

## EXHIBIT A - SCOPE OF WORK

### CITY OF STEVENSON LONG-TERM WATER SOURCE STUDY, PHASE 1A AUGUST 2024

# Proposed Scope of Work

The City of Stevenson (City) owns and operates the City's public water system. The water system is primarily supplied by surface water from three sources which receive treatment at the City's Water Treatment plant (WTP). In addition to the surface water sources, the City owns a groundwater well known as Hegewald Well, which is used as a backup supply during peak demand periods.

Reliability of the largest existing surface water source, Rock Creek, has diminished over time to a point where the City is concerned about meeting demands during peak periods. Recent investigations into the Rock Creek and Hegewald Well water sources has prompted the City to revisit their long-term strategy for meeting buildout capacity of the community.

Grayling Engineers (Grayling) has developed this scope of services to analyze long-term water supply alternatives for the City's public water system. The purpose of this analysis is to further refine and investigate supply options with the goal of narrowing the final selection to one preferred alternative.

The project is divided into two phases:

- **Phase 1A - Identification and Evaluation of Water Supply Alternatives.** The goal of this phase is to identify long-term water supply strategies for the City. The long-term strategy will evaluate alternatives that utilize existing surface water, existing groundwater, and (potentially) new surface water or groundwater sources. This work is included in this scope of work.
- **Phase 1B - Feasibility Assessment of Chosen Alternative.** The goal of this phase is to assess the feasibility of the preferred long-term alternative selected as part of Phase 1A. This may include a condition assessment of the WTP for surface water sources and/ or contracting services from a hydrogeologist to identify new groundwater source locations. A life cycle cost analysis will be incorporated as a tie-breaker. An evaluation of the impact on the City's water rights will be included in this phase. This work will be performed as an amendment to the Phase 1A contract.

- 
- **Phase 2 - Pre-Design / Funding Acquisition.** The goal of this phase is to develop a pre-design of the preferred alternative chosen as part of Phase 1A and 1B of this project. Included with this work will be development of a cost estimate to support future funding strategies. Services may also be provided for assistance with funding acquisition. Work under this phase will be performed under a separate task order.

## Task 1 – Project Management

### *Subtask 1.1 - Project Management & Administration*

This task includes correspondence and coordination with the City, tracking and updating the delivery schedule, and tracking the project budget. Included with this task are email and phone correspondence, preparation of monthly invoices, and preparation of monthly progress reports.

#### *Assumptions*

- This task does not include in-person meetings.

#### *Deliverables*

- Monthly invoices
- Monthly progress reports

### *Subtask 1.2 - Kick-off Meeting*

Up to two (2) representatives of Grayling will attend a kick-off meeting with the City. The meeting will be scheduled following contract execution and will be held in person. Grayling will prepare a meeting agenda and summary. Key points of discussion at the meeting will be:

- Use of existing and new water sources for long-term supply.

## Task 2 – Long-Term Supply Analysis

Grayling has developed this task to analyze long-term water supply alternatives for the City's public water system. The purpose of this analysis is to further refine and investigate supply options with the goal of narrowing the final selection to two (2) preferred alternatives.

### *Subtask 2.1 - Data Collection*

Grayling will compile and review existing data and information for the water supply analysis effort. Information will be compiled from various sources including the City's current Water System Plan (WSP), existing water rights records, previous related studies, Skamania County zoning criteria, and water quality test reports.

---

### ***Assumptions***

- The City will provide documentation not already in Grayling's possession.

### ***Deliverables***

- Data request list for the City.

### ***Subtask 2.2 - Water Demand Projections***

The following work will be performed:

- Determine ultimate water demand at buildout for Average Day Demand (ADD) and Maximum Day Demand (MDD).
- Determine the maximum density of the future Pressure Zone 4 based on county zoning.
- Identify trigger points for increases in water demand over time. Trigger points will be used in the establishment of source of supply alternatives.

### ***Assumptions***

- Unit demands and growth rate from the City's current WSP will be used as the basis for calculations.

### ***Deliverables***

- A brief Technical Memorandum summarizing the water demand projections.

### ***Subtask 2.3 - Evaluation of Existing Sources of Supply***

Grayling will identify the capacity of existing facilities and associated deficiencies as they relate to estimated build-out demands determined in Subtask 3.2. This information will be used to develop alternatives in Subtasks 3.4 and 3.5, and will be summarized in the final technical memorandum.

### ***Subtask 2.4 - Surface Water Source Alternatives***

Grayling has identified the following surface water source alternatives to meet long-term water demands:

1. Upgrade the existing Rock Creek intake,
2. Increase capacity at LaBong Creek,
3. Increase capacity at Cedar Springs,
4. Relocate the Rock Creek intake point of diversion,
5. Install a new intake on the Columbia River.

The following work will be performed while evaluating each of these alternatives:

- Summarize improvements necessary to upgrade existing facilities (All),
- Identify potential intake locations (Options 4 & 5),

- 
- Summarize integration of the new supply into the existing water system (Option 5),
  - Perform a preliminary treatment technology assessment (Option 5),
  - Perform a preliminary raw water transmission main routing assessment (Options 4 & 5),
  - Summarize integration of the new supply into the existing water system. (All).

#### ***Assumptions***

- Analysis will be limited to the alternatives listed above.
- Permitting and water rights will be evaluated in Phase 1B.

#### ***Subtask 2.5 - Groundwater Source Alternatives***

Grayling has identified the following groundwater source alternatives to meet long-term water demands:

1. Upgrade the existing Hegewald Well to allow for a higher pumping capacity,
2. Locate a new groundwater well or wells.

The following work will be performed while evaluating this alternative:

- Identify up to three (3) potential future groundwater well locations including estimated production capacities,
- Review neighboring well logs for lithologic conditions and capacity,
- Perform a preliminary treatment technology assessment based on available water quality results,
- Perform a preliminary water main routing assessment from the new groundwater sources to the water system,
- Summarize integration of the new supply into the existing water system.

#### ***Assumptions***

- Analysis will be limited to the alternatives listed above.
- New groundwater well site locations will be limited to publicly owned property.
- Permitting and water rights will be evaluated in Phase 1B.

#### ***Subtask 2.6 - Technical Memorandum***

Grayling will summarize findings and prepare a Technical Memorandum that will be used by the City as a decision document. This document will highlight the possible system configurations, made up of the individually analyzed supply alternatives from Subtasks 3.4 and 3.5, with the goal of narrowing to two (2) preferred system configuration alternatives. Life cycle costs, including annual labor costs, will be provided for the two preferred alternatives. Recommendations will be made for the next steps to be taken toward establishment of this new water supply strategy or modification of an existing water supply. Documentation will also include a discussion of potential external changes that could impact the findings of the analysis over time, such as changing development and growth patterns, new treatment technologies, changes in regulatory requirements, as well as redundancy and resiliency in the face of climate change.

---

It is anticipated that as part of this task a summary of findings that includes recommendations and next steps will be presented to the City Council. This presentation can be made prior to or after the completion of the final Technical Memorandum, as the City sees fit.

***Deliverables***

- Preliminary Draft Technical Memorandum for City review.
- Final Draft Technical Memorandum for City review.
- Final Technical Memorandum.
- Presentation to City Council.

## **Task 3 - Subconsultant Services**

### ***Task 3.1 - Hydrogeologic & Water Right Services***

Aspect Consulting to provide ongoing hydrogeologic and water right related services related to the long-term source alternatives. Assistance to be provided within the work performed for Subtasks 3.4 - 3.6.

***Assumptions***

- Permitting and water rights will only be addressed in a preliminary capacity for decision making purposes.

## **Estimated Fee**

The total estimated fee based on the scope of work described herein is **\$62,832**. Work will be invoiced monthly on a time and materials basis, not to exceed the agreed upon total without prior approval from the City. Please refer to **Exhibit B** for a detailed breakdown of the estimated fee by task.

## **Schedule**

Professional engineering services are assumed to begin in August of 2024 and be substantially completed within 12 months of the agreed upon start date. Outlined below is a schedule of the anticipated project milestones.

Contract Execution	August 2024
Long-Term Supply Analysis	

---

Data Collection & Water Demand Projections  
Source Alternatives Analysis  
Final Technical Memorandum

October 2024  
January 2025  
March 2025

  
8/2/24

**EXHIBIT B - FEE ESTIMATE**  
 CITY OF STEVENSON  
 STEVENSON LONG TERM WATER SOURCE ANALYSIS, PHASE 1A  
 JULY 2024

Task	Description	Engineer, Grade VIII	Engineer, Grade VII	Engineer, Grade VI	Engineer, Grade V	Engineer, Grade IV	Engineer, Grade III	Engineer, Grade II	Engineer, Grade I	Senior Scientist	PM / CM	CAD / GIS Technician	DO	Total Hours	Labor Cost	Expenses			Total
		\$242	\$226	\$210	\$194	\$178	\$162	\$146	\$130	\$210	\$210	\$130	\$150			Mileage	Printing	Subconsultants	
<b>1</b>	<b>Project Management</b>	20	0	0	0	0	4	0	0	0	8	0	2	34	\$ 7,468	\$ -	\$ -	\$ -	\$ 7,468
1.1	Project Management and Administration	16									8		2	26	\$ 5,852				\$ 5,852
1.2	Kick-off Meeting	4					4							8	\$ 1,616				\$ 1,616
<b>2</b>	<b>Long-Term Supply Analysis</b>	60	0	0	0	0	50	164	0	0	0	0	0	274	\$ 46,564	\$ -	\$ -	\$ -	\$ 46,564
2.1	Data Collection						2	8						10	\$ 1,492				\$ 1,492
2.2	Water Demand Projections	8					8	20						36	\$ 6,152				\$ 6,152
2.3	Evaluation of Existing Sources of Supply	12					8	32						52	\$ 8,872				\$ 8,872
2.4	Surface Water Source Alternatives	12					8	32						52	\$ 8,872				\$ 8,872
2.5	Groundwater Source Alternatives	12					8	32						52	\$ 8,872				\$ 8,872
2.6	Technical Memorandum	16					16	40						72	\$ 12,304				\$ 12,304
<b>3</b>	<b>Subconsultant Services</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ 8,800	\$ 8,800
3.1	Hydrogeologic & Water Right Services (AC)													0	\$ -			\$ 8,800	\$ 8,800
	<b>Total</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>54</b>	<b>164</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>308</b>	<b>\$ 54,032</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 8,800</b>	<b>\$ 62,832</b>




# Contract Change

<b>Client:</b> Grayling Engineers Attn: Mr. Kyle Thompson, President 654 Officers Row Vancouver, WA 98661	<b>Date:</b> June 26, 2024
	<b>Change No.:</b> 1
	<b>Project No.:</b> 230406
<b>Project Name:</b> City of Stevenson Skamania County, Washington	
<b>Subject:</b> Water Supply Alternative Analysis	

Description of Work	Cost
<p>Geosyntec Consultants, Inc. dba Aspect Consulting (Aspect) is pleased to provide Grayling Engineers (Grayling) with a scope of work and cost estimate to provide ongoing hydrogeologic and water right related services to the City of Stevenson (City) located in Skamania County, Washington. Aspect understands Grayling is evaluating alternative sources of water supply to replace the City’s Rock Creek diversion. The analysis seeks to identify a new source to provide for both an increase instantaneous demand and late season reliability to meet peak water supply demands. The purpose of this scope of work is to provide budget for on-call assistance to Grayling. The budget assumes about 40 hours of staff time, up to \$8,000.</p>	<p>Time and Materials, not to exceed:</p> <p>Total: \$8,000</p> <p>To be billed according to the attached Schedule of Charges</p>

This change amends Contract Order No. 1 between Aspect Consulting, LLC and Client dated January 24, 2024. Except as amended above, all terms and conditions of contract apply to this contract change.

<b>ASPECT CONSULTING</b>	<b>By:</b> 
	<b>Printed Name:</b> Tyson D. Carlson, LHG Sr. Principal Hydrogeologist
<b>CLIENT</b>	<b>By:</b>
	<b>Printed Name/Date:</b>

S:\Grayling Engineering\City of Stevenson Well Evaluation - 230406\Finalized Contracts and Proposals\CC01\_20240626\_AS240406\_Stevenson WaterSupply.docx

**OFFICE LOCATIONS**

**WASHINGTON:** [Bainbridge Island](#) | [Bellingham](#) | [Olympia](#) | [Seattle](#) | [Wenatchee](#) | [Yakima](#)

**OREGON:** [Portland](#)

[www.aspectconsulting.com](http://www.aspectconsulting.com)





CONFIDENTIAL

## 2024 U.S. RATE SCHEDULE

(All Values are in \$USD)

	<u>Rate/Hour</u>
Staff Professional	\$150
Senior Staff Professional	\$170
Professional	\$195
Project Professional	\$220
Senior Professional	\$255
Principal	\$285
Senior Principal	\$315
Technician I	\$ 85
Technician II	\$ 95
Senior Technician I	\$100
Senior Technician II	\$110
Site Manager I	\$125
Site Manager II	\$135
Construction Manager I	\$145
Construction Manager II	\$155
Senior Designer	\$200
Designer	\$165
Senior Drafter/Senior CADD Operator	\$155
Drafter/CADD Operator/Artist	\$135
Senior Technical Editor	\$170
Technical Editor	\$150
Project Administrator	\$100
Clerical	\$ 75
Direct Expenses	Cost plus 15%
Subcontract Services	Cost plus 15%
Specialized Computer Applications (per hour)	\$ 15
Personal Automobile (per mile)	Current Gov't Rate Plus 15%
Photocopies (per page)	\$ .09

Rates are provided on a confidential basis and are client and project specific.

Unless otherwise agreed, rates will be adjusted annually based on a minimum of the Producer Price Index for Engineering Services.

Rates for field equipment, health and safety equipment, and graphical supplies presented upon request.

Construction management fee presented upon request.