

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

Date: August 20, 2012

Project Name & Number: Ellsworth Air Force Base Water Meter Facility Relocation;  
Project No. W11-1936

CIP #: 50830

Project Description: Design and bidding services for relocation of the EAFB water metering facility. The meter pit at the current location will be impacted by the reconstruction of the N. Maple Avenue/Anamosa Street intersection.

Consultant: FMG, Inc.

Original  
Contract Amount: \$89,010.00

Original  
Contract Date: August 20, 2012

Original  
Completion Date: April 30, 2013

Addendum No:

Amendment Description:

Current Contract Amount: \_\_\_\_\_

Current Completion Date: \_\_\_\_\_

Change Requested: \_\_\_\_\_


New Contract Amount: \_\_\_\_\_ \$0.00

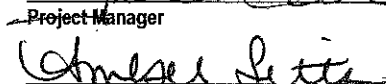
New Completion Date: \_\_\_\_\_

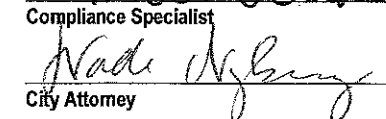
Funding Source This Request:


Amount	Dept.	Line Item	Fund	Comments
\$89,010.00	933	4223	602	
	Total			

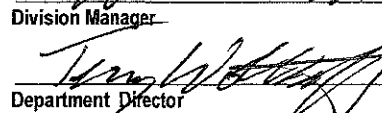
## Agreement Review & Approvals

 8/6/12  
Project Manager Date

 8/6/12  
Compliance Specialist Date

 8/9/12  
City Attorney Date

 8-6-12  
Division Manager Date

 8-6-12  
Department Director Date

### ROUTING INSTRUCTIONS

Route two originals of the Agreement for review and signatures.

Finance Office - Retain one original

Project Manager - Retain second original for delivery to Consultant

cc: Public Works  
Engineering  
Project Manager

### FINANCE OFFICE USE ONLY

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

Date: 8/7/12 Initials: [Signature] Approved: Y N  
Appropriation: Cash Flow

**Agreement Between City of Rapid City and FMG, Inc.  
for Design and Bidding Professional Services for Ellsworth Air Force Base Water  
Meter Facility Relocation, Project No. W11-1936 / CIP No. 50830**

AGREEMENT made August 21, 2012, between the City of Rapid City, SD (City) and FMG, Inc., (Engineer), located at 3700 Sturgis Road, Rapid City, SD 57702. City intends to obtain services for design and bidding, Project No. W11-1936/CIP No. 50830. The scope of services is as described in Exhibits A and B.

The City and the Engineer agree as follows:

The Engineer shall provide professional engineering services for the City in all phases of the Project as defined in Exhibits A and B, 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.

**1.2 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 Exhibits A and B.)
- 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 sub-contractors 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 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 rate schedule. (See Exhibit C.)

### **5.2 Fee**

The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed \$89,010.00 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 at the rates 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 April 30, 2013 based on an award date of August 21, 2012.

## **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, 7<sup>th</sup> 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:

Engineer:

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
FMG, INC.

DATE: \_\_\_\_\_

DATE: 8/6/12

ATTEST:

\_\_\_\_\_  
FINANCE OFFICER

Reviewed By:

\_\_\_\_\_  
DAN COON, PROJECT MANAGER

DATE: Aug. 6, 2012

CITY'S DESIGNATED PROJECT  
REPRESENTATIVE

ENGINEERING FIRM'S DESIGNATED  
PROJECT REPRESENTATIVE

NAME: Dan Coon  
PHONE: (605) 399-9581  
EMAIL: dan.coon@rcgov.org

NAME: Al Foster  
PHONE: (605) 342-4105  
EMAIL: afoster@fmgengineering.com



**EXHIBIT A**

**FMG ENGINEERING  
SCOPE OF SERVICES  
FOR  
DESIGN AND BID PHASE SERVICES  
EAFB WATER METER STATION RELOCATION  
Project No. W11-1936 CIP No. 50830**

**GENERAL**

The City of Rapid City proposes to relocate the Ellsworth Air Force Base (EAFB) water meter station from its current location at the intersection of Anamosa Street and Maple Avenue to a new location approximately 1,500 feet north of the intersection of Seger Drive and Dyess Avenue. The new water meter station has been proposed to be an above grade structure located outside of the ROW and adjacent to or within the existing EAFB water main easement.

Anamosa Street between Midway Street and Milwaukee Street is scheduled for reconstruction in 2014. The Anamosa Street reconstruction project is responsible for abandoning the existing water meter station, which is housed in an underground vault on the northeast corner of Anamosa Street and Maple Avenue. To meet the Anamosa Street schedule, the new water meter station would need to be operational by the end of 2013. The preliminary project schedule for the water meter station relocation is shown below.

**Preliminary EAFB Water Meter Station Relocation Schedule:**

• Notice to Proceed	September 2012
• Preliminary Design Report and Plans for City Review	January 2013
• Final Design Report and Plans	March 2013
• Bid Letting	April 2013
• Construction Complete	November 2013

The proposed scope and schedule for work to be completed under this agreement assumes that EAFB will be able to move forward with the project without the need for a new environmental assessment. The proposed location of the water meter station is such that no new EAFB water main would be located outside of their existing easement. Failure of EAFB to renegotiate a connection location change with the City of Rapid City may require revision of the project schedule.

The project schedule also assumes that the proposed 16" water main that is to be constructed from the intersection of Seger Drive and Dyess Avenue to a new development north of the project site will be in place and ready for service.

The Scope of Work in this contract is for Task 1 - Preliminary Design Services, Task 2 – Final Design Services, and Task 3 – Bidding Period Services, only. Separate contracts will be negotiated and prepared for, Task 4 – Basic Construction Services and Task 5 – Expanded Construction Services, as necessary.

The Consultant will provide services related to data collection, analysis, and coordination with EAFB and other contributing projects, preliminary design, final design, and bidding. A general description of the services are summarized below.

**1.) Project Coordination, General Investigative:**

- A. The Consultant will review the Rapid City Utility System Master Plan to review planned water main extensions in the project area. Provisions for future mains will be included in the design of this facility. The Consultant will also review proposed plans for any other City, State, Federal, or private project in the project area that may affect design or operation of the proposed facility.

**EXHIBIT A**

- B. Consultant shall solicit input from affected property owners and, if applicable, provide information to the neighborhood and the general public regarding the City's project components.
- C. Consultant shall evaluate the requirements for and lead negotiations for easements, right of way, or platted lots for the project. All temporary and permanent easement exhibits, and/or plats will be prepared by a registered land surveyor. It is anticipated that the City Attorney will prepare the easement documents.
- D. Consultant shall attend meetings as required with City staff, EAFB, and the public. Consultant shall prepare minutes of City sponsored meetings. It is assumed that the City will coordinate meetings with EAFB regarding new connection location agreements and that the Consultant will be available as a technical representative.
- E. Consultant shall submit a Preliminary Design Report with the 50% Drawings.

**2.) Survey:**

- A. The Consultant shall perform field surveys to establish a topographic survey in the project area. Items to be surveyed include; existing water, sewer, storm sewers, private utilities, and ground surface features. The Consultant shall also complete a boundary survey as needed.

**3.) Water Infrastructure Design / Analysis:**

- A. Confirm that delivery flows and pressures derived in the planning report are adequate for EAFB delivery contract requirements. The Consultant will need to confirm the accuracy of data in the current City computer model of the water system. FMG will provide updates to reflect current or proposed conditions
- B. The Consultant shall evaluate the necessary water main sizing requirements for the 18-inch main along North Maple extending to the intersection with Anamosa.

A skelintonized computer model for the existing portion of the City water system near Anamosa Street and N. Maple Avenue will be developed to provide recommendations as to the size of water main needed on East Boulevard/Maple Avenue. The skelintonized model will include the portion of the low level system generally bounded by Omaha Street, Rushmore Road/Dilger Avenue, Anamosa Street and Lacrosse Street. The model will be run assuming continued service to EAFB from Maple Avenue/Anamosa Street and a demand of 4400 gpm for the North Rapid Booster Station relocated to College Park. The model will be run using peak flows only and will not include extended period modeling. This analysis will be presented in a separate technical memo for use in the Anamosa Street Phase 3 Reconstruction project

- C. Size water meters and associated piping and appurtenances for accurate flow measurement with bypass and maintenance capability.

**4.) Site Design / Floodplain Analysis:**

- A. The Consultant shall design the water meter station building site to conform with current design criteria for access, parking, security, lighting, signage, and floodplain requirements.
- B. The Consultant shall make recommendations and prepare documents regarding the need to obtain a Zoning Change, Fence Height Exception, Conditional Use, or Floodplain Development Permits.

**5.) Building Structural, Mechanical, and Electrical Design:**

**EXHIBIT A**

- A. The Consultant shall design the water meter station building to conform with current design criteria, including supplemental water facility design criteria, and other applicable design codes for structural, mechanical, and electrical items related to the project. Incorporate security measures as necessary to meet City and EAFB needs.
- B. Demolition of the current EAFB water meter pit is included with the Anamosa Street Phase 3 Reconstruction project. The Consultant for this project shall be responsible for coordinating schedules such that the new water meter station will be operational prior to the demolition of the existing station.

**6.) SCADA Design:**

- A. The Consultant shall design a Supervisory Control and Data Acquisition (SCADA) system capable of adequately monitoring and controlling the facility that can be integrated into the existing SCADA system at the Mountain View Water Treatment Plant.

**7.) 50% Preliminary Design Drawings:**

- A. The Consultant shall prepare 50% Preliminary Design drawings in accordance with City Draft Drafting Standards. Drawings shall include a site plan, water pipe plan and profile information, structure elevations, as well as other details appropriate to 50% design.
- B. Informal design review meetings will be held on an as needed basis with City staff and subconsultants during preparation of intermediate level plans.

**8.) Geotechnical Evaluation:**

- A. The Consultant shall evaluate the existing soil and groundwater conditions to sufficient depths to develop recommendations for utility and building construction, a total of 2 borings are planned at the project site. The boreholes will be drilled to depths of approximately 15 feet below existing grades. Field testing will be performed and samples will be extracted for further laboratory analysis. Select soil samples will be tested in our laboratory to determine their general classification, physical properties, and engineering characteristics with respect to utility design and installation and single story building construction.
- B. In addition to the drilling of boreholes, an in-situ soil electrical resistivity survey will be performed at the project site to support corrosion protection designs. The resistivity survey will be performed in accordance with the City's Draft Corrosion Control Design Manual 2008, using the ASTM G57 Wenner four pin method. FMG will use standard city design, specs and details.
- C. Upon completion of the field and laboratory testing and our analysis, a report will be prepared that transmits the geologic logs and testing results, and provides our recommendations. In general our recommendations will include excavation and fill placement recommendations, utility installation recommendations, and general construction recommendations that we consider applicable to the site conditions encountered.

**9.) Project Design Report**

- A. The Consultant shall finalize the preliminary design report based on comments from City review of the preliminary design report. The Preliminary Design Report will be submitted at the 50% design review and the Final Design report will be submitted with the final drawings. The finalized design report shall adequately document design decisions, and the process that determined the design criteria used for the project.

**EXHIBIT A****10.) Final Design Drawings**

- A. The Consultant shall prepare complete plans, specifications, necessary portions of the contract documents, and an opinion of probable construction cost. Plans and documents shall adhere to current City guidelines including the City of Rapid City Draft Drafting Standards.

**11.) Bidding Services**

- A. The Consultant shall provide services necessary for the administration of the bidding services of the project. These services include; providing information for the advertising authority, conducting a pre-bid conference, issue addenda to the bid documents as necessary, review bid proposals, review construction contract documents and other submittals from the Contractor, and make recommendations for award of the bid.

A detailed listing of the services to be provided by the Consultant are included in the Scope of Services.

**DESIGN CRITERIA**

Design criteria for the project shall include the current edition of the following items:

- Rapid City Infrastructure Design Criteria Manual (2012 Edition);
- City of Rapid City Supplemental Criteria for Water Booster Stations and Pressure Reducing Stations (Draft) *Consultant shall reference design intent of this criteria and modify the requirements, with Design Group Manager's approval, to suite a meter station.*
- City of Rapid City Standard Specifications (2007 Edition);
- City of Rapid City Utility System Master Plan (April 2008);
- South Dakota Department of Environmental Resources Standards and Recommended Design Criteria;
- Ten States Standards as adopted and supplemented by SDDENR;
- Handbook of PVC Pipe Design (UniBell) latest edition;
- AWWA Manual M41, Ductile Iron pipe and Fittings; and
- Any other criteria required for electrical, mechanical, structural, and building construction.

Conflicts between design criteria documents shall be resolved in favor of the more stringent requirement. Other documents and references may be proposed for use and requires written concurrence by the Project Manager and may require application and approval of a Request for Exception to Rapid City Design Standard/Criteria/Regulations.

**SCOPE OF 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.

- 1.1 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.
- 1.2 Review background information described in the general information above and any other resources as necessary.
- 1.3 Prepare Project Design Report: The consultant shall establish and indicate project specific design criteria and standards within the Project Design Report (including ADA requirements). The consultant shall submit all design assumptions for design life, design criteria, and reference of design resources. The Project Design Report shall evaluate and recommend preliminary horizontal and

**EXHIBIT A**

- vertical alignment for utilities, and other public improvements. Establish pipe sizes, determine irrigation and landscaping limits, etc. Provide justification for the facility and analysis of alternatives. Use the City Infrastructure Design Criteria Manual to establish design criteria and standards. The project's geotechnical report shall be included within the Project Design Report, and include soil classifications, N values, water levels, proctors, resistivity tests, and testing recommendations. Submit three (3) copies of the Project Design Report and preliminary plans and specifications to City of Rapid City's project manager for review and comment.
- 1.4 Perform site surveys sufficient for design plan preparation. The route and topography survey shall be tied to at least two City of Rapid City Monument Control system monuments utilizing State Plane coordinates.
  - 1.5 Identify right-of-way (ROW) and permanent and temporary construction easements acquisition needs. Include size and extent of such ROW and easements and contact information of property owners.
  - 1.6 Prepare preliminary opinion of probable construction costs for the project.
  - 1.7 Recommend location and extent of geotechnical services investigations necessary to complete design. The geotechnical evaluation will be completed by FMG.
  - 1.8 Develop and run a skeletonized computer model for the existing portion of the City water system near Anamosa Street and N. Maple Avenue to provide recommendations as to the size of water main needed on East Boulevard/Maple Avenue. Findings of the model will be summarized in a tech memo for use in the Anamosa Street Reconstruction project.
  - 1.9 Prepare preliminary (50%) plan and profile sheets including locations of existing and new utilities and building profiles. Show existing utilities locations with probable depths. The Preliminary Design Report will be submitted with the 50% plans.
  - 1.10 Attend submittal review meeting with City staff and EAFB personnel, if necessary.
  - 1.11 Meet with individual property owners regarding ROW and permanent and temporary easement needs and regarding specific project issues and components.
  - 1.12 Preliminary structural design services related to meter building roof, walls, and foundation.
  - 1.13 Preliminary mechanical/electrical/SCADA engineering services.
  - 1.14 Preliminary architectural design services related to meter building.
  - 1.15 Prepare tech memo for EAFB.

**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.

- 2.1 Address City comments from the Task 1 City review(s) and finalize Project Design Report,
- 2.2 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 of properties where easements are needed, conduct property owner meetings for easement and ROW acquisition, and document acquisition meetings.
- 2.3 FMG will provide a geotechnical report to be included in the Project Design Report and project plans or specifications,
- 2.4 Incorporate design features as necessary to meet the required ADA standards. All applicable ADA requirements shall be outlined in the Project Design Report.
- 2.5 Provide three (3) copies and a PDF version of the finalized Project Design Report,
- 2.6 Provide three (3) copies 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.
- 2.7 Address 100% submittal staff comments as necessary.
- 2.8 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.
  - 2.8.1 Plans shall have a standard City Title Sheet.

## EXHIBIT A

- 2.8.2 General Notes Sheets shall supplement the Standard Specifications with regard to project specific conditions.
- 2.8.3 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.
- 2.8.4 Provide Property Sheets with project layout to include lot lines (front and side) and addresses of all properties (adjacent to construction, or alternatively, in service area).
- 2.8.5 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. (This is new City requirement.)
- 2.8.6 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.
- 2.8.7 Plan and Profile Sheets.
- 2.8.7.a Coordinate directly with utility companies' engineering divisions to ensure that all existing utilities are completely and accurately identified and located in the field; that pertinent information regarding depth, material, size, etc. are noted on the plans; and that conflicts requiring relocation of utilities or special construction techniques are fully specified in the contract documents. Preliminary plans shall be provided to the pertinent utilities for comment at the time they are complete followed by a specific private utility coordination meeting at the City in two to three weeks.
- 2.8.7.b All proposed project items shall be labeled with sufficient information to determine lines and grades.
- 2.8.7.c Provide piping layout and details for building.
- 2.8.8 Architectural Sheets shall be prepared to show proposed building elevations and finishes.
- 2.8.9 Structural Sheets shall be prepared to detail construction requirements for the building foundation and other structural elements of the building.
- 2.8.10 Electrical/Mechanical Sheets shall be prepared to detail the construction requirements for extending power to the building, yard and exterior lighting, interior lighting, HVAC as required, as well as all provisions for security and other SCADA components.
- 2.8.11 Plans shall include all Standard Details and any other details such as corrosion protection, that will be used on the project.
- 2.8.12 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.



**EXHIBIT A**

- 2.8.13 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.
- 2.9 If desiring exceptions from City Design Criteria or Standard Specifications, it is the Consultant's responsibility to request and secure exceptions. Failure by the City to comment on a nonconforming item during a review does not constitute the granting of an exception.
- 2.10 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.
- 2.11 Prepare any and all permits with exhibits required for the City.
- 2.12 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.
- 2.13 Prepare final "Engineer's Estimate" of probable construction cost for the project.
- 2.14 Final structural design services related to meter building roof, walls, and foundation.
- 2.15 Final mechanical/electrical/SCADA engineering services.
- 2.15 Final Architectural design services
- 2.16 Final Landscape Architectural design services.
- 2.18 Meetings and coordination required to combine services from various engineering disciplines.
- 2.19 Provide the following Project Deliverables:
- 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 CD compatible with AutoCAD Release 2008 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 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.
  -

**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 Provide one hard copy and a PDF version of final plans, stamped and signed by a Professional Engineer, for City printing and distribution.
- 3.3 Arrange and conduct a Pre-bid Conference. Record attendance and minutes. Distribute copies to all attendees.

**EXHIBIT A**

- 3.4 Issue addenda to the bid documents as required.
- 3.5 Structural engineering services during bidding.
- 3.6 Mechanical/electrical/SCADA engineering services during bidding.
- 3.7 Architectural services during bidding.
- 3.8 Review Bidder's Proposals and review and sign the City Engineering Services prepared Bid Tab and Award Summary.

END OF SCOPE NARRATIVE

**EXHIBIT B**  
**EAFB WATER METER STATION RELOCATION**  
**Project No. W11-1936 / CIP No. 50830**

<b>TASK 1 - PRELIMINARY DESIGN</b>		Task Fee
1.1	Kickoff Meeting	\$ 470.00
1.2	Collect and Review Background Information	\$ 1,280.00
1.3	Prepare Project Design Report (Draft)	\$ 3,840.00
1.4	Perform Site Surveys	\$ 4,620.00
1.5	Identify ROW and Easements Needs	\$ 710.00
1.6	Preliminary Opinion of Probable Cost	\$ 1,510.00
1.7	Perform Geotechnical Investigation	\$ 3,000.00
1.8	Develop and Run Skeltonized Computer Model-Portion of City System*	\$ 8,880.00
1.9	Prepare Preliminary Plans	\$ 12,470.00
1.10	Attend Review Meetings with City Staff/EAFB Personnel	\$ 1,360.00
1.11	Meet with Property Owners Regarding ROW and Easements	\$ 420.00
1.12	Structural Engineering Services	\$ 770.00
1.13	Mechanical/Electrical Engineering Services	\$ 5,265.00
1.14	Architectural Design Services	\$ 800.00
1.15	Landscape Architectural Design Services	\$ 400.00
	Reimbursables, Supplies, Mileage, Expendables for Prelim Design	\$ 500.00
<b>TOTAL FOR TASK 1-PRELIMINARY DESIGN</b>		<b>\$ 46,295.00</b>

\* Computer Model for Anamosa Street project for Meter Station Relocation as requested by City Engineering staff

<b>TASK 2 - FINAL DESIGN</b>		Task Fee
2.1	Address City Comments from Task 1 and Final Review	\$ 1,640.00
2.2	Prepare Final Easement Exhibits/ROW Plats/Assist with Acquisition	\$ 980.00
2.3	Coordinate with Geotechnical Engineer	\$ 105.00
2.4	Incorporate design features to meet the required ADA standards	\$ 210.00
2.5	Provide (3) Copies and PDF of finalized Project Design Report	\$ 510.00
2.6	Final Design Submittal-Hours Included in Other Tasks	\$ -
2.7	Final Revisions	\$ 950.00
2.8	Prepare Plans-Hours Included in Sub-Tasks	\$ -
2.8.1	Title Sheet	\$ 170.00
2.8.2	Project General Notes Sheets	\$ 1,570.00
2.8.3	Survey Control Sheet / Horizontal/Vertical and Alignment Data	\$ 235.00
2.8.4	Property Sheets	\$ 235.00
2.8.5	Traffic Control Plan	\$ 340.00
2.8.6	Erosion and Sediment Control Plan	\$ 550.00
2.8.7	Site Plans, Piping and Plan and Profile Sheets	\$ 6,860.00
2.8.8	Architectural Sheets	\$ -
2.8.9	Structural Sheets	\$ -
2.8.10	Electrical/Mechanical/SCADA Sheets	\$ -
2.8.11	Standard and Special Details	\$ 680.00
2.8.12	Project Sequence	\$ 1,360.00
2.8.12	Engineer of Record Certification	\$ 105.00
2.9	Meet City Requirements/Secure Exceptions	\$ 770.00
2.10	Detailed Specification Manual and Bid Form	\$ 2,125.00
2.11	Prepare Permits and Exhibits	\$ 690.00
2.12	Identify Permits and Costs	\$ 105.00
2.13	Prepare Opinion of Probable Cost	\$ 1,640.00
2.14	Structural Engineering Services	\$ 2,000.00
2.15	Mechanical/Electrical Engineering Services	\$ 9,045.00
2.16	Architectural Design Services	\$ 2,100.00
2.17	Landscape Architectural Services	\$ 1,000.00
2.17	Meetings and Coordination	\$ 1,360.00
2.18	Deliverables to City Not Separate Task-Hours/Costs Included in Other Tasks	\$ -
	Reimbursables, Supplies, Mileage, Expendables	\$ 250.00
<b>TOTAL FOR TASK 2-FINAL DESIGN</b>		<b>\$ 37,585.00</b>

**EXHIBIT B**  
**EAFB WATER METER STATION RELOCATION**  
**Project No. W11-1936 / CIP No. 50830**

<b>TASK 3 - BIDDING SERVICES</b>		Task Fee
<b>Task 3</b>	<b>Bidding Phase</b>	
3.1	Information to City for Advertising Authority	\$ 105.00
3.2	Provided Hard Copy & PDF Plans-Submitted with Task 2 above	\$ -
3.3	Prebid Meeting	\$ 420.00
3.4	Prepare and Issue Addenda	\$ 1,230.00
3.5	Structural Engineering Services	\$ 630.00
3.6	Mechanical/Electrical Engineering Services	\$ 1,705.00
3.7	Architectural Design Services	\$ 600.00
3.8	Landscape Architectural Services	\$ 100.00
3.9	Bid Tabulations, Review and Recommendation	\$ 340.00
<b>TOTAL FOR TASK 3-BIDDING PHASE</b>		<b>\$ 5,130.00</b>
<b>TOTAL ALL TASKS 1 - 3</b>		<b>\$ 89,010.00</b>

## EXHIBIT C

**FMG ENGINEERING**  
**RATE SCHEDULE**  
**FOR**  
**DESIGN AND BID PHASE SERVICES**  
**EAFB WATER METER STATION RELOCATION**  
**Project No. W11-1936 CIP No. 50830**

<b><u>PERSONNEL</u></b>	<b><u>RATE</u></b>
Professional Engineer – Principal	\$130.00/hr
Professional Engineer – Senior Civil Engineer	\$105.00/hr
Professional Engineer – Senior Geotechnical Engineer	\$110.00/hr
Civil Engineer –EIT	\$70.00/hr
Senior Materials Specialist – Principal	\$105.00/hr
Computer Drafting Technician	\$65.00/hr
Registered Land Surveyor	\$80.00/hr
Survey Crew	\$120.00/hr
Soils Technician	\$50.00/hr
Senior Field Geologist	\$75.00/hr
Drill Rig Operator	\$50.00/hr
Clerical	\$45.00/hr
 <b><u>VEHICLES &amp; EXPENSES</u></b>	
Mobilization (support vehicle)	\$0.70/mile
Drill Rig Mobilization	\$2.50/mile
Drill Rig Operation	\$50.00/hr
Travel Costs - air, lodging, transport, meals, etc.	cost
Document/Plans Reproduction	cost
Sub-Consultants	cost