Approved as to form only:
AHR
Date: 1-5-16

BOARD OF PUBLIC UTILITIES
CITY OF CHEYENNE, WYOMING

SPECIFICATIONS
&
CONTRACT DOCUMENTS

FOR

PROJECT 2016SRH01

2016 SEWER REHABILITATION PROJECTS

Prepared by
THE CITY OF CHEYENNE
BOARD OF PUBLIC UTILITIES
JEFFREY PECENKA, SUPERVISING ENGINEER
City of Cheyenne, Board of Public Utilities

JANUARY 2016

Revised 2015.12.17 Atty

Approved as to
form only:

Date:

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BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING

I. INVITATION FOR BIDS

2016 SEWER REHABILITATION PROJECTS
BID NO. 2016SRH01

The Board of Public Utilities, Cheyenne, Wyoming will receive sealed bid proposals at the Office Facility located at 2416 Snyder Avenue, Cheyenne, WY 82001, until **2:00 P.M.** local time on the **3rd of February, 2016,** for the Rehabilitation of sewer mains at various locations in the City of Cheyenne, WY. A bid guarantee in the amount of 5% of the total bid shall be submitted with each bid proposal as required in the bidding documents. The successful bidder shall furnish performance and payment bonds in the amount of one hundred percent (100%) of the accepted bid. Bidding documents and plans may be downloaded from the Board of Public Utilities website or may be picked up at the Board of Public Utilities, 2416 Snyder Avenue, Cheyenne, WY 82001. A voluntary pre-bid conference will be held at **2:00 P.M,** on **January 27, 2016,** at the Second Floor Conference Room at 2416 Snyder Avenue, Cheyenne, WY.

Board of Public Utilities
City of Cheyenne, Wyoming
Tim Wilson, Director

Wyoming Tribune Eagle
Advertisement Dates:
January 13, 2016
January 20, 2016

BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING

II. INSTRUCTIONS TO BIDDERS

1. USE OF SEPARATE BID FORMS

These contract documents include a complete set of bidding and contract forms which are for the convenience of the bidders. Bid proposals shall be made upon the forms furnished herein and pursuant to the instructions and requirements as set forth herein.

2. INTERPRETATION OF DOCUMENTS

No oral interpretation will be made to any bidder as to the meaning of the contract documents or any part thereof. If any person contemplating submitting a bid proposal is in doubt regarding the meaning of any part of the drawings, specifications, or other portions of the contract documents, or finds discrepancies in or omissions from the drawings or specifications, he/she shall submit a written request for interpretation, clarification or correction thereof to the Board of Public Utilities, hereinafter the "Board." The person submitting the request will be responsible for its prompt delivery.

3. ADDENDA

Every interpretation, clarification or correction made to the bidder will be in the form of a written addendum to the Contract Documents. All addenda will be mailed to each person holding contract documents, but it shall be the bidder's responsibility to make inquiry as to the addenda issued. All addenda issued during the time of bidding shall be acknowledged in the bid proposal and shall be made a part of the Contract. Any bid proposal in which all addenda are not acknowledged will be considered incomplete.

4. INSPECTION OF THE SITE/EXAMINATION OF CONTRACT DOCUMENTS

Each bidder should visit the site of the proposed work and become fully acquainted with the existing conditions as they relate to the construction, required labor, facilities involved, and the difficulties and restrictions that may be encountered in the performance of the contract. Where possible, the Board will conduct a tour of the work areas. Each bidder should thoroughly examine and become familiar with the Drawings, Technical Specifications, and all other contract documents. The bidder, by the execution of a contract, shall in no way be relieved of any obligation under it due to the bidder's failure to receive or examine any form or legal instrument or to visit the site and become acquainted with the existing conditions. The Board will be justified in rejecting any claim based on facts which the Bidder should have been aware of as a result of inspecting the site.

5. ALTERNATE BIDS

Alternate bids **will not be considered** unless alternate bid items are specifically requested by the Specifications and the bid proposal.

6. BID PROPOSAL REQUIREMENTS

a. All bid proposals must be submitted on forms supplied by the Board and shall be subject to all requirements of the contract documents. All bid proposals must be regular in every respect. No interlineations, excisions or special conditions shall be made or included in the bid forms by the bidder. Erasures or other changes in the bid proposals must be explained or noted over the signature of the bidder.

b. Bid documents, including the Bid Proposal, Bid Guaranty, and the Non-Collusion Affidavit of Prime Bidders shall be submitted in a sealed envelope. The envelope shall bear the bidder's name and address, the project name, bid number and the date and time of bid opening in order to guard against premature opening of the bid proposal.

c. The Board may consider as irregular any bid proposal on which there is an alteration of or departure from the bid form provided and, at its option, may reject the bid proposal.

d. Award of a contract resulting from this bid request will be based on (except as provided in Paragraph 14 below) the responsive bid proposal of the most qualified responsible bidder whose bid proposal, including any combination of base proposal items and additive alternates as selected by the Board, is considered to be the best suited for the project. In awarding the bid, the Board will consider all aspects of each bid proposal and may place more weight on non-monetary issues and thus, may not necessarily select the lowest bid. The Board reserves the right to reject any and all bid proposals. All bidders must bid on all base items, additive alternates and supplemental schedules of unit prices. If the base proposal exceeds the funds available, the Board has the right to reject all bid proposals or award the contract on the basis of deductions selected from items listed in the base proposal or supplemental schedule of unit prices.

e. The blank spaces on the bid proposal form must be filled in correctly and the bidder must state the unit or lump sum prices in the spaces provided. All bid proposals must be totaled, and, in the case of errors or discrepancies, the unit or lump sum prices shall govern.

f. Each bid proposal must be signed and shall display the name and address of the bidder in the blank spaces provided. If the bid proposal is made by a sole proprietorship or partnership, the name and address of the sole proprietorship or partnership shall be shown, together with the names and addresses of the proprietor or partners. If the bid proposal is made by a corporation, it must be signed in the name of such corporations by an official who is authorized to bind the bidder.

g. Any bid proposal not displaying the above-mentioned information will be considered incomplete and may be rejected.

h. A pre-construction conference will be held with Board representatives and the bidder upon award of the contract. This conference will be for the purpose of reaching a complete understanding with the bidder concerning quality of work expected, work schedule and time of completion, work progress, coordination of all construction activities and resolving any problems prior to construction. The bidder will have furnished a complete list of proposed subcontractors and materialmen with the bid proposal.

i. If bidding as a Wyoming Resident Bidder (Wyoming Statute § 16-6-102), proof of residency shall be included with bid proposal.

7. BID GUARANTY

a. Each bid proposal shall be accompanied by a bid guaranty which shall not be less than five percent (5%) of the amount of the bid. The bid guaranty may be a certified check, cashier's check, bank or United States Postal money order, or a bid **bond in the form attached** only if the bid is equal to or less than $150,000. Bids greater than $150,000 **will** be accompanied by a bid bond in the form attached. The bid bond shall be secured by a guaranty or surety company which is qualified to do business in the State of Wyoming. **No deviation from the attached form will be allowed.** If a surety company's bid bond form is used, the wording shall be exactly as shown on the Board's bid bond form. No bid will be considered unless it is accompanied by the required guaranty. A certified check, cashier's check, or money order must be made payable to the order of the Board of Public Utilities. Cash deposits will not be accepted. The guaranty shall insure the execution of the agreement and the furnishing of the surety bonds by the successful bidder, all as required by the contract documents.

b. In the event of the withdrawal of the bid proposal within forty-five (45) calendar days after the opening of bid proposals, or the failure of the successful bidder to enter into a contract and give performance and payment bonds and minimum certificates within the time required by Wyoming Statute 15-1-113 after acceptance of the bid proposal by the Board, then the Contractor shall be liable to the Board on account of the default of the successful bidder in any particular thereof in the amount set forth on the bond as liquidated damages for said default.

c. Certified checks, cashiers' checks, money orders and bid bonds of unsuccessful bidders will be returned as soon as practicable after the opening of the bid proposals.

8. COLLUSIVE AGREEMENTS

Each bidder submitting a bid proposal to the Board for any portion of the work contemplated by the documents on which bidding is based shall execute and attach thereto an affidavit substantially in the form herein

provided to the effect that he has not colluded with any other person, firm or corporation in regard to any bid submitted.

9. STATEMENT OF BIDDER'S QUALIFICATIONS

Each bidder shall, upon request of the Board, submit satisfactory evidence that the bidder has a practical knowledge of the particular work bid upon, and has the necessary financial resources required to complete the proposed work. In awarding the contract, due consideration will be given to the present ability, reliability, work load and general reputation of each bidder, as well as the Board's past experience with the bidder.

Each bidder, upon request of the Board, must show that former work performed by the bidder has been handled in such a manner that there are no just or proper claims against such work.

No bid proposal will be acceptable if the bidder is engaged in any other work which impairs his/her ability to finance this contract or provide equipment for the proper execution of the contract.

10. UNIT PRICES

If unit prices are called for, the unit price of each of the several items in the bid proposal shall include the pro rata share of overhead and profit so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price bid represents the total bid. Any bid proposal not conforming to this requirement may be rejected as irregular. The special attention of all bidders is called to this provision for should conditions make it necessary to revise the quantities, no limit will be fixed for such increased or decreased quantities nor extras allowed; provided the net monetary value of all such additive and subtractive changes in quantities of such items shall not increase or decrease the original total contract price by more than twenty percent (20%). The quantities appearing on the bid proposal form are approximate and are prepared for the comparison of bids. Payment to the bidder will be made only for the actual accepted quantities of work performed and/or materials furnished in accordance with the contract.

11. TIME FOR RECEIVING BIDS

Bid proposals received prior to the advertised hour of opening will be kept securely sealed. The officer whose duty it is to open them will decide when the specified time has arrived and no bid proposal received thereafter will be considered.

12. OPENING OF BID PROPOSALS

At the time and place fixed for the opening of bid proposals, the Board will cause to be opened and publicly read aloud every bid proposal received within the time set for receiving bids, irrespective of any

irregularities therein. Bidders and other persons properly interested may be present in person or by representative.

13. WITHDRAWAL OF BID PROPOSALS

Bid proposals may be withdrawn either personally, by written request, or by fax request, at any time prior to the scheduled closing time for receipt of bid proposals.

14. AWARD OF CONTRACT - REJECTION OF BID PROPOSALS

a. The contract will be awarded to the most qualified, responsive and responsible bidder, as determined in the sole discretion of the Board, submitting the lowest bid complying with the conditions of the bidding documents. It is the intent of the Board to award to the bidder with the lowest total bid on the Bid Summary Sheet if the bid price is less than funds available for this project. **The Board of Public Utilities reserves the right to reject a bid proposal if the total bid shown on the Itemized Bid Form is not identical to the total bid shown on the Bid Proposal Sheet. The Board of Public Utilities reserves the right to reject a bid if the total bid price shown on the Itemized Bid Form is not calculated correctly.** If bid prices exceed the available funds for all projects, individual project prices will be used to select a combination of subprojects that have a cost that can be paid for by the available amount of money. However, the bid will be awarded to the bidder with the lowest overall total bid for the combination of projects selected for award. The Board reserves the right to reject any or all bid proposals or to waive any formality or irregularity in any bid proposal in the interest of the Board. No bidder may withdraw his bid proposal for a period of forty-five (45) days after the date of opening thereof.

b. Except where federal funds are involved, preference will be given to Wyoming bidders for any contractual services. The contract will be awarded to the qualified, responsible, certified, resident bidder making the lowest responsive bid, if such resident's bid is not more than five percent (5%) higher than that of the lowest responsible non-resident bidder. For award purposes only, low bid will be determined by increasing the bids of nonresident bidders by 5%.

c. Preference is hereby given to materials, supplies, equipment, machinery and provisions produced, manufactured, supplied or grown in Wyoming, quality being equal to articles offered by competitors outside the state.

d. As defined in Wyoming Statute 16-6-101, "Resident" means a person, partnership or corporation certified as a resident by the Wyoming Department of Workforce Services prior to bidding upon the contract.

15. PREFERENCE FOR STATE LABOR AND MATERIALS

Pursuant to Wyoming Statute § 16-6-201 *et seq.*, resident Wyoming laborers, workmen and mechanics shall be used in the performance of the work and any contract awarded as a result of this agreement; except that other laborers may be used when Wyoming laborers are not available for employment from within the State or are not qualified to perform the work. The bidder specifically acknowledges his or her obligations under Wyoming Statute § 16-6-203. Pursuant to Wyoming Statute § 16-6-104, resident Wyoming laborers, workmen and mechanics shall be used upon all work enumerated in Wyoming Statute § 16-6-102 whenever possible and Wyoming materials and products of equal quality and desirability shall have preference over materials or products produced outside the state. Pursuant to Wyoming Statute § 16-6-106, preference is hereby given to materials, supplies, equipment, machinery, and provisions produced, manufactured, supplied or grown in Wyoming, quality being equal to articles offered by the competitors outside of the state. Pursuant to Wyoming Statute § 16-6-107, all public structures constructed in the State of Wyoming shall be constructed and maintained by materials produced or manufactured in Wyoming if Wyoming materials are suitable and can be furnished in marketable quantities. Preference shall not be granted for materials of an inferior quality to those offered by competitors outside of the state, but a differential of not to exceed five percent (5%) may be allowed in cost of Wyoming materials of equal quality as against materials from states having or enforcing a preference rule against "out-of-state" products. Also see paragraph 14 of this section referring to Wyoming Statute § 16-6-101.

16. CERTIFICATE OF RESIDENCY STATUS

Effective May 22, 1987, bidders desiring residency status for the purpose of obtaining the five percent (5%) preference for resident bidders on public works projects must be so certified by the State of Wyoming Department of Workforce Services. No bidder may be considered a resident for the purpose of the 5% preference unless residency has been certified as provided in Wyoming Statute § 16-6-101.

Additionally, because a successful resident bidder cannot subcontract more than thirty percent (30%) of the work to nonresident contractors, the bidder must ensure and provide documentation to the Board that for any subcontracted work exceeding 30%, the subcontractors also have residency certification.

17. EXECUTION OF AGREEMENT - PERFORMANCE AND PAYMENT BONDS

a. Subsequent to the award and within thirty (30) days after the prescribed forms are presented for signature, the successful bidder shall execute and deliver to the Board an agreement in the form included in the Contract Documents in such number of copies as the Board may require and at the same time shall also provide the insurance, Workers Compensation, and Unemployment insurance certificates, and the performance and payment bonds. The performance and payment bonds will remain active for the two

year warranty period, which is the year following final acceptance of the project. If the bidder is required to perform corrections in the work of the project in the two year warranty period, they will be required to provide copies of insurance, Worker's Compensation, and Unemployment Insurance Certificates as required in the original project.

b. Having satisfied all conditions of award as set forth elsewhere in these documents, the successful bidder shall, within the period specified in paragraph "a" above, furnish a surety bond in a penal sum not less than the amount of the contract as awarded, as security for the faithful performance of the contract, and a bond in an equal sum as surety for the payment of all persons, firms or corporations to whom the bidder may become legally indebted for labor, materials, tools, equipment or services of any nature, including utility and transportation services employed or used by him in performing the work. Such bond or bonds shall be in the same form as that included in the Contract Documents and shall bear the same date as that of the agreement. The current power of attorney for the person who signs for any surety company shall be attached to such bonds. These bonds shall be signed by a guaranty of the surety company qualified to do business in the State of Wyoming. The bidder shall notify the surety of any changes affecting the general scope of the project or change in the contract price, and the amount of the bonds shall be adjusted accordingly. The bidder shall furnish proof of such adjustment to the Board.

c. The failure of the successful bidder to execute such agreement and to supply the required bond or bonds within thirty (30) days after the prescribed forms are presented for signature, or within such extended period as the Board may grant based upon reasons determined sufficient by the Board, shall constitute a default; and the Board may, at its option, award the contract to the next lowest responsible bidder or re-advertise for bids, and the bid guarantee of the bidder shall be forfeited to the Board as liquidated damages; and the Board may charge against the defaulting bidder the additional difference between the amount of the original low bid and the amount for which the contract is subsequently let, if the amount exceeds the amount of the bid bond. If a more favorable bid is received by re-advertising, the defaulting bidder shall have no claim against the Board for a refund.

18. SALES AND USE TAX PROVISIONS

a. It is an express condition of this contract that the bidder be aware of Wyoming Statute § 39-15-101 *et seq.*, and Wyoming Statute § 39-16-101 *et seq.* and conform as required. When required by state or local law or regulation, the bidder shall obtain from the Department of Revenue for the State of Wyoming a Sales and Use Tax License to conduct business in the State of Wyoming. It is a requirement of these Contract Documents that this license be issued in and for the County in which the materials, goods, fixtures and furnishings and all other tangible personal property required by this contract are consumed.

b. When required by state or local law or regulation, all original purchases by a bidder for this project shall be on a non-retail basis (purchased for re-sale) from the original supplier (unless sales tax has been legally paid to another state). Upon the use, installation or transfer of such tangible personal property into the project, the bidder shall report such purchases as a sale by the vendor licensed in the County, State of Wyoming, of an item of tangible personal property as defined in the above cited statutes. The bidder shall accordingly pay any and all taxes due.

c. The bidder shall cause all subcontractors to abide and perform their work on the same terms and conditions as provided above. The bidder shall cause the above statements to be inserted in any contract or agreement between the bidder and all subcontractors.

d. Prime contractors shall notify the Wyoming Department of Revenue, Excise Tax Division, when they begin work on any project in the State of Wyoming. The notice shall include the project name, specific project location and amount of the contract. Questions regarding sales and use taxes should be directed to the Wyoming Department of Revenue, Excise Tax Division (307)-777-7961.

19. TRADE NAME PROVISIONS

When in the specifications or drawings an item is identified by a manufacturer's name, trade name, catalog number, or reference, it is understood that the bidder proposes to furnish the item so identified and does not propose to furnish as "equal" unless the proposed "equal" is definitely indicated by the bidder, and the bidder has obtained prior certification from the Board for approval of the proposed "equal."

The reference to the manufacturer's name, trade name, or catalog number is intended to be descriptive but not restrictive and only to indicate to the bidder articles that will be satisfactory. Bids on other makes, catalog numbers, etc., will be considered, provided each bidder clearly states on the bid proposal exactly what the bidder proposes to furnish, and has submitted to the Board, at least 10 days prior to the bid opening date, illustrations, specifications, or other descriptive matter which clearly indicate the character of the article(s) to be covered by the bid, and has obtained the prior approval of the Board for the proposed "equal."

The Board reserves the right to approve as an equal, or to reject as not being equal, any article the bidder proposes to furnish which contains major or minor variations from specification requirements but which may comply substantially therewith.

20. ADMINISTRATION OF RETAINAGE FOR CONTRACTS EXCEEDING $25,000.00

The Board will withhold ten percent (10%) of the dollar value of work completed throughout the term of the contract. For contracts of more than $25,000.00, the bidder shall designate a depository to serve as

custodian for the retained funds in accordance with Wyoming Statute § 16-6-701 through 16-6-708. The retainage will be deposited in an interest bearing account in the bidder's name and interest income will be paid to the bidder when and as collected or as otherwise instructed by the bidder. All expenses incurred for this service will be charged to the bidder and deducted from payments due and/or from retained funds.

No payments returning retainage from this fund will be made until the Board has determined that satisfactory and substantial reasons exist for the payment, and the required bidder's Certificate of Completion; Affidavit of Release of Liens; bidder's Final Waiver of Liens; Subcontractor's Final Waiver of Liens; Consent of Surety for Final Payment; Sworn Statement for Final Payment Pursuant to Wyoming Statute §16-6-116, and §16-6-117; Engineer's Certificate of Completion, and a Contract Payment Request requesting Release of Retainage have all been received by the Board, and all the items on the punch list have been completed.

21. SUBCONTRACTORS, MATERIALMEN PROTECTION UNDER A BOND OR GUARANTEE; LIMITATIONS.

a. For contracts of $50,000.00 or more, the prime contractor shall post on the construction site a prominent sign citing Wyoming Statute 16-6-121 and stating that any subcontractor or materialmen shall give notice to the prime contractor of a right to protection under the bond or guarantee and that failure to provide the notice shall waive the subcontractor or materialmen's protection under the bond or guarantee and shall waive any right to a lien for material or services provided.

b. Notice of right to protection under a bond or guarantee:

i. Any subcontractor or materialmen entitled to the protection of a bond or other form of guarantee approved by the State or any political subdivision under W.S. 16-6-112 shall give notice of his right to that protection to the prime contractor.

ii. The notice shall be given no later than sixty (60) days after the date on which the services or materials are first furnished.

iii. The notice shall be sent to the prime contractor by certified mail or delivered to and receipted by the prime contractor or his agent. Notice by certified mail is effective on the date the notice is mailed.

iv. The notice shall be in writing and shall state that it is the notice of a right to protection under the bond or guarantee. The notice shall be signed by the subcontractor or materialmen and shall include the following information:

- The subcontractor's or materialmen's name, address and phone number and the name of a contact person;

- The name and address of the subcontractor's or materialmen's vendor; and
- The type or description of the materials or services provided.

c. Failure to give notice to a prime contractor who has complied with subsections (f) and (g) of Section 16-6-121 of the Statutes, waives the subcontractor or materialmen's protection under the bond or guarantee and waives any right to a lien for materials or services provided.

22. PERMITS AND LICENSES

The bidder shall obtain all permits necessary for the execution of the work. Fees will be waived for permits issued by the Board. Permits may be required by other entities which are not furnished or paid for by the Board. The bidder and subcontractors shall be required to hold and pay for any licenses required and shall also pay for all public utility charges.

23. PRE-BID CONFERENCE

A voluntary pre-bid conference will be held at 2:00 P.M. on Wednesday, January 27, 2016 at the Board of Public Utilities office, located at 2416 Snyder Avenue second floor meeting room. Representatives of Board will be present to discuss the Project. General Contractors who intend to submit a bid proposal are not required to attend or participate in the conference. Attendance by subcontractors and suppliers is encouraged, but is optional. The Board will conduct an optional guided tour of the site.

In response to questions arising at the conference, the Board will issue Addenda as Board considers necessary.

Bidders are responsible for legibly signing the attendance list and for making sure their names and email addresses appear on the attendance list.

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BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING

III. BID PROPOSAL

BID NO. 2016SRH01

Open Date: February 3, 2016
Time: 2:00 P.M.

PROJECT: 2016 SEWER REHABILITATION PROJECTS
TO: BOARD OF PUBLIC UTILITIES, 2416 SNYDER AVENUE

1. Pursuant to and in full compliance with all Contract Documents, the undersigned Bidder hereby proposes to furnish all the labor and materials and to perform all the work required for the complete and prompt execution of everything described or shown in or reasonably implied by the Bidding Documents, including the Drawings and Specifications, for the work above indicated for the monies stated herein, which includes all State, County and local taxes normally payable in respect to such work when done for an entity not entitled to any exemption from such taxes. The amounts stated include all allowances for profit and overhead, taxes, fees and permits, transportation, services, tools and equipment, labor and materials and other incidental costs.

2. The bidder has carefully examined the bidding documents, including the drawings and specifications and the work site, and has fully apprised himself of the conditions affecting the work to be executed, and hereby proposes to construct and complete the above-referenced project, all in accordance with the Contract Documents, at and for the following sum, as reflected in the total on the attached itemized bid sheet(s):

_____ Dollars ($_____).

3. This Bid Proposal shall remain open and subject to acceptance by Owner for forty-five (45) days from the date of bid opening. This Bid Proposal is accompanied by the required bid guarantee of five percent (5%) based upon the total cost of all items required to be bid. The Board of Public Utilities is authorized to hold said bid guarantee until such time that the successful bidder executes an agreement and supplies all necessary performance and payment bonds and insurance certificates. If awarded the contract for this work, the undersigned bidder agrees to execute the agreement and furnish the required bonds and insurance certificates within thirty (30) days from the date of Notice of Award.

4. Attached hereto is an affidavit in proof that the undersigned has not entered into a collusive agreement with any person in respect to this bid or any other bid or the submitting of bids for the contract for which this bid is submitted.

5. The undersigned bidder has [ ] has not [ ] been granted a State of Wyoming Certificate of Residency Status.

6. Wyo. Statute § 15-1-113 is hereby made an express part of this Bid Proposal as though fully set forth herein.

7. The Bidder acknowledges receipt of the following addenda to the Bid Documents (if none, so state):

Addendum No.	Dated
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

8. The undersigned Bidder, having examined the Plans, Specifications and other Contract Documents hereto attached, together with any and all addenda thereto, being acquainted with and fully understanding the requirements, stipulations, provisions and conditions thereof, proposes and agrees that he will enter into and perform the Contract attached hereto and of which this Bid forms a part and will do the construction work herein described on the terms and conditions therein set forth; and furnish all labor, materials, tools, equipment, transportation and services for all said construction work in strict conformity with the Plans and Specifications.

Dated this _____ day of _____, 20_____

FIRM NAME

_____

Bidder's Legal Stature:
[ ] Corporation [ ] Partnership [ ] Individual
[ ] Sole Proprietorship [ ] Other_____

State of Incorporation _____

ADDRESS_____

_____

_____

Telephone Number_____

By_____
(Bidder's Signature)

Title_____

_____
Witness

PART III

BID FORM

SUMMARY OF ALL SCHEDULES

FOR

2016 SEWER REHABILITATION PROJECTS
PROJECT NUMBER 2016SRH01

2016 SEWER REHABILITATION PROJECTS

Item	**Subtotal**
Schedule 1 Dry Creek Sewer	
Schedule 2 Andover Drive Sewer	
Schedule 3 10th Street Sewer	
Schedule 4 Pebrican Avenue Sewer	
Schedule 5 Evans Avenue Sewer	
Schedule 6 17th Street Sewer	
Total of all Schedules	

End of Bid Schedule Summary Page

PART III

BID FORM

BASE BID SCHEDULE

FOR

2016 SEWER REHABILITATION PROJECTS
PROJECT NUMBER 2016SRH01

Schedule 1 Dry Creek Sewer

Item	Quantity	Unit	Unit Cost	Subtotal
Mobilization	1	ls		
Bonds and Insurance	1	ls		
Site Safety	1	ls		
Traffic Control	1	ls		
Storm Water Control	1	ls		
R&R Sewer Main 12"	886	ft		
Burst 14" HDPE SEWER MAIN	779	ft		
Eliminate Manhole	1	ea		
R&R Manhole (22 ft)	1	ea		
R&R Manhole (15-20 ft)	1	ea		
R&R Manhole (10-15 ft)	5	ea		
Burst Pits	3	ea		
Asphalt Pavement	350	sy		
Alley Surface Restoration	1025	sy		
Landscaping Basic	2400	sy		
Import Backfill	2000	cy		
Rock Pipe Stabilization	886	cy		
Rock Manhole Stabilization	50	cy		
Concrete Valley Pan	400	sy		
Curb & Gutter	50	lf		
Inspection Overtime	16	hr	$87.50	$1,400.00
Force Account	1	ls	$25,000.00	$25,000.00
Total				

End of Base Bid Schedule

PART III

BID FORM

BASE BID SCHEDULE

FOR

2016 SEWER REHABILITATION PROJECTS
PROJECT NUMBER 2016SRH01

Schedule 2 Andover Drive Sewer

Item	Quantity	Unit	Unit Cost	Subtotal
Mobilization	1	ls		
Bonds and Insurance	1	ls		
Site Safety	1	ls		
Traffic Control	1	ls		
Storm Water Control	1	ls		
R&R&R Sewer Main 8"	749	ft		
Service Reconnect (Construct)	23	ea		
R&R Manhole (10-15 ft)	3	ea		
Add Manhole (5-10 ft)	1	ea		
Asphalt Pavement	1800	sy		
Import Backfill	750	cy		
Curb & Gutter	20	sf		
Inspection Overtime	8	hr	$87.50	$700.00
Force Account	1	ls	$12,000.00	$12,000.00
Total				

End of Base Bid Schedule

PART III

BID FORM

BASE BID SCHEDULE

FOR

2016 SEWER REHABILITATION PROJECTS
PROJECT NUMBER 2016SRH01

Schedule 3 10th Street Sewer

Item	Quantity	Unit	Unit Cost	Subtotal
Mobilization	1	Ls		
Bonds and Insurance	1	Ls		
Site Safety	1	Ls		
Traffic Control	1	Ls		
Storm Water Control	1	Ls		
R&R&R Sewer Main 8"	611	Ft		
R&R Manhole (5-10 ft)	2	Ea		
R&R Manhole (10-15 ft)	2	Ea		
Reconnect Service (DIG)	1	Ea		
Storm Sewer Crossing	3	Ea		
Asphalt Pavement	1300	Sy		
Concrete Pavement	2000	Sf		
Rock Manhole Stabilization	20	Cy		
Rock Pipe Stabilization	600	Cy		
Import Backfill	1800	Cy		
Slurry	80	Cy		
Inspection Overtime	8	Hr	$87.50	$700.00
Force Account	1	Ls	$12,000.00	$12,000.00
Total				

End of Base Bid Schedule

PART III

BID FORM

BASE BID SCHEDULE

FOR

2016 SEWER REHABILITATION PROJECTS
PROJECT NUMBER 2016SRH01

Schedule 4 Pebrican Avenue Sewer

Item	Quantity	Unit	Unit Cost	Subtotal
Mobilization	1	Ls		
Bonds and Insurance	1	Ls		
Site Safety	1	Ls		
Traffic Control	1	Ls		
Storm Water Control	1	Ls		
R&R Sewer Main 6"	170	Ft		
Service Reconnect (Construct)	2	Ea		
R&R Manhole (10-15 ft)	1	Ea		
Add Manhole (5-10 ft)	1	Ea		
Pothole	1	Ea		
Asphalt Pavement	470	Sy		
Curb & Gutter	40	Ft		
Import Backfill	200	Cy		
Rock Manhole Stabilization	10	Cy		
Inspection Overtime	8	Hr	$87.50	$700.00
Force Account	1	Ls	$25,000.00	$25,000.00
Total				

End of Base Bid Schedule

PART III

BID FORM

BASE BID SCHEDULE

FOR

2016 SEWER REHABILITATION PROJECTS
PROJECT NUMBER 2016SRH01

Schedule 5 – Evans Avenue Sewer

Item	Quantity	Unit	Unit Cost	Subtotal
Mobilization	1	ls		
Bonds and Insurance	1	ls		
Site Safety	1	ls		
Traffic Control	1	ls		
Storm Water Control	1	ls		
Clean Sewer Main 8"	177	ft		
Video Sewer Main 8"	177	ft		
Line Sewer 8"	177	ft		
R&R&R 8" Sewer Main	173	ft		
R&R&R 10" Sewer Main	8	ft		
R&R Manhole (10'-15' Deep)	2	ea		
R&R Manhole (15'-20' Deep)	1	ea		
Asphalt Pavement	500	sy		
Service Reconnect (Line)	2	ea		
Service Reconnect (R&R)	1	ea		
Point Repair	1	ea		
Inspection Overtime	8	hr	$87.50	$700.00
Force Account	1	ls	$10,000.00	$10,000.00
Total				

End of Base Bid Schedule

PART III

BID FORM

BASE BID SCHEDULE

FOR

2016 Sewer Lining Projects
PROJECT NUMBER 2016SRH02

Schedule 6 - 17th Street Sewer

Item	Quantity	Unit	Unit Cost	Subtotal
Mobilization	1	ls		
Bonds and Insurance	1	ls		
Site Safety	1	ls		
Traffic Control	1	ls		
Clean Sewer Main 12"	345	ft		
Video Sewer Main 12"	345	ft		
Line Sewer 12"	345	ft		
Rehab Manhole (15' to 20'	1	ea		
Service Reconnect (Line)	2	ea		
Point Repair	1	ea		
Inspection Overtime	4	hr	$87.50	$350.00
Force Account	1	ls	$5,000.00	$5,000.00
Total				

End of Base Bid Schedule

PART III

SUBCONTRACTORS AND MATERIAL SUPPLIERS LIST

Bidder's Name: _____

List material suppliers and subcontractors proposed for this project and return list with bid proposal. (Use additional sheet(s) if needed.)

If a subcontractor or material supplier is not listed for work, then the bidder acknowledges that the bidder will be performing this work.

Changes to this listing **may only be made** upon the consent of and pre-approval by the Board of Public Utilities.

Work	Subcontractor or Material Supplier	City/State (Resident or Non-Resident)	Percent of Work

NON-COLLUSION AFFIDAVIT

OF

PRIME BIDDERS

State of _____
County of _____

_____, being first duly sworn, deposes and says that:

(1) He/she is (owner, partner, officer, representative, or agent) of _____, the bidder that has submitted the attached bid proposal;

(2) He/she is fully informed respecting the preparation and contents of the attached bid proposal and of all pertinent circumstances respecting such bid proposal;

(3) Such bid proposal is genuine and is not a collusive or sham bid;

(4) Neither the said bidder nor any of the bidder's officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder, firm, or person to submit a collusive or sham bid in connection with the contract of which the attached bid proposal has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement, collusion, communication, or conference with any other bidder, firm or person to fix the price or prices in the attached bid or of any other bidder; to fix any overhead, profit, or cost element of the bid price or the bid price of any other bidder; or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the Board or any person interested in the proposed contract; and

(5) The price or prices quoted in the attached bid proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the bidder or any of the bidder's agents, representatives, owners, employees, or parties in interest, including this affiant.

Signed: _____
_____

Subscribed and sworn to before me
this _____ day of _____, 20___.

_____
_____
(Title)

My Commission expires_____

BID BOND

PROJECT: 2016 SEWER REHABILITATION PROJECTS
BID NUMBER: 2016SRH01

KNOW ALL MEN BY THESE PRESENTS, that _____, as Principal, and, _____, as Surety, a corporation duly organized under the laws of the State of _____ and authorized to do business within the State of Wyoming, are held and firmly bound unto the Board of Public Utilities, Cheyenne, Wyoming, in the full and just sum of _____ ($_____), lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, said Principal is herewith submitting a Bid Proposal for 2016 SEWER REHABILITATION PROJECTS, and the Board of Public Utilities, Cheyenne, Wyoming has required as a condition for submitting said Bid Proposal, that said Principal deposit specified Bid Security in an amount not less than five percent (5%) of the amount of said Bid Proposal, conditioned that in event of failure of Principal to execute the Contract and furnish the required performance and payment bonds if the Contract is awarded to said principal, that said sum be paid immediately to the Board of Public Utilities, Cheyenne, Wyoming as liquidated damages, and not as penalty, for the Principal's failure to perform.

The condition of this obligation is such that if the aforesaid Principal will, within the time required, enter into a formal contract and give such bonds and insurance certificates as are specified in the bidding documents with surety acceptable to the Board; or if Principal shall fail to do so, pay to the Board the sum determined herein as liquidated damages and not as a penalty, then this obligation shall be void; otherwise to remain in full force and effect.

Signed, sealed and delivered this_____day of_____20___.

Principal

_____
Principal (seal)

_____ by _____
Witness Title

_____
Surety (seal)

_____ by _____
Witness Attorney-in-fact

(Attach Power of Attorney)

BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING

IV. CONTRACT FORMS

NOTICE OF AWARD

BID NUMBER 2016SRH01

2016 SEWER REHABILITATION PROJECTS

DATE: February 15, 2016

TO: Company
Street
City, State Zip

The Board of Public Utilities, having duly considered the bid proposals submitted on February 3, 2016, for the construction of the 2016 Sewer Rehabilitation Projects as outlined in these Contract Documents, and it appearing that your Bid Proposal for performing the work outlined is fair, equitable, and in the Board's best interest, the bid items are hereby accepted at the bid prices contained therein.

In accordance with the terms of these Contract Documents, you are required to execute the formal Agreement (four copies are enclosed) and furnish the required Performance and Payment Bonds within thirty (30) consecutive calendar days from and including the date of this notice.

In addition, you are required to furnish at the same time a copy of Certificate of Insurance evidencing compliance with the requirements for insurance stated in the Contract Documents, including unemployment insurance, and a copy of your Worker's Compensation Certificate.

The Bid Guarantee submitted with your Bid Proposal will be retained until the Agreement has been executed and the required Performance and Payment Bonds have been furnished and approved. In event that you should fail to execute the Contract and furnish the Performance and Payment Bonds within the time limit specified, the said bid security will be retained as liquidated damages and not as penalty for the delay and extra work caused thereby.

BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING

By_____
Brad Brooks, Engineering Manager
City of Cheyenne Board of Public Utilities

BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING

NOTICE TO PROCEED

BID NUMBER 2016SRH01

DATE: MM/DD/YYYY

TO: **COMPANY**
ADDRESS
CITY, STATE ZIP

You are hereby authorized to proceed on this date, **MMM DD, YYYY,** with the construction of the 2016 SEWER REHABILITATION PROJECTS as set forth in detail in the Contract Documents. No work may be done at the site prior to the date stated above.

BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING

By_____

The Contractor is required to return an acknowledged copy of this Notice to the Board of Public Utilities.

Acknowledged:

_____
Contractor

_____
By

_____
Title

_____
DATE

CONTRACTOR'S CERTIFICATION OF COMPLETION

TO:

DATE _____
PROJECT NAME _____
PROJECT NO. _____
OWNER _____

ATTN: Resident Project Rep.

FROM: _____
(Firm or Corporation)

This is to certify that I, _____ am an

authorized official of _____

working in the capacity of _____

and have been properly authorized by said firm or corporation to sign the following statements pertaining to the subject contract:

I know of my own personal knowledge, and do hereby certify, that the work of the contract described above has been performed, and materials used and installed in every particular, in accordance with, and in conformity to, the contract drawings and specifications.

The contract work is now complete in all parts and requirements, and ready for your final inspection.

I understand that neither the determination by the Engineer-Architect that the work is complete, nor the acceptance thereof by the Owner, shall operate as a bar to claim against the Contractor under the terms of the guarantee provisions of the contract documents.

BY _____

TITLE _____

FOR _____

DISTRIBUTION:

1. Project Manager
2. Field Office
3. File

ENGINEER'S CERTIFICATION OF COMPLETION

TO:

DATE _____
PROJECT NAME _____
PROJECT NO. _____
OWNER _____

ATTN: Resident Project Rep.

FROM: _____
(Firm or Corporation)

This is to certify that I, _____ am an

authorized official of _____

working in the capacity of _____

and have been properly authorized by said firm or corporation to sign the following statements pertaining to the subject contract:

I know of my own personal knowledge, and do hereby certify, that the work of the contract described above has been performed, and materials used and installed in every particular, in accordance with, and in conformity to, the contract drawings and specifications.

The contract work is now complete in all parts and requirements, and ready for your final inspection.

I understand that neither the determination by the Engineer-Architect that the work is complete, nor the acceptance thereof by the Owner, shall operate as a bar to claim against the Engineer under the terms of the guarantee provisions of the contract documents.

BY _____

TITLE _____

FOR _____

DISTRIBUTION:

1. Project Manager
2. Field Office
3. File

CONSENT OF SURETY FOR FINAL PAYMENT

Project Name _____

Location _____

Project Name _____ Project No. _____

Type of Contract _____

Amount of Contract _____

In accordance with the provisions of the above-named contract between the Owner and the Contractor, the following named surety:

On the Payment Bond of the following named Contractor:

hereby approves of final payment to the Contractor, and further agrees that said final payment to the Contractor shall not relieve the Surety Company named herein of any of its obligations to the following named Owner: as set forth in said Surety company's bond:

IN WITNESS WHEREOF, the Surety Company has hereunto set its hand and seal this _____ day of _____, 20_____.

_____
(Name of Surety Company)

_____
(Signature of Authorized Representative)

(Affix corporate seal here)

TITLE _____

SUBCONTRACTOR'S FINAL WAIVER OF LIEN

TO ALL WHOM IT MAY CONCERN:

WHEREAS, the undersigned has been employed by (a)_____
_____

to furnish labor and materials for (b)_____

_____work,

under a contract (c)_____

for the improvement of the premises described as (d) _____
_____

in the CITY OF CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING of which the Cheyenne Board of Public Utilities is the Owner.

NOW, THEREFORE, this _____ day of _____, 20___, for and in consideration of the sum of_____
_____ Dollars paid simultaneously herewith, the receipt whereof is hereby acknowledged by the undersigned, the undersigned does hereby waive and release any lien rights to, or claim of lien with respect to and on said above-described premises, and the improvements thereon, and on the monies or other considerations due or to become due from the owner, on account of labor, services, material, fixture, apparatus or machinery heretofore or which may hereafter be furnished by the undersigned to or for the above described premises by virtue of said contract.

_____
(Name of sole ownership, corporation or partnership)

(Affix corporate
seal here)

_____
(Signature of Authorized Representative)

TITLE: _____

STATE OF WYOMING)
) SS
COUNTY OF LARAMIE)

The above and foregoing SUBCONTRACTOR'S FINAL WAIVER OF LIEN was subscribed and sworn to before me by _____, this _____ day of _____, 20____.

Witness my hand and official seal.

_____
Notary Public

My commission Expires:

INSTRUCTIONS FOR FINAL WAIVER:

A) Person or firm with whom you agreed to furnish either labor, or services, or materials, or both.
B) Fill in nature and extent of work; strike the word labor or the word materials if not in your contract.
C) If you have more than one contract on the same premises, describe the contract by number if available, date and extent of work.
D) Furnish an accurate enough description of the improvement and location of the premises so that it can be distinguished from any other property.
E) Amount shown should be the amount actually received and equal to total amount of contract as adjusted.
F) If waiver is for a corporation, corporate name should be used, corporate seal affixed and title of officer signing waiver should be set forth; if waiver is for a partnership, the partnership name should be used, partner should sign and designate himself as partner.

CONTRACTOR'S FINAL WAIVER OF LIEN

TO ALL WHOM IT MAY CONCERN:

WHEREAS, the undersigned has been employed by the Cheyenne Board of Public Utilities (Owner) to furnish labor and materials for (description of contract and project) _____

_____,

in the CITY OF CHEYENNE, COUNTY OF LARAMIE, STATE OF WYOMING.

NOW, THEREFORE, this _____ day of _____, 20____, for and in consideration of the sum of (amount paid to date)_____ _____ Dollars, the receipt whereof is hereby acknowledged by the undersigned, and upon receipt of retainage in the amount of _____ _____, to be paid after final advertisement pursuant to WYO. STAT. Section 16-6-116, the undersigned does hereby waive and release any lien rights to, or claim of lien with respect to and on said above-described premises, and the improvements thereon, and on the monies or other considerations due or to become due from the owner, on account of labor, services, material, fixture, apparatus or machinery heretofore or which may hereafter be furnished by the undersigned to or for the above described premises by virtue of said contract.

_____
(Name of sole ownership, corporation or partnership)

(Affix corporate seal here)

_____
(Signature of Authorized Representative)

TITLE: _____

STATE OF WYOMING)
) SS
COUNTY OF LARAMIE)

The above and foregoing CONTRACTOR'S FINAL WAIVER OF LIEN was subscribed and sworn to before me by_____, this _____ day of _____, 20___.

Witness my hand and official seal.

_____
Notary Public

My commission Expires: _____

AFFIDAVIT OF RELEASE OF LIENS

TO ALL WHOM IT MAY CONCERN:

WHEREAS, the undersigned has been employed by _____
_____

to furnish labor and materials for_____

_____ work, under a contract

_____

for the improvement of the property described as _____

_____

in the _____ of _____

County of _____, State of _____

of which _____

is the Owner.

NOW, THEREFORE, this _____ day of _____, 20____.

The undersigned, as the Contractor for the above-named Contract pursuant to the conditions of the Contract hereby certifies that to the best of his knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all subcontractors, all suppliers of materials and equipment, and all performers of work, labor or services, who have or may have liens against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

Exceptions: (if none, write "None". If required by the Owner, the Contractor shall furnish bond satisfactory to the Owner for each exception).

Contractor _____
(Name of sole ownership, corporation or partnership)

(Affix corporate seal here)

_____
(Signature of Authorized Representative)

TITLE: _____

STATE OF WYOMING)
)SS
COUNTY OF LARAMIE)

The above and foregoing **AFFIDAVIT OF RELEASE OF LIENS** was subscribed and sworn to before me by_____, this ____ day of _____, 20___.

Witness my hand and official seal.

_____
Notary Public

My commission Expires: _____

ATTACHMENTS:

1) Contractor's **FINAL WAIVER OF LIEN**, conditional upon receipt of final payment.
2) Subcontractor's **FINAL WAIVER OF LIEN** from all subcontractors, material and equipment suppliers.

SWORN STATEMENT FOR FINAL PAYMENT

PURSUANT TO WYOMING STATUTE § 16-6-117

RE: _____

PROJECT TITLE – BID NUMBER

This statement is submitted by _____ (Contractor) to satisfy Wyoming Statute § 16-6-117.

I, _____, the authorized representative of the Contractor, hereby certify that all claims for materials and labor performed under the contract for the above-referenced project have been paid for the entire period of time for which the final payment is to be made.

If any claim for material and labor is disputed this sworn statement shall so state, and the amount claimed to be due the laborer shall be deducted from the final payment and retained by the Board of Public Utilities until the determination of the dispute, either by judicial action or consent of the parties, and then paid by the agent or agency to persons found entitled thereto.

Claims for material and labor being disputed are stated as follows (list laborer name and amount due below):

_____
Signature

_____
Title

_____
Date

STATE OF WYOMING)
)SS:
COUNTY OF)

The foregoing instrument was subscribed and sworn to before me by _____ who is the _____ of _____ this _____ day of _____, 20____.

Witness my hand and official seal.

_____
Notary Public

My Commission Expires: _____

THE BOARD OF PUBLIC UTILITIES OF
THE CITY OF CHEYENNE WYOMING

SUPPLEMENTAL AGREEMENT TO CONTRACT

2016 SEWER REHABILITATION PROJECTS

THIS AGREEMENT, made and entered into this _____day of _____, 20___, between the BOARD OF PUBLIC UTILITIES, of the City of Cheyenne, Wyoming, herein called the "Owner", and _____ _____, herein called the "Contractor", and _____, herein called the "Depository".

WITNESSETH:

WHEREAS, on the _____ day of _____, 20___, the Owner entered into a contract with the Contractor for the construction of the 2016 SEWER REHABILITATION PROJECTS herein referred to as "the Contract", and

WHEREAS, the Owner, the Contractor, and the Depository mutually desire to enter into this Supplemental Agreement, which sets forth the procedure for the deposit in an interest bearing account the retainage provided by the terms of the Contract.

NOW, THEREFORE, the parties agree as follows:

1. The Owner and the Contractor agree to deposit in an interest bearing account with the above-named Depository, and pursuant to the procedures set forth in this Supplemental Agreement, the withheld percentage of the contract price of the work, which is ten percent (10%) of the dollar value of the work completed. The amount deposited with the Depository shall not exceed $250,000. Amounts withheld exceeding $250,000 shall be deposited with another approved Depository under the same provisions as set forth by this Supplemental Agreement.

2. Upon proper execution of this Supplemental Agreement by the parties, the Owner will forward to the Depository, checks made payable to the Contractor representing amounts being retained under the payments provision of the Contract.

3. The Depository, pursuant to an appropriate power of attorney granted to the Depository by the Contractor, shall deposit sums received from the Owner in interest bearing accounts subject to the terms of this Supplemental Agreement.

4. The interest bearing account shall be in the name of the Contractor. The Contractor shall supply the Owner with a power of attorney in form satisfactory to the Owner, authorizing the Depository to convert the account into cash, by sale or otherwise. A signed copy of the power of attorney shall be furnished to the Depository. The Owner shall keep the power of attorney in his possession until such time as he determines to act as provided in Paragraphs 9, 10 and 11 of this Supplemental Agreement. The Contractor agrees that such power of

attorney shall be irrevocable until such time as final settlement under the contract has been made or revocation has been authorized in writing by the Owner, whichever comes first.

5. The Contractor hereby assumes full responsibility for the proper performance by the Depository of their duties. The Contractor shall be liable to the Owner for any losses occurring to the interest bearing account as a result of actions of the Depository for any reason whatsoever, including default or bankruptcy of the Depository.

6. The Contractor is responsible for any compensation of the Depository and for the costs incurred by the Depository in the operation of the account. Such costs and compensation of the Depository shall be handled separately from the account and shall not be used to diminish the value of the account.

7. The Depository shall furnish to the Owner and Contractor, a quarterly accounting of all assets held in the account. An accounting of the holdings in the account shall be furnished by the Depository to either the Owner or the Contractor upon written request at any time during the life of this Supplemental Agreement.

8. Any interest actually paid on securities or on sums held by the Depository shall be handled as may be separately agreed upon by the Contractor and the Depository.

9. It is expressly understood that the Owner is authorized to render decisions as to whether the Contractor is in default, that the Contractor has been overpaid under the Contract, or that he is indebted to the Owner because of obligations arising under the Contract. For the purpose of this Supplemental Agreement, it is therefore agreed that a determination of the Owner that the Contractor is in default or that the Contractor is indebted to the Owner under the Contract, shall be final and conclusive. In accordance therewith, the Contractor hereby relinquishes any and all rights that he might have under the terms of the Contract, this Supplemental Agreement, or otherwise, to file or prosecute any claim or demand which might seek to interfere, delay or prohibit the Owner from demanding the proceeds of the account from the Depository or the Depository from delivering the same to the owner upon receipt of a proper demand from the owner.

10. Upon receipt by the Depository of a good faith determination by the Owner that the Contractor is in default or indebted to the Owner as per the terms of the Contract, the Depository shall, pursuant to the Contractor's previously provided power of attorney, remit to the Owner within 15 days of receipt of said determination all sums realized there from up to the amount of the retention which would otherwise have been in the possession of the Owner.

11. In addition to the rights of the Owner provided elsewhere, it is also agreed that if the Owner determines in good faith that the Contractor is in default or is indebted to the Owner under the terms and conditions identified above, he may so notify the Depository in writing.

Upon receipt of such written notice, the Depository will take no action which might result in a disbursement of any portion of the account to the Contractor or his assignee for a period not to exceed 60 days pending issuance of a formal decision of default or indebtedness to the Owner as herein provided.

12. The Owner may, if applicable, periodically determine that the value of sums held by the Depository may be reduced by a stated amount in accordance with the payments provisions of the Contract. Upon receipt of written notice, from the Owner, of such determination, the Depository shall release from the account for the benefit of the Contractor the appropriate sums or securities as are required by such determination.

13. This Supplemental Agreement shall be effective on the date first hereinabove written and shall remain in full force and effect until the Contract is completed. Upon satisfactory completion and acceptance of all work under the Contract, the Owner shall advise the Depository and the Contractor in writing that the proceeds of the account may be released, that the arrangement is concluded, and that this Supplemental Agreement is terminated.

14. The Depository is not a party to nor bound by an instrument or agreement other than this Supplemental Agreement; he shall not be required to take notice of any default or any other matter, nor be bound by, nor required to give any notice or demand, nor required to take any action whatever except as herein expressly provided.

15. The Contractor agrees that this Supplemental Agreement shall in no way infringe on or restrict the rights of the Contractor and the Owner under the Contract.

16. Any notice given by any of the parties hereto shall be sufficient only if made in writing and delivered in person or sent by registered mail or certified mail to the address shown below, or to such other address as the respective parties hereto shall designate by notice given as herein required. Notice hereunder shall be effective when delivered. Notices shall be given as follows:

To the Owner: Board of Public Utilities
2416 Snyder Avenue
Cheyenne, Wyoming 82001

City of Cheyenne, Wyoming
2101 O'Neil Avenue
Cheyenne, Wyoming 82001

To the Contractor: At the Contractor's address stated below in this Supplemental Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the date first hereinabove stated.

CONTRACTOR: _____
(Contractor Name)

Address: _____

_____

By: _____ ATTEST: _____
(Authorized Signature)

_____
(Name and Title, Printed/Typed)

DEPOSITORY: _____
(Depository Name

Address: _____

_____

By: _____ ATTEST: _____
(Authorized Signature)

_____
(Name and Title, Printed/Typed)

OWNER: BOARD OF PUBLIC UTILITIES
CITY OF CHEYENNE, WYOMING

Address P.O. Box 1469
Cheyenne, WY 82003-1469

By: _____ ATTEST: _____
(Authorized Signature)

_____
(Name and Title, Printed/Typed)

IRREVOCABLE POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That _____, a corporation, of the State of _____, hereinafter referred to as Contractor, does hereby make, constitute, and appoint _____ (Depository), its true and lawful attorney, for itself and in its name, place and stead to act as follows:

To deposit sums received from the Cheyenne Board of Public Utilities (Owner), representing amounts being retained on the 2016 SEWER REHABILITATION PROJECTS in accordance with the Contract between Owner and Contractor, in interest bearing accounts and to sell, negotiate, or redeem all or any securities held in interest bearing accounts by the said attorney acting as Depository, upon demand by the Owner, for consideration and in accordance with the Supplemental Agreement between Owner and Contractor, and to execute all instruments necessary or proper for transferring the same to the Owner, (within 15 days of demand) all pursuant to the Supplemental Agreement dated _____ between Depository and Owner and Contractor, which was entered into pursuant to the provisions of the Contract dated _____ for the 2016 SEWER REHABILITATION PROJECTS.

The said Contractor hereby grants and gives unto its said attorney full authority and power to do every act and thing whatsoever requisite and necessary to be done in the premises as fully to all intents and purposes as it might or could do, with full power of substitution and revocation, hereby ratifying and confirming all that said attorney shall lawfully do or cause to be done by virtue hereof.

This power of attorney shall be irrevocable until final settlement under the contract has been made or until such time as the Owner may authorize this revocation in writing, whichever comes first.

======== THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK =======

IRREVOCABLE POWER OF ATTORNEY (NOTARY BLOCK)

CONTRACTOR:

_____

ADDRESS:

_____

_____

BY: _____

TITLE: _____

CORPORATE OR COMPANY (SEAL)

State of Wyoming)
)ss
County of Laramie)

Subscribed and sworn before me this _____ day of

_____, 20___.

Witness My Hand and Official Seal.

_____
Notary Public

My Commission Expires: _____

CONTRACT PAYMENT REQUEST

DATE:

BOARD OF PUBLIC UTILITIES - CONTRACT PAYMENT REQUEST
PROJECT: 2016 SEWER REHABILITATION PROJECTS
BOARD BID NUMBER: 2016SRH01
BOARD PROJECT NUMBER: 2016SRH01
Contractor: INSERT CONTRACTOR'S NAME

CONTRACT PAYMENT REQUEST NUMBER:

The present status of the account for this contract is as follows:

Original Contract Amount	$_____
Net Change by Change Orders to Date	$_____
Current Contract Amount	$_____
Total Completed to Date	$_____
Less 10% Retainage	$_____
Total Earned Less Retainage	$_____
Less Previous Payments	$_____
Total Payment Due	$_____

In the opinion of the engineer (or representative of Owner if there is no project engineer), this estimate is complete and correct and conforms in all material respects with the requirements of the contract and payment is recommended:

RECOMMENDED BY:

_____

PROJECT ENGINEER

AUTHORIZED BY:

_____

BOARD OF PUBLIC UTILITIES' AND/OR CITY OF CHEYENNE'S REPRESENTATIVE

AFFIDAVIT OF PAYMENT TO MATERIALMEN, SUBCONTRACTORS AND LABORERS

(Completed Form is to Accompany Each Request for Progress Payment)

TO ALL WHOM IT MAY CONCERN:

WHEREAS,_____ (the "Contractor")has been retained by the Board of Public Utilities of the City of Cheyenne, Wyoming to furnish labor and materials for construction of the

_____ _____

Project, (the "Contract") which is owned by the Board of Public Utilities; and

WHEREAS, requirements of Wyo. Stat. Ann. § 16-6-1001 (a) (iv), as modified by Wyoming Executive Order 2011-2, must be satisfied before progress payments can be made to general contractor;

NOW, THEREFORE, this _____ day of _____, 20____.

I _____ do hereby certify on behalf of the Contractor that to the best of my knowledge, information and belief, except as listed below, that all materialmen, subcontractors and laborers on the above referenced contract (as of the date of receipt of the most recent payment date of _____, in the amount of $_____) have been paid in full for the performance of work or services relating to the CONTRACT referenced above.

Exceptions: (if none, write "None"). _____

Name of Entity	Amount Not Paid	Reason Funds not Paid
Total $		

The undersigned, on behalf of the Contractor for the above-named Contract does hereby further certify that the above total funds not paid out to date are not included in the current pay request dated _____ and are not included in the total amount claimed as work completed to date.

Contractor: _____
(Name of sole ownership, corporation or partnership)

Signature: _____
(Signature of Authorized Representative)

Printed Name: _____

Title: _____

(Affix Corporate
Seal Here)

STATE OF _____)
) SS
COUNTY OF _____)

The above and foregoing **AFFIDAVIT OF PAYMENT TO MATERIALMEN, SUBCONTRACTORS AND LABORERS** was subscribed and sworn to before me by _____, _____ of the _____, this ___ day of _____, 20___.

Witness my hand and official seal.

_____
Notary Public

My commission Expires: _____

BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING

V. AGREEMENT

BID NUMBER 2016SRH01

2016 SEWER REHABILITATION PROJECTS

THIS AGREEMENT, entered into this ____ day of _____, 20__, by and between the BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING, hereinafter referred to as the "Board," and _____, hereinafter referred to as the "Contractor."

WITNESSETH that the Contractor and the Board, for the considerations stated herein, mutually agree as follows:

ARTICLE 1. STATEMENT OF WORK. The Contractor shall furnish all supervision, technical personnel, labor, materials, machinery, tools, equipment, and services, including utility and transportation services, and perform and complete all work in an efficient and workmanlike manner in the rehabilitation of sewers at various location in Cheyenne, WY: all in strict accordance with the contract documents including all addenda thereto, numbered and dated:

_____ DATE _____

_____ DATE _____

_____ DATE _____

_____ DATE _____

_____ DATE _____

ARTICLE 2. RESPONSIBLE DESIGNEE FOR THE BOARD. The Contractor shall in any and all matters relating to the scope of services to be provided under this Contract or any other provisions herein, contact **Jeffrey Pecenka, Supervising Engineer**, Board of Public Utilities, or his designated representative.

ARTICLE 3. TIME FRAME FOR COMPLETION. The services of this Agreement shall commence on the date stipulated in the "Notice to Proceed" that will be issued by the Board. All work required by this contract is to be completed by October 31, 2016. If the work has not been completed within the time stipulated above, including any extensions of time issued by the Board for excusable delays, the Contractor and his sureties shall pay the Board fixed, agreed liquidated damages, as stipulated, in the Supplemental Conditions for each calendar day of delay until the work is completed.

ARTICLE 4. COMPENSATION AND METHOD OF PAYMENT. The Board will pay the Contractor for the performance of the Contract in current funds, _____. If the bid is in unit prices, in the event there are changes in the estimated quantities shown on the bid proposal, the unit prices multiplied by the actual quantities shall govern, and the total contract amount will be adjusted accordingly. The Board agrees to pay for contractual services in the following manner, upon receipt of appropriate documentation:

a. The Contractor will be paid on a monthly basis for percentage of estimated work completed. Submittal will be by the 25th of each month. The pay request shall be submitted on the Contract Payment Request Form and accompanied by supporting billing documentation. The engineer (or the Board) will review the estimate for his approval or disapproval.

b. The Board will withhold ten percent (10%) of the dollar value of the work completed for a minimum of forty (40) days after Notice of Final Settlement has been published in accordance with Wyoming Statute § 16-6-116. Upon completion of the work under this Contract, the Contractor shall submit a **CONTRACTOR'S CERTIFICATE OF COMPLETION, AFFIDAVIT OF RELEASE OF LIENS, CONTRACTOR'S FINAL WAIVER OF LIENS, SUBCONTRACTOR'S FINAL WAIVER OF LIENS, CONSENT OF SURETY FOR FINAL PAYMENT, SWORN STATEMENT FOR FINAL PAYMENT pursuant to Wyoming Statute § 16-6-117, ENGINEER'S CERTIFICATE for FINAL COMPLETION, and a CONTRACT PAYMENT REQUEST requesting RELEASE of RETAINAGE.** Final payment will not be made until the above documents have been received by the Board and all items on the Punch List have been completed, and the advertising requirements have been met.

ARTICLE 5. CONTRACT. The executed contract documents shall consist of the following:

a. This Agreement
b. Addenda
c. Invitation for Bids
d. Instructions to Bidders
e. Signed Copy of Bid Proposal
f. General Conditions
g. Supplemental Conditions
h. Technical Specifications
i. Drawings
j. Construction Standards
k. All provided Contract Forms
l. Geotechnical Reports

This Agreement, together with other documents enumerated in this Article 5, which said other documents are as fully a part of the Contract as if hereto attached or herein repeated, forms the Contract between the parties hereto.

Agreement Continued

IN WITNESS WHEREOF, the Board of Public Utilities has authorized the Director of the Board to enter into this Agreement on the ____ day of _____, 20___, and that the parties hereto have caused this Agreement to be executed on the day and year in the first part herein written.

BOARD OF PUBLIC UTILITIES:

_____

Attest: Tim Wilson, Director

Contractor (Signature must be notarized)

_____

Signature

_____

Printed Name

_____

Title

_____

Contractor's Address

_____

Contractor's Address

State of Wyoming)
) SS
County of Laramie)

The foregoing instrument was acknowledged before me by _____ who is the _____ of _____ this _____ day of _____, 20 ____.

Witness my hand and official seal.

_____

_____ Notary Public

My Commission Expires:

_____

BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING

PERFORMANCE AND PAYMENT BOND REQUIREMENTS

1. Signature of principal must be affixed to the bond.

2. Signature of principal must be witnessed.

3. Name of principal must be witnessed.

4. The legal capacity of the principal must be stated in the caption of the bond (i.e., corporation, partnership or sole proprietorship).

5. If the principal is jointly owned, all owners must sign the bond.

6. If the principal is a partnership, at least two partners must sign the bond.

7. Signature of the attorney-in-fact acting on behalf of the surety company must appear on the bond.

8. The surety's seal must be affixed to the signature of the attorney-in-fact (Facsimile seals are NOT acceptable).

9. The bond must contain the signature and address of a resident agent of the surety company, qualified to do business in the State of Wyoming.

10. Power of Attorney/Acknowledgment of Surety must be signed, sealed and dated with the same date as execution of bond.

11. Date of written Agreement and date of bond must be same. Post-dated bonds are not acceptable.

12. Bond form must be completely executed. Bonds with blank spaces, including dates, are not acceptable.

13. The bond must be accompanied by a properly executed authorization of Power of Attorney.

CORPORATE PRINCIPALS ONLY

14. The person signing on behalf of the corporate principal must state his/her legal capacity and he/she must be either the president or the vice-president if it is a corporation. If the officer or person signing on behalf of the corporate principal is other than the president or vice-president, there must be attached to the bond a resolution or certified evidence of authority that such officer or person has authority to sign in behalf of the principal.

15. The signature of the principal must be witnessed, or attested to, if it is a corporate principal by ONLY the secretary or assistant secretary of the corporation.

16. The corporate seal must be affixed to the signature of the principal. (Facsimile seals are NOT accepted).

17. Each party is required to sign his/her own name.

18. All changes or strike-throughs must be initialed by the resident agent or attorney-in-fact of the surety company. The surety company must be notified of such changes.

19. The person signing on behalf of a Limited Liability Corporation (LLC) must be an authorized manager or member as evidenced by corporate resolution or corporate by laws.

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That _____
(Name of Contractor)

_____
(Address of Contractor)

a _____, hereinafter called Principal, and

_____
(Name of Surety)

hereinafter called Surety, are held and firmly bound unto the Board of Public Utilities, 2416 Snyder Avenue, Cheyenne, Wyoming, hereinafter called the Board, in the penal sum of:

_____ Dollars ($_____), in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that Whereas, the Principal entered into a certain contract with the Board, dated the _____ day of _____, 20____, a copy of which is hereto attached and made a part hereof for the _____.

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms and conditions, and agreements, of said contract during the original term thereof, and any extensions thereof which may be granted by the Board, with or without notice to the Surety and during the two year guaranty period, and if the principal shall satisfy all the claims and demands incurred under such contact, and shall fully indemnify and save harmless the Board from all costs and damages which the Board may suffer by reason of failure to do so, and shall reimburse and repay the Board all outlay and expense which the Board may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to work to be performed there under or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of this contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Board and the Contractor shall abridge the right of any beneficiary hereunder whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20_____.

_____ (Witness)

_____ (Principal)

By_____

_____ (Title)

_____

_____ (Address)

_____ (Phone Number)

_____ (Witness)

_____ (Surety)

By_____

_____ (Attorney-in-fact)

Countersigned:

_____

_____ (Address)

_____ (Phone Number)

By_____ (Wyoming Resident Agent)

_____ (Address)

NOTE: Date of Bond must be same as date of Contract. If Contractor is partnership, all partners should execute Bond.

IMPORTANT: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

Board of Public Utilities, Cheyenne, Wyoming

VI. GENERAL CONDITIONS

1. INSURANCE REQUIREMENTS:

a. The Contractor shall file a Certificate of Insurance with the Board verifying each type of insurance coverage listed below.

b. The Certificate of Insurance shall be submitted to and approved by the Board prior to commencement of performance under this bid and the subsequent contract.

c.

Type of Coverage	Minimum Limits
Commercial General Liability Including Products and completed Operations)	$1,000,000 Per Occurrence $2,000,000 Aggregate
Explosion, Collapse, Underground (XCU Endorsements) if applicable to the hazards of a specific project.	$1,000,000 Per Occurrence $2,000,000 Aggregate
Business Automobile Liability	$1,000,000 CSL
Workers' Compensation	Statutory
Employer's Liability "Stop Gap" if afforded by voluntary Workers' Compensation)	$500,000 Each Accident $500,000 Each Disease-Policy Limit $500,000 Disease/Each Employee

d. It is understood and agreed that these policies are primary and not contributory. All policies required by this contract shall be in effect for the duration of the project and contract. Insurance certificates must include a clause stating that the insurance may not be canceled, amended or allowed to lapse until the expiration of at least thirty (30) days advance written notice to the Board.

e. The Board and the City of Cheyenne shall be named as **additional insured** on the Contractor's insurance policies, except workers' compensation, and the Contractor shall provide a copy of the endorsement providing this coverage.

f. The Board has the right to reject a certificate of insurance if the Contractor's insurance company is widely regarded in the insurance industry as financially unstable. Any

insurance company providing coverage under this contract shall have a minimum A.M. Best rating of A- (excellent).

g. The Board has the right to review the certificates of any or all subcontractors used by the Contractor. Further, the Board has the right to require, as necessary, that the subcontractors' insurance coverage be equivalent to that required of the Contractor.

h. The Board has the right to increase the required minimum limit of liability on any contract project as warranted by an increase in hazard. Examples of increased hazard include, but are not limited to:
   a. handling of hazardous materials
   b. activities involving large congregations of people

i. The Board shall have the right to consult with the Contractor's insurance agent for disclosure of relevant policy information, but the Board's failure to request or review such policies, endorsements, and certificates shall not affect the Board's rights or Contractor's obligation hereunder. Disclosure of relevant policy information would specifically involve, but is not limited to:

   a. exclusions endorsed
   b. deductibles
   c. claims in progress which could significantly reduce the annual aggregate limit
   d. "claims made" vs. the occurrence form. If "claims made" form, then advise:
      (1) retroactive dates
      (2) extended reported periods of tails.

2. INDEMNITY:

a. The Contractor agrees to indemnify, hold harmless and defend the Board and the CITY from and against any and all liabilities, claims, penalties, forfeitures or suits, and the cost and expenses incident thereto, including reasonable attorney's fees, which may hereafter arise as a result of death or bodily injury to any person, destruction or damage to any property, contamination of or adverse effects on the environment, or any violation of governmental laws, regulations or orders to the extent caused by the Contractor's breach of any term or provision of this agreement, or any negligent or willful acts, errors or omissions by the Contractor's employees or subcontractors in the performance of this Agreement. The Contractor acknowledges that it may incur a financial obligation to the Board and/or the CITY pursuant to the terms of this paragraph.

b. It is expressly understood and agreed that although the Board and its authorized agents and employees have the right under this Agreement to observe and review the work and operations of the Contractor, this shall not relieve the Contractor from any of its covenants and obligations hereunder.

3. GOVERNMENTAL IMMUNITY:

The Board and the CITY and their officials and employees do not waive governmental immunity by entering into this Agreement and specifically retain all immunities and defenses available to them as Governmental Entities pursuant to Wyo. Stat. § 1-39-101, *et seq.*, and all other applicable laws, except to the extent necessary solely for the enforcement of the terms and conditions of this Agreement as between the parties, and limited to an amount not to exceed the dollar amount of the accepted bid. Further, the BOARD and the CITY fully retain all immunities and defenses provided by law with regard to any action, whether in tort, contract or any other theory of law, based on this Agreement. Designation of venue, choice of law and similar provisions should not be construed as a waiver of governmental immunity.

4. GOVERNING LAW, JURISDICTION and VENUE:

The construction, interpretation and enforcement of this Agreement shall be governed by the laws of the State of Wyoming. The courts of the State of Wyoming shall have jurisdiction over any action arising out of this Agreement and over the parties, and the venue shall be the First Judicial District, Laramie County, Wyoming.

5. COMPLIANCE WITH LAWS:

This Agreement shall be governed in all respects by the laws of the State of Wyoming. The Contractor shall comply with all applicable federal, state and local laws, rules and regulations in the performance of this contract. The identified Laws or Regulations are included in this Agreement as mandated by statute or for the convenience of Contractor. Contractor's attention is directed to the fact that all applicable Federal and State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over design and construction of the project shall apply to the Agreement throughout, and they will be deemed to be included in the Agreement the same as though herein written out in full. Other Laws and Regulations apply which are not included herein, and are within Contractor's duty and responsibility for compliance therewith.

6. NONDISCRIMINATION:

The Contractor shall comply with the Civil Rights Act of 1964, the Wyoming Fair Employment Practices Act (Wyo. Stat. §27-9-105 *et seq.*), the Americans With Disabilities Act (ADA), 42 U.S.C. § 12101 *et seq.*, and the Age Discrimination Act of 1975 and/or any properly promulgated rules and regulations thereto and the Contractor assures that no person shall be excluded from participation in, denied the benefits of, or otherwise discriminated against in connection with the award and performance of this Agreement on the grounds of age, sex, race, creed, color, national origin, ancestry, religion, pregnancy or qualifying disability. The Contractor further assures that they will include the language of this paragraph in all agreements associated or connected in any way with this Agreement and shall cause all existing Agreements to similarly include this clause therein.

7. DRUG-FREE WORKPLACE:

In compliance with the Drug Free Work Place Act of November 1988, the Board has established an "Alcohol and Controlled Substance Policy" that pertains to alcohol and drug usage by Board employees. All independent contractors under contract with the Board and their employees and subcontractors are required to comply with the provisions of this policy for drug and/or alcohol usage on City property or other sites occupied by the Contractor while performing the duties and responsibilities of the contract. It is the responsibility of the Contractor to become familiar with the requirements of this policy and to inform all subcontractors and employees of their obligation to comply and to ensure their compliance therewith. If the Contractor, the Contractor's employees or subcontractors are found in violation of this policy, the contract may be terminated. The Contractor is an independent Contractor and shall comply with the Board's Alcohol and Controlled Substance Policy and the provisions of this section.

8. CONTRACTS FOR PUBLIC IMPROVEMENTS:

Wyoming Statute § 15-1-113 is expressly incorporated herein by this reference as though fully set forth herein.

9. SAFETY PROGRAMS:

The Board, as mandated by OSHA, has in place many safety programs. All independent contractors, their employees and/or their subcontractors, under contract with the Board are required to comply with the provisions of the Board's Safety Programs while on Board and/or CITY property or elsewhere while performing the duties and responsibilities of any contract or agreement with the Board. It is the responsibility of the Contractor to familiarize himself with the requirements of these programs and to inform all

of his employees and/or subcontractors of the requirements and ensure their compliance therewith. If the contractor, his employees and/or any subcontractors are found to be in violation of these programs, the contract/agreement may be terminated. These programs include but are not limited to the following:

Lock-out/ Tag-out Procedures
Respiratory Protection Program
Hazardous Communications Program
Confined Space Entry Program
Process Safety Management Program
Risk Management Program

10. INDEPENDENT CONTRACTOR:

At all times during the term of this Agreement, Contractor shall be considered an independent contractor. Neither Contractor nor any one employed by it shall represent, act, purport to act or be deemed to be the agent, representative, employee or servant of the Board.

11. CONFIDENTIALITY:

To the extent allowed by law, the Board and Contractor shall treat as confidential and not disclose to others information (including technical information, experience or data) regarding either party's plans, programs, plants, processes, products, costs, equipment, operations, or customers which come within the knowledge of the parties, without in each instance securing the prior written consent of the other party, unless such disclosure is required by law or legal process. However, nothing shall prevent either Contractor or the Board from disclosing to others or using in any manner information which either party can show (a) has been published or has become part of the public domain other than by acts of Contractor or the Board; (b) has been furnished or made known to Contractor or the Board by third parties without restrictions on its disclosure; or (c) was in either party's possession prior to the disclosure thereof by the Board or Contractor to each other. Neither the Board nor the Contractor shall be restricted in any way from releasing information in response to a subpoena, court order, or legal process, but, the disclosing party shall notify the non-disclosing party of such disclosure at least seven (7) days prior to such disclosure to give the non-disclosing party an opportunity to take any and all steps provided by law to prevent such disclosure.

12. CONFLICT OF INTEREST:

In entering this Agreement, Contractor covenants that it presently has no interest, and shall not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any

manner or degree with performance of the services hereunder. Contractor further covenants that in the performance of this Agreement, no subcontractor or person having such an interest shall be employed. Contractor certifies that no one who has or will have any financial interest under this Agreement is an officer or employee of the Board.

13. ACCEPTANCE NOT WAIVER:

The Board's approval of drawings, plans, specifications, reports, and incidental work or materials furnished hereunder shall not in any way relieve Contractor from responsibility for the technical accuracy of the work. The Board's approval or acceptance of, or payment for, any services shall not be construed to operate as a waiver of any of the Board's rights under this Agreement or any of its legal rights under statute and common law arising out of the performance of this Agreement.

14. DEFAULT:

Each and every term and condition herein shall be deemed a material element of this Agreement. In the event either party shall fail or refuse to perform according to the terms of this Agreement, such party may be declared in default.

15. REMEDIES:

a. In the event a party declares the other party in default hereof, said party declaring default shall notify the defaulting party in writing and such defaulting party shall be allowed a period of fifteen (15) days to cure said default. In the event that the default remains uncorrected, the party not in default may elect to: (a) terminate this Agreement and seek damages; (b) treat this Agreement as continuing and require specific performance; or (c) avail itself of any other remedy at law or equity.

b. In the event Contractor fails to strictly perform in accordance with this Agreement, the Board may elect to make good such deficiencies and charge Contractor therefore.

16. TERMINATION:

The Board may by written notice to Contractor terminate this Agreement in whole or in part by giving Contractor fifteen (15) days written notice. Upon receipt of such notice, Contractor shall:

a. Discontinue all services affected (unless the notice directs otherwise); and

b. Deliver to a Board representative within five (5) days all documents belonging to the Board including but not limited to data, drawings, specifications, reports, estimates and summaries accumulated by Contractor in the performance of this Agreement, whether completed or in progress. In the event of termination, the Board shall pay Contractor for all work accepted as of the date of termination.

17. WAIVER:

The waiver by either party of any term, condition or covenant, or breach of any term, condition or covenant, shall not constitute a waiver of any other term, condition or covenant, or breach thereof.

18. SEVERABILITY:

If any provision, section, subsection, sentence, clause, or phrase of this Agreement is invalidated by any court of competent jurisdiction, such holding shall not affect the validity of the remainder of the Agreement, which shall continue in full force and affect.

19. SUCCESSORS AND ASSIGNS:

All the terms, conditions, and provisions herein shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

20. ASSIGNMENT:

Neither party shall assign this Agreement without prior written consent of the other party. Any delegation or assignment shall not operate to relieve either party of its responsibilities hereunder.

21. THIRD PARTY RIGHTS:

The parties do not intend to create in any other individual or entity the status of third party beneficiary, and this Agreement shall not be construed so as to create such status. The rights, duties and obligations contained in this Agreement shall operate only between the parties to this Agreement, and shall inure solely to the benefit of the parties to this Agreement. The parties to this Agreement intend and expressly agree that only the parties signatory to this Agreement shall have any legal or equitable right to seek to enforce this Agreement, to seek any remedy arising out of a party's performance or failure to perform any term or condition of this Agreement, or to bring action for breach of this Agreement. This paragraph is not intended nor shall it be construed to waive all of the parties' immunities.

22. NOTICES:

Any notice, correspondence or billing required by the terms of this Agreement shall be delivered by hand, or delivered by mail, postage prepaid, to the address of the respective party representative(s) named below:

Board:

Attn: Jeffrey Pecenka
City of Cheyenne
Board of Public Utilities
P.O. Box 1469
Cheyenne, WY 82003

CONTRACTOR: _____
_____
_____
_____
_____

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BOARD OF PUBLIC UTILITIES, CHEYENNE, WYOMING

VII. SUPPLEMENTAL CONDITIONS

The following supplemental conditions are hereby made a part of the Contract Documents and supplement or supersede any articles of these specifications. Any subsequent addenda issued after the contract documents have been issued to bidders shall supplement or supersede any articles of these specifications and shall be made a part of the contract documents.

1. PROJECT SITE

The Contractor shall confine operations to those areas indicated in the Contract Documents, Plans or as Specified in the quantities and permitted by law, ordinances and permits. The Contractor shall not unreasonably encumber the site with any materials or equipment. Any damage to properties due to the Contractor not confining its activities to reasonable areas, will be repaired at the sole cost of the Contractor.

2. TIME FOR COMPLETION

The work which the Contractor is required to perform under this Contract shall be commenced at the time stipulated by the Board in the Notice to Proceed to the Contractor and shall be completed by **October 31, 2016.** Time will not be counted when the project is officially suspended by the Board due to acts of nature, winter shutdown, and Board-originated suspensions that are necessary through no fault of the Contractor. In the latter instance, if the Board suspends the work for more than ninety (90) days, the Contractor may apply for a price adjustment to compensate for reasonable expenses caused by the suspension. Any application for price adjustment or contract time extension will be submitted to the governing body of the Board for its consideration in the form of a contract modification. It will be the responsibility of the Contractor to provide sufficient documentation to substantiate any claim.

3. LIQUIDATED DAMAGES

For each calendar day that any work remains uncompleted after the Contract time specified for the completion of the work provided for in the contract, the following liquidated damage charges will be deducted from any monies due the Contractor:

Original Contract Amount		Liquidated Damage Charge
From more than	to and including	Charge per calendar day
$0.00	$25000.00	$250.00
25,000.01	50,000.00	500.00
50,000.01	100,000.00	1,000.00
100,000.01	500,000.00	1,500.00
500,000.01	1,000,000.00	2,000.00
1,000,000.01	1,500,000.00	3,000.00
1,500,000.01	and greater	3,500.00

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the use of additional contract time, will in no way constitute a waiver on the part of the Board to any of its rights under the Contract.

Unless otherwise provided in the Contract, liquidated damage charges will be calculated in accordance with the table. All time in excess of the required Contract time will be calculated on a calendar day basis.

4. CONTRACT DOCUMENTS

The Board will furnish the Contractor, without charge, six (6) copies of the contract documents including technical specifications and drawings. Additional copies requested by the Contractor will be furnished at cost.

5. JOB OFFICES AND STAGING AREA

It is the Contractors sole responsibility for establishing and maintaining office and storage facilities on the site as are necessary for the proper conduct of the work. These shall be located so as to cause no interference to any work to be performed on the site.

Upon completion of the improvements, or as directed by the Board, the Contractor shall remove all such temporary structures and facilities from the site. Such temporary structures shall become the Contractor's property. The Contractor shall leave the site of the work in the condition required by the Contract. All storage sites will be restored to their original condition by the Contractor at their expense. Construction materials may not be stored in streets, roads, or highways for more than seven (7) days after unloading. All materials or equipment not installed or used in the construction within seven (7) days of unloading will be stored elsewhere by the Contractor at his expense unless authorized by City Engineer for additional storage time.

6. PARTIAL USE OF SITE IMPROVEMENTS

The Board may, at its option, give notice to the Contractor and place in use those sections of the improvements which have been completed, inspected, and can be accepted as complying with the contract documents and if, in its opinion, each section is reasonably safe, fit and convenient for the use and accommodation for which it was intended, provided:

a. The use of such sections of the improvements shall in no way impede the completion of the remainder of the work by the Contractor;

b. The Contractor will not be responsible for any damages or maintenance costs due directly to the use of such sections;

c. The use of such sections shall in no way relieve the Contractor of liability arising from having used defective materials or to poor workmanship.

d. Any guarantee period shall not commence until the date of the final acceptance of all work which the Contractor is required to construct under this contract.

7. PROJECT RECORD DOCUMENTS

a. The Contractor shall maintain at the job site one copy of all contract and project documents, each portion of which shall be clearly marked "Project Record Copy". These documents, including drawings, specifications, addenda, approved shop drawings, change orders, field orders, other contract modifications, and other approved documents submitted by the Contractor in compliance with various sections of the Contract Documents, shall be maintained in good condition, available at all times for inspection by the Board, and not used for construction purposes.

b. The Contractor shall mark up the most appropriate document to show significant changes made during construction progress, significant detail not shown in the original Contract Documents, and the information shall include, but not be limited to, location of underground utilities and appurtenances referenced to permanent surface improvements, and location of internal utilities and appurtenances concealed in building structures referenced to visible and accessible features of structures.

c. The Contractor shall keep the project record documents current and not permanently conceal any work until required information has been recorded. Upon completion of the project and prior to final acceptance, the Contractor shall submit the marked up set of project record documents to the Engineer for the Board.

8. GENERAL TRAFFIC REQUIREMENTS

The Contractor shall provide adequate signs, barricades, lights and flaggers, and take all necessary precautions to prevent accident or injury and to minimize inconvenience to the public during the progress of the work.

All traffic control or other protective devices shall be installed and maintained in accordance with the "Manual on Uniform Traffic Control Devices" (MUTCD) or in conformance with the applicable requirements of the authority having jurisdiction in such matters. The Contractor shall provide an ATSSA certified work site supervisor to supervise all traffic control operations.

Material stored on or adjacent to public streets shall not obstruct or inconvenience the traveling public. Streets, driveways or other access points shall not be closed without the prior consent of the Board, Engineer, and proper governmental authorities. Fire hydrants on or near the site of the work shall be accessible at all times. The Contractor shall notify affected property owners, the Board and the City Traffic Engineer at least two working days in advance of any proposed closure for construction operations, including any work to be done by utility companies. Submittal or approval of a traffic control plan does not constitute notice of the date of start of closure.

The Contractor will submit a traffic control diagram to the Board and the City Traffic Engineer for approval before work begins. The diagram shall indicate location and type of signs, cones, flashers, flagging, reflective barricades, and all other devices deemed necessary for the proper protection of the area of the work.

The Contractor will be prepared to do all work under traffic, and anticipate the use of flaggers and traffic control devises necessary for the work to be accomplishes under traffic.

9. EXISTING ROADWAYS

The Contractor shall take all necessary precautions to protect all underground facilities affected by the Contractor's operations, regardless of the ownership of the facilities. Any existing improvements or facilities damaged by the Contractor's operations in the performance of the work under this Agreement shall be repaired or replaced by and at the expense of the Contractor to the satisfaction of the CITY.

The Contractor shall be responsible for the preservation and maintenance of all existing roadways affected but not directly disturbed by the work. The Contractor shall repair, replace, or clean any roadway indirectly affected by his operations during the course of the project. Such work shall be accomplished by and at the expense of the Contractor without reimbursement by the Board.

10. PROJECT OBSERVATION

It is expressly understood and agreed that the CITY, the Board and Engineer shall have the right under this Agreement to observe and review the work and operations of the Contractor. However, such observation and review shall not relieve the Contractor of any responsibilities, obligations, or covenants hereunder, and the Contractor shall be responsible for and save harmless the Board and Engineer and their respective representatives from all suits, actions, or claims of any character brought on account of any injuries or damages sustained by any person or property in consequence of any neglect in safeguarding the work, observing safety standards or regulations, or otherwise, or through the use of unsafe or unacceptable materials in the construction or completion of the project, or the Contractor's failure to comply with any law, ordinance, or regulation.

11. FINAL CLEANUP

The Contractor shall clean all sidewalk, street and other areas affected by construction, removing all loose surface materials. All piles of excess excavation, rocks, rubbish, or other debris shall be cleaned up and disposed of. Clean-up will include sweeping of pavements, curb and gutter, sidewalks and alleyways prior to opening for traffic. Damage to any areas by the Contractor will be repaired or replaced by the Contractor at no expense to the Board. No extra compensation will be allowed for final cleaning of the site, but the cost thereof shall be included in the unit price bid for other items in the Bid Proposal. If work is suspended for any reason, the Contractor will be required, at the Contractor's expense, prior to shut down, to provide for the public's safety and use as directed by the Board or Engineer.

12. SAMPLES, TEST, CITED SPECIFICATIONS

All material will be inspected, tested and accepted before incorporation into the work. Any work in which untested and unacceptable materials are used without approval or written permission shall be performed at the Contractor's risk and may be considered as unacceptable and unauthorized, and will not be paid for; and if directed by the Engineer, shall be removed at the Contractor's expense.

Unless otherwise modified, tests in accordance with the most recent cited standard methods of AASHTO or ASTM, approved AASHTO Interim Specifications, or ASTM Tentative Specifications, which are current on the date of advertisement for bids, will be made by and at the expense of the Contractor. Samples will be taken and tests will be made by a qualified representative of an independent testing firm. All materials are subject to inspection, test, and either acceptance or rejection at any time prior to incorporation into the work. Copies of all tests will be furnished to the Board representative. The Contractor shall coordinate with the Engineer for timely scheduling for samples and testing. See item #24 of this section.

Testing Laboratories will submit a certified written report of each inspection and test to the Engineer, Contractor, and any other entities designated by the City. Copies of all test results will be provided within twenty four (24) hours of the availability of the test results with written report to follow within seven (7) working days. Reports of each inspection, test, or similar service will include the following:

1. Name, address, and telephone number of testing laboratory.
2. Project title and project number.
3. Date of report and designation (number).
4. Dates of testing and maps showing locations where samples were taken or inspection and field tests made.
5. Ambient conditions at the time of sample taking and inspecting, or field testing.
6. Names of individuals taking the sample or making the inspection or test.
7. Product and test method.
8. Inspection or test data including interpretation of test results and comments or professional opinion on whether inspected or tested work complies with requirements.
9. Recommendation on retesting or re-inspections.
10. Name and signature of laboratory inspector.

13. TWO YEAR CORRECTION PERIOD

If after the approval of final payment and prior to the expiration of **two years** after the date of Final Acceptance or such longer period as may be prescribed by law or by the terms of any applicable special guarantee, the Contractor shall promptly, without cost to the Board and in accordance with the Board's written instructions, either correct such defective work or, if it has been rejected by the Board, remove it from the site and replace it with non-defective work. If the Contractor does not promptly comply with the terms of such instruction, the Board may have the defective work corrected or the rejected work removed and replaced, and all costs incurred therefore, including compensation for additional professional services, shall be paid by the Contractor. The remedies provided in this section are in addition to all other remedies available to the Board under applicable law and shall not be construed as exclusive of any other legal right or remedy available to the Board.

14. OVERTIME PAY

Overtime pay is to be paid to the Board of Public Utilities by the Contractor at the rate of **$87.50** per hour for all overtime hours worked by the Contractor and the Board of Public Utilities inspection staff. Overtime hours are considered on holidays, weekends and not during the regular hours from 7:30 a.m. to 4:00 p.m. Regular hourly inspections between 7:30 a.m. and 4:00 p.m., Monday through Friday, except holidays, will not be charged to the Contractor. Contractor retainage will not be released until inspection fees are paid by the Contractor.

15. TEMPORARY WATER SERVICE

Water service shall not be discontinued for more than two hours at any one time for any business, residence or private person. The Contractor shall be responsible for coordination with the Cheyenne Board of Public Utilities to make notifications of temporary interruptions to all users impacted by the interruption of service. The Contractor will provide and maintain temporary water service to all active water services affected by this project. The hose and associated appurtenances shall be NSF approved. If requested, the Board will coordinate with the Contractor and provide services necessary to accomplish temporary services to users. The Contractor is required to protect the temporary water supply system from freezing and traffic.

All materials used to provide temporary hook ups for residents of areas affected by the work will be NSF approved for potable water use.

The temporary water will be connected to and provided through existing service lines. No alternates will be allowed. Metering the system will be required at the hydrants. The water consumed will not be charged to the Contractor. Each homeowner will continue to receive a monthly bill as water will continue to flow through each residential meter.

The system used to supply residents with temporary water will comply with all Department of Environmental Quality, American Water Works Association, and Board rules and regulations. The temporary water will be the same quality and the same flow as the existing system. No buddy system such as house to house supply line will be permitted.

No separate measurement or payment will be made for temporary water service. Work included is considered subsidiary. Also, refer to the Supplemental Conditions for additional information.

16. DAMAGED MATERIAL

The Contractor shall be responsible for all material damaged, distorted or misplaced during construction along said project and shall replace and repair all material damaged, distorted or misplaced during construction. Repairs to all material damaged, distorted or misplaced shall be made by the Contractor at his expense in manner satisfactory to the Engineer or Owner. Every precaution shall be taken to prevent foreign material from entering storm drainage intakes during construction.

17. DISCHARGE OF WATER

Pumping of water from trenching to storm drain intakes at nearest available locations shall not interfere with traffic flow. All discharge hoses shall be protected from traffic conditions by means of wood

blocking or dirt mounds. Absolutely no ground water shall be allowed to enter into sanitary sewer lines. All surface discharges of construction related water, including construction site storm water, will meet the requirements set forth by the Wyoming Department of Environmental Quality in accordance with the City's WYPDES Permit.

18. DIVERSION OF SEWAGE

The Contractor shall divert all existing sanitary sewer flow by pumping around the disturbed line and then back into the existing system. Pumps are to be of the no-clog trash-pump kind with backup pumps provided on site 100% ready to replace pumps should pump failure occur. Backup pumps are required to prevent any accidents or damages from occurring in the event of pump failure. Contractor shall submit a pumping plan and a spill prevention plan prior to any construction. All discharge hoses shall be protected from traffic conditions by means of wood blocking or dirt mounds. Absolutely no sanitary sewer discharge shall be allowed to enter into any storm drain lines. Pumping shall be done during construction hours only. The Contractor shall provide a temporary coupling whenever pumping is suspended and sanitary flow is resumed to a new line.

19. DISPOSAL OF DEBRIS

Contractor is responsible for locating a proper disposal site and hauling all waste material from project area.

20. CHANGES IN THE WORK

Without invalidating this agreement and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions or revisions in the work; these will be authorized by a Written Amendment, a Change Order, or a Work Directive Change. Upon receipt of any such document, Contractor shall promptly proceed with the work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

If Owner and Contractor are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Written Amendment, Change Order, or Work Directive change, a claim may be made therefore as provided.

Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any work performed that is not required by the Contract Documents as amended, modified and supplemented.

Owner and Contractor shall execute appropriate change orders (or written amendments or work directive changes) covering the following:

a. Changes in the work which are ordered by Owner and which are required because of acceptance of defective work or correcting defective work or are agreed to by the parties; and

b. Changes in the contract price or contract time which are agreed to by the parties; provided that, in lieu of executing such change orders, Owner may order a change in the work and Contractor may appeal from any such decision in accordance with the provisions of the Contract Documents and applicable laws, but during any such appeal, Contractor shall carry on the work and adhere to the progress schedule as ordered.

If notice of any change affecting the general scope of the work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Time) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be the Contractor's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

A Change Order, Written Amendment, Field Order, or Work Directive Change when executed constitutes a modification to the Agreement. All provisions of the Agreement shall apply to the Change Order, Written Amendment, Field Order, or Work Directive Change unless modified by said Change Order, Written Amendment, Field Order, or Work Directive Change. The Contractor shall accept compensation pursuant to the General Conditions for a Written Amendment, Change Order, Field Order, or Work Directive Change as full compensation of both time and cost for the additional work and any delays caused thereby.

21. CHANGE IN CONTRACT PRICE

The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to or for performing the work. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at his expense without change in the Contract Price.

The Contract Price may only be changed by a Change Order or by a Written Amendment. Any claim for an increase or decrease in the Contract Price shall be based on written notice delivered by the Contractor to the Owner promptly (but in no event later than five days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within ten days after such occurrence and shall be accompanied by Contractor's written statement that the amount claimed covers all known amounts (direct, indirect and consequential) to which the Contractor is entitled as a result of the occurrence of said event. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this paragraph.

The value of any work covered by a Change order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

- Where the work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved.

- By mutual acceptance of a lump sum (which may include an allowance for overhead and profit).

- On the basis of the Cost of the Work plus a Contractor's Fee for overhead and profit.

Any claim for an increase or decrease in the Contract Price originated by a subcontractor shall be evaluated by the Contractor. The Contractor shall determine the validity of said claim, and if the Contractor determines that said claim is valid, the Contractor shall so state in writing to the Owner.

22. ESTIMATE OF QUANTITIES

The quantities of work to be done under these specifications are given in the Bid Proposal. These quantities are approximate only and are intended principally as a basis of comparison of Bid Proposals and the award of Contract. Payment to the Contractor will be made for the accepted quantities of work actually performed in accordance with the Plans and Specifications. It is understood that the quantities may be increased or decreased as provided without in any way invalidating the unit bid prices.

23. PAYMENTS

a. SCOPE OF PAYMENT. The Contractor shall receive and accept the compensation provided for in the Contract as full payment for furnishing all materials, labor, and equipment, and for performing all work under the Contract, and for all risk, loss, damage, or expense of whatever character arising from the nature of the work or the prosecution thereof, subject to the provisions of the General Conditions.

Basis of payment in these Specifications relating to any unit price in the bid schedule requires that said unit price shall cover and be considered full compensation for the Work or materials essential to that item, and this same Work or materials shall not be measured or paid for under any item which may appear elsewhere in these plans and Specifications.

b. WITHHOLDING OF PAYMENTS. The Owner may decline to approve any request for payment to such extent as may be necessary in Owner's opinion to protect the Owner from loss because of: defective work; reasonable

doubt that the work can be completed for the unpaid amount of the Contract price; reasonable indication that the work will not be completed within the Contract time; or unsatisfactory prosecution of the work by the Contractor.

c. CORRECTION OR REMOVAL OF DEFECTIVE WORK. If required by Engineer prior to approval of final payment, Contractor shall promptly, without cost to Owner and as specified by Engineer, either correct any defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by Engineer, remove it from the site and replace it with non-defective Work. If Contractor does not correct such defective Work or remove and replace such rejected Work within a reasonable time, all as specified in a written notice from Engineer, Owner may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect costs of such correction or removal and replacement, including compensation for additional professional services, shall be paid by Contractor, and an appropriate deductive Change Order shall be issued. Contractor shall also bear the expenses of making good all Work of others destroyed or damaged by his correction, removal or replacement of his defective Work.

d. FINAL PAYMENT. After the construction project is completed and all deficiencies corrected to the satisfaction of Owner as prescribed by the General Conditions, the Contractor will submit Contractor's Certification of Completion, Affidavit of Release of Liens, Contractors Final Waiver of Liens, Subcontractor's Final Waiver of Liens, Consent of Surety for Final Payment, Sworn Statement for Final Payment Pursuant to Wyoming Statute § 16-6-117, Engineer's Certificate of Final Completion, and a Contract Payment Request requesting Release of Retainage.

Upon receipt of **Certification of Completion, Affidavit of Release of Liens, Contractors Final Waiver of Liens, Subcontractor's Final Waiver of Liens, Consent of Surety for Final Payment, Sworn Statement for Final Payment Pursuant to Wyoming Statute § 16-6-117, Engineer's Certificate of Final Completion, and a Contract Payment Request requesting Release of Retainage**, the Owner, forty (40) days before the final estimate is paid, shall cause to be published in a newspaper of general circulation nearest the point at which the Work is being carried on, once a week for three (3) consecutive weeks, a notice stating that the Owner has accepted the Work as completed according to the plans and specifications and requirements set forth in the contract between the Owner and the Contractor, and that the Contractor is entitled to final settlement therefore. The Owner shall also cause said notice to be posted in three (3) conspicuous places on the Worksite. The notice shall also state that upon the forty-first (41st) day (and the notice shall specify the exact date) after the first publication of the notice, the Owner will pay to the Contractor the full amount due under the contract. The Notices referred to herein are required by Wyoming Statute § 16-6-116 and do not relieve the Contractor and the sureties on his bond from any claims for work or labor done or materials or supplies furnished in the execution of the contract. Final payment to the Contractor will include

the entire sum due after deducting all previous payments and all amounts to be retained or deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment. Any unresolved claims must be resolved prior to issuance of the final payment.

24. TRENCH DENSITY TESTING

Field density tests will be performed by an independent laboratory at the Contractor's expense. The Contractor shall notify the Engineer/Inspector 24 hours in advance of any need for testing in order to comply with the specifications. Tests will be performed on each 16 inch lift at 100 foot intervals or fraction thereof on trenches and/or if city or Board project employees observe inadequate compaction or large lifts are being installed. At Manhole locations the testing will occur at 16" lifts in at least two locations 180 degrees opposite each other between the trench wall and the manhole concrete.

25. LOCATION OF UNDERGROUND FACILITIES AND UTILITIES

The Contractor is hereby notified that compliance with Wyoming Statute §37-12-302, regarding location of underground utilities/facilities, is made part of the work. The Contractor is to obtain locations and elevations from the owners of each utility or facility in the vicinity of the work, prior to any excavation for water or sewer line installations.

No separate payment will be made for this item, it is considered part of the normal work.

26. UNDERGROUND UTILITY CARE

The Contractor will be responsible for the care of underground utilities encountered during excavation. This responsibility includes but is not limited to protecting and supporting underground water lines, storm sewer pipe, sanitary sewer pipe, gas lines, buried electric cables, buried telephone lines, buried fiber optics and subway systems.

No separate payment will be made for this item, it is considered a subsidiary part of the normal work associated with all work items.

27. ACCESS

The Contractor will be responsible for providing access for the residents of the area to their homes and driveways. No trenches or excavations will be left open overnight that may restrict homeowner access.

28. TESTING

Testing for this project will be as defined in the City of Cheyenne & Board of Public Utilities Specifications and Standard Drawings dated 2007, as annually amended. Any questions regarding testing will be directed to the CITY & BOARD Engineering and Inspection forces. Their direction will be the final word with regard to testing.

29. TERMINATION

If Contractor otherwise violates in any substantial way any provision of the Contract Documents:

a. OWNER may, after giving CONTRACTOR (and the surety, if any) seven days' written notice and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR'S tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by the CONTRACTOR, incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR will not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses and damages sustained by OWNER arising out of or resulting from completing the Work such excess will be paid to CONTRACTOR. If such claims, costs, losses and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such claims, costs, losses and damages incurred by OWNER will be reviewed by ENGINEER as to their reasonableness and when so approved by ENGINEER incorporated in a Change Order, provided that when exercising any rights or remedies under this paragraph OWNER will not be required to obtain the lowest price for Work performed.

b. Where Contractor's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

c. Upon seven day's written notice to CONTRACTOR and ENGINEER, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Agreement. In such case, CONTRACTOR will be paid (without duplication of any items);

i. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination.

ii. for valid expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials or equipment as required by the Contract Documents in connection with uncompleted Work.

30. FRONTIER DAYS

During Cheyenne Frontier Days (CFD), typically the last full week in July, and the week immediately preceding, special rules shall apply in the following designated areas:

a. All roadways contained in the area bounded by 15th St. on the south, Snyder Ave. on the west, Pershing Blvd. on the north, and Van Lennen Ave. on the east, including the roadways making up the boundaries.
b. All roadways contained in the area bounded by Pershing Blvd. on the south, Interstate 25 on the west, the extensions of Manewal Dr. on the north, and Warren Ave./Yellowstone Rd. on the east, including the roadways making up the boundaries.
c. All roadways designated on the functional classification map as "Other Principal Arterial" or "Minor Arterial".
d. All roadways located north of the Union Pacific Railroad tracks designated on the functional classification map as "Collector".

Functional classification maps are available from the office of the CITY ENGINEER.

The special rules are as follows:

During the week immediately preceding CFD:
a. Work in the designated areas shall be in a state whereby all facilities are available to the public no later than 5 pm Wednesday of the week immediately preceding CFD;
b. After Wednesday of the week immediately preceding CFD, the only work allowed in designated areas are emergency repairs and operations having a duration of less than 1 hour (including moving operations, such as striping or street sweeping).
c. All equipment, materials, traffic control devices, and other construction items shall be removed from the designated areas prior to 5 pm Wednesday of the week immediately preceding CFD. All roadways and pedestrian ways shall be in such a condition that there shall be no interference with parades or other CFD event operations.

During CFD:
a. No work will be allowed in the designated areas with the exception of CITY-approved emergency repairs and moving operations, such as striping or street sweeping.
b. all moving operations must be approved in advance by the CITY ENGINEER.

Work and traffic control operations can recommence on the Monday morning following the end of CFD.

Exceptions to the above will be made at the sole discretion of the Board.

31. SUMMARY OF WORK

This project involves the rehabilitation of sanitary sewers at various locations in Cheyenne, WY.

All work items necessary to make the system fully functional with control will be included. This will include, but is not necessarily limited to:

- Dry Creek Sewer remove and replace and regrade from Prairie Avenue to Powderhouse Road.
- Andover Drive from East 3rd Avenue to north of 5th Avenue.
- 10th Street from Monroe Avenue to Cleveland Avenue.
- Pebrican Avenue from East 18th Street to north of East 18th Street.
- Evans Avenue from 17th to 18th Streets.
- 17th Street from Evans Avenue to House Avenue

The contractor shall comply with all applicable codes including the NEC and the NESC.

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BOARD OF PUBLIC UTILITIES, CHEYENNE, WY

VIII. TECHNICAL SPECIFICATIONS

BID 2016SRH01

PROJECT WORK ITEMS

1. MOBILIZATION

The work will consist of the mobilization and demobilization of the Contractor's forces and equipment necessary for performing the work required under the contract. Payment will be made to cover the costs of preparatory work and operations including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site. Fifty percent of each mobilization bid item will be paid upon the start of work at that site and the remaining balance will be paid when the related work is over fifty percent complete.

2. BONDS AND INSURANCE

The work will consist of providing the performance and guaranty bond and the certificates of insurance as are required in the contract documents. Payment will be made with the first pay request processed after the required performance and guaranty bonds and the required certificates of insurance are provided.

3. SITE SAFETY

Site Safety measures will be required on this project. Site Safety will be provided by the Contractor to protect the Public, BOPU, City, and Contractor's forces from construction activities. All safety barricades, lighting, barrier fencing, and other materials to cordon off and protect the public from the construction activities will be provided by the Contractor. Proposed site safety and construction site protection will be coordinated with the Cheyenne Board of Public Utilities and the City of Cheyenne Traffic Department; a submittal will be required. Method of measurement for this item will be by lump sum. Basis of Payment for this item will be a percent of the work provided satisfactorily, as determined by CITY & BOPU. Site safety includes furnishing of

materials, labor and equipment to construct temporary pedestrian corridors to provide access to adjacent business and office buildings. Temporary sidewalks will provide a continuous hard surfaced path from existing or new concrete walks to the business door for access by personnel or patrons. The CONTRACTOR will also provide temporary, thirty-six (36) inch fluorescent plastic fencing, sturdily erected and continuously maintained, around all excavations, trenches, and other hazardous sites to cordon off and protect the public from the construction activities.

4. TRAFFIC CONTROL

A. This item shall include providing sufficient barricades, signs, flashers, striping, flagmen and other warning devices necessary to control vehicular traffic and maintain a safe work site in accordance with the "Manual of Specifications and Procedures to setting up Traffic Control Devices in Construction and Maintenance Areas" (MUTCD).

B. The Contractor shall submit a Traffic Control Diagram for review by the Project Engineer and the City Traffic Engineer two working days prior to beginning any phase of the project. The Traffic Control Diagram shall show the number, type and spacing of devices to be used. Traffic Control devices (type, number and spacing) shall conform to the City of Cheyenne MUTCD.

C. The contractor shall be responsible for notifying the 911 Center (637-6410) prior to closing any portion of the public right-of-way and when opening any right-of-way closure.

D. Traffic Control for these projects will require the submission of a traffic plan to the City of Cheyenne Traffic Department. This Traffic Plan must be accepted and approved and noted by signature of a City Engineer before proceeding.

5. STORM WATER CONTROL

Description. This work consists of all work necessary to comply with Wyoming Department of Environmental Quality Storm Water Control Plans for construction work sites to be disturbed by construction activities.

Materials. Materials will conform to **"The Wyoming Surface Water Standards".**

Construction Requirements. This item shall be constructed in conformance with **"The Wyoming Surface Water Standards".** Contractor should anticipate controlling and detaining construction site runoff in a manner compliant with Wyoming Surface Water Standards.

Method of Measurement. The quantity of Storm Water Control to be measured for payment will be by the lump sum (LS) completed in place and accepted, consisting of all labor materials, tools, equipment, and other incidentals necessary for doing all work involved in placing, maintaining and removing Storm Water Control measures.

Basis of Payment.

Payment will be made under:

Pay Item	**Pay Unit**
Storm Water Control	LS

6. R&R SEWER MAIN

Description. This work consists of removing old sewer pipe and replacing with new sewer main to existing grades.

Materials. Materials will conform to **"The Standard Specifications".**

Construction Requirements. This item shall be constructed in conformance with **"The Standard Specifications"** and **The Standard Drawings** therein incorporated. Contractor should anticipate laying pipe to the grades and elevation indicated on in the plans and specifications. It is the responsibility of the Contractor to video the installed sewer to observe any deficiencies in installation. Video inspection of installed sewer is subsidiary to this item and will be included in the cost of this item.

Method of Measurement. The quantity of Sewer Main to be measured for payment will be by the linear foot (LF) completed in place and accepted, consisting of all labor materials, tools, equipment, and other incidentals necessary for doing all work involved in excavating, back filling, furnishing, fabricating, transporting, and constructing sewer mains.

Basis of Payment.

Payment will be made under:

Pay Item	**Pay Unit**
R&R Sewer Main 8"	LF
R&R Sewer Main 12"	LF
R&R Sewer Main 15"	LF
R&R Sewer Main 18"	LF
R&R Sewer Main 21"	LF
R&R Sewer Main 24"	LF

7. R&R&R SEWER MAIN

Description. This work consists of removing old sewer pipe and replacing with new sewer main to new grades as shown on the plans.

Materials. Materials will conform to **"The Standard Specifications".**

Construction Requirements. This item shall be constructed in conformance with **"The Standard Specifications"** and The Standard Drawings therein incorporated. Contractor should anticipate laying pipe to the grades and elevation indicated on in the plans and specifications. It is the responsibility of the Contractor to video the installed sewer to observe any deficiencies in installation. Video inspection of installed sewer is subsidiary to this item and will be included in the cost of this item.

Method of Measurement. The quantity of Sewer Main to be measured for payment will be by the linear foot (LF) completed in place and accepted, consisting of all labor materials, tools, equipment, and other incidentals necessary for doing all work involved in excavating, back filling, furnishing, fabricating, transporting, and constructing sewer mains.

Basis of Payment.

Payment will be made under:

Pay Item	**Pay Unit**
R&R&R Sewer Main 8"	LF
R&R&R Sewer Main 12"	LF
R&R&R Sewer Main 15"	LF
R&R&R Sewer Main 18"	LF
R&R&R Sewer Main 21"	LF
R&R&R Sewer Main 24"	LF

8. BURST PIT

Description. This item consists of all work necessary to excavate a pulling pit or an insertion pit.

Construction Requirements. This item will include all labor and equipment to excavate a hole sufficient to introduce the pipe or pulling device for bursting.

Method of Measurement. The quantity of burst pits to be measured for payment will be (EA) each unit completed and accepted, consisting of all labor materials, tools, equipment and other incidentals necessary for doing all work involved in excavating, back filling, measuring, and restoring the burst pit.

Basis of Payment. Payment will be made under:

PAY ITEM	**PAY UNIT**
Burst Pit	EA

9. SLURRY UTILITY CROSSING

Description. This item consists of slurry backfill in trenches where pipes cross water mains, and do not have the required separation from the water main. An area 10 feet each side of such a crossing on each trench will be

backfilled with slurry. This item is required where sewer are not separated by more than 18" vertically below water mains, where sewer mains are not 10 feet horizontally separated from water mains, or where deemed necessary by the Engineer. Slurry will be placed a minimum of 18" above the top pipe at such an intersection. All labor, equipment, materials, tools, excavation, and transportation necessary to accomplish this task are included in this item.

Construction Requirements. Slurry Utility Crossing shall meet all requirements of the "Standard Specifications". All concrete replacement will be constructed in accordance with these specifications.

Materials. The materials for Slurry Utility Crossing will meet the requirements of the "Standard Specifications".

Method of Measurement. Units of measurement for Slurry Utility Crossing are by the cubic yard (CY). Payment will be made for volume satisfactorily placed, densified and cured.

Basis of Payment. Payment will be made under:

Pay Item	**Pay Unit**
Slurry Utility Crossing	CY

10. SEWER MAIN PIPE BURSTING

DESCRIPTION. This specification defines the approved systems method and materials for the rehabilitation of existing gravity sewer lines by the pipe bursting process.

This section specifies the system method or process to include tools, equipment and incidentals necessary to provide for the complete rehabilitation of deteriorated gravity sewer lines by pipe bursting. The Owner has pre-approved the British Gas pneumatic pipe bursting system or BOPU approved equal as determined by BOPU engineering.

The pipe bursting system is defined as the reconstruction of gravity sewer pipe by installing an approved pipe material, by means of the pre-approved method set forth in item 2, Methods, of this specification.

MATERIALS.

A. Solid Wall Polyethylene Pipe (HDPE)

1. The replacement pipe shall be manufactured from a high-density, high-molecular-weight polyethylene resin that conforms to ASTM D1248 and meets the requirements for Type III, Class B, Grade P34, Category 5 and has a PPI rating of PE 3408 when compounded. The pipe produced from this resin shall have a minimum cell

classification of 345434D or E (**inner wall shall be light in color**) under ASTM D3350.

Before beginning work, the Contractor shall submit to the Contracting Officer for approval, the vendor's specific technical data with complete physical properties of pipe and pipe dimensions pertinent to this job.

A certificate of "Compliance with Specification" shall be furnished for all materials to be supplied.

2. The outside diameter and minimum wall thickness shall conform to dimensions listed in Table I and shall be measured in accordance with ASTM D-2122.

TABLE I

POLYETHYLENE REPLACEMENT PIPE DIMENSIONS

IPS NOMINAL OD (Inches)	MINIMUM CD (Inches)	MINIMUM WALL THICKNESS			
		SDR 26	SDR 17	SDR 13.5	SDR 11
6	6.90	.266	.406	.512	.628
8	9.05	.348	.533	.670	.823
10	11.10	.427	.653	.823	1.009
12	13.2	.508	.777	.978	1.200
14	15.30	.589	.900	1.134	1.391
16	17.4	.670	1.024	1.289	1.582
18	19.50	.750	1.147	1.445	1.773

3. The SDR classification for various depths shall be as follows:

The Standard Dimension Ratio (SDR), which is the ratio of the outside diameter (OD) of the pipe to its minimum wall thickness, shall be specified for the various depths listed in Table II. Depth shall be measured from the upstream and downstream rim to the invert of the existing sewer in the pipe segment to be replaced. The SDR shall be selected for the deeper of the 2 manholes for a given pipe segment.

TABLE II POLYETHYLENE REPLACEMENT PIPE SDR (Applicable SDR for Depth Range)	
HDPE PIPE SDR	**MAXIMUM DEPTH (FEET)**
21	10
19	15
17	**20**
11	Over 20

CONSTRUCTION REQUIREMENTS

PRE-INSTALLATION PREPARATIONS

A. The Contractor shall submit a work plan to the Contracting Officer for review and acceptance. The work plan shall address the following minimum preparation/steps, unless approved otherwise by the Contracting Officer:

   a. The Contractor shall carry out operations under this section in strict accordance with all applicable OSHA Standards. Particular attention is drawn to those safety requirements involving work on an elevated platform and entry into a confined space. It shall be the Contractor's responsibility to comply with OSHA Standards and Regulations pertaining to all aspects of the work.

   b. It shall be the responsibility of the Contractor to video (television) inspect the sewer pipe immediately before the pipe bursting to assure that the existing pipe conditions are acceptable for pipe bursting. This inspection, as well as any point repairs required to remove debris, shall be incidental to the installation of the replacement pipe.

   c. Some lines have been previously television inspected by the Owner. This information and other data used in preparation of these specifications are available from the Contracting Officer for the Contractor's review. The Owner does not assume responsibility that this information will indicate the conditions that will be encountered while performing the work, only that this information shows conditions encountered at

the particular point from which the information was obtained.

d. When required for acceptable completion of the pipe bursting process, the Contractor shall provide for continuous sewage flow around the section(s) of pipe designated for the installation of replacement pipe. The pump bypass lines shall be of adequate capacity and size to handle the flow. A second operational pump set providing One Hundred Percent pumping redundancy is required on site. This redundancy will be used for back up pumping should the primary pump set fail.

e. If pre-installation video (television) inspection reveals a sag in the existing sewer that is greater than one-half of the diameter of the existing pipe, it shall be the Contractor's responsibility to install the replacement pipe to result in an acceptable grade without the sag. The Contractor shall take the necessary measures to eliminate these sags by the system of pipe replacement, digging a sag elimination pit and bringing the bottom of the pipe trench to a uniform grade in line with the existing pipe invert or by other measures that shall be acceptable to the Contracting Officer.

f. Before a section is burst all sewer services will be exposed and a one foot section of pipe removed, and the open ends created by removing the section plugged. The section removed will be at least 5 feet from the sewer main to be burst so as not to create a preferential path for the bursting tool to follow. The purpose of this service break is to isolate the service from the vibrations of bursting that may transmit crack inducing vibrations along the services length.

INSTALLATION

A. The Contractor shall submit information, in detail, of the procedure and the steps to be followed for the installation of the pipe bursting system selected, even if the process is named in the specification. All such instructions and procedures submitted shall be carefully following during installation. Any proposed changes in the installation procedures shall require submittal of revised procedures and acceptance by the Contracting Officer.

B. The installed replacement pipe shall be continuous when possible over the entire length of each pipe segment from manhole to manhole and shall be free from visual defects such as foreign inclusions, concentrated ridges, discoloration, pitting, varying wall thickness, pipe separation and other deformities. Replacement pipe with gases, nicks, abrasions or any such physical damage that may have occurred during storage and/or handling, which are larger/deeper than 10 percent of the wall thickness shall not be used and shall be removed from the construction site. **The replacement pipe passing through or terminating in a manhole shall be carefully cut out in a shape and manner approved by the Contracting Officer. The invert and benches shall be streamlined and improved for smooth flow. The installed pipe shall meet the leakage requirements of the pressure test specified.**

Pipe Jointing

Polyethylene Pipe

Sections of polyethylene replacement pipe shall be assembled and joined on the job site above the ground. Jointing shall be accomplished by the heating and butt-fusion system in strict conformance with the manufacturer's printed instructions.

The butt-fusion system for pipe jointing shall be carried out in the field by operators with prior experience in fusing polyethylene pipe with similar equipment using proper jigs and tools per standard procedures that are outlined by the pipe manufacturer. These joints shall have a smooth, uniform, double-rolled back bead made while applying the proper melt, pressure and alignment. It shall be the sole responsibility of the Contractor to provide an acceptable butt-fusion joint. All joints shall be made available for inspection by the Contracting Officer before insertion. The replacement pipe shall be joined on the site in appropriate working lengths near the insertion pit. The maximum length of continuous replacement pipe which shall be assembled above ground and pulled on the job site at any one time shall be 600 linear feet. Interior ribs created by the fusion process will be trimmed of and removed from pipe.

C. The location and number of insertion or access pits shall be planned by the Contractor and submitted in writing for approval by the Contracting Officer prior to excavation. The pits shall be located such that their total number shall be minimized and the length of replacement pipe installed in a single pull shall be maximized. **To minimize the number of access pits, the pipe bursting head used must be able to be received and removed in a manhole, reducing the number of receiving pits required.** Utilizing the Vermeer Hammerhead Mole system or equivalent system that eliminates a receiving pit or extensive manhole reconstruction is approved.

Use the excavation sites for Manhole Removal and Replacement for Insertion Pits. Excavation, shoring, backfilling and reclamation of the insertion pits shall not be paid for separately, but shall be included in the unit price bid for Manhole Removal and Replacement.

D. The Contractor shall allow the liner to return to its original length and shape in the unstressed state and then trim the excess liner in the manholes. The liner pipe manufacturer's recommendations shall be followed regarding the relief and normalization of stress and strain due to temporary stretching or elongation after pulling operations are completed. Time allowed for stress and strain relief shall be not less than 24 hours.

In insertion pits where two HDPE ends require joining the Contractor will use a Rockwell Full Circle Stainless Steel Clamp Coupling No. 261-069012 or approved equal. The clamp couplings required shall be considered incidental to the contract.

E. Though the installation process may be licensed or proprietary in nature, the Contractor shall not change any material, thickness, design values or procedural matters stated or approved in the submittals, without the Contracting Officer's prior knowledge and pre-approval. The Contractor shall submit, in writing, full details about component materials, their properties and installation procedures and abide by them fully during the entire course of the project.

All sewer rehabilitation by pipe bursting systems are being considered structurally equal processes as far as "end product" required by the Owner. The minimum required performance criteria and/or standards, physical/structural

properties, chemical resistance tests and the replacement pipe thickness as given in this specification shall be strictly complied with. It shall be the responsibility of the Contractor to comply with the specifications in full without any request for any change after the award of the contract. The Owner reserves the right to accept, reject or modify any later requests for change at no additional cost to the Owner - even to the extent of asking for a credit for the Owner.

F. The replacement pipe shall be installed with an A-LOC water tight seal with the existing or new manhole. Half-inch diameter activated oakum ban soaked in Scotch seal 5600 or equal shall be applied circumferentially on the replacement pipe and encased with a cementitious mortar to prevent inflow at the manhole. The top half of the pipe within the manhole shall be neatly cut off and not broken or sheared off at least 4 inches away from the manhole walls. The channel in the manhole shall be a smooth continuation of the pipe(s) and shall be merged with other lines or channels, if any. Channel cross-section shall be "U" shaped with a minimum height of half pipe diameter to 3/4 of the pipe diameter for 15 inches or larger. The side of the channels shall be built up with mortar or concrete, as specified, to provide benches at a maximum of 1 in 12 pitch towards the channel.

The replacement pipe in the manhole shall be sealed as specified above before proceeding on to the next manhole section and all manholes shall be individually inspected for replacement pipe cut-offs, benching and sealing works.

G. Piercing Tool

1. The piercing tool must have a free-floating valve to eliminate striker binding or tool stalling.

2. The piercing tool must be able to be disassembled in the field and repaired under 10 minutes without using more than 35-foot pounds (47Nm) of torque or force to disassemble.

3. The piercing tool must utilize composite wear rings on the striker to eliminate metal-to-metal contact, provide for easier starting and reduce tool rebuild costs.

4. The piercing tool must have a serviceable end whip hose that can be replaced without taking the tool apart.

5. The body of the piercing tool must be 1 piece with a forged head with a minimum diameter and a minimum length per the manufacturer's requirements for each diameter of pipe replaced.

6. The striker must have front parts for added power when in reverse mode.

7. The piercing tool must have a forward, neutral and reverse valve position.

8. The piercing tool must incorporate, as an option, a pulling cable connected to the rear of the tool, therefore, enabling the piercing tool to be retrieved in an emergency situation.

9. The piercing tool must be able to adapt to pulling pipe, when required, in the field.

POST INSTALLATION

A. TESTING OF THE REPLACEMENT PIPE

1. Testing shall be required after the replacement pipe has been installed in the existing sanitary sewer main. The first is a low-pressure air test of replacement pipe before it has been sealed in place at the manholes and before any service reconnections have been made. The purpose of this test is to check the integrity of the joints that have been made and to verify that the replacement pipe has not been damaged by inserting it into the sanitary sewer.

Low-Pressure Air Test Procedure

After a manhole-to-manhole section of sanitary sewer main has been pipe bursted and prior to any service lines being connected to the replacement pipe, the pipe shall be plugged at each manhole with pneumatic plugs. The design of the plugs shall be such that they will hold

against the test pressure without requiring external blocking or bracing. One of the plugs shall have 3 air hose connections: 1 for the inflation of the plug, 1 for reading the air pressure in the sealed line and 1 for introducing air into the sealed line. Low pressure air shall then be introduced into the sealed line until the internal air pressure reaches 5.0 psig greater than the average back pressure resulting from any ground water that may be over the pipe. At least 2 minutes shall elapse to allow the pressure to stabilize.

The time required for the internal pressure to decrease from 3.5 to 2.5 psig greater than the average back pressure resulting from any ground water that may be over the pipe, shall not be less than the time shown for a given pipe diameter in the following table:

CARRIER PIPE DIAMETER (Inches)	MINIMUM ELAPSED TIME (Minutes)
8	4
10	**5**
12	6
15	7

METHOD OF MEASUREMENT.

Basis of payment will be made on a per lineal foot of a specific diameter completed and accepted by the Engineer.

BASIS OF PAYMENT.

Payment will be made under:

Pay Item	**Pay Unit**
Burst Sewer Main 8"	LF
Burst Sewer Main 12"	LF
Burst Sewer Main 15"	LF
Burst Sewer Main 18"	LF
Burst Sewer Main 21"	LF
Burst Sewer Main 24"	LF

11. ADD MANHOLES

Description. This work consists of constructing 4', 5' and 6' diameter manholes as required and as indicated in the plans and specifications. This work includes all labor, equipment, and materials necessary to construct multi diameter manholes.

Materials. Materials will conform to **"The Standard Specifications".**

Construction Requirements. This item shall be constructed in conformance with section 02700 of **"The Standard Specifications"** and **The Standard Drawings** therein incorporated. Contractor should anticipate laying pipe continuously and without connections into the manhole, and forming the trough once the manhole is set at proper grade. A joint of pipe and approved coupling (DWF) is to be provided as subsidiary to this item for each sewer main tributary to each manhole.

Method of Measurement. The quantity of manholes to be measured for payment will be by the each unit completed in place and accepted, consisting of all labor materials, tools, equipment, and other incidentals necessary for doing all work involved in excavating, back filling, furnishing, fabricating, transporting, and constructing pre-cast concrete manholes.

Basis of Payment.

Payment will be made under:

Pay Item	**Pay Unit**
Add Manhole 4' (<10')	EA
Add Manhole 4' (10'-15')	EA
Add Manhole 4' (>15')	EA
Add Manhole 5' (<10')	EA
Add Manhole 5' (10'-15')	EA
Add Manhole 5' (>15')	EA
Add Manhole 6' (<10')	EA
Add Manhole 6' (10'-15')	EA
Add Manhole 6' (>15')	EA

12. REMOVE & REPLACE (R&R) EXISTING MANHOLES

Description. This work consists of removing existing manholes and constructing 4', 5' and 6' diameter manholes as required and as indicated in the plans and specifications. This work includes all labor, equipment, and materials necessary to construct multi diameter manholes.

Materials. Materials will conform to "The **Standard Specifications".**

Construction Requirements. This item shall be constructed in conformance with section 02700 of **"The Standard**

Specifications" and **The Standard Drawings** therein incorporated. Contractor should anticipate laying pipe continuously and without connections into the manhole, and forming the trough once the manhole is set at proper grade. A joint of pipe and approved coupling (DWF) is to be provided as subsidiary to this item for each sewer main tributary to each manhole.

Method of Measurement. The quantity of manholes to be measured for payment will be by the each unit completed in place and accepted, consisting of all labor materials, tools, equipment, and other incidentals necessary for doing all work involved in excavating, disposing, back filling, furnishing, fabricating, transporting, and constructing pre-cast concrete manholes and removal of existing manhole.

Basis of Payment.

Payment will be made under:

Pay Item	**Pay Unit**
R&R Manhole 4' (<10')	EA
R&R Manhole 4' (10'-15')	EA
R&R Manhole 4' (>15')	EA
R&R Manhole 5' (<10')	EA
R&R Manhole 5' (10'-15')	EA
R&R Manhole 5' (>15')	EA
R&R Manhole 6' (<10')	EA
R&R Manhole 6' (10'-15')	EA
R&R Manhole 6' (>15')	EA

13. ELIMINATE MANHOLES

Description. This work consists of removing 4', 5' and 6' diameter manholes as required and as indicated in the plans and specifications. This work includes all labor, equipment, and materials necessary to remove and dispose of multi diameter manholes.

Materials. Materials will conform to **"The Standard Specifications".**

Construction Requirements. Remove existing manhole and dispose of the manhole.

Method of Measurement. The quantity of manholes to be measured for payment will be by the each (EA) unit removed and disposed of.

Basis of Payment.

Payment will be made under:

Pay Item	**Pay Unit**
Eliminate Manhole 4' (<10')	EA
Eliminate Manhole 4' (10'-15')	EA
Eliminate Manhole 4' (>15')	EA

Eliminate Manhole 5' (<10')	EA
Eliminate Manhole 5' (10'-15')	EA
Eliminate Manhole 5' (>15')	EA
Eliminate Manhole 6' (<10')	EA
Eliminate Manhole 6' (10'-15')	EA
Eliminate Manhole 6' (>15')	EA

14. CONNECT TO MANHOLE

Description. This work consists of connecting to an existing manhole. Usually these connections are to manholes replaced in a recent rehabilitation project.

Materials. Materials will conform to **"The Standard Specifications".** Where connecting to a PVC sewer main stubbed out of a manhole non-shear couplings such as Dallas Fort Worth non-shear couplings will be used.

Construction Requirements. This item shall be constructed in conformance with section 02700 of **"The Standard Specifications".** Contractor will connect to existing PVC stub out or break into existing manhole as necessary to accomplish connection. Where break in is necessary, manhole repairs will be made with a microsilica mortar with a minimum compressive strength of 9000 psi. All patching will be smooth and conform to the form of the manhole before the break in occurred. All patching will result in a tight leak free system.

Method of Measurement. The quantity of Connect to Manhole to be measured for payment will be by the each unit completed in place and accepted, consisting of all labor materials, tools, equipment, and other incidentals necessary for doing all work involved in connecting to an existing manhole.

Basis of Payment.

Payment will be made under:

Pay Item	**Pay Unit**
Connect to Manhole	EA

15. ROCK MANHOLE STABILIZATION

Description. This work consists of over excavation of manhole base. The contractor shall rock fill the area of over excavation as necessary to stabilize the base of the manhole. This work item may or may not be used as ground water and weather conditions may vary.

Construction Requirements. This work item consists of all labor, materials, and equipment necessary for excavation, removal and disposal of muck, replacement of muck with rock as necessary to stabilize the base of the manholes and/or sewer main being constructed.

Materials. The rock for this work item will consist of a well graded durable crushed material with particles ranging from 1" to 6" on the particles largest dimension. Crushed concrete or other acceptable material is permitted, if approved by engineer. Crushed asphalt will not be permitted.

Method of Measurement. Rock Manhole Stabilization will be measured by the cubic yard (CY) of Rock satisfactorily delivered, placed and accepted. Included in this measurement will be the removal, transportation and disposal of muck.

Basis of Payment. Payment will be made under:

PAY ITEM	**PAY UNIT**
Rock Manhole Stabilization	CY

16. ROCK PIPE STABILIZATION

Description. This work consists of over excavation of pipe base. The contractor shall rock fill the area of over excavation as necessary to stabilize the base of the sewer pipe. This work item may or may not be used as ground water and weather conditions may vary.

Construction Requirements. This work item consists of all labor, materials, and equipment necessary for excavation, removal and disposal of muck, replacement of muck with rock as necessary to stabilize the base of the sewer main being constructed.

Materials. The rock for this work item will consist of a well graded durable crushed material with particles ranging from 1" to 6" on the particles largest dimension. Crushed concrete or other acceptable material is permitted, if approved by engineer. Crushed asphalt will not be permitted.

Method of Measurement. Rock Manhole Stabilization will be measured by the cubic yard (CY) of Rock satisfactorily delivered, placed and accepted. Included in this measurement will be the removal, transportation and disposal of muck.

Basis of Payment. Payment will be made under:

PAY ITEM	**PAY UNIT**
Rock Pipe Stabilization	CY

17. SERVICE RECONNECT (Restore Sewer Service)

Description. This work consists of reconnecting existing services to constructed sewer main as indicated in the plans and specifications; reestablishing sewer service after sewer lining; and reconnecting sewer service after bursting. This work includes all labor, equipment, and materials necessary to reconnect multi diameter sewer services.

Materials. Materials will conform to **"The Standard Specifications".**

Construction Requirements. This item shall be constructed in conformance with section 02700 of **"The Standard Specifications"** and **The Standard Drawings** therein incorporated. Where reconnected Services are along the sections of sewer that are burst, the service will be exposed prior to bursting the sewer and a one foot section of service will be removed. This section removed will eliminate the transmission of vibrations from the burst operation (which have been shown to crack services remote to the bursting process) to the service. The exposure of the service to isolate the service from bursting vibrations will be limited in extent and in no case extend to the pipe to be burst since it has been shown that the bursting mandrill sometimes follows the service when it is exposed to the host pipe. In the case of sewer lining the service will be reestablished with a cross sectional area of not less than 95% of the diameter of the service to be reestablished.

Method of Measurement. The quantity of service reconnects to be measured for payment will be by the each unit completed in place and accepted, consisting of all labor materials, tools, equipment, and other incidentals necessary for doing all work involved in excavating, disposing, back filling, furnishing, fabricating, transporting, and reconnecting sewer services.

Basis of Payment.

Payment will be made under:

Pay Item	**Pay Unit**
Service Reconnect (Construct)	EA
Service Reconnect (Line)	EA
Service Reconnect (Burst)	EA

18. ASPHALT REPLACEMENT AND PATCHING

Description. This item consists of removal and disposal of existing asphalt and replacement with new asphalt and compacted 6" base course underlayment. All labor, equipment, materials, tools, excavation, disposal and transportation necessary to accomplish this task is included in this item.

Construction Requirements. Asphalt replacement and patching shall meet all requirements of the **"Standard Specifications Sections 02512 and 02515"** as the same may hereafter be further amended, attached hereto and incorporated by this reference as though fully set herein. The typical section for the street repairs is shown on standard drawing 022202A and standard drawing 0251501 and standard drawing 251502 will be complied with. **6" base course is subsidiary to this item.**

Materials. The materials for asphalt will meet the requirements of Section 02512 of the Standard Specifications. Base Course will meet the requirements of the "Standard Specifications".

Method of Measurement. Units of measurement for asphalt patching are by the square yard (SY) satisfactorily placed, and densified. This item uses a 20′ wide area of asphalt patch by the length of the project plus 40 additional overrun for sewer projects. A pay quantity of 20′x20′ is used for manhole replacements. A pay quantity of 14′ wide and the project length plus 40′ is used for water projects. The asphalt will match existing thickness with a minimum thickness of 4″ and up to 6″ maximum. All lifts will be 2″.

Basis of Payment. Payment will be made under:

Pay Item	**Pay Unit**
Asphalt Replacement	SY

19. ALLEY SURFACE RESTORATION

Description. This item consists of restoring gravel surfaces to preconstruction or better grades and conditions. All labor, equipment, materials, tools, excavation, disposal and transportation necessary to accomplish this task is included in this item.

Construction Requirements. Gravel Surface Resurfacing shall meet all requirements of the **"Standard Specifications Section 02227"**. Surface will be restored to an equivalent of 6 inches of grading W through the replacement of excavated materials where materials meet grading W requirements and with imported grading W materials where onsite materials do not meet requirements.

Materials. The materials for Alley Resurfacing will meet the requirements of the "Standard Specifications Section 02227". Base Course will meet the requirements of the "Standard Specifications". Gravel material for the top surface will be such that 100% by weight will pass the 1.5″ sieve and 90% by weight will be retained on the 0.75″ sieve as per Section 02227.

Method of Measurement. Units of measurement for Alley Resurfacing is by the square yard (SY) satisfactorily placed, and densified.

Basis of Payment. Payment will be made under:

Pay Item	**Pay Unit**
Gravel Resurfacing	SY

20. SURFACE RESTORATION

Description. This item consists of restoring surfaces to preconstruction or better grades and conditions. All labor, equipment, materials, tools, excavation, disposal and transportation necessary to accomplish this task is included in this item.

Construction Requirements. Landscaped surfaces will be restored to preconstruction conditions. All labor,

equipment, materials, tools, excavation, disposal and transportation necessary to accomplish this task is included in the item.

Materials. The materials for Surface Restoration will be such that the surface is restored to preconstruction conditions, using seed, mulch and fertilizer as necessary to successfully restore surface. Greenway restoration will comply with the requirements of Cheyenne Parks and Recreation.

Method of Measurement. Units of measurement for Surface Restoration is by the square yard (SY) satisfactorily placed.

Basis of Payment. Payment will be made under:

Pay Item	**Pay Unit**
Surface Restoration	SY

21. IMPORT BACKFILL

Definition: This item defines the requirements for imported backfill where needed for excavated trenches in areas where the excavated material is unsuitable for backfill. This work item may or may not be used as ground water and weather conditions may vary.

Construction Requirements: The Engineer or Owner's Representative will determine areas that require the imported backfill. Construction of the backfill will conform to Type A Trench Backfill Procedures.

Materials: The requirements for aggregate of untreated sub-base and base grading W as noted in Section 02190, Paragraph 2.04 of the Standard Specifications or Engineer approved equal.

Method of Measurement: The imported trench backfill quantity on the bid form is intended to facilitate construction in areas where the existing trench material is unstable and unsuitable for immediate re-use as backfill and shall be utilized only upon written approval from the BOPU. Contractor will provide any quantity in excess of the bid form quantity at Contractor's own expense. Import backfill may also be used to properly condition existing trench material for re-use. No separate payment will be made for backfill in excess of the bid form quantity, but deletions of the import quantity will occur if import backfill is not used.

The measurement of this item is the Cubic Yard (CY) properly compacted in place to the neat lines of the specified trench width and depth and will constitute full compensation for furnishing all labor, equipment, and removal and disposal of the unsuitable material, excavating, hauling, placement and compaction in the trench of the imported backfill material and all other incidental items and operations to complete this item. The quantity of imported backfill will be paid only for the minimum trench width and depth shown on the

drawings. Any quantities used outside the minimum trench width and depth will be at the expense of the Contractor.

Basis of Payment:

Payment will be made under:

Pay Item	**Pay Unit**
Import Backfill	CY

22. CONCRETE REPLACEMENT & PATCHING (Misc. Concrete)

Description. This item consists of removal and disposal of existing Concrete and replacement with new Concrete and compacted 6" base course underlayment. All labor, equipment, materials, tools, excavation, disposal and transportation necessary to accomplish this task is included in this item.
ADA Ramps: are estimated on the basis of 82 sq. ft. of sidewalk, 15 linear feet of curb and gutter, and 62 sq. ft. of concrete pavement.
Alley Approach: are estimated on the basis of 25 linear feet of Curb and Gutter, and 300 sq. ft. of Valley Pan/Concrete Pavement.
Sidewalk: are estimated on the basis of constructing a 4" thick sidewalk and removal and disposal of removed sidewalk material.
Concrete Pavement: are estimated based on 8" thick concrete pavement installed and removal and disposal of removed concrete pavement material.
Curb & Gutter: are estimated based on linear feet of TYPE A Curb and Gutter installed and removal and disposal of removed Curb and Gutter.

Construction Requirements. Concrete replacement and patching shall meet all requirements of the "Standard Specifications". All concrete replacement will be constructed in accordance with these specifications. **6" base course is subsidiary to this item. Removals are performed in accordance with Section 02075. Construct ADA ramps in accordance with latest ADA standards. Subgrade compaction is required to be a minimum of (95) percent of maximum dry density and is determined by ASTM D698. Test at every drive approach, curb turn fillet, every 200 square feet of valley gutter, and every 100 linear feet of curb & gutter or sidewalk. Make disturbed alley approaches ADA compliant.**

Materials. The materials including subsidiary base course for concrete pavement will meet the requirements of the "Standard Specifications". All concrete replacement in the right of way will be 4500 psi fiber reinforced concrete, and all concrete pavement will be 4500 psi minimum.

Method of Measurement. Units of measurement for concrete replacement are as indicated below. Payment will be made for area satisfactorily placed, finished and cured.

Basis of Payment. Payment will be made under:

Pay Item	**Pay Unit**
Concrete Pavement	SF

Valley Pan	SF
Sidewalk	SF
Curb & Gutter	LF
Alley Approach	EA
ADA Corner	EA
Curb Fillet	EA
Decorative Sidewalk	SF

23. BOPU INSPECTION OVERTIME

This item will be utilized to reimburse the Contractor for all BOPU overtime billed against the project. BOPU invoices must be submitted to document reimbursement. The invoice amount will be increased by 10% to compensate the Contractor for handling and processing the invoice.

24. FORCE ACCOUNT

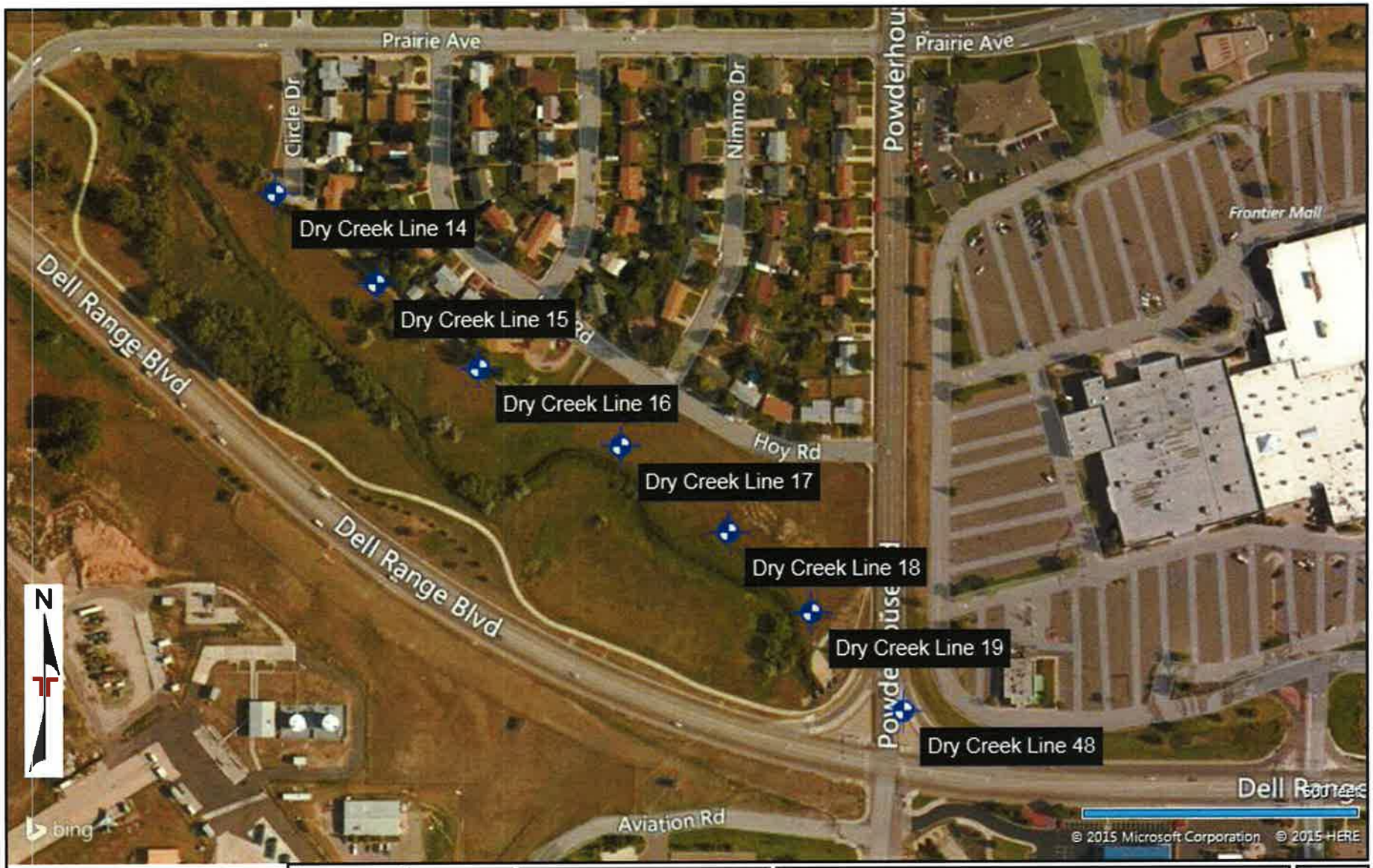
This item will be for change order costs and will only be expensed by a change order authorized in writing by the Contractor and the BOPU.

BOARD OF PUBLIC UTILITIES, CHEYENNE, WY

IX. PART IX

GEOTECHNICAL REPORT

BID 2016SRH01



AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Manager:	BW
Drawn by:	TO
Checked by:	BW
Approved by:	BW

Project No.	24155036
Scale:	AS SHOWN
File Name:	BLD
Date:	8/26/15

Terracon
1505 Old Happy Jack Road
Cheyenne, WY 82001

EXPLORATION PLAN

FY 2016 Water and Sewer Rehabilitation
Various Locations
Cheyenne, WY

Exhibit
A-8

BORING LOG NO. Dry Creek Line 14

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.16328° Longitude: -104.81326°

DEPTH	ELEVATION (Ft.)	Description	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.3		FILL - ASPHALT, 3 inches								
1.0		SILTY CLAYEY SAND (SC-SM), dark brown to black, fine to medium sand, loose				3-4-4 N=8	13 8			
3.0		POORLY GRADED SAND WITH SILT (SP-SM), brown to rust brown, fine to medium to coarse sand, loose								
7.0		SANDY LEAN CLAY (CL), gray, fine sand, soft	5	▽ ▽		2-2-2 N=4	19			
10.5		CLAYEY SAND (SC), black to dark brown, fine to medium to coarse sand, loose	10			1-2-2 N=4	25			
14.5		POORLY GRADED SAND WITH SILT (SP-SM), brown, fine to medium sand, loose								
		POORLY GRADED SAND WITH SILT (SP-SM), brown, fine to medium to coarse sand, medium dense to very dense	15			3-4-6 N=10	23 21			
19.7		cemented at 19.5'				13-50/2"	13			
		Boring Terminated at 19.7 Feet								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater observed during drilling*

▽ *Groundwater observed immediately after drilling*

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 7/31/2015 | Boring Completed: 7/31/2015

Drill Rig: CME75 | Driller: SL

Project No.: 24155036 | Exhibit: A-29

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Dry Creek Line 15

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.16283° Longitude: -104.81259°

DEPTH	ELEVATION (Ft.)	Description	DEPTH (Ft.)	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		CLAYEY SAND (SC), brown, fine to medium sand, loose to medium dense, trace gravel, vegetation to 0.5'			12-14-15 N=29	7			
4.5		**SILTY SAND (SM)**, brown, fine to medium sand, loose	5		2-4-3 N=7	19 7			
7.0		**POORLY GRADED SAND WITH GRAVEL (SP)**, brown, fine to medium to coarse sand, very loose, trace clay							
10.5		**SILTY SAND (SM)**, greenish-brown, fine sand, medium dense, trace clay color changes to brown at 11.5'	10		3-2-1 N=3	11			
16.0		**SILTY CLAYEY SAND (SC-SM)**, brown, fine to medium sand, medium dense to very dense	15		5-8-11 N=19	20			
19.7		cemented at 19.5' ***Boring Terminated at 19.7 Feet***			5-50/2"	20			

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 8/13/2015 | Boring Completed: 8/13/2015

Drill Rig: CME75 | Driller: TO

Project No.: 24155036 | Exhibit: A-30

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Dry Creek Line 16

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.16241° Longitude: -104.81191°

DEPTH	ELEVATION (Ft.)	Description	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.5		FILL - POORLY GRADED SAND WITH GRAVEL (SP), brown, fine to medium to coarse sand, medium dense	12-8-6 N=14	2 12			
		FILL - CLAYEY SAND (SC), dark brown, fine to medium sand, medium dense to very loose,vegetation near 4'					
4.0		CLAYEY SAND (SC), dark brown, fine to medium sand, very loose	1-0-1 N=1	21			
5.0		SILTY CLAYEY SAND (SC-SM), brown, fine to medium sand, loose, varies to silty sand with clay					
8.0		WELL GRADED GRAVEL (SW), brown, loose	2-2-2 N=4	3			
10.0		SILTY CLAYEY SAND (SC-SM), brown, fine to medium sand, medium dense, varies to silty sand trace clay slightly cemented below 10'					
		1' heave at 14' sample	31-37-30 N=67	14			
19.0		***Boring Terminated at 19 Feet***		17			

DEPTH (Ft.): 5, 10, 15

WATER LEVEL OBSERVATIONS: ▽ Groundwater observed during drilling; ▽ Groundwater observed immediately after drilling

SAMPLE TYPE

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:
Hole caved in at 8'

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 8/13/2015 | Boring Completed: 8/13/2015
Drill Rig: CME75 | Driller: TO
Project No.: 24155036 | Exhibit: A-31

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Dry Creek Line 17

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.16202° Longitude: -104.81097°

DEPTH	ELEVATION (Ft.)		FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		SILTY SAND (SM), dark brown, fine to medium sand, medium dense, vegetation to 2'	8-7-8 N=15	4			
2.0		**CLAYEY SAND (SC)**, dark brown, fine to medium sand, loose					
5.0		**SILTY CLAYEY SAND (SC-SM)**, light brown, fine to medium sand, loose	1-2-2 N=4	21 18			
8.0		**WELL GRADED SAND WITH GRAVEL (SW)**, brown, medium dense					
10.0		**SILTY CLAYEY SAND (SC-SM)**, brown, fine to medium sand, medium dense to very dense	3-6-9 N=15	12 23			
		cemented at 17.5'	5-9-14 N=23	21			
19.2		cemented at 19'	50/2"	7			
		Boring Terminated at 19.2 Feet					

DEPTH (Ft.) | WATER LEVEL OBSERVATIONS | SAMPLE TYPE

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater observed during drilling*

▽ *Groundwater observed immediately after drilling*

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 8/13/2015 | Boring Completed: 8/13/2015

Drill Rig: CME75 | Driller: TO

Project No.: 24155036 | Exhibit: A-32

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Dry Creek Line 18

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.16159° Longitude: -104.81026°

DEPTH	ELEVATION (Ft.)	DESCRIPTION	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		CLAYEY SAND (SC), dark brown, fine to medium sand, loose to medium dense, vegetation to 2'	4-7-6 N=13	9			
		color changes to brown at 3'	2-3-3 N=6	18			
8.0		**SILTY SAND (SM)**, brown, fine to medium sand, medium dense to very dense, trace clay	4-7-11 N=18	21			
		cemented at 14.25' to 15'	50/5"	18			
15.0		**SILTY CLAYEY SAND (SC-SM)**, brown, fine to medium sand, medium dense	6-10-15 N=25	21			
20.5		***Boring Terminated at 20.5 Feet***					

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 8/13/2015 | Boring Completed: 8/13/2015

Drill Rig: CME75 | Driller: TO

Project No.: 24155036 | Exhibit: A-33

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Dry Creek Line 19

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.16119° Longitude: -104.80971°

DEPTH	ELEVATION (Ft.)	DESCRIPTION	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.0		**CLAYEY SAND (SC)**, dark brown, fine to medium sand, loose to medium dense, trace gravel, vegetation to 0.5'			X	5-7-8 N=15	7			
		color changes to brown/light brown at 4'	5		X	4-4-4 N=8	19			
6.0		**SILTY CLAYEY SAND (SC-SM)**, brown, fine sand, loose to very dense	10		X	2-3-4 N=7	22			
		cemented at 15' to 17'	15		X	4-19-50/2"	17			
20.5		slightly cemented at 20'	20		X	9-11-22 N=33	19			
		Boring Terminated at 20.5 Feet								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 8/13/2015 | Boring Completed: 8/13/2015

Drill Rig: CME75 | Driller: TO

Project No.: 24155036 | Exhibit: A-34

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Dry Creek Line 48

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.1607° Longitude: -104.8091°

DEPTH	ELEVATION (Ft.)	Description	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.3		**CONCRETE**, 3 inches					
0.3		**BASE COURSE**, 1 inch					
		FILL - CLAYEY SAND (SC), dark brown, fine to medium sand, very loose to loose	1-2-5 N=7	18			
		sandy lean clay lense, color changes to grayish-brown at 3.5'	3-5-7 N=12	17			
		red brick construction debris at 10'	1-1-2 N=3	20			
12.0		**CLAYEY SAND (SC)**, dark brown, fine to medium sand, medium dense, trace vegetation	3-5-10 N=15	17			
17.0		**SILTY SAND (SM)**, brown, fine to medium sand, medium dense, trace clay	3-5-7 N=12	19			
20.5		***Boring Terminated at 20.5 Feet***					

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures

See Appendix B for description of laboratory procedures and additional data (if any).

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 8/21/2015 | Boring Completed: 8/21/2015

Drill Rig: CME75 | Driller: TO

Project No.: 24155036 | Exhibit: A-63

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

Project Manager: BW	Project No. 24155036	Terracon	EXPLORATION PLAN	Exhibit
Drawn by: TO	Scale: AS SHOWN	1505 Old Happy Jack Road	FY 2016 Water and Sewer Rehabilitation	A-5
Checked by: BW	File Name: BLD	Cheyenne, WY 82001	Various Locations	
Approved by: BW	Date: 8/26/15		Cheyenne, WY	

BORING LOG NO. Andover Drive 7

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.14953° Longitude: -104.80386°

DEPTH	ELEVATION (Ft.)	GRAPHIC LOG	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.3										
0.6										
					X	4-5-15 N=20	19			
			5		X	4-4-4 N=8	29			
			10		X	4-6-8 N=14	29			
			15		X	12-11-13 N=24	24			
			20		X	6-8-11 N=19	22			
17.0										
20.5										

ASPHALT, 4 inches

BASE COURSE, 3 inches

CLAYEY SAND (SC), dark brown to brown, fine sand, loose to medium dense

slightly cemented lense at 14.75' to 15'

SILTY SAND (SM), brown, fine sand, medium dense, trace clay

Boring Terminated at 20.5 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures

See Appendix B for description of laboratory procedures and additional data (if any).

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 7/16/2015 | Boring Completed: 7/16/2015

Drill Rig: CME55 | Driller: TO

Project No.: 24155036 | Exhibit: A-22

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Andover Drive 8

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.15035° Longitude: -104.80387°

DEPTH	ELEVATION (Ft.)	Description	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.3		**ASPHALT**, 3 inches					
0.5		**BASE COURSE**, 3 inches					
		CLAYEY SAND (SC), brown, fine sand, loose to medium dense, trace calcium carbonate stringers	5-4-4 N=8	8			
			5-5-6 N=11	14			
		slightly cemented at 12'	10-12-12 N=24	20			
18.0		**SILTY SAND (SM)**, brown, fine to medium sand, medium dense, trace clay up to 19.5'	15-11-9 N=20	12			
20.5			6-8-11 N=19	27			
		Boring Terminated at 20.5 Feet					

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 7/16/2015 | Boring Completed: 7/16/2015

Drill Rig: CME55 | Driller: TO

Project No.: 24155036 | Exhibit: A-23

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Andover Drive 9

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.15084° Longitude: -104.80388°

DEPTH	ELEVATION (Ft.)	Description	DEPTH (Ft.)	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.3		**ASPHALT**, 4 inches							
0.7		**BASE COURSE**, 4 inches							
		POORLY GRADED SAND WITH GRAVEL (SP), brown, fine to medium to coarse sand, medium dense to very dense			7-8-10 N=18	1			
					7-13-50/2"	1			
		cemented at 5' to 7'	5						
8.5		**CLAYEY SAND (SC)**, brown, fine sand, medium dense, slightly cemented			7-8-11 N=19	15			
		calcium carbonate stringers, sandy lean clay lenses at 12' to 16'	10						
			15		4-8-12 N=20	23			
20.5			20		5-8-11 N=19	21			
		Boring Terminated at 20.5 Feet							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 7/16/2015 | Boring Completed: 7/16/2015

Drill Rig: CME55 | Driller: TO

Project No.: 24155036 | Exhibit: A-24

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Andover Drive 10

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.15151° Longitude: -104.80371°

DEPTH	ELEVATION (Ft.)	Description	DEPTH (Ft.)	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.3		ASPHALT, 4 inches							
0.6		BASE COURSE, 3 inches							
		CLAYEY SAND (SC), dark brown, fine sand, loose to very dense			4-3-3 N=6	11			
		color changes to brown at 3'							
			5		4-3-6 N=9	17			
		slightly cemented at 8'							
			10		10-14-16 N=30	16			
		calcium carbonate stringers at 12'							
			15		6-10-11 N=21	27			
			20		21-34-28 N=62	12			
20.5		***Boring Terminated at 20.5 Feet***							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 7/16/2015 | Boring Completed: 7/16/2015

Drill Rig: CME55 | Driller: TO

Project No.: 24155036 | Exhibit: A-25

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Manager:	BW
Drawn by:	TO
Checked by:	BW
Approved by:	BW

Project No.	24155036
Scale:	AS SHOWN
File Name:	BLD
Date:	8/26/15

Terracon
1505 Old Happy Jack Road
Cheyenne, WY 82001

EXPLORATION PLAN

FY 2016 Water and Sewer Rehabilitation

Various Locations
Cheyenne, WY

Exhibit

A-15

BORING LOG NO. E. 10th Street 55

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.13467° Longitude: -104.75887°

DEPTH	ELEVATION (Ft.)		SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.4		**ASPHALT**, 4.5 inches						
0.8		**BASE COURSE**, 4.5 inches						
		CLAYEY SAND WITH GRAVEL (SC), dark brown, loose to medium dense, fine to medium sand		3-5-5 N=10	11			
				3-2-3 N=5	11			
6.0		**SILTY CLAYEY SAND (SC-SM)**, brown, medium dense, fine to medium sand		0-3-7 N=10	19			
				5-7-8 N=15	20			
				4-5-7 N=12	19			
20.5		***Boring Terminated at 20.5 Feet***						

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater observed during drilling*

▽ *Groundwater observed immediately after drilling*

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 8/25/2015 | Boring Completed: 8/25/2015

Drill Rig: CME-75 | Driller: TO

Project No.: 24155036 | Exhibit: A-70

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. E. 10th Street 56

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.13466° Longitude: -104.75798°

DEPTH	ELEVATION (Ft.)	Description	DEPTH (Ft.)	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.3		**ASPHALT**, 4 inches							
0.8		**BASE COURSE**, 5 inches							
		CLAYEY SAND (SC), dark brown, medium dense, fine to medium sand			6-6-5 N=11	10			
3.5		**POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM)**, brown, loose, fine to medium sand	5		6-5-3 N=8	8			
5.5		**SILTY SAND (SM)**, trace clay, brown, medium dense, fine to medium sand							
8.0		**SILTY CLAYEY SAND (SC-SM)**, brown, medium dense to dense, fine to medium sand							
		slightly cemented to cemented lenses below 9'	10		12-5-5 N=10	20			
			15		4-23-23 N=46	18			
20.5			20		5-9-9 N=18	25			
		Boring Terminated at 20.5 Feet							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater observed during drilling*

No water present after drilling opperations - boring sealed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 8/25/2015 | Boring Completed: 8/25/2015

Drill Rig: CME-75 | Driller: TO

Project No.: 24155036 | Exhibit: A-71

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. E. 10th Street 57

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.13464° Longitude: -104.75686°

DEPTH	ELEVATION (Ft.)		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.4		**ASPHALT**, 4.5 inches								
0.7		**BASE COURSE**, 4 inches								
		SILTY CLAYEY SAND (SC-SM), dark brown, loose, fine to medium to coarse sand			X	5-4-3 N=7	16			
2.5		**CLAYEY SAND (SC)**, dark brown to brown, loose, fine to medium sand	5		X	3-2-2 N=4	17			
7.0		**SILTY CLAYEY SAND (SC-SM)**, brown, loose to medium dense, fine to medium sand		▽						
			10		X	3-3-2 N=5	10			
15.0		**SILTY SAND (SM)**, trace clay, brown, medium dense, fine to medium sand	15		X	5-7-9 N=16	20			
			20		X	5-8-4 N=12	20			
20.5		***Boring Terminated at 20.5 Feet***								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater observed during drilling*

▽ *Groundwater observed immediately after drilling*

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 8/25/2015 | Boring Completed: 8/25/2015

Drill Rig: CME-75 | Driller: TO

Project No.: 24155036 | Exhibit: A-72

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

Project Manager:	BW
Drawn by:	TO
Checked by:	BW
Approved by:	BW
Project No.	24155036
Scale:	AS SHOWN
File Name:	BLD
Date:	8/26/15

Terracon
1505 Old Happy Jack Road
Cheyenne, WY 82001

EXPLORATION PLAN

FY 2016 Water and Sewer Rehabilitation

Various Locations
Cheyenne, WY

Exhibit A-4

BORING LOG NO. Pebrican Avenue 5

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.1383° Longitude: -104.80785°

DEPTH	ELEVATION (Ft.)	Description	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.3		**ASPHALT**, 3 inches						
0.5		**BASE COURSE**, 3 inches						
1.0		**CLAYEY SAND (SC)**, dark brown to black, fine sand, medium dense						
		CLAYEY SAND (SC), brown, fine to medium sand, medium dense, trace calcium carbonate stringers		4-5-7 N=12	13			
				4-4-6 N=10	19			
8.0		**POORLY GRADED SAND WITH SILT (SP-SM)**, brown, fine to medium to coarse sand, medium dense, trace clay		3-7-8 N=15	16			
12.0		**CLAYEY SAND (SC)**, brown, fine to medium sand, medium dense		4-5-6 N=11	25			
				4-5-6 N=11	28			
20.5		***Boring Terminated at 20.5 Feet***						

DEPTH (Ft.) markers: 5, 10, 15, 20

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 7/16/2015 | Boring Completed: 7/16/2015

Drill Rig: CME55 | Driller: TO

Project No.: 24155036 | Exhibit: A-20

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Pebrican Avenue 6

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.138° Longitude: -104.80766°

DEPTH	ELEVATION (Ft.)	GRAPHIC LOG	DESCRIPTION	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.1			**ASPHALT**, 1 inch								
0.3			**BASE COURSE**, 2 inches								
1.8			**CLAYEY SAND (SC)**, brown, fine to medium sand, very loose				3-2-1 N=3	9			
5.5			**POORLY GRADED SAND (SP)**, brown, fine to medium sand, loose, trace gravel	5			1-4-5 N=9	6			
11.0			**POORLY GRADED SAND (SP)**, brown, fine to medium to coarse sand, medium dense, trace clay, varies to clayey sand	10			3-5-6 N=11	16			
20.5			**CLAYEY SAND (SC)**, brown, fine sand, medium dense	15	▽		4-7-9 N=16	25			
			Boring Terminated at 20.5 Feet	20			8-12-12 N=24	27			

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures

See Appendix B for description of laboratory procedures and additional data (if any).

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

▽ *Groundwater observed during drilling*

▽ *Groundwater observed immediately after drilling*

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 7/16/2015 | Boring Completed: 7/16/2015

Drill Rig: CME55 | Driller: TO

Project No.: 24155036 | Exhibit: A-21

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

Project Manager: BW	Project No. 24155036	Terracon 1505 Old Happy Jack Road Cheyenne, WY 82001	EXPLORATION PLAN FY 2016 Water and Sewer Rehabilitation Various Locations Cheyenne, WY	Exhibit A-6
Drawn by: TO	Scale: AS SHOWN			
Checked by: BW	File Name: BLD			
Approved by: BW	Date: 8/26/15			

BORING LOG NO. Evans Avenue 11

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.1354° Longitude: -104.81145°

DEPTH	ELEVATION (Ft.)	GRAPHIC LOG	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
0.5										
0.6										
					X	4-4-5 N=9	3			
			5		X	4-4-3 N=7	4			
			10		X	18-0-1 N=1				
10.5										

ASPHALT, 6 inches

BASE COURSE, 1 inch

POORLY GRADED SAND WITH GRAVEL (SP), brown, fine to medium to coarse sand, loose to medium dense

boring terminated at suspect storm sewer line

Boring Terminated at 10.5 Feet

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures

See Appendix B for description of laboratory procedures and additional data (if any).

See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 7/17/2015 Boring Completed: 7/17/2015

Drill Rig: CME55 Driller: TO

Project No.: 24155036 Exhibit: A-26

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15

BORING LOG NO. Evans Avenue 12

PROJECT: FY-2016 Water & Sewer Rehabilitation

CLIENT: Cheyenne Board of Public Utilities

SITE: Cheyenne, Wyoming

LOCATION See Exhibit A-2

Latitude: 41.13605° Longitude: -104.81196°

DEPTH	ELEVATION (Ft.)	Description	Depth (Ft.)	Sample Type	Field Test Results	Water Content (%)	Dry Unit Weight (pcf)	Atterberg Limits LL-PL-PI	Percent Fines
0.4		**ASPHALT**, 5 inches							
0.7		**BASE COURSE**, 3 inches							
		SILTY SAND (SM), dark brown, fine to medium sand, medium dense, trace gravel			5-7-15 N=22	12			
2.5		**POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM)**, brown, fine to medium sand, dense	5		15-21-25 N=46	2			
8.0		**SILTY CLAYEY SAND (SC-SM)**, brown, fine to medium sand, medium dense to very dense	10		3-4-10 N=14	20			
		slightly cemented to cemented lenses below 10'	15		10-50/6"	19			
17.0		**CLAYEY SAND (SC)**, brown, fine sand, very dense, trace calcium carbonate stringers, slightly cemented	20		19-35-41 N=76	15			
20.5		***Boring Terminated at 20.5 Feet***							

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:
4" SFA

Abandonment Method:
Borings backfilled with soil cuttings and surface patched with cement grout upon completion.

See Exhibit A-1 for description of field procedures
See Appendix B for description of laboratory procedures and additional data (if any).
See Appendix C for explanation of symbols and abbreviations.

Notes:

WATER LEVEL OBSERVATIONS

No free water observed

Terracon
1505 Old Happy Jack Road
Cheyenne, Wyoming

Boring Started: 7/17/2015 | Boring Completed: 7/17/2015

Drill Rig: CME55 | Driller: TO

Project No.: 24155036 | Exhibit: A-27

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 24155036 FY-2016 WATER AND SEWER REHABILITATION PROJECTS.GPJ TERRACON2015.GDT 9/3/15