REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN PROFESSIONAL SERVICES AGREEMENT OR AMENDMENT
Date: 04/04/2014

Project Name & Number: Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements, Project No. 14-2178
CIP #: 50812.CD

Project Description: Analysis of the design upgrades necessary for optimization of operations with regard to surge mitigation at the existing Northridge Booster Station located at 1041 Sagewood St. Analysis of the design upgrades necessary for optimization of operations with regard to surge mitigation and chemical feed repairs at the Well #12/Stoney Creek BPS located 2930 Catron Blvd.

Consultant: Bartlett & West

Original Contract Amount: $29,398
Original Contract Date: 04/21/2014
Original Completion Date:

Addendum No:
Amendment Description:

Current Contract Amount: ___________________________
Change Requested: ___________________________
New Contract Amount: $0.00
Current Completion Date: ___________________________
New Completion Date: ___________________________

Funding Source This Request:

<table>
<thead>
<tr>
<th>Amount</th>
<th>Dept.</th>
<th>Line Item</th>
<th>Fund</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>$29,398.00</td>
<td>922.602</td>
<td>4361 602-633</td>
<td>Water Replacement / Improvements</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$29,398.00 Total

Agreement Review & Approvals

Project Manager: ___________________________ Date: 4/4/14
Compliance Specialist: ___________________________ Date: 4/14/14
City Attorney: ___________________________ Date: 4/14/14
Division Manager: ___________________________ Date: 4/7/14
Department Director: ___________________________ Date: 4/7/14

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
Public Works
Engineering
Project Manager

FINANCE OFFICE USE ONLY
(Note to Finance: Please write date of Agreement is appropriate space in the Agreement document)

Appropriation: 4/10/14 Initiates: N
Cash Flow: 4/10/14 Approved: N

109A Authorization for Mayor & Finance Officer to Sign
Rev. 03/2009
Agreement Between City of Rapid City and Bartlett & West, Inc. for Design and Bidding Professional Services for Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements, Project No. 14-2178, CIP# 50812.CD

AGREEMENT made ____________, April 21, 2014, between the City of Rapid City, SD (City) and Bartlett & West, Inc. (Engineer), located at 5900 S. Western Ave Suite 101, Sioux Falls South Dakota 57108. City intends to obtain services for Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements, Project No. 14-2178, CIP# 50812.CD. 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 in any way involving the specification or recommendation of asbestos, in any form, or any claims based upon use of a product containing asbestos.

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

4.2 City of Rapid City NonDiscrimination Policy Statement

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

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

Section 5—Payments to the Engineer

5.1 Schedule of Pay Rates

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

5.2 Fee

The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed $29,398.00 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 June 30, 2015 based on an award date of May 5, 2014.

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:  
[Signature]  
MAYOR

DATE: 4/21/14

ATTEST:

[Signature]  
FINANCE OFFICER

Reviewed By:  
[Signature]  
Morgan Gagliano, PROJECT MANAGER

DATE: 4/4/14

Engineer:  
[Signature]  
BARTLETT & WEST, INC.

DATE: 4/4/14

CITY'S DESIGNATED PROJECT REPRESENTATIVE  
NAME Morgan R. Gagliano  
PHONE (605) 394-4154  
EMAIL Morgan.gagliano@gmail.com

ENGINEERING FIRM'S DESIGNATED PROJECT REPRESENTATIVE  
NAME Brian L. Hoellein  
PHONE (605) 373-5909  
EMAIL brian.hoellein@bartwest.com
EXHIBIT A

Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements
Project Number 14-2178/ CIP 50812.CD

BACKGROUND

1. **Existing Pump Station Background Summary:**
   The Northridge Booster Pump Station was constructed in 2012 and provides service to the North Deadwood Zone from the North Rapid Pressure Zone. The static hydraulic grade between the two zones varies from approximately 3855 ft to 3544 ft. The existing pump station is an above grade station with two 300 gpm centrifugal pumps. It does have the ability to be remotely controlled.

   The Well #12/Stoney Creek Booster Pump Station was constructed in 2007 and provides service to the HWY 16 Zone and Carriage Hills and Southwest Zone from the Southwest Zone Pressure Zone. The Zones are fed depending on control valves. The static hydraulic grade between the two zones varies from approximately 4025 ft to 3783 ft. The existing pump station is an above grade station with three 1050 gpm centrifugal pumps. It does have the ability to be remotely controlled.

2. **Proposed Pump Station Upgrades – Northridge BPS:** The Northridge BPS is experiencing issues thought to be related to surge and surge devices that were installed for the facility. The existing pump station surge anticipation valve operation has been a concern to operators, and the surge anticipator drain is undersized for the amount of flow that can discharge. Further, there are concerns on the settings of the surge valve and what settings trigger it to open. The selected consultant will provide services related to analysis and recommendations for improvements for the Northridge BPS surge anticipation valve and surge anticipation valve discharge or drain. The project is proposed to be designed in 2014 and constructed in 2015. The preliminary evaluation services (Task 1) will be completed in 2015. Any follow up final design and construction is not currently a part of this project, and will be determined by the preliminary evaluation. Project objectives include but are not limited to:

   - A detailed surge analysis for various emergency, pump stop and valve closure conditions. The Consultant shall provide recommendations based on their analysis, and present findings and recommendations for operation changes and improvements, as necessary.

   - The pump station currently has a system of controls in place for local and remote operation and monitoring. Any system controls proposed for the design shall be designed to be integrated into the City’s existing SCADA system by a control system design specialist (integrator/instrumentation and control engineer). It is anticipated that the contract provisions will require an Integrator as part of the general contractor’s subcontractors.

   - The design will have a design life and mechanical component life in accordance with the City Infrastructure Design Criteria Manual (IDCM) Section 3.10.3 (1) and supplementary design criteria, whichever is longer. Develop a set of clear
contract documents that will allow the necessary improvements to be efficiently and economically bid and constructed.

- This project will be bid on unit pricing. The consultant shall develop lump sum unit pricing for individual components. It is anticipated that the contractor will be required to provide a schedule of values attached to applicable lump sum items. The consultant will develop a specification to accommodate this.

- The Consultant will prepare an Operations and Maintenance (O&M) Manual table of contents for the pump station. The Contractor-provided O&M Manual will be considered as supplementary to the O&M manual provided herein. Detailed operation information shall be included in the O&M Manual including Startup sequence (normal, emergency), Shutdown sequence (normal, emergency), Normal Operation, Troubleshooting. Operations description shall include a general narrative in addition to specific control discussion (e.g., local, on, off, auto, and remote). The selected consultant shall involve the integrator/instrumentation and control engineer in the development/review of the O&M Manual for development of the control language and to verify continuity between disciplines.

- The Consultant shall provide Construction Administration services. The consultant should demonstrate their personnel/staff expertise with respect to managing the construction. The City is designing for a top-notch facility and the construction component carries the same importance as the design.

- Specific requirements as outlined in Tasks 1 through 5 and the Supplemental Design Criteria.

- It is the intent of this project that a complete and fully operational facility is delivered, and it is expected that all other items that are needed for successful completion of the project, whether explicitly expressed or not, within normal reason, are incorporated for the successful completion of the project.

- Develop a clear deliverable that will provide a road map to allow future projects to be developed for projects that can be efficiently and economically bid and constructed.

Proposed Pump Station Upgrades - Well #12/ Stoney Creek BPS: The existing Well #12/ Stoney Creek BPS is experiencing issues thought to be related to surge and operation of the surge anticipation valve potentially in conjunction with the starting and stopping of the booster pumps or the well. The existing Madison well pump motor is controlled via a VFD; however the existing booster pumps do not utilize VFD's; rather they utilize soft starts. The soft starts do not allow adequate time to ramp the pumps down and as a result during controlled pump stops the surge anticipator valve routinely opens to release a surge wave. The consultant shall evaluate methods to address this issue so that the surge anticipator valve is not a problem during the standard shutdown operation. There are concerns on the settings of the surge valve and what settings trigger it to open. The selected consultant will provide services related to analysis and recommendations for improvements for the pump station surge anticipation valve. Also, the existing sodium hypochlorite diaphragm feed pumps that pump into the distribution system and have experienced problems since startup. The consultant shall analyze the existing chemical feed system setup and provide recommendations and a design for improvements. The
The project is proposed to be designed in 2014 and constructed in 2015. The preliminary evaluation services (Task 1) will be completed in 2015. Any follow up final design and construction is not currently a part of this project, and will be determined by the preliminary evaluation. Project objectives include but are not limited to:

- A detailed surge analysis for various emergency, pump stop and valve closure conditions. The Consultant shall provide recommendations based on their analysis, and present findings, and recommendations for operation changes and improvements, as necessary.

- The pump station currently has a system of controls in place for local and remote operation and monitoring. Any system controls proposed for the design shall be designed to be integrated into the City’s existing SCADA system by a control system design specialist (integrator/instrumentation and control engineer). It is anticipated that the contract provisions will require an Integrator as part of the general contractor’s subcontractors.

- A detailed analysis and preliminary design to remediate issues with the sodium hypochlorite feed system pumps.

- The design will have a design life and mechanical component life in accordance with the City Infrastructure Design Criteria Manual (IDCM) Section 3.10.3 (1) and supplementary design criteria, whichever is longer.

- This project will be bid on unit pricing. The consultant shall develop lump sum unit pricing for individual components. It is anticipated that the contractor will be required to provide a schedule of values attached to applicable lump sum items. The consultant will develop a specification to accommodate this.

- The Consultant will prepare an Operations and Maintenance (O&M) Manual table of contents for the pump station. The Consultant provided O&M Manual will be considered as supplementary to the O&M manual provided herein. Detailed operation information shall be included in the O&M Manual including Startup sequence (normal, emergency), Shutdown sequence (normal, emergency), Normal Operation, Troubleshooting. Operations description shall include a general narrative in addition to specific control discussion (e.g., local, on, off, auto, and remote). The selected consultant shall involve the integrator/instrumentation and control engineer in the development/review of the O&M Manual for development of the control language and to verify continuity between disciplines.

- The Consultant shall provide Construction Administration services. The consultant should demonstrate their personnel/staff expertise with respect to managing the construction. The City is designing for a top-notch facility and the construction component carries the same importance as the design.

- Specific requirements as outlined in Tasks 1 through 5 and the Supplemental Design Criteria.

- It is the intent of this project that a complete and fully operational facility is delivered, and it is expected that all other items that are needed for successful completion of the project, whether explicitly expressed or not, within normal reason, are incorporated for the successful completion of the project.
Develop a set of clear contract documents that will allow the necessary improvements to be efficiently and economically bid and constructed.

Develop a clear deliverable that will provide a road map to allow future projects to be developed for projects that can be efficiently and economically bid and constructed.

**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 within 48 hours of the meeting.

1.2 Review background information listed below and any other resources as necessary. Summarization of understanding of this review is anticipated in the design report. This includes but is not limited to:

- City of Rapid City GIS maps,
- City of Rapid City *Utility System Master Plan* (Burns & McDonnell, 2008),
- City of Rapid City *Municipal Water System* (FMG Inc. 1985)
- City of Rapid City benchmark data,
- City of Rapid City water, sanitary sewer and storm sewer maps,
- City of Rapid City historical bid tabulation/cost data, and plans of existing facilities.
- Anamosa Street Reconstruction Phase 2 Haines Ave. to Midway St. Water and Sanitary Reconstruction. City of Rapid City Project No. SSW07-1472 CIP 50519 PCN XOOY (F.M.G., 2010).
- Holiday Inn, North Street, and Farlow Avenue Water Main Reconstruction. City of Rapid City Project No. W07-1631 CIP #50465.
- “Alma Street, Gladys Streets, and Lennon Lane Area Water Main Extension City of Rapid City Project No. 12-2039 CIP No 50912”, by Dream Design International (D.D.I) (2013).
- “Planning Report for Skyline, Terracita, Southwest, Carriage Hills, and Future Southwest Rapid City Water Service Zones” Project No.
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 State Plane coordinates.

1.4 Identify the existing right-of-way (ROW) location and permanent and temporary construction acquisition needs necessary for the Project. Include size and extent of such ROW and easements and contact information of property owners.

1.5 Prepare preliminary opinion of probable construction costs for the project. The design projects will be bid on unit pricing. The consultant shall develop lump sum unit pricing for individual components. It is anticipated that the contractor will be required to provide a schedule of values attached to applicable lump sum items. The consultant will develop a specification to accommodate this. Covered in section 1.15.

1.6 Recommend location and extent of geotechnical services investigation necessary to complete design. Geotechnical services typically will be a subconsultant to the Consultant, and payment for geotechnical services is the responsibility of the Consultant.

1.7 Any system controls proposed for the designs shall be designed to be integrated into the City's existing SCADA system by a control system design specialist (integrator/instrumentation and control engineer). It is anticipated that the contract provisions will require an Integrator as part of the general contractor's subcontractors. Payment for integrator/instrumentation and control professional services is the responsibility of the Consultant. Recommend extent of services necessary to complete design. Services are required to be completed by an instrumentation and control/controls/integration engineer or experienced professional with a minimum of 10 years of experience in municipal water projects. Services under this task will focus on the City's overall SCADA system for the water distribution system. Work will include meetings and field investigation to clearly gain an understanding of the existing master control PLC (Siemens LC 3000), and how new or modified remote stations and vaults will be able to interact with the existing master control PLC, or if a second parallel system will be required. The Consultant will communicate with the local representative for the existing system.

1.8 The site design shall protect the surrounding environment and comply with all existing environmental regulations and laws.

1.9 Public Involvement/Presentations: Public participation and information will be an important part of the project(s). The Consultant will develop and distribute a survey questionnaire to property owners adjacent to proposed new construction areas approximately 3 months or more ahead of soliciting bids for construction. The questionnaire should be developed to obtain information on site-specific concerns such as building aesthetics, concerns, and special needs such as access considerations during construction, or history of utility or infrastructure problems in this area. Questionnaires would be returned to and evaluated by the consultant, who would 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. Arrange and conduct
public and/or affected property owners meetings. The Consultant shall provide the City with any and all necessary drawings, renderings, and exhibits to convey the intent of the design to City Departments, committees, neighborhood groups, and other interested parties.

1.10 Meet with individual property owners regarding ROW and permanent and temporary easement needs and regarding specific project issues and components, if necessary.

1.11 The facility shall take special care to accommodate the accessibility needs for the disabled as required by the City, paying particular attention to the Americans with Disabilities Act (ADA).

1.12 Attend submittal review meeting with City staff, as necessary.

1.13 Attend Public Works and Council meetings as necessary. No time included.

1.14 Quality Assurance/Quality Control Plan (QA/QC) is critical to project success and is expected throughout the project. QA/QC shall include but shall not necessarily be limited to: Schedule monitoring and compliance, Milestone monitoring, Project reviews - both internal and external, Project communications, Project meetings, Standards used, Cost review and control, and Technical design review. The Consultant is responsible for providing a quality control plan at the kickoff meeting.

1.15 Preliminary Design Submittal: The Consultant shall prepare the Preliminary Design Submittal. The Preliminary Design Submittal shall generally consist of the following document documents:

   A. Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements

      1. Design Report Design Report: Note***The Design Report shall be named the "name of project--Design Report" through all (Preliminary, Intermediate, and Final) until at which time that the Design Report is Finalized. At this point, the consultant may add “Final” to the Report Name.

         a) The Consultant shall, prior to submission of the Design Report, develop a proposed table of contents for City PM review. It is the intent that all Preliminary Design analysis and findings be clearly explained in the Design Report. This includes, but is not limited to, options presented to the City for review, an outline of compliance with regulatory criteria, and results of all analyses including design calculations.

         b) Hydraulic Modeling: Meet and get existing model from City. Load model on Consultant computer, run analysis and compare to City results for same analysis. Using current water Master Plan, City design criteria, and City growth information, and develop future flow rates through the PRV stations. Determine head and various flow rates ( develop system curve). Evaluate capacity and flow velocities in transmission mains. If areas of concern are noted, evaluate mitigation alternatives. Evaluate Fire flows. When appropriate, run extended period simulations to model tank fluctuation and valve potion run times. NO FIELD CALIBRATION OR FIELD DATA COLLECTION IS INCLUDED. City shall provide available data on existing pumps when requested by the Consultant.
c) Site Visits: The Consultant will visit each Pump Station to document the existing equipment, condition, and to collect any field data required to complete the Facility Plan Report.

d) The Design Report shall provide discussion about the issues related to surge and surge devices that were installed for the facility.

e) The Consultant shall complete a detailed surge analysis for various emergency, pump stop and valve closure conditions. The Consultant shall provide recommendations based on their analysis, and the consultant will incorporate improvements into the pump station. Field data collection will be obtained by the Consultant as required to complete analysis. The City will assist in data collection as needed, within reason. The City will not perform extensive field assistance.

f) The Consultant will provide in the Design Report, a discussion on anticipated operation including a narrative on Normal Operation and anticipated emergency failure circumstances. Operations description shall include the general narrative that will lead to control description development.

g) Review any existing system controls at the Pump Stations, and provide discussion in the Design Report for recommended changes and additions. Any system controls required for the pump stations shall be designed by a control specialist and provisions shall be made that they are incorporated into the City’s existing SCADA system. Complete instrumentation and control diagrams including local equipment control, control at the motor control center, and remote SCADA control are expected for all systems required for the operation of the pumps are expected in design. Work under this task will focus on the pump station facilities. Work under this task will be completed in conjunction with Task 1.7.

h) The City is moving to variable speed drives (VFD) on many pumps. It is the intent of this project to evaluate the efficacy of installing VFD controls on any existing pumping equipment where appropriate. The Consultant shall provide a discussion of constant speed/soft start verses variable speed pumping for the existing pump station(s), shall provide a listing of pros and cons, and shall provide a recommendation for the proposed pump station. The comparison of constant versus variable speed pumping may be included in the life cycle cost analysis.

i) 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.

j) The existing sodium hypochlorite diaphragm feed pumps pump into the distribution system and have experienced problems since startup at the Stoney Creek PS. The consultant shall analyze the existing chemical feed system setup and provide recommendations and a preliminary design for improvements. The Consultant will incorporate, into the Design Report, details of their findings and recommendations. The report will include analysis, findings, and recommendations for operation changes and improvements, as necessary.

k) The Consultant shall evaluate the existing heating and ventilation systems at both pump stations. The Consultant will incorporate, into the Design Report, details of their findings and recommendations. The report will include analysis, findings, and recommendations for operation changes and improvements, as necessary.
EXHIBIT A
Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements
Project Number 14-2178/ CIP 50812.CD

1. The Design Report shall address how all of the improvements shall meet the operational and maintenance requirements of the City.
2. The Design Report shall address how all improvements and modifications shall meet SD-DENR requirements.
3. The Design Report shall address how any additions shall meet or exceed all building codes and City requirements.
4. The consultant shall submit all design assumptions.
5. The Design Report shall provide review of compliance with City’s Standard Specifications for construction of the project(s).
6. 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. This project will be bid on unit pricing. The consultant shall develop lump sum unit pricing for individual components. It is anticipated that the contractor will be required to provide a schedule of values attached to applicable lump sum items. The consultant will develop a specification to accommodate this.
7. Additional requirements including but not limited to surge analysis, flow metering provisions, and power costs, are provided for in the Supplemental Design Criteria in Attachment Seven. Work covered under other task items. No specific fee is associated with this item.
8. The Consultant shall provide an intended table of contents of what they intend to include in the required O&M Manual for the project. It is expected that the O&M manual will include detailed O&M information including startup sequence(normal, emergency), Shutdown sequence (normal, emergency), Normal Operation, Troubleshooting, etc. The Consultant shall meet with utility maintenance staff to discuss what their needs and concerns are. These meeting minutes will be included in an appendix of the Design Report.
9. The consultant shall submit, in an appendix for review and approval, the template for the construction daily reports to be submitted in Task 5 (5.1 Prepare daily reports.)
10. The Consultant shall elaborate on other project components as necessary. Work covered under other task items. No specific fee associated with this item.
11. Design Report Submittal:
   i. The Consultant shall deliver the following:
      - The Consultant will prepare a report which summarizes, documents, and discusses the findings, and recommendations of the previous sub-tasks.
      - Submit four (4) paper copies and an electronic PDF version of the Design Report along with or before the submission of Preliminary plans and specifications to City’s PM for review and comment. Preliminary plans and specifications are described in further detail in the following section.
      - The Consultant will attend a review meeting with the City of the Design Report submittal.
      - Following the review meeting, the Consultant will incorporate changes as needed.
2. Preliminary Design Plans

a) The Engineer shall develop sufficient types and numbers of drawings to convey the design concepts being proposed. Drawings to be produced shall include but shall not be limited to: Floor, equipment, and piping plans; sections, elevations, and details.

b) The preliminary drawings shall contain, at minimum, the following sheets:

i. General
   - Cover Sheet — Note the index of sheets indicating the anticipated drawing sheets shall be provided.
   - Plan Sheet Index
   - Abbreviations, General Notes

ii. Structural
   - Design Criteria, and Codes
   - Plan Views and Sections
   - Special Details — If Needed

iii. Process/Pumps/Above Floor Pipe and Valves
   - Prepare drawings for report as needed using existing drawings as background.
   - Process Design Criteria, Hydraulics
   - Design Criteria, and Codes
   - Floor Plan
   - Sections — General
   - Special Details — If Needed

iv. Mechanical/HVAC
   - Design Criteria, and Codes
   - Floor Plan
   - Sections — General
   - Special Details — If Needed

v. Plumbing
   - Design Criteria, and Codes
   - Floor Plan
   - Sections — General
   - Special Details — If Needed

vi. Electrical
   - Prepare drawings for report as needed using existing drawings as background.
   - Design Criteria, and Codes
   - Floor Plan
   - Sections — General
   - Special Details — If Needed

vii. Instrumentation and Control
   - Design Criteria, and Codes
   - Schematic Diagrams
   - Piping and Instrumentation Diagram
   - Floor Plan
   - Special Details — If Needed
viii. Anticipated Rapid City Standard Details:

ix. Plan sheets shall be prepared utilizing the latest City Drafting Standards. Work covered under other task items. No specific fee associated with this item.

c) Preliminary Plans Submittal:

i. The Consultant shall deliver the following:

   * Preliminary Drawings

ii. Submit four (4) paper copies and an electronic PDF version of the Preliminary plans and specifications to City’s PM for review and comment.

iii. The Consultant will attend a review meeting with the City of the Preliminary Plans submittal.

3. Preliminary Design Specifications

a) The preliminary design specifications shall contain, at minimum, the following sheets:

   i. Detailed Table of Contents including all anticipated specifications. Specifications will utilize the most current CSI numbering system consisting of 48 divisions.

   ii. The City is responsible for preparing “Front End Documents”

   iii. Consultant will prepare Schedule of Bid Items. Will be a combination of unit priced, and lump sum items. Including a specification defining schedule of values and how they relate to the lump sum portions of the unit pricing.

   iv. Preliminary Design phase level major equipment specifications including but not limited to pumps, valves, variable frequency drive, surge equipment, etc.

   v. A control and instrumentation specification with modes of operation shall be a requirement in this submittal. This specification shall include a general operation and control narrative along with control descriptions.

b) Preliminary Specifications Submittal:

i. The Consultant shall deliver the following:

   * Preliminary Specifications

ii. Submit four (4) paper copies and an electronic PDF version of the Preliminary Specifications to City’s PM for review and comment.

iii. The Consultant will attend a review meeting with the City of the Preliminary Specification submittal.

4. Project Management

a) The Consultants’ PM and the City’s PM will hold bi-weekly check-in and progress meetings. These meetings will primarily be held remotely by phone or video conference. The Consultant will prepare minutes following the meetings, and distribute within 48 hrs.

b) Update project schedule, in MS Project, on a monthly basis.

c) General Project Management: Prepare detailed monthly invoice and supporting documents, track monthly fee/budget, coordination with subconsultants, and other general project coordination.
5. **Project Meetings**

In addition to the special meetings identified in the previous tasks, the following meetings are also anticipated:

a) Monthly progress meetings. The Consultant’s PM will attend in person, or a designated representative. Other consultant project team members will attend either in person, or remotely, as dictated by the meeting agenda. The Consultant will prepare minutes following the meetings, and distribute within 48 hrs.

b) Consultant internal project meetings. Anticipated to be one per month, in-between the monthly meetings with the City.
**TASK 2 - FINAL DESIGN SERVICES:**
Not included at this time.

**TASK 3 – BIDDING SERVICES:**
Not included at this time.

**TASK 4 – BASIC CONSTRUCTION SERVICES:**
Not included at this time.

**TASK 5 – EXPANDED CONSTRUCTION SERVICES:**
Not included at this time.
PROJECT TEAM, MEETINGS, AND SUBMITTALS SUMMARY

6.1 Project team members will include:
- The Consultant
- City Engineering Services staff
- Operations Division staff
  - Utility Maintenance Division (Service area and O&M related issues)
  - Street Division
  - Water Division
  - Water Reclamation Division
  - Parks Division

6.2 Meetings requiring the Consultant’s participation will likely include, but may not be limited to the following:
- Kick-off meeting, Task 1.
- Committee and Council Meetings as required, All Tasks.

6.3 Refer to specific Tasks for detailed information pertaining to Submittals. Submittals generally include (refer to detailed information in RFP and Attachment One for more detailed information):
- Kick-off meeting, Task 1 meeting minutes.
- Design Report/Facility Plan, Plans, Specifications, and Cost Estimate Submittal, Task 1 including meeting minutes.

Deliverables shall be identified on the schedule to be developed by the Consultant. The consultant shall deliver all meeting minutes with 48 hours of the meeting. The Consultant shall allow a minimum of 15 working days for City review of the Project Design report and Preliminary Design submittal, the Intermediate Design Submittal and the Final (100%) Design Submittal.
# ENGINEERING FEE ESTIMATE  EXHIBIT B

City of Rapid City  

50812.CD Northridge and Stoney Creek Booster Pump Station Improvements  
(Project Number 14-2178)  

4/3/2014

<table>
<thead>
<tr>
<th>TASK NUMBER</th>
<th>Classification</th>
<th>Rate</th>
<th>TASK NUMBER</th>
<th>Classification</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Preliminary Design</td>
<td></td>
<td>1.2</td>
<td>Review Background Info</td>
<td>$1,156</td>
</tr>
<tr>
<td>1.3</td>
<td>Site Surveys</td>
<td></td>
<td>1.4</td>
<td>R-O-W, Easements, Land</td>
<td>$0</td>
</tr>
<tr>
<td>1.5</td>
<td>Opinion of Construction Cost</td>
<td>$0</td>
<td>1.6</td>
<td>Geotech</td>
<td>$0</td>
</tr>
<tr>
<td>1.7</td>
<td>Inst, Controls, SCADA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Field Meetings and Data Gathering</td>
<td>$234</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication w/ Heavy Ruff</td>
<td>$234</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall System Evaluation</td>
<td>$234</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Review Environmental Regs, Determine Mitigation</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.9</td>
<td>Public Meetings, Presentations</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.10</td>
<td>Meet w/ Property Owners</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.11</td>
<td>ADA Compliance Review</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.12</td>
<td>Submittal Review w/ City</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.13</td>
<td>PW and Council Meetings</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.14</td>
<td>QA and QC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop QC Plan</td>
<td>$265</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Schedule, Milestones</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Design/Technical QC</td>
<td>$770</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication, Meetings</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Confirm Compliance with City Requirements</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cost Control</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.15</td>
<td>Preliminary Design Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>Develop Table of Contents</td>
<td>$107</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>Hydraulic Modeling</td>
<td>$2,338</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>Site Visits</td>
<td>$1,960</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>Discussion Related to Surge</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>Surge Analysis</td>
<td>$3,951</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>Operations Description</td>
<td>$539</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>Inst, Controls, SCADA (At Stations)</td>
<td>$234</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h</td>
<td>Electrical, VFDs vs Soft Starts</td>
<td>$1,010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i</td>
<td>Design Life</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j</td>
<td>Sodium Hypo Feed at Stoney Creek</td>
<td>$956</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k</td>
<td>Mechanical, HVAC</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l</td>
<td>Discuss Meeting O&amp;M Requirements</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m</td>
<td>SDDENR Requirements</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>City Codes and Regulations</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o</td>
<td>Design Assumptions</td>
<td>$517</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p</td>
<td>Facility Justification</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# ENGINEERING FEE ESTIMATE  EXHIBIT B

## City of Rapid City

50812.CD Northridge and Stoney Creek  Booster Pump Station Improvements  
(Project Number 14-2178)

4/3/2014

<table>
<thead>
<tr>
<th>TASK NUMBER</th>
<th>Classification</th>
<th>Rate</th>
<th>TASK SUBTOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Compliance with City Standard Specs</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>Opinion of Construction Cost</td>
<td>$724</td>
<td></td>
</tr>
<tr>
<td>s</td>
<td>Covered Under Other Work Tasks</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>t</td>
<td>O&amp;M Table of Contents</td>
<td>$207</td>
<td></td>
</tr>
<tr>
<td>u</td>
<td>Template for Const Daily Report</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>v</td>
<td>Covered Under Other Work Tasks</td>
<td>$0</td>
<td></td>
</tr>
<tr>
<td>w</td>
<td>Design Report Submittal</td>
<td>$857</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Report Writing and Prep</td>
<td>$1,671</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review Meeting</td>
<td>$1,331</td>
<td></td>
</tr>
</tbody>
</table>

2 Preliminary Design Plans

a and b Prelim Plan Sheets

- General Sheets | $0
- Civil/Site/Underground/Landscape | $0
- Architectural | $0
- Structural | $0
- Process/Pumps/Above Floor Pipe & Valves | $1,628
- Mechanical/HVAC | $0
- Plumbing | $0
- Electrical | $1,075
- Instrumentation/Controls | $0
- City Standard Details | $0

| c Prelim Plan Submittal | $0 |
| Review Meeting | $0 |

3 Preliminary Design Specs

a Table of Contents & Preliminary Spec | $0

| Schedule of Bid Items | $0 |

b Prelim Spec Submittal | $0

| Spec Prelim Writing | $0 |
| Review Meeting | $0 |
### ENGINEERING FEE ESTIMATE  EXHIBIT B

**City of Rapid City**

50812.CD Northridge and Stoney Creek  Booster Pump Station Improvements  
(Project Number 14-2178)

4/3/2014

<table>
<thead>
<tr>
<th>TASK NUMBER</th>
<th>Classification</th>
<th>Rate</th>
<th>TASK SUBTOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Project Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Bi-Weekly PM Level Meeting and Minutes (3 Calls)</td>
<td>$1,053</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Schedule Update, Monthly</td>
<td>$248</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. General Project Management</td>
<td>$1,053</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Project Meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Monthly Progress and Minutes with City (2 Meetings)</td>
<td>$1,429</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Consultant Internal Meetings</td>
<td>$1,229</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fee</td>
<td>$28,542</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total Fee, Including Sub-Consultants 2014</th>
<th>$28,542</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 Yearly Fee Adjustment, Max Increase of 3%</td>
<td>$29,398</td>
<td></td>
</tr>
<tr>
<td>Sub-Consultants Amounts (2015 $)</td>
<td>$4,230</td>
<td></td>
</tr>
<tr>
<td>ZZ Technology (Surge Analysis)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Northridge - Stoney PS Fee (Task 1) - Exhibit B Abbrev (Final) (3-31-14).xlsx**  
**Page 3**
**EXHIBIT C**

Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements  
Project Number 14-2178/ CIP 50812.CD

**BARTLETT & WEST, INC.**  
2014 SCHEDULE OF HOURLY CHARGES  
Effective January 1, 2014

<table>
<thead>
<tr>
<th>Position</th>
<th>Hourly Rate</th>
<th>Position</th>
<th>Hourly Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineer XI/Landscape Arch XI</td>
<td>$200.00</td>
<td>Right-of-Way Technician IV</td>
<td>$85.00</td>
</tr>
<tr>
<td>Engineer X/Landscape Arch X</td>
<td>190.00</td>
<td>Right-of-Way Technician III</td>
<td>78.00</td>
</tr>
<tr>
<td>Engineer IX/Landscape Arch IX</td>
<td>179.00</td>
<td>Right-of-Way Technician II</td>
<td>69.00</td>
</tr>
<tr>
<td>Engineer VIII/Landscape Arch VIII</td>
<td>165.00</td>
<td>Right-of-Way Technician I</td>
<td>59.00</td>
</tr>
<tr>
<td>Engineer VII/Landscape Arch VII</td>
<td>152.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineer VI/Landscape Arch VI</td>
<td>137.00</td>
<td>GIS Coordinator VIII</td>
<td>$200.00</td>
</tr>
<tr>
<td>Engineer V/Landscape Arch V</td>
<td>127.00</td>
<td>GIS Coordinator VII</td>
<td>190.00</td>
</tr>
<tr>
<td>Engineer IV/Landscape Arch IV</td>
<td>117.00</td>
<td>GIS Coordinator VI</td>
<td>180.00</td>
</tr>
<tr>
<td>Engineer III/Landscape Arch III</td>
<td>107.00</td>
<td>GIS Coordinator V</td>
<td>170.00</td>
</tr>
<tr>
<td>Engineer II/Landscape Arch II</td>
<td>97.00</td>
<td>GIS Coordinator IV</td>
<td>155.00</td>
</tr>
<tr>
<td>Engineer I/Landscape Arch I</td>
<td>87.00</td>
<td>GIS Coordinator III</td>
<td>140.00</td>
</tr>
<tr>
<td>Engineering Technician XI</td>
<td>$160.00</td>
<td>GIS Coordinator II</td>
<td>125.00</td>
</tr>
<tr>
<td>Engineering Technician X</td>
<td>140.00</td>
<td>GIS Coordinator I</td>
<td>115.00</td>
</tr>
<tr>
<td>Engineering Technician IX</td>
<td>125.00</td>
<td>GIS Developer/DBA V</td>
<td>$150.00</td>
</tr>
<tr>
<td>Engineering Technician VIII</td>
<td>108.00</td>
<td>GIS Developer/DBA IV</td>
<td>140.00</td>
</tr>
<tr>
<td>Engineering Technician VII</td>
<td>97.00</td>
<td>GIS Developer/DBA III</td>
<td>130.00</td>
</tr>
<tr>
<td>Engineering Technician VI</td>
<td>89.00</td>
<td>GIS Developer/DBA II</td>
<td>120.00</td>
</tr>
<tr>
<td>Engineering Technician V</td>
<td>81.00</td>
<td>GIS Developer/DBA I</td>
<td>110.00</td>
</tr>
<tr>
<td>Engineering Technician IV</td>
<td>74.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Technician III</td>
<td>66.00</td>
<td>GIS Analyst V</td>
<td>$125.00</td>
</tr>
<tr>
<td>Engineering Technician II</td>
<td>60.00</td>
<td>GIS Analyst IV</td>
<td>115.00</td>
</tr>
<tr>
<td>Engineering Technician I</td>
<td>55.00</td>
<td>GIS Analyst III</td>
<td>105.00</td>
</tr>
<tr>
<td>Surveyor VIII</td>
<td>$133.00</td>
<td>GIS Analyst I</td>
<td>95.00</td>
</tr>
<tr>
<td>Surveyor VII</td>
<td>125.00</td>
<td>GIS Analyst I</td>
<td>85.00</td>
</tr>
<tr>
<td>Surveyor VI</td>
<td>115.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveyor V</td>
<td>103.00</td>
<td>Surveyor V</td>
<td></td>
</tr>
<tr>
<td>Surveyor IV</td>
<td>94.00</td>
<td>Surveyor IV</td>
<td></td>
</tr>
<tr>
<td>Surveyor III</td>
<td>83.00</td>
<td>Surveyor III</td>
<td></td>
</tr>
<tr>
<td>Surveyor II</td>
<td>73.00</td>
<td>Surveyor II</td>
<td></td>
</tr>
<tr>
<td>Surveyor I</td>
<td>63.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey Technician VI</td>
<td>$81.00</td>
<td>Computer Systems Manager</td>
<td>$123.00</td>
</tr>
<tr>
<td>Survey Technician V</td>
<td>71.00</td>
<td>Systems Analyst</td>
<td>120.00</td>
</tr>
<tr>
<td>Survey Technician IV</td>
<td>61.00</td>
<td>Network Administrator</td>
<td>99.00</td>
</tr>
<tr>
<td>Survey Technician III</td>
<td>52.00</td>
<td>IS Support Specialist</td>
<td>69.00</td>
</tr>
<tr>
<td>Survey Technician II</td>
<td>47.00</td>
<td>Computer Systems Technician III</td>
<td>79.00</td>
</tr>
<tr>
<td>Survey Technician I</td>
<td>42.00</td>
<td>Computer Systems Technician II</td>
<td>69.00</td>
</tr>
<tr>
<td>Field Representative X</td>
<td>$127.00</td>
<td>Computer Systems Technician I</td>
<td>55.00</td>
</tr>
<tr>
<td>Field Representative IX</td>
<td>120.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Representative VIII</td>
<td>108.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Representative VII</td>
<td>98.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Representative VI</td>
<td>88.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Representative V</td>
<td>80.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Representative IV</td>
<td>72.00</td>
<td>Administrative Technician V</td>
<td>$65.00</td>
</tr>
<tr>
<td>Field Representative III</td>
<td>65.00</td>
<td>Administrative Technician IV</td>
<td>58.00</td>
</tr>
<tr>
<td>Field Representative II</td>
<td>59.00</td>
<td>Administrative Technician III</td>
<td>51.00</td>
</tr>
<tr>
<td>Field Representative I</td>
<td>53.00</td>
<td>Administrative Technician II</td>
<td>46.00</td>
</tr>
<tr>
<td>Right-of-Way Specialist IV</td>
<td>$180.00</td>
<td>Administrative Technician I</td>
<td>40.00</td>
</tr>
<tr>
<td>Right-of-Way Specialist III</td>
<td>150.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-of-Way Specialist II</td>
<td>130.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-of-Way Specialist I</td>
<td>115.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Right-of-Way Technician V</td>
<td>95.00</td>
<td>Client Services Representative</td>
<td>$75.00</td>
</tr>
</tbody>
</table>

**Note:** For projects that extend beyond December 31, 2014 the Hourly Charges are subject to an increase on January 1 of each succeeding year, maximum of 3% annually.
EXHIBIT C
CITY OF RAPID CITY BOOSTER STATION PROJECTS

BARTLETT & WEST, INC.
SCHEDULE OF REIMBURSABLE COSTS/CHARGES
COSTING RATES ONLY
EFFECTIVE JANUARY 1, 2014

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CHARGE AMOUNT</th>
<th>UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REPRODUCTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blackline Prints (In-House)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bond, Full Size - 24x36</td>
<td>$ 1.00</td>
<td>Each</td>
</tr>
<tr>
<td>Bond, Half Size Reduction - 11x17</td>
<td>$ 0.70</td>
<td>Each</td>
</tr>
<tr>
<td>Photocopies (In-House)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black &amp; White - up to 11x17</td>
<td>$ 0.15</td>
<td>Each</td>
</tr>
<tr>
<td>Small Size Color Copies, 8.5x11</td>
<td>$ 0.90</td>
<td>Each</td>
</tr>
<tr>
<td>Large Size Color Copies, &gt; 8.5x11</td>
<td>$ 1.50</td>
<td>Each</td>
</tr>
<tr>
<td>Scan (In-House)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small Scan - 8.5 x 11 (Black/Color)</td>
<td>$ 0.12</td>
<td>Each</td>
</tr>
<tr>
<td>Full Size Scan - 24x36 - (Black)</td>
<td>$ 2.00</td>
<td>Each</td>
</tr>
<tr>
<td>Full Size Scan - 24x36 - (Color)*</td>
<td>$ 5.00</td>
<td>Each</td>
</tr>
<tr>
<td>Inkjet Plotters - 24x36 (In-House)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bond (Black)</td>
<td>$ 1.50</td>
<td>Lin. Ft.</td>
</tr>
<tr>
<td>Bond (Color)</td>
<td>$ 2.50</td>
<td>Lin. Ft.</td>
</tr>
<tr>
<td><strong>LAMINATING/MOUNTING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laminating - 8.5x11 (In-House)</td>
<td>$ 1.00</td>
<td>Each</td>
</tr>
<tr>
<td><strong>VEHICLES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trucks, Cars, SUV's - all vehicles</td>
<td>$ 0.60</td>
<td>Mile</td>
</tr>
<tr>
<td><strong>PER DIEM</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meals</td>
<td>$30.00</td>
<td>Day</td>
</tr>
<tr>
<td>Lodging</td>
<td>$110.00</td>
<td>Day</td>
</tr>
<tr>
<td><strong>OTHER REIMBURSABLE EXPENSES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Consultants</td>
<td>Actual Cost x 1.0</td>
<td></td>
</tr>
<tr>
<td>Lodging (Non Per Diem)</td>
<td>Actual Cost x 1.0</td>
<td></td>
</tr>
<tr>
<td>Meals (Non Per Diem)</td>
<td>Actual Cost x 1.0</td>
<td></td>
</tr>
<tr>
<td>Air Travel</td>
<td>Actual Cost x 1.0</td>
<td></td>
</tr>
<tr>
<td>Outside Printing</td>
<td>Actual Cost x 1.0</td>
<td></td>
</tr>
<tr>
<td>All Other Outside Expenses</td>
<td>Actual Cost x 1.0</td>
<td></td>
</tr>
</tbody>
</table>

Note: For projects that extend beyond December 31, 2014 the Reimbursable Charges are subject to an increase on January 1 of each succeeding year, maximum of 3% annually.