

**Agreement Between City of Rapid City and Bartlett & West, Inc. for Professional Services for Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements**

**Project Number 14-2178/ CIP 50812.CD**

AGREEMENT made \_\_\_\_\_, 20\_\_\_\_, 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 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**

#### **Task 1**

Task 1 was completed under a separate contract.

#### **Task 2, and Task 3**

The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed **\$57,853.00** for Task 2 and Task 3 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 within Task 2 and Task 3 as long as the total fee is not exceeded. Prime consultant may not mark up sub-consultant or sub-contractor services.

#### **Task 4 and Task 5**

The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed **\$75,289.00** for Task 4 and Task 5 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 with Task 4 and Task 5 as long as the total fee is not exceeded. Prime consultant may not mark up sub-consultant or sub-contractor services.

#### **Total**

The total amount for Task 2 through Task 5 is **\$133,142.00**.

### **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 **April 30, 2023** based on an award date of **October 7, 2019**.

## **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 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 may be provided. Claims-made coverage shall continue through the term of this Agreement, and Engineer shall purchase at its sole expense either 1) an Extended Reporting Endorsement (also known as Tail Coverage); or 2) Prior Dates Coverage from new insurer with a retroactive date back to the date of, or prior to, the inception of this Agreement; or 3) shall demonstrate through Certificates of Insurance that Engineer has maintained continuous coverage with the same or original insurer. Coverage provided under items 1), 2), or 3) will continue for at least a period of 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. The policy shall name the City and its representatives as an additional insured.

7.4.4 Professional liability insurance providing 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. If this policy provides for claims-made coverage, the claims-made coverage shall continue through the term of this Agreement, and Engineer shall purchase at its sole expense either 1) an Extended Reporting Endorsement (also known as Tail Coverage); or 2) Prior Dates Coverage from new insurer with a retroactive date back to the date of, or prior to, the inception of this Agreement; or 3) shall demonstrate through Certificates of Insurance that Engineer has maintained continuous coverage with the same or original insurer. Coverage provided under items 1), 2), or 3) will continue for at least a period of three years after completion of the terms of this Agreement.

## **Section 8—Hold Harmless**

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





act, error or omission of the Engineer and/or its employees/agents arising out of the professional services described in the Agreement.

### **Section 9—Independent Business**

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

### **Section 10-Indemnification**

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

### **Section 11-Controlling Law and Venue**

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

### **Section 12-Severability**

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

### **Section 13—Funds Appropriation**

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



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

**City of Rapid City:**

**Engineer:**

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
BARTLETT & WEST, INC.

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

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

ATTEST:

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

**Reviewed By:**

\_\_\_\_\_  
MORGAN FALCONE, PROJECT MANAGER

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

CITY'S DESIGNATED PROJECT  
REPRESENTATIVE

ENGINEERING FIRM'S DESIGNATED  
PROJECT REPRESENTATIVE

NAME Morgan Falcone  
PHONE (605) 394-4154  
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NAME Brian L. Hoellein  
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## **EXHIBIT A**

### **Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements**

#### **Tasks 2 to 5**

#### **Project Number 14-2178/ CIP 50812.CD**

### **BACKGROUND**

The Consultant prepared a Preliminary Design Report for the Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements dated December 2018, herein referred to as Report. The following is a list of recommendations for each station:

#### **The Northridge Booster Pump Station**

1. Recommend the surge anticipator function be removed from the two (2) pressure relief/ surge anticipator valves (existing Cla-Val model 52-03). Reinstall both pressure relief valves.
  - a. The pressure relief valve on the upstream side of the two pressure reducing valves should be converted to Cla-Val model 50-36.
  - b. The pressure relief valve on the downstream side of the two pressure reducing valves should be converted to Cla-Val model 50-01.
2. Modify both existing pressure reducing valves to fail closed.
3. Install 4-inch piping and valves to connect the discharge from both pressure relief valves back into the pump suction line. Reference report Figure 3-1 for preliminary design.
4. Install a magnetic flow meter in the pump station discharge line header. Anticipated size is 12 inch and will be located as shown on report Figure 3-1.
5. Install Cla-Val model Z144 flow measurement device into the two (2) existing pressure reducing valves.
6. Electrical conduit and wiring related to the flowmeter power and controls wiring.
7. Controls signals
  - a. Flowmeters instantaneous and totalizer (3 new flow meters)
  - b. Low suction pressure switches on each pump. Connect back to VFDs to shut down the pumps on low suction pressure.
  - c. High discharge pressure on each pump. Connect back to VFDs to shut down the pumps on high discharge pressure.
  - d. Add a limit switch on the two pressure relief valves to signal when they are not shut.

#### **The Well #12/Stoney Creek Booster Pump Station**

1. A 1,000 gallon surge tank (or combination of smaller tanks that total 1,000 gallons) is required. The surge tank needs to be connected to the Red Rock zone line. Recommended preliminary design was two (2) 500 gallons tanks mounted on legs to elevate the tanks above the floor to allow work space under them. Reference report Figures 4-7 and 4-8.

2. A 4-inch pressure relief valve (Cla-Val model 50-36) is required on the booster pump suction line. Reference report Figure 4-1.
3. Recommend that the surge anticipator function be removed from the existing pressure relief/surge anticipator valve (Cla-Val model 52-03). This relief valve should be converted to Cla-Val model 50-36.
4. Assumed need to relocate some existing plumbing piping to accommodate installation of surge tanks.
5. Assumed need to relocate some existing lights and conduit to accommodate installation of surge tanks.
6. Electrical conduit and wiring related to the flowmeter power and controls wiring.
7. Desire to add a flow meter into the piping connecting to the Red Rock zone. There is very limited space within the booster station to allow for the installation of a flow meter. The preliminary report recommendation was to install an insertable flow meter in an outside manhole. Since the report completion, the City has indicated that placing the meter in a manhole is not desired. Thus, they have requested additional options be explored during final design.
8. Controls signals
  - o Flowmeter instantaneous and totalizer (1 new flowmeter)
  - o Low suction pressure switches on each of the three booster pumps. Connect back to starters to shut down the pumps on low suction pressure.
  - o High discharge pressure on each of the three booster pumps pump. Connect back to starters to shut down the pumps on high discharge pressure.
  - o Add a limit switch on the existing and proposed pressure relief valves to signal when they are not shut.

**TASK 2 - FINAL DESIGN SERVICES:**

This task consists of the following services by the Consultant.

- 2.1 The Consultant will attend a kick-off meeting with the City upon receiving notice to proceed. The Consultant will prepare meeting agenda and minutes and distribute to attendees.
- 2.2 Process Design, Drawings, and Specifications:
  - 2.2.1 Prepare a technical memo to again review options for installation of a flowmeter on the Red Rock discharge line within the Stoney Creek BPS. Submit a draft of the technical memo to the City and participate in a conference call to review the memo with the City. Finalize the memo and submit to the City following the conference call.
  - 2.2.2 Develop final designs for the pressure relief piping, valves, and connections at the Northridge BPS. Two (2) preliminary configurations will be developed and discussed with the City by conference call.
  - 2.2.3 Develop final designs for the pressure relief piping, valves, and connections from the booster pump suction header at the Stoney Creek BPS. A preliminary configuration will be developed and discussed with the City by conference call.

- 2.2.4 Develop final designs for the surge tank connection piping, valves and connections at the Stoney Creek BPS. A preliminary configuration will be developed and discussed with the City by conference call.
- 2.2.5 Design and specify modifications to existing hydraulic control valves, and new hydraulic control valves. Include limit switches, and flowmeter additions.
- 2.2.6 Design and specify flanged style magnetic flowmeter and installation details for addition at the Northridge BPS.
- 2.2.7 Design and specify the final style of flowmeter selected by the City for the Red Rock discharge line at the Stoney Creek BPS.
- 2.2.8 Design layout configuration and specification for two (2) 500-gallon surge tanks to be located horizontally on elevated legs. The surge tank, saddle support, legs, and other direct appurtenances will be specified to be designed by the manufacturer.
- 2.2.9 Develop technical specifications for piping, valves, flowmeters, control valves, limit switches for control valves, pressure switches, pipe supports, paint, and other materials required for the process portion of the project.
- 2.2.10 Develop design details such as pipe supports, pipe restraint, connections for pressure switches, etc.
- 2.2.11 Develop plan set cover sheet, and general notes sheets.
- 2.2.12 Develop a list of controls signals, number and type of wire(s), and purpose/function of each signal which will be added by this project. The list will be placed on a plan sheet. Participate in phone calls with the City's SCADA system integrator to discuss the objective of each signal, and which control panel each signal needs to go into. Technical specifications for field devices will be developed.
- 2.2.13 Develop demolition drawings for both booster stations

### 2.3 Structural Design, Drawings, and Specifications:

- 2.3.1 Review existing Stoney Creek BPS floor to determine if improvements are needed to support the weight of the surge tanks. Design any necessary improvements to the concrete floor.
- 2.3.2 Provide design requirements to be included in the surge tank specifications for the support legs.
- 2.3.3 Develop demolition drawings as needed.
- 2.3.4 Develop technical specifications.

### 2.4 Plumbing Design, Drawings, and Specifications:

- 2.4.1 Provide design, drawings, and specifications to identify plumbing that needs to be relocated to accommodate the installation of the surge tanks in the Stoney Creek BPS.
- 2.4.2 Develop demolition drawings as needed.
- 2.4.3 Develop technical specifications.

2.5 Electrical Design, Drawings, and Specifications:

- 2.5.1 Provide design, drawings, and specifications to identify lighting, and conduit that needs to be relocated to accommodate the installation of the surge tanks in the Stoney Creek BPS.
- 2.5.2 Design and specifications for power wiring and conduits to new flowmeters and other devices being added by the project.
- 2.5.3 Prepare a drawing showing the location of control field devices, conduit size, number and type of wire, and to which panel the control wires are to be routed. Design will be from the field devices up to the entrance to the existing panels.
- 2.5.4 Develop demolition drawings as needed.
- 2.5.5 Develop technical specifications.

2.6 Division 1 Technical Specification Sections

- 2.6.1 The Consultant will prepare the Division 1 technical specifications needed for the project. Project sequencing will be one item to be included.

2.7 Contract Front End Documents

- 2.7.1 The Consultant will work with the City to prepare the front-end documents for the project. The starting documents will be provided by the City. The Consultant will focus primarily on:
  - a) Special Bid Conditions and Explanation of Bid Schedules
  - b) Prime Contractor Qualifications Statement
  - c) Subcontractor Qualifications Statement
  - d) Subcontractor Listing
  - e) Critical Equipment Listing
  - f) Bidder's Schedule
  - g) Section 7S Supplemental Conditions

2.8 Final Cost Estimate

- 2.8.1 The Consultant will prepare final "Engineer's Estimate" of probable construction costs for the project which will be submitted with the 100% submittal.

2.9 Permits:

- 2.9.1 The Consultant will assist the City in submitting the final documents to the SDDENR to obtain a construction permit. The Consultant shall address any comments or corrections required.

- 2.9.2 Identify permits that will be required for the Contractor. Identify permit costs and indicate if any permit costs are to be paid for directly by the owner or if it is a cost that should be covered by the Contractor.
- 2.10 Final Design Submittals and Review Meetings
- 2.10.1 In lieu of a formal 65% submittal during the design, key drawings or technical specifications will be provided to the City for review and comment.
- 2.10.2 100% Submittal: Final 100% set of drawings, front end documents, and technical specifications will be submitted to the City for final review. A review meeting will be held once the City has reviewed the 100% submittal. Three (3) hard copies and an electronic PDF set of documents will be delivered. Drawings will be half size on 11x17 paper. 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.
- 2.10.3 The Consultant will prepare meeting minutes following both review meetings and distribute to meeting attendees.
- 2.10.4 Following the 100% review meeting, the Consultant will finalize the documents to a bid ready state.
- 2.10.5 A Technical Memo summarizing final decisions made during the final design will be prepared.
- 2.11 Bid Documents Submittal
- 2.11.1 Provide one (1) half size 11x17 or full size 22x34 set of plan draws and a PDF version of bid documents including complete plans, front end documents, technical specifications, and Engineer's Estimate of probable construction costs. Items shall be stamped and signed by a Professional Engineer.
- 2.11.2 Provide complete set of AutoCAD drawings on CD compatible with AutoCAD Release 2020(Release currently used by the City) or newer format.
- 2.11.3 Provide the City complete specifications and contract documents on CD in Microsoft Word, and PDF format.
- 2.11.4 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.

- 2.12 Project Management for Tasks 2 and 3
- 2.12.1 The Consultant's PM and the City's PM will hold periodic check-in and progress phone calls. Meeting minutes will not necessarily be prepared but will be determined depending upon the nature of the conversation. The PMs will get other project team members involved in these periodic meetings as needed to discuss specific project topics.
- 2.12.2 Update project schedule when needed and include with invoice.
- 2.12.3 Develop detailed monthly invoice and supporting documents.
- 2.12.4 Monthly Fee/Budget review and update.
- 2.12.5 The Consultant PM will coordinate between the project team members to answer questions and check status.
- 2.12.6 QC Review

Services Not Included in Final Design Task

- 1. Any revisions, updates, or reproduction of the Preliminary Design Report, Dec 2018.
- 2. Splitting the project up into more than one construction contract.
- 3. Services related to the buildings of both pump stations, and code reviews for items not being affected by the project.
- 4. Electrical code reviews, except for the work specifically associated with the defined project.
- 5. Electrical design, except as noted in the scope of services.
- 6. HVAC review or design.
- 7. Any structural review except the design of floor improvements associated with the surge tank, and other items specifically associated with the defined project.
- 8. Preparation of a Controls Narrative or P&ID drawing for the signals being added by this project.
- 9. Site review or design
- 10. Stormwater runoff control, traffic coordination, geotechnical coordination, surveying, staking, landowner coordination or meetings, attending public meetings, attending City Council meetings.

**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 enough information to the City for completion of City Advertising Authority form.
- 3.2 Consultant shall proof the print quality at City's local printer before full production of copies are made.



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Project Number 14-2178/ CIP 50812.CD

- 3.3 Coordinate with the City to conduct a Pre-bid Conference. Prepare agenda, record attendance and create minutes. Distribute copies to all attendees.
- 3.4 Respond to Bidder Questions
- 3.5 Prepare and issue addenda to the bid documents as required.
- 3.6 Review Bidder's Proposals and review and sign the City Engineering Services prepared Bid Tab, prepare an award recommendation letter, and sign a City Engineering Services prepared Award Summary.
- 3.7 Review construction contract documents and other submittals from the contractor and submit to City for distribution to the City Attorney's for approval and signatures of the Mayor and Finance Officer.

Services Not Included in Bidding Task

1. Attend the bid opening.
2. Attend Public Works Committee and/or Council Meetings.
3. Redesign or rebidding.
4. Splitting the project up into more than one construction contract.

**TASK 4 – BASIC CONSTRUCTION SERVICES:**

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

- 4.1 Review construction contract documents and other submittals from the contractor and submit to the City of Rapid City project manager for distribution to City Attorney's for approval and signatures of the Mayor and Finance Officer.
- 4.2 Coordinate with the City to conduct a Pre-Construction Conference including agenda. Record minutes and distribute to all attendees.
- 4.3 Respond to Requests for Information (RFIs) submitted by the Contractor. Provide written clarification regarding drawing and specifications as appropriate. The Consultant will prepare a response and provide to the City for review and approval before sending the response to the Contractor.
- 4.4 Develop Supplemental Instructions to address changed or unknown conditions that may appear during construction. The Consultant will prepare a response and provide to the City for review and approval before sending it to the Contractor.
- 4.5 Review and take action on shop drawings, product submittals, test results, and other submittals. For equipment noted by the City, send planned response to the City for review and approval before sending the response to the Contractor. Submittal will be provided electronically, and not by hard copy. Anticipated level of effort is the initial submittal and one resubmittal for each required submittal.

- 4.6 Participate in phone calls with the City's SCADA system integrator.
- 4.7 Prepare "Record" plans and specifications. A full size (22x34) hard copy of "Record" plans and specifications shall be submitted to the City in the same size and format as construction plans. Additionally, the Consultant will provide PDF's and CAD files on a CD or DVD. The digital submittal must be compatible with AutoCAD Civil 3D 2020, or newer, and contain all files and data packaged in a format that will allow City personnel to seamlessly open "Record" drawings. The Consultant will work with the City CAD technician, in person, to demonstrate the CAD file operation and compatibility with City CAD software. If the Consultant is hired for Tasks 4 and 5, "Record" plans and specifications shall be provided thirty (30) days following project acceptance. The Consultant will be paid for this work in advance on the last invoice, but will 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 "Record" 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 Record 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.

"Record" specifications will be submitted in PDF format only and will consist of the project specifications with record annotations added with PDF markup software. PDF format shall be compatible with City software to read the PDF.

- 4.8 Consultant will prepare a list of the following expected items from the Contractor:
- 4.8.1 List of equipment submittals which will be include in the contract documents. Review covered under scope of services 4.5.
  - 4.8.2 List of warranty documents and special warranties (warranties beyond the City's standard 2 year warranty). Anticipated level of effort is the initial submittal and one resubmittal for each required submittal.
  - 4.8.3 List of O&M manuals from equipment suppliers. Anticipated level of effort is the initial submittal and one resubmittal for each required submittal.
  - 4.8.4 List of training to be provided by the equipment suppliers, and confirmation of completion
- 4.9 Consultant will assemble, in electronic PDF format, construction close-out documentation and submit to the City on a CD or flash drive. Three (3) hard copies will also be produced and delivered. This documentation will include all the documents developed during the construction phase but does not include the equipment submittals. Thumb-nail exhibits of the construction photos will be created with an associated date and provided in hardcopy to ease finding pictures in the future.

- 4.10 Project Management for Task 4 and 5
- 4.10.1 The Consultant's PM and the City's PM will hold periodic check-in and progress phone calls. Meeting minutes will not necessarily be prepared but will be determined depending upon the nature of the conversation. The PMs will get other project team members involved in these periodic meetings as needed to discuss specific project topics.
- 4.10.2 Update project schedule when needed and include with invoice.
- 4.10.3 Develop detailed monthly invoice and supporting documents.
- 4.10.4 Monthly Fee/Budget review and update.
- 4.10.5 The Consultant PM will coordinate between the project team members to answer questions and check status.

Services Not Included in Basic Construction Task

- 1. Splitting the project up into more than one construction contract.
- 2. Equipment re-submittals by the Contractor beyond the anticipated level of effort.
- 3. O&M manual prepared by the Consultant.
- 4. Warranty, lien waiver, spare parts, and training documentation re-submittal by the Contractor. beyond the anticipated level of effort.

**TASK 5 – EXPANDED CONSTRUCTION SERVICES:**

This task consists of all services necessary for the administration of the Expanded Construction Services of the project construction and includes the following itemized services.

5.1 On-Site Observation

- 5.1.1 Provide part-time on-site observation to assure that the methods and materials used by the contractor meet the intent of the plans and specifications. For buried installations the Consultant shall be on site during all times the Contractor is performing work.
- 5.1.2 Prepare daily reports. A daily record of activity will be maintained by the Construction Observer including weather conditions, construction progress, deviations from the plans and specifications, work performed, quantities installed, progress photos and any other pertinent information and prepare and submit a daily PDF report. In addition, information shall be entered into the City of Rapid City Project Inspector's Diary and Inspection quantity book. Submit detachable copies to Engineering Services on a monthly basis.
- 5.1.3 Document daily quantities of work progress. Quantities will be defined as a percentage complete for each lump sum schedule of values. Summarize quantities completed for each monthly pay request.
- 5.1.4 Provide witness to Contractor field testing. All test results shall be submitted to the City of Rapid City within 30 days of project completion.

- 5.2 Arrange and conduct construction progress meetings. Record minutes and distribute to all attendees. Meetings will typically be held weekly but may be further apart depending on

project status at the time. Consultants staff will attend in-person or remotely via conference call.

- 5.3 Prepare and submit monthly pay request information. Prepare monthly pay request spreadsheet update. Review final pay request document prepared by the City, and sign.
- 5.4 Prepare Change Orders, and Request for Proposals. Arrange review by the City, finalize and send to the Contractor. Review request for additional payment or time extension received by from the Contractor and make recommendations for their approval or denial.
- 5.5 Site review, prepare and submit project completion punch list items to the Contractor. Construction Observer will coordinate with the City to document completion.
- 5.6 The Consultant's engineering staff will participate in the surge tank and control valves startup at the Stoney Creek BPS. The anticipated level of effort is one 8 hour day.
- 5.7 Prepare and submit City of Rapid City project "Construction Project Close-out Checklist" The Consultant is responsible for coordinating completion of the checklist items with the Contractor.
- 5.8 Prepare letter of certification of project completion verifying compliance with plans and specifications and start of warranty period.
- 5.9 Assist the City in preparing a letter to SDDENR notifying them of project completion.
- 5.10 Ensure Contractor's two-year warranty surety is provided to the City either within the performance bond or as a separate bond.
- 5.11 Prepare milestone and final competition documents and provide to the City for one (1) review. Finalize and submit to the City and/or Contractor as appropriate. Work with the City to establish the date on which the 2-year warranty period starts, which is typically the date of final acceptance.
- 5.12 Assist the City in addressing and communicating warranty items with the Contractor that may arise during the City's two-year warranty period.
- 5.13 Coordinate a 23-Month Walk-Through and documentation,.

Services Not Included in Basic Construction Task

1. Prepare Public Service Announcements (P.S.A.'s).
2. Coordination or meetings with any adjacent landowners.
3. Completion by the Consultant of compaction, concrete, welding, paint, or any other field testing.
4. Startup activities in a time frame greater than noted in scope of services 5.6.

PROJECT TEAM, MEETINGS, AND SUBMITTALS SUMMARY

6.1 Project team members will include:

- The Consultant
- City Engineering Services staff
- Operations Division staff
  - Water Division

6.2 Meetings requiring the Consultant's participation will likely include, but may not be limited to the following:

- Kick-off meeting, Task 2
- 100% Plans, Specifications, and Contract Documents review, Task 2 (This submittal is made when the consultant believes the plans, specifications, contract documents, and opinion of probable construction cost documents are complete).
- Prebid Conference, Task 3
- Pre-construction Conference, Task 4
- Construction Progress Meetings, Task 5
- Start-Up Services, Task 5
- Elaborate on submittal requirements as necessary, Task 5

6.3 Submittals include:

- All submittals shall include a title, date of submittal, name of person at the City the submittal is being delivered to, and name of firm and individual making the submittal. Submittals and drawings shall also clearly be labeled with one of the following statements:
  - "For Review Only"
  - "Issued For Bid"
  - "Issued For Construction"
  - "Record"
  - Other as maybe necessary to effectuate submittal purpose.
- Kick-off meeting, Task 2 meeting minutes
- Final Project Technical Memo, Task 2
- 100% complete plans, specifications, contract documents, and opinion of probable construction cost Contract Documents Review, Task 2 including meeting minutes
- Final submittal of bid documents including complete plans, specifications, contract documents, and Engineer's Estimate of probable construction cost, Task 2
- Prebid conference meeting minutes, Task 3
- Bid Tab and award recommendation, Task 3
- Pre-Construction conference meeting minutes, Task 4
- Shop Drawing submittal reviews, Task 4
- "Record" plans and specifications, Task 3
- Progress meeting minutes, Task 5
- Daily observation reports, Task 5

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

- Quantity Books (in City format)
- Inspector diaries (in City format)
- Project completion “Punch List”, Task 5
- “Construction Project Close-out Checklist”, Task 5
- Project testing report documentation
- Letter of certification of project completion, Task 5
- Elaborate on submittal requirements as necessary

The Consultant shall allow 15 working days for City review of the Project Design report and Conceptual Design submittal, and the 100% complete plans; specifications; geotechnical report; and opinion of probable construction cost submittal.

# ENGINEERING FEE ESTIMATE

Exhibit B

City of Rapid City, SD

Northridge Booster Pump Station and Stoney Creek Booster Pump  
Station Improvements

Project Number 14-2178/ CIP 50812.CD

Final Design - Phase 2

TASK NUMBER	Classification Rate	TASK SUBTOTAL	LINE SUBTOTAL
	<b>TASK</b>		
2.1	Kick Off Meeting & Minutes (Remote)	\$744	\$744
2.2	Process Design, Drawings, Specs	\$15,524	
2.2.1	Flowmeter Memo		\$617
2.2.2	Northridge PRV Pipe Layout		\$1,679
2.2.3	Stoney PRV Pipe Layout		\$2,423
2.2.4	Stoney Surge Tank Pipe Layout		\$2,873
2.2.5	Control Valve design		\$225
2.2.6	Northridge Flowmeter design		\$98
2.2.7	Stoney Flowmeter design		\$98
2.2.8	Stoney Surge Tank Design		\$450
2.2.9	Tech Specs		\$3,604
2.2.10	Pipe Details		\$1,018
2.2.11	Plan Set Cover Sheet and General Sheets		\$325
2.2.12	Controls Signals - Coordination		
	Develop List		\$421
	Drawing		\$274
	Coordination & Calls		\$900
2.2.13	Demo Sheets		\$520
2.3	Structural Design, Drawings, Specs	\$3,655	
2.3.1	Floor for Surge Tank Support		\$2,383
2.3.2	Design Requirements for Tank Legs		\$413
2.3.3	Demo Sheet		\$260
2.3.4	Tech Specs		\$600
2.4	Plumbing Design, Drawings, Specs	\$2,583	
2.4.1	Stoney Move Plumbing Design		\$1,739
2.4.2	Demo Sheet		\$194
2.4.3	Tech Specs		\$650
2.5	Electrical Design, Drawings, Specs	\$7,085	
2.5.1	Stoney Move Elec Design		\$2,637
2.5.2	Power supply to field devices		\$2,429
2.5.3	Controls Field Device Drawing		\$915

# ENGINEERING FEE ESTIMATE

Exhibit B

**City of Rapid City, SD**

**Northridge Booster Pump Station and Stoney Creek Booster Pump  
Station Improvements**

**Project Number 14-2178/ CIP 50812.CD**

**Final Design - Phase 2**

<b>TASK NUMBER</b>	<b>Classification Rate</b>	<b>TASK SUBTOTAL</b>	<b>LINE SUBTOTAL</b>
	<b>TASK</b>		
2.5.4	Demo Sheet		\$194
2.3.5	Tech Specs		\$910
2.6	Div 1 Spec Sections	\$1,234	
2.6.1	Div 1 Spec Sections		\$1,234
2.7	Front End Docs	\$1,350	
2.7.1	Front End Docs		\$1,350
2.8	Cost Estimate	\$1,445	
2.8.1	100% Cost Est		\$1,445
2.9	Permits	\$392	
2.9.1	SDDENR Permit		\$196
2.9.2	Other Permits		\$196
2.10	Submittals and Meetings	\$6,110	
2.10.1	Periodic Key Drawings/Specs		\$1,361
2.10.2	100% Submittal		\$1,369
	100% Meeting (Remote)		\$615
2.10.3	Meeting Minutes		\$147
2.10.4	Finalize Documents to 100%		\$2,197
2.10.5	Final Project TM		\$421
2.11	Bid Docs Final Submittal	\$1,151	
2.11.1	PDF Submittal		\$568
2.11.2	ACAD Drawings		\$274
2.11.3	Specs in WORD		\$196
2.11.4	Engineer Certification		\$113



**ENGINEERING FEE ESTIMATE**

**City of Rapid City, SD  
 Northridge Booster Pump Station and Stoney Creek Booster Pump  
 Station Improvements**

**Project Number 14-2178/ CIP 50812.CD**

**Final Design - Phase 2**

<b>TASK NUMBER</b>	<b>Classification Rate</b>	<b>TASK SUBTOTAL</b>	<b>LINE SUBTOTAL</b>
	<b>TASK</b>		
2.12	Project Management	\$9,730	\$0
2.12.1	Calls with City PM, Intermediate Conf Calls		\$1,292
2.12.2 .3. .4	Monthly Schedule, Invoice, Budget		\$900
2.12.5	Internal Meetings		\$2,558
2.12.6	QC		\$4,980
			\$0
	<b>Fee</b>	\$51,001	\$51,001

# ENGINEERING FEE ESTIMATE

Exhibit B

City of Rapid City, SD

Northridge Booster Pump Station and Stoney Creek Booster Pump Station Improvements

Project Number 14-2178/ CIP 50812.CD

Bid - Phase 3

TASK NUMBER	Classification Rate	TASK SUBTOTAL	LINE SUBTOTAL
	TASK		
3.1	Provide Info for Bid Authority	\$203	\$203
3.2	Print Check	\$264	\$264
3.3	Pre-Bid Meeting	\$2,627	
	Agenda		\$507
	Attend Meeting		\$1,917
	Minutes		\$203
3.4	Respond to Questions	\$1,827	\$1,827
3.5	Prepare Addendums	\$1,307	\$1,307
3.6	Review Bids, Review Bid Tab, Rec Letter	\$421	\$421
3.7	Review Const Contracts	\$203	\$203
			\$0
	<b>Fee</b>	\$6,852	\$6,852

# ENGINEERING FEE ESTIMATE

Exhibit B

City of Rapid City, SD

Northridge Booster Pump Station and Stoney Creek Booster Pump  
Station Improvements

Project Number 14-2178/ CIP 50812.CD

Base Construction - Phase 4

TASK NUMBER	Classification Rate	TASK SUBTOTAL	LINE SUBTOTAL
	<b>TASK</b>		
4.1	Assist with NTP	\$101	\$101
4.2	Pre-Con Meeting	\$2,354	
	Agenda		\$254
	Attend Meeting (Some Remote)		\$1,898
	Minutes		\$203
4.3	RFIs	\$4,487	\$4,487
4.4	Develop Supplemental Instructions	\$1,014	\$1,014
4.5	Submittals	\$8,439	\$8,439
4.6	Controls Signals - Coordination	\$932	\$932
4.7	Record Drawings & Specs	\$3,357	\$3,357
4.8	Lists of Expected Items	\$2,515	
4.8.1	List of Submittals		\$304
4.8.2	List of Warranties & Review		\$811
4.8.3	List of O&M manuals & Review		\$1,196
4.8.4	List of Training & Confirm Complete		\$203
4.9	Compile Construction Documents	\$3,740	
	Assembly		\$2,536
	Print 3 copies		\$1,204
4.10	Project Management	\$5,692	
4.10.1	Calls with City PM		\$1,630
4.10.2 .3. .4	Monthly Schedule, Invoice, Budget		\$1,164
4.10.5	Internal Meetings		\$2,898
			\$0
			\$0
			\$0
<b>Fee</b>		\$32,631	\$32,631

**ENGINEERING FEE ESTIMATE****City of Rapid City, SD****Northridge Booster Pump Station and Stoney Creek Booster Pump  
Station Improvements****Project Number 14-2178/ CIP 50812.CD****Expanded Construction - Phase 5**

<b>TASK NUMBER</b>	<b>Classification Rate</b>	<b>TASK SUBTOTAL</b>	<b>LINE SUBTOTAL</b>
	<b>TASK</b>		
5.1	Const Observation	\$22,308	
5.1.1, 5.1.4	On-Site Observation		\$19,120
5.1.2, 5.1.3	Daily Report & Quantities		\$3,188
5.2	Progress Meetings (Assume 13 Weeks Construction)	\$11,290	\$0
	Weekly Meeting Remote) (10)		\$3,747
	Weekly Meeting (In-Person) (13)		\$1,036
	Other Conf Calls Prior to Const. Start		\$609
	Monthly Progress (In Person) (3)		\$3,870
	Agenda, Minutes		\$2,029
5.3	Monthly Pay Request (5)	\$761	\$761
5.4	Change Orders and RFPs	\$406	\$406
5.5	Punchlist walk through and documentation	\$1,869	\$1,869
5.6	Start Up Time	\$2,413	\$2,413
5.7	Construction Close-Out Check List	\$406	\$406
5.8	SDDER completion letter assistance	\$101	\$101
5.9	Contractor Warranty Surety Review	\$203	\$203
5.10	Documentation for Milestone, Final Dates	\$609	\$609
5.11	2 Year Warranty Assistance	\$609	\$609
5.12	23-Month Walk Through and Documentation	\$1,684	\$1,684
			\$0
			\$0
	<b>Fee</b>	\$42,658	\$42,658

Exhibit C

**BARTLETT & WEST, INC.**  
**2019 SCHEDULE OF HOURLY CHARGES**  
**Effective January 1, 2019**

	XI	\$225.00	Right-of-Way Technician VI	\$119.00
	X	205.00	Right-of-Way Technician V	110.00
	IX	190.00	Right-of-Way Technician IV	100.00
Engineer	VIII	178.00	Right-of-Way Technician III	90.00
Landscape Architect	VII	165.00	Right-of-Way Technician II	79.00
Architect	VI	150.00	Right-of-Way Technician I	68.00
Planner	V	140.00		
	IV	130.00	GIS Coordinator IX	\$225.00
	III	120.00	GIS Coordinator VIII	210.00
	II	110.00	GIS Coordinator VII	200.00
	I	98.00	GIS Coordinator VI	184.00
			GIS Coordinator V	174.00
			GIS Coordinator IV	160.00
			GIS Coordinator III	145.00
			GIS Coordinator II	130.00
			GIS Coordinator I	120.00
Engineering Technician XI		\$175.00		
Engineering Technician X		150.00		
Engineering Technician IX		130.00		
Engineering Technician VIII		117.00		
Engineering Technician VII		105.00		
Engineering Technician VI		97.00	GIS Developer/DBA V	\$160.00
Engineering Technician V		90.00	GIS Developer/DBA IV	150.00
Engineering Technician IV		83.00	GIS Developer/DBA III	140.00
Engineering Technician III		70.00	GIS Developer/DBA II	130.00
Engineering Technician II		60.00	GIS Developer/DBA I	120.00
Engineering Technician I		50.00		
			GIS Analyst V	\$130.00
			GIS Analyst IV	120.00
			GIS Analyst III	110.00
			GIS Analyst II	100.00
			GIS Analyst I	90.00
Surveyor X		\$180.00		
Surveyor IX		165.00		
Surveyor VIII		150.00		
Surveyor VII		135.00		
Surveyor VI		123.00		
Surveyor V		110.00	GIS Technician IV	\$90.00
Surveyor IV		98.00	GIS Technician III	80.00
Surveyor III		88.00	GIS Technician II	70.00
Surveyor II		77.00	GIS Technician I	60.00
Surveyor I		67.00		
			Project Coordinator VII	\$208.00
			Project Coordinator VI	180.00
			Project Coordinator V	165.00
			Project Coordinator IV	140.00
			Project Coordinator III	125.00
			Project Coordinator II	115.00
			Project Coordinator I	103.00
			Systems Analyst	\$160.00
			Systems Administrator	120.00
			Systems Technician	80.00
			Administrator VI	\$125.00
			Administrator V	110.00
			Administrator IV	100.00
			Administrator III	85.00
			Administrator II	74.00
			Administrator I	66.00
			Administrative Technician V	\$72.00
			Administrative Technician IV	65.00
			Administrative Technician III	58.00
			Administrative Technician II	53.00
			Administrative Technician I	47.00
Right-of-Way Specialist IV		\$208.00		
Right-of-Way Specialist III		165.00		
Right-of-Way Specialist II		143.00		
Right-of-Way Specialist I		127.00		

Yearly increase will be a maximum of 3.5%

The listed rates are subject to annual adjustment January 1 of each year

BWE-2019

**EXHIBIT C**

**Northridge Booster Pump Station and Stoney Creek Booster Pump Station  
Improvements**

**Tasks 2 to 5**

**Project Number 14-2178/ CIP 50812.CD**

**BARTLETT & WEST, INC.**

**SCHEDULE OF REIMBURSABLE COSTS/CHARGES**

**EFFECTIVE JANUARY 1, 2019**

<b>REPRODUCTION</b>		
Blackline Prints		
Bond, Full Size - 24x36	\$ 1.00	Each
Bond, Half Size Reduction - 11x17	\$ 0.70	Each
Vellum, Full Size - 24x36	\$ 6.00	Each
Mylar, Full Size – 24x36	\$ 12.00	Each
Photocopies		
Black & White - up to 11x17	\$ 0.15	Each
Small Size Color Copies , 8.5x 11	\$ 0.90	Each
Large Size Color Copies, > 8.5x 11	\$ 1.50	Each
On-line Documents	\$ 2.00	Each
Scan		
Small Scan – 8.5 x 11 (Black/Color)	\$ 0.12	Each
Full Size Scan – 24x36 –(Black)	\$ 2.00	Each
Full Size Scan – 24x36 – (Color)	\$ 5.00	Each
Inkjet Plotters – 24x36		
Bond (Black)	\$ 1.50	Lin. Ft.
Bond (Color)	\$ 2.50	Lin. Ft.
Vellum (Black/Color)	\$ 3.00	Lin. Ft.
Mylar (Black/Color)	\$ 6.00	Lin. Ft.
<b>SYSTEMS &amp; SOFTWARE CHARGES</b>		
CADD Software Charges (AutoCAD, Civil 3D, LDD, GEOPAC etc.)	\$ 7.00	Hour
GIS Software Charges (ArcView, ArcInfo, ArcEditor)	\$ 7.00	Hour
<b>FIELD EQUIPMENT &amp; MATERIALS</b>		
Nuclear Density Testing Equipment	\$ 30.00	Hour
Survey Equipment		
Survey Equipment One-Man Crew	\$ 50.00	Hour
Survey Equipment Two-Man Crew	\$ 25.00	Hour
<b>FIELD EQUIPMENT &amp; MATERIALS (cont.)</b>		
LiDAR Equipment		
LiDAR Equipment Charges (Static)	\$ 1500.00	Day
LiDAR Equipment Charges (Mobile)	Minimum \$5000/day up to 5 miles per day. Add'l miles per day are \$1000/mile after 5 mile minimum is reached.	Day/Mile

**EXHIBIT C**

**Northridge Booster Pump Station and Stoney Creek Booster Pump Station  
Improvements**

**Tasks 2 to 5**

**Project Number 14-2178/ CIP 50812.CD**

**BARTLETT & WEST, INC.**

**SCHEDULE OF REIMBURSABLE COSTS/CHARGES**

**EFFECTIVE JANUARY 1, 2019**

Staking Materials		
Lath & Flats (16")	\$ 0.45	Each
Lath & Flats (48")*	\$ 0.70	Each
Wooden Hubs	\$ 0.40	Each
Iron Pins	\$ 1.55	Each
<b>VEHICLES</b>		
Trucks, Cars, SUV's - all vehicles	\$ 0.58 to \$ 0.66	Mile
ATV (All Terrain Vehicle)	\$ 50.00	Day
ATV (All Terrain Vehicle) incl. Trailer	\$ 75.00	Day
UTV (Utility Terrain Vehicle) incl. Trailer	\$ 130.00	Day
<b>MISCELLANEOUS</b>		
<del>Per Diem-</del>	<del>Per established Per Diem-</del>	<del>Day-</del>
<b>OTHER REIMBURSABLE EXPENSES</b>		
Sub-Consultants	Actual Cost x 1.0	
Lodging (Non Per Diem)	Actual Cost x 1.0	
Meals (Non Per Diem)	Actual Cost x 1.0	
Air Travel	Actual Cost x 1.0	
Outside Printing	Actual Cost x 1.0	
All Other Outside Expenses	Actual Cost x 1.0	

**Notes:**

1. All items on the list may not be used for this project.
2. Rates are subject to change January 1 of each year.
3. Yearly increase will be a maximum of 3.5%