

Contract for Professional Architectural and Engineering Services

W.O. 20-30 Hallowell Lane Water Main Replacement

In consideration of the mutual promises herein, City of Billings and Sanderson Stewart agree as follows. This Contract consists of:

- Part I, consisting of 15 Sections of Special Provisions;
- Part II, consisting of 11 Sections of General Provisions;
- Appendix A consisting of 9 pages (Basic Services of Contractor);
- Appendix B consisting of 1 page (Methods and Times of Payment);
- Appendix C consisting of 1 page (Additional Services of Contractor);
- Appendix D consisting of 3 pages (Schedule of Professional Fees);
- Appendix E consisting of 1 page (Project Schedule);
- Appendix F consisting of 1 page (Certificate(s) of Insurance); and

PART I SPECIAL PROVISIONS

Section 1. Definitions.

In this Contract:

- A. "Administrator" means the City Engineer of the Engineering Division of the Public Works Department or his designee.
- B. "Billings" means the City of Billings.
- C. "Contractor" means Sanderson Stewart.

Section 2. Scope of Services.

- A. The Contractor shall perform professional services in accordance with Appendix A, which is attached hereto and incorporated in this Section by reference.
- B. Billings shall pay the Contractor in accordance with the Schedule of Professional Fees attached as Appendix D and incorporated herein by reference for services actually performed under this Contract.
- C. Billings shall not allow any claim for services other than those described in this Section. However, the Contractor may provide, at its own expense, any other services that are consistent with this Contract.

- D. The Engineer shall provide as-built drawings as approved by the City of Billings, to the Administrator within 30 days after the project completion date. Final payment will be withheld until the as-built drawings are received by the City of Billings. Requirements for submitting as constructed documents of completed Private Contracts, Work Orders, Special Improvement Districts and Site plans involving any City of Billings infrastructure: a point file; 1 (*.asc, *.txt, comma delimited; point number, northing, easting, elevation and description) / 2 (*.csv, with headings for; point number, northing, easting, elevation and description), with northings and eastings to the nearest tenth of a foot, elevations to the nearest hundredth of a foot, representing new, updated or relocated City of Billings infrastructure features such as, but not limited to Sanitary Sewer Manholes, Storm Drain Manholes, Water Valves, Water Bends, Signals, Street Light, etc., in the coordinates of Montana State Plane, Zone 2500 using NAD83(2011), Horizontal and NAVD88 Vertical, Horizontal units and Vertical units will be International feet, one half size paper copy to scale, one full size paper copy to scale, two CD's or DVD's with PDF files being half size to scale and full size to scale and AutoCAD DWG files as-constructed / as-built, Version 2016, or equivalent.
- E. The Contractor shall provide certified construction payrolls to the Administrator stating in writing that the payrolls have been reviewed and are acceptable.

Section 3. Time for Performance.

- A. This Contract becomes effective when signed on behalf of Billings.
- B. The Contractor shall commence performance of the Work described in Section 2 on receipt of written Notice to Proceed and complete that performance in accordance with the schedule set forth in Appendix E.
- C. This Contract shall terminate at midnight on December 31, 2022.

Section 4. Compensation; Method of Payment.

- A. Each month, or at the conclusion of each phase of the Work for which payment is due, as negotiated on a per-task basis, the Contractor shall present a bill to the Administrator describing the Work for which it seeks payment and documenting expenses and fees to the satisfaction of the Administrator. If any payment is withheld because the Contractor's performance is unsatisfactory, the Administrator must, within ten (10) days of the payment denial, notify the Contractor of the payment denial and set forth, with reasonable specificity, what was unsatisfactory and why. Billings will pay Contractor within 30 days of receiving an acceptable invoice.
- B. The Contractor is not entitled to any compensation under this Contract, other than is expressly provided for in this Section.
- C. As a condition of payment, the Contractor shall have paid all City taxes currently due and owing by the Contractor.

Section 5. Termination of the Contractor's Services.

The Contractor's services under Section 2 of this Part may be terminated:

- A. By mutual consent of the parties.

- B. For the convenience of Billings, provided that Billings notifies the Contractor in writing of its intent to terminate under this paragraph at least 10 days prior to the effective date of the termination.
- C. For cause, by either party where the other party fails in any material way to perform its obligations under this Contract. Termination under this Subsection is subject to the condition that the terminating party notifies the other party of its intent to terminate, stating with reasonable specificity the grounds therefor, and the other party fails to cure the default within 30 days after receiving the notice.

Section 6. Duties Upon Termination

- A. If Billings terminates the Contractor's services for convenience, Billings shall pay the Contractor for its actual costs reasonably incurred in performing before termination and Billings shall pay for services rendered prior to termination. Payment under this Subsection shall never exceed the total compensation allowable under Section 4 of this Part. All finished and unfinished documents and materials prepared by the Contractor shall become the property of Billings.
- B. If the Contractor's services are terminated for cause, Billings shall pay the Contractor the reasonable value of the services satisfactorily rendered prior to termination, less any damages suffered by Billings because of the Contractor's failure to perform satisfactorily. The reasonable value of the services rendered shall never exceed ninety percent (90%) of the total compensation allowable under Section 4 of this Part. Any finished or unfinished documents or materials prepared by the Contractor under this Contract shall become the property of Billings at its option.
- C. If the Contractor receives payments exceeding the amount to which it is entitled under Subsections A or B of this Section, he shall remit the excess to the Administrator within 30 days of receiving notice to do so.
- D. The Contractor shall not be entitled to any compensation under this Section until the Contractor has delivered to the Administrator all documents, records, Work product, materials and equipment owned by Billings and requested by the Administrator.
- E. If the Contractor's services are terminated for whatever reason the Contractor shall not claim any compensation under this Contract, other than that allowed under this Section.
- F. If a final audit has not been performed before the Contractor's services are terminated, Billings may recover any payments for costs disallowed as a result of the final audit.
- G. Except as provided in this Section, termination of the Contractor's services under Section 5 of this Part does not affect any other right or obligation of a party under this Contract.

Section 7. Insurance.

- A. The Contractor shall maintain in good standing the insurance described in Subsection B of this Section. Before rendering any services under this Contract, the Contractor shall furnish the Administrator with proof of insurance in accordance with Subsection B of this Section.

- B. The Contractor shall provide the following insurance:
1. Workers' compensation and employer's liability coverage as required by Montana law.
 2. Commercial general liability, including contractual and personal injury coverage's -- \$1,500,000 per occurrence.
 3. Commercial automobile liability -- \$1,500,000 per accident.
 4. Professional liability in the amount of \$1,500,000 per claim.
- C. Each policy of insurance required by this Section shall provide for no less than 30 days' advance notice to Billings prior to cancellation.
- D. Billings SHALL be listed as an additional insured on all policies except Professional Liability and Worker's Compensation Policies. In addition, all policies except Professional Liability and Worker's Compensation shall contain a waiver of subrogation against Billings.

Section 8. Assignments.

Unless otherwise allowed by this Contract or in writing by the Administrator, any assignment by the Contractor of its interest in any part of this Contract or any delegation of duties under this Contract shall be void, and an attempt by the Contractor to assign any part of its interest or delegate duties under this Contract shall give Billings the right immediately to terminate this Contract without any liability for Work performed.

Section 9. Ownership; Publication, Reproduction and Use of Material.

- A. Except as otherwise provided herein, all data, documents and materials produced by the Contractor under this Contract shall be the property of Billings, which shall retain the exclusive right to publish, disclose, distribute and otherwise use, in whole or in part, any such data, documents, or other materials. Exclusive rights shall not be attributed to portions of such materials presently in the public domain or which are not subject to copyright. Contractor shall retain rights to pre-existing proprietary property including but not limited to interactive models. The Contractor shall have the right to include photographic or artistic representations of the design and construction of the Project among the Contractor's promotional and professional materials. The Contractor's materials shall not include Billings' confidential or proprietary information regardless of whether Billings has previously advised the Contractor in writing of the specific information considered by Billings to be confidential and proprietary.
- B. Equipment purchased by the Contractor with Contract funds: See Appendix A, Section 3. Scope of Work.
- C. Should Billings elect to reuse Work products provided under this Contract for other than the original project and/or purpose, Billings will indemnify and hold harmless the Contractor from any and all claims, demands and causes of action of any kind or character arising as a result of reusing the documents developed under this contract. Additionally, any reuse of design drawings or specifications provided under this Contract must be limited to conceptual or preliminary use for adaptation, and the original Contractor's or subcontractor's signature, professional seals and dates removed. Such reuse of drawings and specifications, which require

professional seals and dates removed, will be signed, sealed, and dated by the professional who is in direct supervisory control and responsible for adaptation.

Section 10. Notices.

Any notice required pertaining to the subject matter of this Contract shall be either sent via facsimile (FAX) or mailed by prepaid first class registered or certified mail, return receipt requested to the following addresses:

Billings: Debi Meling, PE
City of Billings
Public Works - Engineering
2224 Montana Avenue
Billings, Montana 59101 FAX: (406) 237-6291

Contractor: D.J. Clark, PE, PTOE
Sanderson Stewart
1300 North Transtech Way
Billings, MT 59102 FAX: (406) 656-0967

Notices are effective upon the earlier of receipt, proof of good transmission (facsimiles only), or 5 days after proof of proper posting.

Section 11. Contract Budget.

In connection with its performance under this Contract, the Contractor shall not make expenditures other than as provided in line items in the Contract budget.

Section 12. Force Majeure.

- A. Any failure to perform by either party due to force majeure shall not be deemed a violation or breach hereof.
- B. As used in this Contract, force majeure is an act or event of substantial magnitude, beyond the control of the delayed party, which delays the completion of this Contract, including without limitation:
 - 1. Any interruption, suspension or interference resulting solely from the act of Billings or neglect of Billings not otherwise governed by the terms of this Contract.
 - 2. Strikes or Work stoppages.
 - 3. Any interruption, suspension or interference with the project caused by acts of God, or acts of a public enemy, wars, blockades, insurrections, riots, arrests or restraints of governments and people, civil disturbances or similar occurrences.
 - 4. Order of court, administrative agencies or governmental officers other than Billings.

Section 13. Financial Management System.

The Contractor shall establish and maintain a financial management system that:

- A. Provides accurate, current, and complete disclosure of all financial transactions relating to the Contract;
- B. Maintains separate accounts by source of funds for all revenues and expenditures and identifies the source and application of funds for the Contractor's performance under this Contract, including information pertaining to subcontracts, obligations, unobligated balances, assets, liabilities, outlays and income;
- C. Effectively controls and accounts for all municipal funds and Contract property;
- D. Compares actual expenditures with budgeted amounts and relates financial information to performance or productivity data including unit cost information where applicable;
- E. Allocates administrative costs to direct service delivery units;
- F. Minimizes the time between receipt of funds from Billings and their disbursement by the Contractor;
- G. Provides accounting records supported by source documentation; and
- H. Provides a systematic method assuring the timely and appropriate resolution of audit findings and recommendations.

Section 14. Funding Requirements.

In the event that any funding source for this Contract should impose additional requirements upon Billings for the use of those funds, the Contractor agrees to abide by those additional requirements immediately upon receipt of written notice thereof from Billings.

Section 15. Subcontracts.

The Contractor may enter into subcontracts for the purchase of goods and services necessary for the performance of this Contract, provided:

- A. Every subcontract shall be reduced to writing and contain a precise description of the services or goods to be provided and the nature of the consideration paid therefor.
- B. Every subcontract under which the Contractor delegates the provision of services shall be subject to review and approval by the Administrator before it is executed by the Contractor.
- C. Every subcontract in an amount exceeding \$1,000 shall require reasonable access to business records of the subcontractor relating to the purchase of goods or services pursuant to the subcontract.

PART II GENERAL CONTRACT PROVISIONS

Section 1. Relationship of Parties.

The Contractor shall perform its obligations hereunder as an independent Contractor of Billings. Billings may administer the Contract and monitor the Contractor's compliance with its obligations hereunder. Billings shall not supervise or direct the Contractor other than as provided in this Section.

Section 2. Nondiscrimination.

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, sex, or marital status or who is a "qualified individual with a disability" (as that phrase is defined in the Americans With Disabilities Act of 1990). The Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, or mental or physical impairment/disability. Such action shall include, without limitation, employment, upgrading, demotion or transfer, recruitment or recruiting advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Contractor agrees to post, in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.
- B. The Contractor shall state, in all solicitations or advertisements for employees to Work on Contract jobs, that all qualified applicants will receive equal consideration for employment without regard to race, color, religion, national origin, ancestry, age, sex or marital status, or mental or physical impairment/disability.
- C. The Contractor shall comply with any and all reporting requirements that may apply to it which the City of Billings may establish by regulation.
- D. The Contractor shall include the provisions of Subsections A through C of this Section in every subcontract or purchase order under this Contract, so as to be binding upon every such subcontractor or vendor of the Contractor under this Contract.
- E. The Contractor shall comply with all applicable federal, state, and city laws concerning the prohibition of discrimination.
- F. The Contractor and subcontractor shall abide by the requirements of 41 CFR 60-300.5(a) and 41 CFR 60-741.5(a), which prohibit discrimination against qualified protected veterans and/or qualified individuals on the basis of disability, and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.

Section 3. Permits, Laws, and Taxes.

The Contractor shall acquire and maintain in good standing all permits, licenses and other entitlements necessary to its performance under this Contract. All actions taken by the Contractor under this Contract shall comply with all applicable statutes, ordinances, rules and regulations. The Contractor shall pay all taxes pertaining to its performance under this Contract.

Section 4. Nonwaiver.

The failure of either party at any time to enforce a provision of this Contract shall in no way constitute a waiver of the provision, nor in any way affect the validity of this Contract or any part hereof, or the right of such party thereafter to enforce each and every provision hereof.

Section 5. Amendment.

- A. This Contract shall only be amended, modified or changed by a writing, executed by authorized representatives of the parties, with the same formality as this Contract was executed.
- B. For the purposes of any amendment modification or change to the terms and conditions of this Contract, the only authorized representatives of the parties are:

Contractor: Sanderson Stewart

Billings: City Council or Authorized Designee

- C. Any attempt to amend, modify, or change this Contract by either an unauthorized representative or unauthorized means shall be void.

Section 6. Jurisdiction; Choice of Law.

Any civil action rising from this Contract shall be brought in the District Court for the Thirteenth Judicial District of the State of Montana, Billings. The law of the State of Montana shall govern the rights and obligations of the parties under this Contract.

Section 7. Severability.

Any provision of this Contract decreed invalid by a court of competent jurisdiction shall not invalidate the remaining provisions of the Contract.

Section 8. Integration.

This instrument and all appendices and amendments hereto embody the entire agreement of the parties. There are no promises, terms, conditions or obligations other than those contained herein; and this Contract shall supersede all previous communications, representations or agreements, either oral or written, between the parties hereto.

Section 9. Liability.

The Contractor shall indemnify, defend, save, and hold Billings harmless from any and all claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses including reasonable attorneys' fees and costs, arising from any wrongful or negligent act, error or omission of the Contractor or any agent, employee or subcontractor as a result of the Contractor's or any subcontractor's performance pursuant to this Contract.

- A. The Contractor shall not indemnify, defend, save and hold Billings harmless from claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses or attorneys' fees and costs arising from wrongful or negligent acts, error or omission solely of Billings occurring during the course of or as a result of the performance of the Contract.

- B. Where claims, lawsuits or liability, including attorneys' fees and costs arise from wrongful or negligent act of both Billings and the Contractor, the Contractor shall indemnify, defend, save, and hold Billings harmless from only that portion of claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses including attorneys' fees and costs, which result from the Contractor's or any subcontractor's wrongful or negligent acts occurring as a result from the Contractor's performance pursuant to this Contract.

Section 10. Inspection and Retention of Records.

The Contractor shall, at any time during normal business hours and as often as Billings may deem necessary, make available to Billings, for examination, all of its records with respect to all matters covered by this Contract for a period ending three years after the date the Contractor is to complete performance in accordance with Section 2 of the Special Provisions. Upon request, and within a reasonable time, the Contractor shall submit such other information and reports relating to its activities under this Contract, to Billings, in such form and at such times as Billings may reasonably require. The Contractor shall permit Billings to audit, examine and make copies of such records, and to make audits of all invoices, materials, payrolls, records of personnel, and other data relating to all matters covered by this Contract. Billings may, at its option, permit the Contractor to submit its records to Billings in lieu of the retention requirements of this Section.

Section 11. Availability of Funds.

Payments under this Contract may require funds from future appropriations. If sufficient funds are not appropriated for payments required under this Contract, this Contract shall terminate without penalty to Billings; and Billings shall not be obligated to make payments under this Contract beyond those which have previously been appropriated.

IN WITNESS WHEREOF, the parties have executed this Contract on the date and at the place shown below.

City of Billings

Contractor

William A. Cole, Mayor



Date: _____

Name: D.J. Clark

Title: Municipal Group Manager

Date: June 10, 2020

ATTEST:

IRS Tax ID # _____

City Clerk

APPROVED AS TO FORM:

Date: _____

By _____

BRENT BROOKS, City Attorney

Appendix A Basic Services of Engineer

W.O. 20-30 Hallowell Lane Water Main Replacement

Section 1. Engineer's Rights and Duties.

- A. To furnish all labor, materials, equipment, supplies, and incidentals necessary to conduct and complete the Engineer's portion of the project as defined in the scope of work and to prepare and deliver to Billings all plans, specifications, bid documents, and other material as designated herein.
- B. Ascertain such information as may have a bearing on the work from local units of government, utility companies, and private organizations and shall be authorized to procure information from other authorities besides Billings, but shall keep Billings advised as to the extent of these contacts and the results thereof.
- C. Prepare and present such information as may be pertinent and necessary in order for Billings to pass critical judgment on the features of the work. The Engineer shall make changes, amendments or revisions in the detail of the work as may be required by Billings. When alternates are being considered, Billings shall have the right of selection.
- D. Engineer's work shall be in accordance with the standards of sound engineering and present City, State, and National standards and policies currently in use.
- E. Conform to the requirements of the Montana Code Annotated Title 18 "Public Contracts" and more particularly Sections 18-2-121 and 18-2-122, and all other codes of the State of Montana applicable to providing professional services including codes and standards nationally recognized.
- F. The Engineer shall certify with the submission of final plans that the plans are in conformance with applicable sections of Title 69, Chapter 4, Part 5, of the Montana Code Annotated as pertaining to existing utilities.
- G. To perform professional services in connection with the project and will serve as Billings' representative in those phases of the project to which this agreement applies.
- H. Where Federal funds are involved, the necessary provisions to meet all requirements will be complied with and documents secured and placed in the bidding documents.
- I. Submit an estimated progress schedule as to time and costs at the beginning of the work, and monthly progress reports thereafter until complete. The reports will include any problems, potential problems, and delays as foreseen by the Engineer. Reports will be submitted in a timely manner to permit prompt resolution of problems.
- J. Name a Task Director who shall be the liaison between Billings and the Engineer. For this project the Task Director designated for the Engineer is D.J. Clark, PE, PTOE working under the Principal-in-Charge, Mac Fogelsong, PE.

Section 2. Billings Rights and Duties.

- A. To furnish all labor, materials, equipment, supplies, and incidentals necessary to conduct and complete Billings' portion of the project as designated in the scope of work.
- B. Name a Task Director who shall be the liaison between the Engineer and Billings. For this project, the Task Director designated is Tyler Westrope, PE working under the City Engineer, Debi Meling, PE.

Section 3. Scope of Work.

SCOPE OF WORK:

The scope of work covered by this agreement is described hereafter:

The project consists of the design, bidding, and construction services for the '*City of Billings W.O. 20-30, Hallowell Lane Water Main Replacement*' project. The project includes approximately one mile of water main replacement (upsized from 6-inch to 8-inch) under Hallowell Lane from King Avenue East to State Avenue, as well as the extension of a sanitary sewer main at the north end of the corridor. The scope of work and budget assumes a single construction contract covering all necessary work.

Professional services include design of a water main replacement, preparation of contract plans and specifications, including traffic control plans and special provisions, bidding process administration, review of contractor pay estimates, construction staking, and observation of construction for the water main replacement and associated appurtenances. Engineer will coordinate work efforts with other related improvement projects expected to be completed concurrently in the project areas. The scope of work covered by this Contract shall include the following tasks:

Phase 100 - Preliminary Design

- Task 1. Project scoping and consultant contracts.
- Task 2. General project management and coordination of work, including internal QA/QC of project deliverables.
- Task 3. Meetings and correspondence with City of Billings staff on project-related items.
- Task 4. Project status update e-mails to City of Billings.
- Task 5. Monthly project invoicing.
- Task 6. Internal team meetings and correspondence, including a project kickoff meeting and a design review meeting.
- Task 7. Review existing atlas maps, as-built drawings, and water service records provided to Sanderson Stewart by the City of Billings and through GIS.
- Task 8. Research and review of maps and other information provided by private utility companies. This task shall also account for up to four (4) meetings with private utility companies to discuss facility locations, potential

conflicts, and timing of construction.

- Task 9. Pre-design field review site visit, including measure downs on existing valves and photographs of key features.
- Task 10. Survey control field work, including control placement, horizontal ties, levels and adjustments. Survey control will consist of either MAG Nails in asphalt or, where applicable, 18"x5/8" rebar with 2-inch aluminum caps clearly stamped SANDERSON STEWART CONTROL MONUMENT with the control point number. Control points will be spaced no more than 250 feet apart in scanning areas, and no more than 600 feet apart in non-scanning areas. All control points will be double observed to ensure horizontal accuracy within 0.04 feet. Reciprocal levels will be performed to ensure vertical accuracy to within 0.03 feet. Setup Trimble Business Center project and controller files. Download, maintain, and manage project data.
- Task 11. Field work related to LIDAR scanning survey. Scanning will be utilized to collect topographic survey data for hard surface and vertical elements of the project corridor. We anticipate utilizing approximately 25 setups at intersection and mid-block locations to obtain adequate coverage of project surface features.
- Task 12. Downloading and register of scanning data to create one point cloud.
- Task 13. Review of LIDAR scanning data to determine if there are any voids in the scan data that need to be surveyed.
- Task 14. Topographic survey pickups of project area to supplement LIDAR scanning data. Pickup surveys will utilize conventional total station methods.
- Task 15. Processing of completed topographic survey data, importation into base CADD file and drafting existing conditions features. Unless otherwise directed by the City, the project will use the following coordinate systems:
- a. Billings Low Distortion Projection (NAD83-2011) with horizontal units expressed in international feet.
 - b. Vertical datum will be NAVD88 with GPS elevations derived from GEOID12A and vertical units expressed in U.S. survey feet.
- Task 16. Coordination with WWC Engineering regarding the transfer of topographic survey point data and an Autocad file with existing conditions line work drawn based on the results of topographic survey activities.
- Task 17. Review and analyze water main alignments with respect to other utilities. Review extents of water main replacement at side streets and determine which hydrant laterals and water services require replacement.
- Task 18. Review feasibility of pipe bursting alternate and summarize pros and cons for City via e-mail.
- Task 19. Review and analyze options for extension of sanitary sewer main and

associated appurtenances with respect to potential conflicts.

- Task 20. Prepare concept-level (30%) design alignment and profile line work and create plan sheet exhibits. Submit concept-level design exhibits to City for review.
- Task 21. Revisions to concept-level (30%) alignment and profile design based on City review comments (as required).
- Task 22. Identify areas to perform subsurface utility “potholing” at identified pipeline or utility crossings to identify specific pipe elevations or private utility locations. Scope of work assumes Sanderson Stewart will provide a “vacuum” truck via subcontract to remove material in order to survey said utilities. Scope of work includes up to two (2) full 8-hour days of subcontract “potholing” for an estimated total of up to 12 potholes. Holes will be backfilled with temporary cold-mix asphalt at the time of potholing. Scope of work for this task also includes two (2) days of traffic control for potholing.
- Task 23. Geotechnical Investigation of Hallowell Lane project area. Geotechnical engineering shall include field sampling, laboratory testing and review of subsurface soils to determine appropriate pavement section design alternatives, subgrade treatment, groundwater conditions, and foundations for utility installations. Recommendations for specific construction materials and groundwater management established in this review will be included in the project plans and specifications. Up to eight (8) soil borings will be completed to a depth of 15 feet and up to four (4) groundwater monitoring wells will be installed along the corridor. Geotechnical investigation includes traffic control during boring operations.
- Task 24. Groundwater elevation monitoring of up to four (4) monitoring wells. We have assumed monitoring the groundwater elevations from November to May using transducers in the monitoring wells.
- Task 25. Revise alignment and profile and related design details based on results of potholing and to show existing public and private utilities. Develop preliminary (70%) plan set, including title sheet, key/legend sheet, plan and profile sheets, and plan details as part of preliminary plan set.
- Task 26. Send preliminary plans (70%) to applicable private utility companies for review and comment. Correspond with providers regarding any comments or special requests. Revise preliminary (70%) plans as required based on private utility comments.
- Task 27. Meet with local contractors and suppliers to discuss constructability and traffic control issues.
- Task 28. Prepare preliminary traffic control plans and special provisions for the project. Standard City of Billings and MDT traffic control details will be referenced wherever possible. Customized traffic control layouts for specific work zones will be described with a text narrative in a traffic control and construction sequencing special provision in cases where

standard details are not applicable. An overall project area work zone exhibit will be provided, but individual work zone traffic control exhibits will not be prepared except in special cases as determined jointly between Sanderson Stewart and the City of Billings.

- Task 29. Prepare preliminary (70%) opinion of probable construction cost with 15 percent contingency included.
- Task 30. Final revisions to preliminary (70%) plans and specifications based on internal review comments. Submit package to City of Billings for review.

Phase 100 Deliverables:

- a. Draft and final scope of work and fee estimate documents
- b. Project status update e-mails
- c. Pipe bursting feasibility summary e-mail
- d. Concept design (30%) plan and profile exhibits on 11x17 size plans and in PDF format
- e. Preliminary geotechnical report
- f. Preliminary plans (70%) on 11x17 size plans and PDF format
- g. Preliminary traffic control plans
- h. Preliminary specifications
- i. Preliminary opinion of probable cost with 15% contingency

Phase 200 - Final Design and Bidding Services

- Task 1. General project management and coordination of work, including internal QA/QC of project deliverables.
- Task 2. Meetings and correspondence with City of Billings staff on project-related items.
- Task 3. Project status update e-mails to City of Billings.
- Task 4. Monthly project invoicing.
- Task 5. Design of temporary water system performance specifications for project area.
- Task 6. Prepare plan for sequencing of water main flushing and testing including location and size of test ports to assist the City's valve operation crew during construction.
- Task 7. Incorporate City of Billings comments on preliminary traffic control plans and special provisions and prepare final bid documents for inclusion in the project specification book.
- Task 8. Complete final plan and specification sets for submittal, review, and approval by the City of Billings and the Montana Department of Environmental Quality (MDEQ).

- Task 9. Submittal of two (2) copies of the project specifications, two (2) 11x17 plan sets, contract-bidding documents, design report and certified water checklist to (MDEQ) for approval. The MDEQ review fees up to \$2,310 are included in this contract, based on approximately 5,700 lineal feet of water main being replaced, one assumed deviation, and a design report.
- Task 10. Receive final redline comments from the City of Billings, MDT and the MDEQ and incorporate said comments in final plans and specifications. Final plans and specifications will be prepared in accordance with the Montana Public Works Standard Specifications, Sixth Edition, April 2010 and the current adopted City of Billings Standard Modifications to the Sixth Ed. Stamp and sign all plans and specifications with seal of Professional Engineer in charge.
- Task 11. Calculate bid quantities and prepare bid proposal and contract documents. Update Engineer's Opinion of Probable cost based upon final plan quantities.
- Task 12. Assist in preparation of bid advertisement and provide documents to prospective bidders and suppliers. Bid advertisement text will be provided to the City for publication.
- Task 13. Attend one pre-bid meeting.
- Task 14. Answer bid questions and issue addendums as required.
- Task 15. Attend bid opening, tabulate bids, and make recommendation to the City for award.
- Task 16. Assist in City procurement of final contract agreement, verification of insurance and bonds, and issue notice to proceed.

Phase 200 Deliverables:

- a. Final plans on 11x17 size plans and PDF format
- b. Final specifications book including geotechnical report, final traffic control plans, water main flushing and testing plan
- c. MDEQ approval documents including design report
- d. Final opinion of probable cost
- e. Pre-bid meeting minutes and addenda as required
- f. Bid tabulations
- g. Recommendation of award
- h. Final contracts
- i. Notice to proceed

Phase 300 - Construction Services and Contract Administration

- Task 1. General project management and coordination of work, including internal QA/QC of project deliverables.

- Task 2. Schedule and conduct pre-construction conference prior commencement of work at the site. Issue pre-construction meeting minutes to Contractor and City.
- Task 3. Implement and coordinate QA/QC testing program for materials testing developed in the design phase of the project.
- Task 4. Take preconstruction photos of proposed work areas.
- Task 5. Prepare weekly website informational update content for distribution to the City of Billings and email to property owners along project corridor based on a 75 calendar day construction contract.
- Task 6. Review Contractor shop drawing submittals in conformance with the information given in contract documents. Also review valve requests and temporary water plans. Review does not include review of any dewatering plans, and said review shall not extend to Contractor means, methods, techniques, sequences, or procedures of construction or Contractor safety programs.
- Task 7. Attend weekly construction meetings during construction based on a 75 calendar day construction contract.
- Task 8. Make visits to the site at intervals appropriate to various stages of construction to observe as an experienced and qualified design professional the progress of the Contractor's executed work. Visits by Engineer shall be limited to spot checking and similar methods of general observation of the work as assisted by the Resident Project Representative.
- Task 9. Meetings and correspondence with property owners during construction. Assume one hour per week based on 75 calendar day construction contract.
- Task 10. Respond to Contractor requests for information. Issue necessary clarifications and interpretations of the Contract Documents as appropriate, consistent with the intent and reasonably inferable from the Contract Documents. Engineer may issue Field Orders authorizing minor variations in the Work from the requirements of the Contract Documents.
- Task 11. Recommend and prepare Change Orders and Work Change Directives to City as appropriate.
- Task 12. Provide field staking to give the Contractor measurements, lines, locations, and grades necessary for construction. Field staking shall include work shall include:
- Horizontal and vertical control for the project using survey grade GPS and robotic total station equipment.
 - Provide survey staking points with offsets at all ends, tees, crosses, bends, services, and hydrants.
 - Prepare construction staking notes.

- Task 13. Coordinate and schedule quality assurance testing during all phases of construction.
- Task 14. Provide full-time construction observation during construction utilizing a Resident Project Representative (RPR) to assist Engineer in observing progress and quality of the Work. The budget includes one RPR at 50-hours per week for 75 calendar days. RPR shall report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor said clarifications and interpretations as issued by Engineer. RPR will prepare daily inspection reports, and daily diaries for the term of construction activity.
- In addition to review of major work items for the water main replacement, inspection activities shall include general review of traffic control set-up and sediment and erosion control.
- Task 15. Review and recommend payment and contract requests in accordance with City of Billings format. Up to four (4) pay applications are estimated based on a 75 calendar day construction contract.
- Task 16. Review traffic control permits and submittals, as well as field observation of compliance with plans and traffic conditions.
- Task 17. Keep track of actual in-place materials, locations, and quantities and transfer to field plans for preparation of record drawings.
- Task 18. Coordinate testing of final water main installations and recommend approval or adjustments as necessary.
- Task 19. Conduct final inspection and prepare punchlist.
- Task 20. Prepare reproducible construction record drawings for City of Billings files from records prepared by Contractor. Survey all new water main surface features (e.g., valve boxes and hydrants) following project completion and incorporate into record drawings. Record drawings will include at a minimum:
- Offset distances measured from the centerline of the right-of-way to all public water mains.
 - Locations of water services based on measurements from property lines.
 - Elevations indicating the depth of bury of all public water mains. These elevations shall be shown at each street or right-of-way intersection and at such intervals along the public water mains as may be deemed appropriate by the City Engineer.
- Task 21. Conduct one-year inspection with City of Billings staff and Contractor.

Phase 300 Deliverables:

- a. Pre-construction meeting minutes
- b. Shop drawing review

- c. Pay applications and change orders
- d. Final inspection and one-year warranty inspection punchlists
- e. Final record drawings, in accordance with Part 1, Section 2, Article D of this Contract, and as required by MDEQ.
- f. Copy of materials testing and water main testing records

Appendix B Methods and Times of Payment

W.O. 20-30 Hallowell Lane Water Main Replacement

Section 1. Payments for Basic Services.

Billings shall authorize payment to the Engineer for services performed under Appendix A of this Agreement. Partial payment shall be due the Engineer upon receipt of the Engineer's pay estimate, said estimate being proportioned to the work completed by the Engineer.

Partial payment shall be made to the Engineer upon receipt of the Engineer's pay estimate, said estimate being proportioned to the work completed by the Engineer. Billings shall deduct five percent (5%) from each monthly pay estimate to be held until the completion of the final scope of work. The final payment shall be made only after acceptance of final documents by Billings, and determination that the scope of work has been satisfactorily completed.

- A. For services rendered prior to construction, Appendix A, the Engineer shall be paid based upon actual time accrued, but not to exceed the total contract amount.

1. Preliminary Design	\$108,525.00
2. Final Design	\$52,860.00
3. Construction/Contract Administration	\$145,480.00
TOTAL CONTRACT	\$306,865.00

- B. Final payment shall be the above stated basic fee less all previous payments.

Section 2. Payments for Extra Services when Authorized by Billings.

Requests made or conditions identified by interested groups at the agency or public meetings, which are beyond the scope and intent of this study shall be paid for on an hourly basis at the applicable fees in Appendix D.

Section 3. Corrections.

Costs of Billings work that is required for corrections to the Engineer's work which requires redoing by Billings shall be deducted from any payments due the Engineer, if the Engineer fails to make the required corrections.

Section 4. Fee Increases

For contracts and services that are expected to require more than one (1) year to complete, the above stated basic services payments may be reviewed and adjusted annually by mutual agreement of the parties, based upon documented evidence that the Engineer's costs and hourly rates as shown in Appendix D have increased for all comparable clients.

Appendix C
Additional Services of Engineer

W.O. 20-30
Hallowell Lane Water Main Replacement

Extra Services of the Engineer will be paid only with written prior authorization by Billings.

- A. Field and laboratory testing of materials and reports.
- B. Requests made or conditions identified by interested groups at the agency or public meetings, which are beyond the scope and intent of this study.

Appendix D
Schedule of Professional Fees

W.O. 20-30
Hallowell Lane Water Main Replacement

Current agreements for engineering services stipulate that the standard hourly rates are subject to review and adjustments. Hourly rates for services effective on the date of this Agreement are included below.

The itemized schedule provided below includes direct labor costs, normal payroll and overhead costs, transportation, furnishing equipment and materials normally required for performance of the work and reasonable profit. Direct project costs not itemized herein shall be paid for at actual cost.

(Please see attached rate sheets)

CHARGE OUT RATES EFFECTIVE AUGUST 2019

At Sanderson Stewart, we strive to provide great customer service and value. While we can offer the traditional method of billing by hourly charge rates, we strongly encourage our current and prospective clients to consider a lump sum arrangement in determining your overall project compensation. Fixed-fee projects can result in substantial savings over our posted hourly billing rates and provide a level of certainty at the outset of your project.

STAFF PERSONNEL SERVICES

Expert Witness/Special Consultant	\$ 265.00 / hour
Principal	\$ 185.00 / hour
Senior Engineer I	\$ 145.00 / hour
Senior Engineer II	\$ 170.00 / hour
Project Engineer I	\$ 110.00 / hour
Project Engineer II	\$ 120.00 / hour
Staff Engineer I	\$ 95.00 / hour
Staff Engineer II	\$ 105.00 / hour
Engineer Intern	\$ 65.00 / hour
Senior Land Planner	\$ 135.00 / hour
Land Planner	\$ 130.00 / hour
Right-of-Way Agent	\$ 135.00 / hour
Landscape Architect	\$ 115.00 / hour
Senior Landscape Architect I	\$ 125.00 / hour
Senior Landscape Architect II	\$ 140.00 / hour
Landscape Designer I	\$ 80.00 / hour
Landscape Designer II	\$ 100.00 / hour
Senior Professional Land Surveyor	\$ 135.00 / hour
Professional Land Surveyor	\$ 115.00 / hour
Staff Surveyor I	\$ 85.00 / hour
Staff Surveyor II	\$ 100.00 / hour

Field Survey Technician I	\$ 75.00 / hour
Field Survey Technician II	\$ 80.00 / hour
Marketing Director	\$ 125.00 / hour
Graphic Artist	\$ 95.00 / hour
Photographer	\$ 180.00 / hour
Web Developer	\$ 90.00 / hour
Senior Designer I	\$ 95.00 / hour
Senior Designer II	\$ 105.00 / hour
Designer	\$ 90.00 / hour
CADD Technician	\$ 80.00 / hour
Senior Construction Engineering Technician	\$ 115.00 / hour
Construction Engineering Technician	\$ 85.00 / hour
Construction Inspector	\$ 80.00 / hour
Project Administrator	\$ 75.00 / hour
Administrative/Clerical	\$ 70.00 / hour

SURVEY CREW SERVICES

1-man Crew/2-man Crew	\$ Per Job
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OUTSIDE CONSULTANTS

- 1) At cost if independently billed direct to client.
- 2) Cost plus 5% if billed through us.

INDEPENDENT LABORATORIES

- 1) At cost if independently billed direct to client.
- 2) Cost plus 5% if billed through us.

ADMINISTRATIVE EXPENSES

Administrative expenses (including copies, prints, phone, postage, materials, and travel) based on professional services only	3.5% *
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* unless modified by contract

**Appendix E
Project Schedule**

**W.O. 20-30
Hallowell Lane Water Main Replacement**

Based on a notice to proceed by Billings date no later than July 13, 2020, the completion date for the Engineer's work through final design shall be:

- | | |
|--|--------------------|
| A. Preliminary Design | September 18, 2020 |
| B. Final Design and Bidding Services | October 30, 2020 |
| C. Construction Services and Contract Administration | July 30, 2021 |

Delays affecting the completion of the work within the time specified of more than ninety (90) days, not attributable to or caused by the Parties hereto, may be considered as cause for the renegotiation or termination of this Contract.

If the Engineer is behind on this Contract due to no fault of Billings, then the Engineer hereby acknowledges the right of Billings to withhold future Contracts to the Engineer in addition to any other remedy until this Contract is brought back on schedule or otherwise resolved.

