

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

Date: 04/04/2014

Project Name & Number: Pressure Reducing Valve Stations Facility Plan, Project No. 14-2179 **CIP #:** 50812.E

Project Description: Professional engineering services for various analyses/improvements and the development of a facility plan for five of the City's PRV stations (Springbrook Acres PRV Pit #1 located at 3008 Springbrook Road, Springbrook Acres PRV Pit #2 located at 2821 Nugget Gulch Road, Enchanted Hills PRV Pit #1 located at 1409 Enchantment Road, Enchanted Hills PRV Pit #2 located at 724 Enchantment Road, and Parkridge PRV Located at 3609 Meadowbrook Dr.

Consultant: Bartlett & West

Original Contract Amount: \$39,829 **Original Contract Date:** 05/05/2014 **Original Completion Date:**

Addendum No:

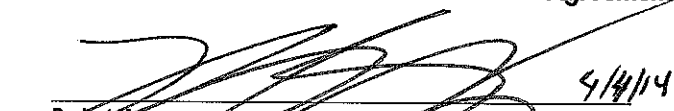
Amendment Description:


Current Contract Amount: _____ **Current Completion Date:** _____
Change Requested: _____
New Contract Amount: _____ \$0.00 **New Completion Date:** _____

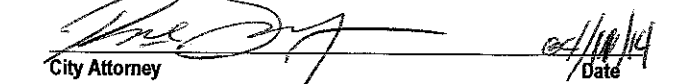
Funding Source This Request:


Amount	Dept.	Line Item	Fund	Comments
\$39,829.00	933 602	4381	602 933	Water Replacement / Improvements
		4003		
\$39,829.00	Total			


Agreement Review & Approvals

 _____ 4/4/14
Project Manager **Date**

 _____ 4/4/14
Compliance Specialist **Date**

 _____ 4/10/14
City Attorney **Date**

 _____ 4-7-14
Division Manager **Date**

 _____ 4-7-14
Department Director **Date**

ROUTING INSTRUCTIONS

Route two originals of the Agreement for review and signatures.
 Finance Office - Retain one original
 Project Manager - Retain second original for delivery to Consultant
 cc: Public Works
 Engineering
 Project Manager

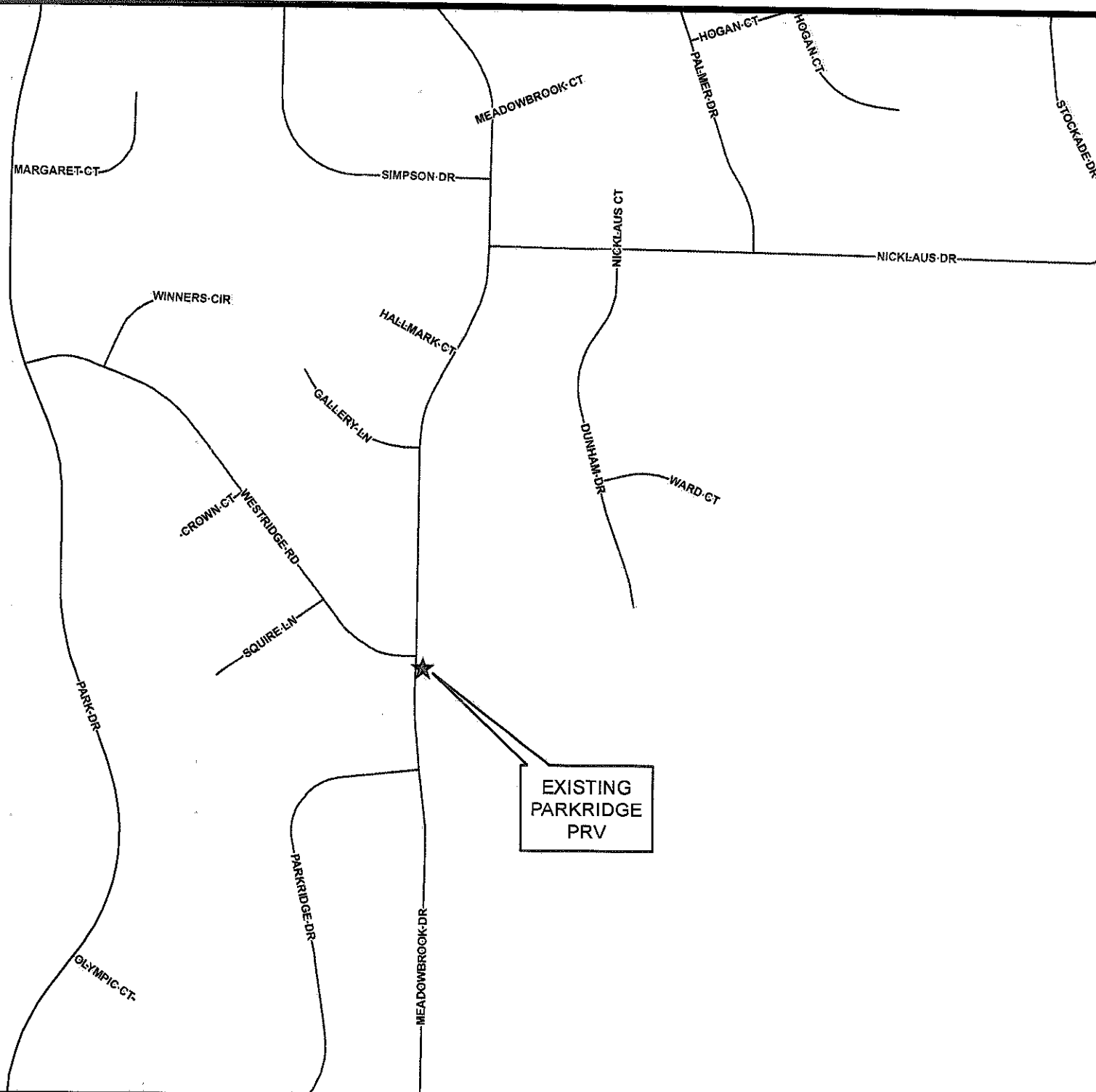
FINANCE OFFICE USE ONLY

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

Date	Initials	Approved
4/10/14	JD	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Y <input type="checkbox"/> N
Appropriation		
Cash Flow		



Figure 8



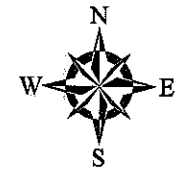


Figure 6

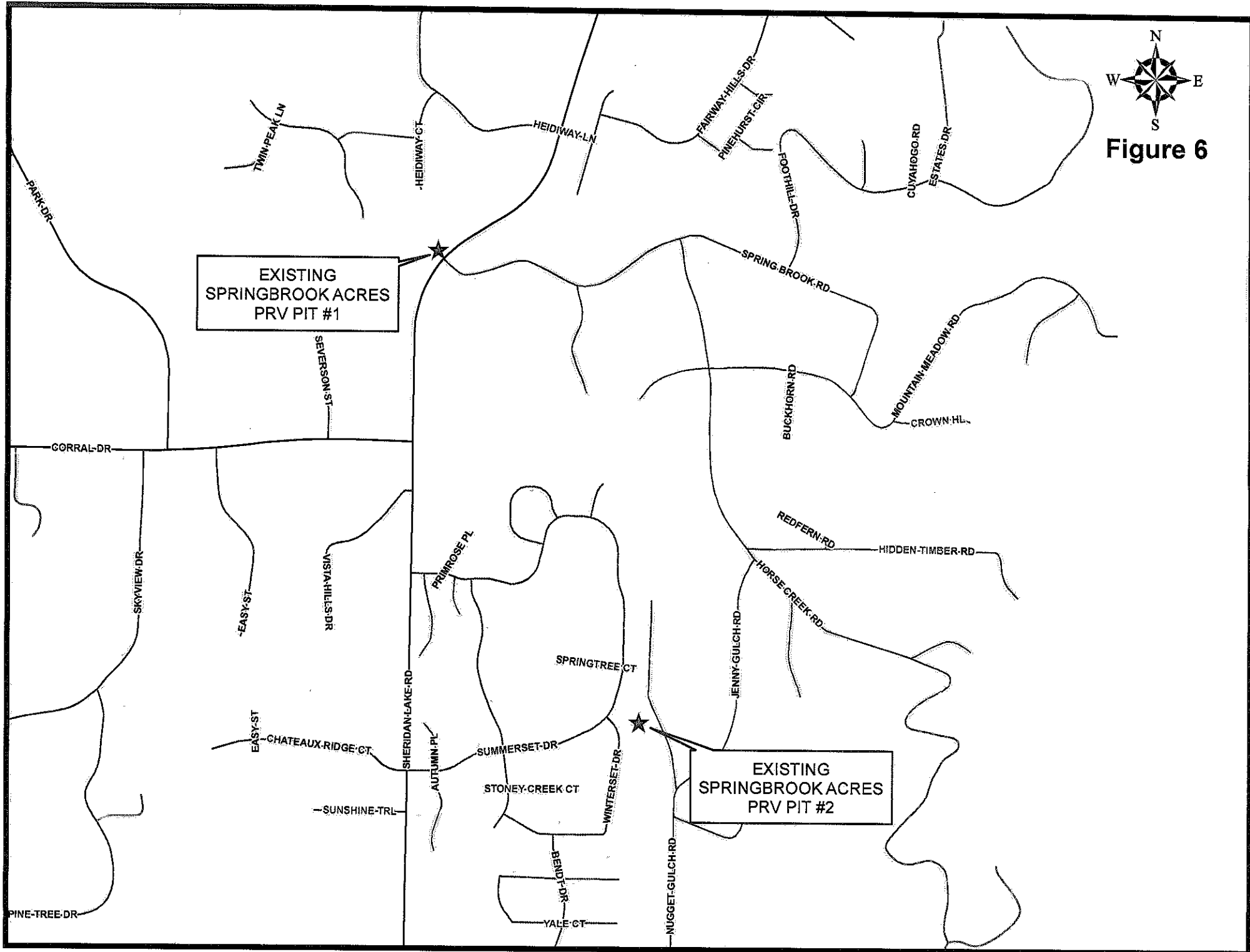
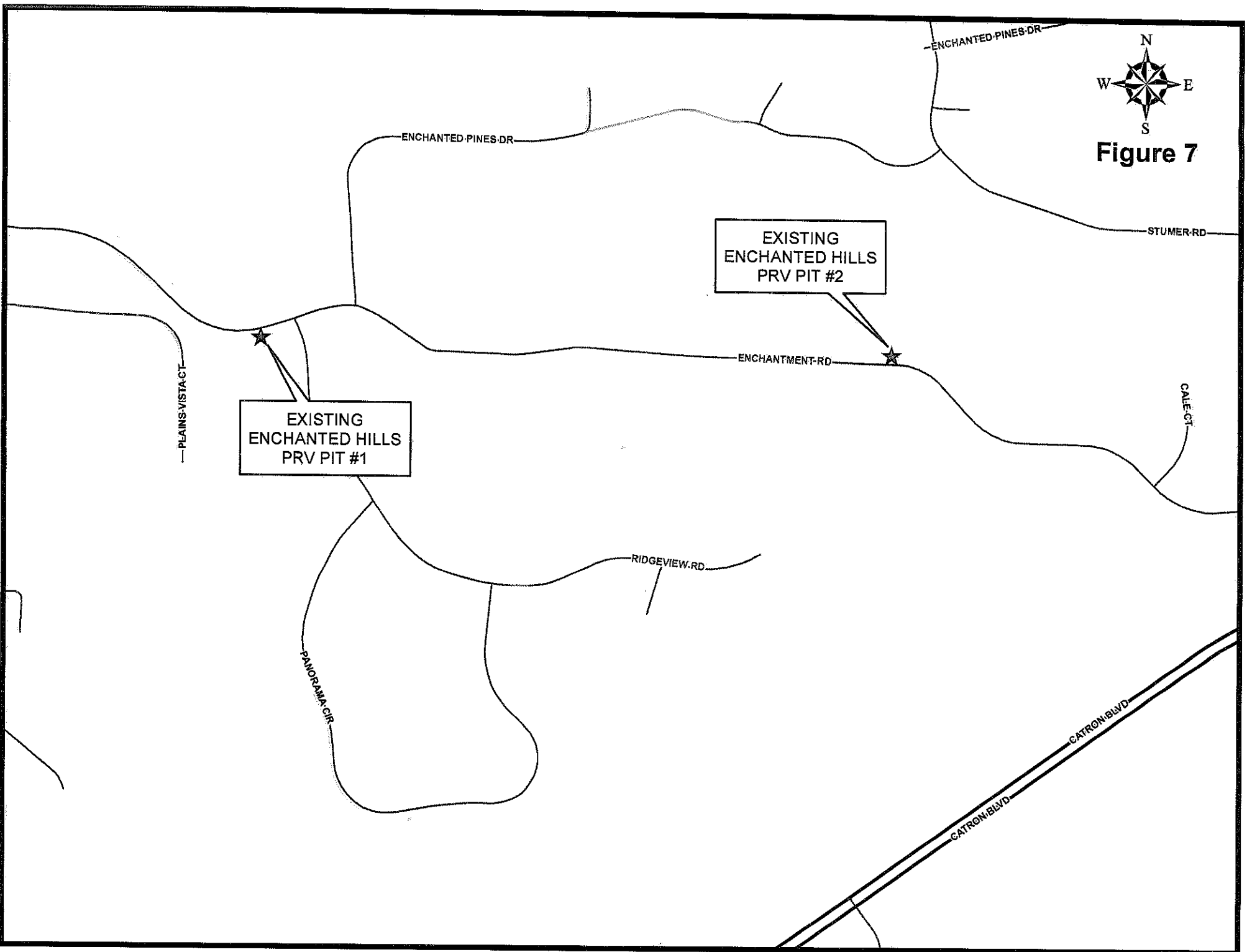




Figure 7



Agreement Between City of Rapid City and Bartlett & West, Inc. for Professional Services for Pressure Reducing Valve Stations Facility Plan, Project No. 14-2179, CIP# 50812.E

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 **Pressure Reducing Valve Stations Facility Plan, Project No. 14-2179, CIP# 50812.E**. The scope of services is as described within this document and as further described in Exhibits A, B and C (attached).

The City and the Engineer agree as follows:

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

Section 1—Basic Services of Engineer

1.1 General

- 1.1.1 The Engineer shall perform professional services described in this agreement, which include customary engineering services. Engineer intends to serve as the City's professional representative for those services as defined in this agreement and to provide advice and consultation to the City as a professional. Any opinions of probable project cost, approvals, and other decisions provided by Engineer for the City are rendered on the basis of experience and qualifications and represent Engineer's professional judgment.
- 1.1.2 All work shall be performed by or under the direct supervision of a professional Engineer licensed to practice in South Dakota.
- 1.1.3 All documents including Drawings and Specifications provided or furnished by Engineer pursuant to this Agreement are instruments of service in respect of the Project and Engineer shall retain an ownership therein. Reuse of any documents pertaining to this project by the City on extensions of this project or on any other project shall be at the City's risk. The City agrees to defend, indemnify, and hold harmless Engineer from all claims, damages, and expenses including attorney's fees arising out of such reuse of the documents by the City or by others acting through the City.
- 1.1.4 The contract will be based on an hourly rate and reimbursable fee schedule with a maximum not-to-exceed amount.



1.2 Scope of Work

The Engineer shall:

- 1.2.1 Consult with the City, other agencies, groups, consultants, and/or individuals to clarify and define requirements for the Project and review available data.
- 1.2.2 Perform the tasks described in the Scope of Services. (See Exhibit A.)
- 1.2.3 Conduct a location survey of the Project to the extent deemed necessary to provide adequate site information.
- 1.2.4 Prepare a report presenting the results of the study as outlined in the scope of services.

Section 2—Information Provided by City

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

Section 3—Notice to Proceed

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

Section 4—Mutual Covenants

4.1 General

- 4.1.1 The Engineer shall not sublet or assign any part of the work under this Agreement without written authority from the City.
- 4.1.2 The City and the Engineer each binds itself and partners, successors, executors, administrators, assigns, and legal representatives to the other party to this agreement and to the partners, successors, executors, administrators, assigns, and legal representatives of such other party, regarding all covenants, agreements, and obligations of this agreement.
- 4.1.3 Nothing in this agreement shall give any rights or benefits to anyone other than the City and the Engineer.



- 4.1.4 This agreement constitutes the entire agreement between the City and the Engineer and supersedes all prior written or oral understandings. This agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.
- 4.1.5 The Engineer shall make such revisions in plans which may already have been completed, approved, and accepted by the City, as are necessary to correct Engineer's errors or omissions in the plans, when requested to do so by the City, without extra compensation therefore.
- 4.1.6 If the City requests that previously satisfactorily completed and accepted plans or parts thereof be revised, the Engineer shall make the revisions requested by the City. This work shall be paid for as extra work.
- 4.1.7 If the City changes the location from the one furnished to the Engineer, or changes the basic design requiring a new survey for the portions so changed, the redesign will be paid for as extra work.
- 4.1.8 The City may at any time by written order make changes within the general scope of this Agreement in the work and services to be performed by the Engineer. Any changes which materially increase or reduce the cost of or the time required for the performance of the Agreement shall be deemed a change in the scope of work for which an adjustment shall be made in the Agreement price or of the time for performance, or both, and the Agreement shall be modified in writing accordingly. Additional work necessary due to the extension of project limits shall be paid for as extra work.
- 4.1.9 Extra work, as authorized by the City, will be paid for separately and be in addition to the consideration of this Section.
- 4.1.10 For those projects involving conceptual or process development services, activities often cannot be fully defined during the initial planning. As the project does progress, facts and conditions uncovered may reveal a change in direction that may alter the scope of services. Engineer will promptly inform the City in writing of such situations so that changes in this agreement can be renegotiated.
- 4.1.11 This Agreement may be terminated (a) by the City with or without cause upon seven days' written notice to the Engineer and (b) by the Engineer for cause upon seven days' written notice to the City. If the City terminates the agreement without cause, the Engineer will be paid for all services rendered and all reimbursable expenses incurred prior to the date of termination.



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

- 4.1.12 The City or its duly authorized representatives may examine any books, documents, papers, and records of the Engineer involving transactions related to this agreement for three years after final payment. All examinations will be performed at reasonable times, with proper notice. Engineer's documentation will be in a format consistent with general accounting procedures.
- 4.1.13 The City shall designate a representative authorized to act on the City's behalf with respect to the Project. The City or such authorized representative shall render decisions in a timely manner pertaining to documents submitted by the Engineer in order to avoid unreasonable delay in the orderly and sequential progress of the Engineer's services.
- 4.1.14 Costs and schedule commitments shall be subject to renegotiation for delays caused by the City's failure to provide specified facilities or information or for delays caused by other parties, excluding sub-contractors and sub-consultants, unpredictable occurrences including without limitation, fires, floods, riots, strikes, unavailability of labor or materials, delays or defaults by suppliers of materials or services, process shutdowns, acts of God, or the public enemy, or acts of regulations of any governmental agency or any other conditions or circumstances beyond the control of the City or Engineer. Temporary delays of services caused by any of the above which results in additional costs beyond those outlined may require renegotiation of this agreement.
- 4.1.15 The City will give prompt written notice to the Engineer if the City becomes aware of any fault or defect in the Project or nonconformance with the Project Documents.
- 4.1.16 Unless otherwise provided in this Agreement, the Engineer and the Engineer's consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos products, polychlorinated biphenyl (PCB), or other toxic substances.
- 4.1.17 In the event asbestos or toxic materials are encountered at the jobsite, or should it become known in any way that such materials



may be present at the jobsite or any adjacent areas that may affect the performance of Engineer's services, Engineer may, at their option and without liability for consequential or any other damages, suspend performance of services on the project until the City retains appropriate specialist CONSULTANT(S) or contractor(s) to identify, abate, and/or remove the asbestos or hazardous or toxic materials.

- 4.1.18 This agreement, unless explicitly indicated in writing, shall not be construed as giving Engineer the responsibility or authority to direct or supervise construction means, methods, techniques, sequences, or procedures of construction selected by any contractors or subcontractors or the safety precautions and programs incident to the work of any contractors or subcontractors.
- 4.1.19 Neither the City nor the Engineer, nor its Consultants, shall hold the other liable for any claim based upon, arising out of, or in any way involving the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, or gases, waste materials, or other irritants, contaminants, or pollutants.
- 4.1.20 Neither the City nor the Engineer, nor its Consultants, shall hold the other liable for any claim based upon, arising out of, or any way involving the specification or recommendation of asbestos, in any form, or any claims based upon use of a product containing asbestos.
- 4.1.21 Engineer hereby represents and warrants that it does not fail or refuse to collect or remit South Dakota or City sales or use tax for transactions which are taxable under the laws of the State of South Dakota.

4.2 City of Rapid City NonDiscrimination Policy Statement

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

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

This section shall be binding on all subcontractors or suppliers.



Section 5—Payments to the Engineer

5.1 Schedule of Pay Rates

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

5.2 Fee

The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed **\$39,829.00** 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:

Engineer:

MAYOR

Brian L. Hoellein
BARTLETT & WEST, INC.

DATE: _____

DATE: 4/8/14

ATTEST:

FINANCE OFFICER

Reviewed By:

Morgan R. Gagliano
Morgan Gagliano, PROJECT MANAGER

DATE: 4/4/14

CITY'S DESIGNATED PROJECT
REPRESENTATIVE

ENGINEERING FIRM'S DESIGNATED
PROJECT REPRESENTATIVE

NAME Morgan R. Gagliano
PHONE (605) 394-4154
EMAIL Morgan.gagliano@gmail.com

NAME Brian L. Hoellein
PHONE (605) 373-5909
EMAIL brian.hoellein@bartwest.com



EXHIBIT A

Pressure Reducing Valve (PRV) Station Facility Plan Project Number 14-2179/ CIP 50812.E

BACKGROUND

1. **Existing PRV Station Background Summary:** The existing PRV stations installation years and provision of zone boundaries is as follows:
 - i. Springbrook Acres PRV Pit #1: Constructed in 1995. Provides service to the Springbrook Pressure Zone from the Southwest Pressure Zone. The static hydraulic grade for the two zones is approximately 3703 ft and 3783 ft respectively. Located at 3008 Springbrook Road.
 - ii. Springbrook Acres PRV Pit #2: Constructed in 1995. Provides service to the Springbrook Pressure Zone from the Southwest Pressure Zone. The static hydraulic grade for the two zones is approximately 3703 ft and 3783 ft respectively. Located at 2821 Nugget Gulch Road.
 - iii. Enchanted Hills PRV Pit #1: Constructed in 1995. Provides service to the Upper Enchanted Hills Zone from the HWY 16 Pressure Zone. The static hydraulic grade for the two zones is approximately 3879 ft and 4025 ft respectively. Located at 1409 Enchantment Road.
 - iv. Enchanted Hills PRV Pit #2: Constructed in 1998. Provides service to the Terracita Zone from the Upper Enchanted Hills Pressure Zone. The static hydraulic grade for the two zones is approximately 3785 ft and 3879 ft respectively. Located at 724 Enchantment Road.
 - v. Parkridge PRV: Originally constructed in 1980 as a constant pressure system for the planned development to the south of the building. When the Southwest Reservoir zone was plumbed into this development, the constant pressure system was taken out of the building and a PRV installed for pressure reduction to the north and east of the building. The Parkridge PRV currently provides service to the Parkridge PRV Zone from the Southwest Pressure Zone. The static hydraulic grade for the two zones is approximately 3630 ft and 3783 ft respectively. Located at 3609 Meadowbrook Dr.
2. **Proposed Upgrades:** Pressure Reducing Valve Stations are critical components providing pressure changes at five locations around the City. Because they are mechanical, there is an inherent chance of failure. The failure of these valves could have serious implications. The existing PRV stations' condition, operation, and likelihood of failure and implications should they fail need to be clearly understood by the City. The facility plan with recommended improvements is proposed to be completed in 2016. Project objectives include but are not limited to:
 - The Consultant will develop a facility plan report detailing their findings and recommendations. The report will include analysis, findings, and recommendations for long term as well as interim operational changes and improvements. The plan will include but not be limited to Facility Evaluation (Structural, Mechanical, Process, Electrical), Cathodic Protection Review and recommendations, Regulatory review, building code analysis, head loss curves and equipment information, and piping and instrumentation diagrams.
 - ~~The facility plan may be expanded to include a preliminary design that could easily provide a framework for the development of a set of clear contract documents that will~~

~~allow the necessary improvements to be efficiently and economically bid and constructed. Preliminary design plans and specifications will not be included.~~

- ~~The Consultant will prepare an Operations and Maintenance (O&M) Manual table of contents for the existing PRV stations. 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.~~
- 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.
 - “Planning Report for Skyline, Terracita, Southwest, Carriage Hills, and Future Southwest Rapid City Water Service Zones” Project No. W03-953.M1, by CETEC Engineering Services, Inc. dated April 25, 2006.
 - City of Rapid City Supplemental Design Criteria – Regional Water Facilities.
- ~~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. Survey to confirm ground elevation at the PRV stations. Will utilize the City’s existing ground elevation data for each location.~~

EXHIBIT A
Pressure Reducing Valve (PRV) Station Facility Plan
Project Number 14-2179/ CIP 50812.E

- ~~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 I.15.q~~
- ~~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. The Consultant will complete a "desk top" radio path study between the Control Vault sites, and the existing master PLC location during this task of the project.
- ~~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 documents:

A. Pressure Reducing Valve (PRV) Stations

1. **Facility Plan: Note***The Facility Plan 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: The Consultant will utilize the City’s existing model results, for the Facility Plan, and will not complete independent modeling. Will meet with the City to obtain needed output information.
- i. Evaluate function of existing PRV stations, and recommend operational changes if appropriate
- ii. ~~If the evaluation in (i) indicates the PRV station is not required, document and explain distribution system operation without it. Will be covered by upcoming Water System Master Plan Update.~~
- iii. ~~If the evaluation in (i) indicates a new PRV at another location is recommended, indicate location, and explain distribution system operation with the new station. Will be covered by upcoming Water System Master Plan Update.~~
- c) Site Visits: The Consultant will visit each PRV station to document the existing equipment, condition, and to collect any field data required to complete the Facility Plan Report.
- d) The Facility Plan shall provide discussion about the issues related to the operation and failure mechanisms of the PRV Stations. The discussion should include, anticipated operation including a narrative on Normal Operation and anticipated emergency failure circumstances. Operations description shall include the general operations narrative.

EXHIBIT A
Pressure Reducing Valve (PRV) Station Facility Plan
Project Number 14-2179/ CIP 50812.E

- e) The Facility Plan shall include but is not limited to: History of the structures, facility plan objective, facility evaluation (~~architectural~~/structural, mechanical, process, electrical), building code analysis, PRV operation graphs/charts inherent to the equipment installed, piping and instrument schematics and diagrams, current and proposed PRV settings, proposed new PRV station locations and recommendations.
- f) The Facility Plan shall include a risk analysis at each of the PRV station to determine cost versus likely of failure.
- g) The Facility Plan shall provide a detailed discussion for operation and closure issues related to the normal operation versus fire flow operation. Operations description shall include the general narrative that will lead to control description development
- h) The Facility Plan report shall address how all of the improvements shall meet the operational and maintenance requirements of the City, DENR Requirements if applicable, building codes, etc.
- i) The Facility Plan shall address how all improvements and modifications can be implemented while maintaining water service to downstream customers.
- j) The consultant shall submit all design assumptions.
- k) Provide justification for the facility and analysis of alternatives.
- ~~l) The Facility Plan shall provide review of compliance with City's Standard Specifications for construction of the project(s).~~
- ~~m) Detailed surge analysis for various emergency, and valve opening and closure conditions. The Consultant shall provide recommendations based on their analysis, and the consultant will incorporate surge mitigation into the proposed pump station. The Consultant shall provide recommendations based on their analysis, and the consultant will incorporate into Design Report detailing their findings and recommendations. The report will include analysis, findings, and recommendations for operation changes and improvements, as necessary. 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.—The report will include a general surge discussion based on the function and type of the control valves.~~
- n) Review any existing system controls at the PRV stations, and provide discussion in the Facility Plan for recommended changes and additions. Any system controls required for the PRV 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 PRV station facilities. Work under this task will be completed in conjunction with Task 1.7.
- o) The Consultant shall provide evaluation and recommendations in relation to Cathodic Protection at each PRV Station.
- p) 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.
- q) 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.
- r) 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 7 of the RFP. Work covered under other task items. No specific fee is associated with this item.
 - s) 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 Facility Plan. The O&M manual will be based on the current facilities. It will need to be modified in the future when upgrades are made.
 - t) The Consultant shall elaborate on other project components as necessary. Work covered under other task items. No specific fee is associated with this item.
 - u) Facility Plan Report Submittal:
 - i. The Consultant will prepare a report which summarizes, documents, and discusses the findings, and recommendations of the previous sub-tasks. Prepare drawings as needed for the report.
 - ii. The Consultant shall deliver the following:
 - ~~Submit four (4) paper copies and an electronic PDF version of the Facility Plan 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.
 - Submit four (4) paper copies and an electronic PDF version of the revised Facility Plan Report.

~~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~~
 - ii. ~~Prepare mechanical system layouts as necessary for process, electrical, mechanical, and civil components of the project.~~
 - iii. ~~Anticipated Rapid City Standard Details.~~
 - iv. ~~Special Details Conceptual layouts for special/critical elements for example buildings, special drainage structures, pump facilities, etc.~~
 - v. ~~Plan sheets shall be prepared utilizing the latest City Drafting Standards. Work covered under other task items. No specific fee associated with this item.~~
- e) ~~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 control valves, surge equipment, etc.~~
 - v. ~~A control and instrumentation specification with modes of operation shall be a requirement in this submittal. This specification should 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 sub-consultants, 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.
 - Design Report/Facility Plan, Plans, Specifications, and Cost Estimate Submittal review 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.E Pressure Reducing Valve Stations Facility Plan

(Project Number 14-2179)

4/3/2014

TASK NUMBER	Classification Rate	TASK SUBTOTAL
	TASK	
1	Preliminary Design	
1.1	Kick-Off Conference	\$1,410
1.2	Review Background Info	\$1,399
1.3	Site Surveys, Establish Elevation at each Site	\$0
1.4	R-O-W, Easements, Land	\$0
1.5	Opinion of Construction Cost	\$0
1.6	Geotech	\$0
1.7	Inst, Controls, SCADA	
	Field Meetings and Data Gathering	\$234
	Communication w/ Healy Ruff	\$585
	Overall System Evaluation	\$234
	Desk Top Radio Path Study	\$936
1.8	Review Environmental Regs, Determine Mitigation	\$0
1.9	Public Meetings, Presentations	\$0
1.10	Meet w/ Property Owners	\$0
1.11	ADA Compliance Review	\$0
1.12	Submittal Review w/ City	\$0
1.13	PW and Council Meetings	\$0
1.14	QA and QC	
	Develop QC Plan	\$365
	Schedule, Milestones	\$248
	Design/Technical QC	\$1,060
	Communication, Meetings	\$200
	Confirm Compliance with City Requirements	\$214
	Cost Control	\$200
1.15	Facility Plan Report	
a	Develop Table of Contents	\$107
b	Review City Hydraulic Modeling	\$1,844
c	Site Visits	\$3,825
d	Operation and Failure Mechanism Discussion	\$1,128
e	History, objective, evaluation, codes, etc	\$878
f	Risk Analysis due to Failure	\$878
g	Operations Description	\$1,005
h	City and SDDENR Requirements	\$107
i	Options to Maintain Water Service	\$566
j	Design Criteria Standards and Assumptions	\$214
k	Facility Justification	\$207
l	Compliance w/ City Standard Specs	\$0
m	Surge Analysis	\$0
n	Inst., Controls, SCADA (PRV Stations)	\$1,250
o	Cathodic Protection Evaluation	\$1,664
p	Design Life	\$207
q	Opinion of Construction Cost	\$1,722

ENGINEERING FEE ESTIMATE EXHIBIT B

City of Rapid City

50812.E Pressure Reducing Valve Stations Facility Plan

(Project Number 14-2179)

4/3/2014

TASK NUMBER	Classification Rate	TASK SUBTOTAL
	r Covered Under Other Work Tasks	\$0
	s O&M Table of Contents	\$564
	t Covered Under Other Work Tasks	\$0
	u Design Report Submittal	
	Report Writing and Prep	\$4,586
	Draft Submittal	\$813
	Review Meeting	\$1,498
	Incorporate Changes	\$885
	Final Submittal	\$913
	2 Preliminary Design Plans	
a and b	Prelim Plan Sheets	
	General Sheets/Location Maps	\$0
	Civil/Site/Underground (5 Sites)	\$0
	Interior Equipment (5 Sites)	\$0
	Instrumentation/Controls	\$0
	City Standard Details	\$0
c	Prelim Plan Submittal	\$0
	Review Meeting	\$0
	3 Preliminary Design Specs	
a	Table of Contents & Preliminary Specs	\$0
	Schedule of Bid Items	\$0
b	Preliminary Specs Submittal	\$0
	Spec Prelim Writing	\$0
	Review Meeting	
	4 Project Management	
a	Bi-Weekly PM Level Meeting and Minutes (3 Calls)	\$1,053
b	Schedule Update, Monthly	\$248
c	General Project Management	\$1,053
	5 Project Meetings	
a	Monthly Progress and Minutes with City (2 Meetings)	\$2,537
b	Consultant Internal Meetings	\$1,833
	Total Hours	
	Fee	\$38,669

Total Fee, Including Sub-Consultants 2014 \$	\$38,669
2015 Yearly Fee Adjustment, Max Increase of 3%	\$39,829
Sub-Consultants Amounts (2015 \$)	
None	

EXHIBIT C

**Pressure Reducing Valve (PRV) Station Facility Plan
Project Number 14-2179/ CIP 50812.E**

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

Engineer XI/Landscape Arch XI	\$200.00	Right-of-Way Technician IV	86.00
Engineer X/Landscape Arch X	190.00	Right-of-Way Technician III	78.00
Engineer IX/Landscape Arch IX	179.00	Right-of-Way Technician II	69.00
Engineer VIII/Landscape Arch VIII	165.00	Right-of-Way Technician I	59.00
Engineer VII/Landscape Arch VII	152.00		
Engineer VI/Landscape Arch VI	137.00	GIS Coordinator VIII	\$200.00
Engineer V/Landscape Arch V	127.00	GIS Coordinator VII	190.00
Engineer IV/ Landscape Arch IV	117.00	GIS Coordinator VI	180.00
Engineer III/Landscape Arch III	107.00	GIS Coordinator V	170.00
Engineer II/Landscape Arch II	97.00	GIS Coordinator IV	155.00
Engineer I/Landscape Arch I	87.00	GIS Coordinator III	140.00
		GIS Coordinator II	125.00
		GIS Coordinator I	115.00
Engineering Technician XI	\$160.00		
Engineering Technician X	140.00		
Engineering Technician IX	125.00	GIS Developer/DBA V	\$150.00
Engineering Technician VIII	108.00	GIS Developer/DBA IV	140.00
Engineering Technician VII	97.00	GIS Developer/DBA III	130.00
Engineering Technician VI	89.00	GIS Developer/DBA II	120.00
Engineering Technician V	81.00	GIS Developer/DBA I	110.00
Engineering Technician IV	74.00		
Engineering Technician III	66.00	GIS Analyst V	\$125.00
Engineering Technician II	60.00	GIS Analyst IV	115.00
Engineering Technician I	55.00	GIS Analyst III	105.00
		GIS Analyst II	95.00
		GIS Analyst I	85.00
Surveyor VIII	\$133.00		
Surveyor VII	125.00		
Surveyor VI	115.00		
Surveyor V	103.00	GIS Technician IV	\$85.00
Surveyor IV	94.00	GIS Technician III	75.00
Surveyor III	83.00	GIS Technician II	65.00
Surveyor II	73.00	GIS Technician I	55.00
Surveyor I	63.00		
		Computer Systems Manager	\$123.00
		Systems Analyst	120.00
		Network Administrator	99.00
		IS Support Specialist	69.00
		Computer Systems Technician III	79.00
		Computer Systems Technician II	69.00
		Computer Systems Technician I	55.00
Survey Technician VI	\$81.00		
Survey Technician V	71.00		
Survey Technician IV	61.00		
Survey Technician III	52.00		
Survey Technician II	47.00		
Survey Technician I	42.00		
		Administrator V	\$110.00
		Administrator IV	95.00
		Administrator III	80.00
		Administrator II	72.00
		Administrator I	64.00
		Administrative Technician V	\$65.00
		Administrative Technician IV	58.00
		Administrative Technician III	51.00
		Administrative Technician II	46.00
		Administrative Technician I	40.00
Right-of-Way Specialist IV	\$180.00	Client Services Representative	\$75.00
Right-of-Way Specialist III	150.00		
Right-of-Way Specialist II	130.00		
Right-of-Way Specialist I	115.00		
Right-of-Way Technician V	\$95.00		

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**

<u>DESCRIPTION</u>	<u>CHARGE AMOUNT</u>	<u>UNIT</u>
REPRODUCTION		
Blackline Prints (In-House)		
Bond, Full Size - 24x36	\$ 1.00	Each
Bond, Half Size Reduction - 11x17	\$ 0.70	Each
Photocopies (In-House)		
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
Scan (In-House)		
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 (In-House)		
Bond (Black)	\$ 1.50	Lin. Ft.
Bond (Color)	\$ 2.50	Lin. Ft.
LAMINATING/MOUNTING		
Laminating - 8.5x11 (In-House)	\$ 1.00	Each
VEHICLES		
Trucks, Cars, SUV's - all vehicles	\$ 0.60	Mile
PER DIEM		
Meals	\$30.00	Day
Lodging	\$110.00	Day
OTHER REIMBURSABLE EXPENSES		
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	

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.