

Contract for Professional Architectural and Engineering Services
City of Billings W.O. 20-33: Public Works Professional Geographic Information Systems (GIS) Services

In consideration of the mutual promises herein, City of Billings and HDR Engineering 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 7 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 1 page (Schedule of Professional Fees);
- Appendix E consisting of 1 page (Project Schedule);
- Appendix F consisting of 19 pages (Certificate(s) of Insurance); and

PART I
SPECIAL PROVISIONS

Section 1. Definitions.

In this Contract:

- A. "Administrator" means the Deputy Director of the Public Works Department or her 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 Section 4.
- 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.

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 January 31, 2021.

Section 4. Compensation; Method of Payment.

- A. Subject to the Contractor's satisfactory performance, Billings shall pay the Contractor no more than One Hundred Ninety-Six Thousand Four Hundred and Ninety-Five dollars (\$196,495) in accordance with this Section and Appendix B.
- B. 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.
- C. The Contractor is not entitled to any compensation under this Contract, other than is expressly provided for in this Section.
- D. 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: Jennifer Duray
City of Billings
Public Works
2224 Montana Avenue
Billings, MT 59101

FAX: (406) 237-6291

Contractor: Bridget Brown
HDR Engineering, Inc.
970 South 29th St. W

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: Jared Harris (Area Manager) or Authorized Signatory

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

City Council or Designee

Date: _____

Name: _____

Title: _____

Date: _____

ATTEST:

IRS Tax ID # 47-0680568

APPROVED AS TO FORM:

City Clerk

By _____

Date: _____

BRENT BROOKS, City Attorney

Appendix A

Basic Services of Engineer City of Billings W.O. 20-33: Public Works Professional Geographic Information Systems (GIS) Services

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 Bridget Brown working under the Principal-in-Charge, Jared Harris.

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 Jennifer Duray.

Section 3. Scope of Work.

The City of Billings currently has a well-developed GIS that supports the Public Works Department. As the technology spectrum continues to evolve, further refinement and enhancement of the City's enterprise GIS environment is key in handling changing needs and maximizing financial investments in the system. The primary objective of the project is to extend a straightforward and easy to access GIS system that will improve the productivity and efficiency of Public Work's staff as they conduct business operations. Community engagement and open data access will also be improved through the enterprise GIS system. HDR understands the City wishes to accomplish this project in two phases, this approach outlines Phase I.

Phase I will include an evaluation of the City's current enterprise GIS infrastructure, conducting a needs assessment by reviewing current GIS data structure, standards, and enterprise systems integrations. HDR will develop a roadmap leveraging the results of the needs assessment that will outline clear steps to optimize the City's enterprise GIS system. The roadmap will include a Standards and Quality Assurance/Quality Control Plan for maintaining enterprise GIS database systems and establishing data accuracy and cartographic criteria.

DETAIL SCOPE OF SERVICES

The Basic Services of the Engineer that will be utilized on the City of Billings W.O. 20-33: Public Works Professional Geographic Information Systems (GIS) services is presented in the summaries for Tasks 1 through 4. The scope of services is organized as follows:

<u>Task</u>	<u>Description</u>
100	Project Management
200	Project Kick-Off Presentation
300	GIS Environment Needs Assessment
400	Roadmap Development

Task 100: Project Management

101 Project Management

Project management includes project communications with the City related to scope, schedule, and budget as well as HDR's internal management of quality, scope, schedule, budget, and invoices. HDR's project manager will also participate in bi-weekly (every two weeks) meetings with the City's project management team. As part of project management, HDR will invoice the City monthly for the services rendered.

Deliverables:

- Monthly status reports and invoices
- Status reports that compare work accomplished with scheduled activities

Assumptions:

- One-hour bi-weekly check in calls/meetings for two HDR staff for the duration of Phase I. The HDR Project Manager will be on-site for one meeting per month during the first three months.

Task 200: Project Kick-Off

201 Kick Off Presentation

The project will begin with a kick-off presentation to introduce our core team to the City. HDR will cover our project scope, milestones, schedule, and an outline of our technical approach. Next, to help the City's GIS stakeholders understand current industry best practices when it comes to GIS, HDR will present on implementation of enterprise GIS solutions, workflows, data models, mobile tools, systems integration, and cloud infrastructure. The goal of this presentation is to provide City GIS stakeholders with a foundational understanding of the capabilities of a more mature GIS and the investment needed to build and sustain such a system. HDR will provide a SharePoint and Teams site, or a City solution that can be leveraged to share information and data.

Deliverables:

- Presentation materials
- Project Kick Off Presentation Meeting Summary Memorandum
- Project collaboration site with project document library, contacts and schedule

Assumptions:

- One full-day in person (8 hour) meeting with up to five HDR staff and up to 8 key Public Works GIS Stakeholders.
- Scope includes travel for four HDR staff for up to two nights.

Task 300: GIS Environment Needs Assessment

To evaluate an Enterprise GIS environment a thorough understanding of Public Works operational needs and roadblocks must be understood. HDR will conduct a GIS Needs Assessment by interviewing and job shadowing key department staff, evaluating and documenting existing conditions. Based on this research HDR will identify recommendations and options for enhancing the City's GIS.

301 Interviews and Field Visits

HDR will conduct interviews with key staff from each pertinent department as well as interviews with City leadership. These interviews will include office meetings and field visits. An example of a field visit is to accompany City stormwater staff for routine maintenance or a water service call.

Office based interviews will have standard questions and reporting for ease in comparing and analyzing results. Questions will be provided to the City prior to interviews. The focus of interviews will be to gain an understanding of current workflows, data gaps, and opportunities for improvements. HDR will conduct interviews and relay debriefs highlighting takeaways and questions to the Public Works Project Manager and GIS Stakeholders.

Interviews and field visits will occur with each of the following departments and divisions at the City:

Table 1:

Task 301 Interviews and field visits		
Division/Department	Onsite Interviews	Field Visits
Public Works Management	2 hours	
Distribution and Collection	2 hours	2 days
Water Quality	4 hours	2 days
Engineering Division	8 hours	2 days
Solid Waste	1 hour	
Street-Traffic	4 hours	2 days

Deliverables:

- Draft and Final Technical Memorandum that includes interview and field visit summaries

Assumptions:

- Key Public Works GIS Stakeholders from divisions in table 1 will be made available for in office interviews with HDR GIS staff.
- Key Public Work teams will be available from distribution and collection, water quality, and engineering divisions to host HDR GIS staff during field visits to evaluate current data consumption and dissemination methods.
- City GIS Stakeholders will provide comments on the technical memorandum two weeks after its draft submittal.
- Cost estimate for this task includes travel to Billings for 2 staff to participate in interviews and field visits.

302 GIS Environment and Systems Integration Overview

A top to bottom review of the City GIS and IT infrastructure will be undertaken and documented. HDR will work with the City to review and document the existing GIS environment. This will include documentation of software, hardware, security, data storage, disaster and recovery plans, and system integration. The HDR team will evaluate current GIS platforms being utilized by the city including but not limited to ArcGIS Desktop and its extensions, ArcGIS Enterprise, ArcGIS Online, Collector, and other packages noted within the addendum provided by the City. During evaluation HDR staff will meet with City IT staff in an online half day workshop session. Workshop will include comprehensive review of the City’s Enterprise GIS architecture and

supporting systems.

HDR's Cityworks implementation lead, will work with the HDR team and the City to review and evaluate existing conditions and challenges. Existing (and potential) integrations will be included in the documentation.

Deliverables:

- Draft and Final Existing GIS Environment and Systems Integration Schematic and Summary Memorandum

Assumptions:

- HDR staff will have access to the City's enterprise systems and/or will have the support of City IT staff as needed.
- HDR will be permitted to facilitate meetings and other communication methods including emailing with the Public Works Asset Management team and selected consultant for the current Asset Management Needs assessment project.
- One half-day in person (4 hour) meeting with up to two HDR staff and up to four key City IT and GIS Stakeholders.
- Scope for this task includes travel to Billings for 2 staff.
- City GIS Stakeholders will provide comments on the schematic and summary memorandum two weeks after its draft submittal.

303 GIS Data Review

This subtask is the more detailed review of GIS data. HDR will focus on these outcomes for the data review: a comprehensive library of data with documented positional and attribute accuracy, and an understanding of data gaps.

Coordinate system and datum assignment will be reviewed for consistency and HDR's survey sub consultant will provide oversight in evaluating the ability of existing data to meet location accuracy needs for public works.

Data attributes will be reviewed for completeness and consistency. HDR will summarize the results and data gaps. The City's current feature class domains and descriptions will also be evaluated to help streamline data entry.

Deliverables:

- Draft and Final Data Review Technical Memorandum including data catalog and data gaps.

Assumptions:

- HDR staff will have access to GIS datasets within the City's Production and Publication GIS environments.
- HDR staff will have access to as-built records referenced in the GIS data update process.
- Current data interaction platforms and hardware including GPS devices will be compiled. HDR will be permitted to use these devices and platforms along with Public Works staff in the field and in the office to understand workflows and potential roadblocks with data interaction.

- Assets to be evaluated for existing accuracy and consistency will be identified by the City and represent areas of known issues and a good cross sector of assets from distribution and collection, water quality, and engineering divisions and includes no more than five 8-hour days of field time, and includes data processing and office analysis.
- Deliverables will consist of a PDF report provided by subcontractor assessing horizontal and/or vertical accuracy of as-surveyed features against spatial GIS information provided by others, and an AutoCAD drawing of as-surveyed features on MT State Plane grid, international foot units.
- City GIS Stakeholders will provide comments on the technical memorandum two weeks after its draft submittal.

304 Needs Assessment Report

The conclusion of the Needs Assessment is the final report. The report will consolidate and summarize the technical memorandums generated throughout this task for reference. The report is expected to include the following:

- GIS staff roles and responsibilities
- Summary of GIS needs by department
- GIS Environment Schematic – hardware/software/ systems integration
- GIS Data Library including condition and gaps
- Overview of existing GIS data works flows and QA/ QC practices
- ArcGIS Online/Portal needs and user account allocation
- Public Works internal business processes affecting GIS data
- Recommendations

HDR will provide the draft report and then follow with a review meeting with the City to go over comments for the final. The review meeting will be hosted in an online session; remote HDR staff will attend virtually.

Deliverables:

- Draft and Final Needs Assessment Report

Assumptions:

- City GIS Stakeholders will provide comments on the report two weeks after its final submittal.

Task 400: Roadmap Development

401 Roadmap

HDR will develop a Roadmap outlining recommendations for optimizing the City's GIS system. Each recommendation or initiative will have defined goals, associated investment, schedule, dependencies and benefits. HDR will lead a prioritization exercise with the City Project Manager and key GIS stakeholders. HDR will help the City objectively prioritize projects for inclusion in the Roadmap. The Roadmap will be organized to clearly communicate goals and benefits to executive management and will include enough detail for technical execution. A proposed timeline including estimated investment to complete each initiative will be visualized within the report. After initial feedback from Public Works, HDR will refine the report to incorporate comments and recommendations.

Deliverables:

- Draft and Final Roadmap Report
- Roadmap Prioritization Workshop

Assumptions:

- Two day workshop session for three on-site HDR staff and Public Works GIS Stakeholders.
- Scope for this task includes travel to Billings for two staff to participate in two day workshop session.
- This scope of services does not include outreach efforts for City Council meetings, or additional stakeholder meetings to help the City communicate and implement the roadmap.

402 Standards and QA/QC Plan

Two predetermined Roadmap initiatives will be addressed during Phase I; the development of the Standards and QA/AC Plan. It is assumed these standards and plans are dynamic and will be updated as Roadmap initiatives are rolled out during Phase 2.

Standards Development: A section of the Roadmap Report will outline a proposed standards implementation throughout GIS and Public Works. The specifics of these standards will in large part be dependent on the results of the Needs Assessment.

Quality Assurance/Quality Control Plan Development: A section of the Roadmap will outline a comprehensive QA/QC process for the City of Billings GIS group to implement. HDR will reference existing industry and local government standards in relation to geospatial data upkeep, while also incorporating the information gathered during the Needs Assessment to construct this plan.

- Standards and QA/QC Plan is expected to include:
 - Field data collection industry practices and GPS device location tolerance thresholds
 - Field data collection workflows
 - Workflows for integration of data with Cityworks and other systems
 - Database schema and domain construction methodologies
 - Metadata framework and requirements
 - Map production standards and style guides
 - Web feature service publication standards

Deliverables:

- Draft and Final Standards and QA/QC Plan Reports

Assumptions:

- City GIS Stakeholders will provide comments on the reports two weeks after its final submittal.

Appendix B

Methods and Times of Payment City of Billings W.O. 20-33: Public Works Professional Geographic Information Systems (GIS) Services

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 amount:

1. Project Management	\$27,607
2. Kick Off Presentation	\$29,247
3. GIS Environment Needs Assessment	\$82,291
4. Roadmap Development	\$57,350
Total	\$196,495

- 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 based on a negotiated fee.

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 have increased for all comparable clients.

Appendix C

Additional Services of Engineer City of Billings W.O. 20-33: Public Works Professional Geographic Information Systems (GIS) Services

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

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

Appendix D

Schedule of Professional Fees City of Billings W.O. 20-33: Public Works Professional Geographic Information Systems (GIS) Services

Not used on this Contract.

Appendix E

Project Schedule City of Billings W.O. 20-33: Public Works Professional Geographic Information Systems (GIS) Services

Based on a notice to proceed by Billings dated no later than January 13, 2020, the completion date for the Engineer's work shall be on or before December 3, 2020 based on the following estimated schedule for major deliverables:

- A. Kick-off Presentation – March, 2020
- B. Needs Assessment Report – July, 2020
- C. Roadmap Report and Standards and QA/QC Plan – October 2020
- D. Implementation Workshop – November 2020

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 City of Billings W.O. 20-33: Public Works Professional Geographic Information Systems (GIS) Services

(Attach Certificate(s) of Insurance)

