## FIFTH AMENDMENT TO AGREEMENT FOR SERVICES #467-S1411

THIS FIFTH AMENDMENT to that Agreement for Services #467-S1411 made and entered into by and between the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "COUNTY"), and Quincy Engineering, Incorporated, a wholly owned subsidiary of CONSOR North America, Inc., a corporation duly qualified to conduct business in the State of California, whose principal place of business is 11017 Cobblerock Drive, Suite 100, Rancho Cordova, California 95670 (hereinafter referred to as "CONSULTANT");

#### RECITALS

WHEREAS, CONSULTANT has been engaged by COUNTY to provide project delivery support services, including updating the feasibility study, and providing environmental support services for the Mosquito Road Bridge at the South Fork American River Project for its Department of Transportation pursuant to Agreement for Services #467-S1411, dated July 29, 2014; First Amendment to Agreement for Services #467-S1411, dated March 7, 2017; Second Amendment to Agreement for Services #467-S1411, dated August 15, 2017; Third Amendment to Agreement for Services #467-S1411, dated August 28, 2018, and Fourth Amendment to Agreement for Services #467-S1411, dated March 15, 2022, incorporated herein and made by reference a part hereof (hereinafter referred to as "Agreement");

WHEREAS, the parties hereto desire to amend the Agreement to update the scope of work to include tasks for Phase 4 of the Project, amending ARTICLE I, Scope of Services, and adding Exhibit A-2, Additional Scope of Work – Phase 4;

WHEREAS, the parties hereto desire to amend the Agreement to include a new rate schedule and cost proposal for Phase 4 of the Project, amending ARTICLE II, Compensation for Services, ARTICLE V, Allowable Costs and Payments, and ARTICLE LII, Claims Filed by County's Construction Contractors, and adding Exhibit B-1, Rate Schedule – Phase 4 and Exhibit C-4, Cost Proposal – Phase 4;

**WHEREAS**, the parties hereto desire to amend the Agreement to update the performance period, amending **ARTICLE IV**, **Performance Period**;

**WHEREAS**, the parties hereto desire to amend the Agreement to increase the not-to-exceed compensation amount of the Agreement by \$713,403.02 for a total not-to-exceed amount of \$6,950,886.23, amending **ARTICLE V, Allowable Costs and Payments**;

**NOW, THEREFORE**, in consideration of the foregoing and the mutual promises and covenants hereinafter contained, COUNTY and CONSULTANT mutually agree to amend

the terms of the Agreement in this Fifth Amendment to Agreement for Services #467-S1411 on the following terms and conditions:

- All references to Exhibit A and Amended Exhibit A throughout the Agreement are substituted with Exhibit A, Amended Exhibit A, Exhibit A-1, and Exhibit A-2, Additional Scope of Work – Phase 4, attached hereto and incorporated herein by reference.
- **II. ARTICLE I**, **Scope of Services**, paragraphs B, C, D, E, and F of the Agreement are amended in their entirety to read as follows:
  - B. CONSULTANT shall perform all professional and technical services, work and tasks required to accomplish the objectives set forth herein, and shall available **CONSULTANT's** provide and make own personnel, subconsultants, materials, equipment, and vehicles necessary to update the feasibility report, obtain Caltrans' Project approval, and provide environmental support services, and other Project delivery support services including, but not limited to, those tasks identified in Exhibit A, marked "Scope of Work," Amended Exhibit A, marked "Amended Scope of Work," Exhibit A-1, marked "Additional Scope of Work," and Exhibit A-2, marked "Additional Scope of Work - Phase 4," all exhibits are incorporated herein and made by reference a part hereof.

Unless otherwise indicated below, and notwithstanding any other provision of this Agreement to the contrary, deliverables for the specific items of work to be provided under Exhibit A, Amended Exhibit A, Exhibit A-1, and Exhibit A-2 shall be as specified therein, shall be prepared using the software described in Section E of this Article and shall be submitted in accordance with the timeframes and formats specified in Exhibit A, Amended Exhibit A, Exhibit A-1, and Exhibit A-2. Adjustments to the completion times specified in Exhibit A, Amended Exhibit A, Exhibit A-1, and Exhibit A-2 may only be made in accordance with the prior written approval (may consist of an email) of COUNTY's Contract Administrator or designee.

COUNTY's Contract Administrator shall issue CONSULTANT a Notice to Proceed for the Tasks and Items of Work identified in Exhibit A, Amended Exhibit A, Exhibit A-1, and Exhibit A-2, and CONSULTANT shall not commence work on any Task and/or Item of Work until receiving the Notice to Proceed. No payment will be made for any work performed prior to the date specified in the Notice to Proceed.

C. In addition to the specific services identified in Exhibit A, Amended Exhibit A, Exhibit A-1, and Exhibit A-2 hereto, this Agreement may also include Supplemental Item of Work, Task 7 -Traffic Analysis. COUNTY's Contract Administrator will issue a separate written Notice to Proceed to CONSULTANT for Supplemental Item of Work, Task 7. CONSULTANT

shall not commence work on Supplemental Item of Work, Task 7 until receiving the appropriate Notice to Proceed. No payment will be made for any work performed prior to the date specified in the Notice to Proceed.

D. In addition to the specific services identified in Exhibit A, Amended Exhibit A, Exhibit A-1, and Exhibit A-2 or as assigned to CONSULTANT as Supplemental Item of Work, Task 7 hereunder, this Agreement may also include Optional Services. Such Optional Services may supplement, expand, or otherwise modify the Scope of Work or may include, but not be limited to, tasks that are deemed critical by COUNTY's Contract Administrator to the furtherance of the Project.

Before proceeding with any work concerning Optional Services under this Agreement, the parties will identify the specific services to be provided for each assignment in individual Task Orders and/or Work Orders to be issued in accordance with this Agreement.

The specific services for each Optional Services assignment shall be determined at a meeting or telephone conference between CONSULTANT and COUNTY's Contract Administrator, or designee, to discuss the needs, applicable design standards, required deliverables, specific CONSULTANT staff or subconsultants to be used, and any task-related mileage budget, if applicable, on a task-by-task basis. Within an agreed timeframe as determined by COUNTY's Contract Administrator, following the meeting or telephone conference, CONSULTANT shall provide COUNTY's Contract Administrator with a written scope of work for the Optional Services, a schedule including a list of tasks with completion dates, a target completion date for the overall scope of work, and a not-to-exceed cost itemization to complete the work (resulting in a Task Order or a Work Order, as applicable), which shall require written approval, authorization, and written notification to proceed from COUNTY's Contract Administrator, prior to commencement of the work. No payment will be made for any Optional Services assignment performed prior to approval and full execution of the Task Order or Work Order, as applicable, and no payment will be made for amounts in excess of the not-to-exceed amount of the Task Order or Work Order.

COUNTY's Contract Administrator will issue a written Task Order for work assignments where the not-to-exceed cost itemization is greater than \$50,000. COUNTY's Contract Administrator will issue a written Work Order for any work assignments where the not-to-exceed cost itemization is \$50,000 or less.

CONSULTANT shall provide COUNTY's Contract Administrator with the names and titles of CONSULTANT's representatives that are authorized to bind CONSULTANT by signing Task Orders and Work Orders and Task

Order and Work Order Amendments on CONSULTANT's behalf.

CONSULTANT's notification of individuals authorized to execute Task Orders and Work Orders and Task Order and Work Order Amendments on CONSULTANT's behalf shall be communicated to COUNTY in accordance with the provisions of ARTICLE XXIX, Notice to Parties, of this Agreement.

The period of performance for Task Orders and Work Orders shall be in accordance with dates specified in each Task Order or Work Order. No payment will be made for any work performed before or after the period of performance in the Task Order or Work Order, unless COUNTY and CONSULTANT amend the Task Order or Work Order. No Task Order or Work Order will be written which extends beyond the expiration date of this Agreement, nor the cumulative total of the not-to-exceed Agreement amount

COUNTY shall review CONSULTANT's progress at key points as specified in each Task Order or Work Order. Milestone reviews shall be performed for the specific products and deliverables listed in each Task Order and/or Work Order. Milestones may only be changed by written agreement (may consist of an email) between COUNTY's Contract Administrator, or designee and CONSULTANT.

- E. If a submittal or Task Order or Work Order deliverable is required to be an electronic file, CONSULTANT shall produce the file using Microsoft (MS) Office 2010 applications (specifically, MS Word, MS Project, and MS Excel). Signed reports shall be submitted in Adobe portable document format (pdf). All plans, specifications, and similar documents shall be produced in MicroStation and submitted in both MicroStation and AutoCAD 2010 formats. All deliverables shall be submitted in language, format, and design that are compatible with and completely transferable to COUNTY's computer and engineering applications and that are acceptable to COUNTY's Contract Administrator. Newer versions of software may be used and other engineering software used for analytical purposes may be approved by COUNTY's Contract Administrator. authorized if CONSULTANT shall submit all deliverables to COUNTY's Contract Administrator in accordance with the completion time schedules identified in Exhibit A, Amended Exhibit A, Exhibit A-1, and Exhibit A-2 or in the individual Task Orders or Work Orders that may be issued for Optional Services. Failure to submit the required deliverables in the format required shall be grounds for termination of the Agreement, as provided in ARTICLE VI, Termination, herein.
- F. CONSULTANT's responsibilities for compliance with Disadvantaged Business Enterprise (DBE) requirements are described in ARTICLE XLVI, Disadvantaged Business Enterprise (DBE) Considerations, and in

ARTICLE XLVII, Disadvantaged Business Enterprise (DBE) Participation, herein.

**III. ARTICLE II, Compensation for Services**, of the Agreement is amended in its entirety to read as follows:

#### ARTICLE II

Compensation for Services: For services provided herein including all of the deliverables described in Exhibit A, Amended Exhibit A, Exhibit A-1, Exhibit A-2, and in the individual Task Orders and Work Orders issued, if applicable, pursuant to this Agreement, and including all of the forms and reports required under the Disadvantaged Business Enterprise (DBE) provisions of this Agreement, and including the progress reports required in ARTICLE III, Progress Reports, below, COUNTY agrees to pay CONSULTANT monthly in arrears. Payment shall be made within thirty (30) days following COUNTY's receipt and approval of itemized invoices detailing services rendered.

For the period beginning July 29, 2014, the effective date of the Agreement, and continuing through the day before the effective date of the Third Amendment to the Agreement, for the purposes hereof, the billing rates shall be in accordance with Exhibit B, marked "Rate Schedule," incorporated herein and made by reference a part hereof.

For services identified and performed under Exhibit A, Amended Exhibit A, and Exhibit A-1, for the period beginning with the effective date of the Third Amendment to the Agreement and continuing through the remaining term of the Agreement, for the purposes hereof, the billing rates shall be in accordance with Amended Exhibit B, marked "Amended Rate Schedule," incorporated herein and made by reference a part hereof.

For serviced identified and performed under Exhibit A-2, for the period beginning with the effective date of this Fifth Amendment to the Agreement and continuing through the remaining term of the Agreement, for the purposes hereof, the billing rates shall be in accordance with Exhibit B-1, marked "Rate Schedule – Phase 4," incorporated herein and made by reference a part hereof.

Other direct costs including special reproductions, delivery charges, and other outside services authorized herein, shall be invoiced at CONSULTANT's cost, for the services rendered. Any invoices that include other direct costs shall be accompanied by backup documentation to substantiate CONSULTANT's costs for the services being billed on those invoices.

Reimbursement for mileage expenses for CONSULTANT and subconsultants, if applicable, shall not exceed the lesser of (1) the rates to be paid to COUNTY employees under the current Board of Supervisors Travel Policy at the time the mileage expenses are incurred; or (2) the rates authorized to be paid to rank and

file state employees under the then current State of California Department of Personnel Administration (DPA) rules. References to the DPA rates and CONSULTANT's responsibilities for cost differences and any overpayments are more fully described in ARTICLE VII, Cost Principles and Administrative Requirements, herein. Mileage reimbursement rates apply to CONSULTANT and to any subconsultants authorized under this Agreement. There shall be no markups allowed on mileage rates for CONSULTANT or for any subconsultant. Any reimbursements for mileage expenses will only be made if such expenses are included under Other Direct Costs in Exhibit C, marked "Cost Proposal\*," Amended Exhibit C-3, marked "Amended Cost Proposal," and Exhibit C-4, marked "Cost Proposal – Phase 4," incorporated herein and made by reference a part hereof or in the budget of an approved and fully executed Task Order or Work Order issued pursuant to this Agreement.

Reimbursement for travel (i.e., overnight lodging, meals, parking, airfare, bridge tolls, and other per diem expenses) is authorized only for CONSULTANT's subconsultant, SYSTRA International Bridge Technologies. Reimbursement for travel expenses shall be in accordance with the rates authorized to be paid to rank and file state employees under the then current State of California Department of Human Resources rates. These rates may be found http://www.calhr.ca.gov/employees/Pages/travel-reimbursements.aspx. The rates found above are maximums and not allowances. In the event of an audit, CONSULTANT must be able to produce receipts substantiating the amount claimed. Travel reimbursement rates apply only to authorized subconsultant, SYSTRA International Bridge Technologies, under this Agreement. There shall be no markups allowed on travel rates for SYSTRA International Bridge Technologies. Any reimbursements for travel expenses will only be made if such expenses are included in Exhibit C-4.

For the purposes of budgeting the items of work identified in Exhibit A, Amended Exhibit A, and Exhibit A-1, the maximum allowable billing amounts for each item of work are described in Amended Exhibit C-3. The amounts indicated in Amended Exhibit C-3 represent the composition of the total not-to-exceed budget for the various tasks. In the performance of the scope of services to be provided under this Agreement, CONSULTANT may request to reallocate the expenses listed in Amended Exhibit C-3 among the various Scope of Work tasks and Items of Work, Other Direct Costs, and Optional Tasks identified therein, including reallocating such expenses between subconsultants listed in Amended Exhibit C-3, subject to COUNTY's Contract Administrator's prior written approval.

For the purposes of budgeting the items of work identified in Exhibit A-2, the maximum allowable billing amounts for each item of work are described in Exhibit C-4. The amounts indicated in Exhibit C-4 represent the composition of the total not-to-exceed budget for the various tasks. In the performance of the scope of services to be provided under this Agreement, CONSULTANT may request to reallocate the expenses listed in Exhibit C-4 among the various Scope of Work

tasks and Items of Work, Other Direct Costs, and Optional Tasks for Phase 4 identified therein, including reallocating such expenses between subconsultants listed in Exhibit C-4, subject to COUNTY's Contract Administrator's prior written approval.

In accordance with ARTICLE XII, State Prevailing Wage Rates, CONSULTANT shall provide COUNTY's Contract Administrator with certified payroll for applicable personnel for the period for which payment is requested and such certified payroll shall accompany each invoice submitted. The certified payroll shall contain information related only to the applicable Project. No invoice shall be paid until the certified payroll is submitted. CONSULTANT shall keep payroll records in accordance with California Labor Code Section 1776.

- **IV. ARTICLE IV, Performance Period**, paragraph A of the Article is amended in its entirety to read as follows:
  - A. This Agreement shall go into effect upon execution, contingent upon approval by COUNTY, and CONSULTANT shall commence work after notification to proceed by COUNTY's Contract Administrator. The Agreement, as amended, shall expire on December 31, 2025.
- V. ARTICLE V, Allowable Costs and Payments, paragraphs A, D, and H of the Article are amended in their entirety to read as follows:
  - A. The method of payment for this contract will be based on actual cost plus a fixed fee. COUNTY 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 Amended Exhibit B and Exhibit B-1, unless additional reimbursement is provided for by contract amendment. In no event will CONSULTANT be reimbursed for overhead costs at a rate that exceeds COUNTY's approved overhead rate set forth in Amended Exhibit B and Exhibit B-1. In the event that COUNTY determines that a change to the work from that specified in Exhibit A, Amended Exhibit A, Exhibit A-1, or Exhibit A-2 is necessary, the contract time or actual costs reimbursable by COUNTY shall be adjusted by an amendment to this Agreement to accommodate the changed work. The maximum total cost as specified in Paragraph "H," as amended, shall not be exceeded, unless authorized by an amendment to the Agreement prior to exceeding the maximum total cost.
    - D. When milestone cost estimates are included in Amended Exhibit C-3 and Exhibit C-4, CONSULTANT shall obtain prior written approval for a revised milestone cost estimate from COUNTY's Contract Administrator before exceeding such estimate.

H. The total amount payable by COUNTY, including the fixed fee, shall not exceed \$6,950,886.23, as amended.				
Except as herein amended, all other parts and sections of Agreement for Services #467-S1411, as amended, shall remain unchanged and in full force and effect.				

**IN WITNESS WHEREOF**, the parties hereto have executed this Fifth Amendment to Agreement for Services #467-S1411 on the dates indicated below.

## -- COUNTY OF EL DORADO--

Ву:	Dated:
Board of Supervisors "COUNTY"	
Attest: Kim Dawson Clerk of the Board of Supervisors	
By: Deputy Clerk	Dated:
QUINCY ENGINEERIN	
By: Sandeep Patil Chief Executive Officer "CONSULTANT"	Dated:
By: Shawn Goodpaster Corporate Secretary	Dated:

#### Exhibit A-2

## Additional Scope of Work - Phase 4

# Design Support Services During Construction of the Mosquito Road Bridge at South Fork American River Project

## TASK 1 – PROJECT MANAGEMENT

CONSULTANT, and authorized subconsultants, shall provide communication and coordination with COUNTY under Agreement for Services #467-S1411 for design support services during construction of the Mosquito Road Bridge at South Fork American River Project, Capital Improvement Program project number 77126/36105028. This task includes regular monthly invoicing and Progress Reports. Progress Reports shall be submitted in accordance with the Agreement for Services, ARTICLE III, Progress Reports, to facilitate Project oversight.

## Activities:

• Prepare invoices, progress reports, and applicable Quality Assurance/Quality Control documentation.

## Deliverable(s):

• Progress reports and invoices

#### **Duration:**

Monthly for duration of Project

## TASK 2 – DESIGN SUPPORT DURING CONSTRUCTION

After award of the construction contract, CONSULTANT shall provide services including, attending a pre-construction meeting, reviewing Contractor submittals, respond to Contractor Requests for Information (RFI's), reviewing shop plans, preparing and/or reviewing change orders, and making other field observations, at COUNTY's request. All activities include appropriate recommendations and documentation of the Construction Management (CM) Team's activities.

Authorized subconsultant, SYSTRA International Bridge Technologies (SYSTRA IBT), shall provide services at COUNTY's request specific to the main piers and segmental superstructure such as reviewing Contractor submittals; reviewing pier, pier table, segment, and abutment diaphragm shop plans; and responding to Contractor RFI's. SYSTRA IBT shall also review as-cast survey data during cantilever construction to verify Contractor adherence to proposed geometry control plan and will provide feedback to Resident Engineer or Structure's Representative if survey data suggests the final bridge profile may not be achieved. The review shall be performed using

Contractor-provided, as-built concrete material data, field surveys by COUNTY, and other supporting field data to verify time dependent models.

A list of anticipated Contractor submittals is shown in the Table below. The "Primary Review" includes performing a detailed review of the submittal, coordinating with other CM Team and designers to gather their input, and providing formal comments and recommendations to the Resident Engineer or Structure's Representative for consideration. The "Secondary Review" consists of a more cursory review of the submittal for general conformance with the construction contract documents and providing feedback to the individuals performing the Primary Review and Resident Engineer or Structure's Representative in their development of formal responses to the submittal and coordination with the Contractor. Secondary Review items marked as "For Information Only (FIO)" are submittal items that are provided to CONSULTANT and subconsultant staff as possible coordination items, or project record keeping items that are not anticipated to need review action unless otherwise requested by COUNTY.

Submittal	Primary Review	Secondary Review
Prime Contractor Qualifications	CM	FIO
Segmental Bridge Contractor Qualifications	CM	CONSULTANT/
		Subconsultant
Soil Nail & Ground Anchor Contractor Qualifications	CM	CONSULTANT/
		Subconsultant
Contractor's Construction Schedule	CM	FIO
Environmental/Permit Compliance	CM	CM
Rock Blasting Plan	CM	CONSULTANT*
Footing Excavation Material Observation	CM	Subconsultant
Temporary Access Roads/Platforms	CM	FIO
Temporary Bridge/Platform Plans	CM	FIO
Soil Nail Install Plan	CM	CONSULTANT/
		Subconsultant
Soil Nail Shop Plans	CONSULTANT	CM
Ground Anchor Install Plan	CM	CONSULTANT
Ground Anchor Shop Plans	CONSULTANT	CM
Soil Nail & Ground Anchor Drilling	CM	Subconsultant
Inclinometer Shop Plan & Monitoring	CM	Subconsultant
CIDH Pile Install Plan	CM	CONSULTANT
Micropile Install Plan	CM	CONSULTANT
Micropile Shop Plans	CONSULTANT	CM
Pile Drilling Material Observation	CM	Subconsultant*
Shotcrete Materials	CM	CONSULTANT*
Superstructure Geometry Control Manual	CONSULTANT/	CM
	Subconsultant	
Superstructure Construction Manual (travelers, forming,	CONSULTANT/	CM
casting)	Subconsultant	
Concrete Mix Designs	CM	CONSULTANT/

		Subconsultant*
Polyester Concrete Mix Design/Placement Plan	CM	CONSULTANT/
		Subconsultant*
Mass Concrete Placement Plans	CONSULTANT/	CM
	Subconsultant	
Temporary Structures & Falsework	CM	CONSULTANT*
Crane Erection Plans	CM	CONSULTANT*
Prestressing Shop Plans	CONSULTANT/	CM
	Subconsultant	
PTFE Bearing Shop Plans	CONSULTANT	CM
Joint Seal Shop Plans	CONSULTANT	CM
Miscellaneous Metal Shop Plans	CM	CONSULTANT*
Type 85 Concrete Barrier Shop Plans	CM	CONSULTANT*
Metal Railing Shop Plans	CM	CONSULTANT*
Soldier Pile Shop Plans	CM	CONSULTANT*
Shop Painting and Field Painting	CM	CONSULTANT*
Bar Reinforcing Shop Plans	CM	CONSULTANT/
		Subconsultant
Welding Quality Control Plan	CM	CONSULTANT*

<sup>\*</sup>Secondary reviews as needed and requested by COUNTY.

FIO – indicates "For Information Only" (or For Your Records) and are submittals that are provided for possible coordination items, or project record keeping, but are not anticipated to need review action unless otherwise requested by COUNTY.

The above list of submittals is approximate and may change as needed based on actual review needs.

CONSULTANT, and authorized subconsultants, shall provide review and comments on all CONSULTANT Primary Review shop plans and other submittals on a high-priority basis and within approximately fifty percent (50%) of the duration identified in the Project construction specifications whenever possible to allow for potential follow up, item resolution, and field coordination. Under no conditions shall CONSULTANT and any authorized subconsultants provide review comments in excess of timeframe (or duration) identified in the Project construction specifications unless prior coordination and approval is granted by Resident Engineer or Structure's Representative.

COUNTY (and the Project's CM Team) will coordinate with CONSULTANT staff and authorized subconsultants as needed for technical details related to bridge work. In addition, the COUNTY and the Project's CM Team shall provide the following services that may involve coordination with CONSULTANT and authorized subconsultants related to the bridge work:

 Resident Engineer, Structure's Representative, and office engineer for general record keeping;

- Coordination and interaction with all Federal, State, COUNTY, and local agencies and jurisdictions, permitting agencies, and stakeholders;
- On site materials sampling and testing including bridge concrete, shotcrete, rebar, on site welding, butt welded hoops, ultimate rebar splices, grout, mortar, foundation soils properties, compaction;
- Environmental monitoring and compliance;
- Observation of Micropile testing (if applicable), observation/inspection of soil nail, ground anchors, rock bolt, and/or tie back construction;
- Observation/inspection of temporary retaining walls, and temporary bridges, not part of the bridge construction;
- Cast-In-Drilled-Hole piling gamma-gamma testing;
- Source inspection for concrete batch plan, bridge bearings, joint seals, and rebar splices; and
- Bridge profilograph and Bridge Deck Skid Testing.

#### Activities:

- Review Contractor submittals
- Respond to Requests for Information

## Deliverable(s):

- Shop Plan Comments/Approvals
- Inquiry Responses
- Change Order Comments & Attachments
- Meeting/Conference Call Notes

#### Duration:

Construction Project award through construction duration.

## TASK 3 – GEOTECHNICAL OBSERVATION

Authorized subconsultant, Crawford & Associates, Inc. (Crawford) shall provide geotechnical engineering observation, as requested by COUNTY, during the following construction operations to assure that in situ field soil/rock conditions are consistent with the conclusions and recommendations shown in the Geotechnical Report:

- Excavations for the foundations at all piers and abutments.
- Excavations for the foundations at all wingwalls and retaining walls.
- Pile drilling at Abutment 1 and Piers 2 & 3.

Crawford is anticipated to be on site to observe the installation of at least one (1) Cast-in-drilled-hole (CIDH) pile or micropile at each of Pier 2 and Pier 3 foundations. Additional site observation for pile installation shall be on an as-requested basis from COUNTY. Crawford shall be on site to observe the soil/rock materials in the completed footing excavations for each retaining wall and abutment spread footing prior to the Contractor placing any bar reinforcing or formwork. COUNTY to provide Crawford five (5) working days advance notice of Contractor's completion of each footing excavation.

Authorized subconsultant, WRECO, shall provide geotechnical engineering observation during the drilling operations for the soil nails and ground anchors at Piers 2 and 3 to assure that in situ field soil/rock conditions are consistent with the conclusions and recommendations shown in the Geotechnical Report.

WRECO is anticipated to be on site to observe the installation of at least one soil nail and one ground anchor in each in each wall segment at each of Pier 2 and Pier 3 foundations. Additional site observation for soil nail and ground anchor installation will be on an asrequested basis from COUNTY.

COUNTY will observe and compile inclinometer readings developed by the Contractor and submit the information to WRECO for review and evaluation. WRECO shall evaluate inclinometer readings to be provided by COUNTY and make appropriate observations and recommendations.

Based on these observations, if it is concluded that existing conditions vary significantly from the Geotechnical Report or retaining wall design assumptions, Crawford and/or WRECO shall make recommendations to modify and resolve the issue. Recommendations could include adjusting excavation limits, modifying the existing soils/rock, modifying the design, and other possible solutions. Additional geotechnical observation may be performed by Crawford and/or WRECO.

COUNTY will provide observation and inspection of all temporary earthwork at the site including Contractor-installed laydown areas, temporary support locations, equipment work pads, and access roads to wall, abutment, and pier locations.

CONSULTANT shall incorporate modifications to the design plans as requested.

#### Activities:

• Field observations of soil nail, ground anchor, and pile foundation installation.

#### Deliverables:

- Geotech Observation memo (Crawford) as an electronic (pdf) file
- Drilling Observation memo (WRECO) as an electronic (pdf) file
- Inclinometer letter report (WRECO) as an electronic (pdf) file

#### Duration:

 Prior to retaining wall and foundation construction thru completion of foundations and retaining walls.

## TASK 4 – JOBSITE OBSERVATION AND MEETINGS

CONSULTANT shall participate, as requested by COUNTY, in meetings via conference call or on-line video conferencing with CM Team and Contractor to discuss RFI's, status of shop plan reviews, project schedule, stage construction, and other key

aspects of the project as requested by the COUNTY. CONSULTANT design staff shall be available to meet on site to answer questions and resolve issues as requested by the CM Team.

## Activities:

Site visits, field meetings, and video conference calls

#### Deliverables:

- Site Meeting/Conference Call Notes, as electronic files (i.e. Word and pdf)
- Addenda as required, as electronic files (i.e. Word and pdf)

#### **Duration:**

As needed during construction contract duration

## TASK 5 – PREPARE RECORD DRAWINGS

When construction is completed, and as requested by COUNTY, CONSULTANT shall prepare Record Drawings (as-builts) for bridge and retaining wall plans for COUNTY's files. These as-builts will be based on information clearly marked on a set of contract plans prepared by COUNTY's Resident Engineer and CM Team. The information will be transferred into the project CAD files on its own unique level and color. The updated drawings will be printed into .PDF format and compiled on a CD/DVD for submittal to COUNTY.

#### Activities:

• CAD file updates including plan markups by Resident Engineer

#### Deliverables:

Record Drawings in .PDF format

## Duration:

• Within three (3) months of receipt of all redlines on plans from Resident Engineer

## TASK 6 – OPTIONAL SERVICES

COUNTY may require CONSULTANT to perform Optional Services. Such Optional Services may supplement, expand, or otherwise modify the Scope of Work and the Supplemental Item of Work or may include, but not be limited to, tasks that are deemed critical by COUNTY's Contract Administrator. If CONSULTANT's services are required for Optional Services, COUNTY's Contract Administrator will issue separate Task Orders and/or Work Orders for CONSULTANT to perform those tasks In accordance with the provisions of this Agreement.

## Exhibit B-1

## Rate Schedule - Phase 4

Labor by Classification	Hourly Rate
Principal Engineer	\$75 - \$130
Senior Engineer	\$50 - \$120
Associate Engineer	\$40 - \$85
Professional Engineer VII	\$40 - \$85
Engineering Designer I	\$30 - \$50
Engineering Designer II	\$36 - \$66
Engineering Designer IX	\$50 - \$90
CAD Manager	\$34 - \$70
CAD Tech	\$25 - \$60
Student Intern	\$18 <b>-</b> \$26
Administrative Assistant	\$17 <b>-</b> \$55
Senior Project Manager	\$60 - \$120
Project Manager I	\$50 - \$110
Surveying - Office Classifications	
Survey Manager	\$60 - \$90
Project Surveyor	\$40 - \$70
Surveying - Field Classifications	
Party Chief	\$40 - \$70
Chainman/Rodman	\$30 - \$60
Overhead Rate - 142.95%	
Other Direct Coete	

## **Other Direct Costs**

Office Computer & Software Included in Overhead Office Phone/Cell/Fax Included in Overhead

Reproduction

In office Included in Overhead

Vendor Cost Delivery Cost

Mileage In accordance with ARTICLE II,

Compensation for Services

Subconsultants Cost

Prevailing Wage\*\* loaded with overhead and fee

Miscellaneous Cost

<u>Fee</u>

Labor + Overhead 10%

## Notes:

\*\*Prevailing Wage may apply for Construction Inspection and Surveying Services. Labor Costs to be invoiced based on actual hourly rate plus overhead plus fee. Other Direct Costs to be invoiced at actual cost.

The COUNTY and CONSULTANT agree that the Indirect Cost Rate shall remain unchanged for a multi-year contract.

## **Exhibit C-4**

## Cost Proposal - Phase 4

Item of Work Task 1 Task 2 Task 3	Project Management Design Support During Construction Geotechnical Observation Jobsite Observation and Meetings		<b>Cost</b> 52,130.05 161,744.54
Task 4 Task 5			50,438.43 44,144.56
	Item of Work Subtotal:	\$	308,457.58
	CONSULTANT – Other Direct Costs	\$	292.50
Task 6	Optional Services	\$	107,514.27
	CONSULTANT Subtotal	\$	416,264.35
Subconsultants:			
SYSTRA IBT Task 3 Task 5	Design Support During Construction Prepare Record Drawings Other Direct Costs (travel, per diem, etc.)	\$ \$ \$	88,969.10 18,373.00 1,229.68
	Subtotal:	\$	108,571.78
HDR Engineering Services (WRECO) Task 3	Geotechnical Observation Other Direct Costs	\$ \$	45,729.48 1,500.00
	Subtotal:	\$	47,229.48
Crawford & Associates, Inc.			
Task 3	Geotechnical Observation Other Direct Costs	\$ \$	110,497.41 30,840.00
	Subtotal:	\$	141,337.41
	Subconsultant Subtotal:	\$	297,138.67

## TOTAL COST ESTIMATE: \$ 713,403.02

All expenses and their distribution among Tasks and Items of Work are estimates only. This Exhibit represents the composition of the total not-to-exceed budget for this Agreement. In the performance of the Scope of Work to be provided in accordance with this cost estimate, CONSULTANT may request to reallocate the expenses listed herein among the various Scope of Work tasks and items of work, Other Direct Costs, Optional Services identified herein, including reallocating such expenses between subconsultants identified herein, subject to COUNTY's Contract Administrator's prior written approval. In no event shall the total not-to-exceed amount of the Agreement be exceeded.