

Contract for Professional Architectural and Engineering Services

Project W.O. 22-07 Mullowney Lane

In consideration of the mutual promises herein, City of Billings and HDR Engineering, Inc. 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 10 pages (Basic Services of Contractor);

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

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

Appendix D consisting of 4 pages (Schedule of Professional Fees);

Appendix E consisting of 1 pages (Project Schedule);

Appendix F consisting of 1 pages (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 HDR Engineering, Inc..

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 September 30, 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: Tim Erickson, PE
HDR Engineering, Inc.
970 S 29th St W
Billings, MT 59102 FAX: (406) 652-2758

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.
- G. The Contractor and subcontractor shall abide by the requirements of 41 CRF 60-1.4, which states employees or applicates may not be discharges or in any other manner discriminated against because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. However, employees who have access to the compensation information of other employees

or applicants as a part of their essential job functions cannot disclose the pay of other employees or applicants to individuals who do not otherwise have access to compensation information, unless the disclosure is (a) in response to a formal complaint or charge, (b) in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or (c) consistent with the contractor's legal duty to furnish information.

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: Tim Erickson, Jared Harris, or Authorized Signatory
(title of position)

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: _____

ATTEST:

Date: _____

City Clerk

IRS Tax ID # _____

Date: _____

APPROVED AS TO FORM:

By _____

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 Tim Erickson, PE working under the Principal-in-Charge, Amanda McInnis, 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 Ken Ard, PE.

Section 3. Scope of Work.

The City of Billings proposes to reconstruct Mallowney Lane from Midland Road to Elysian Road. Mallowney Lane is classified by the City as a Collector and is currently comprised mostly of a single northbound lane with a short two-lane section at the Midland intersection, southbound lanes vary from two to one merging near Interstate Avenue. Shoulders, curbs, gutters, and sidewalks are inconsistent throughout the corridor. The proposed project will include improvements to roadway, curb, gutter, sidewalk, multi-use trail, storm drain, irrigation ditches, street lighting along the corridor and improvements to the two intersections at Midland Road and Elysian Road.

HDR has teamed with IMEG and SK Geotechnical to perform professional services, as shown below, in connection with the W.O. 22-07 project.

- HDR
 - Overall project management and coordination
 - Public involvement
 - Traffic analysis
 - Roadway lighting
 - Storm drain & irrigation design
 - Utility design (sewer and overall utility coordination)
 - Roadway design
 - Plan preparation
 - Assistance during bidding
 - Construction administration
 - As-Built plans
- IMEG
 - Engineering survey
 - Cadastral survey
 - Construction staking
 - Construction inspection
- SK Geotechnical

- Subsurface investigations
- Subgrade improvements
- Pavement design
- Materials testing during construction

General Project Assumptions

The following are assumptions associated with the scope of services for this project:

- Project will be bid no earlier than July 2022 and constructed at a time that best fits funding needs, project goals, and stakeholder needs.
- Major intersection improvements are limited to the Mallowney Lane/Midland Road and Mallowney Lane/Elysian Road intersections. Improvements and design will be assessed for the minor intersections along the corridor.
- Public involvement includes a presentation of 30% design to City Council and coordination with adjacent business owners. 2 public meetings are also included in this scope of services.
- Project limits are from Midland Road to Elysian Road. Project limits extend approximately 500 feet along Elysian Road East and West of Mallowney Ln. and 500 feet along Mallowney South of Elysian to accommodate potential additional traffic lanes if they are justified by traffic analysis.
- Street lighting will include black powder coated light poles with LED luminaires.
- No right-of-way acquisition is assumed for this project. Development of plats or acquisition are not included in this scope of services. HDR will coordinate easements as needed.
- Drainage infrastructure improvements will meet the City of Billings Stormwater Management Manual and the local MS4 requirements as feasible. HDR will document any improvements that do not meet these requirements with the City of Billings throughout design.
- Drainage design improvements for private businesses adjacent to the roadway are not included. Drainage design will not include improvements for existing developments or subdivisions in the area.
- Improvements will be required to accommodate offsite drainage from the adjacent irrigation ditches.
- Design will include storm drain stubs to property line as needed.
- The best alternative for the storm drain system to be determined during design process.
- Utility potholes will be provided by the City of Billings.
- As necessary, HDR will assist the City with the development of an SID, including maps, quantities of construction and will also document and track SID improvements made during construction.
- Traffic counts will be acquired for 3 intersections (Midland, Interstate, & Elysian) along with a 72-hour tube. Truck information will be included in the traffic counts. Pedestrian & Bicycle information will not be collected.

TASK 100 – PROJECT MANAGEMENT

101 – Project Initiation

As part of this task, the Project Manager will lead coordination of the design team with the City as well as supervise the design team and subconsultants. Project Manager and Accountant will monitor project status, maintain project schedule, and prepare monthly invoices with progress reports.

Deliverables:

- Monthly invoices and progress reports

102 – Project Meetings

HDR will attend the following meetings:

- City and consultant project team kickoff meeting
- 30% Plan Review meeting
- 60% Plan Review meeting
- 90% Plan Review meeting

Assumptions:

- Up to two team members will attend each meeting

Deliverables:

- Meeting Minutes

103 – Public Outreach

HDR will coordinate with business owners adjacent to the roadway regarding project improvements such as approaches and storm drain improvements. HDR will also coordinate with the City to support a presentation to City Council, as necessary.

Business coordination will include the following meetings:

- Single meeting with project team and business owners adjacent to the project to discuss proposed project prior to construction.
- One on one meetings with each business adjacent to the project to discuss existing issues/constraints and project improvements.

Assumptions:

- 2 public meetings are included in this scope.
- Meetings with the SBURA or other TIF Districts are not required.

Deliverables:

- Meeting minutes

TASK 200 – SURVEY AND GEOTECHNICAL INVESTIGATIONS

201 – Survey – Engineering and Cadastral

Provide survey services for design including control, engineering topographical survey and cadastral survey to identify existing right-of-way.

Survey project limits include:

- Survey project limits are from Midland Road to Elysian Road. 100 feet along Elysian Road west of Mullowney Ln., 500 feet along Elysian west of Mullowney Ln. and 500 feet along Mullowney south of Elysian, including the abandoned suburban ditch.
- The suburban ditch open channel between Mullowney Ln. and Songbird Dr.
- The convergence area of the Suburban Ditch and Hogan's Slough Lateral adjacent to Songbird Drive and the existing lateral to the Yellowstone River outfall.
- The convergence area of the Suburban Ditch and Hogan's Slough Lateral adjacent to Songbird Drive and the existing lateral to the Yellowstone River outfall.
- Any pertinent upstream or downstream controlling structures will be surveyed.
- Survey to include a minimum of 20 feet beyond city property, sufficient area of driveways to complete design.
- Survey will include but not limited to picking up features such as sidewalk, curb, landscaping features, approaches, and driveways.
- Survey will also include flange shots on existing hydrants, measure downs on all water valves, measure adjustment ability on all manholes and shots on all manholes. Survey will also include buried utilities as required.

Assumptions:

-
- Retracement of adjacent R/W for +/- 16 individual parcels along Mullowney Lane, Midland Road and Elysian Road
- A certificate of Survey of Survey (COS) is not required for retracement of the R/W.

202 – Geotechnical Investigations

Provide geotechnical investigations by SK Geotechnical including:

- Borehole staking.
- A total of 4 new borings of 15 feet in depth will be performed: 3 along Mullowney Lane and 1 at the Elysian Road intersection. 1 existing boring from Midland Road project at the Midland Road intersection will be included.
- Pavement and utility geotechnical work – All 4 borings will be used to evaluate subgrade strength and suitability to support the proposed pavement. A geotechnical engineering report will be prepared. Due to the inherently poorly drained conditions along the existing roadway, soft soils are anticipated so the report will also address possible digouts, rehabilitation methods, or stabilization with geosynthetics. Samples of existing road base material will be collected for consideration of reuse as special backfill throughout the project. 2 borings will be placed in old pavement area and 2 borings placed in newer pavement in order to understand the causes of varying performance. 4 borings will be required to evaluate rehabilitation alternatives and will help characterize the subgrade strength. 4 new boreholes will allow for design of both a typical section where sufficient and a sturdier section where warranted.

Assumptions:

- Gravel alluvium is typically anticipated at a varying depth along Mullowney Lane.

TASK 300 – PRELIMINARY DESIGN

301 – Traffic Study

Develop a traffic study report of the proposed roadway to include collecting new traffic counts and projected traffic for the design year 2042. Traffic study to include traffic projections for the intersection with Midland Road and Elysian Road.

Assumptions:

- Traffic counts will be acquired for 3 intersections (Midland, Interstate, & Elysian) along with a 72-hour tube. Truck information will be collected in standard format. Pedestrian & Bicycle information will not be collected.
- Traffic growth to be based on historical data from MDT and, if available, from the City of Billings and traffic impact studies completed within the last 6 years for new land development that generates traffic on the part of Mallowney Lane covered by this project. HDR will also evaluate known and potential future development areas that will impact the corridor to include in growth calculations.

Deliverables:

- Traffic Study Report

302 – Intersection Analysis

Develop preliminary intersection improvement alternatives at the Midland Road and Elysian Road intersections based on the traffic study and coordination with City staff.

Assumptions:

- Up to three intersection improvement options will be developed per intersection during this task.
- Conceptual intersection layouts will show geometric and lane use features for all alternatives.
- LOS C is will be considered as the desired standard for the design year peak hour condition.

Deliverables:

- Exhibits of intersection improvement alternatives at Midland Road and Elysian Road to be included in the Traffic Study Report as part of Task 301.

303 – Drainage Study and Report

HDR will prepare a Preliminary Drainage Report documenting the existing and proposed drainage patterns within the project limits and summarize the analyses.

Task 303.1 – Project Site Visit

Two (2) staff members from HDR will visit the project site to photo-document existing conditions and to become familiar with the drainage patterns within the project area. Field notes will be completed for the project file and provided to the City.

Task 303.2 – Existing Drainage Patterns Analysis

HDR will review the existing topography mapping, culverts, off-site drainage facilities, and storm drain facilities within the project area. HDR will review any available and pertinent reports from area developments. The existing drainage patterns and facilities will be described in the drainage report accompanied by an existing conditions basin map.

Task 303.3 – Existing Hydrologic Analysis

HDR will analyze the existing hydrology and calculate the existing peak flows for the drainage basins within the project area. The hydrologic method utilized for analysis will be selected in accordance with the SWMM and as appropriate for the proposed design based on basin sizes and the extent of required hydrograph routing required for design. The peak flows will be documented in the Drainage Report.

Task 303.4 – Proposed Drainage Patterns Analysis & Preliminary Design

HDR will design a stormwater management system which includes facilities designed to that treat the first 0.5 inches of runoff for the water quality event per Section 4.5 in the City of Billings Stormwater Management Manual. HDR will prepare a preliminary design for curb and gutter with storm drain system and stormwater management system to capture roadway runoff and evaluate gutter spread for the 10-year and 100-year storm events. The hydrologic method utilized for analysis will be selected in accordance with the SWMM.

HDR will evaluate existing irrigation facilities and design improvements and/or new facilities to effectively integrate with the Mallowney Lane stormwater management system on an as needed basis.

The proposed drainage patterns and facilities will be described in the preliminary drainage report accompanied by a proposed conditions basin map based on the preliminary drainage design.

Assumptions:

- Storm drain and stormwater management system design will be in conformance with the City of Billings Stormwater Management Manual.
- Detention pond design will be completed if required for storm drain system.
- Autodesk Storm and Sanitary Analysis will be used to evaluate gutter spread, inlet designs, and storm sewer pipe hydraulics.
- Additional hydraulic software may be used to evaluate culvert crossings and channels, which may include HY-8, HEC-RAS, Flowmaster, etc.
- Data input and results including water quality will be documented and included as part of the Drainage Report.

Task 303.5 – Preliminary Drainage Report

HDR will prepare a Preliminary Drainage Report for submittal to the City. The report will include a summary of approach and results for:

- Hydrology calculations (PDF)
- Water quality calculations (PDF)
- Hydraulic calculations (PDF)

Deliverables:

- Preliminary Drainage Report for review and comment (PDF)

304 – Roadway Lighting Analysis

Analyze street lighting levels and determine light pole spacing based on analysis of LED luminaires to meet current design standards.

Assumptions:

- Light poles will be included in design. Color and size will be determined during design.

Deliverables:

- Memo summarizing lighting analysis, including total number of poles, spacing, lumen output, and wattage to assist the City in setting up a SLIMD or include the lighting as part of the TIF District assessment.

305 - 30% Design Plans

Prepare preliminary design plans for the proposed roadway. Prepare preliminary construction cost estimate.

Include the following in the plans:

- Horizontal and vertical alignment of proposed roadway
- Roadway typical sections including the proposed pavement design
- Proposed approaches for business access
- Preferred intersection improvements at Midland Road and Elysian Road
- As needed roadside swale improvements along Mullowney Lane
- Storm drain plan and profile sheets
- As needed irrigation ditch improvement detail sheets
- Street lighting pole, pole schedule, and electrical quantities
- Curb, Gutter, Sidewalk and Multi-Use Path layout
- Existing right-of-way limits

Assumptions:

- No water main, sewer main, or service improvements are included in this project, unless required to facilitate roadway and storm drain improvements.
- Utility relocations will be handled by others. HDR to review conflicts and provide coordination.
- Landscape architecture not included. Irrigation systems design not included. Simple landscaping type callouts will be included as needed.
- Profiles for approaches will not be developed for 30% design.
- Cross sections will not be developed at 30%
- Construction cost estimate will be based on preliminary quantities and will include a 20% contingency.
- Project specifications will not be developed for 30% design.

Deliverables:

- Preliminary design plans and construction cost estimate

306 – 60% Design Plans

Incorporate comments and design revisions from 30% design to develop 60% design plans, specs, and estimate.

Assumptions:

- No water main, sewer mains, or service improvements are included in this project, unless required to facilitate roadway and storm drain improvements.
- Utility relocations will be handled by others. HDR to review conflicts and provide coordination.
- Construction cost estimate will be based on preliminary quantities and will include a 15% contingency.
- Preliminary project special provision will be developed for 60% design.

Deliverables:

- 60% design plans, specs, and construction cost estimate

TASK 400 – FINAL DESIGN

401 – Drainage Design Updates

Update drainage design to incorporate comments/changes from 60% design, as well as from continued coordination with adjacent business owners. Prepare final drainage report.

Deliverables:

- Final Drainage Report

402 – 90% Design Plans

Incorporate comments and design revisions from 60% design to develop 90% design plans, specs, and estimate. Perform an in-field plan review of the project.

Assumptions:

- No water main, sewer main, or service improvements are included in this project, unless required to facilitate roadway and storm drain improvements.
- Utility relocations will be handled by others. HDR to review conflicts and provide coordination.
- Construction cost estimate will be based on preliminary quantities and will include a 10% contingency.

Deliverables:

- 90% design plans, specs, and construction cost estimate

403 – 100% Design Plans

Incorporate comments and design revisions from 90% design to develop 100% design plans, specs, and estimate.

Assumptions:

- No water main, sewer main, or service improvements are included in this project, unless required to facilitate roadway and storm drain improvements.

- Utility relocations will be handled by others. HDR to review conflicts and provide coordination.
- Construction cost estimate will be based on preliminary quantities and will include a 5% contingency.

Deliverables:

- 100% design plans, specs, and construction cost estimate

TASK 500 – Bid Phase

501 – Bidding Administrative Assistance

Prepare bid documents and distribute to prospective bidders. Answer bidder questions and prepare addenda as needed. Schedule and conduct pre-bid meeting.

Assumptions:

- Bid openings online, in-person attendance not required.

Deliverables:

- Pre-bid Meeting Minutes

502 – Post-Bid Administrative Assistance

Receive, evaluate, and tabulate bids. Assess completeness of bid. Make recommendations to the City on award of contract. Issue Notice of Award.

Deliverables:

- Notice of Award

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

1. Project Management, Meetings, and Public Outreach	\$38,611
2. Survey and Geotechnical Investigations	\$74,186
3. Preliminary Design	\$121,718
4. Final Design	\$56,176
5. Bidding	\$7,797
Total	\$298,488

- 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. 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

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.



2021 HOURLY RATE SCHEDULE

BILLING CLASSIFICATION	RATE	BILLING CLASSIFICATION	RATE
<u>ENGINEERS</u>		<u>DESIGNERS / TECHNICIANS / INSPECTORS</u>	
<i>Design Engineers</i>			
LEVEL I	108.00	LEVEL I	91.00
LEVEL II	113.00	LEVEL II	108.00
LEVEL III	123.00	LEVEL III	116.00
LEVEL IV	131.00	LEVEL IV	123.00
		LEVEL V	131.00
<i>Project Engineers / Project Managers</i>		LEVEL VI	146.00
LEVEL I	146.00	LEVEL VII	158.00
LEVEL II	158.00	LEVEL VIII	173.00
LEVEL III	173.00	LEVEL IX	185.00
LEVEL IV	190.00		
		<u>CADD / BIM Specialist</u>	
<i>Senior Engineers / Senior Project Managers</i>		LEVEL I	66.00
LEVEL I	198.00	LEVEL II	78.00
LEVEL II	217.00	LEVEL III	91.00
LEVEL III	232.00	LEVEL IV	108.00
LEVEL IV	237.00	LEVEL V	116.00
LEVEL V	241.00	LEVEL VI	123.00
		LEVEL VII	131.00
<i>Project Principal / Senior Technical Advisors</i>		LEVEL VIII	146.00
LEVEL I	241.00		
LEVEL II	263.00	<u>ACCOUNTING / ADMINISTRATION</u>	
LEVEL III	300.00	LEVEL I	66.00
LEVEL IV	337.00	LEVEL II	78.00
		LEVEL III	93.00
		LEVEL IV	105.00
		LEVEL V	112.00
		LEVEL VI	123.00
		LEVEL VII	131.00
		LEVEL VIII	146.00

2021 CHARGEABLE EXPENSE SCHEDULE

Direct project expenses will be charged at the rates listed below unless a separate rate is negotiated for a specific project.

SUBSISTENCE (PER DIEM)

Subsistence such as meals and lodging while out on a project will be charged at actual cost or at the per diem rate negotiated for a specific project.

TRAVEL

Travel expenses will be charged at the following rates unless a separate rate is negotiated

2 Wheel Drive Vehicle	\$ 0.75 /mile
4 x 4 Vehicle	\$ 0.75 /mile
Rental Vehicles & Aircraft	\$ Actual Cost

TELEPHONE/FAX/POSTAGE

Long distance calls, telegrams, fax, cellular phone, and any special class postage will be charged at actual cost.

PRINTING

B&W 8.5x11 30% RECYCLED	\$ 0.04 each
B&W 11x17 30% RECYCLED	\$ 0.08 each
COLOR 11X17	\$ 0.90 each
COLOR ON CARD STOCK 11X17	\$ 1.50 each
COLOR 30% RECYCLED 8.5x11	\$ 0.14 each
COLOR 30% RECYCLED 11x17	\$ 0.28 each
PLASTIC COIL BIND TO 1 IN	\$ 1.45 each
PAGE INSERTING	\$ 0.01 each
3 HOLE DRILL	\$ 0.01 each
8.5x11 5-TAB DIVIDERS	\$ 0.48 each
11x17 CLEAR COVERS	\$ 1.78 each
11x17 Black COVERS	\$ 1.82 each
8.5x11 BLACK BINDERS	\$ 12.19 each
3" BINDERS	\$ 14.39 each
11x17 BLACK BINDERS	\$ 19.00 each
11x17 TABS	\$ 0.48 each

SPECIAL EQUIPMENT CHARGES

Electronic Distance Measuring	\$ 10.00 /hr.
GPS - GEO XT	\$ 20.00 /hr.
GPS - RTK	\$ 40.00 /hr.
Manta 3-Phase Test Set	\$ 40.00 /hr.
Megger Testing Equipment	\$ 250.00 /day
Soil Resistivity Testing Equipment	\$ 500.00 /day
UTV	\$ 10.00 /hr.

OVERHEAD

Overhead costs, such as rent, insurance, utilities, office furniture, employee benefits, and taxes are included in the hourly billing rates.

Appendix E

Project Schedule

Based on a notice to proceed by Billings date no later than October 1, 2021, the completion date for the Engineer's work through final design shall be: June 30, 2022

A. Submittals and Meetings

1. Preliminary Design – February 2022
2. City Council Meeting – March 2022

B. Final Design – June 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)