SPECIFICATIONS

AND

CONTRACT DOCUMENTS

FOR

Bolivar Sewer
Rehabilitation Cure in Place Pipe

5,832 feet of 8inch clay pipe

CITY OF BOLIVAR
1506 W. Broadway
P.O. BOX 9
BOLIVAR, MO 65613
Telephone 417-326-2489
FAX 417-777-3212

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Sewer Rehabilitation Cure in Place Pipe

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NOTICE TO CONTRACTORS

June 12, 2014
Office of City Administrator
Bolivar, MO 65613

Sealed bids subject to the conditions contained herein will be received until 1:30 p.m. on, Monday, July 7, 2014, and then publicly opened and read at **1506 W Broadway-Golf Pro Shop-City Hall in Bolivar, Polk County, Missouri**, for proposed **Sewer Rehabilitation Cure in Place Pipe Specifications** in accordance with plans and construction specifications as adopted by City Council.

Each bidder to whom a contract for the work is awarded will be required to furnish Performance and Payment Bonds, executed on the specified forms and acceptable to the City of Bolivar, Missouri, in the amount of one hundred percent (100%) of the contract. The City may, at its discretion, agree to a modification of the specified forms to accommodate alternate forms of surety other than a commercial surety, such as a cash bond or a bank letter of credit.

All Contractors will be required to pay the prevailing wage as determined by the Missouri Division of Labor which will be in effect on the date of the bidding or at the time the work is accomplished.

All Contractors will be required to comply with laws and regulations as set forth by OSHA.

All Contractors will be required to obtain a business license from the City of Bolivar.

Specifications and Bid Documents are on file and may be examined between the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday in the City Administrator's Office at the Golf Pro Shop City Hall, 1506 W Broadway, Bolivar, Missouri.

The City of Bolivar reserves the right to reject any and all proposals and to waive technicalities.

_____

Darin Chappell City Administrator
City of Bolivar, Missouri

INSTRUCTIONS TO BIDDERS

1. Each Proposal shall be legibly written or printed in ink on the Proposal provided in this bound copy of the proposed Contract Documents. No alterations in proposals, or in the printed forms therefore, by erasures, interpolations, or otherwise will be acceptable unless each such alteration is signed or initialed by the Bidder. If initialed, the Owner may require the bidder to identify any alteration so initialed. No alteration in any proposal, or in the proposal form on which it is submitted, shall be made by the person after the Bidder has submitted the Proposal. Any and all addenda to the Contract Documents, on which a proposal is based, properly signed by the Bidder shall accompany the Proposal when submitted.

Each Proposal submitted shall be enclosed in a sealed envelope, addressed to the City Administrator City of Bolivar, Missouri identified on the outside with the words ***"Sewer Rehabilitation Cure in Place Pipe Specifications",*** and filed with the City Administrator, Bolivar, Missouri.

Each Proposal shall be accompanied by either a Cashier's Check, a Certified Check drawn on an acceptable bank, or an acceptable bid bond, in an amount of not less than five percent (5%) of the total amount of the bid, made payable without condition to "City of Bolivar, Missouri", hereinafter referred to as the Owner, and the amount of said Proposal Guarantee may be retained by and forfeited to the Owner as liquidated damages if the bidder should fail to enter into a Contract in the form prescribed, with legally responsible sureties, within ten (10) days after such award is made by the Owner.

The Proposal guarantee deposit of the bidder will be returned if, and when, his proposal is rejected. The proposal guarantee deposit of the bidder to whom a contract is awarded will be returned provided when said successful bidder executes a contract and files satisfactory bonds as hereinafter stipulated. The proposal guarantee deposit of the second lowest responsible bidder may be retained for a period of not to exceed thirty (30) days pending the execution of the contract and bonds by the successful bidder.

2. Each Bidder shall carefully examine the Specifications and other Contract Documents, shall visit the sites and fully inform himself of all conditions affecting the work or the cost thereof, and shall be presumed to have done so and his bid shall be based upon his own conclusions. Each Bidder shall inform himself concerning all Federal, State, and local laws, ordinances, or regulations, which may in any manner affect his proposed operations of construction, or those engaged or employed on the work or the material or equipment. Should a Bidder find discrepancies in or omissions from, the Specifications or other Contract Documents, he should at once notify the Director of Public Works and obtain clarification or interpretation prior to submitting any bid. Any interpretation of the proposed Contract Documents will be made only by addendum duly issued and a copy of such addendum will be mailed or delivered to each person obtaining a set of such documents from the Director of Public Works. The Owner will not be responsible for any other explanations or interpretations of the proposed Contract Documents.

3. Each Bidder to whom a contract for the work is awarded will be required to furnish surety as follows: Contract Payment & Performance Bonds to the Owner in an amount equal to one hundred percent (100%) of the Contract price.

The Bonds shall be executed in two (2) counterparts on the forms bound herein, signed by a Surety Company authorized to do business in the State of Missouri and acceptable as surety to the Owner.

4. All sales and use taxes, as well as other taxes, that might lawfully be assessed against the Owner in the execution and performance of the proposed contract and work covered thereby and are to be paid by the contractor from monies obtained in satisfaction of his contract. It is to be understood by all bidders that the bid price or prices submitted shall include the total cost of all such taxes.

5. No bidder may submit more than one proposal. Two proposals under different names will not be received from one firm or association.

6. No bidder may withdraw his proposal for a period of thirty (30) days after the date and hour set for the opening herewith. A bidder may withdraw his proposal at any time prior to the expiration of the period during which proposals may be submitted, by written request of the same person or persons who signed the proposal.

7. The Owner reserves the right to accept the bid, which in its judgment is the lowest and best bid; to reject any or all bids; and to waive irregularities or informalities in any bids submitted. Bids received after the specified time of closing will be returned unopened.

8. None of the Instructions to Bidders, Proposal, Contract Payment and Performance Bonds, Contract Agreement, General Conditions, Special Conditions, Specifications, and other documents shall be removed from the bound copy of the "Contract Documents" prior to filing the Proposal contained therein.

9. Each Bidder shall sign his proposal, using his usual signature, and giving his full business address. Bids by Partnerships shall be signed with the Partnership named, followed by the signature of one of the members of the Partnership or by an authorized representative and designation of the person signing. Bids by Corporations shall be signed with the name of the Corporation, followed by the signature and designation of the President, Secretary, or other person authorized to bind it in the matter. The names of all persons signing should also be typed or printed below the signature. A bid by a person who affixes to his signature the word "*President", "Secretary", "Agent",* or other designation, without disclosing his Principal, may be held to be the bid of the individual signing. When requested by the Owner, satisfactory evidence of the authority of the officer signing on behalf of a corporation shall be furnished.

BID

PROPOSAL OF _____

(hereinafter called *"Bidder")* organized and existing under the laws of the State of

_____ doing business as _____. *

To the City of Bolivar, Missouri (hereinafter called "Owner"). In compliance with your Advertisement for Bids, Bidder hereby proposes to perform all work for the completion of to ***"Sewer Rehabilitation –Cure in Place Pipe"*** in strict accordance with the Contract Documents, within the time set forth therein, and at the prices stated below.

By submission of this Bid, each Bidder certifies, and in the case of a joint Bid, each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

Bidder hereby agrees to commence work under this contract within ten calendar days following receipt of a Notice to Proceed, and to fully complete the project within the specified consecutive calendar days thereafter.

Completion Date: _____

Bidder further agrees to pay as liquidated damages, the sum of $100.00 for each consecutive calendar day past completion date until completion.

Bidder acknowledges receipt of the following addenda:

_____

*Insert "*a corporation", "a partnership", or "an individual"* as applicable.

The total bid for …….. improvements to ……..…….. shall be: _____
($_____) lump sum complete in place.
Show bid in both words and figures. In case of discrepancy, the amount in words will govern. The above price shall include all labor and materials to cover the finished work for the improvements mentioned above.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informality in the bidding.

The bidder further agrees that this bid shall be good and may not be withdrawn for a period of 30 calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this bid, same bidder shall execute the formal contract attached within ten days and deliver a Surety Bond or bonds as required in the General Conditions. The bid guaranty furnished herewith by (Certified Check) (Bid Bond) in the amount of ($_____) equal to 5% of the lump sum bid price which I understand is to become the property of the owner in the event the contract and bond are not executed within the time set forth as liquidated damages for the delay and additional expense to the owner caused thereby.

Respectfully submitted,

_____ Attest: _____
Contractor Secretary

By: _____

Title: _____ Address: _____

_____

_____

SEAL
(If bid is by a corporation)

BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT we, the undersigned, _____

_____ as Principal,

and _____ as Surety, are

hereby held and firmly bound unto_____ as the owner in

the penal sum of _____

for the payment of which, will and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed this _____ day of _____, 201____.

The Condition of the above obligation is such that whereas the Principal has submitted to

_____ a certain

Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for

the _____

_____

_____

NOW THEREFORE,

(a) If said Bid shall be rejected, or

(b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a Bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its Bond shall be in no way impaired or affected by any extension of the time within which the owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

Bid Bond Contd.

IN WITNESS WHEREOF, The Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____ (L.S.)
Principal

_____
Surety

By: _____

THIS AGREEMENT, made and entered into this _____ day of _____ , 2014, by and between the **City of Bolivar, Missouri**, Party of the First Part, hereinafter referred to as the "Owner", and _____, Party of the Second Part, hereinafter referred to as the "Contractor" for as detailed in the Bid Specifications **"Bolivar Sewer Rehabilitation –Cure in Place Pipe,"**

WITNESSETH:

ARTICLE 1. It is hereby mutually agreed that for and in consideration of the payment as provided for herein to the Contractor by the Owner, the said Contractor shall furnish all labor, equipment, and material and shall perform all work necessary to complete all improvements as detailed in the specifications in a good and substantial manner, and in strict accordance with this Contract, a copy of which is filed pursuant to law in the office of the legal representative of the Owner.

ARTICLE 2. The Contractor agrees to perform all of the work described in the Contract Documents for the Total Contract Amount.

ARTICLE 3. It is hereby further agreed that in consideration of the faithful performance of this contract by the Contractor, the Owner shall pay the Contractor the compensation due him by reason of said faithful performance of the work, in the amount specified in accordance with the provisions of this Contract.

ARTICLE 4. It is hereby further agreed that, at completion of the work and its acceptance by the Owner, all sums due the Contractor by reason of his faithful performance of the work, taking into consideration additions to or deductions from the Contract price by reason of alterations or modifications of the original Contract, will be paid the Contractor by the Owner after said completion and acceptance.

ARTICLE 5. It is hereby further agreed that the Contractor acknowledges that Section 285.530 RSMo. prohibits any business entity or employer from knowingly employing, hiring for employment, or continuing to employ an unauthorized alien to perform work within the State of Missouri. Contractor therefore covenants that it is not knowingly in violation of Subsection 1 of Section 285.530 RSMo., and that it will not knowingly employ, hire for employment, or continue to employ any unauthorized aliens to perform work on the project, and that its employees are lawfully eligible to work in the United States.

ARTICLE 6. It is hereby further acknowledged and agreed that the City of Bolivar has adopted a formal written policy to encourage the purchase of products manufactured or produced in the United States. Whenever possible, the Contractor is requested and encouraged to use products manufactured or produced in the United States in the performance of this Agreement whenever the quality and price are comparable with other goods.

ARTICLE 7. It is hereby further acknowledged and agreed that any of the Contractor's employees and/or subcontractors found on the project site without documentation of the successful completion of a construction safety program shall be required to produce such documentation within twenty (20) days, or will be subject to removal from the project.

ARTICLE 8. It is hereby further agreed that any reference herein to the "Contract Documents" are hereby made a part of this Agreement as fully as if set out at length herein, and that this Contract is limited to the items in the Proposal as signed by the "Contractor" and included in the "Contract Documents".

IN WITNESS WHEREOF, the Party of the First Part and the Party of the Second Part, respectively, have caused this Agreement to be duly executed on the day and year first herein written, in three (3) copies, all of which to all intents and purposes shall be considered as the original.

CONTRACTOR (Party of the Second Part)	OWNER (Party of the First Part)
_____	**City of Bolivar, Missouri**
By: _____	By: _____ Mayor
_____	
SEAL:	ATTEST:
	_____ City Clerk Bolivar, Missouri

CERTIFICATION OF FORMAL WRITTEN POLICY ENCOURAGING PURCHASE OF PRODUCTS MANUFACTURED OR PRODUCED IN THE UNITED STATES

Indentify Contract to which Certification applies:

Nature of Contract**: Bolivar Sewer Rehabilitation Cure in Place Pipe**

Certification: The undersigned hereby certifies, pursuant to 34.353.3(5), that the City of Bolivar has adopted a formal written policy to encourage the purchase of products manufactured or produced in the United States.

CITY OF BOLIVAR, MISSOURI

SEAL

_____

City Administrator

ATTEST:

_____

City Clerk

PERFORMANCE BOND	BOND NUMBER
PRINCIPAL *(Legal Name and Business Address)*	
SURETY *(Legal Name and Business Address)*	STATE OF INCORPORATION
PENAL SUM OF BOND *(Expressed in words and numerals)*	CONTRACT DATE

OBLIGATION

KNOW ALL PERSONS BY THESE PRESENTS, that the above named PRINCIPAL, hereinafter referred to and called CONTRACTOR, and the above named SURETY hereby bind themselves unto **{LEGAL NAME AND ADRRESS OF SPONSOR}**, as OBLIGEE, hereinafter referred to and called OWNER, in the penal sum stated above, in lawful money of the United States of America to be paid to OWNER. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

CONTRACTOR has entered into the written contract agreement identified hereinabove with the OWNER for the following project:

Project Name: _____

Project Location: _____

which said contract and associated contract documents, including any present or future amendment thereto, is incorporated herein by reference and is hereinafter referred to as the Contract.

CONDITION

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if CONTRACTOR shall promptly and faithfully perform all undertakings, covenants, terms, conditions and agreements of the Contract during the original term of the Contract and any extensions thereof that are granted by the OWNER, with or without notice to the SURETY, and during the period of any guarantee or warranties required under the Contract, and if CONTRACTOR shall perform and fulfill all undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of the Contract that hereafter are made, then this obligation shall be void; otherwise it shall remain in full force and effect subject to the following additional conditions:

1. SURETY, for value received, hereby stipulates and agrees that no change, extension of time, modification, omission, addition or change in or to the Contract, or the work performed thereunder or the specifications accompanying the same, shall in any way affect the SURETY'S obligation on this bond; and SURETY hereby agrees to waive notice of any and all such extensions, modifications, omissions, alterations, and additions to the terms of the Contract, work or specifications.

2. Whenever CONTRACTOR shall be and declared by the OWNER to be in default under the Contract, the Surety shall promptly and at the SURETY'S expense remedy the default by implementing one or more of the following actions:

    a. Arrange for the CONTRACTOR, with consent of the OWNER, to perform and complete the Contract; or

    b. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

    c. Obtain bids or negotiated proposals from qualified contractors acceptable to the OWNER for a contract for performance and completion of the Contract; arrange for a contract to be prepared for execution by the OWNER and the contractor selected with the OWNER'S concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the Bonds issued on the Contract; and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the penal sum of the bond. The term "balance of the contract price", as used in this paragraph, shall mean the total amount payable by OWNER to CONTRACTOR under the Contract and any amendments thereto, disbursed at the rate provided in the original contract, less the amount properly paid by OWNER to CONTRACTOR.

    d. With written consent of the OWNER, SURETY may waive its right to perform and complete, arrange for completion or obtain a new contractor and with reasonable promptness, investigate and determine the amount the SURETY is liable to the OWNER and tender payment therefor to the OWNER.

3. CONTRACTOR and SURETY agree that if in connection with the enforcement of this Bond, the OWNER is required to engage the services of an attorney, that reasonable attorney fees incurred by the OWNER, with or without suit, are in addition to the balance of the contract price.

4. No right of action shall accrue on this bond to or for the use of any person or corporation other than the OWNER named herein or the successors or assigns of the OWNER.

WITNESS

In witness whereof, this instrument is executed this the _____ day of_____, 2012.

INDIVIDUAL PRINCIPAL:

Company Name: _____

Signature: _____

Name and Title: _____

CORPORATE PRINCIPAL:

ATTEST:

Signature: _____

Name and Title: _____
(Affix Corporate Seal)

Corporate Name: _____

Signature: _____

Name and Title: _____

SURETY:

ATTEST:

Signature: _____

Name and Title: _____
(Affix Seal)

Surety Name: _____

Signature: _____

Name and Title: _____
(Attach Power of Attorney)

OWNER ACCEPTANCE:

The OWNER approves the form of this Payment Bond.

ATTEST:

Signature: _____

Name and Title: _____
(Affix Seal)

Date: _____

Signature: _____

Name and Title: _____

NOTICE OF AWARD

To: Date:

PROJECT: **City of Bolivar**
Sewer Rehabilitation
Cure in Place Pipe

The Owner has considered the Proposal submitted by you for the above described work in response to its Notice to Contractors dated _____, and Instructions to Bidders.

You are hereby notified that your Proposal has been accepted for items in the amount of $_____.

You are required by the Instructions to Bidders to execute the Contract Agreement within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Contract Agreement within the ten (10) days from the date of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Proposal as abandoned and as a forfeiture of your Bid Security. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the Owner.

Dated this _____ day of _____, 2013.

THE CITY OF BOLIVAR, MISSOURI

By: _____

Title: _____City Administrator

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by _____ _____ , this the _____ day of _____, 20_____.

By: _____

Title: _____

GENERAL CONDITIONS

CONTRACT SECURITY

The Contractor shall furnish a surety bond in an amount at least equal to one hundred percent (100%) of the total amount of the contract, as evidenced by the proposal tabulation, or otherwise guaranteeing the full and faithful execution of the work and performance of the Contract, and for the protection of the City and all other persons against damage by reason of negligence of the Contractor, or improper execution of the work or the use of inferior materials. This surety bond shall guarantee the payment for all labor, materials, and equipment used in the construction of the work and shall remain in full force and effect for a period of one year after the date of completion and acceptance of the improvements by the City of Bolivar. The surety on such bond shall be a duly authorized surety company satisfactory to the City of Bolivar, Missouri.

CO-ORDINATION OF PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS

These specifications, approved plans, any special provisions, and all documents affecting the work issued by the Director of Public Works to the Contractor are essential parts of the project. They are intended to be mutually complementary. In case of discrepancy, figured dimensions shall prevail over scaled dimensions. Plans shall prevail over specifications and special provisions shall prevail over both plans and specifications.

CONTRACTOR'S AND SUB-CONTRACTOR'S INSURANCE

The Contractor shall procure, and maintain for the life of this contract, the following:

(a) Workmen's Compensation Insurance for all of his employees to be engaged in work under this contract.

(b) Contractor's Public Liability Insurance in an amount not less than $100,000 for injuries, including accidental death to any one person, and subject to the same limit for each person in an amount not less than $300,000 on account of one accident, and Contractor's Property Damage Insurance in an amount not less than $100,000 each accident and $300,000 aggregate.

(c) Automobile Liability Insurance in an amount not less than $100,000 each person, $300,000 each accident for bodily injury or death, and $300,000 each accident for property damage.

(d) Owner's Protective Liability Insurance – The Contractor shall also obtain at his own expense, and deliver to the City, an Owner's Protective Liability Insurance Policy naming the City of Bolivar as being insured with the same insurance company with which the contractor carries his Contractor's Public Liability Insurance and Automobile Liability Insurance, and in like amounts.

The owner's protective policy may be the standard policy now used in the industry insuring the City of Bolivar against bodily injury or property damage caused by an occurrence and rising out of:

(1) Operations performed for the named insured by the contractor at the location of the project, or

(2) Acts or omissions of the City in connection with its general supervision of the operations.

Provided, however, no such owner's protective policy shall have any exclusion for bodily injury or property damage occurring after that portion of the contractor's work out of which the injury or damage arises has been put to its intended use. Nor shall any such policy be cancelable by the insurer except upon at least ten days prior written notice to the City.

(e) In case any or all of this work is sublet, the Contractor shall require the sub-contractor to procure and maintain all insurance required in sub-paragraphs (a), (b), and (c) hereof, and in like amounts.

(f) Scope of Insurance and Special Hazard – The insurance required under sub-paragraphs (b) and (c) hereof shall provide adequate protection for the Contractor and his sub-contractors, respectively, against damage claims which may arise from operations under this contract, whether such operations be by the insured or by anyone directly or indirectly employed by him and also against any special hazards which may be encountered in the performance of this contract.

Paragraph (f) is construed to require the procurement of contractor's protective insurance (or contingent public liability and contingent property damage policies) by a general contractor whose sub-contractor has employees working on the project, unless the general public liability and property damage policy (or rider attached thereto) of the general contractor provides adequate protection against claims arising from operations by anyone directly or indirectly employed by him.

(g) The Contractor and/or Sub-contractor shall furnish the City, prior to beginning the work, satisfactory proof of carriage of all insurance required.

All work shall be performed under the supervision of the Director of Public Works or his duly authorized assistants, agents, inspectors, or superintendents acting within the scope of the particular duties entrusted to them, in a workmanlike manner, and to his satisfaction. He shall decide all questions which arise as to the quality and acceptability of materials furnished, work performed, manner or performance, rate or progress of the work, sequence of the construction, interpretation of the plans and specifications, acceptable fulfillment of the contract, compensation mutual rights between Contractors under specifications, and suspension of the work. He shall determine the amount and quality of the work performed and materials furnished, and his decision and estimates shall be final. His estimate in such event shall be a condition precedent to the right of the Contractor to receive money due him under the Contract.

CONSTRUCTION STAKES

The Contractor shall furnish all lines, grades, and measurements necessary to the proper prosecution and control of the work contracted for under these specifications. Such stakes or markings as the Director of Public Works may require either for his own use or the Contractor's guidance shall be preserved by the Contractor until authorized by the Director of Public Works to remove same.

INSPECTION AND FINAL INSPECTION

The Director of Public Works shall at all times have access to the work during its construction, and shall be furnished with every reasonable facility for ascertaining that the stock and materials used and employed and the workmanship are in accordance with the requirements and intentions of the specifications. All work done and all materials furnished shall be subject to his inspection and approval.

The Director of Public Works will not make the final inspection until the work provided and contemplated by the contract has been completed and the final cleaning up performed.

SAMPLES AND TESTS OF MATERIALS

Where, in the opinion of the Director of Public Works or as called for in the specifications, tests of materials are necessary, such tests will be made at the expense of the Contractor unless otherwise provided. The failure of the City to make any tests of materials shall in no way relieve the Contractor of his responsibility of furnishing materials conforming to the specifications.

Tests, unless otherwise specified, shall be made in accordance with latest methods of the American Society of Testing Materials. The Contractor shall provide such facilities as the Director of Public Works may require for collecting and forwarding samples and shall not use the materials represented by the samples until tests have been made. The Contractor shall furnish adequate sample containers without charge.

LAWS TO BE OBSERVED

The Contractor shall at all times observe and comply with all Federal and State Laws and City Ordinances and Regulations, which in any manner affect the conduct of the work, and shall observe and comply with all orders, laws, ordinances and regulations which exist or which may be enacted later by bodies having jurisdiction or authority for such enactment.

No plea of misunderstanding or ignorance thereof will be considered.

The Contractor and his sureties shall indemnify and save harmless the City and all its officers, agents, and employees against claims or liability arising from or based on the violation of any law, ordinance, regulation or order, whether by himself or employee.

PUBLIC CONVENIENCE AND SAFETY

Precautions shall be exercised at all times for the protection of persons (including employees) and property. The safety provisions of applicable laws, buildings and construction codes shall be observed. Machinery, equipment, and all hazards shall be guarded or eliminated in accordance with the safety provisions of the Manual of Accident Prevention and Construction published by the Associated General Contractors of America to the extent that such provisions are not in contravention of applicable law.

Materials stored about the work shall be so placed, and the work shall, at all times, be so conducted as to cause no greater obstruction to the public than is considered necessary by the Director of Public Works. The Contractor shall make provisions by bridges or otherwise at all

cross streets, highways, sidewalks, and private driveways for the free passage of pedestrians and vehicles, provided that where bridges are impracticable or unnecessary, in the opinion of the Director of Public Works, the Contractor may make arrangements satisfactory to the Director of Public Works for the diversion of traffic, and shall at his own expense, provide all material, and perform all work necessary for the construction and maintenance of roadways and bridges for the diversion of traffic. Sidewalks must not be obstructed except by special permission of the Director of Public Works. The materials excavated, and the construction materials or plant used in the construction of the work, shall be placed so as not to endanger the work or prevent free access to all fire hydrants, water valves, gas valves, manholes for telephone, telegraph, signal or electric conduits, sanitary or storm sewers, and fire alarm or police call boxes in the vicinity.

The City reserves the right to remedy any neglect on the part of the Contractor, as regards public convenience and safety, which may come to its attention after twenty-fours hours notice in writing to the Contractor, save in cases of emergency when it shall have the right to remedy any neglect without notice; in either case, the cost of such work done by the City shall be deducted from monies due the Contractor. The Contractor shall notify the Fire Department headquarters when any street is closed or obstructed, and when directed by the Director of Public Works, shall keep any street or streets in condition for unobstructed use by fire apparatus. The Contractor will be required to give the Traffic Division of the police Department a twenty-four hour notice of intent to cut any street in the project. This notice may be given by telephone. A separate notice must be given whenever any additional street in the contract is to be cut. Where the Contractor is required to construct, his responsibility for accidents shall include the roadway approaches as well as the structures of such crossings.

PROTECTION AND RESTORATION OF PROPERTY

Where the work passes over or through private property, the City will provide the right-of-way shown on plans. The Contractor shall notify the proper representatives of any public utility, corporation, any company or any individual, not less than forty-eight hours in advance of any work which might damage or interfere with the operation of their, or his, property along or adjacent to the work. The Contractor shall be responsible for all damage or injury to property of any character (except such as may be due to the provisions of the contract documents), by reason of any negligent act or omission on the part of the Contractor or the Contractor's employees or agents, or at any time due to defective work or materials, or due to his failure to reasonably or properly prosecute the work, and said responsibility shall not be released until the work shall have been completed and accepted. When and where any such damage or injury is done to public or private property on the part of the Contractor he shall restore or have restored at his own cost and expense such property to a condition similar or equal to that existing before such damage was done, by repairing or otherwise restoring as may be directed, or he shall make good such damage from injury in a manner acceptable to the Director of Public Works. In addition to the above he shall:

(1) Cause any fences upon the real estate that may be injured or destroyed to be removed and replaced.

(2) Cause any bushes, flowers, or shrubbery upon the real estate to be removed and replaced when necessary to avoid destruction or injury, covenanting only to use reasonable care to preserve the life and condition of same.

(3) Cause any excavation upon the real estate to be backfilled and graded to the original grade.

(4) Remove, insofar as reasonably possible, all debris resulting from construction, including rock.

(5) Cause the reseeding of any disturbed area.

(6) Preserve, insofar as reasonably possible and where it will not unreasonably interfere in the progress or the completion of the work, the life and condition of any tree upon the real estate.

(7) Provide at reasonable times during construction, reasonable access to the public street where any excavation upon the real estate might otherwise interfere therewith.

(8) Replace any improved walkway, drive, or retaining wall damaged or destroyed by construction.

(9) Cause all lot corner pins disturbed by his operation to be reset by a registered land surveyor and will file with the City a certificate from the surveyor that says pins have been reset, or agreement to reset such pins as may be later found to be disturbed.

In case of failure on the part of the Contractor to restore such property, or make good such damage or injury, the Director of Public Works may, upon forty-eight hours written notice under ordinary circumstances and without notice when a nuisance or hazardous condition results, proceed to repair, rebuild, or otherwise restore such property as may be determined necessary, and the cost thereof will be deducted from any monies due, or to become due, the Contractor under his contract.

It is the intention of the above paragraph that clean up shall follow immediately after and at the same rate as construction.

SHEETING, TIMBERING, OR BRACING

The Contractor shall place sheeting, timbering, or bracing, wherever necessary for the proper preserving of any excavation, embankment, or structure. Where the material is of such a character, or other conditions are such as to render it necessary, the sheeting shall be closely driven and to such depth below the lowest point of the final excavation as may be directed.

The Contractor shall be held responsible for the sufficiency of all sheeting, and proper quality, strength, placing, maintaining, or removing the same. No extra compensation will be made for sheeting and bracing whether left in place or not.

The Contractor shall, at his own expense, shore up, protect, and insure from injury, all buildings, retaining walls, viaduct piers and footings, storm sewers, sanitary sewers, gas lines, water lines, fences, curbs, trees, or other property liable to be injured during the progress of the work, and he will be held responsible for all damage which may occur by reason or prosecution of the work.

REMOVAL OF WATER

The Contractor shall furnish and operate sufficient pumps and appliances, and shall provide all materials, labor, etc., required to prevent interference with any work by water, ice or snow. Damage of any kind resulting from insufficient pumping favilities or similar lack of proper conduct of the work shall be made good by the Contractor at his own expense. No structure or pipes shall be laid in water and no water shall be allowed to run into or over any concrete work or pipe, or into or through any pipe, unless by special permission in writing by the Director of Public Works.

LEAKS OR SPRINGS

When leaks or springs are found which, in the opinion of the Director of Public Works, affecting the safety or usefulness or satisfactory operation of any of the permanent work, he may direct special provisions to be taken. Such work shall be performed without extra compensation.

BACKFILLING

Material used for backfilling at structures shall be free from perishable matter and from other material liable to become unstable when saturated with water after having been compacted. No frozen material shall be used in the backfill. Care shall be taken to avoid injury to the structures or producing unequal pressure thereon. Special precautions shall be taken in backfilling over pipes. No backfill shall be placed over any portion of pipes not inspected by the Director of Public Works and the joints have been hard set. The trenches must be filled to the height which previously existed, unless the Director of Public Works shall otherwise direct.

Whenever, in the opinion of the Director of Public Works, the material excavated from the trenches is not suitable for filling around the sewer pipe, or there is a deficiency of material, the Contractor shall, at his own expense, provide suitable material.

CONTRACTORS LIABILITY

(a) Sufficient amber lights shall be maintained on the work from sunset to sunrise to make all excavations and dangerous places safe to vehicular traffic and pedestrians. Barriers shall be kept at all times to prevent accidents. Proper provisions shall be made for taking care of traffic during construction at all street intersections. Failure of Contractor to comply with this paragraph may result in the issuance of summons and fine in Municipal Court.

(b) The Contractor shall be held responsible for any damage to person or property through any negligence of himself or his employees.

(c) The Contractor assumes full responsibility and the City in no event is to be held liable for the use of any patented materials, equipment, or method of construction.

(d) The Contractor assumes all risks as to the legality and illegality, validity and invalidity of this contract and the proceedings of the City Council in regard to this project.

(e) All sidewalks and driveways, private or public property, disturbed or damaged, shall be restored to their former condition or to the satisfaction of their owner. All drains,

culverts bridges, etc., shall be protected from damage, or rebuilt if damaged. All gutters, ditches, etc., shall be cleaned out and no waterway shall be left in an obstructed condition. All fences shall be promptly repaired.

(f) The Contractor shall be responsible for the entire work included in this contract until the same is completed, tested and accepted by the Director of Public Works, and final payment and formal release made by the City.

(g) It shall be the duty of the Contractor to notify the City Utilities, all Public Service Corporations, and individuals, to remove within ten days after notification, all poles, pipes, conduits of any kind, that may be in the way of any structure or in the line of pipe, provided the Director of Public Works deems it necessary to be so removed. The Contractor shall use proper care in fulfilling this contract to protect all pipes, poles and conduits to the best of his ability.

(h) If the Contractor shall negligently fail to place sufficient amber lights or barricades to provide proper protection to vehicles or pedestrians and the City finds it necessary to place additional barricades, the Contractor shall reimburse the City for same at the rate of $15.00 per barricade for each such occasion, or the total amount withheld from monies due the Contractor.

SANITATION

The Contractor shall provide necessary sanitary conveniences for the use of all laborers on the work, properly secluded from the public observation, built and maintained in a manner and at such points as approved by the Director of Public Works. Their use shall be strictly enforced and no nuisance shall be created on either public or private property in the vicinity of any work.

ADJUSTMENT TO SANITARY SEWERS

Any and all adjustments to sanitary sewer facilities existing at the time of construction shall be made by the City. This shall include all trunk sewer lines, district sewer lines, house laterals and all appurtenances such as manholes, lamp holes, cleanouts, wyes, tees, risers, and bends. Any adjustments, or removal and replacement, which may be required in order to carry out the normal prosecution of the work shall be performed by the City in such a manner that the sanitary sewer facility will be left in as good or better condition than existing at the initiation of this project.

Any adjustment, or removal and replacement, called for under this provision will not be recognized as a basis of claim by the Contractor for additional compensation. All such costs of adjustment, or removal and replacement, shall be a part of the construction of the items of work called for in the bid proposal and will be considered paid for when the Contractor is paid for these items of work.

REMOVAL OF DRAINAGE PIPE AND CULVERTS

The drainage structures at all driveways and private entrance, which must be removed during the normal prosecution of the work called for under this project, shall be deemed the property of the City of Bolivar. The Contractor shall use reasonable care in the removal of all drainage structures and stack them for salvage by the owner. Should the private property owner not wish to claim

said drainage structures, the City of Bolivar shall have prior rights over the Contractor to claim said drainage structures for salvage. In the event that the private property owner and the City of Bolivar both relinquish their claims to said structures, the Contractor shall have the right to salvage such structures. It will be the Contractor's responsibility to notify the owner, in writing, that said structures are available for salvage, and upon expiration of three (3) working days of such written notice the owner has not removed said drainage structures from the site of the work under this contract by the Contractor, it shall be deemed that the owner has relinquished all claim to said drainage structures, and said drainage structures may be disposed of by the Contractor.

OPENING OF TRAFFIC

The pavement shall not be opened to traffic or to construction equipment of the Contractor, until so ordered by the Director of Public Works.

CLEANING OF RIGHT-OF-WAY

Upon completion of any portion of the work, all the land and right-of-way shall be cleaned of all surplus material, earth, rubbish, etc., and left in good condition.

TIME OF COMPLETION

Unless otherwise specified in the "Special Provision", work on this contract shall be started within fourteen (14) days after the contract has been properly executed and the work shall be completed in the time set forth in the contract.

MAINTENANCE

The Contractor shall maintain all trenches for a period of one year after the completion and acceptance by the City. Said maintenance shall include backfill of settlement in trenches and all costs of labor and materials pertaining thereto.

AFFIDAVIT OF EMPLOYMENT LEGALITY

STATE OF MISSOURI)
) SS
COUNTY OF)

Before me, the undersigned authority, personally appeared _____, who, being by me duly sworn, deposed as follows:

My name is _____ and I am of sound mind, capable of making this affidavit, and personally acquainted with the facts herein stated:

I understand that as a condition for the award of any contract or grant in excess of five thousand dollars by the state, or by any political subdivision of the state, to a business entity, or for any business entity receiving a state-administered or subsidized tax credit, tax abatement, or loan from the state, the business entity shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services.

That _____ does not knowingly employ any person who is an unauthorized alien in connection with the contracted services.

_____
Authorized Signature

_____
Title

In witness whereof I have hereunto subscribed my name and affixed my official seal this _____ day of _____, 2014.

_____
Notary Public

My Commission expires _____

Missouri
Division of Labor Standards

WAGE AND HOUR SECTION

JEREMIAH W. (JAY) NIXON, Governor

Annual Wage Order No. 21

Section 084

POLK COUNTY

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by
John E. Lindsey, Director
Division of Labor Standards

This Is A True And Accurate Copy Which Was Filed With The Secretary of State: **March 10, 2014**

Last Date Objections May Be Filed: **April 9, 2014**

Prepared by Missouri Department of Labor and Industrial Relations

OCCUPATIONAL TITLE	** Date of Increase	*	Basic Hourly Rates	Over-Time Schedule	Holiday Schedule	Total Fringe Benefits
Asbestos Worker (H & F) Insulator			$21.11	FED		$2.64
Boilermaker			$32.72	57	7	$26.89
Bricklayer and Stone Mason			$27.67	24	74	$15.63
Carpenter			$23.83	61	4	$13.89
Cement Mason			$22.40	64	4	$9.10
Communication Technician			$24.15	21	48	$11.80 + 10%
Electrician (Inside Wireman)			$24.15	21	48	$11.80 + 10%
Electrician (Outside-Line Construction\Lineman)			$38.60	125	65	$5.00 + 34.5%
Lineman Operator			$36.54	125	65	$5.00 + 34.5%
Groundman			$24.95	125	65	$5.00 + 34.5%
Elevator Constructor		a	$42.340	26	54	$26.705
Glazier			$22.30	36	52	$6.06
Ironworker			$26.90	50	4	$26.40
Laborer (Building):						
General			$19.83	112	4	$11.02
First Semi-Skilled			$21.71	112	4	$11.02
Second Semi-Skilled			$20.51	112	4	$11.02
Lather			USE CARPENTER RATE			
Linoleum Layer and Cutter			$23.83	61	4	$13.89
Marble Mason			$21.15	124	74	$12.68
Marble Finisher						
Millwright			$23.83	61	4	$13.89
Operating Engineer						
Group I			$24.85	84	4	$11.93
Group II			$23.26	84	4	$11.93
Group III			$22.55	84	4	$11.93
Group III-A			$23.26	84	4	$11.93
Group IV						
Group V			$14.91	84	4	$11.93
Painter			$20.45	7	14	$11.78
Pile Driver			$23.83	61	4	$13.89
Pipe Fitter			$28.00	19	1	$14.22
Plasterer			$22.54	64	4	$9.30
Plumber			$28.00	19	1	$14.22
Roofer \ Waterproofer			$22.00	10	2	$9.13
Sheet Metal Worker			$27.76	4	24	$13.01
Sprinkler Fitter - Fire Protection			$31.13	33	19	$18.90
Terrazzo Worker			$28.15	124	74	$14.32
Terrazzo Finisher						
Tile Setter			$21.15	124	74	$12.68
Tile Finisher						
Traffic Control Service Driver			$16.35	48	49	$2.75
Truck Driver-Teamster						
Group I			$19.45	98	4	$4.72
Group II						
Group III			$19.45	98	4	$4.72
Group IV			$19.45	98	4	$4.72

Fringe Benefit Percentage is of the Basic Hourly Rate

Attention Workers: If you are not being paid the appropriate wage rate and fringe benefits contact the Division of Labor Standards at (573) 751-3403.

OCCUPATIONAL TITLE	** Date of Increase	Basic Hourly Rates	Over-Time Schedule	Holiday Schedule	Total Fringe Benefits

* Welders receive rate prescribed for the occupational title performing operation to which welding is incidental.

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

a - Vacation: Employees over 5 years - 8%, under 5 years - 6%

POLK COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE

FED: Minimum requirement per Fair Labor Standards Act means time and one-half (1 ½) shall be paid for all work in excess of forty (40) hours per work week.

NO. 4: Means the regular working day shall consist of eight (8) hours labor on the job between six (6) a.m. and six-thirty (6:30) p.m. and the regular working week shall consist of five (5) consecutive eight (8) hour days beginning with Monday and ending with Friday of each week. All full time or part time labor performed during such hours shall be recognized as regular working hours and paid for at the regular hourly rate. All work performed outside the regular working hours and performed during the regular work week and Saturday work, shall be paid at one & one-half (1½) times the regular rate. All recognized holidays or days locally observed as such, and Sundays shall be paid at the double (2) time rate of pay. Also, there may be a 40-hour work week which would consist of ten (10) hours each day for Monday, Tuesday, Wednesday, Thursday or Friday.

NO. 7: Means work between the hours of 7:00 a.m. and 6:00 p.m. daily, Monday through Saturday, as assigned by the Employer shall be considered regular hours. Weekend work shall be paid at the rate of one and one-half (1 ½) times the regular rate of pay. Weekend begins 12:01a.m. Saturday. Overtime is time worked over forty (40) hours per pay period, and shall be paid at the rate of one and one-half (1½) times the regular rate of pay. Sunday and Holidays will be paid at the rate of two (2) times the regular rate of pay.

NO. 10: Means the regular working day shall be scheduled to consist of at least eight (8) hours but no more than ten (10) consecutive hours, exclusive of the lunch period, unless otherwise provided. Crews shall be scheduled to commence at any time between the hours of 5:00 a.m. and 10:00 a.m. or earlier if agreed on by the majority of any one crew. Except as specifically provided for Saturdays, Sundays and holidays, all work performed by Employees anywhere in excess of forty (40) hours in one (1) work week, or in excess of ten (10) hours in one work day shall be paid at the rate of one and one-half (1½) times the regular hourly wage scale. Any work performed on a Saturday shall be paid at the rate of one and one-half (1½) times the regular hourly wage scale unless such Saturday work falls under the category of Saturday make Up Day. When this Saturday Make Up Day does occur, the Employee may work on Saturday at straight time; provided, however, if during the period worked by said Employee on Saturday, the Employee's compensable time at the straight time rate exceeds forty (40) hours, all time worked in excess of the forty (40) hours will be paid at the rate of one and one-half (1½) time the regular hourly wage scale. The provision of this Saturday Make Up Day shall not apply to any weeks in which a designated holiday is recognized. Any work performed by Employees anywhere on Sunday or holidays shall be paid at the rate of double (2) time the regular wage scale.

NO. 19: On single shift operation, eight (8) hours of work, between 8:00 a.m. and 4:30 p.m., shall constitute a day's work. Forty (40) hours of work Monday through Friday shall constitute a workweek. The starting time may be changed to begin between the hours of six (6:00) and ten (10:00) a.m. The first two (2) hours performed in excess of an eight (8) hour workday Monday through Friday, and the first ten (10) hours on Saturday, shall be paid at time and one-half (1.5) the basic straight–time rate. All work performed on Sundays and holidays, and in excess of ten (10) hours a day shall be paid at double (2) the basic straight time rate of pay. When hours worked are outside of established work hours, the pay rate shall be one and one-half (1.5) times the regular rate of pay for the first ten (10) hours, and all hours in excess of ten (10) hours shall be at the double-time rate. Shift work of either one (1) eight hour night shift, or two (2) eight (8) hour night shifts on a job which will continue for at least one (1) week, all employees shall be paid eighteen and one-half percent (18.5%) over the straight-time hourly rate on the night shifts. All hours worked in excess of eight (8) in a shift shall be paid at the applicable overtime rate of pay. The normal workweek may be changed to four (4) ten (10) hour days or four (4) ten (10) hour nights, if on shift work, with the following provisions: Monday through Thursday would be the normal workweek with Friday being used as scheduled workday in case of a day being lost due to weather, all employees working night shift, on a job that will continue at least one (1) week, shall be paid thirty percent (30%) over the regular straight-time hourly rate of pay, and any hours worked before or after established starting and quitting times being paid at double (2) time hourly rates of pay.

POLK COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE

NO. 21: Means eight (8) hours of work between the hours of 8:00 a.m. and 4:30 p.m. shall constitute a work day. Forty (40) hours within five (5) days, Monday through Friday, shall constitute a work week. The regular starting time of a job may be moved not more than two (2) hours prior to 8:00 a.m. However, in no case shall more than eight (8) hours be worked per day without the applicable overtime rate being paid. When job conditions dictate, the Employer shall be allowed to establish a four (4) day, ten (10) hours per day work week. This work week is defined as Monday through Thursday or Tuesday through Friday. All hours worked in excess of ten (10) hours per day or forty (40) hours per week shall be paid at the applicable overtime rate. This language is not intended to change the normal five (5) day, eight (8) hour per day work week. All overtime work performed after the regularly scheduled working hours Monday through Friday and Saturday shall be paid for at time and one-half (1½) the regular straight time rate of pay. Sundays and recognized holidays shall be paid for at two (2) times the straight time rate of pay. Shift work performed between the hours of 4:30 p.m. and 1:00 a.m. (second shift) shall receive eight (8) hours pay at the regular hourly rate of pay plus 17.3% for all hours worked. Shift work performed between the hours of 12:30 a.m. and 9:00 a.m. (third shift) shall receive eight (8) hours pay at the regular hourly rate of pay plus 31.4% for all hours worked. An unpaid lunch period of thirty (30) minutes shall be allowed on each shift. All overtime work required before the established start time and after the completion of eight (8) hours of any shift shall be paid at one and one-half (1½) times the shift hourly rate.

NO. 24: Means eight (8) hours shall constitute a day's work on all classes of work between the hours of 6:00 a.m. and 5:30 p.m., Monday through Friday. The pay for time worked during these hours shall be at the regular wage rate. The regular workweek shall be Monday through Friday. A workweek of four (4), ten (10) hour days may be established on a per job basis. Saturday may be used for a make-up day, when working 5-8's, Friday when working 4-10's. All time worked before and after the established workday of eight (8) hours, Monday through Friday, and all time worked on Saturday shall be paid for at the rate of time and one-half (1½) except after eight (8) hours worked, then double (2) time will apply. All time worked on Sundays and the recognized holidays shall be paid at the rate of double (2) time.

NO. 26: Means that the regular working day shall consist of eight (8) hours worked between 6:00 a.m., and 5:00 p.m., five (5) days per week, Monday to Friday, inclusive. Hours of work at each jobsite shall be those established by the general contractor and worked by the majority of trades. (The above working hours may be changed by mutual agreement). Work performed on Construction Work on Saturdays, Sundays and before and after the regular working day on Monday to Friday, inclusive, shall be classified as overtime, and paid for at double (2) the rate of single time. The employer may establish hours worked on a jobsite for a four (4) ten (10) hour day work week at straight time pay for construction work; the regular working day shall consist of ten (10) hours worked consecutively, between 6:00 a.m. and 6:00 p.m., four (4) days per week, Monday to Thursday, inclusive. Any work performed on Friday, Saturday, Sunday and holidays, and before and after the regular working day on Monday to Thursday where a four (4) ten (10) hour day workweek has been established, will be paid at two times (2) the single time rate of pay. The rate of pay for all work performed on holidays shall be at two times (2) the single time rate of pay.

NO. 33: Means the standard work day and week shall be eight (8) consecutive hours of work between the hours of 6:00 a.m. and 6:00 p.m., excluding the lunch period Monday through Friday, or shall conform to the practice on the job site. Four (4) days at ten (10) hours a day may be worked at straight time, Monday through Friday and need not be consecutive. All overtime, except for Sundays and holidays shall be at the rate of time and one-half (1½). Overtime worked on Sundays and holidays shall be at double (2) time.

NO. 36: Means eight (8) hours shall constitute a work day, Monday through Friday between the hours of 6:00 a.m. and 6:00 p.m. Saturday can be used as a makeup day if time is lost due to weather. All hours in excess of the regular forty (40) hour work week or eight (8) hours per day shall be considered overtime and shall be paid for at the rate of one and one-half (1½) times the regular rate. Employees will be paid at the rate of one and one-half (1½) times their regular rate for work performed on Saturdays. Sundays and holidays worked are to be paid at double (2) the regular hourly rate. Four (4) ten-hour days, at the option of the Employer, shall be the standard work week, consisting of a consecutive ten-hour period, Monday through Thursday or Tuesday through Friday, between the hours of 6:00 a.m. and 6:00 p.m. Forty (40) hours per week shall constitute a week's work.

POLK COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE

NO. 48: Means the regularly scheduled work week shall be five (5) consecutive days, Monday through Friday or Tuesday through Saturday. Eight (8) hours shall constitute a day's work. Starting time shall not be earlier than 7:00 a.m. nor later than 10:00 a.m. Forty (40) hours shall constitute a week's work. Overtime at the rate of time and one-half (1½) will be paid for all work in excess of forty (40) hours in any one work week. On the Monday through Friday schedule, all work performed on Saturday will be time and one-half (1½) unless time has been lost during the week, in which case Saturday will be a make up day to the extent of the lost time. On the Tuesday through Saturday schedule, all work performed on Monday will be time and one-half (1½) unless time has been lost during the week, in which case Monday will be a make-up day to the extent of the lost time. Any work performed on Sunday will be double (2) time. If employees work on any of the recognized holidays, they shall be paid time and one-half (1½) their regular rate of pay for all hours worked.

NO. 50: Means eight (8) hours constitute a normal day's work Monday through Friday. Any time worked over eight (8) hours will normally be paid at time and one-half (1½) except for exclusions stated in some following additional sentences. The Employer, at his discretion, may start the work day between 6:00 a.m. and 9:00 a.m. Any schedule chosen shall be started at the beginning of the work week (Monday) and used for at least five days. Work may be scheduled on a four (4) days a week (Monday through Thursday) at ten (10) hours a day schedule. If such a schedule is employed, then Friday may be used as a make-up day when time is lost due to inclement weather. Time and one-half (1½) shall be paid for any work in excess of eight (8) hours in any regular work day Monday through Friday unless working 4-10's, then time and one-half (1½) after ten (10) hours. All work performed on Saturday will be time and one-half (1½). Double (2) time shall be paid for all work on Sundays and recognized holidays.

NO 56: Means the regular work day shall consist of eight (8) hours between 8:00 a.m. and 4:30 p.m. An optional four day work week may be utilized with the ten (10) hour clause, days Monday through Thursday or Tuesday through Friday. Work hours shall be from 7:00 a.m. to 5:30 p.m. any work performed on Monday or Friday outside the regular scheduled four (4) days shall be at one and one half (1 ½) the regular rate of pay. Work performed outside of the regular work day, and on Saturdays shall be paid at one and one half (1 ½) the regular rate of pay. Sundays and holidays shall be paid at double (2) time the regular rate of pay.

NO. 57: Means eight (8) hours per day shall constitute a day's work and forty (40) hours per week, Monday through Friday, shall constitute a week's work. The regular starting time shall be 8:00 a.m. If a second or third shift is used, the regular starting time of the second shift shall be 4:30 p.m. and the regular starting period for the third shift shall be 12:30 a.m. These times may be adjusted by the employer. The day shift shall work a regular eight (8) hours shift as outlined above. Employees working a second shift shall receive an additional $0.25 above the regular hourly rate and perform seven and one-half (7½) hours work for eight (8) hours pay. Third shift employees shall be paid an additional $0.50 above the regular hourly rate and work seven (7) hours for eight (8) hours pay. When circumstances warrant, the Employer may change the regular workweek to four (4) ten-hour days at the regular time rate of pay. All time worked before and after the established workday of eight (8) hours, Monday through Friday, and all time worked on Saturday shall be paid at the rate of time and one-half (1½) except in cases where work is part of an employee's regular Friday shift. All time worked on Sunday and recognized holidays shall be paid at the double (2) time rate of pay except in cases where work is part of an employee's previous day's shift. For all overtime hours worked $25.65 of the fringe benefits portion of the prevailing wage shall be paid at the same overtime rate at which the cash portion of the prevailing wage is to be paid. The remaining $1.24 of the fringe benefit portion of the prevailing wage may be paid at straight time.

NO. 61: Means except as herein provided, eight (8) hours a day, 8:00 a.m. to 4:30 p.m., shall constitute a standard work day, and forty (40) hours per week shall constitute a week's work. The regular workday starting time of 8:00 a.m. (and resulting quitting time of 4:30 p.m.) may be moved forward to 6:00 a.m. or delayed one (1) hour to 9:00 a.m. All time worked outside of the standard work day and on Saturday shall be classified as overtime and paid the rate of time and one-half (1½). All time worked on Sunday and holidays shall be classified as overtime and paid at the rate of double (2) time. The Employer has the option of working either five (5) eight-hour days or four (4) ten-hour days to constitute a normal forty (40) hour work week. When the four (4) day ten hour work week is in effect, the standard work week shall consist of forty (40) hours, Monday through Friday, which will consist of any four (4) consecutive ten-hour four days within the five (5) day period. In the event the job is down for any reason beyond the control of the Employer, then Friday and/or Saturday may, at the option of the Employer, be worked as a make-up day, straight time not to exceed ten (10) hours per day, or forty (40) hours per week. When the five (5) day eight-hour work week is in effect, forty (40) hours per week shall constitute a week's work (normal work week being Monday through Friday). In the event the job is down for any reason beyond the control of the Employer, then Saturday may, at the option of the Employer, be worked as a make-up day, at straight time not to exceed eight (8) hours for that day, or forty (40) hours per week. A make-up day is not to be used to make up time lost due to recognized holidays.

POLK COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE

NO. 64: Means eight (8) hours shall constitute a day's work beginning at 8:00 a.m. and ending at 4:30 p.m. Forty (40) hours shall constitute a week's work, Sunday through Saturday. In the event time is lost due to weather or conditions beyond the control of the Employer, the Employer may schedule work on Saturday at straight time. All work over eight (8) hours in one day, forty (40) hours in one week, or on Saturday (except as herein provided) shall be classified as overtime and be paid at the rate of time and one-half (1½). All work on Sunday or recognized holidays shall be classified as overtime and be paid at the rate of double (2) time. When the four (4) day ten-hour work week is in effect, the standard work day shall be consecutive ten (10) hour periods. Forty (40) hours per week shall constitute a week's work Sunday through Saturday inclusive. In the event the job is down for reasons beyond the contractors control, then Friday and/or Saturday may, at the option of the Employer be worked as a make-up day, straight time not to exceed ten (10) hours per day or forty (40) hours per week.

NO. 84: The regular working starting time of 8:00 a.m. (and resulting quitting time of 4:30 p.m.) may be moved forward to 6:00 a.m. or delayed one (1) hour to 9:00 a.m. Except as provided in this Article, eight (8) hours a day shall constitute a standard work day and forty (40) hours per week shall constitute a weeks' work, which shall begin on Sunday and end on Saturday. All time worked outside of the standard work day and on Saturday shall be classified as overtime and paid at the rate of time & one-half (1½) (except as herein provided). All time worked on Sunday and recognized holidays shall be classified as overtime and paid at the rate of double (2) time. The Employer has the option of working either five (5) eight-hour days or four (4) ten-hour days to constitute a normal forty (40) hour work week. When the four (4) ten-hour work week is in effect, the standard work day shall be consecutive ten (10) hour periods, exclusive of the lunch period, beginning at 6:30 a.m. and forty (40) hours per week shall constitute a week's work, Monday through Thursday, inclusive. In the event the job is down for any reason beyond the Employer's control, then Friday and/or Saturday may, at the option of the Employer, be worked as a make-up day, straight time not to exceed ten (10) hours or forty (40) hours per week. When the five (5) eight-hour work week is in effect, forty (40) hours per week shall constitute a week's work, Monday through Friday, inclusive. In the event the job is down for any reason beyond the Employer's control, then Saturday may, at the option of the Employer, be worked as a make-up day, straight time not to exceed eight (8) hours or forty (40) hours per week.

NO. 98: Means eight (8) hours a day shall constitute a standard work day, and forty (40) hours per week shall constitute a week's work which shall begin on Sunday and end on Saturday. All time worked outside of the standard work day and on Saturday shall be classified as overtime and paid the rate of time and one-half (1½) (except as herein provided). All time worked on Sunday and recognized holidays shall be classified as overtime and paid at the rate of double (2) time. The Employer has the option of working either five (5) eight-hour days or four (4) ten-hour days to constitute a normal forty (40) hour work week. When the four (4) ten-hour work week is in effect, the standard work day shall be consecutive ten (10) hour periods between the hours of 5:30 and 6:30 a.m. and 6:30 p.m. Forty (40) hours per week shall constitute a week's work, Monday through Thursday, inclusive. In the event the job is down for any reason beyond the Employer's control, then Friday and/or Saturday may, at the option of the Employer, be worked as a make-up day; straight time not to exceed ten (10) hours per day or forty (40) hours per week. When the five (5) day eight (8) hours work week is in effect forty (40) hours per week shall constitute a week's work, Monday through Friday, inclusive. In the event the job is down for any reason beyond the Employer's control, then Saturday may, at the option of the Employer, be worked as a make-up day; straight time not to exceed eight (8) hours per day or forty (40) hours per week. When the five (5) day eight (8) hour work week is in effect, starting time shall be between 7:00 a.m. and 8:00 a.m. All time worked before 7:00 a.m. shall be paid for at the rate of time and one-half (1½). All work performed on Saturday up to 6:00 p.m. (except as herein provided) shall be compensated for at the rate of time and one-half (1½). All time worked from 6:00 p.m. Saturday to 7:00 a.m. Monday will be paid for at the rate of double (2) time.

NO. 112: Means the regular starting time of 8:00 a.m. (and resulting quitting time of 4:30 p.m.) may be moved forward to 6:00 a.m. or delayed one (1) hour to 9:00 a.m. Except as provided for, eight (8) hours a day shall constitute a standard work day, and forty (40) hours per week shall constitute a week's work, which shall begin on Sunday and end on Saturday. All time worked outside of the standard work day and on Saturday shall be classified as overtime and paid the rate of time and one-half (1½) (except as herein provided). All time worked on Sunday and recognized holidays shall be classified as overtime and paid at the rate of double (2) time. The Employer has the option of working either five (5) eight (8) hour days or four (4) ten (10) hour days to constitute a normal forty (40) hour work week. When the four (4) ten-hour work week is in effect, the standard work day shall be consecutive ten hour periods between the hours of 6:30 a.m. and 6:30 p.m. Forty (40) hours per week shall constitute a week's work, Monday through Thursday, inclusive. In the event the job is down for any reason beyond the Employer's control, then Friday and/or Saturday may, at the option of the Employer, be worked as a make-up day; straight time not to exceed eight (8) hours or forty (40) hours per week.

POLK COUNTY
BUILDING CONSTRUCTION OVERTIME SCHEDULE

NO. 123: Means except as provided, eight (8) hours a day (8:00 A.M. to 4:30 P.M.) shall constitute a standard work day, excluding the 30-minute lunch period, and forty (40) hours per week shall constitute a week's work. All time worked outside of the standard work day and on Saturday shall be classified as overtime and paid the rate of time and one-half (except as herein provided). All time worked on Sunday and herein named holidays shall be classified as overtime and paid at the rate of double time. The Employer has the option of working either five (5) eight-hour days or four (4) ten-hour days to constitute a normal forty (40) hour work week. When the four (4) day ten-hour work week is in effect, the standard work week shall consist of forty (40) hours, Monday through Friday, which will consist of any four (4) consecutive ten (10) hour days within the five day period. In the event the job is down for any reason beyond the control of the Employer, then Friday and/or Saturday may, at the option of the Employer, be worked as a make-up day, straight time not to exceed ten (10) hours or forty (40) hours per week. Starting time will be designated by the Employer. When the five (5) day eight (8) hour work week is in effect forty (40) hours per week will constitute a week's work (normal work week being Monday through Friday). In the event the job is down for any reason beyond the control of the Employer, then Saturday may, at the option of the Employer, be worked as a make-up day; at straight time not to exceed eight (8) hours or forty (40) hours per week.

NO. 124: Means eight (8) hours shall constitute a day's work on all classes of work between the hours of 6:00 a.m. and 5:30 p.m., Monday through Friday. The pay for time worked during these hours shall be at the regular wage rate. The regular workweek shall be Monday through Friday. Employment from 4:30 p.m. to 12:00 midnight, Monday through Friday, shall be paid for at one and one-half (1½) times the regular hourly rate. From 12:00 midnight until 8:00 a.m. on any day shall be paid for at twice the regular hourly rate. All time worked on Sundays and the recognized holidays shall be paid at the rate of double (2) time. It is understood that forty (40) hours shall constitute a regular workweek, (5-8's) Sunday Midnight through Friday Midnight, understanding anything over eight (8) hours is one and one-half (1½) times the hourly wage rate.

NO. 125: Eight (8) hours of work between the hours of 8:00 a.m. and 4:30 p.m. shall constitute a work day. Forty (40) hours within the five (5) days, Monday through Friday inclusive, shall constitute the work week. Starting time may be adjusted not to exceed two (2) hours. Work performed outside of the aforementioned will be paid at the applicable overtime rate. When starting time has been adjusted, all other provisions concerning the work day shall be adjusted accordingly. The overtime rate of pay shall be one and one-half (1½) times the regular rate of wages, other than on Sundays, holidays and from Midnight until 6:00 a.m., which will be paid at double (2) the straight time rate.

POLK COUNTY
HOLIDAY SCHEDULE – BUILDING CONSTRUCTION

NO. 1: All work done on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day shall be paid at the rate of double time. When one of the above holidays falls on Sunday, the following Monday shall be observed. When one of the above holidays falls on Saturday the preceding Friday shall be observed.

NO. 2: All work performed on New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day, or the days observed as such, shall be paid at the double time rate of pay.

NO. 4: All work done on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas Day shall be paid at the double time rate of pay. If any of the above holidays fall on Sunday, Monday will be observed as the recognized holiday. If any of the above holidays fall on Saturday, Friday will be observed as the recognized holiday.

NO. 7: The following days are assigned days and are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. If a holiday falls on a Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This is applied to protect Labor Day. When a holiday falls during the normal workweek, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week. However, no reimbursement for these eight (8) hours is to be paid to the workman unless worked. If workman are required to work the above enumerated holidays or days observed as such, or on Sunday, they shall receive double (2) the regular rate of pay for such work.

NO. 14: The following days are recognized Holidays: Memorial Day, Fourth of July, Thanksgiving Day, Christmas Day, and New Year’s Day. No work shall be done on Labor Day. When falling on a Sunday and the following Monday is observed as part of the holiday, then that Monday shall be considered a holiday. Sunday and Holidays will be paid at the rate of two (2) times the regular rate of pay.

NO. 19: All work done on New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day shall be paid at the double time rate of pay. The employee may take off Friday following Thanksgiving Day. However, the employee shall notify his or her Foreman, General Foreman or Superintendent on the Wednesday preceding Thanksgiving Day. When one of the above holidays falls on Sunday, the following Monday shall be considered a holiday and all work performed on either day shall be at the double (2) time rate. When one of the holidays falls on Saturday, the preceding Friday shall be considered a holiday and all work performed on either day shall be at the double (2) time rate.

NO. 24: All work done on Christmas Day, Thanksgiving Day, New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Presidential Election Day or days locally observed as such, and Sunday shall be recognized as holidays and paid at the double time rate of pay.

NO. 28: All work done on New Year's Day, Veteran's Day, Memorial Day, Independence Day, Thanksgiving Day and Christmas Day shall be paid at the double time rate of pay. No work shall be performed on Labor Day except when triple (3) time is paid. When a holiday falls on Sunday, the following Monday shall be observed as the holiday.

NO. 48: All work performed on New Year’s Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day shall be paid for at double (2) the straight-time rate of pay. Any one of the above-listed holidays falling on Sunday shall be observed on the following Monday and paid for at double (2) the straight-time rate of pay. Any of the above holidays falling on Saturday shall be observed on the previous Friday and paid at double (2) the straight-time rate of pay. Employees working on the Saturday will receive the standard pay for Saturday work.

NO. 49: The following days shall be observed as legal holidays: New Year's Day, Decoration Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day, Employee's birthday and two (2) personal days. The observance of one (1) of the personal days to be limited to the time between December 1 and March 1 of the following year. If any of these holidays fall on Sunday, the following Monday will be observed as the holiday and if any of these holidays fall on Saturday, the preceding Friday will be observed as the holiday. If employees work on any of these holidays they shall be paid time & one-half (1½) their regular rate of pay for all hours worked.

NO. 52: All work performed on Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day shall receive the double (2) time rate of pay.

NO. 54: All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day shall be paid at the double (2) time rate of pay. When a holiday falls on Saturday, it shall be observed on Friday. When a holiday falls on Sunday, it shall be observed on Monday.

NO. 65: Work performed on New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day, or days celebrated as such, shall be paid at the double time rate of pay. If the holiday falls on Saturday, it will be observed on Friday; if the holiday falls on Sunday, it will be observed on Monday, and shall be paid for at double (2) the regular straight time rate of pay.

NO. 74: All work performed on New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day, shall be paid at double (2) time of the hourly rate of pay. In the event one of the above holiday's falls on Saturday, the holiday shall be celebrated on Saturday. If the holiday falls on Sunday, the holiday will be celebrated on Monday.

NO. 78: The following days shall be recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas. If any of the above holidays fall on Sunday, Monday will be observed as the legal holiday. If any of the above holidays fall on Saturday, Friday will be observed as the legal holiday. All time worked on Sunday and herein named holidays shall be classified as overtime and paid at the rate of double time.

OCCUPATIONAL TITLE	* Date of Increase	Basic Hourly Rates	Over-Time Schedule	Holiday Schedule	Total Fringe Benefits
Carpenter		$28.22	7	16	$14.25
Electrician (Outside-Line Construction\Lineman)		$38.60	18	24	$5.00 + 34.5%
Lineman Operator		$36.54	18	24	$5.00 + 34.5%
Lineman - Tree Trimmer		$20.90	31	30	$6.01 + 23.5%
Groundman		$24.95	18	24	$5.00 + 34.5%
Groundman - Tree Trimmer		$16.90	31	30	$6.01 + 23.5%
Laborer					
General Laborer		$22.77	4	18	$11.56
Skilled Laborer		$23.32	4	18	$11.56
Millwright		$28.22	7	16	$14.25
Operating Engineer					
Group I		$28.53	5	15	$12.49
Group II		$28.18	5	15	$12.49
Group III		$27.98	5	15	$12.49
Group IV		$25.93	5	15	$12.49
Oiler-Driver		$25.93	5	15	$12.49
Pile Driver		$28.22	7	16	$14.25
Traffic Control Service Driver		$16.35	29	28	$2.75
Truck Driver-Teamster					
Group I		$27.22	12	3	$10.90
Group II		$27.38	12	3	$10.90
Group III		$27.37	12	3	$10.90
Group IV		$27.49	12	3	$10.90

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate sheet.

POLK COUNTY
OVERTIME SCHEDULE - HEAVY CONSTRUCTION

FED: Minimum requirement per Fair Labor Standards Act means time and one-half (1 ½) shall be paid for all work in excess of forty (40) hours per work week.

NO. 4: Means a regular work week shall consist of not more than forty (40) hours of work, Monday through Saturday, and all work performed over and above ten (10) hours per day and forty (40) hours per week shall be paid at the rate of time & one-half (1½). Workers shall receive time and one-half (1½) for all work performed on Sundays and holidays. A work day is to begin between 6:00 a.m. and 9:00 a.m. at the option of the Employer except when inclement weather or other conditions beyond the reasonable control of the Employer prevent work, in which event, the starting time may be delayed, but not later then 12:00 noon. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward a forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid to the worker(s) unless worked.

NO. 5: Means a regular work week shall consist of not more that forty (40) hours work, Monday through Saturday, and all work performed over and above ten (10) hours per day and forty (40) hours per week shall be paid at the rate of time & one-half (1½). Workmen shall receive time and one-half (1½) for all work performed on Sundays and recognized holidays or days observed as such. Double (2) time shall be paid for work on Sunday or recognized holidays when and only if any other craft employees of the same employer at work on that same job site are receiving double (2) time pay for that Sunday or holiday. If a job can't work forty (40) hours, Monday through Saturday, because of inclement weather or other conditions beyond the control of the Employer, Friday and Saturday may be worked as make up days at straight time (if working 4-10's). Saturday may be worked as a make up day at straight time (if working 5-8's). Make up days shall not be utilized for days lost to holidays. A work day is to begin between 6:00 a.m. and 9:00 a.m. at the option of the Employer except when inclement weather or other conditions beyond the reasonable control of the Employer, including requirements of the owner, prevent work. In such event the starting time may be delayed but not later than 12:00 noon. Where one of the holidays falls or is observed during the work week, then all work performed over and above thirty-two (32) hours shall be paid at time & one-half (1½).

NO. 7: Means the regular work week shall start on Monday and end on Friday, except where the Employer elects to work Monday through Thursday, ten (10) hours per day. All work over ten (10) hours in a day or forty (40) hours in a week shall be at the overtime rate of one and one-half (1½) times the regular hourly rate. The regular work day shall be either eight (8) or ten (10) hours. If a job can't work forty (40) hours Monday through Friday because of inclement weather or other conditions beyond the control of the Employer, Friday or Saturday may be worked as a make-up day at straight time (if working 4-10's). Saturday may be worked as a make-up day at straight time (if working 5-8's). Make-up days shall not be utilized for days lost due to holidays. A workday is to begin at the option of the Employer but not later than 11:00 a.m. except when inclement weather, requirements of the owner or other conditions beyond the reasonable control of the Employer prevent work. Except as worked as a make-up day, time on Saturday shall be worked at one and one-half (1½) times the regular rate. Work performed on Sunday shall be paid at two (2) times the regular rate. Work performed on recognized holidays or days observed as such, shall also be paid at the double (2) time rate of pay.

NO. 12: Means a regular work week shall consist of not more than forty (40) hours of work and all work performed over and above ten (10) hours per day and forty (40) hours per week shall be paid at the rate of time & one-half (1½). A workday is to begin between 6:00 a.m. and 9:00 a.m. at the option of the Employer except when inclement weather or other conditions beyond the reasonable control of the Employer, in which event, the starting time may be advanced or delayed. Workers shall receive time and one-half (1½) for all work performed on recognized holidays or days observed as such.

NO: 18: Eight (8) hours of work between the hours of 8:00 a.m. and 4:30 p.m. shall constitute a work day. Forty (40) hours within the five (5) days, Monday through Friday inclusive, shall constitute the work week. Starting time may be adjusted not to exceed two (2) hours. Work performed outside of the aforementioned will be paid at the applicable overtime rate. When starting time has been adjusted, all other provisions concerning the work day shall be adjusted accordingly. The overtime rate of pay shall be one and one-half (1½) times the regular rate of wages, other than on Sundays, holidays and from Midnight until 6:00 a.m., which will be paid at double (2) the straight time rate.

POLK COUNTY
OVERTIME SCHEDULE - HEAVY CONSTRUCTION

NO. 29: Means the regularly scheduled work week shall be five (5) consecutive days, Monday through Friday or Tuesday through Saturday. Eight (8) hours shall constitute a day's work. Starting time shall not be earlier than 7:00 a.m. nor later than 10:00 a.m. Forty (40) hours shall constitute a week's work. Overtime at the rate of time and one-half (1½) will be paid for all work in excess of forty (40) hours in any one work week. On the Monday through Friday schedule, all work performed on Saturday will be time and one-half (1½) unless time has been lost during the week, in which case Saturday will be a make up day to the extent of the lost time. On the Tuesday through Saturday schedule, all work performed on Monday will be time and one-half (1½) unless time has been lost during the week, in which case Monday will be a make-up day to the extent of the lost time. Any work performed on Sunday will be double (2) time. If employees work on any of the recognized holidays, they shall be paid time and one-half (1½) their regular rate of pay for all hours worked.

NO. 31: Means the overtime rate shall be time and one-half the regular rate for work over forty (40) hours per week. Sundays and Holidays shall be paid at double the straight time rate. All employees performing work on affected properties during or following emergencies shall receive the applicable rate of pay for the first sixteen (16) consecutive hours and all hours worked in excess of sixteen (16) consecutive hours shall be paid at double time until broken by an eight (8) hour rest period. Should an employee be called back to work within two hours of his normal quitting time, the previous hours worked shall count toward the above sixteen (16) hour provision.

POLK COUNTY
HOLIDAY SCHEDULE – HEAVY CONSTRUCTION

NO. 3: The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid to the workmen unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make up day when an observed holiday occurs during the work week. Employees have the option to work that make up day**.** If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive time & one-half (1½) the regular rate of pay for such work.

NO. 15: The following days are recognized as holidays: New Year's Day, Memorial Day, July Fourth, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on Sunday, it shall be observed on the following Monday. If a holiday falls on Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. If workmen are required to work the above enumerated holidays or days observed as such, they shall receive time and one-half (1½) the regular rate of pay for such work. Where one of the holidays specified falls or is observed during the workweek, then all work performed over and above thirty-two (32) hours in that week shall be paid at the rate of time and one-half (1½). Workmen shall receive time and one-half (1 ½) for all work performed on Sundays. Double (2) time shall be paid for work on Sunday or recognized holidays when and only if any other craft employees of the same employer at work on that same job site are receiving double (2) time for that Sunday or holiday.

NO. 16: The following days are recognized as holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on Sunday, it shall be observed on the following Monday. If a holiday falls on Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid to the worker unless worked. If workers are required to work the above recognized holidays or days observed as such, they shall receive double (2) the regular rate of pay for such work.

NO. 18: All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day shall be paid at the time and one-half (1½) rate of pay. If a holiday falls on Sunday, it shall be observed on the following Monday. If a holiday falls on Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward a forty (40) hour week; however no reimbursement for this eight (8) hours is to be paid to the working person(s) unless the holiday is worked.

NO. 24: Work performed on New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day, or days celebrated as such, shall be paid at the double time rate of pay. If the holiday falls on Saturday, it will be observed on Friday; if the holiday falls on Sunday, it will be observed on Monday, and shall be paid for at double (2) the regular straight time rate of pay.

NO. 28: The following days shall be observed as legal holidays: New Year's Day, Decoration Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day, Employee's birthday and two (2) personal days. The observance of one (1) of the personal days to be limited to the time between December 1 and March 1 of the following year. If any of these holidays fall on Sunday, the following Monday will be observed as the holiday and if any of these holidays fall on Saturday, the preceding Friday will be observed as the holiday. If employees work on any of these holidays they shall be paid time & one-half (1½) their regular rate of pay for all hours worked.

NO. 30: All work performed on New Year's Day, Decoration Day, Fourth of July, Labor Day, Christmas Day, Thanksgiving Day and Day after Thanksgiving or days celebrated for the same.

PROJECT TAX EXEMPTION CERTIFICATE

(Missouri Sales Tax)

For

Bolivar Sewer Rehabilitation Cure In Place Pipe

Bolivar, Missouri

EXEMPT ENTITY NAME AND ADDRESS:

City of Bolivar, Missouri
PO Box 9, 1506 W. Broadway
Bolivar, MO 65613

EXEMPT ENTITY TAX IDENTIFICATION NUMBER: 12486973

PROJECT IDENTIFICATION NUMBER: None

PROJECT LOCATION AND DESCRIPTION: Within the City Limits of Bolivar

CONTRACT DATE: _____

ESTIMATED COMPLETION DATE: _____

CERTIFICATE EXPIRATION: _____

Contractors and sub-contractors shall present this certificate along with the City's exemption document, to suppliers to purchase, on behalf of the City of Bolivar, tangible personal property and materials to be incorporated into the above named project only, on a tax-exempt basis. This certificate does not allow tax-exempt purchase of machinery, equipment or tools.

Suppliers accepting this project exemption certificate are required to render to the Contractor invoices billable to the Contractor and bearing the name of the exempt entity (City of Bolivar).

The purchasing Contractor shall retain all invoices for a period of five years and shall be subject to audit by the Missouri Director of Revenue.

SIGNATURE OF AUTHORIZED AGENT OF EXEMPT ENTITY

_____

Natalie Scrivner,
City Clerk, City of Bolivar

Section 02513

SEWER REHABILITATION – CURED-IN-PLACE PIPE (CIPP)

Approximately 5,832 feet of 8 inch Clay Pipe

PART 1 - GENERAL

1.01 SCOPE

A. This section covers the materials, labor and equipment required to rehabilitate existing active sanitary sewers that are partially deteriorated as defined by ASTM 1216 or ASTM 1743 by installation of a cured in place pipe (CIPP) consisting of a resin-impregnated flexible tube coated on one side with an impermeable plastic that tightly fits the existing pipe. The tube shall be pulled in or inverted by use of hydrostatic head or pressurized air, and inflated to conform to the circumference/profile of the host pipe. The resin is cured by circulating hot water or steam throughout the length of the installed tube. When cured, the tube shall be hard, strong, and chemically inert, be continuous and jointless from manhole to manhole, and shall be tight-fitting and closely follow the contours throughout the entire length of the original pipe.

B. The Contractor is responsible for the design of the thickness of the liner based on the design data provided. The minimum thickness for the liner when compressed at installation shall be as follows:

Pipe Diameter (inches)	Minimum Liner Thickness (mm)
6	4.5
8 to 15	6.0
18 to 21	7.5
24	9.0
27	10.5
30	12.0
36	13.5
42	15.0

C. All portions of existing pipe are to be provided new pipe lining and provided water tight connections to and through existing structures and service laterals connections. Service connections to be re-established shall be coordinated with the Resident Project Representative.

D. Contractor shall take measurements in the field to properly size the liner and shall verify the length and diameter of the pipe prior to ordering the liner.

1.02 REFERENCES

A. This Specification references ASTM International (ASTM) standard specifications, which are made a part hereof by such reference and shall be the latest edition and revision thereof. In case of conflicting requirements between this Specification and these referenced documents, this Specification shall govern.

1. ASTM International (ASTM):
   a. ASTM F1216 – Rehabilitation of Existing Pipelines and Conduits by Inversion and Curing of Resin-Impregnated tube.
   b. ASTM F1743 – Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of a Cured-in-Place Thermosetting Resin Pipe.
   c. ASTM D903 – Test Method for Peel or Stripping Strength of Adhesive Bonds.
   d. ASTM D543 – Standard and Practice for Evaluating the Resistance of Plastics to Chemical Reagents.
   e. ASTM D638 – Standard Test Method for Tensile Properties of Plastics.
   f. ASTM D790 – Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
   g. ASTM D792 – Standard Test Methods for Density and Specific Gravity of Plastics by displacement.
   h. ASTM D2122 – Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings.
   i. ASTM D2990 – Tensile, Compressive, and Flexural Creep and Creep-Rupture of Plastics.
   j. ASTM D5813 – Cured-in-Place Thermosetting Resin Sewer Pipe.

1.03 PACKAGING, HANDLING, SHIPPING, AND STORAGE

A. Packaging, handling, shipping, and storage shall be performed in accordance with the manufacturer's instructions.

B. Onsite storage locations shall be approved by the Owner and Engineer.

1.04 SUBMITTALS

A. Contractor shall furnish data covering design and installation. Submittals shall be made in a timely manner so that the project schedule can be met. The data to be submitted shall include the following:

1. Contractor shall submit the Vendor's specific technical data with complete physical properties of the liner and dimensions pertinent to this job.
2. Contractor shall submit a certificate of "Compliance with Specifications" for all materials supplied and for the specified experience.
3. Contractor shall submit a site health and safety plan, a traffic control plan which provides for the passage of pedestrians and vehicles, and a bypass pumping plan before beginning any work.
4. Contractor shall submit all appropriate construction permits once they have been paid for and obtained.
5. Contractor shall submit a work plan to the Resident Project Representative for acceptance prior to beginning any work. The work plan shall address preparation steps required for pre-installation, bypass pumping, installation, curing and clean up.
6. Contractor shall submit all engineering design calculations, in accordance with the Appendix of ASTM F1216, for each length of liner to be installed including the thickness of each proposed CIPP. These calculations shall be performed and certified by a qualified, Professional Engineer. All calculations shall include data that conforms to the requirements of these specifications. Preliminary calculations with all assumed values clearly labeled, may be submitted for preliminary review in order to facilitate purchasing of materials in a timely fashion. All assumptions must be field verified through CCTV inspection, and calculations shall be resubmitted representing actual field conditions prior to actual installation. All adjustments from the preliminary calculations shall be identified in the final calculations based on field conditions.
7. Contractor shall submit all pre installation, final main line CIPP inspection, and post rehabilitation inspection videos as required in the Television Inspection of Sewer Pipelines section for review prior to the installation process and all post installation videos in DVD format for acceptance prior to final payment. CCTV videos shall be submitted directly to the Resident Project Representative.
8. Contractor shall submit a detailed quality control plan including procedures for CIPP samples and testing of physical properties as specified herein.

9. Contractor shall submit process control sheet including temperature/time log information and curing cycle, Vendor certification of proper installation, and certified copies of test reports on CIPP coupons obtained during actual installation.

10. Contractor shall submit proposed method and materials to be used to provide lateral re-connections to the liner pipe and restoration of access openings at manholes and structures.

1.05 QUALIFICATIONS. The Contractor shall meet the qualifications identified in the Project Requirements section.

1.06 WARRANTY. All liner installations shall be warranted to be free from defects in material and workmanship. The lining must be repairable at any time during the life of the structure. Manufacturer shall warrant the performance of the liner materials for 3 years and Certified Installer shall provide 3 years labor warranty to repair or replace any failing conditions of the liner in the structure from the date of acceptance. Certification of the conforming warranty shall be provided prior to approval of the submittals.

PART 2 - PRODUCTS

2.01 GENERAL

A. Liner pipe shall be a CIPP resin-impregnated flexible tube that is air or hydro-statically inverted or pulled into place into the existing sewer. Curing shall be accomplished by circulating hot water or steam to cure the resin into a hard, impermeable, corrosion resistant pipe-within-a-pipe. When cured, the finished pipe will be continuous, tight fitting against the interior wall of the existing sewer and will be a structurally stand-alone pipe capable of withstanding exterior and interior loading

2.02 MATERIALS

A. The resin system shall be a corrosion resistant polyester or vinyl ester system including all required catalysts, initiators that when cured within the tube create a composite that satisfies the requirements of ASTM F1216, ASTM D5813 and ASTM F1743, the physical properties herein, and those which are to be utilized in the submitted and approved design of the CIPP for this project. The resin shall produce a CIPP that will comply with the structural and chemical resistance requirements of this specification.

B. The tube shall consist of one or more layers of flexible, absorbent needled, woven, or non-woven felt fabric and meet the requirements of ASTM F1216 or ASTM D5813 or ASTM F1743. The tube shall be sewn or spot-welded

and shall be constructed to withstand installation pressures, have sufficient strength to bridge missing pipe segments, and stretch to fit irregular pipe sections. Seams in the tube shall be stronger than the non-seamed felt material. The Contractor shall also measure the inside diameter of the existing pipelines in the field prior to ordering the liner so that the liner can be installed in a tight-fitting condition, to prevent overlaps or wrinkles.

C. The outer layer of the tube before wet out (impregnation) shall be coated with an impermeable, flexible membrane that will contain the resin and facilitate monitoring of resin saturation during the resin impregnation procedures and to facilitate post installation inspection.

D. The wet out tube shall have a uniform thickness that when compressed at installation pressures shall meet or exceed the design thickness. The tube shall be homogeneous across the entire wall thickness. No dry or unsaturated layers shall be evident. The wet out tube shall have a relatively uniform thickness that when compressed at installation pressures shall equal or exceed the calculated minimum design CIPP wall thickness. The outside of the tube shall be marked for distance at regular intervals along its entire length, not to exceed 5 feet. Such markings shall include the manufacturer name or identifying symbol.

E. The wall color of the interior liner surface after installation shall be a light reflective color so that a clear detailed inspection with CCTV may be conducted.

2.03 STRUCTURAL REQUIREMENTS

A. The cured CIPP shall conform to the minimum physical properties as listed below:

Property	Test Method	Cured Composite Per ASTM F1216 or ASTM F 1743	Enhanced Resin
Flexural Modulus of Elasticity (Short Term)	ASTM D-790	250,000 psi	400,000 psi
Flexural Strength (Short Term)	ASTM D-790	4,500 psi	4,500 psi

B. The required structural CIPP wall thickness shall be based on the physical properties of the cured composite and per the design of the Professional Engineer and in accordance with the Design Equations contained in the appendix of the ASTM standards, and the following design parameters:

DESIGN PARAMETER TABLE	
Design Safety Factor	2.0
Ovality	Calculated from X1.1 of ASTM F1216, and being not less than 2%
Retention Factor for Long-Term Flexural Modulus (Approved by Owner)	50% to 75%
Groundwater Depth	5 feet above top of pipe
Soil Depth (above crown of existing pipe)	Minimum of 16 feet or actual field measured depth
Enhancement Factor	7
Soil Load	120 pcf
Minimum Service Life	50 years

1. The required structural CIPP wall thickness shall be designed in accordance with the guidelines of ASTM F1216, Appendix X1 for partially deteriorated pipes, and assume no bonding to the original pipe wall. The wall thickness shall be rounded up to the nearest 0.5 mm of the designed thickness.

2. The manufacturer must have performed long-term testing for flexural creep of the CIPP pipe material installed by Subcontractors. Such testing results are to be used to determine the long-term, time dependent flexural modulus to be utilized in the product design. This is a performance test of the materials (tube and resin) and general workmanship of the installation and curing. A percentage of the instantaneous flexural modulus value was used in design calculations for external buckling. The percentage, or the long-term creep retention value utilized, will be verified by this testing, Retention values exceeding 50 percent of the short-term test results shall not be applied. The materials utilized for the Work shall be of a quality equal to, or better than, the materials used in the long-term test with respect to the initial flexural modulus used in the CIPP design.

3. The layers of the cured CIPP shall be uniformly bonded. It shall not be possible to separate any two layers with a probe or point of a knife blade so that the layers separate cleanly or the probe or knife blade moves freely between the layers. If the layers separate during held sample testing, new samples will be required to be obtained from the installed pipe. Any reoccurrence may cause rejection of the Work.

4. Any layers of the tube that are not saturated with resin, prior to insertion into the existing pipe, shall not be included in the structural CIPP wall thickness computation.

5. The CIPP shall meet the chemical resistance requirements of ASTM F1216, Appendix X2, CIPP samples for testing shall be of tube and resin system similar to that proposed for actual construction. It is required that CIPP samples, with and without plastic coating, meet these chemical testing requirements.

PART 3 - EXECUTION

3.01 CONTRACTOR'S RESPONSIBILITIES

A. Locate and designate all proposed manhole access points as necessary for the Work.

B. Provide water from hydrants for cleaning, installation and other process related work items requiring water. Contractor shall comply with all Owner connection and use requirements. The Contractor shall obtain a fire hydrant meter or meters from the City Utilities and comply with requirements for use, including backflow prevention or air gap.

C. Locate and mark all existing utilities in areas where excavation is to be performed prior to beginning any excavation. Protect utilities in place or relocate at no additional cost to the Owner.

D. Contractor shall conduct operations in strict accordance with all applicable Federal, State, City, and OSHA standards and shall secure the site for the working conditions in compliance with the same.

1. The Contractor shall submit a proposed safety plan, prior to beginning any work, identifying all competent persons. The plan shall include a description of a daily safety program for the job site and all emergency procedures to be implemented in the event of a safety incident. All work shall be conducted in accordance with the Contractor’s submitted safety plan.

2. Contractor shall provide temporary support to the pipe wall as needed if man entry is required prior to completion of lining operations.

3.02 INSTALLATION ACCESS PLAN

A. Submit an Installation Access Plan to the Resident Project Representative prior to commencement of work. Plan shall include:

1. Proposed access/insertion pit locations.
2. Site plan sketch showing dimensions of access within work limits and utilities.
3. Approximate installation rate (ft/day).

B. Appropriate excavation/backfill/resurfacing procedures including permits according to Owners Standard Specifications.

C. Schedule and timeline of lining activities identified by line segment.

3.03 TRAFFIC CONTROL

A. The Contractor shall prepare a traffic control plan (TCP) and submit it to the Resident Project Representative in accordance with the Traffic Control Section.

3.04 FIELD VERIFICATION OF DIMENSIONS

A. The existing sewer is vitrified clay and concrete pipe. The Contractor is responsible for field verifying the inside dimensions of the sewer and the lengths between access manholes/structures prior to ordering the flexible liner tube.

3.05 TEMPORARY FLOW DIVERSION AND BYPASS PUMPING

A. Contractor shall provide for flow of sewage around the section or sections of pipe designated for repair. Bypassing operations shall be as specified herein and as specified in the Temporary Sanitary Sewer Flow Control section.

B. Bypassing shall be maintained until the CIPP is fully cured, cooled down, the ends have been finished and all sampling and testing is complete.

3.06 CLEANING, INSPECTION, AND CCTV

A. Contractor shall remove all internal debris and protruding roots from the sewer line with the use of water jet equipment, root cutting equipment, and vacuum tank in accordance with National Association of Sewer Service Companies (NASSCO) standards. Cleaning shall be completed as specified in the Gravity Sewer Pipeline Cleaning section.

B. After cleaning, inspection of pipelines shall be performed by the Contractor using closed circuit television (CCTV) inspection techniques as specified in the Television Inspection of Sewer Pipelines section. Inspection of pipelines shall be performed by experienced personnel trained in locating breaks,

obstacles and service connections by close circuit television. The information from this inspection shall be used for the design of the liner and a copy furnished for review by the Engineer. Complete bypass of sewage will be required for pre-inspection video, repair of internal pipe defects and post installation inspection.

3.07 LINE OBSTRUCTIONS

A. Clear the line of obstructions, solids, or dropped joints, protruding taps, debris and gaskets that will prevent or interferes with the CIPP insertion in accordance with Gravity Sewer Pipeline Cleaning Section. If inspection reveals an obstruction that is not at the location of the access manhole, the Contractor shall remove or repair the obstruction. Such repair shall be approved in writing by the Owner prior to the commencement of the liner insertion.

3.08 PUBLIC RELATIONS

A. The public information and notification program shall require Contractor to be responsible for contacting 48- hours in advance, each home or business connected to the sanitary sewer and informing them of the work to be done and when the sewer will be off line by the following:

1. Written notice to be delivered to each home or business describing work, schedule, how it affects them, and a local telephone number of Contractor they can call to discuss the project or problems.
2. Personal contact on the day of pre-installation inspection of the sewer. Each lateral shall be verified by having the homeowner run water down their drain. If the homeowner is unavailable, other arrangements shall be made to water through the lateral.
3. Personal contact and written notice the day prior to beginning work on the section of sewer to which they are connected.
4. Personal contact with any home or business which cannot be reconnected within the time stated in the written notice.
5. The Contractor shall document pre-construction site conditions by video recording. The videos will be utilized to assess any potential complaints that the Owner may receive regarding post-construction conditions.

3.9 INSTALLATION

A. Install in accordance with ASTM F1216, Section 7 or ASTM F1743 Section 6, with the following modifications:

1. The quantity of resin used for tube impregnation shall be sufficient to fill the volume of air voids in the tube with additional allowances for polymerization shrinkage and the loss of resin through cracks and irregularities in the original pipe wall.

2. A vacuum impregnation process is required and shall be used to insure thorough resin saturation throughout the length of the felt tube. The point of vacuum shall be no further than 25 feet from the point of initial resin introduction. After vacuum in the tube is established, a vacuum point shall be no further than 75 feet from the leading edge of the resin. The leading edge of the resin slug shall be as near to perpendicular to the longitudinal axis of the tube as possible. A roller system shall be used to uniformly distribute the resin throughout the tube.

3. The wet out tube shall be positioned in the pipeline using inversion methods. The tube should be inverted or pulled in through an existing manhole or approved access point and fully extend to the next designated manhole or termination point. There are to be no sections of pipe that are not lined.

4. Prior to installation, and as recommended by the manufacturer, remote temperature gauges or sensors shall be placed inside the host pipe to monitor the temperatures during the cure cycle. At a minimum, temperature gauges shall be placed inside the tube at the invert level of each end to monitor the required temperatures during the cure cycle. Liner and/or host pipe interface temperature shall be monitored and logged during curing of the liner.

3.10 CURING

A. After installation is completed, suitable heat source and water circulation equipment are required to circulate heated water or steam throughout the pipe. The equipment should be capable of delivering hot water or steam throughout the section to uniformly raise the temperature above the temperature required to effect curing of the resin. Water temperature in the line during the cure period should be as recommended by resin manufacturer. Once curing is complete, the Contractor shall cool the CIPP in accordance with approved CIPP manufacturer's recommendation.

B. Contractor shall cool the CIPP once curing is complete according to the manufacturer's recommended procedures. Temperatures and curing data shall be monitored and recorded by the Contractor throughout the cooling process. Copies of all curing data will be provided to the Owner.

3.11 REINSTATEMENT OF SERVICE CONNECTIONS

A. The Contractor is responsible for branch connections to be reopened without excavation. Non man entry sewerage shall be reinstated utilizing a remote controlled cutting device monitored by a video TV camera. Reconnection that cannot be completed from inside the pipe will require excavation.

B. Restoration of sewer service shall provide a full diameter water tight connection, free from burrs or projections and finished with a smooth, brushed and buffed crack free edge. The hole shall match the original sewer service pipe diameter (a minimum of 95% of original diameter) and location.

C. Coupons of pipe resulting from the service tap cutting shall be collected at the next manhole downstream of the pipe rehabilitation operation prior to leaving the site. Coupons may not be allowed to pass through the system.

D. It is the Contractor's responsibility to insure all active services as identified by the Owner are reconnected.

3.12 SEALING LINER AT ENDS

A. Prior to the installation of the CIPP, the Contractor shall install hydrophilic waterstops to the interior circumference of the existing sewer at the inlet and outlet of each manhole, or as otherwise directed by the district.

B. The waterstop material shall be "Insignia" by LMK or an approved equal. End seal shall be composed of neoprene rubber with a mechanical fastener composed of spring loaded retaining rings. Two (2) seals at each end.

3.13 FINAL INSPECTION, TESTING AND ACCEPTANCE

A. The final inspection of the CIPP by CCTV shall be done prior to flow being returned to the sewer. The finished product shall have no visual and material defects, no defects in smoothness and continuity, except where anticipated by the precondition of the existing pipe. The finished product shall be free of pinholes, folds, wrinkles or other deformities. The chemical and physical properties of the finished product shall meet or exceed the requirements of applicable ASTM values.

B. Wall thickness of samples shall be determined as described in ASTM F1216 or ASTM F1743. The minimum wall thickness at any point shall not be less than the minimum design wall thickness as calculated in the design. The flexural modulus must meet or exceed the value used in design.

C. The Contractor shall provide and submit test results from field installation in accordance with ASTM F1216 or ASTM F1743. The Engineer shall approve the sampling, testing procedure and final product acceptance. The physical properties of the installed CIPP shall be verified through field sampling and laboratory testing. All materials for testing shall be furnished by the Contractor for testing. All materials testing shall be performed at the Contractor's expense, by an independent third party laboratory selected by the Owner as recommended by the CIPP manufacturer. These tests should include Flexural Modulus, Flexural Strength and Wall Thickness tests. All tests shall be in accordance with applicable ASTM test methods to confirm compliance with the requirements specified in these Contract Documents.

The Contractor shall provide samples for testing from the actual installed CIPP liner. Samples shall be provided, at a minimum from one location per 1,000 feet of CIPP installed. Contractor shall prepare samples from material taken from the tube and the resin/catalyst or resin/hardener system used, and clamped mold, placed in the tube with heated circulating water or the samples shall be cut from a section of cured CIPP at the termination point, submit test results from field installation in accordance with ASTM 1216. All curing, cutting and identification of samples may be witnessed by the Owner and transmitted by the Contractor to the testing laboratory.

D. Acceptance of the installed liner shall be based on the video CCTV inspection after installation of the liner to assure no damage exists, and that no visible leakage or deformation exists as determined by the Engineer. Provide MPEG 1 digital video files to Owner as specified in the Television Inspection of Sewer Section.

E. Correction of failed liner deemed defective from post-installation CCTV inspection shall be repaired at no extra cost to the Owner. Method of repair shall be approved by the Engineer and Owner.

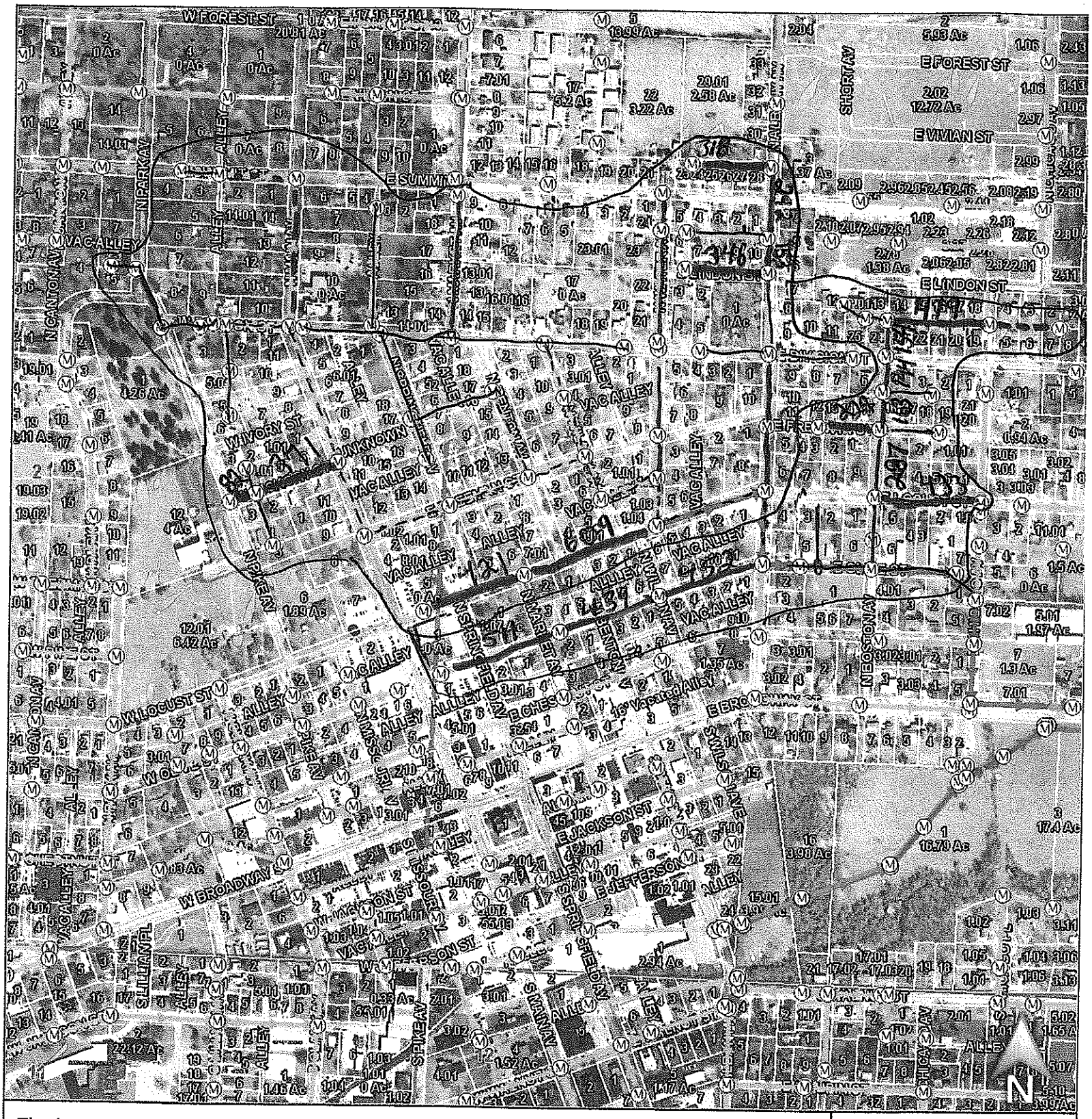
3.14 CLEANUP AND SURFACE RESTORATION

A. Upon acceptance of the installation work and testing, Contractor shall restore the project area affected by the operations to a condition at least equal to that existing prior to the work in accordance with the City's Specifications.

End of Section

5,832 & 8in clay

Bolivar, MO GIS



The locations of underground utilities as shown hereon are based upon record drawings and general locations as identified by the client and/or his agents. Locations of underground utilities/structures may vary from the locations shown. Additional buried utilities/structures may exist. No excavations were made by Midland GIS Solutions to locate or verify the buried utilities/structures shown. Data contained within this web site was created from record research provided by the county and/or city. The City of Bolivar does not guarantee any accuracies to the data or attribute information displayed, queried, or printed from this web site. Missouri One Call.