



## Consulting Scope of Services & Cost Estimate

PROJECT NAME: Missoula Water - East Front Street Replacement			\$75	\$95	\$95	\$110	\$140	\$150	\$150	\$120	\$180	DATE: October 16, 2021		
100 Series - Preliminary Project Assessment and Planning			Admin	CAD	Technician	Production	Project Manager	Senior Staff		Survey Crew		Consulting Cost Estimate		
Item No.	Description	Scope		Lead Drafter	El/Other	PE/EI	PE	PE	PLS	1 Man	2 Man	IMEG Services	Direct Expenses	Agency Review Fees
100	Project Management	IMEG project meetings, schedule, and project coordination associated with this portion of work.					4					\$ 560.00		
107	Pre-Design Meeting with Client	Project Manager and select team members will meet with the Client to discuss project goals and project coordination. Initial meeting with Missoula Water to review as-builts of the main plus service ditch cards and discuss tie in options. Review preliminary survey research.				4	2					\$ 720.00		
119	Review Right-of-Way, Plats & COS's	Time included to research the status of the adjacent right of ways (ROWs). Time included to research at Records Room concerning ROW. Assumes ROW will not be determined to be exact as improvements will take place within the road right of ways and service lines will be run just outside of road area.							2			\$ 300.00		
197	Preliminary Alignment Review - Stage 2	Based on the information gained through the initial feasibility tasks and field work, IMEG will prepare a preliminary alignment and connection options of the water main replacement. IMEG will submit preliminary alignment to Missoula Water for review/comment as part of the Stage 2 submittal process.		14		6	2					\$ 2,270.00		
198	Preliminary Agency Coordination - Floodplain	Once preliminary layout of water main replacement has been established. IMEG will send a letter describing the project to all entities related to the Joint Application regarding stream permitting. Based on our research, it is assumed that the only permitting necessary would be a Floodplain Permit due to the FIRM panel of Rattlesnake Creek, but this coordination will be used for purposes of officially confirming that assumption.				4	1					\$ 580.00		
Series 100 Total			0	14	0	14	9	0	2	0	0	\$ 4,430.00	\$ -	\$ -
200 Series - Field Work & Surveying			Admin	CAD	Technician	Production	Project Manager	Senior Staff		Survey Crew		IMEG Services	Direct Expenses	Agency Review Fees
200	Project Management	IMEG project meetings, schedule, and project coordination associated with this portion of work.					3					\$ 420.00		
202	General Site Visit	Engineering staff member to walk site to get general understanding of topography and existing features. Become familiar with the previously unidentified potential challenges to the project and take photos of the site. Assumes time included to research and dip sewer mains in the project area.			4	2						\$ 600.00		
241	Limited R/W Survey & Utility/Topographic Mapping	IMEG will request a utility locate five business days prior to the survey crew being on site. The visible, above ground utilities and respective underground utility locations will be tied by the survey crew for future placement on to the site map. Time included for a drafter to reduce the mapping into a site map. IMEG survey crews will visit the site and ties structures, improvements, cultural features and ground elevations sufficient to create an accurate map of the site. Contours will be generated at one-foot intervals based upon the collected data, creating a surface suitable for design. Cultural features include, but are not limited to: mail boxes, utility lines, fences, power poles, wells, pathways, driveways and signs. Mapping will be completed and referenced to the Montana State Plane coordinate system and the vertical datum will be referenced to NAVD88. In addition to topographic features, limited R/W ties will be made to existing monumentation & surveys/plats of record. Mapping information will be depicted in relation to the R/W. Survey control will also be placed in areas out of the construction area that can be used during the construction staking phase of the project. Assumes 5 days of survey crew field work. Project survey area is East Front Street from Madison to Van Buren, and Van Buren/Jackson/Monroe to East Broadway. Assumes 2 man survey work for MDT ROW and Rattlesnake Creek mapping at crossing location.	2	16			6		2	22	30	\$ 10,850.00	\$ 600.00	
Series 200 Total			2	16	4	2	9	0	2	22	30	\$ 11,870.00	\$ 600.00	\$ -

500 Series - MDEQ: Applications, Sewer Designs; Water Designs; Subdivision Drainage Design			Admin	CAD	Technician	Production	Project Manager	Senior Staff		Survey Crew		IMEG Services	Direct Expenses	Agency Review Fees
500	Project Management	IMEG project meetings, schedule, and project coordination associated with this portion of work.					6					\$ 840.00		
575	DEQ 1 Water System, Report - Exhibits	Develop the water system collection maps for this vicinity and gather hydrant test data. Assumes that Missoula Water will provide the hydrant test data to IMEG if needed.			2	1						\$ 300.00		
577	DEQ 1 Water System, Report - Produce	Given that the involved parties are familiar with this type of water main replacement work, the MDEQ Certified Checklist for water mains will be used. This checklist requires a thorough review of the plans against MDEQ's Circular DEQ-1 for compliance. In addition, a simple design report will be prepared in accordance with Circular DEQ-1. This includes getting certification from the Client that they will retain a PE to certify the improvements and review by the governing body's Engineering staff for the main replacement plans. Assumes there will be one Deviation request.			6	1						\$ 680.00		\$ 300.00
580	DEQ 1 Water System, Construction Plans - Plan/Profile	Complete Construction Plans will be prepared depicting plan and profile of the water main replacement for the following areas: East Front Street from Madison to Jackson, Jackson from Front to Broadway, and Monroe from Front to Broadway. The plans will include water main with valves, bends, blow-off, services, and fire hydrant. Includes one solicitation of preliminary review from system Owner. Assumes up to four sheets will be required for plan and profile. Assumes boring will occur under Rattlesnake Creek.		36		8	4					\$ 4,860.00		
582	DEQ 1 Water System, Construction Plans - Details	Prepare cover sheet and up to two detail sheets including water service table and typical details for water main construction. Additional coordination with the system Owner is not anticipated for details since this is a standard water main construction.		6		4	2					\$ 1,290.00		
584	Agency Comments - Floodplain Permit	Assumes IMEG will need to complete the "Joint Application for Proposed Work in Montana's Streams, Wetlands, Floodplains, and Other Water Bodies" for work completed with the Rattlesnake Creek floodplain. Assumes the Floodplain Permit will be reviewed by the City and the approximate per fee based on current City values is \$740.			8	1	1					\$ 1,010.00		\$ 740.00
585	Agency Comments -MDT Encroachment/Utility Permit	IMEG will complete MDT Encroachment Permit and associated attachments (i.e. Environmental Checklist) for proposed water main replacement. Time included to complete application and necessary exhibits for MDT submittal. Coordination with MDT to acquire ROW and As-Built Plans is included. Time included to follow up with MDT in regards to approvals received by MDEQ and City of Missoula as these approvals are needed prior to final approval of Encroachment Permit. Cost Associated with electronic permit submittal.			8	1	1					\$ 1,010.00		\$ 150.00
588	City of Missoula Stage 3 and Stage 4 Checklists	Assumes that the Stage 3 and Stage 4 Checklist will need to be completed for the City of Missoula. Time included to complete these 2 checklist and submit to the City for their review and approval.		3	12	6	2					\$ 2,365.00		
591	MDEQ Submittal	Finalize packet, copy, and send in. Assumes no review fees as project will be an SRF project.				2	1	4				\$ 960.00		
594	Address Reviewer Questions	As these are simple main projects with the Certified Checklist, it is assumed that there will be no MDEQ requests for additional information.										\$ -		
Series 500 Total			0	45	36	24	17	4	0	0	0	\$ 13,315.00	\$ -	\$ 1,190.00
800 Series - Construction Administration, Inspections, and Staking			Admin	CAD	Technician	Production	Project Manager	Senior Staff		Survey Crew		IMEG Services	Direct Expenses	Agency Review Fees
800	Project Management	Time included for project meetings and project coordination.					8					\$ 1,120.00		
801	Contract Documents and Specifications - Including SRF Documentation	IMEG will prepare a Project Manual with Contract Documents and Specifications. The contract documents will be appropriately formatted for the project funding source and will integrate the City of Missoula Project Special Conditions and applicable contract forms. The Contract Documents will include the following sections: Invitation to Bid, Instructions to Bidders, Acknowledgment of Receipt of Addendum, Bid Form and Unit Price Schedule, Bid Bond, Notice of Award, Agreement, Payment and Performance Bonds, Notice to Proceed, Change Order Form, Application for Payment Form, Certificate of Completion Form, General Conditions, Supplementary Conditions, Wage Rates, EEO Requirement Provisions, City of Missoula Special Provisions, SRF Requirements, and IMEG Special Provisions. The contract documents will also include the Final Construction Drawings.			12	8	6					\$ 2,860.00		
803	Quantity Estimates	Based on Construction Drawings IMEG will determine quantities of work items for an Engineers Cost Estimate.		4		8						\$ 1,260.00		
805	Engineer's Cost Estimate	Prepare an engineer's estimate based on the bid item schedule (quantities) in the contract documents. Unit costs will be derived from other recent construction projects and any preliminary unit costs the Client may have obtained.				6	2					\$ 940.00		



Project Summary	Admin	Lead Drafter	Technician	Production	Project Manager	Senior Staff		Survey Crew		IMEG Services	Direct Expenses	Agency Review Fees
Item No. - Description			El/Other	PE/El	PE	PE	PLS	GPS	Total Station			
100 Series - Preliminary Project Assessment and Planning	0	14	0	14	9	0	2	0	0	\$ 4,430.00	\$ -	\$ -
200 Series - Field Work & Surveying	2	16	4	2	9	0	2	22	30	\$ 11,870.00	\$ 600.00	\$ -
500 Series - MDEQ: Applications, Sewer Designs; Water Designs; Subdivision Drainage Design	0	45	36	24	17	4	0	0	0	\$ 13,315.00	\$ -	\$ 1,190.00
800 Series - Construction Administration, Inspections, and Staking	0	4	206	82	44	0	2	0	16	\$ 38,310.00	\$ 7,200.00	\$ -
900 Series - Final Project Documentation	1	8	28	5	2	0	0	0	0	\$ 4,325.00	\$ -	\$ -
1000 Series - 5% Additional Services - TBD By City's Project Manager										\$ 3,600.00		
Total Consulting and Reimbursable to Obtain Approvals	3	87	274	127	81	4	6	22	46	\$ 75,850.00	\$ 7,800.00	\$ 1,190.00
Total Estimate including Reimbursable										\$84,840.00		