

AMENDMENT NO. 4

TO

CONTRACT FOR PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES

CITY OF BILLINGS WORK ORDER 16-05,

Central Avenue (Shiloh Road to 32nd Street West) Road Improvements

THIS AGREEMENT, made and entered into on _____, 2018, by and between the following:

CITY OF BILLINGS, a Municipal Corporation,
Billings, Montana 59103,
Hereinafter designated the City

and

DOWL
222 North 32nd Street, Suite 700
Billings, Montana 59101
Hereinafter designated the Contractor

WITNESSETH:

WHEREAS, the City and Contractor have entered into a contract dated December 21st, 2015, for Contractor to provide professional services to the City for Work Order 16-05, and;

WHEREAS, the City has authority to contract for professional services, and;

WHEREAS, the Contractor represents that he is qualified to perform such services, is in compliance with Montana Statutes relating to the registration of professional engineers and is willing to furnish such services to the City;

NOW, THEREFORE, in consideration of the terms, conditions, covenants and performance contained herein, the Parties hereto agree as follows:

Add the following to Appendix A, Section 3, Task 110 – Right-of-Way, Utilities, and Mapping

- 1) Prepare four additional right-of-way exhibits, and one easement exhibit. The original scope assumed DOWL will prepare individual right-of-way exhibits for three parcels where the City will need to add to the existing right-of-way. DOWL created a total of eight exhibits for the City.

Add the following to Appendix A, Section 3, Task 240 – Final Utility Design

- 1) Incorporate future utility service stubs to Eggebrecht property on the west end of the project per the final right-of-way agreement; including four water services, four sanitary sewer services, one water main, and one new fire hydrant. The Addition of the services include coordination with the City, a plan detail, special provisions, and construction cost estimating.
- 2) Relocate the MSU-B water meter vault. The location and grade of the proposed roundabout intersection treatment at 38th Street West conflicted with the existing water meter vault. The relocation of the water meter vault includes a field review, coordination with the City, coordination with MSUB facilities personnel, a plan detail, special provisions, and construction cost estimating.

Add the following to Appendix A, Section 3, Task 360 – Final Design Package

- 1) Incorporate future driveway access points to Eggebrecht property, Lyndes property, and the Homestead Capital property per the final right-of-way agreements. Incorporate driveway access to Shiloh Commons per approved development plans. The addition of the driveways includes updating the road corridor model, adding approach details to the plans, and construction cost estimating.

Add the following to Appendix A, Section 3

Task 600 – Construction Administration & Materials Testing

This amendment scope and the associated professional fee assume:

- One construction contract and one prime contractor for this project, with a construction contract duration of 150 calendar days. RPR time assumes 180 calendar days to cover an extended contract length or the need for two RPRs.
- Engineer shall consult with the City and act as representative for the City as defined in the construction contract documents, which will incorporate the MPWSS, and specifically the General Conditions contained therein as modified by the City of Billings Standard Modifications, latest edition.
- The extent and limitation of the duties, responsibilities, and authority of the Engineer will be as assigned in the construction contract documents and shall not be modified, except as Engineer may otherwise agree in writing.

1) Pre-Construction Services

- a. Attend a pre-construction conference, publish meeting minutes, and answer contractor questions. Conduct a pre-construction field review with the contractor as necessary.
- b. Take pre-construction photos and videos of the project areas.

- c. Attend a “Meet the Contractor” public meeting. The contractor will schedule and conduct the meeting.
- 2) Submittal Review – Review contractor's submittals, such as shop drawings, samples, equipment, mix designs, aggregates, and other data, for conformance to the contract documents. This review does not include acceptance review of any dewatering plans, and shall not extend to contractor's means, methods, techniques, sequences, procedures, or safety programs.
- 3) Inspection – Provide full-time construction observation utilizing a Resident Project Representative (RPR) to assist the Engineer in observing progress, quality of work, and conformance to the contract documents and other applicable codes and standards. One (1) full-time RPR will be on-site for 50 hours per week, 5 days a week for 26 weeks. Inspection activities will include review of all major work items in the construction documents, including traffic control set-ups and sediment and erosion control plans. The RPR will prepare daily inspection reports, daily quantity summaries, weekly progress reports, weekly workforce and equipment reports, and other reports as required. RPR responsibilities are further defined in the General Conditions contained in the City of Billings Standard Modifications, latest edition.
- 4) Quality Assurance Testing – Develop and implement a quality assurance testing plan for materials testing in accordance with the City of Billings Standard Modifications, latest edition. DOWL will conduct a pre-construction testing meeting with RPRs, field testing personnel, and lab manager to coordinate testing requirements. DOWL will provide qualified personnel, equipment, and supplies for field testing of materials throughout construction. Monitor and collect results from contractor's separate quality control materials testing program. Monitor and collect results from contractor's separate quality control materials testing program.
- 5) Construction Administration
 - a. Respond to contractor requests for information. Issue necessary clarifications and interpretations of the contract documents. Notify the City immediately of any contract problems or deviations from the approved contract documents. Issue notices as required by the construction contract. Recommend and prepare Work Change Directives and Change Orders for the City as necessary. Change orders that require additional design or construction services by Engineer will be considered Additional Services and compensated in accordance with the provisions of this Contract.
 - b. 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 work. Visits by the Engineer shall be limited to spot checking and similar methods of general observation of the work as assisted by the RPR.
 - c. Receive, review, and transmit to City all contractor requests for City staff involvement and approvals, such as valve and hydrant operation requests, water quality sampling requests, traffic control reviews, etc. Assure required advance

notice requirements are being met by contractor for all requests to the City for reviews, inspections, operations, and testing.

- d. Review and recommend monthly contractor payment requests.
- 6) Weekly Construction Meetings – Schedule, attend and conduct a weekly construction meeting with the City and contractor. Allow up to 3 hours per week for the weekly construction meeting and any related follow-up activities.
- 7) Website & Email Updates – Prepare weekly website and email informational update content, including current project maps and work descriptions. The City will host and maintain the website, with content provided by the Engineer. The Engineer will collect email addresses from mailing and meeting responses, and disseminate the same content to the email list.
- 8) Substantial Completion Services – Conduct substantial completion and final inspections with City and Contractor. Prepare and monitor punchlist items required for completion of the work by contractor.
- 9) Project Management & Quality Assurance – Provide project management and internal quality assurance throughout this phase, which will generally follow DOWL Operational Excellence procedures.
- 10) Deliverables – The deliverables for this task include:
 - a. Pre-construction meeting minutes
 - b. Pre-construction photos and videos, upon request
 - c. Contractor submittals; electronic copy to City
 - d. Weekly RPR inspection reports, upon request
 - e. Monthly quality assurance materials testing reports, upon request
 - f. Miscellaneous construction forms, as required
 - g. Weekly website and e-mail update content

Task 700 – Construction Staking

Coordination and Management – Collect survey requests and schedule survey staff to perform work in a timely manner.

- 1) Weekly Construction Meetings – One surveyor to attend weekly construction meetings. Two (2) hours per week for the weekly construction meeting through the contract duration is assumed to cover travel, meeting time and any follow-up activities related to the meeting.
- 2) Set Preliminary Field Control – Control set for topographic survey for design will be verified. Offsets (hub and lath) to baseline will be staked once at 100-foot intervals on one side of the roadway. Baseline offsets will be placed as far away from construction activities as feasible and will show hub elevation, stationing, and appropriate finished grade cut/fills to the roadway section.

- 3) Monumentation – Street monuments have been surveyed as part of the design survey. DOWL will reset street monuments after street reconstruction, providing offsets for monument box installation. Monument boxes and brass cap encased in concrete are to be set by others. DOWL will stamp brass cap and file corner records related to the reset monuments at 36th Street, 34th Street, and 33rd Street.
- 4) Construction Staking – Provide personnel, equipment, and supplies for field staking of principal elements of the construction layout to give the contractor measurements, lines, locations, and grade necessary for construction. DOWL will stake the following construction activities once for the project.
 - a. Slope staking and street baseline staking at 50-foot intervals.
 - b. Bluetop top of subgrade at 100-foot intervals on the baseline only.
 - c. Bluetop base course at 50-foot intervals. Bluetopping will be baseline only as the curb and gutter will set the edge elevations.
 - d. Curb and gutter staking (all types) at 25-foot intervals 2-foot offset to back of curb, PCs, PTs, and critical vertical geometry.
 - e. Driveway/approach horizontal staking.
 - f. ADA Ramp horizontal staking of curves, tangents, and radius points.
 - g. Control for paving shall be provided by the Contractor.
 - h. Storm Drain – Stake manholes and inlets only, and provide temporary benchmarks adjacent to the work.
 - i. Sanitary Sewer – Stake manholes only, and provide temporary benchmarks adjacent to the work.
 - j. Water Line – Stake offset pipe centerline and provide vertical benchmark elevation, including identifying new features (valves, fittings, fire hydrants).
 - k. Electrical – stake horizontal position of poles and posts, pull boxes and service points.
 - l. Signing – Stake sign foundation location behind sidewalk by station only. Offset to be determined by others.
 - m. Pavement Marking – Provide sufficient control to complete Work. Control will be provided at beginning and end points and at transition locations. All symbols will be marked at the center of the symbol.
- 5) Deliverables – The deliverables for this task include:
 - a. Contractor Staking Requests, upon request
 - b. Survey Notes, upon request

