

Contract for Professional Architectural and Engineering Services

Work Order 20-12 S 32nd St W (King Ave W to BBWA)

In consideration of the mutual promises herein, City of Billings and DOWL 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 16 pages (Basic Services of Contractor);

Appendix B consisting of 2 pages (Methods and Times of Payment);

Appendix C consisting of 1 page (Additional Services of Contractor);

Appendix D consisting of 5 pages (Schedule of Professional Fees);

Appendix E consisting of 1 page (Project Schedule);

Appendix F consisting of (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 DOWL.

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 August 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: Ken Ard, PE
City of Billings
Public Works - Engineering
2224 Montana Ave
Billings, Montana 59101 FAX: (406) 237-6291

Contractor: DOWL
Doug Enderson, PE, PTOE
Transportation Engineering Manager
222 N. 32nd Street, Suite 700
Billings, MT 59101 FAX: (800) 865-9847

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: Wade Irion, PE, Regional Business Supervisor

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: _____

Title: _____

Date: _____

ATTEST:

IRS Tax ID # _____

City Clerk

APPROVED AS TO FORM:

Date: _____

By _____

BRENT BROOKS, City Attorney

Appendix A

Basic Services of Engineer

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. Contract administration duties will include review of contractor certified payrolls for wage rate compliance. Discrepancies in certified payrolls will be resolved with the

Contractor. A signed Engineer's Payroll Check Sheet (included in the Standard Modifications to MPWSS) will be submitted as proof of this review with one copy of each payroll.

- K. 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 Doug Enderson, PE, PTOE.

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 Ken Ard, PE.

Section 3. Scope of Work.

The following tasks will be undertaken by DOWL (Engineer). Any item not specifically discussed or as otherwise noted are assumed to be a City of Billings (City) responsibility or beyond the services listed in this scope. DOWL assumes that all preliminary tasks will encompass the entire 32nd St W corridor from Gabel Rd to King Ave W and that all pre-final, final, and construction tasks are limited to the 32nd St W corridor between the BBWA canal and King Ave W (with exceptions for the multi-use path and roadway lighting which will extend from Transtech Way to King Ave W).

Task 100 – Project Management and Public Outreach

- 1) Attend project scoping meeting (field and office review) with City personnel.
 - 2) Perform general coordination with the City of Billings to begin project.
 - 3) Investigate available information, documents, and studies.
 - 4) Coordinate and develop public involvement:
 - a. Draft a News Release regarding the start of the project to be submitted to the City for distribution to media outlets and for posting on the City's website.
 - b. Develop an informational letter to be sent by the City to all adjacent property owners within the limits of the corridor. The letter will serve as the initial public outreach for this project.
 - c. Address questions and participate in individual meetings with property owners and City staff, as directed by the City.
 - d. Attend and assist with one (1) public informational meeting:
 - i. Draft a meeting announcement letter for all landowners adjacent to the project corridor to be used by the City.
 - ii. Provide figures and/or electronic presentation materials for the meeting.
 - iii. Monitor sign-in sheets during the meeting.
 - iv. Draft meeting minutes after the meeting.
- Assume City responsibilities include:
- i. Setting up meeting location and time.
 - ii. Advertising all meeting announcements.

- iii. Sending meeting announcement letters to property owners adjacent to the project.
- iv. Moderating the meeting.

Fees associated with advertisements, mailings, or securing meeting locations will be the responsibility of the City.

- 5) Prepare monthly progress reports for the City detailing the work completed that month. The monthly progress reports will be completed and submitted with each monthly invoice for an assumed 24 month contract duration.

Task 100 Deliverables:

- 1. ***Draft News Release***
- 2. ***Property Owner Informational Letter***
- 3. ***Meeting Announcement***
- 4. ***Monthly Progress Reports***

Task 110 – Right-of-Way, Utilities, and Mapping

- 1) All existing and available City right-of-way plans and as-built/record drawings applicable to this project will be provided by the City.
- 2) Acquire available plats and certificates of survey to develop property lines to determine the location of the existing right-of-way within the corridor; a recorded Certificate of Survey for a retracement of public right-of-way is not included in this scope of services.
- 3) Survey property controlling corners (e.g. section corners, quarter corners, centerline monument boxes) along the corridor and property corners along the corridor that can be searched and tied with minimal effort. Property corners that are not found will not be reset.
- 4) Provide up to six (6) right-of-way exhibits. One assuming the City will need to add to the existing right-of-way for construction north of the King Ave W, and five (5) south of the canal on the east side of 32nd Street.
- 5) An ownership report listing current property ownership adjacent to the project corridor will be provided by the City. The information will be included on the plan sheets to identify addresses and owners of each parcel along the corridor. The ownership report will serve as a framework for both the public outreach as well as the identification of right-of-way needs.
- 6) Set, tie, level, and process new survey control for the project, spaced at approximately 1000' intervals for the length of the project. Control points will be set in the field as nails glued into concrete or as rebar with aluminum caps. This scope of this task does not include relocating or resetting survey control after it is installed.
- 7) Use the following coordinate system parameters unless directed otherwise by the City:
 - a. Montana State Plane (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.

Provide coordinate listings of benchmarks and control stations for new and existing survey control in the design plans.

- 8) Survey and map 32nd St. W. from the Gabel Road intersection on the south end of the project to the Rosebud Drive intersection on the north end using a combination of total station and GPS survey equipment. Conduct the ground survey from right-of-way to right-of-way and 150-ft up each side street within the project limits. Ground survey outside of the right-of-way will be conducted at specific locations as necessary where additional topography is needed for driveway connections, special landscape features, right-of-way to be acquired etc. The project informational letter sent to property owners as part of Task 100 will inform property owners that DOWL surveyors will be in the area and may be on private property.
- 9) Coordinate with the City and private utility companies for the location, type, and size of their utilities within the project corridor. In addition to storm water features in the project corridor, survey will include upstream and downstream hydraulic facilities associated with the Hogans Slough culvert crossings. Utility information for the project will be determined through utility-provided atlas mapping, Montana One Call, and surface features as marked or indicated by the respective owners. The City will be notified of any non-responsive utility companies.
- 10) Coordinate exploratory excavation (soft digging), as necessary, to expose underground utilities in perceived or potential conflict areas. Provide one (1) surveyor for up to eight (8) hours to survey exposed utilities.
- 11) Schedule and conduct up to two (2) meetings with all private utility owners, one after each plan review submittal (Task 160 and Task 260). A representative from each applicable utility company will be invited to the meeting and potential conflicts will be highlighted and discussed. The purpose of the meetings will be to proactively encourage rehabilitation or relocation of the utilities in conflict prior to construction.

Task 120 – Preliminary Geotechnical and Materials

- 1) Review available geotechnical information provided by the City and research/review regional geology, soil survey, site setting, and topography.
- 2) Conduct a site investigation including field exploration, borings, and laboratory testing for the project:
 - a. Facilitate and drill nine (9) borings approximately every 500 feet to depths ranging from 5 to 20 feet. Single-lane closure traffic control will be necessary during exploration.
 - b. One of the nine borings will be located near the existing gas station at the intersection of King Ave W to screen for potential for hydrocarbon contaminated soils with a photoionization device (PID). One of the nine borings will be located over new trail location south of canal bridge.
 - c. Perform laboratory testing including classification (gradation & Atterberg Limits), moisture content, Proctor, California bearing ratio (CBR); and corrosion tests.
 - d. Identify groundwater levels encountered at the time of field exploration.

- 3) Visually inventory existing surfacing throughout the project area to estimate what sections of roadway, if any, can be reused. Up to five (5) pavement cores will be collected to supplement this review if utility mapping precludes geotechnical drilling.
- 4) Use City-supplied traffic data (AADT, vehicle classifications) to develop a preliminary surfacing design for approval by the City. Additionally, evaluate an option to perform full depth reclamation to use existing pavement materials.
- 5) Prepare the Preliminary Geotechnical Technical Memorandum including review of the existing data, surfacing evaluation, subsurface exploration, laboratory testing, and preliminary surfacing design. One (1) hard copy and one (1) PDF copy of the memo will be issued to the City.

Task 120 Deliverables:

1. Preliminary Geotechnical Memorandum

Task 130 – Preliminary Traffic

- 1) Intersection turning movement counts at 32nd St. W./King Ave. W. and 32nd St. W./Henesta Dr. along with available crash and annual average daily traffic (AADT) for the 32nd St. W. corridor between King Ave. W. and Gabel Rd will be provided by the City.
- 2) All existing and available as-built/record drawings for the existing signals and street lights at 32nd St. W./King Ave. W. and 32nd St. W./Gabel Rd. will be provided by the City.
- 3) Prepare the Preliminary Traffic Report:
 - a. Evaluate traffic safety and traffic operations at the 32nd St. W./King Ave. W. and 32nd St. W./Henesta Dr.:
 - i. Review historic crash data at the intersections.
 - ii. Evaluate the need for intersection improvements based on existing and design year traffic volumes during the AM, PM, and mid-day peak hours.
 - iii. Analyze impact of adding raise median to control access at 32nd St. W./Henesta Dr. intersection.
 - iv. Provide recommendations for the cross-section design on 32nd St. W., based on historic based on crash data and design year AADT.
 - b. One (1) hard copy and one (1) PDF copy of the Preliminary Traffic Report will be issued to the City.
- 4) Inventory existing signing along the corridor within the project limits.
- 5) Develop preliminary pavement marking plans as part of Task 160.
- 6) Layout roadway lighting to include spacing, height, and mast-arm lengths along 32nd St. W. from Gabel Rd. to King Ave. W. Review existing street lighting along 32nd St. W. from Gabel Rd. to Transtech Way for incorporation into the overall lighting design/layout.
- 7) Design preliminary 32nd St. W./King Ave. W. intersection signal modifications based on the results of the Preliminary Traffic Report.
 - a. Review the record drawing information for the intersection signals and field verify that the record drawing information is accurate; and
 - b. Layout modifications within existing/proposed right-of-way meeting all MUTCD, ADA, and City of Billings design requirements.

Task 130 Deliverables:

1. Preliminary Traffic Report

Task 140 – Preliminary Utility Design

- 1) North of BBWA Canal: Coordinate with Public Works for the extension of approximately 300 LF of new water and sanitary sewer mains further south in 32nd St. W. The extensions will include new water and sanitary sewer service stubs for future service to the vacant parcel on the east side of 32nd St. W. Main and service sizing, along with other applicable design criteria, will be coordinated with Public Works. Hydraulic modeling, field flow metering, or other detailed pipe sizing analyses are not included in this scope. In addition to the sewer main extension, investigate the construction requirements for eliminating the parallel 8-inch sewer main between MH 151-5 & 151-7 and present the findings to Public Works.
- 2) South of BBWA Canal: Coordinate with Public Works for the extension of approximately 400 LF of new 8-inch diameter water and 8-inch diameter sanitary sewer mains further north in 32nd St. W., terminating just south of Hogans Slough. The extensions will include new water and sanitary sewer service stubs for future service to the county parcels on the east side of 32nd St. W. New mains will be sized to match existing pipe diameters at the connection points. Service sizing and other applicable design criteria will be coordinated with Public Works. Hydraulic modeling, field flow metering, or other detailed pipe sizing analyses are not included in this scope.
- 3) Coordinate with Public Works for the design of any additional water system modifications that result from the acquisition of additional right-of-way or the placement of proposed surface improvements. It is expected that this task will include the relocation of certain hydrants, service valves, and other water system features that may be located near the right-of-way boundary. It is assumed that design for this item will consist primarily of a standard detail and location table for each relocation type. This scope does not include replacement of any existing water or sanitary sewer mains along the project corridor.
- 4) Acquire from the City all available as-builts, water and sewer service line records, CCTV inspections, and other information and studies as applicable. Incorporate available information into design drawings and specifications.
- 5) Design of water and sewer main alignments, profiles, and related improvements, to a 30% design level, are to be included in the preliminary roadway submittal (Task 160). Trenchless construction alternatives will not be evaluated, as the characteristics of the water and sewer work associated with this project are not favorable for cost effective trenchless construction.
- 6) Geotechnical engineering information including field sampling, laboratory testing and review of subsurface soils gathered under Task 120 will be used to determine design alternatives, subgrade treatment, groundwater conditions, pipe material selections, and foundations for utility installations.

Task 150 – Preliminary Hydraulics

- 1) Perform a stormwater drainage study for the 32nd St. W. corridor from the BBWA canal to King Ave. W. The existing 32nd St. W. storm drain above the BBWA canal discharges into the King Ave. W. storm drain system. An intermediate level evaluation of the entire King Ave. W. storm drain system will be performed to verify that the additional drainage area contributing to this system will not increase flooding hazards. The study area for this project includes the storm drain facilities on King Ave. W. from Shiloh Rd. to the connection of the 60-inch RCP in Bannister Drain as well as the small storm drain stubs connecting to the main trunkline including the existing storm drain along 32nd St. W. Existing storm drain located below the BBWA canal discharges into Hogans Slough and the Gabel Rd. storm drain system. Evaluation of the future impacts on the Gabel Road storm drain system is not included in this scope of services.
- 2) Identify existing flooding issues along the project area, including interviews with City of Billings maintenance personnel to understand existing drainage patterns and problems.
- 3) We assume that the existing bridge over the BBWA is adequate and no hydraulic analysis or coordination with the BBWA will be required for the stormwater design.
- 4) Compile and review storm drainage reports and as-built drawings provided by the City of Billings. Projects include P_428, P_474_P1, SID_1379, SID_1356, and WO_1988_08, and any others within the study area.
- 5) Visit the site to inventory the existing storm drain facilities and verify facilities depicted on the GIS maps and identify flow patterns.
- 6) Identify and evaluate drainage basins, drainage patterns, and basin characteristics within the study area (on-site visual inspection).
- 7) Develop a stormwater model of the area to reflect existing conditions drainage patterns.
- 8) Perform a drainage evaluation for the north segment only (BBWA canal to King Ave. W.) of the 32nd St. W. corridor looking at connecting a new storm drain system into the King Ave. W. storm drain.
- 9) Use the stormwater model to size the new storm drain system along the north segment of 32nd St. W., including sizing and locating inlets, determining the storm drain pipe sizing, downstream storm drain capacities, and evaluating flood hazards along the King Ave. W. corridor.
- 10) Design water quality treatment facilities throughout the project corridor anticipating that one mechanical treatment device will be designed for the north segment of 32nd St. W.
- 11) Investigate the potential of installing underground storage adjacent to the roadway under the boulevard and multi-use path if downstream capacity in the King Ave. W. storm drain system becomes an issue.
- 12) Evaluate the Hogans Slough crossing using HEC-RAS to determine the existing culvert capacity; evaluation will include a culvert inspection to understand the condition of the existing pipe and the potential of extending the existing culvert. Determine the design flow rate for the Hogans Slough crossing using the culvert capacities under the

BBWA canal near the Scheels site along with drainage area runoff below this crossing. Evaluate 2 to 3 alternatives for a replacement crossing. It is assumed that there may need to be improvements downstream of the crossing in the adjacent Albrecht property to facilitate a crossing that can pass the design flow. Provide recommendation of these improvements to the City of Billings for the future project segment.

- 13) Develop a memorandum discussing the stormwater design for 32nd St. W. between the BBWA canal and King Ave. W. and potential improvements and flooding risks. One (1) hard copy and one (1) PDF copy of the preliminary storm drain memorandum will be issued to the City.
- 14) Develop preliminary plan and profile SD alignment for the preliminary roadway design submittal (Task 160). Storm drain details including lateral profiles and structural details will be provided under Task 250.
- 15) Access the Montana Department of Transportation (MDT) Bridge Management System (online) and download the most recent routine bridge inspection data and any load rating analysis for completing the bridge inspection and preparing the load rating analysis. Perform field bridge inspection to verify routine bridge inspection data. Findings of the inspection will be summarized in a formal report for the City of Billings and MDT's review and record.

Task 150 Deliverables:

1. **Preliminary Storm Drain Memorandum**
2. **Bridge Inspection Report**

Task 160 – Preliminary Roadway Design and Plan Review

- 1) The proposed cross section will be a three-lane principal arterial with one driving lane in each direction and a center two-way left-turn lane or raised median as described in the City's subdivision regulations. A detached ten-foot multi-use path will be designed on the west side of 32nd St. W. Proposed widths will accommodate all improvements within the existing right-of-way.
- 2) DOWL will develop a preliminary design along 32nd St. W. from Gabel Rd. to King Ave. W. that will include the following:
 - a. Strip Plot. The strip plot will include the:
 - i. Proposed horizontal and vertical alignment (plan and profile)
 - ii. Proposed construction limits
 - iii. Preliminary sanitary sewer main rehab alignment (Task 140)
 - iv. Preliminary storm drainage alignment (Task 150)
 - v. Preliminary pavement markings
 - vi. Intersection improvements (preliminary layout of signal only)
 - vii. Roadway Lighting
 - viii. Existing right-of-way
 - ix. Proposed right-of-way as necessary
 - x. Existing utilities
 - b. Plan Sheets. Plan sheets will contain:

- i. Typical section(s)
 - ii. Preliminary traffic signal layout (Task 130)
 - c. Preliminary quantities and opinion of probable construction cost
- 3) Perform Quality Assurance and Quality Control practices during the preliminary design and especially prior to preliminary plan review meeting.
- 4) Conduct an “over-the shoulder” plan review meeting with City staff to discuss the preliminary plan package. Document the City’s comments during the “over-the-shoulder” plan review meeting and distribute to the City.
- 5) Create roadway, storm drain, and utility rehabilitation plan sheets along 32nd St. W. from the BBWA canal to King Ave. W. and electrical plans along 32nd St. W. from the TransTech Way to King Ave. W. for distribution to the private utility companies on the project. One (1) copy of the preliminary plans will be sent to each private utility company for their review and comment.

Task 160 Deliverables:

- 1. ***Preliminary Design Package***
- 2. ***Opinion of Probable Construction Costs***
- 3. ***Utility Submittal***

Task 220 – Final Geotechnical and Materials

- 1) Develop final surfacing design recommendations based on City’s comments to the preliminary geotechnical memorandum and design considerations developed in Task 160.
- 2) Submit a final geotechnical memorandum to the City for their record and to be included in the final construction documents. One (1) hard copy and one (1) PDF copy of the memo will be issued to the City.

Task 220 Deliverables:

- 1. ***Final Geotechnical Memorandum***

Task 230 – Final Traffic

- 1) Prepare pavement marking detail sheets and plan sheets for the Pre-Final Design Package.
- 2) Prepare signing detail sheets, D3 format sheets, and signing plan sheets for the Pre-Final Design Package.
- 3) Prepare a traffic signal modification plan for the traffic signal poles at the 32nd St. W./King Ave. W. intersection. The modifications will include:
 - a. Traffic Signal Plan sheet to include a plan view layout of the intersection, conduit and wire schedule, traffic signal and pole schedule, the current phase diagram, signal and pedestrian indication table, conduit run designation table, loop detector wiring schematic and general notes necessary for the modification.

- b. Utility Plan sheet that depicts the assumed location of existing utilities and/or the proposed relocation of existing utilities relative to the proposed relocation of the traffic signal equipment.
 - c. Standard detail sheets in accordance with standard City of Billings and MDT traffic signal details. All other information will be referenced to the original design plans for the signal.
- 4) Calculate conduit fill to ensure compliance with NEC or other City of Billings requirements and submit the results to the City.
 - 5) Prepare roadway lighting detail sheets and plan sheets for the Pre-Final Design Package.
 - 6) Prepare Northwestern Energy's (NWE) Application for New Service for the roadway lighting and submit to the City. The City will submit the application to NWE and coordinate the service installation with NWE.
 - 7) Develop preliminary specifications and construction cost estimates for traffic related items for the Pre-Final Design Package.
 - 8) Develop a traffic control special provision to provide guidance to the construction contractor. The construction contractor will develop and submit a proposed traffic control plan based on their proposed project sequencing.

Task 230 Deliverables:

- 1. Conduit Fill Compliance Calculations***
- 2. Application for New Service***

Task 240 – Final Utility Design

- 1) Incorporate PUD and City comments pertaining to the preliminary design package and prepare new water and sanitary sewer main extension plan and profile sheets, parallel sewer elimination details (if necessary), and miscellaneous water system relocation details for the Pre-Final design package.
- 2) Prepare project specifications, details, special provisions, quantities, and probable constructions costs for water and sewer system work to be incorporated into the Pre-Final Design Package.
- 3) Include existing and proposed private utilities to the plan set as provided by the private utility companies. The scope of services does not include design or engineering for the relocation of private utilities.
- 4) Prepare a water and sewer system project design report for the City, and as required for Montana Department of Environmental Quality (MDEQ) approval. Submit construction documents, the design report, and related checklist materials for approval by MDEQ. All MDEQ review fees will be paid by the City.
- 5) Construction stormwater permits shall be the responsibility of the construction Contractor and are excluded from this scope.

Task 240 Deliverables:

- 1. Water and Sewer Main Design Report***
- 2. MDEQ Submittal Package***

Task 250 – Final Hydraulics

- 1) Finalize the hydraulic design of the storm drain systems in 32nd St. W. by incorporating City comments.
- 2) Develop storm drain lateral details based on known and assumed utility locations. Should soft digs be determined to be necessary prior to the initial construction work, DOWL will coordinate with the City to address the work.
- 3) Prepare project specifications, details, special provisions, quantities, and probable construction costs for storm drain construction to be incorporated into the Pre-Final Design Package.
- 4) Complete a load rating analysis of the bridge using the AASHTO Manual for Bridge Evaluation and AASHTO Bridge Ware BRR load rating software. Findings of past inspection reports, the results of DOWL's inspection completed under Task 150, and the dead load effect of the proposed asphalt wearing course and any new traffic/pedestrian barrier rails will be incorporated into the load rating model. Live loads to be included in the load rating consist of AASHTO HL-93, typical legal loads (Type 3, Type 3S2 and Type 3-3), and SUV's of weights ranging from 27 tons to 40 tons.

Task 250 Deliverables:

1. ***Final Hydraulics Report***
2. ***Results of the Bridge Load Rating Analysis***

Task 260 – Pre-Final Design and Review

- 1) Incorporate the City's preliminary design package comments into the Pre-Final Design Package, including modifications to the plan, profile, typical sections and cross sections.
- 2) Develop demolition plans to identify removal items or items to be adjusted. Tree removals will be identified; however, the final determination of tree removal will be identified by City field personnel prior to construction.
- 3) Identify private property landscape restoration. Restoration may include sodding, seeding, or stockpiling and replacing existing landscape treatments. This scope does not include the design of irrigation system replacements on private property or landscape-specific plan sheets.
- 4) Develop construction plans for a Pre-Final Design Package for the City's review. Plans will include:
 - a. Cover sheet;
 - b. Sheet Index, Legend and Notes sheet;
 - c. Typical sections;
 - d. Miscellaneous Detail sheets (including retaining wall details, if needed);
 - e. Demolition sheets;
 - f. Roadway Sheets (plan and profile, intersection details, driveway details);
 - g. Storm drain sheets;
 - h. Water sheets;
 - i. Sanitary sewer sheets;
 - j. Bridge sheets;
 - k. Electrical sheets;

- l. Pavement marking sheets;
 - m. Signing sheets; and
 - n. Roadway cross section sheets.
- 5) Perform Quality Assurance and Quality Control practices during the Pre-Final design and especially prior to Pre-Final design package submittal.
 - 6) Develop a Pre-Final project manual. The project manual will include project specifications and special provisions based on the current edition of the Montana Public Works Standard Specifications (MPWSS) and City of Billings Standard Modifications to the MPWSS.
 - 7) Prepare a Pre-Final Opinion of Probable Construction Cost.
 - 8) One (1) copy of the Pre-Final Plans will be sent to each private utility company for their review and comment.

Task 260 Deliverables:

1. **Pre-Final Plans**
2. **Pre-Final Project Manual**
3. **Pre-Final Opinion of Probable Construction Cost**

Task 360 – Final Design Package

- 1) Attend a comment resolution meeting with City staff to discuss the City's Pre-Final design comments. Develop a comment response matrix to formally address City comments.
- 2) Prepare final design plans by incorporating the City's Pre-Final comments.
- 3) Prepare the final project manual by incorporating the City's Pre-Final comments.
- 4) Prepare the final opinion of probable construction costs by incorporating the City's Pre-Final comments.
- 5) Perform Quality Assurance and Quality Control practices during the final design and especially before the Final design package submittal.
- 6) Provide the City with one copy of the final plans and project manual to verify all Pre-Final comments were addressed before advertisement.
- 7) After the City's final approval, prepare bid-ready plans and project manual for bid advertisement. The number of copies of plans and project manuals to be produced will be determined by the City of Billings.
- 8) One (1) copy of the final plans will be sent to each private utility company for their use.

Task 360 Deliverables:

1. **Final Construction Plans and Project Manual**
2. **Final Opinion of Probable Construction Cost**

Task 400 – Bidding and Preconstruction Services

- 1) Provide bid advertisement text from the project manual to the City for publication by the City. The City will advertise the project.
- 2) Distribute bid sets, maintain the plan-holders list, and issue addenda and clarifications.

- 3) Attend the pre-bid meeting and assist the City during the pre-bid meeting with questions related to the construction documents. Issue pre-bid meeting minutes within one week after the meeting.
- 4) Tabulate all received bids and provide the City with an award recommendation.

Task 400 Deliverables:

1. **Pre-Bid Meeting Minutes**
2. **Bid Tabulation**
3. **Award Recommendation**

Task 500 – Construction Administration & Materials Testing

- 1) This scope of services assumes:
 - a. One construction contract and one prime contractor for this project, with a construction contract duration of 90 calendar days.
 - b. 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.
 - c. 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.
- 2) 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.
- 3) Review Contractor's submittals, such as shop drawings, staking requests, 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.
- 4) Provide part-time or full-time construction observation, depending on construction activity level, using 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. Incorporate discipline expert inspection as needed at project milestones to observe critical work items. It is assumed that one (1) RPR or discipline expert will be on-site for an average of 40 hours per week, 5 days a week for 13 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.

- 5) Develop and implement a quality assurance testing plan for materials testing in accordance with the City of Billings Standard Modifications, latest edition. Conduct a pre-construction testing meeting with RPRs, field testing personnel, and lab manager to coordinate testing requirements. 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.
- 6) 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 the 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.
- 7) 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.
- 8) 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.
- 9) Conduct substantial completion and final inspections with City and Contractor. Prepare and monitor punchlist items required for completion of the work by Contractor.

Task 500 Deliverables:

1. ***Pre-Construction meeting minutes***
2. ***Pre-Construction photos and videos, upon request***
3. ***Contractor submittals; electronic copy to City***
4. ***Weekly RPR Inspection Reports, upon request***
5. ***Monthly Quality Assurance Materials Testing Reports, upon request***
6. ***Miscellaneous construction forms, as required***
7. ***Weekly website and e-mail update content***

8. Construction Punchlist, upon request

Task 600 – Construction Staking

- 1) 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) Control set for topographic survey for design will be verified. Densify and transfer vertical control for the baseline 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) Provide preliminary staking of stationing, construction limits, and/or ROW for potential utility relocations and project planning
- 4) Develop staking sheets and electronic files from plans. 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. One-time staking for the following construction activities is included in this scope of services.
 - a. Stake curb and gutter (all types) at 25-foot intervals at 2-foot offset to back of curb, including all PCs, PTs, and critical vertical geometry.
 - b. Stake storm drain manholes and inlets, sanitary sewer manholes, and water system features only (no pipe staking) and provide temporary benchmarks adjacent to the work.
 - c. Stake horizontal position of signal/light poles.
 - d. Stake new sign assembly foundation locations behind sidewalk by station only. Offset to be determined by others.
 - e. Provide sufficient control for pavement marking locations including beginning and end points, intermittent points (if length is greater than 50 feet), transition points, and word and symbol locations.
 - f. Stake driveway/approach locations.
 - g. It is assumed control for paving shall be provided by the Contractor.

Task 600 Deliverables:

1. **Contractor Staking Requests, upon request**
2. **Survey Notes, upon request**

Task 601 – Miscellaneous Staking & Survey

- 1) At the request of the City of Billings, address miscellaneous staking requests for fence corners, property lines, and utilities (power, communications, gas, etc.) up to a maximum of 40, 2-man crew hours and 12 professional hours.
- 2) Property pins are assumed not to be disturbed. However, due to the proximity of the work to the right-of-way line, DOWL will provide the contractor with an exhibit of the known property corners. The contractor will notify DOWL if a property pin is disturbed. DOWL will reset up to seven (7) property pins as requested by the City.

Task 700 – Record Drawings and Project Completion

- 1) DOWL will prepare record drawings based on City-supplied construction notes and drawings upon project completion.

- 2) DOWL will attend and assist the City on a one-year warranty walk-through of the project.

Task 700 Deliverables:

1. ***Record Drawings***

Appendix B

Methods and Times of Payment

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, Appendix A, the Engineer shall be paid based upon actual time accrued, but not to exceed the total contract amount.

| | |
|---|--------------|
| 1. Project Management and Public Outreach | \$12,735.00 |
| 2. Preliminary Design | \$197,901.25 |
| 3. Final Design | \$146,525.00 |
| 4. Preconstruction Services | \$5,910.00 |
| 5. Construction Administration Services | \$210,597.50 |
| Total | \$573,668.75 |

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

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.
- C. Revisions or additions when such revisions or additions are inconsistent with written approvals or instructions previously given, required by enactment or revisions of codes, laws, or regulations, or are due to other causes not solely within control of the Engineer.
- D. As may be requested by Billings, additional design services not included in the original scope of work as outlined in Appendix A.
- E. Additional time and/or services resulting from additional requirements imposed by any funding source for use of those funds, as outlined in Part I, Section 14 of this Contract.

Appendix D

Schedule of Professional Fees

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 in the attached fee schedule.

The itemized schedule provided 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.



MONTANA FEE SCHEDULE

Personnel Billing Rates

Personnel are identified on our invoices by name and/or labor category.

| Description | Rate | Description | Rate |
|-----------------------------------|-------|----------------------------------|-------|
| Accounting Manager | \$155 | Engineer VI | \$170 |
| Accounting Technician | \$85 | Engineer VII | \$180 |
| Administrative Assistant | \$60 | Engineer VIII | \$190 |
| Administrative Manager | \$95 | Engineer IX | \$215 |
| Biologist I | \$100 | Engineer X | \$230 |
| Biologist II | \$110 | Engineering Technician I | \$70 |
| Biologist III | \$120 | Engineering Technician II | \$85 |
| Biologist IV | \$130 | Engineering Technician III | \$95 |
| Biologist V | \$175 | Engineering Technician IV | \$115 |
| CAD Drafter I | \$75 | Engineering Technician V | \$125 |
| CAD Drafter II | \$90 | Engineering Technician VI | \$145 |
| CAD Drafter III | \$100 | Environmental Specialist I | \$90 |
| CAD Drafter IV | \$110 | Environmental Specialist II | \$105 |
| CAD Drafter V | \$120 | Environmental Specialist III | \$110 |
| Civil and Transportation Designer | \$95 | Environmental Specialist IV | \$120 |
| Contract Administrator I | \$130 | Environmental Specialist V | \$125 |
| Contract Administrator II | \$155 | Environmental Specialist VI | \$170 |
| Corporate Development Manager | \$180 | Environmental Specialist VII | \$180 |
| Crew Chief I | \$90 | Environmental Specialist VIII | \$190 |
| Crew Chief II | \$100 | Environmental Specialist IX | \$215 |
| Crew Chief III | \$105 | Environmental Specialist X | \$225 |
| Crew Chief IV | \$115 | Field Project Representative I | \$85 |
| Crew Chief V | \$125 | Field Project Representative II | \$95 |
| Cultural Resources Specialist I | \$90 | Field Project Representative III | \$125 |
| Cultural Resources Specialist II | \$105 | Geologist I | \$100 |
| Cultural Resources Specialist III | \$115 | Geologist II | \$110 |
| Cultural Resources Specialist IV | \$135 | Geologist III | \$120 |
| Cultural Resources Specialist V | \$165 | Geologist IV | \$140 |
| Document Production Supervisor | \$120 | Geologist V | \$165 |
| Engineer I | \$95 | GIS Technician | \$75 |
| Engineer II | \$105 | GIS Specialist | \$90 |
| Engineer III | \$115 | GIS Coordinator | \$140 |
| Engineer IV | \$140 | Graphics Designer | \$100 |
| Engineer V | \$160 | Inspector I | \$90 |



| | |
|------------------------------------|-------|
| Inspector II | \$105 |
| Inspector III | \$110 |
| Inspector - Supervisor | \$130 |
| Intern I | \$55 |
| Intern II | \$75 |
| Laboratory Supervisor | \$80 |
| Laboratory Manager | \$95 |
| Landscape Architect I | \$100 |
| Landscape Architect II | \$115 |
| Landscape Architect III | \$130 |
| Landscape Architect IV | \$145 |
| Landscape Architect V | \$160 |
| Landscape Architect VI | \$170 |
| Landscape Architect VII | \$180 |
| Landscape Planner | \$105 |
| Landscape Designer | \$85 |
| Lead Materials Technician | \$85 |
| Marketing & Administrative Manager | \$180 |
| Marketing Assistant | \$75 |
| Marketing Coordinator | \$95 |
| Materials Technician | \$60 |
| Materials Technician II | \$70 |
| Materials Manager | \$100 |
| Planner I | \$90 |
| Planner II | \$105 |
| Planner III | \$125 |
| Planner IV | \$145 |
| Planner V | \$160 |
| Planner VI | \$170 |
| Planner VII | \$180 |
| Planner VIII | \$190 |
| Planner IX | \$210 |
| Planner X | \$250 |
| Professional Land Surveyor I | \$90 |
| Professional Land Surveyor II | \$100 |
| Professional Land Surveyor III | \$110 |
| Professional Land Surveyor IV | \$120 |
| Professional Land Surveyor V | \$130 |
| Professional Land Surveyor VI | \$135 |
| Professional Land Surveyor VII | \$145 |

| | |
|--|-------|
| Professional Land Surveyor VIII | \$155 |
| Professional Land Surveyor IX | \$170 |
| Professional Land Surveyor X | \$190 |
| Project Assistant I | \$85 |
| Project Assistant II | \$100 |
| Project Administrator | \$100 |
| Project Controller | \$125 |
| Project Manager I | \$125 |
| Project Manager II | \$140 |
| Project Manager III | \$155 |
| Project Manager IV | \$170 |
| Project Manager V | \$185 |
| Project Manager VI | \$200 |
| Project Manager VII | \$215 |
| Proposal Manager | \$110 |
| Public Involvement Assistant | \$85 |
| Public Involvement Planner | \$105 |
| Public Involvement Coordinator | \$115 |
| Public Involvement Program Manager | \$170 |
| Real Estate Services Manager | \$150 |
| Right of Way Assistant | \$85 |
| Right of Way Agent I | \$95 |
| Right of Way Agent II | \$110 |
| Right of Way Agent III | \$125 |
| Right of Way Agent IV | \$135 |
| Right of Way Agent V | \$150 |
| Right of Way Agent VI | \$185 |
| Risk Manager | \$170 |
| Senior CAD Drafter | \$135 |
| Senior Civil and Transportation Designer | \$140 |
| Senior Manager I | \$200 |
| Senior Manager II | \$220 |
| Senior Manager III | \$230 |
| Senior Manager IV | \$265 |
| Senior Manager V | \$275 |
| Senior Manager VI | \$295 |
| Senior Materials Technician | \$90 |
| Senior Proposal Manager | \$155 |
| Survey Crew Surveyor I | \$60 |
| Survey Crew Surveyor II | \$70 |



| | | | |
|--------------------------|-------|---------------------------------|-------|
| Survey Crew Surveyor III | \$80 | Survey Technician VI | \$105 |
| Survey Crew Surveyor IV | \$90 | Survey Technician VII | \$110 |
| Survey Crew Surveyor V | \$100 | Survey Technician VIII | \$120 |
| Survey Technician I | \$55 | Survey Technician IX | \$140 |
| Survey Technician II | \$65 | Survey Technician -- Supervisor | \$120 |
| Survey Technician III | \$75 | Systems Administrator | \$125 |
| Survey Technician IV | \$85 | Technical Coordinator | \$150 |
| Survey Technician V | \$95 | | |

Survey Crews

| | | |
|--------------------------------------|---|------------|
| One-Person Survey Crew | = | \$120/hour |
| One-Person Survey Crew GPS/ Robotics | = | \$130/hour |
| Two-Person Survey Crew (Non-GPS) | = | \$160/hour |
| Two-Person Survey Crew | = | \$180/hour |
| Two-Person Survey Crew GPS/ Robotics | = | \$190/hour |
| Two-Person Survey Crew (PLS + LSIT) | = | \$225/hour |
| Three-Person Survey Crew | = | \$260/hour |

Travel, Mileage, & Miscellaneous

| | | |
|-------------------------------------|---|----------------|
| Lodging | = | Cost per night |
| Airfare | = | Cost |
| Vehicle Usage – Passenger Cars | = | 0.85/mile |
| Vehicle Usage – Trucks & SUV's | = | 1.05/mile |
| Printing/Supplies/Phone/Fax/Postage | = | Note 3 |
| In-House Usage Charges | = | Note 4 |

Per Diem

Unless otherwise specified contractually, per diem will be billed when travel is more than 50 miles from the office during a meal allowance period of three or more consecutive hours or involves an overnight stay. The three meal allowance periods are breakfast (midnight to 10 am), lunch (10 am – 3 pm) and dinner (3 pm to midnight).

| | Breakfast | Lunch | Dinner | Incidentals | GSA Per Diem Rate |
|-----------------|-----------|---------|---------|-------------|-------------------|
| Billings | \$13.00 | \$14.00 | \$23.00 | \$5.00 | \$55.00 |
| Bozeman | \$14.00 | \$16.00 | \$26.00 | \$5.00 | \$61.00 |
| Butte | \$13.00 | \$14.00 | \$23.00 | \$5.00 | \$55.00 |
| Helena | \$16.00 | \$17.00 | \$28.00 | \$5.00 | \$66.00 |

All other cities not listed above, please use the following link: <https://www.gsa.gov/travel/plan-book/per-diem-rates>
 Please use the following link for the meal breakdown: <https://www.gsa.gov/travel/plan-book/per-diem-rates/meals-and-incidentals-expenses-mie-breakdown>

Notes

1. DOWL's Professional Services Fee Schedule is subject to adjustment each year or at the end of a contract period, whichever is appropriate. Should adjustments be anticipated or required, such adjustments will not affect existing contracts without prior agreement between Client and DOWL.
2. Straight-time rates are given. Multiply by 1.5 for overtime rates. Overtime rates will be applied at the rate prescribed by applicable state law.
3. Direct reimbursable expenses such as travel, freight, subcontractors, and request beyond those requests considered reasonable by the Project Manager for phone/fax/postage, office supplies, reproduction and photography, and laboratory analysis will be billed at cost plus the negotiated markup.
4. In-house equipment usage charges or specialized software/equipment that are not separately stated on the fee schedule will be negotiated at rates deemed fair and reasonable.
5. Late charges will be assessed on the unpaid balance of all accounts not paid within 30 days of the billing date, at a rate of 1.0 percent per month (12% per year).

Appendix E

Project Schedule

Based on a notice to proceed by Billings date no later than December 16, 2019, the completion date for the Engineer's work shall be on or before November 30, 2021 based on the following estimated schedule for major deliverables:

1. Preliminary Design – July 2020
2. Final Design – October 2020
3. Bidding – November 2020
4. Construction Start – May 2021
5. Construction Wrap up – November 2021
6. One Year Warranty Walk Thru – October 2022

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

(Attach Certificate(s) of Insurance)