

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
BOARD ACTION SUMMARY

DEPT: Public Works

BOARD AGENDA #: *C-1

AGENDA DATE: December 13, 2016

SUBJECT:

Approval to Amend the Agreement for the Environmental Documentation, Bridge Engineering and Project Delivery Services with HDR Engineering, Inc. of Folsom, California, for the Tim Bell Over Dry Creek Bridge Replacement Project

BOARD ACTION AS FOLLOWS:

No. 2016-623

On motion of Supervisor Withrow, Seconded by Supervisor Chiesa
and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Withrow, DeMartini, and Chairman Monteith

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1) Approved as recommended

2) Denied

3) Approved as amended

4) Other:

MOTION:

ATTEST: Elizabeth A. King
ELIZABETH A. KING, Clerk of the Board of Supervisors

File No.

**THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
AGENDA ITEM**

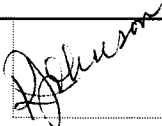
DEPT: Public Works

Urgent

Routine

BOARD AGENDA #: *C-1

AGENDA DATE: December 13, 2016



CEO CONCURRENCE:

4/5 Vote Required: Yes No

SUBJECT:

Approval to Amend the Agreement for the Environmental Documentation, Bridge Engineering and Project Delivery Services with HDR Engineering, Inc. of Folsom, California, for the Tim Bell Over Dry Creek Bridge Replacement Project

STAFF RECOMMENDATIONS:

1. Approve Amendment No. 1 to the Professional Design Services Agreement for the Environmental Documentation, Bridge Engineering and Project Delivery Services with HDR Engineering, Inc., in the amount of \$1,023,778 for the Tim Bell over Dry Creek Bridge Replacement Project.
2. Authorize the Director of Public Works to execute Amendment No. 1 with HDR Engineering, Inc. and sign the necessary documents.

DISCUSSION:

The purpose of the Tim Bell Road over Dry Creek Bridge Replacement Project is to replace the existing bridge. The Tim Bell Road Bridge was built in 1915, and the timber deck was replaced with a galvanized corrugated steel deck in 1979. The structure consists of a single reinforced concrete arch with timber spandrels and timber approach spans for a total length of 131 feet and an arch span of 80 feet. The bridge carries traffic of Tim Bell Road across Dry Creek. Tim Bell Road is an isolated rural county road in the eastern part of Stanislaus County, southeast of Oakdale. Tim Bell Road extends north-south connecting State Route 132 on the south with Warnerville Road on the north, a distance of less than 10 miles. The road has a relatively low average daily traffic, but is a key arterial highway in this part of the County due to the limited number of roads in this area. The closest north-south road to the west is Ellenwood Road, which is about five miles away.

On September 16, 2011, Stanislaus County published a Request for Proposals (RFP) for all-inclusive bridge engineering services. On October 12, 2011, six consulting firms submitted proposals. Public Works staff evaluated all proposals and determined HDR Engineering, Inc. (Consultant) to be the most qualified. Because the fee proposal submitted by the Consultant exceeded \$1 million, a Caltrans Pre-Award Audit was required, which was completed by Caltrans in December 2012.

When the Pre-Award Audit was completed, only \$575,000 in Federal funding was available for this project. On August 13, 2013, the Board of Supervisors approved a contract for partial Project Approval and Environmental Documents (PA&ED) scope only, in the amount of

Approval to Amend the Agreement for the Environmental Documentation, Bridge Engineering and Project Delivery Services with HDR Engineering, Inc. of Folsom, California, for the Tim Bell Over Dry Creek Bridge Replacement Project

\$493,275. Public Works applied for additional Federal funding and was approved for \$947,000 additional Federal funds. The remainder of the scope is being added to the Consultant's contract increasing the contract from \$493,275 to \$1,517,053. Total approved Federal funding for this project is \$1,522,000.

The additional scope of services includes:

- Strategy determination and strategy report
- Comprehensive project management services
- Public relations and outreach services
- Geotechnical investigation
- Topographical survey
- Comprehensive environmental services
- Structural engineering services
- Comprehensive civil engineering services
- Traffic system design
- Electrical system design
- Utilities design and relocation coordination
- Comprehensive right of way services
- Plans, Specifications, and Estimates (PS&E)
- Bidding and construction support services

The Project's PE phase is tentatively scheduled to be completed in April 2019. The construction of this Project will begin September 2019, with an anticipated completion date in March 2021.

POLICY ISSUE:

The Board of Supervisors must approve any amendments to existing professional services agreements.

FISCAL IMPACT:

On August 13, 2013, the Board of Supervisors approved a contract with the Consultant in the amount of \$493,275 for environmental documentation bridge engineering services associated with the project's PA&ED phase. The requested Amendment No. 1 will cost \$1,023,778, bringing the total contract amount to \$1,517,053. The PE phase of this project is 100% Federally funded by the Highway Bridge Program (HBP) and Bridge Toll Credits. Funding for the project is available in Fiscal Year 2016-2017 Public Works Road Projects budget.

Approval to Amend the Agreement for the Environmental Documentation, Bridge Engineering and Project Delivery Services with HDR Engineering, Inc. of Folsom, California, for the Tim Bell Over Dry Creek Bridge Replacement Project

Cost of recommended action:		\$ 1,023,778
Source(s) of Funding:		
Federal Funding (Highway Bridge Program)	<u>\$ 1,023,778</u>	
Funding Total:		<u>1,023,778</u>
Net Cost to County General Fund		<u>\$ -</u>

Fiscal Year:	2016/2017
Budget Adjustment/Appropriations needed:	No

BOARD OF SUPERVISORS' PRIORITY:

The recommended actions are consistent with the Board's priorities of providing A Safe Community, A Healthy Community, and A Well-Planned Infrastructure System by replacing a seismically deficient bridge in Stanislaus County.

STAFFING IMPACT:

Existing Public Works staff will oversee the project.

CONTACT PERSON:

Matt Machado, Public Works Director

Telephone: (209) 525-4153

ATTACHMENT(S):

1. Amendment No. 1 with HDR Engineering, Inc.

ATTACHMENT 1

Amendment No. 1 with HDR Engineering, Inc.

STANISLAUS COUNTY

First Amendment to Professional Design Services Agreement
Tim Bell Road over Dry Creek Bridge Replacement Project - #9587

This Amendment is made and entered into this 13th day of December, 2016, in the City of Modesto, State of California, by and between the County of Stanislaus ("County") and HDR Engineering, Inc., ("Consultant"), for and in consideration of the promises, and the mutual promises, covenants, terms, and conditions, hereinafter contained.

WHEREAS, on August 13, 2013, the Stanislaus County Board of Supervisors awarded a Professional Design Services Agreement ("Agreement") to Consultant, for partial project approval and environmental document services;

WHEREAS, there is a need for additional services as shown in "Exhibit I-A", attached hereto and made a part of this Amendment;

WHEREAS, an increase of One Million Twenty-Three Thousand Seven Hundred Seventy-Seven and 56/100 Dollars (\$1,023,777.56) to the Agreement is necessary to cover the remaining services;

\$493,275.00	Agreement
<u>+1,023,777.56</u>	First Amendment
\$1,517,052.56	Total

WHEREAS, additional federal funding, that was not available at the time of award, is now available to complete the remaining services;

WHEREAS, because the Consultant's current agreement with the County will expire January 1, 2017, the Director of Public Works has determined that an extension of time is required for Consultant to complete the remaining services;

WHEREAS, Consultant has continued to diligently perform the services requested to support this project in good faith; and,

NOW THEREFORE, the parties agree as follows:


1. Section 1.1 – Scope of Services: Scope of Services is amended to include additional services as shown in Exhibit "1-A" attached hereto and made a part of this Amendment.
2. Section 2.1 - Compensation: Compensation is amended to include additional fees of One Million Twenty-Three Thousand Seven Hundred Seventy-Seven and 56/100 Dollars (\$1,023,777.56) as shown in Exhibit "1-A" attached hereto and made a part of this Amendment. Consultant's compensation shall in no case exceed One Million Five Hundred Seventeen Thousand Fifty-Two and 56/100 Dollars (\$1,517,052.56).


3. Section 10A – Performance Period: This agreement shall go into effect on August 13, 2013, contingent upon approval by the County, and the Consultant shall commence work after notification to proceed by the County. The agreement shall end on January 1, 2021, unless extended by agreement amendment.
4. All other terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this First Amendment effective on the date written above.

COUNTY OF STANISLAUS

HDR ENGINEERING, INC.

By: 
Matt Machado, Director
Department of Public Works

By: 
Mike Lohman
Transportation Business Group Manager

APPROVED AS TO FORM
John P. Doering, County Counsel


By: 
Amanda DeHart
Deputy County Counsel



EXHIBIT 1-A

November 11, 2016

Denis Bazyuk, Project Manager
Stanislaus County Public Works
1716 Morgan Road
Modesto, CA 95358

**RE: Tim Bell Road over Dry Creek Bridge Replacement Project
Request for Contract Amendment 1**

Dear Mr. Bazyuk:

In response to County's RFP for all-inclusive bridge engineering services, October 12, 2011 HDR Engineering, Inc. (HDR) submit a proposal to perform services associated with the development and design of reference project. The original proposal included detailed scope of work necessary to deliver complete services associated with Plans Specifications and Estimate (PS&E) for this project. At the time the County did not have sufficient funding to enter into agreement with HDR for full PS&E scope of services. Instead, the County decided to phase the development of this project into two phases.

Phase I, consists of partial PA&ED services and Phase II delivers all services not covered under Phase I. August 13, 2013 County's Board of Supervisors approved agreement with HDR, in the amount of \$493,275, for Phase I services. County staff has applied for and secured additional federal funding for revised total amount of \$1,522,000. These funds are sufficient to cover the costs associated with Phase II scope of services to be provided by HDR. Phase II scope of services is necessary to complete environmental NEPA/CEQA clearance phase, final design, project improvement plans, specifications, estimate and ensure that the project is successfully constructed.

HDR is now requesting County to authorize Amendment 1 in the amount of \$1,023,777.56 to fund all Professional Design Services necessary to complete Tim Bell Road over Dry Creek Bridge Replacement Project PS&E. Once Amendment 1 is approved by County's Board of Supervisors, the agreement amount with HDR will be \$1,517,052.56. HDR has updated Professional Design Services Agreement Exhibit A Detailed Scope of Work dated June 28, 2013 to include lined out deferred tasks plus following changes.

- Geotechnical Task 7.2 number of borings has been increased from 4 to 5 borings and depth has been increased from 80 feet to 100 feet to accommodate the longer bridge that has been approved by Caltrans to clear flood high water elevation. Parikh's fee went from \$50,212 to \$75,092 to cover this additional effort. The largest cost increase was for drilling costs that went from \$6,400 to \$14,500. Drillers have been raising their rates exponentially over the last couple of years which is the reason for the large increase.
- Environmental Task 11.12, Visual Impact Assessment; Task 11.13, Noise Abatement Decision Report; Task 11.14, Community Impact Assessment; and Task 11.15, Extended Phase Investigation were added per Caltrans approved PES document requirements. HDR environmental staff will be providing Task 11.12 for \$15,445.28 and 11.13 for \$34,675.43. Sycamore will be providing Task 11.14 for \$12,380.45 and 11.15 for \$17,612.08. These tasks were added to the Project per request from Caltrans D10.

Denis Bazyuk

Date: November 11, 2016

Tim Bell Amendment 1 Letter.docx

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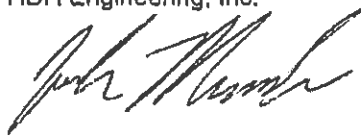
Shortly after HDR submit original full scope proposal October 12, 2011, Caltrans D10 performed Pre-Award Audit. As part of this amendment, HDR and all sub consultants employed by HDR will comply with all requirements imposed by Caltrans Pre-Award Audit. In addition, HDR certifies that:

- The key staff has not changed,
- The sub consultants have not changed,
- HDR will meet original DBE goal of 6.38% for full scope professional agreement services.

In addition to adjusting funding and scope for this project, this amendment request also seeks to extend the contract period between County and HDR Engineering, Inc. Please see attached revised project schedule.

Please let us know if you have questions. Please contact me at (916) 817-4787 or email me at john.maniscalco@hdrinc.com

Sincerely,
HDR Engineering, Inc.



John Maniscalco
Project Manager

ATTACHMENTS:

- 1) Attachment A - Scope of Services for Amendment 1
- 2) Attachment B - Fees for Amendment 1
- 3) Attachment C - Updated project schedule

Attachment A

Scope of Services for Amendment 1

Exhibit A

Stanislaus County Department of Public Works Tim Bell Road over Dry Creek Bridge Replacement Scope of Work

This scope of work is for providing Stanislaus County with professional services required to deliver a complete construction document that is ready to bid for the replacement of the Tim Bell Road Bridge 38C-0073. To achieve this goal the work plan has been broken into two phases. The first phase is to provide the Strategy Determination and second phase will provide Project Design; ready to advertise for construction bids.

Note: To meet budget constraints a partial Scope of Work, dated June 28, 2013, was used for Phase I work. Additional funding was approved by County to complete Phase II. This Scope of Work includes both Phase I and II Tasks.

Phase I: Strategy Determination

Phase II: Project Design

The following tasks will be covered under phase I

- Task 1 - Project Management
- Task 2 - Research and Data Collection
- Task 3 - Surveying and Right of Way Engineering
- Task 4 - Preliminary Engineering Studies/Strategy Report

The following tasks will be covered under phase II

- Task 5 - Utilities
- Task 6 - Traffic Studies
- Task 7 - Geotechnical and Foundation Report
- Task 8 - Hydraulics Report
- Task 9 - Public Outreach
- Task 10 - Bridge Type Selection Report
- Task 11 - Prepare Environmental Documents
- Task 12 - Permitting
- Task 13 - Caltrans District 10 Work Plan
- Task 14 - Prepare 30% Bridge General Plan and Foundation Plan
- Task 15 - Right of Way Work
- Task 16 - Prepare 60% Design - Draft Plans
- Task 17 - Prepare 90% Design - Draft Plans, Specifications and Estimate
- Task 18 - Prepare 100% Design - Final Plans, Specifications and Estimate
- Task 19 - Final Plans, Specifications and Estimate
- Task 20 - PS&E Certification and Bidding Assistance
- Task 21 - Construction Support
- Task 22 - As-built Plans

NOTE: Exhibit 10-H cost proposal hourly rates will be adjusted by 3% annually in January for cost of living increase. Exhibit 10-H total cost will not be exceeded without Stanislaus County Department of Public Works written approval. Fee for each task is an estimate and will be adjusted up or down to match level of effort needed to complete task over the life of the project.

Task 1 - Project Management, Administration, Meetings, and QA/QC

Scope Adjustment: Most of the costs associated with the services to be delivered under the scope of this task are covered under Phase I Contract fees. However, additional scope was added to this task for project management and various meetings.

WBS 100

The Project Manager will manage the project and coordinate all project issues and progress with the individual discipline managers. Each discipline manager will be responsible for the work involved in their discipline and they will coordinate with their staff for day to day activities. This will allow the Project Manager to stay focused on the overall project.

Task 1.1 - Manage Workplan, Budget, Schedule and Administration

Workplan Management: HDR's workplan will be monitored on a monthly basis and updated as required to account for completion of work, schedule variations and staff utilization.

Budget Management: HDR will manage all charges to the project to control performance within budget limitations. HDR's computerized accounting system will be utilized to monitor and control budgets. Monthly progress reports and invoices will be prepared and submitted to the County.

Schedule Management: HDR will maintain a detailed Microsoft Project schedule, reporting monthly on critical path items. The schedule will show the beginning, ending, and duration of each work task or activity, and identify those activities that are on the critical path. The schedule will clearly show those tasks to be carried out by HDR; and also show those tasks performed by others, including County, utility providers, sub consultants, and other involved entities.

Administration Activities: HDR's project administration activities consist of project file setup both within HDR's Project Wise system (electronic filing) and paper files, developing sub-consultant agreements, monthly reporting and invoicing, copying correspondence and communication with the project team.

Deliverables:

- Project work plan
- Project schedule in MS Projects
- Project Development Team (PDT) progress reports and schedules
- Meeting notes prepared by HDR and distribution to all attendees
- Local Assistance Procedures Manual (LAPM) documents required

Task 1.2 - Monthly Meetings, Workshops and Internal Meetings

It is anticipated that the PDT recommended by HDR and approved by the County will meet monthly or as requested by the County to review progress, share information, perform risk monitoring and identify critical issues, reach decisions, and handle other items critical to the success of the project. Fehr & Peers, WRECO and Parikh will attend one of the PDT meetings. Sycamore and JRP will participate in up to 4 of the PDT meetings.

Workshops will be held to discuss specific design issues in depth such as geometrics, structure types, right of way activities, aesthetics and other design processes.

As required by CEQA/NEPA, key public meetings will be coordinated and managed with HDR leading the process. The outreach team will work closely with the County on overall scheduling, strategy and format of meetings. It is anticipated that we will coordinate and facilitate a scoping meeting at the kick off of the

environmental process and a second public meeting during the public circulation period of the document to solicit input on the draft alternatives. Meeting summaries will be provided and will include promotional activities, meeting format and materials, as well as public comments solicited during the meetings.

Sycamore will attend the Board of Supervisors hearing for the EIR.

HDR will prepare minutes of all meetings with copies of handouts and presentation materials for all PDT meeting attendees and copies to all interested stakeholders.

Deliverables for Phase II scope:

- Add ten (10) meetings for revised total of up to twenty (20) PDT Meetings
- Add two (2) meetings for revised total of four (4) Focused Design Meetings/Workshops Meetings
- Add one (1) meeting for revised total of two (2) Environmental Public Meetings
- Sixteen (16) Project Management (PM) Meetings
- Meeting minutes shall be provided to the County after each meeting.

Task 1.3 - Quality Assurance / Quality Control Activities

The Project Manager will assure that HDR's quality assurance and quality control procedures are applied and followed on all aspects of project work and deliverables. The quality control plan establishes a process for checking, correcting, and back checking design calculations, plan sheets, quantity take-offs, estimates, specifications, and project reports in advance of all major deliverables including County reviews and Caltrans oversight.

The Project Manager recognizes that HDR is responsible, as prime consultant, for the quality of the project deliverables, whether they are prepared by HDR staff or by another firm on the project team. For that reason, the Project Manager will prepare a Quality Control Plan that will be adopted by all parties on the HDR Team. The Quality Control Plan will be submitted to the County for review and comment. Work will be done in accordance with County and Caltrans standards and guidelines.

Design work is to be completed in English units and in accordance with the latest editions from the following design standards and design criteria:

DESIGN STANDARDS

- Caltrans Traffic Manual
- Caltrans Manual of Uniform Traffic Control Devices
- Caltrans Standard Plans and Specifications
- Caltrans Standard Special Provisions
- County Storm Water Management Manual
- Caltrans Bridge Design Specifications, Division of Structures (AASHTO)
- Caltrans Bridge Details Manual, Division of Structures
- Caltrans Bridge Design Aids Manual, Division of Structures
- Caltrans Bridge Memo to Designers, Division of Structures
- Caltrans Bridge Design Practice Manual, Division of Structures
- Caltrans local Assistance Procedures Manual
- A Policy on Geometric Design of Highways and Street, AASHTO
- Design Criteria
- Avoid or minimize impacts to sensitive environmental areas

SOFTWARE

HDR has an extensive library of software that will be used on this project. The software that could be used on this project is as follows:

- Autoturn
- Guidsign
- Bentley Projectwise V8i
- In Roads
- Microsoft Office 2007
- Microstation
- L pile
- Group 6
- CT Bridge
- Vbent
- Vbridge
- LEAP
- Larsa
- SAP
- PCA
- Ensoft
- Enercalc
- Math CAD
- Imbsen Products
- WinABUD
- WinBDS
- WinCAPS 7.80.16 USA
- WinCSD
- WinFAD
- WinNFAD
- WinRAR archiver
- WinRECO

Deliverable: Quality Control Plan

Task 2 - Research and Data Collection

Scope Adjustment: All of the costs associated with the services to be delivered under this task are covered under Phase I Contract fees.

WBS 150

Each member of the consultant team will be responsible for the collection of data relevant to their respective project work. Data gathered shall include Assessor Parcel Maps and Owners lists, prior studies completed associated with this project, As-built road plans, As-built bridge plans, utility plans, geotechnical report from previous studies, flood studies, etc.

HDR will provide available information as requested by the County for their preparation of the "Field Review Form."

Deliverables: "Field Review Form"

Task 3 - Surveying and Right of Way Engineering

Scope Adjustment: All of the costs associated with the services to be delivered under this task are covered under Phase I Contract fees.

WBS 160.20.25 Existing Records

RECORD RESEARCH

Perform record research at Stanislaus County to locate recorded control maps, right-of-way maps, records of survey, corner records, and other official maps of records.

RECORD CALCULATIONS

Calculate record right-of-way lines and property lines located within the project limits in accordance with record maps, record deeds, and documents as required to calculate field search positions for existing right-of-way monuments, street survey monuments, and parcel corner monuments.

Perform research of relevant land and survey records at Stanislaus County records, to locate all necessary survey and land ownership records required to complete field survey, and for analysis, determination, and delineation of the existing land-net. Research will be limited to public information. Create survey monument search map for use during the Land Net Survey.

WBS 160.20.40 Right of Way Engineering Products

RIGHT OF WAY AND MAPPING SERVICES

Prepare a Right-of-Way Requirements Map based on identified right-of-way requirements. The Right-of-Way Requirements Map shall define all property acquisition required. It appears that a total of three properties may require right of way dedications based on a review of the Stanislaus County Assessor's Maps. Prepare an Easement Requirements Map based on identified easement requirements. The Easement Requirements Map shall define all easement acquisitions required. Prepare appropriate right-of-way and easement legal descriptions and exhibits for three parcels.

- a. Order Preliminary Title Reports for each property affected by right-of-way acquisition (3 Title Reports - fees to be paid by Stanislaus County).
- b. Prepare legal descriptions and plats for temporary construction easements, staging areas, and disposal areas for excess soil generated by project construction.
- c. Specify existing and proposed rights-of-way, land dedications, and easement agreements.
- d. Verify property lines at those locations where any portion of the project infringes upon the required setback limits or lies within 50 feet of project improvements, work areas, storage, and staging areas.
- e. Prepare and file a Record of Survey for any new right-of-way required, and/or for any other triggers specified in the Professional Land Surveyors Act.
- f. Prepare final right-of-way map and legal descriptions for acquisition of all necessary parcels and easements.

WBS 160.20.50 Control Surveys

RIGHT-OF-WAY AND CONTROL FIELD SURVEY

Perform a Topographic and Right-of-Way Survey to provide design control and right-of-way mapping for the project. Set horizontal and vertical control points for project mapping in accordance with Stanislaus County horizontal and vertical

control requirements. All surveying and mapping shall be in compliance with the provisions of the Professional Land Surveyors Act, Sections 8700 to 8805 Business and Professions Code the provisions of the California Coordinate System, Sections 8801 to 8819 of the Public Resources Code, and any other applicable code in the State of California. The horizontal datum will be based on the North American Datum 83 (NAD 83) as shown in Volume 22 of Surveys, Page 51 (22-S-51), Stanislaus County Records. The vertical datum shall be based on the North American Vertical Datum of 1988 (NAVD 88) as in shown in Volume 22 of Surveys, Page 51 (22-S-51), Stanislaus County Records. Perform a field survey to search and locate existing survey monuments and physical evidence required to establish existing rights-of-way and property lines at those locations where any portion of the project infringes upon the required setback limits or lies within 50 feet of project improvements, work areas, storage, and staging areas.

WBS 160.20.60 Engineering Surveys

TOPOGRAPHIC SURVEY

Perform detailed field survey of existing roadways, physical improvements, visible utilities, and drainage features. This scope of work is proposed based on the understanding that Tim Bell Road will be realigned to meet Caltrans Highway Design Manual (HDM) criteria for new alignment and approach road way geometry. This scope of work is based on additional topography limits to include the revised alignment and associated transitions. Cross sections and tie-in surveys will ensure an accurate design and smooth transitions from existing roadway and infrastructure features. All work and files will be based on project coordinate control in accordance with County requirements for the preparation of documents and maps. Topographic field survey will locate existing site improvements and visible utilities including, but not limited to, trees, ground shots, Tim Bell Road cross sections, striping, bridge structures (Limited survey based on removal of existing structure), headwalls and wingwalls, fences, driveways, pavement elevations, guard rails, Dry Creek cross sections, and other miscellaneous visible features. Cross sections will be taken at 50 foot intervals along Tim Bell Road. Consultant will coordinate with property owners to gain "right of entry" during the field survey. A total of 8 channel cross sections will be taken for utilization in HEC-RAS hydraulic study. Cross sections will be taken as follows:

ROADWAY CROSS SECTIONS:

- 1000' of 50' interval sections for the Northerly roadway approach to the bridge
- 800' of 50' interval sections for the Southerly roadway approach to the bridge
- 50' interval sections along bridge top edge of deck & centerline only

CHANNEL CROSS SECTIONS:

- 9 Sections downstream
- 2 Sections at the existing bridge (1 at upstream face, 1 at downstream face)
- 6 Sections upstream

Deliverables:

- Topographic Base Map
- LandNet survey

WBS 160.20.55 Photogrammetric Maps and Products

COLOR ORTHORECTIFIED AERIAL PHOTO

NorthStar will provide a color orthorectified aerial image which will cover the project limits and will be utilized in the development, planning and design of the proposed project. Aero-Graphics will prepare the color orthorectified aerial photo. NorthStar will set ground control in accordance with aerial flight plan provided by Aero-Graphics, and will provide coordinates and elevations on ground control for aerial orientation. The aerial survey will not include topographic features delineated in AutoCAD, and will not include breakline data. All topographic features and terrain modeling will be provided by conventional survey methods.

Deliverables:

- Orthorectified color aerial image

Exclusions:

1. Services required for the preparation of legal descriptions or other Surveying and Engineering Services not specified in this Scope of Work.
2. Application and processing fees or charges (including County map checking and recording fees). The County will be responsible for payment of all associated fees.

Task 4 - Preliminary Engineering Studies/Strategy Report

Scope Adjustment: All of the costs associated with the services to be delivered under this task are covered under Phase I Contract fees.

WBS 160.10, 185.15 & 185.30

Preliminary Engineering: HDR will complete adequate engineering to scope the project alternatives that include construct new bridge on new alignment and preserve existing bridge and construct new bridge on new alignment and demolish existing bridge. Work will include three layouts adequate to develop the bridge design concepts, develop geometric layouts, and obtain approval from County on strategy to use.

Deliverable: Draft and Final Strategy Report

Task 5 - Utilities

Scope Adjustment: All of the costs associated with the services to be delivered under this task are covered under Phase I Contract fees.

WBS 150.05.15 Utility Search

HDR will coordinate with the utility companies to provide utility documents of their facilities within the project area. Once received, HDR will take this information and provide a utility map to send back to the utility companies to verify their facilities. This is also known as the "A", "B", and "C" letter process identified through the American Public Works Association (APWA) utility coordination process.

WBS 150.15.10 Utility Relocation Requirements Assessment

Once the alternatives are identified, HDR will evaluate the utility conflicts and provide an estimated cost for each.

WBS 160.10.45 Utility Locations Determined for Preliminary Engineering

Provide Updated Utility Estimates, Utility Verification Maps, Verified Utility Locations transferred to plan sheet, Request for Pothole (Pos Loc), Pothole plan, Task Orders, Notice to Owner to Pothole, Report of Investigation to Pothole, Utility Agreement to Pothole, Potholed facility information transferred to plan sheets, and Utility Survey. Potholing will be limited to 4 locations. HDR will coordinate with the potholing company to provide potholing at each location. HDR will coordinate with the traffic control company to provide traffic control plans and traffic control during potholing operations. Consultant will send to applicable utility companies the "A" Letter, the Utility Information Form, and a County-approved

letter requesting verification of the location, size, and depth (if applicable) of each utility company's facilities within the work area or those that might be affected by the proposed work. Information regarding planned utility construction that might affect the project also will be requested.

It is assumed that the existing underground utilities will require potholing 4 locations to positively identify the location and depth of the facilities. It is assumed that potholing can be performed using the Air/Vacuum soil extraction method.

UTILITY IMPACTS

WBS 200 Utility Relocation

HDR will identify utilities and coordinate with their respective agencies for those facilities that may be affected by the project. HDR will take a proactive approach to minimize delays caused by utility company reviews or relocations.

"A", "B", "C" Letter Phases - HDR will coordinate with the respective utility company or agency using the American Public Works Association (APWA) "A", "B", & "C" letter process. HDR will coordinate with utility companies to determine the feasibility to relocate or protect facilities in place as necessary.

Deliverables:

- "A" Letter with Utility "A" Plans (2 copies)
- "B" Letter with Utility "B" Plans (2 copies)
- "C" Letter with Utility "C" Plans (2 copies)

Task 6 - Traffic Studies

Scope Adjustment: All of the costs associated with the services to be delivered under this task will be covered under Phase II Contract fees.

WBS 100 Project Management

Fehr & Peers will provide project management for the transportation engineering team. Specific duties include the following:

- Supervise, coordinate, and monitor traffic study for conformance with Stanislaus County standards and policies
- Prepare invoices
- Prepare, circulate, and file correspondence, memos, and reports as appropriate
- Perform scheduling and coordination
- Prepare monthly progress reports

WBS 160.05.20 Identify Study Locations and Collect Traffic Data

The study locations selected for this study will need to be adequate enough to capture the project impacts and benefits. In consideration of the fact that the project alternatives have not yet been clearly defined Fehr & Peers has made some assumptions regarding the study area.

Fehr & Peers, in consultation with the Project Team, will identify up to four roadway locations to evaluate. Based on a review of the project vicinity, Fehr & Peers has identified the following four locations for the Teams' consideration:

- Tim Bell Road between Claribel Road and State Route 132
- Ellenwood Road between Claribel Road and Oakdale-Waterford Highway

- Oakdale-Waterford Highway between Claribel Road and State Route 132
- Claribel Road between Oakdale-Waterford Highway and Tim Bell Road

Fehr & Peers will collect 24-hour traffic and vehicle classification (car & truck) counts at up to four roadway locations. Fehr & Peers will also perform field surveys to identify existing geometric features, such as number of lanes and posted speed limit.

WBS 160.10.10 Prepare Traffic Forecasts

There is the possibility that one of the Project alternatives may require closing the Tim Bell Road Bridge for an extended period of time during construction. The likely effects of closing the Tim Bell Road Bridge during construction would be a redistribution of traffic on to parallel routes such as Ellenwood Road and the Oakdale-Waterford Highway. Daily level traffic forecasts will be developed for No Build conditions and one alternative that assumes the Tim Bell Road Bridge is closed to traffic during a single construction year. The traffic forecasts will be developed for the same locations identified in WBS 160.05.20.

Fehr & Peers will develop design year traffic forecasts for the No Build Alternative and up to two Build Alternatives. This scope assumes that the build alternatives will be similar in nature (e.g. same start and end points, similar alignments, etc.) such that the traffic forecasts are likely to be similar among the build alternatives. Design year daily forecasts for the Tim Bell Road Bridge will be prepared. Traffic forecasts will be based on a single set of land use and roadway network assumptions using the StanCOG RTP Model. The team will be consulted to determine the most appropriate land use and roadway network assumptions to use for the study.

WBS 160.10.35 Perform Traffic Analysis

The daily traffic counts will be used to determine existing level of service (LOS) for the same roadway locations identified in WBS 160.05.20. For the construction year, a daily roadway analysis will be performed for the event that the Tim Bell Bridge is closed during construction. The locations that will be evaluated are the same as those presented in WBS 160.05.20. The results of the construction impact analysis will be summarized and presented in the same traffic report prepared under WBS 160.10.70.

The design year traffic forecasts developed under WBS 160.10.10 will be used to evaluate the Tim Bell Road Bridge for up to three alternatives including No Build conditions. Changes in ADT and level of service as a result of the Project will be determined. In addition, the number of lanes on the Tim Bell Road Bridge to provide acceptable service levels will also be determined.

WBS 160.10.70 Prepare Traffic Report

Fehr & Peers will prepare the Traffic Operations Report summarizing the results and findings. We will submit a Draft Traffic Operations Report to the project team for one round of review and written comments. We have budgeted up to four hours to respond to written comments and prepare the Final Traffic Operations Report. We will submit the final report in both hard copy and electronic format. For scoping and budgeting purposes, Fehr & Peers has assumed that the project team's environmental firm will make use of the traffic report to prepare the transportation chapter for the environmental document.

Deliverables: Draft and Final Traffic Operations Report

Task 7 - Geotechnical Report

Scope Adjustment: Most of the costs associated with the services to be delivered under this task will be covered under Phase II Contract fees. However, Initial Site Assessment (ISA) Report is covered under Phase I Contract fees.

WBS 150.20.10 Initial Site Assessment (ISA)

Parikh Consultants, Inc (PCI) will prepare Phase I Initial Site Assessment study report for the proposed Tim Bell Road Bridge Replacement project near Waterford, California.

Generally the ASTM recommends a 1.0 mile radius for the data search. The ISA study will be prepared to identify potential hazardous waste sites and evaluate environmental factors that may have impacted the soil groundwater quality within the project limits. The study will include data collection and documents research including historical land use based on study of aerial photographs and other relevant documents. The data research will be ordered from Environmental Data Research Inc. (EDR Inc.) for the proposed project. No field exploration and/or testing are included in this phase of the work.

Deliverable: Phase I ISA Report

WBS 240.65 & 185.20.15/25 Preliminary Foundation Report**Task 7.1 - Research and Data Collection**

Review of readily available geologic and soil literature in the vicinity of the site including review of any as-built drawings and existing LOTB, if any.

Permits/USA Clearances: We will comply with the Agency Permit requirements.

Task 7.2 - Field Exploration

For the bridge structure, we will drill five (5) borings up to 100' in depth. Hollow stem auger drilling is proposed. These explorations will provide an evaluation of subsurface soils/rock conditions for the proposed structure. Two bulk samples will be collected from the roadway subgrade to evaluate the R-value for pavement design.

The boring locations will depend upon the available access and the boring data from previous studies. We anticipate using a truck mounted drill rig for our work and drilling in the general area of the proposed abutment locations. No traffic control is anticipated at this time.

Classify and continuously log subsurface soil conditions encountered in each test boring at the time of drilling. 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 7.3 - Laboratory Testing

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

Task 7.4 - Soils Analysis/Evaluation

Perform engineering analyses and develop design recommendations for the proposed foundations. Concrete piles are expected for the bridge supports. Pavement design will be based on the Traffic Index value (provided by others) and the R-value.

Task 7.5 - Prepare Draft Foundation Report

Prepare preliminary recommendations for foundations. Prepare a Foundation Type Selection Report with the LOTB for the structure. Attend a Type Selection meeting as necessary in Sacramento or Modesto. Develop pavement design recommendations.

Task 7.6 - Prepare Final Foundation Report

Prepare detail report including design recommendations for foundation type and footing elevations lateral design capacities, incorporate potential scour data in the design, evaluate slope stability as necessary at the abutments, pile foundation or spread footing recommendations.

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 1.6) and 2010 updates shall be provided. Information related to the recently revised Seismic design guidelines and the ARS curves (2009) will be provided.

Deliverables: Draft and Final Geotechnical Report; Prepare final Foundation report for the structure; Provide boring log

Task 8 - Hydraulics Report

Scope Adjustment: All of the costs associated with the services to be delivered under this task are covered under Phase I Contract fees.

WBS 160.10.25 Perform Hydraulics/Hydrology Studies**Task 8.1 - Data Review**

WRECO will review available data, including previous studies, provided by the County and the Project Team. Key information to review will be the available hydrologic and hydraulic data for Dry Creek.

Task 8.2 - Field Reconnaissance

WRECO will conduct a field reconnaissance to assess the existing conditions in the vicinity of the Project site.

Task 8.3 - Hydrologic Assessment

WRECO will coordinate with the County to confirm the most recent Dry Creek hydrology. There are the FEMA's design flows and flows from a 1994 study by WH Engineering. WRECO will perform an independent hydrologic analysis using the flow record from the gaging station downstream of Claus Road.

Task 8.4 - Hydraulic Analyses

WRECO will perform hydraulic analyses to determine the design flow characteristics for the existing condition and the proposed bridge. WRECO will coordinate with the Project Team to obtain the surveyed canal cross-sections for building the hydraulic model.

Task 8.5 - Bridge Location Hydraulic Study

WRECO will perform a Bridge Location Hydraulic Study and conduct a floodplain risk assessment for the proposed Project. WRECO will prepare a Bridge Location Hydraulic Study Memo, which will include the standard Summary of Floodplain Encroachment Form and technical discussions.

Deliverables: Bridge Location Hydraulic Study Memo (Draft and Final)

WBS 185.20.10 Prepare Hydrology and Hydraulic Reports

Task 8.6 - Scour Analysis

WRECO will perform a bridge scour analysis to determine the scour potential for the proposed Project per the methodology specified in the Federal Highway Administration's HEC-18 and HEC-23 Manuals. WRECO will make recommendations on the need for scour countermeasures.

Task 8.7 - Bridge Design Hydraulic Study Report

WRECO will prepare a Bridge Design Hydraulic Study Report to summarize the results from the hydraulic and bridge scour analyses and recommendation for bridge scour countermeasures. The report will include all the detailed hydraulic model output.

Deliverables: Bridge Design Hydraulic Study Report (Draft and Final)

Task 9 - Public Outreach

Scope Adjustment: All of the costs associated with the services to be delivered under this task are covered under Phase I Contract fees.

WBS 175.10 Prepare for, and Hold Public Hearings

The following communications tools are recommended for the overall Public Involvement Plan for the Tim Bell Road Bridge Replacement Project:

Task 9.1 - Database Mailing List/Comments Matrix (Up to 500)

Creation and management of an accurate project database will be the first step in beginning communications with the impacted public. The database will include up to 500 contacts such as property owners, Waterford Historic Society, local, state, and federal agencies, elected officials, media, environmental organizations, school districts, the Stanislaus Farm Bureau, and more. Direct communications with the impacted properties will occur early and often to ensure their continued engagement and understanding of the issues.

Along with the database, a comments matrix will be created and maintained during the course of the project. The matrix will track all comments received from the public and stakeholders and categorize them for ease of reviewing.

Task 9.2 - Property Owner/Stakeholder Coordination

Direct communications with the impacted public will be a critical component to the success of the public involvement plan and ultimately, the project. Working closely with the Project Engineer, the Public Involvement Staff will coordinate and attend up to 8 property owner, stakeholder meetings during the course of the project scheduled in two rounds. The initial meetings will be scheduled at the onset of the project to gather initial data and concerns from the target stakeholders. The second round will occur following the release of the draft environmental document and prior to the public meeting to walk through the proposed alternatives and garner feedback. A meeting summary of comments will be developed following each meeting or discussion.

Task 9.3 - Environmental Process Noticing (2 Ads, 2 Newsletter Invitations)

As required, public noticing of the NOI/NOP, and environmental document circulation will occur at key milestones. HDR will take the lead on the development and coordination of approval of these documents with the client. On behalf of the project team, we will manage the coordination and promotion of the process and subsequent environmental document working closely with a local print house/mail house for distribution.

It is anticipated that we will produce 2 advertisements to be distributed to local and regional media (possible suggestions: Modesto Bee, Waterford News) for the NOI/NOP as well as the circulation of the draft document. Lastly, it is recommended that the plan include the production of 2 newsletter invitations to be distributed prior to the scoping meeting and board meeting. The newsletter invites will be mailed using standard USPS as well as electronically and will also be hand delivered to Waterford City offices, the Library, local restaurants and other key gathering places.

The first newsletter will be distributed at the beginning of the project to announce the project, layout the process, educate the public on the bridge issues and invite them to attend the scoping meeting. Newsletter two will focus on the draft feasible alternatives that will move forward through the environmental process. It will describe them at a high level and invite the public to participate in a public meeting to provide input on the draft environmental document. The newsletters will be two-sided, full color and no larger than 8.5x11 in size. It is recommended that all materials be printed in Spanish as well as English to ensure clear communications and understanding by the target audience.

Task 9.4 - Media Relations (2 Press Releases)

By working closely with the local and regional media to promote the project and get key project information published, we will be able to capitalize on all communication mediums. We anticipate working with multi-lingual media outlets to distribute up to two press releases at key milestones. The outreach team will work closely with the media to ensure any coverage highlights correct project information and promotes opportunities for the public to participate.

Task 9.5 - Ethnic Outreach

Due to the diverse community, our outreach team will coordinate with language interpreters and translators to ensure that our materials and meetings are bi-lingual in Spanish and English. We will work with proven vendors who we have long standing relationships with to ensure our materials are understood within the community. We anticipate translating all materials into Spanish and providing interpreters at the Scoping and Public Meeting.

Deliverables:

- Database
- Two (2) newsletters
- Two (2) press releases

Task 10 - Bridge Type Selection Report

Scope Adjustment: All of the costs associated with the services to be delivered under this task are covered under Phase I Contract fees.

WBS 240.75

Work shall be in accordance with Caltrans standards, including but not limited to, the following Caltrans' documents: LRFD Bridge Design Specifications, Bridge Design Aids, Bridge Design Details, Bridge Memo to Designers, Standard Specifications and Plans, and Traffic Manual. Work shall be performed to the satisfaction of County and in English units.

Prepare a Preliminary Bridge Type Selection Report for bridge. The report shall include the general description, design and construction data, general plan and structure type selection considerations and recommendations and the preliminary geotechnical recommendations. A Type Selection Review Meeting will be held at Stanislaus County in which HDR shall be prepared to discuss and provide information on foundation requirements, falsework requirements, seismic and aesthetic considerations, traffic handling, construction cost and other pertinent information that is needed to determine the proper structure type. Copies of the proposed General Plan, General Plan Estimate, and Type Selection Memo shall be submitted

for review two weeks prior to the "Structure Type Selection" Review Meeting. County will provide summaries of the meeting to the Consultants within two weeks.

Deliverables:

Preliminary Bridge Type Selection Report

Ten (10) copies of Structures General Plans (11"x17") and Structure Type Selection Reports that includes General Plan Estimate for each structure

Structure Type Selection Review Meeting includes Structures General Plans and Type Selection Memo

Bridge General Plans: will be prepared by HDR for the selected structure type (1-inch = 20-foot scale)

Task 11 - Prepare Environmental Documents

Scope Adjustment: Most of the costs associated with the services to be delivered under this task will be covered under Phase I Contract fees. However, some additional services were added to this task which. The additional services will be cover under Phase II Contract fees.

WBS 165 Perform Environmental Studies and Prepare Draft Environmental Document

The Sycamore Environmental team understands the environmental processes required by the Local Assistance Programs Manual (LAPM) for federally funded bridge and highway projects. Specific services to be conducted are divided into the tasks and described below. We have included the Caltrans Work Breakdown Structure # (WBS) for each task as applicable.

Task 11.1 - Preliminary Environmental Study and Field Review

The Preliminary Environmental Study (PES) is the first step in the Caltrans process to determine what studies are needed to identify the potential presence of sensitive environmental resources within the project area. Sycamore Environmental will prepare the PES Form in accordance with Chapter 6.3 and Exhibit 6-B of the Local Assistance Procedures Manual and attend the Caltrans Field Review Meeting. The PES will identify technical studies, coordination, and permits required to complete NEPA. Caltrans approves and signs the PES.

Task 11.2 - Natural Environment Study (NES) Report

WBS 165.15.20

Sycamore Environmental will prepare the NES. The NES incorporates the results of biological studies and coordination with the resource agencies. A NES report describes the existing biological environment and how the project affects that environment and provides the technical concerning plants, animals and natural communities occurring in the project study area. Chapter 2 of the Caltrans Standard Environmental Reference (SER) Environmental Handbook Volume 3 provides the methods, procedures, and standards for an NES report. The NES will include a conceptual Revegetation Plan.

Task 11.3 - Wetlands Study

WBS 165.15.10

Sycamore Environmental will conduct a Wetlands Study of the project study area in accordance with the SER. Chapter 3 of the Environmental Handbook Volume 3 (Caltrans 3 January 2003) provides the methods, procedures, and standards for a Wetlands Study. The Wetlands Study will include a formal jurisdictional delineation of wetlands and waters of the U.S. conducted in accordance with the 1987 Corps Wetland Delineation Manual, Regulatory Guidance Letter 05-05, the Regional Supplement, and the Sacramento District minimum standards.

Task 11.4 - Biological Assessment

WBS 165.15.05

The document used for federal Endangered Species Act (ESA) consultation is a Biological Assessment (BA), a document similar to the NES but focused solely on federal listed and proposed species and critical habitat. Chapter 14 of the Environmental Handbook Volume 1 and Chapter 4, Volume 3 provides the methods, procedures, and standards for a Biological Assessment. The Biological Assessment will be prepared using the current Caltrans format.

Task 11.5 - Resource Agency Permit Related Coordination

WBS 165.15.15

Sycamore Environmental will consult and coordinate with resource agencies as necessary to complete the biological studies. This task includes coordination with DFG, USFWS and the Corps to ensure that agency comments, recommendations, and required avoidance, minimization, and mitigation measures are incorporated in the NES and BA. Sycamore Environmental will coordinate with Caltrans and USFWS and NOAA Fisheries to obtain documentation of FESA compliance, as appropriate.

Task 11.6 - Farmland Impact Memo and Form AD 1006

WBS 165.10.15

Potential impacts to farmlands will be addressed in a Farmland Impact Memo in accordance with the Caltrans Environmental Handbook Volume 4 (Community Impact Assessment (1997)). As part of the farmland impact assessment, Form AD 1006, which assess farmland impacts, must be completed in coordination with the Natural Resources Conservation Service (NRCS). Under this task Sycamore Environmental will prepare a Farmland Impact Memo and Form AD 1006.

Task 11.7 - Water Quality Assessment Memo

WBS 165.10.35

Sycamore Environmental will prepare a Water Quality Assessment Memo in accordance with Caltrans standards. The Water Quality Assessment Memo will address the following general components; regulatory setting and permits (e.g. Porter-Cologne Water Quality Control Act and Section 303(d) of the federal Clean Water Act); affected environment; potential water quality impacts (long and short term); and appropriate avoidance, minimization, and/or mitigation measures.

Task 11.8 - Archaeological Survey Report

WBS 165.20.05.25

In accordance with Caltrans Environmental Handbook Volume 2, Far Western will prepare the Area of Potential Effects (APE) Map and an Archaeological Survey Report based on the APE map to identify archaeological resources in the study area that are eligible or potentially eligible for listing on the National Register of Historic Places or the California Register of Historical Resources. Far Western will assist JRP to prepare the HPSR regarding archaeological resources and Native American and Interested Party consultation.

Task 11.9 - Historical and Architectural Resource Studies

WBS 165.20.20

TASK 11.9.1 - ASSIST WITH STRATEGY DETERMINATION. JRP will assist the project team with strategy determination, providing input regarding compliance issues about the historic bridge during the identification and comparison of feasible project alternatives.

TASK 11.9.2 - ESTABLISH APE. JRP will assist HDR establish the APE for historic architectural resources. HDR will submit the APE graphic to the County for Caltrans approval and signature.

TASK 11.9.3 - CONDUCT PUBLIC PARTICIPATION. As part of the project requirements for Section 106 compliance and upon County approval, JRP will send letters regarding the project to parties interested in historic sites and architectural resources, and collect responses;

TASK 11.9.4 - REVIEW PREVIOUS DOCUMENTATION AND STUDIES. JRP will review previously prepared documentation regarding historic architectural resources in the APE. Project archaeologists will conduct a records search at the appropriate Information Center and share the results with JRP, as they pertain to historic architectural resources.

TASK 11.9.5 - CONDUCT ON-SITE INSPECTION. JRP will visually inspect and photograph the bridge and other built environment properties in the APE.

TASK 11.9.6 - CONDUCT RESEARCH. JRP will conduct general and property specific research to develop the appropriate historic context for resources in the APE. JRP will undertake research at the Stanislaus County Public Library; McHenry Museum and Historical Society; Stanislaus County Recorder, Assessor, and Public Works; libraries at the University of California, Davis; California State Library in Sacramento; and other repositories as necessary.

TASK 11.9.7 - PREPARE HRER. JRP will undertake field work and research to inventory and evaluate the properties in the APE, and will prepare an HRER with the required DPR 523 forms. The HRER will incorporate previous identification of the Tim Bell Road Bridge and will update the recordation and evaluation of the former Waterford Irrigation District lateral.

TASK 11.9.8 - PREPARE HPSR. JRP will prepare the HPSR with assistance from team archaeologist regarding archaeological resources and Native American coordination. Team archaeologist will provide JRP the Archaeological Survey Report (ASR) for inclusion in the HPSR.

TASK 11.9.9 - PREPARE FOE. JRP will prepare a FOE to assess whether the project will have an adverse effect on historic properties.

TASK 11.9.10 - ASSIST WITH MOA. JRP will prepare a draft MOA, if necessary, to address measures to mitigate adverse effects to historic properties (Tim Bell Road Bridge), providing assistance in considering various mitigation measures to help reduce adverse effects the project will have on historic properties. The MOA signatories will finalize the document prior to signing it.

Following work shall not proceed without written approval from the County. When County written approval is received by HDR, HDR will give written authorization for Far Western to proceed with following work. Far Western will conduct subsurface testing for buried archaeological resources, if necessary. An Extended Phase I is an identification effort that supplements the initial inventory and pedestrian survey. Backhoe trenching would occur in areas where research has found high sensitivity for buried resources. The results will be incorporated into the ASR.

Task 11.10 - Programmatic Section 4(f) Evaluation

WBS 165.25.10

The Federal Highway Administration developed a nationwide programmatic evaluation for Section 4(f) properties for Historic Bridges that may be used only for projects designed to improve operational characteristics, safety and/or the physical condition of an existing highway on essentially the same alignment. Sycamore Environmental will prepare a Programmatic Section 4(f) evaluation for Historic Bridges using the Caltrans' Programmatic Section 4(f) Evaluation Annotated Outline.

There is no requirement to coordinate with the Department of Interior and as appropriate the Department of Agriculture and the Department of Housing and Urban Development. Interagency coordination is still required with the agency having jurisdiction over the resource. It does not require a legal sufficiency or HQ review. The Programmatic Section 4(f) Evaluation must be approved by Caltrans before the NEPA document is approved. Public circulation of the Programmatic Section 4(f) Evaluation is not required.

Task 11.11 - CEQA/ NEPA Documentation

WBS 165, 175, 180.10.05

The technical studies and agency coordination that satisfy NEPA also support CEQA. Caltrans prepares its NEPA document, which is expected to be a 6004 NEPA Categorical Exemption. Sycamore Environmental will coordinate with Caltrans for NEPA Categorical Exemption documentation, including wetlands only practicable findings, flood plains only, and other findings, as applicable.

Sycamore Environmental will prepare the Environmental Document (ED) using the County's EIR format. The focus of the EIR would analyze project impacts to historic resources. The general approach to the analysis will include defining the standards of significance, determining the significance of potential impacts, and identifying mitigation measures to reduce the significance of the impact. Pursuant to the CEQA Guidelines, the Draft EIR will address cumulative impacts, growth inducing impacts, and irreversible environmental effects. An analysis of project alternatives will be provided under this scope. WBS codes are listed for the major levels and deliverables for the Draft and Final EIR.

TASK 11.11.1 - DRAFT ENVIRONMENTAL DOCUMENT

WBS 165.25

Prepare an administrative CEQA draft environmental impact report (EIR) (or Administrative DED) using the County's format. The document will summarize the results of environmental technical studies,

document the project Purpose and Need, the alternatives development and screening process, and summarize the public outreach process conducted as part of environmental compliance.

TASK 11.11.1 - CIRCULATE DRAFT ENVIRONMENTAL DOCUMENT AND SELECT PREFERRED PROJECT ALTERNATIVE IDENTIFICATION

WBS 175.05

Prepare, publish and distribute the CEQA Draft EIR (Draft ED).

Prepare draft notices of publication and availability of the Public Review Draft ED (CEQA) and prepare draft public advertisements for County to publish in newspapers of general circulation. Advertisements will follow the standard Caltrans ad format.

TASK 11.11.1 - PREPARE AND APPROVE FINAL ENVIRONMENTAL DOCUMENT AND RESPONSE TO COMMENTS

WBS 180.10.05

Prepare an Administrative Draft Final EIR (Administrative Final Environmental Document [ED]) incorporating responses to comments received during the public circulation period and focusing on the identified preferred alternative. An Administrative Draft Final ED, revised Administrative Draft Final and Draft Final ED will be prepared for review by the County.

The Final ED will include responses to comments received on the DED.

The Final ED will include the revised Final Section 4(f) Evaluation which will be updated based on comments from participating agencies and any modifications to the identified preferred alternative.

The Final ED will include records of consultations which must be concluded prior to publication of the Final ED. This will include CEQA Findings and Statement of Overriding Considerations which will be adopted by the CEQA lead agency, a Mitigation Monitoring Reporting Plan, an approved and signed Section 106 MOA (if required), and any updated consultation to obtain a Biological Opinion from the U.S. Fish and Wildlife Service under the federal Endangered Species Act.

I. Deliverables

The Deliverables will include an electronic copy in Microsoft Word .doc and Adobe .pdf formats and hard copies. All deliverables assume up to two rounds of review by the County and Caltrans. Electronic copies will be provided on CD or via email. Photographs will be provided in .jpg format. CAD and GIS files will be provided.

Deliverables for all tasks except Task 11

- County review draft: Two hardcopy draft reports, MS Word, and .pdf formats
- Caltrans initial review draft: Two hardcopy draft reports, MS Word, and .pdf formats
- Five final copies each for County and Caltrans. (4-bound, 1-unbound).

Deliverables for Task 11

- County review Administrative DED: Two hardcopy draft reports, MS Word, and .pdf formats
- Public Review Draft ED: 15 hardcopies for the State Clearinghouse, 10 hardcopies for the County plus electronic copies in MS Word and PDF formats.
- Administrative Draft Final ED: Two hardcopy, MS Word, and PDF formats for County review

- Revised Administrative Draft Final ED: Two hardcopy, MS Word, and PDF formats for County review.
- Draft Final ED: Two hardcopy, MS Word, and PDF formats for County review.
- Final ED: 10 hardcopies for the County plus electronic copies in MS Word and PDF formats.

II. ASSUMPTIONS

- Biological studies will be conducted according to the project schedule.
- The Jurisdictional Delineation report will be submitted to the Corps with a request for a preliminary jurisdictional determination (PJD).
- Sycamore Environmental will submit Caltrans review drafts to County for County to submit to Caltrans.
- Sycamore Environmental will prepare the Notice of Intent to Adopt an EIR. County will post the NOI at the County Clerk's office and in the local newspaper of record. County will prepare the Notice of Determination, staff reports, presentations, recommendations, and findings for the Board of Supervisors.
- The County will provide all applicable permit application fees.
- CEQA and NEPA environmental documents must be completed before environmental permits can be obtained.
- The project does not require a permit/ lease with the State Lands Commission.
- The project is not in a designated floodway and does not require an encroachment permit from the Central Valley Flood Protection Board/ State Reclamation Board.

Task 11.12 – Visual Impact Assessment

WBS 165, 175, 180.10.05

HDR will prepare an Advanced/Complex Visual Impact Assessment that will assess the potential visual impacts of the proposed build alternatives. The visual evaluation shall consider both the "view from the road" and the "view of the road." This analysis shall be conducted in accordance with the Caltrans SER Guidance, and Caltrans Visual Impact Assessment (VIA) Checklist. The report will be prepared in the established Caltrans format and under the direction of a California licensed landscape architect.

Field Work/Establish Key Observation Points. HDR will coordinate with Caltrans and members of the project team to make one visit to the project site and its surrounding areas to assess the visual context of the project. Up to 6 Preliminary Key Observation Points (KOPs) will be verified during this site visit and may be changed depending upon the sensitivity of lack of sensitivity of a specific KOP. A digital photographic inventory will be taken from these Final Key Observation Points. Prior to this field work and verification of the Preliminary KOPs, HDR will verify and receive approval on these Preliminary KOPs with Caltrans. If a Preliminary KOP must be relocated due to its sensitivity or lack of sensitivity, HDR will gain approval of the new location prior to any further work. Photo-simulations will be prepared illustrating the "before and after" conditions of the proposed project. This proposal reflects the preparation of up to two visual simulations. Should additional KOPs be required or requested, these additional KOPs can be addressed through an amendment to the scope and budget.

Visual Criteria Matrix. HDR will use the data gathered in the previous task to subjectively measure each KOP (to and from) relative to visual quality. The report will include photos to support these measurements. HDR will then develop a visual criteria matrix which will summarize the measurements of

each view. The purpose of this matrix will be to objectively compare the visual impacts to/from each KOP of the existing site versus the proposed project.

Preparation of Visual Assessment Report. HDR will prepare a Draft Visual Impact Assessment based on the conclusions of the Visual Criteria Matrix. The report will include: justifications for the location of each KOP; photographs to and from each KOP; narrative describing the communities surrounding each KOP; the Visual Criteria Matrix; narrative describing the purpose of the matrix; narrative describing the conclusions illustrated in the matrix; and possible measures to mitigate any negative visual impacts resulting from the project. Upon receipt of the review comments, HDR will revise the Visual Impact Assessment for Caltrans review and approval.

Task 11.13 – Noise Abatement Decision Report

WBS 165, 175, 180.10.05

A noise-sensitive receptor is located along the project alignment: the single-family residence located along the west side of Tim Bell Road. As the proposed project will be changing the vertical and horizontal alignment of Tim Bell Road it is a Type I project that will require a Noise Study Report (NSR).

HDR will prepare an NSR consistent with the Caltrans Noise Analysis Protocol (Protocol, May 2011) and Technical Noise Supplement (TeNS, September 2013) to address traffic noise impacts on noise-sensitive uses. Noise standards regulating noise impacts, including the Noise Abatement Criteria (NAC) and applicable local noise ordinances, will be discussed for land uses located adjacent to the project. The areas with potential future traffic noise impacts will be identified using land use information, aerial photographs, and field reconnaissance. A discussion of any existing sensitive uses and approved future residences in the project vicinity will be included.

Ambient noise level measurements will be conducted to establish the existing noise environment at representative noise-sensitive land uses within the project area. Short-term (20-minute) noise level measurements will be made with concurrent traffic counts to document the existing noise environment and to calibrate the traffic noise model. Observations of other noise sources, barriers, terrains, building heights, and other site-specific information will be noted during each measurement period.

The FHWA Traffic Noise Model (TNM), Version 2.5, will be used to evaluate the traffic noise levels associated with the Existing, Future No Build, and Build Alternatives. Model input data include peak-hour traffic volumes, vehicle mix among autos, medium and heavy trucks, vehicle speeds, ground attenuation factors, and roadway configurations. Existing roadway traffic noise will be calculated as baseline conditions, using concurrent traffic counts obtained during ambient noise level measurement. The future traffic conditions will assume either the worst-case traffic condition or the projected traffic volumes provided in the traffic study.

Noise abatement measures (sound barriers) designed to reduce long-term traffic noise impacts by 5 A-weighted decibels (dBA) or more, as required to be feasible, will be evaluated. A reasonable allowance per residence and total reasonable allowance per residence will be calculated for each sound barrier.

HDR will prepare a Noise Study Report with appropriate mitigation measures regarding noise and vibration and (if necessary) a Noise Abatement Decision Report (see optional task below).

Optional Task: Noise Abatement Decision Report

If feasible sound barriers are identified in the NSR, HDR will prepare a Noise Abatement Decision Report (NADR), as defined in the Protocol. The report will summarize the preliminary reasonableness determination from the NSR, present the engineer's cost estimate for the evaluated abatement, evaluation of non-acoustical factors related to feasibility, preliminary noise abatement decision, and secondary effects of abatement (impacts on cultural resources, scenic views, hazardous materials, and biology). HDR will prepare the NADR consistent with Caltrans report guidelines with the best information available.

Task 11.14 - Community Impact Assessment

WBS 165, 175, 180.10.05

Caltrans included a Community Impact Assessment (CIA) on the signed PES. The CIA will enable the assessment of the proposed Tim Bell Bridge replacement's impacts on the community and for achieving context sensitive solutions in the design of the +900 foot long new structure. The Caltrans Environmental Handbook Volume 4, Community Impact Assessment (2011) provides guidance for preparing the CIA. The CIA will address those community impact issues relevant to the proposed project. The CIA touches on a number of topics that are addressed in other technical reports and memorandum, as well as the CEQA Initial Study. A community profile will be prepared. Land use, farmlands, and growth topics will be discussed. Social and economic impacts, along with Title VI and environmental justice will be addressed. Relocation is not anticipated. Caltrans highlighted the need for the farmland discussion.

Subtasks:

- Coordinate with County and Caltrans on the scope of issues addressed in the CIA report.
- Delineate the CIA study area.
- Prepare County review draft CIA Report as described in Caltrans Environmental Handbook Volume 4, Community Impact Assessment (2011).
- Incorporate County comments and prepare Caltrans review draft CIA Report
- Incorporate Caltrans comments and prepare Caltrans final CIA for County submittal to Caltrans.

Deliverables:

- County Review Draft CIA Report. Two unbound copies and one electronic copy.
- Caltrans Review Draft CIA Report. Two unbound copies and one electronic copy.
- Final CIA Report. Five bound copies and one electronic copy.

Task 11.15 - Extended Phase Investigation

WBS 165, 175, 180.10.05

Conducted a Record Search and summarized the results in a December 2013 letter. The letter indicated that there was a high sensitivity for buried archaeological sites on the north side of the creek. Far Western will prepare draft and final version of an XPI Work Plan for County and Caltrans approval prior to conducting an XPI and hand excavations to test for the presence of prehistoric deposits. Following the field investigations, Far Western will prepare draft and final versions of an XPI Findings Reports summarizing the results of the XPI studies. For the purpose of budgeting, this task does not include artifact collection.

Activities:

- Attend one (1) conference call or meeting with County to discuss survey findings and strategy for fieldwork
- Coordinate Native American monitoring at Project site.
- Conduct hand excavation for presence or absence of buried cultural resource.
- Prepare Draft XPI Work Plan and Draft XPI Findings Reports and submit to County and Caltrans for review and comment.
- Prepare Final XPI Work Plan and Final XPI Findings Report, incorporating County's and Caltrans comments, and submit to COUNTY and Caltrans.

Deliverables:

- Draft and Final XPI Work Plan.
- Draft and Final XPI Findings Report.

Schedule:

- Draft and Final XPI Work Plan shall be submitted to County and Caltrans for review and comment within six (6) weeks of receipt of the Task Order or Work Order.
- Draft and Final XPI Findings Report shall be submitted to County and Caltrans within three (3) weeks after completion of the field investigation.

Task 12 - Permitting

Scope Adjustment: All of the costs associated with the services to be delivered under this task will be covered under Phase II Contract fees.

WBS 205.10

Sycamore Environmental will prepare applications for a section 404 permit from the U.S. Army Corps of Engineers, a section 401 water quality certification from the Regional Water Quality Control Board (RWQCB), and a 1602 Streambed Alteration Agreement from the California Department of Fish and Game (DFG). For an HBP project with a NEPA CE, we anticipate the project would be authorized under a Nationwide 23 permit. A conceptual mitigation plan and mitigation requirements in the NES and IS/MND will support the permit applications. Sycamore Environmental will coordinate as necessary with the agencies to obtain the permits on the County behalf. The County will provide application fees.

Task 13 - Caltrans District 10 Work Plan and Environmental Commitments Record and Coordination

Scope Adjustment: All of the costs associated with the services to be delivered under this task will be covered under Phase II Contract fees.

WBS 180.15.20, 205.10.60

Sycamore Environmental will prepare and maintain the Caltrans District 10 Local Assistance Work Plan and Tracking Sheet and respond to County and Caltrans questions regarding the work plan. The work plan lists the project tasks, milestones, and responsible parties for completing various project task components.

Sycamore Environmental will compile and maintain the Environmental Commitments Record for the biological and cultural phases of the Project. The Environmental Commitments Record includes the avoidance, minimization measures, permit conditions, and mitigation requirements.

Sycamore Environmental will coordinate as requested with the Project Coordinator and the design team to obtain or exchange data, develop design alternatives, and discuss scheduling implications of environmental regulations. We will prepare status memos to assist the County to monitor project progress. We assume a half-hour long teleconference with the County and the County's engineering consultant every other week for the duration of the project.

Task 14 - Prepare 30% Bridge General Plan and Foundation Plan

Scope Adjustment: All of the costs associated with the services to be delivered under this task will be covered under Phase II Contract fees.

WBS 230 and 240.75

Concurrent with obtaining approval of the environmental documentation, HDR will proceed with completion of the 30% Design for the project in order to expedite the schedule for completion of the project.

30% Design - Bridge General Plan and Roadway Geometric Design

Task 14.1 - Bridge General Plans

HDR will prepare the Bridge general Plans for the selected bridge types. The Bridge General Plans for the selected bridge types, the Bridge General Plans will be prepared as a scale of 1"=20'.

Task 14.2 - Roadway Geometric Design

HDR will prepare preliminary roadway geometric design drawings for the project. These drawings will include layouts, profiles, and typical sections, superelevations, stage construction, conceptual drainage, and survey base maps. These preliminary roadway drawings will be prepared at a scale of 1"=50'.

Task 14.3 - Review and Approval

The Bridge General Plan and Roadway Geometric Drawings will be furnished to the County for review and approval.

HDR will submit upon completion of 30% design work:

- "Structure Type Selection"
- Ten (10) copies of 11"x17" General Plan, General Plan Estimate, Type Selection Memo, Vicinity Map
- Ten (10) copies of 11"x17" Roadway Plan, Profile, Superelevation, Typical Sections, and Stage Construction
- Two (2) copies of Hydrology Report

After Approval of General Plan

- Ten (10) copies of 11"x17" General Plan incorporating County comments

Task 15 - Right of Way Work

Scope Adjustment: All of the costs associated with the services to be delivered under this task will be covered under Phase II Contract fees.

WBS 220 and 225**CALTRANS RIGHT OF WAY DATA SHEETS AND COST ESTIMATES - PROGRAM OVERVIEW**

OPC has been tasked with analyzing and researching the right of way impacts of the proposed Tim Bell Road Bridge Project, assessing any temporary and permanent easement and permanent fee impacts for up to (3) unique Assessor's Parcel Numbers. Information ascertained from this analysis will be used to assist in the clarification of design concerns throughout the planning and PSE phases of the project. Additionally, the identification of critical property acquisitions will influence program management decisions pertaining to the project delivery schedule, project financing, project risk management approaches and other significant factors. OPC will facilitate the integration of this analysis into the appropriate project documents and assist the project team in understanding how the right of way component of the project influences all aspects required for a successful project delivery.

Task 15.1 - Design Review and Project Team Coordination

TASK 15.1.2 - Ascertain all relevant design plans available for review of project impacts.

TASK 15.1.3 - Coordinate with Project Design Team to review impacts and confirm impact assumptions.

TASK 15.1.4 - Continue coordination with Design Team as new findings are revealed throughout field research phase.

Task 15.2 - Field Research

TASK 15.2.1 - Individual field agent design review of assigned parcels. Individual meetings with appropriate OPC management ensue, as necessary to examine impacts and potential remediation possibilities.

TASK 15.2.2 - Physical viewing of site, appropriate data recorded. Online data of individual properties incorporated into field research, where necessary.

TASK 15.2.3 - Integration of field research into appropriate OPC cost estimating formats.

Task 15.3 - Property Analysis

TASK 15.3.1 - Field Agent and OPC Property Analysts meeting to discuss data and draw impact conclusions and property remediation strategies.

TASK 15.3.2 - Reporting to Design Team of initial property impact conclusions. Opportunities provided to Project Team for creative problem-solving either in design or property remediation strategies.

Task 15.4 - Caltrans Data Sheet Drafts

TASK 15.4.2 - Preparation of latest approved Caltrans Right of Way Data Sheet form, and draft per the standards and guidelines presented in the revised Caltrans Right of Way Manual.

TASK 15.4.2 - Coordination with relevant Caltrans district representatives and/or design leads to address comments and recommendations.

Task 15.5 - Quality Assurance Reviews / Report Drafts and Submittal

TASK 15.5.1 - Concurrent with the Design Team's review of OPC's initial conclusions on select parcels, the OPC QA/QC Team will review its internal data reporting, analysis and conclusions for accuracy and consistency.

TASK 15.5.2 - Once property remediation and design assumptions are finalized and property impact conclusions are confirmed, data is finalized into the approved cost estimating formats

TASK 15.5.3 - The report is subsequently submitted to the client for their formal review.

Task 15.6 - Project Oversight and Post-Submittal Design Team Follow-up

TASK 15.6.1 - Review of initial comments from Project's Design Team and possible coordination of subsequent team meetings to clarify assumptions and strategize about cost and/or remediation strategies.

TASK 15.6.2 - Potential new analyses are determined from revised assumptions.

TASK 15.6.3 - Incorporation of new analysis and conclusions into the revised cost estimate analysis and subsequent re-submittal of report, where necessary.

Task 15.7 - Acquisition Services

TASK 15.7.1 - RIGHT OF WAY MANAGEMENT AND DOCUMENT SUPPORT

1. Preparation of a comprehensive project planning worksheet designed to ensure all project elements are considered and the work plan and client's policies are clearly understood.
2. Tracking and managing all budgetary-related aspects of the project associated with OPC's Scope of Work.
3. Assisting with the development of administrative policies, procedures and forms necessary to carry out the initial program.
4. Ongoing general consultation and project coordination with the client, social service agencies, governmental entities and project team members.
5. Representation of the client at public meetings, hearings and litigation related matters.
6. Preparation of tracking reports that monitor the completion of project milestones of the various disciplines involved on the project.
7. Preparation and presentation of a monthly written status report based on the agreed-upon guidelines on information to be provided. Confer weekly with client verbally on general status, problem areas, and progress.
8. Coordination with federal and state oversight agencies such as Caltrans, HUD, FHWA, FAA and FTA.
9. Subcontracting for and managing all necessary disciplines needed for the project.

TASK 15.7.2 - TITLE INVESTIGATION SERVICES

1. Secure vesting deeds, property profile, and tax map for each property.
2. Secure copies of recorded back-up documents as needed.
3. Share preliminary title information with right of way engineer, surveyor, and real estate appraisers for their use on the project.
4. Facilitate changes to preliminary title reports after the preparation of the legal descriptions if necessary for partial acquisition projects.

TASK 15.7.3 - APPRAISAL AND APPRAISAL REVIEW SERVICES

1. Appraiser will mail a notification letter and acquisition policies brochure to the property owner, requesting permission to conduct an on-site inspection of the property, advising them of their right to accompany the appraiser at the time of the inspection, and requesting information regarding the property appraised which could influence the appraised value.

2. Appraiser will review title information pertaining to respective ownerships and will review drawings and other pertinent information relative to the parcel.
3. Appraiser will inspect each property personally with the owner (if possible) and document the inspection with photographs for use in the report.
4. Appraiser will inventory all improvements affected by the proposed taking including notes on their manner of disposition (i.e., pay-for and remove vs. move back).
5. Further, Appraiser will retain a specialty appraisal to establish the value for fixtures & equipment for non-residential full take properties.
6. Appraiser will perform market research to support the selected appraisal methodologies and will document and confirm comparable sales information.
7. Appraiser will prepare a narrative appraisal report that conforms to the Uniform Standards of Professional Appraisal Practice (USPAP). The appraisal study and report are intended to serve as an acquisition appraisal and will be prepared in a summary format consistent with the specifications for narrative appraisal reports.
8. Upon completion of the fee appraisal, OPC will conduct a formal review by an independent appraiser in accordance with federal regulations and Caltrans procedures manual.
9. OPC will receive and analyze the completed appraisal reports and will reconcile the real estate and fixtures and equipment conclusions as necessary.

TASK 15.7.4 - NEGOTIATE RIGHT OF WAY SETTLEMENT AND PREPARE ACQUISITION DOCUMENTS - FEE OWNER

1. Establish and maintain a complete and current record file for each ownership in a form acceptable to the client.
2. Receive and analyze title information, approved appraisal reports and legal descriptions in sufficient detail to negotiate with property owners and other parties.
3. Prepare all offer letters, summary statements, and lists of compensable items of fixtures and equipment, in accordance with state or federal regulations and approval of client.
4. Present written purchase offers to owners or their representatives in person, when possible. Secure receipt of delivery of offer as practical and present and secure tenant information statements, as applicable.
5. Follow-up and negotiate with each property owner, as necessary; prepare and submit recommended settlement justifications to client for review and approval; review any independent appraisal secured by property owner and coordinate reimbursement of appraisal fees (up to \$5,000) with client. Ongoing negotiations and settlement discussions will continue for 8 weeks after the initial offer or until we reach settlement or impasse.
6. Prepare and assemble acquisition contracts, deeds and related acquisition documents required for the acquisition of necessary property interests. Legal descriptions to accompany easements or to accompany partial acquisition deeds are not included in this Scope of Work.
7. Maintain a diary report of all contacts made with property owners or representatives and a summary of the status of negotiations indicating attitude of owners, problem areas, and other pertinent information. Copies of all applicable written correspondence will be maintained in files.
8. Prepare an impasse letter for any parcel where, after diligent attempts to settle by negotiation, it appears eminent domain will be needed or prudent to acquire the needed interest.
9. Transmit executed acquisition documents to client. Each transmittal package shall include a fully executed and properly notarized deed(s), fully executed acquisition contract with attachments, and a brief settlement memorandum which summarizes the pertinent data relative to the transaction.

TASK 15.7.5 - NEGOTIATE RIGHT OF WAY SETTLEMENT AND PREPARE ACQUISITION DOCUMENTS - TENANT-INTEREST OWNER (WHERE NECESSARY)

1. After the formal offer to purchase is delivered to the underlying property owner, deliver a "tenant notification letter" notifying tenant of their rights in the transaction and informing them of needed quitclaims of interests.
2. Secure copy of lease to determine the extent of possessory interest in property to be acquired.
3. Participate in and/or facilitate discussions between property owner and tenant regarding apportionment of just compensation, ownership of fixtures and equipment or improvements, and other elements needed to secure tenants voluntary settlement of rights and interests.
4. Prepare purchase agreements and deeds for acquisition of tenants' rights and property.

TASK 15.7.6 - TITLE CLEARANCE SERVICES

1. Work in conjunction with escrow officer to facilitate the clearance of title matters as set forth in the settlement memorandum and escrow instructions.
2. Secure full or partial reconveyance instruments from lien holders of record.
3. Coordinate and facilitate recordation of corrective deeds to clear vesting issues.
4. Secure subordination agreements from conflicting easement holders.

TASK 15.7.7 - ESCROW COORDINATION

If by Negotiated Settlement: Assist the escrow/title company in the following:

1. Open escrow and coordinate execution of closing instructions providing for title insurance coverage at the settlement amount.
2. Provide escrow officer with fully executed acquisition contract and notarized deed.
3. Review settlement statement for accuracy.
4. Coordinate deposit of acquisition price and estimated closing costs with escrow.

TASK 15.7.8 - EMINENT DOMAIN ASSISTANCE

If Settlement by Eminent Domain: Assist eminent domain counsel with the following:

1. Provide eminent domain counsel with available right of way maps and legal descriptions, preliminary title reports and title review documents, and information on how to contact each owner or interest holder.
2. Provide eminent domain counsel with a duplicate copy of the parcel file, together with a copy of the appraisal, offer to purchase, correspondence, acquisition contract, and deed as presented.

TASK 15.7.9 - RIGHT OF WAY SUPPORT SERVICES: CERTIFICATION OVERSIGHT

1. Ensure appraisal maps/right of way maps and legal descriptions are all properly identified and prepared in conformance with approved right of way numbering system.
2. Ensure that all interests necessary for the project have been secured and all relocation activities have been performed in compliance with applicable law and regulations.
3. Prepare certification forms in coordination with engineer and client to include the compilation of all necessary back-up documents required including; deed, final order of condemnation, access easements, cooperative agreements, permits, right of entries, etc.

Deliverables:

- Plats and Legal Descriptions
- Three copies of each Appraisal that meet all State and Federal Standards

- Up to 5 Appraisal reports
- Review certification appraisal reports for up to 4 Independent Appraisal
- Acquisition of up to 4 ownerships

Task 16 - Prepare 60% Design – Draft Plans

Scope Adjustment: All of the costs associated with the services to be delivered under this task will be covered under Phase II Contract fees.

WBS 230 & 240

Design Standards: Design will conform to Chapter 11, “Design Standards,” of the Local Assistance Procedures Manual. PS&E will be prepared in english units in accordance with Chapter 12, “Plans, Specifications, & Estimates,” of the Local Assistance Procedures Manual.

Bridge Design/Plans: Upon approval of the Bridge General Plans, HDR will complete the design calculations for the replacement structure in accordance with Caltrans Bridge Design Manuals, incorporating recommendations from the Design Hydraulics Study Report, the Foundation report, environmental documents, and permit requirements. A full set of detailed bridge plans will be prepared, including, as necessary, deck contours, foundation plan, abutment layout and details, bent layout and details, typical section, girder layout and reinforcement, railing details, and Log of Test Borings. All bridge plans will be prepared using computed aided drafting. All sheets will have datum information.

Aesthetics: HDR will coordinate aesthetic concepts with the County and incorporate agreed upon aesthetic features.

Roadway Design/Plans: Upon completion of necessary mapping and field surveys, and based upon preliminary design approved by the County, HDR will prepare a geometric base map, preliminary layouts, profiles, and Superelevation diagrams. These plan sheets will be prepared in accordance with County Standards. The layouts will include calculated horizontal alignment as a scale of 1”= 50’ (english); the profiles will include calculated vertical alignment as a scale of 1”=50’horizontal. Typical cross sections will be prepared for proposed roadway improvements. Preliminary design cross sections will be generated at 100-foot intervals. Sections will also be provided at major drainage structures and at the beginning and end of each horizontal and vertical curve. Drainage Calculations and a drainage report will be prepared for Drainage pipes that will be relocates. All sheets will have datum information.

Road Plans will include:

- Typical Cross Sections
- Layout, Profile, and Superelevation Diagrams
- Construction Details
- Drainage Plan, Profile, Details, and Quantities
- Construction Area Signs
- Pavement Delineation Plans, Details, and Quantities
- Summary of Quantities
- Sign Plans, Details, and Quantities

Stage Construction and Traffic Handling Plans: HDR will prepare plans for stage construction and traffic handling for construction stages.

Submittal and Review: HDR will prepare and furnish the 60% Plans for the proposed bridge replacement to the County for review and approval. After County approves 60% plan, HDR will prepare 90% PS&E.

HDR will submit upon completion of 60% design work:

- Two (2) sets of full sized 24"x36" print of the complete plans
- Ten (10) sets of 11"x17" prints of complete plans
- Two (2) Hydraulic Reports
- Two (2) Foundation Reports
- The County's original red-lined set of comments

Task 17 - Prepare 90% Design – Draft Plans, Specifications and Estimate

WBS 230 & 240

Design Review Meeting. Upon receipt of 60% comments, and prior to commencing revision, HDR will schedule a review session, if required, with the County to confirm intent of comments. HDR will update bridge and road plans accordingly.

Technical Specifications: HDR will provide technical specifications based on Caltrans' Standards Special Provisions for County review for 90% submittal.

Bridge Independent Design Check: Upon review of the 60% Bridge Plans by County, HDR will provide an independent design check of the bridge plans for the 90% submittal. The independent check will confirm structural adequacy and assure that details are complete and constructible.

Engineer's Estimate: HDR will prepare separate Engineer's Estimates for the participating and non-participating portions of the project. Engineer's Estimates will be prepared using local unit costs furnished by the County or included in the latest Caltrans Cost Data Book. The Engineer's Estimate will be prepared in the "BEES" format.

HDR will submit upon completion of 90% design work:

- Two (2) sets of full sized 24"x36" print of the complete plans
- Ten (10) sets of 11"x17" prints of complete plans
- Two (2) copies of technical Specifications
- One (1) copy of the Engineers Estimate
- The County's original red-lined set of comments

Task 18 - Prepare 100% Design – Final Plans, Specifications and Estimate

WBS 230 & 240

Design Review Meeting. Upon receipt of 90% comments and prior to commencing revision, HDR will schedule a review session, if required, with the County to confirm intent of comments. HDR will update bridge and road plans accordingly.

Specifications: HDR will prepare Special Provision for the project based on Caltrans' Standard Special Provisions and Standard Specifications. These will be modified, where appropriate, to meet County standards and requirements. County will provide specification's Boiler Plate sections.

Update Engineer's Estimate: HDR will prepare updated Engineer's Estimates.

Calculations: HDR will provide design and design check calculations for the County to review. Calculations will include joint movement calculations forms.

Quantities: HDR will provide Quantity and Quantity check calculations.

Resident Engineer's File: HDR will prepare a resident Engineer's Pending File in accordance with the EFPB information and Procedures Guide 4-2, and PDPM.

Submittal and Review: HDR will prepare and furnish the Plans, Complete Specifications, and Estimate for the proposed bridge replacement to the County for review and approval, and to Caltrans for review and comment.

HDR will submit upon completion of 100% design:

- Two (2) sets of full sized 24"x36" prints of complete plans
- Ten (10) copies of 11"x17" prints of complete plans
- Two (2) hard copies and 1 disk of the Boiler Plate and Special Provisions
- One (1) set of plans on disk
- One (1) Marginal Estimate
- One (1) Design and Design Check Calculations
- One (1) Quantity and Quantity Check Calculations
- One (1) Working day schedule
- One (1) RE Pending File
- The County's original red-lined set of PS&E comments

Task 19 - Final Plans, Specifications and Estimate

WBS 250

Design Review Meeting. Upon receipt of comments, and prior to commencing revision, HDR will schedule a review session, if required, with the County to confirm intent of comments.

Final Submittal. HDR will update and furnish Final PS&E for advertising, as well as hard copy and electronic files of spreadsheets used to create the estimates. PS&E will incorporate resolution of 100% comments from reviewing agencies.

HDR will submit upon completion of Final PS&E:

- One (1) set of full size vellum original tracings
- One (1) set of full size bond complete plans
- One (1) set of (11"x17") complete plans
- One (1) set of complete plans on disk
- Two (2) hardcopies of the Contract Specifications in Microsoft Word format
- One (1) disk of the Contract Specifications in Microsoft Word format
- One (1) 1"=4' scale drawing of the Deck Contours
- One (1) Marginal Estimate
- If updated, One (1) Design and Design Check Calculations
- If updated, One (1) Quantity and Quantity Check Calculations
- If updated, One (1) Working day schedule
- If updated, One (1) RE Pending File

Task 20 - PS&E Certification and Bidding Assistance

WBS 260 & 265

HDR will complete and submit the PS&E Certifications and Checklist, in accordance with the Local Assistance Procedures Manual, for the County's use.

Request for Authorization

HDR will provide information requested by the County for their preparation of the Request for Authorization for Construction

HDR will provide on-going consultation and interpretation for construction documents during the construction of the proposed project including answering and documenting questions from prospective bidders, preparation of addenda (if required), and bid analysis as required.

Task 21 - Construction Support

WBS 270

HDR will provide on-going consultation and interpretation of construction documents during the construction of the proposed project. Construction support services will include:

- Attend pre-construction meeting
- Review and approve maximum 10 submittals /shop drawings
- Provide on-going consultation and interpretation of contract documents, as requested
- Prepare plan and/or specification modification for contract change orders
- Site visits as requested
- Review and approve any change orders

*Note: Cost proposal fee for construction support is an estimated fee and actual fee will be coordinated with County during construction.

Task 22 - As-built Plans

WBS 295.15

HDR will prepare and deliver the final As-Built Plans to the County using marked prints provided by the Construction Resident Engineer.

Attachment B

Fees for Amendment 1

Attachment C

Updated Project Schedule

