

**EXHIBIT A**  
**SCOPE OF SERVICES**  
**Rapid City Solid Waste**  
**Lake Herman Outfall Improvements**  
**Project No. 20-2589 / CIP 51289**

The City of Rapid City has determined the need to complete the design, bidding, and construction period services for a new outfall structure at the Solid Waste Facility Lake Herman Stormwater Detention Pond. FMG has previously performed Task 1 - Preliminary Design Services for the project under the Supplementary Engineering Task 2.24 of the Cell 16 Final Cover contract, City project #18-2448 / CIP 51202.

This project consists of three phases: Final Design, Bidding, and Construction. The Final Design and Bidding phase shall include all tasks necessary for development and design, including bid documents, for the Lake Herman Outfall Improvements project. The Construction Phase shall include Basic and Expanded Construction Service tasks necessary for the construction administration, oversight, and quality assurance.

In general, the Final Design and Bidding Phase will consist of:

- Final Design of a valved outfall structure that allows manual discharge into either the sanitary sewer system or the surface water drainage system. Design shall include electrical engineering drawings to supply power to a new electric flow meter and various outlets near the new outfall.
- Other improvements consisting of an embankment raise of approximately 1.5 to 2 feet vertically, and construction of a new overflow spillway and downstream channel.
- Final plans and specifications sufficient for bidding and construction of the outfall project.

The Construction Phase will include:

- Basic and Expanded Construction Services for construction administration, observation, and construction testing activities.

Further discussion of the project and specific tasks are as follows.

**TASK 2 – FINAL DESIGN:**

This task consists of all services necessary to take the project from the Preliminary Design submittal stage to Final Design and construction plans and specifications and may include the following itemized services.

- 2.1. Provide complete plans and specifications for a unit price construction contract. Scope of work assumes project is to be bid as one overall project.

The following plans sheets are anticipated:



- Cover Sheet
- General Note Sheets
- Survey Control Sheet
- Grading Sheet
- Overall Project Layout Sheet including Property Lines and Land Ownership
- Profile Sheet
- Outfall Details
- Erosion Control Plans
- Erosion Control Details
- SWPPP

Plans are to be prepared using City of Rapid City drafting standards. Drawing scales shall be 1" = 20' H and 1" = 5' V for plan and profile sheets. Alternate scales may be used for overall sheets and cross sections.

Staking information shall include either of the following formats:

- Station offsets for all items of work requiring field staking. In tabular form on a plan sheet (schedule).
- Coordinates and description of inter-visible control points.
- Coordinates of all items of work requiring field staking.

This task shall include fees for West Plains Engineering to complete the electrical design for a new power supply near the outfall location.

- 2.2. Prepare Final Review detailed specifications supplementing the City of Rapid City Standard Specifications as necessary. City of Rapid City Standard Specifications and contract documents are to be used where applicable. It is anticipated any specifications required in addition to City Standard Specifications will be provided on plan sheet notes.
- 2.3. Obtain Design or Specification Exceptions.
- 2.4. Electrical Design of modifications required to install power to facilitate a new flow meter near the new outfall location. An electrical mounting panel, receptacles, and new light will be installed near the new outfall. A new pole, power main routing, and transformer will also be required.
- 2.5. Prepare a unit price cost probable opinion of construction cost for the final review drawings and specifications.
- 2.6. Submit Final Review Specifications, Drawings, and Opinion of Probable Cost to City of Rapid City and South Dakota Department of Natural Resources (DENR) for review. The Final Review Submittal will be made to the City when the Consultant believes the plans, specifications, contract documents, and Opinion of probable construction cost are 100% complete.



Provide three (3) copies and a PDF version of the Final Design Submittal to City. Provide copies and PDF of the Final Design Submittal to DENR as necessary.

## 2.7. City Meetings during Final Design

The Consultant shall schedule and participate in the following meetings with City staff. The Consultant shall prepare an agenda, take minutes, and distribute minutes. This task assumes all meetings can be held locally or over teleconference.

- Final Review Plans and Specifications Review Meeting (Approximately 100% Design), and one progress meetings throughout project.
- Bi-weekly progress meetings with City Project Manager (PM). To estimate level of effort, a total of four (4) meetings will be assumed.

2.8. DENR coordination including meetings as required. To estimate level of effort, two teleconference meetings are assumed. Task includes one Final Design submittal and required revisions following DENR 30-day review of final stamped drawings.

2.9. Address Final Review comments by City of Rapid City and DENR.

2.10. Prepare any and all permits with exhibits for the project that the City will need to execute.

2.11. Identify permits that will be required for the Contractor. Identify permit costs and indicate if any permit costs are paid for directly by the owner or if it is a Contractor cost. Typically, all permit costs are the Contractor's obligation.

2.12. Prepare final "Engineer's Estimate" of probable construction cost for the project.

2.13. Provide Final Plans and Specifications.

All submittals (drawings and specifications) believed by the Engineer of Record to be a final, shall contain a Certification Statement of Conformance with City Standards which shall read, "I (insert Engineer of Record's name) certify that I have read and understand the provisions contained in the City of Rapid City Standard Specifications for Public Works Construction, current edition and the City of Rapid City's adopted Design Criteria Manuals. The drawings and specifications contained here within, to the best of my knowledge, were prepared in accordance with these documents or a properly executed exception to the Standard Specifications and/or Infrastructure Design Criteria Manual has been secured". This statement shall appear on the title sheet of the drawings and on the first page of specifications after the cover sheet. The "Certification Statement of Conformance with City Specifications" shall be signed and dated by the Engineer of Record.

Deliver the following:



- Provide one (1) copy and a PDF version of bid documents including complete plans, specifications, and Engineer's Estimate of probable construction cost to the City's PM for City distribution.
- Provide complete plans electronically with AutoCAD Release 2011 or newer format.
- Provide all topographic, control, and design points in the .dwg file and in tabular format, both on CD and on hard copy printout.  
Provide complete specifications and contract documents on CD in Microsoft Word XP or previous versions.
- Provide a unit price cost estimate on CD in Microsoft Excel XP or previous version on the City of Rapid City "Engineer's Estimate" form.
- Provide Engineer's Estimate of probable construction costs as a component of this submittal.
- Provide all final design documents in PDF format on a CD.

2.14. This task accounts for reimbursable expenses and costs such as printing costs, equipment rental, mileage, etc. The estimates for expenses and reimbursables are on a not-to-exceed basis. Unused funds in this item shall not be available for reallocation to other tasks without City PM's approval.

2.15. Supplemental Engineering Services.

This task includes supplemental engineering services on an as-needed basis. These services could include but are not limited to additional design services, meetings, technical memorandums, or engineering calculations, cost estimates, civil design work, and/or other engineering consultation services. These services may also be utilized for work occurring under Tasks 3, 4, and 5 of this agreement. An allowance is established under Exhibit B for this task. If supplemental services are requested by the City, a proposal will be completed that defines deliverables and estimates the level of effort required to complete the supplemental services. The City will then review and comment or accept the proposal. As the work is progressing, if the Consultant believes the scope has changed or a new level of effort is needed, the Consultant shall notify the PM for direction prior to commencing with the out-of-scope work. Work on this task will only commence after approval by the City PM and will be billed on a time and materials basis.

2.16. DENR State Revolving Fund (SRF) loan and grant assistance.

Assist the City in preparation of a DENR funding application for the State Water Board. Coordinate with DENR staff and Black Hills Council of Local Governments on funding application. Consultant shall fill out the funding application on behalf of the City. Consultant shall work with different City Departments and Divisions in obtaining the data necessary to fill out the funding application. The Consultant shall attend public hearings and City meetings as necessary in the process of completing the funding applications. The Consultant shall prepare a Project Facility Plan for the funding application and assist the City in the process of applying for the funding application.



### TASK 3 – BIDDING SERVICES:

This task consists of all services necessary for the administration of the Bidding Services of the project and will include the following itemized services.

City to be responsible for bid document distribution. City to be responsible for printing costs.

- 3.1. Submit sufficient information to the City PM for completion of City Advertising Authority form.
- 3.2. Consultant shall proof print quality before full production of project bid copies are made.
- 3.3. Arrange and conduct a Pre-bid Conference. Prepare pre-bid agenda and submit to City PM for review and comment two (2) working days prior to the pre-bid meeting. Record attendance and minutes. Distribute minute copies to only Consultant and City.
- 3.4. Prepare and issue addenda to the bid documents as required.
- 3.5. Review Bidder's Proposals and review and sign the City Engineering prepared Bid Tab, prepare an award recommendation letter to the City PM, and sign a City Engineering prepared Award Summary.

### TASK 4 – BASIC CONSTRUCTION SERVICES:

This task consists of all services necessary for the administration of the Basic Construction Services of the project construction stage and will include the following itemized services.

- 4.1 Review construction contract documents and other submittals from the contractor and submit to the City PM for distribution to the City Attorney's for approval and signatures of the Mayor and Finance Officer.
- 4.2 Prepare Notice to Proceed on City letterhead for City PM signature and distribution to contractor for execution.
- 4.3 Arrange and conduct Pre-construction Conference. Prepare pre-construction agenda and submit to City PM for review and comment two (2) working days prior to pre-construction meeting. Record meeting minutes and distribute to all attendees.
- 4.4 Provide written clarification regarding drawing and specification questions.
- 4.5 Provide recommendations to City PM to address changed or unknown conditions that may appear during construction.
- 4.6 Review and take action on shop drawings, product submittals, test results, and other submittals.



- 4.7 Prepare “As Built” plans and specifications. This task will also include the topographic survey work required to identify pertinent features and grades for “As-Built” plans. A hard copy of “As Built” plans and specifications shall be submitted to the City in the same size and format as construction plans. Additionally, the Consultant will provide PDFs, and CAD files electronically. The digital submittal must be compatible with AutoCAD Civil 3D 2011, or newer, containing all files and data packaged in a format that will allow City personnel to seamlessly open “As Built” drawings. The Consultant will work with the City CAD Technicians, in person, to demonstrate the CAD file operation and compatibility with City CAD software.

#### TASK 5 – EXPANDED CONSTRUCTION SERVICES:

Task 5 consists of all services necessary for the administration of the Expanded Construction Services of the project construction stage and includes the following itemized services.

- 5.1 Arrange and conduct weekly progress meetings with the Contractor, Consultant and City PM. Record minutes and distribute to all attendees. For the purpose of estimating the level of effort required, this task assumes four (4) meetings.
- 5.2 Provide daily on-site observation to assure that the methods and materials used by the contractor meet the intent of the plans and specifications. For buried installations, the Consultant shall be on site all the time the Contractor is installing these buried installations.
- 5.3 Prepare daily reports. A daily record of activity will be maintained by the inspector including weather conditions, construction progress, deviations from the plans and specifications, work performed, quantities installed, and any other pertinent information. Submit previous week’s reports to City PM prior to Monday the following week. Prior to start of construction, the Consultant shall prepare an example of the daily report and submit to PM for review and comment minimum of two (2) working days before the pre-construction meeting.
- 5.4 Perform stormwater inspections, prepare reports, and keep the erosion and sediment control plans current as required by the ordinance regulating construction site runoff control, Ordinance Chapter 8.46, and the Stormwater Quality Manual. This task will be coordinated with the Contractor as required by permits. The Consultant shall verify the Contractor is performing work in compliance with permits and notify City PM immediately of any observed issues.
- 5.5 Provide materials testing on behalf of City according to the Standard Specifications, Detailed Specifications, and approved plans. All test results shall be submitted to the City of Rapid City within 30 days of project completion.



- 5.6 Provide electrical construction period services. This task will be completed by the Sub-Consultant and will include all necessary services during construction including final punch list, project closeout and As-Builts as required.
- 5.7 Provide construction staking in accordance with Section 201 of the City Standard Specifications. This task assumes initial staking only and does not account for disturbance of initial stakes by contractor or additional staking required due to circumstances beyond the owner or engineer's control.
- 5.8 Prepare and submit monthly pay request information. Consultant shall track quantities installed utilizing the City's Quantity Book or preapproved Consultant document.
- 5.9 Prepare change orders and extra work orders for Contractor on City of Rapid City forms and make recommendations for their approval or denial.
- 5.10 Prepare and submit project completion punch list items to the Contractor and City Engineering Services and oversee its completion.
- 5.11 Prepare letter of certification of project completion verifying compliance with plans and specifications and start of warranty period.
- 5.12 Assist the City in addressing and communicating warranty items with the Contractor that may arise during the City's two-year warranty period to the City PM. Prepare a project acceptance and start of warranty letter on City letterhead for City PM signature. This will be a lump sum task and will be paid as part of the Consultant's final invoice after the project has been accepted. Consultant shall be contract obligated for these services until expiration of the two-year warranty.
- 5.13 Schedule and participate in a two-year warranty inspection with the City PM and Operations staff. Document the two-year warranty items and assist the City in addressing and communicating the warranty items with the Contractor. The two-year warranty inspection typically occurs three months prior to the warranty expiring. This will be a lump sum task and will be paid as part of the Consultant's final invoice after the project has been accepted. Consultant shall be contract obligated for these services until expiration of the two-year warranty.



## SCHEDULE

Following are the project schedule milestone dates. These dates are goals and subject to change as the project advances.

Contract Effective Date	June 1, 2020
Final Design Services Submittal	July 17, 2020
Final Plans, Specifications, and Contract Documents Complete	July 22, 2020
Project Bid Opening Date	September 1, 2020
Project Construction Begins	TBD, Summer/Fall 2020
Project 100% Construction Complete	TBD, +/-December 4, 2020
Two-Year Warranty Expiration	Two Years After Project Acceptance

Schedule assumes City will provide review comments to all submittals within one week of receipt.

