

**COUNTY OF MONTEREY
MONTEREY BAY SANCTUARY SCENIC TRAIL
MOSS LANDING SEGMENT
ENVIRONMENTAL DOCUMENTATION
AND
PLANS, SPECIFICATIONS AND ENGINEER'S ESTIMATE**

SCOPE OF SERVICES
Revised March 13, 2008

PROJECT UNDERSTANDING

The Monterey Bay Sanctuary Scenic Trail (MBSST) is a collaborative effort between public agencies, nonprofit organizations and the public, to construct a trail that would allow people to bicycle around Monterey Bay from Lovers Point in Pacific Grove to Wilder Ranch in Santa Cruz. The primary purpose of the Trail is to enhance appreciation and protection of the Monterey Bay National Marine Sanctuary by promoting public use and enjoyment at its shoreline. The Transportation Agency for Monterey County (TAMC) has developed a draft Monterey Bay Sanctuary Scenic Trail Master Plan (Master Plan) dated October 2006.

Wood Rodgers, Inc. prepared an Initial Engineering and Alternatives Analysis for the Moss Landing segment of the MBSST under contract to Monterey County in January 2008; a "roundtable" meeting organized by Congressman Sam Farr on January 24, 2008 with all of the agencies with responsibility for some aspect of the project selected "Alternative 1" of that report for further development. The Monterey County Department of Public Works is now preparing to proceed with the design and environmental clearance of the segment of the MBSST in Moss Landing and has requested a proposed scope and budget from Wood Rodgers for this work.

The subject segment of the proposed bicycle/pedestrian trail would run northward from Moss Landing Road near State Route 1 (SR-1) along the west side of SR-1, crossing Elkhorn Slough on a new bridge to join the existing segment of the MBSST adjacent to the North Harbor facilities of the Moss Landing Harbor District. The proposed trail segment is approximately 4,200 feet (0.80 mile) long, and would be constructed partly within State right of way for SR-1 and partially in easements from adjacent property owners.

This scope outlines the professional services necessary to further develop this project by obtaining environmental clearance and Caltrans and County approval of the design of the Moss Landing segment of the Trail, and the preparation of the construction contract documents. Since this project will involve the construction of less than \$3 million in improvements within the State right of way, the project can be constructed under an encroachment permit from Caltrans. The formal Caltrans project development procedures required for larger projects will not be applicable to this project. This work will involve the preparation of environmental technical studies and reports, and the appropriate environmental document. The final construction Plans, Specifications, and Estimate (PS&E) will require review and approval by Caltrans and issuance of an Encroachment Permit, since a significant portion of the project is to be constructed in the State right of way for Highway 1. It is anticipated that federal funds will be used for construction of the proposed project. Therefore, the project will comply with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

PROJECT DESCRIPTION

The 0.80-mile long project area is on the west side of State Route 1 (SR-1), between Moss Landing Road and the recently-completed section of trail just north of Elkhorn Slough at North Harbor, Moss Landing, Monterey County, California. The Project crosses Elkhorn Slough, near its entry to Monterey Bay, approximately 5 miles northwest of Castroville and 26 miles south of Santa Cruz. The project area consists of undeveloped, level to gently sloping terrain near Moss Landing Road in the southern portion of the project area, with a bluff near the intersection of SR-1 and Dolan Road. The Moss Landing Power Plant (now operated by Dynegy, formerly Duke Energy and originally PG&E) occupies the land east and west of the highway from this location northward to Elkhorn Slough. This area consists of a knoll, mostly on the west side of SR-1, which ends near the Elkhorn Slough bridge (Bridge #44-0074) with a steep bank to the water's edge. The remnants of the former alignment of SR-1 and the abutments of the original highway bridge across the slough are on the west side of the current SR-1 bridge across Elkhorn Slough. North of the approximately 350-foot-wide slough, the terrain is flat with a large paved parking area to the west of SR-1.

The Project proposes to construct a 0.80 mile (4,200 feet) portion of the Monterey Bay Sanctuary Scenic Trail (MBSST or Trail) through the Moss Landing area, between Moss Landing Road and the existing section of trail at North Harbor. The current route for bicycle and pedestrian traffic is on the shoulders of SR-1. A discussion of the concepts for each subsection making up this project segment follows.

Moss Landing Road to Dolan Road

Station 59+00 to Station 70+00

This segment of the MBSST begins with an intersection on the north side of Moss Landing Road, about 150 feet west of the edge of traveled way of SR-1. Moss Landing Road to the west of this point will be the Trail route south of the subject segment of the MBSST. From Moss Landing Road to a point opposite Dolan Road, the slopes in the project area are gentle, so the trail can be constructed with minimal grading. No significant retaining structures would be required. This subsection is on parcel(s) which are part of the former National Refractories facility, now owned by REVX-173, LLC.

To the south of the access road to the former National Refractories seawater intake (about 900 feet north of Moss Landing Road), the trail would be constructed on the harbor (west) side of a line of trees. Some trees will require trimming and/or removal to provide space for the trail. For most of this subsection, the profile grade of the trail would be approximately 2% uphill towards the north. The trail would be well outside the clear recovery zone for SR-1 (defined as within 20 feet of the edge of traveled way), so guardrail or barrier will not be required to protect trail users from errant vehicles. The trail environment would be characterized by views the harbor.

Station 70+00 to Station 74+60

To the north of the access road to a point opposite Dolan Road, the trail must be closer to SR-1, due to steep terrain further west. Along most of this sub-section the edge of the trail can be at least 20 feet away from the traveled way of SR-1, so guardrail or barrier between the trail and the highway should not be required. An easement from the property owner (REVX-173, LLC) will need to be obtained to construct this subsection.

Past Moss Landing Power Plant Station 74+60 to Station 81+50

North of Dolan Road, along the southern seawater intake facility for the Moss Landing Power Plant, the trail can be constructed to the west of the existing metal beam guardrail, approximately 3 feet below the grade of the adjacent highway. Retaining walls will be required on either side of the trail, and the security fence for the seawater intake facility will be relocated onto the westerly retaining wall (see typical cross section in Attachment B). The profile grade in this area is nearly flat, and the transitions between the depressed grade of the trail and the driveways to the MLPP seawater intakes can be kept to a grade of less than 5%. An existing easement on the Moss Landing Power Plant property provides the necessary right of way for this subsection; that easement may need minor revisions.

Station 81+50 to Station 87+00

The subsection of the trail adjacent to the northern seawater intake facility for the power plant will require minimal grading, although a small, short retaining wall may be required towards the northern end of the subsection. The profile grade will be gentle. To separate the two-way trail from the adjacent southbound SR-1 lane, metal beam guardrail would be constructed. Although the existing 6-ft chain-link security fencing need not be relocated, the three strands of barbed wire extending outward on arms would be too close to bicyclists on the trail. Therefore, we assume that the existing fence would be replaced with 8-ft chain-link fence. The existing easement on the power plant property is sufficient for this subsection. It may be necessary to remove a small number of eucalyptus trees to provide sufficient width for the trail.

Knoll Area

(Station 87+00 to Station 92+25)

To construct the trail past the knoll to the north of the northern seawater intake facility, the trail would turn to the west for approximately 100 feet to the top of a steep slope, then turn northward along the slope and descend to the north at a profile grade of not more than 5%. Retaining walls would be used to provide a bench sufficient for the trail along the steep western side of the knoll. Since the knoll area is highly sensitive for cultural resources, the retaining structures are planned to primarily retain imported fill material, thereby minimizing the amount of excavation into cultural deposits.

An existing fuel oil pipeline along the western side of the knoll provides a constraint on the trail alignment, since Moss Landing Power Plant staff has advised that the trail could not be constructed over the pipeline. The pipeline is underground north of Station 91+10; information regarding the location of the underground portion cannot be found by MLPP staff, so it will be necessary to locate the pipeline in the field. When the location of the underground portion of the pipeline is known, the alignment of the adjacent trail can be refined to minimize the excavation required to construct the trail. A line of eucalyptus trees just west of the oil pipeline will need to be trimmed, and some trees may need to be removed to provide sufficient width for the trail.

We anticipate use of dry-stack masonry gravity walls (e.g., Keystone[™] or Versa-Lok[™]) to retain the soil, since that type of wall requires little excavation for footings, avoiding more extensive excavation that would impact potential archeological resources at the site. Where necessary, geogrids will be used in wall backfill to provide stability of tall walls. A wall with an exposed face up to 12 feet high is anticipated. Guard railing with a height of 4'-6" will be used to prevent accidental falls. Wood Rodgers will design/specify guard railing in consultation with Monterey County that will be durable and appropriate for the site. At about Station 92+00 the trail alignment crosses an existing drainage from a culvert outfall, so culvert(s) will be necessary to allow the water to pass under the trail. An

existing 10-foot-wide public access easement on the power plant property does not align with any practical trail alignment, so must be revised for the construction of this “knoll” trail subsection. This is not anticipated to be difficult to negotiate, since power plant management is generally supportive of the trail project, so long as it does not adversely affect power plant operations or security.

Southern Approach to Elkhorn Slough Bridge (Station 92+25 to 96+20)

North of the knoll, the trail can be constructed within State right of way on the old embankment that formerly supported SR-1 approaching Elkhorn Slough. The profile grade is proposed to be less than 1%. This subsection can be constructed with minimal grading, so construction costs and potential environmental impacts will be minimal. Some fill will be required toward the bridge, but is not anticipated to be extensive and will not extend to the waterline. Existing structures, including mooring bollards and a concrete masonry stormwater settling basin, can be avoided. The trail in this subsection would be entirely within existing State right of way.

Bridge Across Elkhorn Slough (Station 96+20 to 100+00)

A new 380-ft-long bridge will be required to carry the trail across Elkhorn Slough. Wood Rodgers will apply the Caltrans Bridge Design Specifications that require an 85 pound per square foot pedestrian live load and check that the bridge can support a H10 vehicle loading. The new trail bridge would be constructed on the site of the former SR-1 bridge, just west of the existing SR-1 bridge, with a nearly flat profile. The bridge would be constructed entirely within existing State right of way. The new bridge abutments can be constructed behind the abandoned bridge abutments, so abutment construction will be straightforward; no fill in the harbor will be required. The intermediate bridge columns can be driven precast concrete piles, so dewatering and excavation in the Elkhorn Slough channel will not be required. The new pedestrian bridge soffit elevation will be set at or above the soffit elevation of the existing SR-1 bridge, and the columns will be aligned with those of the adjacent highway bridge to facilitate navigation by boats. The superstructure is planned to be constructed with precast slab elements, so construction can be fairly economical and rapid, and with minimal environmental impacts. Wood Rodgers will give attention to the structure configuration and member shapes to provide an aesthetically pleasing bridge that is compatible with the site. Railings on the bridge would be fabricated of either stainless steel or galvanized steel to minimize maintenance requirements.

North Harbor Area (Station 100+00 to 101+00)

North of the bridge, approximately 100 feet of trail construction will be required to meet the existing section of the MBSST, which was constructed in 2007 along the North Harbor facilities of the Moss Landing Harbor District. Minimal grading will be required, and the area is already paved, so minimal environmental impacts are associated with this short subsection. Some fill will be required to raise the trail to the grade of the bridge, but is not anticipated to be extensive and will not extend to the shoreline. An existing temporary paved 5-ft-wide trail connection to the shoulder of southbound SR-1 (Station 101+50 to 103+00) will be removed by this project. All of the proposed work for this subsection is expected to be confined to the area of the old SR-1 alignment west of the current SR-1 and within 300 feet of the old SR-1 bridge north abutment, within existing State right of way.

SCOPE OF WORK

The Wood Rodgers Team will prepare the environmental documentation and project construction documents (plans, specifications and engineer's estimate) to obtain Monterey County and Caltrans approval of the project features through the following tasks:

PROJECT MANAGEMENT

Project management will be a continuous activity and will commence with the receipt of the Notice to Proceed and will continue through submittal of the final project deliverables. We assume that the environmental documentation phase of project development will take approximately 23 months, and the final design (PS&E) and permitting of the project will require an additional 10 months. If the actual project duration exceeds these times, the scope and budget may require modification to include additional project management activities. Key elements of our project management program include regular progress reports and meetings with Monterey County, work progress direction and monitoring, coordination, and communications. All coordination will be with the Monterey County Project Manager. The Wood Rodgers Project Manager will monitor and direct work activities on this project in accordance with the contracted work scope, schedule, and budget.

Kick-off and Project Development Team Meetings: A project kick-off meeting will be scheduled as soon as practical after Notice to Proceed. This meeting should include representatives of Monterey County, Caltrans District 5, Wood Rodgers, and subconsultants, who will constitute the Project Development Team (PDT). Other organizations (e.g., TAMC or other interested agencies) may also attend as appropriate. This meeting will be used to establish lines of communication, review the project scope of work, finalize the schedule, and identify key project goals and issues.

During the environmental documentation phase of project development, PDT meetings will be held as required to discuss project issues, work progress, budget status, and key project tasks. A total of four PDT meetings are anticipated during the development of the environmental documentation phase. LSA Associates will attend up to three of these meetings, including the project kickoff meeting and two progress meetings. Wood Rodgers will prepare the meeting agendas in consultation with the County's Project Manager, distribute the agenda prior to the meeting, arrange for appropriate participants to attend, and prepare and distribute the meeting minutes to the participants within five days after the meeting.

During the Design phase of project development, PDT meetings will be held as required to discuss project issues and design details, work progress, budget status, and key project tasks. A total of four meetings are anticipated during the Design phase.

Project Schedule: Wood Rodgers will develop and maintain a comprehensive Critical Path Method (CPM) schedule for the project development process. A global CPM schedule will be prepared for all tasks necessary to take the project through to Construction. This schedule will be updated once a month or as necessary to show the master schedule and the actual progress schedule. The schedule will be in Gantt format.

Oversight, Progress Reporting, etc.: Wood Rodgers' project management program includes regular progress reports, work progress monitoring and cost control, coordination, and communication. This task includes project management for a project schedule of up to 33 months from the Notice to Proceed. If the project schedule exceeds 33 months, the budget may need to be modified accordingly. Wood Rodgers' Project Manager is responsible for providing oversight and the controls necessary to

ensure that assignments are completed within the budget and schedule for development of the Environmental Documentation and Project Report for this project. Once project protocol is defined, the Wood Rodgers Project Manager will maintain close contact with the County of Monterey's Project Manager and the members of the Wood Rodgers Project Team. The Project Managers will act as the principal liaison between the County and the Project Team.

Written progress reports will be submitted monthly to the County of Monterey with monthly invoices. These progress reports will present work progress by project activity/task. Progress will be presented by comparison of work hours expended to estimated work product completed and the baseline project schedule. This report will include a discussion of issues requiring action or decisions that may impact project deliverables, schedule and budget, and anticipated work for the following month.

Quality Assurance/Quality Control: Quality Assurance (QA) at Wood Rodgers is a project-wide approach that establishes and oversees policies, procedures, standards and guidelines aimed at producing an acceptable level of quality. Quality Control (QC) consists of task specific activities that apply the QA policies at each level to maintain an acceptable level of quality through the application of sound project management, guidance and review. Our approach to QA/QC, combined with active coordination early in the analysis and design process with the County and third party interests will ensure that project requirements are met, thus avoiding costly design iterations, contract addenda, and change orders.

Prior to the submittal of any draft or final document to the County, a senior staff engineer will complete a QA/QC review. The reviewer will verify that the documents are prepared in conformance with the contract requirements and generally accepted professional standards of engineering. Wood Rodgers' Project Manager has the general responsibility for ensuring that all elements of the QA/QC are complied with, including that adequate resources are available to perform quality work. Each and every team member is responsible for ensuring quality as an integral part of his/her project responsibility. The senior staff review is an additional check, the final QC review prior to making a submittal.

MILESTONE 1 – PROJECT DEFINITION

The Wood Rodgers team will refine the "Alternative 1" alignment of the trail selected in January 2008 for the project as additional detailed information is developed through site surveys and environmental studies. This engineering analysis will occur in parallel with the development of the environmental documentation, since information from the engineering technical studies will be needed to properly evaluate the environmental impacts of the project.

The following tasks are required for the definition of the Project:

Task 1.1: Surveys and Base Mapping

Wood Rodgers will provide aerial photography, aerial topographic mapping and supplemental field surveys for the project site. The project survey limits will be west of State Route 1 from Moss Landing Road to 400 feet north of the north shoreline of Elkhorn Slough. The field survey area will consist of a swath approximately 200' wide and will include the western edge of State Route 1 pavement. This task will provide mapping to support the environmental analysis, and base mapping for the final design and construction plans for the project. This scope does not include an underwater bottom survey along the alignment of the proposed bridge over the Elkhorn Slough. The depth and underwater soil characteristics of this area will be detailed by "As-built" plans for the dredging recently completed by the Moss Landing Harbor District, as available, and the geotechnical investigation. Wood Rodgers will perform the following surveying and mapping tasks:

Task 1.1.1 - Aerial Photogrammetry

Wood Rodgers will provide aerial photogrammetry for the project mapping area and provide a digital color orthographic photograph that will meet National Map Accuracy Standards.

Task 1.1.2 - Supplemental Topographic Field Surveys

Wood Rodgers will perform a conventional field survey to acquire critical surface features such as surface features of underground utilities, tree locations, drainage-inlets, flow lines of storm drains accessible from inlets or outfalls, and flow lines of drainage areas. The underground portion of the oil pipeline north of the northern seawater intake of the Moss Landing Power Plant will be located. No other subterranean information will be acquired. Cross-sections at 50-foot intervals will be surveyed from the edge of SR-1 to the shoreline.

Task 1.1.3 - Aerial Topographic Mapping

The aerial photogrammetry and field surveys will be compiled into topographic mapping with a one-foot contour interval at a horizontal scale of 1" = 40' to National Mapping Standards accuracy.

Task 1.1.4 – Right of Way Base Mapping

The Assessor's Parcels within and adjacent to the project study area will be identified, labeled and cataloged in a database for the project. This information will be derived from Monterey County's tax roll information, and Preliminary Title Reports to be supplied by the County.

Wood Rodgers will prepare a Cadastral (property) base map for the project area. This will be based on Caltrans right of way record maps and adjacent affected properties will be shown from record information available from the County Recorders such as Record Maps and Grant Deeds. (Land and water boundaries owned by the State of California would need extensive research and coordination to determine the sovereign boundaries of the State of California; this is not included in this scope of work)

Assessor's Parcel Numbers will be shown for each parcel in the base map as text. (no linked attribute information). The topographic mapping with a one-foot contour interval will be a screened background component of the Cadastral Base Map at a scale of 1" = 40'.

Deliverables:

- a) Project Mapping
- b) Digital color ortho-photograph of project area
- c) Survey notes

Task 1.2: Bridge & Retaining Walls Foundation Report

Parikh Consultants, Inc. (PCI) will evaluate foundation conditions for the proposed bridge at Elkhorn Slough and dry-stack precast concrete retaining walls at the Knoll area and soldier pile retaining walls at the Moss Landing Power Plant southern seawater intake. The geotechnical effort will be focused on these structures.

PCI has reviewed the as-built log of test borings for the Caltrans bridge structure (#44-74) at Elkhorn Slough. PCI can use a significant amount of this data and specifically the borings within the water. However, two borings are proposed to collect current data and conduct laboratory testing on samples for liquefaction analyses. It should be noted that the subsurface soils in the area have been subject to liquefaction and this can have a significant impact on structures. Also, recent studies and published opinions have taken a different perspective/approach on the analyses (and potential for such occurrences) and therefore the structure design will need to include feasible mitigations.

The effort to evaluate foundation conditions for the structures will be broken down as follows:

Task 1.2.1: Research and Data Collection

PCI will review readily available geologic and soil literature in the vicinity of the site including review of as-built drawings and existing LOTB for adjacent structures.

Task 1.2.2: Permits/USA Clearances

PCI will comply with Caltrans Encroachment Permit requirements for any work to be performed in the State right of way. No other permits are anticipated to be required if the borings are drilled on land. PCI will obtain mark out from Underground Service Alert for the proposed boring locations to assure clearance from underground utility facilities.

Task 1.2.3: Field Exploration

Following is the summary table for the proposed boring program. These explorations will provide an evaluation of subsurface conditions for the proposed structures.

<i>Project Element</i>	<i>Number of Borings</i>	<i>Approximate Depths</i>
Elkhorn Slough Trail Bridge	2	90'
Retaining Walls at Knoll Area	3	30'
Retaining Walls at Power Plant	3	30'

The boring locations will depend upon the available access and the boring data from previous studies. PCI anticipates using a rotary wash drill rig for the bridge and portable drill rig for the retaining walls. Traffic control is anticipated for the completion of this task.

PCI will classify and continuously log subsurface soil conditions encountered in each test boring at the time of drilling. PCI will also obtain "relatively undisturbed" and bulk samples of substrata from test borings. The borings will be drilled and capped in accordance with the permit requirements.

Task 1.2.4: Laboratory Testing

Perform laboratory tests on representative soil samples such as moisture density, unconfined compression, gradation analyses, corrosion tests and Plasticity Index test, as necessary.

Task 1.2.5: Soils Analysis/Evaluation

Perform engineering analyses and develop design recommendations for the proposed foundations.

Task 1.2.6: Prepare Draft Foundation Memo (Type Selection Letter)

Prepare preliminary recommendations for foundations and provide a memo for the preparation of the Type Selection Report with the LOTB.

Task 1.2.7: Prepare Final Foundation Reports

PCI will prepare a detailed report including design recommendations for foundation types and footing elevations lateral design capacities, pile foundation recommendations or spread footings.

- Discuss seismic considerations, evaluate the liquefaction potential and comment on the site soil conditions from this standpoint. Information related to Caltrans Seismic design criteria (SDC v 1.4) such as depth to rock like material, etc. shall be provided.
- Prepare a final Foundation report.
- Using a structure general plan provided by Wood Rodgers as a base map, PCI will provide boring logs.

Task 1.2.8: Design Review Consultation through Final Design

PCI will be available to provide consultation regarding geotechnical matters to Wood Rodgers and

Monterey County during preparation of project construction documents.

Deliverables:

- a) Bridge & Retaining Walls Foundation Report (5 copies)
- b) Memo for Type Selection Report (5 copies)

Task 1.3: Identify Utility Relocation Requirements

Wood Rodgers will compile information regarding potentially-affected utility facilities immediately upon receipt of a written notice to proceed. During analysis of project alternatives, we will contact the utility owners and request their latest utility facility maps and provide them with an exhibit of the various alignment alternatives for the project with utility facilities shown so that they can verify the location of their facilities, any impacts to their facilities can be identified and/or they can make appropriate plans for their facilities. Wood Rodgers will update utility facility in the project base mapping in accordance with any updated information supplied by the utility owners. Two exhibits showing the utility information gathered will be provided to each utility owner as an attachment to the transmittal letter. The letter will request that utility owners verify any utility conflicts with proposed improvements and indicate whether any future utility facilities are proposed in the area. A copy of the utility data obtained from utility owners will be provided to the County and the original will be kept in the project files.

Deliverables:

- a) 5 copies of utility impact plans.
- b) Letter report on utility issues.

Task 1.4: Geometric Approval Drawing

Based upon the Alternative 1 alignment from the Initial Engineering Report, Wood Rodgers will prepare a Geometric Approval Drawing (GAD). The GAD will include layouts, profiles, and typical cross-sections as necessary to obtain County concurrence with the proposed design. The goal will be to verify the Project Impact Area map for Environmental Document preparation and PS&E development.

Deliverables:

- a) GAD (5 copies)

Task 1.5 Prepare Bridge Type Selection Report and General Plan

Using the site seismic and foundation parameters developed by Parikh Consultants for the bridge at Elkhorn Slough, Wood Rodgers will prepare a Bridge Type Selection Report. The report will contain all necessary information that will lead to the selection of the main features of the bridge and to establish the basis upon which the final structures design will proceed. Selection of the best structure type alternative will be based on several factors; requirements to be considered include:

1. Construction cost
2. Site requirements (topography, navigability, ADA grade requirements, etc.)
3. Safety (during construction and in operation)
4. Structural (foundation conditions, seismic considerations)
5. Environmental (impacts on sensitive biological or cultural resources)
6. Aesthetics (compatibility with surroundings, architectural or aesthetic treatments of textures and railing style, consideration of lighting)
7. Construction (ease of construction, falsework, duration, season)

8. Hydraulics (stream flow, bank and pier protection,)
9. Life cycle costs (maintenance, durability)
10. Other (commitments to officials and community, conformance to the Master Plan)

These items will be discussed in the Type Selection Strategy Memo for the bridge. Based on factors such as cost, bridge serviceability and the ease of construction, the more reasonable of the bridge alternatives will be recommended to the County in this memo. A General Plan will be presented to Monterey County and Caltrans for the recommended alternative.

Deliverables:

- a) Bridge Type Selection Memo
- b) 24" x 36" Bridge General Plan (1"=20' scale)
- c) General Plan Estimate
- d) Vicinity Map.

Task 1.6: Type Selection Review Meeting

Once the agencies have had the opportunity to review the Bridge Type Selection Memo and General Plan, a joint meeting between the County, Caltrans and the design team will be held. In this meeting, the recommendations included in the Bridge Types Selection Memo and the General Plan will be discussed. The goal of the meeting will be to reach gain concurrence on the recommended structure type. Following the meeting, Wood Rodgers will incorporate any revisions and distribute the final General Plan to the agencies involved with the structure. The General Plan approved by the County and Caltrans will constitute the 30% design, and will form the basis for the detailed design plans.

Deliverables:

- a) Revised General Plan (if necessary)
- b) Revised Type Selection Memo (if necessary)

Task 1.7: Prepare Preliminary Cost Estimates

Wood Rodgers will estimate quantities of work (e.g., earthwork, building materials, bridge, retaining walls) to construct the proposed project and will estimate the construction cost on the basis of contract prices paid for similar items of work on similar projects as reported in Caltrans' Contract Cost Data book. Cost estimates for environmental mitigation, right of way acquisition and utility relocation will also be incorporated in the preliminary cost estimate summary.

Deliverables:

- a) Cost estimate (5 copies)

MILESTONE 2 – ENVIRONMENTAL DOCUMENT

Anticipated Environmental Approval

It is anticipated that the CEQA environmental documentation necessary for the proposed project will be a Mitigated Negative Declaration (MND) under Article 6, Section 15070. However, the type of documentation is dependent on the project's ultimate impact on jurisdictional waters, listed species, coastal resources, and adjacent facilities. The potential for impacts to these resources located within the project area cannot be accurately determined prior to completing environmental technical studies. If it is determined that there would be significant impacts to those resources even with the application of mitigation, a higher level CEQA document may be required.

Since federal funds are to be used to construct this project, it will be necessary to comply with the National Environmental Policy Act (NEPA) in addition to CEQA. It is anticipated that the NEPA environmental documentation would be a Categorical Exclusion (CE) if no significant environmental impacts are determined to result from the proposed project. If it is determined that there would be significant environmental impacts, a higher level NEPA document may be required. If a higher-level NEPA environmental document is required for the proposed project, the scope and budget would need to be modified accordingly.

Environmental Document Work Program

The tasks identified below outline the work program identified in the Preliminary Environmental Studies (PES) conducted for the proposed project (Caltrans District 5, February 2006). The PES defined the proposed environmental scope of services and process for environmental clearance of the project under NEPA. The level of effort is based on a CE with required technical studies for NEPA clearance. Based on a review of existing project information, the level of effort for CEQA compliance is based on preparation of technical studies and a MND.

Task 2.1: Environmental Project Initiation & Caltrans Encroachment Permit

If requested, LSA will meet with Monterey County Department of Public Works (County) staff, Wood Rodgers, and Caltrans to discuss the project description, schedule, issues, and impacts of the project. During this task, LSA will review existing information and participate in a field review of the project site with the County and Caltrans (and the Federal Highway Administration [FHWA], if required). Because the project may impact coastal resources and because there is potential for sensitive biological resources to occur in the project vicinity (see Task 2.3.1), an LSA biologist, archaeologist and Project Manager will attend the field review meeting. LSA recommends that a Caltrans biologist and archaeologist also be invited to attend the field meeting.

Items needed for this task include: (1) base topographical map (1" = 200' or larger); (2) aerial photograph; (3) limits of work; (4) preliminary engineering plans and profiles in digital format (using ArcGIS or computer-aided drafting [CAD] software); and (5) any technical reports prepared for the project study area (e.g., Geotechnical Evaluation and a Hydraulics Study) in electronic format.

Preparation of technical studies listed below will require an Encroachment Permit from Caltrans for LSA's field work in the portion of the project within State right-of-way. LSA will prepare a Standard Encroachment Permit Application for Caltrans review and approval. LSA will submit the permit application form and coordinate with Caltrans for permit approval. A fee will be included with the application form.

Deliverables:

- a) Caltrans Encroachment Permit Application
- b) Meeting Attendance & Notes

Task 2.2: Environmental Project Management and Meetings

This task includes project management for a project schedule of up to 1 year from the Notice to Proceed. If the project schedule exceeds 1 year, the scope and budget may need to be modified accordingly. LSA will attend up to five meetings, including one project kickoff meeting as described above under Task 1, two progress meetings, and up to two public hearings.

Deliverables:

- a) Meeting Attendance & Notes

Task 2.3: Environmental Technical Reports

In accordance with Caltrans and FHWA current procedures and guidelines, LSA will prepare the required technical reports for the project in support of the CE/MND. The proposed scope of these environmental studies is consistent with the PES prepared by Caltrans (February 2006). The level of effort assumes two rounds of Caltrans review: the first round for major comments and the second round for minor cleanup (e.g., no substantial new work required). This scope and budget are based on an evaluation of the Alternative 1 alignment selected in January 2008 plus the No Build Alternative.

Task 2.3.1: Natural Environment Study (NES)

LSA will prepare a NES in accordance with recent Caltrans guidelines (October, 2005). The NES describes the biological resources present in the project area and evaluates project effects on those resources. A key objective of the NES is to identify any special status plant or wildlife species or sensitive habitats that may be affected by the project.

LSA will request a list of special status species from the United States Fish and Wildlife Service (USFWS) and will query the California Natural Diversity Data Base and California Native Plant Society online database. As part of this process, LSA biologists will informally coordinate with the California Department of Fish and Game (CDFG) and USFWS, as necessary, regarding the potential presence of special status species on the project site.

Numerous special status plants and animals occur in the general vicinity of the proposed trail and some may potentially occur within the proposed project area. The road shoulder and small, isolated strip of land between the highway and the harbor provides limited habitat for native wildlife and plants or sensitive communities such as wetlands. Listed species that are known from the immediate vicinity around the mouth of Elkhorn Slough include southern sea otter, tidewater goby, and California brown pelican. Other special status species that occur in the vicinity of the project site include western pond turtles and black legless lizards. Although they have been recorded from the vicinity of the project site, species such as California red-legged frog, Santa Cruz long-toed salamander, California tiger salamander, and burrowing owl are not expected to occur on the project site. This conclusion is based on the preliminary reconnaissance of the site conducted by LSA biologists during which time they observed no suitable habitat for these species in the isolated project area west of the highway. However, LSA will assess the presence of habitat for these and other special status species as part of the field surveys conducted for the NES and recommend species-specific surveys if necessary. Not all of these species are likely to be affected by the proposed trail project, but we will include such species in the assessment when habitat is present or the species are known to occur in the project area.

In addition to special status species, issues of marine mammal protection are also important in the Elkhorn Slough area. We will include an assessment of the impacts to marine mammals such as harbor seals and California sea lions in the assessment as well, although no surveys for these species are required as their presence in the area is well documented.

The project could result in the removal of several species of trees (primarily eucalyptus). If project plans determine that trees will be impacted, replacement will be required for the loss of any species considered important by the County. This scope assumes that the replacement of oaks and/or other trees, if necessary, will be included as part of the project (a project feature) and not as mitigation. If the replacement is treated as mitigation, a higher level of CEQA document may be required. LSA will work with the project team to identify suitable on-site, or if necessary, off-site planting areas to replace removed trees. Since the number of oak or other species of trees to be removed and the availability of suitable replacement sites are not known prior to the field surveys, it is not possible to accurately determine the level of effort needed to complete the task of finding suitable planting areas.

Based on similar experiences on other County projects, we have budgeted 30 hours to assist the County in locating a suitable oak tree replacement area.

The proposed project could result in removal or damage of eel grass where the piers for the trail bridge over Elkhorn Slough would be placed adjacent to the existing road bridge. The National Marine Fisheries Service (NMFS) considers eel grass to be valuable habitat for marine life. LSA will research existing location data that may be available from the Harbor District and/or Monterey Bay Sanctuary (NOAA) for eel grass in the vicinity of the proposed bridge. Field reconnaissance to verify existing conditions for eel grass locations within the project impact footprint is included for one day for one biologist.

LSA proposes to conduct the following field surveys:

- One (1) general field survey to map plant communities, assess habitat conditions, and evaluate potential impacts to sensitive biological resources from the proposed project will be conducted. Field data to be used in assessing habitat for listed and non-listed special status species will be gathered at this time. This will be conducted by a botanist and wildlife biologist.
- Three (3) 1-day focused plant surveys are proposed to identify special status plants that occur on the project site. The surveys will be conducted according to CDFG and USFWS guidelines and will be scheduled to ensure that special status plants that may occur on the project site are readily identifiable during the surveys. Plant communities will be mapped during the plant surveys. Two botanists will conduct each survey.
- A 2-day visit to perform a jurisdictional waters delineation of the project site to determine any areas potentially subject to regulation by the United States Army Corps of Engineers (Corps) and/or Central Coast Regional Water Quality Control Board. The limits of CDFG jurisdiction will also be delineated. A wetland specialist and botanist will conduct the survey. *Note the delineation should be considered preliminary until verified by the Corps.*
- A 2-day tree survey will be conducted. All trees located in the project area will be mapped and the size and species of the trees will be noted. Two biologists will conduct this survey.
- Three (3) 1-day, spring-time bird surveys will be conducted to assess the presence and nesting status of breeding birds such as tricolored blackbirds, California horned lark, and short-eared owl. The surveyors will also search for heron/egret rookeries during the survey. Two wildlife biologists will conduct each survey.
- Three one (1) day surveys for Black Legless Lizards will be conducted. Two wildlife biologists will conduct the surveys, assessing the site for presence of this species, including searching for sign. LSA will coordinate with the CDFG to develop a specific survey method for this species.

One or more of these surveys may be combined for efficiency with the resulting time savings passed on to the County. If suitable habitat for listed or non-listed special status species is present in the project area, LSA will recommend species-specific surveys to determine the presence or absence of the species. These surveys will be conducted under a separate scope and budget. Species-specific surveys will not be proposed for species such as southern sea otter or tidewater goby that are documented to occur in the project area. LSA would instead use existing information sources to document occurrences and develop mitigation measures for these species.

The results of the field studies will be documented in the NES. The NES will include a discussion of plant communities present on the project site, as well as a discussion of common plant and animal species occurring (or expected to occur) on the project site based on the communities present. A generalized vegetation map will be prepared showing plant community types as well as the locations of any sensitive biological resources identified. The results of the jurisdictional delineation will also be incorporated into the NES. The NES will include an assessment of project impacts on the biological resources present and recommended mitigation measures, where appropriate. Project impacts will be identified, and the significance of both direct and indirect impacts will be assessed on both a project level and a cumulative basis.

The project may affect federally threatened species as indicated in the Caltrans PES. Consequently, it may be necessary to prepare a Biological Assessment (BA) in accordance with Caltrans guidance (October 2005) to facilitate consultation with NOAA Fisheries and/or USFWS pursuant to Section 7 of the Endangered Species Act. For purposes of this scope, we are assuming it will be necessary to prepare a BA and are therefore including it in the permitting assistance task.

LSA will prepare the draft NES for submittal to Wood Rodgers and the County for review. Following the internal review, the draft NES will be prepared and submitted to Caltrans for review. Following revisions to the draft NES, the final NES will be prepared in conjunction with the draft BA. These two documents will then be submitted to Caltrans for review. Following revisions to the draft BA, the final BA will be prepared and submitted to Caltrans. Based on our experience working with Caltrans on projects requiring both an NES and a BA, this is the most efficient way to complete the process.

Task 2.3.2: Cultural Resources Studies

The following cultural resources studies are needed for the Monterey County Public Works Department and Caltrans to comply with Section 106 of the National Historic Preservation Act, the *Programmatic Agreement Among The Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance With Section 106 of the National Historic Preservation Act* (2004). Caltrans is the lead agency for Section 106 compliance.

LSA will conduct a records search, background research, and archaeological and built environment field studies to prepare the following documents:

- Historic Property Survey Report
- Archaeological Survey Report
- Extended Phase I Plan & Report
- Archaeological Evaluation Plan & Report (CA-MNT-229)
- Historical Resources Evaluation Report (CA-MNT-2051H)
- California Department of Parks and Recreation form DPR 523 records for CA-MNT-229 and CA-MNT-2051H, and possibly updates for CA-MNT-235, CA-MNT-731/H, and CA-MNT-1467/H
- Finding of Effect (Optional)
- Memorandum of Agreement (Optional)
- Historic Property Treatment Plan (Optional)

All reports will be submitted to the Northwest Information Center (NWIC) in fulfillment of a requirement to access their archives.

Area of Potential Effects (APE) Map

- LSA will assist in the preparation of an APE map to Caltrans standards.

Assumptions

- The County and Wood Rodgers will provide LSA with hard copies and electronic files of project maps and drawings. The electronic files will be provided as CAD files projected in a real-world coordinate system, GIS shape files, or Geo-databases. Any aerial imagery will be provided geo-referenced or with the appropriate world file (*.wld) to tie it to a real-world coordinate system.
- As requested by Caltrans, LSA will provide GIS shape files of the cultural resources work conducted for the MBSST project on disk for incorporation into Caltrans' GIS system.

Historic Property Survey Report (HPSR) & Archaeological Survey Report (ASR)

The following tasks will be done:

- An HPSR will be prepared to summarize the results of identification and evaluation efforts. The HPSR is the cover report for the Archaeological Survey Report, Extended Phase I Report, Archaeological Evaluation Report, and the Historical Resources Evaluation Report.
- LSA will conduct a records search of the APE and a 1/4-mile radius at the NWIC of the California Historical Resources Information System. The NWIC is an affiliate of the State of California Office of Historic Preservation and is the official state repository of cultural resource reports and records for Monterey County. This records search is needed for the ASR to comply with Caltrans standards that require records searches to be current.
- A literature review, as necessary, of archaeological, ethnographic, and historical publications and maps at historical archives and LSA will be done.
- If requested, LSA will participate in one field review meeting with County, Wood Rodgers, and Caltrans project personnel to discuss the proposed project.
- LSA will conduct a pedestrian survey of the APE.
- The Monterey County Historical Society and the Maritime Museum of Monterey will be contacted for any information or concerns they may have about the APE.
- The California State Lands Commission in Sacramento will be contacted for any information or concerns they may have in regards to submerged cultural resources in the APE.
- LSA will respond to one set of County comments and one set of Caltrans comments on the draft report.

Assumptions

- The budget for this scope of work is based on the assumption that no more than five archaeological resources will be identified in or adjacent to the APE: CA-MNT-229, CA-MNT-2051H, CA-MNT-235, CA-MNT-731/H, and CA-MNT-1467/H. If additional archaeological resources are identified in the APE as a result of field work, archival research, or by other means, a scope and budget adjustment will be necessary to document, record, analyze, and report on such resources.

- The budget for this scope of work is based on the Cultural Resources Constraints Study (Goetter 2007). Any additions such as staging areas outside of the constraints study area will require a budget augment.
- There will only be one alternative (“Alternative 1” the most westerly route, Goetter 2007: Attachment A: Figure 3) of the trail studied, not multiple alternatives.

Historical Resources Evaluation Report (HRER) – Evaluation of CA-MNT-2051H

The following tasks will be done:

- Archival and background research will be conducted at local archives.
- Built environment field studies will be conducted.
- LSA will prepare a California Department of Parks and Recreation form DPR 523 records to update CA-MNT-2051H.
- LSA will prepare an HRER that documents the resources’ National Register eligibility.

Assumptions

- Construction work at CA-MNT-2051H will take place on roadway/fill and will not disturb native soils, and no subsurface investigations will be required at CA-MNT-2051H.

Extended Phase I (XPI) – Subsurface Study

The following tasks will be done:

- As required by Caltrans, LSA will prepare an XPI Plan to document the methods for determining if archaeological deposits are present in the APE.
- LSA will hand excavate up to 115 auger borings throughout the proposed trail route except within the known boundaries of CA-MNT-229 and CA-MNT-2051H, areas that have been previously excavated, and areas with known disturbance.
- LSA will prepare a California Department of Parks and Recreation form DPR 523 records for updating CA-MNT-235, CA-MNT-731/H, and CA-MNT-1467/H.
- LSA will prepare an XPI Report that will discuss background research, methods, and findings, and provide recommendations as necessary.
- As required by Caltrans, a Native American representative will be retained by LSA to be present during the fieldwork.

Assumptions

- A maximum of 115 augers excavated to a depth no greater than 30 inches
- It is assumed that the XPI study will not identify archaeological deposits and that no archaeological evaluations, except those already accounted for within this scope, will be required.
- If Caltrans requires excavation methods other than hand augering as described above, a budget augment will be required.
- If human remains are encountered, a budget augment will be required to coordinate with the Monterey County Coroner and Native American representatives.
- LSA will respond to one set of County comments and one set of Caltrans comments on the draft report.

Archaeological Evaluation of CA-MNT-229

The following tasks will be done:

- As required by Caltrans, LSA will prepare an Archaeological Evaluation Report (AER) Plan to document the methods for determining if archaeological deposits are present in the APE and whether the deposit contributes to the resources' National Register eligibility.
- LSA will hand excavate up to 8 Shovel Test Pits (STPs) (50x50 cm) and a maximum of 2 excavation units (1x1 m) will be excavated within the known boundaries of CA-MNT-229, except in areas that have been previously excavated or areas with known disturbance.
- LSA will prepare a California Department of Parks and Recreation form DPR 523 records for updating CA-MNT-229.
- LSA will prepare an AER that will discuss background research, methods, and findings, and provide recommendations as necessary.
- As required by Caltrans, a Native American representative will be retained by LSA to be present during the fieldwork.

Assumptions

- Within the northern and southern loci of CA-MNT-229, only the route of the trail will be studied.
- A maximum of 8 STPs (50x50 cm) and a maximum of 2 excavation units (1x1 m) will be excavated to a depth no greater than 80 centimeters.
- Any unanticipated archaeological features such as house floors, hearths, burials, etc., encountered would necessitate a budget augment.
- If human remains are encountered, a budget augment will be required to coordinate with the Monterey County Coroner and Native American representatives.
- LSA will respond to one set of County comments and one set of Caltrans comments on the draft report.

Native American Consultation for field work for Archeology

The following tasks will be done:

- The Native American Heritage Commission in Sacramento will be contacted for (1) a review of the Sacred Lands File to determine if the APE contains any listed sites, and (2) a list of Native American contacts who may have concerns about the APE.
- LSA will engage in specific outreach and consultation with the local Native American representatives on the list provided by the NAHC. Local Native Americans on that list will be contacted by letter and/or telephone to inquire about any concerns or information they may have, which will be reported in the HPSR and ASR. LSA will provide the local Native American representatives with information regarding prehistoric resources in the project area, and will offer to meet with the local Native Americans on the list to discuss the project.
- LSA will meet with the local Native Americans that so desire, to inform them about LSA's methods and goals for fieldwork and to solicit any concerns they may have regarding fieldwork and treatment of cultural resources as it pertains to the MBSST project.
- A Native American representative will be retained by LSA to be present during all fieldwork.

Assumptions

- The Native American consultation described in this section is solely for the proposed fieldwork and does not include consultation for preparation of Finding of Effect, Memorandum of Agreement, or Historic Property Treatment Plan.
- Areas within the APE that have been previously excavated will not need further investigation.
- Subsurface study will not take place within previous highway and bridge locations, and areas documented as extensively disturbed.
- No new archaeological sites will be identified, recorded, or evaluated.
- Those portions of CA-MNT-229 within the proposed project area will be evaluated for National Register eligibility; the rest of the project area will be studied as an Extended Phase I (XPI).
- No underwater field studies will be conducted; geoarchaeological analysis will address disturbances to the Elkhorn Slough channel.
- Traffic control and barriers, if needed for safety, will be the responsibility of the County of Monterey.
- The area opposite and south of Vierra Road where the retaining wall/barrier will be constructed does not require subsurface investigation due to previous disturbance from construction and maintenance of HWY 1.
- Evaluations of CA-MNT-235, CA-MNT-731/H, CA-MNT-1467/H, & Moss Landing Power Plant will not be required.
- The entire trail will be staked ahead of any cultural work.
- Curation costs are approximate and may vary depending on how much archaeological material is recovered and which curation facility is able to accept the collection.
- LSA will meet with local Native Americans to consult on the field studies for a maximum of 80 hours (including travel time).
- Any burials encountered would necessitate an augment to coordinate with the County Coroner, the Native American Heritage Commission (NAHC), Native Americans, Caltrans, and other agencies as appropriate.
- The above scope & budget is based on the maps in the Cultural Resources Constraints Study (Goetter 2007: Attachment A). Any additions such as staging areas will require a budget augment.
- The above scope/budget is contingent upon Caltrans and Monterey County acceptance.
- Costs are dependent on continuous fieldwork uninterrupted by inclement weather.
- Construction monitoring and data recovery will require a budget augment.
- An LSA Cultural Resources Group Principal will attend up to two meetings regarding project coordination.
- The U.S. Army Corps, U.S. Coast Guard, Fish and Wildlife Service, and other federal agencies, except for the Federal Highway Administration, will have no cultural resources requirements.
- The reports prepared for Caltrans can be submitted to the California Coastal Commission in fulfillment of any cultural resource requirements the Commission may have.
- LSA will respond to County, Caltrans, OHP, and any other agency comments on the FOE, MOA, HPTP on a time-and-materials basis.

Task 2.3.3: Hazardous Waste Initial Site Assessment (ISA)

LSA will prepare an ISA in accordance with Caltrans procedures and in general accordance with the American Society of Testing and Materials (ASTM) Designation E 1597-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The following tasks will be conducted as part of this evaluation:

- Review available project area information.
- Complete the Caltrans ISA checklist as referenced in the Caltrans Project Development Procedures Manual.
- Conduct an agency records database search to identify hazardous waste sites located within the ASTM radius of the project site and classified as hazardous waste under State law. The records search will also identify business types located within the ASTM radius that store, transfer, or utilize large quantities of hazardous materials. This information will be obtained from records maintained by federal, State, and local agencies. LSA will utilize a database service to perform this search.
- Review historic land use information for the study area to determine whether previous uses in the project area may have resulted in hazardous waste contamination. This information may include historic aerial photographs, historic United States Geological Survey (USGS) maps, Sanborn Fire Insurance Maps, Oil and Gas maps, available groundwater depth/flow data, City directories, County Assessor's data, and building permits.
- Conduct a visual survey of the study area via public right-of-way to identify any obvious area of hazardous waste contamination.
- If hazardous waste sites are identified within the project limits (via governmental records and/or the visual survey), LSA will review available public records at the appropriate oversight agency to determine the potential impact to the project.

The ISA will evaluate the presence or potential presence of sources of contamination that may have adversely affected the soil and/or groundwater in the project area, and will make recommendations for further investigation, if necessary, in accordance with Caltrans requirements and the ASTM standard. If the County or Caltrans requests an update to the ISA at a later date, the additional research and report of findings would require additional budget. This scope of work does not include review of private records or interviews with private property owners.

Task 2.3.4: Visual Impact Assessment

LSA will prepare a visual impact assessment report that evaluates how the project would affect the existing visual setting from several nearby viewpoints.

The report will describe the existing visual characteristics of the project site and identify any significant visual resources (e.g., ocean views). Key issues to be addressed in the report are removal of any native trees, grading excavation, construction of retaining walls, and the addition of boardwalk/bridge structures. If any native trees are removed by the project or impacted by the proposed project (those over 4 inches in diameter at approximately breast height), they will be counted, and the number and species of trees to be removed will be documented in the report. The potential visual impacts from project construction will be evaluated through the use of ground-level photographs from sensitive viewpoints near the project site. Impacts would be assessed in terms of views of the trail as well as the sensitivity of viewers. The views to be analyzed will be determined by LSA in coordination with Wood Rodgers, the County, and Caltrans. Visual conditions and project impacts will be discussed from a qualitative perspective. Mitigation measures or project features

shall be recommended, if necessary, to reduce adverse visual impacts. The visual impact analysis will be prepared consistent with the FHWA publication “Visual Impact Assessment for Highway Projects.”

This scope does not assume preparation of visual simulations. If it is determined that visual simulations to assess the project’s impacts on scenic resources are necessary, LSA will prepare an amendment to this scope and budget.

Task 2.3.5: Floodplain Evaluation (Optional Task)

The Caltrans PES specified a Floodplain Evaluation, but the bridge over Elkhorn Slough in Moss Landing Harbor will have no impact on water surface elevations by inspection, since the harbor is open to the Pacific Ocean. The trail portions of the project are anticipated to have no impact on flooding, since they will either be located in upland areas or will be constructed at or near the original grade. Should a Floodplain Evaluation or Location Hydraulic Study be required, LSA and Wood Rodgers will prepare an amendment to this scope and budget.

Task 2.3.6: Water Quality Assessment

LSA will prepare a Water Quality Assessment Report (WQAR) for the project that discusses watershed characteristics, groundwater hydrology, regulatory requirements, pollutants of concern, and receiving waters conditions, objectives, and beneficial uses. The report will also discuss design pollution prevention best management practices (BMPs), construction site BMPs, and treatment BMPs that are applicable to the project alternatives per the Caltrans Storm Water Quality Handbooks Project Planning and Design Guide. The project’s potential impact on water quality will be evaluated, and mitigation measures necessary to prevent adverse water quality impacts will be identified.

Task 2.3.7: Public Lands Impact - Section 4(f)

Depending on the areas of direct impact established for the project, impacts to Section 4(f) resources could occur that would necessitate the need for a Section 4(f) Evaluation pursuant to the Department of Transportation Act of 1966. If cultural resources as defined under Section 4(f) are identified as part of the work performed under Section 165.20, and these resources would be used by the proposed project, then a Section 4(f) analysis would be required. The Section 4(f) analysis, if required, will be prepared based on the guidance contained in the FHWA Section 4(f) Policy Paper dated March 1, 2005; the FHWA Technical Advisory 6640.8A, Guidance for Preparing and Processing Environmental and Section 4(f) Documents (October 30, 1987); the FHWA Guidance for Determining De Minimis Impacts to Section 4(f) Resources Memorandum dated December 13, 2005; the Section 4(f) Checklist (revised July 1998); the Caltrans Project Development Procedures Manual; the FHWA Section 4(f) Evaluation and Approval for Transportation Projects that have a net benefit to a Section 4(f) Property guidance; and the Caltrans Standard Environmental Reference, Volume 1, Chapters 20 and 37.

Deliverables:

- a) Copies of all technical reports prepared will be provided to the County upon completion.

Task 2.4: Coastal Act Consistency Analysis

As the project is within the coastal zone (North County Local Coastal Plan [LCP]), a Coastal Development Permit (CDP) application and associated backup documentation will be required for project approval by the California Coastal Commission. The CDP application will be required to address consistency of the proposed project with the North County LCP that was previously approved by the Board of Supervisors and California Coastal Commission. LSA will provide an analysis,

utilizing information developed as part of Task 3 as a starting point, to determine the proposed project's consistency with the certified LCP. No additional technical analysis would be conducted as part of this task. LSA will work with County staff during the development of the CDP application to ensure that all relevant issues are addressed in the consistency analysis.

Deliverables:

- a) Completed CDP application.

Task 2.5: NEPA Categorical Exclusion

Following approval of the technical studies by Caltrans, LSA will prepare a CE per NEPA requirements. The CE, including the approved technical studies as backup, would be submitted for approval by Caltrans and FHWA. One round of revisions to the CE is included in this scope.

Deliverables:

- a) Completed draft CE and final CE.

Task 2.6: Administrative Draft Initial Study/Mitigated Negative Declaration (IS/MND)

Following approval of the draft technical memoranda, LSA will prepare an administrative draft IS/MND and submit the document to Wood Rodgers for review. The technical analyses identified in Section 3 above will be incorporated into the IS/MND. The environmental document will summarize the results of the technical reports and will provide impact analyses of other relevant environmental topics in which technical studies are not required, such as land use and utilities.

After receiving consolidated comments on the Administrative Draft IS/MND from Wood Rodgers, LSA will revise the document and submit it to the County for review. The format shall be based on County requirements and would also meet the CEQA compliance procedures.

If desired, LSA will meet in a workshop format with Wood Rodgers and County department staff to receive comments on the Administrative Draft IS/MND and address significant issues to be resolved prior to release of the Administrative Draft IS/MND. This meeting will provide LSA with a clear understanding of the County's expectations for the Administrative Draft IS/MND, and would provide a forum to resolve issues in an expedited manner that would avoid multiple rounds of review, correction, and re-review. As previously stated, if the County chooses to forgo the meeting/workshop, LSA requires one set of non-conflicting, consolidated comments on the Administrative Draft IS/MND from the County.

Deliverables:

- a) Administrative Draft IS/MND

Task 2.7: Draft IS/MND for Public Review

LSA will respond to County comments (one set of nonconflicting consolidated comments) on the Administrative Draft IS/MND, and complete necessary revisions. LSA will provide the preprint version of the Draft IS/MND to Wood Rodgers for a limited final review prior to submission of the Draft IS/MND to the County. The purpose of submitting this preprint version would be to review the changes to the document, resolve any remaining questions that arise, and verify that Wood Rodgers is satisfied with the overall Draft IS/MND. After Wood Rodgers reviews and approves the document for print, the Draft IS/MND would be forwarded to the County for final approval.

Once the Draft IS/MND is approved for public review, LSA will distribute up to 40 copies of the document to a distribution list for the project developed by LSA with County staff input. LSA will prepare a Draft Notice of Intent (NOI) and a public notice regarding the availability of the Draft

IS/MND for public review. Monterey County will be responsible for publication of the public notice in a general circulation newspaper. In addition, LSA will file a Notice of Completion (NOC) with the County Clerk and/or the State Clearinghouse to begin the required public review period. As part of the public review process, LSA will participate in one community presentation meeting coordinated by County staff.

Deliverables:

- a) Completed Draft IS/MND

Task 2.8: Final IS/MND & Mitigation Monitoring and Reporting Plan

LSA will prepare written responses to comments received on the Draft IS/MND that raise substantive environmental issues and submit the responses for review by both Wood Rodgers and Monterey County after the close of the public comment period. LSA shall confer with the County to review written comments and comments from any public meetings to develop a general framework and strategies for preparation of responses. Any revisions to the IS/MND will be shown in the text by a line in the margin. Responses to comments and associated changes to pages of the IS/MND will be submitted to both Wood Rodgers and the County for review.

LSA will attend up to two public hearings. Following the Planning Commission's approval of the IS/MND, LSA will prepare and file a Notice of Determination (NOD) with the County Clerk and State Clearinghouse. If the environmental review indicates that the project would not qualify for the CDFG exemption, the project applicant shall provide a check for \$1,876.75 to be submitted to the County Clerk with the NOD.

LSA will prepare a Mitigation Monitoring and Reporting Program (MMRP) in accordance with CEQA Guidelines Section 15097 for use in ensuring implementation of the mitigation measures for the project. The Draft MMRP will be submitted to the County for review and comment, and the Final MMRP will be provided to the County along with the IS/MND for approval.

Deliverables:

- a) Final IS/MND and MMRP

MILESTONE 3 - FINAL DESIGN

Task 3.1: Bicycle/Pedestrian Trail Base Plans (30% Plans)

Upon approval of the preliminary design layout of the bike trail by Monterey County, Wood Rodgers will make any necessary revisions to the geometric base map or profiles for the proposed improvements, and will prepare the improvement plan sheets in US Customary units. These plan sheets will be prepared in accordance with Caltrans Manual of Instructions, CADD User's Manual, and Standard Plans. Wood Rodgers will also comply with County's requirements for facilities outside the Caltrans right of way. The layouts will include calculated horizontal alignment at a scale of 1"=40 feet; the profiles will include calculated vertical alignment at a scale of 1"=40 feet horizontal and 1"=5 feet vertical and will conform to design requirements established in Caltrans Highway Design Manual. Typical cross sections will be prepared for the bike trail. Preliminary design cross-sections will be generated at minimum 50-foot intervals. Sections will also be provided at drainage structures, ends of retaining walls and bridge, and at major changes in horizontal curve and vertical curve.

Upon approval of these preliminary plans, preparation of grading, signing and striping, retaining wall plans and bridge plans will be initiated.

Deliverables:

- a) 30% Trail Plans

Task 3.2: Utility Coordination

Wood Rodgers will perform a utility investigation and coordinate with utility owners throughout the project development process such that the County is immediately notified if there is any anticipated delay to the project due to utility company reviews or relocations. During the development of the construction plans, specifications, and estimate (PS&E), Wood Rodgers will set up a meeting with the County, Caltrans and local utility agencies/companies to present proposed project and request utility verification. Wood Rodgers will provide necessary mapping to utility agencies/companies for utility verification. We can also assist with utility agreements, if necessary.

Wood Rodgers is prepared to arrange for the services of a vacuum extraction subcontractor to pothole high-risk underground utilities, if necessary. However, potholing of existing utility facilities is not included in this scope and budget. If potholing becomes necessary, Wood Rodgers will provide any necessary surveying for the "pot-holing" of existing underground utilities to establish their horizontal/vertical location. Such pothole surveys will be required for high-risk utilities in the project area or where the exact location could affect constructibility.

Notification letters and plan sets will be provided to utility owners at two additional stages during PS&E development beyond the notification or "A" Plan submittal during alternatives analysis, as follows:

"B" Plan Submittal to Utility Companies - Wood Rodgers will prepare draft transmittal letters (Utility verification and Notice to Owners) to affected utility owners for County review and approval prior to transmitting "B" Plans to utility owners. Two sets of half-size 65%-complete "B" plans will be provided to each utility owner. The letter will request that utility owners verify any utility conflicts with proposed improvements and indicate whether any future utilities are proposed in the area. A copy of the utility data obtained from utility owners will be provided to the County and State and the original will be kept in the project files. Information on existing utilities obtained as a result of the "B" plan submittal will be used to determine potential utility conflicts and to resolve the conflicts identified.

"C" Plans Submittal to Utility Companies - Wood Rodgers will prepare draft transmittal letters to affected utility owners for County review and approval prior to transmitting "C" Plans to utility owners. Two sets of half-size 100% plans or "C" plans will provided to each utility owner as an attachment to the transmittal letter. The letter will indicate to the utility owners whether any changes have been made to the project plans since the "B" plans submittal and request written confirmation of utility relocations and utility relocation schedule.

Deliverables:

- a) Utility files, containing correspondence and maps
- b) Letter report summarizing utility issues and impacts

Task 3.3: Bicycle/Pedestrian Trail Design

Task 3.3.1: Trail Plans

In close coordination with Monterey County and Caltrans, Wood Rodgers will prepare the Trail Plans for construction of the project. Approved geometric layouts will provide the base for the Bike Trail Plans and will be used to create the 65%, 95% and 100% (Final) submittal packages.

The 65% submittal will include a letter addressing comments from the Geometric approval submittal, revised plans addressing comments as well as all additional sheets for complete detailed design.

The 95% submittal will include a letter addressing comments from the 65% submittal and revised plans as necessary to address comments from the 65% submittal.

Wood Rodgers will use AutoCAD for plan preparation. The following plan sheets are anticipated for the project:

- Title Sheet (1)
- Typical Cross Sections (2)
- Layout /Profile Sheets (1" = 40') (5)
- Summary of Quantities (1)
- Construction Details (4)
- Grading & Drainage Plan, Profile, Details & Quantities (1" = 20') (12)
- Sign & Pavement Delineation Plans, Details & Quantities (1" = 40') (6)
- Structural Plans (10)
- Trail Cross-sections (13)

Task 3.3.2: Special Provisions

Wood Rodgers will prepare Technical Special Provisions for the project based on Caltrans' Standard Special Provisions and Standard Specifications. Specifications will be modified as appropriate to the specific requirements of the County for the project.

Task 3.3.3: Engineer's Estimate

Wood Rodgers will prepare a construction cost estimate based upon approved plans and special provisions. The Engineer's Estimate will be prepared in the Caltrans "BEES" format.

Task 3.3.4: Draft PS&E Submittal

Wood Rodgers will prepare and furnish the draft PS&E for the proposed project to the County and Caltrans for review and comment, as noted earlier in this section. A safety review meeting will be held with County/Caltrans during the Draft PS&E comment and review period, if requested by Caltrans.

Task 3.4: Hydrology and Storm Drainage Design

Wood Rodgers' hydraulics staff will prepare a drainage report summarizing the changes in drainage patterns and recommendations for drainage facility improvements. Based on these recommendations, topographic mapping and cross section data, Wood Rodgers will develop drainage plans to be incorporated into the PS&E package and reviewed at 65% and 95% submittals. An analysis of the project drainage will be prepared in accordance with Caltrans practices, including site-specific rainfall intensity-duration-frequency data; design criteria and assumptions; contributing shed areas; design discharges based on the Rational Method; pipe sizes, slopes and materials; and hydraulic grade lines based on Manning's Equation. We assume that this analysis is to include only the area of the project. We anticipate that much of the project drainage can be accomplished by sloping pavement to drain directly to adjacent vegetated areas without ditches, inlets, or storm drains; this will provide the lowest maintenance requirements and the lowest construction costs with integral bio-filtration of runoff.

Deliverables:

- a) Drainage Report (5 copies)
- b) Drainage Plans

Task 3.5: Structure Design

Task 3.5.1: 65% Structures Design

Based on the approved bridge and retaining wall concepts, Wood Rodgers will complete the design calculations for the new structures in accordance with Caltrans standards, incorporating recommendations from County, the geotechnical report, environmental documents, and permit requirements. A full set of detailed structure plans will be prepared, including, as necessary, general plan, deck contours, foundation plan, abutment layout and details, bent layout and details, typical section, precast prestressed slab layout and reinforcement, and guard railing details.

Deliverables:

- a) Three sets of full size 24"x36" prints and half-size 11" x 17" structural plans.

Task 3.5.2: 95% Structures Design – Plans Specifications & Estimate (PS&E)

- Design Review Meeting - Upon receipt of comments on the 65% structural plans and prior to commencing revisions, Wood Rodgers will schedule a review session, if required, with Caltrans and/or Monterey County to confirm the intent of comments.
- Wood Rodgers will incorporate 65% comments on the structural plans.
- Bridge Independent Design Check—Prior to the 95% PS&E submittal, Wood Rodgers will complete an independent check to confirm structural adequacy and assure that details are complete and constructible.
- Specifications—Wood Rodgers will prepare Technical Specifications for the project based on the latest Caltrans Standard Specifications. These will be modified, where appropriate, to meet County standards and requirements.
- Engineer's Estimates will be prepared using local unit costs from recent bid results furnished by Monterey County or Caltrans or published in the latest Caltrans Contract Cost Data Book.

Deliverables:

- a) Full size 24"x36" prints of complete plans (3 sets)
- b) Technical Specifications for structure items
- c) Marginal Estimate for structures.
- d) Microsoft Word documents on CD-ROM.

Task 3.5.3: Final Plans, Specifications and Estimate (PS&E)

- Design Review Meeting—Upon receipt of comments on the 95% PS&E and prior to commencing revisions, Wood Rodgers will schedule a review session, if required, with Caltrans and/or Monterey County to confirm the intent of comments.
- Wood Rodgers will incorporate 95% comments into the structure plans, specifications and estimate.

Deliverables:

- a) One Original set of signed full-size Vellum or Mylar Tracings
- b) Drawing files on CD-ROM in AutoCAD format
- c) Printed Technical Specifications
- d) Technical Specifications in Microsoft Word format on CD-ROM
- e) 1"= 4' scale drawing of the Deck Contours
- f) Marginal Estimate for structures

- g) Design Calculations and Check Calculations
- h) Quantity Calculations and Check Quantity Calculations

Task 3.6: Environmental Permitting Assistance

LSA will identify required environmental permits for project construction during development of the environmental document. A preliminary scope and budget have been provided for the permitting assistance task. Wood Rodgers will prepare the PS&E certification document and assist the County to obtain the Caltrans encroachment permit for the construction of the project and the construction permits from the US Coast Guard and Moss Landing Harbor District.

The project will involve compliance with Section 7 of the Federal Endangered Species Act (FESA), Sections 401 and 404 of the Clean Water Act (CWA), Section 10 of the Rivers and Harbors Act (RHA), Section 1602 of the California Fish and Game code, and Coastal Zone Permits.

3.6.1 Section 404/Section 10 Permit Application

LSA will prepare the permit application for a Section 404 and/or Section 10 permit for project. At this time we anticipate that the proposed project would have minimal impacts to wetlands and waters of the U.S and would likely be permitted under the Nationwide Permit Program if wetlands or waters of the U.S. were impacted by the project. Nationwide Permits 14 (Linear Transportation Projects) and 15 (Coast Guard Approved Bridges) are expected to cover activities associated with the bridge and trail construction. The extent of jurisdiction under the acts will be determined during a formal jurisdictional delineation of the project area. If impacts to wetlands or waters of the U.S. exceed the limits imposed under the Nationwide Permits, then an individual permit will be required. Preparation of an Individual Permit would be completed under a separate scope and budget.

It is expected that the following items will be required for a Nationwide Permit application:

- Verified delineation of jurisdictional waters for both Section 404 of the CWA and Section 10 of the RHA;
- Complete project plans in plan view and cross-section that have been reduced to a size that can fit on an 8 ½" X 11" sheet (for inclusion in the Corps' Public Notice);
- Natural Environment Study (NES) that identifies endangered species issues related to the project and the measures proposed to mitigate impacts to special status species;
- Essential Fish Habitat Assessment;
- Wetland and Waters Mitigation Plan that specifies the mitigation measures and compensation to be implemented for impacts associated with the project (i.e., purchase of credits in mitigation bank, creation of compensatory wetlands on- or off-site, possible habitat enhancement);
- Cultural Resources Report. This proposal assumes that a cultural resources study will be completed for the project by LSA. A copy of this study must accompany the Corps permit application.

LSA will prepare the required reports related to the delineation of jurisdictional waters, NES, essential fish habitat assessment, and wetland mitigation plan. This work will be completed in consultation with the USACE and the NOAA Fisheries as needed to ensure that the agencies complete the work in as timely a way as possible.

3.6.2 Coastal Zone Consistency Determination

Projects permitted under the Nationwide Permit Program within the Coastal Zone require a consistency determination or waiver from the Coastal Commission. LSA will work with the applicant, USACE, and Coastal Commission to obtain the consistency determination or waiver.

3.6.3 Water Quality Certification

LSA will prepare a draft application package for a Water Quality Certification to be submitted to the County for review and comment. A revised application package, if necessary, will be prepared and submitted to the Regional Water Quality Control Board. The application package for the Water Quality Certification requires a copy of the Section 1602 Streambed Alteration Agreement issued by the California Department of Fish and Game, the delineation of jurisdictional waters, the Clean Water Act permit, the notice of determination showing CEQA compliance, and a check for the application fee¹.

3.6.4 California Fish and Game Code Section 1602 Streambed Alteration Agreement

Work within Elkhorn Slough cannot proceed without a Streambed Alteration Agreement, a type of permit issued by the California Department of Fish and Game. LSA will prepare a permit application that will include a notice of determination showing CEQA compliance, project plans for the location of each project element (i.e. bridge pilings, etc.) affecting the stream, biological assessment report (in the form of an NES) identifying the affected habitats, and a check in an amount to be determined by the extent of impact¹. Minor revisions and/or coordination regarding questions on the notification package will be provided as necessary.

3.6.5 Section 7 Consultation with NOAA Fisheries and/or U.S. Fish and Wildlife Service

LSA will use the current Caltrans Biological Assessment Template and guidance to prepare a Section 7 Biological Assessment (BA) that will lead to the issuance of a Biological Opinion authorizing any take for this project. We expect that NOAA Fisheries will be the primary agency involved in the consultation, however, if the project is determined to adversely affect species outside the regulatory authority of NOAA Fisheries (e.g., listed birds, reptiles, amphibians, terrestrial mammals) then consultation with both NOAA Fisheries and the U.S. Fish and Wildlife Service will be required. The BA will utilize the existing information and survey data collected in the Natural Environment Study to assess potential affects to federally-listed species. The BA will address mitigation necessary to compensate for impacts to federally-listed species caused by the proposed project. This scope provides for preparation of a draft BA to be submitted for review to the applicant and a final BA to be submitted to the agencies. Once round of revisions and modifications of the BA are also included in the scope after initial review by the agencies. This task also provides for one meeting with the agency staffs, should such a meeting be required.

3.6.6 Marine Mammal and Bird Mitigation Plan

LSA will prepare a Marine Mammal and bird mitigation plan to comply with the requirements of the Incidental Harassment Authorization expected from NOAA Fisheries, County and State Coastal Development Permits, and CDFG requirements. The plan will stipulate protection measures to be incorporated into the project to avoid or minimize impacts on marine mammals and sensitive birds that occur in the area. Species likely to be covered by the plan include Pacific harbor seal, California sea lion, southern sea otter, and brown pelican. A draft plan will be submitted to the applicant for

¹ Fees are not included in the scope and budget and will be paid by the lead agency.

review after which a final plan will be prepared and submitted to the agencies for approval. We have provided for one round of revisions if necessary in response to agency comments.

3.6.7 Cultural Resources Permitting.

If LSA's field studies described in Task 2.3.2 identify cultural deposits that are eligible for listing in the National Register of Historic Places or the California Register of Historic Resources, additional documents, including the following, will be necessary:

- Finding of Effect (FOE)
- Memorandum of Agreement (MOA)
- Historic Property Treatment Plan (HPTP)

LSA will respond to County, Caltrans, OHP, and any other agency comments on the FOE, MOA, HPTP on a time-and-materials basis.

3.6.8 Permitting Coordination Meetings

Meetings are often a critical part of the planning process during the application process for permits. The purpose of these meetings will be to exchange information and facilitate the completion of the permits. This proposal provides for a Senior Biologist and Associate Biologist to attend 5 meetings in Monterey, California, and one in San Francisco, California.

Task 3.7 Plats and Legal Description for Right of Way Acquisitions

Wood Rodgers' right of way engineering staff will review all existing record right-of way information from the County and Caltrans right of way plans and field notes, available record parcel and final maps. We assume that Monterey County will provide a preliminary title report for each affected property. From the preliminary title reports affecting private property, Wood Rodgers will establish the approximate side property lines and any existing easement on the subject property.

The approximate property lines of the private property owners will be coordinated with the as-built utility location acquired during the field survey of planimetric features with the applicable easements (if any). This information will be shown on a right-of-way Appraisal and Acquisition Map published for preliminary right of way engineering needs.

With concurrence from the County regarding the right of way needs, Wood Rodgers will prepare the necessary plat maps and legal descriptions for the County's use in acquiring easements or modifying existing easements for trail construction and maintenance. We assume that one legal description will be required for the Moss Landing Power Plant and one additional legal description will be required for the former National Refractories parcel, now owned by REVX-173, LLC. Plat maps will, at a minimum, delineate existing and proposed right of way, identify proposed square footage of right of way acquisition and assessor parcel numbers and provide a legal meets and bounds description. A licensed Land Surveyor or Civil Engineer with proper registration will stamp all plats and legal descriptions. We understand that the County will provide appraisals and acquisition of the required right of way for this project.

Deliverables:

- a) Appraisal and Acquisition Mapping
- b) Plat and Legal Descriptions

Task 3.8: Conceptual Storm Water Pollution Prevention Plan

Wood Rodgers will develop a Conceptual Storm Water Pollution Prevention Plan (CSWPPP) to address the National Pollutant Discharge Elimination System General Construction Permit requirements for the construction of the Trail. The CSWPPP will include an evaluation of pollutants of concern related to proposed construction activities; an evaluation of temporary construction site best management practices (BMPs); a plan to address non-storm water management (specifically dewatering activities); a Sample and Analytical Plan (SAP) to address the General Construction Permit requirements; and a SWPPP exhibit that will identify suggested locations for BMP implementation. The CSWPPP will aid the contractor in accurately bidding the SWPPP contract item; assist with SWPPP compliance during construction; and can be utilized to secure other regulatory permits required for the protection of species of concern or sensitive habitat.

Deliverables:

- a) CSWPPP (3 copies)

Task 3.9 Planting / Erosion Control Plans

Wood Rodgers will prepare planting plans that show the type and location of plant material along the 0.8 mile length of the trail project. We anticipate that plantings will use native plant materials, compatible with the existing local plant material. Planting details will be provided showing installation consistent with local requirements. Technical specifications for planting work will be prepared in conformance with local requirements. A statement of probable cost for planting work will be prepared at the 95% level of plans completion, and will be incorporated in the Engineer's Estimate for the trail construction project.

Deliverables: Landscape Planting / Erosion Control Plans

Task 3.10 Final PS&E ("C" Plans)

Upon completion of the 95% submittal package, Wood Rodgers will schedule a review session, if required, with the County and Caltrans to discuss review comments and resolve any conflicting comments. Prior to final design submittal, Wood Rodgers will perform an internal quality and constructability review of the entire PS&E package. Corrections to the PS&E documents are made as per the review comments. Additional documents that are prepared at this stage are the working day schedule, and the "Resident Engineer (RE) pending" file.

Upon approval of the final PS&E, Wood Rodgers will furnish the County approved Plans, Specifications and Estimates to be used for project advertising. Plan submittal to Caltrans and the County will include velum plots and electronic CADD drawing files. Specifications submittal will include a "camera ready" copy and electronic files in MS Word for Windows format. A hard copy and electronic files used to generate the Engineer's Estimate will also be furnished to the County and Caltrans.

Deliverables: Final Plans, Special Provisions & Engineer's Estimate

Task 3.11 Construction Permitting

Wood Rodgers will prepare an Application for Encroachment Permit for Monterey County to obtain Caltrans permission to enter State Right of Way and construct the project. Wood Rodgers will coordinate with the Caltrans District 5 Permits Engineer as necessary to obtain the necessary Encroachment Permit. Wood Rodgers will also apply for and obtain the necessary permits from the US Coast Guard and Moss Landing Harbor District for construction of the bridge over Elkhorn Slough in Moss Landing Harbor. Any permit fees will be paid by Monterey County.

Deliverables:

- a) Construction Encroachment Permit Applications

MILESTONE 4 - ASSISTANCE DURING CONTRACT BIDDING (OPTIONAL)

Wood Rodgers will attend pre-bid meeting, if requested, and assist the County in answering questions from Contractors during the bidding process as well as assisting the County with bid evaluation as required. This work will be performed on a time-and-materials basis.

MILESTONE 5 - ASSISTANCE DURING CONSTRUCTION (OPTIONAL)

Wood Rodgers will be available to provide on-going consultation and interpretation of construction documents during the construction of the proposed project. This work will be performed on a time-and-materials basis. Typical construction support services would include:

- Attend pre-construction meeting.
- Review and approve Contractor submittals and shop drawings as requested by the County.
- Provide on-going consultation and interpretation of contract documents.
- Consult with and assist Monterey County engineering and construction management staff regarding Contractor proposals, construction issues, and plan revisions.
- Prepare plan and/or specification modifications for contract change orders.
- Assist Monterey County in review of contractor's SWPPP (Storm Water Pollution Prevention Plan) to insure NPDES compliance.

MILESTONE 6 – CONSTRUCTION CLOSEOUT (OPTIONAL)

At the completion of construction, Wood Rodgers can draft any changes to the project plans to create the "As-built" record drawings, based on red-marked plans prepared by the Resident Engineer.