

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

Date:

Project Name & Number: Disk Drive and Haines Avenue Intersection, Project No. 16-2347

CIP #: 51121

Project Description: Preliminary Design, Final Design and Bidding Services for the project.

Consultant: FMG Engineering, Inc.

Original
Contract Amount: \$149,393.00

Original
Contract Date: 11/20/2017

Original
Completion Date: 2/1/2019

Addendum No:

Amendment Description:

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

Current Completion Date: _____
New Completion Date: _____

Funding Source This Request:

Amount	Dept.	Line Item	Fund	Comments
\$2,000.00	833	4223	604	
\$71,820.00	933	4223	602	
\$75,573.00	8910	4223	505	
\$149,393.00	Total			

Agreement Review & Approvals

Sam Oades 11/6/17
Project Manager Date

Chris 11/6/17
Compliance Specialist Date

Wade 11/8/17
City Attorney Date

Ben 11-9-17
Division Manager Date

Ben 11-9-17
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	Initials	Approved	
Appropriation	11/13/17	EW	Y	N
Cash Flow			Y	N

Agreement Between City of Rapid City and FMG Engineering for Design and Bidding Professional Services for Disk Drive and Haines Avenue Intersection, Project No. 16-2347/CIP No. 51121

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 design and bidding for Disk Drive and Haines Avenue Intersection, Project No. 16-2347 / CIP No. 51121. 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 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 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 \$149,393.00 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 February 1, 2019, based on an award date of November 20, 2017.

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:

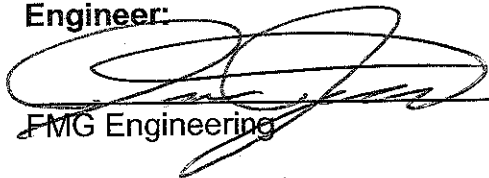
MAYOR

DATE: _____

ATTEST:

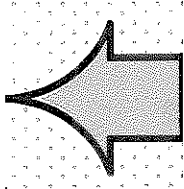
FINANCE OFFICER

Engineer:



FMG Engineering

DATE: 11/6/17



Reviewed By:



Sara Odden, PROJECT MANAGER

DATE: 11/6/2017

CITY'S DESIGNATED PROJECT REPRESENTATIVE

ENGINEERING FIRM'S DESIGNATED PROJECT REPRESENTATIVE

NAME: Sara Odden
PHONE: 605.394.4154
EMAIL: sara.odden@rcgov.org

NAME: Jason Pettyjohn
PHONE: 605.342.4105
EMAIL: jpettyjohn@fmgengineering.com



SCOPE OF SERVICES

FOR

**DISK DRIVE AND HAINES AVENUE INTERSECTION
PROJECT NO. 16-2347 / CIP 51121**

The City of Rapid City has determined the need to procure professional services including Preliminary Design Services, Final Design Services, and Bidding Services for the Disk Drive and Haines Avenue Intersection Project. Basic Construction Services and Expanded Construction Services may be negotiated at a later date as a separate contract.

The includes the reconstruction of the Haines Avenue and Disk Drive intersection and includes ancillary water main reconstruction, sewer service line abandonment, concrete paving and ADA improvements. Project also includes easement research for the water main serving various commercial properties in the western half of the Control Data Subdivision.

It is anticipated that the improvements will include the following:

1. Traffic Flow Analysis to determine vehicular traffic needs at the intersection of Disk Drive and Haines Avenue. The analysis will determine traffic needs out to the year 2045.
2. Concrete pavement reconstruction at intersection of Disk Drive and Haines Avenue.
3. Traffic and Pedestrian Signal modifications.
4. ADA compliance at intersection of Disk Drive and Haines Avenue (including but not limited to: pedestrian push buttons, ramps, cross walks, and APS).
5. Panel replacement on Disk Drive from intersection with Haines Avenue east to Hardees access.
6. Panel replacement on Haines Avenue where necessary for water main reconstruction.
7. Pavement markings, including cross walks.
8. MUTCD Traffic Control Plan and project phasing.
9. Abandonment of sanitary sewer service line (Best Buy- located approximately 29 feet east of MH H5-01).
10. Condition of sanitary sewer mains in the project area to be determined. Mains in poor condition will be replaced.
11. Non-conforming water and/or sewer service lines may exist in the project limits. Project to correct non-conforming services where reasonable. If not corrected, a recommended solution for future conformance shall be documented.
12. The existing metallic and asbestos-cement (AC) water mains within the intersection not slated for abandonment will be replaced as part of the intersection reconstruction. Construction phasing should address strategy for replacement of the 16-inch water main that serves as a main feed between the North Rapid Reservoir and the North Rapid Booster Pump Station. City will use their computer water model to evaluate alternate water feeds with FMG's input and review of results.
13. The existing 8-inch water main west of the intersection, along the north side of Disk Drive, is undersized and is proposed to be replaced with a 12-inch water main (approximately 250 feet).
14. Currently there are dual water mains in Haines Avenue south of Disk Drive. The existing water main located on the east side of Haines Avenue is a metallic water main of varying size (8-inch and 10-inch) that connects to the existing 10-inch water main in the intersection of Haines Avenue and Disk Drive and extends approximately 700 feet south to serve various commercial properties in the western half of the Control Data



Subdivision. This main is in poor condition and should be replaced or abandoned. The City is looking for a recommendation on the best option to provide service to customers served by this water main. It is anticipated that easement research will be necessary to identify the legalities and rights associated with the east-west water main that extends onto private property to serve Applebee's and other businesses, to see who the existing easements grant permission to (City, joint private property ownership, etc.), if additional easements will be required, and if there is non-conforming services that the City needs to fix. Discussions with the impacted commercial property owners are anticipated.

FMG Engineering will complete all Civil Engineering related tasks and will utilize subconsultants Fellsburg, Holt, & Ullevig for Traffic Analysis tasks and West Plains Engineering for Traffic Signal and Electrical Design tasks.

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 and any other resources as necessary.
- 1.3 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 NAD 83 (2011) State Plane coordinates and the NAVD 88 vertical datum.
- 1.4 Existing easement research in western portion of Control Data Subdivision. The Consultant will prepare a summary of the research findings in a separate technical memorandum. The City Attorney's Office shall review the findings and provide directive. FMG will prepare letter to impacted property owners utilizing the directive from the Attorney's Office.
- 1.5 Determine locations of existing water mains & services.
 - A. Rapid City Utility Maintenance will provide locating services for all water mains and service lines that can be traced.
 - B. Consultant will collect water service cards to determine the location of service lines that cannot be traced and to compare rerecord formation to that marked in the field.
 - C. Verification of water service by operation of curb stops is not assumed to be necessary due to the age and nature of the commercial services in the project area.
- 1.6 Determine locations of existing sanitary sewer mains & services.
 - A. Rapid City Utility Maintenance will provide locating services for all sanitary sewer mains and service lines that can be traced. City will flush sanitary sewer mains as necessary prior to CCTV work.
 - B. Rapid City Utility Maintenance will provide a vacuum truck and operator in the event that the vertical location of a sanitary sewer service is in question or in potential conflict with proposed facilities.
 - C. Verification of sewer service by CCTV of each service is not assumed to be necessary due to the age and nature of the commercial services in the project area.



- 1.7 Develop and distribute a survey questionnaire to property owners adjacent to proposed construction areas approximately 3 months or more ahead of soliciting bids for construction. The questionnaire will be developed to obtain information on site-specific concerns such as landscaping or irrigation systems, service line locations, special needs such as access considerations during construction, or history of utility or infrastructure problems at the property. Questionnaires will be returned to FMG, and will follow up with appropriate individual contact with property owners prior to completion of 100% plans and contract documents to review project considerations that may be addressed or mitigated by the project work. Most of this work will be completed under Task 2. Property owner meetings will be conducted as necessary.
- 1.8 Meet with individual property owners regarding ROW and permanent and temporary easement needs and regarding specific project issues and components.
- 1.9 Private Utilities Base Plan Verification Meeting: The consultant shall send base plans to the private utilities requesting verification 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 shown correctly and to make plan revisions as needed.
- 1.10 Perform Geotechnical Evaluation.
To evaluate the existing soil conditions along the project alignment, a total of 2 boreholes will be drilled. 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. In addition to the boreholes, soil electrical resistivity will be measured at 2 locations along the water main alignment.

Upon completion of the field and laboratory testing and our analysis, a report will be prepared that transmits the boring logs, field data, and laboratory results, provides a limited geologic analysis of the area, and provides our recommendations for utility design and installation and pavement section design. In general our recommendations will include excavation conditions, utility installation, groundwater mitigation, suitability of backfill materials and any other recommendations we consider applicable to the site conditions encountered. Our report will also include recommendations to mitigate the effects of expansive soils, should they be present at the site, on driveway and sidewalk reconstruction.
- 1.11 Perform Traffic Analysis for current conditions and forecast 2045 conditions. The analysis will provide traffic operations and safety analyses that shape the improvements to be constructed with the reconstruction project and provide options for potential future reconstruction of Haines Avenue and other intersections in the vicinity of Disk Drive to accommodate projected Year 2045 traffic volumes.
- 1.12 Preliminary Electrical Design of intersection lighting, traffic signal and ADA improvements for push buttons and Audible Pedestrian Signals. Replacements of detector loops is anticipated where existing loops are disturbed by reconstruction. Design effort assumes that no new lanes are being added to the intersection or any other items that require complete reconfiguration of existing signals. A contract amendment may be necessary if such items are recommended.
- 1.13 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 (including ADA requirements). The consultant shall submit all design assumptions for pipe sections, water, sewer, and storm sewer locations, pavement sections, etc. 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 evaluate and recommend pavement design; based on a life cycle cost analysis, preliminary horizontal and vertical alignments for utilities, roadways, project phasing and limits, and other public improvements. Establish pipe sizes, lane configurations, drainage system capacity, etc. Provide justification for the facility and analysis of alternatives. The project's geotechnical report shall be included within the Conceptual Project Design Report and include soil classifications, N values, water levels, proctors, CBR's, resistivity tests, pavement design, and testing recommendations. 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.

The consultant shall establish and indicate project specific design criteria and standards within the Conceptual Design Report. Use the City Infrastructure Design Criteria Manual to establish design criteria and standards. The Conceptual Design Report shall provide review of compliance with City's Standard Specifications for construction of the project(s).

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. Design effort assumes that no impacts requiring replacement of existing retaining walls will occur. A contract amendment for final design may be necessary if easements or ROW impact existing retaining walls.

Identify all non-conforming water and sewer service lines and include a map showing a proposed solution to making them conform with the City's current standards. Status of service lines in the Control Data Subdivision will be investigated as part of the easement research task. Design effort assumes that no new public main extension will occur within the subdivision to correct non-conforming services. A contract amendment for final design may be necessary if new main extensions are recommended.

Design effort assumes that no new lanes requiring additional pavement width are being added to the intersection. A contract amendment for final design may be necessary if such items are recommended.

Submit two (2) 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 (2) copies and a PDF version of the conceptual drawings. The conceptual drawings shall contain the following sheets:

- Cover Sheet – Note the index of Sheets indicating the anticipated drawing sheets shall be provided.
- Survey Control Sheet – The Survey Control sheet shall include control points with



Northings, Eastings, Elevation, and Description with Station and Offset to the closest alignment. Horizontal alignments including beginning and end stations, and deflections and curve data. Combined ground to grid scale factor and Basis of Bearings.

- Anticipated traffic control phasing and erosion control measures
- Property Layout and Land Ownership
- Plan and Profile Sheets - Show existing and proposed utility mains and existing services, storm sewers, driveway locations, fittings, and proposed surfacing and drainage items. The utilities should be shown in profile as well. Design Criteria elements like profile grades, "K" values, vertical and horizontal curve data should be included.
- Anticipated Rapid City Standard Details
- Special Details - Conceptual layouts for special/critical elements for example storm water quality features, special drainage structures, etc.
- Plan sheets shall be prepared utilizing the latest City of Rapid City Drafting Standards. Use current City-provided drawing templates.

1.14 Attend submittal review meeting with City staff, if necessary.

1.15 Reimbursables including, Printing, Supplies, Mileage, Expendables for Preliminary Design. Non-professional services from utility locating companies also included in this task.

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 Conceptual Design Report. The Conceptual Design Report should be now titled "Project Design Report".
- 2.2 Coordinate with Geotechnical Engineer to address recommendations from the geotechnical report that should be incorporated into the project plans or specifications.
- 2.3 Finalize Traffic Analysis recommendations for incorporation into project including traffic movement sequencing and timing requirements.
- 2.4 Final Electrical Design of intersection lighting, traffic signal and ADA improvements for push buttons and Audible Pedestrian Signals.
- 2.5 The consultant shall create a detailed list of all potential utility conflicts caused by the project. City Project Manager shall schedule the Private Utility Coordination Meeting. The consultant shall prepare the meeting agenda and include the list of utility conflicts for discussion at the meeting. If a private utility intends to replace their infrastructure, the consultant shall coordinate a location corridor for the utilities and show the proposed location on the drawings. Indicate if the private utilities intend to abandon or replace the infrastructure prior to or during this project's construction. 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. Prior to the meeting, preliminary plans shall be provided to the pertinent utilities for comment at the time they are complete. The consultant shall document the resolution of each utility conflict agreed upon by each utility company



- 2.6 Provide the City Project Manager a list of all private utility conflict resolutions. If private utilities will need to be relocated, assist PM as necessary with formal notification.
- 2.7 Engineer shall obtain a design exception for Infrastructure Design Criteria manual requirements and Standard Specifications as needed. Exceptions to the Standard Specifications shall be documented on the General Notes sheet of the construction plans. The table shall include the following:
- City Exception File Number
 - Specification Section
 - Description
 - Stipulations
- 2.8 Provide Complete Plans and Specifications. It is anticipated the complete plans and specification will include. Additional design requirements follow the list of anticipated sheets.
- Project Manual Milestones, Special Bid Conditions, and Bidders Proposal
 - Provide detailed specifications supplementing the City of Rapid City Standard Specs
 - Title Sheet
 - Legend Sheet
 - Estimate of Quantities and General Note Sheets
 - 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
 - Project Sequencing and Phasing Schedule Notes
 - Detailed Traffic Control Sheets
 - Existing Condition and Removal Sheets
 - SWPPP sheets with City Std. Notes Plus SDDENR requirements
 - Erosion Control Plan Sheets
 - Typical Sections
 - Street Plan & Profile Sheets
 - Utility Plan & Profile Sheets
 - Curb and Gutter & Surfacing Sheets
 - Standard City Details
 - Special Project Details
 - Corrosion Control Details

The total number and/or type of sheets may vary upon final design depending on final project requirements.

Provide project layout to include lot lines (front and side) and addresses of all properties (adjacent to construction, or alternatively, in service area). Identify if property is owner occupied or a rental.

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

Incorporate ADA compliance items, for example fillet, driveway and sidewalk improvements. All applicable ADA requirements shall be 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.

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.

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.

- 2.9 Act as the City's Agent to complete the following tasks: 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.
- 2.10 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.



- 2.11 Address 100% final review submittal staff comments as necessary.
- 2.12 Prepare any and all permits with exhibits the City will need to execute for the project.
- 2.13 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 except as indicated in the City's contract front end documents.
- 2.14 Prepare final "Engineer's Estimate" of probable construction cost for the project.
- 2.15 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 CD compatible with AutoCAD Release 2011 or newer format.
 - Provide all topographic, control, and design points in the .dwg file and in tabular format, both on CD and on hard copy printout.
 - Provide complete specifications and contract documents on CD in Microsoft Word XP or previous versions.
 - Provide a unit price cost estimate on CD in Microsoft Excel XP or previous version on the City of Rapid City "Engineer's Estimate" form. Provide Engineer's Estimate of probable construction costs as a component of this submittal.
 - Provide all final design documents in PDF format on a CD.

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.

- 2.16 The City will submit plans and specifications to the Department of Environment and Natural Resources for approval, and the Consultant shall address any comments or corrections required.
- 2.17 Reimbursables including, Printing, Supplies, Mileage, Expendables for Preliminary Design.

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 Consultant shall proof print quality at printers before full production of copies are made.
- 3.3 Arrange and conduct a Pre-bid Conference. Record attendance and minutes. Distribute minute copies to only Consultant and City.
- 3.4 Prepare and issue addenda to the bid documents as required.
- 3.5 Review Bidder's Proposals and review and sign the City Engineering Services prepared Bid Tab, and prepare an award recommendation letter to the City of Rapid City project manager.
- 3.6 Prepare "As Built" plans and specifications. A hard copy of "As Built" plans and specifications shall be submitted to the City in the same size and format as construction plans. The Consultant will provide PDF's, and CAD files on a CD or DVD. The digital submittal must be compatible with AutoCAD Civil 3D 2011, or newer, containing all files and data packaged in a format that will allow City personnel to seamlessly open "As Built" drawings. The Consultant will work with the City CAD technician to demonstrate the CAD file operation and compatibility with City CAD software, if necessary.

If the Consultant is hired for Tasks 4 and 5, "As Built" plans and specifications shall be provided thirty (30) days following project acceptance. However, if the Consultants is not hired for Tasks 4 and 5, "As Built" plans shall be provided thirty (30) days following the Consultants receipt of City markups/redlines. The Consultant will be paid for this work in advance, on the last invoice, but is required to complete the work at a later date per the contract, even if the Consultant has billed 100% of the Contract and the City has closed the Contract.

All "As Built" plans and specifications, believed by the Engineer of Record to be a final, shall contain a Certification Statement of Conformance, which shall read, "I (insert Engineer of Record's name) Certify that the As Built drawings and specifications contained here within, to the best of my knowledge, represent the constructed project. 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" shall be signed and dated by the Engineer of Record.

3.7 Electrical Subconsultant Bidding Services

SCHEDULE:

Notice to Proceed	November 20, 2017
Conceptual Design Services Submittal	May 2018
Final Design Services Submittal	September 2018
Final Plans, Specifications, and Contract Documents Complete	November 2018
Project Bid Opening Date	December 2018
Project 100% Construction Complete	August 2019



TASK SCHEDULE AND FEES

FOR

DISK DRIVE AND HAINES AVENUE INTERSECTION

PROJECT NO. 16-2347 / CIP 51121

TASK 1 - PRELIMINARY DESIGN		
1.1	Kickoff Meeting	\$ 500.00
1.2	Collect and Review Background Information	\$ 1,728.00
1.3	Perform Site Surveys	\$ 11,863.00
1.4	Easement Research in Control Data Subdivision	\$ 2,120.00
1.5	Determine Locations of Existing Water Mains/Services (11 Services)	\$ 215.00
1.6	Determine Locations of Existing Sewer Mains/Services (11 Services)	\$ 215.00
1.7	Develop & Distribute Questionnaire	\$ 485.00
1.8	Meet with Individual Property Owners (Approx 13 Properties)	\$ 3,000.00
1.9	Private Utility Base Map Verification Meeting.	\$ 610.00
1.10	Perform Geotechnical Investigation	\$ 3,500.00
1.11	Traffic Analysis	\$ 18,744.00
1.12	Preliminary Electrical Design	\$ 3,720.00
1.13A	Conceptual Design Report	\$ 16,891.00
1.13B	Conceptual Design Drawings	\$ 14,664.00
1.14	Attend Submittal Review Meeting with City Staff	\$ 250.00
1.15	Reimbursables, Printing, Supplies, Mileage, Expendables for Prelim Design	\$ 700.00
TOTAL FOR TASK 1-PRELIMINARY DESIGN		\$ 79,205.00

TASK 2 - FINAL DESIGN-PHASE 2		
2.1	Address City Comments from Task 1 Review & Finalize Design Report	\$ 2,536.00
2.2	Coordinate with Geotechnical Engineer	\$ 125.00
2.3	Finalize Traffic Analysis (Subconsultant)	\$ 2,500.00
2.4	Final Electrical Design (Subconsultant)	\$ 2,718.00
2.5	Private Utility Coordination	\$ 3,020.00
2.6	List of Private Utility Conflict Resolutions, Assist PM with Notification	\$ 500.00
2.7	Obtain Design Exceptions	\$ 760.00
2.8	Provide Complete Plans and Specifications for Final Review	\$ 38,897.00
2.9	Assist City with Easement/ROW Acquisition	\$ 3,452.00
2.10	Submit Final Design Services Documents	\$ 1,030.00
2.11	Address 100% Submittal Staff Comments if Necessary	\$ 1,936.00
2.12	Prepare Permits and Exhibits Needed for Project	\$ 400.00
2.13	Identify Permits Required for the Contractor	\$ 125.00
2.14	Prepare Final Engineer's Cost Estimate	\$ 1,368.00
2.15	Final Plans Deliverables	\$ 3,696.00
2.16	Address DENR Review Comments	\$ 200.00
2.17	Reimbursables, Printing, Supplies, Mileage, Expendables	\$ 900.00
TOTAL FOR TASK 2-FINAL DESIGN		\$ 64,163.00

EXHIBIT B

TASK 3 - BIDDING SERVICES		
Task 3	Bidding Phase	
3.1	Information to City for Advertising Authority	\$ 125.00
3.2	Proof Print Quality at Printers	\$ 125.00
3.3	Prebid Meeting/Minutes	\$ 520.00
3.4	Prepare and Issue Addenda	\$ 1,730.00
3.5	Bid Tabulations, Review and Recommendation	\$ 125.00
3.5	Prepare "As Built" Plans	\$ 2,770.00
3.7	Electrical Subconsultant Bidding Services	\$ 630.00
TOTAL FOR TASK 3-BIDDING		\$ 6,025.00
Total Project Task 1-3		\$ 149,393.00

RATE SCHEDULE

FOR

**DISK DRIVE AND HAINES AVENUE INTERSECTION
PROJECT NO. 16-2347 / CIP 51121**

FMG ENGINEERING

<u>PERSONNEL</u>	<u>RATE</u>
Principal Civil Engineer	\$148.00/hr
Senior Geotechnical Engineer	\$127.00/hr
Senior Civil Engineer	\$125.00/hr
Senior Materials Specialist	\$115.00/hr
Civil Engineer – PE II	\$90.00/hr
Civil Engineer – PE I	\$82.00/hr
Civil Engineer – EIT	\$78.00/hr
Engineering Technician	\$60.00/hr
CADD Technician	\$75.00/hr
GIS Specialist	\$90.00/hr
Registered Land Surveyor	\$92.00/hr
Survey Crew Chief	\$72.00/hr
Survey Technician	\$60.00/hr
Senior Administrative Assistant	\$60.00/hr
<u>VEHICLES & EXPENSES</u>	
Mobilization (support vehicle)	\$0.70/mile
Travel Costs - air, lodging, transport, meals, etc.	cost
Document/Plans Reproduction	cost





October 31, 2017

MEMORANDUM

To: FMG Engineering

From: Lyle DeVries

Re: Disk Drive and Haines Avenue Intersection Reconstruction
Felsburg Holt & Ullevig Scope of Services

Per your request, Felsburg Holt & Ullevig has developed a scope of tasks necessary to provide traffic analysis in support of the design of improvements to the intersection of Disk Drive with Haines Avenue in Rapid City. The traffic analysis task is envisioned to fulfill the following two objectives:

- Provide traffic operations and safety analyses that shape the improvements to be constructed with the reconstruction project. It is our understanding that these near-term improvements will be concentrated at the intersection of Haines Avenue with Disk Drive, with any broader enhancements beyond this intersection reserved for future efforts.
- Provide options for potential future reconstruction of Haines Avenue and other intersections in the vicinity of Disk Drive to accommodate projected Year 2045 traffic volumes. Prior analyses have indicated that such improvements could include installation of a raised median along Haines Avenue, and other improvements such as traffic control changes or spot widening will be investigated. These analyses will also help to ensure that the near-term design is consistent with the broader future vision for improvements in the area.

The following scope of work enumerates the tasks needed to accomplish these objectives.

1. **Data Collection:** Compile available traffic volume information for area roadways, including Haines Avenue, Disk Drive, Howard Street, Mall Drive, and the Exit 58 interchange. Existing data sources may include traffic counts completed by the City of Rapid City or SDDOT. The SDDOT recently (Summer 2016) conducted traffic counts at the intersection of Mall Drive with Haines Avenue, so no new counts will be needed at this location. Weekday AM and PM peak hour counts will be conducted at the following Haines Avenue intersections:

- Haines/Disk
- Haines/I-90 (all movements at the SPU)
- Haines/Howard
- Haines/Pahasapa
- Haines/Gas Station
- Haines/Applebee's
- Haines/Hardee's

Traffic counts would be completed by FMG Engineering and furnished to FHU.

2. **Traffic Forecasting:** Develop Year 2045 traffic volume forecasts for the intersections identified in Task 1. Utilize information from the Rapid City Area MPO's Year 2045 travel demand model to develop growth rates.
3. **Safety Review:** Review crash history in the area of the Haines Avenue/Disk Drive intersection based on information provided by the City of Rapid City. Compare findings with information relevant to the Haines Avenue corridor included in the Rapid City Arterial Street Safety Study completed in 2010.
4. **Operations Analysis:** Complete operational analyses of the study intersections for existing and projected future conditions without reconstruction. Utilize Synchro version 10 software to provide Highway Capacity Manual-based Level of Service (LOS) results. Evaluate delay and queuing results to understand operational needs. Evaluate traffic control signal warrants outlined in the Manual on Uniform Traffic Control Devices to determine whether signals would be warranted at study intersections.
5. **Alternatives Evaluation:** Develop design alternatives for the following two scenarios:
 - o Near-term: Examine up to three options for maximizing the operational benefit that could be delivered with the current intersection reconstruction project. Focus alternatives on improving operations for east-west movements along Disk Drive. Compare performance among the options and provide a recommendation for design. Provide information regarding appropriate signal timing splits for the intersection.
 - o Long-term: Develop and evaluate up to three options for improving operations and safety along the Haines Avenue corridor from I-90 to Mall Drive. Recommend an overall future vision for the corridor and ensure that the design of near term improvements is compatible with the overall vision. The corridor vision could incorporate improvements such as access management strategies, spot widening, additional turn lanes, or changes to traffic control.
6. **Documentation:** Develop a report documenting the methods, findings and recommendations associated with tasks 1 through 5.

We propose to complete these tasks for a lump sum of \$17,500, excluding traffic counts.

Please contact me should any questions arise.

October 24, 2017 (No CA)

Jason Pettyjohn, P.E.
FMG Engineering
3700 Sturgis Road
Rapid City, SD 57702

RE: Electrical Design Proposal for
Disk Drive and Haines Avenue Intersection
Rapid City, SD
Project No. 16-2347 CIP 51121

We appreciate the opportunity to provide you with a fee proposal to do the electrical design for the above referenced project. The following is a summary of our proposed fee to do the work:

Provide traffic signal modifications for traffic flow and ADA per recommendations. Provide design of adding push buttons and APS for existing intersection (no new lanes). Replace any loop detectors that may be disturbed by modifications to the intersection. Any changes to lane configuration or quantities will be reviewed as a change in scope and a contract amendment will be issued for that additional work. Provide design for modifications to electrical service, lighting and signal as necessary to accommodate work by others. Again it is anticipated that no change to intersection layout will occur.

This proposal includes development of plans as described above with the anticipation of one review submittals and meetings and one final submission of construction documents. This proposal also includes bid period services in the form of preparing addendums, answering questions, and attendance of a pre-bid meeting. This proposal does not include construction administration services. Construction administration services will be negotiated in the future.

We propose to provide the Electrical Engineering services for a fixed phased fee of Seven Thousand Sixty-Eight Dollars (\$7,068.00) plus taxes. This fee is broken down as follows:

Electrical – Preliminary Design Phase	\$ 3,720.00
Electrical – Final Design Phase	\$ 2,718.00
Electrical – Bidding Phase	\$ 630.00
Electrical – Construction Phase N/A	\$ _____
Total Fee	\$ 7,068.00

Engineering Consultants fees will be billed on a monthly basis, to be included in the Engineer's regular billings to the Owner. Monthly billings will be based on hourly costs plus expenses. Fees are due and payable upon Engineer's receipt of corresponding related fees from Owner, and shall be paid within ten (10) days thereof.

Jason Pettyjohn, P.E.
October 24, 2017 (No CA)
Page 2

Attached to this document is the complete breakdown of anticipated costs and the company's Schedule of Hourly Rates.

We appreciate the opportunity to work with you and the City of Rapid City on this project. We await your direction. Thanks.

Sincerely,

Michael R. Sigman, P.E.
Office Manager/Electrical Engineer

Breakdown of Anticipated Costs: October 24, 2017

Disk Drive and Haines Ave Intersection

A. Site Investigation/Utility Coordination

Sub-Total \$0.00

B. Design Development (35% Construction Drawings)

Sub-Total \$0.00

C. 50% Construction Document Phase

Sub-Total \$0.00

D. Preliminary Design Phase

Principal In Charge	0	hrs. @	\$200.00	\$0.00
Office Manager/Project Manager	0	hrs. @	\$155.00	\$0.00
Site Investigation (Elect)	2	hrs. @	\$105.00	\$210.00
Coordination with Utility for Power	4	hrs. @	\$105.00	\$420.00
Lighting Design (Eng)	6	hrs. @	\$105.00	\$630.00
Lighting Design (Drafting)	4	hrs. @	\$57.00	\$228.00
Signal Modifications (Eng)	6	hrs. @	\$105.00	\$630.00
Signal Modifications (Drafting)	4	hrs. @	\$57.00	\$228.00
Take Offs (Eng)	6	hrs. @	\$105.00	\$630.00
Take Offs (Drafting)	2	hrs. @	\$57.00	\$114.00
In House QC (Elect)	2	hrs. @	\$105.00	\$210.00
Review Meetings (Elect)	4	hrs. @	\$105.00	\$420.00
Reimbursible Expenses				
Mileage: # of Trips/Miles Round Trip/Cost per Mile	0	10	\$ 0.575	\$0.00
Per Diem: # of Meals/Cost per Meal		0	\$ 10.00	\$0.00
Hotel: # of Trips/# of People/Cost for Room	0	0	\$ 150.00	\$0.00

Sub-Total \$3,720.00

E. Final Design

Principal In Charge	0	hrs. @	\$200.00	\$0.00
Office Manager/Project Manager	0	hrs. @	\$155.00	\$0.00
Site Investigation (Elect)	2	hrs. @	\$105.00	\$210.00
Coordination with Utility for Power	2	hrs. @	\$105.00	\$210.00
Lighting Design (Eng)	6	hrs. @	\$105.00	\$630.00
Lighting Design (Drafting)	4	hrs. @	\$57.00	\$228.00
Signal Modifications (Eng)	6	hrs. @	\$105.00	\$630.00
Signal Modifications (Drafting)	4	hrs. @	\$57.00	\$228.00
Update Take Offs (Eng)	3	hrs. @	\$105.00	\$315.00
Update Take Offs (Drafting)	1	hrs. @	\$57.00	\$57.00
In House QC (Elect)	2	hrs. @	\$105.00	\$210.00
Respond to Review Meeting Comments (Elect)	0	hrs. @	\$105.00	\$0.00
Reimbursible Expenses				
Mileage: # of Trips/Miles Round Trip/Cost per Mile	0	10	\$ 0.575	\$0.00
Per Diem: # of Meals/Cost per Meal		0	\$ 10.00	\$0.00
Hotel: # of Trips/# of People/Cost for Room	0	0	\$ 150.00	\$0.00

Sub-Total \$2,718.00

F. Bid Phase

Answer Questions and Prepare Adendums (Elect)	4	hrs. @	\$105.00	\$420.00
Attend Pre-Bid Conference (Elect)	2	hrs. @	\$105.00	\$210.00
Review Bid (Elect)	0	hrs. @	\$105.00	\$0.00
Reimbursible Expenses				
Mileage: # of Trips/Miles Round Trip/Cost per Mile	0	20	\$ 0.575	\$0.00
Per Diem: # of Meals/Cost per Meal		0	\$ 10.00	\$0.00
Hotel: # of Trips/# of People/Cost for Room	0	0	\$ 150.00	\$0.00

Sub-Total \$630.00

G. Construction Administration

Sub-Total \$0.00

Summary

Item A:	\$0.00
Item B:	\$0.00
Item C:	\$0.00
Item D:	\$3,720.00
Item E:	\$2,718.00
Item F:	\$630.00
Item G:	\$0.00

Total Estimate: \$7,068.00

September, 2015

Schedule of Hourly Rates for**West Plains Engineering, Inc.**

Principal	\$200.00/hr.
Office Manager/Project Manager	\$155.00/hr.
Senior Engineer/Project Engineer	\$105.00/hr.
Design Engineer	\$85.00/hr.
Draftsperson	\$57.00/hr.
Clerical	\$50.00/hr.

Reimbursable Expenses

Mileage	\$0.54/mile
Meals	At Cost
Lodging	At Cost
Miscellaneous (i.e. long distance phone calls, outsourced printing, shipping, photos, etc.)	At Cost