

Water Treatment Plant Polymer Blending Skid Replacement



Bid No. 2025-2026-013

Engineering
401 S. Johnstone Avenue, Bartlesville, OK 74003
918-338-4251

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INVITATION FOR BIDS

**City of Bartlesville
Water Treatment Plant Polymer Blending Skid Replacement
Bid No. 2025-2026-013**

Notice is hereby given that the City of Bartlesville will receive sealed bids at the office of the City Clerk until **2:00 p.m. on the 23rd day of February 2026** at such time bids will be opened and publicly read.

The project consists of furnishing all materials, labor, and expenses necessary to remove and replace two (2) polymer blending skids, one for filter aide, and the other for residuals, as called for in the plans and specifications on file in the Engineering Department, (918) 338-4251, City Hall, 401 South Johnstone Ave., Bartlesville, Oklahoma 74003. Plans, specifications, and contract documents may be examined and are available at a nonrefundable charge of **\$25.00** in this office, or they can be requested and received via email at no charge (ajvann@cityofbartlesville.org).

Proposals shall be submitted in sealed envelopes and marked, "City Clerk, City Hall, 401 S. Johnstone, Bartlesville, Oklahoma 74003. **PROPOSAL FOR WATER TREATMENT PLANT POLYMER BLENDING SKID REPLACEMENT, BID NO. 2025-2026-013.**" Proposals shall be accompanied by a five percent (5%) bid guarantee.

Each Bidder must deposit with his Bid, security in the amount, form, and subject to the conditions provided in the Instruction to Bidders. All Bids must be made on the required Bid form and Bidder shall be a record plan holder with the City.

The Owner reserves the right to waive any informalities or to reject any or all Bids and select the lowest and best bid.

Bids received more than ninety-six (96) hours (excluding Saturdays, Sundays and holidays) before the time set for receiving bids as well as bids received after the time set for receipt of bids will not be considered, and will be returned unopened. No Bidder may withdraw his Bid within 30 days after the actual date of the opening thereof.

DATED this 28th day of January, 2026.

Jason Muninger

City Clerk
By *Jason Muninger*

INSTRUCTIONS TO BIDDERS

Bid. No. 2025-2026-013

IB-1. PROPOSALS. All proposals must be made on the forms provided in this bound copy of the contract documents. All proposals must be legibly written in ink, with all prices given in words and figures. No alterations in proposal or in the printed forms therefor, by erasures, deletions, or interpolations will be acceptable unless each alteration is signed or initialed by the Bidder; if initialed, the Owner may require the Bidder to identify the alteration so initialed. No erasures, interpolations, or other physical changes shall be made by anyone, in any bid, after its submission by the Bidder. Each proposal submitted shall be enclosed in a sealed envelope, addressed to the City of Bartlesville, endorsed on the outside of the envelope with the words: **"Water Treatment Plant Polymer Blending Skid Replacement" and the name of the bidder.** The sealed proposal shall be filed with the City Clerk within the time set for receipt of bids.

IB-2. BOUND COPY OF CONTRACT DOCUMENTS. None of the Instructions to Bidders, Proposal Form, Bond Forms, Contract Agreement, General Conditions, Special Conditions or Specifications shall be removed from this bound copy of documents prior to filing same with the City Clerk.

IB-3. PROPOSAL GUARANTEE. Each proposal shall, as a guarantee of good faith on the part of the bidder, be accompanied by either a Cashier's Check or a Certified Check drawn on an acceptable bank, or an acceptable Bidder's Bond with an authorized Surety Company as surety, in an amount of not less than five percent (5%) of the total bid.

The proposal guarantee shall be made payable without condition to the City of Bartlesville and the amount of the check or bond may be retained by and forfeited to said City of Bartlesville as liquidated damages if such proposal is accepted and the contract is awarded, and the bidder fails to enter into a contract in the form prescribed, with legally responsible sureties, within ten (10) days after such award is made by the Owner.

IB-4. SIGNATURE OF BIDDERS. Each bidder shall sign his proposal, using his usual signature and giving his full business address. Bids by partnerships shall be signed with the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and designation of the person signing. Bids by corporations shall be signed with the name of the corporation, followed by the signature and designation of the president, secretary, or other person authorized to bind it in the matter. The names of all persons signing should also be typed or printed below the signature. A bid by a person who affixes to his signature the word "president", "secretary", "agent", or other designation without disclosing his principal may be held to be the bid of the individual signing. Satisfactory evidence of the authority of the officer signing in behalf of a corporation should be furnished.

INSTRUCTIONS TO BIDDERS

Bid. No. 2025-2026-013

- IB-5. **ONLY ONE PROPOSAL.** No bidder may submit more than one (1) proposal. Two proposals under different names will not be received from one firm or association.
- IB-6. **QUALIFICATIONS OF BIDDERS.** Bidders shall have a practical knowledge of the particular work, a proven track record demonstrating proficiency and satisfactory work performance, and the financial resources necessary to successfully complete the project.

IN DETERMINING THE LOWEST AND BEST BID, THE FOLLOWING FACTORS WILL BE CONSIDERED:

- (A) WHETHER THE BIDDER MAINTAINS A PERMANENT PLACE OF BUSINESS;
- (B) WHETHER THE BIDDER HAS SUFFICIENT EQUIPMENT AND PERSONNEL TO COMPLETE THE WORK PROPERLY AND EXPEDITIOUSLY;
- (C) WHETHER THE BIDDER HAS THE FINANCIAL STABILITY NECESSARY TO FULFILL ALL OBLIGATIONS RELATED TO THE PROJECT; AND
- (D) WHETHER THE BIDDER HAS DEMONSTRATED RELEVANT TECHNICAL EXPERTISE AND A RECORD OF SATISFACTORY WORK PERFORMANCE.

Each bidder may be required to submit a qualification statement demonstrating that relevant previous projects were completed satisfactorily and without valid or outstanding claims. Bidders who fail to provide this statement, or who are currently engaged in other work that may hinder their ability to finance this contract or supply adequate equipment and labor, will not be considered eligible.

Whaling Construction is not eligible to perform work on this project in either a prime or subcontractor capacity.

- IB-7. **LOCAL CONDITIONS AFFECTING WORK.** Each bidder shall visit the site of the work and thoroughly and fully inform himself relative to construction hazards and procedure, labor, and all other conditions and factors, local and otherwise, which would affect the prosecution and completion of the work and the cost thereof, including the arrangement and conditions of existing structures and facilities affecting or which are affected by the proposed work, access to the site, the availability and cost of labor, and available facilities for transportation, handling, and storage of materials and equipment. It is understood and agreed that all such factors have been properly investigated and considered in the preparation of every proposal submitted, as there will be no subsequent financial adjustment, to any contract award thereunder, in the event the lack of such prior investigation affects the cost of the work.
- IB-7. **SUBSURFACE CONDITIONS.** The bidder shall be completely responsible for investigating subsurface conditions that may affect the proposed work and preparing his bid accordingly. The existence of unforeseen subsurface conditions, whether investigated or not, that adversely affect the work, shall not entitle the bidder to any additional compensation.

INSTRUCTIONS TO BIDDERS

Bid. No. 2025-2026-013

IB-8. INTERPRETATION OF CONTRACT DOCUMENTS. Any prospective bidder who is in doubt as to the true meaning of any part of the Contract Documents may submit to the Engineer a written request for an interpretation thereof. Any interpretation of such documents will be made only by Addendum duly issued and mailed or delivered to each bid document holder of record. No interpretation Addenda will be issued within the last four days before the date of opening bids. The Owner will not be responsible for any other explanations or interpretations of such documents which anyone presumes to make on behalf of the Owner.

The attention of the bidder is called to the provisions of the General Conditions relative to delays and extensions of time, and to liquidated damages.

IB-10. TIME OF COMPLETION. The time of completion of the work is a basic consideration of the contract. It will be necessary that the bidder satisfy the Owner of his ability to complete the work within the stipulated time. The allowable number of contract time is stated in Article 8 of the Contract Agreement form herein.

IB-11. WITHDRAWAL OF BID. No bidder may withdraw his proposal for a period of 30 days after the date and hour set for the opening herewith. A bidder may withdraw his proposal at any time prior to the expiration of the period during which proposals may be submitted, by written request of the bidder, which request must be signed in the same manner and by the same persons or person who signed the proposal.

IB-12. ACCEPTANCE AND REJECTION OF BIDS. The City of Bartlesville reserves the right to accept the bid which, in its judgment, is the lowest and best bid, to reject any or all bids, and to waive irregularities in bids.

IB-13. RETURN OF PROPOSAL GUARANTEE. The proposal guarantee deposit of the bidder will be returned when and in case his proposal is rejected. The proposal guarantee deposit of the bidder to whom the contract award is made will be returned provided and when said successful bidder executes a contract and files satisfactory bonds and proof of insurance coverage, as hereinafter stipulated. The proposal guarantee deposit of the next lowest responsible bidder may be retained for a period of not to exceed 45 days pending the execution of the contract by the successful bidder.

IB-14. BONDS. The contractor to whom the work is awarded will be required to furnish the following Surety Bonds:

- a. Performance Bond. A Performance Bond to the City of Bartlesville in an amount equals to 100 percent of the contract price.
- b. Statutory Bond. A Statutory Bond to the City of Bartlesville in an amount equal to 100 percent of the contract price.
- c. Maintenance Bond. A Maintenance Bond to the City of Bartlesville in an amount equal to 100 percent of the contract price to protect against defective workmanship and

INSTRUCTIONS TO BIDDERS

Bid. No. 2025-2026-013

materials for a period of one (1) year after acceptance of the project, and payment of all labor and materials including the prime contractor and all subcontractors.

Each bond shall be executed in four counterparts on the forms attached hereto, signed by a Surety Company authorized to do business in the State of Oklahoma and acceptable as Surety to the City of Bartlesville.

With each bond there shall be filed with the City of Bartlesville one copy of "Power of Attorney" certified to include the date of the bond.

IB-15. INSURANCE. The contractor shall furnish the City of Bartlesville with certificates of insurance showing the amount in force of public liability, property damage, contractual liability, contractor's contingent, builder's risk and automobile insurance satisfactory to the City of Bartlesville. Failure to provide proper insurance will result in forfeiture of the bid guaranty and revocation of contract award. The contractor and his Surety shall indemnify and save harmless the City of Bartlesville from claims arising or recovered under the "Workmen's Compensation Law."

IB-16. LICENSES, PERMITS AND CERTIFICATES. The contractor prior to commencement of work shall secure all licenses, permits, certificates, and similar documents required in connection with the work under these contract documents. All costs shall be the responsibility of the contractor. The contractor shall be responsible for maintaining such documents effective for the duration of the contract. Proof shall be provided to the City of Bartlesville.

IB-17. TAX EXEMPT STATUS. The work under this contract is exempt from State and local Sales and Use Taxes. The Contractor will be furnished an exemption certificate by the Owner for the work herein.

IB-18. SUBCONTRACTORS. The experience, performance records and ability of each proposed subcontractor will be considered in the evaluation of bids per the Qualifications of Bidders criteria. Any subcontractor proposed to perform 10 percent or more of the work shall be listed on the Proposal Form. If the contractor wishes to use a subcontractor not listed on the Proposal Form for 10 percent or more of the work after the contract has been signed, the Owner shall have the right to reject or approve the subcontractor or terminate the contract.

The contractor shall be fully responsible to Owner for the acts and omissions of all his subcontractors. Acceptance of any subcontractor by the Owner shall not constitute a waiver of the Owner to reject defective work. Nothing contained in the Contract Documents shall create any contractual relation between any subcontractor and the Owner or any obligation on the part of the Owner to pay any monies due any subcontractor, except as may otherwise be required by law.

IB-19. APPROXIMATE QUANTITIES. On all items on which bids are to be received on a unit price basis, the quantities stated in the bid form will not necessarily be used in establishing final payment due the Contractor. The quantities stated are approximate only and each bidder shall make his own estimate of the quantities from the contract drawings and his site

INSTRUCTIONS TO BIDDERS

Bid. No. 2025-2026-013

investigation, and shall calculate his unit price bid for each item accordingly. Bids will be compared on the basis of number of units stated in the bid form. Payment on the contract on unit price items will be based on the actual number of units installed in the completed work.

- IB-20. **DELETED WORK.** The Owner reserves the right to delete any portions of the work included herein. Any such deletions will be made in writing by the Owner. The Contractor shall not be entitled to any compensation or damages for work deleted.
- IB-21. **PAYMENTS.** Payment for all work performed under this contract will be made in cash, by the Owner within thirty (30) days after completion and acceptance of the work covered by the contract. Progress payments will be made as outlined in the specifications.
- IB-22. **FINAL PAYMENT - LIEN WAIVER RELEASE.** The final payment request shall include a signed Lien Waiver Release as included with the Contract Documents before payment will be processed.

BID PROPOSAL FORM

THE UNDERSIGNED BIDDER, having examined the plans, specifications, the locations, arrangements and conditions of roads, streets, utilities and other facilities or appurtenances which affect or may be affected by the proposed work, the actual sites of the proposed improvements and being acquainted with and fully understanding: (1) the extent and character of the work covered by this proposal; (2) the locations and specified requirements of and for the proposed improvements and other items of work appurtenant thereto; (3) the normal existing, and probable construction difficulties, hazards or all other factors or conditions which may or may not be apparent, which may affect or be affected by the specified work.

HEREBY PROPOSES to furnish all required supplies, equipment, tools, and plant; to perform all necessary labor; and to install, construct, and complete all work stipulated in, required by, and in accordance with the contract documents hereto attached, for and in connection with the contract for which this proposal is herein submitted for and in consideration of the prices set out herein.

The undersigned bidder hereby agrees to furnish the required Performance Bond, Statutory Bond, Maintenance Bond, and proof of insurance and to enter into a contract within fourteen (14) days after the acceptance of this proposal, and further agrees to complete the work within a period of time not to exceed **one hundred and fifty (150) calendar days** following receipt of the Owner's Work Order authorizing the Contractor to commence work. The contract time assumes an 18-week lead time for fabrication of the skids. If the lead time is longer than this assumption, the Owner will suspend contract time during the contract to account for this lead time discrepancy.

Attached hereto is a Certified Check, Cashier's Check or Bidder's Surety Bond in the amount of:

DOLLARS \$

which the undersigned agrees is to be forfeited to and become the property of the City, as liquidated damages, should this proposal be accepted and the contract be awarded to him, he fails to enter into a contract in the form prescribed and to furnish the required bonds and proof of insurance within fourteen (14) days as above stipulated, but otherwise the proposal guarantee shall be returned to the undersigned upon the signing of the contract and delivery of the approved bonds and evidence of insurance to said Owner.

DATED this _____ day of _____, 2026

If an Individual:

d. b. a.:

Signature:

If a Partnership:

Signature:

Typed Name:

If a Corporation:

Signature:

Typed Name:

Title

ATTEST:

Secretary

(CORPORATE SEAL)

BID PROPOSAL FORM

Addendum No.

Date Received

Signature

BID PROPOSAL FORM

Item	Description	Unit	Quantity	Unit Price	Bid Amount
1	MOBILIZATION, INSURANCE AND BONDS	LS	1		
2	FILTER AID POLYMER SYSTEM SKID, COMPLETE IN PLACE	EA	1		
3	RESIDUALS POLYMER SYSTEM SKID, COMPLETE IN PLACE	EA	1		
4	CONSTRUCTION CONTINGENCY ALLOWANCE	LS	1	\$10,000	\$10,000
TOTAL BASE BID (IN FIGURES)				\$ _____	
TOTAL BASE BID (IN WORDS) 					

Name and Address of Bidder: _____

Telephone No.: _____

Contact Person: _____

Title: _____

BID PROPOSAL FORM

**List the Name and Address of Proposed Subcontractors performing
10% or more of the work** **Scope and
Percentage of Work**

**List the Name and Address of Proposed Major Material
Suppliers**

Material

BID PROPOSAL FORM

BID AFFIDAVIT

The following noncollusion affidavits must accompany bid:

A. Noncollusion Affidavit

STATE OF _____)
) ss.
COUNTY OF _____)

, of lawful age being first duly sworn on oath says that he is the agent authorized by the bidder to submit the attached bid. Affiant further states that the bidder has not been a party to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding; or with any municipal official or employee as to quantity, quality, or price in the prospective contract, or any other terms of said prospective contract; or in any discussions between bidders and any municipal official concerning exchange of money or other thing of value for special consideration in the letting of a contract.

Name of Company

Signature of Authorized Agent

(Seal) Notary Public

My Commission Expires:

BID AFFIDAVIT

BID PROPOSAL FORM

B. Business Relationship Affidavit

STATE OF _____)
) ss.
COUNTY OF _____)

Affiant further states that any such business relationship presently in effect or which existed within one (1) year prior to the date of this statement between any officer or director of the bidding company and any officer or director of the architectural or engineering firm or other party to the project is as follows:

Affiant further states that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are as follows:

(If none of the business relationships hereinabove mentioned exist, affiant should so state.)

(Seal) Notary Public

My Commission Expires:

CONTRACT AGREEMENT

Bid No. 2025-2026-013

day of

20 26 by and

between the CITY OF BARTLESVILLE party of the first part, herinafter termed "Owner" and

party of the second part, herinafter termed "Contractor.

WITNESSETH:

WHEREAS, the City of Bartlesville has caused to be prepared, in accordance with law, certain specifications, plans, and other bidding documents for the work hereinafter described and has approved and adopted all of said bidding documents, and has caused solicitation for bids to be given and advertised as required by law, and has received sealed proposals for furnishing materials, labor and equipment for:

Water Treatment Plant Polymer Blending Skid Replacement

as outlined and set out in the bidding documents and in accordance with the terms, specifications, plans, and provisions of said Contract; and,

WHEREAS, Contractor, in response to said solicitation for bids, has submitted to the City of Bartlesville in the manner and at the time specified, a sealed proposal in accordance with the terms of this Contract; and,

WHEREAS, the City of Bartlesville, in the manner provided by law, has publicly opened, examined, and canvassed the proposals submitted and has determined and declared the above-named Contractor to be the lowest responsible bidder on the above-described project, and has duly awarded this Contract to said Contractor, and the said Contractor agrees to receive and accept the sum named in the a proposal as full compensation for furnishing all materials and for doing all the work contemplated and embraced in this agreement; also for all loss or damage, arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by the Owner, and for all risks of every description connected with the work; also for all expenses incurred by or in consequence of the suspension or discontinuance of work and for well and faithfully completing the work, and the whole thereof, in the manner and according to the plans and specifications, and the requirements of the Engineer under them, to wit:

DOLLARS

CONTRACT AGREEMENT

Bid No. 2025-2026-013

NOW, THEREFOR, for and in consideration of the mutual agreements and covenants herein contained, the parties to this Contract have agreed, and hereby agree, as follows:

- (1) That the Contractor hereby agrees to furnish all tools, equipment, materials and labor, and to construct and complete the above-described project in accordance with the specifications therefor on file in the office of the City Engineer of Bartlesville, Oklahoma.
- (2) That the Contractor's proposal is hereby made a part of this Agreement.
- (3) That the Owner shall pay the Contractor for the work performed, as follows:
 - a. Payment for unit price items shall be based upon the unit prices in the Proposal and the actual completed construction quantities as determined by the Engineer
 - b. Construction items specified but not included as bid items shall be considered incidental, and shall not be paid for directly, but shall be included in the bid price for any or all of the pay quantities.
- (4) That the Owner reserves the right to add to or subtract from the estimated quantities or amount of work to be performed. The work to be performed or deducted shall be at the unit price bid.
- (5) That the Contractor will not undertake to furnish any materials or to perform any work not specifically authorized under the terms of this Agreement unless additional materials or work are authorized by written Change Order from the Owner and that in the event any additions are provided by the Contractor without such authorization, the Contractor shall not be entitled to any compensation therefor whatsoever.
- (6) That if any additional work is performed or additional materials provided by the Contractor upon authorization by the Owner, the Contractor shall be compensated therefor at the unit price bid and as agreed to by both parties in the execution of the Change Order.
- (7) That the Contractor shall perform the work and provide the materials strictly in accordance with the specifications as to quality and kind and all work and materials shall be subject to rejection by the Owner through its authorized representatives for failure to meet such requirements, and in the event of such rejection, the Contractor shall replace the work and materials without compensation therefor by the Owner.
- (8) The Contractor shall complete all work in accordance with the terms of this Agreement within a period of time not to exceed 150 calendar days following issuance by the Owner of a Work Order authorizing the Contractor to commence work on this project. The Contractor further agrees to pay liquidated damages as provided in these documents.

CONTRACT AGREEMENT

Bid No. 2025-2026-013

- (9) The Contractor shall furnish bonds and proof of insurance as specified, which bonds and insurance must be approved by the Owner prior to issuance of the Work Order and commencement of work on the project.
- (10) On completion of the work, but prior to the acceptance thereof by the Owner, the City Engineer, or his representative shall determine if the work has been completely and fully performed in accordance with said Contract Documents; and upon making such determination said official shall make his final certificate to the City of Bartlesville.
- (11) The attached sworn statement entitled "Contract Affidavit" must be signed and notarized before this Contract will become effective.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed, in four duplicate originals, the day and year first above written.

“OWNER”

City of Bartlesville

By:

ATTEST:

Mayor

City Clerk

(SEAL)

CONTRACT AGREEMENT

Bid No. 2025-2026-013

"CONTRACTOR"

If an Individual: _____, Doing business

as: _____

Signature: _____

If a Partnership: _____

Names of other partners:

If a Corporation: _____

Signature: _____

Typed Name: _____

Title: _____

ATTEST:

Business Address of Contractor

Secretary

(CORPORATE SEAL)

Telephone No: _____

CONTRACT AGREEMENT

Bid No. 2025-2026-013

CONTRACT AFFIDAVIT

STATE OF _____)

) ss.

COUNTY OF _____)

_____, of lawful age, being first duly sworn on oath says
That (s)he is the agent authorized by the firm of _____
to submit the above Contract to the City of Bartlesville, Oklahoma.

Affiant further states that such firm has not paid, given, or donated or agreed to pay, give, or
donate to any officer or employee of the City of Bartlesville any money or other thing of value,
either directly or indirectly, in the procuring of the Contract.

Company

Subscribed and sworn to before me on this _____ day of _____ 20 ____

(Seal)

Notary Public

My Commission Expires: _____

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That _____ as principal, and _____ a corporation organized under the laws of the state of _____ and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound unto the **City of Bartlesville, Oklahoma**, in the penal sum of _____

DOLLARS

(\$ _____) in lawful money of the United States of America said sum being equal to one hundred percent (100%) of the contract price, for the payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, trustees, successors, and assigns, jointly and severally, firmly by these presents.

DATED this _____ day of _____ 20 _____

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written Contract with the

(Seal)

City of Bartlesville, Oklahoma, dated _____ 20 26 for:

**Water Treatment Plant Polymer Blending Skid
Replacement**

Bid No. **2025-2026-013**

all in compliance with the specifications therefor, made a part of said Contract and on file in the office of the City Clerk, City of Bartlesville, City Administration Building, Bartlesville, Oklahoma.

NOW, THEREFORE, if said Principal shall pay or cause to be paid to the City of Bartlesville all damage, loss, and expense which may result by reason of defective materials and/or workmanship in connection with said work, occurring within a period of one (1) year from and after acceptance of said project by the City of Bartlesville; and if Principal shall pay or cause to be paid all labor and materials, including the prime contractor and all subcontractors; and if Principal shall save and hold the City of Bartlesville harmless from all damages, loss, and expense occasioned by or resulting from any failure whatsoever of said Principal, then this obligation shall be null and void, otherwise to be and remain in full force and effect.

It is further expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligations of this Bond.

MAINTENANCE BOND

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

PRINCIPAL:

ATTEST:

By _____

SURETY:

By _____
Attorney-in-Fact

Address of Surety or Agent:

Telephone No. of Surety/Agent:

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That _____ as principal, and

a Corporation organized under the laws of the State of _____
and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound
unto the **City of Bartlesville**, in the penal sum of _____

DOLLARS

(\$ _____) in lawful money of the United States of America, for the payment of which, well
and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, trustees,
successors, and assigns, jointly and severally, firmly by these presents.

DATED this _____ day of _____ 20 _____

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written Contract with the
City of Bartlesville, Oklahoma, dated _____ 20 26 for:

**Water Treatment Plant Polymer Blending Skid
Replacement**

Bid No. 2025-2026-013

all in compliance with the specifications therefor, made a part of said Contract and on file in the office of
the City Clerk, City of Bartlesville, City Administration Building, Bartlesville, Oklahoma.

NOW, THEREFORE, if said Principal shall, in all particulars, well, truly and faithfully perform
and abide by said Contract and each and every covenant, condition, and part thereof and shall fulfill all
obligations resting upon said Principal by the terms of said Contract and said specifications; and if said
Principal shall promptly pay, or cause to be paid, all labor, materials, and/or repairs and all bills for labor
performed on said work, whether by subcontract or otherwise; and if said Principal shall protect and save
harmless said City of Bartlesville from all loss, damage, and expense to life or property suffered or
sustained by any person, firm, or corporation caused by said Principal or his or its agents, servants, or
employees in the construction of said work, or by or in consequence of any negligence, carelessness or
misconduct in guarding and protecting the same, or from any act or omission of said Principal or his or its
agents, servants, or employees, and if said Principal shall protect and save the City of Bartlesville harmless
from all suits and claims in infringement or alleged infringement or patent rights or processes, then this
obligation shall be null and void, otherwise to be and remain in full force and effect.

PERFORMANCE BOND

It is further expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligations of this Bond.

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

PRINCIPAL:

ATTEST:

By _____

SURETY:

By _____

Attorney-in-Fact

Address of Surety or Agent:

Telephone No. of Surety/Agent:

STATUTORY BOND

KNOW ALL MEN BY THESE PRESENTS:

That _____ as principal, and

a Corporation organized under the laws of the State of _____
and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound
unto the **City of Bartlesville**, in the penal sum of _____

DOLLARS

(\$ _____) in lawful money of the United States of America, for the payment of which, well
and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, trustees,
successors, and assigns, jointly and severally, firmly by these presents.

DATED this _____ day of _____ 20 _____

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written Contract with the

City of Bartlesville, Oklahoma, dated _____ 20 26 for:

**Water Treatment Plant Polymer Blending Skid
Replacement** _____ Bid No. 2025-2026-013

all in compliance with the specifications therefor, made a part of said Contract and on file in the
office of the City Clerk, City of Bartlesville, City Administration Building, Bartlesville, Oklahoma.

NOW, THEREFORE, if said Principal shall fail or neglect to pay all indebtedness incurred
by said Principal or subcontractors of said Principal who performs work in the performance of such
contract, for labor and materials and repairs to and parts for equipment used and consumed in the
performance of said Contract within thirty (30) days after the same becomes due and payable, the
person, firm, or corporation entitled thereto may sue and recover on this bond, the amount so due
and unpaid.

It is further expressly agreed and understood by the parties hereto that no changes or
alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall
have the effect of releasing the sureties, or any of them, from the obligations of this Bond.

STATUTORY BOND

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

PRINCIPAL:

ATTEST:

By: _____

SURETY:

By: _____
Attorney-in-Fact

Address of Surety or Agent:

Telephone No. of Surety/Agent:

SALES TAX EXEMPTION CERTIFICATE

Project Name:

Water Treatment Plant Polymer Blending Skid Replacement

has been appointed agent for the City of Bartlesville, Oklahoma, for the purchase of property or services for the above-referenced project to be owned by the City of Bartlesville. Payment of the purchase price of such property or services shall be made by the Company and not the City, and the supplier shall have no recourse whatever against the City on account of the failure of the Company or any of its subcontractors or agents to pay the purchase price, or any part thereof, of such property or services. Upon passage of title, all such property will be included in a project owned by the City. All of such property or services are exempt from Oklahoma Sales and Use Taxes and/or City Sales Taxes.

DATED this _____ day of _____ 2026

CITY OF BARTLESVILLE, OKLAHOMA

Mike Bailey, City Manager

EVIDENCE OF TAX EXEMPT STATUS

To Vendor: _____

Amount of Purchase: \$ _____ Date _____

Project Name: **Water Treatment Plant Polymer Blending Skid
Replacement**

The City of Bartlesville, Oklahoma, hereby appoints:

_____ as its agent for the sole purpose of purchasing property described herein.

All materials acquired on the above project are for the City of Bartlesville, Oklahoma. Upon passage of Title, all of such property will be included in the above-referenced project owned by the City of Bartlesville. Title to all such property shall pass to said City from the Vendor, f.o.b., Bartlesville, Oklahoma.

This project is owned by the City and accordingly, all of such property is exempt from Oklahoma Sales and Use Taxes and City Sales Tax. Notwithstanding this appointment, the City is not responsible to the Vendor for the payment of the purchase price specified herein. Title to the property described is deemed to pass directly from the Vendor to the City of Bartlesville, Oklahoma.

DATED this _____ day of _____ 20 26

CITY OF BARTLESVILLE, OKLAHOMA

Mike Bailey, City Manager

Signature of Contractor/Purchaser

CONTRACTOR APPLICATION FOR PAYMENT
BARTLESVILLE, OK

Bid No.: 2025-2026-013 Project No.: _____ Date: _____

Account No.: 675-720-55930-26002 P. O. No.: _____ Application No.: _____

Project Name Water Treatment Plant Polymer Blending Skid Replacement

Contractor: _____

Engineer: _____

Period From: _____ 20 _____ To: _____

ORIGINAL CONTRACT AMOUNT \$ _____

Net Adjustments Due To:
Change Orders (List No.'s & Dates): \$ _____

Quantity Changes (List Sheet & Dates): \$ _____

Other (Describe): \$ _____

CURRENT CONTRACT AMOUNT \$ _____

PREVIOUS PAYMENTS TO CONTRACTOR \$ _____

PREVIOUS RETAINAGE \$ _____

TOTAL VALUE OF WORK THIS PERIOD \$ _____

RETAINED AMOUNT: ()% \$ _____

Engineer's Adjustments (Describe) _____

PAYMENT DUE THIS PERIOD: \$ _____

TOTAL PAYMENTS TO DATE: \$ _____

TOTAL RETAINAGE TO DATE: \$ _____

The undersigned Engineer certifies that to the best of his knowledge, observations, and belief, the information presented as a basis payment in this Application is correct, and the Contractor is entitled to the PAYMENT DUE THIS PERIOD.

Engineer: _____ Date: _____

Owner: City of Bartlesville Date: _____

APPLICATION FOR PAYMENT

Item	Description	Unit	Unit Price	Work Completed				Quantities to Date (* = final Q.)	Scheduled Quantity	\$ Amount To Date			
				Total Previous Applications		Total This Application							
				Quantity	\$ Amount	Quantity	\$ Amount						
1													
2													
3													
4													
5													
6													
7													
Total:													

* indicates final quantity

The undersigned Contractor certifies that all work in this Application for Payment has been completed in accordance with the Contract Documents, and that he has paid all obligations for previously completed work on which payments have been issued.

Contractor

I've inspected the project and applicable stored materials and construction qualities requested in this payment are true and correct, and all work has been performed in accordance with the project plans and specifications.

Construction Inspector

INVOICE AFFIDAVIT

STATE OF _____)
) ss.
COUNTY OF _____)

The undersigned consulting engineer or contractor, of lawful age, being first duly sworn, on oath says that this invoice is true and correct. Affiant further states that the work, services or materials as shown by this invoice have been completed or supplied in accordance with the plans, specifications, orders, or requests furnished to the affiant. Affiant further states that (s)he has made no payment, given, or donated or agree to pay, give or donate, either directly or indirectly, to any elected official, officer, or employee of the City of Bartlesville, of money or any other thing of value to obtain payment of this invoice.

Consulting Engineer or Contractor

Subscribed and sworn to before me on this _____ day of _____ 20____

Notary Public

(Seal)

My Commission Expires: _____

STATE OF _____)
) ss.
COUNTY OF _____)

The undersigned City of Bartlesville project engineer, of lawful age, being first duly sworn, on oath says that this invoice is true and correct. Affiant further states that the work, services, or materials as shown by this invoice have been completed or supplied in accordance with the plans, specifications, orders, or requests furnished to the affiant. Affiant further states that (s)he has received no payment of money, gift, or donation, or any other thing of value, either directly or indirectly, from consulting engineer or contractor to obtain payment of this invoice.

City of Bartlesville Project Engineer

Subscribed and sworn to before me on this _____ day of _____ 20____

Notary Public

(Seal)

My Commission Expires:

LIEN RELEASE

WHEREAS, _____ has contracted

with the City of Bartlesville to furnish materials and to provide labor and services for

Water Treatment Plant Polymer Blending Skid Replacement

project name

2025-2026-013

project number

bid number

THEREFORE, the undersigned Contractor does hereby certify and warrant that he has made payment in full for any and all labor and material obligations incurred directly and indirectly as a result of this work. Furthermore, the undersigned Contractor does hereby agree to indemnify and hold harmless from any and all claims and liens, the City of Bartlesville, its agents, and the project improvements and real property.

Contractor:

Authorized Agent:

Page 1 of 1

Typed or Printed Name:

Title:

Date _____

STATE OF _____)
) SS.

COUNTY OF)

Before me the undersigned a Notary Public in and for said County and State on this _____ day of _____

_____, 20_____, Personally appeared _____

, To me known to be the identical person(s) who

Executed the within and foregoing instrument, and acknowledged to me that he (they) executed the same as his (their) free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and seal of office the day and year above written.

Notary Public

My Commission Expires:

GENERAL CONDITIONS

1 DEFINITION

- 1.1. Any word, phrase or other expression defined in this paragraph and used in these Contract Documents shall have the meaning herein given:
- 1.2. "Contract" or "Contract Documents" shall include all of the documents and Drawings enumerated herein.
- 1.3. "Owner" shall mean the City of Bartlesville, designated as "Party of the First Part," in the Contract Agreement and for whom the work covered by this Contract is to be performed, acting on behalf of the City of Bartlesville, Oklahoma.
- 1.4. "Contractor" shall mean the corporation, company, partnership, firm, or individual named and designated in the Contract Agreement as the "Party of the Second Part" and who has entered into this Contract for the performance of the work covered thereby, and its, his (her) or their duly authorized agents and other legal representatives.
- 1.5. "Engineer" shall mean the City Engineer or engineers who have been designated, appointed, or otherwise employed or delegated by the Owner for this work, or their duly authorized agents, such agents acting within the scope of the particular duties entrusted to them in each case.
- 1.6. "Inspector" shall mean the engineering or technical inspector or inspectors duly authorized by the Owner or Engineer, limited in each case to the particular duties entrusted to him (her) or them.
- 1.7. "Date of Contract." Or words equivalent thereto, shall mean the date written in the first paragraph of the Contract Agreement.
- 1.8. "Working Day." Any day, other than a City holiday, Saturday or Sunday, on which weather and working conditions would permit the normal forces of the Contractor to proceed with regular work continuously for a period of at least 6 hours out of the normal 8-hour day, unless work is suspended for causes beyond the Contractor's control. Saturday's, Sunday's and City holidays on which the Contractor's forces engage in regular work requiring the presence of an inspector will be considered working days.
- 1.9. "The Work" shall mean the work to be done and the equipment, supplies, and materials to be furnished under this Contract, unless some other meaning is indicated by the context.
- 1.10. "Plans" or "the plans" shall mean and include all Drawings submitted by the successful bidder with his proposal and by the Contractor to the Owner, when and as approved by the Engineer, and all Drawings furnished by the Owner as a basis for proposals and those furnished during the progress of the work as provided for herein.
- 1.11. Whenever in these Contract Documents the words "as ordered," "as directed," "as required," "as permitted," "as allowed," or words or phrases of like import are used, it shall be understood that the order, direction, requirement, permission, or allowance of the Owner and Engineer is intended.
- 1.12. Similarly the words "approved," "reasonable," "suitable," "acceptable," "properly," "satisfactory," or words of like effect and import, unless otherwise particularly specified herein, shall mean approved, reasonable, suitable, acceptable, proper, or satisfactory in the judgement of the Owner and Engineer.
- 1.13. Whenever any statement is made in the Contract Documents containing the expression "it is understood and agreed," or an expression of like import, such expression means the mutual understanding and agreement of the parties executing the Contract Agreement of which these General Conditions are a part.

GENERAL CONDITIONS

2 CONTRACT DOCUMENTS

2.1. GENERAL.

2.2. It is expressly understood and agreed that the Invitation for Bids, Instructions to Bidders, Proposal, Performance Bond, Statutory Bond, Maintenance Bond, Contract Agreement, General Conditions, Specifications, Drawings, and other Specifications and engineering data furnished by the Contractor (when and as approved by the Owner or Engineer), together with instructions furnished by manufacturers of equipment for the installation thereof, and such other additional Drawings and instructions which may be furnished by the Engineer as are necessary to make clear and to define in greater detail the intent of the Specifications, are each and all included in this Contract, and the work shall be done fully in accordance therewith.

2.3. The Contract Documents comprise the following general classifications of documents, including all modifications thereto.

- 2.3.1.1. Bidding Documents
- 2.3.1.2. Contractual Documents
- 2.3.1.3. General Conditions of the Contract
- 2.3.1.4. Specifications
- 2.3.1.5. Drawings
- 2.3.1.6. Additional Drawings and Instructions

2.4. The order of precedence for documents shall be the Specifications (Technical and General Provisions, respectively), Drawings, General Conditions, Contract Agreement, Instructions to Bidders, and Invitation to Bid.

2.5. BIDDING DOCUMENTS.

2.6. The bidding documents issued by the Owner to assist bidders in preparing their bids include:

- 2.6.1. Invitation to Bid bound herewith.
- 2.6.2. Instructions to Bidders bound herewith.
- 2.6.3. Federal-Aid contract special provisions, all executable provisions properly completed and signed.
- 2.6.4. The bid or proposal, which is the offer of a bidder to perform the work described in the Contract Documents, prepared and submitted on the Proposal Form and Bid Proposal Form bound herewith, and properly signed and guaranteed.
- 2.6.5. Bid Affidavits, all properly completed and signed.
- 2.6.6. Any addenda shall be made a part of the Contract. Receipt of each addendum issued during the bidding period shall be acknowledged in the bid.

2.7. CONTRACTUAL DOCUMENTS

2.7.1. **AGREEMENT.** The Agreement covers the performance of the work described in the Contract Documents, including all supplemental addenda thereto, and the Specifications and Drawings pertaining to the work or materials therefor. The Agreement Form is bound herewith.

2.7.2. **BONDS.** The Contractor shall furnish Surety Bonds payable to the Owner as indicated in these Contract Documents.

GENERAL CONDITIONS

- 2.7.2.1. Performance Bond in an amount equal to 100 percent of the total contract amount, conditioned upon the faithful performance and completion of all covenants and stipulations under the Contract.
- 2.7.2.2. Statutory Bond in an amount equal to 100 percent of the total contract amount, for the payment of all persons, companies, or corporations who perform labor or furnish materials under this Contract.
- 2.7.2.3. Maintenance Bond in an amount equal to 100 percent of the total contract amount, effective for a period of one year after written final acceptance of the work by the Owner.
- 2.7.2.4. Endorsement by the Surety Company of any of the Bonds listed above on behalf of the Contractor shall indicate their complete understanding and agreement with all of the conditions and provisions of this Contract. The Surety Company shall waive their right of notification by the Owner of any change or modification of this Contract, or of decreased or increased work, or of the cancellation of this Contract, or of any other acts by the Owner or its employees or agents under the terms of this Contract. This waiver by the Surety Company shall in no way relieve their obligations under this Contract.

2.8. GENERAL CONDITIONS

- 2.8.1. General Conditions of the Contract bound herewith and of which this paragraph is a part.

2.9. SPECIFICATIONS AND DRAWINGS

- 2.9.1. Specifications bound herewith, and of which this paragraph is a part.

- 2.9.2. All Drawings and Plans, including but not limited to those listed in the Specifications.

2.10. DISCREPANCIES.

- 2.11. Any discrepancies found between the Drawings and Specifications shall be immediately reported to the Engineer, who will promptly correct such inconsistencies or ambiguities in writing. Any work resolution shall be at the Contractor's own risk and expense.

In the event where existing conditions will not permit the construction of an improvement in accordance to the contract drawings and specifications, then the contractor shall immediately request written clarification from the Engineer before proceeding with the construction affected by such discrepancies.

2.12. INTERPRETATION OF SPECIFICATIONS AND DRAWINGS.

- 2.13. The Contract Specifications and Drawings are intended to be explanatory of each other. Any work indicated on the Drawings and not in the Specifications, or vice versa, is to be executed as if indicated in both. In the event of any doubt or question arising regarding the true meaning of the Specifications or Drawings, reference shall be made to the Engineer and his (her) decision thereon shall be final.

2.14. DIMENSIONS.

- 2.15. Finished surfaces in all cases shall conform with the lines, grades, cross-sections and dimensions shown on the plans. Deviations from the plans, as may be required by the exigencies of construction, shall in all cases be determined by the Engineer and authorized in writing.

GENERAL CONDITIONS

2.16. TITLES AND HEADINGS.

- 2.16.1. The titles and heading printed on the Drawings, the General Conditions, the Specifications, or elsewhere in the Contract Documents are inserted for reference only, and shall not be taken or considered as having any bearing on the interpretation thereof.
- 2.16.2. Separation of the Specifications into divisions and sections shall not operate to make the Engineer and arbiter, or to establish limits of work between the Contractor and subcontractors, or between trades.

3 OWNER-CONTRACTOR-ENGINEER RELATIONS

3.1. RIGHTS-OF-WAY.

The Owner will provide all rights-of-way and easements for the work under this Contract.

3.2. SUSPENSION OF WORK.

The Owner may at any time suspend the work or any part thereof, by giving five (5) days notice to the Contractor. The work shall be resumed by the Contractor on the date indicated by the written notice. If suspension of the work is due to no fault of the Contractor, and not otherwise authorized by provisions of the Contract Documents, the Owner will determine and reimburse the Contractor for his expenses incurred as a result of the suspension. There shall be no reimbursement if the suspension occurs after the time allowed for completion of the work, exclusive of any extension because of avoidable delays. The owner or Engineer may suspend without liability any portion of work that is in dispute due to an unresolved issue. The Contractor shall be required to continue work at other locations and make all relocations at his expense.

3.3. RIGHT OF OWNER TO TERMINATE AGREEMENT

- 3.3.1. The Owner shall have the right to terminate this Agreement because of any default by the Contractor. The Owner will provide five (5) days' written notice in such case.
- 3.3.2. It shall be considered a default by the Contractor whenever he shall:
 - 3.3.2.1. Declare bankruptcy, become insolvent, or assign his (her) assets for the benefit of his (her) creditors.
 - 3.3.2.2. Disregard or violate provisions of the Contract Document, or fail to prosecute the work in a manner consistent with the schedule of completion.
 - 3.3.2.3. Fail to provide a qualified superintendent, competent workmen or subcontractors, or proper materials, or fail to make prompt payment for all labor and material obligations under this Contract.
 - 3.3.2.4. In the event of termination of the Agreement by the Owner, the Owner may take possession of the work and of all materials and equipment thereon, and may finish the work by whatever method and means he (she) may select.

3.4. EMERGENCY PROTECTION

- 3.4.1. In case of an emergency which threatens loss, damage, or injury to persons or property, and which requires immediate action to remedy, the Owner shall require the Contractor to provide immediate suitable protection to the persons and property. In the absence of the Contractor's personnel, the Owner may cause emergency work to be done and material to be furnished and adequate. The cost and expense of such work and material shall be borne by the Contractor

GENERAL CONDITIONS

and if the same shall not be paid upon presentation of the bills therefor, then such costs shall be deducted from any amounts due or to become due the Contractor.

- 3.4.2. The performance of emergency work under the direction of the Owner shall in no way relieve the Contractor from any damages which may occur during or after such precaution has been taken by the Owner.

3.5. REPRESENTATIVE FOR CONTRACTOR AT SITE

During the performance of this Contract, the Contractor shall maintain an on-site Foreman or Superintendent designated to receive drawings, instructions, or other communications from the Owner. Any document delivered to the foreman or superintendent shall be deemed to have been delivered to the Contractor.

3.6. ATTENTION TO WORK

The Contractor shall fully supervise the work at all times to ensure completion in accordance with the Contract Documents. He shall be represented by a competent superintendent or foreman who shall be the legal representative of the Contractor at the site to receive instructions or orders given under this Contract, and who shall have full authority to execute the same. The superintendent or foreman shall have the authority to supply materials, tools and labor without delay. The Contractor shall be liable for the faithful observance of any instructions delivered to him (her) or to his (her) designated representative.

3.7. PROTECTION OF EXISTING STRUCTURES

Unless otherwise indicated on the drawings all utilities and structures above or below ground that may be affected by the work shall be protected and maintained by the Contractor, and shall not be disturbed or damaged during progress of the work. Should the Contractor disturb, disconnect, or damage any utility or structure, all expenses for the replacement or repair thereof shall be borne by the Contractor. This provision shall apply whether or not said utility or structure is indicated on the plans. The Contractor shall be responsible for all consequential damages.

3.8. PROTECTION OF CONTRACTOR'S WORK AND PROPERTY

- 3.8.1. The Contractor shall protect his (her) work, supplies, and materials from any source of damage at all times.
- 3.8.2. Neither the Owner nor any of its officers, employees, or agents assumes any responsibility for collecting an indemnity from any person or persons causing damage to the work of the Contractor.

3.9. SURVEYS

- 3.9.1. The Contractor shall provide all surveys required to complete the work.
- 3.9.2. The Contractor shall carefully preserve all existing benchmarks, reference points, and stakes established by others and shall be responsible for any errors or expense resulting from damage thereto.

3.10. LOCATION OF UTILITIES

- 3.10.1. The location of any utilities shown on the drawings were taken from public records. It shall be the responsibility of the Contractor to make final and exact determination of the location and extent of all utilities above and below ground. The Contractor shall use the "OKIE-1" system and any other means necessary in this regard. The Contractor shall be responsible for all damages resulting from his (her) operations.

GENERAL CONDITIONS

3.10.2. Because of the nature of the work, minor adjustments may be required in new construction to meet existing conditions. Adjustments approved by the Engineer which may be accomplished without expense to the Contractor shall be made without additional cost to the Owner.

3.11. SUBCONTRACTORS

3.11.1. All employees of subcontractors engaged in the work shall be considered employees of the Contractor.

3.11.2. Nothing contained in the Contract Documents shall create a contractual relationship between any subcontractor. All communications related to the work under this Contract will be made only to the Contractor.

3.11.3. Should any subcontractor fail to perform the work in a satisfactory manner, the subcontract shall be immediately terminated by the Contractor upon written request from the Owner.

3.12. LIABILITY OF CONTRACTORS

3.12.1. The mention of any specific duty or liability imposed upon the Contractor shall not be construed as a limitation or restriction of any general or other liability or duty imposed by this Contract. Any reference to specific duty or liability is made only for the purpose of explanation.

3.12.2. The Contractor shall be responsible for the acts and omissions of his (her) subcontractors, their agents and employees, and all other persons performing any of the work.

3.13. ASSUMPTION OF RISKS

Until completion of the work in accordance with the Contract Documents and written final acceptance by the Owner, the work shall be under the Contractor's care and charge, and he shall be fully responsible therefor. The Contractor shall replace, repair, or restore to the Engineer's satisfaction, all work damaged whatsoever.

3.14. RESPONSIBILITY FOR DAMAGE

3.14.1. The Contractor shall assume the defense of, and shall indemnify and save harmless the Owner, and each and every officer, employee, and agent thereof, and the Engineer from any and all losses, liability of damage, and from all suits, actions, damages, or claims, of every name and description to which the Owner or any of its officers, employees or agents, or the Engineer may be subjected or put to by reason of injury to persons or property in the execution of the work; or resulting from negligence or carelessness on the part of the Contractor, his (her) employees, subcontractors, or agents, in the delivery of materials and supplies; or by any act or omission of the Contractor, his employees, subcontractors, or agents, including but not limited to, failure to comply with all applicable laws and regulations. The Owner shall have the right to estimate the amount of any damages and to retain necessary sums from the money due or to become due the Contractor under this Contract, until all suits or claims for damages have been settled or otherwise disposed of by the Contractor, and satisfactory evidence to that effect furnished to the Owner.

3.14.2. The rights of the Owner under this Contract in control of the quality and completeness of the work shall not make the Contractor an agent of the Owner. The liability of the Contractor for damages to persons or property arising from the work shall not be lessened because of such rights.

3.15. ACCEPTANCE OF CONTRACTOR'S PLANS

The acceptance by the Engineer of any drawing or any method of work proposed by the Contractor shall not relieve the Contractor of his (her) responsibility under the provisions of this Contract. The Contractor shall not be regarded as an officer or employee of the Engineer or Owner, and shall have no

GENERAL CONDITIONS

claim because of the failure or inadequacy of any plan or method so accepted. Acceptance shall be considered to mean only that the Engineer has no objection to the Contractor using the proposed plans or method at his own risk and responsibility.

3.16. SUGGESTIONS TO CONTRACTOR

Any plan or method of work suggested by the Engineer to the Contractor, but not specified or required, shall be used only at the risk and responsibility of the Contractor. The Engineer shall not be responsible in any way for the methods used by the Contractor.

3.17. COOPERATION WITH THE OWNER AND OTHER CONTRACTORS

Any conflict which may arise between the Contractor and other contractors who may be performing work in behalf of the Owner or between the Contractor and employees of the Owner engaged on the project shall be adjusted and determined by the Engineer. The Contractor shall cooperate fully in this regard. If the work of the Contractor is delayed because of the acts or omissions of another contractor of the Owner, the Contractor shall have no claim against the Owner other than for any extension of time.

3.18. AUTHORITY OF THE ENGINEER

All work under this Contract shall be done in accordance with the Contract Documents and in a good workmanlike manner. To prevent disputes and litigation, the Engineer shall in all cases determine the amount, quality, acceptability, and fitness of the several kinds of work, which are to be paid for under this Contract. The Engineer shall decide all questions relative to the true construction, meaning, and intent of the Specifications and Drawings, and shall decide all questions which may arise relative to the classifications which may arise relative to the classifications and measurements of qualities. The Engineer shall have the power to reject work, which does not conform to the terms of this Contract. His (her) estimate and decision on all matters shall be a condition precedent to appeal to the Owner. Whenever the Engineer or the Owner shall perform any and all of the duties and be vested with any and all of the powers herein given to the Engineer. The Engineer's decision shall be final in regard to Change Order prices, and no claim shall be made for additional amounts after a Change Order has been approved by the Engineer.

3.19. INSPECTION

Properly authorized inspectors shall be considered to be the representatives of the Owner and the Engineer, limited to the duties and powers entrusted to them. It will be their duty to inspect materials and workmanship of those portions of the work to which they are assigned, either individually or collectively under direction of the Engineer, and to report any and all deviations which may come to their attention. Any inspector shall have the right to stop the work to which he is assigned if, in his (her) judgement, such action is necessary to allow proper inspection, avoid irreparable damage, safeguard persons or property, or avoid subsequent rejection of work which could not be readily replaced or restored to an acceptable condition. Such stoppage shall be for a period reasonably necessary for notification of the Engineer and his evaluation of the work. Any cost associated with the work stoppage shall be borne by the Contractor and no claim for additional time or compensation will be considered.

3.20. EXAMINATION OF COMPLETED WORK

3.20.1. The Contractor shall not cover up any work without it being inspected and approved by the Engineer or his Inspector. The Contractor shall be responsible for exposing any work that has been covered without such inspection, and subsequently restoring the work to the finished condition in accordance with the Contract Documents.

3.20.2. The Engineer may order the Contractor in writing to uncover any portion of the completed work for additional inspection at any time prior to final acceptance. The Contractor shall also properly restore the work. Should the work thus exposed be found acceptable by the Engineer,

GENERAL CONDITIONS

the cost of uncovering and restoring the work shall be paid for by the Owner as extra work. Should the work exposed be found unacceptable by the Engineer, the Contractor shall be responsible for all costs, including repair or replacement.

3.21. CONSTRUCTION NOTIFICATION

The Contractor shall notify all property owners adjacent to the project before beginning actual construction. The notification shall be a brief visit with the property owner describing the project, schedule and discussion regarding questions about the project and its impact on the property.

4 MATERIALS, EQUIPMENT AND WORKMANSHIP

4.1. GENERAL QUALITY OF MATERIALS

Materials and equipment shall be new and of a quality equal to that specified.

4.2. QUALITY IN ABSENCE OF DETAILED SPECIFICATIONS

Whenever under this Contract it is required that the Contractor furnish materials or do work for which not detailed Specifications are indicated, the materials shall be of the best quality and workmanship obtainable from firms of established reputation and experience. In general, the work performed shall be in full conformity and harmony with the intent to secure the best standard of construction and equipment as a whole or in part.

4.3. APPROVAL OF MATERIALS AND EQUIPMENT

All materials and equipment proposed for the work are subject to inspection and approval by the Engineer. The Contractor may offer any material or equipment, which shall be equal in every respect to that specified. Written acceptance shall be obtained from the Engineer prior to purchase of such material or equipment. The decision of the Engineer shall be final.

4.4. REMOVAL OF REJECTED MATERIALS, STRUCTURES, OR WORK

The Contractor shall promptly remove from the site all rejected materials, structures, or work of any kind. Upon failure of the Contractor to do so, and following written notice from the Engineer, the rejected material or work may be removed by the Owner and all costs shall be paid from the money that may be due or may become due the Contractor under this Contract. No rejected material shall again be offered for use by the Contractor.

4.5. WEEKEND, HOLIDAY AND NIGHT WORK

No work shall be done by the Contractor between the hours of seven o'clock p. m. and seven o'clock a. m., nor on Saturdays, Sundays, or City holidays, except that which is necessary because of emergency or to properly care for and protect previously completed work. Night work may be established as a regular procedure by the Contractor if he first obtains the written permission of the Engineer. Such permission may be revoked at any time by the Engineer if in his opinion the Contractor fails to maintain adequate force and equipment to prosecute the work and justify inspection. The Engineer may require the Contractor to perform weekend, holiday, or night work in order to maintain the completion schedule or to complete a portion of work with a minimum of disruption to the public.

4.6. RECORDS OF EMPLOYEES

The Contractor and each subcontractor shall keep accurate records indicating place or residence, occupation, pay rate, and daily and weekly time logs for each person employed in connection with the work. The records shall be made available at any time to the Engineer or his (her) duly authorized representative upon request.

GENERAL CONDITIONS

4.7. FINAL GUARANTEE

- 4.7.1. All work shall be guaranteed by the Contractor for a period of one year after the date of final payment by the Owner.
- 4.7.2. If, within the guarantee period, repairs are required in connection with the guaranteed work, which, in the opinion of the Engineer are the result of materials equipment or workmanship which were inferior, defective, or not in accordance with the terms of this Contract, the Contractor shall promptly, upon receipt of written notice from the Owner and without expense to the Owner, correct the work and restore the site as acceptable to the Engineer.
- 4.7.3. If the Contractor fails within ten days of written notice to proceed with the terms of this guarantee, the Owner may have the defects corrected, and the Contractor or his Surety shall be liable for all expenses incurred. In the case of emergency where delay would cause loss or damage, according to the Engineer, repairs may be made without notice and the Contractor shall pay the costs thereof.
- 4.7.4. All special guarantees or warranties applicable to specific parts of the work as may be stipulated in the Specifications or other documents forming a part of this Contract, shall be subject to the terms of this paragraph during the first year of each such guarantee. All special guarantees and manufacturers' warranties shall be furnished by the Contractor to the Engineer before the acceptance of the work.

5 INSURANCE, LEGAL RESPONSIBILITY AND SAFETY

5.1. INSURANCE

The Contractor shall provide and maintain throughout this Contract the insurance coverage indicated below:

5.1.1. PUBLIC LIABILITY

5.1.1.1. LIABILITY AND PROTECTIVE LIABILITY POLICIES

The Contractor shall maintain a Contractor's Liability Policy and a Contractor's Protective Liability Policy which shall protect the Contractor from claims for bodily injury and property damage which may arise from his operations or those of his subcontractors. The Contractor shall also maintain liability coverage for loss or damage resulting from explosion and underground operations.

5.1.1.2. CONTRACTUAL LIABILITY POLICY

The Contractor shall provide a Contractual Liability Policy, which shall name the Owner, the Engineer, their partners, officers, agents and employees as insureds. A copy of the Original Certificate of Insurance policy shall be submitted for retention by the Owner along with a copy for the Engineer. This separate policy shall provide coverage to the Owner, the Engineer and their partners, officers, agents, and employees with respect to the work. Bodily injury and property damage insurance shall be on an occurrence basis. The coverage provided shall be primary coverage to the full limit of liability stated in the declarations, and if the Owner, the Engineer and their partners, officers, agents and employees have other insurance against the loss covered by said policy, that the other insurance shall be deemed excess insurance only. No exclusions shall be permitted by endorsement, with the exception of preparation or approval of maps and plans, opinions, reports, surveys, designs, or Specifications.

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5.1.1.3. SUBCONTRACTORS

Each subcontractor shall be required to maintain a Liability Policy providing the same coverage and limits of liability as those required of the Contractor. The Contractor shall retain certificates of insurance for each of his subcontractors and shall submit copies of the certificates to the Owner and Engineer.

5.1.1.4. AMOUNT OF COVERAGE

The Contractor shall maintain insurance on all motor vehicles used in conjunction with the work, which shall protect the Contractor from claims for bodily injury or property damage as may arise from the use of such motor vehicles. This insurance shall provide minimum limits of liability for bodily injury of \$1,000,000 for each person and \$1,000,000 each occurrence, and \$1,000,000 for property damage each occurrence.

5.1.2. ADDITIONAL INSURANCE

The Contractor shall also maintain the following insurance coverage:

5.1.2.1. COMPREHENSIVE AUTOMOBILE INSURANCE

The Contractor shall maintain insurance on all motor vehicles used in conjunction with the work, which shall protect the Contractor from claims for bodily injury or property damage as may arise from the use of such motor vehicles. This insurance shall provide minimum limits of liability for bodily injury of \$1,000,000 for each person and \$1,000,000 each occurrence, and \$1,000,000 for property damage each occurrence.

5.1.2.2. WORKER'S COMPENSATION INSURANCE

The Contractor shall maintain full Worker's Compensation Insurance for all persons whom he (she) may employ in prosecuting the work under this Contract. The coverage shall apply to the State of Oklahoma.

5.2 PROOF OF INSURANCE

The Contractor shall furnish the Owner with certificates of insurance for all policies required in these Contract Documents. Each such policy shall be satisfactory to the Owner and shall bear an endorsement precluding cancellation, reduction, or change in coverage without 30 days' prior written notice to the Owner. Nothing contained in the insurance requirements shall be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from his (her) operations under this contract.

5.3 NOTIFICATION OF INSURANCE COMPANIES

It shall be the responsibility of the Contractor to notify all insurance companies of the conditions and provisions of this contract. The insurance companies shall not receive notification by the Owner of any change or modification of this Contract, or of decreased or increased work, or of the cancellation of this Contract, or of any other acts by the Owner or its authorized employees or agents under the terms of this Contract.

5.4 HOLD HARMLESS AGREEMENT

By entering into this Contract, the Contractor agrees to indemnify and save harmless the Owner, the Engineer and all of their partners, officers, agents, and employees from all suits, actions, or claims of any character, brought for or on account of injuries, death, or damages to any persons or property, as may result from the operations of the Contractor or any of his (her) subcontractors, except only such

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damage, injury, or death as shall have been occasioned by the sole negligence of the owner or Engineer.

5.5 LAWS TO BE OBSERVED

The Contractor shall comply with all local, State, and Federal laws and regulations applicable to this Contract.

5.6 DELIVERIES TO CONTRACTOR

Deliveries to the Contractor of any drawings, samples, notices, letters of communications by the Owner may be made directly to the Contractor, his foreman or superintendent at the site of the work, the Contractor's business address specified in the proposal or the Owner's current record of address, or the Contractor's local office. Delivery may be made either by personal delivery or through the United States Postal Service.

5.7 ASSIGNMENT OF CONTRACT

The Contract shall not be assigned in whole or in part except upon the written consent of the Owner. Any assignment agreement shall be subject to review and approval by the Owner.

5.8 PROTECTION OF PERSONS AND PROPERTY

The Contractor shall be solely and completely responsible for conditions of the job site, including safety of all persons and property. This requirement shall apply continuously and shall not be limited to normal working hours. The Contractor shall furnish watchmen, guards, fences, warning signs, lights, and walkways, and shall take all other necessary precautions to prevent damage to persons or property. All structures and improvements in the vicinity of the work shall be protected by the Contractor. Any property that is damaged, injured, or destroyed by the Contractor, his employees, subcontractors, or agents, shall be promptly replaced or repaired to the satisfaction of the Engineer.

5.9 CONTRACTOR'S METHODS AND SAFETY PROCEDURES

The Engineer's construction inspection does not include any review of the adequacy of the Contractor's safety measures in, on, or near the construction. The Contractor shall have full responsibility for the adequacy of all safety precautions, and for the means, methods, techniques, sequences, ad procedures required to perform the work.

5.10 LIABILITY OF OWNER'S REPRESENTATIVES

The Owner, the Engineer, their partners, officers, employees, and agents shall not be held responsible for any liability arising under this Contract. The Owner and his representative shall not be responsible for the Contractors failure to carry out the work in accordance with the Contract Documents nor for the acts or omissions of the Contractor, and subcontractors, or any of their agents or employees, or any other persons performing any of the work.

6 PROGRESS AND COMPLETION OF WORK

6.1 SUSPENSION OF WORK

The Contractor shall give written notice to the Engineer prior to any temporary suspension of work. Suspensions shall not be made without the Engineer's written authorization.

6.2 TIME OF COMPLETION

The Contractor shall faithfully prosecute the work in accordance with the schedule as accepted by the Engineer, and shall complete the work within the time specified in the Contract Documents.

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6.3 EQUIPMENT AND METHODS

All work shall be performed with materials, tools, machinery, equipment and labor, and by such methods as are necessary to complete the work in accordance with the Contract Documents. If at any time the Contractor's plant, equipment, or labor, or any of his methods of execution of the work are deemed inefficient or inadequate by the Engineer to ensure the required quality or rate of progress, the Owner may require the Contractor to increase or improve his labor, facilities, or methods. The Contractor shall comply promptly therewith, but neither compliance with such order nor failure of the Owner to issue such orders shall relieve the Contractor from his obligation to secure the quality of construction and the rate of progress required. The Contractor alone shall be responsible for the safety, adequacy, and efficiency of his (her) equipment methods.

6.4 UNFAVORABLE WEATHER AND OTHER CONDITIONS

During unfavorable weather and other unfavorable conditions, the Contractor shall pursue only such portions of the work as shall not be damaged thereby. No portions of the work whose satisfactory quality or efficiency will be affected shall be constructed while these unfavorable conditions exist unless, by special means or precautions, the Contractor shall be able to overcome them to the satisfaction of the Engineer.

6.5 ALTERATIONS, DELETIONS AND EXTRA WORK

- 6.5.1 The Owner reserves the right to increase or decrease any portion of the work or to omit portions of the work as may be deemed necessary. The Owner may also make alterations, deviations, additions, or deletions to the work and to the Drawings and Specifications. Upon written order of the Owner, the Contractor shall proceed with the work as modified. Such work shall be considered a part of and subject to all provisions of the Contract Documents.
- 6.5.2 The Engineer may order minor changes in the work which does not involve extra cost to the Owner and which does not change the character of the work.
- 6.5.3 No claim by the Contractor for extra compensation because of any change, alteration, deletion, addition, or extra work will be paid or be payable unless a written order for such modification is signed by the authorized representative of the Owner. Adjustments in the contract price shall be made as provided under the paragraph, "Payments to Contractor" in these General Conditions. Modifications shall in no way affect, vitiate, or make void this Contract or any part thereof, except that which is necessarily affected by such alteration and is clearly the evident intention of the parties to this Contract.
- 6.5.4 If the Contractor fails to promptly perform or make satisfactory progress on any extra work authorized by the Owner, the Owner may arrange for others to complete the work. The Contractor shall not in any way interfere with the work of others.
- 6.5.5 When any changes decrease the amount of work to be done, such changes shall not constitute a basis for any claim by the Contractor. The Contractor shall not be entitled to any compensation or damages therefor.

6.6 DELAYS

6.6.1 AVOIDABLE DELAYS

- 6.6.1.1 Avoidable delays in the prosecution or completion of the work shall include all delays which might have been avoided by the exercise of care, prudence, foresight or diligence on the part of the Contractor as determined by the Engineer.
- 6.6.1.2 Any delay for whatever reason in the prosecution of any part of the work, which may in itself be unavoidable but does not necessarily prevent or delay the prosecution of other parts of the work nor the completion of the whole work within the time herein

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specified, as determined by the Engineer, or any delay resulting from the Engineer's review of Contractor submittals, or the making of surveys, measurements, and inspections; shall all be deemed avoidable delays.

6.6.2 UNAVOIDABLE DELAYS

Unavoidable delays in the prosecution or completion of the work under this Contract shall include all delays beyond the control of the Contractor and which he could not have provided against by the exercise of care, prudence, foresight, or diligence. Changes in the work ordered by the Owner; failure of the Owner to provide necessary rights-of-way; and unforeseen delays in the work of other contractors employed by the Owner will all be considered unavoidable delays, so far as they interfere with the Contractor's completion of the whole of the work as determined by the Engineer.

6.6.3 NOTICE OF DELAY

Whenever the Contractor foresees any delay in the prosecution of the work or immediately upon the occurrence of any delay, he (she) shall notify the Engineer in writing. The Engineer shall determine whether the delay is to be considered avoidable or unavoidable, and its resolution. Any delays not properly brought to the attention of the Engineer at the time of their occurrence shall be deemed avoidable delays without recourse by the Contractor.

6.7 EXTENSION OF TIME

6.7.1 FOR UNAVOIDABLE DELAY

The Contractor shall be allowed, upon proper written application and approval by the Engineer and extension of time proportionate to any unavoidable delay. The Contractor shall not be charged liquidated damages for such an extension of time.

6.7.2 AVOIDABLE DELAY

The Contractor may be granted an extension of time for avoidable delays in the work. The Contractor shall submit written application to the Engineer for approval. Any such extension of time shall be subject to liquidated damages and engineering and inspection costs as indicated in the Contract Documents.

6.7.3 DETERMINATION AND EXTENSION OF CONTRACT TIME

The contract time consists of the number of calendar days stated in the Contract for the completion of the work beginning on the effective date of the work order or the date the CONTRACTOR begins work, whichever is earlier, including all Sundays, holidays and non-work days. All calendar days elapsing between effective dates of any orders of the Engineer to suspend work and to resume work for suspensions, not the fault of the CONTRACTOR shall be excluded.

The occurrence of unusually severe weather during the life of the contract will be considered a basis for extending contract time when work is not already suspended for other reasons. Unusually severe weather shall mean weather which at the time of year it occurs is unusual for the place in which it occurs.

Extension of time for unusually severe weather will be determined on a monthly basis and will include only those actual adverse weather days in excess of the normal adverse weather days included in the contract time. Normal adverse weather shall mean adverse weather which, regardless of its severity, is to be reasonably expected for that particular place at that particular time of year. The normal adverse weather days included in the contract time as shown in Table A are based on historical records of temperature and precipitation from the **Department of Transportation, Division 8**.

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Actual adverse weather days are those days meeting one or more of the criteria in "a", "b", "c" and "d" below. Time extensions for days meeting more than one criterion will take into consideration only that criterion having the greatest impact. Those actual adverse weather days covered by criterion "a", "b", or "c" that are in excess of the days in Table A will be allowed without regard to when they occur (except prior to mobilization or during suspension for other reasons) or their impact on contract completion. However, those days covered by criterion "d" will be subject to the limitations as noted:

- "a" Days with Maximum temperature of 32° F or less - one full day allowed.
- "b" Days with Minimum temperature of 32° F or less, but whose Maximum temperature is over 32° F- one-half day allowed.
- "c" Days when 1/2" or more precipitation (rain or snow equivalent) occurs- one full day allowed.
- "d" Days when weather related conditions exist which prohibit proper performance of work as specified - one full day allowed. Allowance of such days will be subject to the work which is being delayed, being critical to timely contract completion and the CONTRACTOR making every reasonable effort to minimize the adverse impact of the conditions.

TABLE A
NORMAL ADVERSE WEATHER DAYS (BY MONTH)

MONTH	NORMAL ADVERSE WEATHER DAYS
January	9
February	7
March	6
April	3
May	3
June	3
July	2
August	2
September	3
October	3
November	5
December	7

6.8 PROOF OF COMPLIANCE WITH CONTRACT

The Contractor shall submit to the Engineer, upon request, properly authenticated documents or other satisfactory evidence that the work is in accordance with the Contract Documents.

7 PAYMENTS TO CONTRACTOR

7.1 PROGRESS PAYMENTS

7.1.1 The Owner will make payments periodically on an approximate monthly basis. Payment dates shall be either the first or third Tuesday of the month as established by the initial payment. Payment will be made on Wednesday if a holiday occurs on Monday of that week. Payment requests shall be prepared by the Contractor on forms provided by the Owner. The Contractor shall coordinate with the Engineer in preparing the estimate of work completed during the

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period. All work shall have been completed in accordance with the Contract Documents. Payment will only be made for fully completed work as determined by the Engineer. The payment request shall be submitted to the Engineer a minimum of 12, but no more than 14 calendar days prior to the payment date.

- 7.1.2 The estimates shall be subject to approval by the Engineer and the owner. The owner will pay or cause to be paid on approval request the estimated value of the work performed less a 5% retained amount.

MODIFIED WORK

The Owner will prepare and issue a supplement to the Contract as required for modifications or additions outside the scope of the work. The supplement shall indicate the nature of the modified work and any adjustment in compensation due the Contractor. Adjustments in compensation shall be determined by negotiated unit prices or negotiated lump sum as selected by the Owner. The Owner may also elect to use a time and materials basis for adjusting compensation.

7.1.3 TIME AND MATERIALS PAYMENT

The Contractor will be paid the costs for direct labor, materials, and equipment plus a markup of 15 percent upon the Engineer's approval of the payment request. This markup shall constitute full compensation for overhead and profit. All such payments will be made to the Contractor. The Contractor shall furnish all payroll records, purchase orders, invoices, and any requested information to the Engineer for use in approving the payment request.

- 7.1.3.1 The direct labor cost shall be the wages paid to direct workers including foremen and superintendents devoting their exclusive attention to the work. The direct labor cost shall also include payments for health and welfare, pension, vacation, and similar fringe benefits as accepted by the Engineer.

The markup to the direct labor cost shall constitute full compensation for all payments imposed by State and Federal laws, for worker's compensation insurance, for public liability and property damage insurance, and for all other such payments made to, or on behalf of, the workers.

- 7.1.3.2 The Contractor will be reimbursed only for materials incorporated in the work upon approval of the Engineer. The Contractor shall furnish satisfactory evidence of the cost of materials to the Engineer for approval. If the cost of such materials is considered excessive by the Engineer, then the cost shall be determined by the lowest current wholesale price at which such materials are available in the required quantities delivered to the job site, less any discounts.

The Owner reserves the right to furnish any and all materials and the Contractor shall have no claim whatsoever.

- 7.1.3.3 The Contractor will be reimbursed for the use of required equipment, which shall include the cost of fuel, oil, lubrication, supplies, necessary attachments, necessary current repairs and maintenance, depreciation, storage, insurance, and all incidentals. The current rental rates of established local suppliers shall be used by the Engineer in approving the payment request.

Individual pieces of equipment having a replacement value of fifty dollars or less shall be considered small tools and equipment and no payment will be made for their use.

The rental period for equipment shall be the time the equipment is in operation on the work and shall include the time required to move the equipment to the site and return it to its original location. Reimbursement shall not be allowed while equipment is inoperative due to breakdowns or non-working days.

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7.2 OWNER'S RIGHT TO WITHHOLD ADDITIONAL AMOUNTS

The Owner may withhold from payment to the Contractor, in addition to the retained percentage, any amount deemed necessary for:

- 7.2.1 Just claims for labor or materials.
- 7.2.2 Defective work not remedied.
- 7.2.3 Reasonable doubt that the Contract can be completed for the unpaid balance.
- 7.2.4 Damages to other Contractors.
- 7.2.5 Field engineer and inspection services and other expenses determined by the Engineer.
- 7.2.6 Unsettled claims.

The Owner shall have the right to act as agent for the Contractor in disbursing such funds as have been withheld pursuant to this section to the party or parties who are entitled to payment therefrom. The Owner will provide the Contractor with a proper accounting of all such funds disbursed in his behalf.

The Owner shall also have the right, following completion and final acceptance of the work, to withhold any final amount due the Contractor until it is satisfied that all subcontractors, material suppliers, and employees of the Contractor have been paid in full.

7.3 COST OF FIELD ENGINEERING AND INSPECTION

The Owner shall charge the Contractor for engineering and inspection expenses resulting from any overtime beyond the regular 8-hour day and for any time worked on Saturdays, Sundays, or City holidays, and each additional working day due to an avoidable delay. The Owner will require the presence of an inspector whenever the Contractor is performing work. The cost of this overtime shall be \$60.00 per hour and \$45.00 per hour for an Engineer and Inspector respectively for each hour or fraction thereof.

7.4 DEDUCTION FOR UNCORRECTED WORK

If any portion of the work done or material furnished proves defective and not in accordance with the Contract Documents, and if the imperfection is not of sufficient magnitude or importance to make the work dangerous or wholly undesirable according to the Engineer, or if the removal of such work is impracticable or will create conditions which are dangerous or undesirable, the Engineer shall have the right to make such determination and to retain the work instead of requiring correction. In such case, the Owner may make a just and reasonable deduction as determined by the Engineer from any payment due or to become due the Contractor.

7.5 PAYMENT FOR COMPLETION FOLLOWING TERMINATION

Upon termination of the Contract by the Owner in accordance with the Contract Documents, no further payments shall be due the Contractor.

7.6 LIQUIDATED DAMAGES

The time of completion is a basic consideration of this Contract. Should the work not be completed in all parts and in accordance with the Contract Documents on or before the time specified therein, including any extensions of time for unavoidable delay, substantial damage will be sustained by the Owner. If, because of an avoidable delay the Owner should grant to the Contractor an extension of time to finish and complete all the work, it would be difficult and impracticable to determine the actual amount of damage, which the Owner would sustain. In such case, the Contractor shall pay to the Owner, as liquidated damages and not as a penalty, the sum of \$500.00 plus field inspection costs for each and every calendar day required by him to complete the Contract.

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7.7 ACCEPTANCE

Any part of the work may be accepted in writing by the Owner when it shall have been completed in accordance with the terms of the Contract Documents as determined by the Engineer. The Contractor shall furnish written notice to the Engineer 10 days in advance of the date upon which the work will be ready for inspection.

7.8 FINAL PAYMENT

Following completion of all the work and final acceptance by the Owner, the Contractor shall prepare a final estimate of the amount of work done and the value thereof. The final estimate shall be subject to approval by the Engineer and the Owner. Upon approval, the Owner shall pay to the Contractor the remaining balance due in accordance with the provisions of the Contract Documents.

The Contractor shall not receive final payment nor any part of the retained percentage until he furnishes to the Owner a complete release of all claims or liens for the work under this contract.

SECTION 01000
SPECIAL PROVISIONS

PART - 1. GENERAL

1.1. Construction Surveys.

The Contractor shall provide a land surveyor licensed to perform land survey in the State of Oklahoma to develop, make, and maintain all detail surveys necessary for construction, including slope stakes and batter boards, and shall furnish stakes for reference points and for working points, lines, and elevations. The Contractor shall be responsible for the accuracy of all lines and grades and for the finished work being constructed in conformity to the plans and specifications. The Contractor shall exercise care and be responsible for the preservation of all control points established for his use in staking out the Work.

1.2. Explosives.

The use of explosives will not be permitted on this project.

1.3. Permits And Regulations.

The contractor shall secure and pay for all construction permits required to carry out the work unless otherwise specified and shall produce same upon demand of the Owner. The Contractor shall give all notices and pay all fees and shall, before starting work, ascertain whether the drawings and Specifications are at variance with any codes or regulations applying at the site.

1.4. Water.

The contractor may have access to approved fire hydrants to obtain water for compaction, testing and other construction uses provided a written request is submitted to and approved by the Engineer. The cost of water will not be charged to the contractor unless wastage becomes excessive.

1.5. Classification Of Excavation.

All excavation shall be classified as unclassified excavation. Unclassified excavation shall consist of the excavation and disposal of all materials of whatever character encountered in the work. The Contractor shall base his bid solely upon his site investigations. Where rock is encountered no direct payment shall be made for rock excavation as all costs in connection therewith are to be included in the unit price requiring such work. No direct payment shall be made for earth or structural excavation, as all costs in connection therewith are to be included in the unit price items requiring such work.

PART - 2. REMOVAL OF WATER.

2.1.1. The Contractor shall at all times during the construction of the work provide and maintain proper and adequate dewatering equipment for the removal and disposal of all surface and ground water and water from other sources entering excavations for structures, trenches, or other parts of the work. Surface water shall be diverted, and otherwise prevented from entering excavations and trenches to the greatest extent practicable

without damage to adjacent property from dikes, ditches, or impounded water.

- 2.1.2. Excavations for structures shall be kept dry until the structure to be built therein is completed to the extent that no damage from hydrostatic pressure, floatation, or otherwise will result from contact with water. All excavations for structures which extend down to or below the static ground water elevations at the sites of such structures shall be dewatered by lowering and maintaining the ground water beneath such excavations distance of not less than 12 inches below the bottom of the excavation at all times when work thereon is in progress, during subgrade preparation and the placing of concrete reinforcement thereon and continuously thereafter until the concrete in the floor or footing containing such steel has been placed and hardened. No reinforcement steel shall be placed in water and no water shall be permitted to rise over such steel before the concrete has been deposited.
- 2.1.3. Pipe trenches shall be kept free from water during excavation, fine grading, pipe laying and jointing, and pipe embedment operations in an adequate and acceptable manner. Where the trench bottom is mucky or otherwise unstable because of the presence of ground water, and in all cases where the static ground water elevation is above the bottom of any trench or bell hole excavation, such ground water shall be lowered by means of well points and keep the trench free from water and the trench bottom stable, at all times when work within the trench is in progress.
- 2.1.4. The Contractor will be held responsible for the condition of any existing or proposed drain or other conduit or pipe line which may be used for drainage purposes in the vicinity of construction and all such pipes or conduits shall be clean and free from all sediment before acceptance thereof by the Engineer.

PART - 3. TRAFFIC CONTROL AND SAFETY

- 3.1.1. **Safety.** The Contractor shall provide adequate barricades, flashers and signs on the construction site, all in accordance with the Manual on Uniform Traffic Control Devices to insure the safety of workmen and the public. This shall be considered incidental to construction. Anytime that an unsafe condition exists the field inspector shall immediately halt the construction and order the unsafe practice to be corrected.
- 3.1.2. **Stored Materials on Public Right-of-Way.** Materials stored about the work shall be so placed as to cause no greater obstruction to the traveling public than is considered necessary by the Engineer. Sidewalks must not be obstructed unless by special permission of the Engineer.

Neither the materials excavated nor the construction materials shall be placed so as to endanger the public or work or prevent free access to all fire hydrants, water valves, gas valves, manholes for electric or telephone, traffic signal conduits, sewers or fire alarms in the vicinity.

3.1.3. **Road Closings.** The Contractor shall notify the Engineer at least forty-eight (48) hours prior to the time he intends to obstruct any portion of any thoroughfare or street. If the Engineer agrees to the street obstruction the Contractor shall notify the Fire Department, Police Department, Ambulance service and news media twenty-four (24) hours prior to obstructing the street and when directed by the Engineer shall keep the street in condition for unobstructed use by emergency vehicles. News media notification shall include at least one local newspaper and at least one local radio station.

3.1.4. **Barricades.** When work is carried on, in, or adjacent to any street, alley or public place, the Contractor shall, at his own expense, furnish and erect such barricades, fences, lights and danger signals, shall provide such watchmen and flagmen and shall take such other precautionary measures for the protection of persons or property and of the work as are necessary. Barricades, lights, and other warning devices shall as a minimum meet all AASHTO Standards. The Contractor shall comply with the Manual of Uniform Traffic Control before erecting barricades.

All open trenches shall be barricaded and marked whether on or adjacent to the traveled portion of the right-of-way or not. Trenches on or adjacent to the traveled portion of the right-of-way shall, as a minimum, be completely barricaded and shall be marked (lighted) at forty (40) foot intervals. Trenches not on the traveled portion of the right-of-way shall be barricaded as necessary and shall, as a minimum, be marked at sixty (60) foot intervals.

The Contractor will be held responsible for all damage to the work due to failure of barricades, signs, lights, and watchmen to protect it.

PART - 4. UTILITY LOCATIONS.

Major underground utilities crossing the work areas are shown in their approximate locations on the plans. All utilities may not be shown. The indicated locations are only general and the depths are unknown. Individual service drops or lines are not shown. The Contractor shall be responsible to determine and verify the exact location and depth to avoid interruption of services to any residence. The Contractor shall coordinate the lowering and/or relocation of any and all utilities which may interfere with the proposed construction.

The Contractor shall arrange for all temporary safeguards necessary when working in proximity to utility facilities. The cost of these safeguards shall be included in other items of work. The Contractor shall give the utility company adequate notice to avoid delay of work.

Prior to beginning of construction the Contractor shall have all existing underground utilities located and marked on the ground and the alignment of proposed improvements staked. These utility locations will be used to determine the necessity of revisions to the location of underground improvement prior to beginning of construction.

PART - 5. SHOP DRAWINGS AND PRODUCT DATA.

- 5.1. Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- 5.2. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- 5.3. Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate, for those portions of the Work for which submittals are required, the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review by the Engineer is subject to the limitations stated below in paragraph 5.4.
- 5.4. The Engineer will review and approve or take other appropriate action upon the Contractors submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Engineer's action will be taken with such reasonable promptness as to cause no delay in the Work or in the activities of the Owner, Contractor or separate Contractors, while allowing sufficient time in the Engineer's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Engineer's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Engineer, of any construction means, methods, techniques, sequences or procedures. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- 5.5. The Contractor shall review, approve and submit to the Engineer Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate Contractors. Submittals made by the Contractor which are not required by the Contract Documents may be returned without action.
- 5.6. The Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Engineer. Such Work shall be in accordance with approved submittals.
- 5.7. By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, and has

checked and coordinated the information contained within such submittals with the requirements of the Work and the Contract Documents.

- 5.8. The Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Engineer's approval of Shop Drawings, Product Samples or similar submittals unless the Contractor has specifically informed the Engineer in writing of such deviation at the time of submittal and the Engineer has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Engineer's approval thereof.
- 5.9. The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than those requested by the Engineer on previous submittals.
- 5.10. Shop Drawings shall be submitted for all items specifically fabricated for this Project. Product data shall be submitted for all pre-manufactured items used on this Project. Product certifications shall be provided by the manufacturer for all items which are required to meet certain standards by these specifications.
- 5.11. Submittals shall identify details by reference to plan sheets and/or by specification numbers. Minimum sheet size for submittals shall be 8.5" x 11". When using manufacturer's standard schematic drawings, modify to delete information which is not applicable to Project. Underline, circle or otherwise indicate what item is being proposed.
- 5.12. The Contractor shall provide the number of copies of submittals required for his own distribution plus two (2) copies which will be retained and/or distributed by the Engineer.
- 5.13. Each submittal shall be accompanied with a transmittal letter, containing:
 - Date
 - Project Title and Number
 - Contractor's name and address
 - The number of copies of shop drawings, product datum and certifications
 - Notification of deviations from Contract
- 5.14. Submittals shall include:
 - Identification of product or material
 - Relation to adjacent structure or material if applicable
 - Field dimensions, clearly identified as such
 - Specification section subsection and/or addendum
 - Applicable standards, such as ASTM number or ODOT Specification

PART - 6. MEASUREMENT AND PAYMENT.

It is the intent of the Proposal and these Special Conditions that the total bid, as submitted, shall cover all work shown on the contract drawings and required by the Specifications and other Contract Documents. All costs in connection with the work, including furnishing of all materials, equipment, supplies and appurtenances; providing all construction equipment and tools, and performing all necessary labor to fully complete the work, shall be included in the unit and lump sum prices named in the Proposal.

PART - 7. TRADE NAMES AND MATERIALS.

Where the words "Equivalent", "Proper", or "Equal to" are used, they shall be understood to mean that the thing referred to shall be proper, the equivalent of, or equal to some other thing, in the opinion or judgment of the Engineer. Unless otherwise specified, all materials shall be the best of their respective kinds and shall be in all cases fully equal to approved samples. When the words "or equal to" or other such expressions are used in the Specification in connection with a material, manufactured article or process, the material, article or process, specifically designated shall be used, unless a substitute shall have been approved in writing by the Engineer and the Engineer shall have the right to require the use of such specifically designed material, article or process.

PART - 8. STANDARD SPECIFICATIONS.

The Oklahoma State Highway Commission "Standard Specifications for Highway Construction" edition of 2019, including supplements, are hereby adopted as part of these specifications where reference is made. Said specifications will be hereinafter referred to as the "Standard Specifications", "ODOT Specifications", or "ODOT." However, portions of the Standard Specifications referring to Basis of Payment or contract provisions are not applicable to these specifications. When ODOT Specifications conflict with these specifications or the Construction Drawing, the more stringent shall apply.

8.1. Site Conditions.

8.1.1. All roads, streets, drives, etc., cut during construction shall be properly protected by barricades, flashing lights, etc., and shall be made passable as soon as possible after construction operations during the day and always at night. Contractor shall maintain the above cut roads in a passable condition until the wearing surface is replaced and then kept in a satisfactory condition for one year after job is completed.

8.2. Saturday, Sunday, Holiday And Night Work.

8.3. No work shall be performed between the hours of 7:00 p.m. and 7:00 a.m., nor on Saturday, Sunday or legal City holidays without the written approval or permission of the Engineer in each case, except such work as may be necessary for the proper care, maintenances and protection of work already done, or of equipment, or in the case of an emergency.

PART - 9. PROTECTION OF PROPERTY.

- 9.1. The protection of City, State and Government monuments, street signs and other Owner's property is of prime importance, and if the same be damaged, destroyed or removed, they shall be repaired, replaced or paid for by the Contractor. Disturbance to this property must first be approved by the agency which owns or controls the property.
- 9.2. No valves or other control on any utility main or building service line shall be operated by the Contractor.
- 9.3. At places where the Contractor's operations are adjacent to railway, telegraph, telephone, electric and/or gas lines, or water, sanitary sewers and storm sewers, damage to which results in expense, loss or inconvenience, work shall not proceed until all arrangements necessary for the protection of said lines have been made.
- 9.4. The Contractor shall cooperate with the Owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner and duplication or rearrangement work may be reduced to a minimum. The revision and/or crossing of the various types of lines shall be made as follows:
 - 9.4.1. All overhead and buried telephone and electrical conduits crossed by the construction of this project shall be protected in accordance with the directions of the utility company owning the conduits and/or mains. The Contractor shall notify the companies and obtain their permission before making any crossings. The crossing of said lines shall be at the expense of the Contractor. Any overhead cables or buried cables or conduits damaged by the Contractor shall be repaired at his expense to the satisfaction of the Engineer and the Owner.
 - 9.4.2. The contractor shall not remove any water or sanitary sewer lines unless directed by the Engineer or as required by the Drawings and Specifications, and shall adequately brace and protect them from any damage during construction. Any existing water main or sewer main or lateral damage caused by the Contractor's operations will be repaired by the Contractor. The repairs will be made at the Contractor's expense.
- 9.5. The location of utility service lines serving individual properties are not shown on the Drawings, but the Contractor shall assume that such service lines exist and it shall be the responsibility of the Contractor to contact the necessary utilities and have all utilities located. It shall be the responsibility of the Contractor to make any necessary changes in the line and/or grade of such services, or to secure the necessary changes therein to be made by the particular utility company involved or other owner thereof, or by an agent or individual Contractor approved by such utility company or other owner. Contractor shall pay the cost of all such revisions whether performed by Contractor, the utility company or other owner, or an approved Contractor. In the event of interruption of a utility service as a result of accidental breakage, Contractor shall promptly notify the Engineer and the owner of the utility, and shall repair or cause the same to be repaired, in the same manner as

necessary changes above are provided for, the Contractor shall do all things necessary to see that the restoration of services are done as promptly as may be reasonably done. All sanitary sewer service lines damaged shall be replaced with cast iron pipe regardless of type or kind damaged.

- 9.6. In the event the Contractor in any way fails to comply with the requirements of protecting, repairing and restoring of any utility or utility service, the Owner may, upon forty-eight (48) hours written notice proceed to protect, repair, rebuild or otherwise restore such utility or utility service as may be deemed necessary, and the cost thereof will be deducted from any money due or which may become due the Contractor pursuant to the terms of his contract.

PART - 10. SCHEDULES.

The Contractor shall provide the following relative to project schedules.

- 10.1. **Project Schedule:** The Contractor shall furnish the Engineer with a tentative schedule setting forth in detail the procedure he proposes to follow, and giving the dates on which he expects to start and to complete the separate portions of the work. The schedule shall be updated and submitted to the Engineer on a monthly basis corresponding with the date of the monthly progress meetings. If at any time, in the opinion of the Engineer, proper progress is not being obtained, such changes shall be made in the schedule of operations which will satisfy the Engineer that the work will be completed within the period stated in the contract, or extension thereof made as herein provided.
- 10.2. **Weekly Schedule of Work:** The Contractor shall submit to the Resident Project Representative a schedule of work to be performed each week. The listing shall include the work to be performed each day of the week and the locations. The schedule shall be submitted by the close of business on the Friday before the week covered by the schedule.

PART - 11. SUBCONTRACTORS.

Contractor shall prepare list of proposed subcontractors including material suppliers; submit to Engineer for approval before subcontracts are awarded.

11.1. Safety Standards And Accident Prevention.

With respect to all work performed under this Contract the Contractor shall:

- 11.1.1. Comply with the safety standards provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Section 1910 or 1926, as applicable.
- 11.1.2. Exercise every precaution at all times for the prevention of accidents and protection of persons (including employees) and property.

- 11.1.3. Submit for review by the Owner and Engineer a safety plan which addresses all applicable safety requirements of current Federal and State laws and outlines procedures for implementation. The plan shall be submitted on or before the seventh calendar day following the effective date of the Notice to Proceed. No field work except mobilization and initial site inspection shall be allowed until the plan is acknowledged by the Engineer.
- 11.1.4. Submit completed confined space entry forms on a monthly basis covering all confined space entries during the previous calendar month. The reports shall be submitted to the Engineer at the monthly progress meeting.

11.2. Access To The Work.

Some of the structures, pipeline segments, and swales scheduled for installation or replacement in the project are located on or near private property. Access to these pipeline segments is provided by easements and/or right-of-way; however, the legal access may be covered with private improvements such as fences, landscaping, out-buildings, etc. All proposed easements as indicated on the Construction Drawing may not be available during construction. In addition, the easements and/or right-of-way width covering the proposed work may not be sufficient for the Contractor's construction methods. In such cases, the Contractor shall work with the landowners to find alternative methods of access, and, if necessary, to gain additional work space. A written, signed agreement carefully detailing all provisions shall be obtained by the Contractor. Provisions of all agreements for restoration of removed or damaged private property shall be the responsibility of the Contractor and become part of the work. Private improvements located on the legal access shall be removed and replaced as required by the Contractor at his expense. In such cases the Contractor shall minimize the damage to private property and shall make every effort to work with the landowner. Fences, pavement, out-buildings, and other improvements located on the legal access shall be removed and replaced by the Contractor at NO additional cost to the Owner.

11.3. Monthly Progress Meetings.

During the performance of this contract, monthly progress meetings are not required.

11.4. Field Office.

During the performance of this contract a field office is not required.

11.5. Pollution Prevention Plan.

This item shall govern the control measures necessary to prevent and control soil erosion, sedimentation and storm water pollution which may degrade receiving waters including rivers, streams, lakes reservoirs, ground water and wetlands. The control measures contained herein shall be installed and maintained throughout the construction contract and coordinated with the permanent or existing temporary pollution control features specified elsewhere in the Plans and Specifications to assure effective and continuous water pollution control throughout the construction

and post construction period. These control measures shall not be used as a substitute for the permanent pollution control measures unless otherwise directed by the Engineer in writing. The controls may include silt fences, bale barriers, sediment filters, dikes, dams, berms, sediment basins, mats, soil retention blankets, temporary seeding, mulch, channel liners, slope drains or other structural or non-structural water pollution controls.

Prior to the start of the construction, the Contractor shall submit to the Engineer, for approval, a completed Storm Water Pollution Prevention Plan (SWPPP) which details schedules for accomplishment of pollution control measures. The SWPPP shall be completed by an individual experienced in the preparation of SWPPP's and shall include a Notice of Intent for Storm Water Discharges according to the requirements of the EPA, if applicable. The Contractor shall also submit, for approval, proposed methods of pollution control in areas which may be outside the construction limits such as construction and haul roads, field offices, equipment and supply areas, and material sources, as well as a plan for disposal of waste materials. Work on the project shall not begin until the SWPPP and corresponding schedules for implementation of the controls and methods of operations have been reviewed and approved by the Engineer in writing.

PART - 12. THE SWPPP SHALL ADDRESS THE FOLLOWING REQUIREMENTS:

- 12.1. The disturbed surface areas exposed by construction operations may require limitations to allow for effective control pollution prevention methods. The Contractor shall provide control measures to prevent or minimize impact to receiving waters as required by the SWPPP and/or in a manner approved by the Engineer in writing. If the Contractor is not able to effectively control soil erosion and sedimentation resulting from construction operations, every effort shall be made to limit the amount of disturbed area at any given time.

Should the control measures fail to function effectively, the Contractor shall act immediately to bring the erosion and sedimentation under control by maintaining existing controls or by providing additional controls as directed by the Engineer. When in the opinion of the Engineer the site is adequately stabilized, the control measures shall be removed and properly disposed of by the Contractor.

- 12.2. For areas of the State which have an average annual rainfall less than 20 inches and where stabilization is precluded by seasonal arid conditions, stabilization measures shall be implemented as soon as practicable. For all areas of the State with an average annual rainfall greater than 20 inches, in any disturbed area where construction activities have ceased, permanently or temporarily, the Contractor shall stabilize the area by the use of seeding, mulching, soil retention blankets or other appropriate measures within 14 days, unless construction activities are scheduled to resume within 21 days.
- 12.3. The Contractor shall effectively prevent and control erosion and sedimentation on the site at the earliest practicable time as outlined in the approved SWPPP. Control measures, where applicable, will be implemented prior to the commencement of each construction operation or immediately after the area has been disturbed.

- 12.4. Disposal areas, stockpiles and haul roads shall be constructed in a manner that will minimize and control the amount of sediment that may enter receiving waters. Disposal areas shall not be located in any wetland, waterbody or streambed. Construction roads may not be located in or cross any waterbody or streambed without prior approval of the Engineer and shall be done in compliance with applicable rules and regulations.
- 12.5. Construction operations in rivers, streams, lakes, wetlands and other waterbodies shall be restricted to those areas where it is necessary to perform the work shown on the Plans. Wherever streams are crossed, temporary bridges, timber mats or other structures shall be used, as directed by the Engineer. The use of a work road within a stream channel shall be minimized to the greatest extent practicable.
- 12.6. Protected storage for paints, chemicals, solvents, fertilizers and other potentially toxic materials will be provided by the Contractor and on the location approved by the Engineer.
- 12.7. Construction staging areas and vehicle maintenance areas shall be constructed by the Contractor in a manner to minimize the runoff of pollutants and their location will be approved by the Engineer. The Contractor shall prevent pollution or receiving waters with petroleum products or other hazardous or regulated substances. When work areas of material sources are located adjacent to a waterbody, control measures such as dikes, gabions or rock berms shall be used to keep sediment and other contaminants from entering the adjacent waterbody. Care shall be taken during the construction and removal of such barriers to minimize down-gradient sedimentation.
- 12.8. All waterways shall be cleared as soon as practicable of temporary embankment, temporary bridges, matting, falsework, piling, debris or other obstructions placed during construction operations that are not a part of the finished work.
- 12.9. Disturbance of existing vegetation shall be minimized and limited to only those areas approved by the Engineer.
- 12.10. Construction entrances shall be stabilized by the use of rock, timber matting or other acceptable techniques to minimize the off-site vehicle tracking of sediment.
- 12.11. The project will not be accepted until, in the opinion of the Engineer, the Contractor has established a uniform perennial vegetative cover with a density of 70 percent in all areas not covered by permanent structures, or that equivalent permanent or temporary stabilization measures (such as riprap, gabions, soil retention blankets, mulching or geotextiles) have been employed.
- 12.12. After acceptance of the project by the Owner, the Owner will be responsible for maintenance of permanent erosion control practices.

Development of the Storm Water Pollution Prevention Plan, temporary erosion, sedimentation and stormwater pollution prevention and control will not be measured for payment but shall be included in other items of work with the exception of bale barriers, silt fence, and permanent sodding or seeding. Pollution control measures may be applicable to construction work outside the right of way where such work is

necessary as a result of related construction such as material-source operations, haul roads and equipment-storage sites. Pollution control measures outside the right-of-way or easement will not be measured for payment but shall be performed at the Contractor's expense.

In case of failure on the part of the Contractor to prevent and control soil erosion, sedimentation and water pollution which may degrade receiving water, the Engineer reserves the right to employ outside assistance or to use City forces to provide the necessary corrective measures. Such incurred direct costs plus project engineering costs will be deducted from any monies due or to become due to the Contractor.

PART-13 CONTRACTOR QUALITY CONTROL

Material testing during construction shall be provided by an independent testing laboratory certified by the Associate of Certified Independent laboratories, retained and paid for by the Contractor. All testing methods shall be in accordance with applicable sections of the Standard Specifications. Reports of the test shall be submitted to the Engineer within 48 hours after each test is completed. The testing laboratory shall give verbal notification to the Engineer immediately of any testing failures or irregularity. Material testing and certification shall be in accordance with the following schedule.

13.1 Minimum Sampling and Testing Schedule

13.1.1. Embankment

In place Density and Moisture Content	One per 1,000 linear feet per lift.
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13.1.2. Borrow Excavation

Classification	One per each source per 3,000 C.Y.
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13.1.3. Subgrade

In Place Density & Moisture Content	One each 500 linear feet.
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13.1.4. Aggregate Base

Quality L.A. abrasion	One per Source
Gradation, L.L., & P.I.	One per 750 C.Y.
Thickness in Place	One per 500 linear feet.

13.1.5. Lime Stabilized Subgrade	One per 500 linear feet.
In Place Density & Moisture Content	
1.3.1.6. Rip Rap	
Material	Field Inspection of material at source by project personnel.
1.3.1.7. Filter Blanket	
Quality	One per each source
Gradiation	Each 500 Ton or minimum of one per job.
1.3.1.8. Concrete Fine Aggregate	
Quality	One per each source.
Gradiation	One per 300 Tons.
1.3.1.9. Concrete Course Aggregate	
Quality	One per each source.
Gradiation	One per 300 Tons.
1.3.1.10. Concrete	
Slump & Air Content	Test first delivery and every 5 th unit thereafter and for each set of cylinders.
Cylinders	One set of 3 cylinders for each days pour larger than 15 C.Y. and one set of 3 cylinders for each 50 C.Y. for 28 day strength. Pours smaller than 15 C.Y. to be casted and tested as required by Engineer to insure quality.

1.3.1.11. Asphalt Concrete

Asphalt	One refinery certificate with test results each shipment
Aggregate	Preliminary, one L.A. abrasion test each source.
Mix	Extraction (asphalt, moisture and gradation) one each day or one each 500 tons, whichever is more frequent.
Mix Thickness	Two cores each day.
Density	Two each day or one per 500 tons, whichever is more frequent

13.1.12. Backfill for Cross Drain Culverts

Density	Two each installation.
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END OF SECTION 01000

SECTION 01150 MEASUREMENT AND PAYMENT

PART 1: GENERAL REQUIREMENTS

1.01 **SCOPE:** This section describes the method by which construction of this project shall be measured and paid in accordance with Bid Schedule. Should there be any conflicts between payment described in individual SPECIFICATION sections and this section, payment shall be made in accordance with this section. Only those items described in this Section and included in the Bid Schedule shall be applicable. Any work shown on the Drawings and/or described in the SPECIFICATIONS but not specifically covered by the bid items described in this section shall be included in other items of work.

PART 2: PRODUCTS

2.01 Products and materials are described in other SPECIFICATION sections or on the Drawings.

PART 3: BID ITEMS

3.01 **GENERAL:** The following general items will be paid for separately:

A. **SPECIAL PAYMENT PROVISION: NO PAYMENT SHALL, IN PART OR IN FULL, BE MADE FOR ANY ITEM OF WORK WHICH REQUIRES ANY PERFORMANCE TESTING UNTIL ALL REQUIRED TESTS FOR ANY ITEM OF WORK AT THAT SITE HAS BEEN PERFORMED SATISFACTORILY.**

B. **BID ITEM NO. 1 – MOBILIZATION, INSURANCE AND BONDS:** This item includes mobilization, demobilization, bonds, and insurance. A maximum of 5% is allowed in the Bid Proposal for mobilization and shall be paid for on a lump sum basis in the following manner.

1. 50% on first pay estimate.

2. 35% on pay estimate that shows 50% completion of the work, not including allowances for stored materials.

3. 15% on final pay estimate.

C. **BID ITEM NO. 2 – FILTER AID POLYMER SYSTEM SKID, COMPLETE IN PLACE:** This item shall be paid for on a per each basis. The unit price bid shall be payment for the removal of the existing skid, including but not limited to: disconnection of all wiring

(electrical, control and communication), plumbing and the installation of the new skid unit including connection of all wiring (electrical, control and communication), and plumbing for a fully operational filter aid polymer feeder/blender system. Contractor shall be responsible for incidentals pertaining to this work as well as integrating the new unit into the City's SCADA system. Note, the City will retain the existing skid unit.

D. BID ITEM NO. 3 – RESIDUALS POLYMER SYSTEM SKID, COMPLETE IN PLACE: This item shall be paid for on a per each basis. The unit price bid shall be payment for the removal of the existing skid, including but not limited to: disconnection of all wiring (electrical, control and communication), plumbing and the installation of the new skid unit including connection of all wiring (electrical, control and communication), and plumbing for a fully operational residual polymer feeder/blender system. Contractor shall be responsible for incidentals pertaining to this work as well as integrating the new unit into the City's SCADA system. Note, the City will retain the existing skid unit.

E. BID ITEM NO. 4 – CONSTRUCTION CONTINGENCY ALLOWANCE. This item is an allowance for any unforeseen conditions that are not anticipated in the design. Use of this pay item shall only be on the written approval of the owner authorizing said additional work.

SECTION 01300 SUBMITTALS

PART 1 GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

- A. This Section specifies the general methods and requirements of submissions applicable to Shop Drawings, Product Data, Samples, and Construction or Submittal Schedules. Additional general submission requirements are contained in the General Conditions. Detailed submittal requirements are specified in the technical sections.
- B. All submittals shall be clearly identified by reference to Section Number, Paragraph, Drawing Number or Detail as applicable. Submittals shall be clear and legible and of sufficient size for presentation of data.

1.02 SHOP DRAWINGS, PRODUCT DATA, SAMPLES

A. Shop Drawings

- 1. Shop drawings as specified in individual Sections include, custom-prepared data such as fabrication and erection/installation (working) drawings, scheduled information, setting diagrams, actual shop work manufacturing instructions, custom templates, special wiring diagrams, coordination drawings, individual system or equipment inspection and test reports including performance curves and certifications, as applicable to the work.
- 2. All shop drawings submitted by subcontractors shall be sent directly to the Contractor for checking. The Contractor shall be responsible for their submission at the proper time so as to prevent delays in delivery of materials.
- 3. Check all subcontractor's shop drawings regarding measurements, size of members, materials and details to make sure that they conform to the intent of the Drawings and related Sections. Return shop drawings found to be inaccurate or otherwise in error to the subcontractors for correction before submission thereof.
- 4. All details on shop drawings shall show clearly the relation of the various parts to the main members and lines of the structure and where correct fabrication of the work depends upon field measurements, such measurements shall be made and noted on the drawings before being submitted.

B. Product Data

1. Product data as specified in individual Sections include, standard prepared data for manufactured products (sometimes referred to as catalog data), such as the manufacturer's product specification and installation instructions, availability of colors and patterns, manufacturer's printed statements of compliances and applicability, roughing-in diagrams and templates, catalog cuts, product photographs, standard wiring diagrams, printed performance curves and operational-range diagrams, production or quality control inspection and test reports and certifications, mill reports, product operating and maintenance instructions and recommended spare-parts listing and printed product warranties, as applicable to the work.

C. Samples

1. Samples specified in individual Sections include, physical examples of the work such as sections of manufactured or fabricated work, small cuts or containers of materials, complete units of repetitively-used products, color/texture/pattern swatches and range sets, specimens for coordination of visual effect, graphic symbols and units of work to be used by the Engineer or Owner for independent inspection and testing, as applicable to the work.

1.03 CONTRACTOR'S RESPONSIBILITIES

- A. Review shop drawings, product data and samples, including those by subcontractors, prior to submission to determine and verify the following:
 1. Equipment (or field) measurements
 2. Equipment (or field) construction criteria
 3. Catalog numbers and similar data
 4. Conformance with related Sections
- B. Each shop drawing, sample and product data submitted by the Contractor shall have affixed to it the following Certification Statement including the Contractor's Company name and signed by the Contractor: "Certification Statement: by this submittal, I hereby represent that I have determined and verified all equipment (or field) measurements, equipment (or field) construction criteria, materials, dimensions, catalog numbers and similar data and I have checked and coordinated each item with other applicable approved shop drawings and all Contract requirements." Shop drawings and product data sheets 11-in x 17-in and smaller shall be bound together in an orderly fashion and bear the above Certification Statement on the cover sheet. The cover sheet shall fully describe the packaged data and include a listing of all items within the package. Provide

to the Resident Project Representative a copy of each transmittal sheet for shop drawings, product data and samples at the time of submittal to the Engineer.

- C. Notify the Owner in writing, at the time of submittal, of any deviations in the submittals from the requirements of the Contract Documents.
- D. The review and approval of shop drawings, samples or product data by the Engineer shall not relieve the Contractor from the responsibility for the fulfillment of the terms of the Contract. All risks of error and omission are assumed by the Contractor and the Engineer will have no responsibility therefor.
- E. No portion of the work requiring a shop drawing, sample, or product data shall be started nor shall any materials be fabricated prior to the approval or qualified approval of such item. Fabrication performed or materials purchased accomplished which does not conform to approved shop drawings and data shall be at the Contractor's risk. The Owner will not be liable for any expense or delay due to corrections or remedies required to accomplish conformity.
- F. Project work, materials, and fabrication shall conform with approved shop drawings, applicable samples, and product data.

1.04 SUBMISSION REQUIREMENTS

- A. Make submittals promptly in accordance with approved schedule and in such sequence as to cause no delay in the Work or in the work of any other contractor.
- B. Each submittal, appropriately coded, will be returned within 15 calendar days following receipt of submittal by the Engineer. Except as noted below:
 - 1. Contractor shall allow 30 calendar days following receipt of submittal by the Engineer.
- C. Number of submittals required:
 - 1. Shop Drawings: Electronic.
 - 2. Product Data: Electronic.
- D. Submittals shall contain:
 - 1. The date of submission and the dates of any previous submissions.
 - 2. The Project title and number.
 - 3. Contractor identification.

4. The names of:
 - a. Contractor
 - b. Supplier
 - c. Manufacturer
5. Identification of the product, with the section number, page and paragraph(s).
6. Equipment (or field) dimensions, clearly identified as such.
7. Relation to adjacent or critical features of the work or materials.
8. Applicable standards, such as ASTM or Federal Standards numbers.
9. Identification of deviations from Contract Documents.
10. Identification of revisions on resubmittals.
11. A 8-in by 3-in blank space for Contractor and Engineer stamps.
12. Where calculations are required to be submitted by the Contractor, the calculations shall have been checked by a qualified individual other than the preparer. The submitted calculations shall clearly show the names of the preparer and of the checker.

1.05 REVIEW OF SHOP DRAWINGS, PRODUCT DATA, WORKING DRAWINGS AND SAMPLES

- A. The review of shop drawings, data and samples will be for general conformance with the design concept and Contract Documents. They shall not be construed:
 1. as permitting any departure from the Contract requirements;
 2. as relieving the Contractor of responsibility for any errors, including details, dimensions, and materials;
 3. as approving departures from details furnished by the Engineer, except as otherwise provided herein.
- B. The Contractor remains responsible for details and accuracy, for coordinating the work with all other associated work and trades, for selecting fabrication processes, for techniques of assembly, and for performing work in a safe manner.

C. If the shop drawings, data or samples as submitted describe variations and show a departure from the Contract requirements which Engineer finds to be in the interest of the Owner and to be so minor as not to involve a change in Contract Price or Contract Time, the Engineer may return the reviewed drawings without noting an exception.

D. Submittals will be returned to the Contractor under one of the following codes.

Code 1 - "APPROVED" is assigned when there are no notations or comments on the submittal. When returned under this code the Contractor may release the equipment and/or material for manufacture.

Code 2 - "APPROVED AS NOTED" - This code is assigned when a confirmation of the notations and comments IS NOT required by the Contractor. The Contractor may release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product.

Code 3 - "APPROVED AS NOTED/CONFIRM" - This combination of codes is assigned when a confirmation of the notations and comments IS required by the Contractor. The Contractor may, at his own risk, release the equipment or material for manufacture; however, all notations and comments must be incorporated into the final product. This confirmation shall specifically address each omission and nonconforming item that was noted. Confirmation is to be received by the Engineer within 10 calendar days of the date of the Engineer's transmittal requiring the confirmation.

Code 4 - "APPROVED AS NOTED/RESUBMIT" - This combination of codes is assigned when notations and comments are extensive enough to require a resubmittal of the package. This resubmittal is to address all comments, omissions and non-conforming items that were noted. Resubmittal is to be received by the Engineer within 15 calendar days of the date of the Engineer's transmittal requiring the resubmittal.

Code 5 - "NOT APPROVED" is assigned when the submittal does not meet the intent of the Contract Documents. The Contractor must resubmit the entire package revised to bring the submittal into conformance. It may be necessary to resubmit using a different manufacturer/vendor to meet the Contract Documents.

Code 6 - "COMMENTS ATTACHED" is assigned where there are comments attached to the returned submittal which provide additional data to aid the Contractor.

Code 7 - "RECEIPT ACKNOWLEDGED" - This code is assigned to acknowledge receipt of a submittal that is not subject to the Engineer's review and approval; and, is being filed for informational purposes only. This code is generally used in acknowledging receipt of *means and methods of*

construction work plan, field conformance test reports, and Health and Safety plans.

Codes 1 through 5 designate the status of the reviewed submittal with Code 6 showing there has been an attachment of additional data.

- E. Resubmittals will be handled in the same manner as first submittals. On resubmittals the Contractor shall identify all revisions made to the submittals, either in writing on the letter of transmittal or on the shop drawings by use of revision triangles or other similar methods. The resubmittal shall clearly respond to each comment made by the Engineer on the previous submission. Additionally, the Contractor shall direct specific attention to any revisions made other than the corrections requested by the Engineer on previous submissions.
- F. Partial submittals may not be reviewed. The Engineer will be the only judge as to the completeness of a submittal. Submittals not complete will be returned to the Contractor and will be considered "Not Approved" until resubmitted. The Engineer may at his option provide a list or mark the submittal directing the Contractor to the areas that are incomplete.

G. Repetitive Review

- 1. Shop drawings and other submittals will be reviewed no more than twice at the Owner's expense. All subsequent reviews will be performed at times convenient to the Engineer and at the Contractor's expense, based on the Engineer's then prevailing rates. The Contractor shall reimburse the Owner for all such fees invoiced to the Owner by the Engineer. Submittals are required until approved.
- 2. Any need for more than one resubmission, or any other delay in obtaining Engineer's review of submittals, will not entitle Contractor to extension of the Contract Time.

H. If the Contractor considers any correction indicated on the shop drawings to constitute a change to the Contract Documents, the Contractor shall give written notice thereof to the Engineer at least 7 working days prior to release for manufacture.

I. When the shop drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the manufacture of products in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

1.06 DISTRIBUTION

- A. Distribute reproductions of approved shop drawings and copies of approved product data and samples, where required, to the job site file and elsewhere as directed by the Engineer. Number of copies shall be as directed by the Engineer but shall not exceed six.

1.07 CONSTRUCTION SCHEDULE

- A. The Contractor shall, within 15 days after the Notice to Proceed to provide and submit to the Engineer for approval, the Schedule he plans to maintain in order to successfully construct the work within the time allotted. The Contractor shall coordinate that products are manufactured and delivered to the construction site so that work can be constructed within the time allotted. The Contractor's Schedule shall include a Critical Path Network and a Computer generated print-out. The Schedule shall account for all Installation Contract work in addition to the work of the Contractor. In addition to all reasonably important construction activities, the Schedule shall provide for the proper sequence of construction considering the various crafts, purchasing time, submittal approval, material delivery, equipment fabrication, and similar time consuming factors.
- B. The Schedule shall include as a minimum, the earliest starting and finish dates, latest starting and finish dates, and the total float for each task or item. The Contractor shall update (monitor) and rerun the Schedule at least monthly and shall submit to the Engineer the Network and Computer print-out, both in duplicate, at the same time the pay estimate is prepared. The Schedule shall contain all of the items of the Periodic Estimate and Pay Schedule. The Contractor shall prepare schedule updates for products specified and supplied in the Contract such that the
- C. The monthly Schedule update (monitoring) shall include the following items:
 - 1. Network
 - a. Identify activities that are completed or in process by contrasting heavy lines. Each activity worked on should be proportional to the percentage of progress achieved to date.
 - b. Identify restraints imposed by material deliveries, precedent activity durations or schedule adjustments on the monthly update of the Network.
 - 2. Computer Print-out
 - a. Show the percentage progress status of each activity. The percentage progress status will be used to support each Contractor's periodic pay estimate.
 - b. Show actual start and completion dates.
 - c. Flag all activities started and in progress.
- D. Supplemental to the Critical Path Schedule, the Contractor shall provide a detailed work schedule, projected at least a month in advance. The implementation of the work schedule and the coordination required will constitute the basic agenda of the coordination and planning meetings.

1.08 PROFESSIONAL ENGINEER (P.E.) CERTIFICATION FORM

A. NOT REQUIRED FOR THIS PROJECT

1.09 GENERAL PROCEDURES FOR SUBMITTALS

A. Coordination of Submittal Times: Prepare and transmit each submittal sufficiently in advance of performing the related work or other applicable activities, or within the time specified in the individual work of other related Sections, so that the installation will not be delayed by processing times including disapproval and resubmittal (if required), coordination with other submittals, testing, purchasing, fabrication, delivery and similar sequenced activities. No extension of time will be authorized because of the Contractor's failure to transmit submittals sufficiently in advance of the Work.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01782
OPERATIONS AND MAINTENANCE INFORMATION

PART I GENERAL

1.01 DESCRIPTION

- A. Scope**
 - 1. This section specifies operation and maintenance (O&M) information and manual instructions.
 - 2. O&M instructions shall be provided in accordance with this section and as required in the technical sections of this project manual. O&M information shall be provided for each maintainable piece of equipment, equipment assembly or subassembly, and material provided or modified under this contract.
 - 3. O&M instructions must be submitted and accepted before on-site training may start.
- B. Related Sections:** The work of the following Sections is related to the work of this Section. Other Sections, not referenced below, may also be related to the proper performance of this work. It is the Contractor's responsibility to perform all the work required by the Contract Documents.
- C. Equipment List:** Not Used.
- D. Performance Requirements:** Not Used.
- E. Operating Conditions:** Not Used.

1.02 QUALITY ASSURANCE

- A. References:** Not Used.

1.03 SUBMITTALS

- A.** The following information shall be provided. Contractor shall provide bound O&M manuals for all equipment and material specified in this contract.
 - 1. Control diagrams: Include diagrams for internal and construction wiring.
 - 2. Spare parts list: Manufacturer's recommendations of number of parts which should be stored by the Owner and special storage of precautions which may be required, as well as the generic title and identification number of each component part of the equipment.

3. Exploded view or plan and section views: Detailed plan and section views of equipment when exploded views are not available. All views shall have detailed part callouts matching those callouts of the parts list. Exploded or cut views of equipment shall be provided, if available, as a standard item of the manufacturer's information.
4. Operating procedures: Manufacturer's recommended step-by-step procedures for starting, operating, and stopping the equipment under specified modes of operation.
5. Overhaul instructions: Manufacturer's directions for the disassembly, repair, and reassembly of the equipment, and any safety precautions that must be observed while performing the work.
6. Preventative maintenance procedures: Manufacturer's recommended steps and schedules for maintaining the equipment.
7. Installation and startup procedures: Manufacturer's recommendations for installation, adjustment, calibration, and troubleshooting.
8. Lubrication information: Manufacturer's recommendations regarding the lubricants to be used and the lubrication schedule to be followed.
9. Names and addresses of the manufacturer, the nearest representative of the manufacturer, and the nearest supplier(s) of the manufacturer's equipment and parts.
10. Significant design criteria including pertinent calculations used in designing, selecting, or verifying the appropriateness of the installed equipment.
11. Pump or blower curves: Manufacturer's recommendations shall be provided on procedures and instructions for correcting problems and making repairs.
12. Safety precautions: List personnel hazards for equipment and list safety precautions for all operating conditions.
13. Emergency operations: Provide emergency procedures for equipment malfunctions to permit a short period of continued operation or to shut down the equipment to prevent further damage to systems and equipment. Include emergency shutdown instructions for fire, explosion, spills, or other foreseeable contingencies. Provide guidance on emergency operations of all utility systems including valve locations and portions of systems controlled.
14. Corrective Maintenance: Manufacturer's recommendations shall be provided on procedures and instructions for correcting problems and making repairs.
15. Specific Information: Additional information as specified for subject equipment not included in the above list.

B. O&M Manual Appendices

1. The following information shall be provided: include information not specified in the preceding paragraphs but pertinent to the maintenance or operation of the product or equipment.
 - a. **PARTS IDENTIFICATION:** Provide identification and coverage for all parts of each component, assembly, subassembly, and accessory of the end items subject to replacement. Include special hardware requirements, such as requirement to use high-strength bolts and nuts. Identify parts by make, model, serial number, and source of supply to allow reordering without further identification. Provide clear and legible illustrations, drawings, and exploded views to enable easy identification of the items. When illustrations omit the part numbers and description, both the illustrations and separate listing shall show the index, reference, or key number which will cross-reference the illustrated part to the listed part. Parts shown in the listings shall be grouped by components, assemblies, and subassemblies.
 - b. **WARRANTY INFORMATION:** List and explain the various warranties and include the servicing and technical precautions prescribed by the manufacturers or contract documents to keep warranties in force.
 - c. **PERSONNEL TRAINING REQUIREMENTS:** Provide information available from the manufacturers to use in training designated personnel to operate and maintain the equipment and systems properly.
 - d. **TESTING EQUIPMENT AND SPECIAL TOOL INFORMATION:** Provide information on test equipment required to perform specified tests and on special tools needed for the operation, maintenance, and repair of components.

1.04 ENVIRONMENTAL CONDITIONS

A. Provide a list of environmental conditions (temperature, humidity, and other relevant data) which are best suited for each product or piece of equipment and describe conditions under which equipment should not be allowed to run.

PART 2 PRODUCTS

2.01 BINDER MATERIALS

A. Binders for the final bound O&M manuals shall be 3-ring with metal piano hinges and locking slide bar assembly capable of extending to a maximum 5-inch thickness.

PART 3 EXECUTION

3.01 INITIAL SUBMITTAL

- A. Manufacturer's standard original brochures and manuals used to described the equipment and the O&M procedures, shall be modified to reflect only the model or series of equipment used. Extraneous material will be eliminated or crossed out neatly.
- B. Photocopies or facsimiles of manufacturers' standard brochures and manuals are not allowed.
- C. The initial submittal will be reviewed. Only O&M information which is approved shall be included in the O&M final bound sets.

3.02 FIELD CHANGES

- A. Following the accepted installation and operation of an equipment item, the item's instructions and procedures shall be modified and supplemental to reflect field changes or additional field information specific to this installation.
- B. A minimum of 30 days prior to commissioning of the systems and equipment, all O&M information for equipment, instruments, and controls must be updated to reflect any changes identified during installation and startup. Updates may be made by resubmitting updated information or by submitting redlined markups to previously submitted O&M information. Commissioning will not be allowed to begin until the Owner has a complete set of all of the necessary updated information for any given system.

3.03 FINAL BOUND SETS

- A. Following start-up, but prior to acceptance of the work, provide four binders of the approved O&M information. The information shall be organized in the binders in numerical order by the Specification sections. All brochures and manuals contained therein shall be labeled with the applicable equipment name and equipment number as it appears in the Contract Documents, and shall also indicated the Specification Section.
- B. Each number shall contain a table of contents and spare parts information.
- C. Each binder shall be provided with tab sheets finding each section of the manual (by CSI division).
- D. Each binder shall contain an index that includes a complete equipment list in alpha-numerical order by the equipment numbers assigned in the Contract Documents. Each equipment number shall be cross-referenced to the applicable Specification Section tab located in the manuals.

- E. Each binder shall include a copy of the Spare Parts Documentation Forms and the Warranty Forms per General Conditions.
- F. All information in the final bound O&M set shall be electronically scanned into an indexed *.pdf file.

3.04 PAYMENT

- A. One percent of the awarded Contract Price shall be reserved for preparation and submittal of the final O&M manual. Payment will not be considered until the final O&M manual is approved per this section.

END OF SECTION

FILTER AID POLYMER SYSTEM SPECIFICATION

SAFETY PRECAUTIONS

Ensure that the control panel is grounded to avoid possible electrical shock or damage to equipment. Before servicing, turn off all power and assure power "lockout" to avoid possible electric shock. Disconnect external power to the control panel before removing or replacing fuses.

SPECIFICATIONS

Pump	Progressive Cavity
Inlet	1" FPT, Water Supply 1" FPT, Polymer Supply
Outlet	1-1/2" FPT, Solution Discharge
Water Capacity	900 GPH
Polymer Capacity	5 GPH
Working Pressure	100 PSI Maximum
Electrical Supply	120/1/60, 19 Amps
Dimensions	36" W x 30" D x 60-3/4" H

SYSTEM DESCRIPTION

The purpose of the Poly Blend is to blend polymer with water and deliver polymer solution to the point of application. The system contains a dilution water solenoid valve, motorized flow control valve, mixing chamber, polymer metering pump, and system control panel, which includes the Polymer Dosage Controller. System shall be skid mounted and fit on the existing concrete housekeeping pad currently in place for the existing unit. Provide O&M information in accordance with Section 01782.

SEQUENCE OF OPERATION

Once the unit is called to run, a solenoid valve on the dilution water inlet opens and water will flow to a mixing chamber where it is mechanically mixed with polymer pumped by a metering pump in a two stage mixer. Water flow can also flow to the discharge of the mixing chamber where it meets up with the blended polymer solution exiting the mixing chamber. Both streams are then mixed in a static mixer and discharged out of the unit. A ratio dial on the motorized valve selects the ratio of the total water flow that is split between the mixing chamber inlet and mixing chamber discharge. The system is designed to maintain a preset concentration regardless of the dilution water flow. The system can be programmed to have either the water flow or the polymer flow set as the controlled source. Whichever is selected the other will adjust automatically to maintain a consistent concentration. This flow rate can be set locally, or remotely paced from another piece of equipment. The system will also adjust the water flow automatically to maintain the desired flow rate if the incoming water pressure causes the water flow to change.

CONTROLS

Local/Off/Remote Switch

This switch controls the starting and stopping of the entire unit. In the Local mode the system starts and will run continuously. In the Remote mode the system will start and stop based on a remote dry contact from a remote source.

Polymer Dosage Controller functions

Operators:

- Fluid Control Mode Water/Polymer
- Pump Control Hand/Off/Auto
- Flow control Local/Remote
- Solution Concentration Local/Remote

Displays:

- Dilution water flow rate
- Polymer flow rate
- Solution concentration
- Loss of Water Flow Alarm

Setpoints:

- Local flow setpoint (water or polymer, depending on mode)
- Local solution concentration
- Manual pump speed
- Low dilution water flow alarm

Inputs:

- 4-20ma remote flow pacing setpoint
- 4-20ma remote concentration setpoint
- Remote start/stop dry input contact

Outputs

- 4-20ma water flow output
- 4-20ma pump speed output
- Loss of water flow output dry contact
- Run status output dry contact
- Remote mode output dry contact

Interlocks

If the dilution water flow is below the low flow alarm setpoint then the mixer and metering pump will pause in operation. If the water flow rises above the setpoint the mixer and pump automatically restart.

RESIDUALS POLYMER SYSTEM SPECIFICATION

SAFETY PRECAUTIONS

Ensure that the control panel is grounded to avoid possible electrical shock or damage to equipment. Before servicing, turn off all power and assure power "lockout" to avoid possible electric shock. Disconnect external power to the control panel before removing or replacing fuses.

SPECIFICATIONS

Pump	Diaphragm
Inlet	1/2" FPT, Water Supply 1/2" FPT, Polymer Supply
Outlet	3/4" FPT, Solution Discharge
Water Capacity	30 GPH
Polymer Capacity	0.4 GPH
Working Pressure	100 PSI Maximum
Electrical Supply	120/1/60, 19 Amps
Dimensions	36" W x 30" D x 60-3/4" H

SYSTEM DESCRIPTION

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- 4-20ma remote flow pacing setpoint
- 4-20ma remote concentration setpoint
- Remote start/stop dry input contact

Outputs

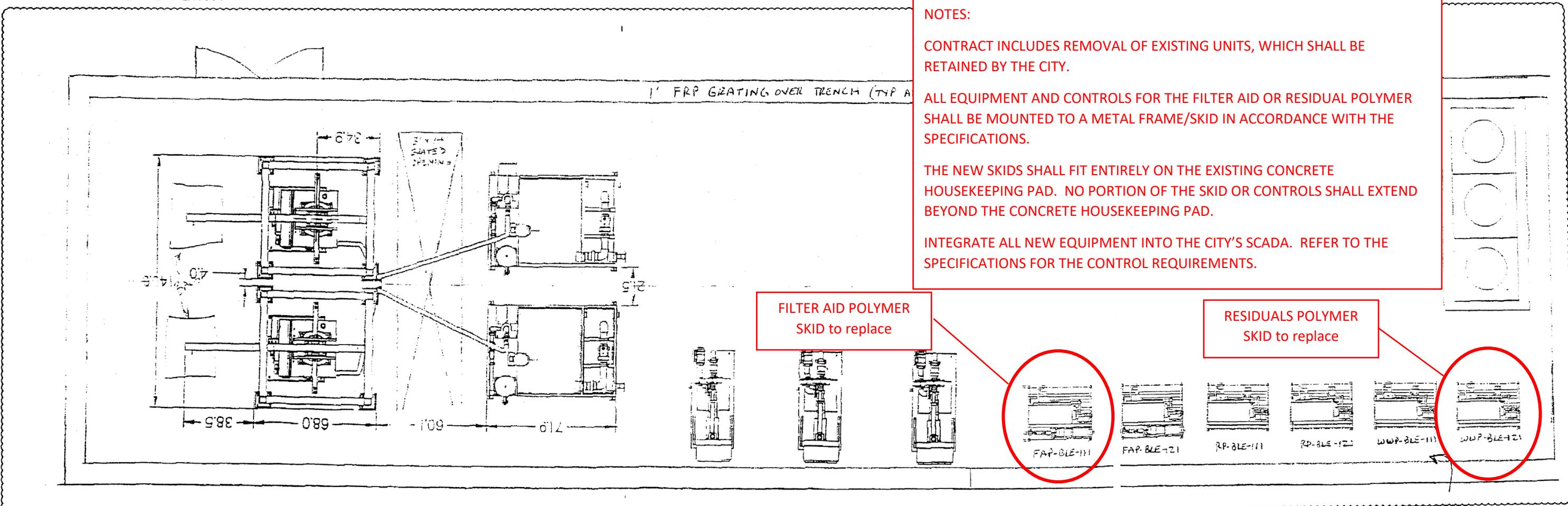
- 4-20ma water flow output
- 4-20ma pump speed output
- Loss of water flow output dry contact
- Run status output dry contact
- Remote mode output dry contact

Interlocks

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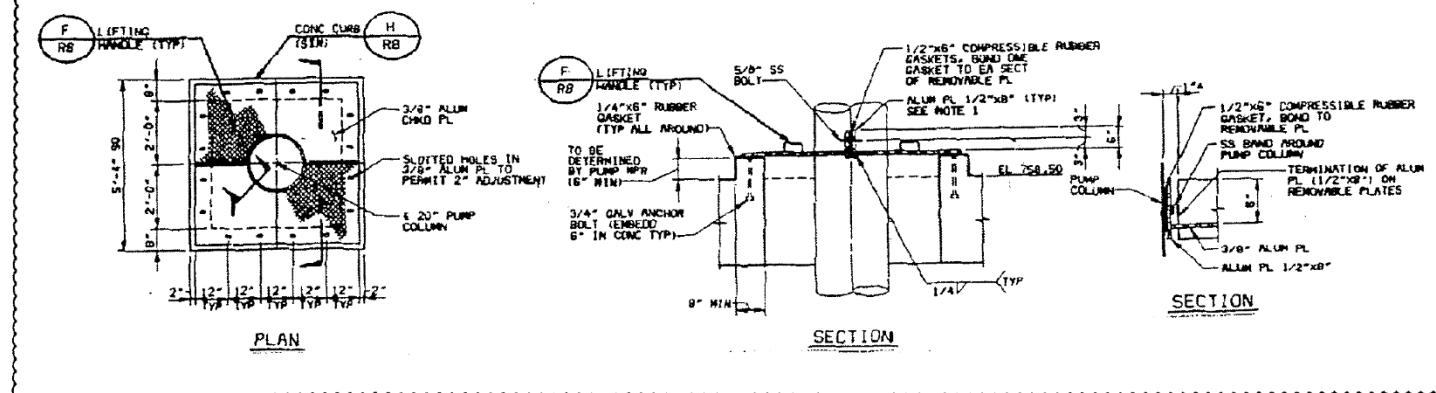
1 REVISED EQUIPMENT LAYOUT



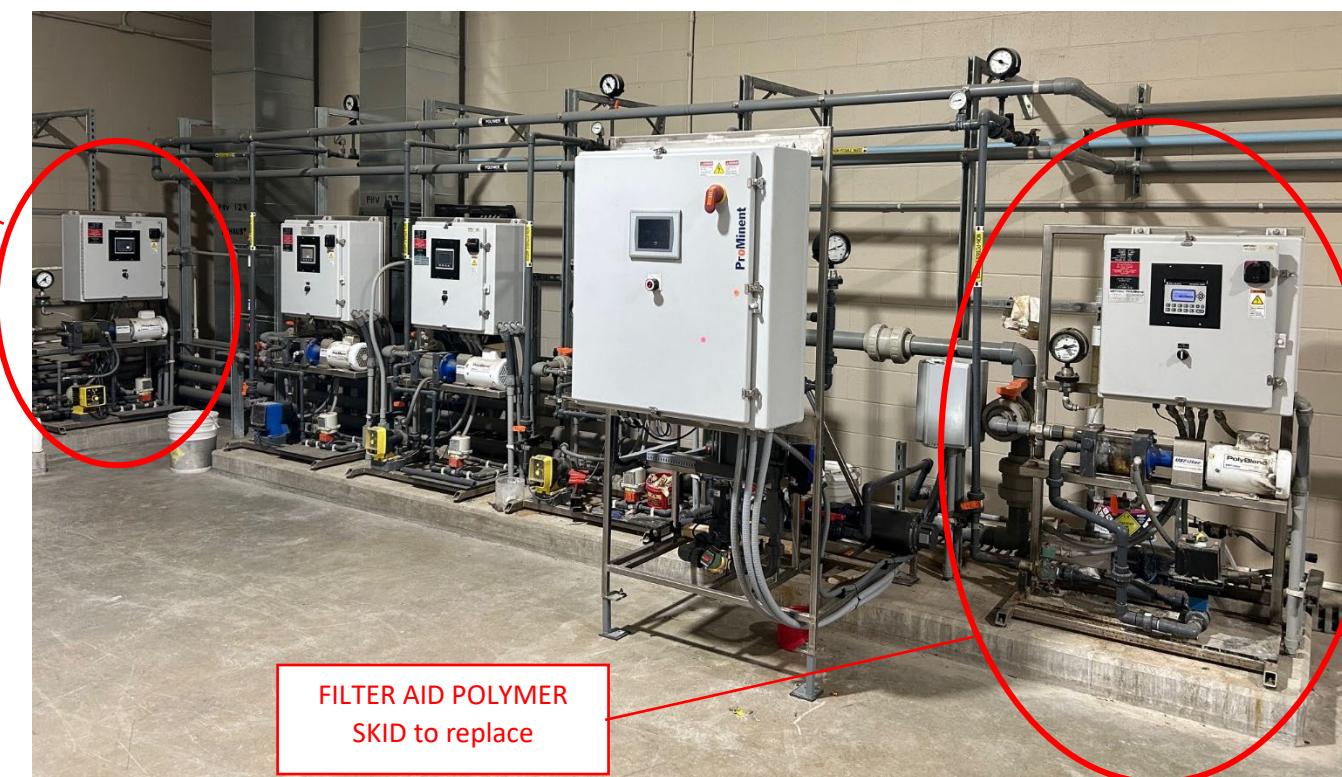
RFI #84 1

Reference Drawing D10, Sections 2/D21, 3/D25, and Detail G/D28: The 90 degree bends down through the floor slab in the referenced sections all have restraint lugs for the harnessed mechanical couplings below the deck, and are called out also to have a floor sleeve and link seal per detail G/D28. To provide enough clearance for pipe installation/ future removal, the sleeves will have to be oversized enough to allow the harness lugs to clear, which greatly exceeds any available modular casing seals. Archer Western proposes to provide a square blockout around the openings, pour a 6"x6" curb continuous around the openings, and provide a 1/4" painted steel plate to cover the openings(cut out around the pipe). Plate to be bolted to concrete curb. Please advise.

Archer Western's proposal is generally acceptable. However, we require that the cover be split into two pieces, be equipped with lifting handles, and that the covers be able to support foot traffic. Also, we require some type of gasket be provided to prevent airflow between the two levels. I have attached an example detail showing a similar arrangement for piping penetrations.



RESIDUALS POLYMER SKID to replace



SCALE CONFIRMATION: ON THE ORIGINAL DRAWING THE BAR SCALE SHOWN BELOW IS ONE INCH LONG. IF THE BAR SCALE IS NOT ONE INCH LONG ON THIS COPY THE SCALES MUST BE ADJUSTED PROPORTIONATELY	08-09-06	1 RECORD DRAWING	FHC	
DATE	REVISIONS AND RECORD OF ISSUE	NO BY CX APP		



TETRA TECH FHC

DESIGNED _____
DETAILED _____
CHECKED _____
APPROVED _____
DATE JANUARY 2004

BLACK & VEATCH Corporation
Kansas City, Missouri

S&V PROJECT NO.
069805
FHC PROJECT NO.
225101

BARTLESVILLE WATER SYSTEM IMPROVEMENTS
WATER TREATMENT PLANT
BARTLESVILLE OKLAHOMA
OPERATIONS BUILDING
CIVIL/PROCESS
HIGH SERVICE PUMP AREA PARTIAL PLAN

D10
SHEET
151B OF 360