

## CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA  
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W12a



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REGULAR CALENDAR  
STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-97-11

Applicant: City of Carlsbad

Agent: Sherry Howard

Description: Completion of Reach 1 of Cannon Road to construct a 450 foot long bridge over Macario Canyon from its west rim to its east rim with two bridge abutments and four piers, requiring approximately 265,000 cubic yards of fill. Also, construction of Reach 2 from the east rim of Macario Canyon to El Camino Real, about 1.54 miles as a major arterial (104 ft. right-of-way) with two 12-foot lanes in each direction, a 18-foot wide landscaped median, two 8-foot wide bicycle lanes in addition to curb, gutter, streetlights, signage, drainage facilities, a 5 foot wide sidewalk and a 4.5 foot wide parkway. Also proposed is the construction of a bridge over Agua Hedionda Creek at El Camino Real with a 130 foot by 90 foot cast-in-place reinforced concrete slab and reinforced steel bar, two bridge abutments and two piers; also proposed is a mitigation plan to mitigate project impacts to riparian habitat and brackish marsh.

Plan Designation	Open Space
Zoning	P-U, E-A

Site: Easterly extension of Cannon Road, extending from present terminus at west side of Macario Canyon to El Camino Real, Carlsbad, San Diego County.

STAFF NOTES:

Summary of Staff's Preliminary Recommendation:

Staff recommends approval of the project, subject to special conditions requiring project compliance with a revised mitigation plan and revised monitoring and maintenance provisions of the proposed mitigation sites, final plans indicating that development impacts to environmentally sensitive habitat within the construction corridor of Macario Canyon are minimized, that the project conform to the recommendations of the resource agencies, revegetation plans, erosion control plans and final staging plans. The revised plans will

assure the Commission that impacts to wetland and riparian resources resulting from proposed construction will be mitigated consistent with resource agency approvals and past Commission action. The erosion control plans will ensure that grading will not result in any sedimentation impacts to the downstream sensitive resources of Agua Hedionda Lagoon or Macario Canyon. The staging area plans will ensure that construction corridors and staging areas shall be located in a manner that has the least impact on biological resources of the area.

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Substantive File Documents: City of Carlsbad Certified Agua Hedionda Segment Land Use Plan; CDP #6-84-617; "Cannon Road: Reach 1 Final Environmental Impact Report" (City of Carlsbad EIR 87-2, March 21, 1989); CDP #6-89-195, CDP #6-97-10. Revised Macario Canyon Bridge Revegetation Plan, dated August 8, 1989; Maintenance and Monitoring Program for the Cannon Road Reach I Mitigation Plan, dated June 1990; Macario Canyon Bridge least Bell's Vireo Summary (undated), The Conceptual Wetlands Mitigation plan for Reaches 1 and 2 of the Cannon Road Extension Project, dated January 1997.

#### PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

##### I. Approval with Conditions.

The Commission hereby grants a permit for the proposed development, subject to the conditions below, on the grounds that the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

##### II. Standard Conditions.

See attached page.

##### III. Special Conditions.

The permit is subject to the following conditions:

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1. Wetland Mitigation/Restoration. Prior to the issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and written approval, a detailed wetland mitigation plan for all temporary and permanent impacts associated with the proposed project. The applicant shall prepare a detailed site plan of the wetland impact area(s), clearly delineating all areas of impact (temporary and

permanent), which shall identify the exact acreage of each impact so identified. The wetland mitigation plan shall also incorporate the following:

a. Identification of the required offsite mitigation site(s). Said mitigation shall occur on one or more of the following sites: the 3.31 acre site upland of Macario Canyon as identified in the City's Conceptual Wetlands Mitigation Plan for Reaches 1 and 2 of the Cannon Road Extension Project, dated January 1997, the .44 acre site on Kelly Ranch adjacent to El Camino Real, and 3.02 acres within the Agua Hedionda Preserve as identified in consultation with the California Department of Fish and Game. The proposed in-lieu fee payment for the above 3.02 acres is specifically not authorized. The applicant shall also submit a site plan of the mitigation site(s) which quantifies the existing wetland and upland areas of the property(ies), including those restored within the Agua Hedionda Preserve.

b. Preparation of the identified off-site mitigation area(s) such that all identified direct wetland impacts associated with the proposed development are mitigated, in-kind, at a minimum 3:1 for all identified impacts to Southern Willow Riparian Scrub and Riparian Scrub. Said mitigation shall only involve upland suitable for conversion to wetlands, and/or restoration as proposed in the Agua Hedionda Preserve area.

c. Plans for off-site mitigation at a replacement ratio of 1:1 for all brackish marsh and riparian vegetation shading impacts shall be required provided that mitigation is shown to be successful by the five year monitoring plan described below; otherwise, mitigation shall be provided at the ratio of 2:1 at the end of the five year monitoring period.

d. Plans for revegetation/mitigation at a replacement ratio of 1:1 for all temporary construction impacts to brackish marsh and riparian vegetation pursuant to Special Condition #7 below.

e. The applicant shall provide evidence in a form and content acceptable to the Executive Director, that the owner of all identified mitigation sites has executed irrevocable offers to dedicate to a public agency or private association acceptable to the Executive Director, an easement for habitat restoration, habitat maintenance, open space and habitat protection over any portion or all of the above properties. The easement shall:

1. Permit the applicant, its agents, and/or the accepting agency to enter the property, create and maintain habitat, revegetate portions of the area, and fence the newly created/revegetated area in order to protect such habitats.

2. Restrict all development, vegetation clearance, fuel modification and grading within the Environmentally Sensitive Habitat open space easement.

3. Permit the Coastal Commission staff to enter and inspect for purposes of determining compliance with Coastal Development Permit #6-97-11.

The easement area shall be described in metes and bounds. The offer shall be recorded free of prior liens and encumbrances which the Executive Director determines may affect

the interest being conveyed. The offer shall run with the land in favor of the People of the State of California, binding all successors and assigns, and shall be irrevocable for a period of 21 years, such period running from the date of recording.

f. Project compliance with the provisions and mitigation measures described in the following documents: Final Environmental Impact Report 87-2, dated March 21, 1989; Revised Macario Canyon Bridge Revegetation Plan, dated August 8, 1989; Maintenance and Monitoring Program for the Cannon Road Reach I Mitigation Plan, dated June 1990; Macario Canyon Bridge least Bell's Vireo Summary (undated); a December 12, 1991 summary letter regarding Cannon Road Reach 1 - Section 7 Negotiation; The Conceptual Wetlands Mitigation plan for Reaches 1 and 2 of the Cannon Road Extension Project, dated January 1997; Appendix A in the Corps 404 permit application for Cannon Road Reach 1, dated February 13, 1997; Appendix A in the Corps 404 permit application for Cannon Road Reach 2, dated February 13, 1997 and the Concurrent Option Mitigation Plan developed by the City of Carlsbad, dated January 15, 1998.

2. Monitoring Program. Prior to the issuance of the coastal development permit, the applicant shall submit for review and written approval of the Executive Director in consultation with the Department of Fish and Game, a detailed monitoring program designed by a qualified wetland biologist, applicable to all mitigation sites approved pursuant to Special Condition #1 above and acceptable to the Executive Director. Said monitoring program shall provide the following:

a. Submittal of evidence of the completion of the mitigation plan(s) addressed in Special Condition #1 above, through submittal of "as built" plans in substantial conformance with the final plans approved pursuant to Special Conditions #3.

b. Monitoring reports on the extent of coverage, rate of growth and species composition of all created wetland areas shall be submitted to the Executive Director on an annual basis for five years following project completion.

c. The monitoring program shall include provisions for augmentation and maintenance of the restoration efforts, including specific performance standards, designed to assure 90% coverage in a five year period. The program shall include criteria to be used to determine the quality and extent of the revegetation efforts, which shall include, but not be limited to, survival rates and species composition.

d. At the end of the five year period, a more detailed report prepared in conjunction with a qualified wetland biologist shall be submitted to the Executive Director. If the report indicates that the mitigation has been, in part, or in whole, unsuccessful, the applicant shall be required to submit a revised or supplemental mitigation program to compensate for those portions of the original program which were not successful. The revised mitigation program, if necessary, shall be processed as an amendment to their coastal development permit.

3. Final Plans/Conformance with Mitigation Measures. Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director for

review and written approval, final site, grading and drainage plans, i.e., construction drawings, in substantial conformance with the submitted preliminary plans and approved by the City of Carlsbad, which shall clearly delineate the construction corridor associated with the Macario Canyon bridge. Said plan shall indicate that the construction corridor is the minimum width necessary to construct the project and shall be developed by the City in consultation with Cal-Trans. Any proposed changes to the approved plan shall be reported to the Executive Director. No change to the plan shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

4. Least Bell's Vireo and Southwestern Willow Flycatcher Nesting. A survey for the presence of least Bell's vireo and Southwestern Willow Flycatcher shall be conducted prior to the commencement of construction. The survey shall be conducted by qualified biologists, and shall be consistent with United States Fish and Wildlife Service specifications for such studies. If no vireos or flycatchers are found, construction may commence. If vireos or flycatchers are found, all appropriate governmental agencies shall be notified, including but not limited to the California Coastal Commission, the California Department of Fish and Game and the U.S. Fish and Wildlife Service, and construction must cease until consultation with the U.S. Fish and Wildlife Service is concluded. In addition, if vireos or flycatchers are identified at the site, mitigation for impacts to vireo and flycatcher habitat consistent with that required under the United States Fish and Wildlife Service specifications for such studies shall be provided through an amendment to this permit or a separate coastal development permit.

5. Runoff Control. Prior to the issuance of a coastal development permit, the applicant shall submit a runoff control plan designed by a licensed engineer qualified in hydrology and hydraulics for those portions of the project which drain to Macario Canyon, Agua Hedionda Creek and the Agua Hedionda Lagoon floodplain which would assure no increase in peak runoff rate from the developed site over runoff that would occur from the existing undeveloped site, as a result of a ten-year frequency storm over a six-hour duration (10 year, 6 hour rainstorm). Discharge of storm flows shall not contribute to erosion. Energy dissipating measures at the terminus of the proposed outflow drains shall be constructed. The runoff control plan shall also include soil or sand filtration or its equivalent sufficient to trap oils and suspended solids, preventing them from entering the riparian and wetland areas located in Macario Canyon, Agua Hedionda Creek and the Agua Hedionda Lagoon floodplain. The runoff control plan, including supporting calculations, shall be submitted to, reviewed and approved in writing by the Executive Director. If meeting the above standards results in sediment control facilities such as desiltation or detention basins being required, an amendment to this permit or a separate coastal development permit shall be required.

6. Erosion Control. Prior to the issuance of the coastal development permit, the applicant shall submit final grading and erosion control plans which shall incorporate the following:

A. All permanent runoff and erosion control devices shall be developed and installed prior to or concurrent with any on-site grading activities.

B. All areas disturbed shall be stabilized in advance of the rainy season (October 1 to March 31 of each year). The use of temporary erosion control measures, such as berms, interceptor ditches, sandbagging, filtered inlets, debris basins, and silt traps shall be utilized in conjunction with plantings to minimize soil loss from the construction site.

7. Revegetation Plan. Prior to the issuance of the coastal development permit, the applicant shall submit a detailed revegetation plan indicating the type, size, extent and location of all plant materials, any proposed irrigation system and other landscape features to revegetate brackish marsh and riparian resources within Macario Canyon, Agua Hedionda Creek and the Agua Hedionda Lagoon floodplain, including the construction corridors of Macario Canyon and the Agua Hedionda Creek bridge crossing as well as all disturbed or manufactured steep slope areas, including the fill structure on the east side of Macario Canyon. Drought tolerant native plants compatible with adjacent natural vegetation shall be utilized to the maximum extent feasible to re-establish the area consistent with its present character. Said plan shall be submitted to, reviewed by and approved in writing by the Executive Director in consultation with the California Department of Fish and Game.

8. Staging Areas. Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director, for review and written approval, detailed plans incorporated into the construction bid documents, for the location of haul roads, construction corridors and staging areas. Construction corridors and staging areas shall be located in a manner that has the least impact on biological resources of the area, and shall be limited to existing disturbed areas and roadways to the greatest extent feasible. Encroachment into environmentally sensitive habitat areas shall not be permitted.

#### IV. Findings and Declarations.

The Commission finds and declares as follows:

The Commission finds and declares as follows:

1. Detailed Development Description and History. Completion of Reach 1 of Cannon Road to construct a 450 foot long bridge over Macario Canyon from its west rim to its east rim requiring approximately 265,000 cubic yards of fill. The proposed bridge would have four piers placed in wetland habitat to support the proposed structure. Also proposed is the construction of Reach 2 from the east rim of Macario Canyon to El Camino Real, about 1.54 miles. Road construction of the major arterial (104 ft. right-of-way) is proposed to travel northeasterly about 1.5 miles to its intersection with El Camino Real, an existing major arterial that serves as a portion of the coastal zone boundary within the City. The arterial will provide two 12-foot lanes in each direction, an 18-foot wide landscaped median, and two 8-foot wide bicycle lanes in addition to curb, gutter, streetlights, signage, drainage facilities, a 5 foot wide sidewalk and a 4.5 foot wide parkway. Reach 2 proposes the construction of a bridge over Agua Hedionda Creek at El Camino Real. The proposed bridge at El Camino Real would consist of a 130 foot by 90

foot cast-in-place reinforced concrete slab with a reinforced steel bar, two bridge abutments and two piers. The City proposes a mitigation plan to mitigate project impacts to riparian and brackish marsh impacts.

Cannon Road Reach 2 is the second segment of four segments in the City's plans to extend the roadway eastward four miles. Only Reaches 1 and 2 are within the coastal zone. Its present improved terminus is at Lego Drive east of and near I-5 in the Carlsbad Ranch, a multi-use project, including Legoland, on 447 acres located about 1/2 mile from the ocean between Palomar Airport Road and Cannon Road.

Design and planning for Cannon Road Reaches I and II were both initiated prior to 1985. Both private development and public works approaches to constructing the road were initiated. Due to the economic downturn in the late 1980s and early 1990s, both projects were postponed and existing approvals expired. Reach I of the Cannon Road alignment was approved in CDP #6-89-195; however, the permit expired. In CDP #6-97-10 (October, 1997), the Commission approved Phase 1 of Reach 1 for the grading of Cannon Road from its easterly terminus at Lego Drive to the westerly bridge abutment at Macario Canyon. Phase 2 of Reach 1 includes the construction of the proposed bridge over Macario Canyon.

Reach 2 of Cannon Road includes construction of the roadway from the eastern rim of Macario Canyon eastward to El Camino Real.

The alignment of Cannon Road Reach 2 was approved in CDP #6-84-617 in the Commission's approval of the Kelly Ranch Master Plan, another mixed use project on 433 acres located east of Agua Hedionda Lagoon. This project was not built but surcharge grading for Cannon Road was done. The Reach 2 project proposes to finish the grading that was previously approved which would include the removal of approximately 26,500 cubic yards of surcharge fill resulting in the ultimate construction of the road.

According to the City of Carlsbad, Reach 2 will generally be constructed as approved in CDP #6-84-617 with two exceptions. A slight modification has been made in the turn radius of the roadway and the Reach 2 bridge spanning Agua Hedionda Creek near El Camino Real would be 10 feet wider than originally planned. These changes would result in an additional .29 acres of impact to coastal sage scrub for the former and .14 acres of additional impact to riparian habitat for the latter. Because of these changes and the uncertain status of build-out of the Kelly Ranch project, the road project is being processed as a new permit. No upstream or downstream construction is proposed beyond the area impacted by the construction of the bridge spanning Agua Hedionda Creek. No temporary or permanent impacts to the wetlands beyond the construction of the bridge are proposed.

The development of this area is subject to the certified Agua Hedionda segment Local Coastal Program Land Use Plan (LUP). The roadway is also contained in the City of Carlsbad LCP Circulation Element as a major road.

2. Environmentally Sensitive Habitat Areas. Section 30231 of the 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, and minimizing alteration of natural streams.

Section 30233(a) of the Act states, in part:

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative...

In addition, Section 30233(c) of the Act states, in part:

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

Section 30240 of the Act states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Finally, Section 30253 of the Act states, in part:

New development shall: [...]

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.



Agua Hedionda is one of 19 identified "high priority" wetlands in the Coastal Act. As such it is afforded special protection under the Act and the certified Agua Hedionda Land Use Plan (LUP). As originally submitted by the City in 1978 in the Agua Hedionda LUP submittal, Cannon Road would have resulted in about 11 acres of wetland fill. Subsequent to the Commission's action to deny the initial submittal, a negotiating committee was formed to address the remaining issues of the Agua Hedionda LUP, including Cannon Road. This committee developed a conceptual alignment involving the least amount of adverse impacts upon lagoon resources which were incorporated into Agua Hedionda Lagoon Land Use Plan. As stated in the Policy 5.8 of the certified LUP, the policies regarding the protection of resources in conjunction with the extension of Cannon Road are as follows:

a) No portion of the road construction shall involve the filling or dredging of fresh or saltwater marsh wetlands, except as noted in the letter from the Coastal Commission to the State Department of Fish and Game.

b) To the extent that any portion of the road construction would occur in or adjacent to an environmentally sensitive habitat area other than a wetland, the road shall be sited and designed to prevent impacts which would significantly degrade such areas, shall avoid significant disruption of habitat values, and shall be sited and designed to be compatible with the continuance of habitat values.

c) To the extent that there are no feasible less environmentally damaging alternatives and the road as designed would nonetheless result in adverse impacts to environmentally sensitive habitat area, such impacts shall be fully mitigated in accordance with the recommendations of the State Department of Fish and Game.

Cannon Road was also addressed by the Commission in LUP Amendment 1-85. It was envisioned that Cannon road was to span the wetlands in its crossing of Macario Canyon, and a specific exhibit indicating the span was included in LUP Amendment 1-85 as certified by the Commission.

In subsequent permit decisions for Reach 1 (CDP #6-89-195) and Reach 2 (6-84-617) the Commission approved the alignment of the road from near I-5 to El Camino Real. The Commission's action approved two bridge crossings of environmentally sensitive areas, riparian and brackish marsh woodland at Macario Canyon in Reach 1 and the Agua Hedionda Creek near El Camino Real in Reach 2.

Since the time of the Commission's original approval for Cannon Road, the listing of a number of sensitive plants and animals (least Bell's vireo, California gnatcatcher, southwestern willow flycatcher, arroyo southwestern toad and Pacific little pocket mouse) brought into question whether the approved alignment is the least environmentally-damaging alternative. As a result, the U.S. Army Corps of Engineers (ACOE) and the U.S. Fish and Wildlife Service (USFWS) determined that new studies were necessary regarding the project which resulted in the need for new approvals. Existing approvals for Reach I and Reach II by the California Department of Fish and Game (CDFG) and the Army Corps of Engineers (ACOE) have expired.

As part of its permit review, the ACOE asked the USFWS to prepare a Biological Opinion regarding the impact of both Reach I and Reach II on the previously mentioned endangered species. The Biological Opinion identifies mitigation measures that can be implemented to mitigate adverse impacts to least Bell's vireo and southwestern willow flycatchers, both on federal and state endangered species lists, in riparian and wetland habitat adjacent to Macario Canyon and along the Reach II alignment. None of the mitigation measures include changing the approved alignment or bridges associated with either Reach I or Reach II, and no changes to the alignment or bridge designs are expected to occur as part of the ACOE permit. The CDFG has also indicated that no change in the alignment or bridge designs of Cannon Road will be recommended in its new streambed alteration agreement. Other alignments near the proposed alignment were considered but dismissed because resource and endangered species impacts associated with those alignments were not significantly less than the proposed alignment. That is, moving the road's alignment around impacted a number of environmentally sensitive plants or animals so that no clearly superior environmentally preferred alignment emerged to replace the proposed alignment. Consequently, the resource agencies agree there are no alternative alignments that are significantly better than the previously approved alignment with respect to protecting sensitive plants and animals, and the Commission concurs.

While the Commission can accept the alignment as the least environmentally damaging alternative on balance, it must also find that project impacts are adequately mitigated. As noted, the Commission has reviewed Cannon Road previously in two permit decisions.

Regarding its previous review of Reach 1, the Commission accepted wetland and riparian impacts associated with bridge construction over Macario Canyon. Specifically, direct brackish marsh impacts for bridge pier construction was 547 sq.ft. (.012 acres), direct riparian impacts for bridge construction was 1.0 acre and temporary direct impacts for construction corridor impacts was .33 acres of brackish marsh. In addition, shading impacts were identified at 0.1 acres to brackish marsh and 0.8 acres to riparian vegetation. Direct brackish marsh impacts resulting from pier construction were required to be mitigated at a 4:1 ratio or 0.05 acres, direct riparian impacts were required to be mitigated at a 3:1 ratio or 3.0 acres. Shading impacts were required to be mitigated at a 1:1 ratio resulting in 0.1 acres of brackish marsh and 0.8 acres and construction corridor impacts were required to be mitigated at 1:1 or .33 acres for a total of 4.28 acres. Of this, 3.95 acres (all the above mitigation except that for temporary direct impacts which required revegetation only), was required to be wetland creation. Wetland creation is the creation of new habitat by converting upland to wetland and requires some grading of uplands to achieve appropriate elevations for the growing of wetland species.

In CDP #6-84-617, regarding its review of Reach 2, the Commission found the bridge spanning of Agua Hedionda Creek was found to be the least environmentally damaging alignment; however the Commission accepted some wetland impacts associated with its construction. These impacts were not quantified but were associated with bridge construction and channel improvements within Agua Hedionda Creek and the construction of a desiltation basin near Cannon Road's intersection with El Camino Real. The City indicates impacts associated with Cannon Road Reach 2 as approved in CDP #6-84-617

have been mitigated. One special condition of CDP #6-84-617 related exclusively to Cannon Road and was entitled Cannon Road/Wetland Encroachment/Wetland Restoration. It required that Cannon Road shall be constructed in accordance with the alignment identified in Policy 5.8 of the LUP unless a wetlands restoration plan was followed which included: establishment of wetland habitat or re-establishment of wetland habitat (areas which have been previously filled or disturbed) on-site at a minimum ratio of 1:1.; a map of the mitigation sites showing the areas in their present and proposed conditions in conjunction with the above wetland replacement ratio requirements; erosion control for construction of Cannon Road and the implementation of approved mitigation programs shall be subject to erosion control requirements contained in CDP #6-84-617; wetland restoration measures which required wetland restoration and enhancement plans for various locations within the proposed 186 acre Agua Hedionda preserve which was required to be put into open space as mitigation for impacts associated with the Commission's approval of Kelly Ranch. A mitigation plan was developed in response to the above provisions and implemented. Compliance with these provisions has been confirmed by the California Department of Fish and Game (attached).

Currently, the project proposes the construction of a bridge over Agua Hedionda Creek at El Camino Real that is 10 feet wider than the previous bridge the Commission approved, which has resulted in some additional impacts. Additionally, a small realignment of the road has resulted in encroachment into disturbed riparian scrub in an existing desiltation basin. Thus, the bridge construction and road improvements will result in the permanent loss of three wetland habitat types: 0.16 acres of southern willow scrub, 0.14 acres of open water and 0.43 acres disturbed riparian scrub. This totals 0.73 acres of wetland impact.

The following is a table summary of the comparison of the City's identified impacts and proposed mitigation provisions for Reaches 1 and 2 with the requirements previously approved by the Coastal Commission in CDPs #6-84-617 (Reach 2) and #6-89-195 (Reach 1).

COASTAL COMMISSION'S MITIGATION REQUIREMENTS

Reach 1

Direct Brackish Marsh	0.012 acres at 4:1 =	0.05 acres
Direct Riparian	1.00 acres at 3:1 =	3.00 acres
Temporary Direct	0.33 acres at 1:1 =	0.33 acres
Shading	.8 ac. riparian .1 ac. br. marsh	
	<u>0.90 acres at 1:1 = 0.90 acres</u>	(if standards are met)
Total	2.35 acres	= 4.28 acres

Reach 2

Direct riparian	0.59 acres at 3:1 =	1.77 acres
open water	<u>0.14 acres at 3:1 =</u>	<u>0.42 acres</u>
Total	0.73 acres =	2.19 acres

Commission requirements for Reach 1 and 2	= 6.47 acres
Reach 1 Creation	= 3.95 acres (all but .33 ac. temp. direct)
Reach 2 Creation	= 2.19 acres

CITY'S PROPOSED IMPACTS AND MITIGATION

Reach 1

Direct Riparian	1.00 acres at 1:1 =	1.00 acres
Temporary Direct	0.68 acre at 1:1 =	0.68 acres
Shading	.8 ac. riparian .1 ac. br. marsh	
	<u>0.90 acre at 1:1 =</u>	<u>0.90 acres</u>
Total	2.58 acres	= 2.58 acres

Reach 2

Direct riparian	0.59 acres at 1:1 =	0.59 acres
open water	<u>0.14 acres at 1:1 =</u>	<u>0.14 acres</u>
	0.73 acres	= 0.73 acres
TOTAL WETLAND IMPACTS		= 3.31 acres

CITY'S CONCURRENT MITIGATION

Total Acreage Proposed as Mitigation	6.77 ac.
Creation in Macario Canyon	3.31 ac.
1.73 ac. @ 1:1	
.90 ac. @ 1:1 shading	
.68 ac. @ 1:1 temporary direct	
Creation on Kelly Ranch Adjacent to El Camino Real	0.44 ac.
Payment to Agua Hedionda	
Lagoon Endowment at \$114,420 per Acre (Total \$345,548) or Restoration	3.02 ac.

The City's impacts analysis for Reach 1 and Reach 2 identifies that the Macario Canyon bridge construction will result in the impact of 1.9 acres of wetland through fill and shading (1.0 acre to fill and 0.9 acre to shading). Approximately 0.68 acres of wetland will be temporarily lost through construction impacts. This totals 2.58 acres of wetland impacts. Mitigation of 1:1 pre-impact is proposed for the wetlands impacted by construction of the bridge. As noted, Reach 2 impacts are proposed at 0.73 acres; total project impacts for both Reach 1 and Reach 2 are proposed at 3.31 acres.

For the 3.31 acres of total impacts, until November 1997, the City had proposed a 1:1 mitigation ratio to be installed and meet performance criteria before any impacts to wetlands were allowed. In this way impacts had to be mitigated in advance of actual project construction on the Macario Canyon bridge. The City's rationale for mitigation was to ensure that there was no net loss of wetlands and was accepted by the resource agencies provided mitigation was deemed acceptable in advance of impacts (pre-impact) for Reach 1 and Reach 2 impacts. The agreed upon offsite wetland mitigation plan consists of excavating 3.31 acres of existing agricultural lands under City ownership adjacent to existing wetlands within Macario Canyon, upstream of the Macario Canyon bridge site, for the purpose of restoring wetland hydrology and creating riparian habitat. The riparian mitigation site will include a 100-foot-wide band of upland habitat outside the 3.31 acres and buffer the riparian and wetland habitats in perpetuity. Active park uses inside the upland buffer would be limited. As noted, this location and design has been accepted by the resource agencies.

In November 1997, the City proposed a change in plans and now proposes bridge construction at Agua Hedionda Creek and construction of a bridge abutment at Macario Canyon to go forward in advance of developing the main mitigation site in Macario Canyon. Consequently, the City has amended the mitigation plan that was approved by the resource agencies as described above. The new mitigation plan is called the Concurrent Impact Option and is identified in the preceding table. While concurrent mitigation is now proposed at two locations outside the main mitigation site (.44 acres near El Camino Real and 3.02 acres within the proposed 186 Agua Hedionda Preserve) no mitigation plans have been submitted for the new mitigation sites. In summary, the resource agencies have agreed to the amended plan and the Biological Opinion is being amended to reflect this change. However, while the amended mitigation plan is acceptable to the resource agencies, it is not strictly consistent with past Commission action and current Commission practices regarding the adequate mitigation of environmentally sensitive habitats.

The Commission's previous approval requires that the proposed construction corridor be revegetated in kind and amount. Although this was not offered as part of the City's mitigation package, the City has agreed to revegetate the corridor upon completion of the project to mitigate the temporary impacts associated with bridge construction. Similarly, the Commission finds that this requirement is necessary to find the project consistent with the resource protection provisions of the Coastal Act. Also, the Commission is concerned about the width of the corridor. The Commission desires that the corridor be kept to a minimum width which would result in less impacts to sensitive vegetation. Therefore, the Commission is endorsing only a 90 foot wide corridor at this time.

Second, there are also differences in the amount of habitat creation between what the Commission approved and what the City is proposing. The City identifies total creation of habitat in Reaches 1 and 2 at 3.75 acres, an additional 3.02 acres is being proposed as an in-lieu payment or restoration for a total of 6.77 acres of mitigation. The Commission approved 3.95 acres as creation in Reach 1 and would typically require 2.19 acres of creation in Reach 2 (0.73 acres of riparian at 3:1) for 6.14 acres total. Thus, the City's proposal is deficient 2.39 acres with respect to actual creation of habitat for impacts.

As noted, the City's proposal does not identify 0.05 acres of direct impacts to brackish marsh for bridge pier construction which was identified by the Commission to be mitigated at 4:1. Thus, the City's proposal proposes no mitigation for this impact. The City's mitigation plan proposes the creation of 0.1 acres of brackish marsh to mitigate shading impacts to sensitive vegetation which will occur when the bridge is built. The Commission's decision was that shading impacts be mitigated at a 1:1 ratio provided that revegetation of the area under the bridge is shown to be successful through a 5 year monitoring plan; otherwise, mitigation shall be provided at a 2:1 ratio at the end of the five year monitoring period. The Commission again finds that this provision must be made part of a revised mitigation plan.

The City's proposed funding option acreage would fund the Agua Hedionda Preserve as envisioned by the California Department of Fish and Game (DFG). DFG is interested in administering 186 acres that was dedicated as open space in the Commission's approval of the Kelly Ranch Master Plan (#6-84-617). To administer this open space system, funding and or restoration of existing resources is necessary. In exchange for accepting project impacts associated with the construction of Cannon Road, DFG is requiring the 3.02 acres mitigation area shall be in the form of restoration of riparian vegetation (establishment of vireo-quality habitat, including a minimum of five years of monitoring, as well a success criteria and contingency plans) within the entire 186-acre Agua Hedionda Preserve or other area approved by the Service and California Department of Fish and Game.

As proposed, the restoration may occur prior to or concurrent with project impacts, or \$114,420.00 per acre (\$345,548.00 total, the City of Carlsbad estimate of per acre cost of wetland creation including grading, installation, irrigation, 5-year mitigation monitoring, and 5-year least Bell's vireo monitoring) may be paid to an endowment fund for the required restoration of 3.02 acres. Under the latter circumstance, the full amount of these funds shall be placed in an interest bearing account for the identified restoration efforts. The habitat restoration and monitoring plans (to include at least 5 years of monitoring, success criteria and contingency measures) must be reviewed and approved by the Service. Documentation to demonstrate the establishment of this account shall be provided to the Service and the California Department of Fish and Game.

If, after three years, a suitable owner/manager for the Agua Hedionda preserve has been identified, the Service shall provide notice to the permittee that they have 90 days in which to proceed with the creation program in another area approved by the Service and the California Department of Fish and Game. At this time, the \$345,548.00 would be transferred to the City to be utilized for this purpose.

However, the Commission can not support the in-lieu fee proposal. While the Commission recognizes that the proposal is supported by CDFG as insurance that project impacts would be mitigated within the proposed Reserve if restoration did not take place, the Commission has historically required impacts to be mitigated in a timely fashion through habitat creation or restoration rather than in the form of a payment. The payment option may not be invoked for a number of years and in that time impacts would go unmitigated. Therefore, the Commission finds that the proposed restoration should occur at this time concurrent with impacts.

Notwithstanding the above, the City's mitigation plan has been accepted by the resource agencies as adequate to compensate for project impacts. The resource agencies state that the impacts described above would not jeopardize the continued existence of endangered species because the City has incorporated significant compensation measures including: 1) replacement through revegetation of any riparian and wetland habitat permanently destroyed by project construction activities at a 1:1 area ratio prior to construction, 2) replacement through revegetation of any riparian and wetland habitat temporarily destroyed by project construction activities at a 1:1 ratio within the temporary impact area, 3) the implementation of a cowbird trapping program, 4) the initiation of a pampas grass removal program, 5) the contribution of \$150,000 and any outstanding start-up costs to fund wildlife management practices in perpetuity within the 186-acre riparian habitat area, 6) use of noise barriers on Reach 1 bridge to reduce vehicle noise, 7) use of shields on lights to minimize the "spillover" of light on adjacent riparian habitats, and 8) construction outside the least Bell's vireo and southwestern flycatcher breeding seasons (March 15 - September 15). In addition, indirect impacts associated with construction will be reduced by fencing the right-of-way with a drift fence so impacts to adjacent sensitive habitats do not occur. Supplemental mitigation includes the removal of pampas grass and cowbird trapping from 28 acres of riparian habitat which will provide significant enhancement to the quality of the habitat. With the exception of the in-lieu fee payment option, the Commission concurs with the resource agencies, based on the above, that the proposed mitigation plan will adequately mitigate project impacts.

With respect to Cannon Road impacts, the Agua Hedionda LUP defers to the California Department of Fish and Game in Policy 5.8 by finding that to the extent that there are no feasible less environmentally damaging alternatives and the road as designed would nonetheless result in adverse impacts to environmentally sensitive habitat area, such impacts shall be fully mitigated in accordance with the recommendations of the State Department of Fish and Game. Because the CDFG has accepted the mitigation plan as proposed by the City, the Commission finds that the subject development, absent the in-lieu fee payment option and as conditioned, is consistent with Section 30233 and the other resource protection provisions of the Act.

Special Condition #1 requires that a detailed revised wetland mitigation plan for all temporary and permanent impacts associated with the proposed project. It shall clearly delineate all areas of impact (temporary and permanent) and shall identify the exact acreage of each impact so identified. Mitigation plans have not been submitted for the proposed 0.44 acre site near El Camino Real or the proposed restoration sites in the 186

acre Agua Hedionda Preserve. The condition also requires preparation of the identified off-site mitigation area(s) such that the all identified wetland impacts associated with the proposed development are mitigated, in-kind, at a minimum 3:1 for all identified direct impacts to Southern Willow Riparian Scrub and Riparian Scrub, 1:1 for brackish marsh and riparian shading impacts if performance standards are met, and revegetation of all temporary construction impacts at a 1:1 ratio. The condition also provides that all identified mitigation sites have executed irrevocable offers to dedicate to a public agency or private association acceptable to the Executive Director, an easement for habitat restoration, habitat maintenance, open space and habitat protection over any portion or all of the above properties.

Special Condition #2 requires a detailed monitoring program including submittal of evidence of the completion of the mitigation plan(s) addressed in Special Condition #1 above, through submittal of "as built" plans in substantial conformance with the final plans approved pursuant to Special Condition #3. The program must include monitoring reports on the extent of coverage, rate of growth and species composition of all created wetland areas on an annual basis for five years following project completion, provisions for augmentation and maintenance of the restoration efforts, including specific performance standards, designed to assure 90% coverage in a five year period, and include criteria to be used to determine the quality and extent of the revegetation efforts, which shall include, but not be limited to, survival rates and species composition. At the end of the five year period, a more detailed report prepared in conjunction with a qualified wetland biologist shall be submitted to the Executive Director. If the report indicates that the mitigation has been, in part, or in whole, unsuccessful, the applicant shall be required to submit a revised or supplemental mitigation program to compensate for those portions of the original program which were not successful.

Special Condition #2 also requires that all recommendations contained in the various documents that identify the mitigation measures and the responses to those recommendation measures by the resource agencies be followed to mitigate project impacts. It also requires that the construction corridor at Macario Canyon be minimized to assure that project impacts to sensitive resources are kept to a minimum and that these provisions are identified in final plans.

Because of least Bell's vireo and Southwestern Flycatcher identified in the project area, the filling or other development of the riparian area cannot be allowed without additional protections for these endangered species. Both species have been identified on the site and may inhabit the site during any year's nesting season. For this reason, Special Condition #4 has been proposed. A survey must be conducted by a qualified biologist to determine whether vireos are present. If the survey discovers any of the two species, construction may not commence or continue, as appropriate, until the Section 7 consultation process with the U.S. Fish and Wildlife Service is concluded. The condition would also require mitigation to be reviewed as an amendment of this permit, if necessary, consistent with Service specifications and/or Section 7 consultation, should the species be discovered on-site.



B. Upland Impacts. In CDP #6-89-195, the Commission found that although the placement of fill or other grading would ordinarily not be allowed to occur on the steeply-sloping, vegetated sides of Macario Canyon, the exemptions from such a restriction are provided for circulation element roads in the City's LCP documents. As such, such impacts could be accepted, if mitigated.

In response to addressing the proposed upland impacts of the project, the City has received a Habitat Loss Permit to "take" 2.4 acres of coastal sage scrub and 3.1 acres of southern maritime chaparral. The permit was received in response to the CDFG's Natural Community Conservation Planning (NCCP) effort. With the approval, DFG has found the project consistent with the NCCP Conservation Guidelines and the 4(d) rule and, by extension, the City's draft Habitat Management Plan (HMP) whose purpose is to preserve coastal sage scrub and other sensitive habitats within the City as part of the NCCP program. In the 4(d) approval, mitigation of 2.4 acres of coastal sage scrub at a 2:1 ratio was approved to be mitigated off-site through the purchase of mitigation credits from Carlsbad Highlands, a mitigation bank. Mitigation at a 2:1 ratio was approved for impacts to 3.1 acres of southern maritime chaparral to be mitigated through the purchase of mitigation credits from the Manchester Avenue Conservation Bank or the purchase of southern maritime chaparral within the City of Carlsbad. The above identified impacts to coastal sage scrub and southern maritime chaparral represent the entirety of impacts to those habitats for both Reaches 1 and 2. The Commission finds that approval of Cannon Road can be found consistent with the statewide NCCP process and the impacts to environmentally sensitive habitats, such as coastal sage scrub and southern maritime chaparral, can be accepted consistent with Section 30240 of the Coastal Act.

The Commission's previous action on Reach 1 required the revegetation of brackish marsh and riparian resources within the bridge construction corridor of Macario Canyon. Temporary impacts to riparian and brackish marsh vegetation resulting from construction of haul roads, stockpile and staging areas, and work areas extending on either side of the Macario Canyon bridge will be mitigated by revegetating and restoring the impact area to the original condition prior to disturbance. Revegetation will include remedial work such as decompaction and surface treatment of the ground and restoration of natural contours and be monitored for three years. The Commission finds it is again appropriate to require revegetation of those sensitive habitat areas that would be disturbed by construction of Cannon Road. As noted, the Agua Hedionda LUP allows for resource impacts associated with construction of Cannon Road as long as they are adequately mitigated. For that reason, Special Condition #7 requires a revegetation plan be provided that indicates all disturbed or manufactured steep slope areas shall be revegetated with native plants compatible with adjacent natural vegetation to re-establish the area consistent with its present character.

The construction of the roadway and the bridges raise the issues of controlling runoff and retarding erosion, particularly on the large manufactured slopes associated with the project. Manufactured slopes of up to 40 feet in height will result from the project's implementation. Indirect impacts to riparian and wetland habitat are proposed to be reduced by fencing the right-of-way with a drift fence to prevent erosion and sedimentation. To further ensure that project impacts would be mitigated, Special

Condition #5 would require the submittal of a runoff control plan for the areas adjacent to Macario Canyon, Agua Hedionda Creek and Agua Hedionda Lagoon. The emphasis of the runoff control plan should be controlling the runoff down the slopes, and should result in water delivered to the level of the canyon floor in such a fashion that no erosion or scour should occur as a result of the runoff reaching the canyon floor. This can take the form of energy dissipaters, detention facilities, etc. In addition, Special Condition #5 would require the provision of traps to prevent oils and suspended solids from reaching the sensitive resources of the canyon floor and downstream lagoon.

Special Condition #6 requires final grading plans in substantial conformance with the submitted plans, that all temporary and permanent run off and erosion control devices shall be developed and installed prior to or concurrent with any on-site grading activities, and that all areas disturbed but not completed during the construction period shall be stabilized. The use of temporary erosion control measures, such as berms, interceptor ditches, sandbagging, filtered inlets, debris basins, and silt traps shall be utilized in conjunction with plantings to minimize soil loss from the construction site.

The project also raises the potential for impacts associated with the construction materials and equipment. Inappropriate access and haul routes, inappropriate storage of equipment, construction materials or stockpiled soils all could result in damage to coastal sage scrub and southern maritime chaparral. For this reason, Special Condition #8 has been proposed. It requires that a plan and construction bid documents identifying all construction staging sites and haul routes be submitted for the Executive Director's review and approval after determining that no impacts to sensitive resources will result beyond those associated with the road construction itself.

Given the attached special conditions, the potential impacts to environmentally sensitive habitat areas will be reduced to the maximum extent feasible. Therefore, the Commission finds that the subject permit, as conditioned, is consistent with Sections 30231, 30240 and 30253 of the Act and the certified Agua Hedionda LUP.

3. Local Coastal Planning. Section 30604 (a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. As noted above, the project lies in the areas under the jurisdiction of the certified Agua Hedionda Land Use Plan which was prepared by the City and approved by the Commission, and which has been subject to several LUP amendments.

The proposal for the construction of the Cannon Road project has been reviewed by the Commission in several separate formal actions. First, the Commission denied certification of the Agua Hedionda LUP as submitted, based, in part, upon the originally proposed alignment's impacts upon the sensitive resources of Agua Hedionda Lagoon. In response to this denial, a negotiating committee comprised of Commission members, City officials and members of both City and Commission staff was formed to identify a conceptual alignment for Cannon Road, as well as address other remaining issues resulting from the denial of the LUP.

Second, the conceptual alignment agreed upon by the negotiating committee was included in the City's LUP resubmitted (subsequently certified by the Commission), along with design criteria and mitigation policies to be applied to the roadway project. The policies regarding mitigation are included in Policy 5.8 of the certified LUP.

Based on the endorsement of the City's mitigation plan by the resource agencies, the Commission can find the project, as conditioned, will not result in any conflicts with the certified LUP. Therefore, the Commission finds that the subject development, as conditioned, is consistent with the certified Agua Hedionda LUP and Chapter 3 policies.

4. Consistency with the California Environmental Quality Act (CEQA).

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

The proposed project has been conditioned in order to be found consistent with the resource protection policies of the Coastal Act. The attached mitigation measures will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally-damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

**STANDARD CONDITIONS:**

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. **Compliance.** All development must occur in strict compliance with the proposal as set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
5. **Inspections.** The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

Wed 12 a

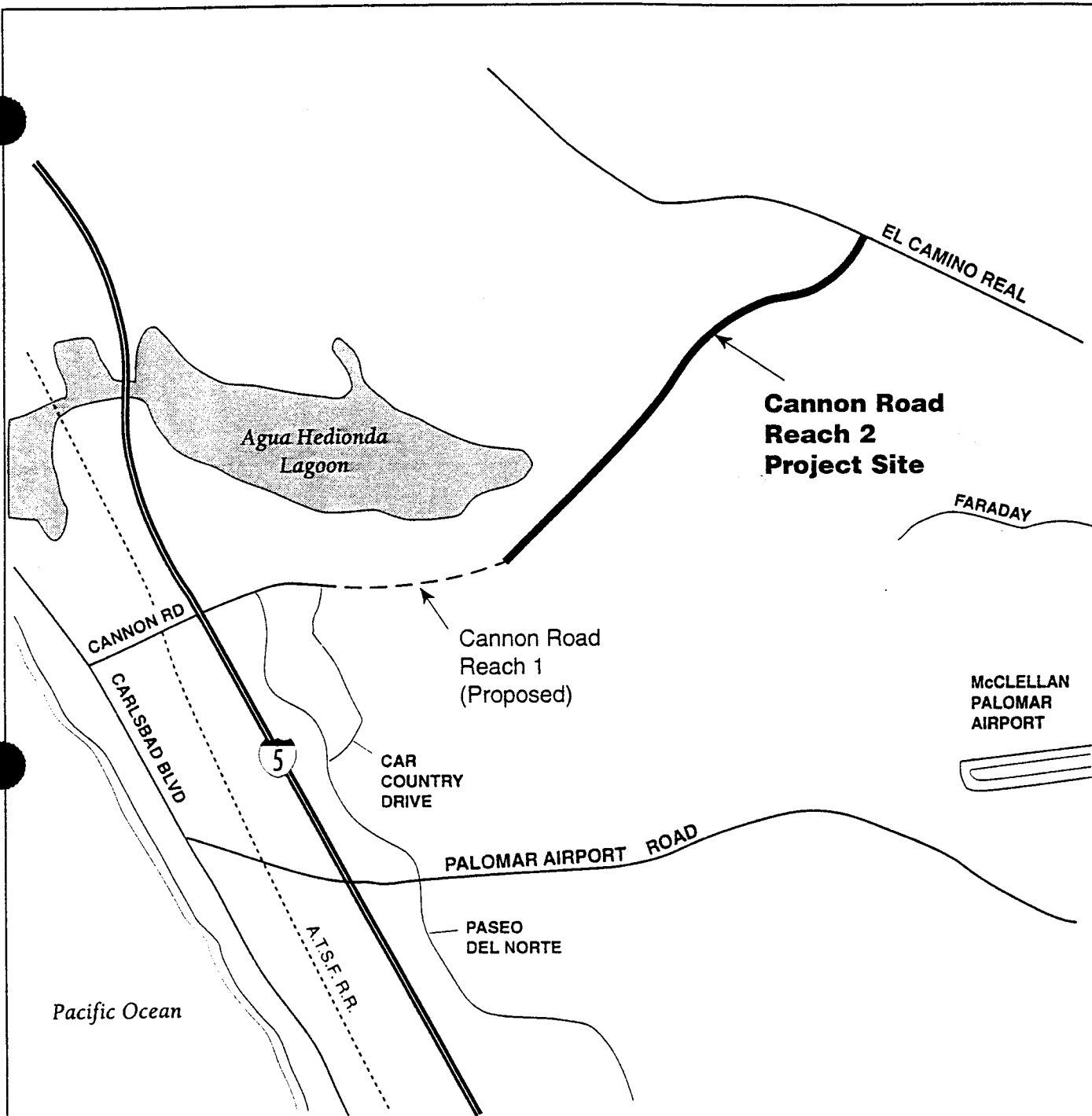


EXHIBIT NO. 1
APPLICATION NO.
6-97-11
Location Maps
California Coastal Commission

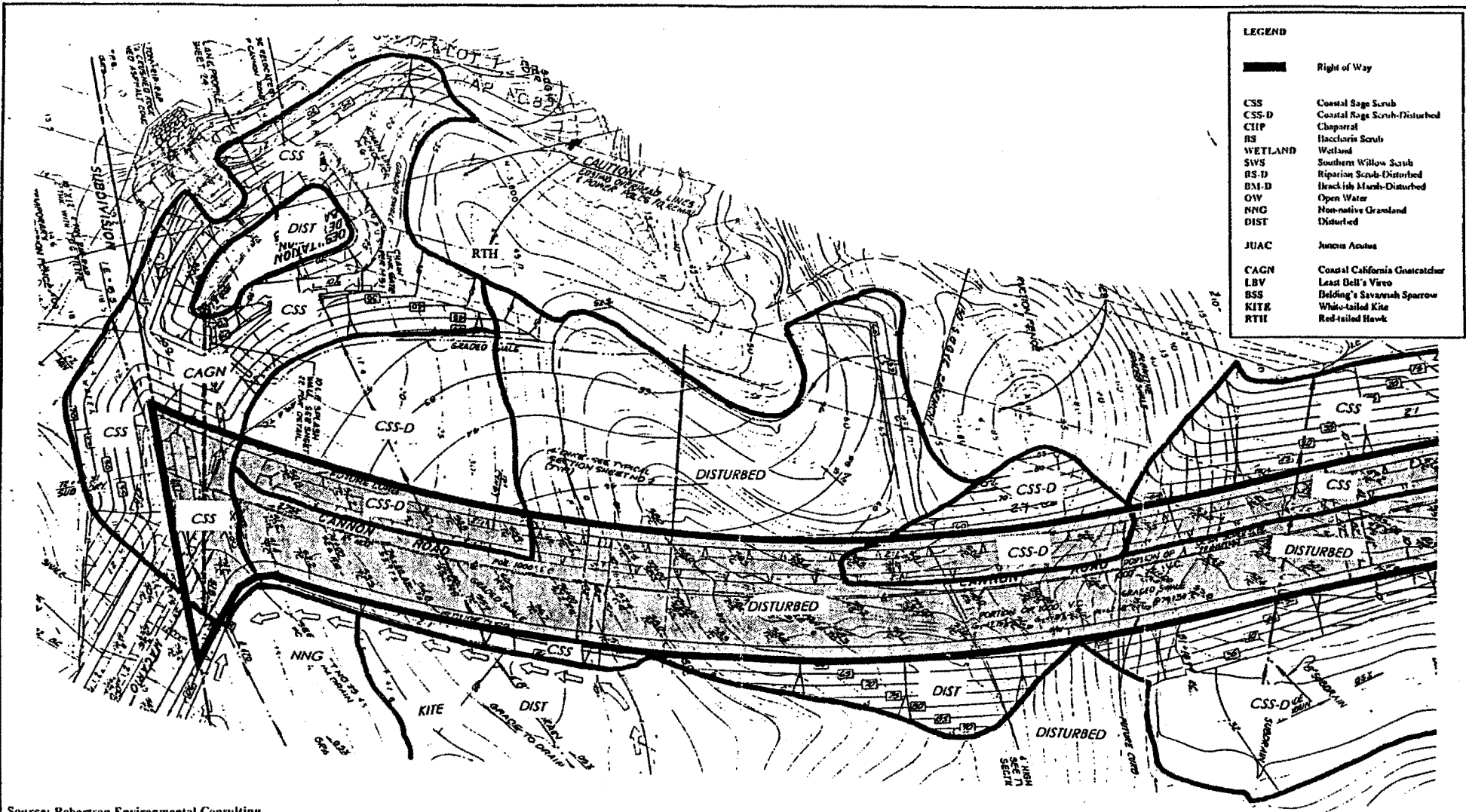


TETRA TECH INC.



No Scale

Figure 2



LEGEND	
	Right of Way
CSS	Coastal Sage Scrub
CSS-D	Coastal Sage Scrub-Disturbed
CHP	Chaparral
RS	Riparian Scrub
WETLAND	
SWS	Southern Willow Scrub
RS-D	Riparian Scrub-Disturbed
BM-D	Blackish Marsh-Disturbed
OW	Open Water
NNG	Non-native Grassland
DIST	Disturbed
JUAC	Juncus Acutus
CAGN	
LBV	Least Bell's Vireo
BSS	Belding's Savannah Sparrow
KITE	White-tailed Kite
RTH	Red-tailed Hawk

Source: Robertson Environmental Consulting



California Coastal Commission

EXHIBIT NO. 2a

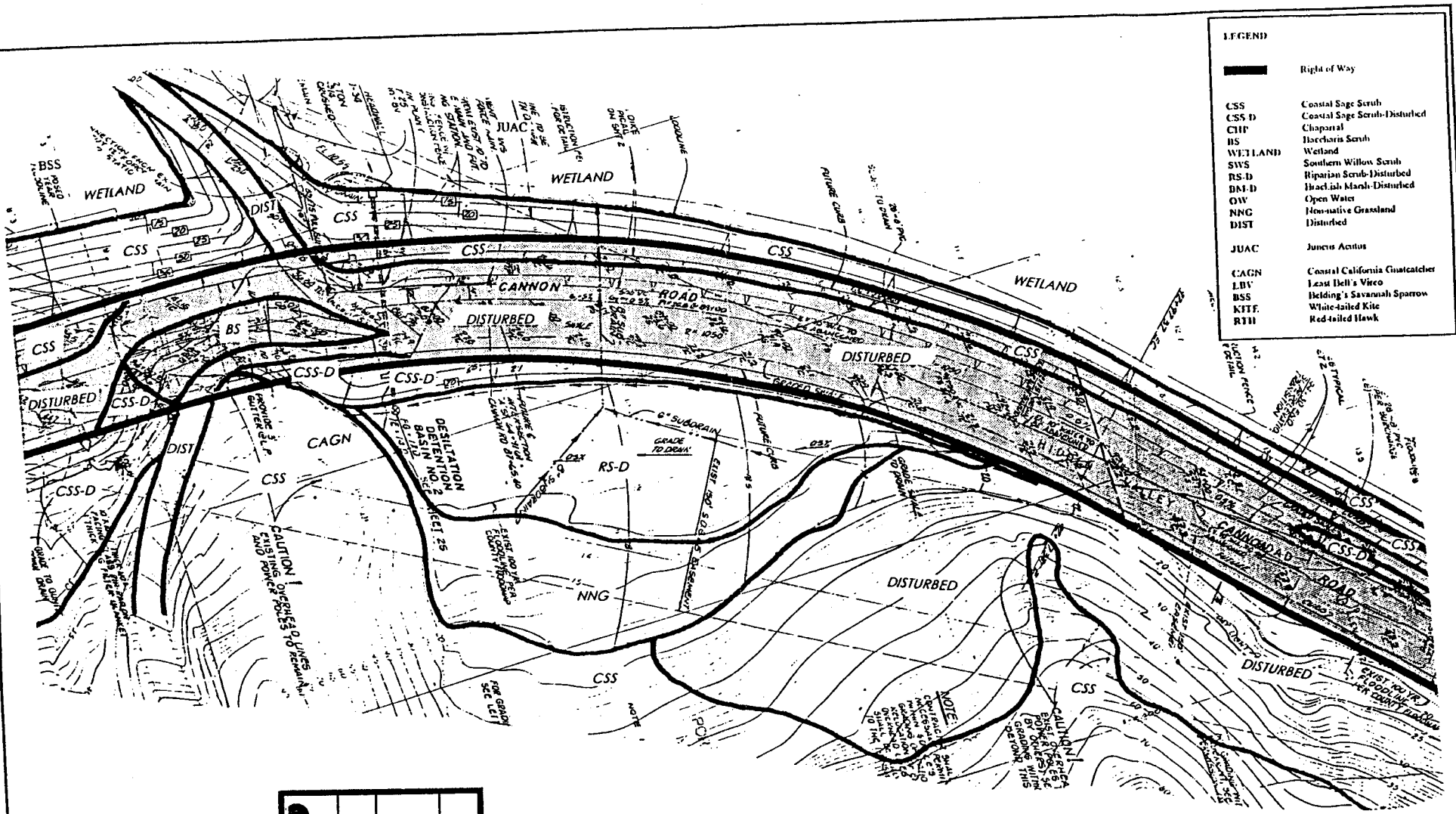
APPLICATION NO.

6-97-11

Alignment

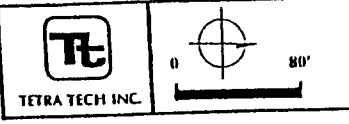
BIOLOGICAL RESOURCES FOR CANNON ROAD REACH 2


FIGURE 3A



LEGEND	
	Right of Way
CSS	Coastal Sage Scrub
CSS-D	Coastal Sage Scrub-Disturbed
CHP	Chaparral
HS	Heather Scrub
WETLAND	Wetland
SWS	Southern Willow Scrub
RS-D	Riparian Scrub-Disturbed
DM-D	Drainage Marsh-Disturbed
OW	Open Water
NNG	Non-native Grassland
DIST	Disturbed
JUAC	Juncus Acutus
CAGN	Coastal California Gnatcatcher
LBV	Least Bell's Vireo
BSS	Belding's Savannah Sparrow
KITE	White-tailed Kite
RTH	Red-tailed Hawk

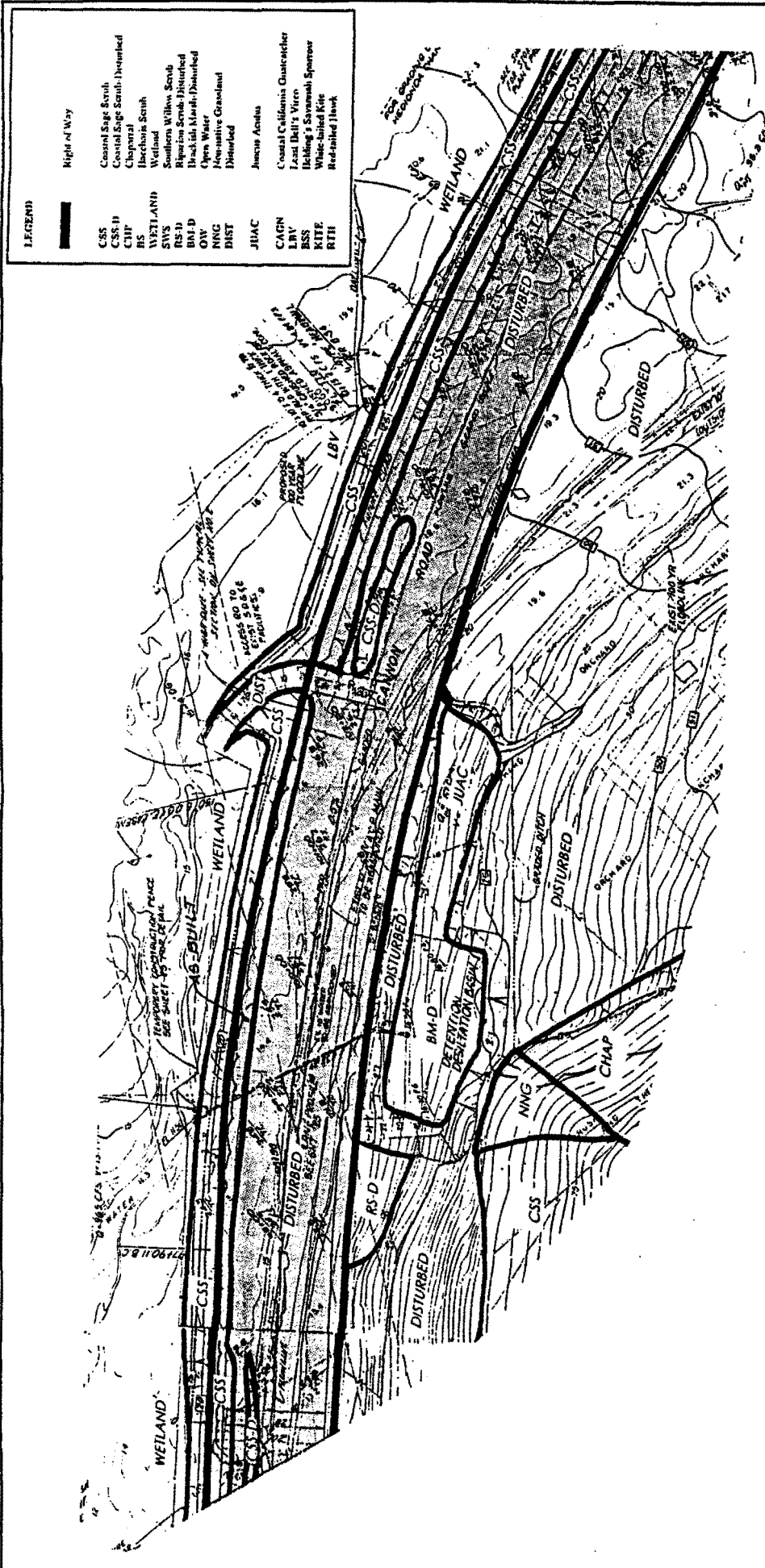
Source: Robertson Environmental Consulting



  
 California Coastal Commission  
**EXHIBIT NO. 2b**  
**APPLICATION NO.**  
**6-97-11**  
**Alignment**

**BIOLOGICAL RESOURCES FOR CANNON ROAD REACH 2**

**FIGURE 3B**



LEGEND



- Right of Way
- CSS Coastal Sage Scrub
- CHP Coastal Sage Scrub - Overland
- RS Raripennis Scrub
- WETLAND Wetland
- SWS Southern Willow Scrub
- RS-D Riparian Scrub - Disturbed
- BM-D Black-tail Marsh - Disturbed
- OAV Open Water
- NNG Non-native Grassland
- DIST Disturbed
- JUAC Junco Acaudus
- CAPN Coastal California Quailcatcher
- LBV Least Bell's Vireo
- BSS Belding's Savannah Sparrow
- KITE White-tailed Kite
- RTH Red-tailed Hawk

BIOLOGICAL RESOURCES FOR CANNON ROAD  
REACH 2

FIGURE 3C

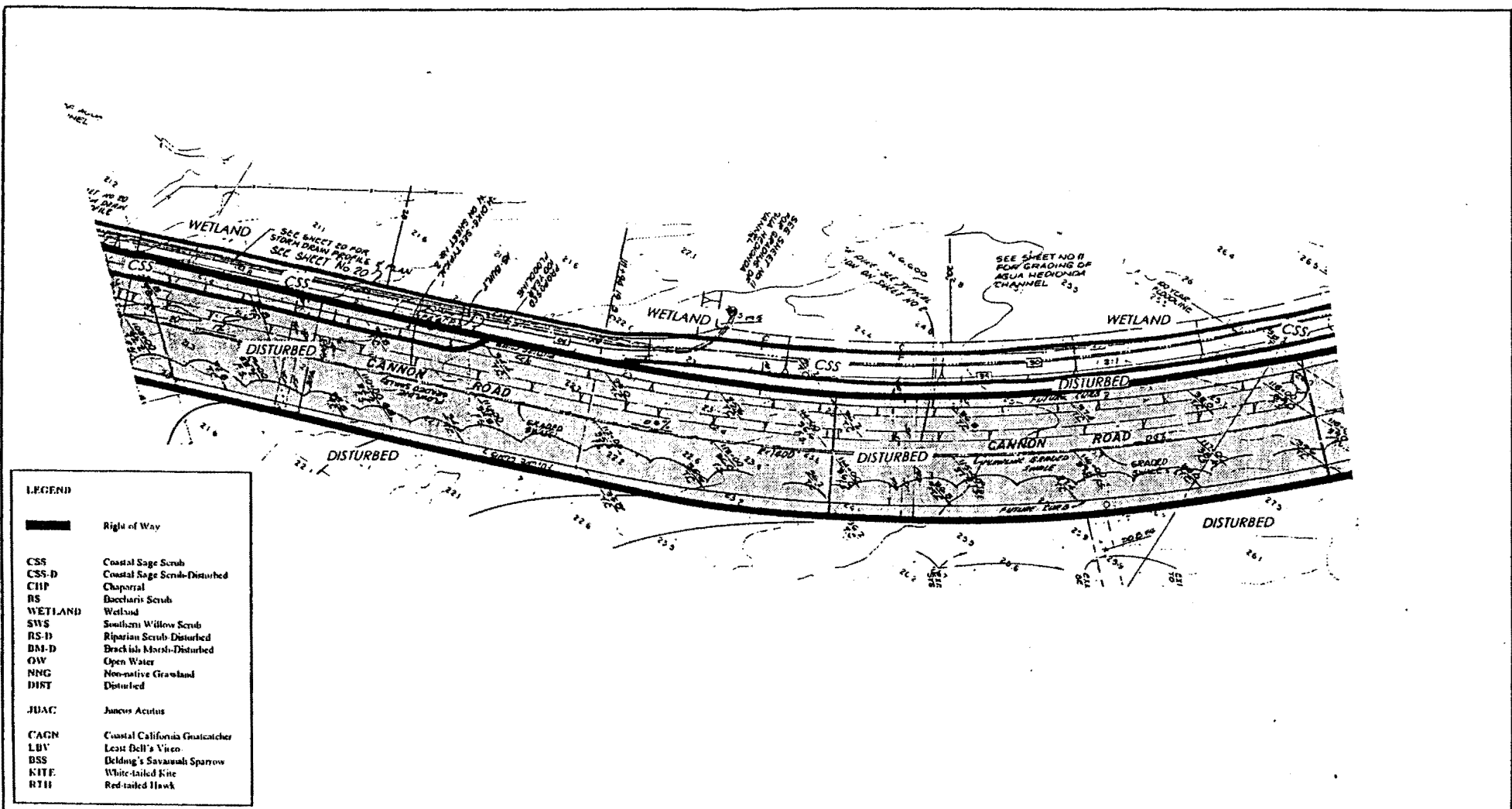
EXHIBIT NO. 2c
APPLICATION NO. 6-97-11
Alignment
4
California Coastal Commission

Source: Robertson Environmental Consulting


 TETRA TECH INC.

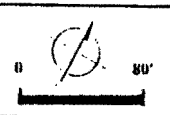




**LEGEND**

	Right of Way
CSS	Coastal Sage Scrub
CSS-D	Coastal Sage Scrub-Disturbed
CHP	Chaparral
RS	Riparian Scrub
WETLAND	Wetland
SWS	Southern Willow Scrub
RS-D	Riparian Scrub-Disturbed
BM-D	Brackish Marsh-Disturbed
OW	Open Water
NNG	Non-native Grassland
DIST	Disturbed
JUAC	Juncus Acutus
CACN	Coastal California Gnatcatcher
LBV	Least Bell's Vireo
BSS	Belding's Savannah Sparrow
KITE	White-tailed Kite
RTH	Red-tailed Hawk

Source: Robertson Environmental Consulting



California Coastal Commission

Alignment

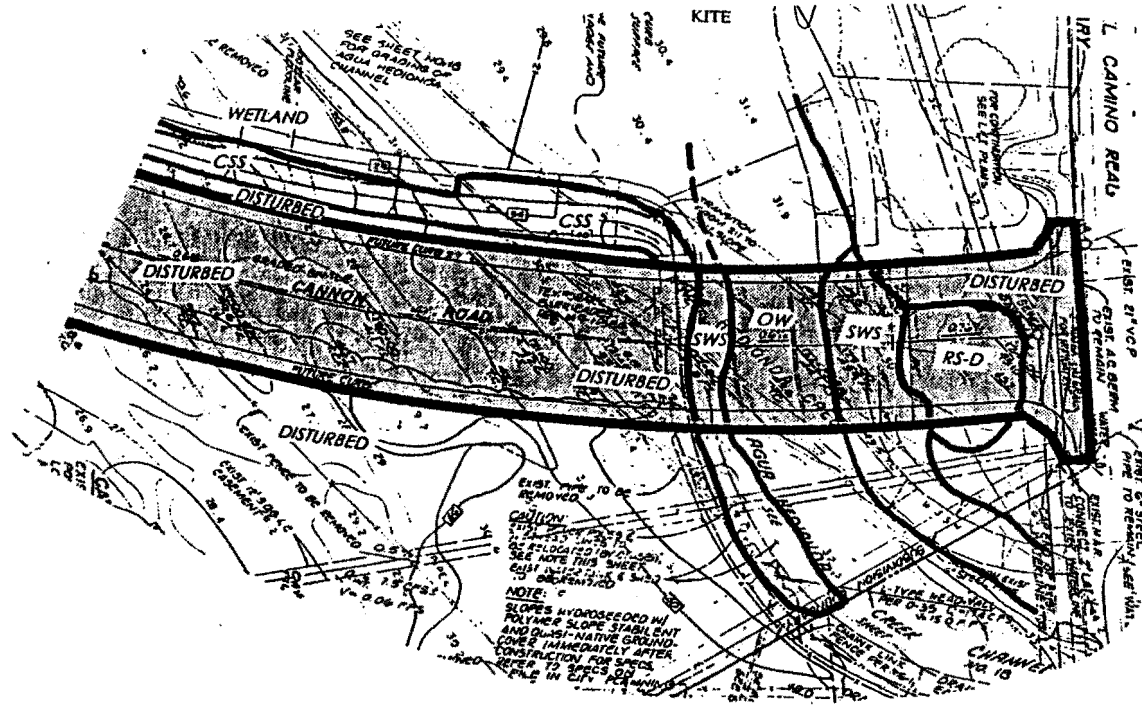
6-97-11

APPLICATION NO.

EXHIBIT NO. 2d

BIOLOGICAL RESOURCES FOR CANNON ROAD REACH 2

FIGURE 3D



**LEGEND**

——	Right of Way
CSS	Coastal Sage Scrub
CSS-D	Coastal Sage Scrub-Disturbed
CHP	Chaparral
BS	Baccharis Scrub
WETLAND	Wetland
SWS	Southern Willow Scrub
RS-D	Riparian Scrub-Disturbed
BN-D	Blackish Marsh-Disturbed
OW	Open Water
NNG	Non-native Grassland
DIST	Disturbed
JHAC	Juncus Acutus
CAGN	Coastal California Gnatcatcher
LBV	Least Bell's Vireo
BSS	Belding's Savannah Sparrow
KITE	White-tailed Kite
RTH	Red-tailed Hawk

Source: Robertson Environmental Consulting

**BIOLOGICAL RESOURCES FOR CANNON ROAD  
REACH 2** **FIGURE 3E**



TETRA TECH INC.

California Coastal Commission

**EXHIBIT NO. 2e**

**APPLICATION NO.**

**6-9711**

**Alignment**

# Memorandum

To : Mr. Bill Ponder  
California Coastal Commission  
3111 Camino del Rio North, Suite 200  
San Diego, California 92108-1725

Date : December 19, 1997

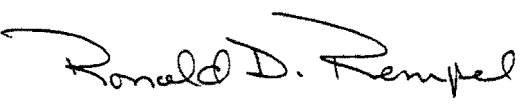
From : Department of Fish and Game

Subject : Application number 6-84-617; Kelly Ranch; Kaufman & Broad Mitigation

Ms. Sheri Howard of the City of Carlsbad has requested that we provide you with a summary of the Department's determination on mitigation success for impacts to wetlands incurred in 1985-1986 due to the subject.


We are satisfied with the results of the wetland restoration projects listed under Section III., Special Conditions. 7. a-f. Those areas have been largely successful, are functioning as wetlands, and are providing habitat for wildlife. The desiltation basin identified in Condition 8 has been unsuccessful; but considering the high quality habitat growing in the former basin which is now supporting the Federally and State Listed Endangered least Bell's vireo, the Department believes that efforts to control sedimentation upstream would be a preferred alternative to reestablishing the desiltation basin at El Camino Real and Cannon Road.

Thank you for the opportunity to comment on this project. Any questions regarding this matter should be addressed to Mr. Tim Dillingham, Associate Wildlife Biologist, at (619) 467-4204.



Ronald D. Rempel  
Regional Manager

cc: See attached list

EXHIBIT NO. 3
APPLICATION NO. 6-97-11
DFG letter
 California Coastal Commission

100-100-100-100