CALIFORNIA COASTAL COMMISSION
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Staff Report:	September 29, 2004
Hearing Date:	October 13-15, 2004
Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION NUMBER: 5-04-297

APPLICANT: California Department of Parks and Recreation, Orange Coast District

PROJECT LOCATION: Crystal Cove State Park, 8471 Pacific Coast Highway, Laguna Beach, Orange County

PROJECT DESCRIPTION: Conversion of the site of the El Morro Mobile Home Park to a public park with day use and overnight camping facilities, including construction of campgrounds, public amenities, parking lots, creek restoration, water quality improvements, utility upgrades, abandonment of an existing septic system, trail improvements including bridges, construction of a lifeguard station, and off-site road improvements.

SUMMARY OF STAFF RECOMMENDATION:

The California Department of Parks and Recreation proposes to change an existing mobile home park to a lower cost visitor serving recreational facility within Crystal Cove State Park. The major issues raised by the proposed development are wave uprush hazards and the siting of a proposed lifeguard tower building, impacts upon biological resources generated by proposed stream restoration and the construction of public trails, maintenance of public access, water quality and protection of archeological resources.

Staff recommends the Commission **APPROVE** the proposed development with special conditions requiring 1) an agreement to assume the risks associated with development at the site; 2) an agreement not to construct a future shoreline protective device to protect the lifeguard tower building or associated development; 3) an agreement that future development be reviewed by the Commission; 4) preparation and implementation of a storm preparedness plan; 5) conformance with measures to remedy potential visual impacts of the lifeguard tower if the beach becomes eroded; 6) preparation and implementation of a final water quality management plan; 7) conformance with development setbacks from ESHA; 8) use of construction best management practices (BMPs); 9) lighting direction and intensity to be controlled to avoid habitat impacts; 10) preparation and implementation of final stream/wetland restoration and monitoring program; 11) preparation and implementation of a final coastal sage scrub restoration and monitoring program; 12) revisions to the landscape plan to eliminate non-native plant species; 13) archaeological monitoring; 14) evidence of Army Corps approval; 15) evidence of other agency approvals; 16) preparation and implementation of a monitoring

program for proposed grade control structures in Moro Creek; 17) conformance of design and construction plans to wave runup analysis; and 18) submission of final revised plans incorporating all the requirements of the special conditions.

SUBSTANTIVE FILE DOCUMENTS: Crystal Cove Public Works Plan (1982) and *El Morro Conversion to Campground and Day Use Crystal Cove State Park FEIR* (August 2002); Coastal Development Permit Application 5-01-269 (Crystal Cove Historic District Interim Plan); 5-04-060 (California Department of Parks and Recreation); 5-01-262 (Dockweiler).

STAFF RECOMMENDATION:

Staff recommends that the Commission APPROVE the permit application with special conditions.

MOTION:

I move that the Commission approve CDP No. 5-04-297 pursuant to the staff recommendation.

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

RESOLUTION:

I. APPROVAL WITH CONDITIONS

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 feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. 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 this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. 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

1. Assumption of Risk, Waiver of Liability, and Indemnity Agreement

A. By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from waves, storm events, flooding, and erosion; (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.

B. PRIOR TO ANY CONVEYANCE OF THE PROPERTY THAT IS THE SUBJECT OF THIS COASTAL DEVELOPMENT PERMIT, the applicant shall execute and record 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 (hereinafter referred to as the "Standard and Special Conditions"); and (2) imposing all Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The restriction shall include a legal description of the applicant's entire parcel or parcels. It shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the Standard and Special 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.

C. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

2. No Future Shoreline Protective Device

A(1) By acceptance of this permit, the applicant agrees, on behalf of itself and all successors and assigns, that no shoreline protective device(s) shall ever be constructed to protect the improvements approved pursuant to Coastal Development Permit No. 5-04-297 including, but not limited to, the lifeguard station and appurtenances, restrooms, foundations, decks, driveways/ramps, access roads and utilities and any other future improvements in the event that the development is threatened with damage or destruction from waves, erosion, storm conditions, bluff retreat, landslides, or other natural hazards in the future. By acceptance of this permit, the applicant hereby waives, on behalf of itself and all successors and

assigns, any rights to construct such devices that may exist under Public Resources Code Section 30235.

A(2) By acceptance of this permit, the applicant further agrees, on behalf of itself and all successors and assigns, that the permittee and/or landowner shall remove the development authorized by this permit, including the lifeguard station and appurtenances, restrooms, foundations, decks, driveways/ramps, access roads and utilities, if any government agency has ordered that the structures are not to be occupied due to any of the hazards identified above. In the event that portions of the development fall to the beach before they are removed, the landowner shall remove all recoverable debris associated with the development from the beach and ocean and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit.

A(3) In the event the shoreline recedes to within 10 feet of the lifeguard station and appurtenances, restrooms, foundations, decks, driveways/ramps, access roads and utilities but no government agency has ordered that the structures not be occupied, a geotechnical investigation shall be prepared by a licensed coastal engineer and geologist retained by the permittee, that addresses whether any portions of the development is threatened by wave, erosion, storm conditions, or other natural hazards. The report shall identify all those immediate or potential future measures that could stabilize the lifeguard station and appurtenances, restrooms, foundations, decks, driveways/ramps, access roads and utilities without shoreline protection including, but not limited to, removal or relocation of portions of the development. If the geotechnical report concludes that the lifeguard station and appurtenances, restrooms, foundations, decks, driveways/ramps, access roads and utilities or any portion of the development is unsafe, the permittee shall, in accordance with a coastal development permit, remove the threatened portion of the development.

B. PRIOR TO ANY CONVEYANCE OF THE PROPERTY THAT IS THE SUBJECT OF THIS COASTAL DEVELOPMENT PERMIT, the applicant shall execute and record 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 (hereinafter referred to as the "Standard and Special Conditions"); and (2) imposing all Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The restriction shall include a legal description of the applicant's entire parcel or parcels. It shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the Standard and Special 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.

C. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a written agreement in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

3. **Future Improvements**

This coastal development permit (5-04-297) is only for the proposed development, as expressly described and conditioned herein. Any non-exempt future improvements or development shall be submitted for Commission review or review by the appropriate delegated local authority and shall not commence unless Commission approval or the

approval of the appropriate delegated local authority is granted. New development, unless exempt, shall require an amendment to this permit, a new coastal development permit from the Coastal Commission or its successor agency, or may be processed as a Public Works Plan Specific Project pursuant to Section 30606 of the Coastal Act.

4. Lifeguard Tower/Access Road/Utilities Storm Preparedness Plan

A. PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit for the review and approval of the Executive Director a storm preparedness plan to temporarily withdraw from and close down the proposed lifeguard tower, access road, utilities, and associated day use amenities on Moro Beach prior to the arrival of predicted severe storms, to prevent impacts upon public safety and water quality. At minimum, the plan shall identify procedures to:

1. Withdraw vehicles (e.g. lifeguard trucks) from the garage and storage yard area and store/stage them in a location that is not subject to storm hazards;
2. Secure or remove any hazardous materials (e.g. oils, grease, cleansers) that could become entrained in surging storm water;
3. Shut down and pump out the sanitary sewer line extending to the lifeguard tower building along the portion of the utility that could be subject to wave hazards and erosion to prevent the discharge of waste in the event of utility leakage or breakage;
4. Shut down any other utilities that could become a hazard if such utility becomes damaged or breaks;
5. Secure or remove any movable equipment and appurtenances (e.g. chairs, benches, picnic tables, trash receptacles, maintenance equipment) that could become entrained in surging storm water;
6. Implement regular safety drills practicing the elements of the storm preparedness plan on at least an annual basis;

Nothing in this special condition voids the requirements of Special Conditions 1 or 2 of this permit.

B. 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 required.

5. Maintenance/Monitoring of Lifeguard Tower

If 5 vertical feet or more (measured from elevation of the sand on the seaward side of the structure to the bottom of the seaward-most grade beam) of the piling and grade beam foundation of the lifeguard tower is exposed and unsupported by sand for more than a complete year, the applicant shall implement a beach re-shaping and/or nourishment program to sufficiently cover the exposed section of the piling and grade beam foundation and restore the section of the beach in this area. The sand shall come from an approved sand donor site.

6. Water Quality Management Plan (WQMP)

A. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OF THE DEVELOPMENT AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit for the review and approval of the Executive Director, two (2) copies of a Final Water Quality Management Plan (WQMP) for the post-construction project site, prepared by a licensed water quality professional, and shall include plans, descriptions, and supporting calculations. The WQMP shall incorporate structural and non-structural Best Management Practices (BMPs) designed to reduce, to the maximum extent practicable, the volume, velocity and pollutant load of stormwater and dry weather flows leaving the developed site. In addition to the specifications above, the plan shall be in substantial conformance with the following requirements:

(a) Post-development peak runoff rates and average volumes shall not exceed pre-development conditions;
(b) Appropriate structural and non-structural BMPs (site design, source control and treatment control) shall be designed and implemented to minimize water quality impacts to surrounding coastal waters;
(c) Impervious surfaces, especially directly connected impervious areas, shall be minimized, and alternative types of pervious pavement shall be used where feasible;
(d) Irrigation and the use of fertilizers and other landscaping chemicals shall be minimized;
(e) Trash, recycling and other waste containers shall be provided onsite. These containers shall be covered, watertight, and designed to resist scavenging animals.
(f) Runoff from all roofs, roads and parking areas shall be collected and directed through a system of structural BMPs including vegetated areas and/or gravel filter strips or other vegetated or media filter devices. The system of BMPs shall be designed to 1) trap sediment, particulates and other solids and 2) remove or mitigate contaminants through infiltration, filtration and/or biological uptake. The drainage system shall also be designed to convey and discharge runoff from the developed site in a non-erosive manner;
(g) Post-construction structural 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 storm event for volume-based BMPs, and/or the 85th percentile, 1-hour storm event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs;
(h) All BMPs shall be operated, monitored, and maintained for the life of the project and at a minimum, all structural BMPs shall be inspected, cleaned-out, and where necessary, repaired at the following minimum frequencies: (1) prior to October 15th each year; (2) during each month between October 15th and April 15th of each year and, (3) at least twice during the dry season;
(i) Debris and other water pollutants removed from structural BMP(s) during clean-out shall be contained and disposed of in a proper manner;
(j) It is the applicant's responsibility to maintain the drainage system and the associated structures and BMPs according to manufacturer's specifications.

B. 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 required.

7. **Development Setbacks/Buffers from Streams/Wetlands and Upland Environmentally Sensitive Habitat Areas (ESHA)**

A. Development within El Moro Creek and a 50-ft wide buffer (horizontally) from the edge of the canopy of the existing native riparian vegetation shall be prohibited, including but not limited to grading, roads, parking areas, utilities, individual or group picnic structures, restrooms, and other buildings except as follows:

(1) Construction, maintenance and use of the two proposed pedestrian/emergency vehicle access bridges and utilities constructed thereon;
(2) Construction and maintenance of the proposed stream habitat restoration described in the Final Stream/Wetland Restoration and Monitoring Program approved by the Executive Director, including proposed grading for stream widening and stabilization, grade control structures, streambed and streambank stabilization structures, brush mat bank protection, and minor drainage facilities;
(3) All proposed development within or adjacent to the 220 linear foot segment of the creek proposed to be stabilized with block wall and armorflex inland of the PCH undercrossing;
(4) One-time, brief (less than 30 days) grading for construction, and maintenance and use of water quality management basins and drainage outlets to the creek provided such basins are located a minimum of 25 feet (horizontally) from the edge of the canopy of the existing native riparian vegetation;
(5) Construction, maintenance and use of public trails, interpretive signs, benches, safety/habitat fences, and minor drainage facilities provided such facilities are sited toward the outer edge of the buffer to the maximum extent feasible. Trails passing through ESHA and buffers shall be limited to pedestrian, wheelchair use (i.e. no bicycles or equivalent), and emergency vehicles;

B. Development within upland ESHA and a 50-foot wide (horizontally) buffer from the edge of the ESHA shall be prohibited, including but not limited to grading, roads, parking areas, utilities, individual or group picnic structures, restrooms, and other buildings, except as follows:

(1) Construction, maintenance and use of public trails, interpretive signs, benches, safety/habitat fences, minor drainage facilities, provided such facilities are sited toward the outer edge of the ESHA and buffer to the maximum extent feasible. Trails passing through ESHA and buffers shall be limited to pedestrian, wheelchair use (i.e. no bicycles or equivalent), and emergency vehicles;
(2) Construction and maintenance of the proposed habitat restoration described in the Final Coastal Sage Scrub Restoration and Monitoring Program approved by the Executive Director, including but not limited to the proposed retirement/disablement/removal of septic facilities and re-vegetation.

8. **Storage of Construction Materials, Mechanized Equipment and Removal of Construction Debris**

In addition to compliance with the setback/buffering requirements outlined in Special Condition 7, the permittee shall comply with the following additional construction-related requirements:

(a) Streams/wetlands and any upland environmentally sensitive habitats shall not be impacted in any way, except as specifically authorized in this permit. No construction materials (except as specifically allowed under Special Condition 7), debris, or waste shall be placed or stored where it may enter sensitive upland habitat or streams/wetlands, storm drain, receiving waters, or be subject to wind erosion and dispersion;

(b) Any and all debris resulting from construction activities shall be removed from the project site within 24 hours of completion of construction;

(c) Best Management Practices (BMPs) designed to prevent spillage and/or runoff of construction related materials, sediment or contaminants associated with construction activity, shall be implemented prior to the on-set of such activity. Selected BMPs shall be maintained in a functional condition throughout the duration of the project.

(d) Construction debris and sediment shall be removed from construction areas each day that construction occurs to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Debris shall be disposed at a debris disposal site outside the coastal zone.

(e) All ESHA areas shall be identified with temporary fencing by a qualified biologist prior to the commencement of construction activities.

(f) An appropriately trained biologist shall monitor construction activity for disturbance to sensitive species or habitat area. At minimum, monitoring shall occur once a week during any week in which construction occurs. Daily monitoring shall occur during construction activities, which could significantly impact biological resources such as construction within 50 feet of streams/wetlands and 50 feet of coastal sage scrub that could result in disturbances to Least Bell's vireo (Vireo bellii pusillus) and California gnatcatcher (Polioptila california). Based on field observations, the biologist shall advise the applicant regarding methods to minimize or avoid significant impacts, which could occur upon sensitive species or habitat areas. The applicant shall not undertake any activity, which would disturb sensitive species or habitat area unless specifically authorized and mitigated under this coastal development permit or unless an amendment to this coastal development permit for such disturbance has been obtained from the Coastal Commission.

(g) There shall be no grading within 100 feet of native scrub habitats that occur within ESHA boundaries during the gnatcatcher breeding season (considered to be from February 15 through August 31), if gnatcatchers are present.

(h) During the non-breeding season(September 1 through February 14), ESHA defined by historical gnatcatcher use shall be shielded from the sight and sound of construction activities taking place within 50 feet of the ESHA.

(i) Staging/stockpile areas shall be confined to designated fenced areas located outside of designated ESHA and buffers to prevent damage to ESHA.

9. <u>Lighting</u>

All proposed lighting shall be directed and shielded so that light is directed away from wetlands, streams, coastal sage scrub, and other habitat areas. Furthermore, no

skyward-casting lighting shall be used. The lowest intensity lighting shall be used that is appropriate to the intended use of the lighting.

10. Final Stream/Wetland Restoration and Monitoring Program

A. PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the applicant shall develop, in consultation with the California Department of Fish and Game and U.S. Fish and Wildlife Service as appropriate, and submit for review and written approval of the Executive Director, a final detailed program designed by a qualified wetland biologist for restoration and monitoring of Moro Creek in substantial conformance with the *El Moro Creek Riparian and Coastal Sage Scrub Restoration Plan* dated September 2004. Required restoration shall be at a minimum ratio of 4:1 (restoration to impact). The restoration and monitoring program shall at a minimum include the following:

1. Plans for site preparation and invasive plant removal;

2. Restoration plan including planting design, plant palette, source of plant material, plant installation, erosion control;

3. Final Success Criteria. The restoration will be considered successful if the overall species composition and the vegetative cover of the dominant perennial species are similar to relatively undisturbed vegetation of the same type in nearby reference areas. The Army Corps of Engineers "50/20" rule shall be used to determine dominance. Species composition shall be considered similar if all the dominant species and at least 80% of the non-dominant species at the reference site are present at the restored site. The vegetative cover of dominant species at the restoration and reference sites will be compared with an appropriate statistical test. Random sampling of the restoration and reference sites will be done with sufficient replication to detect a 10% absolute difference in cover with 90% power with alpha=0.10. The cover of dominant species will be considered similar if there is no statistical difference (P>0.10) in the average cover of each dominant species between the two sites; or, if there is a statistically significant difference, it is no greater than 10% absolute cover;

4. The sampling design to be employed, an estimate of the sample variance, and a statistical power analysis to estimate the necessary number of samples to meet the requirements specified above. Power analysis software is available commercially and on the world wide web (e.g, http://www.stat.uiowa.edu/~rlenth/Power/index.html).

5. Provisions for assessing the initial biological and ecological status of the "as built" restoration site within 30 days of establishment of the site in accordance with the approved restoration program. The assessment shall include an analysis of the attributes that will be monitored pursuant to the program, with a description of the methods for making that evaluation.

6. Provisions for monitoring and remediation of the restoration site in accordance with the approved final restoration and monitoring program for a period of five years or until it has been determined that success criteria have been met or have failed to be met, whichever comes first.

7. Provisions for submission of annual reports of monitoring results to the Executive Director for the duration of the required monitoring period, beginning the first year after submission of the "as-built" assessment. Each report shall include copies of

all previous reports as appendices. Each report shall be a cumulative report that summarizes all previous reports. Each report shall document the condition of the restoration with photographs taken from the same fixed points in the same directions. Each report shall also include a "Performance Evaluation" section where information and results from the monitoring program are used to evaluate the status of the stream/wetland restoration project in relation to the performance standards.

8. Provisions for submission of a final monitoring report to the Executive Director at the end of the final performance monitoring period. Final performance monitoring shall take place after at least three years without remediation or maintenance other than weeding. The performance monitoring period shall either be five years or three years without maintenance or remediation, whichever is longer. The final report must be prepared in conjunction with a qualified wetlands biologist. The report must evaluate whether the restoration site conforms to the goals, objectives, and performance standards set forth in the approved final restoration program. The report must address all of the monitoring data collected over the monitoring period.

B. If the final report indicates that the restoration project has been unsuccessful, in part, or in whole, based on the approved performance standards, the applicant shall submit within 90 days a revised or supplemental restoration program to compensate for those portions of the original program which did not meet the approved performance standards. The revised restoration program, if necessary, shall be processed as an amendment to this coastal development permit.

C. The permittee shall monitor and remediate the stream/wetland restoration site in accordance with the approved monitoring program, including any revised restoration program approved by the Commission or its staff. Any proposed changes to the approved restoration and monitoring program shall be reported to the Executive Director. No changes to the approved restoration and monitoring program shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

11. <u>Final Coastal Sage Scrub Restoration and Monitoring Program</u>

A. PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the applicant shall develop, in consultation with the California Department of Fish and Game and U.S. Fish and Wildlife Service as appropriate, and submit for review and written approval of the Executive Director, a final detailed habitat restoration and monitoring program to offset proposed coastal sage scrub impacts. Required restoration shall be at a minimum ratio of 3:1 (restoration to impact). Supplementary restoration may be identified in the restoration and monitoring program, but would not be treated as a required component of the mitigation. A qualified biologist for restoration and monitoring of the coastal sage scrub restoration site shall design the restoration and monitoring program. The restoration and monitoring program shall at a minimum include the following:

1. Plans for site preparation and preservation of native seed bank;

2. Restoration plan including planting design, plant palette, source of plant material, plant installation, watering, erosion control, soil fertilization and weed abatement;

3. Final Success Criteria. The restoration will be considered successful if the overall species composition and the vegetative cover of the dominant perennial

species are similar to relatively undisturbed vegetation of the same type in nearby reference areas. The Army Corps of Engineers "50/20" rule shall be used to determine dominance. Species composition shall be considered similar if all the dominant species and at least 80% of the non-dominant species at the reference site are present at the restored site. The vegetative cover of dominant species at the restoration and reference sites will be compared with an appropriate statistical test. Random sampling of the restoration and reference sites will be done with sufficient replication to detect a 10% absolute difference in cover with 90% power with alpha=0.10. The cover of dominant species will be considered similar if there is no statistical difference (P>0.10) in the average cover of each dominant species between the two sites; or, if there is a statistically significant difference, it is no greater than 10% absolute cover;

4. The sampling design to be employed, an estimate of the sample variance, and a statistical power analysis to estimate the necessary number of samples to meet the requirements specified above. Power analysis software is available commercially and on the world wide web (e.g, http://www.stat.uiowa.edu/~rlenth/Power/index.html).

5. Provisions assessing the initial biological and ecological status of the "as built" restoration site within 30 days of establishment of the restoration site in accordance with the approved restoration program. The assessment shall include an analysis of the attributes that will be monitored pursuant to the program, with a description of the methods for making that evaluation.

6. Provisions for monitoring and remediation of the restoration site in accordance with the approved final restoration program for a period of five years or until it has been determined that success criteria have been met or have failed to be met, whichever comes first.

7. Provisions for submission of annual reports of monitoring results to the Executive Director for the duration of the required monitoring period, beginning the first year after submission of the "as-built" assessment. Each report shall include copies of all previous reports as appendices. Each report shall be a cumulative report that summarizes all previous reports. Each report shall document the condition of the restoration with photographs taken from the same fixed points in the same directions. Each report shall also include a "Performance Evaluation" section where information and results from the monitoring program are used to evaluate the status of the restoration project in relation to the performance standards.

8. Provisions for submission of a final monitoring report to the Executive Director at the end of the reporting period. Final performance monitoring shall take place after at least three years without remediation or maintenance other than weeding. The performance monitoring period shall either be five years or three years without maintenance or remediation, whichever is longer. The final report must be prepared in conjunction with a qualified biologist. The report must evaluate whether the restoration site conforms to the goals, objectives, and performance standards set forth in the approved final restoration program. The report must address all of the monitoring data collected over the five-year period.

B. If the final report indicates that the restoration project has been unsuccessful, in part, or in whole, based on the approved performance standards, the applicant shall submit within 90 days a revised or supplemental restoration program to compensate for those portions of the original program that were necessary to offset project impacts which did not meet the approved performance standards. The revised

restoration program, if necessary, shall be processed as an amendment to this coastal development permit.

C. The permittee shall monitor and remediate the Coastal Sage Scrub restoration site in accordance with the approved monitoring program, including any revised restoration program approved by the Commission or its staff. Any proposed changes to the approved monitoring program shall be reported to the Executive Director. No changes to the approved monitoring program shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

12. <u>Landscape Plan For Developed Campground & Day Use Areas</u>

A. PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit for review and written approval of the Executive Director a final landscape plan for those areas not covered by the final coastal sage scrub and stream/wetland restoration program areas (e.g. developed campground and day use areas) prepared by a licensed landscape architect in consultation with the project biological consultant for the review and approval of the Executive Director. Prior to submittal to the Executive Director, the California Department of Fish and Game and U.S. Fish and Wildlife Service shall review the plans to ensure that the plans are in conformance with the requirements for the protection of endangered species. The landscape plan shall conform to the following requirements:

1. <u>Preparation/format of plan:</u> The plan shall include, at a minimum, the following components:
   (a) A summary and map showing which species of native plants are found on the site and the topography of the developed site.
   (b) A map showing the species, size, number and location of all plant materials that will be installed on the site, and all other landscape features such as proposed trails and hardscape.
   (c) A separate list showing the species, size, number of all plant materials proposed to be installed including the common and scientific name of the plant and whether or not the plant is native to the project site, and the limits of the area where each particular plant species will be planted and the type of installation proposed.
   (d) A map showing any proposed permanent and temporary irrigation.
   (e) A schedule for installation of plants; and
   (f) A list of goals for timing (i.e. the rate at which plants grow over the site) and coverage (i.e. percent vegetative ground cover) and of measures to slow surface erosion. Timing and coverage shall be based on the expected growth rate of the plants the applicant proposes to use and the typical coverage of the plant community /landscape materials that are proposed. Alternative erosion control measures shall be identified and maintained until coverage is adequate to prevent surface erosion.

2. General Provisions for the Project Site
   (a) All landscaping (including temporary erosion control and final landscaping) shall be of plants native to coastal Orange County and appropriate to the natural habitat type. Native plants used for landscaping shall be obtained, to the maximum extent practicable, from seed and vegetative sources at Crystal Cove State Park. No plant species listed as problematic and/or invasive by the California Native Plant Society, California Invasive Plant Council (a.k.a. California Exotic Pest Plant Council), or as may be identified from time to time by the State of California shall be utilized. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized anywhere within the proposed development area.
   (b) Use of pesticides, fertilizers, and irrigation shall be minimized to the maximum extent feasible. Plants shall be selected that minimize the need for fertilizer, pesticides and irrigation. These types of plants are generally native, drought tolerant plants that are adapted to local soil and climatic conditions and are resistant to pests.
   (c) Plants shall be grouped with similar water requirements in order to reduce excess irrigation runoff and promote surface infiltration.
   (d) All required plantings shall 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 the landscape plan.

B. The applicant will actively monitor the site for five years after permit issuance, remove non-natives and invasives and reinstall plants that have failed.

   1. The applicant will inspect the site no less than every 30 days during the first rainy season (November-March) the first year after the newly constructed road is open to vehicles, and no less than every 60 days during the first year. A written record of such inspection shall be prepared. Plants that failed to grow shall be replaced and invasive plants and weeds removed.

   2. Thereafter, the applicant will inspect the site at a minimum of every three months. Plants that failed to grow shall be replaced and invasive plants and weeds removed.

   3. Five years from the date of the implementation of the landscaping plan, the applicants shall submit for the review and approval of the Executive Director, a landscape monitoring report, prepared by a licensed Landscape Architect that certifies 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.

4. 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 applicant, 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 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. The revised landscaping plan, if necessary, shall be processed as an amendment to this coastal development permit.

C. The permittee shall undertake development in accordance with the approved final 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 Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

13. <u>Archaeological Resource Management and Protection</u>

A. PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit for the review and approval of the Executive Director an archeological monitoring plan prepared by a qualified professional, that shall incorporate the following measures and procedures:

1. If any cultural deposits are discovered during project grading or construction, including but not limited to skeletal remains and grave-related artifacts, traditional cultural sites, religious or spiritual sites, or artifacts, the permittee shall carry out significance testing of said deposits and, if cultural deposits are found to be significant, additional investigation and mitigation in accordance with this special condition including all subsections. No significance testing, investigation or mitigation shall commence until the provisions of this special condition are followed, including all relevant subsections;
2. If any cultural deposits are discovered, including but not limited to skeletal remains and grave-related artifacts, traditional cultural sites, religious or spiritual sites, or artifacts, all grading or construction within a 50 foot wide buffer shall cease in accordance with subsection B. of this special condition;
3. In addition to recovery and reburial, in-situ preservation and avoidance of cultural deposits shall be considered as mitigation options, to be determined in accordance with the process outlined in this condition, including all subsections;
4. Archaeological monitor(s) qualified by the California Office of Historic Preservation (OHP) standards, Native American monitor(s) with documented ancestral ties to the area appointed consistent with the standards of the Native American Heritage Commission (NAHC), and the Native American most likely descendent (MLD) or their designee when State Law mandates identification of a MLD, shall monitor all project grading;
5. The permittee shall provide sufficient archeological and Native American monitors to assure that all project grading that has any potential to uncover or otherwise disturb cultural deposits is monitored at all times;
6. If human remains are encountered, the permittee shall comply with applicable State and Federal laws. Procedures outlined in the monitoring plan shall not prejudice the ability to comply with applicable State and Federal laws, including but not limited to, negotiations between the landowner and the MLD regarding the manner of treatment of human remains including, but not limited to, scientific or cultural study of the remains (preferably non-destructive); selection of in-situ preservation of remains, or recovery, repatriation and reburial of remains; the time frame within which reburial or ceremonies must be conducted; or selection of attendees to reburial events or ceremonies. The range of investigation and mitigation measures considered shall not be constrained by the approved development plan. Where appropriate and consistent with State and Federal laws, the treatment of remains shall be decided as a component of the process outlined in the other subsections of this condition.
7. Prior to the commencement and/or re-commencement of any monitoring, the permittee shall notify each archeological and Native American monitor of the requirements and procedures established by this special condition, including all subsections. Furthermore, prior to the commencement and/or re-

commencement of any monitoring, the permittee shall provide a copy of this special condition, the archeological monitoring plan approved by the Executive Director, and any other plans required pursuant to this condition and which have been approved by the Executive Director, to each monitor.

B. If an area of cultural deposits, including but not limited to skeletal remains and grave-related artifacts, traditional cultural sites, religious or spiritual sites, or artifacts, is discovered during the course of the project, all construction activities in the area of the discovery that has any potential to uncover or otherwise disturb cultural deposits in the area of the discovery and all construction that may foreclose mitigation options or the ability to implement the requirements of this condition shall cease and shall not recommence except as provided in subsection C and other subsections of this special condition. In general, the area where construction activities must cease shall be no less than a 50-foot wide buffer around the cultural deposit.

C. An applicant seeking to recommence construction following discovery of the cultural deposits shall submit a Significance Testing Plan for the review and approval of the Executive Director. The Significance Testing Plan shall identify the testing measures that will be undertaken to determine whether the cultural deposits are significant. The Significance Testing Plan shall be prepared by the project archaeologist(s), in consultation with the Native American monitor(s), and the Most Likely Descendent (MLD) when State Law mandates identification of a MLD.

1. If the Executive Director approves the Significance Testing Plan and determines that the Significance Testing Plan's recommended testing measures are de minimis in nature and scope, the significance testing may commence after the Executive Director informs the permittee of that determination.
2. If the Executive Director approves the Significance Testing Plan but determines that the changes therein are not de minimis, significance testing may not recommence until after an amendment to this permit is approved by the Commission.
3. Once the measures identified in the significance testing plan are undertaken, the permittee shall submit the results of the testing to the Executive Director for review and approval. The results shall be accompanied by the project archeologist's recommendation as to whether the findings are significant. The project archeologist's recommendation shall be made in consultation with the Native American monitors and the MLD when State Law mandates identification of a MLD. The Executive Director shall make the determination as to whether the deposits are significant based on the information available to the Executive Director. If the deposits are found to be significant, the permittee shall prepare and submit to the Executive Director a supplementary Archeological Plan in accordance with subsection D of this condition and all other relevant subsections. If the deposits are found to be not significant, then the permittee may recommence grading in accordance with any measures outlined in the significance testing program.

D. An applicant seeking to recommence construction following a determination by the Executive Director that the cultural deposits discovered are significant shall submit a supplementary Archaeological Plan for the review and approval of the Executive Director. The supplementary Archeological Plan shall be prepared by the project archaeologist(s), in consultation with the Native American monitor(s), the Most Likely Descendent (MLD) when State Law mandates identification of a MLD, as well as others identified in subsection E of this condition. The supplementary Archeological Plan shall identify proposed investigation and mitigation measures. The range of investigation and mitigation measures considered shall not be constrained by the

approved development plan. Mitigation measures considered may range from in-situ preservation to recovery and/or relocation. A good faith effort shall be made to avoid impacts to cultural resources through methods such as, but not limited to, project redesign, capping, and placing cultural resource areas in open space. In order to protect cultural resources, any further development may only be undertaken consistent with the provisions of the Supplementary Archaeological Plan.

1. If the Executive Director approves the Supplementary Archaeological Plan and determines that the Supplementary Archaeological Plan's recommended changes to the proposed development or mitigation measures are de minimis in nature and scope, construction may recommence after the Executive Director informs the permittee of that determination.

2. If the Executive Director approves the Supplementary Archaeological Plan but determines that the changes therein are not de minimis, construction may not recommence until after an amendment to this permit is approved by the Commission.

E. Prior to submittal to the Executive Director, all plans required to be submitted pursuant to this special condition shall have received review and written comment by a peer review committee convened in accordance with current professional practice that shall include qualified archeologists and representatives of Native American groups with documented ancestral ties to the area. Names and qualifications of selected peer reviewers shall be submitted for review and approval by the Executive Director. The plans submitted to the Executive Director shall incorporate the recommendations of the peer review committee. Furthermore, upon completion of the peer review process, all plans shall be submitted to the California Office of Historic Preservation (OHP) and the NAHC for their review and an opportunity to comment. The plans submitted to the Executive Director shall incorporate the recommendations of the OHP and NAHC. If the OHP and/or NAHC do not respond within 30 days of their receipt of the plan, the requirement under this permit for that entities' review and comment shall expire, unless the Executive Director extends said deadline for good cause. All plans shall be submitted for the review and approval of the Executive Director.

F. 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 required.

14. <u>U.S. Army Corps Of Engineers Approval</u>

PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the permittee shall provide to the Executive Director a copy of a permit issued by the U.S. Army Corps of Engineers, or letter of permission, or evidence that no permit or permission is required. The applicant shall inform the Executive Director of any changes to the project required by the U.S. Army Corps of Engineers. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

15. Other Agency Approvals

PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the permittee shall provide to the Executive Director a copy of a permit, or letter of permission, or evidence that no permit or permission is required for the project by the following entities: California Department of Fish and Game; U.S. Fish and Wildlife Service; Regional Water Quality Control Board, California Department of Transportation. The applicant shall inform the Executive Director of any changes to the project required by the California Department of Fish and Game; U.S. Fish and Wildlife Service; Regional Water Quality Control Board, California Department of Transportation. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

16. Materials, Maintenance and Monitoring of Proposed Grade Control Structures

A. The permittees shall maintain the vinyl sheetpile grade control structure in good condition throughout the life of the development. PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the applicants shall submit a Monitoring Plan, for the review and approval of the Executive Director. The permittees, and their successors in interest shall be responsible for carrying out all provisions of the approved Monitoring Plan for as long as the grade control structures remain in place. The monitoring plan, at a minimum, shall provide for:
   (1) Regular inspections by a licensed engineer. These inspections shall be performed at least every 2 years for the first 12 years after the grade control structures have been installed, and at least every year thereafter.
   (2) The inspections shall examine the exposed portions of the grade control structures (to the streambed) for signs of weakness or possible failure, including, but not limited to cracking, bending, splitting, splintering, or flaking. All weak or potential failure areas shall be marked on an as-built plan of the grade control structures, and there shall be photographs and text to explain the nature and extent of each weakness.
   (3) Inspection reports shall be prepared and conveyed to the Executive Director within 30 days of the inspection work. These reports shall provide information on and photographs from the date of the inspection, the name and qualifications of the person performing the inspection, and an overall assessment of the continued integrity of the grade control structures. If the inspection identifies any areas where the grade control structures have been damaged, the report shall identify alternatives to remedy the damage.

B. In the event that any sections of the grade control structures are damaged or flaking, the permittees shall notify the Commission within 10 days; and in such event, within 30 days of such notification, submit to the Commission a complete application for any coastal development permit amendment, or new permit, necessary for the repair or replacement of the grade control structures. The permittee shall carry out the work approved in any such permit or amendment in a timely manner.

C. Future Responses to Address Potential Hazards of Plastics

By acceptance of this permit, the applicant agrees to submit an application for an amendment to this permit or a new coastal development permit if new information becomes available that indicates that plastic has harmful effects on the marine environment, and that environmentally superior, feasible alternative(s) are available.

The amendment or new coastal development shall include measures to eliminate or significantly reduce the adverse impacts of the plastic. The permittee shall carry out the work approved in any such permit or amendment in a timely manner.

17. **Conformance of Design and Construction Plans to Wave Runup Analysis**

A. In order to avoid the construction of a revetment, seawall or similar shoreline protective device the applicant shall utilize the proposed pile foundation alternative for the lifeguard tower building. All final design and construction plans, including foundations, grading and drainage plans, shall be consistent with all recommendations pertaining to the design of a lifeguard tower on a pile foundation system identified in the wave runup analyses by Skelly Engineering, El Moro Beach Proposed Lifeguard Station Wave Runup Analysis, report prepared by David Skelly dated February 17, 2004 and Skelly Engineering, El Moro Beach Proposed Lifeguard Station, letter prepared by David Skelly dated September 14, 2004. PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the Executive Director's review and approval, evidence that an appropriate licensed professional has reviewed and approved all final design and construction plans for the lifeguard tower and certified that each of those final plans is consistent with all of the recommendations for a lifeguard tower on a pile foundation system specified in the above-referenced reports approved by the Califomia Coastal Commission. Said final plans shall be accompanied by an analysis prepared by an appropriately licensed professional that identifies the erosion, seismic and flood event and/or force that was used in the final design, for the Executive Director's review and approval.

B. 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.

18. **Final Revised Plans**

PRIOR TO COMMENCEMENT OF THE CONSTRUCTION AUTHORIZED BY THIS COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for the review and approval of the Executive Director, revised final plans that conform with the requirements of the special conditions of this permit and indicate the final layout of all development including but not limited to grading, structures and foundation systems, utilities and other infrastructure, water quality management system, trails, park and recreation facilities, signs, interpretive amenities, habitat restoration, and landscaping. 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 required.

IV. Findings and Declarations

The Commission hereby finds and declares:

A. PROJECT LOCATION, BACKGROUND AND DESCRIPTION

1. Project Location

Crystal Cove State Park is located in Orange County between the communities of Corona del Mar to the north and Laguna Beach to the south (Exhibit 1). The 2,791-acre State Park includes a 3.25-mile long coastal section west of Pacific Coast Highway (PCH) and several inland areas. The proposed project site is the site of the approximately 32-acre El Morro Mobile Home Park, located along both sides of PCH. Although the area is within a State Park, public access is presently limited by the private mobile homes. Vertical public access to the beach is available approximately 2,400 feet north of the subject site at the Reef Point entrance to Crystal Cove State Park. Existing lateral public access is located seaward of the existing mobile homes.

2. Project Description

Under Coastal Development Permit Application 5-04-060, the applicant is proposing to remove and/or demolish all existing buildings, paved roads, and associated improvements within the Mobile Home Park that remain after the existing private leases expire in December 2004. In place of the private mobile home park, the applicant is proposing to construct a public park with day use and overnight accommodations. The project involves construction of campgrounds, public amenities, parking lots, creek restoration, water quality improvements, utility upgrades, abandonment of the septic system, trail improvements, and construction of a lifeguard station. A substantial majority of the proposed development is located within the footprint of the existing (to be removed) mobile home park and associated facilities.

The applicant divides the project site into four topographic areas: the entrance road, the upper terrace, Moro Creek valley, and the Moro Beach areas. The work proposed in these areas, which is more fully described in the project plans and habitat enhancement plans contained in the project file, is as follows[1]:

Entrance Road Description
The entrance road to the campground and day-use parking will be constructed along the existing access to the Park Headquarters and Visitor Center, and then turn behind the El Morro Elementary School to the inland side of the campground as shown on Exhibit 2. A new signalized intersection with Pacific Coast Highway will be constructed and will serve the school, the Park Headquarters and Visitor Center, and the campground and day-use area. The existing signal and entrance to the school will be moved to this location. The entrance road will be widened 18 feet to accommodate the school traffic and incorporate left and right turning lanes onto Pacific Coast Highway for approximately 500 feet east of Pacific Coast Highway. The road will be widened on the south side (downcoast towards the school) to preserve the maximum width of the wildlife corridor along Muddy Creek and maintain a buffer to human impacts. Existing overhead utilities will be placed underground for this section of road in conformance with the General Plan goal of placing all utilities underground. After the entrance road reduces to two lanes, there will be minor modifications including the placement of fence or guardrail at the existing edge of pavement on the upcoast side, and minor widening on the downcoast side

[1] The following description is, in large part, verbatim from the description provided by the applicant in their application. However, small clarifications are included based on information provided by the applicant since the original application filing.

of the road. Overhead utilities on this section of road will not be placed underground at this time.

The road will also be widened as it turns downcoast towards the campground entrance and a new 24-foot wide road with shoulders will be constructed into the campground. The entrance kiosk, turnaround, and temporary parking area will be placed to provide a direct line of sight along the boundary between the campground and the school. A new gravity sewer line from the existing Park Headquarters/Visitor Center will be placed within the new and existing roads. It will then connect with proposed sewer lines within the campground.

To accommodate park and school traffic traveling northbound on PCH, a right turn lane will be constructed. The lane will require that PCH be widened 12' to the inland side for approximately 500 feet along the frontage of the existing elementary school.

The Upper Terrace -Campground
The project proposes to construct a new 60-unit campground which would serve tents and recreational vehicles in the upper terrace area of the existing mobilehome park. Thirty (30) of the sixty camp sites, along the lower tiers closer to PCH, will be designated for tent camping and small recreational vehicles. A small drive-way on these sites will effectuate the tent-preference and limitation to smaller recreational vehicles. The remaining thirty (30) camping sites, located on the inland-most upper tiers, will be able to accommodate larger recreational vehicles upon a longer drive-way. Electrical utilities and water would be provided to each site. Two combination restroom/shower buildings, one with a laundry room, will also be constructed. Each building and up to 15 of the campsites will meet Americans With Disabilities Act requirements.

Within the campground, the existing roadway that runs along the school boundary will be removed and replaced with loop road sections located farther away from the school. This will create a buffer area between the school and the campsites. The buffer area will be planted with vegetative screening. At the school's request, no access will be provided between the school and campground. The school has an existing fence in this location that will remain in place. A trail will also be constructed to provide access to the campground from the existing north-bound public transportation bus stop in front of El Morro School. Again, the existing school fence along Pacific Coast Highway will prevent access from the trail into the school.

An entry building with office space and a restroom, visitor parking and dump stations will be constructed along the inland side of the campground. The entry building will provide a direct line of sight between the campground and the school and also provide a state park presence for this section of the park. Invasive exotic plant materials requiring permanent irrigation will be removed. A temporary drip or low flow irrigation system will be installed for the native vegetation and abandoned after the native species have been established. New trails to connect to the beach and valley areas, a new vista point, unpaved parking spurs, campsite furnishings, benches, interpretive exhibits, localized spot lighting, signs, fire hydrants, erosion control, and site drainage bioswales are also proposed.

The sewer force main from the valley crosses the front of the terrace area, hook-up with the dump station and combination building sewer lines, then cross school property and connect to a sewer lift station. The sewer lift station has been constructed on the school property by Laguna Beach Unified School District as part of their school expansion project. Then the sewer, serving both the park and school, are connected with the municipal sewer system via a force main pipeline up Pacific Coast Highway to Reef Point.

Water quality controls in the upper terrace will rely primarily on shallow vegetative swales parallel to all park roads to intercept the runoff and provide natural filtration and reduced velocities. In addition, the upper terrace would utilize a CDS unit on the final collection storm drain prior to joining the existing storm drain exiting the site to Moro Creek. The CDS system is a pre-cast underground unit used to capture sediment and debris by creating a vortex that allows water to escape while contaminants are deflected into a sump for removal. Most excess sheetflow will exit to Moro Creek with a portion to Muddy Creek.

Moro Creek Vallev -Stream Restoration/Day-Use
The project proposes to regrade a small portion of the valley area to create access and parking for 212 vehicles. Up to 9 parking spaces will meet Americans With Disabilities Act requirements. An amphitheater/campfire center, three sheltered group picnic areas and twenty family picnic areas with ramadas (i.e. shade structures) will be built primarily upcoast from Moro Creek. Two restroom buildings will be constructed. One will serve primarily group picnic and amphitheater users. The other will serve family picnic and beach users, have a room for a small park store, and have an adjacent outdoor shower.

Overhead lighting will be installed at the intersection of the upper terrace and Moro Creek valley roads. Low level lights will be placed along the path from the campground to the amphitheater/campfire center. The amphitheater is designed to direct activity away from sensitive species located in the slopes behind the existing mobilehome park maintenance yard. A small maintenance storage facility will be attached to the rear of the amphitheater stage. Appropriate site amenities, such as pathways, vehicle barriers, drinking fountains, interpretive facilities, utilities, two small below grade sewer lift stations, and water quality control facilities will also be constructed in the valley.

A large area will be set aside for landscaping with native species and an interpretive "outdoor classroom" on the downcoast side of Moro Creek. The final layout of this interpretive area will not include paving or permanent structures and will be determined after an interpretive plan is developed for the site. This layout will include native plantings. Native shrubs will also be planted along the toe of the bluff slope to prevent volunteer trails into the existing coastal sage habitat downcoast of the valley. On both sides of the creek, a trailhead connection will be made from the valley to the existing trail system up Moro Canyon. At the inland end of the valley, a one-lane single-span bridge will be constructed at the existing unpaved trail crossing of Moro Creek to eliminate erosion, sedimentation, and hydraulic issues associated with the existing crossing for trail users and emergency vehicles.

The lower valley area will also rely on bioswales for water quality treatment with an extended detention basin and shallow biofilter basins for additional control. The extended detention basin provides adequate storage volume to treat the initial "first flush" runoff from a storm through creating longer detention or holding time for enhanced filtering. The shallow vegetative biofilter basins will treat shallow sheet flow from road and path areas allowing vegetative uptake for nutrient removal, lower velocities for sediment removal, breakdown of hydrocarbons by bacterial degradation, and filtering of suspended solids.

Moro Creek will be restored to a more natural streambed. The creek will be widened primarily on the upcoast side of the existing channel and replanted with native vegetation after exotic plant species are removed. Due to the constriction at the Pacific Coast Highway undercrossing, approximately 200 linear feet of the creek immediately inland of PCH will need to be armored, but the remainder of the creek within the restoration area would not be armored and would be planted with native vegetation. The proposed armoring would have spacing to allow vegetation to be planted (Exhibit 3). Overall, the proposed restoration will improve creek function and process, and provide a natural appearance and habitat.

Just inland of PCH and within the area proposed to be armored, a 16-foot wide single-span bridge will be constructed across Moro Creek to provide emergency vehicle access to the day use and campground area from PCH. Emergency vehicle and pedestrian access from the campground and day use area on the inland side of PCH to the beach will be provided via the existing tunnel under the highway along Moro Creek. The tunnel frequently closes due to wave action. The Department will maintain the tunnel opening as needed with a small tractor. State Park Lifeguards and Rangers may patrol the tunnel area with vehicles.

Moro Beach -Day-Use/Public Safety
The existing mobile homes and support facilities (i.e. septic systems) and a substantial component of the existing protective devices located on the seaward side of PCH will be removed under Coastal Development Permit 5-04-060. The existing road that presently provides access to the mobile homes will be retained to provide access to a proposed lifeguard tower with first aid area and public restrooms. A small segment of existing armoring at the mouth of Moro Creek will be retained in place. However, the remainder of the road would not be protected by any hardened structures. Rather, the applicant is proposing to use native vegetation for erosion protection.

The project will construct one building to house public restrooms and a lifeguard tower/office at the toe of the existing bluff slope below the elevation of PCH. This building will be protected from wave damage by construction on piles. The building and surrounding area will be designed to allow proper site drainage during extreme storm events. The proposed multi-use lifeguard building will be approximately 25 feet tall above beach elevation and about 68 feet long by 38 feet wide plus surrounding walkway areas. The structure will be no further seaward than the existing line of mobile homes. The proposed building will also be below the elevation of PCH in order to avoid obstruction of views across the site available from the highway.

Site amenities will include service and emergency access for the restrooms and lifeguard tower, a small lift station and other underground utilities, portable lifeguard stands on the beach and 20 portable picnic sites will be placed at the toe of the bluff on the terrace above the beach. The existing south-bound public transportation bus stop will be maintained as is.

B. STANDARD OF REVIEW AND CONSISTENCY WITH THE CRYSTAL COVE PUBLIC WORKS PLAN

Section 30605 of the Coastal Act provides, in pertinent part, that:

> *Where a plan for a public works or state university or college or private university development project has been certified by the commission, any subsequent review by the commission of a specific project contained in the certified plan shall be limited to imposing conditions consistent with Sections 30607 and 30607.1.*

Section 30606 of the Coastal Act states:

> *Prior to the commencement of any development pursuant to Section 30605, the public agency proposing the public works project, or state university or college or private university shall notify the Commission and other interested persons, organizations, and governmental agencies of the impending development and provide data to show that it is consistent with the certified Public Works Plan or Long Range Development Plan. No development shall take place within 60 working days after the notice.*

Section 13359 of the Commission's Administrative Regulations states:

> *(b) The Commission shall...determine whether the proposed development is consistent with the certified public works plan...*

The Crystal Cove Public Works Plan (PWP) was approved by the Commission with conditions on May 20, 1982. Conditions were met on August 26, 1982. A few amendments to the PWP have occurred since it's initial approval. The most recent PWP amendment was authorized in June 2003 (PWP-4-82-A2) and involved an update that replaced the Crystal Cove Historic District Development and Public Use Plan and On-Site Maintenance Program with the Crystal Cove Historic District Preservation and Public Use Plan. The PWP includes the Crystal Cove State Park General Plan, the On-Site Maintenance Plan and the Crystal Cove State Park Historic District Development and Public Use Plan. Section 30605 of the Coastal Act, cited above, establishes the standard of review. The first threshold question is whether the specific project is contained in the PWP. If it is, then the Commission's review is limited to the imposition of conditions. The Commission cannot deny a project that it previously certified as part of the PWP; however, the Commission can regulate the manner in which the project is carried out to bring it into conformance with the PWP. Once it is determined that a project is contained in the PWP, the second question is whether or not the project is consistent with the PWP.

The Land Use and Facilities Element of the Certified PWP General Plan describes the future use of the El Moro Area of the park as follows:

> *This area of the park, which includes upland and canyon bottom lands inland of the highway, has a high potential for a variety of recreational uses. Visitor support facilities that will be required for full public use and enjoyment are discussed below...*
>
> *...Day-Use Facilities*
>
> *After the mobile home park is removed, day-use activity areas and picnic facilities will be located along both sides of Moro Creek, in Moro Canyon...*
>
> *...Overnight Use*
>
> *A site of about 10 acres in what is now part of the El Morro Mobile Home Park, located on the marine terrace above the highway, will be developed as a campground. After the current mobile home leases expire, most of the utilities and necessary improvements can be adapted to campground development. Park visitors will enjoy coastal camping experiences within walking distance of Moro Cove Beach.*
>
> *...Park Offices*
>
> *Entrance kiosk at El Moro area...Entrance kiosks will consist of small check stations located on park entrance roads. These buildings will include facilities for collecting fees and answering visitor inquiries...*
>
> *...Utilities*
>
> *Sewage...as development progresses in the park, facilities should be served by the appropriate sewage district...*

Other details are provided in the PWP including that the El Moro campground would contain 60 formal campsites and that the parking lot in the El Moro area would include space for 202 vehicles.

When a proposed project is contained in sufficient detail in a certified public works plan, the coastal development permit process is superceded by the public works process. If a project is not included in the certified public works plan, then a coastal development permit from the Commission is required.

The proposed project includes development that is both contained in, and consistent with, the public works plan and development that is not contained in the PWP. For instance, the proposed campground facilities, day use facilities and utility upgrades are described in the PWP. However, other proposed elements were not specifically described such as the proposed lifeguard tower on the seaward side of PCH, and the proposed stream restoration. Thus, the proposed project contains development not specifically approved under the PWP.

The applicant chose to submit the project for a coastal development permit. The Commission finds that the proposed project was not previously contemplated and is therefore not contained in the PWP. The Coastal Act will serve as the standard of review for the proposed project, with the Crystal Cove Certified PWP serving as guidance.

C. HAZARDS

Section 30253 of the Coastal Act states, in relevant part:

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

Seaward of PCH there is an existing row of mobile home structures and a road providing access to those structures that are presently protected by a collection of haphazard shoreline protective devices. Under Coastal Development Permit 5-04-060, the applicant is proposing to remove any of the mobile home structures that remain once the property lease expires, as well as the majority of the shoreline protective devices. Small segments of the existing device, in the area flanking the outlet of Moro Creek will be retained in place. The road will remain in place as well, however the asphalt surface of the road will be replaced with a porous surface (e.g. decomposed granite). Following removal of the existing development, the applicant is proposing the construction of a new lifeguard tower building that would also contain a small office, first aid facilities, garage for lifeguard vehicles, a public restroom, and utilities to serve the development (e.g. sewer, water, electrical, communications). In addition, the applicant is proposing to place portable lifeguard towers, as well as other visitor support appurtenances such as picnic benches and trash receptacles on the beach.

The applicant has submitted wave runup information[2],[3] which states that the shoreline in the El Moro Beach area "...is relatively stable and can be assumed to be stable in the future". Furthermore, the information provided indicates that the summer (accreted) beach width is

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[2] Skelly Engineering. 2004a. El Moro Beach Proposed Lifeguard Station wave Runup Analysis. Report prepared by David Skelly dated February 17, 2004.

[3] Skelly Engineering. 2004b. El Moro Beach Proposed Lifeguard Station. Letter prepared by David Skelly dated September 14, 2004.

about 150 feet, while the winter (eroded) beach profile is about 50 feet or less, with complete erosion occurring during extreme storm events like those experienced in the winter of 1983.

Given the above described conditions, the wave runup studies state that the existing road and the site of the proposed lifeguard building "...will be subject to wave attack and is expected to wash out during times of extreme wave attack". Several options are identified in the applicants submittal to address these hazards including use of a revetment to protect the existing road and proposed lifeguard station; or avoid the use of protective devices by placing the proposed lifeguard station on a pile foundation system that elevates the station above design breaking wave elevation (+14.5 MSL) and incorporate design features (e.g. ramps) or management practices (e.g. periodic beach reshaping) that allow access to the lifeguard station in a manner that doesn't rely upon the presence of the access road (which in turn allows the access road to be expendable during extreme storm events). The applicant has chosen the latter option, use of a pile foundation system, which avoids reliance upon shoreline protective devices.

While the proposed lifeguard tower would be placed on an elevated pile foundation system, the proposed development would still be subject to erosion and wave hazards. For instance, some wave overtopping and flooding of the structure is anticipated during extreme storm events. Section 30253 of the Coastal Act requires the applicant to site development such that risks to the development are minimized and that the development would not require the construction of a shoreline protective device. Accordingly, the Commission typically requires that development be sited as far away from any potential hazards that pose a significant threat as is possible. The options for siting the proposed development in this case are limited given the intended use of the structure as a lifeguard facility. The lifeguard station needs to be close to the beach to effectively provide for public safety. At El Moro beach, there is no perfectly safe location to site the facility on the beach. The beach area to the north will be narrow during periods when waves are coming from the northwest to west. The beach area to the south would be narrow when waves or storm activity comes from the south/south west. The selected location for the lifeguard station will put it in a generally safe location and will provide lifeguard coverage for areas up and down coast from the station. The location selected would also be no further seaward, and in most instances further landward of, the seawardmost line of development established by the existing mobile homes (that will be removed).

The applicant did consider other ways of providing a lifeguard and first aid presence on the beach. For instance, the applicant could rely solely upon mobile lifeguard stands on the beach that could be removed during storm events that threaten those structures, in lieu of a fixed building. However, the applicant has indicated that such facilities would not provide an adequate level of presence on the beach by lifeguard personnel because such facilities could not be occupied as regularly and for the duration that a building can be occupied. The applicant also provided the following factors dictating the need for a permanent (i.e. fixed) facility on the seaward side of PCH as well as the location selected:

> *The lifeguard facility at El Morro will be the central communication center for all aquatic safety activities at CCSP* [Crystal Cove State Park]. *This location will allow the lifeguard dispatcher to view the beach and ocean while he or she coordinates rescue activities by communicating with portable lifeguard towers, vehicles and rescue boat via radio and telephone. The lifeguard facility will house telephone switch board and multiple radio systems (marine, harbor patrol, coast guard, police and fire) which are necessary to communicate with private boaters and other public safety agencies.*
>
> *The lifeguard facility will house the CCSP rescue boats (Personnel Water Craft). In order to immediately launch these vessels and effectively respond to emergencies they must be stored on the beach in a protected facility.*

> *The El Morro location for the lifeguard facility was selected by park planners/lifeguard staff because of its immediate proximity to the El Morro/Reef Point area which enjoys the highest density of visitation. Furthermore, the location also provides staff the opportunity to scan the ocean up coast without significant natural obstructions such as reefs and coastal bluffs.*
>
> *Locating the lifeguard facility* [on the beach] *allows lifeguards to monitor the ocean and beach while conducting administrative, maintenance and training activities.*

Finally, in the EIR adopted for the project[4], the following statement is made about the need to provide a fixed lifeguard building on the seaward side of PCH:

> *...Lifeguards must intervene within minutes to save lives. In order to practice preventative lifesaving, lifeguards must be close to potential victims and have their eyes on the water. The project would improve the effectiveness of emergency response and significantly reduce risks to the public by providing a permanent lifeguard tower and multiple portable towers.*

Thus, the Commission finds that proposed permanent facility is necessary to adequately provide for the safety of visitors to El Moro Beach. Furthermore, the Commission finds that the development has been sited in a manner that minimizes risks from flood hazards and that the integrity and stability of the structure are assured without requiring the construction of shoreline protective devices. However, the Commission finds that certain additional assurances and mitigation measures are necessary in order to find the development consistent with Section 30253 of the Coastal Act.

1. Storm Preparedness Plan

The proposed lifeguard building will be placed on a foundation system that will elevate the structure above all but the most extreme storm events. However, in certain circumstances the proposed lifeguard building, utilities to serve the development (e.g. sewer, water, electrical, communications), and other proposed facilities such as portable lifeguard towers, picnic benches and trash receptacles on the beach could be subject to wave hazards. Thus, certain types of storm preparedness precautions should be taken in advance of such storms to secure the facility and to avoid hazards. Thus, the Commission requires the applicant to prepare a storm preparedness plan for the review and approval of the Executive Director that addresses the following minimum elements: Withdraw vehicles (e.g. lifeguard trucks) from the garage and storage yard area and store/stage them in a location that is not subject to storm hazards; secure or remove any hazardous materials (e.g. oils, grease, cleansers) that could become entrained in surging storm water; shut down and pump out the sanitary sewer line extending to the lifeguard tower building along the portion of the utility that could be subject to wave hazards and erosion to prevent the discharge of waste in the event of utility leakage or breakage; shut down any other utilities that could become a hazard if such utilities becomes damaged or break; secure or remove any movable equipment and appurtenances (e.g. chairs, benches, picnic tables, trash receptacles, maintenance equipment) that could become entrained in surging storm water; and implement regular safety drills practicing the elements of the storm preparedness plan on at least an annual basis. Therefore, the Commission imposes Special Condition 4.

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[4] California Department of Parks and Recreation. 2002. El Morro Conversion to Campground and Day Use, Crystal Cove State Park, Final Environmental Impact Report – SCH# 2001111088. Dated August 2002

2. Wave and Flooding Hazards

While the proposed development has been sited and designed to minimize hazards to the maximum extent feasible given the required function of the facility, the facility will still be subject to flooding and erosion hazards over the anticipated 25-year life of the structure. Therefore, the Commission finds that it is necessary to require the preparation of an assumption-of-risk agreement (Special Condition 1). With this standard waiver of liability condition, the applicant is notified that the development proposed seaward of PCH is located in an area that is potentially subject to flooding and wave uprush hazards that could damage the applicant's property. The applicant is also notified that the Commission is not liable for such damage as a result of approving the permit for development. In addition, the condition ensures that any future owner will be informed of the risks and the Commission's immunity of liability by requiring the applicant to record a deed restriction prior to conveyance.

The assumption-of-risk condition is consistent with prior Commission actions for beachfront development in Orange County since the 1982-83 El Nino storms. For instance, at Crystal Cove the Commission approved CDP 5-01-269 (Crystal Cove Historic District Interim Plan) with an assumption-of-risk special condition. Similarly, the Commission has consistently imposed assumption-of-risk deed restrictions on construction of new beachfront development throughout Newport Beach and Seal Beach, whether on vacant lots or in conjunction with the demolition and replacement of an existing structure. Recent examples include coastal development permits 5-00-492 (Palm), 5-00-466 (Steffensen), 5-00-420 (Collins), 5-00-285 (Collins), 5-00-192 (Blumenthal), 5-99-423(Evans), 5-03-289 (La Barbara), 5-04-018 (Pelican Bluffs LLC), 5-04-154 (Pelican Bluffs LLC), and 5-04-201 (Lane).

3. Future Protective Devices

The proposed development could not be approved as being consistent with Section 30253 of the Coastal Act if continued wave activity would necessitate construction of a shoreline protection device to protect the development proposed. The Coastal Act limits construction of protective devices because they have a variety of negative impacts on coastal resources including adverse affects on sand supply, public access, coastal views, natural landforms, and overall shoreline beach dynamics on and off site, ultimately resulting in the loss of beach. Under Coastal Act Section 30235, a shoreline protective structure must be approved if: (1) there is an existing principal structure in imminent danger from erosion; (2) shoreline altering construction is required to protect the existing threatened structure; and (3) the required protection is designed to eliminate or mitigate the adverse impacts on shoreline sand supply.

No shoreline protection device is currently proposed. The applicant recognizes that the site is subject to wave uprush activity, but sees no need for a seawall now or in the future. Rather, the applicant has indicated there are measures that can be implemented to manage the hazards during the anticipated 25-year life of the structure (e.g. temporary shut-down and retreat from facility), move sand to create ramps to access the lifeguard station, etc.). Furthermore, it is the position of the State Department of Parks and Recreation to discourage construction of structural protective devices. In the event the structure becomes unusable due to persistent hazards, it would need to be re-sited or removed.

Although the applicant is not proposing and does not anticipate the need for shoreline protective devices, it is conceivable that conditions would be such that one could seek a shoreline protective device for the structure. If that were to occur, the approval of this structure would be shown to have been inconsistent with Section 30253. Thus, in order to ensure that this approval is consistent with 30253, the applicant must commit that shoreline protection will not

be sought to protect the structure in the future by waiving any rights that it may have under section 30235.

To ensure that the applicant acknowledges and accepts the prohibition of future protective devices, the Commission imposes Special Condition 2, which requires the applicant to submit a written agreement placing the applicant and their successors in interest on notice that no protective devices shall be permitted to protect the proposed development and that the applicant waives, on behalf of itself and all successors and assigns, any rights to construct protective devices that may exist under Coastal Act Section 30235. In addition, the Commission imposes Special Condition 3 to notify the applicant that all future development at the site, requires Commission approval either as a CDP or through the PWP process.

4. Final Plans

Refinements to the proposed project have been made since the original submittal of plans with the application, including changes to the location and design of the proposed lifeguard tower. For instance, the lifeguard tower has been moved landward of the previously proposed location by about 10 feet. In addition, structural ramps previously proposed on the seaward side the lifeguard tower have been eliminated from the design. Final plans incorporating all of the proposed changes must be submitted for the review and approval of the Executive Director. These final plans will need to incorporate the recommendations by the applicant's engineer relative to the design of the lifeguard tower on a pile foundation system. Engineering for the final plans must address the stability from erosion, earthquakes and flooding events through foundation design, elevation, and architectural details. Thus, final plans should be provided to the Executive Director that note the erosion, seismic and flood event and/or force that was used in the final design. Therefore, the Commission imposes Special Condition 17.

5. Conclusion - Hazards

As conditioned, the Commission finds that the proposed project is consistent with Section 30253 of the Coastal Act.

D. COASTAL ACCESS

Section 30604(C) of the Coastal Act requires that the findings for approval of permit applications for development between the nearest public road and the shoreline of any body of water within the coastal zone shall include a public access and recreation finding. The proposed project includes development that is located between the first public road and the sea at Crystal Cove State Park.

Although the area is within a State Park, public access is presently limited by the private mobile homes. Vertical public access is available approximately 2,400 feet north of the subject site at the Reef Point entrance to Crystal Cove State Park. Existing lateral public access is located seaward of the existing mobile homes.

The Coastal Act provides that development should maintain and enhance public access to the coast and encourages the provision of lower cost visitor and recreational facilities. The following policies are applicable to the proposal (as well as those cited further below):

Section 30210 of the Coastal Act states:

> *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to*

protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30212 of the Coastal Act states, in relevant part:

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects…

Section 30213 of the Coastal Act requires that lower cost visitor and recreational facilities be protected, encouraged and where feasible, provided. It states:

Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Section 30223 of the Coastal Act requires that upland areas appropriate for recreational use be reserved for such use, as follows:

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Public access and recreation is discussed in the Land Use and Facilities Element of the Certified PWP General Plan as follows:

The emphasis for recreation use at Crystal Cove State Park will be placed on providing a variety of appropriate recreation opportunities to enhance visitor enjoyment of the park.

General Plan objectives #3 and #5 state the following:

3. *To provide opportunities for a variety of recreational uses of low to high intensity that will be compatible with the surroundings, and consistent with the park purpose.*

5. *To protect and interpret the significant natural and cultural resources of the park.*

1. Proposed Use

Section 30210 of the Coastal Act encourages the provision of maximum access and recreational opportunities for all the people. In addition, Section 30213 of the Coastal Act requires that lower cost visitor and recreational facilities be protected, encouraged and where feasible, provided. The proposed use of the site of the El Morro Mobile Home Park (a facility only available to those who had a lease) for public campground and day use area will maximize public access and recreational opportunities and create a lower cost visitor and recreational facility where there is presently a residential facility with limited opportunity for public use.

The proposed campground will be available to the general public and managed consistent with other public campgrounds owned and operated by the applicant. The applicant is proposing to create 60 camping spaces in the upper terrace area of the project site inland of PCH where there are presently about 95 mobile home units (the remainder of the 214 mobile home units inland of PCH are in the lower El Moro Creek valley area). These overnight camping spaces will be a lower cost use (compared with other types of overnight facilities such as a hotel), consistent with Section 30213 of the Coastal Act and utilize an upland area owned by the public that has been reserved for public recreational uses, in accordance with Section 30223 of the Coastal Act, but which has been unavailable for such use since acquisition by the State.

Furthermore, the proposed day use areas on the inland side of PCH, with picnic facilities, restrooms, public trails and public parking will significantly enhance the public's ability to access the inland trails of Crystal Cove State Park and to access El Moro beach located on the seaward side of PCH which is presently limited by the lack of public parking proximate to this portion of the beach.

Thus, the proposed use significantly advances Coastal Act goals relative to the preference for and provision of low cost visitor and recreational facilities in the coastal zone.

2. Traffic and Parking

Section 30212.5 of the Coastal Act states:

> *Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.*

Section 30252 of the Coastal Act requires that new development should maintain and enhance public access to the coast. It states, in relevant part:

> *The location and amount of new development should maintain and enhance public access to the coast by...(4) providing adequate parking facilities or providing substitute means of serving the development with public transportation.*

The public access and recreation policies of the Coastal Act, including Section 30252, require that new development provide adequate circulation and parking and facilitate transit service to assure that public access to the coast is not adversely impacted by the new development. For instance, increases in traffic associated with the development can adversely impact the public's ability to use traffic-impacted roads to access the coast. In addition, if adequate parking or public transportation to serve the development is not available, on street public parking and/or public parking lots may be used to support the development. Such use of public parking facilities by the new development would displace members of the public trying to access the coast from those public parking facilities, resulting in adverse impacts to coastal access.

The EIR approved for the project compares existing traffic conditions for the mobile home park and adjacent elementary school with the proposed condition. The EIR states that the existing mobile home park generates an average daily trip volume of 1,380 vehicles. Whereas, the proposed project, under the worst case scenario, would generate 1,375 vehicles. Thus, there is a relatively insignificant difference of 5 vehicles per day. Differences in peak traffic volumes for weekday versus weekend conditions were also identified. The EIR concludes there would not be a significant adverse impact upon traffic on PCH as a result of the project.

The applicant is proposing to re-locate an existing traffic signal on PCH in front of the elementary school to the entrance road. The applicant must obtain approval from the California Department of Transportation (CalTrans) for this work. In order to assure the applicant obtains the required approvals and to create a mechanism for the Commission to review any changes required by CalTrans for consistency with Coastal Act requirements, the Commission imposes Special Condition 15.

The proposed project includes the construction of a public day use parking lot on the inland side of PCH within the Moro Creek Valley area that is presently occupied by mobile homes. The proposal includes 212 parking spaces available to the public for day use at Crystal Cove State Park. Day use picnic facilities and restrooms will be available along the upland banks of Moro Creek on the inland side of PCH. In addition, the proposed 212 parking spaces will be

proximate to a tunnel under PCH that provides a linkage between the inland parking area and the beach on the seaward side of PCH. Thus, opportunities for the public to park and access the beach will be significantly enhanced by the proposal. The proposed 212 spaces exceed the quantity of parking spaces (202 spaces) anticipated in the PWP. Thus, the Commission finds the proposal consistent with the requirements of Section 30212.5 and 30252 of the Coastal Act.

3. Maintenance/Monitoring of Retained Revetment

The applicant is proposing to retain limited segments of an existing rock revetment located upcoast and downcoast of the outlet for El Moro Creek (about 320 feet upcoast and 160 linear feet downcoast). The applicant has stated these retained segments are necessary for continued protection of existing development, including the PCH undercrossing and roadbed. The remainder of the shoreline protection downcoast of El Morro Creek (about 1,600 linear feet), that presently protect mobile homes units, is proposed-to-be removed along with removal of the mobile home units and their septic systems under CDP 5-04-060. Under this proposal, with the exception of the proposed lifeguard tower building, the newly cleared area would return to sandy beach, available to the public.

Rock revetments, and other types of shoreline protective devices, can have adverse impacts upon public access by occupying sandy beach area that would otherwise be available to the public for recreational use, and by contributing to the erosion of the beach seaward of the structure, thus diminishing the amount of sandy beach area available for recreational use. Furthermore, rocks dislodged from rock revetments can create obstructions to public access upon and along the beach. The Commission encourages the applicant to implement a revetment maintenance and monitoring program to retrieve errant rock and either remove it from the beach or restack it into the revetment. The Commission notes that retention of an existing permitted or pre-coastal revetment in and of itself does not need a permit. However, certain methods of repair and maintenance of the revetment and enhancements to the revetment, including any such work that might be necessary in conjunction with retaining the revetment in place that qualifies as a non-exempt form of development, would necessitate a coastal development permit (see California Code of Regulations, Title 14, Section 13252(a)). Thus, the Commission imposes Special Condition 3, which notifies the applicant of the need to obtain Commission approval for any future improvements.

4. Conclusion - Access

As conditioned, the Commission finds the development consistent with the public access and recreation policies of the Coastal Act.

E. VISUAL IMPACTS

Section 30251 of the Coastal Act states:

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

As a result of removal of the Mobile Home Park under coastal development permit 5-04-060, approximately 73 mobile homes and 1,600 linear feet of haphazard shoreline protection will be removed along Moro Beach at the State Park. The removal of these structures will significantly

restore the visual quality of views that are presently degraded by the presence of these structures.

1. Height & Location of Lifeguard Tower

In place of the mobile homes the development proposed under this application will include a single lifeguard tower building, to be constructed landward of the present line of mobile homes and will occupy an area about equivalent to four of the existing mobile home structures. The proposed structure will be located at the toe of the existing bluff at the most feasible landward location. Views to and along the shoreline in the area will not be significantly impacted.

Relative to height, the first floor of the proposed lifeguard tower will be at elevation + 16 feet mean sea level (MSL). The proposed lifeguard tower building will be 25 feet tall. Thus, the roofline of the structure will be at + 41 feet MSL. PCH is located landward of the proposed lifeguard building, and at the proposed location the roadbed is located at approximately + 45 feet MSL. Thus, the roofline of the proposed building will be at least 4 feet below the roadbed elevation. Thus, the proposed lifeguard tower will not obstruct views of the coast and beach from PCH. Nor will the structure degrade views inland from the beach.

2. Lifeguard Tower & Beach Erosion

The proposed lifeguard tower would be located upon a pile foundation system. Under normal circumstances, the pile foundation system will be below the sand line of the beach and would not be visible. As discussed in the Hazards section of these findings, the beach profile at Moro Beach appears to be relatively constant. However, during extreme storm events such as those encountered during the 1982/83 El Nino storms, Moro Beach has been known to entirely erode. During these extreme periods this pile foundation system would be visible. Typically, over the course of a season, the beach would naturally become re-nourished with sand that would cover up the piling foundation. However, beach areas are dynamic environments, which may be subject to unforeseen changes. Such changes may affect beach processes, including sand regimes. The mechanisms of sand replenishment are complex and may change over time, especially as beach process altering structures, such as jetties, are modified, either through damage or deliberate design. If the proposed piling foundation system were to become exposed for extended time periods, adverse impacts to visual resources would occur. In order to prevent such impacts if beach erosion occurs, the Commission imposes Special Condition 5. Special Condition 5 requires that if 5 vertical feet or more (measured from elevation of the sand on the seaward side of the structure to the bottom of the seaward-most grade beam) of the piling foundation of the lifeguard tower is exposed and unsupported by sand for more than a complete year, the applicant shall implement a beach re-shaping and/or nourishment program to sufficiently cover the exposed section of the piling foundation and restore the section of the beach in this area. The sand shall come from an approved sand donor site.

3. Other View Issues

Inland of PCH, the mobile homes within El Moro Creek valley would be removed under CDP application 5-04-060. The proposed development under this application would significantly enhance views looking toward the inland segment of Crystal Cove State Park. In place of the mobile homes, the stream would be restored to its more natural alignment and the riparian and upland coastal sage scrub areas visible from PCH would be restored.

Upon the Upper Terrace, in place of the mobile homes will be a campground for tents and recreational vehicles. The lower tiers closer to PCH would be designated for tents, and the inland-most, upper tiers would be designated for use by recreational vehicle campers. Views from PCH would not be degraded, but would be enhanced by the proposed project.

4. Conclusion – Views

Thus, with Special Condition 5 to address potential view impacts related to the lifeguard tower building, the Commission finds the proposed development consistent with Section 30251 of the Coastal Act.

F. WATER QUALITY

Section 30230 of the Coastal Act states, in pertinent part:

> *Marine resources shall be maintained, enhanced, and where feasible, restored.*

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, and minimizing alteration of natural streams.*

Sections 30230 and 30231of the Coastal Act require maintenance and restoration of marine resources and ensure that the biological productivity of coastal waters is upheld and restored where feasible. Specially, Section 30231 requires the quality of coastal waters to be maintained though the minimization of adverse effects of, among other things, wastewater discharges. Storm water flows from the project site discharge into coastal waters via direct runoff or via Moro Creek. The coastal waters located directly offshore are within a designated Area of Special Biological Significance (ASBS). As such, special attention must be paid to discharges entering the ocean.

As indicating in the findings for Coastal Development Permit 5-04-060, discharges from the El Morro Mobile Home park's septic system are suspected of contributing to non-point source pollution. The site is subject to Orders No. R9-2003-0228 and R9-2003-285 adopted by the San Diego Regional Water Quality Control Board on November 12, 2003. Order No. R-9-2003-0228 establishes waste discharge requirements from the septic system at El Morro and requires the submittal of monitoring reports. Cease and Desist Order R9-2003-0285 establishes a time schedule to achieve compliance with the requirement of R9-2003-0228. The Order requires the discharger to cease and desist from discharging wastes directly to the Crystal Cove ASBS after September 2005. Upon expiration of the leases in December 2004, State Parks intends to permanently cease the discharge of wastewater associated with the septic system. Furthermore, the proposed project contains plans to properly close down, and where necessary/required remove, the septic system and establish a sanitary sewer system to serve the proposed campground and day use facilities. Post-construction best management practices (BMPs) are also proposed to ensure protection of water quality.

1. Construction

Storage or placement of construction materials, debris, or waste in a location subject to entry into the ocean or Moro Creek would result in adverse impacts upon the marine environment that would reduce the biological productivity of coastal waters. For instance, construction debris entering coastal waters may cover and displace soft bottom habitat. In addition, the use of machinery in coastal waters (including creek beds) not designed for such use may result in the

release of lubricants or oils that are toxic to marine life. Sediment discharged to coastal waters may cause turbidity that can shade and reduce the productivity of aquatic vegetation and foraging avian and marine species ability to see food in the water column. In order to avoid such impacts, the Commission imposes Special Condition 8, which outlines the applicants construction responsibilities relative to water quality protection.

The applicant has indicated that the proposed project includes the closure and where feasible removal of the existing septic system that served the mobile homes. In a letter from the applicant dated June 3, 2004, the applicant described in detail the proposed abandonment procedures including removal of tanks, valve boxes, and pipes and backfilling the disturbed areas with clean soil. Special Condition 18 requires the applicant to submit final plans incorporating the proposed removal.

2. Post-Construction Water Quality BMPs

The proposed development would be located in place of a mobile home park which generates pollutants such as sediments, trash and debris or toxic substances such as grease, motor oil, heavy metals, hydrocarbons, pesticides and fertilizers, that are often contained within urban runoff. There are no existing structural BMPs in place to address these pollutants. The proposed development would replace the existing development with a few new buildings, campgrounds, new parking lots, trails and walkways and landscaped areas. Therefore, the primary post-construction water quality concerns associated with the proposed project include sediments, trash and debris, grease, motor oil, heavy metals, hydrocarbons, pesticides and fertilizer.

Unlike the existing mobile home park, the proposed development plan includes various structural "best management practices" (BMPs) in order to control and treat surface runoff generated from the parking lots, campsites, buildings, roads, paths and other active use areas. The runoff from these areas will be collected and treated in a variety of ways including: 1) extended water quality control basins, 2) vegetative swales, 3) shallow biofilter basins, and 4) Continuous Deflection Separator (CDS) units. Additionally, altemative paving surfaces will be investigated and used where appropriate and effective. Impervious surfaces are proposed in areas with higher traffic use, sensitivity to dust, and steep grades. The proposed drainage system is designed to allow natural surface runoff tributary with the developed portions of the park to be intercepted and discharged directly to the creek, without mixing with the runoff from the improved areas. The sizing of all structural BMPs is designed to meet or exceed the minimum requirements identified by the State Regional Water Quality Control Board.

The proposed development represents a significant decrease in the amount of impervious area compared with the existing condition (about 6 acres impervious proposed versus 23 acres impervious under existing condition). When development decreases impervious surface area, the infiltrative function and capacity of the project site is increased. The expansion of permeable surface therefore leads to a decrease in the volume and velocity of runoff that can be expected to leave the site. Furthermore, the proposal includes measures to meet the goal of protecting and enhancing water quality and the beneficial uses of local coastal waters from adverse impacts related to development.

However, similar to most applications for development of the proposed type, the applicant has not submitted a final water quality management plan (WQMP) that shows in detail all of the proposed water quality measures that have been identified by the applicant. Therefore, the Commission requires Special Condition 6 which requires the applicant to submit a final WQMP that incorporates structural and non-structural Best Management Practices (BMPs) designed to reduce, to the maximum extent practicable, the volume, velocity and pollutant load of stormwater and dry weather flows leaving the developed site.

Only as conditioned does the Commission find that the proposed development is consistent with Sections 30230 and 30231 of the Coastal Act.

3. Use of Plastics in the Proposed Moro Creek Grade Control Structures

The proposed project includes a stream restoration and enhancement plan for the segment of Moro creek presently constrained and previously impacted by the existing mobile home park. Part of the proposed restoration includes the removal of existing grade control structures in the stream bed and the installation of fewer such structures that will function better with the proposed stream restoration. The proposed grade control structures would be constructed using vinyl sheetpiles (e.g. ShoreGuard), a type of plastic material. The Commission has expressed concern about the use of plastic in aquatic environments due to the potential for leaching toxins into the environment caused by the possible deterioration of the plastic. In a leach test of recycled plastic composite containing polyethylene, polypropylene, polystyrene, polyvinyl chloride, and other plastics, only minor amounts of copper, iron, and zinc leached from the plastic. None of the contaminants had a concentration significant enough to have any adverse effects on the marine environment.

The Commission's concern with plastics, however, also includes the potential to increase plastic debris in the marine environment due to cracking, peeling, and sloughing of plastic used in marine related projects. Since plastic is an inorganic material, it does not biodegrade, but rather continually breaks down into ever-smaller pieces which can adversely effect the marine environment.

The presence of plastics in the coastal and ocean environment is both widespread and harmful to human and marine life. An article, written by Jose G.B. Derraik, entitled "The Pollution of the Marine Environment by Plastic Debris: A Review," reviews much of the literature published on the topic of deleterious effects of plastic debris on the marine environment. The article states:

> *The literature on marine debris leaves no doubt that plastics make-up most of the marine litter worldwide.*[5]

In support of this statement, the article includes a table that presents figures on the proportion of plastics among marine debris around the world. In most of the locations listed on the table, plastics represented more than 50 percent of the total marine debris found.[6] In other studies, the percentage is even higher.

Existing studies clearly demonstrate that plastic debris creates problems for marine life. Plastic marine debris affects at least 267 species worldwide, including 86% of all sea turtle species, 44% of all sea bird species, and 43% of marine mammal species.[7] For example, plastics cause significant adverse impacts in seabirds, when birds mistakenly ingest the plastic debris. A study performed in 1988, concluded that seabirds consuming large amounts of plastics reduced their food consumption, which limited their ability to lay down fat deposits and in turn reduced fitness. In addition, ingesting plastics can block gastric enzyme secretion, diminish feeding stimulus, lower steroid hormone levels, delay ovulation, and cause reproductive failures.[8]

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[5] Derraik, Jose. "The Pollution of the Marine Environment by Plastic Debris; A Review", Marine Pollution Bulletin, 44: 842-852, 2002.
[6] Ibid.
[7] Laist, D. W. "Impacts of Marine Debris: Entanglement of Marine Life in Marine Debris Including a Comprehensive List of Species with Entanglement and Ingestion Records", Coe, J.M., Rogers, D.B. (Eds.)
[8] Derraik, Jose. "The Pollution of the Marine Environment by Plastic Debris; A Review", Marine Pollution Bulletin, 44: 842-852, 2002.

Plastic debris that has settled on the seabed floor also harms the biological productivity of coastal waters. In Derriak's article, he states:

> *The accumulations of such [plastic] debris can inhibit gas exchange between the overlying waters and the pore waters of the sediments, and the resulting hypoxia or anoxia in the benthos can interfere with the normal ecosystem functioning, and alter the make-up of life on the sea floor. Moreover, as for pelagic organisms, benthic biota is likewise subjected to entanglement and ingestion hazards.*[9]

There are no examples that staff can identify that document the deterioration rate of plastic used in aquatic environments. The standard manufacturer's warranty for plastic floats, often used in marina construction, ranges from 10 to 12 years. The warranties are against cracking, peeling, sloughing and deterioration from ultraviolet rays. Marina operators have indicated that plastic floats will last as long as 20 years before they need to be replaced. To extend the life of the plastics used in the marine environment, stabilizers are added to increase protection from degradation that may result from UV exposure. Thus it is significant to note that the plastic sheet piles proposed in the subject project will be largely below grade, which further reduces exposure to ultraviolet (UV) radiation. In addition, unlike some other uses of marine plastics, the proposed sheet piles will be in a stream environment, not a harbor, thus they won't be adjacent to abrasive forces (such as docking boats, etc.) that can result in breakage.

Notwithstanding the protection provided by the stabilizers and location of the proposed plastic sheet piles, the potential does exist that the plastic may degrade over time. If the plastic were to become brittle, it may splinter or chip and would introduce plastic debris into the coastal waters, and thus would adversely affect water quality and marine resources. However, unlike pilings and fenders that may use plastic for protection, and are constantly subject to abrasive forces from boats, the potential for impact and damage to the proposed sheet pile is nominal. Due to the location of the sheet piles, they are not subject to impact from boats. Furthermore, the sheet piles will be largely buried and not exposed to extensive ultraviolet radiation.

Among the alternatives to the proposed project that were considered was the use of concrete grade control structures or the installation of steel sheet piles rather than plastic. The first alternative would substantially increase the area of disturbance due to the stream bottom and banks. For this reason, it has been dismissed as environmentally inferior. The use of steel sheet piles was considered, but dismissed because the proposed plastic would be inert, whereas the steel is not. Rusting, jagged steel could be a hazard to park visitors. Furthermore, the life of the plastic sheet pile is expected to be significantly longer than the life of the steel. The plastic sheet pile has an expected life of 50 years versus 20 years for steel. The longer life expectancy would mean longer intervals between major work on the grade control structures, thus fewer disturbances to the stream environment.

The use of treated wood was not considered, but it should be noted that in a study comparing the toxic effects of plastics to treated wood, the researchers concluded that, "in all these experiments with four different species of estuarine organisms, the recycled plastic proved to be far less toxic material than the treated wood."[10]

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[9] Ibid.

[10] Toxicity of Construction Materials in the Marine Environment; Weis, Peddrick; Weis, Judith; Greenberg, Arthur; and Nosker, Thomas; Archives of Environmental Contamination and Toxicology; 1992.

Nevertheless, the potential for plastic to break apart and enter the marine environment is not entirely eliminated. Consequently the plastic sheet piles must be monitored to ensure that they are maintained in an environmentally safe operating condition and replaced when damage or degradation has occurred. To minimize the potential of the plastic sheet piles breaking apart and entering the water due to damage or deterioration, Special Condition No. 16 requires that the project be carefully monitored once every two years for the first 12 years, and then every year thereafter. If monitoring confirms that the use of the plastic sheet piles is damaging marine resources, the applicant is required to submit an application for an amendment to this permit or a new coastal development permit. At that time the proposed repair and/or replacement will be evaluated, including consideration of whether use of such materials should be stopped, and whether more environmentally friendly products have been developed. Further, if new information becomes available indicating that the use of plastic does have harmful effects on the marine environment, and that environmentally superior products are available, consideration must be given to substitution of the environmentally superior alternative to plastic. As a condition of approval, the applicant shall agree to submit an application for an amendment to this permit or a new coastal development permit if new information becomes available that indicates that plastic has harmful effects on the marine environment, and that environmentally superior, feasible alternative(s) are available. The amendment or new coastal development shall include measures to eliminate or significantly reduce the adverse impacts of the plastic. Only as conditioned can the proposed project be found consistent with Sections 30230 and 30231 of the Coastal regarding protection of the marine environment.

G. BIOLOGICAL RESOURCES/ENVIRONMENTALLY SENSITIVE HABITAT AREA

Section 30233 of the Coastal Act states, in relevant 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, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> ...
>
> *(7) Restoration purposes.*
>
> *(8) Nature study, aquaculture, or similar resource dependent activities.*

Section 30236 of the Coastal Act states:

> *Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.*

Section 30240 states:

> *(a) 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.*
>
> *(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 those areas, and shall be compatible with the continuance of those habitat and recreation areas.

1. Existing Biological Conditions

The project site is located within Crystal Cove State Park (CCSP). As stated in the EIR for the project "...CCSP contains some of the last remaining undeveloped coastal property in Southern California and features three miles of Pacific coastline, wooded canyons, brush-covered bluffs, and offshore waters designated as an underwater park." While significant portions of the park contain native vegetation, the project site is located in a portion of the park that was previously disturbed when the mobile home park was constructed. The disturbed areas are generally identified on Figure 3.6 of the EIR as 'developed area' and include those areas presently occupied by the mobile homes, paved roads and walkways and a maintenance yard (i.e. the 'Corporation Yard'). Except for the highly disturbed riparian corridor associated with the remnant of Moro Creek that passes through the mobile home park in the lower valley area, these developed areas presently contain no sensitive plant communities or wildlife.

While the existing developed area contains primarily non-native vegetation, the upstream reach of Moro Creek supports well-developed native riparian vegetation and the upland undeveloped terraces surrounding the existing developed area support patches of native vegetation of southern coastal bluff scrub and coastal sage scrub, surrounded by non-native grasslands. Some areas of these native habitats support the federally threatened California Gnatcatcher (Polioptila californica californica) and the State and Federally listed endangered least Bell's vireo (Vireo bellii pusilius), and other native wildlife species. Additionally, two rare plant species are known to occur in CCSP, the many-stemmed dudleya and Turkish rugging. However, no individuals of these plant species have been identified in the proposed project area.

Furthermore, the proposed project area contains Moro Creek and its associated riparian community. The segment of Moro Creek outside of the existing disturbed area contains a variety of winter-deciduous, broadleafed willows, shrubs and herbs. Meanwhile, the lower approximately 1,100 linear feet of the creek which flows through the mobile home park contains some native riparian vegetation, but also has been significantly degraded by non-native exotic plants such as giant reed (Arundo donax), Cape ivy (Delairea odorata), English ivy (Hedera helix), periwinkle (Vinca major), castor bean (Ricinus communis), nasturtium (Tropaeolum majus), and other ornamental species.

2. Location of Wetlands and ESHA within the Project Area

Section 30107.5 of the Coastal Act defines Environmentally sensitive areas (a.k.a. Environmentally Sensitive Habitat Areas) as follows:

> *"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 30121 of the Coastal Act defines 'wetland" as follows:

> *"Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.*

The biological assessment conducted by State Park biologists identified riparian areas, coastal sage scrub, and California annual grasslands that are occupied by California gnatcatchers, least Bell's vireo, yellow-breasted chat (California species of special concern), or grasshopper sparrows (USFWS: Migratory Nongame Birds of Management Concern). Patches of habitat

occupied by these species and adjacent areas were designated "Environmentally Sensitive Area" (ESA) by the applicant. In their letter dated June 3, 2004, the applicant equates the areas they designated as ESA with "Environmentally Sensitive Habitat Area" (ESHA) under the Coastal Act.

The Commission's biologist has reviewed the information supplied by the applicant and states that "...[i]n general, I think the delineations of ESHA in the biological report were appropriate." However, certain riparian zones of Moro Creek (i.e. those portions extending through the mobile home park) were excluded from the ESHA designation made by the applicant, that the Commission would identify as ESHA. Data sheets for the wetland delineation, which includes the subject stream course area, suggest substantial cover of native species. Riparian habitats are unique and highly productive transitional areas between streams and terrestrial uplands. Riparian zones maintain the health and productivity of the stream environment. They reduce the transport of sediment and nitrates from the terrestrial to the aquatic environment, sustain microclimates, and provide large woody debris, which is a source of food and habitat structure. Because riparian vegetation maintains the morphological, physical, and chemical structure of the adjacent stream, riparian zones are generally considered highly effective natural buffers of aquatic habitats. Riparian corridors are also utilized by sensitive amphibian species for estivation and dispersal. Many fish species rely on the functions provided by riparian vegetation to the stream environment. The unique conditions of riparian habitats are also utilized by both migratory and breeding birds for breeding, protection, and feeding, such as least Bell's vireo (Vireo bellii pusillus). Due to the rarity and importance of riparian systems, the entire riparian zone within the project area, although containing some degraded segments, should be considered ESHA. Furthermore, the riparian zone should be considered a wetland under the Coastal Act.

Although included within polygons of coastal sage scrub ESHA at the scale of mapping, photographs of habitat immediately adjacent to some of the roads show areas that appear to be highly degraded and dominated by non-native ruderal vegetation. For instance, the ESA identified as Areas A, B and C (Exhibit 4) in the applicant's biological report include a routinely disturbed area along the existing entrance road that wouldn't be considered ESHA under the Coastal Act. Another patch of vegetation, known as Area H contains a regularly disturbed leach field and non-native grasslands that wouldn't qualify as ESHA. Furthermore, in a letter from the applicant dated September 10, 2004, the applicant suggests that the beach area presently occupied by mobile homes and proposed to be occupied by a lifeguard building would be ESHA. Since the area presently occupied by mobile homes presently includes no rare habitat and provides no habitat for sensitive species, this area does not qualify as ESHA.

3. Effects Upon ESHA and Stream Wetlands

The majority of work proposed as part of the current application will occur within the boundary of the existing developed area. However, some limited amount of work would result in removal of existing native vegetation and/or would occur within areas known-to-have-been occupied by California gnatcatcher and least Bell's vireo.

The applicant's biological report dated March 2002 provides an initial assessment of the areas to be disturbed by the proposed development. However, refinements to the project have resulted in changes to that initial assessment and are discussed in the applicant's letters dated June 2, 2004, June 3, 2004 and September 10, 2004. These letters indicate that a 4-foot wide trail on the downcoast side of Moro Creek would result in a loss of 0.028 acres of CSS. The impact would occur within Area I, as labeled in the applicants March 2002 biological report. Some of the disturbance would occur in the removal of pipes associated with the decommissioning of the septic system, the remainder would occur to construct the trail along the former alignment of the pipes. The proposed trail would connect the lower Moro Creek valley area with trails leading to inland areas of CCSP. The applicant is proposing to offset the

impact to CSS with 5.72 acres of CSS restoration within the area of the decommissioned septic leach fields.

The proposed project includes restoration of the approximately 1,150 linear feet of Moro Creek that passes through the existing mobile home park (that will be removed). This segment of the creek has been degraded by physical encroachments into the historic creek channel by the mobile homes as well as the presence of non-native vegetation. The proposed restoration includes work ranging from removal of non-native plants and planting native riparian vegetation, to more disruptive work (temporarily) including grading to widen the creek to resemble its historic width and alignment, installation of grade control structures, and installation of approximately 240 linear feet of block wall and armorflex along the banks and bottom of the creek where the creek approaches its existing constriction point where it passes through a culvert under PCH to outlet on the beach. The applicant has indicated the creek bank and bottom armoring are necessary to protect PCH from erosion. The armoring system contains 2" x 4" holes within which native vegetation could become established.

One of two proposed bridges would be constructed in the general vicinity of an existing bridge that crosses Moro Creek near the creek culvert that passes under PCH. The bridge would be incorporated into the above described block wall and armorflex system. Impacts associated with this bridge are a component of the creek bank and bottom armoring described above that are necessary to protect PCH.

The second of two proposed bridges would cross Moro Creek at the location of an existing unimproved 'Arizona' style creek crossing near the inland limit of the proposed creek restoration area. This bridge would span the creek and impacts to native vegetation would be limited to some trimming of existing riparian vegetation. This work would occur within Area H, described in the applicants March 2002 biological report. The existing unimproved crossing is prone to erosion that adversely impacts the creek. The proposed bridge would prevent future erosion by keeping pedestrians and emergency vehicles out of the creek bed.

The above-described activities would result in impacts to approximately 0.13 acres of stream wetlands and 0.08 acres of riparian vegetation, but would generate 2.07 acres of riparian restoration.

The proposed project would place some development within areas adjacent to ESHA. For instance, the applicant is proposing an amphitheater/campfire center adjacent to Area F, described in the applicant's March 2002 biological report. The amphitheater is proposed to be located within the footprint of the 'corporation yard' that is proposed to be removed. No impacts within Area F would occur. In addition, according to the Response to Comments contained in the EIR, the proposed facility would be located approximately 100 feet from CSS vegetation located within Area F. Other development associated with the day use component of the project (e.g. parking areas, restrooms, individual and group picnic structures) would be located within 50 feet of Moro Creek along the degraded segment of that ESHA.

Finally, landscape plans submitted by the applicant indicate the applicant is proposing to salvage and re-use certain species of non-native vegetation that is present on the site. For instance, the landscape plans indicate the applicant is planning to salvage and re-use Mexican fan palms (Washingtonia robusta) within the project. These species may be invasive and could represent a threat to the continuance of the adjacent habitat. Since submittal of the landscape plan, the applicant has indicated their intent to revise the landscape plan to incorporate solely native plants appropriate to the habitat type within the project area.

4. Consistency with Coastal Act Policy

a. Section 30233/Wetlands Dredge and Fill

The proposed project includes grading within Moro Creek as part of a habitat restoration plan. This activity will result in the dredging and/or fill of 0.13 acres of wetlands located within Moro Creek. Section 30233 of the Coastal Act limits such dredging and/or fill to certain specified uses where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. Among those allowed uses are "restoration purposes" and "nature study...or similar resource dependent activities." The proposed work is for restoration and nature study purposes, thus it is an allowable use.

Furthermore, the proposed alternative is the least environmentally damaging feasible alternative. There were two other alternatives considered that would avoid wetlands impacts, a reduced design alternative and a no-project alternative. Under both alternatives, restoration of the creek habitat would be significantly reduced or avoided. Thus, unlike the proposed project, habitat values of the creek would not be significantly improved. Rather, habitat would continue to degrade from erosion, sedimentation, and further encroachment and expansion of non-native vegetation.

The proposed project contains feasible mitigation measures in the form of habitat restoration. The proposed 0.13 acres of impacts to streamcourse wetlands will be offset with 2.07 acres of riparian habitat restoration. This quantity of restoration exceeds the 4:1 (restoration to impact) ratio for wetland impacts the Commission would require in this case.

Habitat restoration is an evolving science. Each restoration project has unique challenges that must be overcome for the restoration to be a successful one. Thus, it is important to have a detailed plan in place identifying the restoration procedures, the criteria by which the restoration will be deemed successful, and a response plan if problems are encountered during the restoration. Accordingly, a complete habitat restoration and monitoring program is an essential component of a good restoration project. Therefore, the Commission imposes Special Condition 10 that requires the applicant to submit a final stream restoration plan. As conditioned, the Commission finds the proposed development consistent with Section 30233 of the Coastal Act.

b. Section 30236/Stream Alteration

Under the Moro Creek restoration plan, approximately 240 linear feet of block wall and armorflex would be installed along the banks and bottom of Moro Creek where the creek approaches its existing constriction point as it passes through a culvert under PCH to outlet on the beach. Section 30236 limits this type of stream channelization to necessary water supply projects and cases where there is no other method for protecting existing structures in the floodplain or where the primary function of the channelization is the improvement of fish and wildlife habitat.

The applicant has submitted a hydrology and hydraulics analysis of Moro Creek that demonstrates that the velocities of the stream flow in this constriction, during high flow events, are high enough to erode the banks in this area if the banks were soil alone. Such erosion would threaten the stability of PCH in the vicinity of the creek. Thus, the proposed stream channelization is necessary to protect existing structures in the flood plain. The applicant is proposing the use of block walls with planters and 'armorflex' that will provide 'hard' protection from high-flow scour events, but will also allow vegetation to take hold during lower flow conditions. Alternative types of 'softer' bank protection like those being utilized further upstream (e.g. brush mat bank protection) would not be appropriate in this area. The Commission's engineer reviewed the proposed stream bank stabilization design and determined that the

proposed type and quantity of stabilization are the minimum necessary and the most appropriate at this location.

The proposed stream channelization is necessary to protect and is the only method of protecting existing development in the floodplain. Furthermore, the Commission notes the proposed work is occurring in conjunction with the improvement of fish and wildlife habitat within Moro Creek. Therefore, the Commission finds the proposed development consistent with Section 30236 of the Coastal Act.

c. Section 30240/ESHA

Section 30240(a) of the Coastal Act requires that ESHA be protected against significant disruption to habitat values and limits uses within ESHA to those dependent upon the resource. As described above, the proposed project would result in encroachments into and limited removal of ESHA. These impacts are associated with the construction of public trails or are necessary for habitat restoration.

To the maximum extent possible, it is preferable to avoid crossing ESHA with trails. However, the Commission has found that the construction of public trails within ESHA can be resource dependent. The recreational and educational experience available to trail users is significantly enhanced by circulation through the habitat areas. In this case, the public trails, with their nature study component, can be viewed as resource dependent uses. While the trails pass through the open spaces, the principal use of the open space remains habitat conservation. The proposed trail would not significantly degrade habitat values.

Similarly, the proposed development within Moro Creek, described in the applicant's September 2004 riparian restoration plan, is necessary to restore the habitat value of the creek. Such development includes proposed grading for stream widening and stabilization, grade control structures, streambed and streambank stabilization structures, brush mat bank protection, and minor drainage facilities. Some of these activities, such as the dredging and fill of stream wetlands, are regulated under Section 30233 of the Coastal Act. Other development activities, such as the streambank stabilization near PCH, are regulated under Section 30236 of the Coastal Act. The remainder of the proposed restoration activities are dependent on the resource and are compatible with the continuance of the ESHA. Therefore, these activities are consistent with Section 30240(a) of the Coastal Act. Special Condition 7 identifies the specific type of development the Commission is authorizing or is prohibiting within the riparian ESHA.

The two proposed bridges would cross El Moro Creek and would cross the ESHA. One of the proposed bridges would be located in the area of the proposed streambed and streambank stabilization structures that is necessary to protect PCH and would not generate impacts independent of these required stabilization structures. Meanwhile, the inland bridge crossing follows an existing, eroding path. The bridge will prevent additional erosion occurring within the creek and would protect the riparian ESHA from significant disruption to habitat values.

To offset the loss of 0.028 acres of CSS, 0.13 acres of stream wetlands and 0.08 acres of riparian vegetation, the applicant is proposing to restore 5.72 acres of CSS and 2.07 acres of riparian habitat. These quantities of restoration exceed the typical 3:1 (restoration to impact) ratio for CSS impacts and 4:1 (restoration to impact) ration for wetland impacts the Commission would require in this case. These restoration activities are key elements in the Commission's finding that the proposed restoration work is resource dependent. The applicant has submitted preliminary restoration plans for the proposal, but has not prepared final habitat restoration plans. The applicant must submit final restoration plans for the review and approval of the Executive Director. Thus, the Commission imposes Special Conditions 10 and 11.

As noted above and detailed in Special Condition 7, the Commission is allowing certain types of development within the ESHA where such development wouldn't significantly disrupt habitat

values and is considered resource dependent. However, in addition to protecting the ESHA itself, Section 30240 of the Coastal Act requires that development adjacent to ESHA be sited and designed to prevent impacts that would significantly degrade those areas, and shall be compatible with the continuance of those habitat areas. Buffers and development setbacks protect biological productivity by providing the horizontal spatial separation necessary to preserve habitat values and transitional terrestrial habitat area. Furthermore, buffers may sometimes allow limited human use such as low-impact recreation, and minor development such as trails, fences and similar recreational appurtenances when it will not significantly affect resource values. Buffer areas are not in themselves a part of the environmentally sensitive habitat area to be protected. Spatial separation minimizes the adverse effects of human use and urban development on wildlife habitat value through physical partitioning. The greater the spatial separation, the greater the protection afforded the biological values that are at risk. Buffers may also provide ecological functions essential for species in the ESHA.

The applicant's proposal contains development, such as grading for parking lots and roads, and the construction of picnic facilities, restrooms and other buildings adjacent to the riparian ESHA. In some instances, the proposed development would be located within a few feet of the existing ESHA. The presence of this development in such close proximity to the ESHA would significantly degrade the ESHA and wouldn't be compatible with the continuance of the habitat. In general, degradation would be avoided if development is sited and designed such that it is at least 50 feet from the edge of the canopy of the existing native riparian vegetation, and 50 feet from the edge of upland ESHA. Therefore, the Commission imposes Special Condition 7 that establishes a buffer where only limited types of development may occur. The special condition specifies the type of development the Commission would allow within the buffer such as trails and associated minor appurtenances.

However, the Commission finds that certain deviations from the 50 foot buffer requirement would still avoid degradation of the ESHA and be compatible with the continuance of the habitat. For instance, one-time grading for construction, and maintenance and use of water quality management basins and drainage outlets would be allowed provided there is at least a 25 foot setback of the basin upon its completion. This exception to the general policy are acceptable because no significant native vegetation is affected, protective construction practices are proposed, the disturbance is temporary and brief, and the work will occur in conjunction with planned creek restoration.

Another area where a deviation would be allowed is the development planned adjacent to the 220 linear foot segment of the creek proposed to be stabilized with block wall and armorflex inland of the PCH undercrossing. This area is adjacent to existing development that already disrupts the habitat, such as PCH.

In allowing for the specified deviations, the Commission recognizes certain factors. One factor is that existing development (i.e. the mobile homes) is presently sited such that there is virtually no buffer between the development and the creek habitat. Thus, the creek habitat is significantly degraded. The proposed project will, on the whole, lead to the creation of significant buffers where there are presently none. For instance, on the southerly side of the creek, where there are presently mobile homes, parking lots and roads, such development will be entirely removed and in place there will be re-vegetation. Another factor is that very limited types of development would occur on the southerly side of the creek, such as a few picnic ramadas to be located more than 100 feet from the edge of existing riparian vegetation.

Other types of measures to protect ESHA including changing the landscape plan to contain solely native plants appropriate to the habitat type within the development, directing and controlling the intensity of lighting to prevent adverse lighting effects upon ESHA, and implementing construction phase measures to avoid disturbances during the breeding season of sensitive species and appropriate storage and staging of construction materials and equipment.

Therefore, the Commission imposes Special Conditions 7, 8, 9, 12 and 18 which collectively outline the specific types of development allowed and prohibited within ESHA and buffers, the construction phase habitat impact avoidance requirements, lighting impact avoidance requirements, landscape plan modifications and submission of final project plans implementing all of the requirements of the conditions. As conditioned, the Commission finds the proposed development consistent with Section 30240 of the Coastal Act.

5. Other Agency Approvals

The proposed development will require approvals from other resources agencies including the California Department of Fish and Game (CDFG), U.S. Fish and Wildlife Service (USFWS), Regional Water Quality Control Board (RWQCB) and U.S. Army Corps of Engineers (Corps). These other agencies are responsible for review of the proposed development with respect to State and Federal Endangered Species Act requirements, and Clean Water Act requirements. The applicant has applied for approvals from said agencies but has not yet supplied evidence of their approvals. Information supplied by the applicant indicates that progress toward obtaining the approvals is moving steadily forward. The Commission has not required authorizations from CDFG, USFWS and the RWQCB in advance of it's approval of a CDP in this case because, based on prior experience with projects at CCSP, the approvals of these other agencies are unlikely to conflict with the requirements imposed by the Commission. Meanwhile, Corps approval hasn't yet been obtained because the applicant is required to first obtain approvals from the Commission. However, if such approvals result in changes to the project that are different from the project reviewed by the Commission, the applicant may need to obtain approvals for such modifications from the Commission. Thus, the Commission imposes Special Conditions 14 and 15 which require the applicant to submit evidence of review and approval from the various resources agencies or evidence that such approvals are not required and notifies the applicant that a subsequent authorization from the Commission may be necessary if the project, as modified by the other agencies, deviates substantially from the Commission's authorization.

H. CULTURAL RESOURCES

Section 30116 of the Coastal Act states, in pertinent part,

> *"Sensitive coastal resource areas" means those identifiable and geographically bounded land and water areas within the coastal zone of vital interest and sensitivity. "Sensitive coastal resource areas" include the following:*
>
> *(d) Archaeological sites referenced in the California Coastline and Recreation Plan or as designated by the State Historic Preservation Officer.*

Section 30244 states, in pertinent part,

> *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

The Coastal Act requires reasonable mitigation measures to be imposed *"where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer."* In addition, the General Plan of the certified PWP includes a discussion and policies regarding the management and protection of cultural resources. The management of cultural resources is governed by Sections 5019.74, 50/97.5 and 5097.9 of the Public Resources Code.

Numerous archaeological sites have been identified throughout Crystal Cove State Park. The proposed project area contains a number of potential sites. The PWP contains specific recommendations for the cultural resources identified by geographic area. The policies of the PWP call for the use of proper archaeological methods and agreed upon disposition of resources where cultural resources are likely to be found.

The proposed development was designed in a manner that avoids disturbance to known cultural deposits. For instance, proposed day use facilities and restoration activities have been designed to limit disturbance to known archeological sites both during construction and upon completion of construction (i.e. directing park users away from sensitive sites). Furthermore activities that must disturb soil, such as the installation of utilities, have been designed to work within previously disturbed areas. However, some development may cause impacts to cultural resources where they were thought to have been previously disturbed or where other constraints necessitate a particular utility alignment. The applicant (DPR) has stated that an on-site archaeological professional will be monitoring all activities involving ground disturbance and grading during implementation of the proposed development. In addition, all work will be done in a manner that complies with the *Secretary of the Interior Standards for the Treatment of Historic Properties* (Weeks and Grimmer 1995), which requires archaeological resources to be protected and preserved in place.

Special Condition 13 outlines measures necessary to assure that the proposed development is undertaken consistent with Section 30244 of the Coastal Act. The condition requires that written evidence be submitted which demonstrates that the State Office of Historic Preservation has determined that no additional archeological surveys must be conducted prior to commencement of construction. During the course of grading or other construction activities cultural resources could be uncovered. Therefore, the condition requires that archaeological monitors qualified by State Office of Historic Preservation (OHP) standards and a Native American monitors appointed consistent with the standards of the Native American Heritage Commission (NAHC) be present on the site during all project grading. If cultural deposits or grave goods (as defined by OHP) are uncovered during construction, the condition requires that work stop until the archaeological monitor and the Native American monitor can evaluate the site and, if necessary, develop a treatment plan approved by OHP and the Executive Director. Upon review of the treatment plan, the Executive Director will determine whether an amendment is required. If human remains are found, the Commission could require that the applicant carry out identification and require in-situ preservation, recovery or reburial (or a combination thereof) consistent with State Law and the wishes of the Native American Most Likely Descendent. As conditioned, the Commission finds the project consistent with Section 30244 of the Coastal Act.

I. CALIFORNIA ENVIRONMENTAL QUALITY ACT

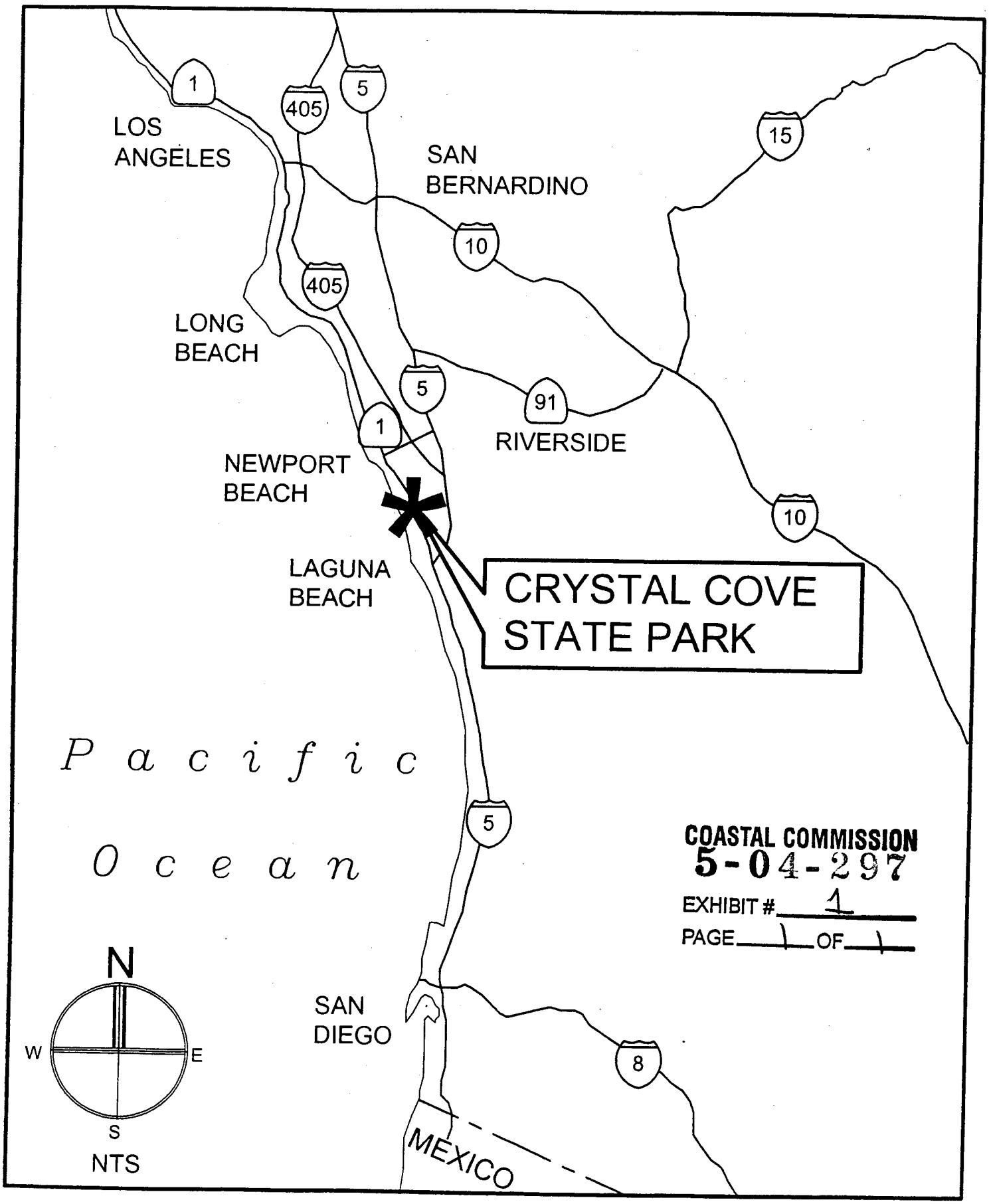
Section 13096(a) of the Commission's administrative regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the Califomia 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 which the activity may have on the environment.

The project is located within a State Park adjacent to the shoreline. The proposed development has been conditioned as follows to assure the proposed project is consistent with the hazards, public access, water quality, ESHA, and archeological resources protection policies of the Coastal Act: 1) an agreement to assume the risk associated with development at the site; 2) an agreement not to construct a future shoreline protective device to protect the lifeguard tower building or associated development; 3) an agreement that future development be reviewed by

the Commission; 4) preparation and implementation of a storm preparedness plan; 5) conformance with measures to remedy potential visual impacts of the lifeguard tower if the beach becomes eroded; 6) preparation and implementation of a final water quality management plan; 7) conformance with development setbacks from ESHA; 8) use of construction best management practices (BMPs); 9) lighting direction and intensity to be controlled to avoid habitat impacts; 10) preparation and implementation of final stream/wetland restoration and monitoring program; 11) preparation and implementation of a final coastal sage scrub restoration and monitoring program; 12) revisions to the landscape plan to eliminate non-native plant species; 13) archaeological monitoring; 14) evidence of Army Corps approval; 15) evidence of other agency approvals; 16) preparation and implementation of a monitoring program for proposed grade control structures in Moro Creek; 17) conformance of design and construction plans to wave runup analysis; and 18) submission of final revised plans incorporating all the requirements of the special conditions.

As conditioned, no feasible alternatives or feasible mitigation measures are known, beyond those required, which would substantially lessen any identified significant effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with CEQA and the Chapter Three policies of the Coastal Act.

FIGURE 1.1 LOCATION MAP



PROJECT SITE: EL MORO CONVERSION TO CAMPGROUND AND DAY USE

SHEET TITLE: PROJECT FEATURES FIGURE 2.2

APPROVED: DATE:

REVISIONS | DESIGNED | DRAWN | CHECKED | DATE | SCALE AS SHOWN | SHEET of

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5-04-297

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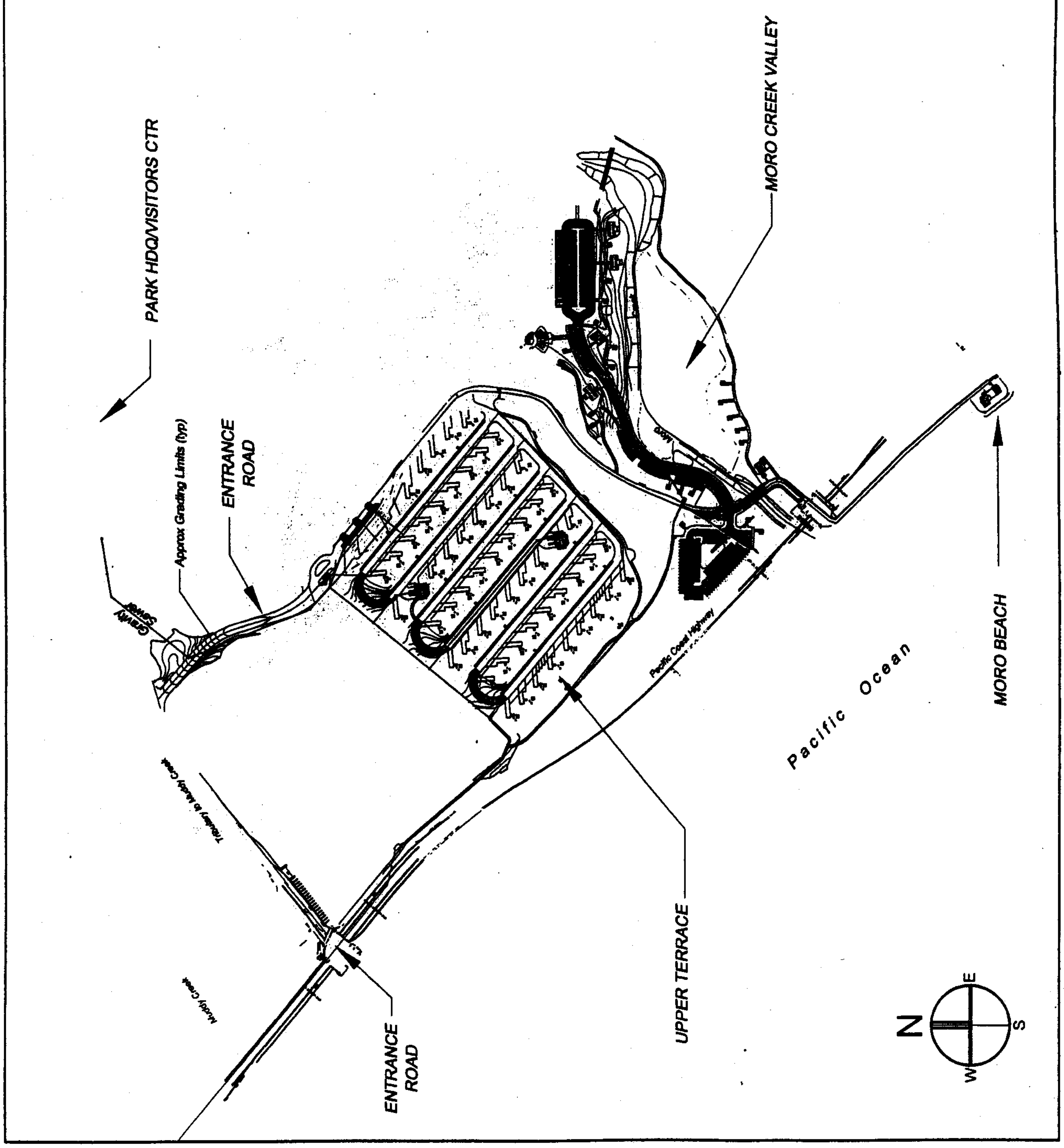
PAGE 1 OF 5



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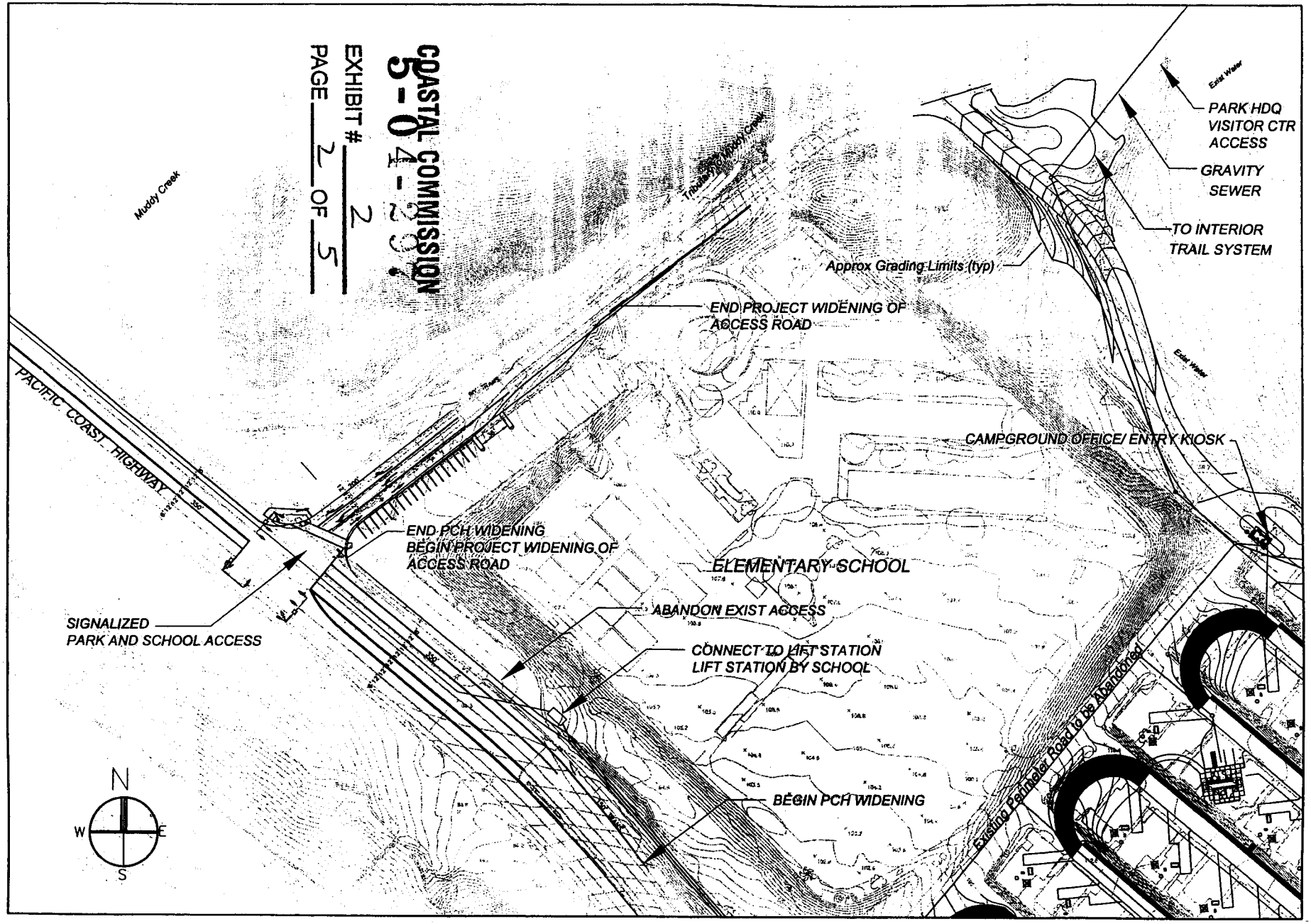
PAGE 2 OF 5



APPROVED: DATE:

SHEET TITLE: PROJECT FEATURES
FIGURE2.2D

PROJECT SITE: EL MORRO CONVERSION TO CAMPGROUND AND DAY USE

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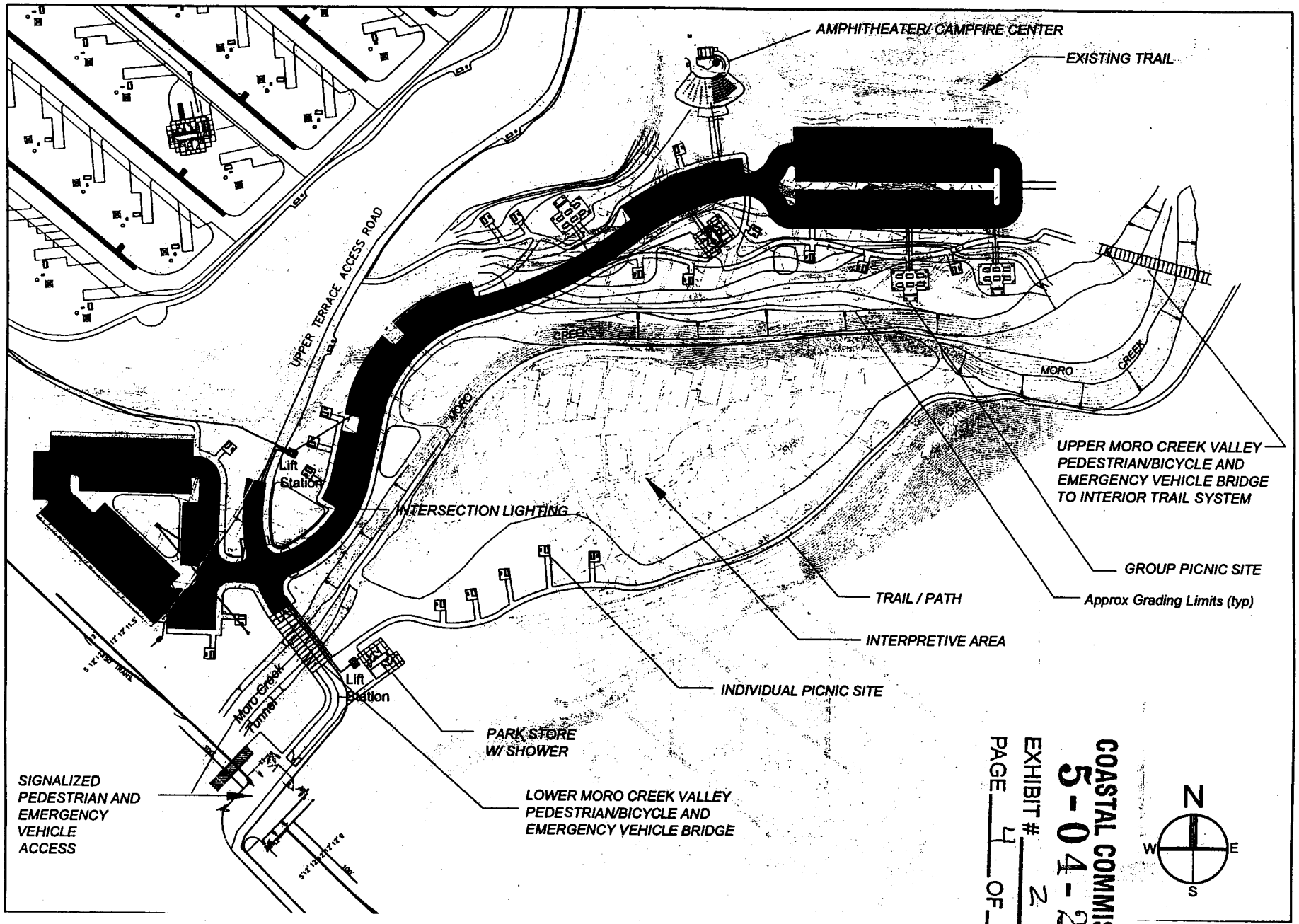
PAGE 3 OF 5

PROJECT SITE: EL MORRO CONVERSION TO CAMPGROUND AND DAY USE
SHEET TITLE: PROJECT FEATURES
FIGURE 2.2C



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PAGE 4 OF 5

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SHEET TITLE: PROJECT FEATURES
FIGURE 2.2B

PROJECT SITE: EL MORRO CONVERSION TO CAMPGROUND AND DAY USE

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DATE
SCALE 1"=100'

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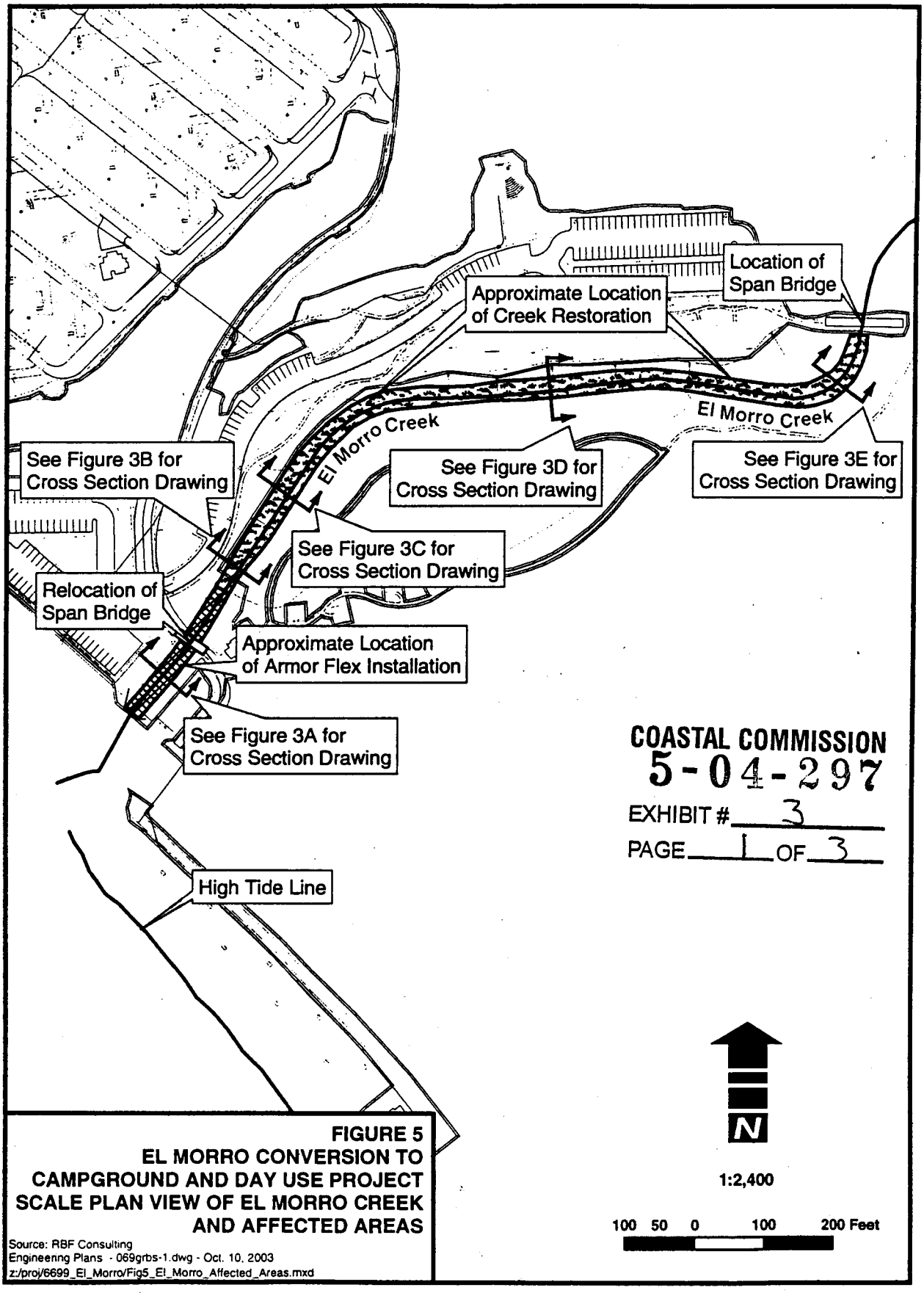
EXHIBIT # 2
PAGE 5 OF 5

PROJECT SITE: EL MORRO CONVERSION TO CAMPGROUND AND DAY USE

SHEET TITLE: PROJECT FEATURES FIGURE 2.2A



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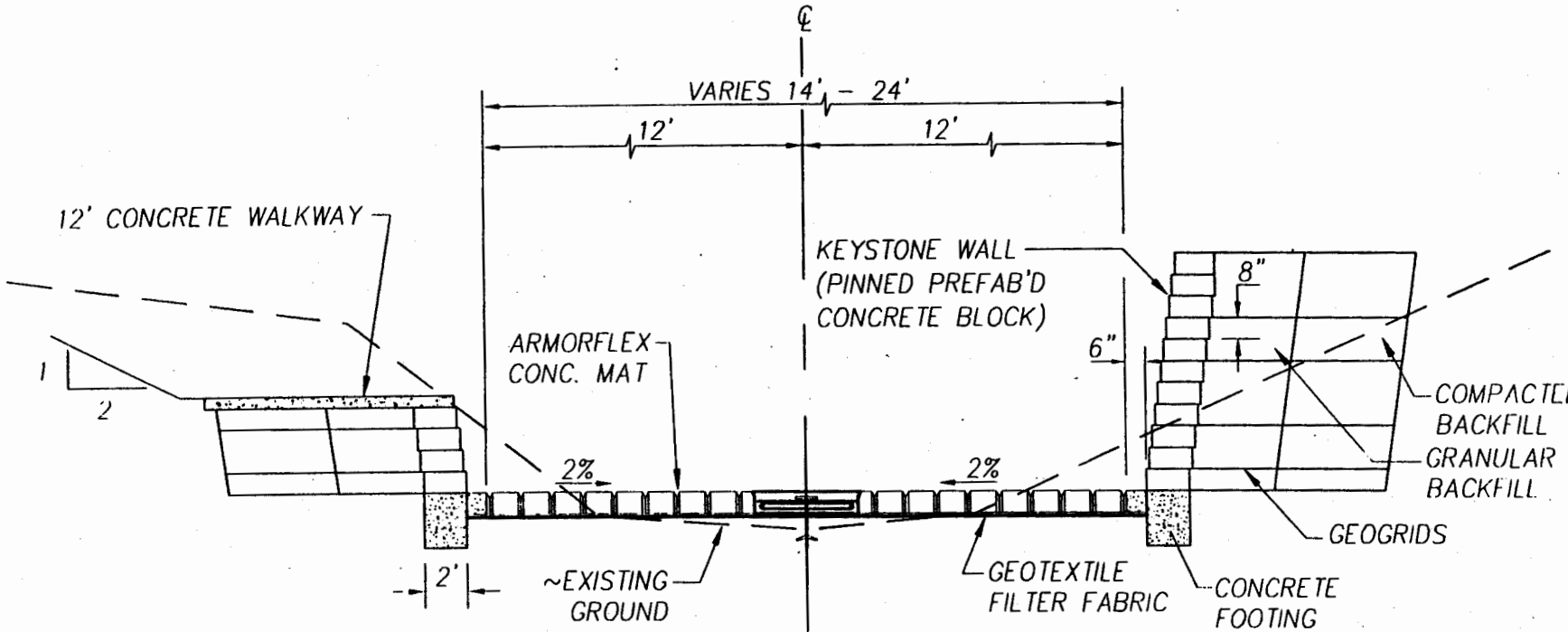
5-04-297
EXHIBIT # 3
PAGE 1 OF 3

FIGURE 5
EL MORRO CONVERSION TO CAMPGROUND AND DAY USE PROJECT SCALE PLAN VIEW OF EL MORRO CREEK AND AFFECTED AREAS

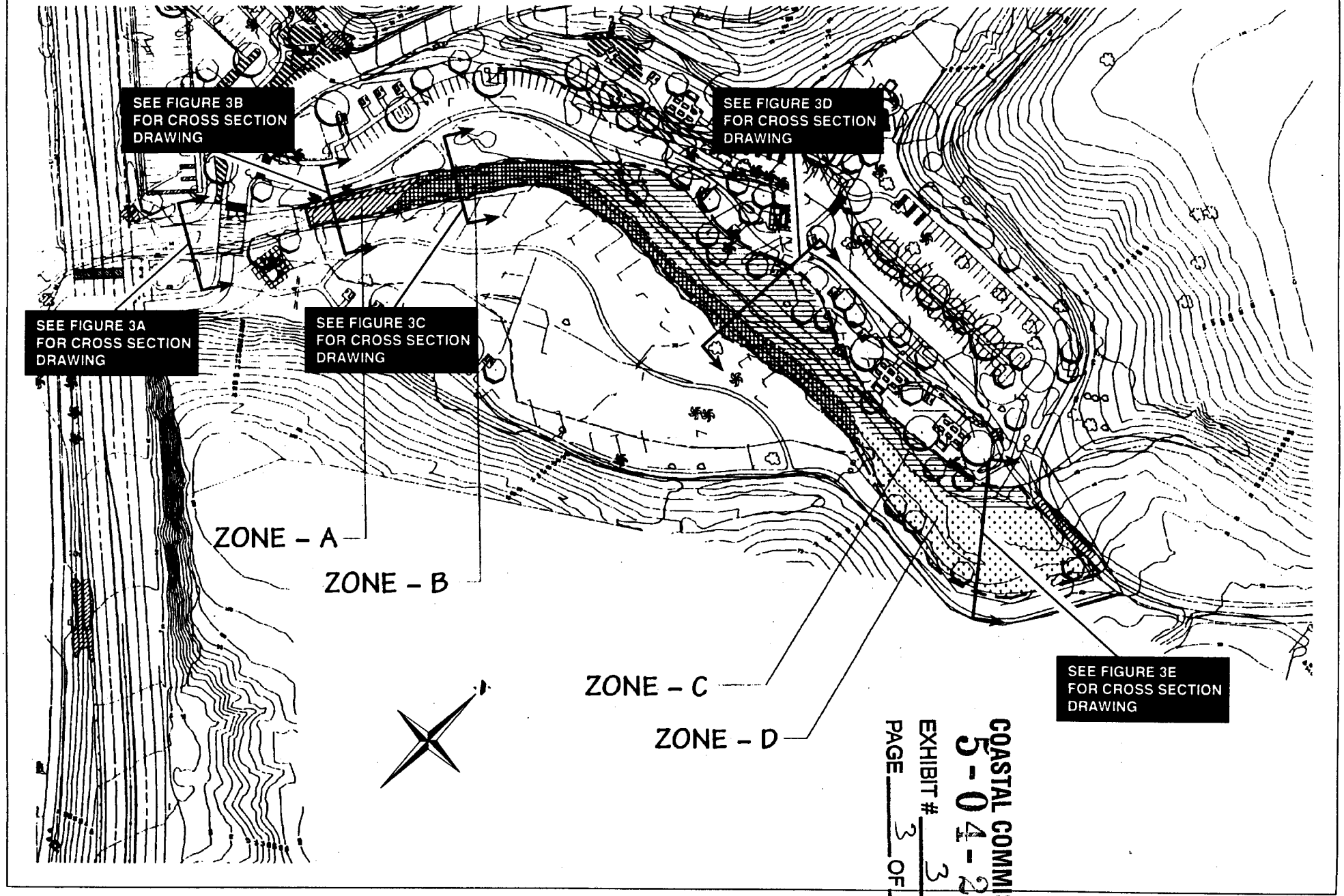
Source: RBF Consulting
Engineering Plans - 069grbs-1.dwg - Oct. 10, 2003
z:/proj/6699_El_Morro/Fig5_El_Morro_Affected_Areas.mxd



ARMORFLEX CONCRETE MAT INVERT LINING TYPICAL SECTION WITH KEYSTONE WALL SLOPE REVETMENT

N.T.S

FIGURE 3A



SCALE:
1" = 160'

CREEK RESTORATION ZONES
Figure 2

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EXHIBIT # 3
PAGE 3 OF 3

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5 - 0
EXHIBIT # 1
PAGE 1