

SCOPE OF SERVICES

TO: ANDY SCHULTZ AND TRISTON FIRTH
FROM: WOITH ENGINEERING, INC.
DATE: UPDATED JULY 20, 2022
JOB: S 5TH ST W WATER MAIN REPLACEMENT
RE: DESIGN, CONSTRUCTION ADMINISTRATION AND PROJECT CLOSEOUT
SCOPE OF SERVICES
CC: FILE

URGENT FOR REVIEW PLEASE COMMENT PLEASE REPLY FOR YOUR USE

Dear Mr. Schultz and Mr. Firth:

Woith Engineering is pleased to submit this proposal and scope of services (SoS) to provide civil design and construction administration services for the S 5th St W Water Main Replacement. This SoS is in response to your request transmitted via email on June 16, 2022, and outlines our understanding of the project, our proposed scope of work, and the estimated cost and time schedule for completion of the civil design services.

PROJECT DESCRIPTION

The project area includes three and a half urban blocks of South 5th Street West, between Russell Street and Garfield Street in Missoula, Montana. The City of Missoula plans to replace approximately 1,569 lineal feet of existing 6-inch Kalmrein water main, along with the associated valves, fire hydrants, and other appurtenances. The replacement project will utilize a State Revolving Fund (SRF) funding mechanism and be subject to the review and approval of the City of Missoula and Montana Department of Environmental Quality.

SCOPE OF SERVICES

Woith Engineering proposes to approach the design and construction administration of this project in a phased approach. Our understanding of the tasks required and deliverables associated with each phase of the work is outlined in the following:

1. Initial Project Coordination, including:

- a. A topographic and boundary survey of the project area will be completed by Woith Engineering. Through further conversations with the City, we have assumed that we will need a full topographic survey of the entire S 5th St W right-of-way.
- b. Collection of as-built plans and ditch cards for the existing water main, water services, and sanitary sewer mains in the project area.

2. Preliminary Design Phase, including:

- a. Woith Engineering will attend a preliminary design meeting with the City of Missoula to determine a preliminary alignment for the water main replacement.
- b. Preparation of a preliminary alignment and profile for the water main replacement, accompanied by preliminary construction plan sheets.
- c. Preparation of a preliminary project manual, including proposed contract documents and specifications.
- d. Completion and submittal of the City of Missoula Stage III public infrastructure plan review checklist.
- e. Deliverables: Schematic Designs, Preliminary Project Manual, Preliminary Construction Cost Estimate, Stage III Public Infrastructure Review Checklist

3. Final Design Phase, including:

- a. Address design review comments received during the Stage III plan review.
- b. Preparation of final alignment, profile, and construction plan sheets for water main replacement.
- c. Preparation of final design of any necessary curb, sidewalk, or driveway approach reconstructions.
- d. Preparation of final project manual. Coordinate required information for SRF funding with the City of Missoula as required.
- e. Completion and submittal of the City of Missoula Stage IV public infrastructure plan review checklist.
- f. Preparation and submission of Montana Department of Environmental Quality Water Main Extension and Replacement Checklist. Submittal shall include final construction plans, final project manual and specifications, water engineer's report, mapping, and certification letters. DEQ review fees shall be determined at the time of submittal and paid directly by the City.

- g. Deliverables: Final Design Sheets, Final Project Manual, Stage IV Public Infrastructure Review Checklist, MDEQ Water Main Extension and Replacement Checklist Submittal

4. Bidding and Construction Administration, including:

- a. Woith Engineering will administer the construction bidding process, preparing a final quantities list and engineer's cost estimate, engineer's bid form, and instructions to bidders. Woith Engineering will answer bidder questions and prepare a certified bid tabulation.
- b. Contract administration, including review of submittals and change orders.
- c. Construction staking of new utility installations and reconstructed surface infrastructure.
- d. Construction inspection and testing certification. Woith Engineering will provide inspection services at half-time for the duration of construction, estimated to take approximately 55 to 60 working days.
- e. Completion and submittal of the City of Missoula Stage V public infrastructure plan review checklist.
- f. Materials testing and compaction testing for contractor quality control and owner quality assurance.
- g. Deliverables: Final Engineer's Opinion of Probable Cost, Bid Form and Instructions to Bidders, Certified Bid Tabulation, Stage V Public Infrastructure Plan Review Checklist.
- h. Exclusions: Scope of services excludes geotechnical investigation, if required.

5. Project Closeout, including:

- a. Completion and submittal of the City of Missoula Stage VI public infrastructure plan review checklist.
- b. Preparation of as-built drawings and final certification for the City of Missoula and the Montana Department of Environmental Quality.
- c. Deliverables: Stage VI Public Infrastructure Plan Review Checklist, As-built Drawings to MDEQ and City of Missoula, Stage VII Public Infrastructure Plan Review Checklist

- 6. **Additional Services** – the SoS includes a phase for Additional Services, totaling **\$4,924**, which is to be used at the discretion of the City project manager.

COST ESTIMATE

Woith Engineering proposes to approach the design and construction administration of this project on a lump sum basis, not to exceed **\$109,404**. We will not exceed these fees for the scope of work items presented above without prior written authorization.

SCHEDULE

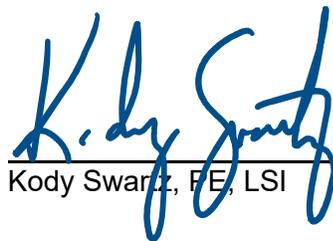
Based on previous conversations with you, the City anticipates to construct this project in spring/summer 2023. Thus, the project must be ready to bid by mid-December, 2022. Woith Engineering anticipates the following schedule upon receipt of the City's authorization to proceed and the preliminary alignment meeting.

Stage III Plan Review Submittal:	August 31, 2022
Stage IV Plan Review Submittal:	October 21, 2022
Department of Environmental Quality Submittal:	October 21, 2022
Publication of Bid Documents:	December 16, 2022

Thank you for the opportunity to submit this proposal. We look forward to working with you on this project. If you have any questions, please contact me at (406) 203-0869.

Sincerely,

Woith Engineering, Inc



Kody Swartz, PE, LSI



Tony Hilliard, EI

**ENCL: FEE ESTIMATE FOR PROFESSIONAL SERVICES: S 5TH STREET W WATER MAIN
REPLACEMENT**

DESIGN, CONSTRUCTION ADMINISTRATION AND
PROJECT CLOSEOUT SCOPE OF SERVICES



Fee Estimate for Professional Services - S 5th Street W Water Main Replacement								
Item No.	Description	Principal Engineer	Professional Engineer/ Surveyor	CAD Designer	Staff Engineer/EI	Admin	2-Man Survey Crew	TOTAL
1.1	Develop scope, fee and agreement. Project Management and coordination in project meetings within Woith Engineering.	2.0			8.0			\$1,230.00
1.2	Boundary and Topographic Survey. Prepare AutoCAD basemap of survey data to be used during the design process.	4.0	16.0	8.0			40.0	\$2,540.00
	Total Hours	6.0	16.0	8.0	8.0	0.0	40.0	
1.0 Scope of Services and Project Coordination Fee Total								\$13,770.00
2.0 Preliminary Design								
2.1	Attend preliminary alignment coordination meeting with City of Missoula staff.	2.0			2.0			\$570.00
2.2	Prepare preliminary water main replacement alignment and profile. Prepare first draft of construction plan and profile sheets. Prepare preliminary design for ADA ramps, sidewalks, and driveways requiring replacement.	4.0		8.0	32.0			\$5,100.00
2.3	Prepare preliminary project manual. A full project manual will be required at DEQ review. Include additional required items for SRF funding to be coordinated with the City of Missoula.	2.0			24.0			\$2,990.00
2.4	Quality assurance; complete Stage III checklist and submittal to City of Missoula.	4.0			8.0			\$1,580.00
	Total Hours	12.0	0.0	8.0	66.0	0.0	0.0	
2.0 Preliminary Design Fee Total								\$10,240.00
3.0 Final Design								
3.1	Address comments received from City of Missoula on Stage III construction plans and project manual. Meet with City of Missoula as required for further project coordination.	2.0		4.0	8.0			\$1,670.00
3.2	Prepare final water main replacement alignment and profile. Prepare final water service relocation plans. Prepare final draft of construction plan and profile sheets.	6.0		8.0	60.0			\$8,530.00
3.3	Prepare final design of curb and sidewalk replacement, driveway replacements, and ADA replacements.	2.0			12.0			\$1,670.00
3.4	Prepare final project manual. Coordinate required information for SRF funding with City of Missoula as required.	8.0			20.0			\$3,600.00
3.5	Quality assurance; complete Stage IV checklist and submittal to City of Missoula.	4.0			8.0			\$1,580.00
3.6	Prepare Montana Department of Environmental Quality certified checklist and plan review submittal. Submittal to include certified checklist, construction plans, final project manual, engineering report, mapping, and certification letters.	4.0			8.0			\$1,580.00
3.7	Address final City of Missoula and Department of Environmental Quality comments; finalize construction plans and project manual.	2.0			20.0			\$2,550.00
	Total Hours	28.0	0.0	12.0	136.0	0.0	0.0	
3.0 Final Design Fee Total								\$21,180.00
4.0 Bidding and Construction Administration								
4.1	Provide bid administration services. Prepare final quantities list, bidding form, instructions to bidders, and project manual. Answer bidder questions. Prepare certified bid tabulation.	2.0			16.0			\$2,110.00
4.2	Provide contract administration, including review of submittals and change orders.	4.0			20.0			\$2,900.00
4.3	Construction staking of new utility installations and reconstruction ADA ramps, driveways, and curbs.						24.0	\$5,280.00
4.4	Provide construction inspection and testing certification. Prepare Stage V checklist and submittal for City of Missoula review.	20.0			300.0			\$36,500.00
	Total Hours	26.0	0.0	0.0	336.0	0.0	24.0	
4.0 Bidding and Construction Administration Fee Total								\$46,790.00
5.0 Project Closeout								
5.1	Prepare Stage VI checklist and submittal for City of Missoula review.	2.0			8.0			\$1,230.00
5.2	Prepare as-built drawings and final certification to City of Missoula and the Montana Department of Environmental Quality.	10.0		8.0	24.0			\$5,270.00
	Total Hours	12.0	0.0	8.0	32.0	0.0	0.0	
5.0 Project Closeout Fee Total								\$6,500.00
Civil Design and Construction Administration								\$98,480.00
Materials Testing Services								\$6,000.00
5% Additional Services								\$4,924.00
Total								\$109,404.00