



**Specifications**

**For**

**Industrial Park Utility  
Improvements**

**(Bid #2012:33)**

**Jonesboro, Arkansas**

**City of Jonesboro ■ Engineering Department**

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**P.O. Box 1845 ■ 307 Vine Street ■ Jonesboro, AR 72403 ■ 870.932.2438**

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## **I. ADVERTISEMENT FOR BIDS**

Sealed bids for the Industrial Park Utility Improvements will be received at the Purchasing Department of the City of Jonesboro City Hall, 515 West Washington Ave., Jonesboro, Arkansas until 2:00 P.M. (Local Time) on October 17, 2012 and then publicly opened and read for furnishing all labor, material, and equipment, and performing all work required for the Industrial Park Utility Improvements. All Submissions shall be annotated on the outside of the envelope with the bid number 2012:33.

The Utility Improvements consists of:

Job 1: installation of 9,450 Linear Feet of Water Main at Barnhill/Frito Lay/CW Post;

Job 2: installation of 9,600 Linear Feet of Water Main at Nestle Way/Nestle Road;

Job 3: installation of 2,600 Linear Feet of Sanitary Sewer at Frito Lay.

Proposals shall be accompanied by a cashier's or certified check upon a national or state bank in an amount not less than five percent (5%) of the total maximum bid price payable without recourse to the City of Jonesboro or a bid bond in the same amount from a reliable surety company, as a guarantee that the Bidder will enter into a contract and execute performance and payment bonds within ten (10) days after notice of award of Contract to him. The notice of award of Contract shall be given by the Owner within sixty (60) days following the opening of bids.

The successful Bidder must furnish a performance and payment bond upon the form provided in the amount of one hundred percent (100%) of the contract price from an approved surety company holding a permit from the State of Arkansas to act as surety, or other surety or sureties acceptable to the Owner.

The attention of bidders is called to the fact that no contractor's license is required to submit a bid, but successful bidder must be licensed prior to entering into a contract with the City for the project.

Plans, specifications, proposal forms and other contract documents may be examined at City of Jonesboro Engineering Department, 307 Vine Street, Jonesboro, Arkansas 72401 and may be secured at the cost of \$25.00 Dollars per set from the City of Jonesboro, 307 Vine Street, Jonesboro, Arkansas 72401. No refunds will be made. Any addendum to this bid will be posted no later than 5 days before bid opening by clicking on "Purchasing" at [www.jonesboro.org](http://www.jonesboro.org).

Proposals will be considered on the basis of cost, the bidder's financial responsibility, his equipment, and his past performance in completing similar work. The City of Jonesboro reserves the right to reject any or all bids, to waive any informalities, and to accept the proposal deemed to be for their best interest.

The City of Jonesboro hereby notifies all bidders that this contract is subject to applicable labor laws, non-discrimination provisions, wage rate laws and other federal laws including the Fair Labor Standards Acts of 1938. The Work Hours Act of 1962 and Title VI of the Civil Rights Act of 1964 also apply.

The City of Jonesboro encourages participation of small, minority, and woman owned business enterprises in the procurement of goods, services, and construction, either as a general contractor or subcontractor. It is further requested that whenever possible, majority contractors who require subcontractors seek qualified small, minority, and women owned businesses to partner with them.

## **II. INSTRUCTION TO BIDDERS**

### **1. PREPARATION OF BID**

Each bid must be submitted on the prescribed form (Proposal) and Unit Price Schedule. All blank spaces must be filled in legibly with ink or typed. All blank spaces for bid prices on the Unit Price Schedule must be filled in with figures; the extended total for each item shall be entered. If the unit price and the extended total of any item are not in agreement, the unit price shall govern and the extended total be corrected to conform thereto. Erasures or other corrections on the Proposal form or Unit Price Schedule shall be initialed by the signer of the bid. All bids must be signed in ink by an individual authorized to bind the Bidder. All bids must be regular in every respect and no interlineations, excisions or special conditions shall be made or included in the Proposal by the Bidder.

A bidder may bid on one or all or any combination of jobs they choose. All bids will be tabulated as separate jobs thus the job will be an "all or none" bid.

There must be a bid on all items which may appear on the Unit Price Schedule for the particular job. No bid will be considered which covers only a part of the work. A conditional bid will not be considered.

The bid form and Unit Price Schedule shall not be detached, but shall be submitted in the original binding as furnished by the Engineer. Submission must be at the place, and at or prior to the time specified in the Advertisement for Bids.

Each bid must be submitted in a sealed envelope clearly marked on the outside that it contains a bid for the Industrial Park Utility Improvements, Bid Number 2012:33 and with the hour and date of bid opening shown thereon. The name and address of the Bidder shall appear in the upper left hand corner of the envelope. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope properly addressed as noted in the NOTICE TO CONTRACTORS.

A bid which obviously is unbalanced may be rejected.

### **2. INTERPRETATIONS AND ADDENDA**

No oral interpretation will be made to any Bidder as to the meaning of the Contract Documents or any part thereof. Every request for such an interpretation shall be made in writing to the City of Jonesboro Engineering Department. Any inquiry received up to seven (7) days prior to the opening of bids will be given consideration. Every interpretation made to a Bidder will be in the form of an Addendum to the contract Documents. All such Addenda shall become part of the Contract and all Bidders shall be bound by such Addenda, whether or not received by the Bidders.

### **3. INSPECTION OF SITE**

Each Bidder shall visit the site of the proposed work and fully acquaint himself with the existing conditions there relating to construction and labor, and shall fully inform himself as to the facilities



involved, and the difficulties and restrictions attending the performance of the Contract. The Bidder shall thoroughly examine and familiarize himself with the Plans, Technical Specifications, and other Contract Documents. The Contractor by the execution of the Contract shall not be relieved of any obligation under it due to his failure to receive or examine any form or legal instrument or to visit the site and acquaint himself with the conditions there existing. The Owner will be justified in rejecting any claim based on facts regarding which the contractor should have been on notice as a result thereof.

#### **4. BID GUARANTY**

The bids must be accompanied by a Bid Guaranty which shall not be less than five percent (5%) of the amount of the bid. At the option of the Bidder, the guaranty may be a certified check, or may be a bid bond (substantially in the form attached). No bid will be considered unless it is accompanied by the required guaranty. Certified check must be payable to the City of Jonesboro, Arkansas. Cash deposits will not be accepted. The Bid Guaranty shall insure the execution of the Contract and the furnishing of the surety bond or bonds by the successful Bidder, all as required by the Contract Documents.

A Bid Guaranty may not be combined if more than one Job is bid.

Certified checks, or bid bonds, of unsuccessful Bidders, will be returned upon request as soon as feasible after the opening of the bids.

#### **5. COLLUSION; SUBCONTRACTS**

A Bidder submitting a Proposal to the Owner for the work contemplated by the Documents on which bidding is based shall not collude with any other person, firm, or corporation in regard to any bid submitted.

Before executing any subcontract, the successful Bidder shall submit the name of any proposed Subcontractor for prior approval of the Owner.

#### **6. STATEMENT OF BIDDER'S QUALIFICATIONS**

Each Bidder shall submit on the form furnished for that purpose (a copy of which is included in the Contract Documents), a statement of the Bidder's qualifications, his experience record in construction of work similar to that which here is involved, and his organization and equipment available for the work contemplated; and when specifically requested by the Owner, the Bidder shall provide a detailed financial statement. The Owner shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform his obligations under the Contract, and the Bidder shall furnish the Owner all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available evidence or information does not satisfy the Owner that the Bidder is qualified to carry out properly the terms of the Contract.

## **7. BALANCED BIDS; VARIATIONS IN QUANTITIES**

The lump sum price and unit price for each of the several items in the Proposal of each Bidder shall be balanced and shall include its pro rata share of overhead.

The Owner shall have the right to increase or decrease the extent of the work or to change the location, gradient, or the dimensions of any part of the work, provided that the length of the improvement is not increased or decreased in excess of 25% of the contract length, or that the quantities of work to be done or the materials to be furnished are not increased or decreased in money value in excess of 25% of the total Contract. Such changes shall not be considered as a waiver of any conditions of the Contract nor invalidate any of the provisions thereof. The Contractor shall perform the work as increased or decreased within the qualifying limits named and no allowance will be made for anticipated profits on increases or decreases so incurred.

Increases or decreases in items of work, and the cost thereof, shall be done in accordance with the Section entitled, CHANGES IN THE WORK under GENERAL CONDITIONS.

## **8. TIME FOR RECEIVING BIDS**

A bid received prior to the advertised time of opening will be kept securely, and will remain sealed until the time of opening. The officer whose duty it is to open them will decide when the specified time has arrived, and any bid received subsequent to that time will be returned unopened.

## **9. OPENING OF BIDS**

At the time and place fixed for the opening of bids, the Owner first will cause the bid guarantees to be checked as stipulated above. The Owner then will cause the qualified bids to be opened and publicly read aloud, irrespective of any irregularities therein. Bidders and other persons properly interested may be present, in person or by representative.

## **10. WITHDRAWAL OF BIDS**

Bids may be withdrawn on written request if the request is received prior to the time fixed for the opening of bids.

## **11. AWARD OF CONTRACT; REJECTION OF BIDS**

The Contract will be awarded to the responsible Bidder submitting the lowest total bid complying with the conditions of the Notice to Contractors and other parts of these Contract Documents. The Bidder to whom the award is made will be notified at the earliest possible date. The Owner, however, reserves the right to reject any or all bids and to waive any informality in bids received whenever such rejection or waiver is in its interests.

The Owner reserves the right to consider as unqualified to do the work any Bidder who does not habitually perform with his own forces the major portions of such work as is involved in construction of these improvements.

## **12. EXECUTION OF AGREEMENT; PERFORMANCE AND PAYMENT BOND**

Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the Owner a Contract in the form included in the Contract Documents in such number of copies as the Owner may require.

Having satisfied all conditions of award as set forth elsewhere in these Documents, the successful Bidder shall, within the period specified above, furnish a surety bond in a penal sum not less than the amount of the Contract as awarded, as security for the faithful performance of the Contract, and for the payment of all persons, firms or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment, or services of any nature, including utility and transportation services employed or used by him in performing the work. Such bond shall be as included in the Contract Documents and shall bear the same date as, or a date subsequent to, that of the Contract. The current power of attorney for the person who signs for any surety company shall be attached to such bond.

The failure of the successful Bidder to execute such Contract and to supply the required bond or bonds within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the Owner may grant, based upon reasons determined insufficient by the Owner, shall constitute a default, and the Owner may either award the Contract to the next lowest responsible Bidder or readvertise for bids.

## **13. BONDS AND INSURANCE**

Attention of Bidders is called to Act 82 of the 1935 Acts of the Arkansas General Assembly, which has certain requirements pertaining to performance bonds, labor bonds, employer's liability insurance, public liability insurance, workmen's collective insurance, and property damage insurance.

All companies furnishing bid bonds and performance bonds shall furnish evidence of being on the U.S. Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the State of Arkansas.

## **14. LEGAL QUALIFICATIONS**

The successful Bidder, if a corporation created under the laws of a state other than the State of Arkansas, will be required to qualify, or to have qualified, with the Secretary of State of Arkansas to do business in the State of Arkansas.

## **15. MODIFICATION OF BID**

No modification of any bid already submitted will be considered unless such modification is received prior to the time set for opening of bids.

III. PROPOSAL

Place Jonesboro, Ark  
Date October 15, 2012

Proposal of Cobar Contracting Inc

a corporation organized and existing under the laws of the State of Arkansas

or

Proposal of \_\_\_\_\_

a partnership consisting of \_\_\_\_\_

or

Proposal of \_\_\_\_\_

an individual doing business as \_\_\_\_\_

**TO: City of Jonesboro**

This bid results from your advertisement for bids for the Industrial Park Utility Improvements.

The undersigned Bidder, having visited the site of the work, having examined the Plans, Specifications, and other Contract Documents including all Addenda, and being familiar with all of the conditions relating to the construction of the proposed project, hereby agrees to comply with all other conditions or requirements set forth in the Plans, Specifications, and other Contract Documents, and further proposes to furnish all material, supplies, equipment, and appliances specified for incorporation into the project and to furnish all labor, tools, equipment, and incidentals to complete the work in accordance with the Plans, Specifications, and other Contract Documents at and for the lump sum and unit prices proposed in the attached Unit Price Schedule.

The undersigned Bidder agrees to begin work within ten (10) calendar days after the issuance by the Owner of a "Work Order" or "Notice to Proceed" and to complete the work within ninety (90) calendar days for award of one job, one hundred twenty (120) calendar days for the award of two jobs, and one hundred fifty (150) calendar days for the award of three jobs thereafter (except as modified in the GENERAL CONDITIONS of these Contract Documents). Should the work fail to be completed within the time herein stated, the Contractor shall pay to the Owner, as fixed and agreed liquidated damages, and not as a penalty, the sum, for each day of delay until the work is completed and accepted, as stipulated in the SPECIAL CONDITIONS of these Contract Documents. It is understood that additional time for the completion of the project is to be allowed only for delays as stipulated in the GENERAL CONDITIONS of these Contract Documents.

Bidder acknowledges receipt of the following addendum (addenda):

\_\_\_\_\_ Dated \_\_\_\_\_

\_\_\_\_\_ Dated \_\_\_\_\_

The undersigned Bidder agrees that this bid shall be good and shall not be withdrawn for a period of sixty (60) calendar days after the opening thereof. If written notice of the acceptance of this Proposal is mailed, telegraphed, or delivered to the undersigned within sixty (60) days after the opening thereof, or at any time thereafter before this Proposal is withdrawn, the undersigned agrees to execute and deliver a Contract in the prescribed form, and furnish the required Performance and Payment Bond, within ten (10) days after the Contract is presented to him for signature.

It is understood by the undersigned Bidder that the Owner reserves the right to reject any or all bids.

Accompanying this Proposal as bid security is certified check/bid bond (Strike One) in the amount of 5% Dollars (\$ 5%), being not less than five percent (5%) of the total of the bid. If the undersigned Bidder is the successful Bidder, but fails or refuses to execute the contract and furnish the required bond within the prescribed ten (10) days of the notification of award, then this bid security is to become the property of the Owner as liquidated damages for the delay and additional expense to the Owner caused by such failure or refusal.

Heri Robertson  
(Witness)

5406 Chandler  
NLR, AR. 72117  
(Address)

Cobas Contracting Inc.  
(Name of Bidder)  
By Sharon Tankersley  
Sharon Tankersley  
(Print Name and Title)

10227 Highway 70  
NLR AR 72117  
(Office Address of Bidder)

NOTES: Sign in ink. Do not detach.  
Items must be bid upon as specified in the Unit Price Schedule.

# IV. UNIT PRICE SCHEDULE

## Job 1 - Barnhill/Frito Lay/CW Post Water Main

Item No	Description	Unit	Quantity	Unit Price	Total Cost
1	12" C-900 PVC	LF	6,340	\$ 24.72	\$ 156,724. <sup>80</sup>
2	24" C-900 PVC	LF	3,030	\$ 79.98	\$ 242,339. <sup>40</sup>
3	12" Fittings included bends, sleeves, plugs, and anchor couplings	Each	8	\$ 750. <sup>00</sup>	\$ 6,000. <sup>00</sup>
4	12" Tapping Valve & 16" Sleeve w/box	Each	1	\$ 4,450. <sup>00</sup>	\$ 4,450. <sup>00</sup>
5	12" Butterfly Valve w/box	Each	4	\$ 2,306. <sup>30</sup>	\$ 9,225. <sup>20</sup>
6	24" Fittings includes bends, sleeves, plugs, tees, and anchor couplings w/accessories	Each	6	\$ 1,645. <sup>32</sup>	\$ 9,871. <sup>92</sup>
7	30" Dry Auger Bore	LF	30	\$ 210. <sup>00</sup>	\$ 6,300. <sup>00</sup>
8	30" Steel Casing	LF	60	\$ 66. <sup>00</sup>	\$ 3,960. <sup>00</sup>
9	24" Ductile Iron	LF	80	\$ 139.63	\$ 11,170. <sup>40</sup>
10	12" Directional Bore with 12" Eagle - LOC C-900 PVC	LF	80	\$ 97. <sup>00</sup>	\$ 7,760. <sup>00</sup>
11	1" Short Blind Tap for Testing includes material and meter box	Each	1	\$ 1,000. <sup>00</sup>	\$ 1,000. <sup>00</sup>
12	Fire Hydrant Assembly - includes tee, valve, anchor coupling, box	Each	3	\$ 3,505. <sup>40</sup>	\$ 10,516. <sup>20</sup>
13	90# Rip Rap	Ton	50	\$ 19.50	\$ 975. <sup>00</sup>
14	3000 Pound Mix Concrete Backing	Yards	20	\$ 99. <sup>00</sup>	\$ 1,980. <sup>00</sup>
15	Testing - Job #1	Each	1	\$ 2,100. <sup>00</sup>	\$ 2,100. <sup>00</sup>
16	Trench and Excavation Safety Systems	LS	1	\$ 7,000. <sup>00</sup>	\$ 7,000. <sup>00</sup>

TOTAL BASE BID: JOB 1

WRITTEN IN WORDS:

Four Hundred Eighty One Thousand Three  
Hundred Seventy Two & 92/100

\$ 481,372.92

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Job 3 – Frito Lay – Sanitary Sewer

<u>Item No</u>	<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Cost</u>
1	21" SDR-35*	LF	2,600	\$ 16.90	\$ 43940.00
2	Manholes 6' Bottom with 4' Transition	Each	6	\$ 2600.00	\$ 15600.00
3	6' Doghouse Manhole with 4' Transition	Each	1	\$ 2900.00	\$ 2900.00
4	4000 Pound Mix Concrete with Limestone and Fiber	Yards	2	\$ 117.75	\$ 235.50
5	Testing – Job #3	Each	1	\$ 1000.00	\$ 1000.00
6	¾" Minus Limestone	Ton	1,000	\$ 17.25	\$ 17250.00
7	12" SDR-35 for Stub-outs	LF	20	\$ 35.12	\$ 702.40
8	12" Solvent weld caps for Stub-outs	LF	20	\$ 143.80	\$ 2876.00
9	Trench and Excavation Safety Systems	LS	1	\$ 500.00	\$ 500.00

TOTAL BASE BID: JOB 3

WRITTEN IN WORDS:

\$ 85003.90

Eighty Five Thousand Three  
and 90/100

\*21" SDR-35 Sewer Pipe will be provided by Owner. Contractor to provide equipment and labor for installation of pipe only.

# THE AMERICAN INSTITUTE OF ARCHITECTS



AIA Document A310

## Bid Bond

BOND # OCBB101612

**KNOW ALL MEN BY THESE PRESENTS**, that we

**CO-BAR CONTRACTING, INC.**

10227 Hwy 70

North Little Rock, AR 72117

(Here insert full name, and address or legal title of Contractor)

as Principal, hereinafter called the Principal, and

**Ohio Casualty Insurance Co.**

136 North Third Street

Hamilton, OH 45025

a corporation duly organized under the laws of the State of OH as Surety, hereinafter called the Surety, are held and firmly bound unto

**City Of Jonesboro**

515 W. Washington Ave.

Jonesboro, AR 72403

(Here insert full name, and address or legal title of Owner)

as Obligee, hereinafter called the Obligee, in the sum of **Five percent of amount bid----- (\$5%)**, for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for

**Job #1 - Barnhill/Frito Lay/CW Post**

**Job #2 - Nestle Way/Nestle Road**

**Job #3 - Sanitary Sewer/Frito Lay**

**Industrial Park Utility Improvements Project #2012-23**

(Here insert full name, address and description of project)

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 17th day of October, 2012

**CO-BAR CONTRACTING, INC.**

(Principal)

(Seal)

(Witness)

(Title)

**Ohio Casualty Insurance Co.**

(Title) J. Alan Rogers - AR Lic#61847, ATTORNEY-IN-FACT

(Witness)



**THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.**

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

5378153

Certificate No. \_\_\_\_\_

American Fire and Casualty Company  
The Ohio Casualty Insurance Company  
West American Insurance Company

Liberty Mutual Insurance Company  
Peerless Insurance Company

**POWER OF ATTORNEY**

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of Ohio, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, that Peerless Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, **DANIEL M. BABB, KIMBERLY L. BABB, JAMES A. ROGERS, MIKI J. ROGERS,**

all of the city of SHERWOOD, state of ARKANSAS each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 10th day of May, 2012.



American Fire and Casualty Company  
The Ohio Casualty Insurance Company  
Liberty Mutual Insurance Company  
Peerless Insurance Company  
West American Insurance Company

By: Gregory W. Davenport  
Gregory W. Davenport, Assistant Secretary

STATE OF WASHINGTON ss  
COUNTY OF KING

On this 10th day of May, 2012, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Company, Peerless Insurance Company and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: KD Riley  
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, West American Insurance Company and Peerless Insurance Company, which resolutions are now in full force and effect reading as follows:

**ARTICLE IV - OFFICERS** - Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

**ARTICLE XIII - Execution of Contracts - SECTION 5. Surety Bonds and Undertakings.** Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

**Certificate of Designation** - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorney-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

**Authorization** - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, David M. Carey, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, West American Insurance Company and Peerless Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 17 day of October, 2012.



By: David M. Carey  
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

## VI. STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1. Name of Bidder. Cobar Contracting Inc
2. Permanent main office address. 10227 Highway 70, NLR. AR 72117
3. When organized. October 2001
4. If a corporation, where incorporated. Arkansas
5. How many years have been engaged in the contracting business under your present firm or trade name? 11 years
6. Contracts on hand: (Schedule these, showing amount of each contract and the appropriate anticipated dates of completion).  
See attached
7. General character of work performed by your company.  
Water, sewer, dirt, concrete, electrical
8. Have you ever failed to complete any work awarded to you?  
No
9. Have you ever defaulted on a Contract?  
No  
If so, where and why?  
Na
10. Have you ever been fined or had your license suspended by a Contractor's Licensing Board?  
No  
If so, where and why?  
Na
11. List the more important projects recently completed by your company, stating the approximate cost for each, and the month and year completed.  
See attached
12. List your major equipment available for this Contract.  
See attached
13. Experience in construction work similar in importance to this project.  
See attached
14. Background and experience of the principal members of your organization, including the officers. See attached
15. Credit available: \$ \_\_\_\_\_.
16. Give Bank reference: Delta Trust.

STATEMENT OF BIDDERS QUALIFICATIONS

NAME OF BIDDER: COBAR CONTRACTING, INC.

PERMANENT MAIN OFFICE ADDRESS: 10227 HIGHWAY 70, NORTH LITTLE ROCK, AR 72117

WHEN ORGANIZED: OCTOBER 2001

IF A CORPORATION, WHEN INCORPORATED: OCTOBER 2001

HOW MANY YEARS HAVE YOU BEEN ENGAGED IN THE CONTRACTING BUSINESS UNDER YOUR PRESENT FIRM OR TRADE NAME: 11 YEARS  
CONTRACTS ON HAND: FAULKNER CROSSING PHASE 5 - \$1.5 MILLION - COMPLETION DATE DECEMBER 2012

SOUTHERN COMFORT PHASE 4 - \$1.1 MILLION - COMPLETION DATE OCTOBER 2012

GENERAL CHARACTER OF WORK PERFORMED BY YOUR COMPANY: WATER, SEWER, DRAINAGE, DIRT, ELECTRICAL

HAVE YOU EVER FAILED TO COMPLETE ANY WORK AWARDED TO YOU? NO

HAVE YOU EVER DEFAULTED ON A CONTRACT? NO

LIST THE MORE IMPORTANT PROJECTS RECENTLY COMPLETED BY YOUR COMPANY, STATING THE APPROXIMATE COST FOR EACH,  
AND THE MONTH & YEAR COMPLETED

NUTTERS CHAPEL - \$1.7 MILLION - 2011, WATER, SEWER, DRAINAGE, ELECTRICAL

PARKWAY DRAINAGE - \$200,000 - 2011

GRAHAM ROAD WATER - \$500,000 - 2012

SOUTHFIELD VILLAS WATER, SEWER, STREETS, DRAINAGE - \$700,000 2012

LIST YOUR MAJOR EQUIPMENT AVAILABLE FOR THIS CONTRACT:

TEREX MINI EXCAVATOR

HITACHI 100 TRACKHOE

JOHN DEERE 550 DOZER

CAT HIGH TRACK DOZER

VOLVO BACKHOE

MACK QUAD AXLE DUMP TRUCK

CASE 230 TRACKHOE

CASE 160 TRACKHOE

JOHN DEERE 700 DOZER

VOLVO BACKHOE

JOHN DEERE BACKHOE

STERLING TRI-AXLE DUMP TRUCK

EXPERIENCE IN CONSTRUCTION WORK SIMILAR IN IMPORTANCE TO THIS PROJECT:

47TH AND 49TH STREET PROJECTS IN NORTH LITTLE ROCK, AR

NUTTERS CHAPEL, CONWAY, ARKANSAS

BACKGROUND AND EXPERIENCE OF THE PRINCIPAL MEMBERS OF YOUR ORGANIZATION, INCLUDING OFFICERS.

BOB TANKERSLEY, PRESIDENT - HAS BEEN IN THE CONSTRUCTION BUSINESS OVER 45 YEARS

SHARON TANKERSLEY, VP - HAS BEEN IN THE CONSTRUCTION BUSINESS OVER 30 YEARS

CHARLES TANKERSLEY, HAS BEEN IN THE CONSTRUCTION BUSINESS OVER 33 YEARS

CREDIT AVAILABLE: WILL PROVIDE UPON LOW BID

GIVE BANK REFERENCE: CAROLE SMITH, DELTA TRUST AND BANK

WILL YOU UPON REQUEST, FILL OUT A DETAILED FINANCIAL STATEMENT? YES

17. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the Owner?

18. The undersigned hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the Owner, in verification of the recitals comprising this statement of Bidder's Qualifications.

Dated at 10:20 this 16<sup>th</sup>

day of October, 20 12.

Cobar Contracting  
(Name of Bidder)

By Sharon Soderlund

Title V.P.

STATE OF Arkansas)

COUNTY OF Pulaski) SS.

Sharon Soderlund being duly sworn deposes and says that  
she is V.P. of Cobar Contracting  
(Name of Organization)

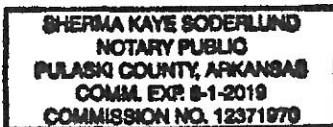
and that the answers to the foregoing questions and all statements therein contained are true and correct.

SUBSCRIBED AND SWORN TO BEFORE ME this 16<sup>th</sup> day of October, 20 12.

Sherma Kaye Soderlund  
(Notary Public)

My Commission Expires:

8-1-2019





## VII. CONTRACT

THIS AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and  
between Cobar Contracting, Inc.

(a Corporation organized and existing under the laws of the State of Arkansas)

Hereinafter called the "Contractor" and the City of Jonesboro, Arkansas, hereinafter called the "Owner".

### WITNESSETH:

That the Contractor and the Owner for the consideration stated herein mutually agree as follows:

ARTICLE 1. Statement of Work. The Contractor shall furnish all supervision, technical personnel, labor, materials, machinery, tools, equipment, incidentals and services, including utility and transportation services and perform and complete all work required for the Industrial Park Utility Improvements, in strict accordance with the Contract Documents, including all Addenda thereto

\_\_\_\_\_ dated \_\_\_\_\_

\_\_\_\_\_ dated \_\_\_\_\_

\_\_\_\_\_ dated \_\_\_\_\_

as prepared by the Engineer.

ARTICLE 2. The Contract Price. The Owner will pay the Contractor, because of his performance of the Contract, for the total quantities of work performed at the lump sum and unit prices stipulated in the Proposal, subject to additions and deductions as provided in the Section entitled "CHANGES IN THE WORK" under the GENERAL CONDITIONS.

ARTICLE 3. Contract Time. The Contractor agrees to begin work within ten (10) calendar days after issuance by the Owner of a "Work Order" or "Notice to Proceed" and to complete the work one hundred twenty (120) calendar days thereafter (except as modified in the GENERAL CONDITIONS of these Contract Documents). If the Contractor shall fail to complete the work within the time specified, he and his Surety shall be liable for payment to the Owner, as liquidated damages ascertained and agreed, and not in the nature of a penalty, the amount specified in the SPECIAL CONDITIONS of these Contract Documents for each day of delay. To the extent sufficient in amount, liquidated damages shall be deducted from the payments to be made under this Contract.

ARTICLE 4. Contract. The executed Contract Documents shall consist of the following:

- |                              |   |
|------------------------------|---|
| a. This Agreement (Contract) | f. General Conditions                                       |
| b. Addenda                   | g. Supplemental General Conditions                          |
| c. Advertisement for Bids    | h. Special Conditions                                       |
| d. Instructions to Bidders   | i. Technical Specifications including<br>Special Provisions |
| e. Proposal                  | j. Drawings (Plans)   |
|                              | k. Performance-Payment Bond                                 |

This Contract, together with other Documents enumerated in this Article 4, which said other Documents are as fully a part of the Contract as if hereto attached or herein repeated, form the Contract between the parties hereto. In the event that any provisions in any component part of this Contract conflicts with any provision of any other component part, the conflict shall be resolved by the Engineer whose decision shall be final.

ARTICLE 5. Surety. The Surety on the Performance-Payment Bond shall be a surety company of financial resources satisfactory to the Owner, authorized to do business in the State of Arkansas, and shall comply with applicable Arkansas laws.



IN WITNESS WHEREOF, the parties hereto have caused this CONTRACT to be executed in four (4) counterparts, each of which shall be considered an original on the day and year first above written.

ATTEST:

\_\_\_\_\_  
(Contractor)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By \_\_\_\_\_  
Title \_\_\_\_\_  
\_\_\_\_\_  
(Street)  
\_\_\_\_\_  
(City)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

City of Jonesboro  
\_\_\_\_\_  
(Owner)  
By \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### **VIII. ARKANSAS PERFORMANCE-PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, \_\_\_\_\_

as Principal, hereinafter called Principal, and \_\_\_\_\_

of \_\_\_\_\_ State of \_\_\_\_\_,  
as Surety, hereinafter called the Surety, are held and firmly bound unto the City of Jonesboro as  
Obligee, hereinafter called Owner, in the amount \_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_) in lawful money of the United States of America,  
for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors,  
administrators, and successors, jointly, severally, and firmly by these presents.

#### **THE CONDITION OF THIS OBLIGATION IS SUCH THAT:**

WHEREAS, The Principal entered into a Contract with the Owner by written Agreement dated  
the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, a copy of which is attached hereto and  
made a part hereof, hereinafter referred to as the Contract, for the Industrial Park Utility  
Improvements.

NOW THEREFORE, if the Principal shall well and truly perform and complete in good, sufficient, and  
workmanlike manner all of the work required by said Contract and within the time called for thereby  
to the satisfaction of the Owner, and shall pay all persons for labor, materials, equipment, and supplies  
furnished by said Principal in accordance with said Contract (failing which such persons shall have a  
direct right to action against the Principal and Surety under this obligation, but subject to the Owner's  
priority) and shall hold and save harmless the Owner from any and all claims, loss, and expense of  
every kind and nature arising because of or resulting from the Principal's operation under said  
Contract, except payments to the Principal rightly due the Principal for work under said Contract, then  
this obligation shall be null and void; otherwise to remain in full force and effect.

Any alterations which may be made in the terms of the Contract, or in the work to be done under it, or  
the giving by the Owner of an extension of time for the performance of the Contract, or any other  
forbearance on the part either of the Owner or Principal to the other shall not release in any way the  
Principal and Surety, or either of them, their heirs, personal representatives, successors, or assigns  
from their liability hereunder, notice to the Surety of any alteration, extension, or forbearance hereby  
being waived.

In no event shall the aggregate liability of the Surety exceed the sum set herein.

No suit, action, or proceeding shall be brought on this bond outside the State of Arkansas. No

suit, action, or proceeding shall be brought on this bond, except by the Owner, after six (6) months from the date on which final payment to the Contractor falls due. No suit, action, or proceeding shall be brought by the Owner after two (2) years from the date on which final payment to the Contractor falls due.

This bond is executed pursuant to the terms of Arkansas Code Ann. §§ 18-44-501 et. seq.

Executed on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
(Principal)

By \_\_\_\_\_

Title \_\_\_\_\_

SEAL

\_\_\_\_\_  
(Surety)

By \_\_\_\_\_  
(Attorney-in-Fact)

NOTES:

1. This bond form is mandatory. No other forms will be acceptable.
2. The date of the Bond must not be prior to the date of the Contract.
3. Any surety executing this Bond must appear on the U.S. Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the State of Arkansas.
4. Attach Power of Attorney.

## **IX. GENERAL CONDITIONS**

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## **GC.1        DEFINITIONS**

Wherever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

(1) The term "Addendum" means any change, revision, or clarification of the Contract Documents which has been duly issued by the Local Public Agency, or the Engineer, to prospective Bidders prior to the time of receiving bids.

(2) The term "Award" means the acceptance by the owner of the successful bidder's proposal.

(3) The term "Bidder" means any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.

(4) The term "Calendar Day" means every day shown on the calendar.

(5) The term "Change Order" means a written order to the contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for the scope of work affected by the change. The work covered by the change order shall be within the scope of the contract.

(6) The term "Contract" means the Contract executed by the Local Public Agency and the Contractor of which these GENERAL CONDITIONS form a part.

(7) The term "Contract Documents" means and shall include the following: Executed Contract, Addenda (if any), Advertisement For Bids, Instructions to Bidders, Proposal, Performance-Payment Bond, General Conditions, Supplemental General Conditions, Special Conditions, Supplemental Special Conditions, Technical Specifications, and Drawings.

(8) The term "Contractor" means the person, firm, or corporation entering into the Contract with the Local Public Agency to construct and install the improvements embraced in this project.

(9) The term "Engineer" means the City of Jonesboro Engineering Department, serving the Local Public Agency with engineering services, its successor, or any other person or persons employed by said Local Public Agency to furnish engineering services in connection with the construction embraced in the Contract.

(10) The term "Local Government" means the City of Jonesboro, Arkansas, within which the Project is situated.

(11) The term "Local Public Agency" or "Owner" means the City of Jonesboro, which is authorized to undertake this Contract.

(12) The term "Plans" or "Drawings" means the official drawings or exact reproductions which show the location, character, and details of the work contemplated, and which are to be considered part of the contract, supplementary to the specifications.

(13) The term "Proposal" means the written offer of the Bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the Plans and Specifications.

(14) The term "Specifications" means a part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials, or testing, which are cited in the specifications by reference shall have the same force and effect as if included in the contract physically.

(15) The term "Subcontractors" shall mean the individual, partnership or corporation entering into an agreement with the Contractor to perform any portion of the work covered by the Plans and Specifications.

(16) The term "Surety" shall mean any person, firm, or corporation that has executed, as Surety, the Contractor's Performance Bond securing the performance of the Contract.

(17) The term "Technical Specifications" means that part of the Contract documents which describes, outlines and stipulates the quality of the materials to be furnished; the quality of workmanship required; and the controlling requirements to be met in carrying out the construction work to be performed under this Contract. This also includes Special Provisions.

(18) The term "Work" shall mean the furnishing of all necessary labor, tools, equipment, appliances, supplies, and material other than materials furnished by the Owner as specified to complete the construction covered by the Plans and Specifications.

## **GC.2 SUPERINTENDENCE BY CONTRACTORS**

Except where the Contractor is an individual and gives his personal superintendence to the work, the Contractor shall provide a competent superintendent, satisfactory to the Local Public Agency and the Engineer, on the work at all times during working hours with full authority to supervise and direct the work and who shall be the Contractor's agent responsible for the faithful discharge of the Contractor's obligations under the Contract.

The Owner shall have the authority to require the Contractor to remove from the work any incompetent or insubordinate superintendent.

### **GC.3 CONTRACTOR'S EMPLOYEES**

The Contractor shall employ only competent skillful workers and shall at all times enforce strict discipline and good order among the employees.

The Contractor shall neither permit nor suffer the introduction or use of alcoholic beverages or controlled substances upon or about the work embraced in this Contract.

The Owner may require the Contractor to dismiss from the work such employee or employees as the Owner or the Engineer may deem incompetent, or careless, or insubordinate.

### **GC.4 SAFETY OF CONTRACTOR'S EMPLOYEES**

The Contractor shall be responsible for the safety of his employees during the progress of the work as well as the safety, efficiency, and adequacy of his plant, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance or operation.

Contractor shall read and comply with all requirements in the safety booklet entitled Safety Rules for All Contractors and Contractors' Employees on All City Water & Light Projects (July 2000, Reprinted 2012). This includes signing the acknowledgement at the end of said booklet included as part of the Technical Specifications. The Contractor shall submit signed acknowledgement as part of the contract execution.

### **GC.5 SUBCONTRACTS**

The Contractor is responsible to the Owner for the acts and omissions of his subcontractors and of persons either directly or indirectly employed by the subcontractors and is aware that nothing contained in the Contract Documents shall create any contractual relation between any subcontractor and the Owner.

### **GC.6 OTHER CONTRACTS**

The Local Public Agency may award, or may have awarded other Contracts for additional work, and the Contractor shall cooperate fully with such other Contractors, by scheduling his own work with that to be performed under other Contracts as may be directed by the Local Public Agency. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other Contractor as scheduled.

### **GC.7 CONTRACTOR'S INSURANCE**

Before any work is commenced, the Contractor shall furnish an approved certificate of insurance addressed to the Owner, showing that he carries the following insurance which shall be maintained throughout the term of the Contract.

(1) Workmen's Compensation	- Statutory Limit
(2) Employer's Liability for Hazardous Work	- If Needed
(3) Public Liability (Bodily Injury) and Property Damage	- \$1,000,000/occurrence - \$2,000,000/aggregate
(4) Builder's Risk	- Insurable Portion

The Contractor shall carry or require that there be carried the insurance listed in (1) through (3) above for the protection of all his employees and those of his Subcontractors engaged in work under this Contract, and for the protection of the public.

If the work includes pipelines or other underground structures, the Property Damage Liability shall include explosion, collapse, and underground coverage.

The premiums for all insurance and the bond required herein shall be paid by the Contractor.

It shall be the obligation of the Contractor to complete and deliver to the Owner the structure required by these Contract Documents regardless of any loss, damage to, or destruction of the structure prior to delivery.

The City of Jonesboro shall be included on the policy as additional insured.

#### **GC.8 OWNER'S AND ENGINEER'S PROTECTIVE LIABILITY INSURANCE**

The Owner requires the Contractor to name the City of Jonesboro and the Engineer as an additional insured on their Protective Liability insurance referenced in GC.7, which shall be in force for the entire project period.

#### **GC.9 FITTING AND COORDINATION OF THE WORK**

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, Subcontractors, or material men engaged upon this Contract. He shall be prepared to guarantee to each of his Subcontractors the locations and measurements which they may require for the fitting of their work to all surrounding work.

#### **GC.10 MUTUAL RESPONSIBILITY OF CONTRACTORS**

If, through acts of neglect or through failure to comply with any applicable Government regulations by the Contractor, any other Contractor or any Subcontractor shall suffer loss or damage on the work, the Contractor shall settle with such other Contractor or Subcontractor by agreement or arbitration, if such other Contractor or Subcontractor will so settle. If such other Contractor or Subcontractor shall



assert any claim against the Local Public Agency on account of any damage alleged to have been so sustained, the Local Public Agency will notify this Contractor, who shall defend at his own expense any suit based upon such claim, and, if any judgments or claims against the Local Public Agency shall be allowed, the Contractor shall pay or satisfy such judgments or claim and pay all costs and expenses in connection therewith.

#### **GC.11 PAYMENT TO CONTRACTOR**

Payment will be made to the Contractor once a month. The Engineer will prepare (with the required assistance from the Contractor) the application for partial payment. If the bid contains lump sum prices, the Contractor shall furnish to the Engineer, upon request, a detailed cost breakdown of the several items of work involved in the lump sum prices. The Engineer will use this cost breakdown to determine the amount due the Contractor as progress payment. A cut-off time shall be established near the last day of the month such as to allow sufficient time for the application to be prepared, approved by the Contractor, and submitted by the Engineer to the Owner by the first day of the successive month. The amount of the payment due to the Contractor shall be determined by the total value of work completed to date, deducting ten percent (10%) for retainage, adding the value of submitted paid invoices covering construction materials, properly stored on the site, and deducting the amount of all previous payments. After the project is fifty percent (50%) complete, no additional retainage beyond ten percent (10%) of the first fifty percent (50%) of the project cost will be withheld provided that the Contractor is making satisfactory progress and there is no specific cause for greater withholding until completion of the project at which time the retainage will be released with the final payment. The total value of work completed to date shall be based on the estimated quantities of work completed and on the unit and lump sum prices contained in the Proposal. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of paid invoices, covering construction materials for which material payments are made, shall be furnished to the Engineer before such material payments are made.

NOTE: It has been the policy of the Owner to make payments for properly stored materials/equipment based upon invoice price and allow the Contractor to submit paid invoices within 30 days (or the next partial payment period). If paid invoices are not provided within the time allowed, then the materials/equipment so paid for will be removed from the next partial payment.

Monthly or partial payments made by the Owner to the Contractor are monies advanced for the purpose of assisting the Contractor to expedite the work of construction. All material and complete work covered by such monthly or partial payments shall remain the property of the Contractor, and he shall be responsible for the care and protection of all materials and work upon which payments have been made. Such payments shall not constitute a waiver of the right of the Owner to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the Owner in all details.

GC.11.1 Withholding Payments: The Local Public Agency may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the Local Public Agency and if it

so elects may also withhold any amounts due from the Contractor to any Subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Local Public Agency and will not require the Local Public Agency to determine or adjust any claims or disputes between the Contractor and his Subcontractors or material dealers, or to withhold any monies for their protection unless the Local Public Agency elects to do so. The failure or refusal of the Local Public Agency to withhold any monies from the Contractor shall not impair the obligations of any Surety or Sureties under any bond or bonds furnished under this Contract. Such withholding may also occur as a result of the Contractor's failure or refusal to prosecute the work with such diligence as will insure its completion within the time specified in these Contract Documents, or as modified as provided in these Contract Documents, or if the Contractor fails to comply with any applicable regulations promulgated by the U.S. Government or any other Government agencies.

GC.11.2 Final Payment: After final inspection and acceptance by the Local Public Agency of all work under the Contract, the application for final payment shall be prepared which shall be based upon the carefully measured or computed quantity of each item of work at the applicable unit and lump sum prices stipulated in the Unit Price Schedule. The total number of the final payment due the Contractor under this Contract shall be the amount computed as described above less all previous payments. All prior payments shall be subject to correction in the final payment. Final payment to the Contractor shall be made subject to his furnishing the Local Public Agency with a release in satisfactory form of all claims against the Local Public Agency arising under and by virtue of his Contract, other than such claims, if any, as may be specifically excepted by the Contractor from the operation and the release as provided under the section entitled DISPUTES under GENERAL CONDITIONS.

The Local Public Agency, before paying the final estimate, may require the Contractor to furnish releases or receipts from all Subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project), and services to the Contractor, if the Local Public Agency deems the same necessary in order to protect its interest. The Local Public Agency, however, may, if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments so made shall not impair the obligations of any Surety or Sureties furnished under this Contract.

Withholding of any amount due the Local Public Agency under the section entitled LIQUIDATED DAMAGES FOR DELAY under SPECIAL CONDITIONS, shall be deducted from the payments due the Contractor.

All equipment warranties and general guarantee and maintenance bond provisions shall become effective for one year upon date of final acceptance of the completed, project by the Local Public Agency.

GC.11.3 Payments Subject to Submission of Certificates: Each payment to the Contractor by the Local Public Agency shall be made subject to submission by the Contractor of all written certifications required of him.

## **GC.12      USE OF COMPLETED PORTIONS**

The Owner shall have the right to use any completed or partially completed portion of the work and such use shall not be considered as an acceptance of any work.

## **GC.13      CHANGES IN THE WORK**

The Local Public Agency may make changes in the scope of the work required to be performed by the Contractor under the Contract or make additions thereto, or omit work therefrom without invalidating the Contract, and without relieving or releasing the Contractor from any of his obligations under the Contract or any guarantee given by him pursuant to the Contract provisions, and without affecting the validity of the Guaranty Bonds, and without relieving or releasing the Surety or Sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is expressly provided otherwise.

Except for the purpose of affording protection against any emergency endangering life or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the improvements, or supply additional labor, services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the Local Public Agency authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract price will be valid unless so ordered.

After the work is complete, a final change order may be prepared to be accepted by the Owner and Contractor to adjust final payment as required to cover the actual units of work acceptably completed.

If the applicable unit prices are contained in the Proposal (established as a result of either a unit price or a Supplemental Schedule of Unit Prices) the Local Public Agency may order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved and the applicable unit and lump sum prices specified in the Contract; provided that in case of a unit price Contract the net value of all changes does not increase or decrease the original total amount shown in the Agreement by more than twenty-five (25) percent in accordance with the section entitled BALANCED BID; VARIATION IN QUANTITIES under INSTRUCTIONS TO BIDDERS.

If applicable unit prices are not contained in the Unit Price Schedule as described above or if the total net change increases or decreases the total Contract price more than twenty-five (25) percent, the Local Public Agency shall, before ordering the Contractor to proceed with a desired change, request an itemized Proposal from him covering the work involved in the change after which the procedure shall be as follows:

- (1) If the Proposal is acceptable the Local Public Agency will prepare the Change Order in accordance therewith for acceptance by the Contractor and

(2) If the Proposal is not acceptable and prompt agreement between the two (2) parties cannot be reached, the Local Public Agency may order the Contractor to proceed with the work on a Force Account basis, under which the net cost shall be the sum of the actual costs that follow:

- (A) Labor, including foremen;
- (B) Materials entering permanently into the work;
- (C) The ownership or rental cost of construction plant and equipment during the time of use on the extra work;
- (D) Power and consumable supplies for the operation of power equipment;
- (E) Insurance;
- (F) Social Security and old age and unemployment contributions.

To the net cost shall be added a fixed fee agreed upon, but not to exceed fifteen (15) percent of the net cost, to cover supervision, overhead, bond, and any other general expense, and profit.

Each Change Order shall include in its final form:

- (1) A detailed description of the change in the work.
- (2) The Contractor's Proposal (if any) or a conformed copy thereof.
- (3) A definite statement as to the resulting change in the Contract price and/or time.
- (4) The statement that all work involved in the change shall be performed in accordance with Contract requirements except as modified by the Change Order.

#### **GC.14 CLAIMS FOR EXTRA COST**

If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten (10) days after the receipt of such instructions, and in any event before proceeding to execute the work, submit his protest thereto in writing to the Local Public Agency, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.

Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be recognized unless accompanied by certified survey data made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted or

would result in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.

Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall at once be reported to the Local Public Agency, and work shall not proceed except at the Contractor's risk, until written instructions have been received by him from the Local Public Agency.

If, on the basis of the available evidence, the Local Public Agency determines that an adjustment of the Contract Price and/or Time is justifiable, the procedure shall then be as provided in the Section entitled CHANGES IN THE WORK under GENERAL CONDITIONS.

#### **GC.15 OWNER'S RIGHT TO TERMINATE CONTRACT**

##### Termination for Cause

If the Contractor shall be adjudged as bankrupt or shall file a petition for an arrangement or reorganization under the Bankruptcy Act, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should persistently or repeatedly refuse or should fail, except under conditions where extension of time is approved, to supply adequate workmen, equipment and material, or disregard laws, ordinances, or the instructions of the Engineer, or otherwise be guilty of a violation of any provisions of the Contract; provided further that if the Contractor at any time fails to comply with any applicable Federal or State regulation which prevents either the Local Public Agency or the Contractor from fulfilling its obligations under these Contract Documents, then the Owner upon certification of the Engineer that sufficient cause exists to justify such action may, without prejudice to any other right or remedy, and after giving the Contractor ten (10) days' written notice, terminate the employment of the Contractor.

At the expiration of the said ten (10) days, the Owner may immediately serve notice upon the Surety to complete the work.

In the case the Surety fails to comply with the notice within thirty (30) days after service of such notice, the Owner may complete the work and charge the expense of the completion, including labor, materials, tools, implements, machinery, or apparatus, to said Contractor; and the expense so charged shall be deducted and paid by the Owner out of such monies as may be due, or that may thereafter at any time become due to the Contractor under and by virtue of this Contract. And in case such expense is less than the sum which would have been payable under this Contract if the same had been completed by the Contractor, then said Contractor shall be entitled to receive the difference. And in case such expense is greater than the sum which would have been payable under this Contract if the same had been completed by said Contractor, then the Contractor and his Surety shall pay the amount of such excess to the Owner, on demand from said Owner or Engineer of the amount so due.

##### Termination for Convenience

The City of Jonesboro may, by written notice to the Contractor, terminate this contract without cause. The City must give notice of termination to the Contractor at least ten (10) days prior to the effective date of termination.

Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall:

- (1) cease operations as directed by the Owner in the notice;
- (2) take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- (3) except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing Subcontracts and purchase orders and enter into no further Subcontracts and purchase orders.

In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work executed, and actual costs incurred directly as a result of such termination, and there will be no compensation for overhead and profit on work not executed.

#### **GC.16 SUSPENSION OF WORK**

Should contingencies arise to make such action necessary, the Owner shall have the right to suspend the whole or any part of the work for a period not to exceed sixty (60) days by giving the Contractor notice in writing three (3) days prior to the suspension.

The Contractor after written notice to resume work shall begin within ten (10) days from the date of such notice.

If the work or any part thereof shall be stopped by the Owner's notice and the Owner fails to notify the Contractor to resume work within sixty (60) days, the Contractor may abandon that portion of the work so suspended and the Contractor shall be paid for all work performed on the portion so suspended at unit prices quoted in the Unit Price Schedule for completed work involved, at agreed prices on any extra work involved, and at a fair and equitable price for partially completed work involved.

The Engineer may suspend work pending the settlement of any controversy. The Contractor shall not be entitled to any claim for loss or damage by reason of such delay, nor shall he be entitled to any extension of time; but an extension may be granted by the Owner at his discretion.

#### **GC.17 DELAYS - EXTENSION OF TIME - LIQUIDATED DAMAGES**

If the Contractor is delayed at any time in the progress of the work by any act or neglect of the Owner, the Owner's Engineer or employees, or by any separate contractor employed by the Owner, or by

changes ordered in the work, or by strikes, lock-outs, fire, unusual delay in transportation, unavoidable casualty, or any other cause beyond the Contractor's control, then the time of completion shall be extended for such reasonable time as the Owner may decide; provided, however, said time of completion shall be extended upon the following conditions and no other.

- 1) Requests for extension of time shall be in writing. No extension of time shall be granted automatically.
- 2) The Contractor claiming an extension of time because of any of the contingencies hereinabove mentioned, shall, within ten (10) days of the occurrence of the contingency which justifies the delay, notify the Owner in writing of his claim and the reasons therefore.
- 3) In event of a continuing cause of delay, only one claim is necessary.

GC.17.1 Excusable Delays: The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due:

- (1) To any acts of the Government, including controls or restrictions upon requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency;
- (2) To any acts of the Owner;
- (3) To causes not reasonable foreseeable by the parties of this Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or of the public enemy, acts of another Contractor in the performance of some other Contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones, and other extreme weather conditions.
- (4) To any delay of any subcontractor occasioned by any of the causes specified in subparagraphs (1), (2), and (3) of this paragraph.

It is acknowledged between the parties to this Contract that the work to be performed by the Contractor will result in a benefit to the Owner and that a delay in completion of the work will be detrimental to the Owner. It is further acknowledged that, while work is in progress, the Owner shall incur an indeterminable amount of expense as a result of necessary supervision of the work and other overhead and administrative expenses.

It is, therefore, agreed that if there is a delay in the completion of the work beyond the period elsewhere herein specified which has not been authorized by the Owner as set forth above, then the

Owner may deduct from the Contract price the amount stated in the Special Conditions, bound herewith, as liquidated damages.

#### **GC.18      DISPUTES**

All disputes arising under this Contract or its interpretation, whether involving law or fact or both, or extra work, and all claims for alleged breach of Contract shall within ten (10) days of commencement of the dispute be presented by the Contractor to the Local Public Agency for decision. All papers pertaining to claims shall be filed in quadruplicate. Such notice need not detail the amount of the claim, but shall state the facts surrounding the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime, the Contractor shall proceed with the work as directed. Any claim not presented within the time limit specified within this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt by the Local Public Agency of notice thereof.

The Contractor shall submit in detail his claim and his proof thereof. Each decision by the governing body of the Local Public Agency will be in writing and will be mailed to the Contractor by registered mail, with return of receipt requested.

If the Contractor does not agree with any decision of the Local Public Agency, he shall in no case allow the dispute to delay the work, but shall notify the Local Public Agency promptly that he is proceeding with the work under protest, and he may then except the matter in question from the final release.

#### **GC.19      ASSIGNMENT OR NOVATION**

The Contractor shall not assign or transfer, whether by an assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the local Public Agency; provided, however, that assignments to banks, trust companies, or other financial institutions may be made without the consent of the Local Public Agency. No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment, supplied for the performance of the work under this Contract in favor of all persons, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

#### **GC.20      TECHNICAL SPECIFICATIONS AND DRAWINGS**

The Drawings and this Specification are to be considered cooperative. All work necessary for the completion of the facility shown on the Drawings, but not described in this Specification, or described in this Specification but not shown on the Drawings, OR REASONABLY IMPLIED BY EITHER OR BOTH, shall be executed in the best manner, the same as if fully shown and specified. When no figures or memoranda are given, the Drawings shall be accurately followed, according to their scale, but in all



cases of discrepancy in figures or details, the decision of the Engineer shall be obtained before proceeding with the Work. If the Contractor adjusts any such discrepancy without first having obtained the approval of the Engineer, it shall be at his own risk, and he shall bear any extra expense resulting therefrom.

## **GC.21 SHOP DRAWINGS**

Shop Drawings shall be required for all equipment, materials, and as required by the Engineer. All Shop Drawings, Machinery Details, Layout Drawings, etc., shall be submitted to the Engineer in four (4) copies for review (unless otherwise specified) sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting, and rechecking if necessary. The Contractor may proceed, only at his own risk, with manufacture or installation of any equipment or work covered by said Shop Drawings, etc. until they are reviewed, and approved; and no claim, by the Contractor, for extension of the Contract time will be granted by reason of his failure in this respect.

Any Drawings submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any Drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of Contract price and/or time; otherwise, the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the Drawings have been reviewed.

The review of Shop Drawings by the Engineer shall be considered an accommodation to the Contractor to assist him in the execution of the Contract. The Engineer's review of such Drawings shall not relieve the Contractor of his responsibility to perform the work in strict accordance with the Plans and Specifications, and approved changes.

If the Shop Drawing is in accordance with the Contract or involves only a minor adjustment in the interest of the Local Public Agency not involving a change in Contract price or time, the Engineer shall so stamp the Drawing and shall contain in substance the following:

"Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner".

## **GC.22      REQUESTS FOR SUPPLEMENTARY INFORMATION**

It shall be the responsibility of the Contractor to make timely requests of the Local Public Agency for any additional information not already in his possession which should be furnished by the Local Public Agency under the terms of this Contract, and which he will require in the planning and execution of the work. Such requests may be submitted from time to time as the need is approached, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and shall list the various items and the latest date by which each will be required by the Contractor. The first list shall be submitted within two (2) weeks after the Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provisions of this Section.

## **GC.23      REFERENCE TO MANUFACTURER OR TRADE NAME - "OR EQUAL CLAUSE"**

If the Plans, Specifications, or Contract Documents, laws, ordinances or applicable rules and regulations permit the Contractor to furnish or use a substitute that is equal to any material or equipment specified, and if the Contractor wishes to furnish or use a proposed substitute, he shall make written application to the Engineer for approval of such a substitute certifying in writing that the proposed substitute will perform adequately the functions called for in the general design, be similar and of equal substance to that specified, and be suited to the same use and capable of performing the same functions as that specified; the use of such substitute will not require revisions of related work. No substitute shall be ordered or installed without the written approval of the Engineer who will be the judge of equality and may require the Contractor to furnish such other data regarding the proposed substitute as he considers pertinent. No substitute shall be ordered or installed without such performance guarantee and bonds as the Owner may require which shall be furnished at Contractor's expense.

Where such substitutions alter the design or space requirements indicated on the Contract Drawings, detailed drawings shall be prepared and submitted by the Contractor delineating any changes in, or additions to, the work shown on the Contract Drawings, and such drawings and changes or additions to the work shall be made by the Contractor at no additional expense to the City. In all cases, the burden of proof that the material or equipment offered for substitution is equal in construction, efficiency, and service to that named on the Contract Drawings and in these Contract Documents shall rest on the Contractor, and unless the proof is satisfactory to the Engineer, the substitution will not be approved.

## **GC.24      SAMPLES, CERTIFICATES, AND TESTS**

The Contractor shall submit all material, product, or equipment samples, descriptions, certificates, affidavits, etc., as called for in the Contract Documents or required by the Engineer, promptly after award of the Contract and acceptance of the Contractor's bond. No such material or equipment shall

be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Engineer. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the Contract time. Submit four (4) copies of data for Engineer's review.

Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with Contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer, and all specifications or other detailed information which will assist the Engineer in passing upon the acceptability of the sample promptly. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.

Approval of any materials shall be general only and shall not constitute a waiver of the Local Public Agency's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable, at the Contractor's expense.

Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:

- (1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the Engineer;
- (2) The Contractor shall assume all costs of re-testing materials which fail to meet Contract requirements;
- (3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient; and
- (4) All Construction materials shall be tested in accordance with AHTD Specifications and at the contractor's expense.

## **GC.25 PERMITS AND CODES**

The Contractor shall give all notices required by and comply with all applicable laws, ordinances, and codes of the Local Government. All construction work and/or utility installations shall comply with all applicable ordinances, and codes including all written waivers.

Should the Contractor fail to observe the foregoing provisions and proceed with the construction and/or install any utility at variance with any applicable ordinance or code, including any written waivers, the Contractor shall remove such work without cost to the Local Public Agency.

The Contractor shall at his own expense, secure and pay to the appropriate department of the Local Government the fees or charges for all permits for street pavements, sidewalks, sheds, removal of abandoned water taps, sealing of house connection drains, pavement cuts, building, electrical, plumbing, water, gas, and sewer permits required by the local regulatory body or any of its agencies.

The Contractor shall comply with applicable local laws and ordinances governing the disposal of surplus excavation, materials, debris, and rubbish on or off the site of the work, and commit no trespass on any public or private property in any operation due to or connected with the Improvements embraced in this Contract.

#### **GC.26 CARE OF WORK**

The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his plant, appliances, and methods, and for any injury, including death, to any person, and for any damage to property which may result from their failure, or from their improper construction, maintenance, or operation. He shall indemnify and save harmless the Local Public Agency and the Engineer and their employees and agents, against any judgement with costs, which may be obtained as a result of such injury or property damage, because of the alleged liability of the Local Public Agency or of the Engineer.

The Contractor shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance, whether or not the same has been covered in whole or in part by payments made by the Local Public Agency.

The Contractor shall provide sufficient competent watchmen, as required to protect the work both day and night, including Saturdays, Sundays, and holidays, from the time the work is commenced until final completion and acceptance.

In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization from the Local Public Agency, is authorized to act at his discretion to prevent such threatened loss or injury, and he shall so act. He shall likewise act if instructed to do so by the Local Public Agency. Any compensation claimed by the Contractor on account of such emergency work will be determined by the Local Public Agency as provided in the Section entitled CHANGES IN THE WORK under GENERAL CONDITIONS.

The Contractor shall avoid damage, as a result of his operations, to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and he shall at his own expense completely repair any damage thereto caused by his operations, to the satisfaction of the Owner.

The Contractor shall shore up, brace, underpin, secure, and protect as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the Improvements embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Local Public Agency, and the Engineer, from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which it may be claimed that the Local Public Agency, or the Engineer, is liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

#### **GC.27      QUALITY OF WORK AND PROPERTY**

All property, materials, and equipment shall be new and free of defects upon completion of the Contractor's performance and, unless different standards are specified elsewhere in the Contract Documents, shall be of the best type and quality available for the purpose. All of the Contractor's work shall be performed with the highest degree of skill and completed free of defects and in accordance with the Contract Documents. Any work, property, materials, or equipment not in conformance with these standards shall be considered defective. If any work, property, materials or equipment is discovered to have been defective or not in conformance with the Contract Documents, whether said discovery is made before or after completion of performance, the Contractor, at his expense, after written notice from the Owner or Engineer, shall promptly replace or correct the deficiency and pay any engineering costs and consequential expense or damage incurred by the Owner in connection therewith. If the Contractor fails to promptly correct all deficiencies, the Owner shall have the option of remedying the defects at the Contractor's cost. If the Contractor is required to furnish shop drawings or designs, the above provisions shall apply to such drawings or designs.

Neither the Owner's payment, acceptance, inspection or use of the work, property, materials, or equipment, nor any other provision of the Contract Documents shall constitute acceptance of work, property, materials, or equipment which are defective or not in accordance with the Contract Documents. If the Contractor breaches any provision of the Contract Documents with respect to the quality of the work, property, materials, equipment or performance, whether initial or corrective, his liability to the Owner shall continue until the statute of limitations with respect to such breach of contract has expired following discovery of the defect. All parts of this section are cumulative to any other provisions of the Contract Documents and not in derogation thereof. If it is customary for a warranty to be issued for any of the property to be furnished hereunder, such warranty shall be furnished, but no limitations in any such warranty shall reduce the obligations imposed under the Contractor in the Contract Documents or by Arkansas Law; but if any greater obligations than imposed in this Contract are specified in any such warranty or by Arkansas Law, those greater obligations shall be deemed a part of this Contract and enforceable by the Owner.

## **GC.28      ACCIDENT PREVENTION**

The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work. The safety provisions of applicable laws and building and construction codes, including applicable parts of the Arkansas Department of Labor Safety Code, shall be observed. The Contractor shall take or cause to be taken such safety and health measures, additional to those herein required, as he may deem necessary or desirable. Machinery, equipment, and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws.

The Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the Local Public Agency with reports concerning these matters.

The Contractor shall indemnify and save harmless the Local Public Agency, and the Engineer, from any claims for damages resulting from personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this Contract.

## **GC.29      SANITARY FACILITIES**

The Contractor shall furnish, install, and maintain ample sanitary facilities for the workers. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required by the sanitary codes of the State and Local Government. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

## **GC.30      USE OF PREMISES**

The Contractor shall confine his equipment, storage of materials, and construction operations to the Rights-of-Way to accommodate the permanent construction furnished by the Local Public Agency, or as may be directed otherwise by the Local Public Agency, and shall not unreasonably encumber the site of other public Rights-of-Way with his materials and construction equipment. In case such Rights-of-Way furnished by the Local Public Agency are not sufficient to accommodate the Contractor's operations, he shall arrange with the Local Government, or with the owner or owners of private property for additional area or areas, and without involving the Local Public Agency in any manner whatsoever.

The Contractor shall comply with all reasonable instructions of the Local Public Agency and the ordinances and codes of the Local Government (including but not limited to those) regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

#### **GC.31      REMOVAL OF DEBRIS, CLEANING, ETC.**

The Contractor shall periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the project site and public Rights-of-Way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris, and unused materials provided for the work, thoroughly clean all drainage pipes, structures, ditches, and other features, and put the whole site of the work and public Rights-of-Way in a neat and "broom" clean condition. Trash burning on the site of the work will be subject to prior approval of the Jonesboro Fire Department.

#### **GC.32      RETURN OF OWNER'S MATERIALS, EQUIPMENT OR PROPERTY**

Any materials, equipment or other property which belongs to the Owner, removed by the Contractor, shall be delivered to the Owner's designated warehouse unless its re-use is specified in the Plans and Specifications. If the Contractor fails to deliver the materials, equipment, or other property, the value, as determined by the Engineer, shall be deducted from amounts due the Contractor.

#### **GC.33      OBSERVATION OF WORK**

The Engineer, his authorized representative, and any Federal, State, County, or local authority representative having jurisdiction over any part of the work, or area through which the work is located, shall at all times have access to the work in progress.

The detailed manner and method of performing the work shall be under the direction and control of the Contractor, but all work performed shall at all times be subject to the observation of the Engineer or his authorized representative to ascertain its conformance with the Contract Documents. The Contractor shall furnish all reasonable aid and assistance required by the Engineer for the proper observation and examination of the work and all parts thereof.

The Engineer is not responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction, or safety precautions and programs incident thereto.

Observers may be appointed by the Engineer or Owner. Observers shall have no authority to permit any deviation from the Plans and Specifications except on written order from the Engineer and the Contractor will be liable for any deviation except on such written order. Observers shall have authority, subject to the final decision of the Engineer, to condemn and reject any defective work and to suspend the work when it is not being performed properly.

The observer shall in no case act as superintendent or foreman or perform other duties for the Contractor, nor interfere with the management of the work by the latter. Any advice which the observer may give the Contractor shall in no way be construed as binding to the Engineer in any way or releasing the Contractor from fulfilling all of the terms of the Contract.

Any defective work may be rejected by the Engineer at any time before final acceptance of the work, even though the same may have been previously overlooked and estimated for payment and payment therefore made by the Owner.

The Contractor shall notify the Engineer sufficiently in advance of backfilling or concealing any facilities to permit proper observation. If the facilities are concealed without approval or consent of the Engineer, the Contractor shall uncover for observation and recover such facilities all at his own expense, when so requested by the Engineer.

Should it be considered necessary or advisable by the Engineer at any time before final acceptance of the entire work to make an examination of work already completed, by uncovering the same, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or his Subcontractors, he shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, plus fifteen (15) percent of such costs to cover superintendence, general expenses and profit, shall be allowed the Contractor and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable extension of time on account of the additional work involved.

Observation of materials and appurtenances to be incorporated in the Improvements embraced in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such observation and acceptance, unless otherwise stated in the Technical Specifications, shall be final, except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the observation of materials as a whole or in part will be made at the project site.

All condemned or rejected work shall be promptly taken out and replaced by satisfactory work. Should the Contractor fail or refuse to comply with the instructions in this respect, the Owner may, upon certification by the Engineer, withhold payment, proceed to terminate the Contract, or perform work as provided herein.

#### **GC.34 REVIEW BY LOCAL PUBLIC AGENCY OR OWNER**

The Local Public Agency, its authorized representatives and agents, shall at all times during work hours have access to and be permitted to observe and review all work, materials, equipment, payrolls, and personnel records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by the Local Public Agency through its



authorized representatives or agents. Representatives of Federal, State, and local government agencies also have the right of physical inspection of the work during work hours.

#### **GC.35 PROHIBITED INTERESTS**

No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this Contract or in any part thereof. No officer, employee, architect, attorney, engineer, or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any executive, supervisory, or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this Contract or in any part thereof.

#### **GC.36 FINAL INSPECTION**

When the Improvements embraced in this Contract are substantially completed, the Contractor shall notify the Local Public Agency in writing that the work will be ready for final inspection on a definite date which shall be stated in the notice. The notice will be given at least ten (10) days prior to the date stated for final inspection, and bear the signed concurrence of the representative of the Local Public Agency having charge of observation. If the Local Public Agency determines that the status of the Improvements is as represented, it will make the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as practicable. The inspection party will also include the representatives of each Department of the Local Government and any other involved government agencies when such improvements are later to be accepted by the Local Government and/or other government agencies.

#### **GC.37 PATENTS**

The Contractor shall hold and save harmless the Local Public Agency, its officers, employees, and the Engineer, from liability of any nature or kind, including costs and expenses, for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the Contract, including its use by the Local Public Agency, unless otherwise specifically stipulated in the Technical Specifications.

#### **GC.38 WARRANTY OF TITLE**

No material, supplies, or equipment for the work shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the

Local Public Agency free from any claims, liens, or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract, shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Local Public Agency. The provisions of this paragraph shall be inserted in all subcontracts and material Contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal Contract is entered into for such materials.

#### **GC.39      GENERAL GUARANTY**

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the Improvements embraced in this Contract by the Local Public Agency or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of twelve (12) months from the agreed upon day of final acceptance of the work. The Local Public Agency will give notice of defective materials and work with reasonable promptness.

## **X. SUPPLEMENTAL GENERAL CONDITIONS**

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## **SGC.1      PROGRESS SCHEDULE**

The Contractor shall submit a construction contract schedule of the bar graph (or other approved) type seven (7) calendar days prior to the preconstruction conference showing the following information as a minimum:

- (1) Actual date construction is scheduled to start if different from the date of notice to proceed.
- (2) Planned contract completion date.
- (3) Beginning and completion dates for each phase of work.
- (4) Respective dates for submission of shop drawings and the beginning of manufacture, the testing of, and the installation of materials, supplies, and equipment.
- (5) All construction milestone dates.
- (6) A separate graph showing work placement in dollars versus contract time. The schedule shall incorporate contract changes as they occur. The schedule shall be maintained in an up-to-date condition and shall be available for inspection at the construction site at all times.

The construction contract schedule shall be submitted in conjunction with and/or in addition to any other specification requirements concerning schedules.

## **SGC.2      DRAWINGS**

One (1) set of Plans and Specifications shall be furnished to the Contractor, at no charge, for construction purposes. Additional copies may be obtained at cost of reproduction upon request.

The Contractor shall keep one (1) copy of all drawings and Contract Documents in good condition readily accessible at the site of the work available to the Engineer and his authorized representatives.

## **SGC.3      ADDITIONAL INSURANCE (i.e. Railroad Insurance)**

Intentionally Left Blank

## **SGC.4      RECORD DRAWINGS**

Before any work is started, the Contractor shall obtain at his own expense one set of Plans to be used for Record Drawings. The Engineer will supply the Plans at printing cost to the Contractor. Record Drawings will be kept on full-size plan sheets; no half-size sheets will be permitted. The Record Drawings shall be stored and maintained in good condition at all times by the Contractor and shall be made available to the Engineer at the work site immediately at the Engineer's request. All writing,

notes, comments, dimensions, etc. shall be legible. The Record Drawings shall be stored flat and shall not be rolled. The Record Drawings shall be submitted to the Engineer before the project can be accepted.

The Contractor shall accurately identify and document the locations of all underground and/or concealed work that he has performed and/or has been affected by his work. This shall include all equipment, conduits, pipe lines, valves, fittings and other appurtenances and underground structures that are part of the Contractor's work and their proximity to existing underground structures and utilities to the extent known. The Contractor will certify accuracy of the Record Drawings by endorsement.

The Contractor's work shall be documented on the Record Drawings in an on-going manner. Distances, offsets, depths, etc. shall be accurately measured from permanent fixed objects so that the Owner can expose any item of the work in the future with a minimum of effort. All such measurements shall be made before the items of work are covered or backfilled. The Contractor shall be required to expose and recover/backfill the work at his own expense if, in the Engineer's opinion, the measurements need to be verified.

#### **SGC.5 TRENCH AND EXCAVATION SAFETY SYSTEM**

This section covers trench and excavation safety system required for constructing improvements that necessitate open excavations on the project. All work under this item shall be in accordance with the current edition of the "Occupational Safety and Health Administration Standard for Excavation and Trenches Safety System, 29 CFR 1926, Subpart P.

The Contractor, prior to beginning any excavation, shall notify the State Department of Labor (Safety Division) that work is commencing on a project with excavations greater than five feet.

The Contractor shall notify all Utility Companies and Owners in accordance with OSHA Administration 29 CFR 1926.651(b) (2) for the purpose of locating utilities and underground installations.

Where the trench or excavation endangers the stability of a building, wall, street, highway, utilities, or other installation, the Contractor shall provide support systems such as shoring, bracing, or underpinning to ensure the stability of such structure or utility.

The Contractor may elect to remove and replace or relocate such structures or utilities with the written approval of the Owner of the structure or utility and the Project Owner.

The work required by this item will be paid for at the price bid for "Trench and Excavation Safety Systems". After award of the contract, the Contractor shall submit to the Engineer a breakdown of cost for work involved in the price bid for "Trench and Excavation Safety Systems" and shall, with each periodic payment request, submit a certification by the Contractor's "competent person" as defined in Subpart "P" 1926.650(b) that the Contractor has complied with the provisions of "Occupational Safety and Health Administration Standard for Excavation and Trenches Safety System", 29 CFR 1926 Subpart P for work for which payment is requested.

## **SGC.6        MINIMUM WAGES**

The Contractor shall comply with the provisions of the Arkansas Prevailing Wage Law, Arkansas Code Annotated §§ 22-9-301 to 22-9-313 (1987) and the administrative regulations promulgated thereunder, as they apply under this Contract.

It shall be the responsibility of each Bidder to determine the consequences of the applicable provisions of the Arkansas Prevailing Wage Law, and include in his bid any costs made necessary because of them. No additional payment will be made, and no extension of Contract time will be allowed because of the provisions of the Law.

The Contractor shall comply with all applicable provisions of the Arkansas Prevailing Wage Law including the following:

- (1) Pay wage rates not less than the prevailing hourly wage for each craft or type of workman needed to execute the Contract, as determined by the Arkansas Department of Labor, such determination covering rates for regular hours, and rates for holidays and overtime work (Arkansas Code Ann. §§ 22-9-308(b)(2) and §§ 22-9-308(c)).
- (2) Post on the site of the work, in a conspicuous and accessible place, a copy of the prevailing wage rates as determined (Arkansas Code Ann. §§ 22-9-309(a)).
- (3) Keep an accurate record of workman employed by him, and by each subcontractor, if any, including the wage payments made. Such record, or records, shall be available for inspection by the Arkansas Department of Labor, and the Owner, during reasonable hours.
- (4) The Contractor's bond shall guarantee the payment of wages as herein specified.

Wage rates as established by the Arkansas Department of Labor are minimum for wage payments under this Contract.

There is no assurance on the part of the Owner that mechanics and laborers can be obtained for the rates herein bound. Each Bidder shall determine for himself the availability of laborers and mechanics, and the rates he must pay to obtain employees. Such rates of pay may be greater than, but cannot be less than, the wage rates bound herein.

General Decision Number: AR120175 01/06/2012 AR175

Superseded General Decision Number: AR20100218

State: Arkansas

Construction Type: Heavy  
Heavy Construction

Counties: Craighead and Poinsett Counties in Arkansas.

Modification Number      Publication Date  
0                              01/06/2012

ENGI0624-003 01/01/2009

	Rates	Fringes
Operating Engineer:		
Roller (Dirt and Grade		
Compaction).....	\$ 22.00	9.80

\* PAIN0424-007 07/01/2010

	Rates	Fringes
PAINTER: Brush & Roller Only....	\$ 16.14	5.94

\* SUAR2008-172 11/21/2008

	Rates	Fringes
CARPENTER.....	\$ 14.55	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 15.54	0.00
ELECTRICIAN.....	\$ 19.16	4.12
IRONWORKER, REINFORCING.....	\$ 17.38	0.00
LABORER: Common or General.....	\$ 9.90	2.23
LABORER: Mason Tender -		
Cement/Concrete.....	\$ 11.67	0.00
OPERATOR:		
Backhoe/Excavator/Trackhoe.....	\$ 13.74	0.00
OPERATOR: Bulldozer.....	\$ 12.00	0.00
OPERATOR: Crane.....	\$ 19.26	0.00
OPERATOR: Mechanic.....	\$ 17.25	0.00
OPERATOR: Piledriver.....	\$ 17.21	0.00
OPERATOR: Scraper.....	\$ 9.00	0.00
OPERATOR: Tractor.....	\$ 11.13	0.00
OPERATOR: Trencher.....	\$ 14.76	0.00
OPERATOR: Front End Loader.....	\$ 13.42	0.00

PAINTER: Spray Only.....\$ 20.15	3.50
TRUCK DRIVER.....\$ 9.00	0.00

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

#### Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters, PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

#### Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.



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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

## **XI. SPECIAL CONDITIONS**

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## **SC.1 GENERAL**

The provisions of this section of the Specifications shall govern in the event of any conflict between them and the "General Conditions".

## **SC.2 LOCATION OF PROJECT**

The project is located in Industrial Park, Jonesboro, Arkansas. A map showing the general location is included in the plan sets.

## **SC.3 SCOPE OF WORK**

The work to be performed under this Contract consists of furnishing all materials, labor, supervision, tools and equipment necessary to Industrial Park Utility Improvements.

## **SC.4 TIME ALLOTTED FOR COMPLETION**

The time allotted for completion of the work shall be ninety (90) calendar days for award of one job, one hundred twenty (120) calendar days for the award of two jobs, and one hundred fifty (150) calendar days for the award of three jobs, which time shall begin within ten (10) days of the work order or notice to proceed. After award of the Contract is made and the Contract Documents are completed, the Engineer shall issue a Notice to Proceed, notifying the Contractor to proceed with the construction of the project, subject to the provisions of this paragraph.

## **SC.5 FORMS, PLANS AND SPECIFICATIONS**

Forms of Proposal, Contract and Bonds, and Plans and Specifications may be examined at the City of Jonesboro Engineering Department, 307 Vine Street, Jonesboro, Arkansas 72403, and obtained upon payment of \$25.00 each. No refunds will be made.

## **SC.6 LIQUIDATED DAMAGES FOR DELAY**

The number of calendar days allowed for completion of the project is stipulated in the Proposal and in the Contract and shall be known as the Contract Time.

1. It is understood and agreed by and between the Owner and the Contractor that the time of completion herein set out is a reasonable time. The Contractor shall perform fully, entirely, and in an acceptable manner, the work contracted for within the contract time stated in the Contract. The contract time shall be counted from ten days after the effective date of the "Notice to Proceed"; and shall include all Sundays, holidays, and non-work days. All calendar days elapsing between the effective dates of any orders of the Engineer for suspension of the prosecution of the work, due to the fault of the Contractor, shall be counted as elapsed contract time, and shall not be considered for an extension of time.
2. Extensions of time for completion, under the condition of 2(a) next below, will be granted; extensions may be granted under other stated conditions:

- a. If the satisfactory execution and completion of the Contract shall require work or material in greater amounts or quantities than those set forth in the Contract, then the Contract time shall be increased in the same proportion as the additional work bears to the original work contracted for.
  - b. An average or usual number of inclement weather days, when work cannot proceed, is to be anticipated during the construction period and is not to be considered as warranting extension of time. If, however, it appears that the Contractor is delayed by conditions of weather, so unusual as not to be reasonably anticipated, extensions of time may be granted.
  - c. Should the work under the Contract be delayed by other causes which could not have been prevented or contemplated by the Contractor, and which are beyond the Contractor's power to prevent or remedy, an extension of time may be granted. Such causes of delay shall include but not necessarily be limited to the following:
    - (1) Acts of God, acts of the public enemy, acts of the Owner except as provided in these Specifications, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather.
    - (2) Any delays of Subcontractors or suppliers occasioned by any of the causes specified above.
3. The Resident Project Representative or other authorized representative of the City shall keep a written record sufficient for determination as to the inclusion of that day in the computation of Contract time. This record shall be available for examination by the Contractor during normal hours of work as soon as feasible after the first of each construction month. In case of disagreement between the representative of the City and the Contractor, as to the classification of any day, the matter shall be referred to the City whose decision shall be final.
  4. The amount of all extensions of time for whatever reason granted shall be determined by the Owner. In general, only actual and not hypothetical days of delay will be considered. The Owner shall have authority to grant additional extensions of time as the Owner may deem justifiable.

The amount of Liquidated Damages to be assessed shall be in accordance with the schedule that follows:

<u>Amount of Contract</u>	<u>Liquidated Damages Per Day</u>
Less than \$25,000.00	\$100.00
Not less than \$ 25,000.00 but less than \$ 50,000.00	\$150.00
Not less than \$ 50,000.00 but less than \$ 100,000.00	\$200.00
Not less than \$100,000.00 but less than \$ 500,000.00	\$250.00
Not less than \$500,000.00 but less than \$1,000,000.00	\$350.00
Over \$1,000,000.00	\$500.00

1. Time is an essential element of the Contract and it is important that the work be pressed vigorously to completion. Loss will accrue to the public due to delayed completion of the facility; and the cost to the Owner of the administration of the Contract, including engineering, inspection and supervision, will be increased as the time occupied in the work is lengthened.
2. Should the Contractor fail to complete the work as set forth in the Specifications and within the time stipulated in the Contract, there shall be deducted the amount shown in the schedule above, for each day of delay, from any monies due or which may thereafter become due him, not as a penalty, but as ascertained and liquidated damages.
3. Should the amount otherwise due the Contractor be less than the amount of such ascertained and liquidated damages, the Contractor and his Surety shall be liable to the Owner for such deficiency.

If the Contractor finds it impossible for reasons beyond his control to complete the work within the Contract time as specified, or as extended in accordance with the provisions of this subsection, he may, at any time prior to the expiration of the Contract time as extended, make a written request to the Engineer for an extension of time setting forth the reasons which he believes will justify the granting of his request. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Engineer finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, he may recommend to the Owner that the contract time be extended as conditions justify. If the Owner extends the contract, the extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

#### **SC.7 KNOWLEDGE OF CONDITIONS**

The Contractor states that he has examined all the available records and has made a field examination of the site and right-of-way and that he has informed himself about the character, quality, and quantity of surface and subsurface materials and other conditions to be encountered; the quantities in various sections of the work; the character of equipment and facilities needed for the prosecution of the work; the location and suitability of all construction materials; the local labor conditions; and all other matters in connection with the work and services to be performed under this contract.

#### **SC.8 PERMITS AND RIGHTS-OF-WAY**

The Owner will secure easements across public or private property permanently required for the pipelines at no cost to the Contractor.

The Contractor shall lease, buy, or otherwise make satisfactory provision, without obligating the Owner in any manner, for any land required outside the land provided by the Owner.

State Highway and Railroad Crossing Permits will be secured by the Owner. All other permits and licenses necessary for the prosecution of the work shall be secured and paid for by the Contractor.

## **SC.9        REFERENCE SPECIFICATIONS**

Where reference is made in these Specifications to the Standard Specifications of the Arkansas State Highway and Transportation Department, such reference is made for expediency and standardization, and such specifications (latest edition thereof) referred to are hereby made a part of these Specifications.

More specifically, if any items or materials required for completion of the work required for this project are not specified in these Contract Documents, such items or materials and requirements for installation shall conform to the latest edition of the Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction.

## **SC.10        PUBLIC UTILITIES AND OTHER PROPERTY TO BE CHANGED**

In case it is necessary to change or move the property of any owner or of a public utility, such property shall not be moved or interfered with until ordered to do so by the Engineer. The right is reserved to the owner of public utilities to enter upon the limits of the project for the purpose of making such changes or repairs of their property that may be made necessary by performance of this Contract.

## **SC.11        USED MATERIALS**

No material which has been used by the Contractor for any temporary purpose whatever is to be incorporated in the permanent structure without written consent of the Engineer.

## **SC.12        EXISTING STRUCTURES**

The Plans show the locations of all known surface and subsurface structures. However, the Owner assumes no responsibility for failure to show any or all of these structures on the Plans, or to show them in their exact location. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for extra work or for increasing the pay quantities in any manner whatsoever, unless the obstruction encountered is such as to necessitate changes in the lines or grades, or requires the building of special work, provisions for which are not made in the Plans and Proposal, in which case the provisions in these Specifications for Extra Work shall apply.

The Contractor shall be responsible for protection of all existing structures, and any damage caused by his operations shall be repaired immediately without cost to the Owner. It shall be the responsibility of the prospective Contractor to examine the site completely before submitting his bid.

### **SC.13      USE OF EXPLOSIVES**

Any use of explosives or blasting shall be as outlined in these Specifications.

### **SC.14      BARRICADES, LIGHTS, AND WATCHMEN**

Where the work is performed on 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 shall provide such other precautionary measures for the protection of persons or property and of the work as are necessary.

Barricades shall be painted in a color that will be visible at night. From sunset to sunrise the Contractor shall furnish and maintain at least one light at each barricade and a sufficient number of barricades shall be erected to keep vehicles from being driven on or into any work under construction. The Contractor shall furnish watchmen in sufficient numbers to protect the work.

The Contractor will be held responsible for all damage to the work due to failure to provide barricades, signs, lights, and watchmen to protect it. Whenever evidence is found of such damage, the Engineer may order the damaged portion immediately removed and replaced by the Contractor at his expense. The Contractor's responsibility for the maintenance of barricades, signs, and lights, and for providing watchmen, shall not cease until the project shall have been accepted by the Owner.

### **SC.15      FENCES AND DRAINAGE CHANNELS**

Boundary fences or other improvements removed to permit the installation of the work shall be replaced in the same location and left in a condition as good or better than that in which they were found except as indicated on the Drawings.

Where surface drainage channels are disturbed or blocked during construction, they shall be restored to their original condition of grade and cross section after the work of construction is completed.

### **SC.16      WATER FOR CONSTRUCTION**

Water used for the mixing of concrete, testing, or any other purpose incidental to this project, shall be furnished by the Contractor. The Contractor shall make the necessary arrangements for securing and transporting such water and shall take such water in a manner and at such times that will not produce a harmful drain or decrease of pressure in the Owners' water system. No separate payment will be made for water used but the cost thereof shall be included in the Unit Price Schedule.

### **SC.17      MATERIAL STORAGE**

Materials delivered to the site of the work in advance of their use shall be stored so as to cause the least inconvenience and in a manner satisfactory to the Engineer.

#### **SC.18      EXISTING UTILITIES AND SERVICE LINES**

The Contractor shall be responsible for the protection of all existing utilities or improvements crossed by or adjacent to his construction operations. Where existing utilities or service lines are cut, broken, or damaged, the Contractor shall replace or repair immediately the utilities or service lines with the same type of original material and construction or better, at his own expense.

#### **SC.19      TESTING, INSPECTION AND CONTROL**

Testing and control of all materials used in the work shall be done by an approved commercial laboratory employed and paid directly by the Owner, unless otherwise specified in the Technical Specifications. The Contractor shall furnish, at his own expense, all necessary specimens for testing of the materials, as required by the Engineer

#### **SC.20      BOND**

Coincident with the execution of the Contract, the Contractor shall furnish a good and sufficient surety bond, in the full amount of the Contract sum, guaranteeing the faithful performance of all covenants, stipulations, and agreements of the Contract, the payment of all bills and obligations arising from the execution of the Contract, (which bills or obligations might or will in any manner become a claim against the Owner), and guaranteeing the work included in this Contract against faulty materials and/or poor workmanship for one (1) year after the date of completion of Contract.

All provisions of the bond shall be complete and in full accordance with Statutory requirements. The bond shall be executed with the proper sureties through a company licensed and qualified to operate in the state and approved by the Owner. The issuing agent's power of attorney shall be attached to the bond and the bond shall be signed by an agent resident in the state and date of bond shall be the date of execution of the Contract. If at any time during the continuance of the Contract the surety on the Contractor's bond becomes irresponsible, the Owner shall have the right to require additional and sufficient sureties which the Contractor shall furnish to the satisfaction of the Owner within ten (10) days after notice to do so. In default thereof, the Contract may be suspended and all payments or money due the Contractor withheld.

#### **SC.21      LIGHT AND POWER**

The Contractor shall provide, at his own expense, temporary lighting and facilities required for the proper prosecution and inspection of the work. At the time the Owner obtains beneficial occupancy of any of the facilities placed in satisfactory service, charges for power and light for regular operation of those involved facilities will become the responsibility of the Owner.

#### **SC.22      LINES AND GRADES**

The Contractor will be furnished baselines and benchmarks to control the work. The Contractor shall be responsible for the additional instrument control necessary to layout and construct the improvements. The Contractor's instrument control of the work shall not be measured for separate payment.



As a minimum, the Contractor shall provide the following instrument control for the work:

- a. For the full length and width of all areas within the limits of paving, the finished grade of the concrete surface course shall be controlled by grade wires or forms set by the Contractor to control the final surface, in accordance with the plans.
- b. For the full length and width of all areas within the limits of paving, the initial courses of bituminous pavement will be controlled by uniform thickness. The course under the final surface course shall be controlled by grade wire, and the final surface course shall be controlled by uniform thickness. The bituminous pavement shall be constructed with a lay down machine with automatic controls and a forty (40) foot ski.
- c. For the full length and width of all areas within the limits of paving, the crushed aggregate base course and the sub base course will be controlled with intermediate and final surface stakes, "blue tops". Stakes shall be set as required or as directed by the Engineer to control the construction.
- d. The Contractor shall set intermediate line and grade stakes and final grade stakes, "blue tops," as required to control the construction of shoulders.

#### **SC.23      LEGAL HOLIDAYS**

January 1, Martin Luther King, Jr. Day, President's Day, Memorial Day, July 4, Labor Day, Veteran's Day, Thanksgiving, Day after Thanksgiving, December 24, and December 25 will be considered as being legal holidays; no other days will be so considered. Should any holiday fall on Sunday, the holiday shall be observed on the following Monday. No engineering observation will be furnished on legal holidays or Sundays, except in an emergency. The Contractor shall observe the legal holidays and Sundays, and no work shall be performed on these days except in an emergency. However, these days shall not be excluded from Contract time.

#### **SC.24      SEQUENCE OF CONSTRUCTION**

Sequence of all phases of work shall be such as to provide for the least possible inconvenience to the Owner. Scheduling of work which would interfere with normal traffic operation shall be coordinated with the Owner. Material and equipment received on the project prior to time of installation shall be stored at such locations designated by the Owner.

The Contractor shall furnish a proposed work schedule to the Engineer for review and approval as soon as possible after award of the Contract. This schedule shall show anticipated equipment delivery schedules and times of beginning and completing of the several work tasks.

#### **SC.25      TEST BORINGS**

The Contractor may rely upon the general accuracy of the test pit or soil boring data contained in reports or drawings, but such reports and drawings are not Contract Documents. The Contractor may

not rely upon or make any claim against Owner, Engineer, or Engineer's Consultants with respect to (1) the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by the Contractor and safety precautions and programs incident thereto, (2) other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings, (3) any Contractor interpretation of or conclusion drawn from any data, interpretations, opinions, or information.

#### **SC.26      TEMPORARY FIELD OFFICE**

Not required for these jobs.

#### **SC.27      RELEASE AND CONTRACTOR'S AFFIDAVIT**

At the project's completion, the Contractor shall execute the attached Release and Lien Waiver to release all claims against the Owner arising under and by virtue of his Contract. The date of the Release shall be that agreed to for the final acceptance of the project with the Owner.

#### **SC.28      MAINTENANCE BOND**

The Contractor shall execute the attached Maintenance Bond guaranteeing the work included in the Contract against faulty materials and/or prior workmanship for one year after completion of the Contract. The date of the Maintenance Bond shall be that agreed to for the final acceptance of the project with the Owner. The Maintenance Bond shall be for 100% of the final contract amount.

At the end of the applicable maintenance period, the Owner and/or the Engineer, with the Contractor, shall make an inspection of the work. The Contractor immediately shall repair and correct any and all defects which have resulted from faulty workmanship, equipment, or materials, following which repair and correction the Local Public Agency will accept full maintenance of the work.

**RELEASE**

FROM: Contractor's Name\_\_\_\_\_

Address\_\_\_\_\_

\_\_\_\_\_

TO: City of Jonesboro

DATE OF CONTRACT: \_\_\_\_\_

Upon receipt of the final payment and in consideration of that amount, the undersigned does hereby release the Owner and its agents from any and all claims arising under or by virtue of this Contract or modification thereof occurring from the undersigned's performance in connection with the construction of the

Industrial Park Utility Improvements

project.

\_\_\_\_\_  
Contractor's Signature

\_\_\_\_\_  
Title

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

**CONTRACTOR'S AFFIDAVIT**

FROM: Contractor's Name\_\_\_\_\_

Address\_\_\_\_\_

\_\_\_\_\_

TO: City of Jonesboro

DATE OF CONTRACT: \_\_\_\_\_

I hereby certify that all claims for material, labor, and supplies entered into contingent and incident to the construction or used in the course of the performance of the work on the construction of the

Industrial Park Utility Improvements

have been fully satisfied.

\_\_\_\_\_  
Contractor's Signature

\_\_\_\_\_  
Title

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

The Surety Company consents to the release of the retained percentage on this project with the understanding that should any unforeseen contingencies arise having a right of action on the bond that the Surety Company will not waive liability through the consent to the release of the retained percentage.

Dated \_\_\_\_\_

\_\_\_\_\_  
Surety Company

By \_\_\_\_\_  
Resident Agent, State of Arkansas

\_\_\_\_\_

**MAINTENANCE BOND**

KNOW ALL MEN BY THESE PRESENTS:

That we, \_\_\_\_\_,  
as Principal, and \_\_\_\_\_,

as Surety, are held and firmly bound unto the City of Jonesboro, as Obligee, in the full and

just sum of \_\_\_\_\_  
(\$ \_\_\_\_\_) DOLLARS, lawful money of the United States of America, to be  
paid to the said Obligee, its successors or assigns, for the payment of which, well and truly to be made,  
we and each of us, bind ourselves, our heirs, executors and assigns, themselves, and their successors  
and assigns, jointly and severally, firmly by these presents.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

The conditions of this obligation are such, that whereas, said Principal,  
has by a certain contract with the City of Jonesboro dated the \_\_\_\_ day of  
\_\_\_\_\_, 20 \_\_\_\_, agreed to construct the Industrial Park Utility  
Improvements and to maintain the said Improvement in good condition for a period of one (1) year  
from the date of acceptance of the improvements.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal  
shall indemnify and hold harmless the said Obligee from and against all loss, costs, damages, and  
expenses whatsoever which it may suffer or be compelled to pay by reason of failure of the said  
Principal to keep said work in repair for a one year period beginning  
\_\_\_\_\_ against any and all defects of faulty workmanship or inferior  
material, then this obligation shall be void; otherwise to remain in full force and effect.

It is further agreed that if the said Principal or Surety herein shall fail to maintain said  
improvements in good condition for the said period of 1 year, and at any time repairs shall be  
necessary, that the cost of making said repairs shall be determined by the Owner, or some person or  
persons designated by the Owner to ascertain the same, and if, upon thirty (30) days notice, the said  
amount ascertained shall not be paid by the Principal or Surety herein, or if the necessary repairs are  
not made, that said amount shall become due upon the expiration of thirty (30) days, and suit may be  
maintained to recover the amount so determined in any Court of competent jurisdiction; and that the  
amount so determined shall be conclusive upon the parties as to the amount due on this bond for the  
repair or repairs included therein; and that the cost of all repairs shall be so determined from time to  
time during the life of this bond, as the condition of the improvements may require.

Signed, sealed and delivered the day and year first above written.

\_\_\_\_\_  
Principal

ATTEST:

\_\_\_\_\_  
BY: \_\_\_\_\_

\_\_\_\_\_  
SEAL

\_\_\_\_\_  
Surety

ATTEST:

\_\_\_\_\_  
BY: \_\_\_\_\_

\_\_\_\_\_  
Attorney in Fact

## **XII. TECHNICAL SPECIFICATIONS**

### TABLE OF CONTENTS

#### **TITLE**

SP-1	Standard Specifications for Highway Construction Arkansas State Highway and Transportation Department, Edition of 2003
SP-2	Arkansas State Highway and Transportation Department Supplemental Specification Errata for the Book of Standard Specifications
SP-3	Special Requirements for Federal Aid Projects
SP-4	Statements and Payrolls
SP-5	Stormwater Pollution Prevention Plan
SP-6	CWL Installation – Water Main
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SP-8	CWL Specifications Water and Sewer Construction
SP-9	CWL – Safety Rules for All Contractors’ Employees on All City Water & Light Projects

## **SP-1 - SPECIFICATIONS, ARKANSAS STATE HIGHWAY COMMISSION**

### General

The standard specifications of the Arkansas State Highway and Transportation are bound in a book titled Standard Specifications for Highway Construction. These specifications are referred to herein as "Standard Specifications." The latest edition shall apply.

A copy of these "Standard Specifications" may be obtained from the Arkansas State Highway and Transportation Department, Little Rock, Arkansas, at their customary charge.



**SP-2 - ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT**

**SUPPLEMENTAL SPECIFICATIONS**

**ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS**

Errors noted in the printed book of Standard Specifications for Highway Construction, Edition of 2003, are listed below and this publication is hereby revised as follows:

- Page 320: The last sentence of the Subsection 501.02(h)(1)(a), Joint Materials-Type 1, should read: The top 1" (25 mm) shall be sealed with a material complying with the requirements of ASTM D 6690, Type I.
- Page 321: Subsection 501.02(h)(2)(f), Joint Materials-Type 7, should read: A joint sealer that is hot poured elastic type complying with ASTM D 6690, Type I.
- Page 430: Delete the pay item  
"\_\_\_" (\_\_\_ mm) Flared End Sections for Pipe Culverts Each"  
and replace with:  
"\_\_\_" (\_\_\_ mm) Flared End Sections for \_\_\_\_\_ Pipe Culverts Each"
- Page 430: Delete the pay item  
"\_\_\_" x "\_\_\_" (\_\_\_ x \_\_\_ mm) Flared End Sections for Arch Pipe Culverts Each"  
and replace with:  
"\_\_\_" x "\_\_\_" (\_\_\_ x \_\_\_ mm) Flared End Sections for \_\_\_\_\_ Arch Pipe Culverts Each"
- Page 612: The first sentence of Subsection 721.02(c)(1), Adhesive Bond Strength, should read: Flat bottomed markers shall withstand adhesive bond strengths of not less than 500 psi (3.4 MPa).
- Page 694 The first sentence of Subsection 802.17(a)(3) should read: Copolymer/synthetic blanket shall meet the performance requirements of AASHTO M 171.
- Page 694 Subsection 802.17(a)(4) should read: Other approved sheeting materials shall meet the performance requirements of AASHTO M 171.

### SP-3 – Special Requirements for Federal Aid Projects

#### Additional Requirements Relating to this Construction Project.

Compliance with the following are require of contractors and subcontractors employed in the completion of this federal-aid supported project. Compliance with all applicable federal, State, territorial, and local laws, and in particular, the following federal public laws (and the regulations issued thereunder), Executive Orders, OMB Circulars, and local law requirement is necessary.

1. The Davis-Bacon Act, as amended (40 U.S.C. §§ 3141-3144, 3146, 3147; 42 U.S.C. § 3212)  
Requiring minimum wages for mechanics and laborers employed on Federal Government public works projects to be based on the wages the Secretary of Labor determines to be prevailing for the corresponding classes of laborers and mechanics employed on projects of a character similar to the contract work in the civil subdivision of the State in which the Project is to be performed, or in the District of Columbia if the Project is to be performed there.
2. The Contract Work Hours and Safety Standards Act, as amended (40 U.S.C. §§ 3701 – 3708)  
Providing work hour standards for every laborer and mechanic employed by any contractor or subcontractor in the performance of a federal public works project.
3. The National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470 *et seq.*), and the Advisory Council on Historic Preservation Guidelines  
Requiring projects involving federal funds to follow the requirements of the National Historic Preservation Act, which requires stewardship of historic properties.
4. The Historical and Archeological Data Preservation Act of 1974, as amended (16 U.S.C. § 469a-1 *et seq.*)  
Requiring appropriate surveys and preservation efforts if a federally-licensed project may cause irreparable loss or destruction of significant scientific, prehistorical, historical, or archeological data.
5. Architectural Barriers Act of 1968, as amended (42 U.S.C. § 4151 *et seq.*), and the regulations issued thereunder, which prescribe standards for the design and construction of any building or facility intended to be accessible to the public or that may house handicapped employees
6. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. § 4601 *et seq.*), and implementing regulations issued at 49 C.F.R. part 24, which establish uniform policies for the fair and equitable treatment of persons, businesses, or farm operations affected by the acquisition, rehabilitation, or demolition of real property acquired for a Project financed wholly or in part with federal financial assistance.
7. The Energy Conservation and Production Act (42 U.S.C. § 6834 *et seq.*)  
Establishing energy efficiency performance standards for the construction of new residential and commercial structures undertaken with federal financial assistance.
8. Requirements for New Construction. For new building construction projects, the Recipient will comply with current local building codes, standards, and other requirements applicable to the Project

9. **Non-Discrimination Requirements.** No person in the United States shall, on the ground of race, color, national origin, handicap, age, religion, or sex, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance. The Recipient agrees to comply with the following non-discrimination requirements.

a. **Statutory Provisions.**

- i. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*) and DOC implementing regulations published at 15 C.F.R. part 8, which prohibit discrimination on the grounds of race, color, or national origin under programs or activities receiving federal financial assistance;
- ii. Title IX of the Education Amendments of 1972 (20 U.S.C. § 1681 *et seq.*), which prohibits discrimination on the basis of sex under federally-assisted education programs or activities;
- iii. Pub. L. No. 92-65, 42 U.S.C. § 3123, which proscribes discrimination on the basis of sex in EDA assistance provided under PWEDA; Pub. L. No. 94-369, 42 U.S.C. § 6709, which proscribes discrimination on the basis of sex under the Local Public Works Program; and the Department's implementing regulations at 15 C.F.R. §§ 8.7-8.15;
- iv. Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), and DOC implementing regulations published at 15 C.F.R. part 8b, which prohibit discrimination on the basis of handicap under any program or activity receiving or benefiting from federal assistance;
- v. The Age Discrimination Act of 1975, as amended (42 U.S.C. § 6101 *et seq.*) and DOC implementing regulations published at 15 C.F.R. part 20, which prohibit discrimination on the basis of age in programs or activities receiving federal financial assistance;
- vi. The Americans with Disabilities Act of 1990 (42 U.S.C. § 12101 *et seq.*), which prohibits discrimination on the basis of disability under programs, activities, and services provided or made available by State and local governments or instrumentalities or agencies thereto, as well as public or private entities that provide public transportation; and
- vii. Other applicable federal statutes, regulations, and Executive Orders.

**Other Provisions.**

a. Parts II and III of Executive Order 11246 (30 Fed. Reg. 12319, 1965), as amended by Executive Order 11375 (32 Fed. Reg. 14303, 1967) and 12086 (43 Fed. Reg. 46501, 1978), requiring federally-assisted construction contracts to include the nondiscrimination provisions of §§ 202 and 203 of that Executive Order and Department of Labor regulations implementing Executive Order 11246 (41 C.F.R. § 60-1.4(b), 1991).

b. Executive Order 13166 (August 11, 2000), "*Improving Access to Services for Persons With Limited English Proficiency*," and DOC policy guidance issued on March 24, 2003 (68 Fed. Reg. 14180) to federal financial assistance recipients on the Title VI prohibition against national origin discrimination affecting Limited English Proficient ("LEP") persons.

## **STATEMENTS AND PAYROLLS**

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

### **1. Compliance with Copeland Regulations (29 CFR 3):**

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

### **2. Payrolls and Payroll Records:**

- a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the City of Jonesboro a payroll of wages

paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - 1. that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
  - 2. that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
  - 3. that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by the authorized representatives of the City of Jonesboro or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the City of Jonesboro, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

Stormwater Pollution Prevention Plan (SWPPP)  
for Small Construction Site

National Pollutant Discharge Elimination System (NPDES)  
General Permit # ARR150000

Prepared for:

**City of Jonesboro  
Industrial Park Utility  
Improvements**

Date:

7/19/2012



Prepared by:

Michael Morris, PE, CFM

Project Name and Location: Industrial Park Utility Improvements

Operator Name and Address: City of Jonesboro – Engineering Department  
515 W. Washington  
P.O. Box 1845  
Jonesboro, AR 72403

A. Site Description

- a. Project description, intended use after NOI is filed:  
Utility Linear Construction
- b. Sequence of major activities which disturb soils:  
Removal of trees, cutting to grade, installation of sewer/water line and backfilling
- c. Total Area: 4.0                      Disturbed Area: 4.0

B. Responsible Parties

Individual/Company	Phone Number	Service Provided for SWPPP (i.e., Inspector, SWPPP revisions, Stabilization Activities, BMP Maintenance, etc.)
City of Jonesboro	(870)-932-2438	Owner

C. Receiving Waters

- a. The following waterbody (or waterbodies) receives stormwater from this construction site: unnamed ditch
- b. Is the project located within the jurisdiction of an MS4? ☒ Yes ☐ No
  - i. If yes, Name of MS4: City of Jonesboro
- c. Ultimate Receiving Water:
  - ☒ St. Francis River
  - ☐ L'Anguille River
  - ☐ Cache River

D. Site Map Requirements (Attach Site Map):

- a. Pre-construction topographic view;



- b. Direction of stormwater flow (i.e., use arrows to show which direction stormwater will flow) and approximate slopes anticipated after grading activities;
  - c. Delineate on the site map areas of soil disturbance and areas that will not be disturbed under the coverage of this permit;
  - d. Location of major structural and nonstructural controls identified in the plan;
  - e. Location of main construction entrance and exit;
  - f. Location where stabilization practices are expected to occur;
  - g. Locations of off-site materials, waste, borrow area, or equipment storage area;
  - h. Location of areas used for concrete wash-out;
  - i. Location of all surface water bodies (including wetlands);
  - j. Locations where stormwater is discharged to a surface water and/or municipal separate storm sewer system if applicable,
  - k. Locations where stormwater is discharged off-site (should be continuously updated);
  - l. Areas where final stabilization has been accomplished and no further construction phase permit requirements apply.
- E. Stormwater Controls
- a. Initial Site Stabilization, Erosion and Sediment Controls, and Best Management Practices:
    - i. Initial Site Stabilization:  
Site stabilization could include natural buffer, silt fence, and / or other BMP's.
    - ii. Erosion and Sediment Controls:  
All control measures were selected to retain sediment on-site to the maximum extend practical.
    - iii. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the operator will replace or modify the control for site situations: ☒Yes ☐No  
If No, explain: [Click here to enter explanation.](#)
    - iv. Off-site accumulations of sediment will be removed at a frequency sufficient to minimize off-site impacts: ☒Yes ☐No  
If No, explain:
    - v. Sediment will be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%: ☐Yes ☒No  
If No, explain: Residential lot no traps or sediment basin needed.
    - vi. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges: ☒Yes ☐No

If No, explain:

- vii. Off-site material storage areas used solely by the permitted project are being covered by this SWPPP: ☐Yes ☒No

If Yes, explain additional BMPs implemented at off-site material storage area:

b. Stabilization Practices

- i. Description and Schedule:

Existing vegetation will be preserved where attainable. Disturbed areas will be stabilized with silt fence, mulch or other BMP's.

- ii. Are buffer areas required? ☐Yes ☒No

If Yes, are buffer areas being used? ☐Yes ☐No

If No, explain why not: No ditch, waterbody or waterway in immediate area.

If Yes, describe natural buffer areas:

- iii. A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included with the plan.

☒Yes ☐No

If No, explain:

- iv. Deadlines for stabilization: Stabilization procedures will be initiated fourteen days after construction activity temporarily ceases on a portion of the site.

If an alternative stabilization schedule is used, click here to describe stabilization schedule.

c. Structural Practices

- i. Describe any structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site: Rock checks and silt fence installed to divert and slow down run-off.

- ii. Sediment Basins:

Are 10 or more acres draining to a common point? ☐Yes ☒No

Is a sediment basin included in the project? ☐Yes ☒No

If Yes, what is the designed capacity for the storage?

☐3600 cubic feet per acre = Enter capacity of basin.

or

☐10 year, 24 hour storm = Enter capacity of basin.

☐ Other criteria were used to design basin:

If No, explain why no sedimentation basin was included and describe required natural buffer areas and other controls implemented instead: Linear Construction – not needed

iii. Describe Velocity Dissipation Devices: Note hay bales are not accepted as Velocity Dissipation Devices:

F. Other Controls

- a. No solid materials, including building materials, shall be discharged to Waters of the State: ☒Yes ☐No
- b. Off-site vehicle tracking of sediments and the generation of dust shall be minimized through the use of:
  - ☐A stabilized construction entrance and exit
  - ☐Vehicle tire washing
  - ☐Other controls, describe:
- c. Temporary Sanitary Facilities: None will be required
- d. Concrete Waste Area Provided:
  - ☐Yes
  - ☐No. Concrete is used on the site, but no concrete washout is provided.  
Explain why: Click here to enter explanation.
  - ☒N/A, no concrete will be used with this project
- e. Fuel Storage Areas, Hazardous Waste Storage, and Truck Wash Areas: Will not have fuel storage areas, truck was areas, or truck wash areas or other hazardous waste storage.

G. Non-Stormwater Discharges

- a. The following allowable non-stormwater discharges comingled with stormwater are present or anticipated at the site:
  - ☐Fire-fighting activities;
  - ☒Fire hydrant flushings;
  - ☐Water used to wash vehicles (where detergents or other chemicals are not used) or control dust in accordance with Part II.A.4.H.2;
  - ☒Potable water sources including uncontaminated waterline flushings;
  - ☒Landscape Irrigation;
  - ☐Routine external building wash down which does not use detergents or other chemicals;
  - ☐Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents or other chemicals are not used;
  - ☐Uncontaminated air conditioning, compressor condensate (See Part I.B.12.C of the permit);,

- ☐ Uncontaminated springs, excavation dewatering and groundwater (See Part I.B.12.C of the permit);
- ☐ Foundation or footing drains where flows are not contaminated with process materials such as solvents (See Part I.B.12.C of the permit);
- b. Describe any controls associated with non-stormwater discharges present at the site: No additional controls needed on site.
- H. Applicable State or Local Programs: The SWPPP will be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the stormwater controls implemented at the site. ☒ Yes ☐ No
- I. Inspections
  - a. Inspection frequency:
    - ☒ Every 7 calendar days
    - or
    - ☐ At least once every 14 calendar days and within 24 hours of the end of a storm even 0.5 inches or greater (a rain gauge must be maintained on-site)
  - b. Inspections:
    - Completed inspection forms will be kept with the SWPPP.
    - ☒ ADEQ's inspection form will be used (See Appendix A)
    - or
    - ☐ A form other than ADEQ's inspection form will be used and is attached (See inspection form requirements Part II.A.4.L.2)
  - c. Inspection records will be retained as part of the SWPPP for at least three years from the date of termination.
  - d. It is understood that the following sections describe waivers of site inspection requirements. All applicable documentation requirements will be followed in accordance with the referenced sections.
    - i. Winter Conditions (Part II.A.4.L.3)
    - ii. Adverse Weather Conditions (Part II.A.4.L.4)
- J. Maintenance:

The following procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition will be followed: Remove minimal amounts of natural vegetation until necessary to remove more. Daily visual checks of BMP's. Weekly hardcopy inspections and maintenance as needed.

Any necessary repairs will be completed, when practicable, before the next storm event, but not to exceed a period of 3 business days of discovery, or as otherwise directed by state or local officials.

K. Employee Training:

The following is a description of the training plan for personnel (including contractors and subcontractors) on this project: I will make all parties aware of the SWPPP, and explain that they have a responsibility to follow the guidelines of the SWPPP.

**\*\*Note,** Formal training classes given by Universities or other third-party organizations are not required, but recommended for qualified trainers; the permittee is responsible for the content of the training being adequate for personnel to implement the requirements of the permit.

Certification

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Responsible or Cognizant Official: \_\_\_\_\_

Title: Civil Engineer

Date: 7/20/2012

**ARR150000 Inspection Form**

Appendix A

Inspector Name: \_\_\_\_\_

Date of Inspection: \_\_\_\_\_

Inspector Title: \_\_\_\_\_

Days Since Last Rain Event: \_\_\_\_\_ days

Rainfall Since Last Rain Event: \_\_\_\_\_ inches

Description of any Discharges During Inspection: \_\_\_\_\_

Location of Discharges of Sediment/Other Pollutant (specify pollutant &amp; location): \_\_\_\_\_

Locations in Need of Additional BMPs: \_\_\_\_\_

## Information on Location of Construction Activities

Location	Activity Begin Date	Activity Occuring Now (y/n)?	Activity Ceased Date	Stabilization Initiated Date	Stabilization Complete Date

## Information on BMPs in Need of Maintenance

Location	In Working Order?	Maintenance Scheduled Date	Maintenance Completed Date	Maintenance to be Performed By

Changes required to the SWPPP: \_\_\_\_\_

Reasons for changes: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_\_\_\_\_\_  
\_\_\_\_\_

SWPPP changes completed (date): \_\_\_\_\_

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Responsible or Cognizant Official: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

Revised date: 11/01/2011

## SP – 6 - INSTALLATION OF WATER MAIN

1. City Water & Light (CWL) will serve as the Owner's Designated Representative for this work.
2. Contractor shall be responsible for requesting locates of all utilities in the designated work area. Contractor shall mark the work area where work is to be performed. Contractor shall notify Arkansas One Call @ 1-800-482-8998. 48-hour notice is required by Arkansas One Call.
3. Contractor shall be responsible for damages to utilities if proper locates were furnished. If damages occur due to improper locates, the contractor shall work with the utility owner involved to settle any disputes or claims for damages.
4. Contractor shall be responsible for maintaining a good working relationship with any and all property owners where work may affect their property. Contractor shall work to resolve any conflicts. Any conflicts between the Contractor and the property owner that cannot be resolved will be referred to the Owner's Designated Representative.
5. Contractor shall perform all work in a safe manner in accordance with all Arkansas Department of Labor Safety Codes and all Occupational Safety & Health Administration (OSHA) Regulations. Contractor shall be responsible for the safety of the contractor's employees while on the job. Contractor shall be responsible for the safety of the general public as it relates to the work site of the work being performed. This includes safety of the work site.
6. Contractor shall abide by the U.S. Department of Transportation's Manual on Uniform Traffic Control Devices (MUTCD) Millennium Edition 2000 (or the most current issue) Part 6 Temporary Traffic Control – Work Zones.
7. Any work affecting city streets, county roads, state highways, private drives, driveways, mailboxes, paper boxes (any structures removed for purposes of work) shall be the contractor's responsibility for re-storing, repairing, or replacing to their original state, unless specifications for such are presented to contractor by owner which meets a Federal, State, or City requirement.
8. Contractor shall not assign or sublet any portion of this contract without prior approval from the Owner and Owner's Designated Representative. **If approved, Contractor must provide lien releases from sub-contractors before final billing.**
9. Owner's Designated Representative's assigned Inspector shall make inspections of work being performed.
10. Contractor shall secure all lines, valves, and fittings to avoid damages due to movement.

11. Contractor shall be responsible to back fill by pushing dirt over the pipe for natural settlement to occur except as otherwise specified.
12. Contractor shall record and furnish "as-built" drawings with accurate measurements.
13. When trench/excavation equals or exceeds five (5) feet in depth, the contractor shall meet all provisions of the current Occupational Safety and Health Administration (OSHA) Standard for Excavation & Trenches Safety Systems.



## SP – 7 - INSTALLATION OF SEWER MAIN

1. City Water & Light (CWL) will serve as Owner's Designated Representative for this work.
2. Contractor shall be responsible for requesting locates of all utilities in the designated work area. Contractor shall mark the work area where work is to be performed. Contractor shall notify Arkansas One Call @ 1-800-482-8998. 48-hour notice is required by Arkansas One Call.
3. Contractor shall be responsible for damages to utilities if proper locates were furnished. If damages occur due to improper locates, the contractor shall work with the utility owner involved to settle any disputes or claims for damages.
4. Contractor shall be responsible for maintaining a good working relationship with any and all property owners where work may affect their property. Contractor shall work to resolve any conflicts. Any conflicts between the Contractor and the property owner that cannot be resolved will be referred to the Owner's Designated Representative.
5. Contractor shall perform all work in a safe manner in accordance with all Arkansas Department of Labor Safety Codes and all Occupational Safety & Health Administration (OSHA) Regulations. Contractor shall be responsible for the safety of the contractor's employees while on the job. Contractor shall be responsible for the safety of the general public as it relates to the work site of the work being performed. This includes safety of the work site.
6. Contractor shall abide by the U.S. Department of Transportation's Manual on Uniform Traffic Control Devices (MUTCD) Millennium Edition 2000 (or the most current issue) Part 6 Temporary Traffic Control – Work Zones.
7. Any work affecting city streets, county roads, state highways, private drives, driveways, mailboxes, paper boxes (any structures removed for purposes of work) shall be the contractor's responsibility for re-storing, repairing, or replacing to their original state, unless specifications for such are presented to contractor by owner which meets a Federal, State, or City requirement.
8. Contractor shall not assign or sublet any portion of this contract without prior approval from the Owner and Owner's Designated Representative. **If approved, Contractor must provide lien releases from sub-contractors before final billing.**
9. Owner's Designated Representative assigned Inspector shall make inspections of work being performed.
10. Contractor shall use a pipeline laser.

11. Pipe shall be installed in accordance with ASTM Manual for installation of PVC sewer pipe.
12. Pipe shall be bedded and backfilled in compliance with Class B bedding Specification.
13. Contractor shall secure all utility lines to avoid damages due to excavation, and is responsible for repairs if they are damaged.
14. Contractor, when working around power lines, will be responsible for making arrangements with utility company for "tying off" poles, and the safety of contractors employees working in the vicinity of power lines (overhead or underground).
15. Contractor shall be responsible for leaks related to the installation of lines and shall be required to air test as per ASTM C828-80.
16. Air test must be satisfactorily completed before acceptance of pipeline.
17. Manholes shall be vacuum tested as per ASTM C1244.
18. Contractor shall be responsible to backfill by pushing dirt back over pipe for natural settlement to occur after hauching and initial backfill, unless otherwise specified.
19. Excess soil shall be left on site for the Owner's use.
20. Owner's Designated Representative shall furnish manhole stations and grade information at the request of the contractor.
21. Contractor shall record and furnish accurate measurements of distances between fittings on mains, such as wyes and manholes.
22. When trench/excavation equals or exceeds five (5) feet in depth, the contractor shall meet all provisions of the current Occupational Safety and Health Administration (OSHA) Standard for Excavation & Trenches Safety Systems 29 CFR 1926 Subpart P.

**SPECIFICATIONS**  
**WATER AND SEWER CONSTRUCTION**

**CITY WATER AND LIGHT**

**JONESBORO, ARKANSAS**

**Date of Last Revision: October 12, 2007**

## **SECTION 1 – PLANS, CONTRACTS, & GENERAL INFORMATION**

1-01. Refunding:

When extending a water or sewer main across other property owners, a refunding contract can be requested. The developer's engineer should make available for review a refunding drawing showing the appropriate footage. CWL's Engineering Department will publish the per foot cost each calendar year.

1-02. Profiles:

All profiles must be drawn from an actual ground survey, not from a topographic map. The survey notes should accompany the submittal.

1-03. **Plans must have MAPC approval before final acceptance of system.**

## SECTION 2 – OVERALL SITE WORK

### 2-01. **Description:**

- (a) Final clean-up of the site shall include the removal and disposal off-site of all construction debris, temporary plant, and surplus materials.
- (b) This section covers the items that follow:
  - (1) Intermittent clean-up
  - (2) Clearing right-of-way
  - (3) Existing storm drainage pipes
  - (4) Private driveways and gravel roads outside city limits
  - (5) Roadways inside city limits
  - (6) Roadways inside new subdivisions
  - (7) Location of new water and sewer mains

### 2-02. **Intermittent Clean-up:**

From time to time, all litter and debris shall be removed from the site and disposed of off-site, such that the site presents a neat appearance and the progress of work is not impeded.

### 2-03. **Clearing Right-of -Way:**

All natural or man-made obstructions shall be removed, including the cutting of existing surfacing, as necessary to permit the new construction. As soon as possible, each manmade obstruction shall be restored to the original condition within reasonable economic limits.

### 2-04. **Existing Storm Drainage Pipe:**

- (a) Obstructing drainage pipes, shall be removed. If in sound, undamaged condition, they may be cleaned and re-laid. If unsound or damaged, they shall be replaced with pipes in kind.
- (b) When the angle between center lines of a drainage pipe and water main will permit, the water main may be installed by tunneling, provided the drainage pipe is not damaged and the water main is laid properly. As an alternative in the case of corrugated metal pipe, a section may be cut from the drainage pipe, and restoration accomplished with new pipe and coupling bands.

### 2-05. **Private Driveways and Gravel Roads Outside City Limits:**

Existing gravel roads outside city limits shall be filled with  $\frac{3}{4}$ " minus crushed stone and tamped, with all debris removed to be disposed of off site. **This includes all existing private drives.**

#### Percent By Weight Passing

<u>Size Sleeve</u>	<u>Gravel</u>	<u>Crushed Stone</u>
1-1/2"	100	-----
1"	85-100	100
3/4"	60-90	50 – 90
3/8"	40-80	-----
No. 4	30-60	25 – 50
No. 10	20-45	-----
No. 40	10-35	10 – 30
No. 100	3-12	3 – 10

**2-06. Roadways Inside City Limits:**

(a) Excavations to be Restored with Flowable Fill:

All material excavated for the street cut shall be removed and disposed of by the person, firm, or corporation performing said excavation. All excavations shall be restored with flowable fill to within 2" of the surrounding bituminous riding surface.\* The mix design for the flowable fill will be prepared by the Applicant. The mixture will be proportioned to produce a flowable mixture without segregation, material for one cubic yard, absolute volume, and shall be as follows:

Cement	80-100 lbs.
Fly Ash	220-300 lbs.
Sand	Variable to equal 1 cubic yard
Water	Approximately 65 gallons

The minimum flow shall be 8". The unit weight shall be a minimum of 110 lbs/ft<sup>3</sup>.

\* If the surrounding riding surface is concrete, flowable fill shall be placed to within 6" of the riding surface.

The flow test shall consist of filling a 3" diameter x 6" high open-ended cylinder to the top with the flowable material mixture. If necessary, the top of the mixture will be struck off level. The cylinder will then be pulled straight up and the flow will be measured by the approximate diameter of the mixture.

Placing of either bituminous hot mix for asphalt surfaces or concrete for concrete surfaces over the flowable fill may begin after the flowable material has taken its initial set, is stable, and does not displace under equipment. A tack coat of liquid asphalt shall be applied to the cut face of the surrounding asphalt pavement before final hot mix surface is placed. Steel plates shall be used to maintain traffic over cuts before flowable fill is placed if necessary and also during the curing time of the flowable fill. These steel plates shall be provided by the City of Jonesboro Street Department. All pavement restoration shall be made by the City of Jonesboro Street Department.

In the event a cut is to be restored during a time when hot asphalt plant mix is not available, cold plant mix may be used as a temporary surface until a time hot plant mix is available. It shall be the applicants responsibility to maintain the cold mix patch until replaced with hot plant mix. The initial deposit will not be released until hot plant mix is in place and a final inspection has been made.

(b) Limits of Excavations:

The limits of cuts to be restored shall be as follows:

- (1) All longitudinal cuts within 5' of the edge of the paved surface.
- (2) All transverse cuts to a distance of 3' beyond the edge of a paved surface.
- (3) When the excavation is not within a gravel surface or concrete or bituminous surface the flowable fill shall be placed to within 6" of the surrounding ground. The remaining 6" shall be filled with topsoil and seeded. No cuts shall be made within 200' of a signalized intersection until the City of Jonesboro Engineering Department has been notified to locate traffic detection loops
- (4) All asphalt and concrete surfaces must be cut with a saw or air chisel.

**2-07. Roadways Inside New Subdivision:**

In a proposed area, (new subdivisions) all street cuts shall be back-filled with fill sand and tamped.

2-08. **Location of New Water or Sewer Mains:**

- (a) Water and sewer lines should be placed on City, County, or State Right of Way or on an easement parallel and adjacent to the Right of Way.
- (b) Water and sewer lines should be placed on opposite sides of the Right of Way. If an exception is required, Water and Sewer lines must have a minimum of 10 feet horizontal separation and a minimum of 18 inches vertical separation.
- (c) Easements should be 20 feet in width. Where other utilities are present, additional width may be required.
- (d) Water and sewer lines shall be a minimum of 10 feet from permanent structures.
- (e) Wyes or manhole stubouts shall be installed at the low elevation of each lot.
- (f) CWL Engineering Dept. must approve any water or sewer lines that will be installed closer than 5' parallel with edge of paved street surface.

## SECTION 3 – EXCAVATION, BACKFILL, AND FILLS

### 3-01. **Description:**

This section covers excavation and backfill in construction installations and operations as follows:

- (a) The trench excavation for the water and sewer pipe.
- (b) Bedding
- (c) The back-filling of pipe lines and all other installations for which excavations are made.

### 3-02. **Proximity To Existing Utilities:**

- (a) At many locations, the new lines are very close to existing utilities, and in many instances, pass beneath the existing utility. In all such cases the existing utilities shall be protected from damage.
- (b) Before doing any excavating it shall be requested that the utility companies locate their underground utilities.
- (c) In the event of a damaged utility line during excavation, the particular utility will be contacted immediately so as to expedite the line's repair.

### 3-03. **Trench Excavation For Water and Sewer Force Main:**

The width of the trench shall be ample to permit the pipe to be laid and jointed properly, and the backfill to be properly replaced. Trenches shall be of such extra width, when required, as will permit the convenient placing of trench boxes for the protection of laborers, the work, and adjoining property. Trench depth will be such as to allow a minimum cover of 42" over water main. The width of the trench shall be a minimum of 24" when installing electric conduit and water mains in the same trench with conduit always on curb side, and minimum separation of 6 inches between conduit and water main.

### 3-04. **Bedding Materials:**

- (a) All backfill material shall be free from cinder, ashes, refuse, vegetable or organic material, boulders, rock or stones, or other material which is unsuitable.
- (b) When the type of backfill material is not indicated, excavated material may be used, provided that such material consists of loam, clay, sand, gravel, or other materials which are suitable for back-filling.
- (c) All trenches shall be back-filled by hand, from the bottom of the trench to the centerline of the pipe with approved material placed in layers of three (3) inches and compacted by tamping. Back-filling material shall be deposited in the trench for its full width on each side of the pipe, fittings, and appurtenances simultaneously.
- (d) Should rock be encountered, trench will be back-filled with suitable bedding material a minimum of 6" over said rock.
- (e) Bedding material for PVC water mains shall have no angular particles larger than 1" and no rounded particles larger than 1½".

### 3-05. **Disposition of Excavated Materials:**

To the extent suitable and needed, excavated materials shall be used in the formation of backfill. Materials not used for the formation of backfill shall be disposed of off-site.



## SECTION 4 – WATER PIPE AND FITTINGS

### 4-01. **Description:**

This section covers the installation of all water pipe and fittings. Water lines will be constructed of Class 350 ductile iron pipe or PVC pipe with ductile iron or cast iron fittings.

### 4-02. **Materials:**

- (a) Ductile iron pipe shall be thickness Class 350 and shall be lined with cement mortar.
- (b) PVC pipe shall have a Pressure Rating (PR) of 200 (SDR 21) conforming to ASTM D2241 and ASTM D3139 or better for pipe sizes up to 3 inches.
- (c) For 4" through 12" pipe, PVC pipe shall be AWWA C-900 Pressure Pipe DR18 (Pressure Class 150) meeting ANSI/AWWA C-900 standard for pressure pipe or better.
- (d) Fittings shall conform to the specifications of 4-01 above.
- (e) Joints shall be compression-type resilient joints, or flanged. Lubricant for push-on type joints shall be that recommended by the manufacturer of the pipe.

### 4-03. **Trench Excavation and Backfill:**

Trench excavation and backfill shall be in accordance with the requirements of SECTION 3 – EXCAVATION, BACKFILL, AND FILLS.

### 4-04. **Equipment:**

All equipment necessary and required for the proper construction of the line shall be in first class working condition.

### 4-05. **Laying Pipe:**

- (a) All soil and other foreign matter shall be removed from the inside of the pipe and fittings before they are lowered into the trench. They shall be kept clean during and after laying; care shall be taken to keep soil out of the jointing space. At the end of each day's work, pipe shall be closed with a water tight plug.
- (b) All pipe and fittings shall be lowered carefully into the trench in such manner as to prevent damage to pipe, fittings, or linings. Neither pipe nor fittings shall be dropped or dumped into the trench.
- (c) Cutting of pipe, where needed, shall be done in a neat and workmanlike manner without damage to pipe or pipe lining.
- (d) Unless otherwise directed, pipe shall be laid with bell ends facing in the direction of laying. For lines on an appreciable slope, bells shall, at the engineer's direction, face upgrade. Wherever necessary to avoid obstruction, or for other allowable reasons, the degree of deflection at any joint shall not be greater than that which will provide adequate gasket space entirely around the spigot end of pipe. The joint opening shall be approximately 1/8 inch. Maximum allowable deflections shall be as limited by the pipe manufacturer's recommendations.
- (e) Pipe shall not be laid in water, when the trench condition is unsuitable, or the weather is unsuitable for such work.
- (f) All pipe shall be laid at a sufficient depth to maintain 42" minimum cover, measured from the top of the pipe to the existing grade of the surrounding undisturbed soil. The only exception to this requirement will be for channel crossings greater than 5 feet which is detailed in 6-04 CHANNEL CROSSINGS.
- (g) Stranded 16 gauge locator wire shall be installed with markers every 750 feet, unless the water line is in a common trench with an electric line.

### 4-06. **Installation of Slip-Type Joints:**

- (a) Prior to jointing, the bell and spigot ends of the pipes, and bells of fittings shall be cleaned thoroughly with soapy water and cloth, or by whatever means are necessary to remove all foreign matter and attain the required cleanliness. A wire brush shall be used if necessary. Particular care shall be exercised to clean the gasket seat. The gland also shall be cleaned in like manner.

- (b) Joints shall be made in strict accord with the recommendations of the pipe manufacturer. The rubber gasket shall be cleaned with soapy water and/or cloth and inserted in the gasket seat within the bell. The spigot end of the pipe shall be inserted into the bell of the pipe to which connection is being made, and forced to a firm contact with the shoulder of the bell. When this initial insertion is made, the alignment of the added pipe shall deviate from true alignment not more than the amount recommended by the manufacturer.
- (c) Following the initial insertion, the bell end of the added pipe shall be moved sideways or up a distance of approximately 8 inches to move the spigot end slightly away from the shoulder of the connecting bell, thus providing for expansion and flexibility in the completed line. The added pipe shall be placed in true alignment at intended grade.
- (d) Radius of Curvature: bending of pipe around curves or in coves shall not exceed that of the recommendations of the pipe manufacturer or refer to the PVC pipe handbook.

4-07. **Installation of Mechanical Joints:**

- (a) The spigot end of pipe and the bell of fittings, and the rubber gasket, shall be cleaned thoroughly as specified for pipe joints in paragraph 4-06 (a) above. The gland also shall be cleaned in like manner.
- (b) After the gland and gasket are placed on the spigot end of the pipe a sufficient distance from the end to avoid fouling the bell, the spigot end shall be inserted in the bell to firm contact with the bell shoulder. The rubber gasket then shall be advanced into the bell and seated in the gasket seat. Care should be exercised to center the spigot end within the bell.
- (c) The gland shall be brought into contact with the gasket, all bolts entered, and all nuts hand tightened. Continued care shall be exercised to keep spigot centered in bell. The joint shall be made tight by turning the nuts with a wrench; first partially tightening a nut, then partially tightening the nut 180 degrees there from, and working thus around the pipe, with uniformly applied tension until the required torque is applied to all nuts. Required torque ranges and indicated wrench lengths for standard bolts are as follows:

<u>Diameter</u>	<u>Range of Torque</u>	<u>Length of Wrench</u>
(inches)	(foot – pounds)	(inches)
5/8"	40 – 60	8
3/4"	60 – 90	10
1"	70 – 100	12
1-1/4"	90 – 120	14

4-08. **Leakage Tests:**

- (a) Leakage tests shall be made on all contractor laid water lines.
- (b) Leakage tests shall be made prior to sterilization operations.
- (c) The test period shall be two (2) hours. Test pressure shall be 1.5 times the calculated working pressure of the main, but not less than 100 psi.
- (d) The line will not be accepted unless or until the total is less than that specified in AWWA C-600-93 for ductile iron and AWWA C-605-94 for PVC pipe.

Allowable leakage (L) shall be according to the following equation:

$$L = \{ [ND(P)^{1/2}] \div 7400 \}$$

where N = number of joints  
D = diameter of pipe in inches  
P = test pressure in psi  
**L = allowable leakage in gallons per hour (gph)**

**4-09. Sterilization:**

- (a) All water lines shall be sterilized in accordance with AWWA C-651-94. Any new construction or repaired water main must be thoroughly cleaned (flushed), disinfected, and tested for bacteriological quality before it can be placed in service.
- (b) The manner in which the lines are sterilized shall be one that is approved for potable water systems by the Arkansas Department of Health.
- (c) Following a contact period of not less than 24 hours, the chlorinated water shall be flushed from the system, and the system filled with water of normal chlorine content. Samples of water then shall be taken on two consecutive days from the lines and delivered to the CWL – LABORATORY for bacterial analysis. This process shall be continued until the samples show the water is safe for domestic requirements. .
- (d) All valves in sections of lines being sterilized shall be opened and closed at least twice during the sterilization period.
- (e) Flushing devices should be sized to provide flows which will give a velocity of at least 2.5 feet per second in the water main being flushed. No flushing device shall be directly connected to any sewer.

<b>Pipe Diameter</b>	<b>Flow Required to Produce 2.5 FPS Velocity (approx)</b>
<b>Inches</b>	<b>GPM</b>
<b>4</b>	<b>100</b>
<b>6</b>	<b>200</b>
<b>8</b>	<b>400</b>
<b>10</b>	<b>600</b>
<b>12</b>	<b>900</b>
<b>16</b>	<b>1600</b>

#### 4-10 Flushing Guidelines

- a. The contractor will be responsible for flushing the new water mains they install. The contractor will flush the mains under the supervision of the CWL inspector. (Flushing on special jobs will require advanced planning and coordination with customers and may require work after normal working hours to meet the needs of the water demand.)
- b. A flushing plan should be in the bid package that is given to contractors invited to bid on CWL water jobs. If the water extension is designed by a consulting engineer, a flushing plan will be required prior to review.
- c. The CWL Inspector will witness the flushing and transport bacteriological samples to the CWL lab for analysis. There will be no cost to the contractor from the CWL lab. If the contractor chooses, he can split the samples and independently analyze the water quality at another lab. The CWL lab results will control acceptance.
- d. Once the CWL lab certifies the water as safe, all valves except for normally closed valves, will be placed in the open position. The CWL Inspector will verify that all valves are in the proper position. (Generally valves will be closed after flushing and open after bacteriological tests have passed.)
- e. The CWL Inspector will send a flushing ticket to the Water Department if the line has set for a one month or longer before final acceptance.
- f. The CWL Inspector will fill out a Valve Operation Record after final acceptance and route to General Operations Associate for official transfer from Engineering to the Water Department.
- g. Each Fire Hydrant shall be flushed.

#### 4-11 Repairs

- a. Repairs shall be made in accordance with AWWA.
- b. If valve is closed by the contractor without CWL's knowledge, the new section must be tested for water quality and flushed.
- c. The CWL Inspector will witness all repairs.

### SECTION 5 – VALVES

#### **5-01. Description:**

This section covers:

- (a) Gate valves
- (b) Check valves
- (c) Butterfly valves
- (d) Tapping connections
- (e) Extensions to existing mains

#### **5-02. Gate Valves:**

- (a) Gate valves shall be set properly and joined to the pipe as specified for the making of joints in SECTION 4 – WATER PIPE AND FITTINGS.
- (b) Gate valves shall conform to American Water Works Association Standard Specifications for iron body, bronze mounted, non-rising stem gate valves. Valves shall be open left, double-disc, parallel seat type, for working water pressure of 200 psi.

#### **5-03. Check Valves:**

Well discharge check valves shall be iron body, bronze mounted, horizontal swing check valves with outside weight and lever and designed for 175 psi working pressure. Check valves shall conform to AWWA C-508.

**5-04. Butterfly Valves:**

- (a) Butterfly valves shall be installed in accordance with the requirements of subparagraph 5-02 above.
- (b) Buried butterfly valves shall be equal to Pratt “Groundhog” valves as manufactured by Henry Pratt Company, 401 S. Highland, Aurora, IL 60507.
- (c) All butterfly valves shall be rubber-seated, tight-closing type with the seat bonded and mechanically secured to the body in such manner as to serve as a flange gasket. Body and disc shall be heavy duty cast iron or cast steel, with straight-through shaft of stainless steel.
- (d) Butterfly valves shall meet the requirements of AWWA Standard C-504 for Rubber-Slated Butterfly Valves, current issue.

**5-05. Tapping Connections:**

- (a) Extensions of existing mains is covered in the paragraph that follows. This paragraph covers connections where taps are made.
- (b) Tapping connections shall consist of tapping sleeves and companion tapping valves. They shall be designed for working water pressure of 200 psi.
  - (1) Sleeves shall have mechanical joint ends encircling the main and the outlet openings shall be flanged for attachment of the inlet sides of the tapping valves.
  - (2) Tapping sleeves that are used on transite water mains must be full circle and stainless steel.
  - (3) Valves shall conform to the applicable specifications for gate valves set out in paragraph 5-02 above. The inlet openings shall be flanged and the outlet openings shall have mechanical joint ends.
- (c) Installation of Tapping Connections:
  - (1) Sleeves shall be fastened securely to the pipe to be tapped. Cleaning of pipe and sleeves, and attachment of sleeves, shall be in accordance with applicable stipulations of SECTION 4 – WATER PIPE AND FITTINGS. The sleeve shall be so positioned that the valve stem of the tapping valve will be plumb.
  - (2) Tapping valves shall be bolted securely to the flanges of the sleeves, and the tapping machine connected to the mechanical joint end. Cleaning of flanges, mechanical joints, and gaskets, and the connecting of sleeves, valves, and machine, shall be in accordance with applicable stipulations of SECTION 4 – WATER PIPE AND FITTINGS.
  - (3) All taps will be performed by CWL – for CWL or for developers for a said fee. These tapping valves shall be operated under the direction of a CWL representative only.
- (d) Installation of Tees:
  - (1) Tees installed for branch lines shall have a valve installed for each line.
  - (2) All valves shall be secured to tee with an anchor coupling.

**5-06. Extensions of Existing Mains:**

- (a) Where the existing main ends in a plugged pipe or with a washout, the extension will begin with the installation of a mechanical joint valve. In some circumstances, the extension (at CWL’s discretion) shall begin with a tapping valve so that the existing area is not valved off. Extensions shall be in accordance with applicable provisions of SECTION 4. Where new extensions end, and future extension is likely, it shall end with a wash-out or fire hydrant with proper size gate valve with concrete backing a minimum of 12’ before end of new line.
- (b) Washouts – where an extension of a new main ends with a wash-out and main size is an 8” diameter pipe, the wash-out installed shall be that of a 3” diameter pipe. An in line valve shall be installed in accordance with SECTION 5-06-a.
- (c) An extension of a new main size that is a 10” diameter pipe of greater shall end with a fire hydrant.

## SECTION 6 – HIGHWAY, RAILROAD, AND CHANNEL CROSSINGS

### 6-01. Crossing Requirements:

- (a) Water pipe passing beneath highways and railroads shall be threaded through steel encasement pipe after the appropriate permits have been obtained.
- (b) For highway crossings, solid encasement pipe shall be used within the limits set by the Arkansas State Highway Department. Such limits presently are to be from Right-of-Way to Right-of-Way.
- (c) For railroad crossings, the limits of solid pipe shall be determined by the involved railroad company. Such limits are presently from Right-of-Way to Right-of-Way.
- (d) Excavation for the steel encasement pipe shall be by the dry bore method.

### 6-02. Encasement Pipe:

- (a) Solid encasement pipe shall be fabricated from plate conforming to current ASTM Designation A 36. Dimensions shall conform to the following, except when the State Highway Department or Railroad companies require a thicker wall.

<u>Nominal Carrier Diameter</u>	<u>Outside Diameter Encasement</u>	<u>Wall Thickness Thickness</u>
24"	36"	1/4"
20"	30"	1/4"
16"	24"	1/4"
12"	20"	1/4"
8"	16"	1/4"
6"	12"	1/4"
4"	12"	1/4"

### 6-03. Installing Pipe In Encasement:

Pipe for installation in encasement shall be ductile iron fastite or mechanical joint type. The pipe shall be threaded through the encasement in such manner that the joints will be in compression and none shall be under tension.

### 6-04. Channel Crossings:

- (a) Water pipe crossing ditches, streams, or canals will be installed as nearly perpendicular to the flowline of the channel as possible. Channels wider than 5 feet will be crossed by one of the following methods:
  - (1) Boring and installing a 12" steel casing under the channel;
  - (2) Dewatering the channel, excavating a trench, and installing 12" steel casing in the open trench;
  - (3) Dewatering and installing the water pipe directly in an open trench 3 pipe diameters wide and at least 36" below the flowline of the channel and encasing the pipe in concrete continuously across the channel to a distance of 5 feet outside the channel on each side.
- (b) In all 3 options in 6-04 (a), the carrier pipe will be ductile iron to a distance of 10 feet outside the ditch bank.
- (c) Options (1) and (2) in 6-04 (a) will require reinforced concrete collars to anchor both ends of the casing outside the ditch bank.
- (d) Ditches less than 5 feet wide will be dewatered and crossed as nearly perpendicular as possible by installing the water line below the flowline at least 42 inches.
- (e) Channels exceeding 40' in width shall have proper size gate valve installed on each side.

## SECTION 7 – FIRE HYDRANTS

7-01. **Description: (revised 10-9-2006)**

Fire hydrants shall be Mueller Company type only – three spud hydrant #A-423, 5-1/4" main valve opening, 3 way, 2 – 2 1/2" hose nozzles, 1 – 4 1/2" pumper nozzle, 4'0" bury, 6" M.J. shoe, pentagon nut, open left, NST.

7-02. **Installation of Fire Hydrant:**

- (a) The hydrant shall be cleaned thoroughly before being set; all dirt and foreign matter shall be removed from barrel and bottom section, and the waste outlet freed of any obstruction. After cleaning, the main valve shall be checked for freedom of movement and proper seating, and the valve left in the closed position.
- (b) The hydrant shall stand plumb with nozzles at proper elevations above finished ground surface. Unless otherwise directed, the face of the pumper nozzle shall be parallel to the street.
- (c) The shoe or bottom of the hydrant shall be supported firmly upon a pre-cast flat concrete block. The back of hydrant and back of tee shall have poured concrete backing
- (d) Hydrant lead must be a minimum of six inches in diameter. A 6" valve shall be installed on all hydrant leads, 18" anchor couplings shall be used between tee and valve and between valve and hydrant. Hydrant shall be back-filled up to and minimum 6" above weep holes with clean #67 rock and rock covered with 8 mm plastic before back-filling to prevent dirt infiltration.
- (e) Hydrants and fittings installed inside Jonesboro City Limits will be provided by CWL.
- (f) Hydrants installed outside Jonesboro City Limits will be the responsibility of the Developer. These must meet the specifications of CWL. After a period of one year CWL will number, maintain, and repair the fire hydrants.

## SECTION 8 – SEWER MAINS AND PIPING

8-01. **PVC Pipe:**

Where PVC pipe is specified, it shall comply with requirements of ASTM D-3034 SDR 35 type psm poly vinyl chloride (pvc) sewer pipe and fittings or better.

8-02. **Vitrified Clay Sewer Pipe:**

All clay sewer pipe and fittings for sanitary sewers shall be of the best quality of hard-burned vitrified glazed clay bell and spigot sewer pipe meeting the requirements of ASTM Designation C 13-57T.

8-03. **Jointing Vitrified Clay Pipe:**

(a) The vitrified glazed clay pipe shall have factory applied joints or coupling on the spigot and bell ends of the pipe meeting ASTM Designation C 425, latest revision, and compounded of a high quality polyurethane elastomer applied to the pipe and properly manufactured to a desired hardness and compressibility to form a tight compression joint. The resilient polyurethane should have the following characteristics:

- (1) A minimum tear strength of 50 psi.
- (2) Percent elongation of not less than 80% and shall return to original volume and shape upon release of elongation force.
- (3) A compression set value of less than 5%.
- (4) A minimum resistance to deflection of 165 psi at 10% deflection.
- (5) A minimum (shore “A” durometer) hardness of 70 from a temperature range of 20°F - 100°F.

The factory applied joint shall be the Dickey coupling, as manufactured by the W.S. Dickey Manufacturing Company, or an approved equal.

(b) In jointing vitrified glazed pipe, the surface shall be wiped free of dust, dirt, gravel, or other foreign matter prior to the application of the lubricant. The vitrified glazed clay pipe with the factory applied coupling shall be connected by first brushing upon the mating surfaces the prior lubricant as recommended by the pipe supplier. The spigot end shall then be centered in grade into the bell end of the last downstream clay pipe length and shoved “home” and properly seated with the application of a moderate force by a pry or lever device.

8-04. **Ductile Iron Pipe:**

Where ductile iron pipe is specified, it shall be as described in Paragraph 4-02.

8-05. **Construction In General:**

Construction of sanitary sewers shall begin at the low point of the line and continue in orderly succession throughout the work as directed by the engineer. Any deviation from this procedure shall be made only with the specific approval of the engineer. Construction shall begin only after the right of way has been cleared, the entire section staked, and the elevations carefully checked.

8-06. **Construction By General Contractors:**

Construction of sanitary sewers shall begin at the low point of the line and continue in orderly succession throughout the work as directed by the developer’s engineer and approved by CWL’s engineer. Any deviation from this procedure shall be made only with the specific approval of both the developer and CWL engineers.

Construction shall begin only after approved plans from the Arkansas Department of Health are submitted to CWL, and all necessary fees are paid in full. Construction by contractors shall then begin only after the right of way has been cleared, the entire section staked, and the elevations carefully checked.



## CWL Specifications

Developer, along with a representative of the Contractor if different, shall meet with a representative of CWL on the first day planned for construction, to review any common issues. During construction, work shall be inspected by the Developer's consulting engineer for necessary safety practices, proper materials, and workmanship. CWL will provide inspections during construction, and other random inspections to insure that the plans approved by the Arkansas Department of Health and CWL are followed concerning workmanship and materials. No portion of the project shall be backfilled without CWL approval.

### 8-07. **Excavation:**

The bottom of the trench shall be excavated to a true line and grade according to the grades and lines furnished by the Engineer. For pipe sewers, the bottom of the trench under each bell shall be excavated sufficiently to allow the pipe to rest throughout its length. Bell hole excavation shall also be sufficient to allow proper placing of the joint compound. Should rock be encountered at excavation, contractor will backfill with suitable bedding material a minimum of 4" over said rock.

### 8-08. **Laying Sewer Pipes:**

- (a) Sewer pipe shall be laid on a firm bed and in a perfect conformity with lines and levels given.
- (b) All PVC sewer pipe shall be laid on no less than 4" of ¾ minus chat laid with even bearing on the bottom of the trench which shall be slopped with the earth and prepared to conform to the form of the pipe by back-filling with ¾ minus chat up to the "spring-line" of the pipe.
- (c) All other pipe shall be laid with even bearing on the bottom of the trench, which shall be slopped with earth and prepared to conform to the form of the pipe. Sufficient dimensions shall be cut in the bottom of the trench to achieve perfect clearance to the bell of the pipe, but not larger than is necessary to make a proper joint.
- (d) All water entering the excavations or other parts of the work shall be removed until all the work has been completed. No sanitary sewer shall be used for the disposal of trench water, unless specifically approved by the engineer, and then only if the trench water does not ultimately arrive at existing pumping or wastewater treatment facilities.
- (e) The inside shoulder of the bell and spigot ends must in all cases meet; the bell end in all cases shall be laid toward the high end of the sewer.
- (f) The grade of the pipe shall be obtained by the use of a pipe laser. The laser shall be placed in the pipe and a target utilized for grading and placement of pipe.
- (g) At the end of each day's work, and when pipe laying is discontinued for any reason, open ends of pipe shall be closed with a cast plug or cap firmly secured.
- (h) Final backfill shall be of suitable material removed from excavation except where other material is specified. Debris, frozen material, large clods or stones, organic matter or other unstable materials shall not be used for final backfill within 2 feet of the top of the pipe.
- (i) Final backfill shall be placed in such a manner as not to disturb the alignment of the pipe.

### 8-09. **Manholes:**

Poured in place or pre-cast concrete manholes will be used.

- (a) In general, pre-cast concrete manholes shall be manufactured in compliance with ASTM Designation 1964 C 478. The concrete used shall have a compressive strength of 4000 psi; maximum absorption determined by boiling test shall be 8%. Aggregate shall be crushed limestone. Commercial fiber reinforcement shall be 1½ lbs per cubic yard of concrete.  
The internal diameter of the manhole section shall be 48 inches and the wall thickness of 5 inches. The cone sections shall have internal diameters of 48 inches at the base and 24 inches at the top and a vertical length of 36 inches with no steps. Other manhole sections shall be made in length of 16, 32, 48, and 64 inches.
- (b) All casting for manhole heads, covers, and other purposes must be made of heavy duty gray iron. Manhole cover should be 250 lbs and 24" diameter Western type or equivalent. Must be free from cracks, holes, swells, and cold sheets and have a workmanlike finish.
- (c) Manhole bottoms and inverts shall be made of Class "A" concrete.

## CWL Specifications

- (d) Drop manholes shall be constructed at all manholes where the difference in invert elevation between incoming and outgoing sewer is 2.0 feet or more. Drop manholes shall be constructed of the same materials and dimensions as are standard manholes, the only difference being the inlet configuration as shown on the standard details sheet.
- (e) Manholes shall be vacuum tested in accordance with ASTM C 1244-93.
- (f) The specifications shall include a requirement for inspection and testing for water tightness or damage prior to placing into service, e.g. manhole bottoms and walls must be free of leakage prior to vacuum test. Also where existing manholes in service are to be broken into prior to a sewer main extension, the existing manholes must be re-vacuum tested.
- (g) The flow channel should be made to conform to the connecting sewers. The angle between connecting sewers shall be a minimum of 90°.
- (h) Straight-line manholes should drop one-tenth of a foot from inlet invert to outlet invert. Manholes that change alignment greater than 45 degrees should drop one-quarter of a foot from inlet invert to outlet invert.

### 8-10. **Infiltration:**

- (a) An air pressure test shall be performed on all contractor laid sewer pipe per ASTM C 828-80.
- (b) After job completion and ditch settlement, infiltration or pipe leakage, shall not exceed 100 gallons per day per mile of pipe per inch of pipe diameter.

### 8-11. **Deflection:**

All flexible laid sewer pipe shall be tested with a mandrel. Deflection shall not exceed 5%. The test shall be performed without mechanical pulling devices. The test shall be conducted after the final backfill has been in place for at least 30 days.

### 8-12. **Plugging Manholes (when tying into existing manholes):**

The downstream side of the first manhole within a sewer extension, must be mechanically plugged to prevent infiltration into CWL's sewer system. The plug must be supplied by the developer or contractor. This separation from CWL's sewer system must be maintained by the developer/contractor until final acceptance by CWL.

### **Slope**

All sewers shall be designed and constructed to give velocities of not less than 2.0 feet per second based on Manning's formula using an "n" value of 0.013.

<b>Slope</b>	<b>Min. Slope in Feet per 100 Feet</b>
8 inch	0.40
10 inch	0.28
12 inch	0.22
15 inch	0.15
18 inch	0.12
21 inch	0.10
24 inch	0.08
30 inch	0.058
42 inch	0.037

## SECTION 9 – LIFT STATIONS

### 9-01. **Lift Station Structure (Same as manhole):**

Poured in-place or pre-cast concrete; Lift Station will be used.

In general, pre-cast concrete Lift Station shall be manufactured in compliance with ASTM Designation 1964 C 478. The concrete used shall have a compressive strength of 4000 psi; maximum absorption determined by boiling test shall be 8%. Aggregate shall be crushed limestone. Steel reinforcement shall consist of a single line of circumferential reinforcement, placed in the center of the concrete pipe wall, with a minimum sectional area of .17 square inches per foot of pipe length. Fiber reinforcement shall be 1½ lbs. per cubic yard of concrete.

The inside diameter of the manhole section shall be 72" and the wall thickness of 5 inches. Soil tests shall be taken to design footing width.

### 9-02. **Check Valve Installation:**

Check valves and gate valves shall be installed in a 5' diameter vault with concrete floor. Vault bottoms and walls shall be free of all leakage. Vault shall have 36" x 36" or larger aluminum, single leaf, locking access door. Each pump shall have it's own set of check valves and gate valves with the gate valve on the down stream side of the check valve. Check valves and gate valves shall have adequate weight support at each location. All gate valves and check shall be easy operable and accessible for maintenance and replacement. Provisions shall be made to remove or drain accumulated water from the valve chamber. The valve chamber may be dewatered to the wet well through a drain line with a gas and water tight valve.

### 9-03. **Lift Station Valves:**

- (a) *Check Valves* shall be flange type, cast iron or bronze body, fully ported, resilient seated, with a outside weight and lever. Designed for 175 psi working pressure. Check valves shall conform to A.W.W.A. C 508-82.
- (b) *Gate Valves* shall be flange type, cast iron or bronze body, fully ported, open left, resilient seated, with wheel type operation. Designed for 175 psi working pressure. Gate valves shall conform to A.W.W.A. C 500-80.

### 9-04. **Pump and Piping:**

- (a) Pump and piping installation shall be completed before any sewage is admitted into basin and should be clean.
- (b) Installation of piping shall be inspected by CWL during the construction of all Ductile Iron piping. Pipe shall be class 150 Ductile Iron with cast-on type flange end x plain end.
- (c) Flange gasket shall be heavy duty red rubber 1/8" thick.
- (d) Hardware – bolts, nuts, flat washers and lock washers shall be 302 stainless steel.
- (e) Antiseize compound shall be used on threads.

### 9-05. **Lift Station Pump Removal System Equipment**

- (a) Stainless steel lift chain.
- (b) Top Rail Support.
- (c) Slide Rail Assembly 1½ " or larger Hydromatic Stainless Steel.
- (d) 30" x 48" or larger single door aluminum access cover.

### 9-06. **Pump Removal**

- (a) Submersible pumps shall be readily removable and replaceable without dewatering the wet well or disconnecting any piping in the wet well.
- (b) Provisions shall be made to facilitate removing pump, motors and mechanical and electrical equipment.

## CWL Specifications

- 9-07. **Control Panel** shall not be mounted directly on top of wet well basin. The power and control wires shall be taken into an air-tight junction box.
- 9-08. **Pump Power Cables** ends shall never come in contact with water. If the cables are extended, do not immerse the splice in water. Install the cable so that it will not over heat. Overheating is caused by coiling the cable and exposing it to direct sunlight. Use short circuit breakers to prevent danger of electrical shock.
- 9-09. **Seal Failure** – All motors shall have seal failure probe installed near the bottom so that any leakage will be detected. A red warning light at the control panel comes on if water enters seal chamber. This is an indicator only and does not stop motor, but warns that seal should be replaced.
- 9-10. **Heat Sensor** – All motors shall have a heat sensing thermostat installed in top of winding in the motor. Any motor winding temperature above 248°F will open thermostat and stop motor. Thermostat will automatically reset as soon as it has cooled.
- 9-11. **Level Controls** shall be held by support bracket and cords are adjusted for proper depth. A sealed mercury switch at the bottom with adjustable lead weights.
- (a) Lower turn-off control shall be set so that pump stops when water level is about to top of motor.
  - (b) Upper turn-on control is set to start pump when level is at height specified above pump.
  - (c) Over-ride control is set a height specified above upper turn-on control.
  - (d) Alarm control is set at 6" to 12" above override control.
  - (e) No control should be set above lowest inlet invert.
- 9-12. **PUMP, MOTOR, & CONTROL ITEMS:**
- (a) Weather-proof control panel with locking hasp.
  - (b) Duplex junction box.
  - (c) 5 level control support bracket with lead weights.
  - (d) Level control cord.
  - (e) Remote alarm panel, NEMA 3R enclosure light.
  - (f) Alarm light red globe solid state.
  - (g) Alarm buzzer.
  - (h) Convenience outlet receptacle.
  - (i) Elapsed time meter.
  - (j) Auxiliary contacts.
  - (k) Motor heat sensor.
  - (l) Lightning arrestor.
  - (m) Moisture sensor.
  - (n) Sealed mercury switch.
- 9-13. **Backflow Preventer** – There shall be no physical connection between the potable water system and the wet well. If potable water is injected into wet well it shall have an approved air gap and must be at least twice the diameter of the water supply outlet, but never less than 1".
- 9-14. **Accessibility** to lift station and equipment shall be provided for maintenance vehicles during all weather conditions and must be approved by CWL.

## SECTION 10 – FORCE MAIN LINES

10-01. **Pipe and Design Pressure:**

Pipe shall be PVC with a Pressure Rating (PR) of 200 (SDR 21) or better conforming to ASTM D2241 and ASTM 3139.

Fittings shall be cast iron and equal to water main strength materials suitable for design conditions. Thrust blocking and fittings should be designed to withstand water hammer pressures associated with the cycling of the lift station pumps.

10-02. **Installation of Force Mains:**

Installation of force mains shall be in accordance with requirement of Sections 3 through 6 of the CWL Specifications for water and sewer construction.

10-03. **Velocity and Diameter of Force Main:**

The design for pumping rates should be at a cleansing velocity of at least two feet per second. The minimum force main diameter for raw wastewater shall be four inches, unless approved by CWL and Arkansas Department of Health.

10-04. **Air and Vacuum Relief Valves:**

Air and Vacuum Relief Valves shall be placed in 46" diameter manhole and be placed at the high point of the force main to relieve any air when the pumps come on and relieve any vacuum when the pumps go off.

10-05. **Force Main Termination:**

Force Main Termination shall enter the gravity manhole near the bottom (a maximum of 1 foot from the invert). Also, the manhole must be a minimum of 8 feet in depth.

## **SECTION 11 – CONTRACTOR/DEVELOPER AGREEMENTS**

### **11-01. Water Extensions:**

1. Plans for the proposed work must be prepared by a professional engineer registered in the State of Arkansas and submitted to CWL. Developer will use CWL's specifications on file at the Arkansas Department of Health, unless mutually agreed by the parties.
2. Upon approval by CWL, Developer's consulting engineer will submit plans, if necessary, to the Arkansas Department of Health for State approval. An inspection fee will be paid to CWL at a rate of \$0.25/ft of line. Subdivision plans must have final approval by MAPC and be filed at the Circuit Court Clerk's office prior to final approval of the system. Any construction occurring prior to such final approval by MAPC shall be at the risk of the Developer.
3. Unless the installation is to be performed on existing public right-of-way, Developer shall furnish easements in favor of CWL and to its specifications across private property. Unless the easement is provided on property included in the original subdivision plat, Developer shall furnish a certificate of title showing ownership of the property covered by the easement.
4. Upon approval by Arkansas Department of Health and acquisition of all easements, construction may begin. Construction must be performed by a qualified contractor knowledgeable in all federal, state and local rules and regulations governing this type of work. Developer must show proof of adequate insurance coverage. (Arkansas Worker's Compensation, \$1,000,000.00 minimum general liability, and \$1,000,000.00 minimum auto liability.) Such insurance may be furnished to CWL by either the Developer or by the Contractor. Contractor must have a State Contractors License, which shall cover Municipal and Utility Construction or a classification specialty covering underground piping, cable, trenching, and boring. .
5. Developer, along with a representative of the Contractor if different, shall meet with a representative of CWL on the first day planned for construction, to review any common issues. During construction, work shall be inspected by the Developer's consulting engineer for necessary safety practices, proper materials, and workmanship. CWL will provide inspections during construction, and other random inspections to insure that the plans approved by the Arkansas Department of Health and CWL are followed concerning workmanship and materials. No portion of the project shall be backfilled without CWL approval.
6. If unsafe practices are discovered by CWL during our inspections of workmanship and materials, CWL will notify the OSHA. This in no way obligates CWL for the responsibility of the Contractor's safety practices.
7. Contractor must pressure test lines to 1.5 times the anticipated working pressure of the water line as calculated by CWL. Contractor shall perform Sterilization per CWL Specifications section 4-09. Contractor shall follow flushing guidelines as per CWL Specifications Section 4-10. Costs for above normal flushing will be the responsibility of the Developer/Contractor.
8. Upon completion of project, the Developer's consulting engineer will certify by letter that all work was accomplished in accordance with all approved plans and specifications and provide CWL with a set of record drawings, which shall include plans but not specifications. The consulting engineer will also certify that all easements have been obtained, that all water is laid on the easements or right-of-way.
9. Developer shall arrange a post construction meeting including the Engineer, and a representative of the Contractor, to meet with a representative of CWL prior to final approval by CWL.
10. The Developer will furnish CWL with a written warranty for one (1) year from acceptance date. This warranty will cover any defects in workmanship and/or materials, maintenance of lines, fill and/or other surface improvements, and grade adjustments of improvements located on or near the construction area. Emergency repairs will be performed by CWL and costs billed to the Developer.
11. The Developer will certify by letter that no liens exist on the work performed. A list of all contractors, subcontractors and material suppliers that worked or supplied materials on the job and a lien release from each will be submitted to CWL with this letter.
12. Newly constructed lines will not become a part of CWL's existing system until final approval has been given by CWL Engineering Department by letter. On the date of the acceptance letter, CWL will assume ownership and warranty will begin.
13. Contractor must bury locate wire in trench per CWL requirements.

## CWL Specifications

14. Installation of domestic water meter taps are required to be made during the installation of the new water mains.

15. Electric Underground Installation (Where applicable):

(a) In order to simplify the contribution that Developers make for underground electric when they also install water lines, CWL will require that Developers install the underground electric conduit. This will be in lieu of paying the standard underground electrical charges.

(b) A mouse and string must be blown in after all applicable work is completed.

Replacement or repair of conduit that is unusable for any reason will be the responsibility of the Developer. The Developer will provide all material, labor and equipment. CWL will provide the appropriate engineering drawings.

16. Contractor shall indemnify and hold harmless CWL, its' officers, agents and employees from and against any and all claims, losses, damages, causes of action, suits, and liability of every kind, including all expenses of litigation, court costs, and attorney's fees, including but not limited to personal injury to or death of any person or for damage to any personal or real property arising out of or in connection with the work performed or products or equipment provided by the Contractor.

17. On all water projects that have not been accepted by CWL within 360 days after hydrostatic tests and bacterial tests, all tests will be required to be repeated and re-certified.

18. It is the intent of this agreement that the basic responsibility for performance with the requirements hereof shall be the responsibility of the Developer, who shall be fully responsible for all activities of the Contractor and shall directly respond to CWL regarding all such Contractor activities.

### **11-02. Sewer Extensions**

1. Plans for the proposed work must be prepared by a registered professional engineer registered in the State of Arkansas, and submitted to CWL. Developer will use CWL's specifications on file at the Arkansas Department of Health, unless mutually agreed by the parties.

2. Upon approval by CWL, Developer's consulting engineer will submit plans, if necessary, to the Arkansas Department of Health for State approval. An inspection fee will be paid to CWL at a rate of \$0.50/ft for gravity lines and \$0.25/ft for force main lines. Subdivision plans must have final approval by MAPC and be filed at the Circuit Court Clerk's office prior to final approval of the system. Any construction occurring prior to such final approval by MAPC shall be at the risk of the Developer.

3. Unless the installation is to be performed on existing public right-of-way, Developer shall furnish easements in favor of CWL and to its' specifications across private property. Unless the easement is provided on property included in the original subdivision plat, Developer shall furnish a certificate of title showing ownership of the property covered by the easement.

4. Upon approval by Arkansas Department of Health, construction may begin. Construction must be performed by a qualified contractor knowledgeable in all federal, state and local rules and regulations governing this type of work. Developer must show proof of adequate insurance coverage. (Arkansas Worker's Compensation, \$1,000,000.00 minimum general liability, and \$1,000,000.00 minimum auto liability.) Such insurance may be furnished to CWL by either the Developer or by the Contractor. Contractor must have a State Contractors License, which shall cover Municipal and Utility Construction or a classification specialty covering underground piping, cable, trenching, and boring.

5. Developer, along with a representative of the Contractor if different, shall meet with a representative of CWL on the first day planned for construction, to review any common issues. During construction, work shall be inspected by the Developer's consulting engineer for necessary safety practices, proper materials, and workmanship. CWL will provide inspections during construction, and other random inspections to insure that the plans approved by the Arkansas Department of Health and CWL are followed concerning workmanship and materials. No portion of the project shall be backfilled without CWL approval.

## CWL Specifications

6. If unsafe practices are discovered by CWL during our inspections of workmanship and materials, CWL will notify OSHA. This in no way obligates CWL for the responsibility of the Contractor's safety practices.

7. All gravity lines must pass ASTM C 828-80 low pressure air test for sanitary sewers. All force main lines must pass a pressure test equivalent to 1 ½ times its expected working pressure. All manholes shall pass ASTM C 1244-93 vacuum test for concrete sewer manholes.

8. Upon completion of project, the Developer's consulting engineer will certify by letter that all work was accomplished in accordance with all approved plans and specifications and provide CWL with a set of record drawings, which shall include plans but not specifications. The consulting engineer will also certify that all easements have been obtained, that all sewer is laid on the easements or right-of-way.

9. Developer shall arrange a post construction meeting including the Engineer, and a representative of the Contractor, to meet with a representative of CWL prior to final approval by CWL.

10. The Developer will furnish CWL with a written warranty for one (1) year from acceptance date. This warranty will cover any defects in workmanship and/or materials, maintenance of lines, fill and/or other surface improvements, and grade adjustments of improvements located on or near the construction area. Emergency repairs will be performed by CWL and costs billed to the Developer.

11. The Developer will certify by letter that no liens exist on the work performed. A list of all contractors, subcontractors and material suppliers that worked or supplied materials on the job and a lien release from each will be submitted to CWL with this letter.

12. Newly constructed lines will not become a part of CWL's existing system until final approval has been given by CWL Engineering Department by letter. On the date of the acceptance letter, CWL will assume ownership and warranty will begin.

13. Contractor shall indemnify and hold harmless CWL, its' officers, agents and employees from and against any and all claims, losses, damages, causes of action, suits, and liability of every kind, including all expenses of litigation, court costs, and attorney's fees, including but not limited to personal injury to or death of any person or for damage to any personal or real property arising out of or in connection with the work performed or products or equipment provided by the Contractor.

14. On all sewer projects that have not been accepted by CWL within 360 days after mandrel tests and low pressure tests, all tests will be required to be repeated and re-certified.

15. It is the intent of this agreement that the basic responsibility for performance with the requirements hereof shall be the responsibility of the Developer, who shall be fully responsible for all activities of the Contractor and shall directly respond to CWL regarding all such Contractor activities.

### 11-03. **Construction Inspection Policy:**

On all sewer projects that have not been accepted by CWL within 360 days after mandrel tests and low pressure air tests, all tests will be required to be repeated and re-certified.

On all water projects that have not been accepted by CWL within 360 days after hydrostatic tests and bacterial tests, all tests will be required to be repeated and re-certified.

### 11-04. **Water Meter Tap Policy:**

Installation of domestic water meter taps are required to be made during the installation of the new water mains.

### 11-05. **Electric Underground:**

In order to simplify the contribution that developers make for underground electric when they also install the water lines, City Water and Light will require that developers install the underground electric conduit. This will be in lieu of paying the standard \$2.50/ft charge.



## CWL Specifications

The 2" conduit must be gray schedule 40 and the 4" conduit must be gray type II pipe. The elbows must have a 36" radius. A mouse and string must be blown in after all applicable work is completed. Replacement or repair of conduit that is unusable for any reason will be the responsibility of the developer. The developer will provide all material, labor, and equipment. City Water and Light will provide the appropriate engineering drawings.

July 2000  
**Reprinted 2012**

**CITY WATER & LIGHT PLANT  
JONESBORO, AR**

**SAFETY RULES**

**FOR ALL CONTRACTORS**

**AND**

**CONTRACTORS' EMPLOYEES**

**ON ALL**

**CITY WATER & LIGHT**

**PROJECTS**

## **PREFACE**

City Water & Light Plant of the City Jonesboro, (hereinafter referred to as "CWL") is committed to conducting construction operations in the safest manner as required by applicable laws, rules and regulations.

We require the full cooperation of all Contractors to effectively carry out this commitment.

This guide has been provided to familiarize all Contractors with CWL's safety rules, procedures and the guidelines for controlling jobsite accidents and injuries.

The safety rules listed on the following pages are **minimum** safety rule requirements of CWL. You will be expected to comply with these rules.

Any safety procedures initiated by CWL shall not be construed as supervision of the contractor's work force, nor make CWL responsible for providing a safe place for the performance of work by the Contractor or the Contractor's employees or those of the suppliers, or his subcontractors; nor for access, visits, use, work, travel or occupancy by any person, as these responsibilities shall be covered by the Contractor and the Contractor's insurance, and cannot be the responsibility of CWL or their representative.

Although CWL or their representatives may recognize safety hazards and in such case will require that changes be made to reduce or eliminate the hazards, CWL or their representative by such action does not take the responsibility as safety engineer or safety inspector for the contractor. Neither does such action indicate that CWL or their representative is a trained safety engineer or safety inspector. It means only that a specific safety hazard has been recognized in the ordinary course of inspection of the technical aspects of the work being done, and such hazard has been called to the attention of the Contractor.

## **I. SAFETY RULES**

EACH CONTRACTOR IS EXPECTED TO BE AWARE OF AND COMPLY WITH FEDERAL, STATE AND LOCAL SAFETY REGULATIONS.

Contractors will agree to comply with all Federal, State, and local statutes, ordinances, and requirements, and have agreed to hold CWL and it's employees harmless for all claims, damages (including legal fees), and/or penalties incurred as a result of Contractor failures to comply with such regulations.

## **II. VIOLATIONS**

If unsafe conditions or practices are observed by CWL's Authorized Representative, the Contractor will be requested to correct them. If no action is taken, a CWL Authorized Representative will take appropriate action as needed to correct such unsafe conditions or practices.

Failure or refusal to comply or enforce any part of these safety rules or any applicable law may result in:

- a.) Removal of the employee involved in the violation from the job site.
- b.) Removal of all employees from the job site.
- c.) Denial of future bid opportunities for CWL.
- d.) Cancellation of contract with 5 days written notice.

### **III. CONTRACTOR LICENSE & INSURANCE**

Contractors must have a valid State of Arkansas Contractors License in accordance with the State of Arkansas contractors Licensing Board. (501-372-4661 phone 501-372-2247 fax)

Contractors must provide proof of:

a.) General Liability Insurance-Limits and Endorsements

Depend on the project but a minimum of \$1,000,000 should be considered.

b.) Auto Insurance-Usually the same as GL but can depend on the project.

c.) Worker's Compensation Insurance-As required by Arkansas Law

d.) OCP-(Owners and Contractors Protective Liability)

-This transfers the liability premium for CWL protection to the contractor.

e.) Builders Risk-This physical damage coverage is sometimes included in specs for the contractor to provide it, and sometimes the owner provides the coverage.

f.) Hold Harmless Clause-This is a standard provision in contracts with general contractors that transfers risk to the contractor. This does not change the requirements for insurance.

Note: Consult CWL Insurance Guidelines. CWL's Financial Services Director will determine adequate coverage.

### **IV. TRAFFIC CONTROL**

When working in road right-of-way, the contractor must comply with Part VI Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility, and Incident Management Operations. (Part VI of the Manual on Uniform Traffic Control Devices) –U.S. Dept. of Transportation-Federal Highway Administration.

### **V. REPORTING TO ARKANSAS DEPARTMENT OF LABOR-SAFETY DIVISION**

CWL complies with Arkansas Public Law Act 291 1993 Section 2. This Act requires CWL to report to the Arkansas Department of Labor any trench or excavation job that equals or exceeds five (5) feet in depth. CWL's contract must specifically require the Contractor to include a separate pay item for trench or excavation safety systems to be included in the base bid.

## **VI. PERSONAL SAFETY OF EMPLOYEES**

OSHA 1926 Subpart E and 1910 Subpart I

Any persons on a CWL job site will wear safety attire appropriate to the job being performed.

## **VII. CWL ALCOHOL AND DRUG WRITTEN PROGRAM**

Illegal and unauthorized substances and drugs, lookalike drugs, synthetic drugs, alcoholic beverages, and drug paraphernalia are strictly prohibited on any CWL Property or Construction site. Any person found to be using or in possession or concealment of any of the above mentioned unauthorized items will not be allowed on CWL's Property or Construction site. Any person under the influence of drugs or alcohol will be removed from the construction site. All persons, their vehicles, and personal property are subject to search and inspection before entering, while on or departing CWL's property or the job site. All persons are subject to CWL's Alcohol and Drug Testing Program unless Contractor has provided proof of such program within their company. A copy of the Contractor's Alcohol and Drug Written Program will be submitted to CWL's Compliance Specialist for review before the Contractor is allowed to bid a CWL project. If the Contractor does not have such program in place, then CWL's Alcohol and Drug Written Program will be followed and the expense of such testing will be reimbursed to CWL by the Contractor.

## **VIII. CONTRABAND AND FIREARMS – CWL POLICY**

Contraband, stolen property, firearms, weapons, explosives, and any other hazardous substance are strictly prohibited on a CWL Construction site or property. Any person found to be using or in possession, or concealment of any of the above unauthorized items will be removed from the job site and will not be allowed to return to CWL's Construction site or property.

## **IX. SEXUAL HARASSMENT POLICY – CWL**

It is the policy of CWL to take action to provide a workplace and work site free of any verbal or physical behavior of a sexual nature that creates an offensive working atmosphere either to the employee or general public. When a working condition or action creates a working atmosphere offensive to an employee or the general public, CWL will take immediate action to investigate the problem.

## **X. WORKPLACE VIOLENCE POLICY – CWL**

Any person who makes substantial threats, exhibits threatening behavior or engages in violent acts while employed under contract with CWL shall be removed from the premises or work site as quickly as safety permits and shall remain removed pending the outcome of any investigation.

## **XI. ARKANSAS ONE CALL**

The Contractor will be responsible for making sure the location of all underground utilities have been successfully marked before digging, trenching, excavation, etc. begins while under contract with CWL. Call ARKANSAS ONE CALL at 1-800-482-8998 48 hours prior to beginning excavation.

## **XII. HAZARD COMMUNICATIONS – OSHA 29 CFR 1910.1200**

In accordance with CWL's Hazard Communication Written Program, all hazardous materials containers must be properly labeled. A list of the hazardous materials used on the job site by CWL and Contractors will be maintained by CWL's Authorized Representative assigned the project. This list will be given to CWL's Authorized Representative assigned when the Contractor enters into a contract with CWL. The Contractor shall supply a Material Safety Data Sheet for all items listed prior to beginning work. A copy of these MSDS's will be forwarded to the office of CWL's Compliance Specialist for review. If additional hazardous materials are introduced to the job site, notification and a copy of the MSDS will be supplied to CWL's Authorized Representative assigned before the hazardous material is allowed on the job site. A copy of CWL's Hazardous Communication Written Program may be obtained by requesting such from CWL's Engineering Department.

## **XIII. TRENCHING AND EXCAVATIONS**

All trench and excavations will comply OSHA 29 CFR 1926 Subpart P.

## **XIV. CONFINED SPACE**

All persons are expected to comply with OSHA 29 CFR 1910.146 and CWL's Written Confined Space Program. A copy may be obtained by requesting such from CWL's Engineering Department.

## **XV. MOTORIZED EQUIPMENT**

All Contractors are expected to comply with OSHA 29 CFR 1916 Subpart O. When equipment is shut down for the night, weekends, etc., buckets shall be lowered to the ground and equipment immobilized so that unauthorized persons cannot operate the equipment. All engines shall be shut off when refueling. Only authorized and properly instructed persons shall operate machinery, equipment, tools or vehicles. A flagman shall direct the backing of a vehicle in congested areas.



## **XVI. MATERIAL HOISTS**

Riding on material hoist equipment at any time is prohibited.

## **XVII. CRANES**

Accessible areas within the swing radius of all cranes must be barricaded to prevent injuries by the counter weight. **All persons are prohibited from riding the load or the headache ball.** Safety latches are required on all crane hooks. No crane or other equipment shall be operated within 10 feet of 50kV (phase-to-ground voltages). Over 50kV the distance shall be 10 feet plus 0.4 inches for each 1 kV over 50kV energized electrical transmission or distribution lines.

## **XVIII. VEHICLES OR EQUIPMENT**

All persons are instructed not to jump off vehicles or equipment, materials, edges of trenches, mounds of dirt, etc. To do so could result in an on-the-job injury. All persons are to stay clear of the sides of loaded flatbeds especially when being unloaded from the sides, rear of loaded dump trucks, front of front end loaders, etc. The operator of the vehicles or equipment has a responsibility to others on the ground around the work site as well as those on the ground around the work site has a responsibility to watch for vehicles or equipment in movement whether loading, unloading, etc.

## **XIX. POWERED INDUSTRIAL TRUCKS (FORKLIFTS) – OSHA 29 CFR 1910.178(1)**

All Contractors will meet the requirements of 29 CFR 1910 regulating the use and operation of powered industrial trucks (forklifts).

## **XX. ELECTRICAL EQUIPMENT – OSHA 29 CFR 1910 SUBPART S**

Contractors are responsible for maintenance of their extension cords. Defective extension cords should be removed from service, OSHA does require daily inspection of extension cords for broken grounds, breaks in the insulation, etc., and does require testing of the extension cords and tools on a quarterly basis to assure that grounds are operative. Contractors are expected to comply with the assured grounding program required by OSHA or use a GFCI system.

## **XXI. LOCKOUT/TAGOUT – OSHA 29 CFR 1910.147 SUBPART J**

All contractors are required to comply with OSHA's control of hazardous energy (lockout/tagout) standard. This standard covers the servicing and maintenance of machines and equipment in which the unexpected energization or start up of the machines or equipment, or release of stored energy could cause injury to employees.

## **XXII.COMMERCIAL DRIVER'S LICENSE (CDL)**

All operators of vehicles requiring the driver to possess a CDL will be in compliance with the Federal Motor Carriers Safety Regulations 49 CFR 391 and the State of Arkansas. Subpart E Part 391.43(c) requires a Medical Examiner's certificate. A driver must be included in an Alcohol and Drug Testing Program by their employer or be a member of a controlled substance test consortium (391.105).

## **XXIII. UTILITIES**

Equipment operators and truck drivers must be cautioned not to operate closer than recommended distances from overhead electrical wires. If work is required within close proximity to these wires, consult with CWL's Engineering Department about the possibility of relocating, de-energizing or insulating wires to protect all persons.

## **XXIV. FIRE PROTECTION – OSHA 29 CFR 1926 SUBPART F**

“No Smoking” signs should be posted and obeyed in areas where flammables are stored or used. Smoking is not allowed in any of CWL’s facilities. Good housekeeping practices are important. Combustible materials should be placed in trash barrels, and not permitted to accumulate in the work area or the job site. When portable heaters are used, make sure that they are placed well away from combustible materials. When welding, cutting or using flammable materials it is the responsibility of the Contractor to have adequate fire extinguishers at the work location. A fire watch shall be maintained when there is a fire exposure because of welding or cutting operations that do not confine sparks to the immediate area. Fire extinguishers are not to be tampered with or removed from assigned locations. Expired or used extinguishers are to promptly replaced or recharged.

## **XXV. HOUSEKEEPING**

Contractors are responsible for housekeeping conditions on their respective job sites. Refuse and scraps should not be allowed to accumulate, particularly when they interfere with workflow or create additional fire hazards. Continuous cleanup will help to reduce the exposure to accidents and fires, and make it easier for everyone to get their work accomplished. **Debris-free work sites will create a positive image to the citizens we serve.** Caution will be taken to prevent debris from traveling to other properties. If debris should travel from the work site, the contractor will promptly work to correct the situation. Refer to 29 CFR 1926 Subpart F for complete standards on Fire Protection and Prevention.

## **XXVI. FALL PROTECTION**

Contractors will comply with OSHA 29 CFR 1926 Subpart M-Duty to have fall protection. When a fall of 6’ or more could occur, whether it be from a building roof, scaffolding, water storage tank, trench or etc., the contractor will take the necessary precautions as outlined in Subpart M. Subpart M refers to Subpart L, N, R, S, V, and X as well depending on the workplace, conditions, operations, and circumstances for which fall protection shall be provided.

## **XXVII. MEDICAL FACILITIES**

First aid supplies will be made available by Contractors to all persons on the job site. Emergency telephone numbers and procedures will be conveyed to all persons. The emergency numbers will include 911 for Craighead County, Arkansas. A person trained in your company's Emergency Action Plan will be available on the job site. The person must be trained in CPR & First Aid. Adequately trained persons on the job depend on the number of persons on the job site and the type of work being performed. All persons on the job site will be informed of emergency procedures.

CWL will be informed immediately of any personal injuries on the job site and damage to property. Notify Authorized Representative (930-3320/935-5581) assigned to the project **and** CWL's Compliance Specialist (930-3316/219-5249/935-5581)

## **XXVIII. INSPECTIONS**

Contractors are encouraged to check the areas where all persons are working and report any unsatisfactory conditions to CWL's Authorized Representative assigned to the project or to CWL's Compliance Specialist. Periodic safety inspections may be performed on all CWL job sites. These will be conducted either by CWL's Authorized Representative or CWL's Compliance Specialist. The Arkansas Department of Labor, CWL's Insurance Carriers' Inspectors, and any other regulatory authority having jurisdiction of CWL's job sites will be allowed to perform inspections. If a regulatory authority having jurisdiction over CWL's job sites visits for an inspection, the Contractor is to notify CWL's Authorized Representative assigned to the project or CWL's Compliance Specialist as soon as possible.

If unsafe conditions are identified, refer to violations under Section II.

## **XXIX .SECURITY OF JOB SITE**

Each job site will be secured by the Contractor in such a manner as to prevent accidental entry to a hazardous area. This is for the protection of all persons on the job, others on the job site due to deliveries, and the general public. Barricades with flashing lights, signs, and whatever means necessary will be used to secure the job site.

**NOTICE**

CWL may request proof of compliance required by any safety rule or regulation.

## ACKNOWLEDGEMENT

This is to acknowledge that I have received a copy of City Water & Light's Safety Rules for ALL Contractors and Contractors' Employees on **ALL CITY WATER & LIGHT PROJECTS**. I will abide by all rules and regulations in the handbook, and all OSHA, Federal, State and local regulations while on CWL property or job site. I understand that this Safety Rule book/pamphlet may not be all inclusive, but agree to abide by all rules and regulations of this manual, and any others that make for a safe work environment for all persons either of my company or others and for the general public.

1. Name (print) \_\_\_\_\_

2. \_\_\_\_\_  
(SIGNATURE)

3. TITLE: \_\_\_\_\_

4. COMPANY: \_\_\_\_\_

5. CONTRACTORS LICENSE # \_\_\_\_\_ STATE: \_\_\_\_\_

6. DATE: \_\_\_\_\_

CWL REPRESENTATIVE (print name) : \_\_\_\_\_

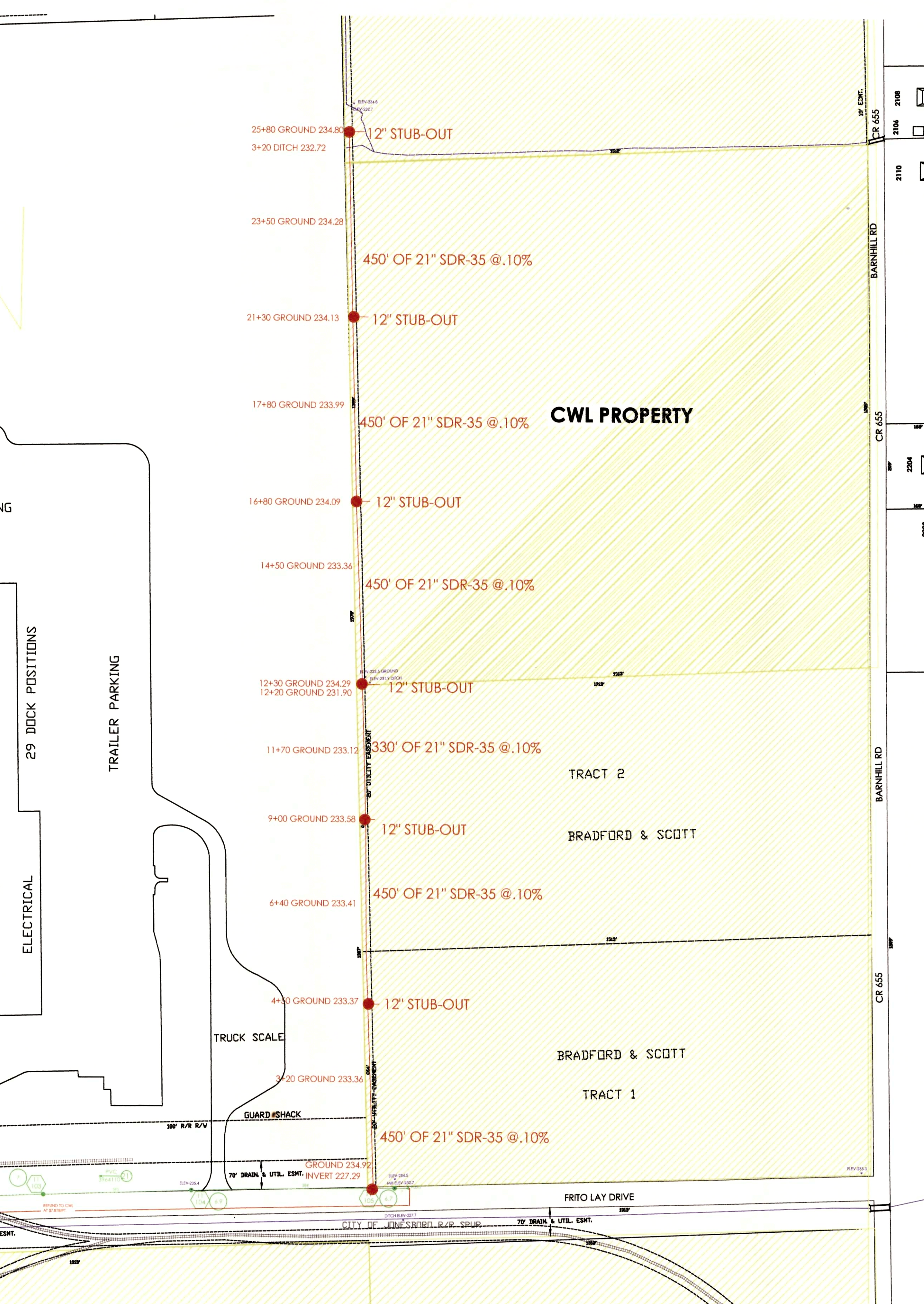
\_\_\_\_\_  
(SIGNATURE)

JOB TITLE: \_\_\_\_\_

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

**Contractor: Complete 1 thru 6 above. Return this page to City Water and Light Representative for this project.**





25+80 GROUND 234.80  
3+20 DITCH 232.72

12" STUB-OUT

23+50 GROUND 234.28

450' OF 21" SDR-35 @.10%

21+30 GROUND 234.13

12" STUB-OUT

17+80 GROUND 233.99

450' OF 21" SDR-35 @.10%

CWL PROPERTY

16+80 GROUND 234.09

12" STUB-OUT

14+50 GROUND 233.36

450' OF 21" SDR-35 @.10%

12+30 GROUND 234.29  
12+20 GROUND 231.90

12" STUB-OUT

11+70 GROUND 233.12

330' OF 21" SDR-35 @.10%

TRACT 2

9+00 GROUND 233.58

12" STUB-OUT

BRADFORD & SCOTT

6+40 GROUND 233.41

450' OF 21" SDR-35 @.10%

4+50 GROUND 233.37

12" STUB-OUT

TRUCK SCALE

3+20 GROUND 233.36

GUARD SHACK

BRADFORD & SCOTT

TRACT 1

GROUND 234.92  
INVERT 227.29

450' OF 21" SDR-35 @.10%

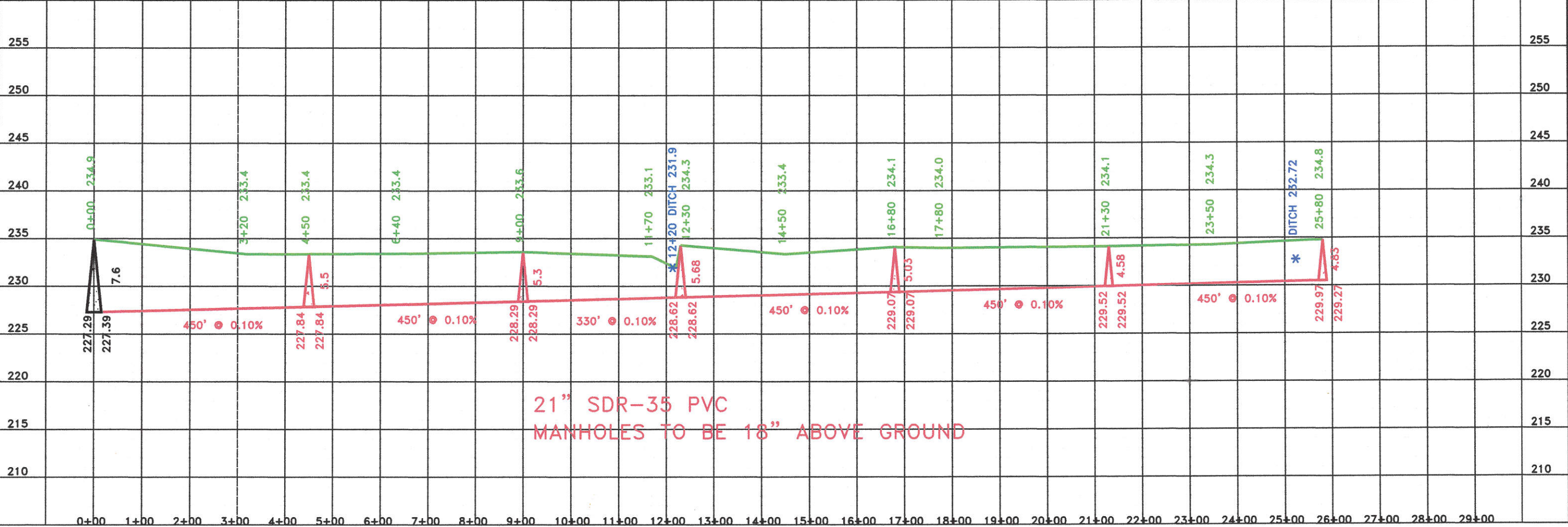
FRITO LAY DRIVE

CITY OF JONESBORO R/R SPUR

70' DRAIN & UTIL. ESMT.



VERTICAL SCALE: 1 = 5 HORIZONTAL SCALE: 1 = 100

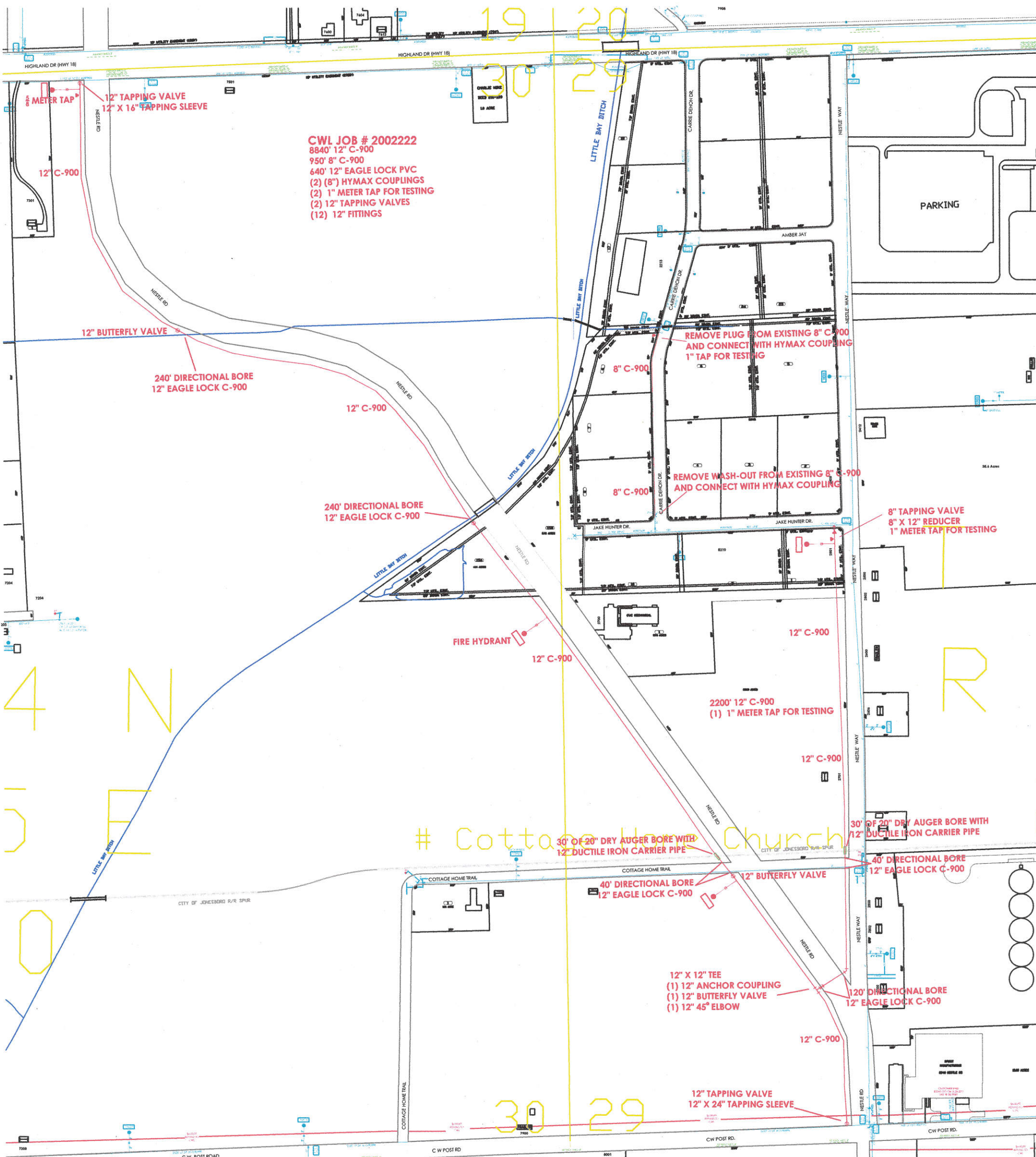


21" SDR-35 PVC  
MANHOLES TO BE 18" ABOVE GROUND

JONESBORO CWL

PROJECT: DATE: BY: F: ACAD DWG





**CWL JOB # 2002222**  
8840' 12" C-900  
950' 8" C-900  
640' 12" EAGLE LOCK PVC  
(2) (8") HYMAX COUPLINGS  
(2) 1" METER TAP FOR TESTING  
(2) 12" TAPPING VALVES  
(12) 12" FITTINGS

12" BUTTERFLY VALVE

240' DIRECTIONAL BORE  
12" EAGLE LOCK C-900

12" C-900

240' DIRECTIONAL BORE  
12" EAGLE LOCK C-900

FIRE HYDRANT

12" C-900

REMOVE PLUG FROM EXISTING 8" C-900  
AND CONNECT WITH HYMAX COUPLING  
1" TAP FOR TESTING

REMOVE WASH-OUT FROM EXISTING 8" C-900  
AND CONNECT WITH HYMAX COUPLING

8" TAPPING VALVE  
8" X 12" REDUCER  
1" METER TAP FOR TESTING

2200' 12" C-900  
(1) 1" METER TAP FOR TESTING

12" C-900

30' OF 20" DRY AUGER BORE WITH  
12" DUCTILE IRON CARRIER PIPE

40' DIRECTIONAL BORE  
12" EAGLE LOCK C-900

12" X 12" TEE  
(1) 12" ANCHOR COUPLING  
(1) 12" BUTTERFLY VALVE  
(1) 12" 45° ELBOW

30' OF 20" DRY AUGER BORE WITH  
12" DUCTILE IRON CARRIER PIPE

40' DIRECTIONAL BORE  
12" EAGLE LOCK C-900

120' DIRECTIONAL BORE  
12" EAGLE LOCK C-900

12" TAPPING VALVE  
12" X 24" TAPPING SLEEVE



