

Appendix A

Basic Services of Engineer

W.O. 16-01, Schedule 4, South Side Sanitary Sewer Replacement Project

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 Chad Hanson, PE working under the Principal-in-Charge, Dave Aune, 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 Randy Straus, PE working under the City Engineer, Debi Meling, PE.

Section 3. Scope of Work.

W.O. 16-01, Schedule 4, South Side Sanitary Sewer Replacement Project (Project) includes the replacement of approximately 2,100 lineal feet of sanitary sewer main located in the alley between South 33rd Street and South 34th Street from State Avenue to 6th Avenue South and the alley between South 35th Street and South 36th Street from 7th Avenue South to 4th Avenue South. Professional services to be provided by the Engineer include the preliminary design, final design, bidding, construction, and post construction phases related to the project.

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

Preliminary Design Phase

- A. Upon written authorization from Billings, Engineer shall:
1. Coordinate with Billings to determine the project limits and/or scope and the design basis.
 2. Visit the Site as needed to prepare the Preliminary Design Phase documents.
 3. Investigate known environmental issues related to the project area, such as documented LUST sites. No field drilling, testing, or sampling is included as part of the environmental investigation.
 4. Complete field surveys of the topography, features, and marked utilities within the identified project limits. Utility locates will be requested using the One-Call service. During the field survey, existing property pins will be located to the greatest extent possible.
 5. Coordinate a geotechnical investigation performed by a Subconsultant to the Engineer. Geotechnical engineering shall include field sampling, laboratory testing and review of subsurface soils to determine appropriate pavement section design alternatives, sub-grade treatment, groundwater conditions, and foundations for utility installations. Field sampling will include four soil borings drilled to an approximate depth of fifteen feet at the intersection of the alleys and 5th and 6th Avenues South and 7th and 8th Avenues South, respectively.
 6. Coordinate a geotechnical investigation performed by a Subconsultant to the Engineer. Geotechnical engineering shall include field sampling and review of subsurface soils to identify the asphalt cross-section of haul routes. Field sampling will include four soil borings drilled to an approximate depth of five feet in South 33rd, Street, South 34th Street, South 35th Street and South 36th Street.

7. Prepare base mapping utilizing the information gathered during the field survey. Existing right-of-way locations will be depicted based upon platted information, ownership records, and found property pins. The base mapping will also include a profile of the existing sanitary sewer mains to be replaced.
8. Review the plan and profile of the existing sanitary sewer main to determine if the grade can be beneficially modified in the areas of user complaints.
9. Review closed caption television (CCTV) inspections of the sanitary sewer mains to be replaced as provided by Billings and provide a recommendation whether or not trenchless replacement technologies such as cured in place pipe (CIPP) may be appropriate for the project. If CIPP is determined to be feasible, prepare an opinion of probable cost for the alternative.
10. Coordinating the identification and potential relocation of private utilities including, but not limited to, overhead and underground power, cable TV, underground telephone and communications, petroleum oil and natural gas.
11. Prepare Preliminary Design Phase documents consisting of a preliminary design memorandum summarizing the findings of the Preliminary Design Phase, preliminary drawings (30% design), outline specifications, and a preliminary opinion of probable Construction Cost.
12. Furnish two review copies of the Preliminary Design Phase documents to Billings in accordance with the schedule included in Appendix E.
13. Schedule and attend a design meeting with Billings to review the Preliminary Design Phase documents. Within 7 calendar days of the design review meeting, Billings shall submit to Engineer any comments regarding the furnished items.

Final Design Phase

- A. After acceptance by Billings of the Preliminary Design Phase documents, subject to any Billings-directed modifications or changes in the scope, extent, character, or design requirements of or for the Project, and upon written authorization from Billings, Engineer shall:
 1. Obtain and review Billings' instructions regarding Billings' procurement of construction services, Billings' construction contract practices and requirements, insurance and bonding requirements, electronic transmittals during construction, and other information necessary for the finalization of Billings' bidding-related documents, and Construction Contract Documents. Also obtain and review copies of Billings' design and construction standards, Billings' standard forms, general conditions, supplementary conditions, text, and related documents or content for Engineer to include in the draft bidding-related documents, and in the draft Construction Contract Documents.
 2. Prepare Drawings and Specifications indicating the scope, extent, and character of the Work to be performed and furnished by Contractor.
 3. Visit the Site as needed to assist in preparing the Drawings and Specifications.
 4. Assemble known reports and drawings of Site conditions, and identify the technical data contained in such reports and drawings upon which bidders or other prospective contractors may rely.
 5. Prepare or assemble draft bidding-related documents, including Construction Contract Documents in addition to the Drawing and Specifications, based on the

specific bidding or procurement-related instructions and forms, text, or content received from Billings. For purposes of developing this scope of work, it is assumed Contractors will be allowed to bid the work either utilizing traditional open cut methods or CIPP trenchless restoration methods.

6. Prepare a construction traffic control plan for temporary signage and construction phasing, based upon Billings' standards as much as possible, and incorporate the traffic control plan into the Drawings and Specifications and bidding-related documents.
7. Incorporate recommendations from the geotechnical investigation into the Drawings and Specifications and bidding-related documents, including but not limited to recommended materials testing for QA and QC.
8. At the 70% design Milestone:
 - a. Furnish for review by Billings, three copies of the Drawings (including full size) and Specifications, assembled drafts of Construction Contract Documents, the draft bidding-related documents, and an updated opinion of probable Construction Cost in accordance with the schedule included in Appendix E. A full size set (22"x34") of the Drawings will also be furnished.
 - b. Schedule and attend a design meeting with Billings to review the 70% Final Design Phase deliverables. Within 7 calendar days of the design review meeting, Billings shall submit to Engineer any comments regarding the furnished items.
 - c. Incorporate comments and instructions from Billings into the 90% Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents, and any other Final Design Phase deliverables.
 - d. Submit 70% construction plans to private utilities for review and comment, and hold a subsequent coordination meeting with the private utilities to assemble and evaluate comments.
9. At the 90% design Milestone:
 - a. Furnish for review by Billings, three copies of the Drawings and Specifications, assembled drafts of Construction Contract Documents, the draft bidding-related documents, and an updated opinion of probable Construction Cost in accordance with the schedule included in Appendix E. A full size set (22"x34") of the Drawings will also be furnished.
 - b. Submit three copies of the Final Drawings and Specifications and bidding-related documents a design report, certified sewer checklist and review fees to the Montana Department of Environmental Quality (MDEQ) for approval.
 - c. Schedule and attend a design meeting with Billings to review the 90% Final Design Phase deliverables. Within 7 calendar days of the design review meeting, Billings shall submit to Engineer any comments regarding the furnished items.
 - d. Incorporate comments and instructions from Billings and the MDEQ into the 100% Drawings and Specifications, assembled drafts of other Construction Contract Documents, the draft bidding-related documents, and any other Final Design Phase deliverables.

10. Furnish Billings three copies of the 100% Drawings and Specifications, Construction Contract Documents, bidding-related documents, and final opinion of probable Construction Cost in accordance with the schedule included in Appendix E. A full size set (22"x34") of the Drawings will also be furnished.
11. Plan and facilitate one public information meeting during the Final Design Phase. The final meeting date shall be coordinated with Billings but will most likely be following the 70% design submittal.

- B. The number of prime contracts for Work designed or specified by Engineer upon which the Engineer's compensation has been established under this Contract is one. If more prime contracts are awarded, Engineer shall be entitled to an equitable increase in its compensation under this Contract.

Bidding Phase

- A. After acceptance by Billings of the final Drawings and Specifications, other Construction Contract Documents, bidding-related documents, and the most recent opinion of probable Construction Cost as determined in the Final Design Phase, and upon written authorization by Billings to proceed, Engineer shall:
1. Assist Billings in advertising for and obtaining bids or proposals for the Work.
 2. Issue assembled design, contract, and bidding-related documents to prospective contractors, maintain a record of prospective contractors to which documents have been issued, and receive and process contractor deposits or charges for the issued documents.
 3. Schedule and attend a pre-bid conference and prepare minutes of the conference.
 4. Prepare and issue Addenda as appropriate to clarify, correct, or change the issued documents.
 5. Attend the bid opening, prepare bid tabulation sheets to meet Billings' schedule, and assist Billings in evaluating bids or proposals, assembling final contracts for the Work for execution by Billings and Contractor, and in issuing notices of award of such contracts.
- B. It is anticipated that the bidding phase will be conducted for a period not to exceed 35 calendar days.

Construction Phase

- A. Upon successful completion of the Bidding Phase, and upon written authorization from Billings, Engineer shall:
1. *General Administration of Construction Contract:* Consult with Billings and act as Billings' representative as provided in the Construction Contract. The extent and limitations of the duties, responsibilities, and authority of Engineer shall be as assigned in EJCDC® C-700, Standard General Conditions of the Construction Contract (2007 Edition), prepared by the Engineers Joint Contract Documents Committee as modified by the City of Billings Standard Modifications to the Montana Public Works Standard Specifications (MPWSS), 6th Edition, February 2015 Edition, or other construction general conditions specified in this Contract. If Billings, or Billings and Contractor, modify the duties, responsibilities, and authority of Engineer in the Construction Contract, or modify other terms of the Construction Contract having a direct bearing on Engineer, then Billings shall compensate Engineer for any related increases in the cost to provide Construction Phase

services. Engineer shall not be required to furnish or perform services contrary to Engineer's responsibilities as a licensed professional. All of Billings' instructions to Contractor will be issued through Engineer, which shall have authority to act on behalf of Billings in dealings with Contractor to the extent provided in this Contract and the Construction Contract except as otherwise provided in writing.

2. *Selection of Independent Testing Laboratory:* Retain an independent testing laboratory, as approved by Billings, to perform quality assurance testing. The Contractor will be responsible for all testing related to quality control.
3. *Pre-Construction Conference:* Participate in a pre-construction conference prior to commencement of Work at the Site.
4. *Electronic Transmittal Protocols:* If the Construction Contract Documents do not specify protocols for the transmittal of Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, then together with Billings and Contractor jointly develop such protocols for transmittals between and among Billings, Contractor, and Engineer during the Construction Phase and Post-Construction Phase.
5. *Schedules:* Receive, review, and determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.
6. *Baselines and Benchmarks:* As appropriate, establish baselines and benchmarks for locating the Work which in Engineer's judgment are necessary to enable Contractor to proceed.
7. *Construction Progress Meetings:* Engineer will coordinate, schedule and facilitate weekly construction progress meetings as needed to be attended by the Contractor, Owner and Owner's representatives, Engineer, RPR and any other interested parties.
8. *Visits to Site and Observation of Construction:* In connection with observations of Contractor's Work while it is in progress:
 - a. Make visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary, to observe as an experienced and qualified design professional the progress of Contractor's executed Work. Such visits and observations by Engineer are not intended to be exhaustive or to extend to every aspect of the Work or to involve detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Contract and the Construction Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment, as assisted by the Resident Project Representative. Based on information obtained during such visits and observations, Engineer will determine in general if the Work is proceeding in accordance with the Construction Contract Documents, and Engineer shall keep Billings informed of the progress of the Work.
 - b. The purpose of Engineer's visits to the Site will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to

provide for Billings a greater degree of confidence that the completed Work will conform in general to the Construction Contract Documents and that Contractor has implemented and maintained the integrity of the design concept of the completed Project as a functioning whole as indicated in the Construction Contract Documents. Engineer shall not, during such visits or as a result of such observations of the Work, supervise, direct, or have control over the Work, nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to any Constructor's work in progress, for the coordination of the Constructors' work or schedules, nor for any failure of any Constructor to comply with Laws and Regulations applicable to furnishing and performing of its work. Accordingly, Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish or perform the Work, or any portion of the Work, in accordance with the Construction Contract Documents.

9. *Defective Work:* Reject Work if, on the basis of Engineer's observations, Engineer believes that such Work is defective under the terms and standards set forth in the Construction Contract Documents. Provide recommendations to Billings regarding whether Contractor should correct such Work or remove and replace such Work, or whether Billings should consider accepting such Work as provided in the Construction Contract Documents.
10. *Compatibility with Design Concept:* If Engineer has express knowledge that a specific part of the Work that is not defective under the terms and standards set forth in the Construction Contract Documents is nonetheless not compatible with the design concept of the completed Project as a functioning whole, then inform Billings of such incompatibility, and provide recommendations for addressing such Work.
11. *Clarifications and Interpretations:* Accept from Contractor and Billings submittal of all matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation or RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. With reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Construction Contract Documents.
12. *Non-reviewable Matters:* If a submitted matter in question concerns the Engineer's performance of its duties and obligations, or terms and conditions of the Construction Contract Documents that do not involve (1) the performance or acceptability of the Work under the Construction Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Billings and Contractor that Engineer will not provide a decision or interpretation.
13. *Field Orders:* Subject to any limitations in the Construction Contract Documents, Engineer may prepare and issue Field Orders requiring minor changes in the Work.
14. *Change Orders and Work Change Directives:* Recommend Change Orders and Work Change Directives to Billings, as appropriate, and prepare Change Orders and Work Change Directives as required.

15. *Differing Site Conditions*: Respond to any notice from Contractor of differing site conditions, including conditions relating to underground facilities such as utilities, and hazardous environmental conditions. Promptly conduct reviews and prepare findings, conclusions, and recommendations for Billings' use.
16. *Shop Drawings, Samples, and Other Submittals*: Review and approve or take other appropriate action with respect to Shop Drawings, Samples, and other required Contractor submittals, but only for conformance with the information given in the Construction Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the Construction Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Engineer shall meet any Contractor's submittal schedule that Engineer has accepted.
17. *Substitutes and "Or-equal"*: Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor in accordance with the Construction Contract Documents.
18. *Inspections and Tests*:
 - a. Receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Construction Contract Documents. Engineer's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Construction Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Construction Contract Documents. Engineer shall be entitled to rely on the results of such inspections and tests.
 - b. As deemed reasonably necessary, request that Contractor uncover Work that is to be inspected, tested, or approved.
 - c. Pursuant to the terms of the Construction Contract, require special inspections or testing of the Work, whether or not the Work is fabricated, installed, or completed.
19. *Change Proposals and Claims*: (a) Review and respond to Change Proposals. Review each duly submitted Change Proposal from Contractor and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Billings and Contractor. If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer will not resolve the Change Proposal. (b) Provide information or data to Billings regarding engineering or technical matters pertaining to Claims.
20. *Public Involvement Services*: Develop an overall public involvement plan to be used during construction. The plan will include provisions for providing information to the City to be included in monthly newsletters, press releases, and road closure notifications. Weekly updates (figures and narratives) showing updated construction areas and traffic control layouts will be made available for the City to post online and email to affected property owners at their request, as will weekly

construction meeting notes. Additional approvals by the City of Billings may be required for release of public involvement plan materials to the public.

21. *Applications for Payment:* Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:
 - a. Determine the amounts that Engineer recommends Contractor be paid. Recommend reductions in payment (set-offs) based on the provisions for set-offs stated in the Construction Contract. Such recommendations of payment will be in writing and will constitute Engineer's representation to Billings, based on such observations and review, that, to the best of Engineer's knowledge, information and belief, Contractor's Work has progressed to the point indicated, the Work is generally in accordance with the Construction Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Construction Contract Documents, and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work. In the case of unit price Work, Engineer's recommendations of payment will include final determinations of quantities and classifications of the Work (subject to any subsequent adjustments allowed by the Construction Contract Documents).
 - b. By recommending payment, Engineer shall not thereby be deemed to have represented that observations made by Engineer to check the quality or quantity of Contractor's Work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Contract. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment including final payment will impose on Engineer responsibility to supervise, direct, or control the Work, or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on Engineer to make any examination to ascertain how or for what purposes Contractor has used the money paid to Contractor by Billings; to determine that title to any portion of the Work, including materials or equipment, has passed to Billings free and clear of any liens, claims, security interests, or encumbrances; or that there may not be other matters at issue between Billings and Contractor that might affect the amount that should be paid.
22. *Contractor's Completion Documents:* Receive from Contractor, review, and transmit to Billings maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Construction Contract Documents, certificates of inspection, tests and approvals, and Shop Drawings, Samples, and other data approved as provided under Paragraph 15. Receive from Contractor, review, and transmit to Billings the annotated record documents which are to be assembled by Contractor in accordance with the Construction Contract Documents to obtain final payment. The extent of

Engineer's review of record documents shall be to check that Contractor has submitted all pages.

23. *Substantial Completion:* Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with Billings and Contractor, visit the Site to review the Work and determine the status of completion. Follow the procedures in the Construction Contract regarding the preliminary certificate of Substantial Completion, punch list of items to be completed, Billings' objections, notice to Contractor, and issuance of a final certificate of Substantial Completion. Assist Billings regarding any remaining engineering or technical matters affecting Billings' use or occupancy of the Work following Substantial Completion.
 24. *Final Notice of Acceptability of the Work:* Conduct a final visit to the Project to determine if the Work is complete and acceptable so that Engineer may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, Engineer shall also provide a notice to Billings and Contractor that the Work is acceptable to the best of Engineer's knowledge, information, and belief, and based on the extent of the services provided by Engineer under this Contract.
 25. *Standards for Certain Construction-Phase Decisions:* Engineer will render decisions regarding the requirements of the Construction Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth in the Construction Contract for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Billings or Contractor, and will not be liable to Billings, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.
- B. Engineer shall furnish a Resident Project Representative ("RPR") to assist Engineer in observing progress and quality of the Work. The RPR will provide full time representation and inspection during any major items of work including utility installation, excavation, trench backfill, subgrade preparation, base-course preparation, concrete installation, and asphalt placement. RPR is Engineer's representative at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions.
1. The duties and responsibilities of the RPR are as follows:
 - a. *General:* RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Billings only with the knowledge of and under the direction of Engineer.
 - b. *Schedules:* Review the progress schedule, schedule of Shop Drawing and Sample submittals, schedule of values, and other schedules prepared by Contractor and consult with Engineer concerning acceptability of such schedules.
 - c. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.

- d. *Safety Compliance:* Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
- e. *Liaison:*
 - i. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Construction Contract Documents.
 - ii. Assist Engineer in serving as Billings' liaison with Contractor when Contractor's operations affect Billings' on-Site operations.
 - iii. Assist in obtaining from Billings additional details or information, when required for proper execution of the Work.
- f. *Clarifications and Interpretations:* Receive from Contractor submittal of any matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation or RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. Report to Engineer regarding such RFIs. Report to Engineer when clarifications and interpretations of the Construction Contract Documents are needed, whether as the result of a Contractor RFI or otherwise. Transmit Engineer's clarifications, interpretations, and decisions to Contractor.
- g. *Shop Drawings and Samples:*
 - i. Record date of receipt of Samples and Contractor-approved Shop Drawings.
 - ii. Receive Samples that are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
 - iii. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal, if RPR believes that the submittal has not been received from Contractor, or has not been approved by Contractor or Engineer.
- h. *Proposed Modifications:* Consider and evaluate Contractor's suggestions for modifications to the Drawings or Specifications, and report such suggestions, together with RPR's recommendations, if any, to Engineer. Transmit Engineer's response (if any) to such suggestions to Contractor.
- i. *Review of Work; Defective Work:*
 - i. Report to Engineer whenever RPR believes that any part of the Work is defective under the terms and standards set forth in the Construction Contract Documents, and provide recommendations as to whether such Work should be corrected, removed and replaced, or accepted as provided in the Construction Contract Documents.
 - ii. Inform Engineer of any Work that RPR believes is not defective under the terms and standards set forth in the Construction Contract Documents, but is nonetheless not compatible with the design concept of the completed Project as a functioning whole, and provide recommendations to Engineer for addressing such Work. ; and

- iii. Advise Engineer of that part of the Work that RPR believes should be uncovered for observation, or requires special testing, inspection, or approval.
- j. *Inspections, Tests, and System Start-ups:*
- i. Consult with Engineer in advance of scheduled inspections, tests, and systems start-ups.
 - ii. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Billings' personnel, and that Contractor maintains adequate records thereof.
 - iii. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
 - iv. Observe whether Contractor has arranged for inspections required by Laws and Regulations, including but not limited to those to be performed by public or other agencies having jurisdiction over the Work.
 - v. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work, record the results of these inspections, and report to Engineer.
- k. *Records:*
- i. Maintain at the Site orderly files for correspondence, reports of job conferences, copies of Construction Contract Documents including all Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Construction Contract, RFIs, Engineer's clarifications and interpretations of the Construction Contract Documents, progress reports, approved Shop Drawing and Sample submittals, and other Project-related documents.
 - ii. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, Subcontractors present at the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, deliveries of equipment or materials, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.
 - iii. Upon request from Billings to Engineer, photograph or video Work in progress or Site conditions.
 - iv. Record and maintain accurate, up-to-date lists of the names, addresses, fax numbers, e-mail addresses, websites, and telephone numbers (including mobile numbers) of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
 - v. Maintain records for use in preparing Project documentation.
 - vi. Upon completion of the Work, furnish original set of all RPR Project documentation to Engineer.

- vii. Record the location of all underground utilities encountered and show these utilities on the project record drawings.
- I. *Reports:*
 - i. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
 - ii. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
 - iii. Furnish to Engineer and Billings copies of all inspection, test, and system start-up reports.
 - iv. Immediately inform Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, possible force majeure or delay events, damage to property by fire or other causes, or the discovery of any potential differing site condition or Constituent of Concern.
 - m. *Payment Requests:* Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.
 - n. *Certificates, Operation and Maintenance Manuals:* During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Billings prior to payment for that part of the Work.
 - o. *Completion:*
 - i. Participate in Engineer's visits to the Site regarding Substantial Completion, assist in the determination of Substantial Completion, and prior to the issuance of a Certificate of Substantial Completion submit a punch list of observed items requiring completion or correction.
 - ii. Participate in Engineer's visit to the Site in the company of Billings and Contractor, to determine completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.
 - iii. Observe whether all items on the final punch list have been completed or corrected, and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work (Exhibit E).
2. Resident Project Representative shall not:
 - a. Authorize any deviation from the Construction Contract Documents or substitution of materials or equipment (including "or-equal" items).
 - b. Exceed limitations of Engineer's authority as set forth in this Contract.

- c. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers, or any Constructor.
 - d. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of the Work, by Contractor or any other Constructor.
 - e. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Billings or Contractor.
 - f. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
 - g. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
 - h. Authorize Billings to occupy the Project in whole or in part.
- C. For purposes of estimating cost for the Construction Phase services, it is assumed that the construction of the project will last eight weeks (or 40 working days), and the RPR time has been based upon eight hours per working day for the duration of the construction.

Post-Construction Phase

- A. Upon written authorization from Billings during the Post-Construction Phase, Engineer shall:
- 1. Prepare record drawings based upon RPR records and Contractor's red lines and submit to Billings for review.
 - 2. Modify and/or update record drawings based upon review comments received from Billings.
 - 3. Submit two sets of final record drawings to Billings and MDEQ, along with final certification of project.
 - 4. Together with Billings, visit the Project to observe any apparent defects in the Work, make recommendations as to replacement or correction of defective Work, if any, or the need to repair of any damage to the Site or adjacent areas, and assist Billings in consultations and discussions with Contractor concerning correction of any such defective Work and any needed repairs.
 - 5. Together with Billings, visit the Project within one month before the end of the Construction Contract's correction period to ascertain whether any portion of the Work or the repair of any damage to the Site or adjacent areas is defective and therefore subject to correction by Contractor.
- B. The Post-Construction Phase services may commence during the Construction Phase and, if not otherwise modified, will terminate twelve months after the commencement of the Construction Contract's correction period.

Appendix B

Methods and Times of Payment

W.O. 16-01, Schedule 4, South Side Sanitary Sewer Replacement Project

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.

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 \$132,000.00 (one hundred twenty eight thousand and 00/100 dollars) based on the following tasks:

Preliminary Design Phase	\$ <u>28,000.00</u>
Final Design Phase	\$ <u>26,000.00</u>
Bidding Phase	\$ <u>7,500.00</u>
Construction Phase	\$ <u>65,000.00</u>
Post Construction Phase	\$ <u>5,500.00</u>

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

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

Work requests made or conditions identified by interested groups at the agency or public meetings which are beyond the scope and intent of this project shall be paid for on an hourly basis at the applicable fees in Appendix D or by an addendum to the agreement.

Section 3. Corrections.

Costs of Billings' work that is required for the purpose of correcting the Engineer's work 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. 15-01, Schedule 4, South Side Sanitary Sewer Replacement Project

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

- A. Requests made or conditions identified which are beyond the scope and intent of the services identified under Appendix A.

Appendix D

Schedule of Professional Fees

W.O. 16-01, Schedule 4, South Side Sanitary Sewer Replacement Project

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.

Rate changes may be made to the fee schedule by the Engineer to reflect increased salaries and other business costs. Engineer shall submit a revised rate schedule at the time of the change if requested by the Owner. Rate schedule changes made by the Engineer during the term of this Contract shall not alter the maximum project professional fee set forth in the Contract. Changes that alter the maximum project professional fee are covered in Appendix B.

The cost of Professional Liability Insurance coverage is included in the hourly rates of personnel.

Appendix E

Project Schedule

W.O. 16-01, Schedule 4, South Side Sanitary Sewer Replacement Project

Based on a notice to proceed by Billings date no later than October 13, 2015, the completion date for the Engineer's work through final design shall be:

1. Preliminary Engineering Services (30% Design): December 4, 2015
2. Preliminary Engineering Services (70% Design): January 15, 2016
3. Preliminary Engineering Services (90% Design): February 5, 2016
4. Final Engineering Services (100% Design): February 26, 2016
5. Construction Services to be based on Contractor Schedule.

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.

Appendix F

Certificate(s) of Insurance

W.O. 16-01, Schedule 4, South Side Sanitary Sewer Replacement Project

Attach Certificate(s) of Insurance