

EXHIBIT “ C ”
SPTC FORNI RD TO MISSOURI FLAT RD CLASS 1 BIKE PATH DESIGN
PHASE 2 SCOPE OF SERVICES – CONSTRUCTION DOCUMENTS
CUNNINGHAM ENGINEERING CORPORATION

SCOPE OF SERVICES

The Cunningham Engineering Corporation (CEC) team proposes to perform the tasks listed below related to the Class 1 Bike Path Design and Engineering for the SPTC Forni Road to Missouri Flat Road corridor. This proposed scope of services is based on the referenced RFP prepared by the County and our site visit in May 2007, our Project Understanding in our Proposal dated May 31, 2007, and our Phase 1 Scope of Services dated June 6, 2007. Our Client is the County of El Dorado (County).

The primary purpose of the Scope of Services is to complete 65%, 95% and Final Plans, Specifications, and Estimates (PS&E) and related documents with sufficient detail to entitle the project, aid in environmental review exhibits and processing, aid in budgeting and funding, and bidding and construction. The scope of services has been tailored to meet the needs of the County and the community.

Tasks To Be Performed By County

In order for CEC to effectively perform necessary services for this project, there are a number of coordination and performance issues that need to be overseen by the County. It is assumed the County will provide, or direct others to provide, the following information and services, and CEC shall be able to rely on such information during the course of its work under this Scope of Services:

- 1) Access to any available site surveys, in electronic format (AutoCad 2000 or later).
- 2) Project programming information of County, funding agencies and community groups.
- 3) Current title report for the corridor with exception documents.
- 4) Existing right-of-way information for the corridor, Forni Road and Missouri Flat Road.
- 5) Improvement plans for Forni Road and Missouri Flat Road.
- 6) Routing designs and/or progress improvement plans in electronic format (AutoCad 2000 or later) for the proposed Missouri Flat Connector that affect the corridor.
- 7) Copy of any drainage studies conducted for any of the existing drainage sheds/culverts along the alignment, if available.
- 8) Existing utility pothole/elevation information if available.
- 9) Project specific environmental documents.
- 10) Electronic formats for Contract Documents in County standard format.
- 11) Contact information for known Caltrans personnel for funding administration, DOT Missouri Flat Connector project manager and other key personnel that will need to be contacted for project coordination.
- 12) If required, negotiations and/or enforcement with adjacent property owners for issues that effect the project, such as illegal drainage.

Tasks To Be Performed By CEC Project Team

Please note that Tasks A & B were included in the Phase 1 Scope of Services. To avoid confusion, this Phase 2 Scope of Services begins with Task C.

C. CONSTRUCTION DOCUMENTS – 65% and 95% PS&E

1. Project Management: CEC will continue to provide project management services similar to those provided during Phase 1. This will include but not be limited to coordination with the design team, the County and applicable agencies, aid in permitting, meeting attendance, and project documentation. In addition to active management the following services would be provided for project management:
 - a. Monthly Progress Reports: Reports will be submitted on a monthly basis to document the design progress, schedule, and decisions made addressing the design and schedule, a list of deliverables for said month, and encountered or anticipated problems that may affect the schedule, budgets and/or work products. A summary of any recommendations to address pending issues will be included.
 - b. Critical Path Method Schedule: Prepare updates to the critical path schedule initiated during Phase 1. The schedule will be updated on a monthly basis and will include individual task start/completion dates, responsibilities, and dependencies. Planned and actual dates will be included. Format will be Microsoft Project and will be provided to the County electronically and via color hard copy.
 - c. Adjacent Project Coordination: The CEC project manager will continue to coordinate with the project manager for the Missouri Flat Connector project to coordinate design efforts with the pathway. If identified by the County during Phase 1 CEC will continue to coordinate with other adjacent proposed projects in the planning stages.
 - d. Permit Coordination: Coordinate permits on an as needed basis, such as encroachment permitting for work within the County rights-of-way and entry permits for investigations within wetlands areas. We have assumed that if specific 404 permits are required from the Army Corps of Engineers that ESP will obtain them for the project.
 - e. Meeting Attendance and Documentation: Attend monthly meetings with County Staff, environmental consultant, Caltrans representative and the design team throughout the 65%, 95% and Final PS&E phases to update project progress, facilitate key decisions, and track action items. Prepare agendas and minutes for the meetings. For the purpose of this proposal a

total of 4 meetings have been assumed (although not necessarily over a period of 4 months).

2. Exhibit Preparation & Environmental Assistance: Visit the site with the Client and environmental consultant and prepare project exhibits, perform calculations and provide engineering project descriptions in support of environmental documentation. Exhibits would include but not be limited to area of potential effect, ADA safety railing renderings, wetlands avoidance alternatives, staging areas, project access areas, potential tree removals, conceptual signage locations, bike locker locations, culverts to be replaced or remain, and areas of potential fill. Prepare calculations including but not limited to preliminary earthwork volumes, length and area of project, area of proposed for staging and construction time estimates. Review and comment on project description for environmental documents.
3. Construction Plans: Prepare construction plans in conformance with Caltrans Design Manuals and applicable funding agency standards. Project plans shall include but not be limited to a cover sheet with vicinity map; index sheet; civil plans including typical sections, survey and control diagram, plan and profile sheets at a scale of 1" = 50', drainage details, miscellaneous construction details, erosion control plan (1" = 40' or 1" = 50'), signing and striping plan and details; decking over existing box culvert and details, and bridge deck and railing plans and details. Provide written response to comments and a design memo with each submittal. If a County comment can not be incorporated a written response addressing why the comment was not feasible to address will be provided.
4. Contract Documents: Prepare Contract Documents, including Notice to Bidders, Contracts, Bonds and Proposal, and Specifications. Contract Documents will be prepared in the County standard format based on language and format electronically provided by the County.
5. Construction Cost Opinion: Prepare a detailed construction cost opinion for the project improvements using the bid items included in the Proposal Section of the Contract Documents.
6. Submit Notice of Intent (NOI) to the Regional Water Quality Control Board to obtain an NOI number. Scope excludes fee for the NOI.

Deliverables for each submittal:

- Three sets each of 22" x 34" plans and 11" x 17" (bond copies) for County review and comments
- Electronic AutoCAD/Land Development 2005 format submittal of the plans for County review and comments
- Three sets of 8.5" x 11" Special Provisions, including electronic computer copy in Microsoft Word format, for County review and comments

- Two copies of the engineer's estimate for construction
- Two copies of Design notes and calculations

D. FINAL CONSTRUCTION DOCUMENTS

1. Provide an original set of stamped and signed plans, copies of the bidding documents and an engineering opinion of probable cost to the County for its use in soliciting construction bids.

Deliverables:

- One set of wet signed and stamped final plans on Mylar including all necessary details and cross sections
- One set of plotted, signed and stamped 11"x17" half-size plans
- Electronic AutoCAD/Land Development 2005 format submittal of the final plans and cross sections for County records
- One set of wet signed and stamped Special Provisions, including electronic computer copy in Microsoft Word format
- One copy of Engineer's Estimate, including electronic computer copy in Microsoft Excel format
- Two wet signed and stamped Bridge Modification Calculations for County records
- Two sets of quantity calculations
- One set of construction staking notes and data tied to County control
- Copies of agency approvals and permits (provided by others). Agencies typically involved in the approval process may include, but are not limited to, the following:
 - El Dorado County Department of Transportation
 - State of California Department of Transportation (Caltrans)
 - Federal Highway Administration (FHWA)
 - Regional Water Quality Control Board (Construction Grading Permit – NPDES)
 - California Department of Fish and Game (DFG)
 - Army Corps of Engineers

E. BID ASSISTANCE

1. Attend pre-bid meeting.
2. Provide engineering consultation during the bidding phase of the project, including required clarification of plans and/or specifications and preparation of addenda (if required).

F. CONSTRUCTION PHASE SERVICES

Construction phase services of the design engineer team will be negotiated at a later date.

G. EXCLUSIONS

Our scope specifically excludes the following. Please note that we can provide, or help coordinate, some of the services listed below, as an additional work task.

1. Agency and permit fees (to be paid by County).
2. Revisions of completed or partially completed designs that incur cost to Consultant and which are the result of action by the County or otherwise necessitated by factors beyond the Consultant's control. If required, this additional work shall be paid for in accordance with the Consultant's then current Schedule of Fees.
3. Soundwall wall design or layout.
4. Attendance at public meetings.
5. Services related to existing underground storage tanks and/or sites of potential contamination. Services related to unsuitable soils.
6. Wetlands permits.
7. Preparation of easement, right-of-way or land dedication documents.
8. Area-wide drainage studies.
9. Preparation of Stormwater Pollution Prevention Plans
10. Traffic control plans unless required to perform the design work.
11. Negotiations or meetings with adjoining property owners.
12. Landscape or lighting design.
13. Design of post-construction stormwater interceptors, vegetative swales, sand filters, except as specifically called out in the tasks above.
14. Participation in value-engineering processes or revisions to our plans to incorporate changes emanating from value engineering.
15. Payment of prevailing labor rates for field or office work, except for the surveying subconsultant.

Prepared by S. Greenfield
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