

FINAL FEDERAL CONSISTENCY CERTIFICATION
CALIFORNIA COASTAL COMMISSION

**Red Rock Beach Storm Damage Repair Project
State Highway 1, Marin County, California**

04-MRN-01 PM 11.95 EA 3S5203



Prepared by

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OFFICE OF BIOLOGICAL SCIENCES AND PERMITS**

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BACKGROUND

The Marin County Route 1 emergency storm damage repair projects are proceeding pursuant to the Governor's proclamation of May 10, 2006, and the Department of Transportation (Caltrans) Director's Orders, pursuant to Public Contract Code 10122(a), "failure or threat of failure of highway." Caltrans considers these Director's Orders projects to be emergencies because the damages are catastrophic failures. It is necessary to perform repair work immediately as the current driving conditions can cause loss or impairment of life and property. Further damage can also cause complete closure of the highway.

On January 3, 2006, Governor Schwarzenegger issued a State of Emergency Declaration for sixteen counties, including Marin County, due to the heavy winter rainfall. The period of this declaration covered only damage in December, January and February. Heavy rains continued into March and April, and that is when the damage to Route 1 in Marin County occurred. On May 10, 2006, Governor Schwarzenegger issued another State of Emergency Declaration to include the heavy rainfall through April 2006. Following the Governor's proclamation, Caltrans applied to the Federal Highway Administration (FHWA) for emergency relief funding under Title 23 USC, Section 125.

The table below provides preliminary information on the repair locations, cost and Coastal Act jurisdiction.

SUMMARY OF EMERGENCY REPAIR LOCATIONS ROUTE 1, MARIN COUNTY

Post mile	Length (feet)	Estimated Cost	Location	Coastal Act Jurisdiction
1.8	110	\$489,000	Muir Beach	None
4.03	109	\$2,046,699	Green Gulch	None
8.03	175	\$3,663,000	Slide Ranch	CCC
8.30	410	\$4,656,249	Cold Stream Creek	CCC
9.0	300	\$3,025,000	Lone Tree Slide	Marin County
10.02	350	\$3,635,000	Lone Tree Creek	Marin County
10.50	210	\$3,495,950	Lone Tree Fire Rd.	Marin County
11.45	575	\$12,460,000	Red Rock Beach	Marin County
11.95	815	(included in PM 11.45)	Red Rock Beach	CCC
TOTAL	2,864	\$33,472,798		

EXISTING CONDITIONS

Caltrans is currently proceeding with storm damage repairs to Highway 1 under the following authorizations from the County of Marin and the California Coastal Commission.

August 25, 2006: The Marin County Community Development Agency provided Caltrans a letter of concurrence that the proposed repairs at PM 10.50, were exempt from the Coastal Permit requirements of Marin County Code Section 22.56.050(A), and are considered part of the repair and maintenance of an existing roadway. Repairs began at Post mile (PM) 10.50 on August 31, 2006.

October 16, 2006: the CCC issued Caltrans a Waiver (NE 080-06) of Federal Consistency for repairs at PM 8.30.

October 25, 2006: the Marin County Community Development Agency provided Caltrans a letter of concurrence that the proposed repairs at PM 9.0-9.14 and 10.0, were exempt from the

Coastal Permit requirements of Marin County Code Section 22.56.050(A), and are considered part of the repair and maintenance of an existing roadway.

PROJECT SCHEDULE

There are eight locations between PM 1.8 and 11.95 on Route 1 that will be repaired, between August 2006 and March 2007. A schedule for each location that includes the construction start date, work duration, and road closures and lane restrictions is included in the attachment Storm Damage Repair Projects in Marin County, Route 1. This attachment also includes information for the public and park visitors regarding detours during construction and alternate routes to Mt. Tamalpais State Park and Stinson Beach/GGNRA. Construction is currently scheduled to begin at PM 11.95 in late November-2006, and continue for 120 days.

PROJECT DESCRIPTION PM 11.95

The project consists of repairs to a 815 foot-long section of the Highway at PM 11.95, and includes the construction of:

1. A 59 foot-high by 722 foot-long tie back retaining wall;
2. A 5 foot-wide bench directly below the retaining wall;
3. Replacement of one drainage inlet and a cross culvert;
4. Repair of existing junction boxes and over-drainpipes; and
5. Reconstruction and resurfacing of a 815 foot-long section of the existing roadway.

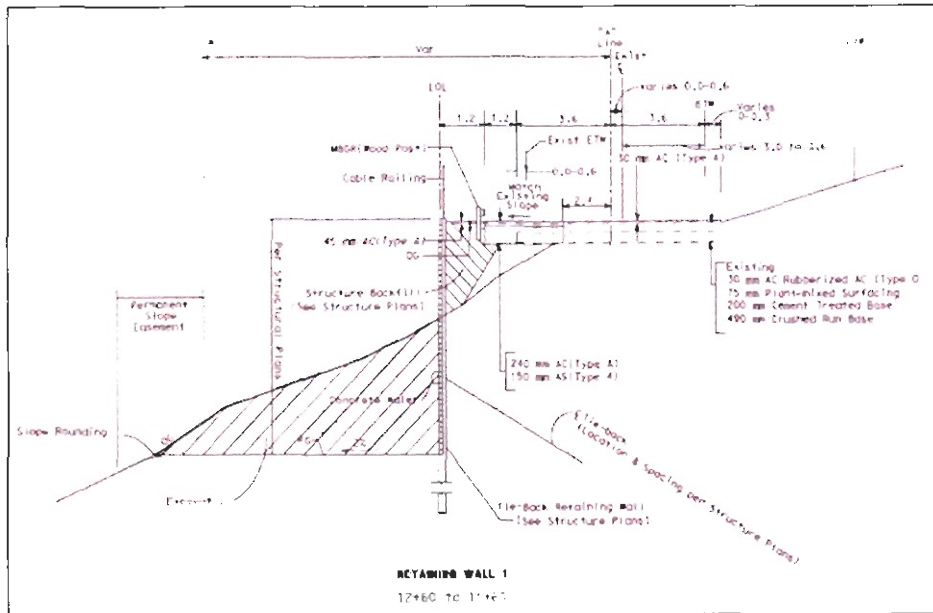
The retaining wall at PM 11.95 will be constructed using Cast-in-Drilled-Hole (CIDH) metal pile foundations, natural wood lagging, and one row of horizontal tie-back anchors. At the bottom of the retaining wall, a 5 foot-wide bench will be constructed to allow for maintenance of the wall, and two existing drainage inlets and cross culverts will be extended through and down the face of the wall. This drainage will connect to a junction box inlet at the bench, and then flow through a separate drainage pipe to a down slope area. In the areas of the roadway where the slip-out and slide has caused extensive cracking and buckling, the roadway will be reconstructed and resurfaced.

The designed height of the retaining walls is 59 feet-high. However, the average height from the top of the retaining wall to the bottom of the wood lagging is 14 feet, and only this section will be exposed. A metal beam guard rail (MBGR) and cable safety railing will be installed on top of the retaining wall.

SETTING

The project area is located within portions of the Golden Gate National Recreation Area (GGNRA) and Mt. Tamalpais State Park, approximately ½ mile from the town of Stinson Beach, and approximately ½ mile from the Steep Ravine Environmental Cabins. Mt. Tamalpais State Park was created in 1928, and is one of the oldest and most popular units of the California State Park System. The total area of the park is 6,300 acres, and it is bordered by Marin Municipal Water District (MMWD) land to the north, and by the GGNRA on the northwest and south. The varied topography of Mt. Tamalpais supports a tremendous diversity of plant life, and more than 750 species, including the coast redwood.

Typical Cross Section of Repairs at PM 11.45 and 11.95



FEDERAL CONSISTENCY REQUIREMENTS

In accordance with the provisions of the Coastal Zone Management Act (CZMA), Section 307(c)(3)(A), and 15 CFR Part 930.57(a), Caltrans has prepared a consistency certification for this project in order to comply with the federal consistency requirements of the CZMA.

The project as proposed complies with the approved California Coastal Management Plan (CCMP) as described below, and will be conducted in a manner consistent with the program, and the enforceable policies of Chapter 3 of the California Coastal Act (California Public Resources Code Section 30210 et seq.)

Section 30240 Environmentally Sensitive Habitat Areas

Provides: (1) for the protection of Environmentally Sensitive Habitat Areas (ESHAs) against any significant disruption of habitat values; (2) that only uses dependent on ESHA resources shall be allowed within ESHAs; and (3) that development adjacent to “ESHAs 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.

The Natural Environment Study (2006) prepared by Caltrans Biologists for the project states that the project is bordered by coastal scrub vegetation, with intrusions of native willows (*Salix sp.*) bushes. Non-native plants including fennel (*Foeniculum vulgare*), and pampas grass (*Cortaderia jubata*) are also present.

Low coverage of wetland plant species tall flatsedge (*Cyperus eragrostis*), and smooth beggar-ticks (*Bidens laevis*) were observed at twelve locations along the inboard (landward) cutbank of the roadway, outside of the project footprint area. The inboard cutbank/ditch varies in width between one and three feet-wide, and is supplied with water artificially, from five drainage/dewatering pipes that are driven into the cutbank. Caltrans will avoid impacting any willow stands during the project preparation and construction.

Appendix D, Section 3, of the California Coastal Commission's Statewide Interpretive Guidelines (1981) state that:

Riparian vegetation is defined as that association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and freshwater bodies.

Appendix C, Section 1(A), also states:

For the purposes of identifying wetlands using the technical criteria contained in this guideline, one limited exception will be made. That is, drainage ditches as defined herein will not be considered wetlands under the Coastal Act. A drainage ditch shall be defined as a narrow (usually less than 5-feet wide), manmade non-tidal ditch excavated from dry land.

Based on the above definition, the isolated species found adjacent to the cut-bank do not qualify as wetland or riparian habitat. The hydrology present at these locations are a result of the dewatering activities that were implemented to prevent roadway degradation and slides. Because the project will not encroach upon the vegetation described above, Caltrans has determined that there is no potential to adversely affect any ESHA.

The project is consistent with Section 30240 of the Coastal Act in that no portion of the proposed project will encroach upon or disturb any ESHA.

Section 30233 Marine Environments

(1) Limits dredging and filling of wetland and open coastal waters to eight allowable uses; (2) requires that any proposal involving dredging or filling be the least environmentally damaging feasible alternative; and (3) provides for adequate mitigation to minimize adverse environmental effects.

The project is consistent with the provisions of Section 30233 of the Coastal Act, as there are no wetlands within the project footprint, and no dredging or filling of wetlands or coastal waters involved with the proposed project.

Section 30231 Water Quality

Protects water quality and the biological productivity and quality of coastal waters, streams, wetlands, estuaries, and lakes...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 habitats, and minimizing alteration of natural streams.

The project will incorporate methods as described in the attachment Erosion Control (TYPE D), and Erosion Control Plan Sheets No. E-1, E-2, ECD-1 and ECD-2. All disturbed soil areas will be managed using Best Management Practices, including the use of Erosion Control Fiber rolls. Temporary Environmentally Sensitive Area (ESA) fences, and temporary silt fences will be installed. All areas of the project where native vegetation has been temporarily disturbed during construction will be restored.

Surplus material generated from the project will be used to backfill the lower sections of the retaining wall prior to re-vegetation and restoration. Any related construction materials or additional soils not suitable for restorative use will be disposed of at an approved off-site

location. No debris, soils, silt, sand, cement, concrete, washings or other material related to construction such as waste, oil, petroleum products or organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into adjacent waters. At the conclusion of operations, any excess material shall be removed from the work area and those areas adjacent to streams to prevent runoff or degradation.

The project is consistent with Section 30231 of the Coastal Act given the measures that Caltrans will implement to reduce impacts to water quality resources.

Section 30210 – 30213 Public Access and Recreation

Provides for the maximization and protection of public access and recreation opportunities. For the purposes of complying with the public access policies, the project is not considered “new development” because it is a maintenance activity for which the commission has previously determined, pursuant to Section 30610 of the Coastal Act, that a Coastal Development Permit will not be required. However, under the provisions of the Commission’s Federal Consistency jurisdiction, the project and its associated facilities must be consistent with the enforceable polices of the CCMP, Chapter 3 of the California Coastal Act, California Public Resources Code Section 30210 et Seq.,¹

Caltrans’ responsibility to maintain a safe and dependable roadway for the public is inherent with its purpose and mission as an agency. In addition, it is Caltrans’ responsibility to make the determination that a roadway is unsafe for the public, or that it represents a potential liability to the State of California. At the same time, the need for continued public access to the coast must be balanced with the need to keep the roadway open, despite continuing geologic stability problems associated with slides, pavement failure, and erosion.

Temporary Closures

Caltrans understands the significance of maintaining public access to the coast from Highway 1, and will continue to invest in preserving the highway. However, in order to return the roadway to a safe condition, some opportunities for coastal visitors must be foregone for a short term period. Highway 1 will be closed on a temporary basis, limiting access to the roadway itself for an estimated 4 to 6 months.

Public Access Long-Term Benefits

The public benefit of these short term closures is that once repairs are completed, visitors will be able to travel a continuous route from Mill Valley to Stinson Beach on Highway 1, and enjoy uninterrupted vistas of the coast. During the construction period, the Panoramic Highway will serve as the alternate route for coastal travelers. This scenic 2-lane road bisects Mt. Tamalpais State Park, and has been the preferred “local route” for West Marin residents for decades. In part, this is due to the deteriorated condition of some sections of Highway 1 in Marin County.

Panoramic Highway Detour to Stinson Beach and Mt. Tamalpais State Park

Through access to Stinson Beach via Highway 1 will not be available to residents and visitors to Mt. Tamalpais State Park. To access Mt. Tamalpais State Park, and Stinson Beach, visitors would use an alternate route via the Panoramic Highway.

Visitors planning to drive to Slide Ranch from the town of Stinson Beach would use the above Panoramic Highway detour and Muir Woods Road. Highway 1 will be completely closed for the emergency repairs between PM 8.3 and 11.95. Although it is possible that the highway will re-

¹ Federal Consistency In A Nutshell, A Guide Concerning the Operations of the Federal Consistency Provision of the Coastal Zone Management Act of 1972 As Amended, California Coastal Commission (2001)

open to one-lane controlled traffic within 90 days of beginning work, due to weather considerations Caltrans can not guarantee this.

Steep Ravine Environmental Cabins and Campground

The closest State Park facility to PM 11.95 is the Steep Ravine Environmental Campground, which is part of Mt. Tamalpais State Park. Steep Ravine is located on a marine terrace about 1 mile south of Stinson Beach, and features ten rustic cabins designed by Berkeley architect Andrew Wurster in the 1930s, and six primitive campsites. Mt. Tamalpais State Park took possession of the cabins in the late 1970s, and they were first opened to public use in 1984. The cabins and environmental campsites at Steep Ravine can be reserved through the park concessionaire Reserve America up to 180 days in advance.

Steep Ravine Environmental Cabins-Mt. Tamalpais State Park



Access to Steep Ravine by car is via a one-lane gated road that intersects Highway 1 at approximately PM 11.0. Access to the pocket beach and trails that traverse Steep Ravine is also available by walking the .80 mile access road, and parking at pull-outs along Highway 1. Hikers can continue to access Steep Ravine and Red Rock Beach during construction from the Pantoll Ranger Station at Park Headquarters, and can use either the Steep Ravine or Dipsea Trail.

It is estimated that between 15,000 to 13,000 registered visitors camp at Steep Ravine each year. The aerial photo, Existing Public Access at PM 11.45 depicts the locations of vertical public accessways to both Steep Ravine and Red Rock Beach relative to the project at PM 11.45. PM 11.95 is north of PM 11.45 (.50 miles). Steep Ravine is traditionally closed for the entire month of October each year to perform annual maintenance.

Aerial View of Steep Ravine Campground and Beach



Red Rock Beach

Red Rock Beach is located approximately .50 miles north of the access road to Steep Ravine (PM 11.40). Located within the Mt. Tamalpais State Park boundaries, access to the beach is by a steep vertical trail, and parking is available at various pull-outs along the highway (within the Caltrans right of way).

Aerial View of Red Rock Beach and Vertical Accessway



Memorandum of Understanding

California Department of Parks and Recreation & California Department of Transportation

In consultation with the California Department of Parks and Recreation (DPR), Caltrans has drafted a Memorandum of Understanding (MOU) that provides for: Right of Entry authorization to Caltrans, compensation to DPR for reservation cancellation fees in the amount of \$8,120.00, and compensation to DPR for the loss of revenue from cancelled reservations for a 5 month

period in the amount of \$76,522.00. The DPR has agreed to the closure of Highway 1, and would cancel all existing reservations made by the public for cabins and campgrounds, for the period November 13, 2006 through March 31, 2007.

MOU Summary

On March 14, 2007, Caltrans entered into an agreement with DPR under the previously mentioned MOU, allowing Caltrans the right to enter and use of the necessary DPR property, as outlined in the Right of Entry Permit dated November 7, 2006. A copy of the MOU is attached with this amended Consistency Certification, including: Exhibit B-Construction Work in Lieu of Payment, Project Plans (L-1,C-1,X-1,C-2) for the Steep Ravine Campground, and Exhibit C-Exotic Species Control Plan.

Caltrans also agreed to:

(a) reimburse DPR the expense associated with the cancellation of reservations for the Steep Ravine State Park Campgrounds for the period November 13, 2006, through March 31, 2007, in the amount of \$7,627.00 and (b) compensate in kind through contract construction work for the loss of revenue of \$78,929.00 caused by cancelled reservations during the same period.

Caltrans agreed to complete the following work at the location of the Steep Ravine Environmental Campground, and the Red Rock Beach parking lot pull-out area, on highway 1, at approximately PM 11.0 and 11.45.

1. Trenching and installation of an 8" diameter pipe sleeve beneath Highway 1, at a depth consistent with standard highway construction specifications parallel to the campground's existing water pipe, including extension of the pipe sleeve beyond the embankment. Estimated cost is \$15,000.00.
2. Paving of a 3,550 foot-long by 15 foot-wide by 1.5 inch-thick access road, that connects Highway 1 to the campground's parking area. The pavement shall be overlaid with asphalt concrete (Type A). Estimated cost is \$70,000.00
3. Grade and pave the gated entrance area to the Steep Ravine Environmental Campground. Estimated cost is \$
4. Develop and implement an exotic species and erosion control strategy to stabilize and restore those areas of parkland and other areas that were disturbed during construction. Areas to be addressed include Post-miles 9.0-10.0-10.50, and 11.45. Targeted species may include those outlined in Exhibit C, Exotic Species Control Plan. Estimated cost is \$14,260.00.

The MOU agreement was signed by representatives of the State of California, Department of Transportation, and the California Department of Parks and Recreation on March 14, 2007. A set of Preliminary Plans for the improvements at the Steep Ravine Campground, are included with this submittal.

**Existing Public Access at PM 11.45
Red Rock Beach and Steep Ravine Environmental Cabins**



Section 30251 Scenic and Visual Qualities

Section 30251 of the Coastal Act protects scenic views and provides for the minimization of natural landform alteration. It states in part that:

the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas...

In the early stages of designing an appropriate treatment for the proposed retaining walls, Caltrans met with Coastal Commission and GGNRA staff to determine what design features, color and texture, would be most compatible with the surrounding coastal landscape, and consistent with several retaining walls that are currently in place along this section of Highway 1.

The retaining wall pictured is currently in place on a section of Highway 1, in Sonoma County, and the design of the walls was conceptually approved by Commission and GGNRA staff for the repairs at PM 10.50. Caltrans will use this same design, natural wood lagging and earth colored horizontal tie-backs, on all of the repair locations.

Metal beam guard railings (MBGR) at the roadway level, and see-thru galvanized cable safety railings with vertical stanchions, will also be uniformly used. The retaining walls have been designed to be visually compatible with the character of the landscape and the surrounding parklands.

Over time, as the natural wood materials become faded and weathered, the exterior color of the walls become even less visible, incorporating the natural elements of the landscape as they age.



Retaining Wall with Cable Railing and Wood Lagging

The project is consistent with the visual resources policy of the Coastal Act, because design options and treatments have been incorporated to minimize any incompatibility or visual impacts.

Section 30253 Development

Requires protection against geologic, flood, and fire hazard, assurance of stability and structural integrity, and prohibits the creation or contribution to erosion, geologic instability, or destruction of the site surrounding the area. Although the project is not a new development, it will provide increased stability and structural integrity to the roadway, that is undergoing periods of geologic instability due to unforeseen natural disasters

By effecting repairs to the roadway and designing methods to contain land slides, Caltrans is reducing the likelihood of a total failure of the roadway in the future. The project is consistent with Section 30253 of the Coastal Act in that repairs to the roadway will minimize the risks to life and property in this area of high geologic and flood hazard.

REPAIR AND MAINTENANCE ACTIVITIES

Section 30610 of the Coastal Act states that no coastal development permit shall be required for repair and maintenance activities, that do not result in addition to, or enlargement or expansion of, the object of those repair or maintenance activities; provided, however, that if the commission determines that certain extraordinary methods of repair and maintenance involve a risk of substantial adverse environmental impact, it shall, by regulation, require a permit be obtained pursuant to the chapter.

Guidelines adopted by the California Coastal Commission on September 5, 1978, further describe the types of development activities which meet the standards of Section 30610, and do not require a coastal development permit. Section II, Description of Activities Excluded states that:

Roads. No permit is required for repair and maintenance of existing public roads including landscaping, signalization, lighting, signing, resurfacing, installation or expansion of retaining walls, safety barriers and railings and other comparable development within the existing right-of-way as specified below. Maintenance activities are generally those necessary to preserve the highway facility as it was constructed...

Appendix I, part 3 of the Commission guidelines further elaborate on the activities included in road maintenance programs for which no coastal development permit is required.

Roadside Maintenance Program. This program includes the repair, replacement, and cleaning of ditches, culverts, under-drains, horizontal drains and miscellaneous headwalls and debris racks. Also included are fence repairs, roadside section restoration (e.g., drift removal, bench cleaning, slide removal, and fill slope replacement). In addition, repairs or replacement of retaining walls, installation of slope protection devices, minor drainage facilities, sidewalks and curbs, bins, cattle guards and other such structures where there is no increase in size (or adding to what exists) is included in this program. This program shall not include seawalls or other shoreline protective works, activities subject to review under Section 1601 of the Fish and Game Code, or excavation or disposal of fill outside of the roadway prism.

The project is necessary to preserve the integrity and structure of the highway as it was constructed, and will include temporary detours, removal of slides and slip cuts, restoration and repairs of drainage facilities, slope protection devices, and restoration of the pavement by replacement and repair. The entire project will be constructed within the Caltrans right of way (ROW), and Caltrans will acquire a 16,983 square-foot permanent slope easement for the construction and maintenance of the retaining wall from the GGNRA.

Approximately 27,000 square feet of soil will be disturbed during the construction process due to the narrowness of the roadway and the steepness of the area immediately downhill (seaward) of the repair locations. All areas of disturbance within the acquired easement areas and other parklands, will be restored as detailed in the attached Plans and Erosion Control Plan Sheets No. E-1, E-2, ECD-1 and ECD-2.

The proposed project meets the repair and maintenance exclusions from the permit requirements of the California Coastal Act, under the general provisions of Section 30610 in that it does not involve: (1) An expansion or enlargement of the existing roadway; (2) The methods of repair do not involve the likelihood of substantial adverse environmental impacts; and (3) The project is included in the Roadside Maintenance Program.

List of Exhibits

Description	
1.	Right of Way Appraisal Map #A-10360.1A-PM 11.45 Caltrans (2006)
2.	Right of Way Appraisal Map #A-10630.1A-PM 11.95 Caltrans (2006)
3.	Location Map
4.	Layout-L1
5.	Layout-L1-Aerial Overlay
6.	Construction Detail C-1
7.	Construction Detail C-2
8.	Preliminary Cross Sections
9.	Erosion Control Plan EC-1A
10.	Erosion Control Plan EC-2A
11.	Erosion Control Details ECD-1
12.	Drainage Plan D-1
13.	Construction Area Signs CS-1
14.	Biological Memo, Office of Biological Sciences and Permits, Caltrans (2006)
15.	Draft Working Day Chart
16.	Draft Memorandum of Understanding, California Department of Parks and Recreation
17.	Correspondence, California Department of Parks and Recreation (2006)
18.	Draft Special Use Permit and Conditions, Golden Gate National Recreation Area (2006)
19.	<u>Final Memorandum of Understanding, between the State of California, Department of</u>
	<u>Transportation and the State of California, Department of Parks and Recreation (2007)</u>
20.	<u>Preliminary Plans-EA 3S1704 for Steep Ravine Campground</u>