REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN PROFESSIONAL SERVICES AGREEMENT OR AMENDMENT

Date: 6-15-2020

Project Name & Number: Tower Road Stabilization Project, Project Number 19-2537  
CIP #: 51254

Project Description: Slope failure has occurred in the north-bound lane of Tower Rd south of the intersection of Tower Rd and Sandstone Ln. FMG has completed preliminary soil exploration and a Feasibility Report for Stabilization Options (Jan. 2020). FMG will provide professional engineering services related to the preparation of design plans and construction services for road repairs and a retaining wall system for slope stabilization as recommended in the report.

Consultant: FMG Engineering

Original Contract Amount: $85,785.00  
Original Contract Date: 7-6-2020  
Original Completion Date: 12/31/2020

Addendum No:

Amendment Description:

Current Contract Amount:  
Change Requested:  
New Contract Amount: $0.00

Current Completion Date:  
New Completion Date:

Funding Source This Request:

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$85,785.00 Total

Agreement Review & Approvals

[Signatures and dates]

Routing Instructions

[Routing instructions for document]

Finance Office Use Only

(Note to Finance: Please write date of Agreement in appropriate space in the Agreement document)

Appropriation  
Cash Flow

[Signatures and dates]

108A Authorization for Mayor & Finance Officer to Sign

Rev. 02/2009
Agreement Between City of Rapid City and FMG Engineering
for Professional Services for
Tower Road Stabilization Project
Project No. 19-2537 / CIP No. 51254

AGREEMENT made ______________________, 20___, between the City of Rapid City, SD (City) and FMG Engineering (Engineer), located at 3700 Sturgis Road, Rapid City, SD 57702. City intends to obtain services for Tower Road Stabilization Project, Project No. 19-2537 / CIP No. 51254. The scope of services is as described within this document and as further described in Exhibits A, B and C (attached).

The City and the Engineer agree as follows:

The Engineer shall provide professional engineering services for the City in all phases of the Project and as further defined in Exhibits A, B and C (attached), serve as the City’s professional engineering representative for the Project, and give professional engineering consultation and advice to the City while performing its services.

Section 1—Basic Services of Engineer

1.1 General

1.1.1 The Engineer shall perform professional services described in this agreement, which include customary engineering services. Engineer intends to serve as the City’s professional representative for those services as defined in this agreement and to provide advice and consultation to the City as a professional. Any opinions of probable project cost, approvals, and other decisions provided by Engineer for the City are rendered on the basis of experience and qualifications and represent Engineer’s professional judgment.

1.1.2 All work shall be performed by or under the direct supervision of a professional Engineer licensed to practice in South Dakota.

1.1.3 All documents including Drawings and Specifications provided or furnished by Engineer pursuant to this Agreement are instruments of service in respect of the Project and Engineer shall retain an ownership therein. Reuse of any documents pertaining to this project by the City on extensions of this project or on any other project shall be at the City’s risk. The City agrees to defend, indemnify, and hold harmless Engineer from all claims, damages, and expenses including attorney’s fees arising out of such reuse of the documents by the City or by others acting through the City.
1.1.4 The contract will be based on an hourly rate and reimbursable fee schedule with a maximum not-to-exceed amount.

1.2 **Scope of Work**

The Engineer shall:

1.2.1 Consult with the City, other agencies, groups, consultants, and/or individuals to clarify and define requirements for the Project and review available data.

1.2.2 Perform the tasks described in the Scope of Services. (See Exhibit A.)

1.2.3 Conduct a location survey of the Project to the extent deemed necessary to provide adequate site information.

1.2.4 Prepare a report presenting the results of the study as outlined in the scope of services.

**Section 2—Information Provided by City**

The City will provide any information in its possession for the project at no cost to the Engineer.

**Section 3—Notice to Proceed**

The City will issue a written notification to the Engineer to proceed with the work. The Engineer shall not start work prior to receipt of the written notice. The Engineer shall not be paid for any work performed prior to receiving the Notice to Proceed.

**Section 4—Mutual Covenants**

4.1 **General**

4.1.1 The Engineer shall not sublet or assign any part of the work under this Agreement without written authority from the City.

4.1.2 The City and the Engineer each binds itself and partners, successors, executors, administrators, assigns, and legal representatives to the other party to this agreement and to the partners, successors, executors, administrators, assigns, and legal representatives of such other party, regarding all covenants, agreements, and obligations of this agreement.

4.1.3 Nothing in this agreement shall give any rights or benefits to anyone other than the City and the Engineer.
4.1.4 This agreement constitutes the entire agreement between the City and the Engineer and supersedes all prior written or oral understandings. This agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

4.1.5 The Engineer shall make such revisions in plans which may already have been completed, approved, and accepted by the City, as are necessary to correct Engineer's errors or omissions in the plans, when requested to do so by the City, without extra compensation therefore.

4.1.6 If the City requests that previously satisfactorily completed and accepted plans or parts thereof be revised, the Engineer shall make the revisions requested by the City. This work shall be paid for as extra work.

4.1.7 If the City changes the location from the one furnished to the Engineer, or changes the basic design requiring a new survey for the portions so changed, the redesign will be paid for as extra work.

4.1.8 The City may at any time by written order make changes within the general scope of this Agreement in the work and services to be performed by the Engineer. Any changes which materially increase or reduce the cost of or the time required for the performance of the Agreement shall be deemed a change in the scope of work for which an adjustment shall be made in the Agreement price or of the time for performance, or both, and the Agreement shall be modified in writing accordingly. Additional work necessary due to the extension of project limits shall be paid for as extra work.

4.1.9 Extra work, as authorized by the City, will be paid for separately and be in addition to the consideration of this Section.

4.1.10 For those projects involving conceptual or process development services, activities often cannot be fully defined during the initial planning. As the project does progress, facts and conditions uncovered may reveal a change in direction that may alter the scope of services. Engineer will promptly inform the City in writing of such situations so that changes in this agreement can be renegotiated.

4.1.11 This Agreement may be terminated (a) by the City with or without cause upon seven days' written notice to the Engineer and (b) by the Engineer for cause upon seven days' written notice to the City. If the City terminates the agreement without cause, the Engineer will be
paid for all services rendered and all reimbursable expenses incurred prior to the date of termination.

If termination is due to the failure of the Engineer to fulfill its agreement obligations, the City may take over the work and complete it. In such case, the Engineer shall be liable to the City for any additional cost to the extent directly resulting from Engineer’s action.

4.1.12 The City or its duly authorized representatives may examine any books, documents, papers, and records of the Engineer involving transactions related to this agreement for three years after final payment. All examinations will be performed at reasonable times, with proper notice. Engineer’s documentation will be in a format consistent with general accounting procedures.

4.1.13 The City shall designate a representative authorized to act on the City’s behalf with respect to the Project. The City or such authorized representative shall render decisions in a timely manner pertaining to documents submitted by the Engineer in order to avoid unreasonable delay in the orderly and sequential progress of the Engineer’s services.

4.1.14 Costs and schedule commitments shall be subject to renegotiation for delays caused by the City’s failure to provide specified facilities or information or for delays caused by other parties, excluding subcontractors and sub-consultants, unpredictable occurrences including without limitation, fires, floods, riots, strikes, unavailability of labor or materials, delays or defaults by suppliers of materials or services, process shutdowns, acts of God, or the public enemy, or acts of regulations of any governmental agency or any other conditions or circumstances beyond the control of the City or Engineer. Temporary delays of services caused by any of the above which results in additional costs beyond those outlined may require renegotiation of this agreement.

4.1.15 The City will give prompt written notice to the Engineer if the City becomes aware of any fault or defect in the Project or nonconformance with the Project Documents.

4.1.16 Unless otherwise provided in this Agreement, the Engineer and the Engineer’s consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos products, polychlorinated biphenyl (PCB), or other toxic substances.
4.1.17 In the event asbestos or toxic materials are encountered at the jobsite, or should it become known in any way that such materials may be present at the jobsite or any adjacent areas that may affect the performance of Engineer's services, Engineer may, at their option and without liability for consequential or any other damages, suspend performance of services on the project until the City retains appropriate specialist CONSULTANT(S) or contractor(s) to identify, abate, and/or remove the asbestos or hazardous or toxic materials.

4.1.18 This agreement, unless explicitly indicated in writing, shall not be construed as giving Engineer the responsibility or authority to direct or supervise construction means, methods, techniques, sequences, or procedures of construction selected by any contractors or subcontractors or the safety precautions and programs incident to the work of any contractors or subcontractors.

4.1.19 Neither the City nor the Engineer, nor its Consultants, shall hold the other liable for any claim based upon, arising out of, or in any way involving the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, or gases, waste materials, or other irritants, contaminants, or pollutants.

4.1.20 Neither the City nor the Engineer, nor its Consultants, shall hold the other liable for any claim based upon, arising out of, or in any way involving the specification or recommendation of asbestos, in any form, or any claims based upon use of a product containing asbestos.

4.1.21 Engineer hereby represents and warrants that it does not fail or refuse to collect or remit South Dakota or City sales or use tax for transactions which are taxable under the laws of the State of South Dakota.

4.2 City of Rapid City NonDiscrimination Policy Statement

In compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination act of 1975, the Americans with Disabilities Act of 1990, and other nondiscrimination authorities it is the policy of the City of Rapid City, 300 Sixth Street, Rapid City, SD 57701-5035, to provide benefits, services, and employment to all persons without regard to race, color, national origin, sex, disabilities/handicaps, age, or income status. No distinction is made among any persons in eligibility for the reception of benefits and services provided by or through the auspices of the City of Rapid City.

Engineer will permit access to any and all records pertaining to hiring and employment and to other pertinent data and records for the purpose of enabling the Commission, its agencies or representatives, to ascertain compliance with the above provisions.
This section shall be binding on all subcontractors or suppliers.

**Section 5—Payments to the Engineer**

5.1 **Schedule of Pay Rates**

The City will pay the Engineer for services rendered or authorized extra work according to the Engineer's hourly and reimbursable rate schedule described in Exhibit C.

5.2 **Fee**

The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed $85,785.00 unless the scope of the project is changed as outlined in Section 4. If expenses exceed the maximum amount, the Engineer shall complete the design as agreed upon here without any additional compensation. Sub task dollar amounts may be reallocated to other tasks as long as the total fee is not exceeded. Prime consultant may not mark up sub-consultant or sub-contractor services.

5.3 **Progress Payments**

Monthly progress payments shall be processed by the City upon receipt of the claim as computed by the Engineer based on work completed during the month per the hourly rates and allowable reimbursable as established in Section 5.1 and approved by the City.

Net payment to the Engineer shall be due within forty-five (45) days of receipt by the City.

**Section 6—Completion of Services**

The Engineer shall complete services on or before December 31, 2020 based on a notice to proceed on or before July 16, 2020.

**Section 7—Insurance Requirements**

7.1 **Insurance Required**

The Engineer shall secure the insurance specified below. The insurance shall be issued by insurance company(s) acceptable to the City and may be in a policy or policies of insurance, primary or excess. Certificates of all required insurance including any policy endorsements shall be provided to the City prior to or upon the execution of this Agreement.
7.2 **Cancellation**

The Engineer will provide the City with at least 30 days' written notice of an insurer's intent to cancel or not renew any of the insurance coverage. The Contractor agrees to hold the City harmless from any liability, including additional premium due because of the Contractor's failure to maintain the coverage limits required.

7.3 **City Acceptance of Proof**

The City's approval or acceptance of certificates of insurance does not constitute City assumption of responsibility for the validity of any insurance policies nor does the City represent that the coverages and limits described in this agreement are adequate to protect the Engineer, its consultants or subcontractors interests, and assumes no liability therefore. The Engineer will hold the City harmless from any liability, including additional premium due, because of the Engineer's failure to maintain the coverage limits required.

7.4 **Specific Requirements**

7.4.1 Workers' compensation insurance with statutory limits required by South Dakota law. Coverage B-Employer's Liability coverage of not less than $500,000 each accident, $500,000 disease-policy limit, and $500,000 disease-each employee.

7.4.2 Commercial general liability insurance providing occurrence form contractual, personal injury, bodily injury and property damage liability coverage with limits of not less than $1,000,000 per occurrence, $2,000,000 general aggregate, and $2,000,000 aggregate products and completed operations. If the occurrence form is not available, claims-made coverage shall be maintained for three years after completion of the terms of this agreement. The policy shall name the City and its representatives as an additional insured.

7.4.3 Automobile liability insurance covering all owned, nonowned, and hired automobiles, trucks, and trailers. The coverage shall be at least as broad as that found in the standard comprehensive automobile liability policy with limits of not less than $1,000,000 combined single limit each occurrence. The required limit may include excess liability (umbrella) coverage.

7.4.4 Professional liability insurance providing claims-made coverage for claims arising from the negligent acts, errors or omissions of the Engineer or its consultants, of not less than $1,000,000 each occurrence and not less than $1,000,000 annual aggregate.
Coverage shall be maintained for at least three years after final completion of the services.

Section 8—Hold Harmless

The Engineer hereby agrees to hold the City harmless from any and all claims or liability including attorneys' fees arising out of the professional services furnished under this Agreement, and for bodily injury or property damage arising out of services furnished under this Agreement, providing that such claims or liability are the result of a negligent act, error or omission of the Engineer and/or its employees/agents arising out of the professional services described in the Agreement.

Section 9—Independent Business

The parties agree that the Engineer operates an independent business and is contracting to do work according to his own methods, without being subject to the control of the City, except as to the product or the result of the work. The relationship between the City and the Engineer shall be that as between an independent contractor and the City and not as an employer-employee relationship. The payment to the Engineer is inclusive of any use, excise, income or any other tax arising out of this agreement.

Section 10—Indemnification

If this project involves construction and Engineer does not provide consulting services during construction including, but not limited to, onsite monitoring, site visits, site observation, shop drawing review and/or design clarifications, City agrees to indemnify and hold harmless Engineer from any liability arising from the construction activities undertaken for this project, except to the extent such liability is caused by Engineer's negligence.

Section 11—Controlling Law and Venue

This Agreement shall be subject to, interpreted and enforced according to the laws of the State of South Dakota, without regard to any conflicts of law provisions. Parties agree to submit to the exclusive venue and jurisdiction of the State of South Dakota, 7th Judicial Circuit, Pennington County.

Section 12—Severability

Any unenforceable provision herein shall be amended to the extent necessary to make it enforceable; if not possible, it shall be deleted and all other provisions shall remain in full force and effect.
Section 13—Funds Appropriation

If funds are not budgeted or appropriated for any fiscal year for services provided by the terms of this agreement, this agreement shall impose no obligation on the City for payment. This agreement is null and void except as to annual payments herein agreed upon for which funds have been budgeted or appropriated, and no right of action or damage shall accrue to the benefit of the Engineer, its successors or assignees, for any further payments. For future phases of this or any project, project components not identified within this contract shall not constitute an obligation by the City until funding for that component has been appropriated.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first above written.

City of Rapid City:  

MAYOR  

DATE:  

ATTEST:  

FINANCE OFFICER  

Reviewed By:  

Mary Bosworth, PROJECT MANAGER  

DATE:  


city’s designated project representative  

NAME:  Mary Bosworth, PE CFM  

PHONE:  605-394-4154  

EMAIL:  mary.bosworth@gmail.com  

engineering firm’s designated project representative  

NAME:  Jason Hinds, PE  

PHONE:  605-342-4105  

EMAIL:  jhinds@fmgengineering.com
EXHIBIT A
SCOPE OF SERVICES

TOWER ROAD STABILIZATION DESIGN
PROJECT NO. 19-2537 CIP 51254

Slope failure has occurred in the north-bound lane of Tower Road south of the intersection of Tower Road and Sandstone Lane. FMG Engineering previously completed preliminary soil exploration and a feasibility study of stabilization options. The findings of that study were published in the Preliminary Feasibility Report for Tower Road Stabilization Options Report, dated January 17, 2020. In general, the feasibility study included evaluation of two stabilization types - re-alignment of the roadway and existing roadway embankment stabilization. The study included an evaluation of existing ground conditions, an assessment of the advantages, disadvantages as well as the risks associated with each option, and a preliminary evaluation of costs. The City of Rapid City has reviewed the report and the preferred stabilization design option is a retaining structure consisting of a drilled, reinforced concrete pier wall design.

FMG Engineering will provide Professional Design services related to survey, geotechnical evaluation, roadway design, public utility relocation as required, and traffic barrier improvements.

The structural design of the reinforced concrete pier retaining wall system will not be provided under this contract. For these types of structures, it is typical for the contractor to provide structural design services. FMG Engineering will prepare contract and/or bidding documents as required to facilitate the design and construction of the retaining wall system.

It is anticipated the project will include two separate bid packages - design build for the structural retention system and construction of the Tower Road street repairs. Under this scope, full plans and specifications will be prepared to allow the City to complete both bid packages. The structural retention system will be completed as a design-build contract. The civil/roadway plans will be completed under this scope. FMG Engineering will provide bidding and construction period services for both bid packages.

The scope of services will generally include:

- Additional geotechnical investigation and testing as required to supplement final design recommendations.
- Additional field topographic survey as required to supplement final design.
- Preliminary Design services to take the project from conceptual design to preliminary design.
- Final Design services to advance the project through to final design and assist in the review of structural drawings by others.
- Assist in preparation of required bidding documents and prequalification requirements for the specialty slope stabilization work.
- Roadside safety barriers (guardrails) design.
- Storm drainage improvements are anticipated to include culvert extension, ditch liners, slope protection mats, and curb and gutter if necessary, to divert flows from steep slopes. The project does not include specific design features for storm water quality treatment.
- Project bidding period services, basic and expanded construction period services.

TASK 1 - PRELIMINARY DESIGN SERVICES:

This task consists of all services necessary to take the project from beginning through the Preliminary Design submittal stage and may include the following itemized services.
• Kick-off Conference: The consultant shall meet with City staff to detail project concept and scope. The consultant shall prepare an agenda, take minutes, and distribute minutes.

• Review available background information provided by the City of Rapid City and other resources where available.

• Perform additional site surveys if required for design plan preparation and legal survey sufficient for establishment of ROW and preparation of easements.

• Private Utilities Base Plan Verification and Coordination Meeting. The consultant shall send base plans to the private utilities requesting verifications that their utilities are shown correctly per their records. A meeting with the private utilities shall be scheduled after submitting plans to verify that the utilities are correct and to assist in project coordination and utility relocation as necessary.

• Geotechnical Evaluation

An initial geotechnical evaluation was previously conducted to facilitate the feasibility study. Limited supplementary information is needed to complete the detailed geotechnical evaluation. To complete the evaluation and provide final geotechnical recommendations and design parameters, the following Geotechnical Evaluation is planned:

2 to 3 additional borings will be drilled within the area of slope movement.

The most significant portion of the additional evaluation will be the detailed soil testing required. Significant lab testing will be required for final design, whereas only limited testing was necessary to reach feasibility level evaluations.

Upon completion of the field and laboratory testing and our analysis, a report will be prepared that transmits the boring logs and field data, and laboratory results, including a limited geologic analysis of the area, and provides our recommendations for stabilization design and construction. In general, our recommendations will include earthwork recommendations and slope stabilization recommendations and design parameters. The report will also include the general and site-specific construction recommendations that we consider applicable.

• Slope Stability Analysis

A slope stability analysis will be performed based on design parameters. We have included a line item cost for what we could consider an involved slope stability scope, based on up to 3 additional boreholes perpendicular to the roadway, additional specific laboratory soil strength testing, detailed slope modeling, and coordination for any adjustments to roadway/slope geometry. Should the necessary scope for slope stability analysis be less than that described herein, fees for the analysis can be adjusted accordingly. For the purposes of this proposal, we have assumed no significant work will be required to construct site access trails are for drilling equipment.

• Conceptual Design Submittal

The Conceptual Design Submittal shall generally consist of the following documents:

A. Conceptual Design Report
Prepare a Conceptual Design Report: The consultant shall establish and indicate project specific design criteria and standards within the Conceptual Design Report. The consultant shall submit all
design assumptions. The Consultant shall include design life, design criteria, and reference of design resources. The Consultant shall use the City Infrastructure Design Criteria Manual to establish design criteria and standards. The Conceptual Design Report shall provide geotechnical stabilization parameters, evaluate and recommend pavement design, preliminary retaining structure considerations and recommendations, surficial slope stability and erosion control, roadside safety barriers, project phasing and limits, and other public improvements. Establish pipe sizes, lane configurations, drainage system capacity, complete water quality assessment, etc. Provide justification for the facility and analysis of alternatives. The project’s geotechnical report shall be included within the Conceptual Project Design Report. The Consultant shall elaborate on other project components as necessary.

A probable opinion of construction costs for the project(s) shall be included. The costs shall be itemized based on the City’s standard bid items and appropriate contingency item allowance.

Identify the existing right-of-way (ROW) location and any ROW or easements necessary for the Project. Include size and extent of such ROW and easements and contact information of property owners.

Submit three (3) copies and a PDF version of the Conceptual Design Report and preliminary plans and specifications to City of Rapid City’s project manager for review and comment.

B. Conceptual Drawings
Provide three (3) copies and a PDF version of the conceptual drawings. The conceptual drawings shall contain the following sheets:

- Cover Sheet
- Survey Control Sheet
- Anticipated traffic control phasing.
- Property Layout and Land Ownership
- Plan and Profile Sheets - Show existing and proposed utility mains and existing services, storm sewers, fittings, and proposed surfacing curb and gutter layout, and guardrail locations, consideration for sidewalks and ADA Facilities and drainage items.
- Retaining structure alignments locations.
- Roadside barrier types and locations.
- Cross Sections
- Special Details - Layouts for special/critical elements for example storm water quality features, traffic calming, special drainage structures, etc.
- Plan sheets shall be prepared utilizing the latest City of Rapid City Drafting Standards. Drawings shall be 22” x 34” sheet size.

- Attend submittal review meeting with City staff.

**TASK 2 - FINAL DESIGN SERVICES:**
This task consists of all services necessary to take project from Task 1 Preliminary Design Services through the Final Design Services and may include the following itemized services.

- Address City comments from the Task 1 City review(s) and finalize Conceptual Design Report. The Conceptual Design Report should be now titled “Project Design Report”.
- Update the geotechnical report as necessary based on final design.
• Incorporate design features as necessary to meet the requirements outlined in the project design report.

• Submit Additional Design Exception Requests to City’s project manager, and verify approvals

• Provide Plans and Specifications.
  • Provide detailed specifications supplementing the City of Rapid City Standard Specifications
  • Project Manual and Bidders Proposal
  • Title Sheet
  • Legend Sheet
  • Estimate of Quantities and General Note Sheets
  • Project Sequencing and Phasing Schedule Notes
  • Estimate of Quantities Tables
  • Property Control Drawings with Layout, Ownership/Type of Occupancy Sheets
  • Right of Way and Easement Layout Sheets
  • Survey Control Sheet / Horizontal/Vertical and Alignment Data
  • Detailed Traffic Control sheets
  • Existing Condition and Removal Sheets
  • SWPPP sheets with City Std. Notes Plus SDDENR requirements
  • Erosion Control Plan Sheets
  • Typical Sections
  • Plan Sheets (combined roadway, utility and drainage)
  • Profile Sheets (combined roadway, utility, and drainage)
  • Curb and Gutter & Surfacing Sheets
  • Retaining Structure Layout sheets
  • Roadside Barrier plan sheets.
  • Striping Plan Sheets
  • Cross Sections
  • Standard City Details
  • Special Project Details

As discussed, it is assumed that the project will consist of two plan sets. The total number and/or type of sheets may vary upon final design depending on final project requirements.

Project layout sheet is to include lot lines (front and side) and addresses of all properties (adjacent to construction, or alternatively, in service area).

Design features as necessary to meet the requirements outlined in the Project Design Report.

Provide a complete stormwater pollution prevention narrative which will include detailed erosion and sediment control measures and specifications. Provide a complete erosion and sediment control site plan which includes station and offset locations for each implemented measure. Include both temporary and permanent erosion and sediment control measures. Include an erosion and sediment control sequence of implementation and phasing schedule. Each erosion control item shall be bid separately.

Provide detailed traffic control plans showing all devices required for a MUTCD compliant plan. Show all streets and alleys that may be impacted by this project. Show all existing signage, pavement markings, etc. All work zones, road closures, lane closures, and pavement marking removals shall be indicated on the plan. A detailed layout will be included for each phase of multi-
phased projects. The traffic control sequence of implementation and phasing schedule shall coincide with erosion and sediment control sequence of implementation and phasing schedule. Each traffic control device shall be bid separately. The City will provide an electronic version of an aerial photo for the selected consultant’s use.

Provide a Project Sequence of implementation and phasing schedule which shall include such items as traffic control, erosion and sediment control, utility installations, paving, restoration, and construction milestones.

Provide detailed specifications supplementing the City of Rapid City Standard Specifications, as necessary. Typically, project drawing specific issues should be indicated as a General Note on the drawings. Material types and material specific items would be included as a detailed specification.

Performance specifications will be provided to pre-qualify bidders for specialty slope stabilization work.

Provide complete plans and specifications for a unit price construction contract. Plan sheets shall be prepared utilizing the latest City of Rapid City Drafting Standards.

Plans documents shall adhere to current City of Rapid City guidelines. Sheet size will be 22”x34”.

Staking information shall include either of the following formats:

On the Plans
  • 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.
  • Benchmark information shall be provided on each sheet.

  • Assist the City with easement(s) acquisition, and obtain property owner contact information, prepare easement and ROW exhibits as necessary, provide copies of current deeds or properties where easements are needed, conduct property owner meetings for easement and ROW acquisition, and document acquisition meetings.

  • Submit Final Design Documents for Final Review. Provide two (2) copies and a PDF version of the finalized Project Design Report, Provide three (3) copies and a PDF version of the Final Design Services submittal. The submittal shall consist of complete plans, specifications, contract documents, and opinion of probable construction cost to the City of Rapid City’s project manager for review. The Final Design Services 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.

  • Address 100% final review submittal staff comments as necessary.

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

  • 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.
• Prepare final “Engineer’s Estimate” of probable construction cost for the project.

• Deliver the following final submittals:
  • 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 of Rapid City’s project manager for City distribution.
  • Provide complete plans on AutoCAD Civil 3D 2010 or newer format.
  • Provide all topographic, control, and design points in the .dwg file and in tabular format, both electronically and on hard copy printout.
  • Provide complete specifications and contract documents electronically in Microsoft Word or previous versions.
  • Provide a unit price cost estimate electronically in Microsoft Excel on the City of Rapid City “Engineer’s Estimate” form. Provide Engineer’s Estimate of probable construction costs as a component of this submittal.
  • Print and distribute five (5) copies of plans/drawings to the City of Rapid City at 11” x 17” scale for construction personnel.

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.

**TASK 3 – BIDDING SERVICES:**

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

3.1 Submit sufficient information to the City of Rapid City project manager for completion of City Advertising Authority form.

3.2 Prepare pre-bid qualifications submittal requirements and review with City staff. Due to the specialty nature of the project and work required, adequate pre-bid qualification submittals will be required to ensure a contractor with adequate design-build experience in related projects is selected to perform the work.

3.3 Consultant shall proof print quality at printers before full production of copies are made.

3.4 Arrange and conduct a Pre-bid Conference. Record attendance and minutes. Distribute minute copies to only Consultant and City. Review any pre-bid qualifications or submittals.

3.5 Prepare and issue addenda to the bid documents as required.
3.6 Review Bidder’s Proposals and review and sign the City Engineering Services prepared Bid Tab and prepare an award recommendation letter to the City of Rapid City project manager.

**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 may include the following itemized services.

- Review construction contract documents and other submittals from the contractor and submit to the City of Rapid City project manager for distribution to City Attorney’s for approval and signatures of the Mayor and Finance Officer.
- Prepare Notice to Proceed for City of Rapid City project manager signature and distribution to contractor for execution.
- Arrange and conduct Pre-construction Conference including agenda. Record meeting minutes and distribute to all attendees.
- Provide written clarification regarding drawing and specification questions.
- Provide recommendations to address changed or unknown conditions that may appear during construction.
- Review and take action on shop drawings, product submittals, test results, and other submittals.
- 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 PDF’s, and CAD files electronically. The digital submittal must be compatible with AutoCAD Civil 3D 2010, 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 may include the following itemized services.

- Arrange and conduct appropriate progress meetings. Record minutes and distribute to all attendees. This task assumes four (4) total meetings are sufficient for the project.
- 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 of the time the Contractor is installing these buried installations.
- 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 detachable copies to Engineering Services on a weekly basis.
• Perform stormwater inspections, prepare reports, and keep the erosion and sediment control plans current as required by the ordinance regulating construction site runoff control, Chapter 8.46, and the Stormwater Quality Manual.

• Provide materials testing 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.

• Provide assurance testing 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.

• Provide all initial construction staking. This task will also include all construction staking necessary to construct all improvements. 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.

• Prepare and submit monthly pay request information.

• Prepare change orders, and extra work orders for contractor on City of Rapid City forms and make recommendations for their approval or denial.

• Prepare and submit project completion punch list items to the Contractor and Engineering Services and oversee its completion.

• Prepare letter of certification of project completion verifying compliance with plans and specifications and start of warranty period.

• Assist the City in addressing and communicating warranty items with the Contractor that may arises during the City’s two-year warranty period.

ANTICIPATED SCHEDULE

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Council Authorization</td>
<td>July 16, 2020</td>
</tr>
<tr>
<td>Notice to Proceed</td>
<td>July 20, 2020</td>
</tr>
<tr>
<td>Conceptual Design Services Submittal</td>
<td>August 16, 2020</td>
</tr>
<tr>
<td>Final Design Services Submittal</td>
<td>August 28, 2020</td>
</tr>
<tr>
<td>Final Plans, Specifications, and Contract</td>
<td>September 1, 2020</td>
</tr>
<tr>
<td>Project Bid Opening Date</td>
<td>September 24, 2020</td>
</tr>
<tr>
<td>Project 100% Construction Complete</td>
<td>December 31, 2020</td>
</tr>
</tbody>
</table>

This schedule is subject to change depending on survey access permission, weather delays, city review periods, easement acquisition, and other items that could affect the schedule.
<table>
<thead>
<tr>
<th>TASK 1 - PRELIMINARY DESIGN SERVICES</th>
<th>FEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Kick-off Conference</td>
<td>$ 1,040.00</td>
</tr>
<tr>
<td>1.2 Review Background Information</td>
<td>$ 2,240.00</td>
</tr>
<tr>
<td>1.3 Perform Site Surveys</td>
<td>$ 1,720.00</td>
</tr>
<tr>
<td>1.4 Private Utilities Base Plan Verification Meeting</td>
<td>$ 840.00</td>
</tr>
<tr>
<td>1.5 Geotechnical Evaluation</td>
<td>$ 6,350.00</td>
</tr>
<tr>
<td>1.6 Slope Stability Analysis</td>
<td>$ 3,780.00</td>
</tr>
<tr>
<td>1.7 Conceptual Design Submittal</td>
<td>$ 6,785.00</td>
</tr>
<tr>
<td>1.8 Attend Submittal Review Meeting with City Staff</td>
<td>$ 1,040.00</td>
</tr>
<tr>
<td>1.12 Reimbursables</td>
<td>$ 570.00</td>
</tr>
<tr>
<td><strong>TOTAL FOR TASK 1 - PRELIMINARY DESIGN SERVICES</strong></td>
<td><strong>$ 24,365.00</strong></td>
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<table>
<thead>
<tr>
<th>TASK 2 - FINAL DESIGN SERVICES</th>
<th>FEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Address City Comments from the Task 1 City Review</td>
<td>$ 2,280.00</td>
</tr>
<tr>
<td>2.2 Update Geotechnical Report and Slope Stability Analysis</td>
<td>$ 2,005.00</td>
</tr>
<tr>
<td>2.3 Incorporate Design Features in the Project Design Report</td>
<td>$ 1,280.00</td>
</tr>
<tr>
<td>2.4 Submit Design Exception Requests</td>
<td>$ 520.00</td>
</tr>
<tr>
<td>2.5 Private Utility Coordination</td>
<td>$ 1,040.00</td>
</tr>
<tr>
<td>2.6 Provide Complete Plans and Specifications</td>
<td>$ 5,845.00</td>
</tr>
<tr>
<td>2.7 Facilitate Permanent and/or Temporary Construction Easement Acquisition</td>
<td>$ 520.00</td>
</tr>
<tr>
<td>2.8 Submit Final Design Documents</td>
<td>$ 540.00</td>
</tr>
<tr>
<td>2.9 Address 100% Submittal Staff Comments as Necessary</td>
<td>$ 1,520.00</td>
</tr>
<tr>
<td>2.10 Prepare Permits with Exhibits for City</td>
<td>$ 240.00</td>
</tr>
<tr>
<td>2.11 Identify Permits Required for Contractor</td>
<td>$ 240.00</td>
</tr>
<tr>
<td>2.12 Prepare Final Engineer's Estimate</td>
<td>$ 1,540.00</td>
</tr>
<tr>
<td>2.13 Final Deliverables Submittal</td>
<td>$ 780.00</td>
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<tr>
<td>2.14 Reimbursables</td>
<td>$ 325.00</td>
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<tr>
<td><strong>TOTAL FOR TASK 2 - FINAL DESIGN</strong></td>
<td><strong>$ 18,675.00</strong></td>
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<table>
<thead>
<tr>
<th>TASK 3 - BIDDING SERVICES</th>
<th>FEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Submit Information for Advertising Authority</td>
<td>$ 480.00</td>
</tr>
<tr>
<td>3.2 Prepare Pre-Bid Qualification Requirements and Review with City Staff</td>
<td>$ 2,240.00</td>
</tr>
<tr>
<td>3.3 Proof Prints Before Production</td>
<td>$ 560.00</td>
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<tr>
<td>3.4 Arrange and Conduct Pre-Bid Conference</td>
<td>$ 1,800.00</td>
</tr>
<tr>
<td>3.5 Prepare and Issue Addenda</td>
<td>$ 720.00</td>
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<tr>
<td>3.6 Review Bidder's Proposals and Review/Sign Engineering Services Prepared Bid Tab</td>
<td>$ 480.00</td>
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<tr>
<td>3.7 Reimbursables</td>
<td>$ 75.00</td>
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<tr>
<td><strong>TOTAL FOR TASK 3 - BIDDING SERVICES</strong></td>
<td><strong>$ 6,355.00</strong></td>
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<table>
<thead>
<tr>
<th>TASK 4 - BASIC CONSTRUCTION SERVICES</th>
<th>FEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Review Construction Contract Documents and Submittals</td>
<td>$ 1,040.00</td>
</tr>
<tr>
<td>4.2 Prepare Notice to Proceed for City PM</td>
<td>$ 1,280.00</td>
</tr>
<tr>
<td>4.3 Arrange and Conduct Pre-Construction Conference</td>
<td>$ 1,760.00</td>
</tr>
<tr>
<td>4.4 Provide Written Clarification for Drawing and Specification Questions</td>
<td>$ 1,240.00</td>
</tr>
<tr>
<td>4.5 Provide Recommendations to Address Changed or Unknown Conditions</td>
<td>$ 1,240.00</td>
</tr>
<tr>
<td>4.6 Review and Take Action on Shop Drawings and Submittals</td>
<td>$ 1,240.00</td>
</tr>
<tr>
<td><strong>TOTAL FOR TASK 4 - BASIC CONSTRUCTION SERVICES</strong></td>
<td><strong>$ 6,800.00</strong></td>
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<tr>
<td>TASK 5 - EXPANDED CONSTRUCTION SERVICES</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>5.1 Arrange and Conduct Appropriate Progress Meetings</td>
<td>$ 3,480.00</td>
</tr>
<tr>
<td>5.2 Provide Daily On-Site Observation</td>
<td>$ 9,760.00</td>
</tr>
<tr>
<td>5.3 Prepare Daily Reports</td>
<td>$ 1,760.00</td>
</tr>
<tr>
<td>5.4 Perform Stormwater Inspections and Prepare Reports</td>
<td>$ 1,080.00</td>
</tr>
<tr>
<td>5.5 Provide Materials Testing</td>
<td>$ 1,600.00</td>
</tr>
<tr>
<td>5.6 Provide Assurance Testing</td>
<td>$ 2,000.00</td>
</tr>
<tr>
<td>5.7 Provide Initial Construction Staking</td>
<td>$ 1,635.00</td>
</tr>
<tr>
<td>5.8 Prepare and Submit Monthly Pay Request Information</td>
<td>$ 1,380.00</td>
</tr>
<tr>
<td>5.9 Prepare Change Orders</td>
<td>$ 1,435.00</td>
</tr>
<tr>
<td>5.10 Prepare and Submit Project Punchlist</td>
<td>$ 1,480.00</td>
</tr>
<tr>
<td>5.11 Prepare Letter of Certification of Project Completion</td>
<td>$ 480.00</td>
</tr>
<tr>
<td>5.12 Assist City in Addressing and Communicating Warranty Items</td>
<td>$ 1,430.00</td>
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<tr>
<td>5.13 Perform Two-Year Warranty Inspection and Create Punch List</td>
<td>$ 1,120.00</td>
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<tr>
<td>5.14 Reimbursables</td>
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<tr>
<td>TOTAL FOR TASK 5 - EXPANDED CONSTRUCTION SERVICES</td>
<td>$ 29,590.00</td>
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<tr>
<td>TOTAL</td>
<td>$ 85,785.00</td>
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NOTES: Although dollar values have been provided for each task FMG retains the right to reallocate monies to other tasks subject to the maximum limiting fee shown above or as discussed in Exhibit A.
**EXHIBIT C**
**FMG ENGINEERING**
**2020 RATE SCHEDULE**

<table>
<thead>
<tr>
<th>PERSONNEL</th>
<th>RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Engineer II</td>
<td>$186.00/hr</td>
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<tr>
<td>Principal Engineer I</td>
<td>$160.00/hr</td>
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<tr>
<td>Senior Engineer</td>
<td>$140.00/hr</td>
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<tr>
<td>Engineer III – PE</td>
<td>$120.00/hr</td>
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<tr>
<td>Engineer II – PE</td>
<td>$110.00/hr</td>
</tr>
<tr>
<td>Engineer I – PE</td>
<td>$100.00/hr</td>
</tr>
<tr>
<td>Geospatial Analyst</td>
<td>$100.00/hr</td>
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<tr>
<td>Graduate Engineer II – EIT</td>
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<tr>
<td>Graduate Engineer I – EIT</td>
<td>$87.00/hr</td>
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<tr>
<td>CADD Technician II</td>
<td>$90.00/hr</td>
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<tr>
<td>CADD Technician I</td>
<td>$80.00/hr</td>
</tr>
<tr>
<td>Geologist - PG</td>
<td>$90.00/hr</td>
</tr>
<tr>
<td>Environmental Scientist</td>
<td>$80.00/hr</td>
</tr>
<tr>
<td>Land Surveyor - RLS</td>
<td>$100.00/hr</td>
</tr>
<tr>
<td>Land Surveyor – LSIT</td>
<td>$90.00/hr</td>
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<tr>
<td>Survey Technician II</td>
<td>$85.00/hr</td>
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<tr>
<td>Survey Technician I</td>
<td>$75.00/hr</td>
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<tr>
<td>Engineering Technician III</td>
<td>$80.00/hr</td>
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<tr>
<td>Engineering Technician II</td>
<td>$75.00/hr</td>
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<tr>
<td>Engineering Technician I</td>
<td>$70.00/hr</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>$75.00/hr</td>
</tr>
</tbody>
</table>

**VEHICLES & EXPENSES**

Mobilization (Support Vehicle)  $0.85/mile
Mobilization (Drill Rig)        $2.00/mile
ATV                             $90/day
Travel Costs - air, lodging, transport, meals, etc. cost
Tower Road Stabilization Project
No. 19-2537 / CIP No. 51254

PROJECT LOCATION

TOWER ROAD SCOPING EVALUATION
PROJECT NO. 19-2357  CIP No. 51254