Snohomish County Standard Consultant Agreement Supplement	Consultant/Address/Telephone **BergerABAM Inc.** 3301 Ninth Avenue South, Suite 300 Federal Way, WA 98003 Contact Name / E-Mail Address Robert L. Fernandes / bob.fernandes@abam.com Telephone 206-357-5616 Fax 206-357-5601	
Supplement Number **Supplement No.3**		
Agreement Number **CCF07-13**	Execution Date *August 8, 2013*	Completion Date *December 31, 2016*
Project Title **Structural Engineering, Geotechnical Design, Survey and Mapping Services for the Index Galena Road (MP 6.4 – 6.9) Flood Repair Project**	New Maximum Amount Payable Remains Unchanged at **$1,237,640.00**	
Description of Work *Provide Structural Engineering, Geotechnical Design, Survey and Mapping Services for the Index Galena Road (MP 6.4 – 6.9) Flood Repair Project. The Index-Galena Road is located along the Skykomish River in the Mount Baker – Snoqualmie National Forest in southeast Snohomish County. During Fall 2006 it was severely damaged by flooding and was washed out between mile posts 6.4 and 6.9.*		

WHEREAS, Snohomish County desires to supplement the Agreement entered into with **BergerABAM Inc.** and executed on the 8th day of August, 2013, as amended by Supplement No.1 on the 13th day of May, 2014, and Supplement No.2 on the 24th day of February, 2015, and identified as Agreement No. **CCF07-13**, and

The changes to this Agreement are described as follows:

1. The "Completion Date" on the Agreement title page is amended as follows:

   Completion Date *((December 31, 2015))* *December 31, 2016*

2. Maximum Amount Payable, on the Agreement title page, shall remain unchanged as payment for the supplemental work will be drawn from the unspent portion of the original budget.

3. Section II Scope of Work, is hereby amended to read:

   The Scope of Work and projected level of effort required for this PROJECT is detailed in Exhibit "A" comprised of Exhibit A-1, Exhibit A-1a, Exhibit A-1b, and Exhibit A-1c attached hereto and by this reference made a part of the AGREEMENT.

4. The first and second paragraphs of section IV Sub-Contracting, are hereby amended to read:

   The COUNTY permits sub-contracts for those items of work as shown in Exhibit "G" comprised of Exhibit G, Exhibit Ga and Exhibit Gb, attached hereto, and by reference made a part of this AGREEMENT.

   Compensation for this sub-consultant work shall be based on the cost factors shown on Exhibit "G-1", Exhibit "G-1a", Exhibit "G-1b" and Exhibit "G-2".

5. **EXHIBIT A-1c Supplemental Scope of Work**, attached hereto is added to and incorporated into the original Agreement.

6. **EXHIBIT E-1c Supplemental Consultant Fee Determination – Budget**, attached hereto is added to and incorporated into the original Agreement.

7. **EXHIBIT E-2 Consultant Fee Determination – Summary Sheet Fee Schedule**, attached hereto and incorporated into the original Agreement has been amended and hereby replaces the original EXHIBIT E-2.

8. **EXHIBIT F Breakdown of Overhead Cost**, attached hereto and incorporated into the original Agreement has been amended and hereby replaces the original EXHIBIT F.

9. **EXHIBIT Gb Supplemental Subcontracted Work**, attached hereto is added to and incorporated into this Agreement.

10. **EXHIBIT G-1b Supplemental Subconsultant Fee Determination – Budget**, attached hereto is added to and incorporated into this Agreement.

11. **EXHIBIT G-2 Subconsultant Fee Determination – Summary Sheet Fee Schedule**, attached hereto and herein by this reference, is added to the original EXHIBIT G-2 as a Fee Schedule for an additional Subconsultant, and made part of the original Agreement.

12. **EXHIBIT G-3 Breakdown of Subconsultant's Overhead Cost**, attached hereto and herein by this reference, is added to the original EXHIBIT G-3 as overhead documentation for an additional Subconsultant, and made part of the original Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Supplement No.3 on this 21 day of OCTOBER, 2015.

SNOHOMISH COUNTY

Director of Public Works

BERGERABAM INC.

Signature

Managing Principal

Title

EXHIBIT A-1c
Supplemental Scope of Work

PROJECT DESCRIPTION

The COUNTY desires to restore the roadway connection of the Index-Galena Road between project design Mileposts 6.088 and 7.032 by constructing a new roadway realigned to the south and east of the original roadway which was damaged during flooding of the North Fork of the Skykomish River in November of 2006.

The phase 1 services included preliminary bridge engineering, bridge study, and preliminary design of other project design elements, including reinforced soil slopes (RSS), structural earth walls, soldier pile walls, an armored crossing/ box culvert vented ford structure, and a debris diversion berm.

Changes in the project, most significantly the reduction of the design speed to 35 miles per hour (MPH), have changed the original scope for completing the project. BergerABAM, including subconsultant firms of Shannon & Wilson and The Louis Berger Group, referred here forward as the CONSULTANT, shall provide the following engineering services as supplemental to the original scope of work. This supplemental scope of work is based upon an understanding of changes to the project design scope as described in the following, for geotechnical, structural, roadway and civil engineering services.

SUPPLEMENTAL SERVICES

The purpose of Supplement No.3 is to provide advancement of the design of all project elements to a level of completion sufficient to develop a working set of plans and construction cost estimate for the project. This includes checking and revising the horizontal and vertical alignment of the revised 35 MPH roadway design alignment developed by the COUNTY, design of associated roadway stormwater conveyance and crossing flows and studies of identified project elements to determine the preferred alternatives for design advancement.

The original scope of work Tasks 1-10 and Supplement No. 2 Task 11 are considered to be completed for the current level of design achieved to date. Supplement No.3 replaces any remaining work from the original tasks to meet immediate goals of the project identified by the COUNTY and project stakeholders.

This supplement includes the following new tasks:

Task 12 - Project Management
Task 13 - Geotechnical Engineering
Task 14 - Hydraulic Engineering
Task 15 – 35 MPH Alignment
Task 16 - Vented Ford Options
Task 17 - Debris Diversion Berm
Task 18 - Bridge & Culvert Comparison
Task 19 – 35 MPH Alignment Cost Estimate
Task 20 - Permitting Support
Task 21 - QA/QC

ESTIMATED LEVEL OF EFFORT

The estimated level of effort to provide these services is shown in Exhibit E-1c and G-1b, and is based upon the scope of work, assumptions, and task descriptions provided below.

SCHEDULE

The current target for advertisement is early 2018 to allow for construction to begin in the spring of 2018, although the project schedule may be accelerated. The project schedule is dependent on the environmental process and milestones for deliverables of this scope will be developed in consultation with the COUNTY

TASK 12 – PROJECT MANAGEMENT

Task 12.1 Project Coordination

The CONSULTANT will provide project management and communications between the CONSULTANT and the COUNTY. The CONSULTANT will perform project administration and management tasks as follows.

- Prepare and submit monthly invoices.
- Prepare monthly progress reports summarizing the status of the budget, highlights, details, issues, approved changes, plans for next period.

- Prepare and update the project schedule as circumstances require. The project schedule will be developed using Microsoft Project.
- Prepare subconsultant agreements and perform ongoing subconsultant coordination.
- Maintain all contract-required documentation.

Task 12.2 Progress Meetings
The CONSULTANT will attend meetings with the COUNTY to coordinate the engineering study and design efforts for the estimated level of effort shown in Exhibit E-1c.

Task 12.3 Management of Subconsultants
The CONSULTANT will manage the subconsultant firms of Shannon & Wilson and The Louis Berger Group (SUBCONSULTANT(s)), and any other subconsultants, that may be added during the duration of the project.

Task 12.4 Project Demobilizations and Restarts
It is anticipated that the project will undergo a period of inactivity following the Supplement No. 3 phase of the design advancement, prior to beginning final design, to accommodate the expected permitting, right-of-way, and easement process timelines. The CONSULTANT will perform services needed to accomplish a demobilization and two restart of project activities, including possible transitions of project staff assigned and record keeping during the demobilization process to facilitate efficient restart of project activities.

TASK 13 GEOTECHNICAL ENGINEERING (SUBCONSULTANT)
The SUBCONSULTANT, under a subconsultant agreement with the CONSULTANT, will provide the following supplemental geotechnical engineering services.

Task 13.1 Project Management
The SUBCONSULTANT will perform Project Management services including invoicing, progress reporting, scheduling and coordinating work assignments.

Task 13.2 Preliminary Design-Phase 1
The proposed 35 MPH alternative alignment changes the layout of structures and graded slopes along the project from the previous alignment. The COUNTY identified several immediate design items required to move the project forward. The SUBCONSULTANT will provide additional geotechnical consultation to aid the CONSULTANT with these items based on the 35 MPH alternative alignment.

For the purposes of establishing an estimate of expected effort, the SUBCONSULTANT will provide geotechnical consultation for:

- 35 MPH Alignment Review
- Box Culvert Vented Ford
- Debris Diversion Berm
- Bridge & Culvert Study
- Construction Cost Estimate
- Update Geology, Soils and Groundwater Discipline Report
- Meetings

Task 13.2.1 35 MPH Alignment Review
The 35 MPH alternative alignment changes the roadway design, including the layout of structures and graded slopes along the project. This task will include reviewing the 35-MPH alternative alignment. Tasks will include:

- Review the subsurface conditions, and proposed structures and graded slopes along the new 35 MPH alignment
- Assist the CONSULTANT with alignment optimization support
- Assist the CONSULTANT and the COUNTY with alignment deviation support

Task 13.2.2 Box Culvert Vented Ford
The SUBCONSULTANT will consult with the CONSULTANT regarding potential changes to the preliminary design elements of the box culvert vented ford crossing based on the newly adopted 35 MPH alignment. The SUBCONSULTANT will assist the CONSULTANT with evaluating other options for the crossing location at approximate STA 29+00. Specific tasks will include:

- Assist the CONSULTANT with a study to review alternatives for the box culvert vented ford crossing. Alternatives include a plain culvert, vented ford, bridge, and possibly a diversion berm.
- Provide the design calculations and recommendation stakeholder preferred option to confirm conformance with the new 35 MPH alignment.

Task 13.2.3 Debris Diversion Berm
The SUBCONSULTANT will consult with the CONSULTANT regarding potential changes to the preliminary design elements of the debris diversion berm based on the 35 MPH alternative alignment. As needed, the SUBCONSULTANT will revise preliminary design recommendations and conceptual drawings for the structure. The SUBCONSULTANT will assist the CONSULTANT with a study to evaluate the need for the debris diversion berm located at approximate STA 53+50, and the risk to the roadway if the structure is not built.

Task 13.2.4 Bridge & Culvert Study
The SUBCONSULTANT will assist the CONSULTANT with reviewing costs and providing a comparison of the bridge structure with a large culvert crossing at the current bridge location. This study will include conceptual design recommendations for construction of culvert crossing at the proposed bridge location.

Task 13.2.5 Construction Cost Estimate
The SUBCONSULTANT will assist the CONSULTANT with developing a construction cost estimate for the 35 MPH alternative alignment. This will include support for the 4 build options at the box culvert vented ford location, debris diversion berm, and the culvert option at the proposed bridge location.

Task 13.2.6 Update Geology, Soils and Groundwater Discipline Report
The SUBCONSULTANT will update the Geology and Soils Discipline Report to conform to the new 35 MPH roadway design. The SUBCONSULTANT will address comments received from WSDOT and the Forest Service.

Task 13.2.7 Meetings
The SUBCONSULTANT will attend one meeting with the CONSULTANT to review the preliminary 35 MPH alignment. The meeting will be at the CONSULTANT's office.

Key project elements and findings will be discussed with the project team at the project site after the new 35 MPH alignment has been surveyed and staked. The SUBCONSULTANT will attend up to one meeting at the project site.

The SUBCONSULTANT will attend one meeting with the CONSULTANT and the COUNTY to review design plans at the COUNTY's office.

The SUBCONSULTANT will attend one meeting with the services and select stakeholders. Likely participants will include the CONSULTANT, the COUNTY, USACE, WDFW, and US Forest Service. The meeting will be at the COUNTY's office.

Deliverables
- Revised Geology, Soils and Groundwater Discipline Report.

TASK 14 HYDRAULIC ENGINEERING (SUBCONSULTANT)
The SUBCONSULTANT, under a subconsultant agreement with the CONSULTANT, will provide the following supplemental hydraulic engineering services.

Task 14.1 Design Support
The SUBCONSULTANT will review the portion of the 35 MPH alternative alignment, including structures and slopes, within the channel migration zone. The SUBCONSULTANT will provide hydraulic engineering support to the project team, including a conceptual evaluation of the culvert option at the proposed bridge location.

TASK 15 35 MPH ALIGNMENT
Working together with the SUBCONSULTANTs, the CONSULTANT will advance the design and drawings of the project for the 35 MPH alignment and the following identified project elements as included in the current set of preliminary plans provided to the COUNTY in March 2014, including the following:

- Roadway Geometrics
- Walls and Slopes
- Drainage & Conveyance

Drawings will be produced by the CONSULTANT with details and other design input from the SUBCONSULTANTs as described under Tasks 13.2.1 thru 13.2.4 and 15.3. The profile and alignment of the roadway will be based on the COUNTY's revised 35 MPH alignment as modified during this phase of design advancement. The following project elements will be investigated in Tasks 16, 17, and 18 and accounted for in this effort.

- Box Culvert Vented Ford *(or other recommended alternative)*
- Debris Diversion Berm *(or other recommended alternative)*
- Bridge *(or other recommended alternative)*

Task 15.1 Roadway Geometrics

The CONSULTANT will review the horizontal alignment, vertical profile, roadway sections, wall locations (see Task 15.2), stopping sight distance, guardrail placement and other roadway safety elements provided by the COUNTY as the current 35 MPH alignment in June 2015.

The CONSULTANT shall attend one 2 hour Geometrics Design Review Meeting with the COUNTY to discuss the roadway design and findings from the review. The CONSULTANT shall prepare notes, including geometric data documentation as plan/profile sheet(s) and provide a response to the COUNTY's comments based on design decisions from the Geometrics Design Review Meeting. The COUNTY comments shall be incorporated into the final meeting notes along with documentation of the review findings and any required design deviations.

Assumptions:

1. Roadway design shall meet or exceed the standards set forth in AASHTO's Guidelines for Geometric Design of Very Low-Volume Local Roads for a design speed of 35 miles per hour (MPH).
2. The current 35 MPH alignment provided by the COUNTY reflects a design that may require some adjustments following the review conducted during this task.

Deliverables:

- Draft meeting notes with geometric data documentation from the Geometrics Design Review Meeting
- Response to COUNTY Comments
- Final meeting notes with geometric data documentation from the Geometrics Design Review Meeting

Task 15.2 Walls and Slopes

The current 35 MPH alignment (June 2015) significantly changes the layout of walls and slopes in a number of areas along the length of the project from the plans submitted to the COUNTY in March 2014. The CONSULTANT will work with the SUBCONSULTANT to identify and confirm limits of walls and slopes, include geometrics - profile, layout, and sections - and interface with the roadway prism. Wall interface detail plan sheets identified in Exhibit E-1c based on the new 35 MPH alignment will be developed.

Task 15.3 Conveyance Design Development (CONSULTANT and SUBCONSULTANT)

The CONSULTANT shall prepare preliminary designs to continue the design development for the project drainage conveyance elements identified in the current set of preliminary plans prepared by the COUNTY. The current 35 MPH alignment is significantly different from the 60 Percent Submittal plans provided to the COUNTY in March 2014 and the change to grades and roadway location in a number of areas along the length of the project is expected to change the conveyance regime and culvert crossings.

Task 15.3.1 Conveyance Progress Meetings

The CONSULTANT shall coordinate design with the COUNTY as the conveyance design progresses. The CONSULTANT shall meet with the COUNTY, up to two times; once to discuss proposed culvert crossing and roadway conveyance designs at an early 30% percent completion level and once (Task 15.3.3) to obtain approval prior to advancing the design to develop the working set of plans identified in Exhibit E-1c.

The CONSULTANT shall join the County, Washington State Department of Fish and Wildlife (WDFW) and the United States Forest Service (USFS) for two meetings, including one on-site visit (Task 15.3.2), to discuss the culvert design. The goal is to achieve concurrence on the culvert design parameters including: location, flow orientation, sizing and other location specific features (such as potential debris sizing) at each proposed culvert as needed. A memorandum documenting the culvert location with pictures and descriptions as well as the agreed upon culvert size shall be developed for the purposes of documentation of the agreed upon culvert properties.

Assumptions:

1. Two meetings with Snohomish COUNTY will be conducted to discuss the current status of the conveyance design as the design progresses.

2. Two meetings will be conducted with WDFW and USFS to discuss design parameters for the proposed culverts with one meeting conducted on site.

Task 15.3.2 Culvert Crossing Design

The CONSULTANT shall update the culvert plans to match the revised 35 MPH alignment geometrics. The CONSULTANT shall develop a memorandum documenting the engineering design of the 13 currently identified culvert crossings along the preliminary 35 MPH design alignment developed by the COUNTY, the justification for sizing the culverts, and requesting approval of each culvert size and location from the project stakeholders. The parameters identified in the on-site visit (Task 15.3.1) with the COUNTY, WDFW, and USFS will be incorporated into the memorandum.

The culvert design will be based on the criteria established by the COUNTY as well as the 2013 WDFW Water Crossing Design Guidelines and the USFS Northwest Forest Management Plan. Culvert sizes established for debris passage will be checked for hydraulic capacity.

The CONSULTANT shall design the channel protection measures for each culvert based on the 2006 Federal Highway Administration (FHWA) Hydraulic Design of Energy Dissipaters for Culverts and Channels. A memorandum will be developed describing the design and selected channel protection measures and submitted to WDFW and USFS for approval.

The CONSULTANT shall then provide advancement of the design for the culvert crossing drainage elements identified in the approved memorandum as agreed upon by the project stakeholders to a level of completion sufficient to develop a working set of plans and construction cost estimate for the project. Further design and drawing development will be performed under Task 15.4.

Assumptions:

1. One site visit will be conducted with WDFW and USFS to confirm each culvert size and location throughout the project.
2. Culverts will be sized using the Stream Simulation method as described in the WDFW 2013 Water Crossing Design Guidelines.

Deliverables:

- Culvert Sizing Memorandum (2 hard copies and 1 electronic copy)
- Culvert Site Visit Documentation Memorandum (2 hard copies and 1 electronic copy)
- Channel Protection Measures Memorandum (2 hard copies and 1 electronic copy)

Task 15.3.3 Roadway Conveyance Design

The CONSULTANT shall develop a roadway conveyance design system that will distribute the stormwater runoff from the roadway prism to the selected stormwater BMPs. The roadway conveyance system will include all elements with the exception of culvert crossings. All conveyance design elements will follow the Washington State Department of Transportation (WSDOT) 2014 Highway Runoff and 2010 Hydraulic Manuals. A Roadway Conveyance Design Memorandum will be developed to document all conveyance elements including calculations.

The CONSULTANT shall then provide advancement of the design for the roadway conveyance design elements identified in the design development as agreed upon by the COUNTY and other project stakeholders, and documented in the Roadway Conveyance Design Memorandum. The design advancement shall be to a level of completion sufficient to develop a working set of plans and construction cost estimate for the project. Further design and drawing development will be performed under Task 15.4.

Assumptions:

1. Assume one meeting with the COUNTY to discuss and resolve the comments from the Roadway Conveyance Design Memorandum.

Deliverables:

- Roadway Conveyance Design Memorandum (2 hard copies and 1 electronic copy)

Task 15.4 35 MPH Alignment Drawings

This task involves engineering and design work required to advance the design of the project to a level of design completion of all project elements for the 35 MPH alignment as designed and confirmed under Task 15.1, with walls and slopes as identified under Task 15.2, roadway drainage conveyance as designed under Task 15.3, and as greed upon between the COUNTY and the CONSULTANT.

The CONSULTANT will prepare the drawings as indicated in Exhibit E-1c and work together with the COUNTY during the plan development to provide sufficient design information for communications with project stakeholders. Drawings will be developed as a working set of plans to a level of detail sufficient to convey project design information to the design team for quantities and cost estimate.

Assumptions:

1. The CONSULTANT shall attend up to two, two hour meetings, and participate in four, one hour conference calls with the COUNTY for plan development and review.
2. Utilities are not present and utility coordination is therefore not required.
3. One site visits with three attendees each during design advancement is assumed.
4. A formal submittal of PS&E documents will not be performed for this task and no formal review will be conducted.
5. The CONSULTANT is responsible for the following plan sheets – please refer to Exhibit E-1c for an estimate of expected drawing sheets:
   a. Cover Sheet with Vicinity Map
   b. Key Map
   c. Grading Plans
   d. Roadway - Sections and Grading Sections
   e. Roadway - Plan and Profile
   f. Access Roads (2) - Plan and Profile
   g. Culverts - Plan and Profile & Details
   h. Wall/Slope Interface Details

Deliverables:

- The CONSULTANT shall provide the following at the design completion level achieved for this task:
  1. Plans
  2. Civil 3D Etransmit file

TASK 16 VENTED FORD OPTIONS

The CONSULTANT will work with the SUBCONSULTANT to reconsider other options for the box culvert vented ford, formerly armored crossing project element located at approximate STA 29+00. A brief study and evaluation will be performed to provide information to stakeholders to assist with determination of a preferred alternative for a design element at this location. The build options considered will include: culvert, vented ford, bridge and possibly a diversion berm, which will be coordinated with the revised 35 MPH roadway design alignment. The study findings will present design options with associated costs, benefits, and risks.

After a preferred alternative has been recommended by the project stakeholders, the design of this project element will be advanced to a concept level of completion sufficient to determine geometrics - profile, layout, and sections - and interface with the roadway prism and any required grading. This will be used to develop the cost for this project element to be included in the cost estimate performed under Task 19. Any associated stream relocation and flow accommodation associated will be included with this design element.

Deliverables

- A draft and final memo summarizing the results of the study and evaluation findings will be submitted as a Debris Flow Crossing Memo.

TASK 17 DEBRIS DIVERSION BERM

The CONSULTANT will work with the SUBCONSULTANT to consider other options for the debris diversion berm project element located at approximate STA 53+50. A brief study and evaluation will be performed to provide information to stakeholders to assist with determination of a preferred alternative for a design element at this location. The study findings will present design options with associated costs, benefits, and risks.

After a preferred alternative has been recommended by the project stakeholders, the design of this project element will be advanced to a concept level of completion sufficient to determine geometrics - profile, layout, and sections - and interface with the roadway prism and any required grading. This will be used to develop the cost for this project element to be included in the cost estimate performed under Task 19 Deliverables.

A draft and final memo summarizing the results of the study and evaluation findings will be submitted as a Debris Flow Diversion Memo.

TASK 18 BRIDGE & CULVERT COMPARISON

The CONSULTANT will work with the SUBCONSULTANT to provide additional bridge study services to review costs and provide a comparison of the bridge structure with a large culvert crossing at the current bridge location.

Up to two (2) different culvert configurations (material/span arrangement) will be evaluated for the proposed culvert structure. The final types to be compared to the bridge for the study will be determined through consultation with the COUNTY. However, at this time the likely candidate types include single or multiple bottomless concrete box or steel arch culverts.

The types identified for the study will be evaluated with criteria agreed upon with the COUNTY to establish the associated pros and cons for each. The criteria will include:

- Feasibility of construction
- Sustainability
- Environmental impacts
- Aesthetics
- Cost

It is assumed that concept level drawings or sketches will be developed as required to adequately describe the culvert types and location.

A meeting to present and discuss the culvert and bridge comparisons with the COUNTY will be conducted. In consultation with the COUNTY, a preferred alternative will be selected based on evaluation of the agreed upon weighted criteria.

Deliverables

- A draft and final memo summarizing the findings of bridge and culvert comparisons.

TASK 19 35 MPH ALIGNMENT COST ESTIMATE

A cost estimates for the project will be produced by the CONSULTANT with input from the SUBCONSULTANT as described under Task 13.2.5 based on the 35 MPH alignment design performed under Task 15. WSDOT Standard Specifications for Road, Bridge, and Municipal Construction (2014) is the current standard specifications for the work and the CONSULTANT shall prepare a construction cost estimate for the project design using WSDOT standard bid items to the maximum extent possible. Given the design level advancement of some of the cost items it is expected that some items may use a lump sum unit format to facilitate estimating.

Deliverables

- Construction Cost Estimate – Draft & Final

TASK 20 – PERMITTING SUPPORT

Agency Coordination

The CONSULTANT will provide additional agency coordination and permit support to include the roadway, drainage conveyance, and other civil engineering project elements, in addition to any changes to the identified project elements from the previous 60% design. It is assumed that the CONSULTANT will attend up to two Agency Coordination Meetings and that they will include presentation of the revised 35 MPH alignment and studies conducted for options of the armored crossing/box culvert vented ford design element (Task 16), the debris diversion berm design element (Task 17), and comparison of the replacement bridge with culvert structures (Task 18).

Design Data for Permit Documents

The CONSULTANT will support the project by providing technical design data (quantities, measured impact areas, etc.) required for the roadway, conveyance, and other project engineering elements designed by the CONSULTANT. The evaluation will include the project footprint and other areas that could be used during construction, including temporary accesses that may be required. Graphics will be based on developed drawings.

TASK 21 QUALITY ASSURANCE / QUALITY CONTROL

The CONSULTANT will provide quality assurance/quality control (QA/QC) for all CONSULTANT design work identified in this scope of services in accordance with the CONSULTANT's QA/QC standards.

EXHIBIT E-1c
Supplemental Consultant Fee Determination – Budget

RC 1532 Index Galena Road Flood Repairs MP 6.4 to 6.9 10/16/2015

Snohomish County Public Works

Agreement Number: CCF07-13

TASK	DESCRIPTION	Authorized Budget	Spent to Date	% Spent	Budget Moved to Tasks 12-21	Budget Remaining
1	**PROJECT MANAGEMENT**	**$ 89,912.00**	**$ 75,893.98**	**84%**	**$ 2,963.09**	**$ 11,054.93**
1.1	Project Coordination	$ 24,870.00	$ 24,309.79	98%	$ -	$ 560.21
1.2	Progress Meetings	$ 28,157.00	$ 23,402.76	83%	$ 1,576.80	$ 3,177.44
1.3	Management of Subs	$ 14,848.00	$ 11,565.54	78%	$ 1,290.18	$ 1,992.28
1.4	Demobs & Restarts	$ 16,712.00	$ 16,615.89	99%	$ 96.11	$ 0.00
1.5	Project Close-out	$ 5,325.00	$ -	0%	$ -	$ 5,325.00
2	**SURVEYING & BASEMAPPING**	**$ 139,291.00**	**$ 55,770.69**	**40%**	**$ 83,520.31**	**$ (0.00)**
2.1	Survey & Topo - Phase 1	$ 45,872.00	$ 45,831.76	100%	$ 40.24	$ (0.00)
2.2	90% Staking/Timber Appraisal	$ 62,952.00	$ -	0%	$ 62,952.00	$ -
2.3	RFP Staking - Phase 3	$ 20,494.00	$ -	0%	$ 20,494.00	$ -
2.4	Additional Survey Allowance	$ 9,973.00	$ 9,938.93	100%	$ 34.07	$ (0.00)
3	**GEOTECHNICAL ENGR / S&W**	**$ 220,181.00**	**$ 120,484.10**	**55%**	**$ 96,696.90**	**$ 3,000.00**
4	**HYDRAULIC ENGR / S&W**	**$ 151,144.00**	**$ 75,582.79**	**50%**	**$ 75,561.21**	**$ -**
5	**PERMITTING SUPPORT**	**$ 31,847.00**	**$ 25,832.12**	**81%**	**$ 6,014.88**	**$ (0.00)**
5.1	Agency Coordination	$ 19,370.00	$ 19,320.29	100%	$ 49.71	$ (0.00)
5.2	Design Data for Permits	$ 12,477.00	$ 6,511.83	52%	$ 5,965.17	$ -
6	**BRIDGE STUDY**	**$ 60,535.00**	**$ 60,357.71**	**100%**	**$ 177.29**	**$ 0.00**
7	**BRIDGE PS&E**	**$ 180,556.00**	**$ 111,304.51**	**62%**	**$ 69,251.49**	**$ -**
7.1	Bridge Design & Drawings	$ 164,503.00	$ 107,056.48	65%	$ 57,446.52	$ -
7.2	Bridge Design Submittals	$ 16,053.00	$ 4,248.03	26%	$ 11,804.97	$ -
8	**PROJECT ELEMENTS PS&E**	**$ 195,103.00**	**$ 88,463.94**	**45%**	**$ 106,639.06**	**$ -**
8.1	Elements Design & Drawings	$ 180,708.00	$ 84,577.98	47%	$ 96,130.02	$ -
8.2	Elements Design Submittals	$ 14,395.00	$ 3,885.96	27%	$ 10,509.04	$ -
9	**QA / QC**	**$ 66,717.00**	**$ 36,245.70**	**54%**	**$ 30,471.30**	**$ -**
10	**SUPPORT DURING BIDDING**	**$ 20,000.00**	**$ -**	**0%**	**$ 20,000.00**	**$ -**
11	**WORKSHOP FACILITATION**	**$ 3,241.00**	**$ 3,130.72**	**97%**	**$ 110.28**	**$ 0.00**
	REIMBURSABLE EXPENSES	**$ 14,833.00**	**$ 6,829.81**	**46%**	**$ 8,003.19**	**$ -**
	TOTALS =	**$ 1,173,360.00**	**$ 659,896.07**	**56%**	**$ 499,409.00**	**$ 14,054.93**

EXHIBIT E-1c, PROJECT FEE DETERMINATION **Total Cost Summary**
BergerABAM 10/16/2015
SUPPLEMENT NO. 3

Index-Galena Road MP 6.4 to 6.9 Realignment
Snohomish County - RC 1532 / UPI #06-0150

BergerABAM PERSONNEL

	Project Function	Hours		FY 2016 Billing Rate		Cost
1	Engineer VIII/IX - Principal / Officer	366.0	X	$ 224.40	= $	82,130
2	Senior Construction Specialist	48.0	X	$ 169.32	= $	8,127
3	Engineer VI (Structural)	290.0	X	$ 158.10	= $	45,849
4	Engineer IV (Structural / Civil)	778.0	X	$ 132.28	= $	102,914
5	Engineer VI (Civil)	322.0	X	$ 158.10	= $	50,908
6	Applications Programmer II	148.0	X	$ 152.07	= $	22,202
7	Designer	520.0	X	$ 116.32	= $	60,486
8	Survey Director	0.0	X	$ 149.10	= $	-
9	Coordinator / Administration	102.0	X	$ 117.30	= $	11,965
	BergerABAM Hours, TOTAL	2,572		Subtotal Personnel Costs =	$	384,581
				Salary Escalation for FY 2017 at = 5.00%	$	19,229
				TOTAL PERSONNEL COSTS =	$	403,810

DIRECT NONSALARY COSTS (DNSC)

Mileage	1,500	miles @	$ 0.575	$	863
Federal Express / Courier	0	each @	$ 15.00	$	-
		TOTAL REIMBURSABLE EXPENSES (DNSC) =		$	863

SUBTOTAL BergerABAM FEE = $ 404,673

SUBCONSULTANTS

Task 13	Geotechnical Engineering - Shannon & Wilson	$	44,263
Task 14	Hydraulic Engineering - Shannon & Wilson	$	4,550
Task 15.3	Conveyance Design Development - The Louis Berger Group	$	45,924
	SUBTOTAL SUBCONSULTANT FEES =	$	94,737

TOTAL AUTHORIZED SUPPLEMENT AMOUNT = $ 499,409

Prepared by: SKJ
Date: 16 October 2015

EXHIBIT E-1c: PROJECT FEE DETERMINATION 10/16/2015
BergerABAM
SUPPLEMENT NO. 3

Index-Galena Road MP 6.4 to 6.9 Realignment
Snohomish County - RC 1532 / UPI #06-0150

BergerABAM COST TOTALS by TASK

		Total Hours		Expenses		Personnel Task Totals
Task 12	Project Management	240.0	$	172.50	$	40,810
Task 15	35 MPH Alignment	1,564.0	$	517.50	$	224,599
Task 16	Vented Ford Options	155.0	$	-	$	22,740
Task 17	Debris Diversion Berm	96.0	$	-	$	14,161
Task 18	Bridge & Culvert Comparison	127.0	$	-	$	18,949
Task 19	35 MPH Alignment Cost Estimate	116.0	$	-	$	17,143
Task 20	Permitting Support	90.0	$	172.50	$	15,537
Task 21	Quality Assurance / Quality Control	184.0	$	-	$	30,642
					$	384,581
	Total BergerABAM Hours	2,572.0				
	Total BergerABAM Expenses		$	862.50		
				Subtotal Personnel Costs =	$	384,581
				Salary Escalation for FY 2017 at = 5.00%	$	19,229
				TOTAL PERSONNEL COSTS =	$	403,810

DIRECT NONSALARY COSTS (DNSC)

	TOTAL REIMBURSABLE EXPENSES (DNSC) =	$ 863
	SUBTOTAL BergerABAM FEE =	**$ 404,673**

SUBCONSULTANT COST TOTALS by TASK

Task 13	Geotechnical Engineering - Shannon & Wilson	$ 44,263
Task 14	Hydraulic Engineering - Shannon & Wilson	$ 4,550
Task 15.3	Conveyance Design Development - The Louis Berger Group	$ 45,924
	SUBTOTAL SUBCONSULTANT FEES =	$ 94,737

TOTAL AMOUNT =	**$ 499,409**

SUPPLEMENT NO. 3 TASK DESCRIPTION	Task Number	Engineer VIII/IX Principal / Officer	Senior Construction Specialist	Engineer VI (Structural)	Engineer IV (Structural / Civil)	Engineer VI (Civil)	Applications Programmer II	Designer	Survey Director	Coordinator / Administration	Totals
BILLING RATE ==>		$ 224.40	$ 188.32	$ 158.10	$ 133.20	$ 158.10	$ 153.37	$ 118.33	$ 148.10	$ 117.30	
TASK 12 - PROJECT MANAGEMENT	12	<u>84</u>		<u>52</u>	<u>8</u>	<u>28</u>	<u>8</u>			<u>60</u>	<u>240</u>
Project Coordination	12.1	40		8						40	88
Progress Meetings	12.2	16		16	8	16	8				64
Management of Subconsultants	12.3	16		16						4	36
Project Demobilization and Restarts	12.4	12		12		12				16	52
		$18,890		$8,221	$1,066	$4,427	$1,227			$7,038	$ 40,810
TASK 13 - GEOTECHNICAL ENGINEERING / S&W	13	See Page 8 for Task 13 S&W Hours									
TASK 14 - HYDRAULIC ENGINEERING / S&W	14	See Page 10 for Task 14 S&W Hours									
TASK 15 - 35 MPH ALIGNMENT	15	<u>166</u>		<u>60</u>	<u>578</u>	<u>210</u>	<u>118</u>	<u>422</u>		<u>10</u>	<u>1,564</u>
Roadway Geometrics	15.1	<u>20</u>			<u>56</u>	<u>32</u>	<u>44</u>	<u>16</u>		<u>6</u>	<u>174</u>
Review of Roadway Geometrics Design		4			16	12	32			4	68
Geometrics Design Review Meeting & Notes		8			16	12	8				44
Response to COUNTY Comments		4			8	4	4	16			36
Final Geometrics Design Review Meeting Notes		4			16	4				2	26
Walls & Slopes	15.2	<u>18</u>		<u>32</u>	<u>56</u>		<u>38</u>	<u>24</u>		<u>4</u>	<u>172</u>
Review of Walls & Slopes for 35 MPH Alignment		4		16	24		24			4	72
Preliminary Layout & Design		8		8	16		8	16			56
COUNTY Review and Comments		4		4	8		2	4			22
Design Layout for Plan Development		2		4	8		4	4			22
Conveyance Design Development	15.3	<u>48</u>									<u>48</u>
Drainage Progress Meetings	15.3.1	16									16
Meetings with COUNTY (2)		8									8
Meeting with WDFW and USFS (1)		8									8
Culvert Crossing Design	15.3.2	27									27
Site Visit with WDFW and USFS / Preparation & Presentation		10									10
Site Visit with WDFW and USFS (1 Site Visit)		8									8
Culvert Site Visit Documentation Memorandum		2									2
Culvert Sizing Memorandum Draft (Assumes 13 Culverts)		2									2
Channel Protection Measures Memorandum Draft		2									2
Review and Respond to Memo Comments		1									1
Final Memorandums / Culvert Sizing & Channel Protection		2									2
Roadway Conveyance Design	15.3.3	5									5
Roadway Conveyance Design Memo Draft (Includes Calculations)		2									2
Review and Respond to Comments		1									1
Roadway Conveyance Design Memo Final		2									2
35 MPH Alignment Drawings	15.4	<u>80</u>		<u>28</u>	<u>466</u>	<u>178</u>	<u>36</u>	<u>382</u>			<u>1,170</u>
Site Visit w/ Project Team		8		8	8	8	8				40
35 MPH Alignment Drawings (see next page)		64		12	450	162	28	382			1,098
Plan Development and Review Mtgs Conference Calls (4)		8		8	8	8					32
		$37,250		$9,486	$76,458	$33,201	$17,944	$49,937		$1,173	$224,699

No.	SUPPLEMENT NO. 3 TASK DESCRIPTION	Task Number	Engineer VIII/IX Principal / Officer	Senior Construction Specialist	Engineer VI (Structural)	Engineer IV (Structural / Civil)	Engineer VI (Civil)	Applications Programmer II	Designer	Survey Director	Coordinator / Administration	Totals
	BILLING RATE ==>		$ 224.60	$ 188.22	$ 180.10	$ 123.20	$ 150.10	$ 132.27	$ 116.53	$ 148.10	$ 117.35	
No.	**TASK 15 - 35 MPH ALIGNMENT DRAWINGS**											Totals
1	COVER SHEET WITH VICINITY MAP					2			2			4
	INDEX SHEET											
	SECTION - SUBDIVISION											
	SURVEY CONTROL, ROW AND ALIGNMENT											
	LEGEND AND ABBREVIATIONS - SHEET 1											
	LEGEND AND ABBREVIATIONS - SHEET 2											
	GENERAL NOTES - SHEET 1											
	GENERAL NOTES - SHEET 2											
	OVERVIEW PLAN & SET-OUT MAP											
	SITE PREPARATION & EROSION CONTROL PLAN - SHEET 1											
	SITE PREPARATION & EROSION CONTROL PLAN - SHEET 2											
	SITE PREPARATION & EROSION CONTROL PLAN - SHEET 3											
	SITE PREPARATION & EROSION CONTROL PLAN - SHEET 4											
	SITE PREPARATION & EROSION CONTROL PLAN - SHEET 5											
	SITE PREPARATION & EROSION CONTROL PLAN - SHEET 6											
	SITE PREPARATION & EROSION CONTROL PLAN - SHEET 7											
	SITE PREPARATION & EROSION CONTROL DETAILS - SHEET 1											
	SITE PREPARATION & EROSION CONTROL DETAILS - SHEET 2											
2	PLAN - KEY MAP		-	-		4	2		4		-	10
3	GRADING PLAN - SHEET 1		1	-		6	3	2	8		-	20
4	GRADING PLAN - SHEET 2		1	-		6	3	2	8		-	20
5	GRADING PLAN - SHEET 3		1	-		6	3	2	8		-	20
6	GRADING PLAN - SHEET 4		1	-		6	3	2	8		-	20
7	GRADING PLAN - SHEET 5		1	-		6	3	2	8		-	20
8	GRADING PLAN - SHEET 6		1	-		6	3	2	8		-	20
9	GRADING PLAN - SHEET 7		1	-		6	3	2	8		-	20
10	GRADING PLAN - SHEET 8		1	-		6	3	2	8		-	20
11	GRADING PLAN - SHEET 9		1	-		6	3	2	8		-	20
12	GRADING PLAN - SHEET 10		1	-		6	3	2	8		-	20
	GRADING PLAN - SHEET 11											
	GRADING PLAN - SHEET 12											
	GRADING PLAN - SHEET 13											
13	ROADWAY SECTIONS AND GRADING SECTIONS - SHEET 1		1	-		6	4	3	8		-	22
14	ROADWAY SECTIONS AND GRADING SECTIONS - SHEET 2		1	-		6	4	3	8		-	22
15	ROADWAY SECTIONS AND GRADING SECTIONS - SHEET 3		1	-		6	4	3	8		-	22
16	ROADWAY SECTIONS AND GRADING SECTIONS - SHEET 4		1	-		6	4	3	8		-	22
17	ROADWAY SECTIONS AND GRADING SECTIONS - SHEET 5		1	-		6	4	3	8		-	22
18	ROADWAY SECTIONS AND GRADING SECTIONS - SHEET 6		1	-		6	4	3	8		-	22
	ROADWAY SECTIONS AND GRADING SECTIONS - SHEET 7											
	ROADWAY SECTIONS AND GRADING SECTIONS - SHEET 8											
	ROADWAY SECTIONS AND GRADING SECTIONS - SHEET 9											
	ROADWAY SECTIONS AND GRADING SECTIONS - SHEET 10											
	PLAN - PROFILE KEY SHEET											
19	PLAN - PROFILE - SHEET 1		1	-		6	4	3	8		-	22
20	PLAN - PROFILE - SHEET 2		1	-		6	4	3	8		-	22
21	PLAN - PROFILE - SHEET 3		1	-		6	4	3	8		-	22
22	PLAN - PROFILE - SHEET 4		1	-		6	4	3	8		-	22
23	PLAN - PROFILE - SHEET 5		1	-		6	4	3	8		-	22
24	PLAN - PROFILE - SHEET 6		1	-		6	4	3	8		-	22
25	PLAN - PROFILE - SHEET 7		1	-		6	4	3	8		-	22
26	PLAN - PROFILE - SHEET 8		1	-		6	4	3	8		-	22
27	PLAN - PROFILE - SHEET 9		1	-		6	4	3	8		-	22
28	PLAN - PROFILE - SHEET 10		1	-		6	4	3	8		-	22
	PLAN - PROFILE - SHEET 11											
	PLAN - PROFILE - SHEET 12											
	PLAN - PROFILE - SHEET 13											
29	ACCESS ROAD 1 - PLAN AND PROFILE		1	-		6	4	3	8		-	22
30	ACCESS ROAD 2 - PLAN AND PROFILE		1	-		6	4	3	8		-	22
	DRAINAGE PLAN & PROFILE KEY SHEET											
	DRAINAGE PLAN & PROFILE - SHEET 1											
	DRAINAGE PLAN & PROFILE - SHEET 2											
	DRAINAGE PLAN & PROFILE - SHEET 3											
	DRAINAGE PLAN & PROFILE - SHEET 4											
	DRAINAGE PLAN & PROFILE - SHEET 5											
	DRAINAGE PLAN & PROFILE - SHEET 6											
	DRAINAGE PLAN & PROFILE - SHEET 7											
	DRAINAGE PLAN & PROFILE - SHEET 8											
	DRAINAGE PLAN & PROFILE - SHEET 9											
	DRAINAGE PLAN & PROFILE - SHEET 10											
	DRAINAGE PLAN & PROFILE - SHEET 11											
	DRAINAGE PLAN & PROFILE - SHEET 12											
	DRAINAGE PLAN & PROFILE - SHEET 13											
	DRAINAGE DETAILS											
	DRAINAGE DETAILS											

SUPPLEMENT NO. 3

	TASK DESCRIPTION	Task Number	Engineer VIII/IX Principal / Officer	Senior Construction Specialist	Engineer VI (Structural)	Engineer IV (Structural / Civil)	Engineer VI (Civil)	Applications Programmer II	Designer	Survey Director	Coordinator / Administration	Totals
	BILLING RATE ==>		$ 224.40	$ 169.32	$ 158.10	$ 132.30	$ 126.02	$ 152.17	$ 116.32	$ 146.70	$ 117.30	
31	CULVERT 1 PLAN & PROFILE		2	-		12	4		8		-	26
32	CULVERT 2 PLAN & PROFILE		2	-		12	4		8		-	26
33	CULVERT 3 PLAN & PROFILE		2	-		12	4		8		-	26
34	CULVERT 4 PLAN & PROFILE		2	-		12	4		8		-	26
35	CULVERT 5 PLAN & PROFILE		2	-		12	4		8		-	26
36	CULVERT 6 PLAN & PROFILE		2	-		12	4		8		-	26
37	CULVERT 7 PLAN & PROFILE		2	-		12	4		8		-	26
38	CULVERT 8 PLAN & PROFILE		2	-		12	4		8		-	26
39	CULVERT 9 PLAN & PROFILE		2	-		12	4		8		-	26
40	CULVERT 10 PLAN & PROFILE		2	-		12	4		8		-	26
41	CULVERT 11 PLAN & PROFILE		2	-		12	4		8		-	26
42	CULVERT 12 PLAN & PROFILE		2	-		12	4		8		-	26
43	CULVERT 13 PLAN & PROFILE		2	-		12	4		8		-	26
44	CULVERT DETAILS - SHEET 1		2	-		12	4		8		-	26
45	CULVERT DETAILS - SHEET 2		2	-		12	4		8		-	26
46	CULVERT DETAILS - SHEET 3		2	-		12	4		8		-	26
47	CULVERT DETAILS - SHEET 4		2	-		12	4		8		-	26
	PAVING, SIGNING & CHANNELIZATION PLAN - SHEET 1											
	PAVING, SIGNING & CHANNELIZATION PLAN - SHEET 2											
	PAVING, SIGNING & CHANNELIZATION PLAN - SHEET 3											
	PAVING, SIGNING & CHANNELIZATION PLAN - SHEET 4											
	PAVING, SIGNING & CHANNELIZATION PLAN - SHEET 5											
	PAVING, SIGNING & CHANNELIZATION PLAN - SHEET 6											
	CHANNELIZATION AND SIGNING DETAILS - SHEET 1											
48	WALL/SLOPE INTERFACE DETAILS - SHEET 1		1		6	6			8		-	21
49	WALL/SLOPE INTERFACE DETAILS - SHEET 2		1		6	6			8		-	21
	PLANTING PLANS, SCHEDULE, AND NOTES - BY COUNTY		-	-	-	-	-		-		-	
	CLASS W SIGNS & TRAFFIC CONTROL PLANS - BY COUNTY		-	-	-	-	-		-		-	
	SUBTOTAL 35 MPH ALIGNMENT DRAWINGS		64		12	497	182	28	312			1,098

TASK DESCRIPTION	Task Number	Engineer VIII/IX Principal / Officer	Senior Construction Specialist	Engineer VI (Structural)	Engineer IV (Structural / Civil)	Engineer VI (Civil)	Applications Programmer II	Designer	Survey Director	Coordinator / Administration	Totals
TASK 16 - VENTED FORD OPTIONS	16	15	6	38	56		8	28		4	155
Develop Alternatives & Screen w/ County		4	2	8				16			30
Alternatives Analysis & Evaluation		4	4	12	24		8	4			56
Summary of Findings		2		4	4						10
Draft Memorandum		2		8	16			4		2	32
Review and Respond to Comments		2		4	8						14
Final Memorandum		1		2	4			4		2	13
		$3,366	$1,016	$6,026	$7,409		$1,217	$3,257		$469	$ 22,748
TASK 17 - DEBRIS DIVERSION BERM	17	10	2	26	36		4	14		4	96
Alternatives Analysis & Evaluation		4	2	8	16		4	8			42
Summary of Findings		2		8							10
Draft Memorandum		2		4	8			4		2	20
Review and Respond to Comments		1		4	8						13
Final Memorandum		1		2	4			2		2	11
		$2,244	$339	$4,111	$4,762		$608	$1,628		$469	$ 14,161
TASK 18 - BRIDGE & CULVERT COMPARISON	18	17	4	34	44			24		4	127
Develop Alternatives & Screen w/ County		4	2	8				12			26
Alternatives Analysis & Evaluation		4	2	8	16			4			34
Preferred Alternative - Selection & Phone Conference		4		4							8
Draft Memorandum		2		8	16			4		2	32
Review and Respond to Comments		2		4	8						14
Final Memorandum		1		2	4			4		2	13
		$3,815	$677	$5,375	$5,820			$2,792		$469	$ 18,949

SUPPLEMENT NO. 3 TASK DESCRIPTION	Task Number	Engineer VIII/IX Principal / Officer	Senior Construction Specialist	Engineer VI (Structural)	Engineer IV (Structural / Civil)	Engineer VI (Civil)	Applications Programmer II	Designer	Survey Director	Coordinator / Administration	Totals
BILLING RATE ⟹		$ 224.40	$ 169.33	$ 158.10	$ 132.29	$ 158.10	$ 152.17	$ 116.38	$ 146.50	$ 117.30	
TASK 19 - 35 MPH ALIGNMENT COST ESTIMATE	19	8	12	14	56	16		8		2	118
Quantities and Construction Cost Estimate / DRAFT		4	8	8	40	8		4			72
Review and Respond to Comments		2	2	4	8	4		2			22
Quantities and Construction Cost Estimate / FINAL		2	2	2	8	4		2		2	22
		$1,795	$2,032	$2,213	$7,408	$2,530		$931		$235	$ 17,143
TASK 20 - PERMITTING SUPPORT	20	24		24		28		8		2	90
Environmental Document Review		4		4		4				2	14
Agency Coordination Meetings (2)		12		12		12					36
Additional Coordination & Consultation		6		6		4					20
Design Data Input to Environmental Documents		2		2		8		8			20
		$5,386		$3,794		$4,427		$931		$235	$ 15,637
TASK 21 - QUALITY ASSURANCE / QUALITY CONTROL	21	40	24	40		40	8	16		16	184
Supplemental Scope / Roadway & Conveyance		40	24	40		40	8	16		16	184
		$8,976	$4,064	$6,324		$6,324	$1,217	$1,861		$1,877	$ 30,642
BergerABAM TOTAL HOURS =		386	48	290	778	322	148	620		102	2,572

DIRECT NONSALARY COSTS (DNSC)	Qty	Unit Cost	Per		
Task 12.2 - Mileage for Meetings (2)	300	$ 0.575	/ Mile	$ 172.50	Task 12
Task 15.1 - Mileage for Meetings (1)	150	$ 0.575	/ Mile	$ 86.25	Task 15
Task 15.3 - Mileage for Meetings (3) and Site Visit (1)	600	$ 0.575	/ Mile	$ 345.00	Task 15
Task 15.4 - Mileage for Site Visit (1)	150	$ 0.575	/ Mile	$ 86.25	Task 15
Task 20 - Mileage for Meetings (2)	300	$ 0.575	/ Mile	$ 172.50	Task 20
	1,500			$ 862.50	

Notes:
1. See Shannon & Wilson Cost Sheets for Tasks 13 & 14 DNSC.

EXHIBIT E-2
Consultant Fee Determination – Summary Sheet
Fee Schedule

Consultant: BergerABAM Inc.

Position Classification	Direct Salary Rate	ICR @168.21%	Profit @25.75%	Max Rate Per Hour
Engineer VIII/IX - Principal/Officer	$76.34	$128.41	$19.66	$224.40
Engineer VII - Project Manager	$55.52	$93.39	$14.30	$163.20
Engineer VI - Project Engineer	$53.78	$90.47	$13.85	$158.10
Engineer V - Project Engineer	$52.05	$87.55	$13.40	$153.00
Engineer IV - Senior Engineer	$45.00	$75.69	$11.59	$132.28
Engineer I/II/III	$36.00	$60.56	$9.27	$105.83
Senior Planner	$52.00	$87.47	$13.39	$152.86
Planner	$41.64	$70.04	$10.72	$122.40
Senior Scientist/Environmental/ Landscape Architect	$50.31	$84.63	$12.96	$147.90
Scientist/Environmental/Landscape Architect	$43.37	$72.96	$11.17	$127.50
Public Involvement	$40.00	$67.28	$10.30	$117.58
Applications Programmer II	$45.11	$75.88	$11.62	$132.60
Applications Programmer II, Jeff Blake	$51.73	$87.02	$13.32	$152.07
CAD Operator IV/V/VI	$38.51	$64.78	$9.92	$113.20
CAD Operator II/III	$31.00	$52.15	$7.98	$91.13
Senior Construction Specialist	$52.05	$87.55	$13.40	$153.00
Senior Construction Specialist, Bob Lee	$57.60	$96.89	$14.83	$169.32
Construction Specialist/Inspector	$45.11	$75.88	$11.62	$132.60
Survey Director	$50.72	$85.32	$13.06	$149.10
Surveyors / Survey Tech	$39.90	$67.12	$10.28	$117.30
Designer I/II/III/IV	$39.57	$66.56	$10.19	$116.32
Coordinators/Graphics/Administration	$39.90	$67.12	$10.28	$117.30

The indirect cost rate (ICR), profit, and max rate per hour listed above are the maximum rates payable under this AGREEMENT. Rates invoiced shall be based on the direct salary of the individual employee plus ICR plus profit and shall not exceed the Max Rate Per Hour for each classification listed in this Exhibit E-2 without prior written consent of the COUNTY.

EXHIBIT F
Breakdown of Overhead Cost

CONSULTANT'S audited overhead report from the WSDOT Audit Office, or other report supporting Overhead Rate (per Chapter 31.5 of the WSDOT Local Agency Guidelines), provided by CONSULTANT attached hereto and incorporated herein as Exhibit "F".

Washington State Department of Transportation

Lynn Peterson
Secretary of Transportation

Transportation Building
310 Maple Park Avenue S.E.
P.O. Box 47300
Olympia, WA 98504-7300
360-705-7000
TTY: 1-800-833-6388
www.wsdot.wa.gov

November 24, 2014

BergerABAM
33301 Ninth Avenue Sout, Suite 300
Federal Way, WA 98003-2600

Subject: Acceptance FYE 2014 ICR – Audit Office Review

Dear Ms. Megan Isaacks:

Transmitted herewith is the WSDOT Audit Office's memo of "Acceptance" of your firm's FYE 2014 Indirect Cost Rate (ICR). This ICR shall be good until 180 days following your FYE 2015 closing date. This rate will be applicable for WSDOT and Local Agency contracts only.

Costs billed to agreements will still be subject to audit of actual costs, based on the terms and conditions of the respective agreement.

This was not a cognizant review. Any other entity contracting with your firm is responsible for determining the acceptability of the ICR.

If you have any questions, feel free to call me at (360) 705-7106 or via email consultantrates@wsdot.wa.gov.

Regards;

ERIK K. JONSON
Manager, Consultant Services Office

EKJ:kal

Acceptance Audit Office Review

Washington State
Department of Transportation

Memorandum

November 24, 2014

TO: Erik Jonson, WSDOT Contracts Administrator

FROM: Martha Roach, Agreement Compliance Audit Manager MR

SUBJECT: BergerABAM, Inc. Indirect Cost Rate for fiscal year end May 31, 2014

We accept the audit work performed by T. Wayne Owens & Associates related to the BergerABAM Indirect Cost Rate for the above referenced fiscal year. T. Wayne Owens & Associates audited the BergerABAM indirect costs for compliance with Federal Acquisition Regulations (FAR), Subpart 31. Our office did not review their audit work.

Based on our acceptance of the CPA's audit, we are issuing this memo establishing the BergerABAM Indirect Cost Rate for fiscal year ending May 31, 2014 at 168.21% of direct labor (rate includes 0.30% Facilities Capital Cost of Money).

Costs billed to agreements will still be subject to audit of actual costs, based on the terms and conditions of the respective agreement.

This was not a cognizant review. Any other entity contracting with the firm is responsible for determining the acceptability of the Indirect Cost Rate.

If you have any questions, feel free to call me at (360) 705-7006 or via email at roachma@wsdot.wa.gov.

cc: Steve McKerney
File

DOT Form 700-008 EF
Revised 5/99

EXHIBIT Gb
Supplemental Subcontracted Work

The County permits subcontracting for the following portions of the work of this AGREEMENT.

TASK 13 GEOTECHNICAL ENGINEERING (SUBCONSULTANT)

The SUBCONSULTANT, under a subconsultant agreement with the CONSULTANT, will provide the following supplemental geotechnical engineering services.

Task 13.1 Project Management

The SUBCONSULTANT will perform Project Management services including invoicing, progress reporting, scheduling and coordinating work assignments.

Task 13.2 Preliminary Design-Phase 1

The proposed 35 MPH alternative alignment changes the layout of structures and graded slopes along the project from the previous alignment. The COUNTY identified several immediate design items required to move the project forward. The SUBCONSULTANT will provide additional geotechnical consultation to aid the CONSULTANT with these items based on the 35 MPH alternative alignment.

For the purposes of establishing an estimate of expected effort, the SUBCONSULTANT will provide geotechnical consultation for:

- 35 MPH Alignment Review
- Box Culvert Vented Ford
- Debris Diversion Berm
- Bridge & Culvert Study
- Construction Cost Estimate
- Update Geology, Soils and Groundwater Discipline Report
- Meetings

Task 13.2.1 35 MPH Alignment Review

The 35 MPH alternative alignment changes the roadway design, including the layout of structures and graded slopes along the project. This task will include reviewing the 35-MPH alternative alignment. Tasks will include:

- Review the subsurface conditions, and proposed structures and graded slopes along the new 35 MPH alignment
- Assist the CONSULTANT with alignment optimization support
- Assist the CONSULTANT and the COUNTY with alignment deviation support

Task 13.2.2 Box Culvert Vented Ford

The SUBCONSULTANT will consult with the CONSULTANT regarding potential changes to the preliminary design elements of the box culvert vented ford crossing based on the newly adopted 35 MPH alignment. The SUBCONSULTANT will assist the CONSULTANT with evaluating other options for the crossing location at approximate STA 29+00. Specific tasks will include:

- Assist the CONSULTANT with a study to review alternatives for the box culvert vented ford crossing. Alternatives include a plain culvert, vented ford, bridge, and possibly a diversion berm.
- Provide the design calculations and recommendation stakeholder preferred option to confirm conformance with the new 35 MPH alignment.

Task 13.2.3 Debris Diversion Berm

The SUBCONSULTANT will consult with the CONSULTANT regarding potential changes to the preliminary design elements of the debris diversion berm based on the 35 MPH alternative alignment. As needed, the SUBCONSULTANT will revise preliminary design recommendations and conceptual drawings for the structure. The SUBCONSULTANT will assist the CONSULTANT with a study to evaluate the need for the debris diversion berm located at approximate STA 53+50, and the risk to the roadway if the structure is not built.

Task 13.2.4 Bridge & Culvert Study

The SUBCONSULTANT will assist the CONSULTANT with reviewing costs and providing a comparison of the bridge structure with a large culvert crossing at the current bridge location. This study will include conceptual design recommendations for construction of culvert crossing at the proposed bridge location.

Task 13.2.5 Construction Cost Estimate
The SUBCONSULTANT will assist the CONSULTANT with developing a construction cost estimate for the 35 MPH alternative alignment. This will include support for the 4 build options at the box culvert vented ford location, debris diversion berm, and the culvert option at the proposed bridge location.

Task 13.2.6 Update Geology, Soils and Groundwater Discipline Report
The SUBCONSULTANT will update the Geology and Soils Discipline Report to conform to the new 35 MPH roadway design. The SUBCONSULTANT will address comments received from WSDOT and the Forest Service.

Task 13.2.7 Meetings
The SUBCONSULTANT will attend one meeting with the CONSULTANT to review the preliminary 35 MPH alignment. The meeting will be at the CONSULTANT's office.

Key project elements and findings will be discussed with the project team at the project site after the new 35 MPH alignment has been surveyed and staked. The SUBCONSULTANT will attend up to one meeting at the project site.

The SUBCONSULTANT will attend one meeting with the CONSULTANT and the COUNTY to review design plans at the COUNTY's office.

The SUBCONSULTANT will attend one meeting with the services and select stakeholders. Likely participants will include the CONSULTANT, the COUNTY, USACE, WDFW, and US Forest Service. The meeting will be at the COUNTY's office.

Deliverables

- Revised Geology, Soils and Groundwater Discipline Report.

TASK 14 HYDRAULIC ENGINEERING (SUBCONSULTANT)

The SUBCONSULTANT, under a subconsultant agreement with the CONSULTANT, will provide the following supplemental hydraulic engineering services.

Task 14.1 Design Support
The SUBCONSULTANT will review the portion of the 35 MPH alternative alignment, including structures and slopes, within the channel migration zone. The SUBCONSULTANT will provide hydraulic engineering support to the project team, including a conceptual evaluation of the culvert option at the proposed bridge location.

TASK 15 35 MPH ALIGNMENT

Working together with the SUBCONSULTANTs, the CONSULTANT will advance the design and drawings of the project for the 35 MPH alignment and the following identified project elements as included in the current set of preliminary plans provided to the COUNTY in March 2014, including the following:

- Roadway Geometrics
- Walls and Slopes
- Drainage & Conveyance

Drawings will be produced by the CONSULTANT with details and other design input from the SUBCONSULTANTs as described under Tasks 13.2.1 thru 13.2.4 and 15.3. The profile and alignment of the roadway will be based on the COUNTY's revised 35 MPH alignment as modified during this phase of design advancement. The following project elements will be investigated in Tasks 16, 17, and 18 and accounted for in this effort.

- Box Culvert Vented Ford *(or other recommended alternative)*
- Debris Diversion Berm *(or other recommended alternative)*
- Bridge *(or other recommended alternative)*

Task 15.3 Conveyance Design Development (CONSULTANT and SUBCONSULTANT)
The CONSULTANT shall prepare preliminary designs to continue the design development for the project drainage conveyance elements identified in the current set of preliminary plans prepared by the COUNTY. The current 35 MPH alignment is significantly different from the 60 Percent Submittal plans provided to the COUNTY in March 2014 and the change to grades and roadway location in a number of areas along the length of the project is expected to change the conveyance regime and culvert crossings.

Task 15.3.1 Conveyance Progress Meetings

The CONSULTANT shall coordinate design with the COUNTY as the conveyance design progresses. The CONSULTANT shall meet with the COUNTY, up to two times; once to discuss proposed culvert crossing and roadway conveyance designs at an early 30% percent completion level and once (Task 15.3.3) to obtain approval prior to advancing the design to develop the working set of plans identified in Exhibit E-1c.

The CONSULTANT shall join the County, Washington State Department of Fish and Wildlife (WDFW) and the United States Forest Service (USFS) for two meetings, including one on-site visit (Task 15.3.2), to discuss the culvert design. The goal is to achieve concurrence on the culvert design parameters including: location, flow orientation, sizing and other location specific features (such as potential debris sizing) at each proposed culvert as needed. A memorandum documenting the culvert location with pictures and descriptions as well as the agreed upon culvert size shall be developed for the purposes of documentation of the agreed upon culvert properties.

Assumptions:

1. Two meetings with Snohomish COUNTY will be conducted to discuss the current status of the conveyance design as the design progresses.
2. Two meetings will be conducted with WDFW and USFS to discuss design parameters for the proposed culverts with one meeting conducted on site.

Task 15.3.2 Culvert Crossing Design

The CONSULTANT shall update the culvert plans to match the revised 35 MPH alignment geometrics. The CONSULTANT shall develop a memorandum documenting the engineering design of the 13 currently identified culvert crossings along the preliminary 35 MPH design alignment developed by the COUNTY, the justification for sizing the culverts, and requesting approval of each culvert size and location from the project stakeholders. The parameters identified in the on-site visit (Task 15.3.1) with the COUNTY, WDFW, and USFS will be incorporated into the memorandum.

The culvert design will be based on the criteria established by the COUNTY as well as the 2013 WDFW Water Crossing Design Guidelines and the USFS Northwest Forest Management Plan. Culvert sizes established for debris passage will be checked for hydraulic capacity.

The CONSULTANT shall design the channel protection measures for each culvert based on the 2006 Federal Highway Administration (FHWA) Hydraulic Design of Energy Dissipaters for Culverts and Channels. A memorandum will be developed describing the design and selected channel protection measures and submitted to WDFW and USFS for approval.

The CONSULTANT shall then provide advancement of the design for the culvert crossing drainage elements identified in the approved memorandum as agreed upon by the project stakeholders to a level of completion sufficient to develop a working set of plans and construction cost estimate for the project. Further design and drawing development will be performed under Task 15.4.

Assumptions:

1. One site visit will be conducted with WDFW and USFS to confirm each culvert size and location throughout the project.
2. Culverts will be sized using the Stream Simulation method as described in the WDFW 2013 Water Crossing Design Guidelines.

Deliverables:

- Culvert Sizing Memorandum (2 hard copies and 1 electronic copy)
- Culvert Site Visit Documentation Memorandum (2 hard copies and 1 electronic copy)
- Channel Protection Measures Memorandum (2 hard copies and 1 electronic copy)

Task 15.3.3 Roadway Conveyance Design

The CONSULTANT shall develop a roadway conveyance design system that will distribute the stormwater runoff from the roadway prism to the selected stormwater BMPs. The roadway conveyance system will include all elements with the exception of culvert crossings. All conveyance design elements will follow the Washington State Department of Transportation (WSDOT) 2014 Highway Runoff and 2010 Hydraulic Manuals. A Roadway Conveyance Design Memorandum will be developed to document all conveyance elements including calculations.

The CONSULTANT shall then provide advancement of the design for the roadway conveyance design elements identified in the design development as agreed upon by the COUNTY and other project stakeholders, and documented in the Roadway Conveyance Design Memorandum. The design advancement shall be to a level of

completion sufficient to develop a working set of plans and construction cost estimate for the project. Further design and drawing development will be performed under Task 15.4.

Assumptions:

1. Assume one meeting with the COUNTY to discuss and resolve the comments from the Roadway Conveyance Design Memorandum.

Deliverables:

- Roadway Conveyance Design Memorandum (2 hard copies and 1 electronic copy)

EXHIBIT G-1b
Supplemental Subconsultant Fee Determination – Budget

EXHIBIT G-1b, SUBCONSULTANT FEE
SHANNON and WILSON
SUPPLEMENT NO. 3

S&W Geotech Cost
10/16/2015

Index-Galena Road MP 6.4 to 6.9 Realignment
Snohomish County - RC 1532 / UPI #06-0150

GEOTECHNICAL ENGINEERING - TASK 13

SHANNON & WILSON PERSONNEL

	Position Classification	Hours		Billing Rate		Cost
1	Officer	36.0	X	$224.40	= $	8,078
2	Sr Associate	4.0	X	$180.40	= $	722
3	Associate	30.0	X	$178.50	= $	5,355
4	Senior Tech Staff	94.0	X	$133.26	= $	12,527
5	Professional Staff II-IV	128.0	X	$110.37	= $	14,127
6	Professional Staff I	0.0	X	$102.00	= $	-
7	Senior Drafter / Tech	10.0	X	$103.04	= $	1,030
8	Drafter / Tech	14.0	X	$98.72	= $	1,382
9	Administrative (Senior)	9.0	X	$86.88	= $	782
10	Administrative	0.0	X	$61.14	= $	-
	Total Hours	325.0		TOTAL PERSONNEL COSTS =	$	44,003

DIRECT NONSALARY COSTS (DNSC)

B&W 8.5x11 Copies	200	copies @	$	0.10	$ 20
B&W 11x17 Copes	200	copies @	$	0.20	$ 40
Color 8.5x11 Copies	100	copies @	$	1.00	$ 100
Color 11x17 Copies	50	copies @	$	2.00	$ 100
	TOTAL REIMBURSABLE EXPENSES (DNSC) =				$ 260

TOTAL TASK 13 SHANNON & WILSON FEE = $ 44,263

EXHIBIT G-1b, SUBCONSULTANT FEE
SHANNON and WILSON
SUPPLEMENT NO. 3

S&W Geotech Hours
10/16/2015

TASK 13 - GEOTECHNICAL ENGINEERING	Shannon & Wilson Personnel									
	Officer	Sr. Associate	Associate	Senior Staff	Professional Staff II-IV	Professional Staff I	Sr. Drafter / Tech	Drafter / Tech	Senior Admin.	Admin
Task 13.1 Project Management	1	4	2	22	0	0	0	0	6	0
Invoicing & Progress Reports		4		6					6	
Scheduling, coordination, work assignments	1		2	16						
Task 13.2 Preliminary Design	16	0	16	72	136	0	16	54	3	0
Task 13.2.1 35 MPH Alignment Review										
Review 35 MPH Alignment	4		8		24		4			
Alignment Optimization Support	1			2	4		4			
Deviation Support	0.5		2		4					
Task 13.2.2 Box Culvert Vented Ford										
Review Design for 35-MPH Alignment	1			4	8					
Alternatives Study	2			8	16		4			
Task 13.2.3 Debris Diversion Berm										
Review Design for 35-MPH Alignment	2			4	16					
Review Conceptual Drawings	1			2	16			4		
Alternatives Study	1			2	4			2		
Task 13.2.4 Bridge & Culvert Study										
Conceptual Recommendations for Culvert Crossing Alternative	2		2	4	16					
Alternatives Study	1			4	8		2			
Task 13.2.5 Construction Cost Estimate										
Cost Estimate Support	2			8	16		4			
Task 13.2.6 Update Geotech, Soils and Groundwater Backbone Report										
Update Report to Reflect the 35 MPH Alignment	2.5			8	24			8	2	
Address Comments from WSDOT and USFS	0.5			2	4				1	
Task 13.2.7 Meetings										
Agency Meetings	6		6	6						
Preliminary Design Meeting with Berger/ABAM			6	6						
35 MPH Alignment Site Visit	6		6	6						
Meeting with COUNTY	6		6	6						
SUBTOTAL TASK 13 HOURS	36	4	30	94	136	0	16	54	9	0

EXHIBIT G-1b, SUBCONSULTANT FEE
SHANNON and WILSON
SUPPLEMENT NO. 3

S&W Hydraulic Costs
10/16/2015

Index-Galena Road MP 6.4 to 6.9 Realignment
Snohomish County - RC 1532 / UPI #06-0150

HYDRAULIC ENGINEERING - TASK 14

SHANNON & WILSON PERSONNEL

	Position Classification	Hours		Billing Rate		Cost
1	Officer	2	X	$224.40	= $	449
2	Sr. Associate	4	X	$180.40	= $	722
3	Associate	4	X	$178.50	= $	714
4	Senior Tech Staff	20	X	$133.28	= $	2,665
5	Professional Staff II-IV	0	X	$110.37	= $	-
6	Professional Staff I	0	X	$102.00	= $	-
7	Senior Drafter / Tech	0	X	$103.04	= $	-
8	Drafter / Tech	0	X	$98.72	= $	-
9	Administrative (Senior)	0	X	$86.88	= $	-
10	Administrative	0	X	$81.14	= $	-
	Total Hours	30		**TOTAL PERSONNEL COSTS =**	**$**	4,550

DIRECT NONSALARY COSTS (DNSC)

Mileage	miles @	$ 0.565	$	-
B&W 8.5x11 Copies	copies @	$ 0.10	$	-
B&W 11x17 Copes	copies @	$ 0.20	$	-
	TOTAL REIMBURSABLE EXPENSES (DNSC) =		**$**	-

TOTAL TASK 14 SHANNON & WILSON FEE =	**$**	4,550

EXHIBIT G-1b, SUBCONSULTANT FEE
SHANNON and WILSON
SUPPLEMENT NO. 3

S&W Hydraulic Hours
10/16/2015

	Shannon & Wilson Personnel									
TASK 14 - HYDRAULIC ENGINEERING	Officer	Senior Associate	Associate	Senior Staff	Professional Staff IV/V	Professional Staff III	Sr. Drafter / Tech	Drafter / Tech	Senior Admin.	Admin
Task 14.1 Design Support	2	4	4	20	0	0	0	0	0	0
Review 35 MUP Alternative Alignment		4		4						
Design Support	2		4	16						
SUBTOTAL TASK 14 HOURS	2	4	4	20	0	0	0	0	0	0

EXHIBIT G-1b, PROJECT FEE DETERMINATION
LOUIS BERGER GROUP
SUPPLEMENT NO. 3

LBG Cost
10/16/2015

Index-Galena Road MP 6.4 to 6.9 Realignment
Snohomish County - RC 1532 / UPI #06-0150

TASK 15.3 - CONVEYANCE DESIGN DEVELOPMENT

LOUIS BERGER GROUP PERSONNEL

	Project Function	Hours		Billing Rate		Cost
1	Vice President	0.0	X	$ 224.38	= $	-
2	Principal	0.0	X	$ 204.05	= $	-
3	Senior Project Manager	102.0	X	$ 163.86	= $	16,714
4	Senior Consultant/Senior Engineer	0.0	X	$ 153.00	= $	-
5	Project Engineer	0.0	X	$ 124.33	= $	-
6	Junior Consultant/Junior Engineer	208.0	X	$ 102.88	= $	21,399
7	Editor/Graphics	0.0	X	$ 88.20	= $	-
8	Landscape Architect/CAD	48.0	X	$ 116.02	= $	5,569
9	Administrative Assistant	24.0	X	$ 80.08	= $	1,922
	Total Hours	382		Subtotal Personnel Costs =	$	45,604
				Salary Escalation for FY 2017 at = 0.00%	$	-
				TOTAL PERSONNEL COSTS =	**$**	**45,604**

DIRECT NONSALARY COSTS (DNSC)

Mileage	-	miles @	$ 0.575	$	-
Rental Car per Day	4	each @	$ 80.00	$	320
Federal Express / Courier	0	each @	$ 15.00	$	-
		TOTAL REIMBURSABLE EXPENSES (DNSC) =		**$**	**320**

TOTAL LOUIS BERGER GROUP FEE = $ 45,924

SUPPLEMENT NO. 3 TASK DESCRIPTION	Task Number	Vice President	Principal	Senior Project Manager	Senior Consultant / Senior Engineer	Project Engineer	Junior Consultant / Junior Engineer	Editor / Graphics	Landscape Architect / CAD	Administrative Assistant	Totals
BILLING RATE ==>		$ 224.30	$ 204.21	$ 185.88	$ 153.00	$ 124.55	$ 102.80	$ 88.25	$ 116.22	$ 80.08	
TASK 15 - 35 MPH ALIGNMENT	15			102			208		48	24	382
Conveyance Design Development	15.3			102			208		48	24	382
Drainage Progress Meetings	15.3.1			16			16			2	34
Meetings with COUNTY (2)				8			8			1	17
Meeting with WDFW and USFS (1)				8			8			1	17
Culvert Crossing Design	15.3.2			60			140		32	16	248
Site Visit with WDFW and USFS / Preparation & Presentation				8			8				16
Site Visit with WDFW and USFS (1 Site Visit)				8			8				16
Culvert Site Visit Documentation Memorandum				8			16		6	4	34
Culvert Sizing Memorandum Draft (Assumes 13 Culverts)				20			60		12	6	98
Channel Protection Measures Memorandum Draft				8			32		8	4	52
Review and Respond to Memo Comments				4			8		2		14
Final Memorandums / Culvert Sizing & Channel Protection				4			8		4	2	18
Roadway Conveyance Design	15.3.3			26			52		16	6	100
Roadway Conveyance Design Memo Draft (includes Calculations)				20			40		12	4	76
Review and Respond to Comments				4			8				12
Roadway Conveyance Design Memo Final				2			4		4	2	12
				$18,754			$21,328		$5,580	$1,922	$ 46,804
LOUIS BERGER GROUP TOTAL HOURS =				102			208		48	24	382

DIRECT NONSALARY COSTS (DNSC)	Qty	Unit Cost	Per		
Task 15.3 - Rental Car for Meetings (3) and Site Visit (1)	4	$ 80.00	/ Mile	$ 320.00	Task 15
	4			$ 320.00	

EXHIBIT G-2
Subconsultant Fee Determination – Summary Sheet
Fee Schedule

Subconsultant: The Louis Berger Group, Inc.

Position Classification	Direct Salary Rate	ICR @148.59%	Profit @25.75%	Max Rate Per Hour
Vice President	$81.79	$121.53	$21.06	$224.38
Principal	$74.38	$110.52	$19.15	$204.05
Senior Project Manager	$59.73	$88.75	$15.38	$163.86
Senior Consultant / Senior Engineer	$55.77	$82.87	$14.36	$153.00
Project Engineer	$45.32	$67.34	$11.67	$124.33
Junior Consultant / Junior Engineer	$38.45	$57.13	$9.90	$105.48
Editor / Graphics	$32.15	$47.77	$8.28	$88.20
Financial	$43.95	$65.30	$11.32	$120.57
Landscape Architect / CAD	$42.71	$63.46	$11.00	$117.17
Administrative Assistant	$29.19	$43.37	$7.52	$80.08

The indirect cost rate (ICR), profit, and max rate per hour listed above are the maximum rates payable under this AGREEMENT. Rates invoiced shall be based on the direct salary of the individual employee plus ICR plus profit and shall not exceed the Max Rate Per Hour for each classification listed in this Exhibit G-2 without prior written consent of the COUNTY.

EXHIBIT G-3
Breakdown of Subconsultant's Overhead Cost

SUBCONSULTANT'S audited overhead report from the WSDOT Audit Office, or other report supporting Overhead Rate (per Chapter 31.5 of the WSDOT Local Agency Guidelines), provided by SUBCONSULTANT attached hereto and incorporated herein as Exhibit "G-3".

Washington State Department of Transportation

Lynn Peterson
Secretary of Transportation

Transportation Building
310 Maple Park Avenue S.E.
P.O. Box 47300
Olympia, WA 98504-7300
360-705-7000
TTY: 1-800-833-6388
www.wsdot.wa.gov

April 8, 2015

Louis Berger
412 Mount Kemble Avenue
Morristown, NJ 07962-1946

Subject: Acceptance FYE June 30, 2014 ICR – CPA Report

Dear Mr. James Boland:

We have accepted your firms FYE June 30, 2014 Indirect Cost Rate (ICR) of 148.59% Home Office Rate and 112.59% Field Rate based on the "Independent CPA Report," prepared in accordance with Part 31 of the FAR, by Wiss & Company, LLC. Your ICR acceptance is in accordance with 23 CFR 172.7 and must be updated on an annual basis. This rate may be subject to additional review if considered necessary by WSDOT and will be applicable for:

- ☒ WSDOT Agreements
- ☒ Local Agency Contracts in Washington State only

Costs billed to agreements/contracts will still be subject to audit of actual costs, based on the terms and conditions of the respective agreement/contract.

This was not a cognizant review. Any other entity contracting with the firm is responsible for determining the acceptability of the ICR.

If you have any questions, feel free to contact our office at (360) 705-7104 or via email consultantrates@wsdot.wa.gov.

Regards;

ERIK K. JONSON
Manager, Consultant Services Office

EKJ:rck