

HISTORIC FRANKLIN TENNESSEE

PROJECT MANUAL

EMERGENCY 54" SANITARY SEWER REPAIR PROJECT (CHESTNUT BEND SUBDIVISION)

COF 2017-0033

2/6/2017

PROJECT MANUAL
EMERGENCY 54" SANITARY SEWER REPAIR PROJECT (CHESTNUT BEND SUBDIVISION)
INSERT CONTRACT NO: 2017-0033
CITY OF FRANKLIN, TENNESSEE

TABLE OF CONTENTS

SECTION I	PAGES
Table of Contents	I.1.1
Notice to Bidders	I.1.2 I.1.3
Instruction to Bidders	I.2.1 I.2.7
Bid Form	I.3.1 – I.3. 6
Bid-Bond Form	I.4.1 I.4.2
Performance/Payment Form	I.5.1 – I.5.3
Statement of License Certificate	I.6.1
Drug Free Workplace Affidavit	I.6.2
Indemnification Agreement	I.6.3
Agreement Form	I.7.1 - I.7.3
General Conditions	I.8.1 – I.8.22
Supplementary Conditions	I.9.1
Insurance Requirements	I.10.1 – I.10.8
Retainage Agreement	I.11.1 – I.11.2
Appendix	# of PAGES
Notice to Proceed	# OITAGES
Application for Payment	3
Request for Construction Change	2
Request for Information (RFI)	1

ATTENTION

It shall be the bidders responsibility to confirm that the Project Manual contains all the documents indicated on the Table of Contents. Should any omissions occur, the appropriate documents may be obtained from the City of Franklin, upon request.

BID FORM

33 CONTRACT NO. 2017-00

PROJECT DESIGNATION (to appear on sealed envelope containing the bid):

EMERGENCY 54" SANITARY SEWER REPAIR PROJECT (CHESTNUT BEND SUBDIVISION)

OWNER (address bid submittal as follows):

City of Franklin City Hall Engineering Department 109 Third Avenue South Suite 142 P.O. Box 305 Franklin, Tennessee 37065

PROPOSAL OF WALKER BUILDING GROUP, LLC

(hereinafter called the "Bidder"), organized and existing under the laws of the State of Tennessee, and doing business as Walker Building Group, LLC.

* (insert "A corporation", "a partnership", or "an individual" as applicable).

Gentlemen:

The Bidder, in compliance with your Invitation to Bid for the construction of:

Emergency 54" Sanitary Sewer Repair Project (Chestnut Bend Subdivision)

having examined the Drawings, Specifications, other Contract Documents, the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed Project including the availability of materials and labor, hereby proposes to furnish all labor, materials, equipment and supplies and to construct the Project in accordance with the Contract Documents, within the limits established therein, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents.

The Bidder hereby agrees to commence work on this Project on or before a date to be specified in a written "Notice to Proceed" issued by the Owner and to fully complete the Project within a timeframe mutually agreed upon with the City of Franklin and thereafter as stipulated in the General Conditions. Bidder further agrees to pay as liquidated damages the sum of \$200.00 per day for each consecutive calendar day thereafter as provided in Article 19 of the General Conditions.

Bidder acknowledges receipt of the following Addenda:

Addendum No. N/A

Dated N/A

The Bidder hereby agrees to furnish all labor, materials, and equipment for the construction of the Emergency 54"Sanitary Sewer Repair (Chestnut Bend Subdivision)

Project, Contract No. COF 2017-000; as required for a complete operating installation as described in the Contract Documents for the total Contract Price of:

One Million, Two Hundred Forty Thousand, Three Hundred Fifty Dollars (in writing)

and Zero cents.

233 Contract No. COF 2017-0003 Total Contract Price: \$ 1,240,350.00

The Bidder proposed the following Unit Prices in the attached Emergency Sewer Repair Evaluation and agrees to their use as the basis of adding to or deducting from the Total Contract Price, per Article 17; Changes in Work; of the General Conditions:

Note 1 – Item S-1 consist of mobilizing and demobilizing the prime Contractor's and all Subcontractors' forces, supplies, equipment and incidentals at the Project site. It shall include all Contractor and Subcontractor cost associated with obtaining performance bonds, insurance requirements and other cost incurred after Contract award that are necessary cost to the Project and are of a general nature rather than directly attributable to other pay items.

Note 2 - Flow bypass shall be done in such a manner that will not damage private or public property, or create a nuisance or public menace. Pumped sewage shall be in an enclosed pipe that is adequately protected from traffic and shall be redirected into the sanitary sewer system. The contractor shall furnish, install and maintain power, primary and standby pumps, appurtenances and bypass piping required to maintain existing flows and services. The pumps and the bypass lines shall be of adequate capacity and size to handle all flows without sewage backup to private property. The contractor shall be solely responsible for clean-up, repair, property damage costs and claims resulting from failure of the diversion system.

Note 3 – Additional work outside the cost associated with the initial mobilization and bypass pumping shall be negotiated by the City and the contractor during construction. Work orders shall be signed by the City of Franklin prior to any work being completed.

Note 4 – Quantities are for estimating purposes only and subject to change based on actual need and work completed.

Where the Bid Form requests prices in both words and figures, both blanks are to be completed; and in case of a discrepancy, words shall govern.

The above prices include all costs of labor, materials, supplies, equipment, overhead and profit and other items required to complete the work as required by the Contract Documents.

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

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving bids.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall execute the formal Agreement within twenty-four (24) hours and deliver a Performance and Payment Bond(s) as required by the Contract Documents.

The Bid Security in the amount of One million two handed furty thousand

bree hundred fifty do	Dollars (\$ 1, 440, 350
Payment Bond(s) are not ex-	the Owner in the event the Agreement and Performance and ecuted within the time set forth above, such payment is to be ages for the delay and expense to the Owner caused thereby.
	Respectfully Submitted:
	Walker Building Gran, LLC. (Firm Name)
	BY: (Signature)
	Walker G. Bloodworth (Typed or Lettered Name)
SEAL (if Bid is by a Corporation)	Principle Officer (Title of Individual Signing Bid)

2817 West End An 126-26

Nashville TN 37203

(Business Address)

END OF BID FORM

PERFORMANCE-PAYMENT BOND FORM

KNOW ALL MEN BY THESE PRESENTS: that Walker Building Group, LLC (Name of Contractor) Corporation hereinafter called Principal, (corporation, partnership or individual) Fidelity and Deposit Company of Maryland and hereinafter (Name of Surety) called Surety, are held and firmly bound unto the City of Franklin, Tennessee; 109 Third Avenue, South; P. O. Box 305; Franklin, Tennessee 37065, hereinafter called Owner, in the total aggregate penal sum of: One Million Two Hundred Forty Thousand Three Hundred Fifty and NO/100THS (\$1,240,350.00) PLEASE TYPE THE DOLLAR AMOUNT HERE in lawful money of the United States, for payment of which sum will and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents. THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner, dated the _____ day of 20 , copy of which is hereto attached and made a part hereof for the construction of:

EMERGENCY 54" SANIATARY SEWER REPAIR PROJECT (CHESTNUT BEND SUBDIVISION) COF 2017-00033

NOW THEREFORE, if the Principal shall will, truly and faithfully perform its duties, all of the undertakings, covenants, terms, conditions, and agreements of said Contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and if he shall satisfy all claims and demands incurred under such Contract, and shall fully indemnify and save harmless the Owner from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, and shall promptly make payment to all persons, firms, subcontractors, an corporations furnishing materials for or performing labor in the prosecution of the work provided for in such Contract, and any authorized extension or modification hereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work,

and for all labor, performed in such work whether by subcontractor or otherwise, then these obligations shall be void; otherwise to remain in full force and effect.

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

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

IN WITNESS WHEREOF, this instrument i one of which shall be deemed an original, the	s executed in five (5) counterparts, each
20	day of,
ATTEST:	
	Walker Building Group, LLC
	Principal
	BY: 6. 861
Principal Secretary	(Signature)
	Walker G. Bloodworth, Chief Manager
	(Type or Print)
(SEAL)	
	2817 West End Avenue, Suite 126-256 Nashville, TN 37203-1453
Witness as to Principal	(Address)
(Type or Print)	
2817 West End Avenue, Suite 126-256 Nashville, TN 37203-1453	
(Address)	

Fidelity and Deposit Company of Maryland

Suret

Suret

Attorney-in-Fact

Frank E. Neal, III

(Type or Print)

P.O. Box 40507
Nashville, TN 37204

(Address)

Fidelity and Deposit Company of Maryland

PY:

Attorney-in-Fact

Frank E. Neal, III

(Type or Print)

P.O. Box 40507
Nashville, TN 37204

(Address)

If Contractor is a partnership, all partners should execute Bond.

Date of Bond must not be prior to date of Contract.

NOTE:

ZURICH AMERICAN INSURANCE COMPANY COLONIAL AMERICAN CASUALTY AND SURETY COMPANY FIDELITY AND DEPOSIT COMPANY OF MARYLAND POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by MICHAEL BOND, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Frank E. NEAL, Frank E. NEAL, III, Mark NEAL, Brent W. NEAL, Michael B. MATTOX, Frank E. NEAL, IV, Robert A. DAVIDSON, Andrew D. HEBERT and Matthew W. KEYTON, all of Nashville, Tennessee, EACH its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 11th day of May, A.D. 2016.

ATTEST:

ZURICH AMERICAN INSURANCE COMPANY COLONIAL AMERICAN CASUALTY AND SURETY COMPANY FIDELITY AND DEPOSIT COMPANY OF MARYLAND







Vice President Michael Bond

By: ______ D. Bairf

Secretary
Eric D. Barnes

State of Maryland County of Baltimore

On this 11th day of May, A.D. 2016, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, MICHAEL BOND, Vice President, and ERIC D. BARNES, Secretary, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Maria D. Adamski, Notary Public My Commission Expires: July 8, 2019

EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, <u>Attorneys-in-Fact</u>. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify of revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

	IN TESTIMONY	WHEREOF, I have hereunto	subscribed my name and affixed the corporate seals of the said Companies
this		, 20	







Gerald F. Haley, Vice President

TO REPORT A CLAIM WITH REGARD TO A SURETY BOND, PLEASE SUBMIT ALL REQUIRED INFORMATION TO:

Zurich American Insurance Co. Attn: Surety Claims 1299 Zurich Way Schaumburg, IL 60196-1056

STATEMENT OF LICENSE CERTIFICATE

EACH CONTRACTOR AND/OR SUBCONTRACTOR BIDDING SHALL FILL IN AND SIGN THE FOLLOWING:

This is to certify that Walker Building Group, LLC have fully
complied with all requirements of Chapter No. 6 of Title 62 of the Tennessee Codes
Annotated. The Contractor's name, license number, expiration date of registration, and
license classification appears on the envelope containing the bid, and I understand
otherwise the bid will not be considered. Masonry, electrical, plumbing, heating,
ventilation, and air conditioning subcontractor's name, license number, expiration date of
registration, and license classification likewise appears on the envelope containing the
bid, and I understand otherwise the bid will not be considered. I further understand that
failure to follow Tennessee State Bidding Laws will result in my bid being rejected and
may subject my future bids to be banned for at least one (1) year from the date of
submittal of this bid.

Were issued Certificate No. 57127 on 3/31, 2006 by the State Board of Licensing General Contractors.

Signed: Jelle C. Maler



STATE OF TENNESSEE DEPARTMENT OF COMMERCE AND INSURANCE



119187

WALKER BUILDING GROUP, LLC

ID NUMBER: 57/127 LIC STATUS: ACTIVE EXPIRATION DATE: March 31, 2018

BOARD FOR LICENSING CONTRACTORS
CONTRACTOR

THIS IS TO CERTIFY THAT ALL REQUIREMENTS OF THE STATE OF TENNESSEE HAVE BEEN MET

Atm: WALKER BLOODWORTH WALKER BUILDING GROUP, LLC 2817 WEST END AVE #126-256 NASHVILLE, TN 37203

State of Tennessee

649898331

BOARD FOR LICENSING CONTRACTORS

CONTRACTOR

WALKER BUILDING GROUP, LLC

This is to certify that all requirements of the State of Tennessee have been met.

ID NUMBER: 57127 LIC STATUS: ACTIVE

EXPIRATION DATE: March 31, 2018 AGLM UNLIMITED; BC; HC; HRA; MU



IN-1313
DEPARTMENT OF
COMMERCE AND INSURANCE

DRUG FREE WORKPLACE AFFIDAVIT

DRUG FREE WORKPLACE AFFIDAVIT

STATE OF TENNESSEE

PLIOSON COU

My Commission Expires May 6, 2019

COUNTY C	OF Davidsun	OF PRIME BIDDER
NOV	V COMES AFFIANT, who being du	y sworn denoges and save
NOV	V COMES AFFIANT, who being du	y sworn, deposes and says.
1.	He/She is the principal officer for:	Nalker Brilding Group, LLC (Name of Bidding Entity) 2817 West End Ave #126-256 (Address of Bidding Entity) Nashuslk TN 37203
2.	That the bidding entity has submitte	ed a bid to the City of Franklin on:
		Emergency 54" Sewer Repair (Insert Project Name)
3.	That the bidding entity employs no	less than five (5) employees.
4.	That Affiant certifies that the biddin submission of its bid to perform the drug-free workplace program that co	
5.	That the affidavit is made on person	al knowledge.
Furth	er Affiant says not.	Che Common AFFIANT
201 <u>1</u>	CRIBED AND SWORN TO BEFORE	NOTARY PUBLIC
STATE OF TENNESSEE		My Commission Expires: Maj 4,2019

I.6.2

INDEMNIFICATION AGREEMENT

Government of Franklin, the City of Franklin and individual, on or off duty, officers, and employees of the City of Franklin, harmless from any and all losses, damages and expenses, including court costs and attorneys fees, by reason of any loss, what-so-ever, arising out of or in consequence of the work done in connection with the contract of which this Agreement is a part, excepting only such losses as shall be occasioned solely by the negligence of the City of Franklin.

AGREEMENT FORM

EMERGENCY 54" SANITARY SEWER REPAIR PROJECT (CHESTNUT BEND SUBDIVISION)

THIS AGREEMENT, made this _	day of March , 20 17
BETWEEN the Owner:	THE CITY OF FRANKLIN, TENNESSEE
and the Contractor:	Walker Building Group, LLC
	in consideration of the payments and agreeme

WITNESSETH: That and for in consideration of the payments and agreements hereinafter mentioned to be made and performed by the Owner, the Contractor hereby agrees with the Owner to perform all the Work required by the Contact Documents and described as follows:

BYPASS PUMPING AND EMERGENCY REPAIR OF A 54" SANTIARY SEWER INTERCPTOR LOCATED IN THE CHESTNUT BEND SUBDIVISION.

The Owner shall pay the Contractor for the performance of Work, subject to additions and deductions by Change Order as provided in the Conditions of the Contract, in current funds, the Contract Price of: \$1,240,350

TYPE THE DOLLAR AMOUNT HERE

Payment shall be made in accordance with Article 25 of the General Conditions, "Payments to Contractor", and any modifications thereof in the Supplementary Conditions. Said Contract Price shall constitute full and complete payment for all superintendence, labor, insurance bonds and other accessories and services necessary to complete the Work in accordance with the Contract Documents.

Said Contract Documents have been prepared by the Engineering Department of the City of Franklin and consist of this Agreement, General and Supplementary Conditions, Instructions to Bidders, Contractor's Modifications, as well as Drawings, Specifications and Addenda as enumerated in Article 1 of the Supplementary Conditions, all of which form the Contract and are as fully a part of the Contract as if attached to this document or repeated herein.

The Contractor hereby agrees to commence the work under this Contract within 24 hours of receiving a written Notice to Proceed and to fully complete the Work as mutually agreed upon by the City of Franklin, TN.

The Contractor further agrees to pay as liquidated damages the sum of \$200.00 for each consecutive calendar day thereafter as provided in Article 19 of the General Conditions.

IN WITNESS WHEREOF, the parties to these presents have executed this Agreement in five (5) counterparts, each of which shall be deemed an original, in the year and day first mentioned above.

OWNER

CITY OF FRANKLIN, TN

109 Third Avenue South Franklin, TN 37065

CONTRACTOR (Authorized Signature)

SUBSCRIBED AND SWORN TO BEFORE ME THIS

201

My Commission Expires: May 6, 2019

TOSON CO My Commission Expires May 6, 2019

STATE OF TENNESSEE NOTARY **PUBLIC**

IMPORTANT NOTE: If the Contractor is a corporation, the legal name of the corporation shall be set forth above together with a signature of the officer or officers authorized to sign Contract on behalf of the corporation; if Contractor is a co-partnership, the true name of the firm shall be set forth above together with the signatures of all the partners; and if Contractor is an individual, his signature shall be placed above. If signature is by an agent other than an officer of a corporation or a member of a partnership, a power-of-attorney must be attached hereto. Signature of Contractor shall also be acknowledged before a Notary Public or other person authorized by law to execute such acknowledgment.

GENERAL CONDITIONS TABLE OF CONTENTS

		Page
1.	Contract and Contract Documents	I.8.1
2.	Definitions	I.8.1
3.	Additional Instructions and Detail Drawings	I.8.5
4.	Shop or Setting Drawings	I.8.5
5.	Materials, Services and Facilities	I.8.5
6.	Contractor's Title to Materials	I.8.5
7.	Inspection and Testing of Materials	I.8.6
8.	"or Equal" Clause	I.8.6
9.	Patents	I.8.6
10.	Surveys, Permits and Regulations	I.8.7
11.	Contractor's obligations	I.8.7
12.	Weather Conditions	I.8.7
13.	Protection of Work and Property - Emergency	I.8.7
14.	Inspecting	I.8.8
15.	Reports, Records and Data	I.8.8
16.	Superintendence by Contractor	I.8.8
17.	Changes in Work	I.8.8
18.	Extras	I.8.9
19.	Time for Completion and Liquidated Damages	1.8.9
20.	Correction of Work-	I.8.10
21.	Subsurface Conditions Found Different	I.8.11
22.	Claims for Extra Costs	I.8.11
23.	Owner's Right to Terminate Contract.	I.8.11
24.	Construction Schedule and Periodic Estimates	I.8.13
25.	Payments to Contractor	I.8.13
26.	Acceptance of Final Payment Constitutes Release	I.8.15
27.	Payments by Contractor	I.8.15
28.	Contractors and Subcontractors Insurance	I.8.15
29.	Contract Security	I.8.17
30.	Additional or Substitute Bond	I.8.17
31.	Assignments	I.8.17
32.	Mutual Responsibility of Contractors	I.8.17
33.	Separate Contracts	I.8.18
34.	Subcontracting	I.8.18
35.	Engineer's Authority	I.8.18
36.	Stated Allowances	I.8.19
37.	Use of Premises and Removal of Debris	I.8.19
38.	Quantities of Estimate	I.8.20
39.	Rights-of-Way and Suspension of Work	I.8.20
40.	General Guaranty	I.8.21
41.	Conflicting Conditions	I.8.21
42.	Notice and service Thereof	I.8.21
43. 44.	Provisions Required by Law Deemed Inserted	I.8.21
44. 45.	Underground Obstructions	I.8.21
45. 46.	Contractors Right to Stor Works on Townshots Contractors Right to Story Works on Townshots Contractors Right to Story Works on Townshots Contractors Right to Story Works on Townshots Right to Story Works Right	I.8.22
	Contractor's Right to Stop Work or Terminate Contract	I.8.22
47.	Waiver	I.8.22

GENERAL CONDITIONS

I. CONTRACT AND CONTRACT DOCUMENTS

The Drawings, Specifications and Addenda, hereinafter enumerated in Paragraph I of the Supplementary conditions shall form part of this Contract and the provisions thereof shall be

as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running head lines and marginal notes contained herein and in said documents is solely to facilitate reference to various provisions of the Contract Documents and in no way affect, limit, or cast light on the interpretation of the provisions to which they refer.

2. **DEFINITIONS**

Wherever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural Thereof:

- a. Agreement The written agreement between Owner and Contractor covering the Work to be performed; other Contract Documents are attached to the Agreement.
- b. Application for Payment The form which is to be used by Contractor in requesting progress payments and which is to include a schedule of values consisting of the unit prices as bid, or approved subdivision thereof, which when multiplied by the bid quantities will aggregate the Contract amount. The progress payment form shall also include or be accompanied by an affidavit of Contractor that progress payments theretofore received on account of the Work have been applied by Contractor to discharge in full all of Contractor's obligations reflected in prior Applications for Payment.
- c. **Bid** The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- d. **Bidder** Any person, firm or corporation submitting a Bid for the Work.
- e. **Bonds** Bid, performance and payment bonds and other instruments of security, furnished by Contractor and his surety in accordance with the Contract Documents.
- f. Change Order A written order to Contractor signed by owner authorizing an addition, deletion or revision in the Work, or an adjustment

- in the Contract Price or the Contract Time issued after execution of the Agreement.
- g. Contract Documents The Agreement, Addenda (whether issued prior to the opening of Bids or the Execution of the Agreement), instructions to Bidders, Contractor's Bid, the Bonds, the Notice of Award, these General Conditions, the Supplementary Conditions, the specifications, Drawings and Modifications.
- h. **Contract Price** The total monies payable to Contractor under the Contract Documents.
- i. Contract Time The number of days stated in the Agreement for the completion of the Work, computed as provided in Article 19.
- Contractor The person, firm or corporation with whom owner has executed the Agreement.
- k. **Day** A calendar day of twenty-four hours measured from midnight to the next midnight.
- 1. **Drawings** The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by Engineer and are referred to in the Contract Documents.
- m. **Engineer** The engineer, architect, construction administrator or other authorized owner's representative of the City of Franklin.
- n. **Field Order** A written order issued by Engineer which clarifies or interprets the Contract Documents or orders minor changes in the Work.
- o. **Modification** (1) a written amendment of the Contract Documents signed by both parties; (2) a Change Order; (3) a written clarification or interpretation issued by Engineer; or (4) a written order for a minor change or alteration in the Work issued by Engineer. A Modification may only be issued after execution of the Agreement.
- p. **Notice of Award** The written notice by Owner to the apparent successful Bidder stating that upon compliance with the conditions precedent to be fulfilled by him within the time specified, Owner will execute and deliver the Agreement to him.
- q. **Notice to Proceed** A written notice given by owner to Contractor (a copy to Engineer) fixing the date on which the Contract Time will commence to

- run and on which Contractor shall start to perform his obligations under the Contract Documents.
- r. **Owner -** A public body or authority, corporation, association, partnership, or individual for whom the Work is to be performed.
- s. **Project** The entire construction to be performed as provided in the Contract Documents.
- t. **Project Manual** A bound volume which contains documents concerning bidding and contractual requirements as well as the Specifications. Material included falls into two general categories: those describing the requirements for bidding and those that become part of the Contract Documents upon the signing of the Agreement.
- u. **Resident Project Representative** The authorized representative of the Engineer who is assigned to the Project site or any part thereof.
- v. Shop Drawings All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by Contractor, a Subcontractor, manufacturer, supplier or distributor and which illustrate the equipment, material or some portion of the Work.
- w. **Specifications** Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work.
- x. Subcontractor An individual, firm or corporation having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the site.
- y. **Substantial Completion** The date as certified by Engineer when the construction of the Project or a specified part thereof is sufficiently completed, in accordance with the Contract Documents, so that the Project or specified part can be utilized for the purposes for which it was intended; or if there be no such certification, the date when final payment is due.
- z. Work Any and all obligations, duties and responsibilities necessary to the successful completion of the Project assigned to or undertaken by Contractor under the Contract Documents.

3. <u>ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS</u>

The Contractor will be furnished additional instructions and detail drawings as necessary to carry out the work included in the Contract. The additional drawings and instructions thus supplied to the Contractor will coordinate with the Contract Documents and will be so prepared that they can be reasonably interpreted as part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions. The Contractor and the Engineer will prepare jointly (a) a schedule, fixing the dates at which special detail drawings will be required, such drawings, if any, to be furnished by the Engineer in accordance with said schedule; and (b) a schedule fixing the respective dates for the submission of shop drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment, and the completion of the various parts of the work; each such schedule to be subject to change from time to time in accordance with the progress of the work.

4. **SHOP OR SETTING DRAWINGS**

The Contractor shall submit promptly to the Engineer three copies of each shop or setting drawing prepared in accordance with the schedule predetermined as aforesaid. After examination of such drawings by the Engineer and the return thereof, the Contractor shall make such corrections to the drawings as have been indicated and shall furnish the Engineer with two corrected copies. If requested by the Engineer the Contractor must furnish additional copies. Regardless of corrections made in or approval given to such drawings by the Engineer, the Contractor will nevertheless be responsible for accuracy of such drawings and for their conformity to the Drawings and Specifications, unless he notifies the Engineer in writing of any deviations at the time he furnishes such drawings.

5. <u>MATERIALS. SERVICES AND FACILITIES</u>

It is understood that except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all material, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services, and facilities of every nature whatsoever necessary to execute, complete and deliver the work within the specified time. Any work necessary to be performed after regular working hours, on Sundays or Legal Holidays shall be performed without additional expense to the Owner.

6. <u>CONTRACTOR'S TITLE TO MATERIALS</u>

No materials or supplies for the work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies used by him in the work, free from all liens, claims or encumbrances.

7. <u>INSPECTION AND TESTING OF MATERIALS</u>

All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner, but the Contractor will pay for all laboratory inspection service. Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended.

8. "OR EQUAL" CLAUSE

Whenever a material or article required is specified or shown on the Drawings by using the name of the proprietary product or of a particular manufacturer or vendor, any material or article which will perform adequately the duties imposed by the general design will be considered equal and satisfactory providing the material or article so proposed is of equal substance and function in the Engineer's opinion. It shall not be purchased or installed without his written approval.

9. PATENTS

The Contractor shall hold and save the Owner and its officers, agents, servants, and employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the owner, unless otherwise specifically stipulated in the Contract Documents.

License or Royalty Fees: License and/or Royalty Fees for the uses of process which is authorized by the owner of the project must be reasonable and paid to the holder of the patent, or his authorized licensee, direct by the Contractor.

If the Contractor uses any design, device or materials covered by letters, patent or copyright, he shall provide for such use by suitable agreement with the owner of such patented or copyrighted design, device or material, it is mutually agreed and understood that, without exception, the Contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the work. The Contractor and/or his Sureties shall indemnify and save harmless the Owner, of the Project from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this Contract, and shall indemnify the Owner from any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

10. <u>SURVEYS, PERMITS AND REGULATIONS</u>

Unless otherwise expressly provided for in the specifications, the Owner will furnish to the Contractor all surveys necessary for the execution of the work. This does not include offset staking for sewer lines or final surveys necessary for actual construction unless otherwise noted in the Supplementary Conditions.

The Contractor shall procure and pay for all permits, licenses and approvals necessary for the execution of his Contract.

The Contractor shall comply with all laws, ordinances, rules, orders and regulations relating to the performance of the work, the protection of adjacent property, and the maintenance of passageway, guard fences and other protective facilities.

11. CONTRACTOR'S OBLIGATIONS

The Contractor shall and will, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this Contract, within the time herein specified, in accordance with the Drawings and Specifications covered by this Contract and any and all supplemental drawings and specifications, and in accordance with the directions of the owner or his authorized representative as given from time to time during the progress of the work. He shall furnish.' erect, maintain, and remove such construction plant and such temporary works as may be required. He alone shall be responsible for the safety, efficiency, and adequacy of his plant, appliances, and methods, and for any damage which may result from their failure or other improper construction maintenance, or operation. The Contractor shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the Contract and Specifications, and shall do, carry on, and complete the entire work to the satisfaction of the owner.

12. WEATHER CONDITIONS

In the event of temporary suspension of work, or during inclement weather, or whenever the owner or his authorized representative shall direct, the Contractor will, and will cause his subcontractors to, protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the owner, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his subcontractors so to protect his work, such materials shall be removed and replaced at the expense of the Contractor.

13. PROTECTION OF WORK AND PROPERTY - EMERGENCY

The Contractor shall at all times safely guard the owner's property 'from injury or loss in connection with this Contract he shall at all times safely guard and protect his ---in work,

and that of adjacent property for damage The Contractor shall replace or make good any such damage, loss or injury unless such be caused directly by errors contained in the Contract or by the Owner or his authorized representative. In case of an emergency which threatens loss or injury of property, and/or safety of life, the Contractor will be allowed to act, without previous instructions from the Owner or his authorized representative, in a diligent manner. He shall notify the owner or his authorized representative immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted to the owner or his authorized representative for approval.

Where the contractor has not taken action but has notified the Owner or his authorized representative of emergency threatening injury to persons or damage to the work or any adjoining property, he shall act as instructed or authorized by the Owner or his authorized representative.

The amount of reimbursement claimed by the Contractor an account of any emergency action shall be determined in the manner provided in Paragraph 17 of the General Conditions.

14. **INSPECTION**

The authorized representatives of the owner shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records.

15. REPORTS, RECORDS AND DATA

The Contractor shall submit to the owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the owner may request concerning work performed or to be performed under this Contract.

16. SUPERINTENDENCE BY CONTRACTOR

At the site of the work the Contractor shall employ a construction superintendent or foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the owner or his authorized representative and shall be one who can be continued in that capacity for the particular job involved unless he ceases to be on the Contractor's payroll.

17. CHANGES IN WORK

No changes in the work covered by the approved documents shall be made without having prior written approval of the Owner. Charges or credits for the work covered-by the approved change shall be determined by one or more, or a combination of the following methods.

- a. Unit bid prices previously approved.
- b. An agreed lump sum.
- c. The actual cost of:
 - Labor, including foreman;
 - 2. Materials entering permanently into the work;
 - 3. The ownership or rental cost of construction plant and equipment during the time of use an the extra work;
 - 4. Power and consumable supplies for the operation of power equipment;
 - 5. Insurance;
 - 6. Social Security and old age and-unemployment contributions.

To the cost under 17(c) there shall be added a fixed fee to be agreed upon but not to exceed 15% of the estimated cost of the work. The fee shall be compensation to cover the cost of supervision, overhead, bond profit -and any other general expenses.

18. EXTRAS

Without invalidating the Contract, the Owner may order extra work or make changes by altering, adding to or deducting from the work, the Contract sum being adjusted accordingly, and the consent of the Surety being first obtained where necessary or desirable. All the work of the kind bid upon shall be paid for at the price stipulated in the proposal, and no claims for any extra work or materials shall be allowed unless the work is ordered in writing by the Owner or his authorized representative, acting officially for the owner, and the price is stated in such order.

19. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

It is hereby understood and mutually agreed, by and-between the Contractor and the Owner, that the date of beginning and the time for completion as specified in the Contract of the work to be done hereunder are ESSENTIAL CONDITIONS of this Contract; and it is further mutually understood and agreed that the work embraced in this Contract shall be commenced on a date to be specified in the "Notice to Proceed".

The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the owner, then the Contractor does hereby agree, as a part consideration for the awarding of this Contract, to pay to the Owner the amount specified in the Contract, not as a penalty but as liquidated damages for breach of Contract, as hereinafter set forth, for each and every calendar day that the Contractor shall be in default after the time stipulated in the Contract for completing the work.

The said amount is fixed and agreed upon by and between the Contractor and the owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amount is agreed to be the amount of damages which the owner would sustain, and said amount shall be retained from time to time by the Owner from current periodical estimates.

It is further agreed that time is of the essence of each and every portion of this Contract and of the Specifications wherein a definite and certain length of time is fixed for the performance of-any act whatsoever; and where under the Contract an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this Contract.

Provided, that the Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due:

- a. To any preference, priority or allocation order duly issued by the government;
 - b. To unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God or of the public enemy, acts of the Owner, acts of another Contractor in the performance of a Contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight,
 Embargoes, and unusually severe weather; and
 - c. To any delays of subcontractors or suppliers occasioned by any of the causes specific in subsections a. and b. of this article.

Provided, further, that the Contractor shall within ten (10) days from the beginning of such delay, unless the Owner shall grant a further period of time prior to the date of final settlement of the Contract, notify the owner in writing of the causes of the delay, who shall ascertain the facts and extent of the delay and notify the Contractor within a reasonable time of its decision in the matter.

20. **CORRECTION OF WORK**

All work, all materials, whether incorporated in the Work or not, all processes of manufacture, and all methods of construction shall be at all times and places subject to the inspection of the owner or his authorized representative who shall be the final judge of the quality and suitability of the work, materials, processes of manufacture, and methods of construction for the purposes for which they are used. Should they fail to meet

his approval they shall be forthwith reconstructed, made good, replaced and/or corrected, as the case may be, by the Contractor at his own expense. Rejected material shall immediately be removed from the site. if, in the opinion of the owner or his authorized representative, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the Contract Documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as in the judgment of the Owner or his authorized representative shall be equitable.

21. SUBSURFACE CONDITTONS FOUND DIFFERENT

Should the Contractor encounter subsurface and./or latent conditions at the site materially differing from those shown on- the Drawings or indicated in the Specifications, he shall immediately give notice to the Owner or his authorized representative of such conditions before they are disturbed. The owner or his authorized representative will thereupon promptly investigate the conditions, and if he finds that they materially differ from those shown on the Drawings, or indicated in the Specifications, he will at once make such changes in the Drawings and/or Specifications as he may find necessary, any increase or decrease of the cost resulting from such changes to be adjusted in the manner provided in Paragraph 17 of the General Conditions.

Where information is given in the Contract Documents on the existence, location, type of subsurface soil or rock formations, utility lines, structures and other items, such information is provided for the Contractor's convenience only and neither the owner nor his authorized representative guarantee the accuracy of any such information.

22. <u>CLAIMS FOR EXTRA COST</u>

No claims f or extra work or cost shall be allowed unless the same was done in pursuance of a written order of the owner's authorized representative and approved by the owner, as aforesaid, and the claim presented with the first estimate after the changed or extra work is done. When work is performed under the terms of subparagraph 17(c) of the General Conditions, the Contractor shall furnish satisfactory bills, payrolls, and vouchers covering all items of cost and when requested by the owner, give the Owner access to accounts relating thereto.

23. OWNER'S RIGHT TO TERMINATE CONTRACT

If the Contractor should be adjudged a bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed to take over his affairs, or if he should fail to prosecute his work with due diligence and carry the work forward in accordance with his work schedule and the time-limits set forth in the Contract Documents, or if he should fail to

substantially perform one or more of the provisions of the Contract

Documents to be performed by him, the Owner may serve written notice on the Contractor and the surety on his performance bond, stating its intention to exercise one of the remedies hereinafter set forth and the grounds upon which the Owner bases its right to exercise such remedy.

In any event, unless the matter complained of is satisfactory cleared within ten days after service of such notice, the owner may, without prejudice to any other right or remedy, exercise one of such remedies, at once, having first obtained a certificate from the Owner's authorized representative that sufficient cause exists to justify such action.

- a. The Owner may terminate the services of the Contractor, which termination shall take effect immediately upon service of notice thereof on the Contractor and his Surety, whereupon the Surety shall, have the right to take over and perform the Contract. If the Surety does not commence performance of the Contract within ten days after service of the Notice of Termination, the Owner may itself take over the work, take possession of and use all materials, tools, equipment, and appliances on the premises and prosecute the work to completion by such means as it shall deem best. In the event of such termination of his service, the Contractor shall not be entitled to any further payment under his Contract until the work is completed and accepted. If the owner takes over the work and if the unpaid balance of the Contract price when the owner takes over the work exceeds the cost of completing the work, including compensation for any damages or expenses incurred by the Owner through the default of the Contractor, such excess shall be paid to the Contractor. In such event, if such cost, expenses, and damages shall exceed such unpaid balance of the Contract price, the Contractor and his Surety shall pay the difference to the Owner. Such cost, expenses, and damages shall be certified by the Owner or his authorized representative.
- b. The Owner may take control of the work and either make good the deficiencies of the Contractor itself or direct the activities of the Contractor in doing so, employing such additional help as the owner deems advisable. In such event the Owner shall be entitled to collect from the Contractor and his Surety, or to deduct from any payment then or thereafter due the Contractor, the costs incurred by it through the default of the Contractor, provided the owner's authorized representative approves the amount thus charged to the Contractor.
- c. The Owner may require the Surety on the Contractor's bond to take control of the work at once and see to it that all the deficiencies of the Contractor are made good with due diligence. As between the owner and the Surety, the cost of making good such deficiencies shall all be borne by the Surety. If the Surety takes over the -work, either upon termination of the services of the Contractor or upon instruction from the owner to do so, the

provisions of the Contract Documents shall govern in respect to the work done by the Surety, the Surety being substituted for the Contractor as to such provisions, including provisions as to the right of the Owner to do the work itself or to take control of the work.

24. CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

Immediately after execution and delivery of the Contract, and before the first partial payment is made, the Contractor shall deliver to the owner an estimated construction progress schedule in form satisfactory to the Owner, showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule. The Contractor shall also furnish on forms to be supplied by the owner (a) a detailed estimate giving a complete breakdown of the Contract price; and (b) periodic itemized estimates of work done for the purpose of making partial payments thereon. 'The costs allocated to any of these various schedules will be used only for determining the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the Contract price.

25. PAYMENTS TO CONTRACTOR

Partial payments will be made as the work progresses at the end of each calendar month, or as soon thereafter as practicable, on estimates made by the owners' authorized representative and as approved by the owner, provided the Contractor is performing the overall job in a diligent manner. In making partial payments, there shall be retained 5 percent on the amount of each estimate until substantial completion of all work covered by this Contract, in order to insure proper performance of the Contract. Payments, as approved by the owner's authorized representative, shall be made to the Contractor by the Owner no later that the 15th day of each calendar month for work performed the preceding month provided the Contractor submits data so required by the Owner's authorized representative to the Owner's authorized representative by the 5th day of each calendar month.

The computation of quantities that will be the basis for estimates, both monthly and final, shall be made by the owner's authorized representative in accordance with methods defined in the Contract Documents.

In preparing estimate data to be submitted to the owner's authorized representative, Contractor may include for consideration material properly delivered and stored on site and any preparatory work. All material and work covered by partial payments made shall thereupon become the sale property of the owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any

damaged work, or as a waiver of the right of the Owner to require the fulfillment of all of the terms of the Contract.

Upon completion and acceptance of the work, the owner's authorized representative shall issue a certificate that the work has been completed and accepted by him under the conditions of this contract, and shall make and approve the final estimate of the work. The entire balance found to be due the Contractor, including retained percentages, but excepting such sums as may be lawfully retained by the owner, shall be paid to the Contractor. Such payment shall be conditioned, however, upon submission by the Contractor of evidence satisfactory to the Owner that all claims for labor, material and other outstanding indebtedness in connection with this Contract have been paid.

If, after the work has been substantially completed, full completion thereof is materially delayed through no fault of the Contractor and the owner's authorized representative so certifies, the owner shall upon the certificate of the Owner's authorized representative, and without terminating the Contract, make payment for the balance-due for that portion of the work fully completed and accepted.

The Owner's authorized representative may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any estimate to such extent as may be necessary to protect the owner from loss on account of:

- a. Defective work not remedied.
- b. Claims filed or reasonable evidence indicating probable filing of claims.
- c. Failure of Contractor to make payments promptly to subcontractors or for material or labor.
- d. Reasonable doubt that the Contract can be completed for the balance then unpaid.
- e. Damage to another Contractor.
- f. Failure of the Contractor to keep his work progressing in accordance with his time schedule.

When the above grounds are removed, payment shall he made for amounts withheld because of them.

The Contractor agrees that he will indemnify and save the Owner harmless for all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary incurred in the furtherance of the performance of this Contract. The Contractor shall, at the Owner's request furnish satisfactory evidence that

all obligations of the nature hereinabove designated have been paid, discharged or waived. If the Contractor fails so to do, then the Owner may, after having served written notice on the said Contractor, either pay unpaid bills, of which the Owner has written notice, direct or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged, whereupon payment to the Contractor shall be resumed, in accordance with the terms of this Contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the owner to either the Contractor or his Surety. In paying any unpaid bills of the Contractor, the Owner shall be deemed the agent of the Contractor, and any payment so made by the owner shall be considered as a payment made under the Contract by the owner to the Contractor and the Owner shall not be liable to the Contractor for any such payment made in good faith.

26. ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE

The acceptance by the Contractor of final payment shall be and shall operate as a release to the owner of all claims and all liability to the Contractor for all things done or furnished in connection with this work and for every act and neglect of the owner and others relating to or arising out of this work. No payment, however, final or otherwise, shall operate to release the Contractor or his Sureties from any obligations under this Contract or the Performance and Payment Bond.

27. PAYMENTS BY CONTRACTOR

The Contractor shall pay for (a) all transportation and utility services not later that the 20th day of the calendar month following that in which services are rendered; (b) all material, tools, and other expendable equipment to the extent of 90% of the cost thereof, not later that the 20th day of the calendar month following that in which such materials, tools and equipment are delivered at the site of the project, and the balance of the cost thereof, not later than the 30th day following the completion of tat part of the work in or on which such material, tools and equipment are incorporated or used; and (c) to each of his sub contractors, not later that the 5th day following each payment to the Contractor the respective amounts allowed the Contractor on account of the work performed by his subcontractors to the extent of each subcontractor's interest therein.

28. CONTRACTORS AND SUBCONTRACTORS INSURANCE

The Contractor shall not commence work under this Contract until he has obtained all the insurance required under this paragraph and such insurance has been approved by the owner, nor shall the Contractor allow any subcontractor to commence work on this subcontract until the insurance required of the subcontractor has been so obtained and approved. Contractor and subcontractor shall keep such approved insurance in full force and effect until Project is accepted by Owner.

- a. COMPENSATION INSURANCE: The Contractor shall procure and shall maintain during the life of this Contract Workmen's Compensation Insurance as required by applicable state law for all of his employees to be engaged in work at the site of the project under this Contract, and in case of any such work sublet, the Contractor shall require the subcontractor similarly to provide Workman's Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are cover by the protection afforded by the Contractor's Workmen's Compensation Insurance. In case any class of employees engaged in hazardous work on the project under this Contract is not protected under the Workmen's Compensation Statute, the contractor shall provide and shall cause each subcontractor to provide adequate employer's liability insurance for the protector of such of his employees as are not otherwise protected.
- b. CONTRACTOR'S PUBLIC LIABILITY ANS PROPERTY DAMAGE INSURANCE: The Contractor shall procure and shall maintain during the life of this Contract Contractor's Public Liability Insurance and Contractor's Property Damage Insurance in the amounts specified under Supplemental General Conditions.
- c. SUBCONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE: The Contractor shall either (1) require each of his subcontractor's Public Liability and Property Damage Insurance of the type and in the amounts specified in subparagraph (b), hereof or (2) insure the activities of his subcontractors in his policy specified in subparagraph (b) hereof.
- d. SCOPE OF INSURANCE AND SPECIAL HAZARDS: The insurance required under subparagraphs (b) and (c) hereof shall provide adequate protection for the Contractor and his subcontractors, respectively, against damage claims which may arise from operations under this Contract, whether such operation be by the insured or by anyone directly or indirectly employed by him, and also against any of the special hazards which may be encountered in the performance of this contract as enumerated in the Supplemental General Conditions.
- e. BUILDERS RISK INSURANCE: The Contractor shall provide such insurance as will protect the Contractor and the Owner from loss or damage while the project is under construction and prior to the full acceptance thereof by the Owner. The policies shall be payable to the Contractor and the Owner as their interests may appear. This provision shall not release the Contractor of his obligations to complete, according to plans and Specifications, the project covered by the Contract, and his Surety shall be obligated to full performance of the Contractor's undertaking.

f. PROOF OF CARRIAGE OF INSURANCE: The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of policies. Such certificated shall also contain substantially the following statement: "The insurance covered by this certificate will not be canceled or materially altered, except after 10 days written notice has been received by the Owner".

29. CONTRACT SECURITY

The Contractor shall furnish a performance bond in an amount at least equal to 100% of the contract price as security for the faithful performance of this Contract and also a payment bond in an amount not less than that prescribed by state or local law, as security for the payment of all persons performing labor on the project under this Contract and furnishing materials in connection with this contract The performance bond and the payment bond may be in one or in separate instruments in accordance with local law. Before final acceptance each bond must be approved by the Owner.

Evidence of authority of an attorney in fact acting for the corporate surety must be provided in the form of a certificate as to his power-of-attorney and to the effect that it is not terminated and remains in full force and effect on the date of the bond.

30. ADDITIONAL OR SUBSTITUTE BOND

If, at any time, the owner for justifiable cause shall be or become dissatisfied with any Surety or Sureties for the Performance or Payment Bond, the Contractor shall within 5 days after notice from the owner so to do, substitute an acceptable bond (or bonds) in such form and sum and signed by such other Surety or Sureties as may be satisfactory to the Owner. The premiums on such bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new Surety or Sureties shall have furnished such an acceptable bond to the owner.

31. **ASSIGNMENTS**

The Contractor shall not assign the whole or any part of this Contract or any monies due hereunder without written consent of the Owner. In case the Contractor, assigns all or any part of any monies due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to the Contractor shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for the performance of the work called for in this Contract.

32. MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts of neglect on the part of the Contractor, any other contractor or any subcontractor shall suffer loss or damage an the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement or arbitration if such Contractor or

subcontractors will so settle. If such other Contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the owner against any such claim.

33. <u>SEPARATE CONTRACTS</u>

The Contractor shall coordinate his operations with those of other contractors. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of the work. The Contractor, including his subcontractors, shall keep informed of the progress and the detail work of other Contractors and shall notify the owner or his authorized representative immediately of lack of progress or defective workmanship of the work progressing on the site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by him of the status of the work as being satisfactory for proper coordination with his own work.

34. **SUBCONTRACTING**

- a. The Contractor may utilize the services of specialty subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors.
- b. The Contractor shall not award any work to any subcontractor without prior written approval of the Owner, which approval will not be given until the Contractor submits to the Owner a written statement concerning the proposed award to the subcontractor, shall contain such information as the owner may require.
- c. The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

35. ENGINEER'S AUTHORITY

The Engineer being an authorized representative of the Owner shall determine the amount, quality, acceptability and fitness of the several kinds of work and material which are to be paid for under this Contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Engineer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said Contract or Specifications, the determination or decision of the Engineer shall be a condition

precedent to the rights of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

The Engineer shall decide the meaning and intent of any portion of the Specifications and of any Drawings where the same may be found obscure or be in dispute. Any differenced or conflicts in regard to their work which may arise between the Contractor under this Contract and other Contractors performing work for the Owner shall be adjusted and determined by the Engineer.

The Contractor shall keep on the job a copy of the Drawings and Specifications and shall at all times five the Owner and Engineer access thereto. Anything mentioned in the Specifications and not shown on the Drawings or shown on the Drawings and not mentions in the Specifications shall be considered as covered in both. In case of differences between the Drawings and Specifications, the Specifications shall govern. The Contractor shall not take advantage of any errors, discrepancies or omissions which may exist in the Drawing and Specifications but shall immediately call them to the attention of the Engineer whose interpretation or corrections thereof shall be conclusive.

36. STATED ALLOWANCES

The Contractor shall include in his proposal the cash allowances stated in Paragraph 2 of the Supplementary Conditions. The Contractor shall purchase the "Allowed Material" by soliciting not less than three (3) bids, as directed by the Owner. If the actual price for purchasing the "Allowed Materials" is more or less than the "Cash Allowance", the contract price shall be adjusted accordingly. The adjustment in contract price shall be made on the basis of the purchase price with tax included without additional charges for overhead, profit, insurance, or any other incidental expenses. The cost of installation of "Allowed Materials" shall be included in the applicable sections of the contract Specifications covering this work.

37. <u>USE OF PREMISES AND REMOVAL OF DEBRIS</u>

The Contractor expressly undertakes at his own expense:

- a. To take every precaution against injuries to persons or damage to property;
- b. To store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work of the work of any other contractor;
- c. To place upon the work of any part thereof only such loads as are consistent with the safety of that portion of the work;

- d. To clean up frequently all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of the works shall present a neat, orderly and workmanlike appearance;
- e. Before final payment to remove all surplus material false-work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat, orderly condition; and
- f. To effect all cutting, fitting or patching of his work required to make the same to conform to the Drawings and Specifications and, except with the consent of the Owner or his authorized representation, not to cut or otherwise alter the work of any other Contractor.

38. QUANTITIES OF ESTIMATE

Wherever the estimated quantities of work to be done and material to be furnished under this Contract are shown in any of the documents including the proposal, they are give for use in comparing bids and the right is expressly reserved except as herein otherwise specifically limited to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this Contract, and such increase or diminution shall in no way violate this Contract, nor shall any such increases or diminution have cause for claims or liability for damages.

39. RIGHT-OF-WAY AND SUSPENSION OF WORK

The Owner shall furnish all land and rights-of-way necessary for the carrying out of this Contract and the completion of the work herein contemplated and will use due diligence in acquiring said land and rights-of-way as speedily as possible. It is possible that all lands and rights-of-way may not be obtained as herein contemplated before construction begins, in which event the Contractor shall begin his work upon such land and rights-of-way as the Owner may have previously acquired and no claim for damages whatsoever will be allowed by reason of the delay in obtaining the remaining lands and rights-of-way. Should the Owner be prevented or enjoined from proceeding with the work or from authorizing its prosecution, either before or after commencement, by reason of any litigation, or by reason of its inability to procure and lands or rights-of-way for the said work, the Contractor shall not be entitled to make or assert claim for damage be reason of said delay, or to withdraw from the Contract except by consent of the Owner. Time for completion of the work will be extended to such times as the Owner determines will compensate for the time lost by such delay, such determination to be set forth in writing.

The provisions do not in any way take precedence over Paragraph 46, CONTRACTOR'S RIGHT TO STOP WORK AND TERMINATE CONTRACT.

40. **GENERAL GUARANTY**

Neither the final certificate of payment nor any provision in the Contract Documents nor partial or entire occupancy of the premises by the Owner shall constitute and acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall remedy any defects in the work and pay for any damage to other work resulting there from which shall appear within a period of one year from the date of final acceptance of the project unless a longer period is specified. The Owner will give notice of observed defects with reasonable promptness.

41. <u>CONFLICTING CONDITIONS</u>

Any provision in any of the contract Documents which may be in conflict or inconsistent with any of the paragraphs in these General Conditions shall be void to the extent of such conflict or inconsistency. Provisions of the Supplemental General Conditions take precedence over provisions of the General Conditions where there is a conflict.

42. NOTICE AND SERVICE THEREOF

Any notice to any Contractor from the Owner relative to any part of this Contract shall be in writing and considered delivered and the service thereof completed when said notice is posted by certified or registered mail to the said Contractor at his last given address or delivered in person to said Contractor or his authorized representative on the project.

43. PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in the Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the Contract shall forthwith be physically amended to make such insertion or correction.

44. UNDERGROUND OBSTRUCTIONS

The Contractor shall anticipate all underground obstructions such as water lines, gas lines, sewer lines, utility lines, concrete and debris. No extra payment will be allowed for the removal, replacement, repair or possible increased cost caused by underground obstructions. Any such lines or obstructions indicated on the map show only the approximate locations and must be verified in the field by the contractor. The Owner and his authorized representative will endeavor to familiarize the Contractor with all known underground utilities and obstructions, but this will not relieve the Contractor from full responsibility in anticipating all underground obstructions.

45. CORRECTION OF NUISANCE CONDITION

If, upon 24 hours written notice to the Contractor, the Contractor fails to correct a situation causing an inconvenience, damage or nuisance to the general public, particular property owners or the owner, the owner may with certification of his authorized representative as to the existence of said inconvenience or nuisance, correct the situation by whatever means is at his disposal with cost of said correction being deducted from the payments to the Contractor under the approval of the Owner's authorized representative.

46. <u>CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE</u> <u>CONTRACT</u>

If the work shall be stopped under an order of any court or other public authority for a period of ninety (90) consecutive days through no act or fault of the Contractor or any one employed by him, then the Contractor may on seven consecutive days' written notice to the Owner and the owner's authorized representative stop work or terminate this Contract and recover from the owner payment for all work executed, any losses sustained on any plant or material, and a reasonable profit. If the owner's authorized representative shall fail to issue any certificate for payment within ten (10) days after it is due, or if the owner shall fail to pay the Contractor within fifteen (15) days after its maturity and presentation any sum certified by the Owner's authorized representative, then the Contractor may on seven days' prior written notice to the Owner and the Owner's authorized representative stop work and give written notice of intention to terminate this Contract. If the owner shall thereafter fail to pay the Contractor within seven days after receipt of such notice, then the Contractor may terminate the Contract and recover from the Owner payment for all work executed any losses sustained upon any plant or materials and a reasonable profit.

47. WAIVER

It is expressly understood and agreed that any waiver granted by the owner or his authorized representative of any term, provision or covenant of this contract shall not constitute a precedent or breach of the same or any other terms, provisions, or covenants of this Contract. Neither the acceptance of the work by the owner nor the payment of all or any part of the sum due the Contractor hereunder shall constitute a waiver by the Owner of any claim which the Owner may have against the Contractor or Surety under this Contract or otherwise.

SUPPLEMENTARY CONDITIONS

1. ENUMERATION OF DRAWINGS, SPECIFICATIONS AND ADDENDA

Following are the Drawings, Specifications and Addenda, which form a part of this Contract as set forth in Paragraph 1 of the General Conditions, "Contract and Contract Documents."

CONSTRUCTION DRAWINGS

• (Sheet 5, 6 and 30)

PERMITS:

• N/A

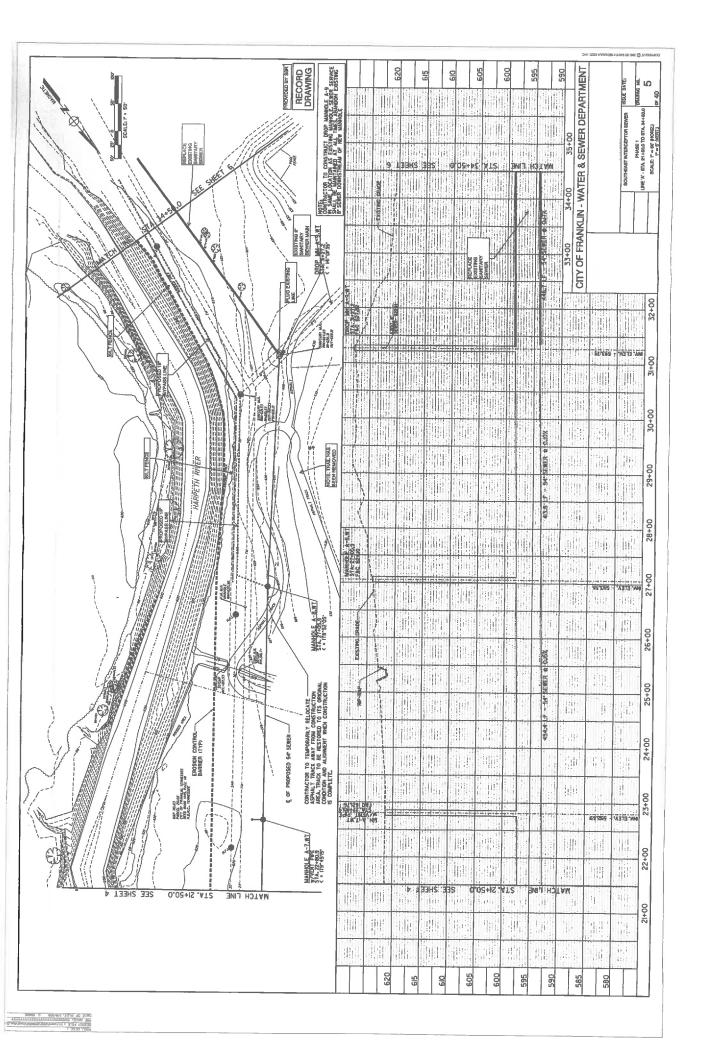
SPECIFICATIONS

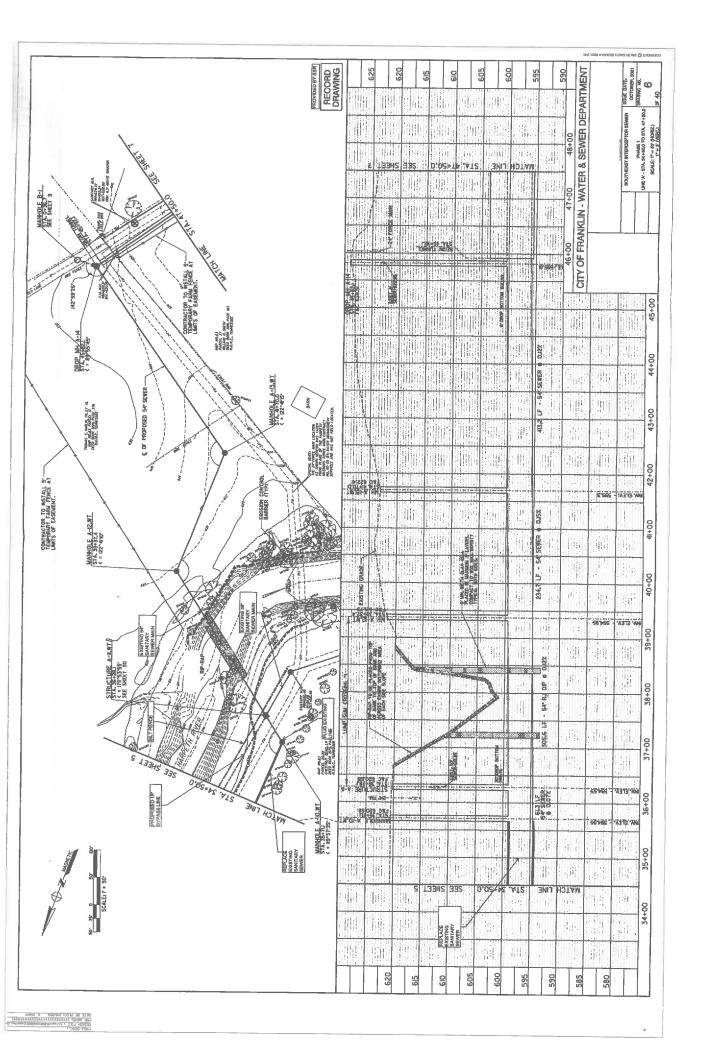
• City of Franklin - Standard Water & Wastewater Guidelines Specifications & Details.

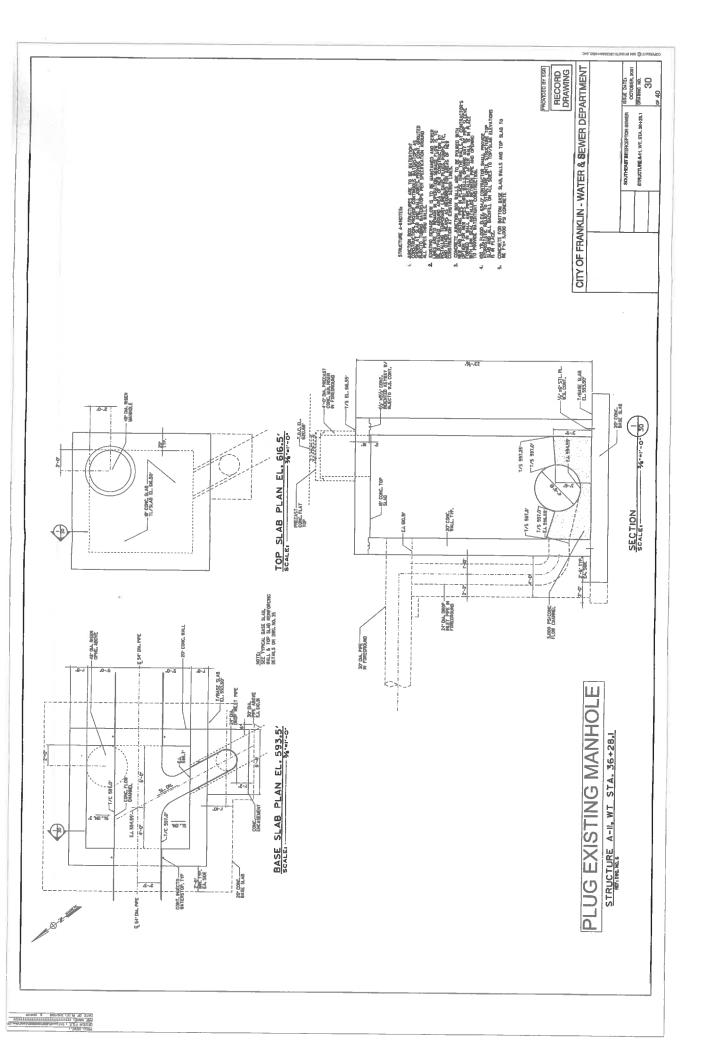
ADDENDA

N/A

HAZEN AND SAWYER: Emergency Sewer Repair Evaluation











February 21, 2017

Re:

54" Southeast Interceptor Sewer Emergency Repair To:

City of Franklin, TN

Introduction

The City of Franklin owns/operates approximately 27,300 feet of gravity sewer that's designated as the Southeast Interceptor Sewer. It ranges in size from 54-inch diameter down to 24-inch. It was constructed in three phases and completed in 2001. The sewer has served the City well up until 2014 when staff discovered a structural failure in a section of the 54-inch just north of Hwy 96 and west of the Harpeth River. The failure was repaired, requiring considerable effort, and the sewer placed back into service.

Taking a proactive approach, the City began conducting series of closed circuit television (CCTV) investigations on the remaining sections of this sewer. Once the data was in and evaluated by City staff in the fall of 2016, Hazen was hired to review a select number of the videos where structural damages was observed and recommend a rehabilitation/replacement plan.

During the time when Hazen was reviewing the videos, staff discovered a second failure earlier this month by observing a sink hole forming. This failure is located between the Harpeth River and the Chestnut Bend subdivision Pool area in an open field maintained by the HOA. Upon review of the CCTV data already collected, the failure location was one of the deficient spots where staff noticed a crack occurring in the top of the pipe and selected it for additional review and correction recommendation.

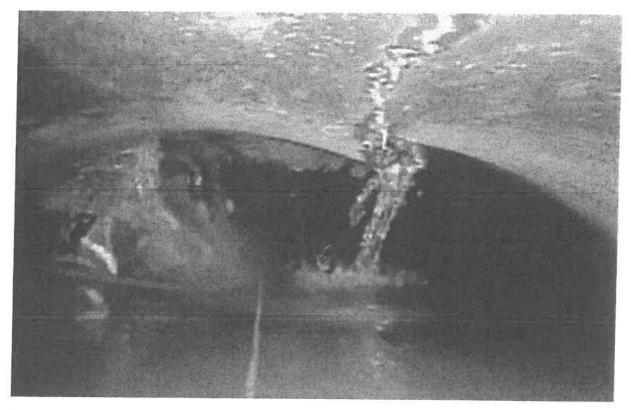
Summary of Current Conditions

Upon discovery of the most recent failure, City staff immediately taped off the area so neighboring residents would be aware of the danger and had the pipe internally videoed again. Staff then asked Hazen for an emergency evaluation and repair recommendation.

After reviewing the second video of this location it was evident that the previously noted crack in the top of the pipe had increased to the point where there was enough separation to allow a collapse. Refer to picture of the collapsed pipe below.







This type of pipe failure is beyond local repair and the damaged pipe must be replaced. To replace the failed pipe, a bypass pumping system has to be installed to transfer sewer flow around the working area. Staff learned from the 2014 failure that simply cutting out the damaged section of pipe and replacing it is difficult to do. Do to the manner in which the pipe failed it currently has an oval/egg shaped cross section. Whereas a newly manufactured piece of pipe is nearly perfectly round. These two dissimilar shapes can't be joined together with a standard manufacturer coupling or repair sleeve and maintain a water tight connection. A new manhole had to be installed to connect the old and new pipes.

Hazen has been given photos of the 2014 repair which included shots of the trench wall which showed subsurface conditions and the trench width in which the existing pipe was placed.

Statement of Assumptions

"This Evaluation is based on the assumptions stated below. Any determinations regarding materials, means of construction, and risk are based on the information available at this time, specific to this emergency repair/replacement, and the timeline required for appropriate responsiveness. Further understanding of this failure and its origin will be understood in greater detail following the analysis of data collected during this replacement action."

Although the expected existing subsurface conditions for this location are assumed to be in a limestone/shale rock trench with medium dense to dense granular overburden a conservative assumption of natural geology present was used to perform vertical loading analysis. These conservative conditions were Loose Sand (SPT blow counts of 4-8 blows per foot) with groundwater at the ground surface. However, for extra conservatism the earth load was assumed at 125 pounds per cubic foot which would normally be expected with a much denser soil column.



February 21, 2017

An embedment condition exceeding the Soil Stiffness Category 2 (SC2) has

been

indicated for the bedding details provided with this rapid design effort. A greater density (92% of maximum standard Proctor density) and greater lift height of select bedding material (12" above the top of pipe) has been required for construction than what was used in the vertical loading analysis for this pipe design providing additional conservatism.

Analysis of Pipe

Based on depth of cover and a conservative estimate of in situ unit weight of the soil, an analysis of the Stiffness (SN) 46 Fiberglass Reinforced Pipe (FRP) was performed based on two native subgrade conditions – Alternative 1 with worst case natural soils and Alternative 2 with a rock trench similar to known conditions at other sections of this pipeline. An open graded, clean aggregate (such as #57 stone) was selected for the embedment condition with little to no compactive effort applied.

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	Native Subgrade	Embedment Condition
Analysis Alternative 1	Loose Sand, SPT N = 4-8 bps	SC 2 - SPD 85%, #57 Stone
Analysis Alternative 2	Rock Trench, SPT N ≥ 50 bps	SC 2 – SPD 85%, #57 Stone

In both scenarios, a SN 46 FRP pipe would meet the minimum criteria (ring deflection, critical buckling, and bending strain) for the 50+ year design life per the national standards for FRP design and installation (AWWA M45 Manual of Practice).

Conclusion

Based on the bridge cracking and the apparent ring deflection observed from CCTV data of the entire reach and construction photos from the previous emergency replacement, and the pipe analysis performed, it would appear that one or a combination of the following was provided during the construction of this pipeline leading to the eventual early failure of the pipe:

- 1. Pipe trench used to install the sewer was too narrow to allow appropriate pipe bedding placement under the pipe haunches and/or compaction,
- Pipe bedding used was not of adequate strength and stability to provide continuous side support necessary to ensure the FRP pipe maintained acceptable ring deflection and was within acceptable range of strain, 3. Pipe stiffness couldn't handle earth loading as installed.

Recommendations

Scope of Emergency Response

MH to MH vs "locational replacement", Cons of locational replacement:

x Can't connect to pipe due to over-deflection x Cost of delays finding proper pipe dimension to

February 21, 2017



connect to x Impacts of returning to the same area to replace additional pipe in the future for same reason x By-pass from MH to MH already setup and promotes full replacement **Pipe Material**

Adequate stiffness FRP (min SN 46) and Protecto 401 lined (min PC 150) DIP are both acceptable selections for this replacement, however with differing risk elements.

Until further investigation into the failure can be performed (with possibly forensic testing and examination), purchasing pipe from the original supplier may create a conflict of interest in the near term. Therefore, to avoid unnecessary exposure to the City, any FRP purchased for this repair shall be from an alternate FRP pipe supplier than the original pipe supplier.

Contractor to select pipe from either of the recommended pipe materials on the basis of the product availability to expedite this repair effort.

Construction/Performance Risk Elements

A Quality Assurance approach to the Construction Oversight of this repair is recommended to reduce risk to the City and the longevity of this replacement.

DIP – Focus on long-term corrosion protection – condition of the pipe and coating, warranty of the coating and assurance that the manufacturer's/applicator's warranty shall begin at the in-service date, inspection of the in-field joint compound application and touch-ups, ensuring proper handling and prevention of temporary over-deflection that can result in long-term poor performance/adhesion of the coating.

FRP – Focus on handling and care onsite, proper preparation of the trench, appropriate select bedding material is provided, placement of bedding under the haunches, maximum lift depths, and compaction. Potential bedding migration prevention if necessary – geotextile, etc.

Contractor Scope of Work

The Contractor shall furnish all labor and materials required to perform all operations for the removal and replacement of sewers and appurtenances including all pipe, jointing materials, concrete, granular bedding, backfill, testing, and incidental work necessary to complete the work as described below.

- 1. Install and maintain perimeter erosion prevention and sediment controls.
- 2. Assume control, responsibility, invoicing, and operation of the bypass pumping system as provided by Heartland Pump for the duration of the project.
- 3. As represented in the attached GIS based map, the Contractor shall remove and replace the existing 54" pipe from MH10324 upstream to MH11110. 2001 asbuilt drawings will also be provided., MH A-9 Sta 31+27.2 upstream to MH A-10 Sta 35+71.1
- 4. Contractor shall establish and install the new pipe from the existing invert in of MH10324 to the invert out of MH11110 maintaining a constant slope.
- 5. Replace the existing MH Frames and Covers with new Watertight versions and securely attach them to the existing MHs with M-1Structural Adhesive/Sealant or equivalent.
- 6. At three (3) locations along the alignment, the Contractor shall allow time and provide labor assisting the Engineer to document the existing pipe's trench characteristics.
- 7. Care shall be taken when removing the existing pipe in the area of the failure. Backfill shall be removed carefully as to not damage the remaining pipe further. The pipe shall be removed and three (3) sample rings salvaged for additional materials testing by the Owner.

Hazen

February 21, 2017

- 8. Carefully follow the trench details for Soil Trench and Rock Trench as field conditions change per the direction of the engineer. The pipe envelope is critical to the installation's long term success.
- 9. Each section of pipe shall be inspected by the owner/engineer prior to installation. Defective pipe shall be rejected and removed from site.
- 10. Bells and Spigots shall be carefully cleaned before pipe is lowered into the trench. Before joints are made, each section of pipe shall rest upon the pipe bed for the full length of it's barrel, with recesses to accommodate bells. After joining of consecutive pipes the recess shall be adequately backfilled. At no time shall a pipe be belled up until the preceding pipe has been adequately backfilled to protect against movement and misalignment.
- 11. The interior of all pipes shall be thoroughly cleaned before installation and kept clean until acceptance of work is granted.
- 12. Laying pipe in wet/submerged conditions is prohibited. In all cases proper trench dewatering shall be maintained so that the water level is kept to at least six (6) inches below the bottom of the trench.
- 13. Each joint shall be pressure tested prior to subsequent joints being placed.
- 14. Any pipe that has it's grade on joint disturbed after laying shall be taken up the reinstalled.
- 15. Prior to acceptance, a mandrel shall be pulled from MH to MH to test deflection (5% Deflection) and CCTV submitted to the Owner/Engineer for review.
- 16. Upon acceptance, the trench shall be completely backfilled finishing with a 4" mounded surface to allow for future settlement.
- 17. Other than trench width, the remaining disturbed area shall receive finish grading, areas that received heavy construction traffic shall be scarified to a 4inch depth.
- 18. All disturbed areas shall receive seasonal seeding and mulch.

Bid Form

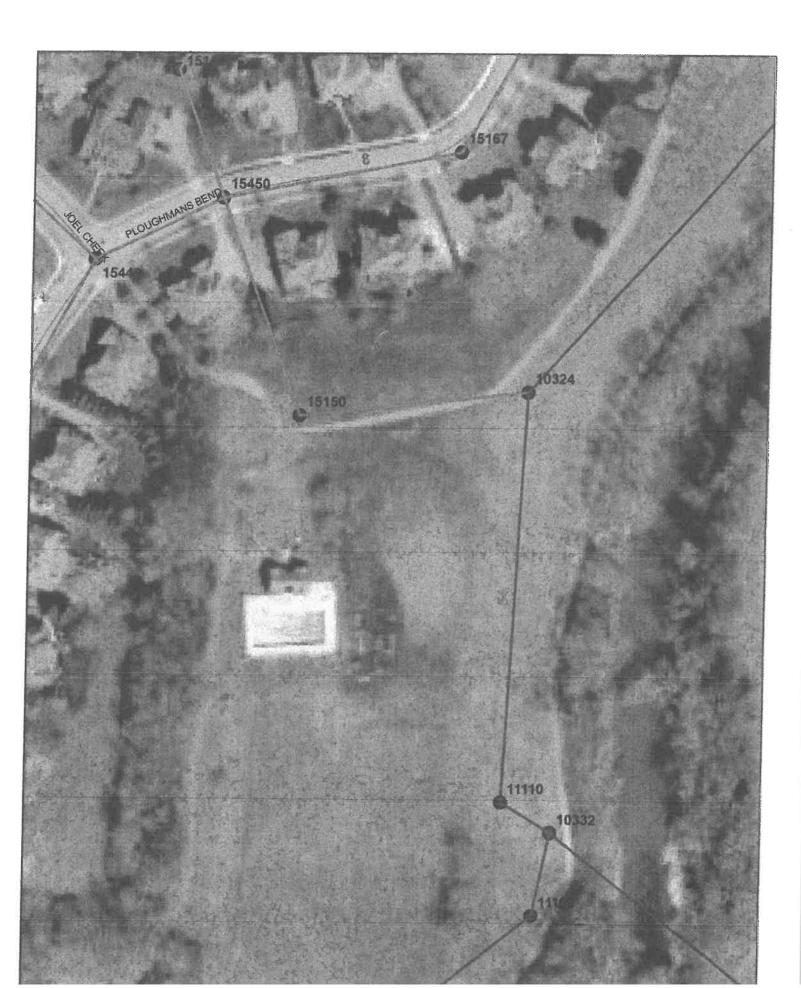
Item Description	Qty	Unit	Unit Price	Total
Construction Mobilization/Demobilization	1	LS	\$60,000.00	\$60,000.00
Manage/Operate Sewer Bypass Pumping System Prior to Construction, "Idle Condition"	15	DY	\$900.00	\$13.500.00
Manage/Operate Sewer Bypass Pumping System Prior to Construction, "Pumping Condition"	15	DY	\$2,400.00	\$36,000.00
54" Sewer Pipe in Soil Trench w/Geotextile Trench Lining (Pipe Material), Installation of "Backfill" material, compacted above "Select Backfill", Compactable trench spoil may be used if it meets the criteria of "Backfill" and compaction requirements, Includes Bypass Pumping During Construction	230	LF		\$284.050.00
	Construction Mobilization/Demobilization Manage/Operate Sewer Bypass Pumping System Prior to Construction, "Idle Condition" Manage/Operate Sewer Bypass Pumping System Prior to Construction, "Pumping Condition" 54" Sewer Pipe in Soil Trench w/Geotextile Trench Lining (Pipe Material), Installation of "Backfill" material, compacted above "Select Backfill", Compactable trench spoil may be used if it meets the criteria of "Backfill" and compaction requirements, Includes Bypass Pumping During	Construction Mobilization/Demobilization Manage/Operate Sewer Bypass Pumping System Prior to Construction, "Idle Condition" Manage/Operate Sewer Bypass Pumping System Prior to Construction, "Pumping Condition" 54" Sewer Pipe in Soil Trench w/Geotextile Trench Lining (Pipe Material), Installation of "Backfill" material, compacted above "Select Backfill", Compactable trench spoil may be used if it meets the criteria of "Backfill" and compaction requirements, Includes Bypass Pumping During	Construction Mobilization/Demobilization I LS Manage/Operate Sewer Bypass Pumping System Prior to Construction, "Idle Condition" Manage/Operate Sewer Bypass Pumping System Prior to Construction, "Pumping Condition" 54" Sewer Pipe in Soil Trench w/Geotextile Trench Lining (Pipe Material), Installation of "Backfill" material, compacted above "Select Backfill", Compactable trench spoil may be used if it meets the criteria of "Backfill" and compaction requirements, Includes Bypass Pumping During	Construction Mobilization/Demobilization Manage/Operate Sewer Bypass Pumping System Prior to Construction, "Idle Condition" Manage/Operate Sewer Bypass Pumping System Prior to Construction, "Pumping Condition" 54" Sewer Pipe in Soil Trench w/Geotextile Trench Lining (Pipe Material), Installation of "Backfill" material, compacted above "Select Backfill", Compactable trench spoil may be used if it meets the criteria of "Backfill" and compaction requirements, Includes Bypass Pumping During 15 DY \$2,400.00 LF

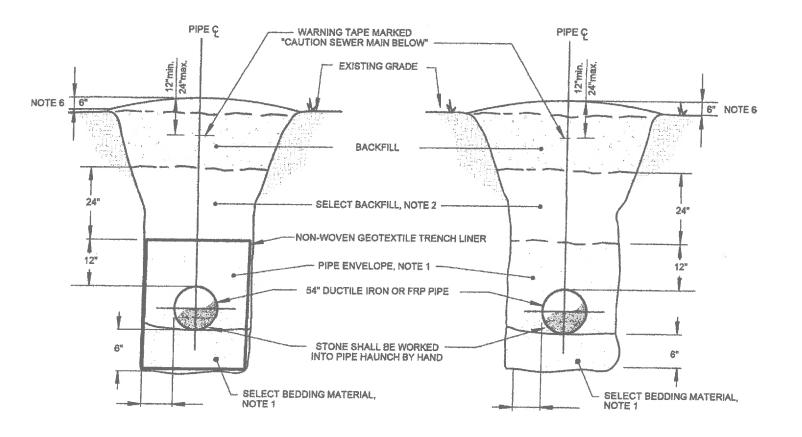
February 21, 2017

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S-5	54" Sewer Pipe in Rock Trench (Pipe Material), Installation of "Backfill" material, compacted above "Select Backfill", Compactable trench spoil may be used if it meets the criteria of "Backfill" and compaction requirements. Includes Bypass Pumping During Construction	230	LF	\$1,485.00	\$341,550.00
S-6	Import and Installation of "Select Backfill" material zone, 24" thickness compacted above pipe envelope	350	CY	\$45.00	\$15,750.00

S-7	Import and Installation of "Backfill" material to replace unsuitable material that can't be reused	3400	CY	\$35.00	\$119,000.00
S-8	Haul and dispose of unsuitable material, "ONsite"	1700	CY		
				\$10.00	\$17,000.00
S-9	Haul and dispose of unsuitable material, "OFFsite"	1700	CY		
ļ				\$50.00	\$85,000.00
S-10	Seasonal Seeding (with Mulch) on all disturbed areas	3	AC		
				\$2,500.00	\$7,500.00
S-11	Silt Fence, along alignment and spoil area	2000	LF		
				\$3.50	\$7,000.00
S-12	Pipe Testing (Joint, CCTV)	1	LS		
				\$60,000.00	\$60,000.00
S-13	Compaction Testing, one (1) per each lift of material placed	1	LS		
S-14	Transh Davistaria			\$60,000.00	\$60,000.00
3-14	Trench Dewatering	1 1	LS	\$100,000.00	6400 000 00
S-15	Final Cleanup and Surface Restoration	1	LS	\$100,000.00	\$100,000.00
5 15	Times Cicarap and Surface Restoration	1	LS	\$30,000.00	\$30,000.00
S-16	Install Watertight Frame and Cover at each MH	2	EA		
				\$1,000.00	\$2,000.00
S-17	Provide and Install new rubber boot connectors at	2	EA		
	each MH connection		LA	\$1,000.00	\$2,000,00
					φ2,000,00
				Total	
					\$1,240,350.00





24"min.
BETWEEN EARTHEN TRENCH WALL
OR INSIDE TRENCH BOX, NOTE 3

24"min. BETWEEN EARTHEN TRENCH WALL OR INSIDE TRENCH BOX, NOTE 3

BASE TRENCH SECTION "IN SOIL"

ALTERNATE TRENCH SECTION

"IN ROCK"

NOTES:

- SELECT BEDDING AND PIPE ENVELOPE BACKFILL SHALL BE PLACED TO A 24-INCH MIN. DEPTH OF COVER OVER PIPE. REFER TO THE ATTACHED SPECIFICATION FOR MATERIAL CHARACTERISTICS.
- THE SELECT BACKFILL SHALL BE A MATERIAL FREE FROM ROCKS GREATER THAN 2" dia., SOIL CLODS, OR FROZEN MATERIAL. WHEN AUTOMATIC TAMPERS ARE USED, CARE SHALL BE EXERCISED TO AVOID DAMAGE TO THE PIPE.
- A MINIMUM OF 24 INCHES OF CLEAR SPACE IS REQUIRED BETWEEN EACH SIDE OF THE PIPE AND THE EARTHEN TRENCH WALL OR INSIDE FACE OF THE TRENCH BOX (IF USED).
- GEOTEXTILE SHALL BE A MINIMUM 8-OUNCE PER SQUARE YARD (NOMINAL) NONWOVEN NEDDLE PUNCHED SYNTHETIC

FABRIC CONSISTING OF STAPLE OR CONTINUOUS FILAMENT POLYESTER OR POLYPROPYLENE MANUFACTURED IN A MANNER ACCEPTED BY THE ENGINEER AND THE OWNER. GEOTEXTILE SHALL BE INERT AND UNAFFECTED BY LONG TERM EXPOSURE TO CHEMICALS OR LIQUIDS WITH A PH RANGE FROM 3 TO 10. GEOTEXTILE SHALL HAVE A SURVIVABILITY CLASS OF CLASS 1 OR 2 IN ACCORDANCE WITH AASHTO M288, UNLESS OTHERWISE SPECIFIED HEREIN. ACCEPTABLE PRODUCTS ARE MIRAFI 180N OR EQUIVALENT.

- ALL SEWER LINE TRENCHES SHALL BE MECHANICALLY COMPACTED IN 6" LOOSE LIFTS AT 95% STANDARD PROCTOR, (FULL DEPTH).
- TRENCH SHALL BE CAPPED OFF WITH A 6" MOUND OF TOP SOIL. ADDITIONAL OFFSITE MATERIAL REQUIRED SHALL BE INCIDENTAL TO THE UNIT PRICES AVAILABLE.
- 7. PIPE BEDDING AND COMPACTED BACKFILL SHALL BE INCIDENTAL TO THE UNIT PRICE FOR SEWER LINE.
- 8. ENGINEER SHALL DETERMINE WHICH TRENCH SECTION SHALL APPLY BASED ON CHANGING FIELD CONDITIONS.

TRENCH DETAIL

PIPE BACKFILL SPECIFICATION

- A. SELECT BACKFILL SHALL CONTAIN NO MAN-MADE OR ORGANIC MATERIALS AND SHALL BE FREE OF ROCKS, CLODS, OR OTHER MATERIALS LARGER THAN 2-INCHES IN NOMINAL DIAMETER. MATERIALS FROM ON-SITE EXCAVATIONS MAY BE USED FOR SELECT BACKFILL PROVIDED THEY MEET THE SPECIFIED REQUIREMENTS. IF SUFFICIENT ON-SITE SELECT BACKFILL MATERIAL IS NOT AVAILABLE, THE CONTRACTOR SHALL SECURE ACCEPTABLE MATERIALS FROM AN OFF-SITE BORROW AREA AT NO ADDITIONAL COST TO THE OWNER. OFF-SITE BORROW MATERIAL SHALL BE APPROVED BY THE ENGINEER BEFORE ANY MATERIAL IS TRANSPORTED TO THE WORK AREA.
- SELECT BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM STANDARD PROCTER DENSITY IN ACCORDANCE WITH ASTM D4253 AND ASTM D4254 (RELATIVE DENSITY). ASTM D698 TESTING METHODS MAY BE USED IF THE TEST RESULTS IN A CLEARLY DEFINED COMPACTION CURVE.
- B. BACKFILL MATERIALS SHALL BE FREE OF ALL ORGANIC MATERIALS AND SHALL NOT CONTAIN ANY ROCKS LARGER THAN 12 INCHES IN DIAMETER. MATERIALS FROM ON-SITE EXCAVATIONS MAY BE USED FOR BACKFILL PROVIDED THEY MEET THE SPECIFIED REQUIREMENTS. IF SUFFICIENT ON-SITE BACKFILL MATERIAL IS NOT AVAILABLE, THE CONTRACTOR SHALL SECURE BACKFILL MATERIALS FROM AN OFF-SITE BORROW AREA AT NO ADDITIONAL COST TO THE OWNER.

 OFF-SITE BORROW MATERIAL SHALL BE APPROVED BY THE ENGINEER BEFORE ANY MATERIAL IS TRANSPORTED TO THE WORK AREA.
- BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM STANDARD PROCTER DENSITY IN ACCORDANCE WITH ASTM D4253 AND ASTM D4254 (RELATIVE DENSITY). ASTM D698 TESTING METHODS MAY BE USED IF THE TEST RESULTS IN A CLEARLY DEFINED COMPACTION CURVE.
- C. SELECT BEDDING AND PIPE ENVELOPE SHALL MEET THE FOLLOWING REQUIREMENTS:
- SELECT BEDDING AND PIPE ENVELOPE SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM STANDARD PROCTER
 DENSITY IN ACCORDANCE WITH ASTM D4253 AND ASTM D4254 (RELATIVE DENSITY). ASTM D698 TESTING METHODS MAY BE
 USED IF THE TEST RESULTS IN A CLEARLY DEFINED COMPACTION CURVE.
- COMPACTION OF SELECT BEDDING AND PIPE ENVELOPE SHALL BE PERFORMED WITH SURFACE PLATE VIBRATORS, VIBRATORY ROLLERS, OR INTERNAL VIBRATORS.
- MAXIMUM LIFT THICKNESS DURING PLACEMENT OF SELECT BEDDING AND PIPE ENVELOPE SHALL NOT EXCEED 6-INCHES. IF COMPACTED WITH INTERNAL VIBRATORS, LIFT THICKNESS SHALL NOT EXCEED THE LENGTH OF THE VIBRATOR.
- 4. MOISTURE CONTENT OF SELECT BEDDING SHALL BE CONTROLLED OF ±3% OF OPTIMUM PER ASTM D698.
- 5. SELECT BEDDING SHALL BE IMPORTED MATERIAL MEETING THE FOLLOWING GRADATION AND PIPE SUPPORT:
 - a. SC1 CRUSHED ROCK CONTAINING ≤ 15% SAND, 100% PASSING THE 1 1/2-IN SIEVE, MAXIMUM 25% PASSING THE 3/8-IN SIEVE AND MAXIMUM 5% PASSING THE NO. 200 SIEVE.
 - SC2 CLEAN, COARSE-GRAINED AGGREGATES MEETING SOIL GROUP A1 OR A3 IN THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) M145 - CLASSIFICATION OF SOILS AND SOIL AGGREGATE MIXTURES.

- c. MAXIMUM PARTICLE SIZE FOR SELECT BEDDING SHALL BE 1.5-IN.
- d. IN NO CASE, SHALL A SOIL AGGREGATE MIXTURE BE ACCEPTED AS SELECT BEDDING IF IT'S USCS DESIGNATION IS SP PER ASTM D2487 AND HAVING 50% PASSING A NO. 100 SIEVE.
- 6. SELECT BEDDING SHALL BE WORKED BY HAND UNDER PIPE TO PROVIDE UNIFORM HAUNCH SUPPORT.
- 7. WHEN ROCK OR UNYIELDING MATERIAL IS PRESENT IN TRENCH BOTTOM, INSTALL A MINIMUM 6-IN CUSHION OF BEDDING MATERIAL BELOW THE BOTTOM OF THE PIPE.

TRENCH BACKFILL NOTES
NTS

Insurance Requirements for contractors doing business with the City of Franklin, Tennessee

I. GENERAL CONSIDERATIONS

It is a requirement of the City of Franklin that any Contractor when working for the City of Franklin shall agree to defend the City Government, its officers, board and commission members and employees against claims for damages arising out of or relating to the work of the Contractor, his subcontractors or their respective employees, servants and/or agents. The purpose of these requirements is to protect the City of Franklin's financial position. If there is a conflict between the wording of these Insurance Requirements and other forms, the wording of these Insurance Requirements will control. No insurance which may be provided by the City of Franklin shall be to the benefit of the Contractor.

To insure compliance with this policy, the City of Franklin requires each Contractor to carry adequate insurance coverage with a company or companies acceptable to said City of Franklin. The City of Franklin fully understands that no insurance policy of any company licensed to do business in the State of Tennessee is all encompassing in coverage or limit of liability.

II. INSURANCE REQUIREMENTS

During performance and up to the date of final acceptance of the work, the Contractor must effect and maintain insurance hereafter checked as required. The first (primary) one million dollars (\$1,000,000) of Bodily Injury and Property Damage limits must be with a company or companies licensed to do business in Tennessee. The excess over one million dollars (\$1,000,000) may be with either a licensed or non-admitted company provided the non-admitted company is: (1) listed as approved to do business in Tennessee by the Tennessee Department of Insurance; (2) has a Best financial rating of A-X or better; and (3) is otherwise acceptable to the Administration of the City of Franklin.

All policies must be of the standard form of coverage as filed with and approved by the Commissioner of Insurance for the State of Tennessee or otherwise authorized. The contractor shall not commence work under the Contract <u>unless and until</u> he/she has obtained all insurance coverages required hereafter and such insurance has been approved by the Risk Manager of the City of Franklin.

If the box is checked beside the type of coverage, it will be required.

Insurance Requirements for contractors doing business with the City of Franklin, Tennessee

A. GENERAL LIABILITY

1. Comprehensive General Liability

The contractor shall have and maintain during the life of the Contract adequate Bodily Injury Liability Insurance and Property Damage Liability Insurance to protect him from all claims for Bodily Injury and Property Damage arising from the Contractor's operations under the Contract, whether such operations are by Contractor or any subcontractors performing work covered by the Contract. The Bodily Injury Liability Insurance shall pay on behalf of the Insured all sums up to the limits provided by the policy which the Insured shall become legally obligated to pay as damages because of bodily injury, sickness or disease, including death at anytime resulting therefrom, sustained by any person other than an employee of the Contractor. The Property Damage Liability Insurance shall pay on behalf of the Insured all sums up to the limits provided by the policy which the Insured shall become legally obligated to pay as damages because of injury to, or destruction of property, including the loss of use thereof.

If there is a check mark here, this policy shall cover liability for damage to property caused by blasting, explosion, collapse, or structural injury to any building or structure, or damage to any property below the surface of the ground (Explosion, Collapse and Underground Damage) as applicable.

2. Premises and Operations Liability

The Contractor shall have and maintain during the life of the Contract such Premises and Operations Liability Insurance as shall protect him and the City of Franklin from liability resulting from the operations under the Contract by the Contractor.

3. Products and Completed Operations Liability

The Contractor shall provide such Products and Completed Operations Insurance as shall protect him from liability arising out of or relating to the Contract and including those products involved in the work for which he is responsible.

4. Broad Form Contractual Liability

The Contractor shall have and maintain during the life of the Contract such Contractual Liability Insurance as shall protect him from liability resulting from the execution of the Contract by the Contractor. If coverage is not provided on the blanket form basis, a copy of the policy or endorsement providing coverage for contractual liability assumed by the Contractor shall be included under Certificate of Insurance.

Insurance Requirements for contractors doing business with the City of Franklin, Tennessee

B. COMPREHENSIVE AUTOMOBILE LIABILITY (all owned, hired and non-owned)

The Contractor shall have and maintain during the life of the Contract such Comprehensive Automobile Liability (all owned, hired and non-owned) Insurance as shall protect the Contractor for claims arising out of or relating to the ownership, operation, maintenance and use of land motor vehicles and trailers intended for use therewith.

C. WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY

The Contractor shall have and maintain during the life of the Contract Workers' Compensation Insurance conforming with the requirements of the laws of Tennessee and, if applicable, the Jones Act and the Longshoremen's and Harbor Workers' Compensation Act. In case any employee or employees are not covered by such laws of Tennessee, the Contractor shall provide Employer's Liability coverage for the protection of such employee or employees.

D. BUILDER'S RISK INSURANCE

The Contractor shall have and maintain during the life of the Contract such Property Insurance upon his entire work at the site to the full insurable value thereof. This insurance shall protect the City of Franklin, as its interest may appear in the work and shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for the physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief. All Risk insurance may contain the normal exclusions such as, but not limited to, flood, earthquake, mysterious disappearance, inherent vice, war and nuclear event. If the City of Franklin requires coverage for flood or earthquake, specific requirements concerning same are set out hereafter in these specifications. If not covered otherwise, the Contractor shall have and maintain during the life of the Contract similar Property Insurance on portions of the work stored off the site or in transit when such portions of the work are to be included in any payment.

"The Contractor shall purchase and maintain during the life of this contract a policy of insurance naming the Owner, the Engineer, their officers, agents and employees as Named Insureds. Said policy shall protect the interest of the Named Insureds."

for contractors doing business with the City of Franklin, Tennessee

F.		OTHER INSURANCE
	-	
	-	
	-	

III. ADDITIONAL INSURANCE REQUIREMENTS

A. The Certificate or Certificates of Insurance shall contain the following provision:

"The coverage provided shall not be canceled, reduced in coverage, or allowed to lapse <u>unless and until</u> the City of Franklin receives at least thirty (30) days advance <u>written</u> notice of same. Said <u>written</u> notice must be delivered to the Risk Manager, at his office shown as the address of the Certificate Holder below."

- **B.** Each of said policies set out above for contracts in excess of \$250,000 may contain a deductible feature not in excess of \$25,000 per occurrence. If a deductible feature is provided in a policy or policies, the Contractor shall be liable for said amount of any claim or loss. Each of said policies set out above for contracts not in excess of \$250,000 shall not contain a deductible feature.
- C. The word "contract" above means the CONTRACT AND AGREEMENT (C & A) for this PROJECT. The word "Contractor" is the successful BIDDER who is the CONTRACTOR for this PROJECT. The limit "Ea. Person" is the monetary limit applied to each person injured in a given occurrence. The limit "Ea. Occur." is the limit of the total liability for claims, subject to the limit for "Ea. Person," from one common cause. The word "Aggregate" is the limit of the total liability for all damage of the specified coverage for each annual term of the insurance policy.
- D. The CONTRACTOR is required to have the CERTIFICATE OF INSURANCE set out hereafter properly executed by an insurance company or insurance companies authorized to do business in the State of Tennessee. No other Certificate of Insurance shall be used.

IV. MINIMUM LIMITS OF COVERAGE

Coverage shall be at least to the following minimum limits. If the Contractor has or obtains primary and umbrella excess policies, there shall be <u>no</u> gap between them.

for contractors doing business with the

City of Franklin, Tennessee

A. GENERAL LIABILITY

1. Comprehensive General Liability

a. For contracts in excess of \$250,000

	Bodily Injury	\$3,000,000 \$3,000,000	Ea. Occur. Aggregate
	Property Damage	\$3,000,000 \$3,000,000	Ea. Occur. Aggregate
	(or)		
	Combined Single Limit	\$3,000,000	Per Occur.
b.	For contracts not in excess of \$250,000		
	Bodily Injury	\$1,000,000 \$1,000,000	Ea. Occur. Aggregate
	Property Damage	\$1,000,000 \$1,000,000	Ea. Occur. Aggregate
	(or)		
	Combined Single Limit	\$1,000,000	Per Occur.

- 2. Premises and Operations Liability: same limits as for Comprehensive General Liability as shown above.
- 3. Products and Completed Operations Liability: same limits as for Comprehensive General Liability as shown above.
- **4. Broad Form Contractual Liability:** same limits as for Comprehensive General Liability as shown above.

for contractors doing business with the

City of Franklin, Tennessee

В.	COMPREHENSIVE	AUTOMOBILE	LIABILITY	(all	owned,	hired	and	non-
	owned):			`	,			

1.	For	contracts	in	excess	of	\$250.0	000
----	-----	-----------	----	--------	----	---------	-----

Bodily Injury	\$3,000,000 \$3,000,000	Ea. Person Ea. Occur.
Property Damage	\$3,000,000 \$3,000,000	Ea. Occur. Aggregate
(or)		
Combined Single Limit	\$3,000,000	Per Occur.
For contracts not in excess of \$250,000		
Bodily Injury	\$1,000,000 \$1,000,000	Ea. Person Ea. Occur.
Property Damage	\$1,000,000 \$1,000,000	Ea. Occur. Aggregate
(or)		

C. WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY

1. For contracts in excess of \$250,000

Combined Single Limit

a. Workers' Compensation \$1,000,000 (including compliance with the Jones Act and the Longshoremen's and Harbor Workers Act, as applicable)

b. Employer's Liability

2.

\$1,000,000 Ea. Occur.

Per Occur.

\$1,000,000

2. For contracts not in excess of \$250,000

a. Workers' Compensation Statutory Amount (including compliance with the Jones Act and the Longshoremen's and Harbor Workers Act, as applicable)

b. Employer's Liability

\$300,000 Ea. Occur.

for contractors doing business with the

City of Franklin, Tennessee

D. BUILDER'S RISK INSURANCE

For all contracts, regardless of value:

Builder's Risk Insurance

Value of Structure

E. OWNER'S AND CONTRACTOR'S PROTECTION

1. For contracts in excess of \$250,000

Owner's Protective Liability

\$3,000,000

2. For contracts not in excess of \$250,000

Owner's Protective Liability

\$1,000,000

F. OTHER INSURANCE:

AS REQUIRED

Insurance Requirements for contractors doing business with the City of Franklin, Tennessee

V.	CERTIFICATION
w	

This is to further certify to the City of Franklin concerning the policies of insurance listed and the coverages provided thereby that:

- A. The Contractual Liability Insurance coverage is on a Blanket Broad Form basis unless this box () is checked and such coverage is fully explained on an attached sheet which becomes a part of this Certificate.
- B. The company or companies, upon request, agree to deliver within fifteen (15) days a certificate copy of any and/or all of the policies of insurance to the City of Franklin.
- C. If one (1) or more Umbrella Excess policies are used, there is <u>no gap</u> between the limits of the primary policies and the deductible features of the Umbrella Excess policies.
- D. Coverage under the primary policies has no deductible features unless there is a check mark here (___). If there are deductible features or the insured has adopted a funded self-insurance program, such arrangements are fully explained on an attached sheet which becomes a part of this Certificate.
- E. The coverage provided shall not be cancelled, reduced in coverage, or allowed to lapse <u>unless and until</u> the City of Franklin receives at least thirty (30) days advance <u>written</u> notice of same. Said written notice <u>must</u> be delivered to the Certificate Holder as listed below and, if one is listed below, to the Secondary Certificate Holder.

THOUGH WE HERE DELOW WIND IT OHE IS HER	a below, to the Secondary Certificate Moider.
CERTIFICATE HOLDER:	DATE ISSUED: 3-10-17
The City of Franklin c/o Risk Manager 109 3 rd Avenue South Franklin, TN 37065	(Agency or Company) By Mall
SECONDARY CERTIFICATE HOLDER:	(Authorized Representative) (Attach Power of Attorney)
	City Department:
	Purchasing Office Solicitation No.:



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 2/28/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to

	the terms and conditions of the polic certificate holder in lieu of such endo	y, ce orsen	rtain nent(s	policies may require an	endors	ement. A st	atement on	this certificate does i	ot confer	rights to the
PF	ODUCER				CONT	ACT				
F	rank E. Neal & Co., Inc.				DHUN	E 460-) 383-887	4 FAX	No); (615) 3	183_8030
P	О. Вож 40507				E-MAI ADDR	No, Ext): (615 L ESS: 1tombe			No); (025)	703 0333
19	3-B Polk Avenue					IN	SURER(S) AFFO	ORDING COVERAGE		NAIC#
Na	shville TN 37	7204			INSUR			ional Ins. Co.		20109
INS	GURED							erty Casualty (o of he	
1	lker Building Group, LLC					ER C:		or ty castarty (O CLAM	23079
28	17 West End Ave #126-256				INSUR	ERD:				
Na	shville TN 37	203			INSUR		.			
			CAT	E NUMBED-00/15/201	INSUR	ERF:		DELAGIONIANIA		
_	THIS IS TO CERTIFY THAT THE POLICIE			ENUMBER:09/15/201		EN ICCUED 7	0 THE 1110H	REVISION NUMBER	<u> </u>	
- (NDICATED. NOTWITHSTANDING ANY R CERTIFICATE MAY BE ISSUED OR MAY EXCLUSIONS AND CONDITIONS OF SUCH	PER POL	REME TAIN, ICIES	ENT, TERM OR CONDITION THE INSURANCE AFFORI LIMITS SHOWN MAY HAV	OF ANDED BY	Y CONTRACT THE POLICIE REDUCED BY	T OR OTHER ES DESCRIBE Y PAID CLAIM	DOCUMENT WITH RE ED HEREIN IS SUBJEC S.	SPECT TO	WHICH THIS
LTR	TYPE OF INSURANCE	INSD	SUBR	POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	POLICY EXP	L	IMITS	
	X COMMERCIAL GENERAL LIABILITY							EACH OCCURRENCE	\$	1,000,000
A	CLAIMS-MADE X OCCUR							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	100,000
				CLP3643400B		9/15/2016	9/15/2017	MED EXP (Any one person)	\$	5,000
								PERSONAL & ADV INJURY	\$	1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$	2,000,000
	POLICY X PRO-							PRODUCTS - COMP/OP AC	G \$	2,000,000
	OTHER:								\$	
	AUTOMOBILE LIABILITY							COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000
A	X ANY AUTO							BODILY INJURY (Per persor	1) \$	
-	ALL OWNED SCHEDULED AUTOS			CAP3643398B		9/15/2016	9/15/2017	BODILY INJURY (Per accide	nt) \$	
	X HIRED AUTOS X NON-OWNED AUTOS							PROPERTY DAMAGE	s	
	70100					-		(Per accident)	s	
	X UMBRELLA LIAB X OCCUR							EACH OCCURRENCE	s	5 000 000
В	EXCESS LIAB CLAIMS-MADE							AGGREGATE	\$	5,000,000
_	DED RETENTIONS 0	[ZUP61M66078	- 1	9/15/2016	9/15/2017	AGGREGATE		5,000,000
	WORKERS COMPENSATION					5,55,555	7/10/2011	X PER OTH	\$	
	AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE					İ	}			
A	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A		WC3643399		9/15/2016	9/15/2017	E.L. EACH ACCIDENT	\$	500,000
	If yes, describe under DESCRIPTION OF OPERATIONS below			103043333	ľ	3/13/2010	9/15/201/	E.L. DISEASE - EA EMPLOY		500,000
_								E.L. DISEASE - POLICY LIMI	T \$	500,000
A	INSTALLATION FLOATER	[CLP3643400B		9/15/2016	9/15/2017	LEASED/RENTED EQP LIMIT	Γ:	175,000
	LIMIT: \$100,000 / DED:1,000		İ					DEDUCTIBLE:		500
ESC	RIPTION OF OPERATIONS / LOCATIONS / VEHIC	LES (CORD	101, Additional Remarks Schedu	ule, may i	e attached if mo	re space is requ	ired)		
Œ:	EMERGENCY 54" SANITARY SE	WER	REF	AIR PROJECT @ CHE	STNUI	BEND SU	BDIVISION	Ī		
ro ro	RESPECTS GENERAL LIABILITY	ON	AF	RIMARY & NON-CONT	RIBUT	ORY BASIS	3, THE CI	TY OF FRANKLIN,	ITS OF	FICERS,
RT	RD AND COMMISSION MEMBERS	AND	EMP Toto	CAME HOLDER AND M	ONAL	INSURED I	PER FORM	GL-3085 WITH RE	SPECT T	O THE
GR	TTEN CONTRACT BETWEEN THE EEMENT. WAIVER OF SUBROGA	TIO	A LM	LYANDS OF WHE YOU	да МА ТФТОМ	MAL INCUM	KED FOR T	AS KEPERENCED P	KOJECT	OR
IA	BILITY AND WORKERS COMPENS	ATI	ON C	OVERAGE 30 DAY	CANCE	T.T.ATTON X	IOTTOP NO	FULES AS RESPEC	TS GENE	EOD
ON	-PAYMENT.			J. DOUBLE	Jan 10E		TOTALE MP.	ENIES, EACEPT I	O DAIS	EOR
ER	TIFICATE HOLDER				CANC	ELLATION				
		@fr	ank	lintn.gov	UNITO	IVII				
	_			3	SHOU	LD ANY OF TH	HE ABOVE DE	SCRIBED POLICIES BE	CANCELLE	D BEFORE
	CITY OF FRANKLIN				THE	EXPIRATION	DATE THE	REOF, NOTICE WILL	BE DELIV	VERED IN
	* RISK MANAGER				MOUL	NUMBER WILL	n ine PULICI	PROVISIONS.		1
	109 THIRD AVENUE SOUTH	L		L						

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FRANKLIN, TN 37065

AUTHORIZED REPRESENTATIVE

Mitchell Johns/LEE

RETAINAGE AGREEMENT

COF Contract No.: 2017-0033

and among the City of Franklin ("Owner"):	tered into this

WHEREAS, Owner and Contractor have heretofore entered into COF Contract No.: 2017-0033, (the "Contract"), whereby Contractor will make improvements to certain real property of Owner, pursuant to a certain project known as Emergency 54" Sanitary Sewer Repair Project (Chestnut Bend Subdivision) ("Project") located in Franklin, Tennessee, with the Contract providing that Owner is to retain a percent of all payment requests of Contractor, all as more specifically set forth in the Contract, to which specific reference is hereby made; and

WITNESSETH:

WHEREAS, the Owner and the Contractor are desirous of creating an escrow account with the Bank for the deposit of such retainage; and

WHEREAS, the Bank has agreed to act as escrow agent to receive and hold the retainage paid to it until the receipt of a release or partial release by the Owner.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants and promises hereinafter set forth, the parties hereto agree as follows:

- 1. The Owner hereby agrees to pay all retainage held pursuant to the Contract to the Bank, to be held in escrow by the Bank in a separate interest-bearing account (the "Escrow Account").
- 2. The Escrow Account shall be owned by the Contractor, except to the extent ownership thereof is affected by the assignment to the Owner pursuant to the terms hereof.
- 3. The Contractor shall and hereby does conditionally assign all its ownership interest in the Escrow Account, including its power to make withdrawals therefrom, to the Owner. This conditional assignment shall terminate upon the Owner's execution of release, to the extent of such release.
- 4. So long as retainage remains on deposit and the Contractor is not in default of the Contract, all interest earned on deposited retainage shall go to the Contractor less any custodial care and servicing costs.
- 5. When the Owner determines, upon the request of the Contractor, in accordance with the provisions of the Contract, that the Contractor is entitled to all or a portion of the retainage, the Owner shall forward a written release to the Bank, substantially in the forms attached hereto as Exhibit A or Exhibit B, whereupon all or a portion of the amounts held in the Escrow Account may be released and paid, together with any interest thereon, to the Contractor by the Bank.

- 6. Should a dispute arise between the Owner and the Contractor whereby the Owner fails to execute and deliver a release to the Bank, the Bank shall not be liable to either the Owner or the Contractor for failure to deliver the amounts on deposit in the Escrow Account, with interest thereon, to the Contractor. The Bank shall transfer the amounts on deposit in the Escrow Account to the Owner upon the Owner's written request and shall not be liable to the Contractor for such action. In the event that litigation ensures between the Owner and the Contractor, the Bank shall tender into the registry or custody of any court of competent jurisdiction all assets or property held by the Bank pursuant to the terms of this Agreement, together with such pleadings as it deems appropriate, and thereupon be discharged from all further duties and liabilities under this Agreement.
- 7. The Bank may resign as Escrow Agent by returning all money back to the Owner.
- 8. The Contractor will execute a vendor form with the City's Finance Department as soon as possible upon execution of the Contract.

STATE

Undu'L-Par Commission expires 2/23/20

City of Franklin

APPENDIX

NOTICE TO PROCEED

City of Franklin	5.	
•	Date	
Engineering Office	Contract No.	2017-0033
109 Third Avenue South	Project	Emergency 54" Sanitary Sewer Repair Project
Franklin, TN 37064		(Chestnut Bend Subdivision)
You are hereby notified to commence work	in accordance with	the above referenced Contract on
and you are to co	omplete the work w	vithin consecutive calendar days
thereafter. The date of completion of all wo	rk is, therefore,	
CITY OF FRANKLIN, TN		
Ву:		
CITY PROJECT MANAGER		
Date:		
ACCEPTED		
Receipt of the above Notice to Proceed is her	eby acknowledged	by this the day of
, 20		*
Ву:		
CONTRACTOR (Authorized Signature)		
Date:		

APPLICATION FOR PAYMENT NO.

From:Contract:Project:	
Project:	
OUDIED: G	
OWNER's Contract No ENGINE For Work accomplished through the date of	BER's Project No.
2 Of 17 Old accomplished all older of	
1. Original Contract Price:	\$
2. Net change by Change Orders and Written Amendments (+ or -)	\$
3. Current Contract Price (1 plus 2)	\$
4. Total completed and stored to date:	\$
5. Retainage (per Agreement):	
% of completed Work: \$	
% of stored material:	
Total Retainage:	\$
6. Total completed and stored to date less retainage (4 minus 5):	\$
7. Less previous Application for Payments	\$
8. DUE THIS APPLICATION (6 MINUS 7)	\$
CONTRACTOR'S Certification: The undersigned CONTRACTOR certifies that (1) all previous progress payment account of Work done under the Contract referred to above have been applied on CONTRACTOR's legitimate obligations incurred in connection with Work cover Payment numbered 1 through inclusive; (2) title of all Work, materials and Work or otherwise listed in or covered by this Application for Payment will pass free and clear of all Liens, security interests and encumbrances (except such as an OWNER indemnifying OWNER against any such Lien, security interest or encumby this Application for Payment is in accordance with the Contract Documents and	account to discharge red by prior Applications for l equipment incorporated in said to OWNER at time of payment e covered by a bond acceptable to nbrance); and (3) all Work covered
Dated	CONTENACTOR
Ву:	CONTRACTOR
State of	
County of Subscribed and sworn to before me this	
Day of,	
Notary Public My Commission expires: Payment of the above AMOUNT DUE THIS APPLICATION is recommended.	
Dated	ENGINEER
Ryr	

APPLICATION FOR PAYMENT

INSTRUCTIONS

A. GENERAL INFORMATION

The sample form of Schedule of Values is intended as a guide only. Many projects require a more extensive form with space for numerous items, descriptions of Change Orders, identification of variable quantity adjustments, summary of materials and equipment stored at the site and other information. It is expected that a separate form will be developed by Engineer and Contractor at the time contractor's Schedule of Values is finalized. Note also that the format for retainage must be changed if the Contract permits (or the law provides), and Contractor elects to deposit securities in lieu of retainage. Refer to Article 14 of the General Conditions for provisions concerning payments to Contractor.

B. COMPLETING THE FORM

The Schedule of Values, submitted and approved as provided in paragraphs 2.05.B.3 and 2.07 of the General Conditions, should be reproduced as appropriate in the space indicated on the Application for Payment form. Note that the cost of materials and equipment is often listed separately from the cost of installation. Also, note that each Unit Price is deemed to include Contractor's overhead and profit.

All Change Orders affecting the Contract Price should be identified and included in the Schedule of Values as required for progress payments.

The form is suitable for use in the Final Application for Payment as well as for Progress Payments; however, the required accompanying documentation is usually more extensive for final payment. All accompanying documentation should be identified in the space provided on the form.

C. LEGAL REVIEW

All accompanying documentation of a legal nature, such as Lien waivers, should be reviewed by an attorney, and Engineer should so advise Owner.

Page 1 of 1

	CHI-CAOK MCC					Sundale 7	MATOR TAR		
						CURF	CURRENT	TOTAL	TOTAL TO DATE
Ö	DESCRIPTION OF WORK	L S	BID	UNIT	AMOUNT	QUANTITY	AMOUNT	4 2 1 2	QUANTITY AMOUNT
14									
\dagger									
+									
A PROPERTY.									
I AT.									

Request for Construction Change Change Order No. _____

City of Franklin	Contract No.			
Engineering Office	Project			
109 Third Avenue South Franklin, TN 37064	_			
rialikilli, IN 37004	_			
Whereas, we	entered into a	n contract with	the CITY C	OF FRANKLIN, on
, for the constructio	n by said Contractor of the abo	ove designated of	contract; a	nd Whereas, certain
items of construction encountered a	are not covered by the original	contract, we de	sire to sub	omit the following
additional items of construction to b	pe performed by the Contracto	r and paid by th	e City at tl	ne prices scheduled
therefore below:				
Dancar for Change Order				
Reason for Change Order:				
Attachments (List documents suppo	orting change):			
Attachments (List documents suppo	orting change).	· · · · · · · · ·		
	1124	Estimate	Unit	Amount
Item Description of Work	Unit			Amount
No.		Quantity	Price	
			1	-
TOTAL				

	CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
	Original Contract Price	Original Contract Times:
		Substantial Completion:
		Ready for final payment:
	Net Increase (Decrease) from previous Change	Net change from previous Change Orders No. 0 to
	Orders	to:
	No. 0 to:	Substantial Completion:
		Ready for final payment:
	Contract Price prior to this Change Order:	Contract Times prior to this Change Order:
		Substantial Completion:
		Ready for final payment:
	Net increase (decrease) of this Change Order:	Net increase (decrease) this Change Order:
		Substantial Completion:
		Ready for final payment:
	Contract Price with all approved Change Orders:	Contract Times with all approved Change Orders:
		Substantial Completion:
		Ready for final payment:
1	hereby made a part of the original contract and will be	and prices, and agree that this Supplemental Agreement is e performed by this Contractor in accordance with emain in full force and effect, except in so far as specifically
	Dr.	0
	By: By: By: By:	MAGER CITY ENGINEER OF DESIGNEE
	ENGINEER CITT ROJECT WA	CITT ENGINEER OR DESIGNEE
	Date:Date:	Date:
A	ACCEPTED:	APPROVED:
В	y:	Bv:
	CONTRACTOR (Authorized Signature)	By:OWNER (Authorized Signature)
	, , , , , , , , , , , , , , , , , , , ,	
D	ate:	Date:
_		

REQUEST FOR INFORMATION (RFI) PROJECT NAME

Response:			
•	DATE	BY:	DATE:
RWARDED TO:		FORWARDED TO:	CONTRACTOR
QUEST		RESPONSE	
		By:	ontractor
Fl Description: (Fully d	lescribe the question or type	e of information requested)	
		-	DRAWINGS:
ROM:			PEC. SECTION BMITTAL NO.:
			RFI No:TACHMENTS: