

**AMENDMENT NO. 17
TO
CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES**

THIS AMENDMENT, by and between the City of Okanogan, Washington, hereinafter referred to as the Agency, and Gray & Osborne, Inc., hereinafter referred to as the Engineer, hereby modifies the contract for engineering services dated (by Agency) July 16, 2013, for additional services related to the Agency's On-Call Engineering Services.

Elmway Water Main Extension – Phase 3

See attached Exhibits A and B for scope and fee. The total estimated engineering cost to provide these services is \$106,000 as shown on Exhibit B.

IN WITNESS WHEREOF, the parties hereto have executed, or cause to be executed by their duly authorized officials, this AMENDMENT to the Contract for Engineering Services in duplicate on the respective dates indicated below.

GRAY & OSBORNE, INC.

CITY OF OKANOGAN

By: 
(Signature)

By: _____
(Signature)

Name: Michael B. Johnson, P.E., President
GRAY & OSBORNE, INC.

Name: _____
(Print)

Date: 12/11/23

Date: _____

"Equal Opportunity/Affirmative Action Employer"

EXHIBIT A

SCOPE OF WORK

CITY OF OKANOGAN ELMWAY WATER MAIN EXTENSION – PHASE 3

Based on our understanding of the project, this Scope of Work presents the professional engineering services requested by the City of Okanogan for design engineering and bid and award services for the Elmway Water Main Extension – Phase 3 project.

It is our understanding that the project consists of the installation of approximately 1,600 feet of 12-inch water main pipe, hydrants, valves, and appurtenances located on 2nd Avenue North (SR 215) within right-of-way from Elgin Street to Shellrock Point. It is our understanding that this project will also include a new 24-inch steel casing installed by jacking and boring across Elgin Creek for installation of the new 12-inch water main pipe. We further understand that the project will be funded with City and Okanogan County ARPA funds.

More specifically, the work will include:

DESIGN ENGINEERING SERVICES

Task 1 – Project Management

This task will include the following:

- Incorporate overall project management as well as in-house quality assurance and quality control (QA/QC) reviews of all documents in order to address relevant issues that may affect the project.

Task 2 – Design Survey

The objective is to establish vertical and horizontal control necessary for the construction of the proposed improvements that includes identifying existing utilities, alignment and other related work. This task will include the following:

- Establish vertical and horizontal control for survey and mapping suitable for the development of plans at a horizontal scale of 1"=20'.
- Field survey existing sewer, water, and stormwater utilities, obtain invert elevation data at each manhole, catch basin, and storm drain manhole, and field survey marked underground utilities within roadway and alley rights-of-way.
- Acquire public records of survey, plat maps, assessor maps, and record drawings as may be available. Identify existing utilities of record and delineate existing rights-of-way, recorded easements, and other related and pertinent site topography.

Geotechnical Investigation – The objective is to review provide field exploration, investigations, and laboratory analysis; design and construction recommendations by the geotechnical subconsultant PanGEO, to support the water system extension project. This task will include the following:

- Site Reconnaissance – Perform a site reconnaissance along the project alignment to mark the locations where test borings will be drilled and logistics planning for the field explorations.
- Coordinate Field Work – Prepare a site plan showing the approximate locations of the proposed explorations and submit it to the City for approval. Contact the one-call center for utility locates prior to field explorations.
- Subsurface Explorations (Test Borings) – Drill one test boring at the creek crossing to about 30 feet deep, to provide surface data (soils and groundwater) below the launching/receiving pits for shoring and dewatering design of the pits. Drill an additional four shallow test borings up to about 10 feet deep along the project alignment to evaluate the soil conditions within the trench depths. Standard Penetration Tests (SPT) will be conducted in the boreholes at 2-1/2- and 5-foot intervals.
- Groundwater Level Monitoring – The boring at the creek crossing will be developed with a standpipe piezometer to allow monitoring of groundwater levels.
- Laboratory Testing – Select soil samples for grain size analysis, moisture content, and Atterberg limits tests to evaluate the engineering properties of the site soils
- Engineering and Report – Perform appropriate engineering analysis based on the field exploration and laboratory test program results. Prepare and submit draft report for review by the Engineer. The draft report will be revised and finalized once review comments are received. In general, the report will include:
 - A site map with approximate test boring locations;
 - Description of subsurface conditions (soil and groundwater), and summary boring logs;
 - Appropriate trenchless methods to construct the creek crossing;
 - Shoring and trenching, including design approach and parameters for the launching/receiving pits for jack and bore;
 - A discussion of groundwater levels and construction dewatering considerations;
 - Geotechnical engineering recommendations regarding trenching and backfill; and
 - Earthwork recommendations including the suitability of the site soils for use as structural fill, subgrade preparation, temporary

excavation, control of groundwater (if needed), and general earthwork discussions.

- Post-Report Consultation – Provide post-report consultation to assist with the design and preparation of plans and specifications on an as-needed basis.
- Traffic control, if needed, will be provided by the City.
- Drill cuttings will be spread out in the shoulder of the roadways.

Task 3 – Preliminary Design

The objective is to develop preliminary design concepts and construction drawings at preliminary design phase (35 percent). Design plans and specifications will be prepared in City-approved format. This task will include the following:

- Prepare preliminary plans at a scale of 1"=20'. These Plans will provide a planimetric view of existing utilities and also incorporate City design standards, as applicable.
- Incorporate available utility record drawing information, plat map (property line) and rights-of-way information.
- Prepare preliminary specifications, to include proposal, contract, and bonding requirements.
- Provide preliminary construction cost estimate.
- Determine and describe local, state, and federal permits, and licenses required for construction of the proposed improvements. Prepare and submit said permits and approval applications prior to completion of design. The City will pay any permit and approval review fees.
- Perform a quality assurance and quality control (QA/QC) review of all documents in order to address those relevant issues that may affect the project.
- Review plans, specifications, and cost estimates with the City.

Task 4 – Final Design Contract Documents

The objective is to provide final Contract Documents and cost estimate in City-approved format. This task will include the following:

- Prepare final plan designs and project specifications to and including final quantities, order of work, schedule, and cost estimate.

- Submit Contract Documents and cost estimate to the City, to include incorporation of all previous City comments.
- Conduct an on-site review with the City.
- Perform a quality assurance and quality control (QA/QC) review of all documents in order to address those relevant issues that may affect the project.

Task 5 – Bid and Award Services

The objective is to assist the City in bid and award of the project. This task will include the following:

- Provide the City with the Call for Bids for advertisement for bids (City will pay all publishing costs) and the Contract Documents and construction cost estimate (in both hard copy and electronic formats).
- Provide access to Contract Documents to local plan centers, licensed contractors and material suppliers free-of-charge via Gray & Osborne Bid Document Distribution System website at <http://gobids.grayandosborne.com>.
- Answer questions from potential bidders and issue any addenda, as required.
- Attend the bid opening, review the bids, check bidder references, prepare the bid summary, and recommend award of the construction contract.

Construction administration services are not included in this Scope of Work. A separate Amendment for construction administration services will be prepared for City approval once the construction contract is awarded.

BUDGET

The maximum amount payable to the Engineer for completion of all work associated with this Scope of Work, including contingencies, salaries, overhead, direct non-salary costs and net fee shall be as shown in Exhibit B. This amount shall not be exceeded without prior written authorization of the City.

EXHIBIT B

ENGINEERING SERVICES SCOPE AND ESTIMATED COST

City of Okanogan - Elmway Water Main Extension - Phase 3

Tasks	Principal Hours	Project Manager Hours	Project Engineer Hours	AutoCAD/ GIS Tech./ Eng. Intern Hours	Professional Land Surveyor Hours	Field Survey (2 person) Hours
1 Project Management		8				
QA/QC Reviews	4	8	8	4		
2 Design Survey					8	30
3 Preliminary Design		8	80	124		
4 Final Design Contract Documents		24	40	40		
5 Bid and Award Services		40	8			
Hour Estimate:	4	88	136	168	8	30
Fully Burdened Billing Rate Range:*	\$150 to \$235	\$140 to \$235	\$125 to \$175	\$60 to \$165	\$125 to \$190	\$180 to \$295
Estimated Fully Burdened Billing Rate:*	\$210	\$190	\$175	\$140	\$180	\$260
Fully Burdened Labor Cost:	\$840	\$16,720	\$23,800	\$23,520	\$1,440	\$7,800

Total Fully Burdened Labor Cost: \$ 74,120

Direct Non-Salary Cost:

 Mileage & Expenses (Mileage @ current IRS rate) \$ 2,487

 Printing \$ 100

Subconsultant:

 PanGEO, Inc. \$ 26,630

 Subconsultant Overhead (10%) \$ 2,663

TOTAL ESTIMATED COST: \$ 106,000

* Actual labor cost will be based on each employee's actual rate. Estimated rates are for determining total estimated cost only. Fully burdened billing rates include direct salary cost, overhead, and profit.