

III

The "Maximum Amount Payable" amount on the Agreement title page is amended as follows:
Maximum Amount Payable \$3,981,846.00

IV

EXHIBIT A-2 Supplemental Scope of Work - attached hereto and by this reference made part of the original Agreement, as additional work to be performed under Exhibit A.

V

EXHIBIT D Prime Consultant Cost Computations – Fee Schedule, attached hereto by this reference made part of the previously amended Agreement, has been further amended and hereby replaces the previously amended EXHIBIT D.

VI

EXHIBIT E Subconsultant Cost Computations – Fee Schedule, attached hereto by this reference made part of the previously amended Agreement, has been further amended and hereby replaces the fee schedule previously amended EXHIBIT E.

VII

EXHIBIT L Consent to Assignment, attached hereto and by this reference made part of this supplement, Snohomish County consents to the assignment of the professional service subcontract to this Agreement CCF02-18, *Ash Way: 164th Street SW to Gibson Road*, to Atlas Technical Consultants LLC.

If you concur with this supplement and agree to the changes as stated above, please sign in the appropriate spaces below and return to this office for final action.

By: **JACOBS ENGINEERING GROUP, INC.**

By: **SNOHOMISH COUNTY**

Consultant Signature

Approving Authority Signature

Exhibit A-2 Supplemental Scope of Work

Exhibit A-2
Scope of Services
Supplement No. 13
Snohomish County Public Works
Swamp Creek Culverts and revisions to 90% Plans, Specifications, & Estimate for:
Ash Way: 164th St SW to Gibson Rd
RC-1638, UPI# 11-0011-1

INTRODUCTION

This amendment includes Swamp Creek Culverts Preliminary, 60% Design Plans, and 90% Design Plans, Specifications and Opinion of Cost for construction.

The target for completing the 90% design including the Swamp Creek Culverts is 9 months following this supplement's notice to proceed.

GENERAL SCOPE OF SERVICES

(Amend the original scope of work to include the following additional scope of work summary)

This scope of work describes the work elements to be accomplished by the CONSULTANT as summarized under each Task. This scope consists of the following work elements:

- Task 1 – Project Management and Coordination
- Task 2 – Survey and Basemapping
- Task 3 – Right-of-Way Assistance and Coordination
- Task 4 – Environmental and Public Involvement Support
- Task 5 – Agency Coordination (No additional work in this supplement)
- Task 6 – Geotechnical Coordination
- Task 7 – Utility Coordination
- Task 8 – Storm Drainage Design
- Task 9 – Swamp Creek Culverts Design
- Task 10 – Curb Ramp Type and Location Analysis (No additional work in this supplement)
- Task 11 – 60% Plan Preparation, Specification List and Opinion of Cost (No additional work in this supplement)
- Task 12 – Roundabout Design (No additional work in this supplement)

Task 13 – Project File Management and Electronic Exchange of Engineering and Other Data
(No additional work in this supplement)

Task 14 – Final Design

Task 15 – Final Design Project File Management and Electronic Exchange of Engineering and Other Data (No additional work in this supplement)

This Scope of Services is defined in the tasks below:

SCOPE OF SERVICES DEFINED

Task 1 – Project Management and Coordination

(Supplement the scope of work with the following to include an additional 9 months of project management and coordination)

Overall project management and coordination work elements include:

1.1 Project Administration

The CONSULTANT will provide project management and administration (including invoicing, monthly progress reports, and schedule updates) and coordination with AGENCY staff throughout the project's duration. The CONSULTANT will provide oversight, direction, and management of the consultant's project team for execution of work as identified in this scope of services and will monitor the project budget and schedule. For budgeting purposes, the project duration is assumed to be an additional 9 months, beginning from this supplement's notice to proceed.

The CONSULTANT will manage the schedule, scope, budget, and quality of deliverables over the term of the Agreement. Progress report including project progress, upcoming work, schedule status and financial status will be included with each invoice. This work element is intended to help monitor costs and budgets, and to propose corrective actions. This will include development of formal scope and/or budget modifications.

The CONSULTANT's Project Manager will maintain communication with the AGENCY's Project Manager and the CONSULTANT's Project Team via informal meetings, telephone discussions, electronic mail, and other means necessary.

1.2 Project Coordination Meetings

Participate in coordination meetings, assuming additional 12 coordination calls / meetings. Attend up to additional three (3) coordination meetings with AGENCY resource groups and staff on an as needed basis. Project coordination meetings are anticipated to last approximately 1 hour each. The CONSULTANT will prepare meeting agendas and meeting notes with the assistance from the AGENCY. Up to five (5) staff will attend each coordination meeting.

1.3 Project Schedule

The CONSULTANT will create, maintain, and submit a Microsoft Project schedule including milestones dates for each work item and will include AGENCY predecessor tasks (if provided by the AGENCY). The CONSULTANT will update and submit this schedule up to two (2) times as requested by the AGENCY throughout the life of the project.

Assumptions for Task 1:

- Project meetings will all be held online via MS Teams.
- The number of CONSULTANT's staff attending each meeting are approximate and limited to the hours shown within the project level of effort (budgeting) spreadsheet.
- Hours required for quality control (checking) of work products are included in the tasks under which those work products are scoped.

Deliverables for Task 1:

- Project Meeting Agenda and Meeting Notes, when applicable (up to 15 meetings)
- Monthly Invoices and Progress Reports (up to 9 invoices)
- Project Schedule (up to 2 (two) project schedule updates in Microsoft Project)

Task 2 – Survey and Basemapping

(Supplement the scope of work with the following)

The CONSULTANT will provide supplemental topographic mapping services.

The CONSULTANT will attend one (1) meeting with the AGENCY'S project manager. Meetings will be one (1) hour each with four (4) attendees from the CONSULTANT. The CONSULTANT will prepare meeting agendas, figures, and meeting notes with assistance from the AGENCY.

Additional Topographic Mapping Services (where mutually agreed by the AGENCY and CONSULTANT): This task is limited to the level of effort shown within the project level of effort (budgeting) spreadsheet which includes project management, data processing, and QC.

Assumptions:

- The CONSULTANT will use existing horizontal and vertical control from the 90% Contract
- Rights-of-Entry, if required, will be organized, granted, and confirmed by the AGENCY.
- Right-of-Way and parcel resolution are not a part of these services.
- Utility locates are not a part of these services.
- The CONSULTANT will use existing base map files from the 90% contract.
- The survey control plan will be prepared by the AGENCY for the contract documents with assistance from the CONSULTANT.

Deliverables:

- Meeting agendas, figures and minutes.
- Updated AutoCAD Civil 3D survey base map at 1" = 20' (electronic copy) in AGENCY Standards.
- Updated integrated Land XML-compatible digital terrain model (DTM).
- ASCII file with point numbers, coordinates, elevations, and descriptions for each survey point, with benchmarks and survey control points clearly identified.

Task 3 – Right-of-Way Assistance and Coordination

(Supplement the scope of work with the following)

The CONSULTANT will work with the AGENCY to determine possible changes to Right-of-Way lines and easement areas. The CONSULTANT will provide up to four (4) AutoCAD Civil 3D base files containing proposed line work for permanent right-of-way and easements. The target for submitting possible revisions to the ROW Plan is 4 months following this supplement's notice to proceed.

The CONSULTANT will provide figures in PDF format showing right-of-way impacts to assist the AGENCY with property owner discussions. The level of effort to perform this task is limited to the hours shown within the project level of effort (budgeting) spreadsheet, which includes quality control (QC).

Assumptions for Task 3:

- The AGENCY will be responsible for preparing and assembling all the Right-of-Way plans and acquisition documents, including easements in PDF format.
- Right-of-Way Appraisals, Acquisitions and Negotiation Services are not included in this scope of services.
- The AGENCY will facilitate and attend all property owner discussions.
- The CONSULTANT will not participating in property owner discussions.

Deliverables for Task 3:

- AutoCAD Civil 3D files (e-transmitted with all the necessary data shortcuts), using AGENCY standards, containing suggested revisions for the proposed permanent right-of-way and easements for road and drainage improvements; and approximate temporary easements for construction of driveways and cut/fill slopes (up to four (4) transmittals).
- Property owner figures showing proposed impacts.

Task 4 – Environmental and Public Involvement Support

(Supplement the scope of work with the following)

The CONSULTANT will assist the AGENCY with environmental documentation and public involvement as defined below.

4.1 Support for Environmental Documentation and Permit Requirements

CONSULTANT will provide supporting data for environmental permit development by the AGENCY, based on 90% design development of the project including Swamp Creek Culverts. The CONSULTANT will provide disturbed area base file in AutoCAD Civil 3D and EXCEL file, review environmental reports outlining the results of environmental sampling at 1714 and 1730 Gibson Road to determine if unsuitable soil(s) needs to be removed. The disturbed area base file will include cut/fill lines, disturbed area, quantity boundaries and wetland/stream impacts lines. The EXCEL file will include earthwork quantities, amount of existing and new impervious surfaces and flow control/water quality information. Additionally, CONSULTANT will provide input for the environmental permit applications developed by the AGENCY. The CONSULTANT will provide permit application fill-in information as requested by the AGENCY. The level of effort to perform this task is limited to the hours shown within the project level of effort (budgeting) spreadsheet.

Assumptions for Task 4:

- The AGENCY will coordinate, create, and apply for all environmental permits.
- The AGENCY is proceeding with design as a federally funded project in the event that federal funds are allocated.
- AGENCY staff will provide wetland delineations in the field for surveyor data collection
- The AGENCY will perform all planning, soil borings, soil and groundwater samples, associated analysis, including Investigation Derived Waste (IDW) management. Laboratory reports and relevant field records (boring logs, groundwater monitoring forms, etc.) will be provided by the AGENCY.

Deliverables for Task 4:

- Disturbed area base file - One (1) AutoCAD Civil 3D file (e-transmitted)
- Disturbed area EXCEL file - One (1) EXCEL

Task 6 – Geotechnical Coordination

(Supplement the scope of work with the following)

The CONSULTANT will provide a base file in AutoCAD Civil 3D identifying areas needing geotechnical exploration. The file will include geotechnical exploration locations for proposed wall locations, signal pole locations and stormwater facility locations for use by the AGENCY in developing a geotechnical investigation plan.

The CONSULTANT will attend four (4) coordination meetings with a AGENCY geotechnical engineer. Meetings will be one (1) hour each with two (2) attendees from the CONSULTANT. The CONSULTANT will prepare meeting agendas and meeting notes with the assistance from the AGENCY.

Assumptions for Task 6:

- The AGENCY will perform all geotechnical exploration.
- The AGENCY will provide a stamped Geotechnical Report for the project. This report will include retaining wall type recommendations with retaining wall and stormwater (infiltration data) design parameters.

Deliverables for Task 6:

- Geotechnical exploration base file in AutoCAD Civil 3D (e-transmitted)
- Attend coordination meeting with AGENCY geotechnical staff including meeting agendas and minutes.

Task 7 – Utility Coordination

(Supplement the scope of work with the following)

The AGENCY will coordinate with the various public and private utilities along the route. Coordination will include working with the identified utilities to allow for each to be included under the AGENCY's project permits and environmental documents.

The CONSULTANT will create utility conflict plans to assist the AGENCY with utility relocations.

Due to the uncertainty inherent in coordinating utility relocations, additional work beyond what the level of effort estimated for this task may be required. Additional work requested by the AGENCY project manager may require a supplement.

The CONSULTANT's specific tasks for utility coordination are described below:

7.1 Utility Conflict Plans

The CONSULTANT will determine potential utility conflicts, identify pothole locations, and check if conflict resolution requires a design change or utility relocation along Ash Way between 135th St SW and Admiralty Way.

The AGENCY will confirm the pothole locations and coordinate the necessary pothole work with the utility franchises.

The AGENCY will then assist in scheduling the time and day of potholing and have the CONSULTANT survey the pothole locations (See Subtask 2.9 for Survey Pothole Locations).

The CONSULTANT will survey pothole locations (horizontal and vertical) and add the information to the base map as defined in Task 2 and utility plans.

Upon determination of actual conflicts (post-potholing), the AGENCY will coordinate with utilities to provide notice, discussion, and resolution of all conflicts. Utility relocations that occur prior to completion of 90% plans will be shown in the plans by the CONSULTANT based on utility-provided plans or the latest available survey. The CONSULTANT will update the Utility Conflict plan and Utility Conflict EXCEL spreadsheet based on the outcome of the potholing and utility coordination meetings (limited to hours shown in the fee estimate).

The CONSULTANT will provide updates to the utility conflict plans at the Swamp Creek Culverts (assuming the update of 4 plans and 4 profiles) to the AGENCY and revisions (up to four (4) submittals). The plan submittals will include:

- Initial Submittal - Initial creation with preliminary pothole locations
- Update One – Finalized pothole locations
- Update Two - Updated to include pothole information
- Update Three - Storm drainage revisions to avoid conflict

7.2 Franchise Utility Coordination

The CONSULTANT will review and provide comments on (proposed) utility franchise relocation plans (up to seven plans).

Assumptions for Task 7:

- The following utilities and utility franchises exist along the project corridor:
 - Power (Snohomish County PUD)
 - Communication and Fiber-optics (Zipty Fiber and MCI)
 - Cable (Comcast and Astound Broadband)
 - Water (Alderwood Water and Wastewater District)
 - Gas Distribution (Puget Sound Energy)
- The AGENCY approach to utility coordination assumes that the design will be modified (wherever feasible) during the development of the 90% design to reduce the impact of utility relocations on development of the project.
- The utilities generally agree to bear the cost of the pothole work or perform the pothole work with their own forces. Potholing costs are not included in the fee estimate and it is assumed will be completed by the utility companies.
- Incorporation of any utility franchise design, such as new or upgraded waterlines, into the contract documents is not included in this scope of services and considered additional work.
- The AGENCY will prepare and maintain a utility coordination log.
- The CONSULTANT will provide updates to the utility conflict plans at the Swamp Creek Culverts (assume 4 plans and 4 profiles) to the AGENCY and revisions (up to four (4) submittals).
- The CONSULTANT will provide updates to the utility conflict EXCEL spreadsheet at the Swamp Creek Culverts and provide up to four (4) submittals.
- The AGENCY will prepare inter-local agency agreements between the AGENCY and the utility agencies for incorporation of contract services to be included in the AGENCY's construction contracts. Examples of the services that could be included: adjustment of utilities, removal of abandoned structures and facilities, trenching, relocation of water lines, and traffic control.

Deliverables for Task 7:

- Create Swamp Creek Culverts utility conflict plans (PDF and AutoCAD Civil 3D (e-transmitted) file)
- Three updates to Swamp Creek Culverts utility conflict plans (PDF and AutoCAD Civil 3D (e-transmitted) file)

- Create Swamp Creek Culverts utility conflict EXCEL spreadsheet
- Three updates to Swamp Creek Culverts utility conflict EXCEL spreadsheet
- Review and provide comments on (proposed) utility franchise relocation plans near Swamp Creek Culverts

Task 8 – Storm Drainage Design

(Supplement the scope of work with the following)

8.2 Threshold Discharge Area (TDA) Maps

The CONSULTANT will update existing TDA maps to reflect new development along the corridor that has impacted existing drainage patterns.

8.5 Stormwater Quality Treatment Calculations

The CONSULTANT will update the stormwater quality treatment calculations to reflect new development along the corridor that has impacted existing drainage patterns.

8.6 Stormwater Flow Calculations

The CONSULTANT will update the stormwater flow calculations to reflect new development along the corridor that has impacted existing drainage patterns.

The level of effort to perform this task is limited to the hours shown within the project level of effort (budgeting) spreadsheet.

Deliverables for Task 8:

- Updated TDA maps
- Updated stormwater quality treatment calculations
- Update stormwater flow calculations

Task 9 – Swamp Creek Culverts Design

(Replace the original scope of work with the following in Task 9)

The existing Swamp Creek fish passage pipe arch culvert at the intersection of Admiralty Way and Gibson Road will be replaced with two shorter in length, but wider fish passage structures. The culverts design shall comply with WAC 220-660-190 & WAC 220-660-200.

Hydraulic Preliminary

The CONSULTANT will prepare hydraulic calculations and stream design for the full replacement of the existing Swamp Creek pipe arch culvert at the intersection of Admiralty Way and Gibson Road. Stream Simulation methodology or Unconfined Channel (otherwise called Unconfined

Bridge) as determined per the WDFW Water Crossing Manual will be used for the culverts design to provide fish passage, and it is assumed the existing culvert will be replaced entirely with either two: three-sided or box concrete structures. The design will be developed using the WSDOT Hydraulics Manual, the Washington Department of Fish and Wildlife (WDFW) 2013 Water Crossing Design Guidelines, and the WSDOT Bridge Design Manual LRFD.

The Swamp Creek channel will be realigned up to a distance of 50' upstream of the first culvert, and 30' downstream of the second culvert to connect the existing channels with the new culvert alignment. A new 210' channel for Swamp Creek will be designed between the two new culverts that will allow for fish habitat and flood plain habitat.

Structures Preliminary Design

Once the preliminary hydraulic calculations and stream design are available: the CONSULTANT will meet with the AGENCY and Stakeholders as outlined in Task 9.1 to discuss the culverts type being proposed by the CONSULTANT. The CONSULTANT will then complete the Culverts Basis of Design Memorandum for the most feasible culverts type, size(s), and locations of the new fish passages based on the hydraulics analysis, roadway conditions, and input from the AGENCY and Stakeholders. The new structures may need to be constructed in stages to maintain traffic during construction, but it will be evaluated with inputs from the AGENCY and other team members.

9.1 Meetings and Stakeholder Coordination

The CONSULTANT will participate in the following meetings:

- One (1) meeting with the AGENCY Design, Environmental, and Surface Water Management (SWM) staff to discuss channel realignment and go over the comments and input from the WDFW and Tribes gathered during the "Bankfull Widths' Measurements" site visit.
- One (1) site visit with AGENCY, WDFW, and Tribes to discuss proposed design.
- One (1) meeting with Agency Design, Environmental, and Surface Water Management (SWM) staff to discuss comments and input from the WDFW and Tribes gathered during the 'Bankfull Width Measurements' site visit. Meeting will guide the development of Conceptual Alternatives Analysis including water crossing structures, channel realignment, and habitat features.
- One (1) meeting to present design alternatives to Agency and confirm preferred alternative.
- Two (2) virtual meetings with Agency, WDFW, and Tribes. First meeting will focus on discussing attributes of the preferred alternative, including structures' type and size, streambed materials, and habitat elements such as large woody material (LWM). The meeting will provide feedback from project stakeholders that will guide the 60% stream design. The second meeting will present 60% stream plans to WDFW and Tribes for consensus and guide changes for 90% plans.

- Up to three (3) meetings with the Agency to refine or resolve structural design of the water crossings; proposed channel, changes to stream alignment, profiles, and cross sections; and determine type, number, and placement of habitat features.
- Up to two (2) meetings with the AGENCY to refine or resolve landscaping design.

Assumptions for Task 9.1:

- Up to four (4) CONSULTANT staff members will attend each meeting listed above.
- The CONSULTANT will provide the agenda and minutes for the design coordination meetings with the AGENCY to discuss the channel realignment and earlier comments from the WDFW and Tribes.
- The AGENCY will provide the agenda and minutes for all the coordination meetings with the Stakeholders (WDFW and Tribes).
- The AGENCY will lead project permitting and communicate all applicable permit and design requirements to CONSULTANT. Permitting support is not included in this scope.

Deliverables/Meetings for Task 9.1:

- Site visit (up to 1 meeting)
- Meetings and stakeholder coordination meeting minutes input (up to 10 meetings)

9.2 Swamp Creek Culverts Alternative Analysis

A Draft Swamp Creek Culvert Basis of Design Memo was completed during the 60% design phase. The options presented in the memo were disregarded by the AGENCY. Through a series of meetings and design iterations an option that included two culverts and an open channel area was selected by the AGENCY (see Figure 1).

The CONSULTANT will rename the Draft Swamp Creek Culvert Basis of Design Memo to “Swamp Creek Alternative & Alignment Analysis” and update it to include the alignment and alternatives’ analysis, including selection of the preferred two-culvert alternative.

The design for the two culverts will follow the Stream Simulation methodology or Unconfined Channel approach (also referred to as Unconfined Bridge) as determined per the WDFW Water Crossing Manual to provide fish passage. The evaluation will determine whether the existing culvert should be entirely replaced with either two three-sided concrete structures or box concrete structures.

The analysis will include:

- A written summary of the conceptual analysis and supporting statements for the preferred alternative selection. This will include:
 - Comments and input from the Agency or stakeholders.
 - General data collection and preliminary analysis such as:
 - Very brief description or identification of the alternatives (e.g. crossing type, size, and location).

- Positive and negative attributes (pros and cons) of each alternative in a table format.
- Watershed or basin planning map
 - Conveyance/flooding or habitat (WRIA plans)
- Bankfull width measurements
- Preliminary hydrologic and hydraulic studies.
- Methods of determining preliminary structure size, type, and placement for the most feasible fish passages, whether three-sided or box concrete designs, based on the hydraulics analysis, roadway conditions, and Stakeholders input.
- Methods used to determine preliminary stream alignment, profile, and section
- WDFW Water Crossing Design Guidelines summary sheets or correction analysis forms

The Swamp Creek Alternative & Alignment Analysis will be included in an appendix of the Culverts Basis of Design Memorandum for the preferred alternative (see section 9.3).

Assumptions for Task 9.2:

- The AGENCY will provide a planning level cost estimate for the preferred alternative (if needed).

Deliverables for Task 9.2:

- Swamp Creek Alternative & Alignment Analysis
 - Draft and Final
 - Response to AGENCY Draft Comments
 - PDF and word document and supporting files in the original format

9.3 Culverts Basis of Design Memo (Hydraulics and Structures)

The Consultant will develop a Basis of Design Memorandum (BOD) for the preferred alternative only, derived from the Snohomish County template. The report will be developed for the preferred conceptual alternative.

The AGENCY will provide pebble counts and a geomorphic study prior to the draft BOD submittal.

A final BOD report will be stamped, dated, and submitted to the AGENCY. The report will state, describe, and reflect the design approach chosen. It is preferred that the current WDFW Water Crossing Guidelines and Washington State Administrative Code (WAC) be used as guiding documents unless there are special circumstances that prevent their use, in which case additional supporting documentation will be required.

The CONSULTANT will complete analysis and design for the culverts as follows:

- Size culverts using either the Stream Simulation methodology or Unconfined Channel approach per the WDFW Water Crossing Manual.
- Conduct Hydraulic Analysis
 - Model flows using SRH-2D and HEC-RAS for the existing culvert and stream (conditions when survey was completed)
 - Model flows using HEC-RAS for the proposed stream realignment and proposed culverts
- Complete Scour Analysis. May include determination of:
 - Streambed aggregate sizing and long term stability based on incipient motion
 - Meander bar (if used) stability at 2-yr & 100-yr flow rates for inundation and stability.
- Prepare Climate Change Analysis for preferred alternative
 - Use WDFW Culverts and Climate Change web app (include large wood stability analysis based on WSDOT Hydraulics Manual).

The Basis of Design, for the preferred alternative, will at a minimum:

- Provide sections for:
 - Project Introduction
 - Project Description
 - Project Site and Reach Conditions description (including a brief geomorphic summary).
 - Climate Change
 - Culverts Design Methodology description (Including freeboard within each structure, the 2-yr & 100-yr water surface elevations in proposed stream sections, plus a summary of upstream and in-culvert velocities at 2-yr & 100-yr flow rates).
 - Description of Culverts Size
 - Culverts Geometrics
 - Description of Habitat Features and how they are stabilized. Small wood, meander bars, and other habitat features should be discussed in regard to how they match geomorphic conditions and perform in 2-yr & 100-yr flow rates.
 - Any additional design considerations including:
 - Scour
 - Streambed aggregate sizing
 - Summary of Culverts Design Criteria
 - Supporting maps and photos
- Include a summary of and/or as attachments:
 - Attachment A: Swamp Creek Alternative & Alignment Analysis
 - Attachment B: Summary Form for Fish Passage Design Data
 - Attachment C: Hydrologic and Hydraulic Report for Swamp Creek
 - Attachment D: Climate Change Tool Results
 - Attachment E: Bankfull Width Memorandum.

- Attachment F: WDFW Stream Simulation Culverts Sizing
- Attachment G: Geomorphic Analysis including Streambed Gradation Calculations (to be provided by the AGENCY)
- Attachment H: Preliminary (30%) Culverts Plans

Assumptions for Task 9.3:

- Number of preliminary (30%) plans limited to what is shown in the level of effort budgeting spreadsheet
- The preferred alternative used in the BOD will be reviewed with the AGENCY prior to the development of the BOD.
- The AGENCY will provide a complete pebble count for the reach following Section 7 of the WSDOT Hydraulics Manual (Wolman pebble count or a grab sample, as appropriate).
- The AGENCY will conduct a Geomorphic Study, including, but not limited to:
 - Documenting stream planform, bed, bank, and floodplain characteristics.
 - Assessing channel evolution, longitudinal profile, geometry, and wood loading.
 - Evaluating riparian vegetation and land use changes.
 - Analyzing lateral and vertical stability, sediment dynamics, and channel response to design and climate.
 - Designing streambed material per WSDOT Hydraulics Manual.
- The AGENCY will provide the Streambed Material Gradation design. Sediment design will meet WSDOT Hydraulics Manual design criteria

Deliverables for Task 9.3:

- Culverts Basis of Design Memorandum
 - Draft and Final
 - Response to AGENCY Draft Comments
 - PDF and word document and supporting files in the original format

9.4 Mitigation Design and Plans (Landscape)

CONSULTANT will provide onsite Mitigation Plans and Specifications for Parcel 00380900200101 being acquired for culvert replacement and re-routing Swamp Creek and the area on Parcel 00374000001100 designated for buffer mitigation (around the stormwater pond).

The Mitigation Design shall be coordinated with CONSULTANT's Scope for development of new stream habitat for daylighted portions of Swamp Creek and other areas requiring stream habitat restoration design. Design will include details and specifications for riparian corridor habitat and, areas of backwater refugia for fish in daylighted creek and upstream of where the re-routed Swamp Creek ties into the mainstem south of the Admiralty Way intersection.

The CONSULTANT will determine onsite potential for wetland creation on Parcel 00380900200101 and mitigation design and a landscaping plan for wetland and/or floodplain habitat will be prepared. Parcel 00374000001100, not including the stormwater pond, is currently envisioned as buffer habitat.

The CONSULTANT shall provide a Landscaping Plan for this area. In addition to plantings, the landscaping plan should include preparation of subgrade, quality and depth of topsoil, discussion of amendments, and how they will not cause nutrient loading to the wetlands or creek, and type / quality / and depth of mulch. CONSULTANT shall also provide a Landscaping Plan for other wetland/critical areas temporarily impacted. All temporarily impacted areas will be restored through replanting of native vegetation.

- Meeting participation with AGENCY (1hr meeting with 4 CONSULTANT participants)
 - Prior to 60% Submittal

Assumptions for Task 9.4:

- AGENCY will confirm wetland boundaries relative to intersection/roadway/culverts project design elements prior to survey work.
- AGENCY will approve plant list for planting areas.
- Meeting will be held at the same time as the meeting described in Task 9.5.

Deliverables for Task 9.4:

- Meeting attendance including agendas, graphics, and meeting minutes
- Draft Mitigation Design Memo with 60% Plans, Special Specification List
 - See Task 9.6 for 60% plans
- The CONSULTANT will overlay wetland/stream impacts lines in AutoCAD Civil 3D quantifying the extent of critical areas impacts (wetland, stream, and buffer impacts).
- Disturbed area base file - One (1) AutoCAD Civil 3D file (e-transmitted)
- Disturbed area EXCEL file - One (1) EXCEL
- Final technical memorandum containing written description of mitigation design for project elements.
- Final Mitigation 90% Plans, Specifications, and Estimate
 - See Task 14 for 90% plans, specification and estimate scope

9.5 Landscaping Design and Plans (Landscape)

CONSULTANT will develop and provide Landscaping Plans and Specifications for areas along the proposed stream alignment, planter strips, streetscapes (including areas along the alignment where tree canopy is lost), disturbed areas within public ROW and/or associated with roadway design, and areas used for stormwater flow control and treatment facilities.

Parcel 00380900200101 (being acquired for culvert replacement), areas surrounding the stormwater pond on Parcel 00374000001100, and any temporary impact areas associated with critical areas are covered under Mitigation Design.

Landscaping Plans shall be developed consistent with applicable provisions in the Snohomish County Code and in accordance with specifications identified in the Snohomish County Drainage Manual and the Engineering Design and Development Standards.

- Meeting participation with AGENCY (1hr meeting with 4 CONSULTANT participants)
 - Prior to 60% Submittal

Assumptions for Task 9.5:

- Meeting will be held at the same time as the coordination meeting with the AGENCY described in Task 9.4.
- CONSULTANT will present concept schematics for alignment to the AGENCY
- AGENCY will approve list of plants and spacing used in landscaping

Deliverables for Task 9.5:

- Brief written description of landscape design concept and concept schematics for alignment
- Draft Landscaping/Planting Plans and List of Special Specifications.
 - See Task 9.6 for 60% plans and list of special specification
- Final Landscaping/Planting Plans, Specifications, and Estimate
 - See Task 14 for 90% plans, specification and estimate scope

9.6 Plans (Hydraulics, Structures, and Landscaping)

The CONSULTANT will prepare 60% level plans for the Swamp Creek culvert replacement and address the following:

- Complete a 2D hydraulic analysis based on floodplain utilization ratio comparing upstream and in-culvert velocities for the proposed channel and floodplain.
- Based on geomorphic analysis of upstream channel (or other representative, unmodified channel/floodplain section) design:
 - Stream channel cross section geometry including low flow channel, bankfull width, and floodplain connectivity (entrenchment).
 - Stream planform including radius of curvature, wavelength, and sinuosity.
 - Stream profile bed features such as riffle/pools.
- Design streambed aggregate mix(es) based on pebble count and shear stress analysis.
- Placement of large wood material and small mobile wood.
 - Preference is for the large wood to be ballasted via streambed and streambank embedment or be sized large enough to exceed carrying capacity of the stream.

- Complete a scour analysis and place habitat features in a manner to mitigate areas of scour.
- Structural Plans in accordance with 60% Stream Design
- Planting plan and details to support streambank stabilization and habitat improvement.

The 60% level plans will include the following sheets:

- Stream Plan and Profile (up to 3 sheets)
- Stream Channel Typical Sections (up to 2 sheets)
- Stream Details (up to 2 sheets)
- Culvert Replacement Plan and Elevation including wingwalls and headwalls (up to 2 sheets)
- Culverts Structural Plan and Elevation (up to 4 sheets)
- Culverts Structural Details (up to 4 sheets)
- Stream Buffer Planting Plan (4)
- Mitigation Planting Plans (8)
- Landscaping Planting Plans (35)
- Planting Schedule and Quantities (4)
- Planting Details (4)
- Temporary Stream Bypass Plans (up to 2 sheet)

Assumptions for Task 9:

- The AGENCY will provide a stamped Geotechnical Report for the project.
- The AGENCY's SWM Staff provided flows for Swamp Creek at the 60% design phase. These flows from the AGENCY HSPF model will be used for hydraulic modeling for the 90% design. (A flow rate multiplier for climate change needs to be included using the WDFW online tool to predict the change in bankfull width; time range should be the 2080 value.).
- The proposed roadway profile shown in the 60% plans will be utilized for the design of the culverts, no changes will be made beyond AGENCY provided 60% comments.
- Large Woody Material (LWM) will be incorporated into the design of the channel.
- The channel will not be realigned outside of the 300' referenced above.
- The previously provided 1D HEC-RAS model from the AGENCY will be used in the development of the 2D model for stream design.
- The AGENCY will compile a single document with comments from agencies and tribes on bankfull width memo.
- The structural design of culverts structure and wingwalls will be in accordance with the WSDOT Bridge Design Manual.

- This scope is based on either two three-sided concrete structures or box concrete structures. The final PS&E will specify the manufacturer will prepare the structural calculations and plans to submit to the AGENCY for review and approval for construction.
- Bridge load rating analysis will be performed by the Consultant who prepared the structural design and plans for the prefabricated concrete culverts.
- All necessary permits and coordination for the removal of the existing culvert and construction of the new culverts (HPA, etc.) will be provided by the AGENCY.
- The CONSULTANT will overlay the 60% design with critical areas information developed by the AGENCY to provide impact assessment information that supports project permitting led by the AGENCY. Permit drawings are not included in this scope.
- All other adjacent private culverts will not be removed or replaced as part of this scope of work and are expected to remain in place as potential barriers to fish passage.
- Geotechnical investigation for the design of the culverts structure and their wingwalls, which will include design parameters required for structural design and culverts and their wingwalls/retaining walls construction, will be performed by the AGENCY and provided to the CONSULTANT.
- The AGENCY will be the geotechnical engineer of record for all culverts structures and culverts structure wingwalls.

Deliverables for Task 9.6:

- 2D hydraulic model
- 60% Stream Restoration Plans
- 60% Mitigation Plans and List of Special Specifications
- 60% Landscaping Plans and List of Special Specifications
- Draft list of bid items for AGENCY provided specification package.
- 60% Plan Comment Review Meeting with the AGENCY (up to 6 CONSULTANT participants)

Task 14 – Final Design

(Supplement the scope with the following)

The CONSULTANT will prepare 90% level plans, details, bid items, quantities, special provisions, and estimate for detailed review by AGENCY staff. The 90% package will incorporate comments from the 60% AGENCY review.

14.5 Construction Sequencing and Detour Plans

The CONSULTANT will prepare 90% Construction sequencing for Admiralty Way and Gibson Road. Construction staging will include the following:

- Up to 3 additional stages to construct the roundabout and culverts
 - Up to 2 cross sections per stage
 - Culverts will be constructed in 2 or 3 sections
 - Intersection sequencing overview will be shown with hatching, no traffic control plans will be provided.
- Up to 2 detour plans

14.6 Admiralty Way & Gibson Road Roundabout Memo and Plans

The CONSULTANT will revise the single lane Admiralty Way and Gibson Road roundabout to be a circular roundabout. This task will include the following:

The CONSULTANT will participate in the following meetings:

- One (1) meeting with the AGENCY Design, Environmental, and Roundabout Subject Matter Experts (SME) to discuss up to two preliminary roundabout layouts.
- One (1) meeting with the AGENCY Design, Environmental, and Roundabout Subject Matter Experts (SME) to discuss the preferred roundabout layout.

The CONSULTANT will prepare a draft and final Roundabout Memo for the single lane Admiralty Way and Gibson Road circular roundabout. The Roundabout Memo will include the following items:

- Layout (including (a) version(s) of the preliminary layouts in AutoCAD Civil 3D)
- Fastest path analysis
- AutoTurn Figures for Design Vehicles
- Sight Distance Figures

Assumptions for Task 14.6:

- All project files will be delivered electronically.
- Up to four (4) CONSULTANT staff members will attend each meeting listed above.

- The CONSULTANT will provide the agenda, graphics and minutes for each meeting listed above.
- The AGENCY will provide comments within one week of each meeting and submittal listed above.
- The roundabout will follow the 2023 NCHRP 1043 – Guide for Roundabouts and the following:
 - One preliminary layout will shift the roundabout to the southwest. Hopefully reducing adjacent critical area impacts.
 - Lane widths will be a minimum of 11-ft.
 - Circulatory roadway width will be a minimum of 16-ft
 - Shared used paths around the roundabout shall be 2-ft stamped concrete buffer and an 8-ft shared used path.
 - Design vehicles will be WB-62 and City Bus, as included in the original Ash Way roundabout memo.

Deliverables for Task 14.6:

- AutoCAD Civil 3D files (e-transmitted with all the necessary data shortcuts)
- Agenda, graphics and meeting minutes for roundabout meetings
- Draft and Final Roundabout Design Memorandum
- Response to AGENCY's Draft Roundabout Design Memorandum comments

14.7 Final Design PS&E (90%)

The CONSULTANT will prepare 90% level plans, details, bid items, quantities, special provisions, and estimate for detailed review by AGENCY staff. The 90% design will incorporate the agreed upon 60% AGENCY review comments.

Final Design is based on the proposed improvements shown on the 60% Ash Way plans and the AGENCY's 60% review comments.

Design documents will include the following:

90% Plans:

It is anticipated that the 90% plans will consist of the following sheets:

- Updated 60% plans brought to 90% level (based on previous comments)
- Stream Plan and Profile
- Stream Channel Typical Sections
- Stream Details
- Culverts Replacement Plan and Elevation
- Culverts Structural Plan and Elevation

- Culvert Structural Details
- Mitigation/Landscape/Stream Buffer Planting Plan
- Planting Schedule and Quantities
- Planting Details
- Construction Sequencing Plans
- Roundabout Plan (1)
- Roundabout Profiles (up to 8 profiles)
- Roundabout Details (up to 4 details)
- Roundabout Grading sheets (up to 2 sheets)
- Up to three detour plans

90% Special Provisions:

The CONSULTANT will prepare Draft Special Provisions for non-standard bid items; draft list of bid items, and list of proposed AGENCY and WSDOT standard details.

The CONSULTANT will review the specification package prepared by the AGENCY and provide any feedback.

90% Opinion of Costs:

The CONSULTANT will calculate 90% level quantities based upon the 90% plans. Quantities will be generated from AutoCAD Civil 3D measurements and EXCEL file summaries.

The opinion of cost will be developed from quantities calculated by the CONSULTANT and AGENCY provided unit costs.

90% Comments:

The AGENCY will provide 90% comments for the entire corridor submittal in BlueBeam. The CONSULTANT will provide initial responses to the AGENCY's 90% comments in BlueBeam.

The CONSULTANT will attend a two (2) hour comment response meeting with the AGENCY to verify the comment responses. The CONSULTANT will provide initial comment responses one week prior to the comment resolution meeting.

Assumptions for Task 14.7:

- All project files will be delivered electronically.
- The AGENCY will provide a stamped Geotechnical Report for the project. This report will include recommendations for signal foundation, illumination foundation, retaining wall type, retaining wall design parameters, culverts and culverts wingwalls/retaining walls parameters, and infiltration rates for storm drainage design.

- The AGENCY will compile the specification package for the project.
- The AGENCY will provide unit prices for the opinion of cost.
- The cost will be calculated in up to two (2) control groups.
- Detour plans will address vehicle and non-motorized users.
- Any 90% comments resulting in revisions will be addressed as part of a future phase of work.
- Up to ten (10) CONSULTANT team members will attend the comment response meeting.

Deliverables for Task 14.7:

- Response to AGENCY 60% comments (directly compiled in document provided by the AGENCY)
- Draft list of bid items for AGENCY provided specification package.
- 90% plan (22"x34" PDF, AutoCAD Civil 3D (e-transmitted))
- Alignment cross sections at 25-foot intervals with earthwork quantities (22"x34" PDF and AutoCAD Civil 3D (e-transmitted))
- 90% opinion of cost (PDF and quantity calculation spreadsheet)
- Draft Special Provisions (PDF and word document)
- The CONSULTANT will provide responses to the AGENCY's 90% PS&E comments in BlueBeam.

Exhibit D

Prime Consultant Cost Computations

Fee Schedule

Consultant: Jacobs Engineering Group

Position Classification	Direct Salary Rate	ICR @99.14%	Profit @27.40%	Max Rate Per Hour
Project Manager 5	\$138.75	\$137.56	\$38.02	\$314.32
Project Manager 4	\$106.20	\$105.29	\$29.10	\$240.59
Project Manager 3	\$97.60	\$96.76	\$26.74	\$221.10
Project Manager 2	\$91.34	\$90.55	\$25.03	\$206.92
Project Manager 1	\$85.23	\$84.50	\$23.35	\$193.08
Civil Engineer 6	\$96.96	\$96.13	\$26.57	\$219.65
Civil Engineer 5	\$98.75	\$97.90	\$27.06	\$223.71
Civil Engineer 4	\$90.02	\$89.25	\$24.67	\$203.93
Civil Engineer 3	\$77.53	\$76.86	\$21.24	\$175.64
Civil Engineer 2	\$62.40	\$61.86	\$17.10	\$141.36
Civil Engineer 1	\$55.78	\$55.30	\$15.28	\$126.36
Structural Engineer 6	\$96.96	\$96.13	\$26.57	\$219.65
Structural Engineer 5	\$98.75	\$97.90	\$27.06	\$223.71
Structural Engineer 4	\$90.03	\$89.26	\$24.67	\$203.95
Structural Engineer 3	\$77.53	\$76.86	\$21.24	\$175.64
Structural Engineer 2	\$62.40	\$61.86	\$17.10	\$141.36
Structural Engineer 1	\$55.78	\$55.30	\$15.28	\$126.36
CADD Design 5	\$74.87	\$74.23	\$20.51	\$169.61
CADD Design 3	\$55.52	\$55.04	\$15.21	\$125.78
Contract Administration	\$60.02	\$59.50	\$16.45	\$135.97
Project Administrative Assistant	\$39.90	\$39.56	\$10.93	\$90.39
Project Controller	\$56.99	\$56.50	\$15.62	\$129.11
Intern - Engineering	\$39.90	\$39.56	\$10.93	\$90.39
Environmental Planner 4	\$77.95	\$77.28	\$21.36	\$176.59
Biologist 5	\$93.30	\$92.50	\$25.56	\$211.36
Estimating Manager 5	\$100.68	\$99.81	\$27.59	\$228.08
Estimating Manager 4	\$90.20	\$89.42	\$24.71	\$204.34
Senior Construction Manager	\$103.32	\$102.43	\$28.31	\$234.06
Construction Manager	\$74.53	\$73.89	\$20.42	\$168.84
Landscape Architect 5	\$88.57	\$87.81	\$24.27	\$200.65
Landscape Architect 4	\$79.46	\$78.78	\$21.77	\$180.01
Landscape Architect 3	\$70.96	\$70.35	\$19.44	\$160.75
Landscape Architect 2	\$65.52	\$64.96	\$17.95	\$148.43
Arborist	\$67.78	\$67.20	\$18.57	\$153.55
Stream Design 5	\$88.57	\$87.81	\$24.27	\$200.65
Stream Design 4	\$79.46	\$78.78	\$21.77	\$180.01

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 D without prior written consent of the COUNTY.

Subconsultant Services and Other Direct Costs (ODC) will be reimbursed at the Actual Cost to the Consultant with no markup. ODCs are limited to the following items:

Reimbursable Classifications

Mileage

Outside Vendor Costs

Rates

Current IRS Rate

At Cost

Any ODC not included in the above list shall not be eligible for payment without prior written consent of the County. All reimbursable charges must be necessary for the services provided under this AGREEMENT.

Exhibit D

Prime Consultant Cost Computations



Development Division
Contract Services Office
PO Box 47408
Olympia, WA 98504-7408
7345 Linderson Way SW
Tumwater, WA 98501-6504

TTY: 1-800-833-6388
www.wsdot.wa.gov

March 28, 2025

Jacobs Engineering Group, Inc.
Building & Infrastructure Americas Division
6312 S Fiddler's Green Circle, Suite 300 N
Greenwood Village, CO 80111

Subject: Acceptance FYE 2024 ICR – CPA Report

Dear Jennifer Whited:

We have accepted your firm's FYE 2024 Indirect Cost Rate (ICR) based on the "Independent CPA Report" prepared by Cleary Government Services, LLC as follows:

- Home Office: 99.14% of direct labor
- Field Office: 92.24% of direct labor

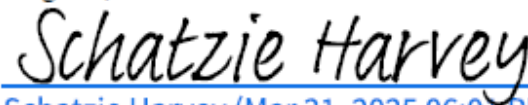
This rate will be applicable for WSDOT Agreements and Local Agency Contracts in Washington only. This rate may be subject to additional review if considered necessary by WSDOT. Your ICR must be updated on an annual basis.

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) 704-6397 or via email consultantrates@wsdot.wa.gov.

Regards,


Schatzie Harvey
Schatzie Harvey (Mar 31, 2025 06:01 PDT)
SCHATZIE HARVEY, CPA
Contract Services Manager

SH: ah

Ash Way Swamp Creek Supplement Fee Estimate

Ash Way: Swamp Creek Culvert Supplement Summary									
Level of Effort Summary									
Task No. Task Description		Jacobs		CM Design		Atlas		Total Hours	
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
1.0	Project Management and Coordination	108	\$18,405	100	\$17,985			208	\$36,390
2.0	Survey and Basemapping	26	\$3,939			224	\$24,956	250	\$28,895
3.0	Right-of-Way Assistance and Coordination	74	\$11,005					74	\$11,005
4.0	Environmental and Public Involvement Support	80	\$13,692	76	\$11,310			156	\$25,002
6.0	Geotechnical Coordination	28	\$5,016					28	\$5,016
7.0	Utility Coordination	124	\$17,016	76	\$10,255			200	\$27,271
8.0	Storm Drainage Design	36	\$5,567	252	\$39,057			288	\$44,624
9.0	Swamp Creek Culvert Design								
9.1	Meetings and Stakeholder Coordination	74	\$13,712	69	\$12,136			143	\$25,848
9.2	Swamp Creek Culvert Alternative & Alignment Analysis Memo	88	\$14,993	144	\$22,638			232	\$37,631
9.3	Culvert Basis of Design Memo (Hydraulics and Structures)	242	\$40,215	615	\$90,019			857	\$130,234
9.4	Mitigation Design and Plans	124	\$20,161	24	\$4,007			148	\$24,168
9.5	Landscaping Design and Plans	22	\$3,506	24	\$4,007			46	\$7,513
9.6	60% Plans	755	\$123,327	400	\$54,101			1,155	\$177,428
14	Final Design	1,199	\$191,654	417	\$51,333			1,616	\$242,987
Sub-Totals		2,980	\$482,208	2,197	\$316,849	224	\$24,956	5,401	\$824,013
Direct Expenses			\$ 330		\$460		\$1,120		\$1,910
Total			\$ 482,538		\$317,309		\$26,076		\$825,923
Task 9 Summary									
Original Task 9 Budget								\$ (207,718)	
Task 9 Already Spent								\$ 9,902	
Task 9 Credit								\$ (197,816)	
Additional Supplement Value								\$628,107	

Ash Way Swamp Creek Supplement
Jacobs Fee Estimate

Jacobs Engineering Group Inc.		\$277.83	\$232.90	\$177.99	\$133.82	\$114.20	\$193.39	\$195.28	\$125.35	\$188.97	\$189.67	\$164.32	\$160.31	\$128.52	\$85.44		1.0000
											Landscape Architect-05	Landscape Architect-04	CADD Design 5	Contract Admin	Project Admin. Assistant	Labor Costs inc. OH & Fee	
Task No.	Task Description	PM-05	PM-04	CE-04	CE-03	CE-01	SE-05	SE-05	SE-02	Biologist-5							
1.0	Project Management and Coordination	3	26	9	31			7		7		7		9	9	108	\$ 18,405
1.1	Project Administration (Assume 9 month contract)	3	9		9									9	9	39	\$ 6,060
1.2	Project Coordination Meetings (up to 6 meetings)		9	9	18			3		3		3				45	\$ 7,752
1.4	Project Schedule (up to 2 updates)		8		4			4		4		4				24	\$ 4,593
																	\$ -
2.0	Survey and Basemapping		4		10	8				4						26	\$ 3,939
	List of additional survey requirements		2		4	8				4						18	\$ 2,671
	Meeting agenda, attendance, and minutes		2		2											4	\$ 733
	Update Wetland Buffers in Civil 3D File																\$ -
	Review and add updated survey basemap to ProjectWise				4											4	\$ 535
																	\$ -
3.0	Right-of-Way Assistance and Coordination		4	16	54											74	\$ 11,005
	CADD file with proposed R/W and easement line work		2	8	24											34	\$ 5,101
	Property owner figures showing proposed impacts (up to max 80 staff hours)		2	8	30											40	\$ 5,904
																	\$ -
4.0	Environmental and Public Involvement Support			40								40				80	\$ 13,692
4.1	Support for Environmental Documentation and Permit Requirements																\$ -
	CAD file with cut/fill lines, disturbed area, quantity boundaries and wetland/stream impact lines			40								40				80	\$ 13,692
	Excel file with earthwork quantities																\$ -
																	\$ -
6.0	Geotechnical Coordination		2	2	8			16								28	\$ 5,016
	Prepare base file showing proposed wall, signal pole and stormwater facility locations		2	2	8											12	\$ 1,892
	Attendance of Coordination Meeting							16								16	\$ 3,124
																	\$ -
7.0	Utility Coordination		10	12	46	56										124	\$ 17,016
7.1	Utility Conflict Plans																\$ -
	Create and update utility conflict plan sets (assume 4 plans and 4 profiles and up to 4 submittals)		4	4	20	44										72	\$ 9,345
	Create and update utility conflict excel spreadsheet (assume up to 4 submittal)		2		2	12										16	\$ 2,104
																	\$ -
7.2	Franchise Utility Coordination																\$ -
	Review and provide comments on (proposed) utility franchise relocation plans (up to 7 plans)		4	8	24											36	\$ 5,567
																	\$ -
8.0	Storm Drainage Design		4	8	24											36	\$ 5,567
	Design Coordination		4	8	24											36	\$ 5,567
																	\$ -

Ash Way Swamp Creek Supplement
Jacobs Fee Estimate

Jacobs Engineering Group Inc.		\$277.83	\$232.90	\$177.99	\$133.82	\$114.20	\$193.39	\$195.28	\$125.35	\$188.97	\$189.67	\$164.32	\$160.31	\$128.52	\$85.44		1.0000
Task No.	Task Description	PM-05	PM-04	CE-04	CE-03	CE-01	SE-05	SE-05	SE-02	Biologist-5	Landscape Architect-05	Landscape Architect-04	CADD Design 5	Contract Admin	Project Admin. Assistant		Labor Costs inc. OH & Fee
9.0	Swamp Creek Culvert Design		36	18	77		174	114	254	122	36	100	374			1,305	\$ 215,914
9.1	Meetings and Stakeholder Coordination																\$ -
	Coordination Meeting with County SWM Staff		1		3					3							7 \$ 1,201
	Coordination Meeting with Agency SWM Staff		1		3					3							7 \$ 1,201
	Meeting to present design alternatives to Agency		1		3					3							7 \$ 1,201
	2 meetings with Agency, WDFW, and Tribes & up to 3 Cordination Meetings with Agency		10		5			4		5							24 \$ 4,724
	Up to 2 Coordination Meetings County for landscaping design		3		6							8					17 \$ 2,816
	Site Visit		6					6									12 \$ 2,569
9.2	Swamp Creek Culvert Alternative & Alignment Analysis Memo																\$ -
	Draft Memo		2		2		16	6	16	8			8				58 \$ 9,799
	Final Memo		2				8	4	8	4			4				30 \$ 5,194
																	\$ -
9.3	Culvert Basis Of Design Memo																\$ -
	30% Culvert Plans (2 Culverts - Plan, Elevation, & Section) (Assume 4 Sheets Total)		2	2	16		48	20	64	8							160 \$ 25,685
	Culvert Analysis Summary							8	16								24 \$ 3,568
	Complete Scour Analysis (Support CM)									8							8 \$ 1,512
	Prepare Climate Change Analysis for Preferred Alternative (Support CM)									4							4 \$ 756
	Basis of Design Memo - narrative, figures									8							8 \$ 1,512
	Appendix A - Swamp Creek Alternative Alignment Analysis (Support CM)									8							8 \$ 1,512
	Appendix C - Hydrologic and Hydraulic Report for Swamp Creek (Support CM)									4							4 \$ 756
	Appendix D - Climate Change Tool Results (Support CM)									4							4 \$ 756
	Appendix H - Swamp Creek Culvert Alternative Analysis Memo (Support CM)									2							2 \$ 378
	Draft Basis of Design Memo (Support CM)									8							8 \$ 1,512
	Review County Comments (Support CM)									8							8 \$ 1,512
	Final Basis of Design Memo (Support CM)									4							4 \$ 756
																	\$ -
9.4	Mitigation Design and Plans																\$ -
	Meeting with County (attendance, agenda, graphics, and meeting minutes)		2		2							4	8				16 \$ 2,673
	Draft Mitigation Design Memo										2	4					6 \$ 1,037
	Critical areas impacts plan (wetland, stream, and buffers) with impact area quantities										2	8	40				50 \$ 8,106
	Prepare disturbed area CAD base file				4							4	24				32 \$ 5,040
	Prepare disturbed area Excel file											4	8				12 \$ 1,940
	Prepare final technical memo with written description of mitigation design for project elements										2	6					8 \$ 1,365
																	\$ -
9.5	Landscaping Design and Plans																\$ -
	Meeting with County prior to 60% submittal (concurrent with meeting under Task 9.4)											2					2 \$ 329
	Written description of landscape design concept and concept schematics for alignment			6	6							6	2				20 \$ 3,177
																	\$ -
9.6	60% Plans																\$ -
	Prepare 60% Stream Plan and Profile (Assume 3 sheet)									8							8 \$ 1,512
	Prepare 60% Stream Channel Typical Section (Assume 2 sheet)									8							8 \$ 1,512
	Prepare 60% Stream Channel Details (Assume 2 sheets)									8							8 \$ 1,512
	Prepare 60% Culvert Structural Plan and Elevation (Assume 4 sheets)				8		24	10	40								82 \$ 12,679
	Prepare 60% Culvert Structural Details (Assume 4 Sheets)		2	4	2		60	32	60								160 \$ 26,819
	Prepare 60% Mitigation Planting Plan (Assume 8 Sheets)				4						4	8	60				76 \$ 12,227
	Prepare 60% Landscaping Planting Plan (Assume 35 Sheets)			2	4						12	16	160				194 \$ 31,446
	Prepare 60% Planting Schedule and Quantities (Assume 4 Sheets)										4	8	16				28 \$ 4,638
	Prepare 60% Planting Details (Assume 4 Sheets)										4	8	16				28 \$ 4,638
	Prepare 60% Temporary Stream Bypass Plans (Assume 2 Sheets)									4							4 \$ 756
	Prepare 60% Cost Estimate for Culvert Replacement			2	4		18	16	40		2	4	24				110 \$ 17,395
	Prepare draft list of bid items		2	2	2						2	4					12 \$ 2,126
	Prepare List of Special Provisions							6	10		2	2	4				24 \$ 3,774
	60% Plan Comment Review Meeting with County		2		3			2		2		4					13 \$ 2,293
																	\$ -

Ash Way Swamp Creek Supplement
Jacobs Fee Estimate

Jacobs Engineering Group Inc.		\$277.83	\$232.90	\$177.99	\$133.82	\$114.20	\$193.39	\$195.28	\$125.35	\$188.97	\$189.67	\$164.32	\$160.31	\$128.52	\$85.44		1.0000
Task No.	Task Description	PM-05	PM-04	CE-04	CE-03	CE-01	SE-05	SE-05	SE-02	Biologist-5	Landscape Architect-05	Landscape Architect-04	CADD Design 5	Contract Admin	Project Admin. Assistant		Labor Costs inc. OH & Fee
14.0	Final Design		40	196	301	80		160	80	26	34	48	234			1,199	\$ 191,654
14.0	Roadway Design																\$ -
	Refine stream alignment/model based on 60% comments			8	40					4							52 \$ 7,533
	Refine proposed surface based on new survey - including side street refinement			8	24												32 \$ 4,636
	Refine model based on the proposed culvert			8	24												32 \$ 4,636
																	\$ -
14.5	Construction Sequencing and Detour Plans		2	4	16												22 \$ 3,319
	Prepare Detour Plan (2 additional plans)		8	16	32												56 \$ 8,993
	Prepare Sequencing Plans (3 additional sequences)																\$ -
																	\$ -
14.6	Admiralty Way & Gibson Road Roundabout Memo and Plans																\$ -
	2 Meeting with County including agenda, graphics and meeting minutes		2	5	10												17 \$ 2,694
	Draft RAB Memo			40	20												60 \$ 9,796
	Response to Comments			1	4												5 \$ 713
	Final RAB Memo			4	8												12 \$ 1,783
																	\$ -
14.7	Final Design PS&E (90%)																\$ -
	Response to 60% Comments				4					8							12 \$ 2,047
	RAB Grading			40	20												60 \$ 9,796
	Cover sheet with vicinity map and index			1	1	2											4 \$ 540
	Legend, abbreviations and general notes			1		2											3 \$ 406
	Stream Plan and Profile (Assume 3 sheets) (Subconsultant)									4							4 \$ 756
	Stream Channel Typical Section (Assume 2 sheets) (subconsultant)									4							4 \$ 756
	Stream Channel Details (Assume 2 sheets)																\$ -
	Culvert Replacement Plan and Elevation (Assume 2 sheets)																\$ -
	Culvert Structural Plan and Elevation (Assume 2 new sheets)				8			64	40								112 \$ 18,582
	Culvert Structural Details (Assume 2 sheets)		2	4	2			84	40								132 \$ 22,863
	Mitigation Planting Plan (Assume 8 Sheets)			2							4	8	40				54 \$ 8,842
	Landscaping Planting Plan (Assume 35 Sheets)			2							18	8	128				156 \$ 25,604
	Planting Schedule and Quantities (Assume 4 Sheets)										4	2	12				18 \$ 3,011
	Planting Details (Assume 4 Sheets)										4	2	12				18 \$ 3,011
	Temporary Stream Bypass Plans (Assume 2 Sheets)																\$ -
																	\$ -
	Construction Sequencing Plans		4	8	4	40											56 \$ 7,459
	Detour Plans (3 detour plans)		4	4	2	24											34 \$ 4,652
																	\$ -
	AutoCAD Civil 3D Alignment Cross Sections with Earthwork Quantities		4	16	40												60 \$ 9,132
																	\$ -
	Draft bid item list and review of County provided specs		2	2	2							4	4				14 \$ 2,388
	Draft Special provisions for non-standard bid items (up to 4 specials)							2			2	8	4				16 \$ 2,726
																	\$ -
	Calculate 90% bid quantities			2	4	8						4	8				26 \$ 3,745
	Prepare 90% estimate of probable construction cost		2		2	4					2	4	8				22 \$ 3,509
																	\$ -
	Submit 90% plans, specs and estimate				16			2		2		2	18				40 \$ 6,124
																	\$ -
	Response to 90% Comments Including 2 hour comment response meeting		10	20	18			8		4		6					66 \$ 11,602
																	\$ -
																	\$ -
Hours Totals		3	126	301	551	144	174	297	334	159	70	195	608	9	9	2,980	\$ 482,208

Exhibit E

Sub-Consultant Cost Computations

Fee Schedule

Subconsultant: CM Design Group, LLC

Position Classification	Direct Salary Rate	ICR @110.00%	Profit @27.40%	Max Rate Per Hour
Principal	\$98.00	\$107.80	\$26.85	\$232.65
Sr Project Manager	\$81.50	\$89.65	\$22.33	\$193.48
Project Manager	\$71.00	\$78.10	\$19.45	\$168.55
Engineer 4	\$61.00	\$67.10	\$16.71	\$144.81
Engineer 3	\$48.00	\$52.80	\$13.15	\$113.95
Engineer 2	\$42.00	\$46.20	\$11.51	\$99.71
Engineer 1	\$37.25	\$40.98	\$10.21	\$88.43
CAD Drafter	\$29.00	\$31.90	\$7.95	\$68.85

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 without prior written consent of the COUNTY.

Other Direct Costs (ODC) will be reimbursed at the Actual Cost to the subconsultant with no markup. ODCs are limited to the following items:

Reimbursable Classifications	Rates
Mileage	Current IRS Rate
Outside Vendor Costs	At Cost

Any ODC not included in the above list shall not be eligible for payment without prior written consent of the County. All reimbursable charges must be necessary for the services provided under this AGREEMENT.

Ash Way Swamp Creek Supplement
CM Design Fee Estimate

CM Design		\$225.53	\$ 137.69	\$ 109.20	\$ 84.28	Mult	1.00
Task No.	Task Description	Principal/ PM	Eng 4	Eng 3	Eng 1	Total Hours	Labor Costs inc. OH & Fee
1.0	Project Management and Coordination	48	52			100	\$ 17,985
1.1	Project Administration	32	36			68	\$ 12,174
1.2	Project Coordination Meetings	16	16			32	\$ 5,812
4.0	Environmental and Public Involvement Support	20	24	32		76	\$ 11,310
4.1	Support for Environmental Documentation and Permit Requirements	20	24	32		76	\$ 11,310
7.0	Utility Coordination	8	36	32		76	\$ 10,255
7.1	Utility Conflict Plans						
	Create and update utility conflict plan sets (assume 4 plans and 4 profiles and up to 4 submittals)	4	24	24		52	\$ 6,827
	Create and update utility conflict excel spreadsheet (assume up to 4 submittal)		4			4	\$ 551
7.2	Utility Coordination Meetings						\$ -
	Review and provide comments on (proposed) utility franchise relocation plans (up to 7 plans)	4	8	8		20	\$ 2,877
							\$ -
8.0	Storm Drainage Design	60	160	32		252	\$ 39,057
8.1	Analysis for culvert crossing at Sta 348+75						\$ -
8.2	Site Assessment & Mapping						\$ -
	Review/Verify TDAs	4	24			28	\$ 4,207
	Downstream discharge flow paths	4	16			20	\$ 3,105
8.5	Stormwater Quality Treatment						\$ -
	Calculations	20	48	16		84	\$ 12,867
	Geotechcnical Coordination - Storm Facility Feasibility	8	16			24	\$ 4,007
8.6	Stormwater Flow Control						\$ -
	Calculations	20	48	16		84	\$ 12,867
	Geotechcnical Coordination - Storm Facility Feasibility	4	8			12	\$ 2,004
							\$ -
9.0	Swamp Creek Culvert Design	242	846		188	1,276	\$ 186,909
9.1	Meetings and Stakeholder Coordination						\$ -
	Coordination Meeting with County SWM Staff	3	3			6	\$ 1,090
	Coordination Meeting with Agency SWM Staff	3	3			6	\$ 1,090
	Meeting to present design alternatives to Agency	3	3			6	\$ 1,090
	2 meetings with Agency, WDFW, and Tribes & up to 3 Cordination Meetings with Agency	6	12			18	\$ 3,005
	Up to 2 Coordination Meetings County for landscaping design	3	6			9	\$ 1,503
	Site Visit	12	12			24	\$ 4,359

Ash Way Swamp Creek Supplement
CM Design Fee Estimate

CM Design		\$225.53	\$ 137.69	\$ 109.20	\$ 84.28	Mult	1.00
Task No.	Task Description	Principal/ PM	Eng 4	Eng 3	Eng 1	Total Hours	Labor Costs inc. OH & Fee
9.2	Swamp Creek Culvert Alternative & Alignment Analysis						\$ -
	Add written summary to include alternative analysis	8	48			56	\$ 8,413
	Design Coordination with Structural	12	24			36	\$ 6,011
	Draft Memo	8	24			32	\$ 5,109
	Final Memo	4	16			20	\$ 3,105
9.3	Culvert Basis of Design Memo (Hydraulics and Structures)						\$ -
	Size culvert using WDFW Stream Simulation	4	20			24	\$ 3,656
	Model HEC Ras for Existing	8	40			48	\$ 7,312
	Model HEC-Ras for Proposed	8	20			28	\$ 4,558
	Complete Geomorphic Study (support to Jacobs)	1	2			3	\$ 501
	Complete Scour Analysis	8	32			40	\$ 6,210
	Prepare Climate Change Analysis for Preferred Alternative	4	16			20	\$ 3,105
	Basis of Design Memo - narrative, figures	16	40		16	72	\$ 10,465
	Appendix A - Swamp Creek Alternative Alignment Analysis		4			4	\$ 551
	Appendix B - Summary Form for Fish Passage Design Data (by Jacobs)	1	8			9	\$ 1,327
	Appendix C - Hydrologic and Hydraulic Report for Swamp Creek	2	24			26	\$ 3,756
	Appendix D - Climate Change Tool Results	2	24			26	\$ 3,756
	Appendix E - Bankfull Width Memorandum		2			2	\$ 275
	Appendix F - WDFW Stream Simulation Culvert Sizing	1	12			13	\$ 1,878
	Appendix G - Geomorphic Analysis including Streambed Gradation Calcs	4	20			24	\$ 3,656
	Appendix H - Swamp Creek Culvert Alternative Analysis Memo		4			4	\$ 551
	Appendix I - Preliminary (30%) Culvert Plans	8	80		60	148	\$ 17,876
	Draft Basis of Design Memo	16	48			64	\$ 10,218
	Review County Comments	8	12			20	\$ 3,457
	Final Basis of Design Memo	16	24			40	\$ 6,913
9.4	Mitigation Design and Plans						\$ -
	Design Coordination with Mitigation Team	8	16			24	\$ 4,007
9.5	Landscaping Design and Plans						\$ -
	Design Coordination with LA	8	16			24	\$ 4,007

Ash Way Swamp Creek Supplement
CM Design Fee Estimate

CM Design		\$225.53	\$ 137.69	\$ 109.20	\$ 84.28	Mult	1.00
Task No.	Task Description	Principal/ PM	Eng 4	Eng 3	Eng 1	Total Hours	Labor Costs inc. OH & Fee
9.6	Plans						\$ -
	Prepare 60% Stream Plan and Profile (Assume 3 sheet)	8	80			88	\$ 12,819
	Prepare 60% Stream Channel Typical Section (Assume 2 sheet)	4	40		16	60	\$ 7,758
	Prepare 60% Stream Channel Details (Assume 2 sheets)	8	40		24	72	\$ 9,335
	Prepare 60% Culvert Replacement Plan and Elevation (Assume 2 sheets)						\$ -
	Prepare 60% Culvert Structural Plan and Elevation (Assume 4 sheets)	2	4			6	\$ 1,002
	Prepare 60% Culvert Structural Details (Assume 4 Sheets)						\$ -
	Prepare 60% Stream Buffer Planting Plan (Assume 4 Sheets)	2	4			6	\$ 1,002
	Prepare 60% Mitigation Planting Plan (Assume 8 Sheets)	2	4			6	\$ 1,002
	Prepare 60% Landscaping Planting Plan (Assume 35 Sheets)	2	4			6	\$ 1,002
	Prepare 60% Planting Schedule and Quantities (Assume 4 Sheets)						\$ -
	Prepare 60% Planting Details (Assume 4 Sheets)						\$ -
	Prepare 60% Temporary Stream Bypass Plans (Assume 2 Sheets)	16	24		32	72	\$ 9,610
	Prepare 60% Cost Estimate for Culvert Replacement	4	16		40	60	\$ 6,476
	Prepare draft list of bid items	4	8			12	\$ 2,004
	Prepare List of Special Provisions	2	4			6	\$ 1,002
	60% Plan Comment Review Meeting with County	3	3			6	\$ 1,090
14.0	Final Design	65	120	24	208	417	\$ 51,333
14.5	Construction Staging and Traffic Control						\$ -
	Additional Staging Plans (up to 3 stages)	16	4		16	36	\$ 5,508
	Detour Plans						\$ -
							\$ -
14.6	Final Design PS&E (90%)						\$ -
	Response to 60% Comments	8	20			28	\$ 4,558
	Cover sheet with vicinity map and index						\$ -
	Legend, abbreviations and general notes						\$ -
	Stream Plan and Profile (Assume 3 sheets) (Subconsultant)	8	24		100	132	\$ 13,537
	Stream Channel Typical Section (Assume 2 sheets) (subconsultant)	8	24		60	92	\$ 10,166
	Stream Channel Details (Assume 2 sheets)	8	16		32	56	\$ 6,704
	Culvert Replacement Plan and Elevation (Assume 2 sheets)						\$ -
	Culvert Structural Plan and Elevation (Assume 2 new sheets)						\$ -
	Culvert Structural Details (Assume 2 sheets)						\$ -
	Stream Buffer Planting Plan (Assume 4 sheets)	1	2			3	\$ 501
	Mitigation Planting Plan (Assume 8 Sheets)	1	2			3	\$ 501
	Landscaping Planting Plan (Assume 35 Sheets)	1	2			3	\$ 501
	Planting Schedule and Quantities (Assume 4 Sheets)						\$ -
	Planting Details (Assume 4 Sheets)						\$ -
	Temporary Stream Bypass Plans (Assume 2 Sheets)	4	8	24		36	\$ 4,624
							\$ -
	Response to 90% Comments (including 2 hour comment response meeting)	10	18			28	\$ 4,734
							\$ -
							\$ -
							\$ -
							\$ -
		443	1238	120	396	2197	\$ 316,849

Ash Way Swamp Creek Supplement
Atlas Fee Estimate

Atlas		\$225.00	\$ 165.11	\$ 114.14	\$ 87.34	\$ 119.65	Mult	1.00
Task No.	Task Description	Prinicipal Surveyor	Project Manager	Tech 2	Tech 1	Admin. Ass. 5	Total Hours	Labor Costs inc. OH & Fee
2.0	Survey and Basemapping	8	16	104	88	8	224	\$ 24,956
	Survey PM, Admin, QA/QC	8	16			8	32	\$ 5,399
	Modified Areas			8	16		24	\$ 2,311
	Miscellaneous Survey Areas			8	16		24	\$ 2,311
	Utility Information Gathering			8	16		24	\$ 2,311
	Tree Locations				16		16	\$ 1,397
	Pothole Locations				24		24	\$ 2,096
	Office Processing			80			80	\$ 9,131
Hours Totals		8	16	104	88	8	224	24,956

Exhibit L
Consent to Assignment

CONSENT TO ASSIGNMENT

The asset sale between 1 Alliance Geomatics, LLC (“Alliance”) to Atlas Technical Consultants LLC (“Atlas”) certain Alliance contracts are scheduled to be assigned and transferred to Atlas effective upon closing (the “Effective Date”) of the transaction.

By signing below, Snohomish County (“Client”) consents to the assignment (“Consent to Assignment”) of the professional services contract(s) and task or work orders (if applicable), collectively referred to as the “Agreement” as follows:

CCF02-18 - Ash Way: 164th Street SW to Gibson Road, Effective 1/1/2025

Client agrees that, upon completion of the transaction between Alliance and Atlas, all of the current Alliance rights, title and interest in the Agreement will be transferred to and will be vested into Atlas, and Client will continue to be bound by the Agreement after its assignment to Atlas. Client also agrees that this Consent to Assignment satisfies all statutory or other requirements of the Agreement related to the Consent to Assignment. Client also agrees that this Consent to Assignment does not transfer to Atlas any past obligations or liability associated with any services provided prior to the Effective Date. Contracts and services performed prior to the Effective Date are not assigned to Atlas and remain the responsibility of Alliance. However, Atlas will complete the identified current in-progress and unfinished services required under the Agreement.

Consent to Assignment Accepted by Snohomish County:

UNITED STATES OF AMERICA

The State of Washington



Secretary of State

CERTIFICATE OF MERGER

I, **STEVE R. HOBBS**, Secretary of State of the State of Washington and custodian of its seal, hereby certify that documents meeting statutory requirements have been filed and processed with the Secretary of State merging the below listed "Merging Entity/Entities" into:

ATLAS TECHNICAL CONSULTANTS LLC

DELAWARE LIMITED LIABILITY COMPANY

UBI: 604 659 446

Effective Date: 01/01/2025

Filing Date: 12/31/2024

Merging Entities:

603 260 116

1 ALLIANCE GEOMATICS, LLC, WA LIMITED LIABILITY COMPANY



Given under my hand and the Seal of the State of Washington at Olympia, the State Capital

Steve R. Hobbs, Secretary of State

Date Issued: 12/31/2024

**ASSIGNMENT OF MEMBERSHIP INTERESTS
IN
1 ALLIANCE GEOMATICS, LLC**

Effective as of the Closing Date (the “**Effective Date**”), Project Azimuth LLC, a Washington limited liability company (“**Assignor**”), for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged and confessed, delivers to Atlas Technical Consultants, a Delaware limited liability company (the “**Assignee**”), all of Assignor’s membership interests in 1 Alliance Geomatics, LLC, a Washington limited liability company (the “**Company**”) which conveyed interest constitutes one hundred percent (100%) of the issued and outstanding membership interest in the Company, together with all rights appurtenant thereto (collectively, the “**Assigned Interests**”), in each case free and clear of all Liens, except Permitted Liens. Assignee hereby accepts the assignment of the Assigned Interests from Assignor.

This Assignment of Membership Interests (this “**Assignment**”) is being executed and delivered pursuant to that certain Membership Interest Purchase Agreement by and among Assignor, Assignee, and Takeshi Jason Nakamura, an individual residing in the state of Washington (“Nakamura”), Brian Blevins, an individual residing in the state of Washington, Jay Byrd, an individual residing in the state of Washington (collectively, the “**Principals**”), executed effective as of March 18, 2022 (the “**Purchase Agreement**”). Nothing contained herein shall in any way supersede, enlarge, diminish, limit, amend or modify any of the representations, warranties, indemnities, covenants or agreements of such parties set forth in the Purchase Agreement. This Assignment is expressly subject to the terms and conditions of the Purchase Agreement. If there is a conflict between the terms of this Assignment and the Purchase Agreement, the terms of the Purchase Agreement shall control. Capitalized terms used but not otherwise defined in this Assignment shall have the respective meaning ascribed to such terms in the Purchase Agreement.

Assignor hereby undertakes and agrees for the benefit of the Assignee, its successors and assigns, that the Assignor and its successors and assigns will do, execute, acknowledge and deliver, or will cause to be done, executed, acknowledged and delivered, all such further acts, transfers, assignments and conveyances, and assurances to ensure the proper selling, transferring, assigning, assuring, conveying and confirming unto the Assignee, its successors and assigns, the Assigned Interests.

Upon the effectiveness of this Assignment, Assignor will cease to be a Member of the Company and Assignee will automatically and simultaneously be admitted as a Member of the Company without any further action by either party to this Assignment or any other Party to the Purchase Agreement.

This Assignment shall be governed in all respects by the internal laws of the State of Washington, without regard to principles of conflicts of law. This Assignment may be executed in any number of counterparts, and each such counterpart hereof shall be deemed to be an original instrument, but all of such counterparts shall constitute for all purposes one agreement. Any signature to this Assignment delivered by electronic transmission shall be deemed an original signature to this Assignment.

[signature page follows]

IN WITNESS WHEREOF, the Parties have executed and delivered this Assignment in one or more counterparts to be effective as of the Effective Date.

ASSIGNOR:

PROJECT AZIMUTH LLC

By: 
T. Jason Nakamura, Manager

[SIGNATURE PAGE TO ASSIGNMENT OF MEMBERSHIP INTEREST]

ASSIGNEE:

ATLAS TECHNICAL CONSULTANTS LLC

By: 

Name: L. Joe Boyer

Title: Authorized Person

[SIGNATURE PAGE TO ASSIGNMENT OF MEMBERSHIP INTEREST]