibu/Santa Monica Mountains Land Use Plan (LUP) resource maps. The applicant designed the proposed projects to occupy a development area of less than 10,000 sq. ft. in which all development is situated nearest existing disturbed areas, clustered, and utilizing a common access route. The proposed building sites are also located on the flattest portion of the properties that has been disturbed prior to the Coastal Act and does not contain ESHA. In addition, the applicant's proposed development on Lot 3 is situated 400 feet from the on-site riparian stream corridor. The applicant's proposed residence on Lot 2 is situated 200 feet from the west fork of Encinal Creek, and the existing orchard proposed to be retained in CDP 4-06-092 maintains a 100-foot setback from the stream. Any other alternative location on the sites would require more grading, the removal of more native vegetation, and encroachment into on-site riparian and/or chaparral ESHA. The proposed building sites on the parcels are located as close as feasible to existing roads, services, and existing residential development.

As discussed previously, a significant portion of the existing access road is situated among the riparian woodland corridor of the east fork of Encinal Canyon Creek. The existing access road to serve both parcels has existed prior to the effective date of the Coastal Act and is currently being utilized by two existing residences in the vicinity. In the case of the proposed access road improvements associated with CDP 4-06-092, proposed road widening and retaining walls will substantially encroach upon the protected zones of several oak trees and be in very close proximity to the stream riparian ESHA. The applicant has worked with the Fire Department to minimize sections of the access road that require widening to 24 feet. Given the topography in this area and proximity of existing development, staff has concluded that it is not feasible to site

or design the access road in any other way that would provide a greater buffer from the riparian ESHA or avoid impacts to oak trees. No alternative access routes exist.

The proposed developments are in close proximity to blue-line streams considered to be ESHA and involve sloping hillside terrain with soils that are susceptible to erosion. In past permit actions the Commission has found that new development adjacent to or upslope of coastal streams and natural drainages results in potential adverse impacts to riparian habitat and the water quality of the creek from increased erosion, contaminated storm runoff, introduction of non-native and invasive plant species, disturbance of wildlife, and loss of riparian plant and animal habitat. The sensitive habitats found in the stream and downstream of the project sites could be adversely impacted by the proposed project through the introduction of excavated materials, chemicals, debris or sediment into the stream. The proposed developments will result in an increase in impervious surfaces, which in turn decreases the infiltrative function and capacity of existing permeable land on site. The reduction in permeable space leads to an increase in the volume and velocity of stormwater runoff that can be expected to leave the site. Further, pollutants commonly found in runoff associated with residential use include petroleum hydrocarbons including oil and grease from vehicles; heavy metals; synthetic organic chemicals including paint and household cleaners; soap and dirt from washing vehicles; dirt and vegetation from yard maintenance; litter; fertilizers, herbicides, and pesticides; and bacteria and pathogens from animal waste. The discharge of these pollutants to coastal waters can cause cumulative impacts such as: eutrophication and anoxic conditions resulting in fish kills and diseases and the alteration of aquatic habitat, including adverse changes to species composition and size; excess nutrients causing algae blooms and sedimentation increasing turbidity which both reduce the penetration of sunlight needed by aquatic vegetation which provide food and cover for aquatic species; disruptions to the reproductive cycle of aquatic species; and acute and sublethal toxicity in marine organisms leading to adverse changes in reproduction and feeding behavior. These impacts reduce the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes and reduce optimum populations of marine organisms and have adverse impacts on human health.

Therefore, in order to find the proposed developments consistent with the water and marine resource policies of the Coastal Act, the Commission finds it necessary to require the incorporation of Best Management Practices designed to control the volume, velocity and pollutant load of stormwater leaving the developed sites. Critical to the successful function of post-construction structural BMPs in removing pollutants in stormwater to the Maximum Extent Practicable (MEP), is the application of appropriate design standards for sizing BMPs. The majority of runoff is generated from small storms because most storms are small. Additionally, storm water runoff typically conveys a disproportionate amount of pollutants in the initial period that runoff is generated during a storm event. Designing BMPs for the small, more frequent storms, rather than for the large infrequent storms, results in improved BMP performance at lower cost.

The Commission finds that sizing post-construction structural BMPs to accommodate (infiltrate, filter or treat) the runoff from the 85th percentile storm runoff event, in this case, is equivalent to sizing BMPs based on the point of diminishing returns (i.e. the BMP capacity beyond which, insignificant increases in pollutants removal (and hence water quality protection) will occur, relative to the additional costs. Therefore, the Commission requires the selected post-construction structural BMPs be sized based on design criteria specified in **Special Condition No. Three (3) of CDPs 4-06-092 and 4-06-093**, and finds this will ensure the proposed developments will be designed to minimize adverse impacts to coastal resources, in a manner consistent with the water and marine policies of the Coastal Act.

Furthermore, interim erosion control measures implemented during construction and post construction landscaping will serve to minimize the potential for adverse impacts to water quality resulting from drainage runoff during construction and in the post-development stage. Therefore, the Commission finds that **Special Condition Eleven (11) of CDPs 4-06-092 and 4-06-093** is necessary to ensure the proposed developments will not adversely impact water quality or coastal resources. Additionally, Special Condition Eleven (11) of CDPs 4-06-092 and 4-06-093 requires all graded areas to be replanted with native vegetation so as to reduce erosion and sediment laden runoff into coastal waterways.

To ensure that water quality impacts to Encinal Creek will be minimized during the proposed construction activities within and adjacent to Encinal Creek, the Commission finds it necessary to require the applicant of CDP 4-06-092 to implement the construction best management practices detailed in **Special Condition No. Fourteen (14) of CDP 4-06-092**. Furthermore, excavated materials that are placed in stockpiles are subject to increased erosion. In order to ensure that excavated material associated with Lot 3 will be properly removed and disposed in a timely manner, **Special Condition No. Twelve (12) of CDP 4-06-093** requires the applicant to properly contain, secure, and remove all debris and excavated material from the site.

The applicant of CDP 4-06-092 proposes to replace the existing corrugated metal pipe culvert/Arizona-type stream crossing where the proposed access road crosses the east fork of Encinal Canyon Creek with a 24-ft. wide, 24-ft. long, pre-fabricated single span bridge with concrete footings. The abutments will be located outside of the stream banks. In addition, the applicant of CDP 4-06-092 proposes to remove an existing concrete box culvert stream crossing from the west fork of Encinal Creek on Lot 2, as well as remove an existing small tool shed and a 675 sq. ft. dilapidated miniature house structure adjacent to Encinal Creek on Lot 2. Removal of the box culvert stream crossing and existing structures, and replacement of the Arizona-type stream crossing with a bridged crossing will reduce impacts to the streams and their associated riparian habitat. The Commission has consistently required road crossings of streams to be accomplished through bridging, where feasible. Currently, the existing stream crossing on the east fork of Encinal Creek (along access road) is impacting a 400 sq. ft. area of stream, and the existing stream crossing on the west fork of Encinal Creek (Lot 2) is impacting an approximately 100 sq. ft. area of stream. The proposed project will

eliminate these permanent impacts to stream habitat. While the improvements will ultimately improve stream flow and riparian habitat value, there will still be temporary impacts to the stream's riparian vegetation from the removal of the existing structures and then construction of the bridge on the east fork. A total of about 50 sq. ft. surrounding each creek crossing will be temporarily impacted during crossing removal and construction of the bridge on the east fork. In addition, proposed removal of the existing small tool shed and miniature house structure adjacent to Encinal Creek on Lot 2 will result in a temporary impact to the riparian ESHA corridor. Therefore, in order to ensure that adverse effects to riparian habitat and water quality from increased erosion and sedimentation are minimized to the maximum extent feasible, the Commission finds that **Special Condition No. Thirteen (13) of CDP 4-06-092**, Riparian Habitat Revegetation, is necessary. Specifically, Special Condition 13 requires that prior to issuance of the permit, the applicant shall submit, for the review and approval of the Executive Director, a detailed Riparian Habitat Revegetation Plan, prepared by a biologist or environmental resource specialist with qualifications acceptable to the Executive Director, for 1) the area of the access road stream crossing replacement, and 2) the area of the box culvert and structure removal on the subject parcel, where riparian vegetation will be temporarily disturbed or removed due to construction and/or demolition activities using native plant species that are appropriate for a riparian/oak woodland habitat area. All invasive and non-native plant species shall be removed from the stream channel/riparian vegetation corridor within the Revegetation Plan area. In addition, Special Condition 13 also requires the applicant to implement a five year monitoring program to ensure the success of the replanting.

The proposed developments include the installation of on-site septic systems to serve the residences. The applicants' geologic consultants performed percolation tests and evaluated the proposed septic systems. The report concludes that the sites are suitable for the septic systems and there would be no adverse impact to the site or surrounding areas from the use of a septic system. Finally, the County of Los Angeles Environmental Health Department has given in-concept approval of the proposed septic systems, determining that the systems meet the requirements of the plumbing code. The Commission has found that conformance with the provisions of the plumbing code is protective of resources.

In conclusion, the project, as conditioned, will maintain the biological productivity and quality of coastal waters by minimizing adverse effects of waste water, controlling runoff, and minimizing erosion. Therefore, the Commission finds that, as conditioned, the project is consistent with Section 30231 of the Coastal Act.

E. Local Coastal Program

Section 30604 of the Coastal Act states:

> ***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 program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200).

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 to Chapter 3 policies of the Coastal Act. The preceding sections provide findings that the proposed projects will be in conformity with the provisions of Chapter 3 if certain conditions are incorporated into the projects and are accepted by the applicants. As conditioned, the proposed developments will not create adverse impacts and is found to be consistent with the applicable policies contained in Chapter 3. Therefore, the Commission finds that approval of the proposed developments, as conditioned, will not prejudice the County of Los Angeles' ability to prepare a Local Coastal Program for this area which is also consistent with the policies of Chapter 3 of the Coastal Act, as required by Section 30604(a).

F. California Environmental Quality Act

Section 13096(a) of the Commission's administrative 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 would substantially lessen any significant adverse effect that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed in detail above, project alternatives and mitigation measures have been considered and incorporated into the proposed projects. Five types of mitigation actions include those that are intended to avoid, minimize, rectify, reduce, or compensate for significant impacts of development. Mitigation measures required as part of these coastal development permits include the avoidance of impacts to ESHA through clustering structures, prohibiting development outside of the approved development area as required by the granting of an open space and conservation easement, removal of structures, and identifying an appropriate location for disposal of excess cut material. Mitigation measures required to minimize impacts include requiring drainage best management practices (water quality), interim erosion control (water quality and ESHA), native tree and nesting bird protection (ESHA), limiting lighting (ESHA), requiring future improvements to be considered through a CDP, and employing construction best management practices (water quality). Finally, habitat impact and oak tree mitigation conditions are a measure required to compensate for impacts to ESHA. As conditioned, there are no feasible alternatives or feasible

mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed projects, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

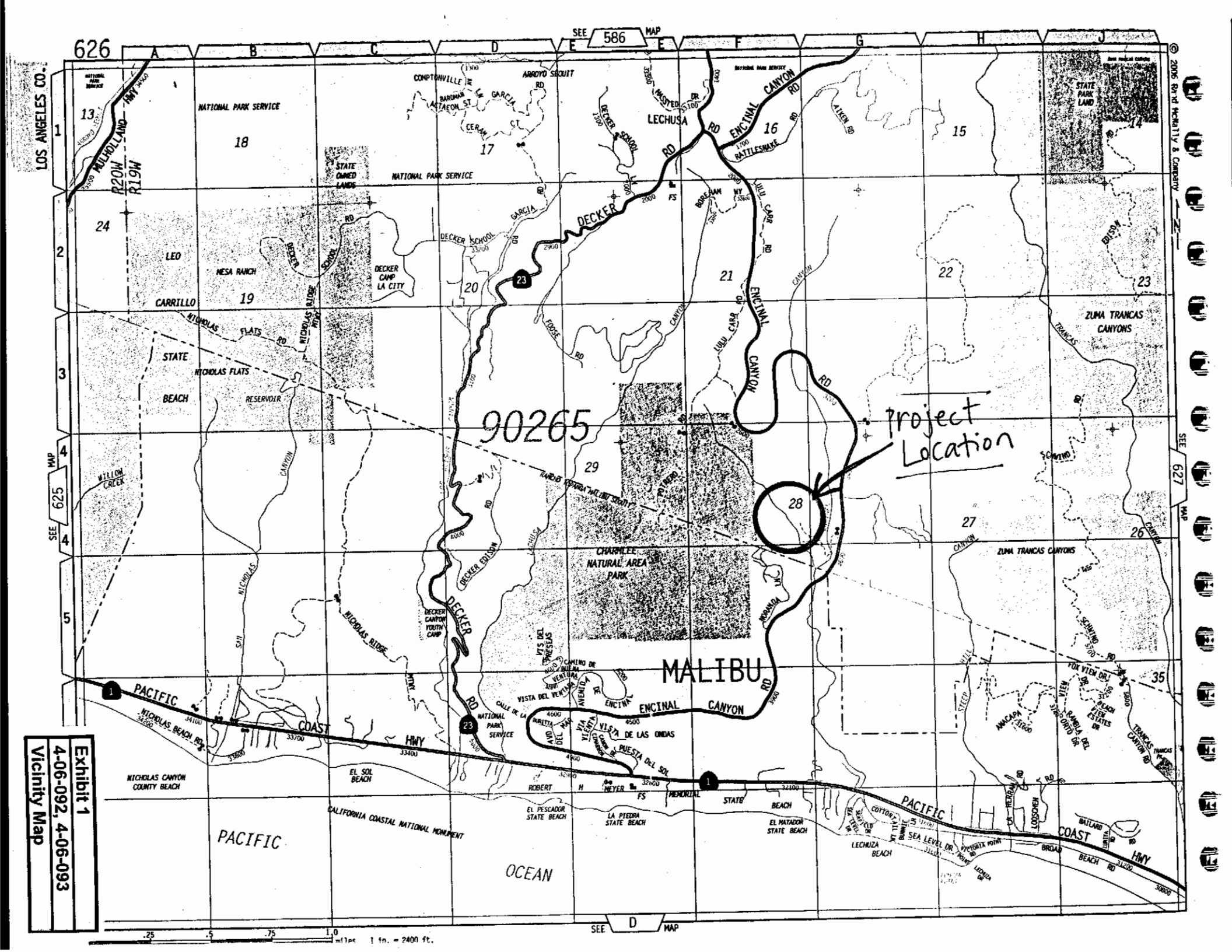


Exhibit 1
4-06-092, 4-06-093
Vicinity Map

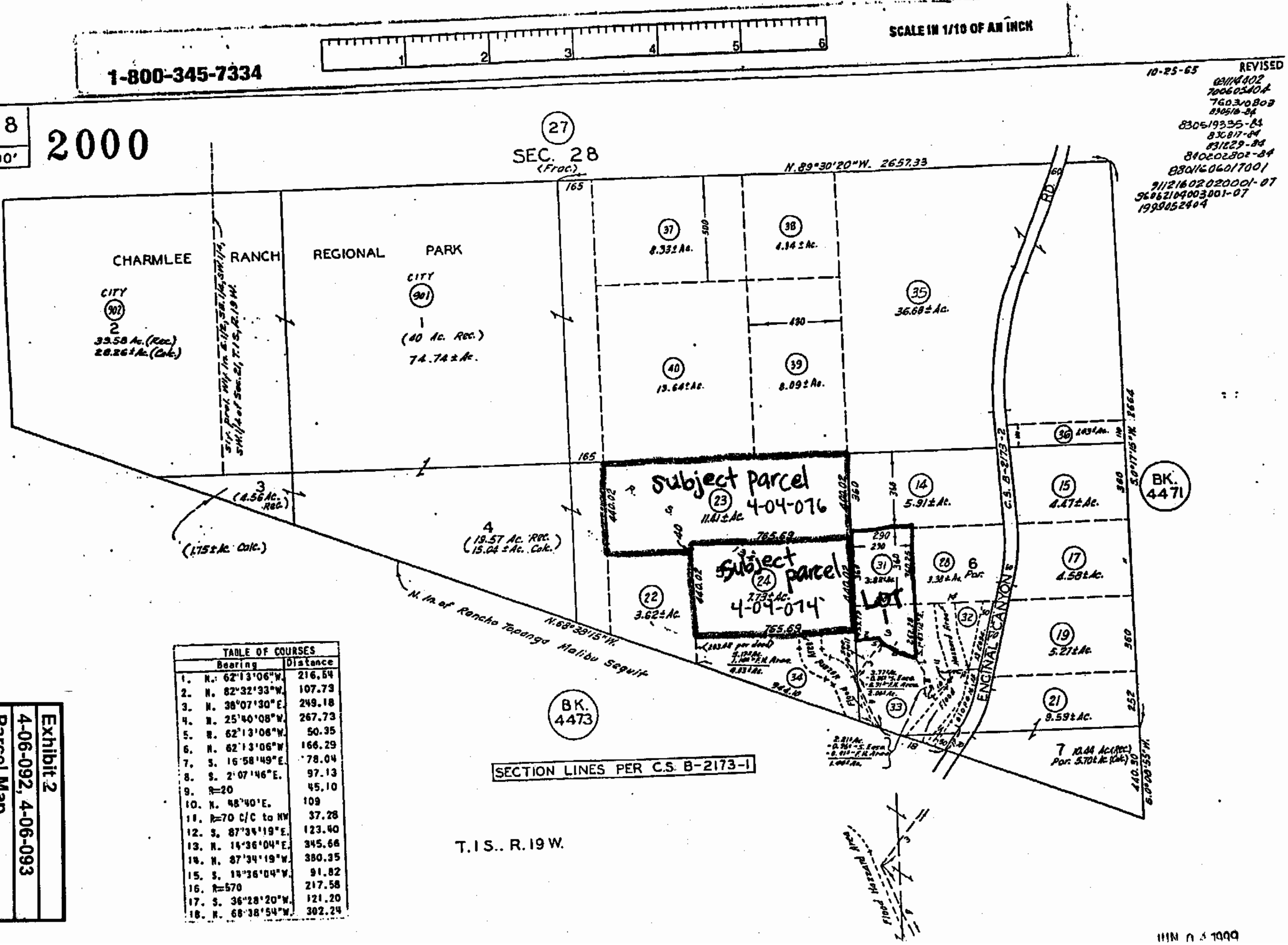


TABLE OF COURSES		
	Bearing	Distance
1.	N. 62°13'06"W.	216.54
2.	N. 82°32'33"W.	107.73
3.	N. 38°07'30"E.	249.18
4.	N. 25°40'08"W.	267.73
5.	N. 62°13'06"W.	50.35
6.	N. 62°13'06"W.	166.29
7.	S. 16°58'49"E.	78.04
8.	S. 2°07'46"E.	97.13
9.	R=20	45.10
10.	N. 48°40'E.	109
11.	R=70 C/C to NW	37.28
12.	S. 87°34'19"E.	123.40
13.	N. 14°36'04"E.	345.66
14.	N. 87°34'19"W.	380.35
15.	S. 14°36'04"W.	91.82
16.	R=570	217.58
17.	S. 36°28'20"W.	121.20
18.	N. 68°38'54"W.	302.24

Exhibit 2
4-06-092, 4-06-093
Parcel Map

PROJECT DESCRIPTION

LEGAL DESCRIPTION:

Parcels 1,2 and 3 of portions of Gov't Lots 5&6, Section 20, TWP 1 South, RGE 19 West, S.B.M. in the County of Los Angeles, in the State of California.

GRADING: 4,150 cu. yds. (CUT)
1,600 cu. yds. (FILL)

3533 ENCINAL CANYON ROAD

C of C: 88-215026
LOT AREA: 11.1 AC.
RESIDENCE AREA: 5,279 S.F.

3535 ENCINAL CANYON ROAD

83-10717661
7.7 AC.
EA: 5,953 S.F.

LAN

T= 60 - 0'

LAWS RESIDENCES
3533 & 3535 ENCINAL CYN RD.
MALIBU, CA 90265

BARSOCCHINI & ASSOCIATES, INC.
ARCHITECTS
MICHAEL S. BARSOCCHINI A.I.A. - (310)456-3625
30502 COAST VIEW DRIVE MALIBU, CA 90265

PLOT PLAN
PARCELS 2,3

A-5

Exhibit 3
4-06-092, 4-06-093
Site Plan

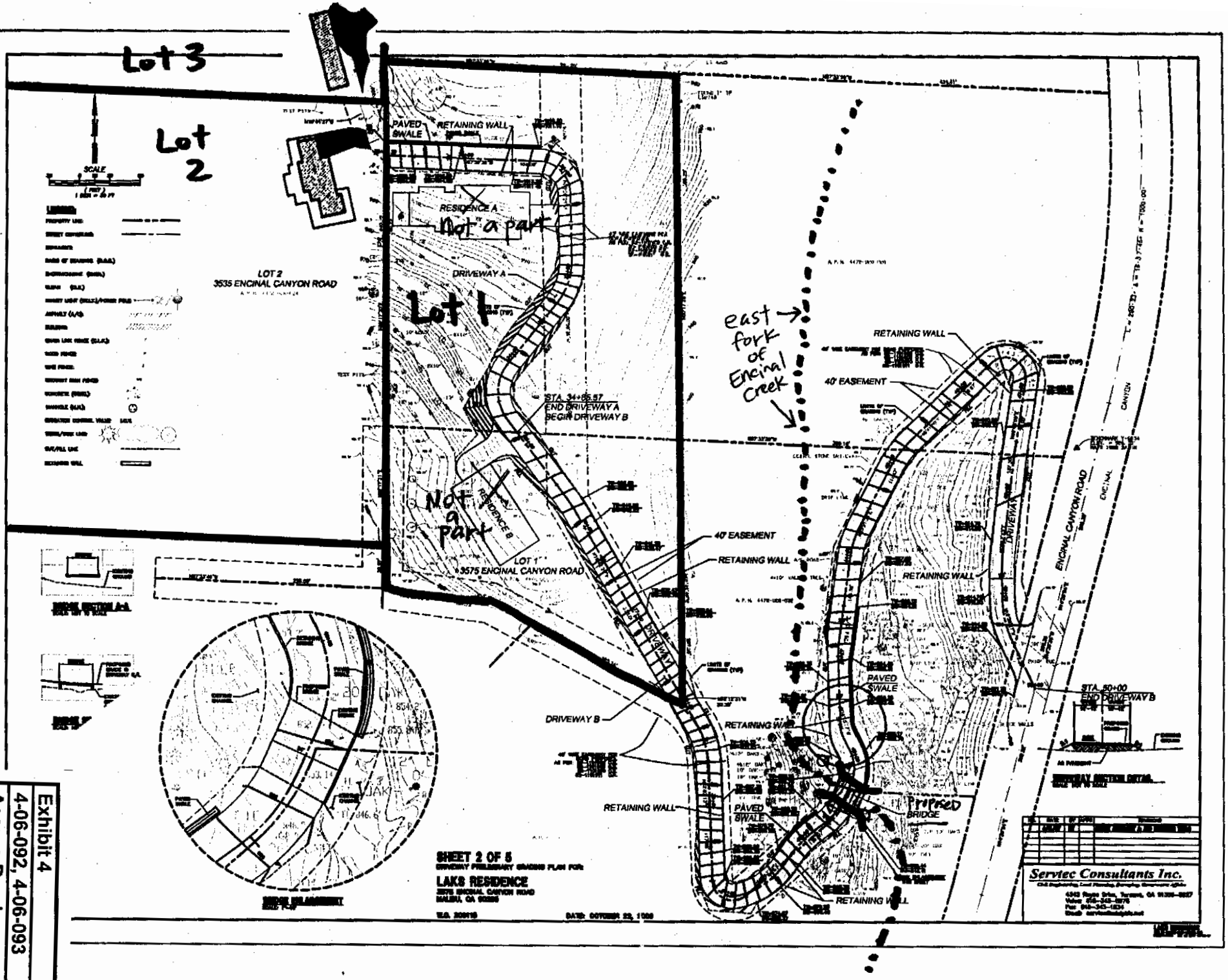
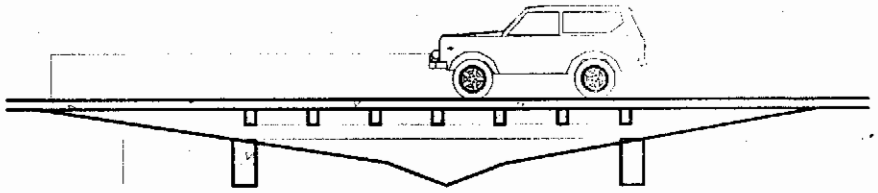
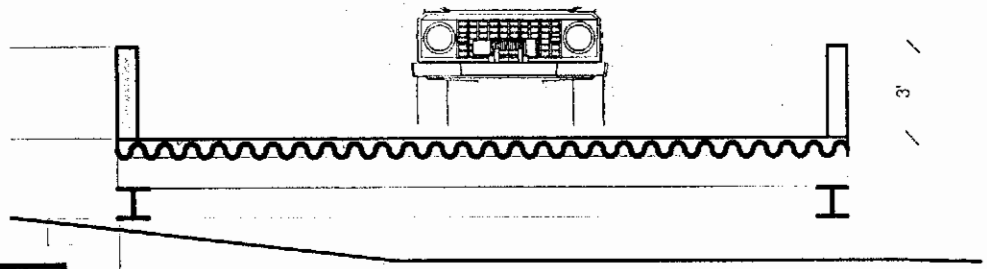


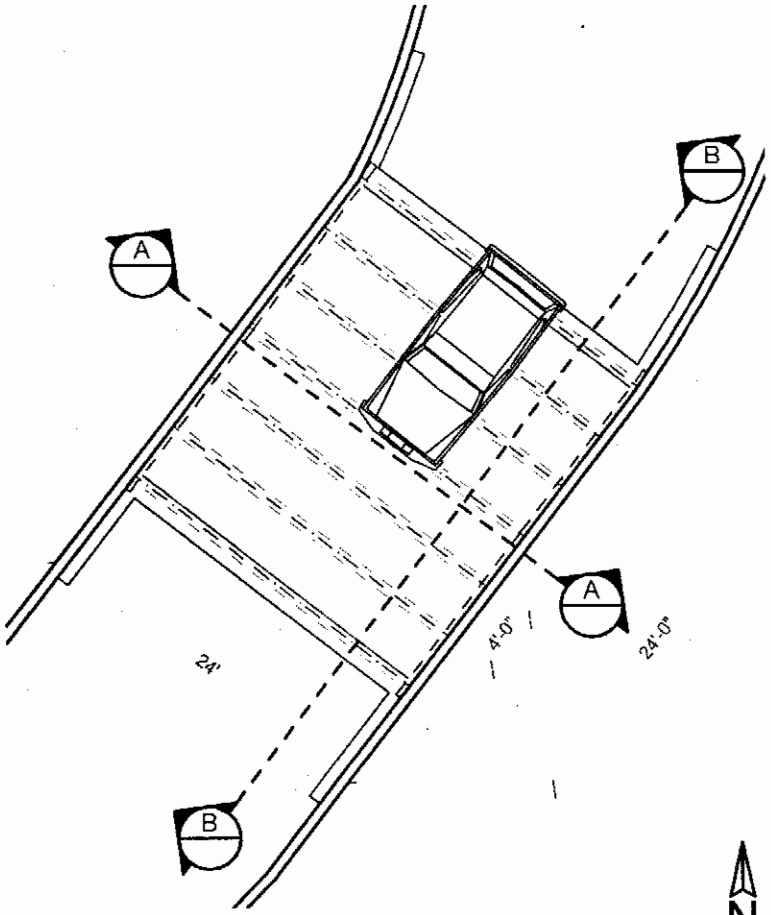
Exhibit 4
4-06-092, 4-06-093
Access Road
Grading Plan



B SECTION BB 1/8" = 1'-0"



SECTION AA 1/4" = 1'-0"



1. FLOOR PLAN 1/8" = 1'-0"

Dr. Laks Bridge
3575 Encinal Canyon Rd.
MALIBU, CA 90265

BARSOCCHINI & ASSOCIATES, INC.
MICHAEL E. BARSOCCHINI, A.I.A. (310) 456-3825
3502 COAST VIEW DRIVE - MALIBU, CA 90265

PLAN & SECTIONS

B-001

Exhibit 5
4-06-092, 4-06-093
Bridge Plans

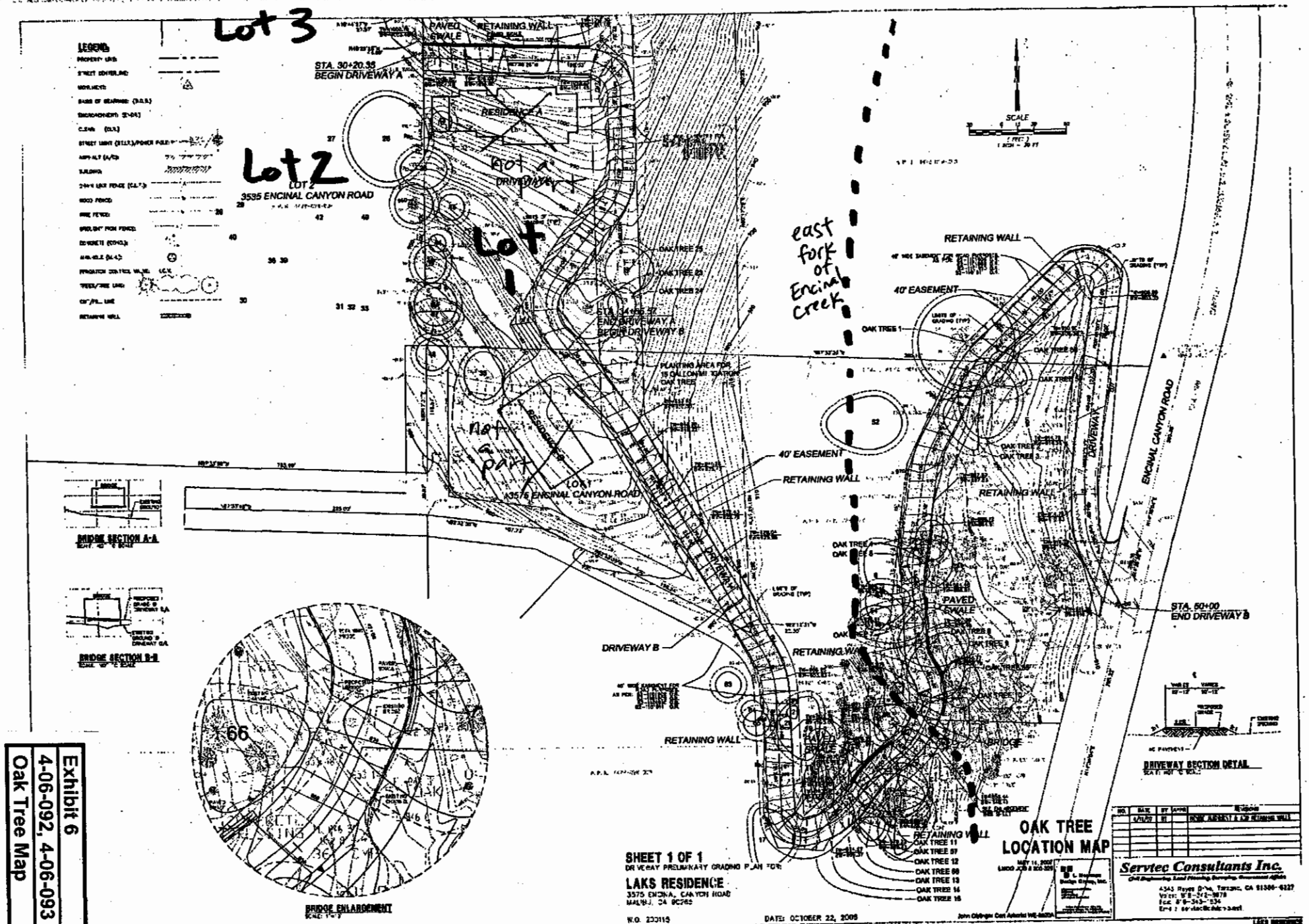
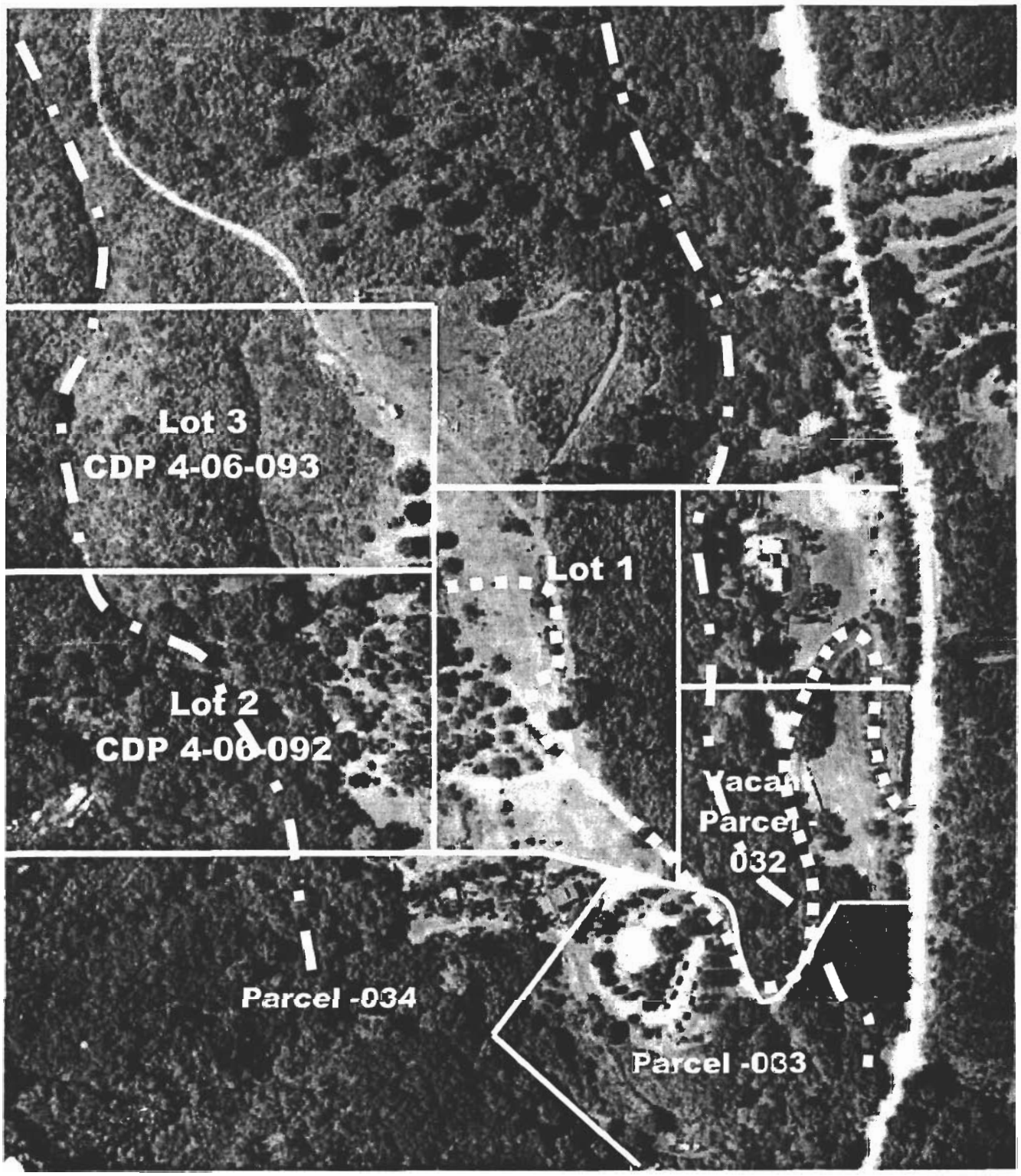


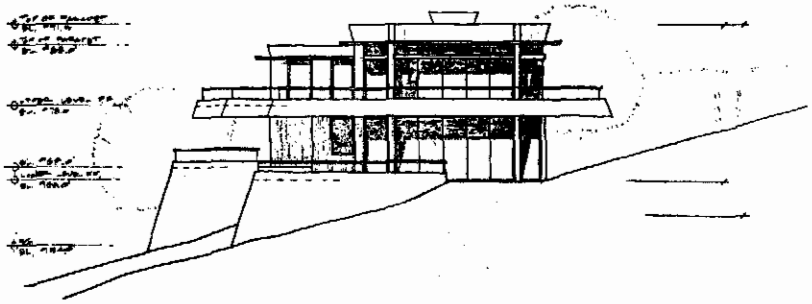
Exhibit 6
4-06-092, 4-06-093
Oak Tree Map



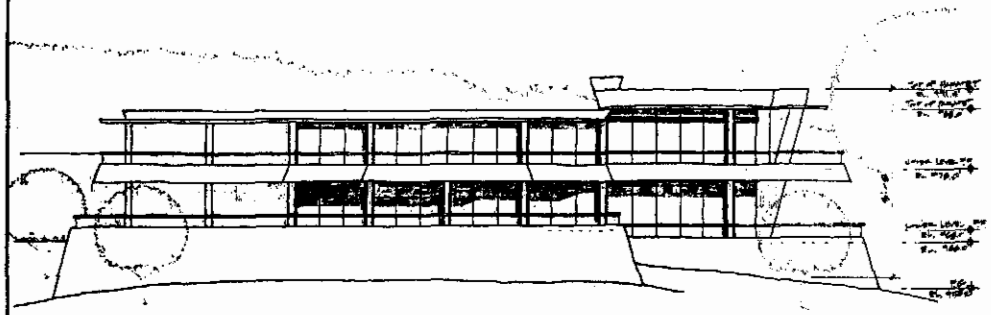
(2001 aerial)

Parcel Boundaries
Encinal Creek
Access Road

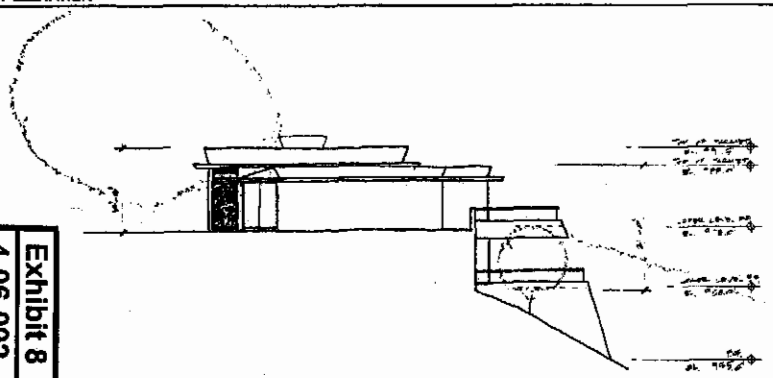
Exhibit 7
4-06-092, 4-06-093
Aerial View



SOUTH ELEVATION



WEST ELEVATION



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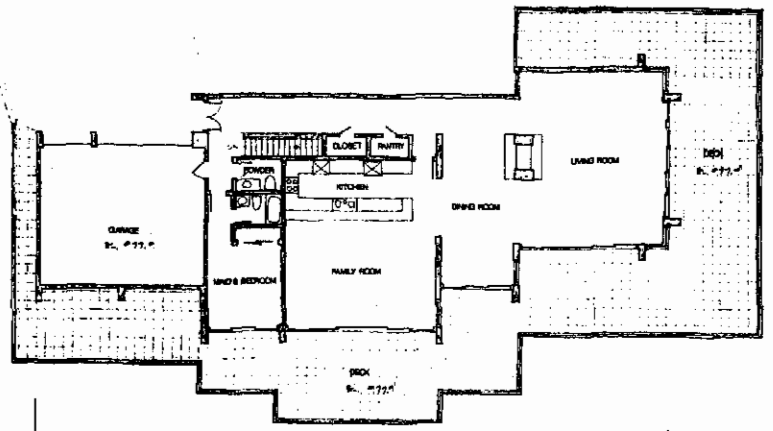
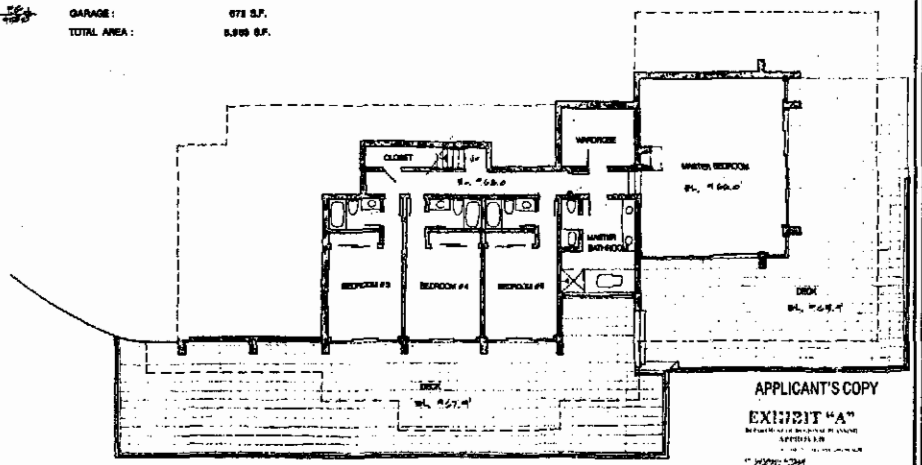


UPPER LEVEL FLOOR PLAN

AREA TABULATION

UPPER LEVEL :	2,908 S.F.
LOWER LEVEL :	2,473 S.F.
RESIDENCE TOTAL :	5,381 S.F.
GARAGE :	673 S.F.
TOTAL AREA :	6,054 S.F.



LOWER LEVEL FLOOR PLAN

APPLICANT'S COPY

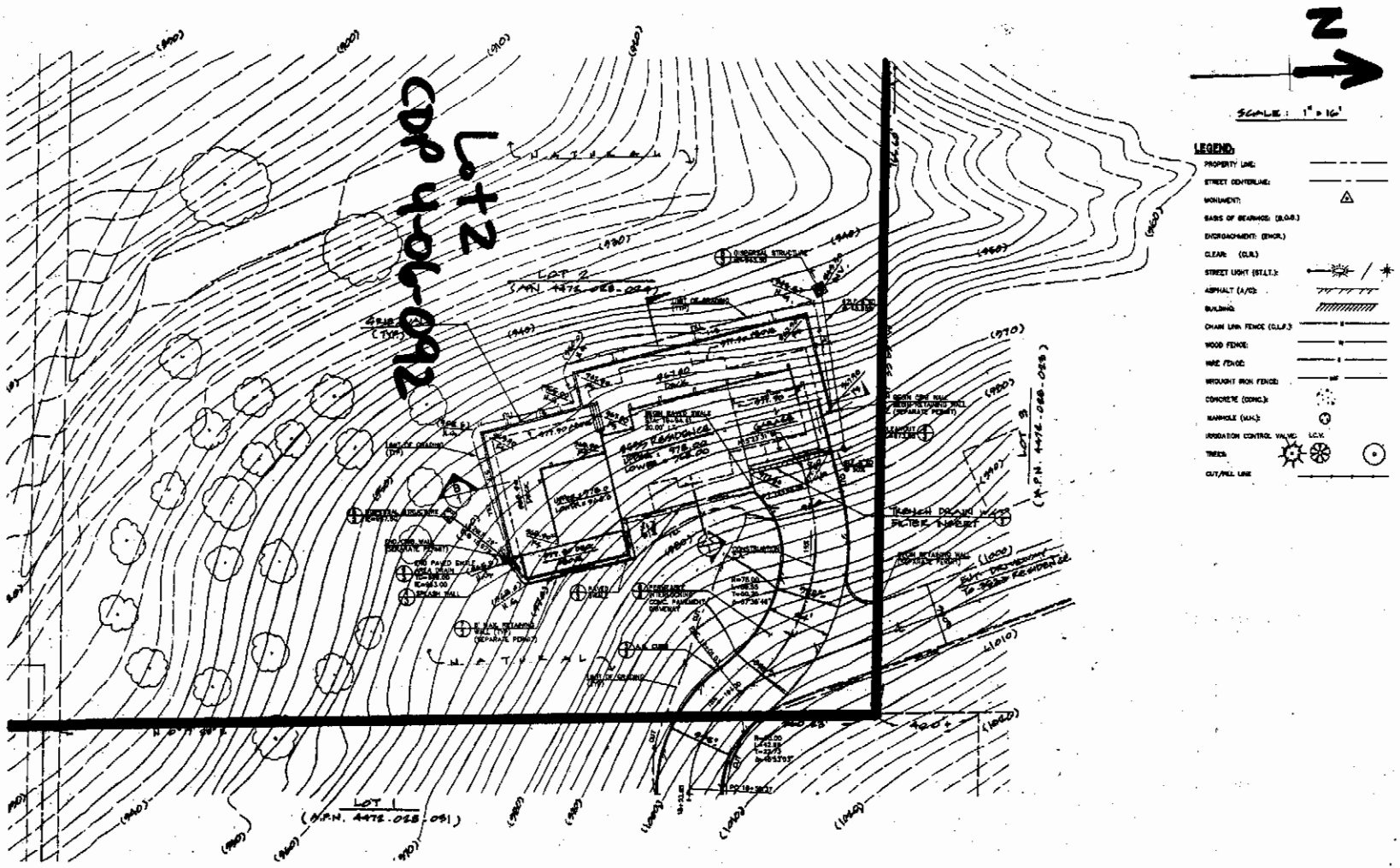
EXHIBIT "A"

A SINGLE FAMILY RESIDENCE FOR: DR. HILLEL LAKS
3535 ENCINAL CYN RD.
MALIBU, CA 30265

BARSOCCHINI & ASSOCIATES, INC.
ARCHITECTS
MICHAEL E. BARSOCCHINI, A.I.A. - (310) 456-3623
3302 COAST VIEW DRIVE - MALIBU, CA 90265

A-3

Exhibit 8
4-06-092, 4-06-093
Lot 2 Floor Plans and Elevations



SHEET 2 OF 4
GRADING AND DRAINAGE PLAN FOR:

DR. HILLEL LAKS
3535 ENCINAL CANYON ROAD
MALIBU, CA 90265

W.O. 200118 DATE: JANUARY 11, 2005

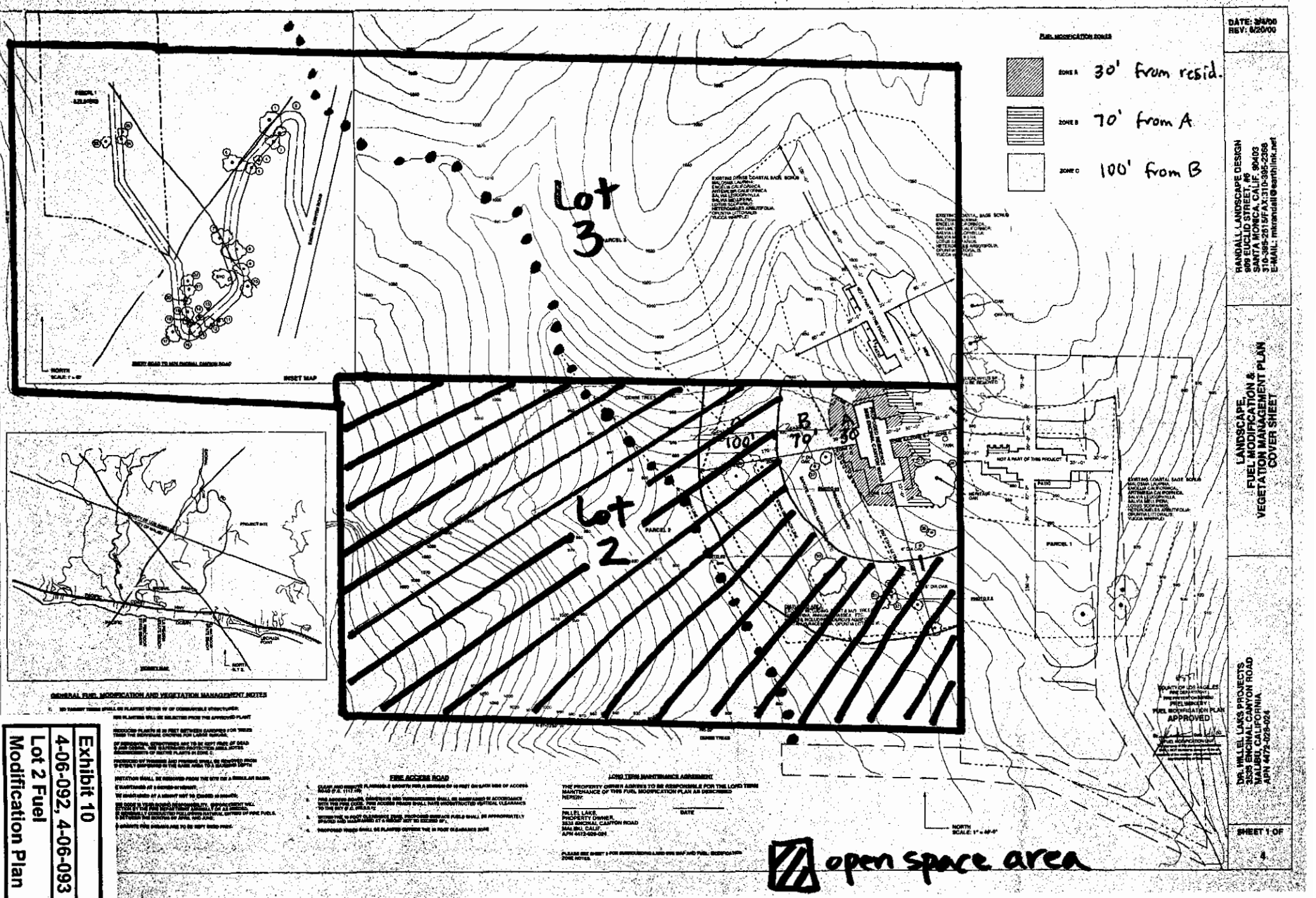
Servtec Consultants Inc.
Civil Engineering, Land Planning, Surveying, Construction Affairs
THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION

NO.	DATE	BY	APPR	REVISIONS

Servtec Consultants Inc.
Civil Engineering, Land Planning, Surveying, Construction Affairs
4343 Reyes Drive, Torzana, CA 91356-5227
Voice: 818-342-8676
Fax: 818-343-1834
Email: servtec@adelphia.net

Exhibit 9
4-06-092, 4-06-093
Lot 2 Grading Plan

JAN 10 2006



DATE: 3/6/00
REV: 6/20/00

RANDALL LANDSCAPE DESIGN
909 EUCLID STREET, #6
SANTA MONICA, CALIF. 90403
310-395-2615/FAX:310-395-2366
E-MAIL: mkrandall@earthlink.net

LANDSCAPE, FUEL MODIFICATION & VEGETATION MANAGEMENT PLAN COVER SHEET

DR. HILLEL LAKS PROJECTS
3535 ENCINAL CANYON ROAD
MALIBU, CALIFORNIA
APN 4472-028-024

SHEET 1 OF 4

GENERAL FUEL MODIFICATION AND VEGETATION MANAGEMENT NOTES

FIRE ACCESS ROAD

LONG TERM MAINTENANCE AGREEMENT

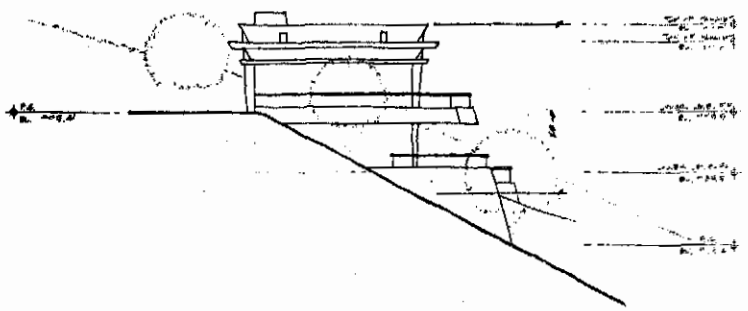
THE PROPERTY OWNER AGREES TO BE RESPONSIBLE FOR THE LONG TERM MAINTENANCE OF THIS FUEL MODIFICATION PLAN AS DESCRIBED HEREIN.

DATE

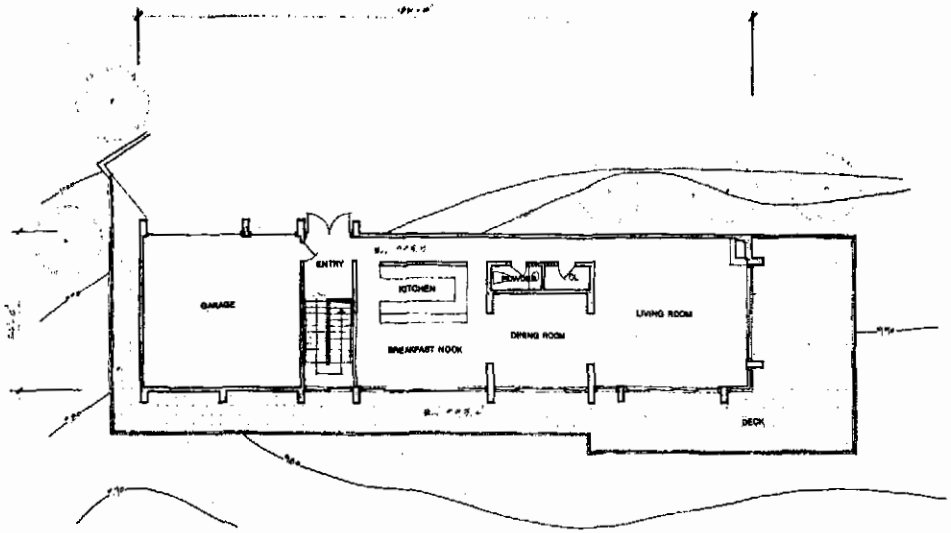
HILLEL LAKS
PROPERTY OWNER
3535 ENCINAL CANYON ROAD
MALIBU, CALIF.
APN 4472-028-024

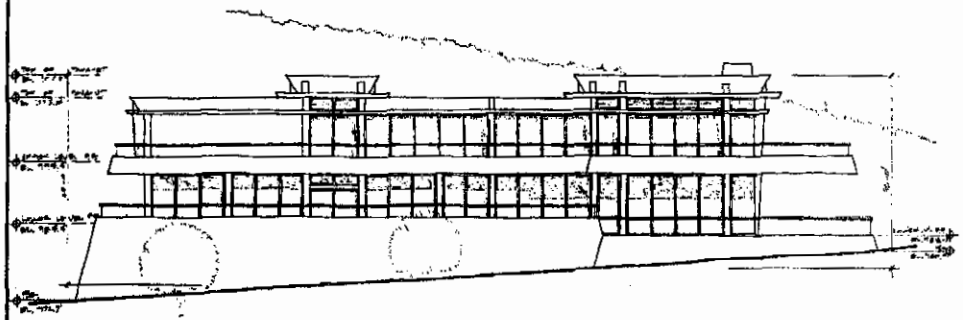
PLEASE SEE SHEET 3 FOR SURROUNDING LAND USE MAP AND FUEL MODIFICATION ZONE NOTES

Exhibit 10
4-06-092, 4-06-093
Lot 2 Fuel Modification Plan



NORTH ELEVATION



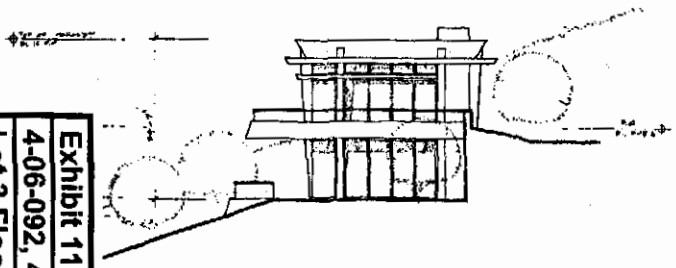


WEST ELEVATION

UPPER LEVEL FLOOR PLAN

AREA TABULATION

UPPER LEVEL :	2,001 S.F.
LOWER LEVEL :	2,576 S.F.
RESIDENCE TOTAL :	4,577 S.F.
GARAGE :	702 S.F.
TOTAL AREA :	5,279 S.F.



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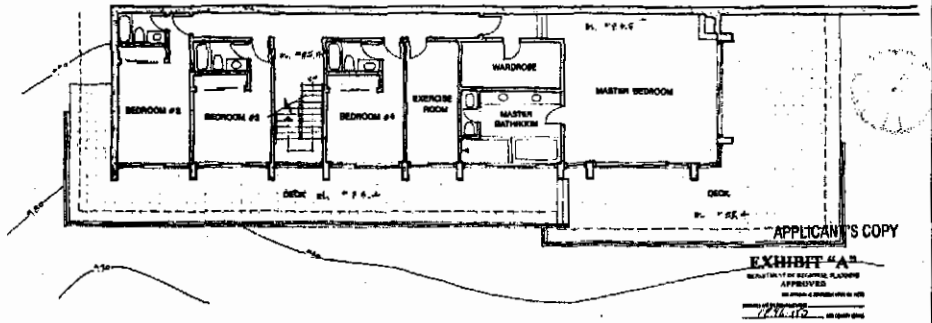


LOWER LEVEL FLOOR PLAN

APPLICANT'S COPY

EXHIBIT "A"

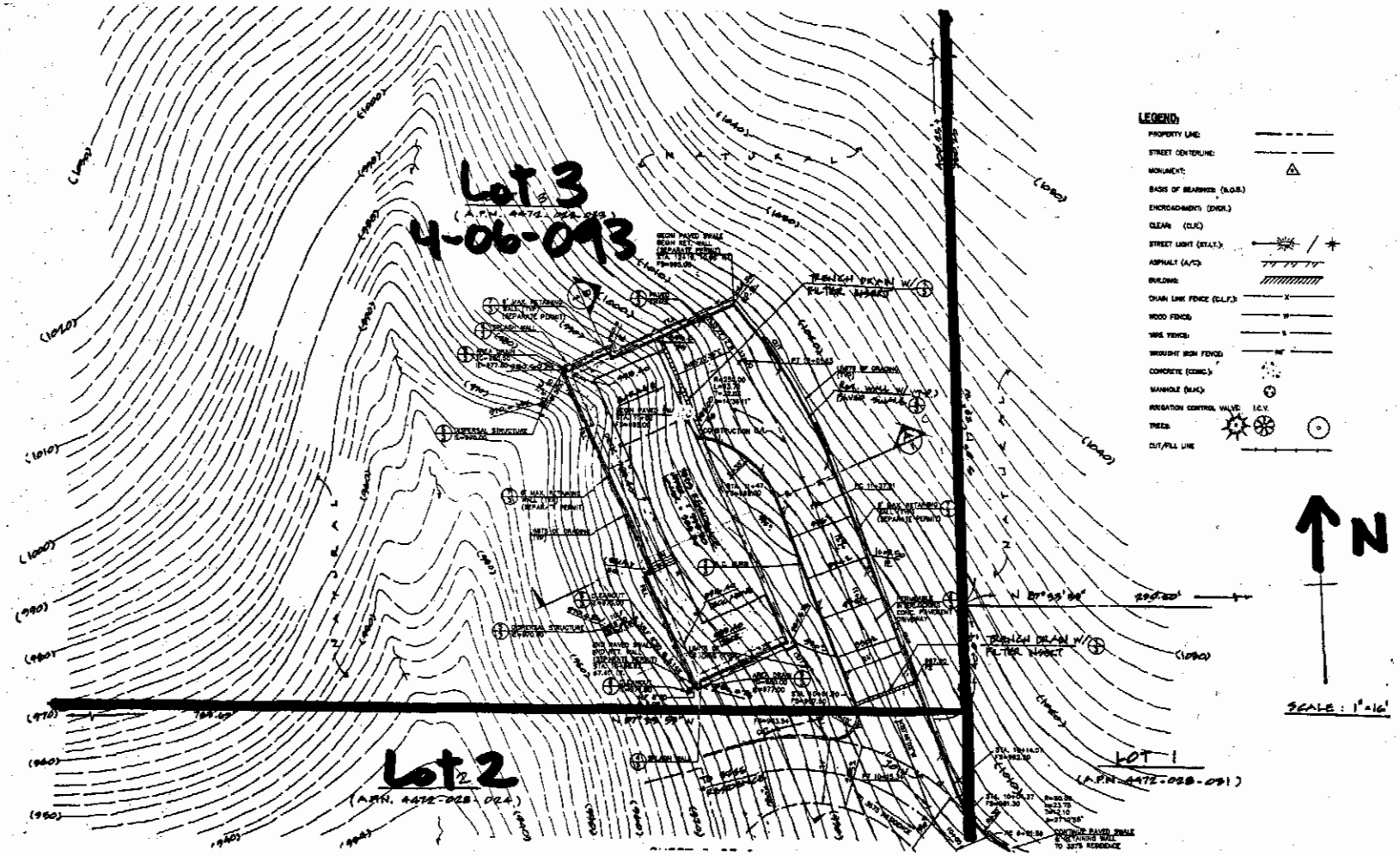
APPROVED

BARSOCCHINI & ASSOCIATES, INC.
ARCHITECTS
MICHAEL E. BARSOCCHINI, A.I.A. · (310) 456-3625
3502 COAST VIEW DRIVE · MALIBU, CA 90265

A SINGLE FAMILY RESIDENCE FOR: DR. HILLEL LAKS
3533 ENCINAL CYN RD.
MALIBU, CA 90265

A-2

Exhibit 11
4-06-092, 4-06-093
Lot 3 Floor Plans and Elevations



NO.	DATE	BY	APPR	REVISIONS

SHEET 2 OF 4
GRADING AND DRAINAGE PLAN FOR:

DR. HILLEL LAKS
3533 ENCINAL CANYON ROAD
MALIBU, CA 90265

W.O. 200117 DATE: JANUARY 10, 2005

Servtec Consultants Inc.
Civil Engineering, Land Planning, Surveying, Government Affairs

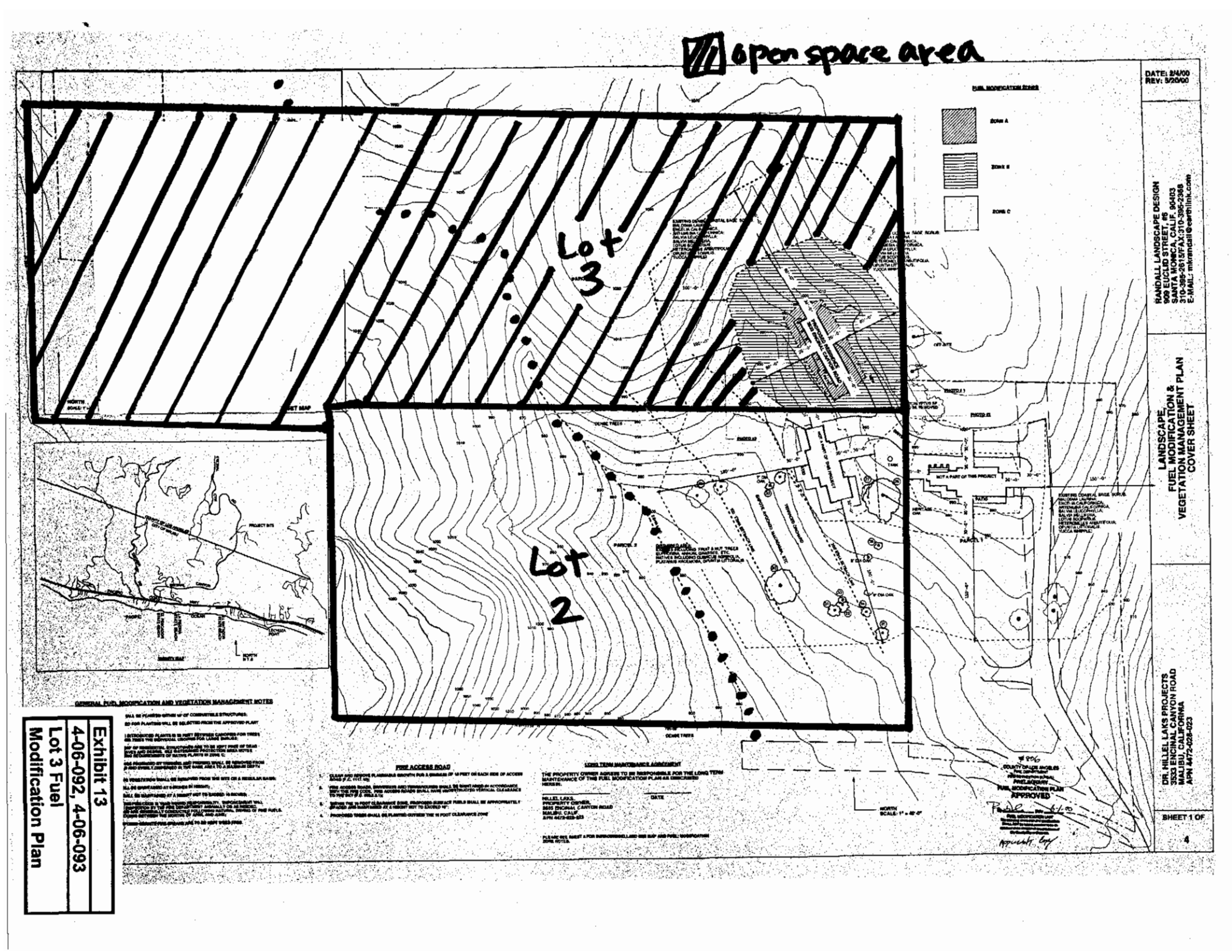
THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION

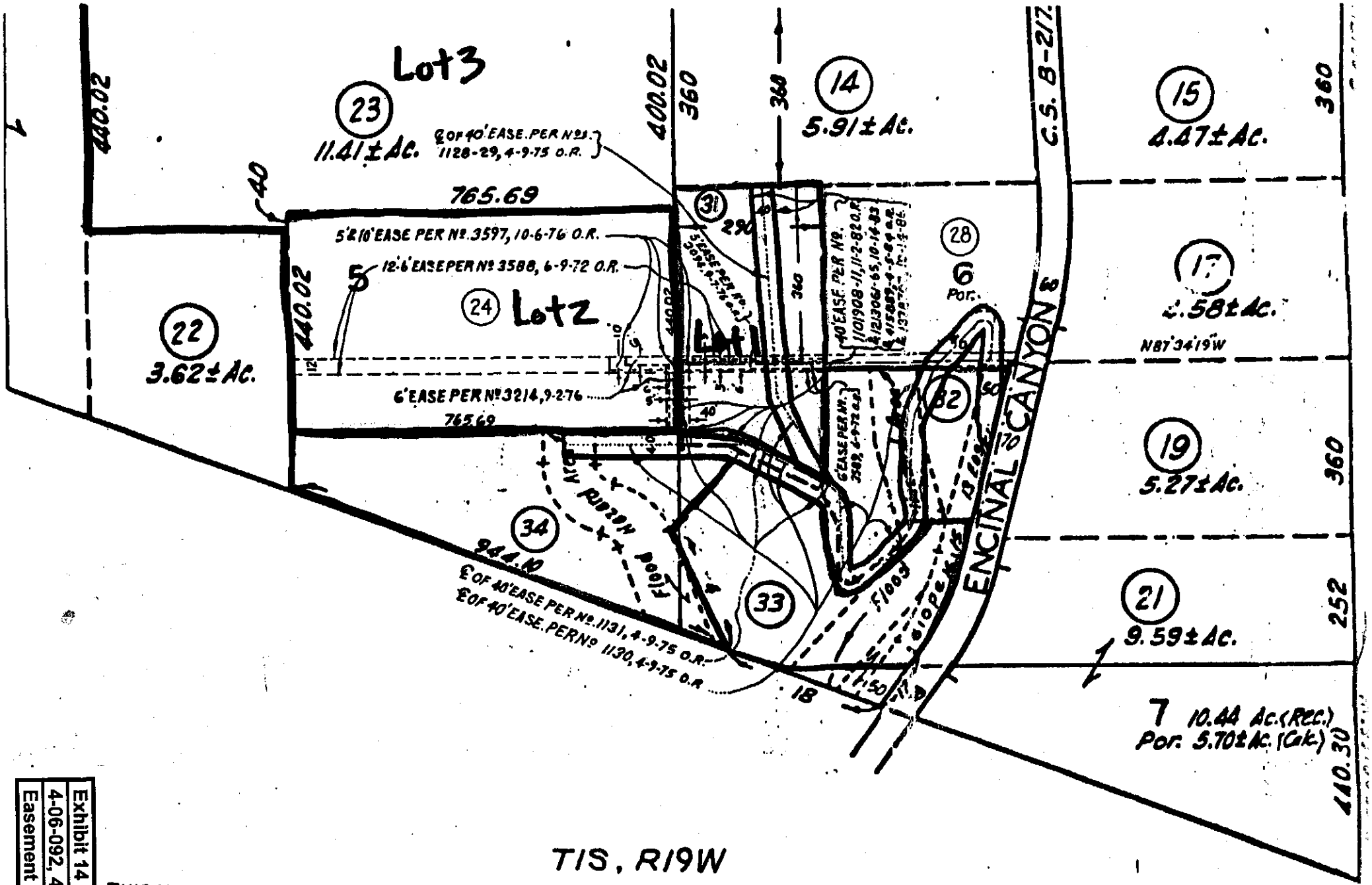
Kenneth E. Wormeck, RCE# 26657 Date

Servtec Consultants Inc.
Civil Engineering, Land Planning, Surveying, Government Affairs
4343 Reyes Drive, Torrance, CA 91336-5227
Voice: 818-342-8676
Fax: 818-343-1834
Email: servtec@delphi.net

Exhibit 12
4-06-092, 4-06-093
Lot 3 Grading Plan

JAN 10 2006


open space area
Lot 3
Lot 2
FUEL MODIFICATION ZONES
ZONE A
ZONE B
ZONE C
DATE: 8/4/00
REV: 9/20/00
RANDALL LANDSCAPE DESIGN
909 EUCLID STREET, #5
SANTA MONICA, CALIF. 90403
310-395-2815/FAX:310-395-2368
E-MAIL: mkrandall@earthlink.com
LANDSCAPE,
FUEL MODIFICATION &
VEGETATION MANAGEMENT PLAN
COVER SHEET
DR. HILLEL LAKS PROJECTS
3333 ENCINAL CANYON ROAD
MALIBU, CALIFORNIA
APN 4472-028-023
SHEET 1 OF
4
GENERAL FUEL MODIFICATION AND VEGETATION MANAGEMENT NOTES
FIRE ACCESS ROAD
LONG TERM MAINTENANCE AGREEMENT
THE PROPERTY OWNER AGREES TO BE RESPONSIBLE FOR THE LONG TERM MAINTENANCE OF THIS FUEL MODIFICATION PLAN AS DESCRIBED HEREIN.
HILLEL LAKS,
PROPERTY OWNER
3333 ENCINAL CANYON ROAD
MALIBU, CALIF.
APN 4472-028-023
DATE
NORTH
SCALE: 1" = 40'-0"
COUNTY OF LOS ANGELES
FIRE DEPARTMENT
PRELIMINARY
FUEL MODIFICATION PLAN
APPROVED
Exhibit 13
4-06-092, 4-06-093
Lot 3 Fuel
Modification Plan



T1S, R19W

THIS MAP MAY OR MAY NOT BE A SURVEY OF THE LAND DEPICTED HEREON. YOU SHOULD NOT RELY UPON IT FOR ANY PURPOSE OTHER THAN ORIENTATION TO THE GENERAL LOCATION OF THE PARCEL OR PARCELS DEPICTED. FIRST AMERICAN EXPRESSLY DISCLAIMS ANY LIABILITY FOR ALLEGED LOSS OR DAMAGE WHICH MAY RESULT FROM RELIANCE UPON THIS MAP.

First American Title Company of Los Angeles

Exhibit 14
4-06-092, 4-06-093
Easement Map

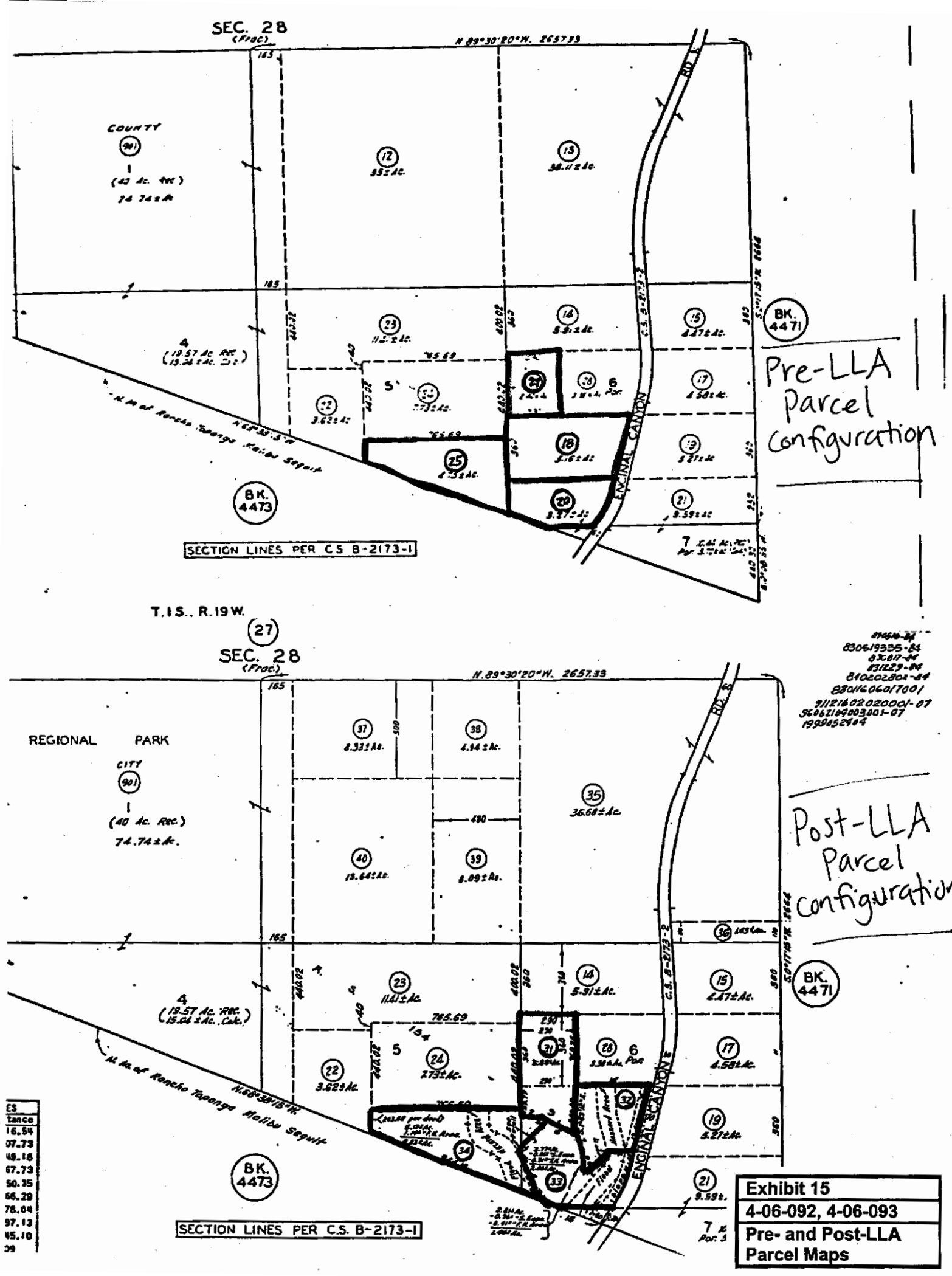
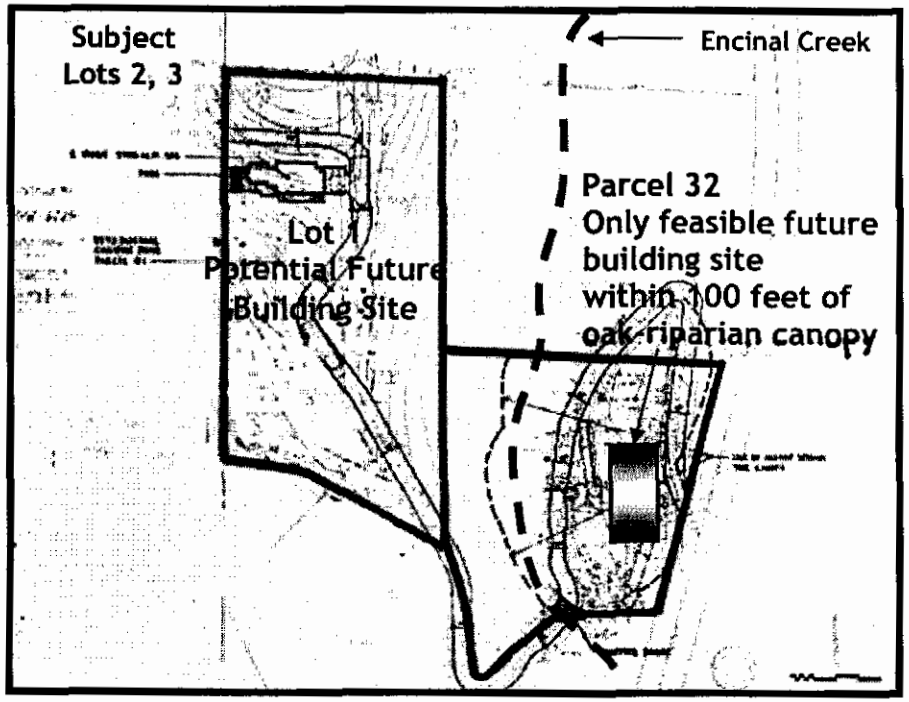


Exhibit 15
4-06-092, 4-06-093
Pre- and Post-LLA Parcel Maps

Existing Unpermitted
Parcel Configuration



CDP Application 4-06-133
Proposed Parcel Configuration

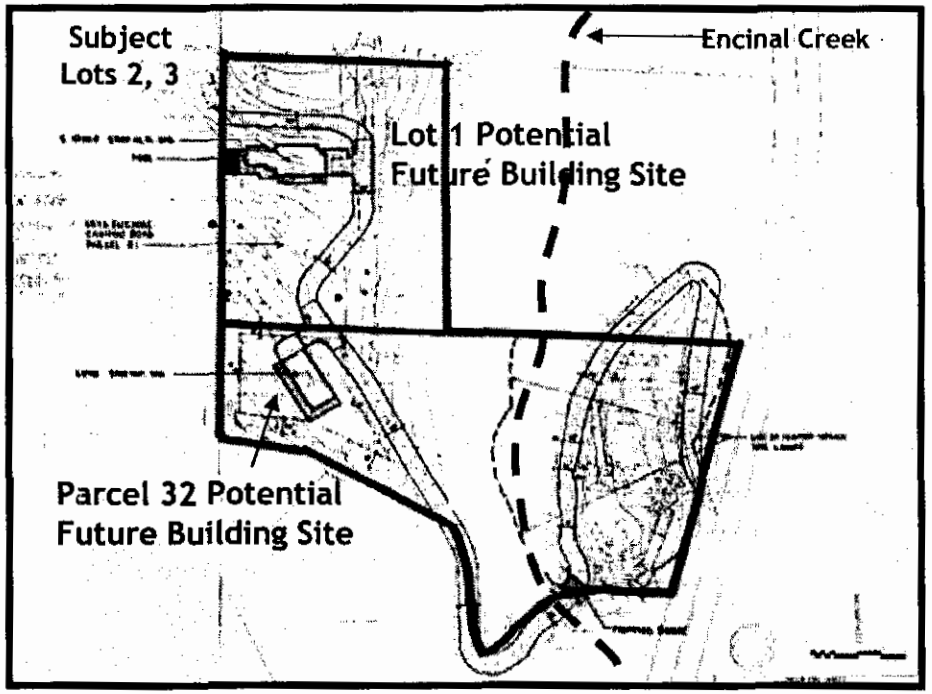


Exhibit 16
4-06-092, 4-06-093
4-06-133 Proposed
Lot 1 and Parcel 32
LLA Plan Comparison

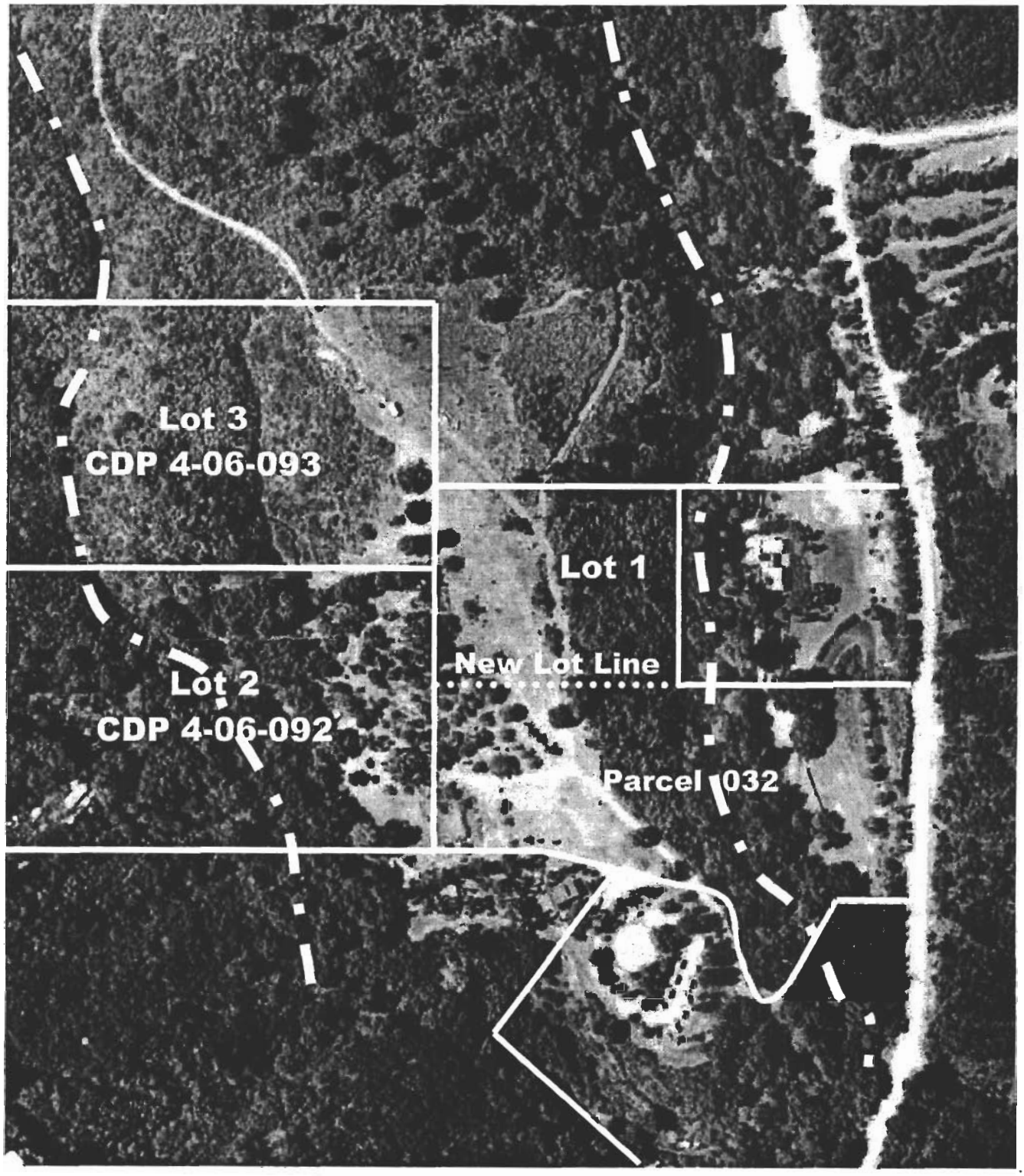


Exhibit 17
4-06-092, 4-06-093
4-06-133 Proposed Lot 1 and Parcel 32 LLA Plan - Aerial View