

**SECOND ADDENDUM TO CONTRACT FOR SERVICES
BY INDEPENDENT CONTRACTOR**

THIS SECOND ADDENDUM is to that Contract for Services entered into on July 16, 2018, and as amended on March 10, 2020, by and between the County of Siskiyou ("County") and CH2MHill, Inc. ("Contractor") and is entered into this 19th day of May, 2020.

WHEREAS, the cost of services to be provided under the contract is expected to exceed the amount provided in the Contract; and

WHEREAS, the parties desire to increase the amount of compensation payable under the contract; and

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

Paragraph 2 of the Contract, Statement of Work, shall be amended to include the Scope of Services as set forth in Attachment "B" attached hereto.

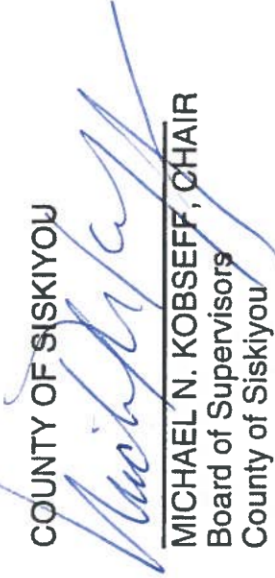
Paragraph 5 of the Contract, Allowable Costs and Payments, shall be amended to add an additional One Hundred Eighty-Six Thousand One Hundred Seventy-Three Dollars and 18/100 (\$186,173.18), to increase the compensation payable under the Contract to an amount not to exceed Two Hundred Thirty Thousand Seven Hundred Fifty Dollars and 04/100 (\$230,750.04) and, will be based on actual Cost-Plus-Fixed Fee as set forth in Attachment "A" attached hereto.

All other terms and conditions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, County and Contractor have executed this Second Addendum on the dates set forth below, each signatory represents that he/she has the authority to execute this agreement and to bind the Party on whose behalf his/her execution is made.

Date: 5/19/2020

COUNTY OF SISKIYOU



MICHAEL N. KOBSEFF, CHAIR
Board of Supervisors
County of Siskiyou
State of California

ATTEST:
LAURA BYNUM
Clerk, Board of Supervisors

By: Wendy Diga
Deputy

CONTRACTOR: CH2MHILL, INC.

Date: May 8, 2020

Li AL
Lisa Alliger, Designated Project Executive

Date: MAY 8, 2020

Michael Cooper
Michael Cooper, Project Manager

License No.: 38017

(Licensed in accordance with an act providing for the registration of contractors)

Note to Contractor: For corporations, the contract must be signed by two officers. The first signature must be that of the chairman of the board, president or vice-president; the second signature must be that of the secretary, assistant secretary, chief financial officer or assistant treasurer. (Civ. Code, Sec. 1189 & 1190 and Corps. Code, Sec. 313.)

TAXPAYER I.D. On file

ACCOUNTING:

Fund 2103 Organization 301010 Account 761110 Activity Code (1268)

Encumbrance number (if applicable): E1900325

If not to exceed, include amount not to exceed: \$230,750.04

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5. ALLOWABLE COSTS AND PAYMENTS

- A. The method of payment for this CONTRACT will be based on actual cost plus a fixed fee. LOCAL AGENCY will reimburse CONSULTANT for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by CONSULTANT in performance of the work. CONSULTANT will not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved CONSULTANT'S Cost Proposal, unless additional reimbursement is provided for by CONTRACT amendment. In no event, will CONSULTANT be reimbursed for overhead costs at a rate that exceeds LOCAL AGENCY'S approved overhead rate set forth in the Cost Proposal. In the event, that LOCAL AGENCY determines that a change to the work from that specified in the Cost Proposal and CONTRACT is required, the CONTRACT time or actual costs reimbursable by LOCAL AGENCY shall be adjusted by CONTRACT amendment to accommodate the changed work.
- B. The indirect cost rate established for this CONTRACT is extended through the duration of this specific CONTRACT. CONSULTANT's agreement to the extension of the 1-year applicable period shall not be a condition or qualification to be considered for the work or CONTRACT award.
- C. In addition to the allowable incurred costs, LOCAL AGENCY will pay CONSULTANT a fixed fee. The fixed fee is nonadjustable for the term of the AGREEMENT, except in the event of a significant change in the scope of work and such adjustment is made by AGREEMENT amendment.
- D. Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal.
- E. When milestone cost estimates are included in the approved Cost Proposal, CONSULTANT shall obtain prior written approval for a revised milestone cost estimate from the Contract Administrator before exceeding such cost estimate.
- F. Progress payments will be made monthly in arrears based on services provided and allowable incurred costs. A pro rata portion of CONSULTANT'S fixed fee will be included in the monthly progress payments. If CONSULTANT fails to submit the required deliverable items according to the schedule set forth in Article III Statement of Work, LOCAL AGENCY shall have the right to delay payment or terminate this CONTRACT.
- G. No payment will be made prior to approval of any work, nor for any work performed prior to approval of this CONTRACT.
- H. CONSULTANT will be reimbursed promptly according to California Regulations upon receipt by LOCAL AGENCY'S Contract Administrator of itemized invoices in duplicate. Invoices shall be submitted no later than 45 calendar days after the performance of work for which CONSULTANT is billing. Invoices shall detail the work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this CONTRACT number and project title. Final invoice must contain the final cost and all credits due LOCAL AGENCY The final invoice should be submitted within sixty (60) calendar days after completion of

CONSULTANT's work. Invoices shall be mailed to LOCAL AGENCY's Contract Administrator at the following address:

Siskiyou County Public Works
Scott Waite, PE Director of Public Works
1312 Fairland Road
Yreka, CA 96097

I. The total amount payable by LOCAL AGENCY including the fixed fee shall not exceed approved amendments.

For personnel subject to prevailing wage rates as described in the California Labor Code, all salary increases, which are the direct result of changes in the prevailing wage rates are reimbursable.



Wooley Creek Bridge (2C-016)
Phase 2 Environmental Studies and Final Design
Fee Proposal Summary

Amendment 2 Estimated Budgets by Task						
Task	Labor			DBE Subs	Expenses	Total
	Hours	Cost	Fixed Fee			
Task 2.1 Project Management	49	\$6,595.87	\$659.59		\$672.08	\$7,927.54
Task 2.2 Environmental Studies	984	\$95,640.40	\$9,564.04		\$4,400.00	\$109,604.44
Task 2.3 Final Design	334	\$37,289.90	\$3,728.99			\$41,018.89
Topographic Survey	170	\$14,763.44	\$1,476.34		\$11,382.52	\$27,622.31
Topographic Survey Contingency						
Task 2.4 Bidding and Construction Support						
Amendment 2 Phase 2 Subtotals	1537	\$154,289.62	\$15,428.96	\$0.00	\$16,454.60	\$186,173.18
				Original Contract Value, Phase 1		
				Contract Total with Amendment 2 \$290,750.04		

Attachment B, Amendment 2 Scope of Services Wooley Creek Bridge Phase 2

This Scope of Services is Amendment 2 to the Contract between the County of Siskiyou (“LOCAL AGENCY”) and CH2M HILL, Inc. (“CONSULTANT”) generally described as the Wooley Creek Bridge (2C-016) rehabilitation and pier repair project.

A Phase 1 Scope of Services was performed under the initial Contract. Amendment 1 was executed to extend the period of performance, and this Phase 2 Scope of Services will be initiated under Amendment 2. In administering federal funding for the Wooley Creek Bridge project, Caltrans Local Assistance has partially funded the Phase 2 Scope of Services and is expected to fully fund the Phase 2 Scope of Services at a future date. Therefore, this Phase 2 Scope of Services will be initiated under Amendment 2 and completed under a future amendment.

In general, Phase 2 services include: performing required environmental studies; preparing plans, specifications and estimates (P&S&E) for construction; and providing engineering and environmental support during construction. The Phase 2 detailed Scope of Services is described below.

Phase 2 – Environmental Studies, Final Design and Construction Support Services

Task 2.1–Project Management and Administration

Project Coordination

CONSULTANT will hold project coordination meetings, if necessary, with LOCAL AGENCY staff to review project status, discuss and resolve critical issues, and develop action items to facilitate project completion. CONSULTANT will develop and distribute meeting agendas, facilitate the meetings, and record and distribute meeting notes. Up to four coordination meetings are assumed during Phase 2.

Budget and Schedule Control

CONSULTANT will prepare brief written monthly status reports and invoices to document work performed during that period. CONSULTANT will identify scope, schedule, and budget issues along with recommended solutions. Anticipated activities for the coming month will be identified to allow LOCAL AGENCY to independently assess overall progress.

Deliverables:

- *Meeting agendas and meeting notes*
- *Invoices and status reports*

Task 2.2-Environmental Studies

The following studies listed under Task 2.2 are based on email communication direction from Chris Fazzari/Caltrans to Kyla Burton/Siskiyou County, dated March 15, 2018. All documentation listed under this subtask will be submitted to LOCAL AGENCY who will then submit to Caltrans as necessary.

Cultural Resources Survey Reports

The Project will require compliance with Caltrans regulations, including the Standard Environmental Reference (SER) handbook and the Section 106 Programmatic Agreement between the Federal Highway Administration, Advisory Council on Historic Preservation, State Historic Preservation Officer, and Caltrans (Section 106 PA).

CONSULTANT's team will include individuals meeting the Caltrans Professional Qualifications Standards as a Principal Architectural Historian and Principal Investigator - Historical Archaeology and Prehistoric Archaeology, who possess a detailed knowledge of Caltrans regulations and the various cultural resources types and sensitivity of Siskiyou County. CONSULTANT will coordinate with the LOCAL AGENCY and Caltrans to establish the Area of Potential Effects (APE). The APE map and required studies will be approved by Caltrans District 2 and the LOCAL AGENCY prior to survey activities.

As part of the pre-field research, CONSULTANT will complete a records search for the Project through the California Historical Resources Information System database at the Northeast Information Center. The records search will be completed for the APE and up to a one-mile search radius. CONSULTANT may complete additional searches or inquiries with Caltrans; the National Register of Historic Places; the California Register of Historical Resources; the federally and state recognized tribes (currently assumed to be limited to the Karuk Tribe); U.S. Forest Service and other land-holding agencies in the area; and local landmark listings, to obtain relevant, previously-identified archaeological or historical information. CONSULTANT will perform an architectural history and archaeology pedestrian survey within the APE. As part of the field survey, CONSULTANT will follow the procedures set forth in Attachment 4 of the Section 106 PA. The bridge is currently included in the Caltrans Historic Bridge Inventory as Not Eligible for the listing in the National Register of Historic Places.

CONSULTANT will finalize the results of the research, survey and outreach efforts in an APE Map, Historic Property Survey Report, Archaeology Survey Report, as well as the required appendices for each report. If significant or unavoidable cultural resources are identified in the APE, Caltrans may require establishment of Environmentally Sensitive Areas to avoid effects to the resources and a Finding of No Adverse Effect report.

Deliverables:

- *Draft and final APE Map*
- *Draft and final copies of Historic Property Survey Report (Short form), and Archaeology Survey Report*

Section 4(f) Assessment

Section 4(f) of the DOT Act of 1966 requires that an assessment of the potential impacts on publicly owned parks, recreational areas, or wildlife or waterfowl refuges or historic sites of national, state or local significance in development of transportation projects. Significant historic sites are those listed in or eligible for listing in the NRHP.

A Section 4(f) assessment will be completed as follows, CONSULTANT will:

- Identify all park/recreation resources in the project study area that are subject to Section 4(f) regulations.
- Identify any cultural resources in the project study area that are subject to Section 4(f) regulations (i.e. cultural resources that are either listed in, or have been determined eligible for, the National Register of Historic Places).
- Determine whether a "use" is occurring at any Section 4(f) resources in the study area per the temporary occupation of the resource(s) during construction.

If the project would temporarily occupy land at the resource (i.e. during construction) an assessment will be done to determine whether the temporary occupancy would meet the temporary occupation exception criteria in the Section 4(f) statute (23 CFR 774.13(d)).

- a. If there is a temporary occupancy of land at a park/ recreation resource and the exception criteria are met, the consultant will prepare a temporary occupancy exception concurrence letter(s) for delivery to the applicable official(s) with jurisdiction (no written concurrence is required with respect to temporary occupancy exception findings at historic resources).
 - b. If there is a temporary occupancy of land at a resource and the exception criteria are NOT met, this would constitute a "use" under Section 4(f) and the consultant would prepare a "No Feasible and Prudent Avoidance Alternatives" discussion.
- Determine appropriate measures to minimize harm, as necessary.
 - Attend up to six (6) meetings via conference call with the officials with jurisdiction over Section 4(f) resources in the study area. The purpose of these meetings would be to gain concurrence on: the applicability of Section 4(f) to resources, the description of 4(f) resources, measures to minimize harm, and use determinations/ temporary exception findings).
 - Prepare content for Section 4(f) temporary occupancy agreements.

Deliverables:

- *Preparation of Section 4(f) assessment documentation; this will likely take the form of an administrative "No Section 4(f) Use" memorandum to file for the Project (Section 4(f) agreements would be appended to this memorandum).*

- Development of content for Section 4(f) agreements (i.e. temporary occupancy agreements), as necessary.
- Attendance at up to six (6) meetings via conference call with the official(s) with jurisdiction over Section 4(f) resources in the study area, as necessary.

Assumptions:

- There are three Section 4(f)-protected Section 4(f) park/recreation resources in the Project study area:
 - Wooley Creek Trail/Trailhead
 - Six Rivers National Forest
 - Salmon River (subject to Section 4(f) regulations per 23 CFR 774.11(g) due to its being classified as a National Wild and Scenic River and functioning as a significant recreation resource).
- The Project will not result in any permanent proximity impacts to Section 4(f) resources (i.e. noise impacts; visual impacts; access impacts).
- The Project will not result in a Section 106 Finding of Adverse Effect to any Section 4(f)-protected cultural resource.
- No Individual Section 4(f) Evaluation will need to be prepared as part of the project.
- No more than three (3) Section 4(f) temporary occupancy agreements will need to be prepared.
- Per California State Parks LWCF webpage (https://www.parks.ca.gov/?page_id=21360), there are no Section 6(f) properties located in the study area; as such, no Section 6(f) assessment documentation will need to be prepared.
- For identifying cultural resources, to avoid the duplication of effort, the Section 4(f) analysis will use data collected as part of the cultural resources/Section 106 assessment.
- Caltrans shall be responsible for the final submittal of all Section 4(f) agreements (e.g. de minimis and temporary occupancy agreements) to applicable officials with jurisdiction as well as the processing of the agreement(s) through NDOT and FHWA approval procedures and signatures.
- Preparation of all Section 4(f) materials will be done in accordance with applicable Caltrans SER guidance (SER Chapter 20; <http://www.dot.ca.gov/sci/vo11/sec3/special/ch20-4/clmp20.htm>).
- Up to two (2) rounds of Caltrans review (each) of Section 4(f) assessment documentation and temporary occupancy letters to applicable official(s) with jurisdiction.

Wild and Scenic Rivers Evaluation

The Salmon River and Wooley Creek are both tributaries to the Klamath River (i.e. part of the Klamath River System) and as such are included in the National Wild and Scenic Rivers System as established under Public Law 90-542; 16 U.S.C. 1271 et seq

(<https://www.law.cornell.edu/uscode/text/16/chapter-28>). The Salmon River is also an individually-designated river in the California Wild and Scenic Rivers System.

CONSULTANT will consult with applicable river managing agency for the segment of the Salmon River in the Project study area.

CONSULTANT will prepare draft and final findings showing:

- Project will not have an adverse effect on the free-flowing characteristics of the Salmon River

Project will not alter the Salmon River's ability to continue to meet National Wild and Scenic Rivers System eligibility (via the river's current outstanding values – scenic, recreational, fish and wildlife; <https://www.rivers.gov/documents/studies/american-eel-klamath-smith-trinity-study.pdf>).

Deliverables:

- *Draft and Final Wild and Scenic River Findings Memorandum*
- *Up to two (2) phone meetings with applicable river managing agency*

Assumptions:

- *The Project will not result in an adverse effect on the free-flowing characteristics of the Salmon River OR alter the Salmon River's ability to continue to meet National Wild and Scenic Rivers System eligibility.*
- *Preparation of all Section 4(f) materials will be done in accordance with applicable Caltrans SER guidance (SER Chapter 19: <http://www.dot.ca.gov/sci/pol/sec3/special/ch19seiners/chmp19.htm>)*
- *Up to two (2) rounds of Caltrans review (each) of the draft and final Wild and Scenic River Findings.*

Biological Assessments

Based on the results of a brief database search, State and federally listed special-status species, including anadromous salmonids, may occur at the Project site. Therefore, to support NEPA compliance and permit acquisition, consultation with the USFWS and National Marine Fisheries Service (NMFS) under the Federal Endangered Species Act, and consultation with CDFW under the California Endangered Species Act may be required.

CONSULTANT will conduct a reconnaissance survey of the Project area along the ESL to determine habitat attributes and the potential for occurrence of special-status species. Prior to the survey, we will review the California Natural Diversity Database, USFWS, NMFS, and California Native Plant Society species lists for special-status species and habitats that may occur in the ESL. CONSULTANT will produce a joint USFWS/ NMFS Biological Assessment documenting the results.

CONSULTANT will be available to assist in consultation efforts if requested by the LOCAL AGENCY.

Deliverables:

- *Draft and final USFWS/NMFS Biological Assessment*

Aquatic Resources Delineation Report

To support permit acquisition from the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board, CONSULTANT will conduct a field investigation to delineate potentially jurisdictional wetlands and waters of the U.S. to determine the location and extent of potentially federal and state jurisdictional waters and wetlands. Potential waters of the U.S. will be delineated using field indicators along with aerial photography, topographic data, and hydraulic modeling data. Streams and/or wetlands within the vicinity of the bridge will be mapped, and a Draft Aquatic Resources Delineation Report (ARDR) consistent with the USACE Sacramento District's 2016 Minimum Standards for Acceptance of Aquatic Resources Delineation Reports will be prepared. CONSULTANT will submit the delineation to USACE and request a Preliminary Jurisdictional Determination (PJD). If requested, CONSULTANT will organize and attend one field visit with the USACE to review the PJD. Based on feedback received from the USACE, CONSULTANT will revise the delineation, if necessary, and submit the revised version to the USACE.

The aquatic resource delineation data collection and analysis will follow procedures in the Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987) and the Regional Supplement.

Deliverables:

- *Draft and Final Aquatic Resources Delineation Report*

Natural Environment Study

Based on the results of the reconnaissance biological surveys and aquatic resources delineation, CONSULTANT will prepare a Draft and Final Natural Environment Study (NES). The NES will be based on the most recent template available from Caltrans dated November, 2018. The NES will include a biological resources assessment that identifies the potential for occurrence of special-status plant and animal species and their habitat, and sensitive habitats such as wetlands within the Project area.

The scope does not include focused surveys (e.g. protocol-level surveys to determine the presences/absence of listed plants and wildlife species). The level of effort assumes three rounds of comments and responses to comments on the Draft NES will occur with Caltrans.

Deliverables:

- *Draft and Final NES Document*

Water Quality Assessment Report

CONSULTANT will utilize the technical information developed in the NES to prepare a Draft and Final Water Quality Assessment Report (WQAR) using the most recent template available from Caltrans dated October, 2017.

Deliverables:

- *Draft and Final WQAR*

Environmental Documentation

When the required project reviews and environmental studies are completed, CONSULTANT will assist the LOCAL AGENCY, as requested, in the preparation of the CEQA document, currently assumed to be an Initial Study/Mitigated Negative Declaration (IS/MND).

It is assumed Caltrans will prepare the NEPA documentation for the project. The LOCAL AGENCY will submit all documentation, including required environmental studies, to Caltrans as necessary.

Task 2.3-Final Design

Design Criteria

CONSULTANT will design repairs and retrofit measures in accordance with current Caltrans Bridge Design Details Manual, Bridge Design Aids Manual, Bridge Memos to Designers, and Bridge Design Practice. AASHTO LRFD Bridge Design Specifications, 2012 (6th Edition) with California Amendments (AASHTO-CA BDS-6) constitute the primary design specifications for bridges and ancillary structures. Repair and retrofit measures will be developed in accordance with these specifications. Seismic design will be in accordance with Caltrans Seismic Design Criteria, Version 1.7 and Caltrans Memo to Designers 20-4.

CONSULTANT will prepare details and construction specifications in accordance with Caltrans 2018 Standard Plans, 2018 Standard Specifications, and current Standard Special Provisions. Details will be supplemented with LOCAL AGENCY standards as appropriate.

Conflicts with existing utilities and/or coordination with utility owners is not anticipated to accommodate the retrofit and repair measures envisioned for Wooley Creek Bridge.

Topographic and Control Surveys

CONSULTANT will perform topographic field surveys to collect channel cross section data upstream and downstream of the project site and to define detailed existing location information for bridge piers, abutments, soffit and deck. The coordinate system will be based on the California Coordinate system, Zone 1. Survey control will be established using the NGS CORS system, supplemented by an existing benchmark at the bridge. The river banks will be measured up to the elevation of Salmon River Road. The river bed will be measured using GPS or with GPS and a sonar depth measuring device, depending on the water level.

CONSULTANT will collect a total of eight (8) channel cross sections as follows:

- Perpendicular to channel approximately 2,400 feet, 1,300 feet, 750 feet and 200 feet downstream of bridge (total 4 downstream)
- At and parallel to downstream and upstream faces of bridge (total 2 at bridge)
- Perpendicular to channel approximately 250 feet and 500 feet upstream of bridge (total 2 upstream)

CONSULTANT will coordinate the channel cross section locations with the hydraulic modeling effort in advance of performing the field surveys.

CONSULTANT will summarize all control points and field-collected topographic data points in an Excel file. Each data point entry will include: point number, northing and easting coordinate values, elevation and point description.

Deliverables:

- *Survey control and Channel cross sections point listings*

Unchecked Details (65 Percent PS&E)

Retrofit and Repair Details

CONSULTANT will develop repair and retrofit details to the unchecked details stage. This stage will culminate with a design and details that are essentially complete and ready for the independent checkers to begin their review. CONSULTANT's independent check will be performed concurrently with the LOCAL AGENCY's review.

The following anticipated sheet list encompasses repair and retrofit measures identified in the Phase 1 evaluation. As the final design progresses, it may become necessary to modify the sheet list as retrofit and repair details evolve. CONSULTANT will keep LOCAL AGENCY apprised of changes in the sheet list which may materially affect the level of effort estimated to complete the design.

- Title Sheet
- Construction Area Signs
- Maintenance of Traffic No. 1
- Maintenance of Traffic No. 2
- Contractor Staging Areas and Site Access
- Temporary Erosion Control Plan
- Conceptual River Diversion Plan
- Wooley Creek Bridge General Plan
- Foundation Plan, General Notes and Quantities
- Abutment 1 Plan and Elevation
- Abutment 2 Plan and Elevation
- Abutment Seat Retrofit Details
- Pier 1 and Pier 3 Plan and Elevation
- Pier 1 and Pier 3 Cap Retrofit Details
- Pier 2 Plan and Elevation
- Pier 2 Grouted Steel Casing Details
- Pier 2 Cap Retrofit Details
- Cable Restrainer Details

The Bridge General Plan sheet will include details and/or notes for restoring permanent traffic striping following bridge deck sealing operations. The Construction Area Sign Sheet will include advance notice signs alerting motorists of the date and time of temporary bridge closure. Maintenance of Traffic Plans will include one lane of traffic on the bridge with flaggers stationed for reversible traffic control.

Deliverables:

- *Preliminary plans (11x17, hard copy and PDF formats)*
- *Preliminary construction contract item list*
- *Preliminary construction cost estimate*

Initial PS&E

Retrofit and Repair Details

CONSULTANT's independent check engineers will validate the repair and retrofit details, review the special provisions, and prepare independent quantity calculations. Issues raised by the review will be discussed with the designers and resolved. CONSULTANT's final PS&E package will reflect agreement among the designers and reviewers and will incorporate comments received from LOCAL AGENCY staff and adjudicated with the design team.

For LOCAL AGENCY's review and approval, CONSULTANT will submit checked and revised plans, technical special provisions, and construction cost estimate.

Deliverables:

- *Plans (11x17, hard copy and PDF formats)*
- *Construction contract item list*
- *Technical Special Provisions*
- *Construction cost estimate*

Construction Flow and Bypass Design

CONSULTANT will determine the Salmon River flow volume anticipated during construction and develop a conceptual design for a flow bypass system to construct retrofit and repair measures. CONSULTANT will document the design methodology and calculations used to determine the flow volume and bypass design in a technical memorandum. Analysis and design of the conceptual bypass will consider the dry weather flow period between April 15 and October 15 unless.

The draft bypass design and technical memorandum will be included with the Initial PS&E submittal package. The final bypass design and technical memorandum will be included with the Final PS&E submittal package.

Deliverables:

- *Bypass design technical memorandum (PDF format)*

Assumptions:

- The analysis and design will consider the dry weather flow period as being between April 15 and October 15 for one construction season unless otherwise agreed to with the LOCAL AGENCY in advance of the analyses.
- No existing gauging or flow data is available at or immediately near the project site. However, flow data from a gaging station located on the Salmon River approximately 3.5 miles downstream can be utilized to calculate project site construction flows through adjustments using basin characteristics at each respective location. Alternately, the gaging station flow may be used directly without adjustment to conservatively estimate flows at the project site. CONSULTANT will

coordinate the approach to determining project site flows with the LOCAL AGENCY.

Conceptual SWPPP

CONSULTANT will prepare a design phase Conceptual Stormwater Pollution Prevention Plan (CSWPPP) in compliance with the statewide National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP), Order No. 2009-0009-DWQ, most recently updated by Order No. 2012-0006-DWQ. The CSWPPP will comply with County standards and project-specific requirements from the North Coast Regional Water Quality Control Board. CONSULTANT will use the SWPPP template and guidance developed by the California Stormwater Quality Association.

CONSULTANT will include in the CSWPPP an evaluation and documentation of the risk assessment as presented in the CGP. CONSULTANT will identify potential temporary water quality and erosion impacts and propose appropriate temporary construction site and erosion control best management practice (BMP) measures. These BMP measures will be identified on the Water Pollution Control (WPC) Plans included in the CSWPPP.

The draft conceptual SWPPP and WPC plans will be included with the Initial PS&E submittal package. The final SWPPP and WPC plans will be included with the Final PS&E submittal package.

Deliverables:

- *Draft SWPPP and WPC plans (PDF format, with Initial PS&E submittal)*
- *Final SWPPP and WPC plans (PDF format, with Final PS&E submittal)*

Assumptions:

- The CSWPPP is based on design-level information to be used for reference purposes only and will not be a construction document.
- CONSULTANT staff will not perform the duties of a qualified SWPPP developer (QSD) or Qualified SWPPP Practitioner during construction.
- The Contractor's QSD will be required to develop an independent SWPPP for approval by the County and uploaded to the State Water Resources Control Board's Storm Water Multiple Applications and Report Tracking System.

Location Hydraulic Study and Floodplain Evaluation Report

CONSULTANT will perform hydrologic analysis to determine the 100- and 50-year design flows (Q100 and Q50) and will use the surveyed channel cross section data to build a one-dimensional (1-D) steady state HEC-RAS hydraulic model. From the HEC-RAS model, CONSULTANT will determine the flow depths and velocities for both the existing and proposed conditions.

Based on the results from the hydraulic modeling study, CONSULTANT will perform a floodplain risk assessment to determine the potential impacts to the floodplains. If the proposed bridge retrofit will cause impacts to the floodplains, CONSULTANT will make recommendations on the potential mitigation measures. CONSULTANT will prepare a Floodplain Evaluation Report, which will include the Technical Information for the Location

Hydraulic Study and Floodplain Evaluation Report Summary forms, to document the investigation and determine the specific impacts to the floodplain and necessary mitigation measures.

Deliverables:

- *Draft Floodplain Evaluation Report (PDF)*
- *Final Floodplain Evaluation Report (PDF and 3 hard copies)*
- *Location Hydraulic Study Form (PDF and 3 hard copies)*
- *Floodplain Evaluation Report Summary Form (PDF and 3 hard copies)*

Final PS&E

CONSULTANT will incorporate adjudicated LOCAL AGENCY comments into the plans and technical special provisions and will submit the following final approved PS&E.

CONSULTANT will coordinate deliverables with the LOCAL AGENCY to ensure that formats are compatible for insertion into the LOCAL AGENCY's standard construction contract forms. CONSULTANT will coordinate with the LOCAL AGENCY to ensure the project contract items are captured and included in the final bid form.

Deliverables:

- *One set of stamped and signed 11x17 plan sheets*
- *CD containing electronic drawing files in AutoCAD format*
- *Technical special provisions in Word and PDF format*
- *Design and check calculations stamped and signed by the responsible engineer*
- *Quantity calculations*
- *Construction cost estimate*

Task 2.4-Bidding and Construction Support

Bidding Support Services

During the bid period, CONSULTANT will be available to assist the LOCAL AGENCY as follows:

- Answer questions to clarify details of the plans and special provisions
- Provide data for the LOCAL AGENCY to issue addenda as required
- Coordinate, schedule, and attend a pre-bid meeting
- Make recommendations on the award of the project

Construction Support Services

During construction, CONSULTANT will be available to provide the following engineering services:

- Attend a preconstruction meeting
- Provide ongoing consultation and document interpretation
- Review and comment monthly on the percentage of work completed
- Prepare plan and/or specification revisions necessitated by unexpected conditions

- Review and approve construction submittals (including shop drawings and material certifications)
- Respond to requests for information (RFIs)
- Assist in preparing a final construction report summarizing as-built data from plan markups and data provided by the contractor

For providing bidding and construction support services, a budget of 232 hours has been assumed based on experience on similar projects.

Optional Environmental Support Services during Construction

CONSULTANT may provide these optional environmental support services during construction if requested by the LOCAL AGENCY. CONSULTANT is not obligated to incur costs for these optional services nor is the LOCAL AGENCY obligated to reimburse CONSULTANT for these optional services without prior written agreement between LOCAL AGENCY and CONSULTANT.

If requested, CONSULTANT will prepare materials for and conduct worker environmental awareness training (WEAT) to educate construction personnel on environmentally sensitive species and archaeological resources that may occur within the project area. WEAT training will be conducted by a qualified biologist and/or archaeologist prior to construction activities. WEAT training will continue to occur as necessary, when new personnel are added to the construction team.

Suitable nesting habitat is located within the vicinity of the Project. If construction occurs during the nesting season, a pre-construction nesting bird survey will be required. Therefore, as part of this task, CONSULTANT will complete a pre-construction nesting bird survey.

If requested, CONSULTANT will conduct monitoring during construction to identify sensitive-species that occur on the project site, and work with regulatory personnel from CDFW, USFWS, and/or NMFS as needed to address species concerns and avoidance during construction.

If potentially sensitive archaeological resources identified within the ESL, CONSULTANT will be available to provide ongoing archaeological monitoring during periods of ground disturbance and excavation.