



**CONTRACT DOCUMENTS
AND
SPECIFICATIONS**

DIVISION OF WATER QUALITY

FOR

FY 2019 Sanitary Sewer Rehabilitation

Bid No. 18-2018

Set # _____

PREPARED BY:

**DIVISION OF WATER QUALITY
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT**

TABLE OF CONTENTS
CONTRACT DOCUMENTS
UNIT PRICE CONTRACT FOR
FY 2019 SANITARY SEWER SYSTEM REHABILITATION

PART I	ADVERTISEMENT FOR BIDS
PART II	INFORMATION FOR BIDDERS
PART III	FORM OF PROPOSAL
PART IV	GENERAL CONDITIONS
PART V	SPECIAL CONDITIONS
PART VI	CONTRACT AGREEMENT
PART VII	PERFORMANCE AND PAYMENT BONDS
PART VIII	ADDENDA
PART IX	TECHNICAL SPECIFICATIONS

PART I
ADVERTISEMENT FOR BIDS

INDEX

1.	INVITATION	AB-2
2.	DESCRIPTION OF WORK	AB-2
3.	OBTAINING PLANS, SPECIFICATIONS, AND BID DOCUMENTS	AB-2
4.	METHOD OF RECEIVING BIDS	AB-3
5.	METHOD OF AWARD	AB-3
6.	BID WITHDRAWAL	AB-3
7.	BID SECURITY	AB-3
8.	SUBMISSION OF BIDS	AB-3
9.	RIGHT TO REJECT	AB-4
10.	NOTIFICATION TO THE LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT FOR AFFIRMATIVE ACTION PLAN	AB-4
11.	NOTICE CONCERNING DBE GOAL	AB-4
12.	PRE-BID MEETING	AB-5
13.	CONSENT DECREE REQUIREMENTS	AB-5
14.	STATE REVOLVING LOAN REQUIREMENTS	AB-6

ADVERTISEMENT FOR BIDS

1. INVITATION

Sealed proposals for the following work will be received by the Lexington-Fayette Urban County Government until **2:00 p.m.**, local time, [REDACTED] for furnishing all labor and/or materials and performing all work as set forth by this advertisement, conditions (general and special), specifications, and/or the drawings prepared by and [REDACTED]. Immediately following the scheduled closing time for reception of bids, all proposals which have been submitted in accordance with the above will be publicly opened and read aloud.

2. DESCRIPTION OF WORK

The project includes providing all construction supervision, labor, materials, tools, test equipment necessary for [REDACTED].

3. OBTAINING PLANS, SPECIFICATIONS, AND BID DOCUMENTS

Plans, Specifications, and Contract Documents may be obtained from the official bid document distributor, [REDACTED], 328 Old Vine Street, Lexington, KY 40507, (859) 255-1021 or (www.lynnimaging.com) and click on plan room for a non-refundable price of reproduction for each full set of plans and documents.

Specifications, Plans, and Bid Documents may be examined at the following places:

LFUCG

Division of Central Purchasing
200 East Main Street, Third Floor, Rm 338
Lexington, Kentucky 40507
(859) 258-3320

Builders Exchange
1035 Strader Drive, Ste 100
Lexington, Kentucky, 40505

LFUCG

Division of Water Quality
125 Lisle Industrial Avenue
Lexington, Kentucky 40511
(859) 425-2400

McGraw-Hill Co./F. W. Dodge
2321 Fortune Drive, Ste 112-A
Lexington, Kentucky 40509

4. METHOD OF RECEIVING BIDS

Bids will be received from Prime Contracting firms on a [REDACTED], for total Project Area. Bids shall be submitted in the manner and subject to the conditions as set forth and

described in the Instruction to Bidders and Special Conditions.

Sealed bids shall be clearly marked on the outside of the container as follows: Company Name and Address, Bid Invitation Number, and the Project Name. Bids are to remain sealed until official Bid closure time.

Mailed bids/proposals should be sent to the Director, Division of Central Purchasing, 200 East Main Street, Lexington, KY 40507.

5. METHOD OF AWARD

The Contract, if awarded, will be to the lowest, qualified responsible bidder for the total project whose qualifications indicate the award will be in the best interest of the OWNER and whose bid/proposal complies with all the prescribed requirements. No Notice of Award will be given until the OWNER has concluded such investigation as deemed necessary to establish the responsibility, qualifications and financial ability of Bidders to do the work in accordance with the Contract Documents to the satisfaction of the OWNER within the time prescribed. The OWNER reserves the right to reject the Bid of any Bidder who does not pass such investigation to the OWNER's satisfaction. In analyzing Bids, the OWNER may take into consideration alternate and unit prices, if requested by the Bid forms.

6. BID WITHDRAWAL

No bidder may withdraw his bid for a period of sixty (60) calendar days after the closing date for receipt of bids. Errors and omissions will not be cause for withdrawal of bid without forfeit of bid bond. Bids may be withdrawn in person prior to the closing date of receipt of bids.

7. BID SECURITY

If the bid is \$50,000 or greater, bid shall be accompanied by a certified / cashier's check or bid bond payable to the Lexington-Fayette Urban County Government in an amount not less than Five Percent (5%) of the base bid. Bid bond shall be executed by a Surety Company authorized to do business in the Commonwealth of Kentucky and countersigned by a licensed Kentucky Resident Agent, representing the Surety Company. Bid Bonds are not required for bids under \$50,000. A certified check or cashier's check is also acceptable forms of bid security.

8. SUBMISSION OF BIDS

CONTRACTORS shall submit their bids to the Lexington-Fayette Urban County Government, Division of Purchasing, Third Floor, 200 East Main Street, Lexington, Kentucky 40507. Bids shall be submitted in a sealed envelope not later than 2:00 p.m., local time, [REDACTED], 2018. Sealed proposals shall be clearly marked on the outside of the container as follows: Company Name and Address, Bid Invitation Number, and Project Name to be opened at 2:00 p.m. local time [REDACTED], 2018. Bids received after the scheduled closing time for receipt of bids will not be considered and will be returned unopened.

9. RIGHT TO REJECT

The Purchasing Agent for the Lexington-Fayette Urban County Government reserves the right to reject any and all bids and to waive all informalities and/or technicalities where the best interest of

the Lexington-Fayette Urban County Government may be served.

10. NOTIFICATION TO THE LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT FOR AFFIRMATIVE ACTION PLAN AND CURRENT WORKFORCE

The successful bidder must submit with their bid the following items to the Lexington-Fayette Urban County Government:

1. Affirmative Action Plan for his/her firm.
2. Current Workforce Analysis Form.

Failure to submit these items as required herein may result in disqualification of the Bidder from the award of the contract.

All submissions should be directed to:

Lexington-Fayette Urban County Government
Division of Purchasing
200 East Main Street, 3rd Floor, Room 338
Lexington, Kentucky 40507

11. NOTICE CONCERNING MWDBE GOAL

Notice of requirement for Affirmative Action to ensure Equal Employment Opportunities and Disadvantaged Business Enterprises (DBE) Contract participation. Disadvantaged Business Enterprises (DBE) consists of Minority-Owned Business Enterprises (MBE), [REDACTED] and Woman-Owned Business Enterprises (WBE).

The Lexington-Fayette Urban County Government has set a goal that not less than ten percent (10%) of the total value of this Contract be subcontracted to Disadvantaged Business Enterprises, which is made up of MBEs and WBEs. The Lexington Fayette Urban County Government also has set a goal that not less than three percent (3%) of the total value of this Contract be subcontracted to Veteran-Owned Small Businesses. The goal for the utilization of Disadvantaged Business Enterprises as well as Veteran-Owned Small Businesses as subcontractors is a recommended goal. Contractor(s) who fail to meet such goal will be expected to provide written explanations to the Director of the Division of Purchasing of efforts they have made to accomplish the recommended goal, and the extent to which they are successful in accomplishing the recommended goal will be a consideration in the procurement process. Depending on the funding source, other DBE goals may apply.

For assistance in locating Disadvantaged Business Enterprises Subcontractors contact:

Sherita Miller, Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, 3rd Floor, Room 338
Lexington, Kentucky 40507
smiller@lexingtonky.gov

12. **PRE-BID MEETING**

A non-mandatory pre-bid meeting will be held at [REDACTED]
[REDACTED]

13. **CONSENT DECREE REQUIREMENTS**

The work to be provided through this bid will assist the **LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT** (the "**OWNER**") in successfully implementing the **PROJECT** and complying with any requirements which are related to the Consent Decree entered in a case styled *United States & Commonwealth of Kentucky v. Lexington Fayette Urban County Government*, United States District Court for the Eastern District of Kentucky, Civil Action No. 5:06-cv-386-KSF (the "**CONSENT DECREE**"). The services provided through this bid are hereinafter referred to as the **PROJECT**. **The primary goal of the PROJECT is to provide the OWNER with the technical support and/or construction services necessary to successfully meet the obligations and deadlines of the CONSENT DECREE.**

The **BIDDER** shall familiarize itself with and shall at all times comply with the **CONSENT DECREE**, and all federal, state and local laws, ordinances, and regulations that in any manner affect the **PROJECT**. Time is of the essence in the performance of this **PROJECT**. **BIDDER** is aware that the **OWNER** is subject to penalties for non-compliance with the **CONSENT DECREE** deadlines.

If delays result solely by reason of acts of the **BIDDER**, the **BIDDER** shall be held liable for any financial penalties incurred by the **OWNER** as a result of the delay, **including but not limited to those assessed pursuant to the CONSENT DECREE**. In the event the parties cannot mutually agree upon the cause(s) associated with delays in completing project deliverables. The **BIDDER** must immediately notify the **OWNER** in the event of such delay, and provide the **OWNER** a written action plan within five (5) business days on how it will attempt to resolve the delay.

In the event that **Bidder's** delay or other nonperformance of its obligations hereunder results in the imposition of penalties against the **OWNER** pursuant to the **CONSENT DECREE**, or the **OWNER** otherwise suffers damage as a result of such delay or nonperformance, **BIDDER** shall be solely liable to **OWNER** for any and all such damages, including any costs and attorney's fees.

An electronic version of the Consent Decree is available on the LFUCG web page for review or to print a copy at no charge at <https://www.lexingtonky.gov/consent-decree>.

14. **STATE REVOLVING LOAN REQUIREMENTS**

This project is not funded by the Kentucky Infrastructure Revolving Loan Fund.

Bidders must comply with Title VI of the Civil Rights Act of 1964, the Anti-Kickback Act, and the Contract Work Hours Standard Act.

Bidders must comply with the President's Executive Order No. 11246 as amended, which prohibits discrimination in employment regarding race, creed, color, sex, or national origin.

Successful bidder shall comply with 41 CFR 60-4, in regard to affirmative action, to insure equal opportunity to females and minorities and will apply the time tables and goal set forth in 40 CFR 60-4.

Successful bidder shall make positive efforts to use small, minority, women-owned, and disadvantaged businesses.

Attention of bidders is particularly called to the conditions of employment to be observed and minimum wage rates to be paid under the Contract, Section 3, Segregated Facility, Section 109 and E.O. 11246 and Title VI. Minority bidders are encouraged to bid.

Successful bidder is required to employ the six "Good Faith Efforts" as listed in EPA's Disadvantaged Business Enterprise Program when soliciting subcontractors and suppliers. Documentation of these efforts will be a required submittal prior to Contract Award.

The Contract Award will be made in writing to the lowest responsive and responsible bidder whose qualifications indicate the award will be in the best interest of the OWNER and whose bid/proposal complies with all the prescribed requirements. No Notice of Award will be given until the OWNER has concluded such investigation as deemed necessary to establish and responsibility, qualifications and financial ability of Bidders to do the work in accordance with the Contract Documents to the satisfactions of the OWNER within the time prescribed. The OWNER reserves the right to reject the Bid of any Bidder who does not pass such investigation to the OWNER's satisfaction. In analyzing Bids, the OWNER may take into consideration alternate and unit prices, if requested by the Bid forms.

END OF SECTION

PART II
INFORMATION FOR BIDDERS

INDEX

1.	RECEIPT AND OPENING OF BIDS	IB-2
2.	PREPARATION OF BID.....	IB-2
3.	SUBCONTRACTS.....	IB-2
4.	QUALIFICATION OF BIDDER.....	IB-3
5.	BID SECURITY	IB-4
6.	LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT	IB-4
7.	TIME OF COMPLETION AND LIQUIDATED DAMAGES.....	IB-4
8.	EXAMINATION OF CONTRACT DOCUMENTS AND SITE.....	IB-5
9.	ADDENDA AND INTERPRETATIONS	IB-5
10.	SECURITY FOR FAITHFUL PERFORMANCE	IB-6
11.	POWER OF ATTORNEY.....	IB-6
12.	TAXES AND WORKMEN'S COMPENSATION.....	IB-6
13.	LAWS AND REGULATIONS	IB-6
14.	EROSION AND SEDIMENT CONTROL AND PERMITS.....	IB-7
15.	PREVAILING WAGE LAW AND MINIMUM HOURLY RATES.....	IB-7
16.	AFFIRMATIVE ACTION PLAN.....	IB-7
17.	CONTRACT TIME	IB-7
18.	SUBSTITUTION OR "OR-EQUAL" ITEMS.....	IB-8
19.	ALTERNATE BIDS	IB-8
20.	SIGNING OF AGREEMENT	IB-8
21.	ASSISTANCE TO BE OFFERED TO DBE CONTRACTORS.....	IB-9

PART II
INFORMATION FOR BIDDERS

1. RECEIPT AND OPENING OF BIDS

The Lexington-Fayette Urban County Government (herein called the OWNER) invites bids from firms on the project described in the Advertisement for Bids. The OWNER will receive bids at the Division of Purchasing, at the time and in the manner set forth in the Advertisement for Bids, and the Bids will then be publicly opened and read aloud. The OWNER may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 60 days after the actual time and date of the bid opening, but OWNER may, in its sole discretion, release any bid and return the Bid Security prior to that date.

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.

2. PREPARATION OF BID

Each bid must be submitted on the prescribed Form of Proposal. All blank spaces for the bid prices must be filled in, either in ink or typewritten, for both unit prices and extensions. Totals for each bid item must be added to show the total amount of the bid. Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, their address, the name of the project, the invitation number and time and date for which the bid is submitted. Bids must be addressed to the Director of Purchasing, Lexington-Fayette Urban County Government, Third Floor, 200 East Main Street, Lexington, Kentucky 40507. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified above.

3. SUBCONTRACTS

The bidder is specifically advised that any person, firm, or other party to whom it is proposed to award a subcontract under this Contract must be acceptable to the OWNER. All proposed subcontractors must be identified on the Form of Proposal. Prior to the award of Contract, the OWNER or the OWNER'S representative will advise the CONTRACTOR of the acceptance and approval thereof or of any action necessary to be taken. Should any Subcontractor be rejected by the OWNER, the CONTRACTOR shall present a new name and/or firm to the OWNER at no change in the Contract Price.

4. QUALIFICATION OF BIDDER

The OWNER may make such investigations as the OWNER deems necessary to determine the ability of the bidder to perform the Work, and the bidder shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the OWNER that such bidder is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein. Conditional bids will not be accepted.

In evaluating Bids, OWNER shall consider the qualifications of the BIDDERS, whether or not the Bids comply with the prescribed requirements, and alternatives and unit prices, as requested. OWNER may consider maintenance requirements, performance data, and disruption or damage to private property. It is OWNER'S intent to accept alternatives, if requested by the bid forms, in the order in which they are listed in the Bid Form but OWNER may accept or decline them in any order or combination. The contract, if awarded, will be awarded to the lowest, qualified, responsible BIDDER based upon OWNER'S evaluation which indicates that the award will be in the best interest of OWNER and the general public.

In the event there is any question as to the bidder's qualifications and ability to complete the work, a final determination will be made in accordance with a fair evaluation by the Urban County Government of the above listed elements.

- A. If the OWNER requires filling out a detailed financial statement, the bidder may provide its current certified financial statement(s) for the required time interval.
- B. Corporate firms are required to be registered and in good standing with the requirements and provisions of the Office of the Secretary of State, Commonwealth of Kentucky.
- C. Good standing with Public Works Act - any CONTRACTOR and/or subcontractors in violation of any wage or work act provisions (KRS 337.510 to KRS 337.550) are prohibited by Statutory Act (KRS 337.990) from bidding on or working on any and all public works contracts, either in their name or in the name of any other company, firm or other entity in which he might be interested. No bid from a prime contractor in violation of the Act can be considered, nor will any subcontractor in violation of the Act be approved and/or accepted. The responsibility for the qualifications of the subcontractor is solely that of the prime contractor.
- D. Documents Required of CONTRACTOR - (1) A sworn statement signed by the President or owner of the Company regarding all current work in progress anywhere; (2) A document showing the percent of completion of each project and the total worth of each project; and (3) Documentation showing the percentage of the DBE employment levels on each project of the Bidder's current work force, and DBE participation levels for Subcontractors.

- E. Optional OWNER Requirements - The OWNER, at its discretion, may require the BIDDER/CONTRACTOR to provide: (1) a current detailed financial statement for a period including up to 3 prior years; (2) financial security or insurance in amounts and kinds acceptable to the OWNER to meet the financial responsibility requirements for the CONTRACTOR to indemnify the OWNER. (3) Additional information and/or DBE work force data, as well as DBE participation data.

Each bidder agrees to waive any claim it has or may have against the Owner, the Architect/Engineer, and their respective employees, arising out of or in connection with the administration, evaluation, or recommendation of any bid.

5. BID SECURITY

- A. Each bid must be accompanied by a bid bond prepared on a Form of Bid Bond and attached hereto, duly executed by the bidder as principal and having as surety thereon a surety company approved by the OWNER, in the amount of 5% of the bid. Such bid bond will be returned to the unsuccessful bidder(s) only upon written request to the Director of Central Purchasing within seven (7) days of opening of bids. Bid bond shall be made payable to the Lexington-Fayette Urban County Government. Bid security is not required for projects under \$50,000.
- B. Bonds shall be placed with an agent licensed in Kentucky with surety authorized to do business within the state. When the premium is paid for such coverage, the full commission payable shall be paid to such local agent who shall not divide such commission with any person other than a duly licensed resident local agent.

6. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The successful bidder, upon his failure or refusal to execute and deliver the Contract and bonds required within ten (10) days after he has received notice of the acceptance of his bid, shall forfeit to the OWNER, as liquidated damages for such failure or refusal, the security deposited with his bid.

7. TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" from the OWNER and to fully complete the Project within the time as specified in the Contract. Bidder must agree also to pay \$ [REDACTED] per day as liquidated damages, or the sum as specified in the Contract for each consecutive calendar day thereafter as hereinafter provided in the General Conditions.

8. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- A. It is the responsibility of each Bidder before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site(s) to become familiar with local conditions that may affect cost, progress, performance or furnishing of the work, (c) consider Federal, State and Local laws and regulations that may affect cost, progress, performance or furnishing of the work, (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) notify Engineer of all conflicts, errors or discrepancies in the Contract Documents.
- B. Bidders should examine the requirements of section 4 of the General Conditions for information pertaining to subsurface conditions, underground structures, underground facilities, and availability of lands, easements, and rights-of-way. The completeness of data, presented in the Contract Documents, pertaining to subsurface conditions, underground structures, and underground facilities for the purposes of bidding or construction is not assured. The Bidder will, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions (surface and subsurface) which may affect cost, progress, performance or furnishing of the Work and which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price, and other terms and conditions of the Contract Documents. On request in advance, OWNER will provide access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a bid. Bidder shall fill all holes, clean up and restore the site to its former condition upon completion of such explorations.
- C. The submission of a Bid will constitute an incontrovertible representation by the Bidder that Bidder has complied with every requirement of this paragraph 8; that without exception the Bid is premised upon furnishing and performing the Work required by the Contract Documents and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Contract Documents; and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

9. ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the Contract Documents will be made to any bidder orally. Every request for such interpretation should be in writing addressed to the Director of Central Purchasing, who in turn will have an Addendum issued for the Lexington-Fayette Urban County Government, and to be given consideration must be received prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications. Acknowledgement of the receipt of addenda must be included with all submitted bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

10. SECURITY FOR FAITHFUL PERFORMANCE

- A. Simultaneously with his delivery of the executed Contracts, the CONTRACTOR shall furnish a surety bond or bonds as security for the faithful performance of this Contract and for payment of all persons performing labor on the Project under this Contract and furnishing materials in connection with this Contract, as specified in the General Conditions. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the OWNER and authorized to do business in the Commonwealth of Kentucky.
- B. All bonds required by this Contract and laws of this State shall be placed with agents licensed in the State of Kentucky. When the premium is paid for such coverage's, the full commission shall be paid to such local agent who shall not divide such commission with any person other than a duly licensed resident local agent.
- C. **Contractor shall use standard Performance and Payment Bond forms such as documents provided with this contract book or AIA form A312-1984 (or later). Each document will be for 100% of the Contract Bid Amount.**

11. POWER OF ATTORNEY

Attorney-in-fact who signs bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

12. TAXES AND WORKMEN'S COMPENSATION

The CONTRACTOR and subcontractor will be required to accept liability for payment of all payroll taxes, sales and use tax, and all other taxes or deductions required by local, state or federal law, such as old age pension, social security, or annuities measured by wages. Each shall carry Workmen's Compensation Insurance to the full amounts as required by Statutes and shall include the cost of all foregoing items in the proposal. The CONTRACTOR will not otherwise be reimbursed or compensated for such tax payments. The CONTRACTOR is urged to ascertain at his own risk his actual tax liability in connection with the execution or performance of his Contract.

13. LAWS AND REGULATIONS

The bidder's attention is directed to the fact that all applicable state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contract throughout, and they will be deemed to be included in the contract, the same as though herein written out in full.

14. EROSION AND SEDIMENT CONTROL AND PERMITS

The CONTRACTOR and Subcontractors performing work on projects on behalf of the OWNER shall also comply with all applicable federal, state, and local environmental regulations and all requirements and conditions set forth in "special" permits including but not limited to Corp of Engineers 404 permits, 401 Water Quality Certifications, Stream Crossing and Floodplain Encroachment Permits as described in Part 4 General Conditions Paragraph 5.17.

15. PREVAILING WAGE LAW AND MINIMUM HOURLY RATES

Federal or state wage rates and regulations, if required for this Project, will be as described in the Special Conditions.

16. AFFIRMATIVE ACTION PLAN

The successful Bidder must submit with their bid, the following items to the Urban County Government:

1. Affirmative Action Plan of the firm
2. Current Work Force Analysis Form
3. Good Faith Effort Documentation
4. List of Disadvantaged Business Enterprise Subcontractors and the Dollar Value of each Subcontract

A Work Force Analysis Form shall be submitted for each Contract. Failure to submit these items as required herein may result in disqualification of the Bidder from award of the Contract.

All submissions should be directed to:

Director, Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, Third Floor
Lexington, KY 40507

17. CONTRACT TIME

The number of calendar days within which the Work is to be substantially completed and ready for final payment (the Contract Time) is set forth in the Form of Proposal and the Agreement.

18. SUBSTITUTE OR "OR-EQUAL" ITEMS

The Contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by the CONTRACTOR if acceptable to the ENGINEER and OWNER, application for such acceptance will not be considered by the ENGINEER and OWNER until after the effective date of the Agreement. The procedure for submission of any such application by the CONTRACTOR and consideration by the ENGINEER and OWNER is set forth in the General Conditions.

19. ALTERNATE BIDS

Bidders shall submit alternate bids/proposals only if and when such alternate bids/proposals have been specifically requested in an Invitation for Bids. If alternate bids/proposals are requested in an Invitation for Bids, the form of submission of such alternate bid and the conditions under which such alternate bids will be considered for award of a contract will be established in the Invitation.

Any Bidder who submits a bid incorporating an alternate proposal when alternate bids/proposals have not been requested in the Invitation for Bids shall have his/her bid rejected as non-responsive.

Any Bidder who submits a bid incorporating two (2) or more prices for an item or groups of items (unless such method of pricing is requested in the Invitation for Bids), or which imposes conditions for acceptance other than those established in the Invitation for Bids, shall have their bid rejected as non-responsive.

20. SIGNING OF AGREEMENT

When OWNER gives a Notice of Award to the successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within ten days thereafter, CONTRACTOR shall sign and deliver the required number of counterparts of the Agreement and attached documents to OWNER with the required Bonds, Certificate of Insurance, and Power of Attorney. The OWNER will deliver one fully signed counterpart to CONTRACTOR at such time as it has been signed by the Mayor.

21. **ASSISTANCE TO BE OFFERED TO DISADVANTAGED BUSINESS ENTERPRISE (MWDBE) CONTRACTORS**

A. Outreach for MWDBE(s)

The Lexington-Fayette Urban County Government (LFUCG) maintains a database of MWDBE contractors and organizations. When a LFUCG construction project is advertised for bidding, notices are sent to companies registered at [REDACTED]. The notices describe the project and indicate the deadline for submitting bids.

If you wish to be added to the LFUCG MWDBE contractor database, please contact:

Sherita Miller, Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, Room 338
Lexington, Kentucky 40507
smiller@lexingtonky.gov

B. Bid Bond Assistance for MWDBE(s)

For those MWDBE contractors who wish to bid on LFUCG project, bid bond assistance is available. This bid bond assistance is in the form of a "Letter of Certification" which is accepted by the LFUCG's Division of Purchasing, in lieu of a bid bond. The "Letter of Certification" must be included in the bid package when it is submitted to the Division of Purchasing. The "Letter of Certification" will reference the specific project for which the bid is being submitted, and the time and date on which the bid is due. Bid bond assistance must be requested from the Lexington-Fayette Urban County Government's Division of Central Purchasing.

C. Eligibility for Bid Bond Assistance for MWDBE(s)

In order to be eligible for any Bid bonding assistance, a MWDBE construction company must be owned or controlled at the level of 51% or more by a member or members of a minority group or females. Prior to receiving assistance, a statement providing evidence of ownership and control of the company by a member or members of a minority group or females must be signed by the Owner or corporate officer and by an attorney or accountant submitted to:

Sherita Miller, Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, Room 338
Lexington, Kentucky 40507
smiller@lexingtonky.gov

D. MWDBE and Veteran Subcontractors

The LFUCG will, upon request, assist prime contractors in the procurement of eligible DBE subcontractors in an effort to achieve 10% minimum MWDBE and 3% minimum veteran goal.

For a list of eligible subcontractors, please contact:

Sherita Miller, Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street, Room 338
Lexington, Kentucky 40507
smiller@lexingtonky.gov

PART III

Invitation to Bid No. 18-2018

FY 2019 Sanitary Sewer Rehabilitation

1. **FORM OF PROPOSAL**

Place: Lexington, Kentucky

Date: 3/23/2018

The following Form of Proposal shall be followed exactly in submitting a proposal for this Work.

This Proposal Submitted by Leak Eliminators, LLC

330 Lisle Industrial Ave, Lexington, KY 40511

(Name and Address of Bidding Contractor)

(Hereinafter called "Bidder"), organized and existing under the laws of the State of Kentucky, doing business as a corporation
"a corporation," "a partnership", or an "individual" as applicable.

To: Lexington-Fayette Urban County Government
(Hereinafter called "OWNER")
Office of the Director of Purchasing
200 East Main Street, 3rd Floor
Lexington, KY 40507

Gentlemen:

The Bidder, in compliance with your Invitation for Bids for FY 2019 Sanitary Sewer Rehab having examined the Plans and Specifications with related documents, having examined the site for 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, and supplies, and to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the lump sum and/or unit prices stated hereinafter. These prices are to cover all expenses incurred in performing the Work required under the Contract Documents, of which this proposal is a part. The OWNER will issue work orders for work to be performed under this Contract.

BIDDER hereby agrees to commence work under this contract on or before a date to be specified in the Notice to Proceed and to fully complete the project within the time provided in the Purchase Order or Work Orders issued by the OWNER. BIDDER further agrees to pay liquidated damages, the sum of \$ 400 for each consecutive calendar day thereafter.

The Bidder hereby acknowledges receipt of the following addenda:

Addendum No. 1 Date 03/2/2018
Addendum No. 2 Date 3/5/2018
Addendum No. 3 Date 3/5/2018
Addendum No. 4 Date 3/15/18
Addendum No. Date
Addendum No. Date
Addendum No. Date
Addendum No. Date

Insert above the number and the date of any Addendum issued and received. If none has been issued and received, the word "NONE" should be inserted.

2. **LEGAL STATUS OF BIDDER**

Bidder Leak Eliminators, LLC

Date 3/23/2018

* 1. A corporation duly organized and doing business under the laws of the State of Kentucky, for whom Richard Lawrence, bearing the official title of President, whose signature is affixed to this Bid/Proposal, is duly authorized to execute contracts.

* 2. A Partnership, all of the members of which, with addresses are: (Designate general partners as such)

* 3. An individual, whose signature is affixed to this Bid/Proposal (please print name)

*(The Bidder shall fill out the appropriate form and strike out the other two.)

3. BIDDERS AFFIDAVIT

Comes the Affiant Richard Lawrence, and after being first duly sworn, states under penalty of perjury as follows:

1. His/her name is Richard Lawrence and he/she is the individual submitting the bid or is the authorized representative of Leak Eliminators, LLC, the entity submitting the bid (hereinafter referred to as "Bidder").
2. Bidder will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the bid is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.
3. Bidder will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.
4. Bidder has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.
5. Bidder has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Bidder will not violate any provision of the campaign finance laws of the Commonwealth.
6. Bidder has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as the "Ethics Act."
7. Bidder acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

Richard Lawrence
(Affiant)

STATE OF Kentucky

COUNTY OF Fayette

The foregoing instrument was subscribed, sworn to and acknowledged before me by

Richard Lawrence on this the 23 day of March, 2018.

My Commission expires: 8/1/2020



Brandi Morse
NOTARY PUBLIC, STATE AT LARGE

4. BID SCHEDULE - SCHEDULE OF VALUES

The Bidder agrees to perform all the Work described in the Specifications and shown on the Plans for the following proposed lump sum and/or unit prices, if applicable, which shall include the furnishing of all labor, materials, supplies, equipment and/or vehicle usage, services, all items of cost, overhead, taxes (federal, state, local), and profit for the Contractor and any Subcontractor involved, within the time set forth herein. If unit prices are applicable, Bidder must make the extensions and additions showing the total amount of bid.

Form of proposal must include unit bid prices written in words, unit price written in numbers and total amount bid (unit price x quantity) per line item OR bid may be considered non-responsive. In case of price discrepancy, unit bid price written in words will prevail followed by unit price written in numbers then total amount bid per line item.

If a discrepancy between the unit price and the item total exists, the unit price prevails except:

If the unit price is illegible, omitted, or the same as the item total, item total prevails and the unit price is the quotient of the item total and the quantity.

If the unit price and the item total are illegible or are omitted, the bid may be determined nonresponsive. If a lump sum total price is illegible or is omitted, the bid may be determined nonresponsive.

For a lump sum based bid, the item total is the bid amount the Division uses for bid comparison.

For a unit price based bid, the sum of the item totals is the bid amount the Division uses for bid comparison.

The LFUCG's decision on the bid amount is final. This contract is a one year contract with the possibility of four (4) renewals. The Contractor cannot change prices on renewal without Owner's approval and verification from material supplier.

The contract, if awarded, will be on the basis of materials and equipment specified in the specifications without consideration of possible substitute or "or equal" items.

The estimated quantities of items of unit price work are not guaranteed and are solely for the purpose of comparison of bids and determining an initial Contract price. Determination of the actual quantities and classification of unit price work performed by the Contractor will be made by the Engineer in accordance with the General Conditions.

Bid Tabulation chart is located in Part VIII.

TOTAL OF ALL BID PRICES FOR PART A THROUGH E IN FIGURES AND WORDS.

\$ 11,743,370

In case of discrepancy, the amount shown in words will govern.

Eleven million
Seven hundred Forty Three Thousand Three hundred Seventy Dollars

The quantities indicated in the Bid Schedule reflect those anticipated for the upcoming FY 2019 contract year. Estimated quantities always change after the contract is awarded. Final quantities will be at the OWNER's discretion. The CONTRACTOR shall specify the unit price for each item in the Bid Schedule without regard to quantity. The CONTRACTOR will not be permitted to alter the unit price identified in the Bid Schedule for changes in estimated quantities for any Item No.

Submitted by:

Leak Eliminators, LLC

Firm

330 Lisle Industrial Ave

Address

Lexington Ky 40511

City, State & Zip

***Bid must be signed:
(original signature)***

Richard Lawrence

- President

Signature of Authorized Company Representative – Title

Richard Lawrence

Representative/s Name (Typed or Printed)

859-388-9422

Area Code – Phone – Extension

877-568-9294

Fax #

Richard@leakeliminators.com

E-Mail Address

OFFICIAL ADDRESS:

Leak Eliminators, LLC

330 Lisle Industrial Ave

Lexington Ky 40511

_____ (Seal if Bid is by Corporation)

By signing this form you agree to ALL terms, conditions, and associated forms in this bid package

5. **STATEMENT OF BIDDER'S QUALIFICATIONS**

The following statement of the Bidder's qualifications is required to be filled in, executed, and submitted with the Proposal:

1. Name of Bidder: Leak Eliminators, LLC
2. Permanent Place of Business: 330 Lisle Industrial Ave, Lexington, KY 40511
3. When Organized: 1/12/1999
4. Where Incorporated: Kentucky
5. Construction Plant and Equipment Available for this Project:
See Schedule C Attached

(Attach Separate Sheet If Necessary)

6. Financial Condition:

If specifically requested by the OWNER, the apparent low Bidder is required to submit its latest three (3) years audited financial statements to the OWNER'S Division of Central Purchasing within seven (7) calendar days following the bid opening.

7. In the event the Contract is awarded to the undersigned, surety bonds will be furnished by:

BB&T Insurance Services (Surety)

Signed: Debbie Davis (Representative of Surety)

8. The following is a list of similar projects performed by the Bidder: (Attach separate sheet if necessary).

<u>NAME</u>	<u>LOCATION</u>	<u>CONTRACT SUM</u>
<u>Annual Contract 2013-2018</u>	<u>Lexington, KY</u>	<u>\$25,000,000 total for all 5 years</u>
<u>Otter Creek Sewer Rehab</u>	<u>Richmond, Ky</u>	<u>\$1,448,260.00</u>
<u>London Sewer Rehab</u>	<u>London, KY</u>	<u>\$3,949,154.00</u>
<u>Brodhead Sanitary Sewer Rehab</u>	<u>Brodhead, KY</u>	<u>\$723,362.00</u>
<u>4013 CIPP 2017 Contract</u>	<u>Owensboro, Ky</u>	<u>\$207,805.00</u>

9. The Bidder has now under contract and bonded the following projects:

<u>NAME</u>	<u>LOCATION</u>	<u>CONTRACT SUM</u>
<u>2017-2018 Annual Contract</u>	<u>Lexington KY</u>	<u>\$5,000,000.00</u>
<u>Jeffersonville Sinkhole Repair</u>	<u>Jeffersonville, IN - Census Building</u>	<u>\$898,653.00</u>
<u>Ky 9, Phase 11, Call 302</u>	<u>Campbell Co., Kentucky</u>	<u>\$370,931.00</u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>

10. List Key Bidder Personnel who will work on this Project.

<u>NAME</u>	<u>POSITION DESCRIPTION</u>	<u>NO. OF YEARS WITH BIDDER</u>
<u>Richard Lawrence</u>	<u>President</u>	<u>19</u>
<u>Bruce Whitaker</u>	<u>General Manager</u>	<u>15</u>
<u>Brandi Morse</u>	<u>Administrative Assistant</u>	<u>1.5</u>
<u>Darren Whitehouse</u>	<u>Job Supervisor</u>	<u>5</u>
<u>John Courtney</u>	<u>CIPP Crew Supervisor</u>	<u>11</u>

11. DBE Participation on current bonded projects under contract:

<u>SUBCONTRACTORS</u> <u>(LIST)</u>	<u>PROJECT</u> <u>(SPECIFIC TYPE)</u>	<u>DBE</u>	<u>% of WORK</u>
N/A			

(USE ADDITIONAL SHEETS IF NECESSARY)

12. We acknowledge that, if we are the apparent low Bidder, we may be required to submit to the OWNER within 7 calendar days following the Bid Opening, a sworn statement regarding all current work on hand and under contract, and a statement on the OWNER'S form of the experience of our officers, office management and field management personnel. Additionally, if requested by the OWNER, we will within 7 days following the request submit audited financial statements and loss history for insurance claims for the 3 most recent years (or a lesser period stipulated by the OWNER).

6. LIST OF PROPOSED SUBCONTRACTORS

The following list of proposed subcontractors is required by the OWNER to be executed, completed and submitted with the BIDDER'S FORM OF PROPOSAL. All subcontractors are subject to approval of the Lexington-Fayette Urban County Government. Failure to submit this list completely filled out may be cause for rejection of bid.

<u>BRANCH OF WORK - LIST EACH Work</u>	<u>SUBCONTRACTOR</u>	<u>DBE</u>	<u>% of</u>
<u>MAJOR ITEM</u> Such as: Grading, bituminous paving, concrete, seeding and protection, construction staking, etc.		<u>Yes/No</u>	
1. <u>Manhole Rehab</u>	Name: <u>Conco Spray Solutions</u>	<u>Yes</u>	_____
	Address: <u>PO BOX 36726, Indianapolis IN</u>		
2. <u>Manholes</u>	Name: <u>S&M Precast</u>	<u>Yes</u>	_____
	Address: <u>7515 Old Hwy 11, Memphis TN</u>		
3. <u>Manhole Seals</u>	Name: <u>TruTest</u>	<u>Yes</u>	_____
	Address: <u>PO Box 221166, Louisville KY</u>		
4. _____	Name: _____	_____	_____
	Address: _____		
5. _____	Name: _____	_____	_____
	Address: _____		
6. _____	Name: _____	_____	_____
	Address: _____		
7. _____	Name: _____	_____	_____
	Address: _____		

(Attach additional sheet(s) if necessary.)

7. **LEXINGTON FAYETTE URBAN COUNTY GOVERNMENT MWDBE PARTICIPATION GOALS, FORMS, AND GOOD FAITH EFFORTS**

A. GENERAL

- 1) The LFUCG request all potential contractors to make a concerted effort to include Minority-Owned (MBE), Woman-Owned (WBE), Disadvantaged (DBE) Business Enterprises and Veteran-Owned Small Businesses **(VOSB)** as subcontractors or suppliers in their bids.
- 2) Toward that end, the LFUCG has established 10% of total procurement costs as a Goal for participation of Minority-Owned, Woman-Owned and Disadvantaged Businesses on this contract.
- 3) The LFUCG has also established a 3% of total procurement costs as a Goal for participation of Veteran-Owned Small Businesses.
- 4) **It is therefore a request of each Bidder to include in its bid, the same goal (10%) for MWDBE participation, the same goal (3%) veteran participation and other requirements as outlined in this section.**

B. PROCEDURES

- 1) The successful bidder will be required to report to the LFUCG, the dollar amounts of all payments submitted to Minority-Owned, Veteran-Owned and Woman-Owned subcontractors and suppliers for work done or materials purchased for this contract. (See Subcontractor Monthly Payment Report)
- 2) Replacement of a Minority-Owned, Veteran-Owned or Woman-Owned subcontractor or supplier listed in the original submittal must be requested in writing and must be accompanied by documentation of Good Faith Efforts to replace the subcontractor / supplier with another MWDBE Firm; this is subject to approval by the LFUCG. (See LFUCG MWDBE Substitution Form)
- 3) For assistance in identifying qualified, certified businesses to solicit for potential contracting opportunities, bidders may contact:
 - a) The Lexington-Fayette Urban County Government, Division of Central Purchasing (859-258-3320)
- 4) The LFUCG will make every effort to notify interested MWDBE and veteran subcontractors and suppliers of each Bid Package, including information on the scope of work, the pre-bid meeting time and location, the bid date, and all other pertinent information regarding the project.

C. DEFINITIONS

- 1) A Minority-Owned Business Enterprise (MBE) is defined as a business which is certified as being at least 51% owned and operated by persons of African American, Hispanic, Asian, Pacific Islander, American Indian or Alaskan Native Heritage.

- 2) A Woman-Owned Business Enterprise (WBE) is defined as a business which is certified as being at least 51% owned and operated by one or more Non-Minority Females.
- 3) A Disadvantaged Business (DBE) is defined as a business which is certified as being at least 51% owned and operated by a person(s) that are economically and socially disadvantaged.
- 4) A Veteran-Owned Small Business ~~(VOSB)~~ is defined as a business which is certified as being at least 51% owned and operated by a veteran and/or a service disabled veteran.
- 5) Good Faith Efforts are efforts that, given all relevant circumstances, a bidder or proposer actively and aggressively seeking to meet the goals, can reasonably be expected to make. In evaluating good faith efforts made toward achieving the goals, whether the bidder or proposer has performed the efforts outlined in the Obligations of Bidder for Good Faith Efforts outlined in this document will be considered, along with any other relevant factors.

D. OBLIGATION OF BIDDER FOR GOOD FAITH EFFORTS

- 1) **The bidder shall make a Good Faith Effort to achieve the Participation Goal for MWDBE and Veteran subcontractors/suppliers. The failure to meet the goal shall not necessarily be cause for disqualification of the bidder; however, bidders not meeting the goal are required to furnish with their bids written documentation of their Good Faith Efforts to do so.**
- 2) Award of Contract shall be conditioned upon satisfaction of the requirements set forth herein.
- 3) The Form of Proposal includes a section entitled "MWDBE Participation Form". The applicable information must be completed and submitted as outlined below.
- 4) **Failure to submit this information as requested may be cause for rejection of bid.**

E. DOCUMENTATION REQUIRED FOR GOOD FAITH EFFORTS

- 1) Bidders reaching the Goal are required to submit only the MWDBE Participation Form." The form must be fully completed including names and telephone number of participating MWDBE firm(s); type of work to be performed; estimated value of the contract and value expressed as a percentage of the total Lump Sum Bid Price. The form must be signed and dated, and is to be submitted with the bid.
- 2) Bidders not reaching the Goal must submit the "MWDBE Participation Form", the "Quote Summary Form" and a written statement documenting their Good Faith Effort to do so. If bid includes no MWDBE participation, bidder shall enter "None" on the subcontractor / supplier form). In addition, the bidder must submit written proof of their Good Faith Efforts to meet the Participation Goal:

- a. Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses to participate.
- b. Included documentation of advertising in the above publications with the bidders good faith efforts package
- c. Attended LFUCG Central Purchasing Economic Inclusion Outreach event
- d. Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and Veteran-Owned businesses of subcontracting opportunities
- e. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses.
- f. Requested a list of MWDBE and Veteran-Owned businesses or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).
- g. Contacted organizations that work with MWDBE companies for assistance in finding certified MWDBE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
- h. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
- i. Followed up initial solicitations by contacting MWDBEs and Veteran-Owned Businesses to determine their level of interest.
- j. Provided the interested MWDBE firm and Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.
- k. Selected portions of the work to be performed by MWDBE firms and Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce
- l. Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a

thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.

m. Included documentation of quotations received from interested MWDBE firms and ~~Woman-Owned businesses~~ which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.

n. Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE ~~and/or Woman-Owned business~~ quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.

o. Made an effort to offer assistance to or refer interested MWDBE firms ~~and~~ ~~Woman-Owned businesses~~ to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal

p. Made efforts to expand the search for MWBE firms ~~and~~ ~~Woman-Owned businesses~~ beyond the usual geographic boundaries.

q. Other--any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE ~~and~~ ~~Woman-Owned businesses~~.

Note: Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidder may include any other documentation deemed relevant to the requirements which is subject to review by the MBE Union. Documentation of Good Faith Efforts must be submitted with the Bid as the primary method of verification.



MINORITY BUSINESS ENTERPRISE PROGRAM

Sherita Miller, MPA
Minority Business Enterprise Liaison
Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street
Lexington, KY 40507
smiller@lexingtonky.gov
859-258-3323

OUR MISSION: The mission of the Minority Business Enterprise Program is to facilitate the full participation of minority and women owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long term economic viability of Lexington-Fayette Urban County Government.

To that end the city council adopted and implemented resolution 167-91—Disadvantaged Business Enterprise (DBE) 10% Goal Plan in July of 1991. The resolution states in part (a full copy is available in Central Purchasing):

"A Resolution supporting adoption of the administrative plan for a ten percent (10%) Minimum goal for disadvantaged business enterprise participation in Lexington-Fayette Urban County Government construction and professional services contracts; Providing that as part of their bids on LFCUG construction contracts, general Contractors shall make a good faith effort to award at least ten percent (10%) of All subcontracts to disadvantaged business enterprises; providing that divisions of LFCUG shall make a good faith effort to award at least ten percent of their Professional services and other contracts to disadvantaged business enterprises..."

A Disadvantaged Business Enterprise is defined as a business that has been certified as being at least 51% owned, operated and managed by a U.S. Citizen of the following groups:

- African-American
- Hispanic-American
- Asian/Pacific Islander
- Native American/Native Alaskan
- Non-Minority Female
- Economically and Socially Disadvantaged

In addition, to that end the city council also adopted and implemented resolution 167-91—Veteran-owned Businesses, 3% Goal Plan in July of 2015. The resolution states in part (a full copy is available in Central Purchasing):

"A resolution adopting a three percent (3%) minimum goal for certified veteran-owned small businesses and service disabled veteran-owned businesses for certain of those Lexington-Fayette Urban County contracts related to

construction for professional services, and authorizing the Division of Purchasing to adopt and implement guidelines and/or policies consistent with the provisions and intent of this resolution by no later than July 1, 2015.”

We have compiled the list below to help you locate certified MBE, WBE and DBE certified businesses. Below is a listing of contacts for LFUCG Certified MWDBEs

Business	Contact	Email Address	Phone
LFUCG	Sherita Miller	smiller@lexingtonky.gov	859-258-3323
Commerce Lexington – Minority Business Development	Tyrone Tyra	ttyra@commercelexington.com	859-226-1625
State Minority Small Business Council	Susan Monroe	smonroe@ky.gov	502-562-9762
Small Business Development Council	Shirley Lewis	slewis@ky.gov	502-562-7666
Commission on Minority Participation	Debra A. Boone	aboone@ky.gov	502-562-0054
KY Transportation Cabinet (KYTC)	Melvin Bynes	Melvin.bynes2@ky.gov	502-564-3601
KYTC Pre-Qualification	Shella Eagle	Shella.Eagle@ky.gov	502-782-4815
Old River Valley Women's Business Council (WBC)	Shirley A. Mason	smason@ky.gov	502-562-6587
Kentucky MWBE Certification Program	Yvette Smith, Kentucky Finance Cabinet	Yvette.Smith@ky.gov	502-564-8099
National Women Business Owner's Council (NWBOC)	Janet Harris-Lange	janet@nwbo.org	800-675-5066
Small Business Administration	Robert Coffey	robertcoffey@sba.gov	502-582-5971
LaVoz de Kentucky	Andres Cruz	lavozdeky@yahoo.com	859-621-2106
The Key News Journal	Patrice Muhammad	paatricem@keynewsjournal.com	859-373-9428



LFUCG MWDBE PARTICIPATION FORM
Bid/RFP/Quote Reference # 18-2018

The MWDBE and/or Veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately. [REDACTED]

MWDBE Company, Name, Address, Phone, Email	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1. Conco Spray Solutions, PO Box 36726, Indianapolis IN 46236 317-428-6543 jhoop@concoespray.com	Manhole Rehab	\$224,000.00	1.8
2. S&M Precast 7515 Old Hwy 11 Memphis TN 47143 812-246-6258 riggs@smprecast.com	Precast Manholes	\$201,230.00	1.6
3. TruTest, PO BOX 221166 Louisville KY 40252	Manhole seals	\$5,680.00	
4. ADE Construction, 1044 Duncan Rd, Lawrenceburg Ky 40342	Site restoration-Concrete	\$725,000	5.9

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Leak Eliminators, LLC

Company

3/23/2018

Date

Ronald Karamora

Company Representative

President

Title



LFUCG MWDBE SUBSTITUTION FORM

Bid/RFP/Quote Reference # 18-2018

The substituted MWDBE and/or Veteran subcontractors listed below have agreed to participate on this Bid/RFP/Quote. These substitutions were made prior to or after the job was in progress. These substitutions were made for reasons stated below and are now being submitted to Central Purchasing for approval. By the authorized signature of a representative of our company, we understand that this information will be entered into our file for this project.

SUBSTITUTED MWDBE Company Name, Address, Phone, Email	MWDBE Formally Contracted/ Name, Address, Phone, Email	Work to Be Performed	Reason for the Substitution	Total Dollar Value of the Work	% Value of Total Contract
1.					
2.					
3.					
4.					

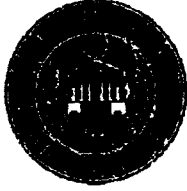
The undersigned acknowledges that any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Leak Eliminators, LLC
Company

3/23/2018
Date

Company Representative

President
Title



MWDBE QUOTE SUMMARY FORM

Bid/RFP/Quote Reference # 18-2018

The undersigned acknowledges that the minority and/or veteran subcontractors listed on this form did submit a quote to participate on this project. [REDACTED]

Company Name Leak Eliminators, LLC	Contact Person Bruce Whitaker
Address/Phone/Email 330 Lisle Industrial Ave, Lexington, KY 40511 859-388-9422/ bruce@leakeliminators.com	Bid Package / Bid Date FY 2019 Sanitary Sewer Rehab, 3/23/2018

MWDBE Company Address	Contact Person	Contact Information (work phone Email, cell)	Date Contacted	Services to be performed	Method of Communication (email, phone meeting, ad, event etc)	Total dollars \$\$ Do Not Leave Blank (Attach Documentation)	MBE * AA HA AS NA Female	Veteran
Conco Spray Solutions, PO Box 36726, Indianapolis IN 46236	Jennifer Hoop	hoop@concospray.com 317-428-8843	3/14/2018	Manhole Rehab	Email, phone	\$224,000.00	WBE	
S&M Precast 7515 Old Hwy 11 Memphis TN 47143	Ed Mayfield	emayfield@smprecast.com 612-248-6256	3/14/2018	precast Manholes	Email, Phone	\$201,230.00	WBE	
ADE Construction, 1044 Duncan Rd, Lawrenceburg Ky 40342	Angie English	adenglish@aol.com 859-821-8741	3/14/2018	Concrete finishing	Email, Phone	\$725,000.00	WBE	
TruTest, PO BOX 221186 Louisville KY 40252	Kristi	truteseals@yahoo.com 602-552-6142	3/14/18	Manhole Seals	Email	\$5,680.00	WBE	

(MBE designation / AA=African American / HA= Hispanic American/AS = Asian American/Pacific Islander/ NA= Native American)

The undersigned acknowledges that all information is accurate. Any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Leak Eliminators, LLC
Company
3/26/2018
Date

Bruce Whitaker
Company Representative
President
Title



LFUCG SUBCONTRACTOR MONTHLY PAYMENT REPORT

The LFUCG has a 10% goal plan adopted by city council to increase the participation of minority and women owned businesses in the procurement process. The LFUCG also has a 3% goal plan adopted by cited council to increase the participation of veteran owned businesses in the procurement process. In order to measure that goal LFUCG will track spending with MWDBE vendors on a monthly basis. By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentation may result in termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims. Please submit this form monthly to the Division of Central Purchasing/ 200 East Main Street / Room 338 / Lexington, KY 40507.

Bid/RFP/Quote # 18-2018

Total Contract Amount Awarded to Prime Contractor for this Project _____

Project Name/ Contract #	Work Period/ From: _____ To: _____
Company Name:	Address: _____
Federal Tax ID:	Contact Person: _____

Subcontractor Vendor ID (name, address, phone, email)	Description of Work	Total Subcontract Amount	% of Total Contract Awarded to Prime for this Project	Total Amount Paid for this Period	Purchase Order number for subcontractor work (please attach PO)	Scheduled Project Start Date	Scheduled Project End Date

By the signature below of an authorized company representative, you certify that the information is correct, and that each of the representations set forth below is true. Any misrepresentations may result in the termination of the contract and/or prosecution under applicable Federal and State laws concerning false statements and false claims.

Leak Eliminators, LLC
 Company
3/23/2018
 Date

 Company Representative
President
 Title

LFUCG STATEMENT OF GOOD FAITH EFFORTS
Bid/RFP/Quote # 18-2018

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE [REDACTED] on the project and can supply the appropriate documentation.

___ Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms [REDACTED] to participate.

___ Included documentation of advertising in the above publications with the bidders good faith efforts package

___ Attended LFUCG Central Purchasing Economic Inclusion Outreach event

Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs [REDACTED] of subcontracting opportunities

___ Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms [REDACTED]

Requested a list of MWDBE [REDACTED] or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).

___ Contacted organizations that work with MWDBE companies for assistance in finding certified MWDBE firms [REDACTED] to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.

___ Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.

Followed up initial solicitations by contacting MWDBEs [REDACTED] to determine their level of interest.

Provided the interested MWDBE firm [REDACTED] with adequate and timely information about the plans, specifications, and requirements of the contract.

Selected portions of the work to be performed by MWDBE firms [REDACTED] in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran

participation, even when the prime contractor may otherwise perform these work items with its own workforce

Negotiated in good faith with interested MWDBE firms [REDACTED] not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.

Included documentation of quotations received from interested MWDBE firms [REDACTED] which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.

_____ Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE [REDACTED] quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.

_____ Made an effort to offer assistance to or refer interested MWDBE firms [REDACTED] to obtain the necessary equipment, supplies, materials, insurance and/or bonding to satisfy the work requirements of the bid proposal

_____ Made efforts to expand the search for MWBE firms [REDACTED] beyond the usual geographic boundaries.

_____ Other—any other evidence that the bidder submits which may show that the bidder has made reasonable good faith efforts to include MWDBE [REDACTED]

[REDACTED]

The undersigned acknowledges that all information is accurate. Any misrepresentations may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Leak Eliminators, LLC

Company

Date

Patricia Lawrence

Company Representative
President

Title

8. AUTHENTICATION OF BID AND STATEMENT OF NON-COLLUSION
AND CONFLICT OF INTEREST

I hereby swear (or affirm) under the penalty for false swearing:

1. That I am the Bidder (if the Bidder is an individual), a partner of the Bidder (if the Bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);
2. That the attached bid has been arrived at by the Bidder independently, and has been submitted without collusion with, and without any agreement, understanding or planned common course of action, with any other contractor, vendor of materials, supplies, equipment or services described in the Invitation to Bid, designed to limit independent bidding or competition;
3. That the contents of the bid or bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished, with the bid or bids, and will not be communicated to any such person, prior to the official opening of the bid or bids;
4. That the Bidder is legally entitled to enter into the contracts with the Lexington-Fayette Urban County Government, and is not in violation of any prohibited conflict of interest;
5. (Applicable to corporation only) That as a foreign corporation, we are registered with the Secretary of State, Commonwealth of Kentucky, and authorized to do business in the State _____ or, that as a domestic corporation, we are in good standing with the Secretary of State, Commonwealth of Kentucky X. Check the statement applicable.
6. This offer is for 60 calendar days from the date this bid is opened. In submitting the above, it is expressly agreed that, upon proper acceptance by the Lexington-Fayette Urban County Government of any or all items bid above, a contract shall thereby be created with respect to the items accepted.
7. That I have fully informed myself regarding the accuracy of the statements made in this statement.
8. That I certify that Subcontractors have not and will not be awarded to any firm(s) that have been debarred from noncompliance with the Federal Labor Standards, Title VI of the Civil Rights Act of 1964 As Amended, Executive Order 11246 As Amended or any other Federal Law.

9. STATEMENT OF EXPERIENCE

NAME OF INDIVIDUAL: Richard Lawrence

POSITION/TITLE: President

STATEMENT OF EXPERIENCE: Has owned Leak Eliminators for 19 years. He oversees the company on a day to day basis. He works on finding and bidding on projects.

He has control and oversight of all aspects of the company

NAME OF INDIVIDUAL: Bruce Whitaker

POSITION/TITLE: General Manager

STATEMENT OF EXPERIENCE: Bruce has been with the company for 15 years. He has overseen the L.F.U.C.G. project for over 6 years. As General Manager, his main concern is the L.F.U.C.G. project but he also oversees any projects inside Fayette Co.

NAME OF INDIVIDUAL: Brandi Morse

POSITION/TITLE: Administrative Assistant

STATEMENT OF EXPERIENCE: Brandi works with Bruce on the daily billings. She produces the monthly statements for payment as well as organizing the pictures taken with them. Brandi has been providing this work for the last year of the current contract.

NAME OF INDIVIDUAL: Darren Whitehouse

POSITION/TITLE: Project Supervisor

STATEMENT OF EXPERIENCE: Darren has worked beside Bruce for the past 5 years.

He has grown in his responsibility. Over the past year, he has supervised the multiple crews that have worked on the current L.F.U.C.G. contract.

NAME OF INDIVIDUAL: Heather Baggett

POSITION/TITLE: Office Manager

STATEMENT OF EXPERIENCE: Heather has worked for Leak Eliminators for 15 years.

She oversees payroll, taxes, and the affirmative action reports.

NAME OF INDIVIDUAL: John Courtney

POSITION/TITLE: C.I.P.P. Crew supervisor

STATEMENT OF EXPERIENCE: John runs our Cured In Place liner crew. He works

all CIPP liner projects for Leak Eliminators.

* Include all officers, office management's, Affirmative Action officials, and field management personnel. (Attach separate sheets if necessary.)

10. EQUAL OPPORTUNITY AGREEMENT

The Law

- * Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- * Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and subcontractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- * Section 503 of the Rehabilitation Act of 1973 States:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- * Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal Contracts.
- * Section 206 (A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

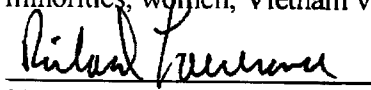
The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors, and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractor may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped, and aged persons.


Signature

Leak Eliminators, LLC
Name of Business

The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.

The Kentucky equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any count, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

- (1) *The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin;*
- (2) *The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age or national origin;*
- (3) *The contract will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provisions of the non-discrimination clauses required by this section; and*
- (4) *The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses.*

The Act further provides:

KRS 45.610. Hiring minorities – Information required

- (1) *For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetable.*
- (2) *Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.*

KRS 45.620. Action against contractor – Hiring of minority contractor or subcontractor

- (1) *If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.*
- (2) *If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 - 45.640.*
- (3) *The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.*

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

It is recommended that all of the provisions quoted above to be included as special conditions in each contract. In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his work-force in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

11. **EQUAL EMPLOYMENT OPPORTUNITY AFFIRMATIVE ACTION POLICY**

It is the policy of Leak Eliminators, LLC

to assure that all applicants for employment and all employees are treated on a fair and equitable basis without regard to their race, religion, sex, color, handicap, natural origin or age.

Such action shall include employment, promotion, demotion, recruitment or recruitment advertising, layoff or termination, rates of pay and other forms of compensation, and selection for training, whether apprenticeship and/or on-the-job-training.

Furthermore, this company agrees to make special recruitment efforts to hire the protected class whenever feasible. This company also agrees to adhere to all applicable federal, state, and local laws relating to Equal Employment Opportunity for all individuals.

12. WORKFORCE ANALYSIS FORM

Name of Organization: Leak Eliminators, LLC

Categories	Total	White (Not Hispanic or Latino)		Hispanic or Latino		Black or African-American (Not Hispanic or Latino)		Native Hawaiian and Other Pacific Islander (Not Hispanic or Latino)		Asian (Not Hispanic or Latino)		American Indian or Alaskan Native (not Hispanic or Latino)		Two or more races (Not Hispanic or Latino)		Total	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Administrators	4	3	1													3	1
Professionals																	
Superintendents	3	3															
Supervisors	2	2														3	
Foremen	3	2		1												2	
Technicians	1	1														3	
Protective Service																1	
Para-Professionals																	
Office/Clerical	4		4														
Skilled Craft	12	8		3						1						12	4
Service/Maintenance	6	5			1											6	
Total:	35	24	4	4	4	1	1	1	1	1	1	1	1	1	30	5	

Prepared by: Heather Baggett
(Name and Title)

Date: 3 / 23 / 2018

13. EVIDENCE OF INSURABILITY

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT CONSTRUCTION PROJECT
(Use separate form for each Agency or Brokerage agreeing to provide coverage)

Names Insured: Leak Eliminators, LLC Employee ID: 61-1338900
 Address: 330 Lisle Industrial Ave, Lexington, KY 40511 Phone: 859-388-9422

Project to be insured: FY 2019 Sanitary Sewer Rehab

In lieu of obtaining certificates of insurance at this time, the undersigned agrees to provide the above Named Insured with the minimum coverage listed below. These are outlined in the Insurance and Risk Management of Part V (Special Conditions), including all requirements, and conditions:

Section Items	Coverage	Minimum Limits and Policy Requirements	Limits Provided To Insured	Name of Insurer	A.M. Best's Code	Rating
SC-3, Section 2, Part 4.1 - see provisions	CGL	\$1,000,000 per occ. And \$2,000,000 aggregate	\$			
SC-3, Section 2, Part 4.1 - see provisions	AUTO	\$2,000,000/per occ.	\$			
SC-3, Section 2, Part 4.1 - see provisions	WC	Statutory w /endorsement as noted	\$			

Section 2 includes required provisions, statements regarding insurance requirements, and the undersigned agrees to abide by all provisions for the coverage's checked above unless stated otherwise when submitting.

Agency or Brokerage _____
 Certificate on File with Dept of Revenue
 Name of Authorized Representative _____

Street Address _____ Title _____
 City _____ State _____ Zip _____ Authorized Signature _____
 Telephone Number _____ Date _____

NOTE: Authorized signatures may be the agent's if agent has placed insurance through an agency agreement with the insurer. If insurance is brokered, authorized signature must be that of authorized representative of insurer.

IMPORTANT: Contract may not be awarded if a completed and signed copy of this form for all coverage's listed above is not provided with the bid.

14. DEBARRED FIRMS

PROJECT NAME: FY 2019 Sanitary Sewer Rehab

BID NUMBER: 18-2018

**LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
LEXINGTON, KY**

All prime Contractors shall certify that Subcontractors have not and will not be awarded to any firms that has been debarred for noncompliance with the Federal Labor Standards, Title VI of the Civil Rights Act of 1964 As Amended, Executive Order 11246 As Amended or any other Federal Law.

All bidders shall complete the attached certification in duplicate and submit both copies to the Owner with the bid proposal. The Owner (grantee) shall transmit one copy to the Lexington-Fayette Urban County Government, Division of Community Development, within fourteen (14) days after bid opening.

The undersigned hereby certifies that the firm of Leak Eliminators, LLC has not and will not award a subcontract, in connection with any contract award to it as the result of this bid, to any firm that has been debarred for noncompliance with the Federal labor Standards, Title VI of the civil Rights Act of 1964, Executive Order 11246 as amended or any Federal Law.

Leak Eliminators, LLC
Name of Firm Submitting Bid


Signature of Authorized Official

President
Title

3/26/2018
Date

15. DEBARMENT CERTIFICATION

All contractors/subcontractors shall complete the following certification and submit it with the bid proposal.


The contractor/subcontractor certifies in accordance with Executive Order 12549 (Debarment and Suspension 2/18/86) that to the best of its knowledge and belief, that it and its principals:

- 1) Are not presently debarred, suspended, proposed for debarment, declared negligible, or voluntarily excluded from covered transactions or contract by any Federal department or agency for noncompliance with the Federal Labor Standards, Title VI of the Civil Rights Act of 1964 as amended, Executive Order 11246 as amended or any other Federal law;
 - a) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - b) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(a) of this certification; and
 - c) Have not within a three year period preceding this bid has one or more public (Federal, State or local) transactions or contracts terminated for cause or default.
- 2) Where the contractor is unable to certify to any of the statements in this certification, such prospective contractors shall attach an explanation to this certification form.

Firm Name: Leak Eliminators, LLC

Project: FY 2019 Sanitary Sewer Rehab

Printed Name and Title of Authorized Representative: Richard Lawrence, President

Signature: 

Date: 3/23/2018

END OF SECTION

PART VIII

ADDENDA

All addenda issued during the bidding of the Project will be reproduced in the signed Contract Documents, on the pages following this heading sheet.

<u>Addendum Number</u>	<u>Title</u>	<u>Date</u>
1.	<u>Bid Schedule</u>	<u>3/2/18</u>
2.	<u># 1 Revised Bid For</u>	<u>3/2/18</u>
3.	<u># 2 Spect on / on exam</u>	<u>3/5/18</u>
4.	<u># 3 @.NOT ON LYNN</u>	<u>3/5/18</u>
5.	<u># 4 Questions</u>	<u>3/15/18</u>

PART VIII

ADDENDA

All addenda issued during the bidding of the Project will be reproduced in the signed Contract Documents, on the pages following this heading sheet.

<u>Addendum Number</u>	<u>Title</u>	<u>Date</u>
1.	<u>Bid Schedule</u>	<u>3/2/18</u>
2.	<u># 1 Revised</u>	<u> </u>
3.	<u># 2 Spert.</u>	<u> </u>
4.	<u># 3 NOT ON LYNN</u>	<u> </u>
5.	<u># 4 Question</u>	<u> </u>

Part A: Administrative Bid Items

Item	Unit	Description	Estimated	Unit Price	Subtotal
A1	LS	Bonds and Insurance	1	50,000.00	50,000
A2	LS	General Requirements	1	50,000.00	50,000
Grand Total Part A (Items A1 through A2)					\$100,000

Part B: Pipeline Rehabilitation & Replacement

Item	Unit	Description	Estimated	Unit Price	Subtotal
B1	EA	Point Repair, 6 to 8-inch pipe (depth 0 to 6.0 ft)	10	2,400.00	24,000
B2	EA	Point Repair, 6 to 8-inch pipe (depth 6.1 to 10.0 ft)	10	2,750.00	27,500
B3	EA	Point Repair, 6 to 8-inch pipe (depth 10.1 to 15.0 ft)	5	3,300.00	16,500
B4	EA	Point Repair, 6 to 8-inch pipe (depth 15.1 to 20.0 ft)	3	4,900.00	14,700
B5	LF	Line Replacement, 6 to 8-inch PVC pipe > 10 LF (depth 0 to 6.0 ft)	3,000	120.00	360,000

B6	LF	Line Replacement, 6 to 8-inch PVC pipe > 10 LF (depth 6.1 to 10.0 ft)	3,000	135.00	405,000
B7	LF	Line Replacement, 6 to 8-inch PVC pipe > 10 LF (depth 10.1 to 15.0 ft)	1,000	150.00	150,000
B8	LF	Line Replacement, 6 to 8-inch PVC pipe > 10 LF (depth 15.1 to 20.0 ft)	200	220.00	44,000
B9	LF	Line Replacement, 6 to 8-inch DI pipe > 10 LF (depth 0 to 6.0 ft)	3,000	135.00	405,000
B10	LF	Line Replacement, 6 to 8-inch DI pipe > 10 LF (depth 6.1 to 10.0 ft)	3,000	145.00	435,000
B11	LF	Line Replacement, 6 to 8-inch DI pipe > 10 LF (depth 10.1 to 15.0 ft)	1,000	170.00	170,000
B12	LF	Line Replacement, 6 to 8-inch DI pipe > 10 LF (depth 15.1 to 20.0 ft)	200	240.00	48,000
B13	EA	Point Repair, 10 to 12-inch pipe (depth 0 to 6.0 ft)	10	2,500.00	25,000
B14	EA	Point Repair, 10 to 12-inch pipe (depth 6.1 to 10.0 ft)	10	2,800.00	28,000
B15	EA	Point Repair, 10 to 12-inch pipe (depth 10.1 to 15.0 ft)	10	3,200.00	32,000
B16	LF	Line Replacement, 10 to 12-inch PVC pipe > 10 LF (depth 0 to 6.0 ft)	200	130.00	26,000
B17	LF	Line Replacement, 10 to 12-inch PVC pipe > 10 LF (depth 6.1 to 10 ft)	200	145.00	29,000
B18	LF	Line Replacement 10 to 12-inch PVC pipe > 10 LF (depth 10.1 to 15.0 ft)	50	160.00	8,000
B19	LF	Line Replacement, 10 to 12-inch PVC pipe > 10 LF (depth 15.1 to 20.0 ft)	200	220.00	44,000
B20	LF	Line Replacement 10 to 12-inch DI pipe > 10 LF (depth 0 to 6.1 ft)	700	150.00	105,000
B21	LF	Line Replacement 10 to 12-inch DI pipe > 10 LF (depth 6.1 to 10 ft)	700	160.00	112,000
B22	LF	Line Replacement 10 to 12-inch DI pipe > 10 LF (depth 10.1 to 15 ft)	200	175.00	35,000
B23	LF	Line Replacement 10 to 12-inch DI pipe > 10 LF (depth 15.1 to 20 ft)	200	200.00	40,000
B24	EA	Point Repair, 15 to 18-inch pipe (depth to 6.0 ft)	7	3,500.00	24,500
B25	EA	Point Repair, 15 to 18-inch pipe (depth 6.1 to 10.0 Ft)	8	3,750.00	30,000
B26	EA	Point Repair, 15 to 18-inch pipe (depth 10.1 to 15.0 ft)	5	4,300.00	21,500
B27	LF	Line Replacement, 15 to 18-inch PVC pipe > 10 LF (depth 0 to 6.0 ft)	700	160.00	112,000

B28	LF	Line Replacement, 15 to 18-inch PVC pipe > 10 LF (depth 6.1 to 10.0 ft)	200	170.00	34,000
B29	LF	Line Replacement, 15 to 18-inch PVC pipe > 10 LF (depth 10.1 to 15.0 ft)	200	195.00	39,000
B30	LF	Line Replacement, 15 to 18-inch PVC pipe > 10 LF (depth 15.1 to 20 ft)	200	240.00	48,000
B31	LF	Line Replacement, 15 to 18-inch DI pipe > 10 LF (depth 0 to 6.0 ft)	200	190.00	38,000
B32	LF	Line Replacement, 15 to 18-inch DI pipe > 10 LF (depth 6.1 to 10.0 ft)	200	200.00	40,000
B33	LF	Line Replacement, 15 to 18-inch DI pipe > 10 LF (depth 10.1 to 15.0 ft)	200	225.00	45,000
B34	LF	Line Replacement, 15 to 18-inch DI pipe > 10 LF (depth 15.1 to 20 ft)	200	250.00	50,000
B35	LF	Line Replacement, 24 to 36-inch PVC pipe > 10 LF (depth 0 to 6.0 ft)	200	195.00	39,000
B36	LF	Line Replacement, 24 to 36 inch PVC pipe > 10 LF (depth 6.1 to 10.0 ft)	200	210.00	42,000
B37	LF	Line Replacement, 24 to 36 inch PVC pipe > 10 LF (depth 10.1 to 15.0 ft)	200	250.00	50,000
B38	LF	Line Replacement, 24 to 36 inch PVC pipe > 10 LF (depth 15.1 to 20 ft)	200	300.00	60,000
B39	LF	Line Replacement, 24 to 36-inch DI pipe > 10 LF (depth 0 to 6.0 ft)	200	270.00	54,000
B40	LF	Line Replacement, 24 to 36 inch DI pipe > 10 LF (depth 6.1 to 10.0 ft)	200	300.00	60,000
B41	LF	Line Replacement, 24 to 36 inch DI pipe > 10 LF (depth 10.1 to 15.0 ft)	200	340.00	68,000
B42	LF	Line Replacement, 24 to 36 inch DI pipe > 10 LF (depth 15.1 to 20 ft)	200	390.00	78,000
B43	LF	6-inch HDPE Lateral installed by Pipe Bursting	250	80.00	70,000
B44	LF	8-inch HDPE Sewer Installed by Pipe Bursting	1,000	65.00	65,000
B45	LF	10-inch HDPE Sewer Installed by Pipe Bursting	1,000	80.00	80,000
B46	LF	12-inch HDPE Sewer Installed by Pipe Bursting	1,000	100.00	100,000
B47	LF	CIPP, 8 inch Pipe	15,000	38.00	570,000
B48	LF	CIPP, 10 inch Pipe	2,000	42.00	84,000
B49	LF	CIPP, 12 inch Pipe	2,000	50.00	100,000

B50	LF	CIPP, 15 inch Pipe	2,000	70.00	140,000
B51	LF	CIPP, 18 inch Pipe	2,000	90.00	180,000
B52	LF	CIPP, 21 inch Pipe	1,000	95.00	95,000
B53	LF	CIPP, 24 inch Pipe	1,000	110.00	110,000
B54	LF	CIPP, 30 inch Pipe	2,000	140.00	280,000
B55	LF	CIPP, 36 inch Pipe	3,000	210.00	630,000
B56	LF	CIPP, 42 inch Pipe	1,000	250.00	250,000
B57	LF	CIPP, 48 inch Pipe	1,000	290.00	290,000
B58	LF	CIPP, 54 inch Pipe	1,000	360.00	360,000
B59	LF	CIPP Lateral, 4 inch Pipe	1,000	48.00	48,000
B60	LF	CIPP Lateral, 6 inch Pipe	1,000	70.00	70,000
B61	EA	CIPP Point Repair, 6 to 8 inch, Pipe	10	1,800.00	18,000
B62	EA	CIPP Point Repair, 10 to 12 inch Pipe	10	2,000.00	20,000
B63	EA	CIPP Point Repair, 15 to 18 inch, Pipe	5	2,200.00	11,000
B64	EA	CIPP Service Connection Repair	50	2,000.00	100,000
B65	EA	Replace Service Connection 4 or 6 inch (depth 0 to 6.0 ft) w Cleanout	100	3,600.00	360,000
B66	EA	Replace Service Connection 4 or 6-inch (depth 6.1 to 10.0 ft) w Cleanout	110	3,850.00	423,500
B67	EA	Replace Service Connection 4 or 6-inch (depth 10.1 to 15.0 ft) w Cleanout	25	4,050.00	101,250
B68	EA	Replace Service Connection 4 or 6-inch (depth 15.1 to 20 ft) w Cleanout	20	4,400.00	88,000
B69	EA	Abandoned Point Repair or Service Connection Excavation	5	1,500.00	7,500
B70	EA	Demolish Manhole	10	1,200.00	12,000
B71	EA	Install 4-inch Cleanout	50	600.00	30,000

B72	EA	Install 6-inch Cleanout	50	1,000.00	50,000
B73	EA	Remove Protruding Tap or Obstruction	50	800.00	40,000
B74	EA	Shallow Manhole, 4-foot diameter (depth < 4.0 ft)	50	3,900.00	195,000
B75	EA	Standard Manhole, 4-foot diameter (depth 4.1 to 6.0 ft)	50	4,300.00	215,000
B76	EA	Standard Manhole, 5-foot diameter (depth to 6.0 ft)	25	5,900.00	147,500
B77	VF	Manhole Rehabilitation, 4' MH	400	400.00	160,000
B78	VF	Manhole Rehabilitation, 5' MH	100	600.00	60,000
B79	VF	Manhole Rehabilitation, 6' MH	100	700.00	70,000
B80	EA	Reset and Seal Manhole Ring	5	600.00	3,000
B81	EA	Time and Materials	5	Cost Plus 15%	NA
B82	EA	Reimbursement	5	Cost Plus 15%	NA
B83	EA	Replace Standard Frame and Lid in Grass	25	1,100.00	27,500
B84	EA	Replace Watertight Frame and Lid in Grass	25	1,200.00	30,000
B85	EA	Replace HDPE Composite frame and Lid in Grass	25	1,500.00	37,500
B86	EA	Install Initial Chimney Seal (up to 7.5 inches)	10	300.00	3,000
B87	EA	Chimney Seal Extensions (up to 7 inches each)	10	200.00	2,000
B88	EA	Raise Manhole to Grade in Pavement, < 12 inches	50	1,400.00	70,000
B89	EA	Raise Manhole to Grade non-Paved Area, < 12 inches	50	1,100.00	55,000
B90	VF	Manhole Barrel Extensions. 4 ft. diameter	50	450.00	22,500
B91	VF	Manhole Barrel Extensions, 5 ft. diameter	20	750.00	15,000
B92	EA	Inside Manhole Drop Connection	20	500.00	10,000
B93	EA	Mr. Manhole Quantity less than 10	50	1,475.00	73,750

B94	EA	Mr. Manhole Quantity greater than 10	50	1,400.00	70,000
GRAND TOTAL: Part 8 (Items B1 through B94)					
					\$ 9,402,700

Part C: Sewer Line Investigation Bid Items

Item	Unit	Description	Estimated	Unit Price	Subtotal
C1	EA	Locate Manhole	10	800.00	8,000
C2	LF	Clean and CCTV 8-inch Pipe	80,000	1.25	100,000
C3	LF	Clean and CCTV 10 to 12-inch Pipe	20,000	1.75	35,000
C4	LF	Clean and CCTV 15 10 18-inch Pipe	5,000	2.00	10,000
C5	LF	Clean and CCTY 24 to 30-inch Pipe	2,500	3.00	7,500
C6	LF	Clean and CCTY >30-inch Pipe	3,000	4.00	12,000
C7	LF	CCTV Lateral 4 to 6-inch Pipe	10,000	1.00	10,000
C8	LF	CCTV 8-inch Pipe	6,000	1.00	6,000
C9	LF	CCTV 10 to 12-inch Pipe	2,000	1.50	3,000
C10	LF	CCTV 15 to 18-inch Pipe	1,000	1.75	1,750
C11	LF	CCTV 24 to 30-inch Pipe	2,000	2.25	4,500
C12	LF	CCTV >30-inch Pipe	1,000	3.00	3,000
C13	EA	CCTV Reverse Set-Up	80	100.00	8,000
C14	LF	Routine Cleaning, ≤ 12-inch Pipe	2,000	1.50	3,000
C15	LF	Routine Cleaning, >12-inch Pipe	1,000	2.00	2,000
C16	LF	Smoke Testing, Main Lines	10,000	1.50	25,000
C17	HR	Smoke Testing, 3-Man Crew with Equipment	100	295.00	29,500

C18	HR	Heavy Cleaning, ≤ 12-inch Pipe	120	275.00	33,000
C19	HR	Heavy Cleaning, > 12-inch Pipe	100	275.00	27,500
C20	LF	Mechanical Root Removal, 6 to 8-inch Pipe	1,800	2.75	4,950
C21	LF	Mechanical Root Removal, 10 to 12-inch Pipe	500	3.50	1,750
C22	LF	Mechanical Root Removal, 15 to 18-inch Pipe	200	4.60	920
GRAND TOTAL: Part C (Item, C1 through C22)					\$326,370

Part D: General Civil Bid Items

Item	Unit	Description	Estimated Quantity	Unit Price (\$)	Subtotal
D1	CY	Rock Removal	300	240.00	72,000
D2	EA	Tree Removal, 6.1 to 12 inch in diameter	10	1,600.00	16,000
D3	EA	Tree Removal, > 12.1 to 24 inch in diameter	5	2,200.00	11,000
D4	EA	Tree Removal, > 24 inch Dia.	5	3,500.00	17,500
D5	SY	Site Restoration, Paved, Bituminous Surface	5,000	50.00	250,000
D6	SY	Site Restoration, Paved, Concrete Surface (up to 6-inch thickness)	5,000	40.00	200,000
D7	SY	Site Restoration, Paved, Concrete Surface (>6-inch thickness)	1,000	90.00	90,000
D8	SY	Site Restoration, Paved, Temporary Winter Repair	1,000	50.00	50,000
D9	SY	Site Restoration, Seeding with Straw Mulch and Net	1,500	10.00	15,000
D10	SY	Site Restoration, Seeding with Coconut Matting	500	8.00	4,000
D11	SY	Site Restoration, Sod	500	25.00	12,500
D12	SY	Creek Bank Restoration, Channel Lining	200	45.00	9,000

D13	SY	Creek Bank Restoration, Rip-Rap	200	40.00	8,000
D14	SY	Creek Bank Restoration, Coconut Matting	200	24.00	4,800
D15	LF	Monolithic Concrete Curb & Gutter Replacement	2,000	55.00	110,000
D16	LF	Concrete Curb Replacement	2,000	50.00	100,000
D17	LF	Bituminous Curb Replacement	100	20.00	2,000
D18	TON	No.9 Crushed Stone	1,000	25.00	25,000
D19	TON	DGA, Class II	1,000	25.00	25,000
D20	CY	Flowable (Controlled Density) Fill	100	135.00	13,500
D21	TON	Asphalt Pavement Milling, 1 1/2 - inch Depth	200	30.00	6,000
D22	TON	Bituminous Pavement Overlay, 1 1/2 - inch Thickness	200	80.00	16,000
D23	TON	No. 2 Crushed Stone	200	30.00	6,000
D24	TON	Class II Chanel Lining	200	50.00	10,000
D25	TON	Asphalt Base	200	75.00	15,000
GRAND TOTAL: Part D (Items D1 through D21)					\$ 1,088,300

Part E: Manpower & Equipment Bid Items

Item	Unit	Description	Estimated	Unit Price	Subtotal
E1	EA	Bypass Pumping SetUp, <12-inch Sewer Line	50	750.00	37,500
E2	EA	Bypass Pumping SetUp, ≥12-inch Sewer Line	20	1,800.00	36,000
E3	HR	Bypass Pumping, 2-inch Pump, <500 LF Discharge Line	50	40.00	2,000
E4	HR	Bypass Pumping, 2-inch Pump, 501 to 1000 LF Discharge Line	50	50.00	2,500
E5	HR	Bypass Pumping, 2-inch Pump, 1001 to 1500 LF Discharge Line	50	60.00	3,000

E6	HR	Bypass Pumping, 4-inch Pump, <500 LF Discharge Line	200	120.00	24,000
E7	HR	Bypass Pumping, 4-inch Pump, 501 to 1000 LF Discharge Line	200	145.00	29,000
E8	HR	Bypass Pumping, 4-inch Pump, 1001 to 1500 LF Discharge Line	200	170.00	34,000
E9	HR	Bypass Pumping, 6-inch Pump, <500 LF Discharge Line	50	210.00	10,500
E10	HR	Bypass Pumping, 6-inch Pump, 501 to 1000 LF Discharge Line	50	235.00	11,750
E11	HR	Bypass Pumping, 6-inch Pump, 1001 to 1500 LF Discharge Line	50	250.00	12,500
E12	HR	Bypass Pumping, 8-inch Pump, <500 LF Discharge Line	50	360.00	17,500
E13	HR	Bypass Pumping, 8-inch Pump, 501 to 1000 LF Discharge Line	50	380.00	19,000
E14	HR	Bypass Pumping, 8-inch Pump, 1001 to 1500 LF Discharge Line	50	420.00	21,000
E15	HR	SSO Site Cleanup	50	90.00	4,500
E16	HR	Combination Vacuum/Hydraulic Jet/Hydro Excavator	50	295.00	14,750
E17	HR	Backhoe/Extend-a-hoe	150	125.00	18,750
E18	HR	Hoe Ram	50	225.00	11,250
E19	HR	Dump Truck, Single Axle	50	100.00	5,000
E20	HR	Dump Truck, Tandem or Tri-Axle	50	125.00	6,250
E21	HR	Large Track Hoe, CAT 311 or Equivalent	50	180.00	9,000
E22	HR	Small Track Hoe, CAT 301.6C or Equivalent	500	140.00	70,000
E23	HR	Skid-Steer Loader	200	125.00	25,000
E24	HR	All-Terrain Vehicle, Gator or Equivalent	50	80.00	4,000
E25	HR	Supervisor/Supintendent	50	90.00	4,500
E26	HR	Crew Foreman	150	90.00	13,500
E27	HR	Laborer	2000	70.00	140,000

E28	HR	Air Compressor (Jack Hammer), 125 cfm or larger	50	110.00	5,500
E29	HR	Roller/Compactor	50	110.00	5,500
E30	HR	Pull-Behind Paver	50	60.00	3,000
E31	HR	Traffic Maintenance - Type I (Flagger)	2000	60.00	120,000
E32	HR	Electronic Arrow Board	200	40.00	8,000
E33	WK	Electronic Message Board	10	1,100.00	11,000
E34	HR	Investigation Crew	200	400.00	80,000
E35	HR	D5 Dozer or Equivalent	50	125.00	6,250
GRAND TOTAL: Part E (Items E1 through E35)					
			Total		\$ 826,000

\$11,743,370

BID SCHEDULE

3/21/2018

 AFE CONTRACTING, INC
DUNCAN RD
LAWRENCEBURG, KY 40342

ANGELA ENGLISH 859-621-7941
HEATHER ENGLISH 859-753-8443
DAMON ENGLISH 859-621-6379
JERRY ENGLISH 859-621-7942

LEAK ELIMINATORS, LLC
LFUCG SEWER CONTRACT
LEXINGTON, KY

<u>Item No.</u>	<u>Item</u>	<u>Unit</u>	<u>QUANTITY</u>	<u>Unit Price</u>	<u>TOTAL</u>
D6	SITE RESTORATION, PAVED, CONCRETE SURFACE(UP TO 6" THICKNESS)	SY	5000	\$115.00	\$ 575,000.00
D7	SITE RESTORATION, PAVED, CONCRETE SURFACE(>6" THICKNESS)	SY	1000	\$150.00	\$ 150,000.00
TOTAL BID					\$ 725,000.00

*Includes 4" stone base

*Does not include excavation

**Maximum 12" concrete thickness



THANK YOU FOR THE OPPORTUNITY

ANGELA D ENGLISH, PRESIDENT



PROPOSAL



To: Bruce Whitaker-Leak Eliminators Email: jhoop@concospray.com
From: Jennifer Hoop Date: 3/21/18
Re: Lexington Annual Bid

Conco Spray Solutions is a certified WBE

Conco Spray Solutions will supply a Sprayroq Spraywall Lining of 250 mils (1/4" thick)
Sprayroq SprayWall Lining is a structural polyurethane lining
Surface will be power washed, cleaned, voids or bug holes mortared, and dried before spraying.
Bench & inverts will be lined as a full monolithic lining.
Confined space entry and certified Sprayroq sprayers will be provided.
Mobilization is included with the assumption of a minimum 100 vertical feet of lining work ready

4' diameter Manhole Lining Price = \$340 vertical foot (400 vf per contract = \$136,000)
5' diameter Manhole Lining Price = \$405 vertical foot (100 vf per contract = \$40,500)
6' diameter Manhole Lining Price = \$475 vertical foot (100 vf per contract = \$47,500)
Grand Total = \$ 224,000.00

Prime Contractor needs to provide access to water, traffic control & bypass when necessary.

Extras/Change Order Items:

- Rebuilding Benches—billed at a 25,50, 75 & 100% -- Full bench rebuild for 4' diameter = \$500
- Infiltration Elimination with Chemical Grout—time & material
- ASTM calculated thickness increases due to water table & infiltration to be billed at extra Spraywall material & labor time to spray.

Terms:

Thirty (30) Days Net—No Retainage Withheld, Performance or Payment Bond Provided
No bypass pumping, vac truck services or water are included in quote
No Traffic Control Included
Quote is valid for 45 days after bid date
Sales Tax is not included and will be charge without a Tax Exempt Certificate

CONCO SPRAY SOLUTIONS • PO BOX 36726, INDIANAPOLIS, IN 46236
PHONE: 317-428-6543 • FAX: 317-888-791-2220

Estimate

TruTest, LLC
P.O. Box 221166
Louisville, KY 40252
(502)552-5142
trutestseals@yahoo.com

Job Quote

1022 03/23/2018

JOB
2019 Lexington Sanitary Rehab

Seal Installation	16	239.00	239.00
Installation of FlexRib Seals (Up to 7.5" of adjustment)			
Extensions Installation	10	139.00	139.00
Installation of FlexRib Extensions			
Mobilization	20	95.00	95.00
Mobilization - Lexington, KY			
TOTAL			\$473.00

Chimney seals

Accepted By

Accepted Date

2390
1390
1900
5680

Plant:
16700 Sima Gray Road
Henryville, IN 47126



Mailing:
7515 Old Hwy 111
Memphis, IN 47143

**Manholes - Storm Products - Grease Traps - Septic Tanks
"NPCA" CERTIFIED PLANT**

Phone: (812) 246-6258 • Fax: (812) 294-4862
Email: emayfield@smprecast.com

QUOTE

PROJECT #: 93610318 **DATE:** 3/20/2018
PROJECT NAME: 2018 LFUCG Sewer Contract
PROJECT LOCATION: Lexington, Ky **BID DATE:** 3/23/2018
CONTRACTOR: All Bidders
ENGINEER: *Quote Valid for 60 Days*

WE PROPOSE TO SUPPLY THE FOLLOWING PRECAST ITEMS FOR THE PROJECT LISTED ABOVE:

ITEM	QTY	DESCRIPTION	PRICE	TOTAL
B-74	50	48" Dia. Sanitary Manholes (depth < 4.0 ft)	\$970.00	\$48,500.00
B-75	50	48" Dia. Sanitary Manholes (depth 4.0 to 6.0 ft)	\$1,365.00	\$68,250.00
B-76	25	48" Dia. Sanitary Manholes (depth to 6.0 ft) Includes, base w/ factory invert, PSX pipe seals, MA Steps @ 12" o/c, Joint Sealant per City Specifications (Drop Lugs Not Included)	\$2,396.00	\$59,900.00
B-88	50	24" Dia Grade Rings <12" Price Per Inch \$13.60	\$163.20	\$8,160.00
B-89	50	24" Dia Grade Rings <12" Price Per Inch \$13.60	\$163.20	\$8,160.00
B-90	50	Manhole Barrel Extensions, 4 ft. Diameter	\$106.00	\$5,300.00
B-91	20	Manhole Barrel Extensions, 5 ft. Diameter	\$148.00	\$2,960.00
		Conseal Mastic 1" Roll @ \$11.00 per roll	\$11.00	
		6" Wide Mastic Wrap	\$50.00	
		12" Wide Mastic Wrap	\$100.00	
		Adhesive for Mastic Wrap CS-75	\$40.00	
		48" Profile Gaskets	\$23.00	
		60" Profile Gaskets	\$34.00	

Coatings or Any Admixtures Not Included

Delivery per Truck Load \$360.00

Plant:
16700 Sima Gray Road
Henryville, IN 47126



Mailing:
7515 Old Hwy 111
Memphis, IN 47143

**Manholes - Storm Products - Grease Traps - Septic Tanks
"NPCA" CERTIFIED PLANT**

Phone: (812) 246-6258 • Fax: (812) 294-4862
Email:emayfield@smprecast.com

QUOTE

PROJECT #: 93610318

DATE: 3/20/2018

PROJECT NAME: 2018 LFUCG Sewer Contract

PROJECT LOCATION: Lexington, Ky

BID DATE: 3/23/2018

CONTRACTOR: All Bidders

ENGINEER:

Quote Valid for 60 Days

WE PROPOSE TO SUPPLY THE FOLLOWING PRECAST ITEMS FOR THE PROJECT LISTED ABOVE:

ITEM	QTY	DESCRIPTION	PRICE	TOTAL
------	-----	-------------	-------	-------

Note: Sales Tax Not Included, an exempt certificate will be required if certificate is not supplied Sales Tax will be added

QUOTE TOTAL: \$201,230.00

INCLUDED IN THIS QUOTE:

Delivery (All items FOB job site; 1 hour unload time included; Any extra time \$150 per hour)
Special or partial loads will be subject to additional charges
Mastic

NOT INCLUDED IN THIS QUOTE:

Sales Tax, Casting, Extended Bases, Sumps, Admixtures, Coatings of Any Kind, Drop Lugs,
Vacuum testing of manholes, trowelable pipe mastic, external joint wrap, Dissipators on Headwalls unless Noted
Invert or Pipe Seals in Storm Structures, Stamped Engineered Drawings

THANK YOU FOR THE OPPORTUNITY TO QUOTE THIS PROJECT.

If you have any questions regarding this quote, please contact Ed Mayfield at (812) 246-6258.

IMPORTANT: *This proposal is based on standard terms and conditions. Items and quantities are the basis of this quotation and we are not responsible for any discrepancies between this list and actual items and quantities.*

Accepted by: _____

Date: _____

Title / Position: _____

Schedule C - Major Equipment - VEHICLES LIST

Inv. No.	Description	Serial No.
V0001	1991 International Dump Truck	1HSHEBYN7MH379318
V0026	2001 Isuzu Box Van	JALB4B14917005683
V0033	1998 Chevy Flat Bed Dump	J8BC4B1K6W7002825
V0034	1994 Chevy Dump	JALM7A1U9R3300098
V0035	1999 Chevy Flat Bed Dump	J8BC4B156X7001704
V0041	1991 Freightliner	1FVX3WY96MH390528
V0045	1999 Chevy Box Van	J8BB4B156X7012763
V0047	1991 Kenworth Vactor	1NKDLBOXXMJ567235
V0050	1995 International Cure in Place Steam	1HTSDAAN3SH630146
V0051	2003 Enclosed Trailer	4X4UUS4263W010752
V0052	2004 Trailer	4MNFB122941002500
V0053	1990 Ford Truck - L9000	1FDYW90L4LVA06466
V0058	2001 Isuzu Truck	JALC4B14717000860
V0062	2003 Isuzu Truck (Cutter)	JALF5C13837700641
V0065	2006 Chevy (CUES camera truck)	1GBE4V1206F425476
V0066	2001 Isuzu Box Van	JALB4B14317003864
V0068	2002 Isuzu Box Truck	JALC4B14127000077
V0073	1999 Volvo Vactor	4VHJCLHEXXN864843
V0077	1999 Isuzu Flat Bed	JALC4B143X7000363
V0079	2005 GMC Truck	J8DC4B16357008770
V0083	2004 Isuzu Truck	JALC4B14347000553
V0086	1999 International	1HTSHADT4XH624068
V0092	2000 Volvo Tri-axel Dump	4V5JC2GF2YN870204
V0094	2004 Ford F150	1FTPX14594NC09493
V0097	1999 Volvo Dump Truck	4VHJCCUF2XN867329
V0098	2001 Sterling Dump Truck	2FZNEECB51AH62544
V108	2002 Chevy 7500 Dump Truck	1GBM7H1C92J517142
V110	1995 Ford Truck	1FDXF80C7SVA39739
V111	2012 Lark Enclosed Trailer	5RTBE202CD026832
V116	2008 Ford E350 Cube Van	1FDWE35L18DA87410
V117	2008 Ford E350 Cube Van- Chip Cutter	1FDWE35LX8DA75451
V119	2000 Ford Pickup	2FTRX18L7YCA70039
V122	2002 Ford F350	1FTSF31S42EC49870
V123	2000 Sterling L8500 Vac Truck	2FZ6BLCB8YAH45703
V124	2000 Freightliner Vac Truck	1FV6JBB4YHG76919
V125 R&K	2005 International Steam Truck	1HTMKAAN95H693481
V126	2012 Lark enclosed Trailer	5RTBE2027CD027019
V127	1999 International Truck	2HSFRAER6XC021784
V128	2002 International Reefer Truck	1HTMNAAM72H529463
V129	2013 kaufman Trailer	5VGFD2029DL004744
V130	2013 kaufman Trailer	5VGFD2022DL004441
V131	2004 Ford Camera Truck	1FDXE45PX4HA58441
V133	2005 Chevy Tahoe	1GNEK13Z5J100244
V135	2013 Kaufman Trailer	5VGFD2023EL000447
V136	2013 Kaufman Trailer	5VGFD2020EL000941
V137	2014 Toyota Sienna (Karcu)	5TDDK3DC5F5413018
V138	2008 Ford F450 Dump Truck	1FDXF46S13ED86394

V139	1966 Rogers Lowboy	11895
V140	2006 International 4300 Reefer	1HTMMAAL86H821219
V141	2005 Ford F250	1FTSW20525EA36796
V143	2002 Ford Crew	1FTNW20L42EB97917
V146	Reefer Trailer	1GRAAG41XSB188501
V148	2006 Pontiac Torrent Richard	2CKDL63F566122924
V149	2006 Mercury Mariner	4M2YU56156KJ06097
V151	2006 Ford F150 - Hank	1FTPW14596FB19891
V152	2007 Saturn Outlook - Bruce	5GZER88737J141704
V153 R&K	2010 Freightliner M2	1FVHCYBS0ADAP6567
V154	2015 Kaufman Trailer	5VGFD2023FL000546
v156	2015 Kaufman Trailer	5VGFC2029FL000647
V157	2007 Chevy Tahoe	1GNFK13087J406352
V158	1999 GMC Dump Truck	1GDM7H1C3XJ511495
V160	2006 Ford F450 Dump	1FDXF46P86EA20352
V163	2006 Ford Super Duty F250 darren	1FTSW20596ED67523
V167	1988 Mack	1M2P198CXJW002458
V168	2000 Ford Dump	1FDXF46F2YEB55918
V170	1987 Walker Trailer	1W9S72AW3H0007011
V171	2007 Chevy C4500	1GBE4C1217F416088
V172	2005 Chevy C4500	1GBE4C1E65F520976
V173	2004 Chevy Pickup	1GBE4E1174F504227
V174	2011 Chevy Suburban (John L)	1GNWK5EG6BR228548
V175	2016 Kaufman Trailer	5VGFH2529GL000906
V178	1999 Polar Tanker	1PMS84322X1021226
V180 R&K	1998 53' Reefer Trailer	1UYVS2583WU519688
V181 R&K	2010 Freightliner Reefer	1FVHCYBS1ADAP6559
V182 R&K	2008 Volvo VNL64T	4V4NC9TG19N840148
V183 R&K	2002 53' Reefer Trailer	1UYVS85872U885704
V184 R&K	2004 Western Star	5KJABCK84PN03897
V185 R&K	2006 Sterling Vactor	2FZHATDCX7AY03504
V187	2004 International 7600	1HTWYAHTX4J081129
V188	2006 Volvo VNM42T	4V4M19GF76N406564
V189	2011 Toyota Rav4	2T3BF4DV8BW115979
V190	2008 International Vactor	1HTWGAZT58J691690
V192	2010 Ford Crown Vic	2FABP7BVXAX186733
V193	2000 Ford Taurus	1FAFP5324YG276156
V194	2008 Ford Explorer 4x4	1FMEU73E78UA28592
V195	2007 LEXUS RX	272HK31U37C014180
V196	1999 Mack CH618	1M1AA3Y5W101129
V197	2007 Mack CV713	1M2AG11C67M058109
V198	1998 Western Star	2WLPCCBEXWK949432
V199	2003 Mack 600 RB800	1M2AM08C23M006317

Schedule C: Major Equipment - Equipment List

2/22/2018

Inventory No.	Description	Serial No.	Model No.	Date Purchased
E 166	CIPP Shooter	68-0446805	61-1338900	8/07
E 168	2008 Kawasaki Mule	JK1AFDD198B50 0293	KAF950D8F	9/07
E0003	1994 SULLIAR AIR COMPRESSOR	E04-114871	185DPOJD	1998
E0069	J.D. GATOR	W006X4X022362		1/2003
E0091	EASEMENT MACHINE	E091	Home made	
E0099	Tric Trenchless			11/2016
E107	All Surface Loader/Skid steer	RSE02318	RC-60	2004
E120	Street Plates		Home made	11/10/05
E121	Fusion Machine 6-8	8398980-05	819901	11/10/05
E122	Saddle Fusing	FR0330088	Framat 110V-US	
E123	Jeanie Pipe Puller	E123	Jeanie	5/1/05
E125	See-Snake Camera	20-020330	70-1950	5/15/05
E126	99 Case 580L Backhoe	JJG0244084	580L	3/1/06
E127	Kent Backhoe Breaker	1179	F8-310E	3/1/06
E130	Shark PRESSURE WASHER	S0406-127319	SGP-403537E	5/16/06
E144	Case Back Hoe	JJG0198291	580 Super L	12/06
E151	Kent Backhoe Breaker	2090	F9-310E	01/07
E176	Generator	7003013626	G70	3/08
E188	OZII Camera w/ Controller	7052303	8032808	5/15/2008
E191	Miller Welder - Bobcat 250	LK022363H	907211	2/14/09
E193	Multi Conductor TV Inspection System (lateral launch)		ID335	3/2009
E194	Upgraded Lateral Launch Software	GX520/EQ135	Cues	3/2009
E195	Wacker Asphalt Roller	5088931	RD11A	4/2009
E205	24" Shooter Trailer hookups		200100	9-09
E206	Multi Conductor Reel	RBB10022	R.S. Tech	12-07
E207	Laser Profiler		Eyetratics	4-09
E225	Trench Boxes	126350	XLD-816	3/10
E228	Monitor for seesnake		R31763	3/10
E229	IHI Escavator	WF002011	35NX-Thumb	3/10
E248	Generator	75HGKAT41934L	Onan	5/10
E249	Hammer	02581	AS730	5/10
E253	Kent Hydraulic Hammer	F271474	KF27QT	6/10
E263	Lumberjack	708	300	9/10
E268	6" Godwin Water Pump	0541700-43	CD150M	10/10
E289	Cummins Generator	72000100	40k W3 Phase / 4BT3.3G5	12/11
E290	Air Compressor	110921	US15	12/11
E288	Perma-Liner Viper Steam Unit		PL-202	12/11
E297	Perma-Liner Top Gun 1" Manifold		PL-202CM	12/11
E309	Perma Liner			
E311	OZII Camera w/ Controller	09091506	04720902	3/12
E319	Compressor	185DPQ-JD	200808220115	4/12
E320	Compressor	185DPQ-JD	200805280102	4/12
E322	Honda Generator	EU6500ISAN	EASJ-1043422	4/12
E323	Honda Generator	EU6500IS	EASJ-1206629	5/12
E326A	Schwalm Camera System-Robot	2060/6D-148	Talpa 2060	4/12
E327A	Schwalm Camera System-Robot	2060/6D-151	Talpa 2060	4/12

Schedule C: Major Equipment - Equipment List

2/22/2018

E333	Inspector General			6/12
E371	2005 Ingersoll-Rand Air Compressor	358432UFP820	P185WIR	3/13
E372	2005 Ingersoll-Rand Air Compressor	351461UK0820	P185WIR	3/13
E374	Lamp II			5/13
E381	2006 IHI Excavator	WP001282	55N-2	7/13
E385	IHI Mini-Excavator	WK001183	80NX-3	7/13
E387	Cat Track Hoe		212	7/13
E388	Kent Hydraulic Hammer	3161	KF12QT	8/13
E401	Komatsu Forklift	4583494	FG 25C 11	10/13
E402	2005 Komatsu Excavator	A86686	PC220LC-7	11/13
E405	CAT DOZER	CAT00DGAFDW 00327	D5G	11/13
E408	2014 Kawasaki Mule	JK1AFCR13EB5 21817	KAF620REF	12/13
E410	2014 Kawasaki Mule	JK1AFCR10EB5 21659	KAF620REF	2/14
E419	Hydraulic power supply			5/14
E426	FSK Camera System			2/14
E429	Cues computer w/ software			1/14
E431	GME Liteshield 6' trenchbox			6/14
E435	IHI Mini-Excavator	WP001090	55N-2	9/14
E436	IHI Mini-Excavator	WK001355	80NX-3	9/14
E437	IHI Mini-Excavator	WP001115	55N-2	9/14
E438	CIPP Shooter		6-8 Air Inverter	7/14
E446	Wetout Mixer			10/14
E447	Reefer Loading Apparatus			10/14
E449	IHI Mini-Excavator	WK001371	80	10/14
E454	Takeuchi Skid Steer	21503891	TLC-150	10/14
E455	Takeuchi Skid Steer	21405819	TL140	10/14
E456	Takeuchi Skid Steer	21305836	TL130	10/14
E458	Takeuchi Skid Steer	21503079	TL150	11/14
E459	Pipe Laser	sitech		11/14
E482	IHI Mini-Excavator	M002333	35N2	1/15
E483-1	Rebuilt motor			2/17
E466	2006 Magnum Light Plant	89672	MLT 3060	1/15
E468	Myer Water Pump		DP80-20	2-15
E470	2006 Kent Backhoe Breaker	5078	KF 9 TLB	3/15
E490	CAT Track Loader	9BL02071	963B	7/15
E496	Toyota Forklift	FG45-10784	FG45	8/15
E497	CAT 320B Excavator	2747	KF-27	8/15
E500	Busch Vacuum Pump	U151700055	Mink MM 1142 BV	8/15
E507	Kent Excavator Breaker	2747	KF-27 CAT 320B	8/15
E516	Generator	EEJD-1012771	EU7000IAT1	1/16
E520	Ingersoll-Rand Air Compressor	399781	HP375	3/16
E524	Cat 433B	1MG0365	433B	4/16
E526	IHI	WK001335	80Nrx3	4/16
E527	IHI	WK001280	50nx3	4/16
E635	1998 JD Loader	624H	DW624HX585667	7/2018
E557	CIPP Shooter			12/2018
E567	Harley Rake		M8H-0022	4/2017
E588	IHI 35 Excavator	WM002482	35n2	4/2017
E571	2016 Kawasaki Mule Pro Fix	JKBAFSG12CB5 01649	KAP620GGF	4/2017

Schedule C: Major Equipment - Equipment List

2/22/2018

E572	Miller Wire Welder	Me130124n	350p	3/2017
E575	MUSTANG SKID LOADER	MMC176RTE000 30814	1750rt	5/2017
E583	Canycorn Rubber Track Crawler	7160752	S25A	6/2017
E586	2013 CAT Excavator	CAT0312EKMJ0 0534	312E	10/2017
E597	FIAT Allis Dozer Tractor		R10B2T	10/2017
E600	Sweepster			10/2017

MAYOR JIM GRAY



LEXINGTON

CHARLES MARLIN
DIRECTOR
WATER QUALITY

ADDENDUM #1

Bid Number: #18-2018

Date: March 5, 2018

Subject: Sanitary Sewer Rehabilitation

**Inquiries to:
Brian Marcum
brianm@lexingtonky.gov
(859) 258-3325**

TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarification to the above referenced Bid:

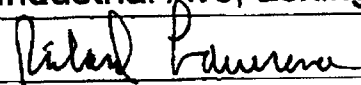
Addendum #1 is a revised bid form in Addendum#2 specifications.


Todd Slatin, Director
Division of Central Purchasing

**All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.**

COMPANY NAME: Leak Eliminators, LLC

ADDRESS: 330 Lisle Industrial Ave, Lexington, KY 40511

SIGNATURE OF BIDDER: 

MAYOR JIM GRAY



LEXINGTON

CHARLES MARTIN
DIRECTOR
WATER QUALITY

ADDENDUM #2

Bid Number: #18-2018

Date: March 5, 2018

Subject: Sanitary Sewer Rehabilitation

Inquiries to:
Brian Marcum
brianm@lexingtonky.gov
(859) 258-3325

TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarification to the above referenced Bid:

Addendum #1 is a revised bid form in the attached Specifications and Addendum#2 is the issuance of the specifications on lonwave, these are available at Lynn Imaging but do not have to be purchased as these documents are the same.

Todd Statin
Todd Statin, Director
Division of Central Purchasing

**All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.**

COMPANY NAME: Leak Eliminators, LLC

ADDRESS: 330 Lisle Industrial Ave, Lexington, KY 40511

SIGNATURE OF BIDDER: *Richard Lawrence*



ADDENDUM #3

Bid Number: #18-2018

Date: March 5, 2018

Subject: Sanitary Sewer Rehabilitation

**Inquiries to:
Brian Marcum
brianm@lexingtonky.gov
(859) 258-3325**

TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarification to the above referenced Bid:

In order to save cost to the contractors this bid will only be available on the LFUCG Procurement site and not from Lynn Imaging. We are sorry for the confusion.

**Todd Slatin, Director
Division of Central Purchasing**

**All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.**

COMPANY NAME: Leak Eliminators, LLC

ADDRESS: 330 Lisle Industrial Ave, Lexington, KY 40511

SIGNATURE OF BIDDER: Rickard Lawrence



ADDENDUM #4

Bid Number: #18-2018

Date: March 15, 2018

Subject: Sanitary Sewer Rehabilitation

**Inquiries to:
Brian Marcum
brianm@lexingtonky.gov
(859) 258-3325**

TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarification to the above referenced Bid:

1. Pre-bid sign-in sheet is attached.
2. This is a price contract for one year with four-(one) year automatic renewals.
3. No bid bond is required with bid.
4. A \$2M P&P bond will be required from Contractor each year of contract.
5. Note changes to the following specs (not all-inclusive):
 - a. Right of way requirements.
 - b. New standard drawings.
 - c. New erosion and sediment control specs.
6. Contractor is responsible for OSHA compliance.
7. Response time is 4 hours, 24 hours to complete unless extension is granted.
8. Lateral installation shall include 10 foot of main line pipe, plus 10 foot of lateral pipe.

Q&A

Q1: Is ductile iron pipe to have 401 protecto?

A1: All ductile iron pipe shall be cementitious lined unless 401 protecto is required by owner. If required the 401 protecto shall be paid for as an additional cost.

Q2: Are lateral reinstates an additional charge not included in lining cost?

A2: Lateral reinstates are included in the liner installation costs and is not an additional charge unless it is required due to a situation, based on case by case.



Q3: Are maps provided for each project?

A3: Yes.

Todd Slatin (P)

Todd Slatin, Director
Division of Central Purchasing

All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.

COMPANY NAME: Leak Eliminators, LLC

ADDRESS: 330 Lisle Industrial Ave, Lexington, KY 40511

SIGNATURE OF BIDDER: *Patricia Lawrence*

PART V
SPECIAL CONDITIONS
INDEX

1	BLASTING.....	SC-2
2	RISK MANAGEMENT PROVISIONS – INSURANCE AND INDEMNIFICATION	SC-3
3	WAGE SCALE (if applicable)	SC-7
4	Shop Drawings.....	SC-7
5	Contract Documents.....	SC-7

1. BLASTING

Blasting shall only be allowed with the specific written permission from the OWNER and the CONTRACTOR will be fully responsible and will be required to provide additional insurance.

Blasting is only allowed by a licensed blaster in compliance with the State of Kentucky Laws, KRS Section 351.310 – 351.340 and applicable rules and regulations issued by the Department of Mines and Minerals.

CONTRACTOR shall notify each property owner and public utility company having structures or facilities in proximity to the site of the work of the intent to use explosives. Give such notice sufficiently in advance to enable those being notified to take the necessary steps to protect their property from injury. CONTRACTOR will be liable for any and all damages and claims made as a result of his blasting operations.

CONTRACTOR shall preserve the original bearing value of rock located under proposed structure foundations from damage by blasting, by concussion from the blasting or by excessive breakage. The CONTRACTOR shall bear any increase in structure costs caused by blasting damage to rock under proposed foundations.

2.

**RISK MANAGEMENT PROVISIONS
INSURANCE AND INDEMNIFICATION**

INDEMNIFICATION AND HOLD HARMLESS PROVISION

- (1) It is understood and agreed by the parties that Contractor hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Contractor or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "CONTRACTOR") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.
- (2) CONTRACTOR shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by CONTRACTOR's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the CONTRACTOR; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.
- (3) In the event LFUCG is alleged to be liable based upon the above, CONTRACTOR shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.
- (4) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.
- (5) The work and services performed hereunder involve a CONSENT DECREE as further explained in Part 1-Advertisement for Bids, provision 13. These provisions are incorporated herein by reference as if expressly stated.
- (6) LFUCG is a political subdivision of the Commonwealth of Kentucky. CONTRACTOR acknowledges and agrees that LFUCG is unable to provide indemnity or otherwise save, hold harmless, or defend the CONTRACTOR in any manner.

FINANCIAL RESPONSIBILITY

BIDDER/CONTRACTOR understands and agrees that it shall, prior to final acceptance of its bid and the commencement of any work, demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions.

INSURANCE REQUIREMENTS

YOUR ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW, AND YOU MAY NEED TO CONFER WITH YOUR INSURANCE AGENTS, BROKERS, OR CARRIERS TO DETERMINE IN ADVANCE OF SUBMISSION OF A RESPONSE THE AVAILABILITY OF THE INSURANCE COVERAGES AND ENDORSEMENTS REQUIRED HEREIN. IF YOU FAIL TO COMPLY WITH THE INSURANCE REQUIREMENTS BELOW, YOU MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

Required Insurance Coverage

BIDDER/CONTRACTOR shall procure and maintain for the duration of this contract the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to LFUCG in order to protect LFUCG against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONTRACTOR. The cost of such insurance shall be included in any bid:

<u>Coverage</u>	<u>Limits</u>
General Liability aggregate (Insurance Services Office Form CG 00 01)	\$1 million per occurrence, \$2 million or \$2 million combined single limit
Commercial Automobile Liability occurrence (Insurance Services Office Form CA 0001)	combined single, \$1 million per
Worker's Compensation	Statutory
Employer's Liability	\$500,000.00

The policies above shall contain the following conditions:

- a. All Certificates of Insurance forms used by the insurance carrier shall be properly filed and approved by the Department of Insurance for the Commonwealth of Kentucky (DOI). LFUCG shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy using the Kentucky DOI approved forms.
- b. The General Liability Policy shall be primary to any insurance or self-insurance retained by LFUCG.
- c. The General Liability Policy shall include a Products and Completed Operations endorsement or Premises and Operations Liability endorsement unless it is deemed not to apply by LFUCG.
- d. The General Liability Policy shall include an Explosion-Collapse Underground (XCU)

endorsement.

- e. The General Liability Policy shall include a Pollution liability and/or Environmental Casualty endorsement unless it is deemed not to apply by LFUCG.
- f. LFUCG shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.
- g. Said coverage shall be written by insurers acceptable to LFUCG and shall be in a form acceptable to LFUCG. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.
- h. Owner requests that the Bidder obtain an Umbrella Liability endorsement to the CGL policy for a limit of liability of \$ [REDACTED] and that this CGL policy endorsement be renewed for one (1) year after completion of this project.

Renewals

After insurance has been approved by LFUCG, evidence of renewal of an expiring policy must be submitted to LFUCG, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

Deductibles and Self-Insured Programs

IF YOU INTEND TO SUBMIT A SELF-INSURANCE PLAN IT MUST BE FORWARDED TO LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, DIVISION OF RISK MANAGEMENT, 200 EAST MAIN STREET, LEXINGTON, KENTUCKY 40507 NO LATER THAN A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE RESPONSE DATE.

Self-insurance programs, deductibles, and self-insured retentions in insurance policies are subject to separate approval by Lexington-Fayette Urban County Government's Division of Risk Management, upon review of evidence of BIDDER/CONTRACTOR's financial capacity to respond to claims. Any such programs or retentions must provide LFUCG with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance coverage. If BIDDER/CONTRACTOR satisfies any portion of the insurance requirements through deductibles, self-insurance programs, or self-insured retentions, BIDDER/CONTRACTOR agrees to provide Lexington-Fayette Urban County Government, Division of Risk Management, the following data prior to the final acceptance of bid and the commencement of any work:

- a. Latest audited financial statement, including auditor's notes.
- b. Any records of any self-insured trust fund plan or policy and related accounting statements.
- c. Actuarial funding reports or retained losses.

- d. Risk Management Manual or a description of the self-insurance and risk management program.
- e. A claim loss run summary for the previous five (5) years.
- f. Self-Insured Associations will be considered.

Safety and Loss Control

CONTRACTOR shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, the public, and LFUCG.

Verification of Coverage

BIDDER/CONTRACTOR agrees to furnish LFUCG with all applicable Certificates of Insurance signed by a person authorized by the insurer to bind coverage on its behalf prior to final award, and if requested, shall provide LFUCG copies of all insurance policies, including all endorsements.

Right to Review, Audit and Inspect

CONTRACTOR understands and agrees that LFUCG may review, audit and inspect any and all of its records and operations to insure compliance with these Insurance Requirements.

DEFAULT

BIDDER/CONTRACTOR understands and agrees that the failure to comply with any of these insurance, safety, or loss control provisions shall constitute default and that LFUCG may elect at its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging BIDDER/CONTRACTOR for any such insurance premiums purchased, or suspending or terminating the work.

3. **WAGE SCALES** – [REDACTED]
4. **SHOP DRAWINGS**-The Shop Drawings for this contract are the Division of Engineering Standard Drawings 2017 located at <https://www.lexingtonky.gov/new-development>.
5. **CONTRACT DOCUMENTS**-The Contract Documents concerning the construction on Sanitary Sewer facilities and infrastructure are the Sanitary Sewer and Pumping Station Manual 2009 located at <https://www.lexingtonky.gov/new-development>.

END OF SECTION

PART IV

GENERAL CONDITIONS

TABLE OF CONTENTS

Article Number	Title	Page
1.	DEFINITIONS	GC-6
2.	PRELIMINARY MATTERS.....	GC-10
3.	CONTRACT DOCUMENTS: INTENT, CONFLICTS, AMENDING AND REUSE.....	GC-11
4.	AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS	GC-13
5.	CONTRACTOR'S RESPONSIBILITIES	GC-15
6.	OTHER WORK.....	GC-26
7.	OWNER'S RESPONSIBILITIES	GC-27
8.	ENGINEER'S STATUS DURING CONSTRUCTION	GC-27
9.	CHANGES IN THE WORK.....	GC-30
10.	CHANGE OF CONTRACT PRICE.....	GC-31
11.	CHANGE OF CONTRACT TIME	GC-37
12.	WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK.....	GC-38
13.	PAYMENTS TO CONTRACTOR AND COMPLETION	GC-42
14.	SUSPENSION OF WORK AND TERMINATION	GC-45
15.	MISCELLANEOUS.....	GC-48

DETAILED TABLE OF CONTENTS OF GENERAL CONDITIONS

1. Definitions
2. Preliminary Matters
 - 2.1 Delivery of Bonds
 - 2.2 Copies of Documents
 - 2.3 Commencement of Contract Time; Notice to Proceed
 - 2.4 Starting the Project
 - 2.5 Before Starting Construction
 - 2.6 Submittal of Schedules
 - 2.7 Preconstruction Conference
 - 2.8 Finalizing Schedules
3. Contract Documents, Intent, Conflicts, Amending, and Reuse
 - 3.1 General
 - 3.2 Intent
 - 3.3 Conflicts
 - 3.4 Amending and Supplementing Contract Documents
 - 3.5 Reuse of Documents
4. Availability of Lands, Physical Conditions, Reference Points
 - 4.1 Availability of Lands
 - 4.2 Physical Conditions
 - 4.3 Physical Conditions - Underground Facilities
 - 4.4 Reference Points
5. CONTRACTOR'S Responsibilities
 - 5.1 Supervision
 - 5.2 Superintendence
 - 5.3 General Manager
 - 5.4 Labor
 - 5.5 Start-Up and Completion of Work
 - 5.6 Materials and Equipment
 - 5.7 Adjusting Progress Schedule
 - 5.8 Substitutes or "Or-Equal" Items
 - 5.9 Subcontractors, Suppliers and Others
 - 5.10 Patent Fees and Royalties
 - 5.11 Permits
 - 5.12 Laws and Regulations
 - 5.13 Taxes

- 5.14 Use of Premises
 - 5.15 Record Drawings
 - 5.16 Shop Drawings and Samples
 - 5.17 Continuing the Work
 - 5.18 Erosion and Sediment Control
6. Other Work
- 6.1 Related Work at Site
 - 6.2 Other Contractors or Utility Owners
 - 6.3 Delays Caused By Others
 - 6.4 Coordination
7. OWNER'S Responsibilities
- 7.1 Communications
 - 7.2 Data and Payments
 - 7.3 Lands, Easements, and Surveys
 - 7.4 Change Orders
 - 7.5 Inspections, Tests, and Approvals
 - 7.6 Stop or Suspend Work
8. ENGINEER'S Status During Construction
- 8.1 OWNER'S Representative
 - 8.2 Visits to Site
 - 8.3 Project Representation
 - 8.4 Clarification and Interpretations
 - 8.5 Authorized Variations in Work
 - 8.6 Rejecting Defective Work
 - 8.7 Shop Drawings
 - 8.8 Change Orders
 - 8.9 Payments
 - 8.10 Determinations for Unit Prices
 - 8.11 Decisions on Disputes
 - 8.12 Limitations on ENGINEER'S Responsibilities
9. Changes in the Work
- 9.1 OWNER May Order Changes
 - 9.2 Claims
 - 9.3 Work Not in Contract Documents
 - 9.4 Change Orders
 - 9.5 Notice of Change

10. Change of Contract Price
 - 10.1 Total Compensation
 - 10.2 Claim for Increase or Decrease in Price
 - 10.3 Value of Work
 - 10.4 Cost of the Work
 - 10.5 Not to Be Included in Cost of the Work
 - 10.6 CONTRACTOR'S Fee
 - 10.7 Itemized Cost Breakdown
 - 10.8 Cash Allowance
 - 10.9 Unit Price Work

11. Change of Contract Time
 - 11.1 Change Order
 - 11.2 Justification for Time Extension
 - 11.3 Time Limits

12. Warranty and Guarantee; Tests and Inspections;
Correction, Removal or Acceptance of Defective Work
 - 12.1 Warranty and Guarantee
 - 12.2 Access to Work
 - 12.3 Tests and Inspections
 - 12.4 OWNER May Stop Work
 - 12.5 Correction or Removal of Defective Work
 - 12.6 One Year Correction Period
 - 12.7 Acceptance of Defective work
 - 12.8 Owner May Correct Defective Work

13. Payments to CONTRACTOR and Completion
 - 13.1 Schedule of Values
 - 13.2 Application for Progress Payments
 - 13.3 CONTRACTOR'S Warranty of Title
 - 13.4 Review of Application for Progress Payments
 - 13.5 Partial Utilization
 - 13.6 Final Inspection
 - 13.7 Final Application for Payment
 - 13.8 Final Payment and Acceptance
 - 13.9 CONTRACTOR'S Continuing Obligation
 - 13.10 Waiver of Claims

14. Suspension of Work and Termination

- 14.1 OWNER May Suspend Work
- 14.2 OWNER May Terminate
- 14.3 CONTRACTOR'S Services Terminated
- 14.4 Payment After Termination
- 14.5 CONTRACTOR May Stop or Terminate

15. Miscellaneous

- 15.1 Claims for Injury or Damage
- 15.2 Non-Discrimination in Employment
- 15.3 Temporary Street Closing or Blockage
- 15.4 Percentage of Work Performed by Prime CONTRACTOR
- 15.5 Clean-up
- 15.6 General
- 15.7 Debris Disposal

END OF SECTION

PART IV

GENERAL CONDITIONS

1. DEFINITIONS

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

1.1 Addenda

Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bid Documents or the Contract Documents.

1.2 Agreement

The written agreement between OWNER and CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

1.3 Application for Payment

The form accepted by ENGINEER which is to be used by CONTRACTOR in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

1.4 Bid

The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

1.5 Bidder

An individual, partnership, or corporation, who submit a Bid for a prime contract with the OWNER, for the Work described in the proposed Contract Documents.

1.6 Bonds

Bid, performance and payment bonds and other instruments of security.

1.7 Calendar Day

A calendar day of twenty-four hours measured from midnight to the next midnight shall constitute a day.

1.8 Change Order

A document recommended by ENGINEER, which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.

1.9 Contract Documents

The Advertisement for Bidders, Information for Bidders, Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR'S Bid (including documentation accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Bonds, these General Conditions, the Special Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all amendments, modifications and supplements.

1.10 Contract Unit Price

The monies payable by OWNER to CONTRACTOR under the Contract Documents as stated in the Agreement. Unit Prices are to be firm for the term of this Contract.

1.11 Contract Time

The number of consecutive calendar days between the date of issuance of the Notice to Proceed and the contract completion date.

1.12 CONTRACTOR

The person, firm or corporation with whom OWNER has entered into the Agreement.

1.13 Defective

An adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER'S recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER).

1.14 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.

1.15 Effective Date of the Agreement

The date indicated in the Agreement on which it becomes effective.

1.16 ENGINEER

The Lexington-Fayette Urban County Government Division of Water Quality or its authorized representative.

1.17 Field Order

A documented order issued by ENGINEER which orders minor changes in the Work, but which does not involve a change in the Contract Price or the Contract Time.

1.18 Giving Notice

Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

1.19 Laws and Regulations

Laws, rules, regulations, ordinances, codes and/or orders.

1.20 Notice of Award

The written notice by OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the conditions enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.

1.21 Notice to Proceed

A written notice given by OWNER to CONTRACTOR fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR'S obligations under the Contract Documents.

1.22 OWNER

The Lexington-Fayette Urban County Government.

1.23 Partial Utilization

Placing a portion of the Work in service for the purpose for which it is intended (or related purpose) before reaching Completion for all the Work.

1.24 Project

The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

1.25 Inspector

The authorized representative of the ENGINEER who is assigned to the site or any part thereof.

1.26 Shop Drawings

All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.

1.27 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 and certain administrative details applicable thereto.

1.28 Standard Specifications

The "Standard Specifications for Road and Bridge Construction", Transportation Cabinet, Department of Highways, Commonwealth of Kentucky, current edition. MUTCD shall refer to the "Manual of Uniform Traffic Control Devices.

1.29 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.

1.30 Special Conditions

The part of the Contract Documents which amends or supplements these General Conditions.

1.31 Supplier

A manufacturer, fabricator, supplier, distributor, materialman or vendor.

1.32 Underground Facilities

All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

1.33 Unit Price Work

Not applicable

1.34 Work

The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

1.35 Time Period

When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

2. PRELIMINARY MATTERS

2.1 Delivery of Bonds

When the CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER, such Bonds, Insurance Certificate, and Power of Attorney as CONTRACTOR may be required to furnish.

2.2 Copies of Documents

Owner shall furnish to CONTRACTOR up to three copies (unless otherwise specified in the Special Conditions) of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

2.3 Commencement of Contract Time; Notice to Proceed

The Contract Time will commence to run on the day specified in the Notice to Proceed.

2.4 Starting the Project

CONTRACTOR shall start to perform the Work on the date when the Contract Time commences to run, but no Work shall be done at the site prior to the date on which the Contract Time commences to run.

2.5 Before Starting Construction

Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents, unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

2.6 Submittal of Schedules

Within ten days after the effective date of the Agreement (unless otherwise specified) CONTRACTOR shall submit to ENGINEER for review:

2.6.1 an estimated progress schedule indicating the starting and completion dates of the various stages of the Work;

2.6.2 a preliminary schedule of Shop Drawing submissions; and

2.6.3 a preliminary schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the

basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by CONTRACTOR at the time of submission.

2.7 Preconstruction Conference

Before CONTRACTOR starts the Work at the proposed site, a conference attended by CONTRACTOR, ENGINEER, EEO-Affirmative Action Officer, and other appropriate parties will be held to discuss the following issues: (1) The scheduling of the Work to be completed; (2) The procedures for handling shop drawings and other submittals; (3) The processing of applications for payment; (4) The establishment of an understanding among the involved parties in regard to the proposed project; and (5) The establishment of procedures for effectively implementing the LFUCG's 10% minimum DBE goals.

2.8 Finalizing Schedules

At least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, ENGINEER and others as appropriate will be held to finalize the schedules submitted in accordance with paragraph 2.6. The finalized progress schedule will be acceptable to ENGINEER as providing orderly progression of the Work to completion within the Contract Time, but such acceptance will neither impose on ENGINEER responsibility for the progress or scheduling of the Work nor relieve CONTRACTOR from full responsibility thereof. The finalized schedule of Shop Drawing submissions will be acceptable to ENGINEER as providing a workable arrangement for processing the submissions. The finalized schedule of values will be acceptable to ENGINEER as to form and substance.

3. CONTRACT DOCUMENTS: INTENT, CONFLICTS, AMENDING AND REUSE

3.1 General

The Contract Documents comprise the entire agreement between OWNER and CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.

3.2 Intent

It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials or equipment such words shall be interpreted in accordance with that meaning. Reference to standard specifications,

manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR or ENGINEER, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to ENGINEER, or any of ENGINEER'S consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 8.12.3 or 8.12.4. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in paragraph 8.4.

3.3 Conflicts

If, during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall so report to ENGINEER in writing at once and before proceeding with the Work affected thereby shall obtain a written interpretation or clarification from ENGINEER; however, CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any conflict, error or discrepancy in the Contract Documents unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

In resolving such conflicts, errors and discrepancies, the documents shall be given precedence in the following order:

1. Agreement
2. Field and Change Orders
3. Addenda
4. Special Conditions
5. Instruction to Bidders
6. General Conditions
7. Specifications and Drawings

Figure dimension on drawings shall govern over scale dimensions and detailed Drawings shall govern over general Drawings.

3.4 Amending and Supplementing Contract Documents

The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof by means of a Change Order or a Field Order. Contract Price and Contract Time may only be changed by a Change Order.

3.5 Reuse of Documents

Neither CONTRACTOR nor any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with OWNER shall have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER; and they shall not reuse any of them on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaptation by ENGINEER.

4. AVAILABILITY OF LANDS; PHYSICAL CONDITIONS, REFERENCE POINTS

4.1 Availability of Lands

OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR believes that any delay in OWNER'S furnishing these lands, rights-of-way or easements entitles CONTRACTOR to an extension of the Contract Time, CONTRACTOR may make a claim therefor as provided in Article 11. ENGINEER shall determine if the claim is legitimate or not. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2 Physical Conditions

4.2.1 Explorations and Reports

Reference is made to the Special Conditions for identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such reports, but not upon non-technical data, interpretations or opinions contained therein or for the completeness thereof for CONTRACTOR'S purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to subsurface conditions at the site.

4.2.2 Existing Structures

Reference is made to the Special Conditions for identification of those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities referred to in paragraph 4.3 which are at or contiguous to the site that have been utilized by ENGINEER in preparation of the Contract Documents. CONTRACTOR may rely upon the accuracy of the technical data contained in such drawings, but not for the completeness thereof for CONTRACTOR'S purposes. Except as indicated in the immediately preceding sentence and in paragraph 4.2.6, CONTRACTOR shall have full responsibility with respect to physical conditions in or relating to such structures.

4.2.3 Report of Differing Conditions
If CONTRACTOR believes that:

4.2.3.1 any technical data on which CONTRACTOR is entitled to rely as provided in paragraphs 4.2.1 and 4.2.2 is inaccurate, or

4.2.3.2 any physical conditions uncovered or revealed at the site differ materially from that indicated, reflected or referred to in the Contract Documents,

CONTRACTOR shall, promptly after becoming aware thereof and before performing and WORK in connection therewith (except in an emergency) notify OWNER and ENGINEER in writing about the inaccuracy or difference.

4.2.4 ENGINEER'S Review

Engineer will promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto and advise CONTRACTOR of ENGINEER'S findings and conclusions.

4.2.5 Possible Document Change

If ENGINEER concludes that there is a material error in the Contract Documents or that because of newly discovered conditions a change I the Contract Documents is required, a Change Order will be issued as provided in Article 10 to reflect and document the consequences of the inaccuracy or difference.

4.2.6 Possible Price and Time Adjustments

In each such case, an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, or any combination thereof, will be allowable to the extent that they are attributable to any such inaccuracy or difference.

4.3 Physical Conditions-Underground Facilities

4.3.1 Shown or Indicated

The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to OWNER or ENGINEER by the owners of such underground facilities or by others. Unless it is otherwise expressly provided in the Special Conditions:

4.3.1.1 OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and,

4.2.1.2 CONTRACTOR shall have full responsibility for reviewing and checking all such information and data; for locating all underground

facilities shown or indicated in the Contract Documents; for coordination of the Work with the owners of such underground facilities during construction; and for the safety and protection thereof and repairing any damage thereto resulting from the Work, the cost of all of which will be considered as having been included in the Contract Price.

4.3.2 Not Shown or Indicated

If an underground facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency), identify the owner of such Underground Facility and give written notice thereof to that owner and to OWNER and ENGINEER. ENGINEER will promptly review the underground facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and the Contract Documents will be amended or supplemented to the extent necessary. During such time, CONTRACTOR shall be responsible for the safety and protection of such underground facility. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any underground facility that was not shown or indicated in the Contract Documents and which CONTRACTOR could not reasonably have been expected to be aware of.

4.4 Reference Points

OWNER shall provide engineering surveys to establish reference points for construction which in ENGINEER'S judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work (unless otherwise specified), shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by a Registered Land Surveyor.

5. CONTRACTOR'S RESPONSIBILITIES

5.1 Supervision

CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall assure that all CONTRACTOR personnel (including subcontractors, etc.) conduct themselves in a courteous and respectful manner toward the ENGINEER and the general public. Failure to comply with this condition of the Contract will result in immediate suspension of the Work. Following a review by the Commissioner of Public Works, the Contract may be

terminated (see GC section 14). CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence or procedure of construction which is indicated in and required by the Contract Documents. CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

5.2 Superintendence

CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR'S representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR.

5.3 General Manager

CONTRACTOR shall keep at all times during Contract progress a COMPETENT General Manager, who shall not be replaced without written notice to OWNER except under extraordinary circumstances. Owner must approve this person. Owner may request removal and replacement of General Manager at any time. If so, Contractor shall have thirty (30) days to make replacement. The General Manager will be CONTRACTOR'S main representative for all technical, billing, data management, subcontractor coordination, and complaint resolutions and shall have authority to act on behalf of CONTRACTOR. The General Manager shall spend a minimum of eighty (80) percent of their time in the office. All communications given to the General Manager shall be as binding as if given to CONTRACTOR.

5.4 Labor

CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday or any legal holiday without OWNER'S written consent given after prior written notice to ENGINEER.

5.5 Start-Up and Completion of Work

Unless otherwise specified, CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

5.6 Materials and Equipment

All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to ENGINEER, or any of ENGINEER'S consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 8.12.3 or 8.12.4.

5.6.1 Not Clearly Specified or Indicated

In all instances where materials specified are obtainable in different sizes, weights, trade grades, qualities or finishes, etc., whose weights, trade grades, qualities or finishes, etc., are not clearly specified or indicated on the Drawings, the CONTRACTOR shall notify the ENGINEER of all such instances at least five (5) days in advance of receiving the proposals. The Engineer will then determine which size, weight, trade grade, quality, finish, etc., is required.

5.6.2 Coordination of Work

The CONTRACTOR shall see that for his own Work and for the work of each subcontractor, proper templates and patterns necessary for the coordination of the various parts of the Work are prepared. The CONTRACTOR shall furnish or require the Subcontractor to furnish such duplicates as will enable the Subcontractors to fit together and execute fully their respective portions of the Work.

5.7 Adjusting Progress Schedule

CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.8) adjustments in the progress schedule to reflect the impact thereon of new developments; these will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the Contract Documents applicable thereto.

5.8 Substitutes or "Or-Equal" Items

5.8.1 General

Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function, and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other

Suppliers may be accepted by OWNER/ENGINEER if sufficient information is submitted by CONTRACTOR to allow OWNER/ENGINEER to determine that the material or equipment proposed is equivalent or equal to that named. The procedure for review by OWNER/ENGINEER will include the following. Requests for review of substitute items of material and equipment will not be accepted by OWNER/ENGINEER from anyone, other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to OWNER/ENGINEER for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will state that the evaluation and acceptance of the proposed substitute will not prejudice CONTRACTOR'S achievement of completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by OWNER/ENGINEER in evaluating the proposed substitute. OWNER/ENGINEER may require CONTRACTOR to furnish at CONTRACTOR'S expense additional data about the proposed substitute.

5.8.2 Substitutes

If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to OWNER/ENGINEER, if CONTRACTOR submits sufficient information to allow OWNER/ENGINEER to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by OWNER/ENGINEER will be similar to that provided in paragraph 5.7.1 as applied by OWNER/ENGINEER.

5.8.3 OWNER/ENGINEER'S Approval

OWNER/ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. OWNER/ENGINEER will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without OWNER/ENGINEER'S prior written acceptance which

will be evidenced by either a Change Order or an approved Shop Drawing. OWNER may require CONTRACTOR to furnish at CONTRACTOR'S expense a special performance guarantee or other surety with respect to any substitute. OWNER/ENGINEER will record time required by OWNER/ENGINEER and OWNER/ENGINEER'S consultants in evaluating substitutions proposed by CONTRACTOR and in making changes in the Contract Documents occasioned thereby. Whether or not OWNER/ENGINEER accepts a proposed substitute, CONTRACTOR shall reimburse OWNER for the charges of OWNER/ENGINEER and OWNER/ENGINEER'S consultants for evaluating each proposed substitute.

5.9 Subcontractors, Suppliers, and Others

5.9.1 Acceptable to ENGINEER

CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization (including those acceptable to OWNER and ENGINEER as indicated in paragraph 5.8.2), whether initially or as a substitute, against whom OWNER or ENGINEER may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier or other person or organization to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

5.9.2 Objection After Due Investigation

If the Contract Documents require the identity of certain Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal items of materials and equipment) to be submitted to OWNER in advance of the specified date prior to the Effective Date of the Agreement for acceptance by OWNER and ENGINEER and if CONTRACTOR has submitted a list thereof, OWNER'S or ENGINEER'S acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the bidding documents or the Contract Documents) of any such Subcontractor, Supplier or other person or organization so identified may be revoked on the basis of reasonable objection after due investigation, in which case CONTRACTOR shall submit an acceptable substitute. No acceptance by OWNER or ENGINEER of any such Subcontractor, Supplier or other person or organization shall constitute a waiver of any right of OWNER or ENGINEER to reject defective Work.

5.9.3 Contractor Responsible for Acts of Subcontractors

The CONTRACTOR shall perform on the site, and with its own organization, work equivalent to at least fifty (50) percent of the total amount of Work to be performed under the Contract. This percentage may be reduced by a supplemental agreement to this Contract if, during performing the Work, the CONTRACTOR requests a reduction and the Urban County

Engineer determines that the reduction would be to the advantage of the Urban County Government.

The CONTRACTOR shall, at the time he submits his proposal for the Contract, notify the OWNER in writing of the names of Subcontractors proposed for the Work. He shall not employ any Subcontractor without the prior written approval of the OWNER.

CONTRACTOR shall be fully responsible to OWNER and ENGINEER for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR'S own acts and omissions. Nothing in the Contract Documents shall create any contractual relationship between OWNER or ENGINEER and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of OWNER or ENGINEER to pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Laws and Regulations.

5.9.4 Division of Specifications

The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

5.9.5 Agreement Between Contractor and Subcontractors

All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and ENGINEER.

5.9.6 Statements and Comments by CONTRACTOR

Neither the CONTRACTOR, his employees, nor his subcontractors shall at any time make any statement or comment as to the project scope, nature, intention, design, or construction method to any third party or parties without the explicit written consent of the OWNER.

Any third party requesting such information shall be referred to the OWNER or his representative.

Should there be any change from the original intent of the project as a result of any statement or comment by the contractor, his employees or subcontractors, contractor shall be held liable for any change in the scope,

nature, design, or construction method and shall bear the full cost for the previously mentioned changes.

5.10 Patent Fees and Royalties

CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others.

5.11 Permits

Unless otherwise provided in the Special conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of Bids, or if there are no Bids on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto such as plant investment fees.

5.12 Laws and Regulations

5.12.1 CONTRACTOR to Comply

CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to furnishing and performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor ENGINEER shall be responsible for monitoring CONTRACTOR'S compliance with any Laws and Regulations.

5.12.2 Specifications and Drawings at Variance

If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations, CONTRACTOR shall give ENGINEER prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 3.4. If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Laws, or Regulations, and without such notice to ENGINEER, CONTRACTOR shall bear all costs arising therefrom; however, it shall not be CONTRACTOR'S primary responsibility to make certain that the Specifications and Drawings are in accordance with such Laws and Regulations.

5.13 Taxes

CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the

place of the Project which are applicable during the performance of the Work. Any party, firm or individual submitting a proposal pursuant to invitation must have paid all taxes owed to the Lexington-Fayette Urban County Government at the time the proposal is submitted, and must maintain a "current" status in regard to those taxes throughout the Contract. If applicable, business must be licensed in Fayette County.

5.14 Use of Premises

5.14.1 Project Site

CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the staging areas or work site areas identified in and permitted by the Contract Documents and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against OWNER or ENGINEER by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim by arbitration or at law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold OWNER and ENGINEER harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any such other party against OWNER or ENGINEER to the extent based on a claim arising out of CONTRACTOR'S performance of the Work.

5.14.2 Clean UP

During the progress of the Work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by OWNER. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents.

5.14.3 Loading of Structures

CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

5.15 Record Drawings

CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Change Orders, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.4) in good order and annotated to show all changes made during construction. These record documents together with all approved samples and a counterpart of all approved Shop Drawings will be available to ENGINEER for reference. Upon completion of the Work, these record documents, samples and Shop Drawings will be delivered to ENGINEER for OWNER.

5.16 Shop Drawings and Samples

5.16.1 Shop Drawing Submittals

After checking and verifying all field measurements and after complying with applicable procedures specified, CONTRACTOR shall submit to ENGINEER for review and approval in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.8), or for other appropriate action if so indicated in the Special Conditions, five copies (unless otherwise specified) of all Shop Drawings, which will bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR'S responsibilities under the Contract Documents with respect to the review of the submission. All submissions will be identified as ENGINEER may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable ENGINEER to review the information as required.

5.16.2 Sample Submittals

CONTRACTOR shall also submit to ENGINEER for review and approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that CONTRACTOR has satisfied CONTRACTOR'S responsibilities under the Contract Documents with respect to the review of the submission and will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended.

5.16.3 Review by CONTRACTOR

Before submission of each Shop Drawing or sample CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.

5.16.4 Notice of Variation

At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each Shop Drawing submitted to ENGINEER for review and approval of each such variation.

5.16.5 ENGINEER'S Approval

ENGINEER will review and approve with reasonable promptness Shop Drawings and samples, but ENGINEER'S review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make corrections required by ENGINEER, and shall return the required number of corrected copies of Shop Drawings and submit, as required, new samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals.

5.16.6 Responsibility for Errors and Omissions

ENGINEER'S review and approval of Shop Drawings or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER'S attention to each such variation at the time of submission as required by paragraph 5.15.4 and ENGINEER has given written approval of each such variation by a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the Shop Drawings or from responsibility for having complied with the provisions of paragraph 5.15.3.

5.16.7 Cost of Related Work

Where a Shop or sample is required by the Specifications, any related Work performed prior to ENGINEER'S review and approval of the pertinent submission will be the sole expense and responsibility of CONTRACTOR.

5.17 Continuing the Work

CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolutions of any disputes or disagreements, except as permitted by paragraph 14.5 or as CONTRACTOR and OWNER may otherwise agree in writing.

5.18 Erosion and Sediment Control

5.18.1 General Environmental Requirements

The CONTRACTOR and Subcontractors performing work on projects on behalf of the OWNER shall comply with all applicable federal, state, and local environmental regulations and all requirements and conditions set forth in "special" permits including but not limited to Corp of Engineers 404 permits, 401 Water Quality Certifications, Stream Crossing and Floodplain Encroachment Permits.

Any fines or penalties resulting from the failure to comply with the terms of the federal, state or local permits or perform necessary corrective action are solely the obligation of the CONTRACTOR.

5.18.2 Stormwater Pollution Prevention

A. The CONTRACTOR shall exercise due care to prevent or minimize any damage to any stream or wetland from pollution by debris, sediment or other material. The operation of equipment and/or materials in a jurisdictional wetland is expressly prohibited. Water that has been used for washing or processing, or that contains oils, sediments or other pollutants shall not be discharged from the job site. Such waters shall be collected and properly disposed of by the CONTRACTOR in accordance with applicable local, state and federal law.

B. The CONTRACTOR is solely responsible for securing all required state and local permits associated with stormwater discharges from the project including, but not necessarily limited to the KY Notice of Intent to Disturb (NOI) for Coverage of Storm Water Discharges Associated with Construction Activities under the KPDES Storm Water General Permit KYR100000 and the LFUCG, Land Disturbance Permit. Permit application preparation and all required documentation are the responsibility of the CONTRACTOR. The CONTRACTOR is solely responsible for maintaining compliance with the stormwater pollution prevention plan or erosion and sediment control plan and ensuring the following:

- a. That the Stormwater Pollution Prevention Plan (SWPPP) or erosion control plan is current and available for review on site;
- b. That any and all stormwater inspection reports required by the permit are conducted by qualified personnel and are available for review onsite; and
- c. That all best management practices (BMPs) are adequately maintained and effective at controlling erosion and preventing sediment from leaving the site.

C. The CONTRACTOR shall provide the necessary equipment and personnel to perform any and all emergency measures that may be required to contain any spillage or leakage and to remove materials, soils or liquids that become contaminated. The collected spill material shall be properly disposed at the CONTRACTOR's expense.

D. Upon completion of the work and with the concurrence of the OWNER, the CONTRACTOR must file a Notice of Termination (NOT) of Coverage Under the KPDES General Permit for Storm Water Discharges Associated with Construction Activity with the appropriate local and state authorities.

E. Any fines or penalties resulting from the failure to comply with the terms of the state or local stormwater permits or perform necessary corrective action are solely the obligation of the CONTRACTOR.

6. OTHER WORK

6.1 Related Work at Site

OWNER may perform other work related to the Project at the site by OWNER'S own forces, have other work performed by utility owners or let other direct contracts therefor which shall contain General Conditions similar to these. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to CONTRACTOR prior to starting any such other work; and, if such performance will involve additional expense to CONTRACTOR or requires additional time, a Change Order to the Contract will be negotiated.

6.2 Other Contractors or Utility Owners

CONTRACTOR shall afford each utility owner and other contractor who is a party to such a direct contract (or OWNER, if OWNER is performing the additional work with OWNER'S employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the Work with theirs. CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

6.3 Delays Caused by Others

If any part of CONTRACTOR'S Work depends for proper execution or results upon the work of any such other contractor or utility owner (or OWNER), CONTRACTOR shall inspect and promptly report to ENGINEER in writing any

delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. CONTRACTOR'S failure so to report will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR'S Work except for latent or non-apparent defects and deficiencies in the other work.

6.4 Coordination

If OWNER contracts with others for the performance of other work on the Project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified in the Special Conditions, and the specific matters to be covered by such authority and responsibility will be itemized, and the extent of such authority and responsibilities will be provided, in the Special Conditions.

7. OWNER'S RESPONSIBILITIES

7.1 Communications

OWNER shall issue all communications to CONTRACTOR through ENGINEER.

7.2 Data and Payments

OWNER shall furnish the data required of OWNER under the Contract Documents promptly after they are due.

7.3 Lands, Easements, and Surveys

OWNER'S duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.4. Paragraph 4.2 refers to OWNER'S identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions at the site and in existing structures which have been utilized by ENGINEER in preparing the Drawings and Specifications.

7.4 Change Orders

OWNER is obligated to execute Change Orders as indicated in paragraph 9.4.

7.5 Inspections, Tests and Approvals

OWNER'S responsibility in respect to certain inspections, tests and approvals is set forth in paragraph 13.3.

7.6 Stop or Suspend Work

In connection with OWNER'S right to stop Work or suspend Work, see paragraph 12.4 and 14.1 Paragraph 14.2 deals with OWNER'S rights to terminate services of CONTRACTOR under certain circumstances.

8. ENGINEER'S STATUS DURING CONSTRUCTION

8.1 OWNER'S Representative

ENGINEER will be OWNER'S representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER'S representative during construction are set forth in the Contract Documents and shall not be extended without written consent of OWNER and ENGINEER.

8.2 Visits to Site

ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. ENGINEER will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. ENGINEER'S efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and on-site observations, ENGINEER will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against defects and deficiencies in the Work.

8.3 Project Representation

ENGINEER will provide an Inspector to assist ENGINEER in observing the performance of the Work. If OWNER designates another agent to represent OWNER at the site who is not ENGINEER'S agent or employee, the duties, responsibilities and limitations of authority of such other person will be as provided in the Special Conditions.

8.4 Clarifications and Interpretations

ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

8.5 Authorized Variations in Work

ENGINEER may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order.

8.6 Rejecting Defective Work

ENGINEER will have authority to disapprove or reject Work which ENGINEER believes to be defective, and will also have authority to require special inspection or testing of the Work as provided in paragraph 12.3, whether or not the Work is fabricated, installed or completed.

8.7 Shop Drawings

In connection with ENGINEER'S responsibility for Shop Drawings and samples, see paragraphs 5.15.1 through 5.16 inclusive.

8.8 Change Orders

In connection with ENGINEER'S responsibilities as to Change Orders, see Articles 10, 11 and 12.

8.9 Payments

In connection with ENGINEER'S responsibilities with respect to Applications for Payment, etc., see Article 13.

8.10 Determinations for Unit Prices

ENGINEER will determine the actual quantities and classifications of Unit Price Work performed by CONTRACTOR.

ENGINEER will review with CONTRACTOR ENGINEER'S preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise).

8.11 Decision on Disputes

ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and claims under Articles 10 and 11 in respect of changes in the Contract Price or Contract Time will be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph, which ENGINEER will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter will be delivered to ENGINEER promptly (but in no event later than thirty days) after the occurrence of the event giving rise thereto, and written supporting data will be submitted to ENGINEER within sixty days after such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim.

8.12 Limitations on Engineer's Responsibilities

8.12.1 CONTRACTOR, Supplier, or Surety

Neither ENGINEER'S authority to act under this Article 8 or elsewhere in the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or

responsibility of ENGINEER to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization performing any of the Work, or to any surety for any of them.

8.12.2 To Evaluate the Work

Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved" or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper", or "satisfactory" or adjectives or like "effect" or "import" are used to describe a requirement, direction, review or judgment of ENGINEER as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign ENGINEER any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 8.12.3 or 8.12.4.

8.12.3 CONTRACTOR'S Means, Methods, Etc.

ENGINEER will not be responsible for CONTRACTOR'S means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR'S failure to perform or furnish the Work in accordance with the Contract Documents.

8.12.4 Acts of Omissions of CONTRACTOR

ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

9. **CHANGES IN THE WORK**

9.1 **OWNER May Order Change**

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

9.2 **Claims**

Claims for an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Change Order will be settled as provided for in Article 10 or Article 11.

9.3 Work Not in Contract Documents

CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraph 3.4, except in the case of an emergency and except in the case of uncovering Work as provided in paragraph 12.3.4.

9.4 Change Orders

OWNER and CONTRACTOR shall execute appropriate Change Orders covering:

9.4.1 changes in the Work which are ordered by OWNER pursuant to paragraph 9.1, are required because of acceptance of defective Work under paragraph 12.7 or corrective defective Work under paragraph 12.8, or are agreed to by the parties;

9.4.2 changes in the Contract Price or Contract Time which are agreed to by the parties; and

9.4.3 changes in the Contract Price or Contract Time which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 8.11; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and REGULATIONS, but during any such appeal, CONTRACTOR shall carry on the Work and adhere to the progress schedule as provided in paragraph 5.16.

9.5 Notice of Change

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

10. CHANGE OF CONTRACT PRICE

10.1 Total Compensation

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

10.2 Claim for Increase or Decrease in Price

The Contract Price may only be changed by a Change Order. Any claim for an increase or decrease in the Contract Price shall be based on written notice delivered by the CONTRACTOR to the ENGINEER promptly (but in no event later than

thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within sixty days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by CONTRACTOR'S written statement that the amount claimed covers all known amounts (direct, indirect, and consequential) to which the CONTRACTOR is entitled as a result of the occurrence of said event.

10.3 Value of Work

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

10.3.1 Unit Prices

Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of paragraphs 10.9.1. through 10.9.3, inclusive).

10.3.2 Lump Sum

By mutual acceptance of a lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 10.6.2.1).

10.3.3 Cost Plus Fee

On the basis of the Cost of the Work (determined as provided in paragraphs 10.4 and 10.5) plus a CONTRACTOR'S fee for overhead and profit (determined as provided in paragraphs 10.6 and 10.7).

10.4 Cost of the Work

The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project; shall include only the following items; and shall not include any of the costs itemized in paragraph 10.5:

10.4.1 Payroll Costs

Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by OWNER and CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall

include superintendents and foremen at the site. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by OWNER.

10.4.2 Materials and Equipment Costs

Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to OWNER, and CONTRACTOR shall make provisions so that they may be obtained.

10.4.3 Subcontractor Costs

Payments made by CONTRACTOR to the Subcontractors for Work performed by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to OWNER who will then determine, with the advice of ENGINEER, which bids will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a Fee, the Subcontractor's Cost of the Work shall be determined in the same manner as CONTRACTOR'S Cost of the Work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

10.4.4 Special Consultant Costs

Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys and accountants) employed for services specifically related to the Work.

10.4.5 Supplemental Costs

10.4.5.1 The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR'S employees incurred in discharge of duties connected with the Work.

10.4.5.2 Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less

market value of such items used but not consumed which remain the property of CONTRACTOR.

10.4.5.3 Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER with the advice of ENGINEER, and the costs of transportation, loading, unloading, installation, dismantling and removal shall be in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

10.4.5.4 Sales, consumer, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

10.4.5.5 Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

10.4.5.6 Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by CONTRACTOR in connection with the performance and furnishing of the Work (except losses and damages within the deductible amounts of property insurance established by OWNER), provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR'S fee. If, however, any such loss or damage requires reconstruction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid a fee proportionate to that stated in paragraph 10.6.2 for services.

10.4.5.7 The cost of utilities, fuel and sanitary facilities at the site.

10.4.5.8 Minor expenses such as telegrams, long distance telephone calls, telephone service at the site,

expressage and similar petty cash items in connection with the Work.

10.4.5.9 Cost of premiums for additional Bonds and insurance required because of changes in the Work and premiums for property insurance coverage within the limits of the deductible amounts established by OWNER.

10.5 Not to Be Included in Cost of the Work

The term Cost of the Work shall not include any of the following:

10.5.1 Costs of Officers and Executives

Payroll costs and other compensation of CONTRACTOR'S officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR'S principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 10.4.1 or specifically covered by paragraph 10.4.4 - all of which are to be considered administrative costs covered by the CONTRACTOR'S fee.

10.5.2 Principal Office

Expenses of CONTRACTOR'S principal and branch offices other than CONTRACTOR'S office at the site.

10.5.3 Capital Expense

Any part of CONTRACTOR'S capital expenses, including interest on CONTRACTOR'S capital employed for the Work and charges against CONTRACTOR for delinquent payments.

10.5.4 Bonds and Insurance

Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 10.4.5.9 above).

10.5.5 Costs Due to Negligence

Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

10.5.6 Other Costs

Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.4.

10.6 Contractor's Fee

The CONTRACTOR'S Fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

10.6.1 a mutually acceptable fixed fee; or if none can be agreed upon,

10.6.2 a fee based on the following percentages of the various portions of the Cost of the Work:

10.6.2.1 for costs incurred under paragraphs 10.4.1 and 10.4.2, the CONTRACTOR'S fee shall be fifteen percent;

10.6.2.2 for costs incurred under paragraph 10.4.3, the CONTRACTOR'S fee shall be five percent; and if a subcontract is on the basis of Cost of the Work Plus a fee, the maximum allowable to CONTRACTOR on account of overhead and profit of all Subcontractors shall be fifteen percent;

10.6.2.3 no fee shall be payable on the basis of costs itemized under paragraphs 10.4.4, 10.4.5 and 10.5;

10.6.2.4 the amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR'S Fee by an amount equal to ten percent of the net decrease; and

10.6.2.5 when both additions and credits are involved in any one change, the adjustment in CONTRACTOR'S fee shall be computed on the basis of the net change in accordance with paragraphs 10.6.2.1 through 10.6.2.4, inclusive.

10.7 Itemized Cost Breakdown

Whenever the cost of any Work is to be determined pursuant to paragraph 10.4 or 10.5, CONTRACTOR will submit in form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

10.8 Cash Allowances

It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such Subcontractors or Suppliers and for such sums within the limit of the allowances as may be acceptable to ENGINEER, CONTRACTOR agrees that:

10.8.1 Materials and Equipment

The allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and

10.8.2 Other Costs

CONTRACTOR'S costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances. No demand for additional payment on account of any thereof will be valid.

10.8.3 Change Order

Prior to final payment, an appropriate Change Order will be issued as recommended by ENGINEER to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

10.9 Unit Price Work

10.9.1 General

Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by ENGINEER in accordance with Paragraph 8.10.

10.9.2 Overhead and Profit

Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR'S overhead and profit for each separately identified item.

10.9.3 Claim for Increase in Unit Price

Where the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement and there is no corresponding adjustment with respect to any other item of Work and if CONTRACTOR believes that CONTRACTOR has incurred additional expense as a result thereof, CONTRACTOR may make a claim for an increase in the Contract Price in accordance with Article 10.

11. CHANGE OF CONTRACT TIME

11.1 Change Order

The Contract Time may only be changed by a Change Order. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered to ENGINEER promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within sixty days after such occurrence (unless ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by ENGINEER in accordance with paragraph 8.11. No claim for an adjustment in the Contract Time will be valid if not submitted in accordance with the requirements of this paragraph 11.1.

11.2 Justification for Time Extensions

The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of CONTRACTOR if a claim is made therefore as provided in paragraph 11.1. Such delays shall include, but not be limited to, acts or neglect by OWNER or others performing additional work as contemplated by Article 6, or to fires, floods, labor disputes, epidemics, abnormal weather conditions or acts of God.

11.3 Time Limits

All time limits stated in the Contract Documents are of the essence of the Agreement. The provisions of this Article 11 shall not exclude recovery for damages (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court costs) for delay by either party.

11.4 Contract Renewal

The contract time is for one (1) year. The contract can be renewed up to four (4) additional times at the Owner's discretion.

12. WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

12.1 Warranty and Guarantee

CONTRACTOR warrants and guarantees to OWNER and ENGINEER that all Work will be in accordance with the Contract Documents and will not be defective. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 12.

12.2 Access to Work

ENGINEER and ENGINEER'S representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide proper and safe conditions for such access.

12.3 Tests and Inspections

12.3.1 Timely Notice

CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests or approvals.

12.3.2 Requirements and Responsibilities

The ENGINEER may require such inspection and testing during the course of the Work as he/she deems necessary to ascertain and assure the integrity and acceptable quality of the materials incorporated and the work performed. Inspection presence may be either full-time or intermittent, and neither the presence nor absence at any time of the ENGINEER or the INSPECTOR shall relieve the CONTRACTOR of sole responsibility for the acceptability and integrity of the Work or any part thereof.

The costs of sampling, testing, and inspection on-site to ascertain acceptability of the Work and materials will be borne by the OWNER except as otherwise provided. The OWNER will select a testing laboratory to perform such sampling and testing. Sampling and/or testing required by the CONTRACTOR or necessitated by failure of Work or materials to meet the above acceptability test shall be at the expense of the CONTRACTOR.

Inspection services may be performed by the employees of the OWNER or by others selected or designated by the OWNER or the ENGINEER.

Sampling and/or testing required for manufacturing quality and/or process control, for certification that raw mineral materials or manufactured products are the quality specified in the contract, or to assure the acceptability for incorporation into the Work shall be borne by the CONTRACTOR or the material supplier.

Cost for inspection, sampling, testing, and approvals required by the laws or regulations of any public body having competent jurisdiction shall be borne by the CONTRACTOR or the material supplier.

Sampling and testing will be in accord with pertinent codes and regulations and with appropriate standards of the American Society of Testing Materials or other specified standards.

12.3.3 On-Site Construction Test and Other Testing

All inspections, tests or approvals other than those required by Laws or Regulations of any public body having jurisdiction shall be performed by organizations acceptable to OWNER and CONTRACTOR (or by ENGINEER if so specified).

12.3.4 Covered Work

If any Work (including the work of others) that is to be inspected, tested or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation. Such uncovering shall be at CONTRACTOR'S expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR'S intention to cover the same and ENGINEER has not acted with reasonable promptness in response to such notice.

12.3.5 CONTRACTOR'S Obligation

Neither observations by ENGINEER nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR'S obligations to perform the Work in accordance with the Contract Documents.

12.4 OWNER May Stop the Work

If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any other party.

12.5 Correction or Removal of Defective Work

If required by ENGINEER, CONTRACTOR shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with non-defective Work. CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

12.6 One Year Correction Period

If within one year after the date of Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER'S written instructions, either correct such defective Work, or, if it has been rejected by

OWNER, remove it from the site and replace it with non-defective Work. If CONTRACTOR does not promptly comply with the terms of such instructions; or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by CONTRACTOR. In special circumstances where a particular item of equipment is placed in continuous service before Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Change Order.

12.7 Acceptance of Defective Work

If, instead of requiring correction or removal and replacement of defective Work, OWNER prefers to accept it, OWNER may do so. CONTRACTOR shall bear all direct, indirect and consequential costs attributable to OWNER'S evaluation of and determination to accept such defective Work (such costs to be approved by ENGINEER as to reasonableness and to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals).

12.8 OWNER May Correct Defective Work

If CONTRACTOR fails within a reasonable time after written notice of ENGINEER to proceed to correct and to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 12.5, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days' written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph OWNER shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR'S services related thereto, take possession of CONTRACTOR'S tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER'S representatives, agents and employees such access to the site as may be necessary to enable OWNER to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of OWNER in exercising such rights and remedies will be charged against CONTRACTOR in an amount approved as to reasonableness by ENGINEER, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price. Such direct, indirect and consequential costs will include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all court costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR'S defective Work. CONTRACTOR shall not be

allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by OWNER of OWNER'S rights and remedies hereunder.

13. PAYMENTS TO CONTRACTOR AND COMPLETION

13.1 Schedule of Values

The schedule of values established as provided in paragraph 2.8 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.

13.2 Application for Progress Payment

At least ten days before each progress payment is scheduled (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice or other documentation warranting that OWNER has received the materials and equipment free and clear of all liens, charges, security interests and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect OWNER'S interest therein, all of which will be satisfactory to OWNER. OWNER shall, within thirty (30) calendar days of presentation to him of an approved Application for Payment, pay CONTRACTOR the amount approved by ENGINEER. Monthly progress payments shall be ninety (90) percent of the sum obtained by applying the respective bid unit prices to the approved estimated quantities of work completed by the Contractor during the preceding month. The remaining ten (10) percent will be held by the Owner, as retainage. At such time as the Engineer deems appropriate - based on the quality of work performed, progress of cleanup, and other pertinent factors - the rate of retainage, or the total amount retained, may be reduced; although, any reduction in retainage, below the ten (10) percent level, is made solely at the Engineer's discretion. All remaining retainage held will be included in the final payment to the Contractor.

13.3 CONTRACTOR'S Warranty of Title

CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

13.4 Review of Applications for Progress Payment

13.4.1 Submission of Application for Payment

ENGINEER will, after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER, or return the Application to CONTRACTOR indicating in writing ENGINEER'S reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application.

13.4.2 ENGINEER'S Recommendation

ENGINEER may refuse to recommend the whole or any part of any payment, if, in ENGINEER'S opinion, it would be incorrect to make such representations to OWNER. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in ENGINEER'S opinion to protect OWNER from loss because:

13.4.2.1 the Work is defective, or completed Work has been damaged requiring correction or replacement;

13.4.2.2 the Contract Price has been reduced by Written Amendment or Change Order;

13.4.2.3 OWNER has been required to correct defective Work or complete Work in accordance with paragraph 12.8; or

13.4.2.4 of ENGINEER'S actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.2.1 through 14.2.9 inclusive.

13.5 Partial Utilization

OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and has been completed. If CONTRACTOR agrees, CONTRACTOR will certify to OWNER that said part of the Work is complete and request that a Certificate of Completion be issued for that part of the Work.

13.6 Final Inspection

Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, ENGINEER will make a final inspection with CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

13.7 Final Application for Payment

After CONTRACTOR has completed all such corrections to the satisfaction of ENGINEER and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 5.14) and other documents - all as required by the Contract Documents, and after ENGINEER has indicated that the Work is acceptable (subject to the provisions of paragraph 13.10), CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to OWNER) of all Liens arising out of or filed in connection with the Work. In lieu thereof and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full; an affidavit of CONTRACTOR that the releases and receipts include all labor, services, material and equipment for which a Lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or OWNER'S property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If any Subcontractor or Supplier fails to furnish a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

13.8 Final Payment and Acceptance

13.8.1 ENGINEER'S Approval

If, on the basis of ENGINEER'S observation of the Work during construction and final inspection, and ENGINEER'S review of the final Application for Payment and accompanying documentation - all as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR'S other obligations under the Contract Documents have been fulfilled, ENGINEER will, after receipt of the final Application for Payment, indicate in writing ENGINEER'S recommendation of payment and present the Application to OWNER for payment. Thereupon ENGINEER will give written notice to OWNER and CONTRACTOR that the Work is acceptable, subject to the provisions of paragraph 13.10. Otherwise, ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application.

13.8.2 Delay in Completion of Work

If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed, OWNER shall, upon receipt of CONTRACTOR'S final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is

less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 10 of Part II, Information for Bidders, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

13.9 CONTRACTOR'S Continuing Obligation

CONTRACTOR'S obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by ENGINEER, nor the issuance of a certificate of Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor any review and approval of a Shop Drawing or sample submission, nor any correction of defective Work by OWNER will constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR'S obligation to perform the Work in accordance with the Contract Documents (except as provided in paragraph 13.10).

13.10 Waiver of Claims

The making and acceptance of final payment will constitute:

13.10.1 a waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled Liens, from defective Work appearing after final inspection or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by OWNER of any rights in respect of CONTRACTOR'S continuing obligations under the Contract Documents; and

13.10.2 a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

14. SUSPENSION OF WORK AND TERMINATION

14.1 OWNER May Suspend Work

OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to CONTRACTOR and ENGINEER which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if CONTRACTOR makes an approved claim therefor as provided in Articles 10 and 11.

14.2 OWNER May Terminate

The OWNER may terminate the Work upon the occurrence of any one or more of the following events:

14.2.1 if CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;

14.2.2 if a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

14.2.3 if CONTRACTOR makes a general assignment for the benefit of creditors;

14.2.4 if a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of CONTRACTOR is for the purpose of enforcing a Lien against such property or for the purpose of general administration of such property for the benefit of CONTRACTOR'S creditors;

14.2.5 if CONTRACTOR admits in writing an inability to pay its debts generally as they become due;

14.2.6 if CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.8 as revised from time to time);

14.2.7 if CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;

14.2.8 if CONTRACTOR disregards the authority of ENGINEER, or

14.2.9 if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may, after giving CONTRACTOR (and the surety) seven days' written notice and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, exclude CONTRACTOR from

the site and take possession of the Work and of all CONTRACTOR'S tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct, indirect and consequential costs of completing the Work (including but not limited to fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs) such excess will be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such costs incurred by OWNER will be approved as to reasonableness by ENGINEER and incorporated in a Change Order, but when exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

14.2.10 If safety violations are observed and brought to the Contractors attention and Contractor fails to take immediate corrective measures any repeat of similar safety violations, Owner will order an immediate termination of contract. Note: it is the Contractor's responsibility to know proper safety measures as they pertain to construction and OSHA.

14.2.11 This contract may be canceled by either party thirty (30) days after delivery by canceling party of written notice of intent to cancel to the other contracting party.

14.2.12 This contract may be canceled by the Lexington-Fayette Urban County Government if it is determined that the Bidder has failed to perform under the terms of this agreement, such cancellation to be effective upon receipt of written notice of cancellation by the Bidder.

14.3 CONTRACTOR'S Services Terminated

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

14.4 Payment After Termination

Upon seven days' written notice to CONTRACTOR, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, CONTRACTOR shall be paid for all Work executed and any expense sustained plus reasonable termination expenses, which will include, but not be limited to, direct, indirect and consequential costs (including,

but not limited to, fees and charges of engineers, architects, attorneys and other professionals and court and arbitration costs).

14.5 CONTRACTOR May Stop Work or Terminate

If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within sixty days after it is submitted, or OWNER fails for sixty days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days' written notice to OWNER and ENGINEER, terminate the Agreement and recover from OWNER payment for all Work executed and any expense sustained plus reasonable termination expenses. In addition and in lieu of terminating the Agreement, if ENGINEER has failed to act on an Application for Payment or OWNER has failed to make any payment as aforesaid, CONTRACTOR may upon seven days' written notice to OWNER and ENGINEER stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of the obligations under paragraph 5.16 to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with OWNER.

15. MISCELLANEOUS

15.1 Claims for Injury or Damage

Should OWNER or CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim will be made in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph 15.1 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

15.2 Non-Discrimination in Employment

The CONTRACTOR shall comply with the following requirements prohibiting discrimination:

15.2.1 That no person (as defined in KRS 344.010) shall bid on Lexington-Fayette Urban County Government construction projects, or bid to furnish materials or supplies to the Lexington-Fayette Urban County Government, if, within six months prior to the time of opening of bids, said person shall have been found, by declaratory judgment action in Fayette Circuit Court, to be presently engaging in an unlawful practice, as hereinafter defined. Such declaratory judgment action may be brought by an aggrieved individual or upon an allegation that an effort at conciliation pursuant to KRS 344.200 has been attempted and failed, by the Lexington-Fayette County Human Rights Commission.

15.2.2 That it is an unlawful practice for an employer:

15.2.2.1 to fail or refuse to hire, or to discharge any individual or otherwise to discriminate against an individual, with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, sex, age, or national origin; or

15.2.2.2 to limit, segregate or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee because of such individual's sex, race, color, religion, age, or national origin.

15.2.3 That it is an unlawful practice for an employer, labor organization, or joint-labor management committee controlling apprenticeship or other training or retraining, including on-the-job training programs to discriminate against an individual because of his race, color, religion, sex, age, or national origin in admission to, or employment in, any program established to provide apprenticeship or other training.

15.2.4 That a copy of this Ordinance shall be furnished all suppliers and made a part of all bid specifications.

15.2.5 This Ordinance shall take effect after it is signed, published and recorded, as required by law.

15.3 Temporary Street Closing or Blockage

The CONTRACTOR will notify the ENGINEER at least 72 hours prior to making any temporary street closing or blockage. This will permit orderly notification to all concerned public agencies. Specific details and restrictions on street closure or blockage are contained in the Special Conditions.

15.4 Percentage of Work Performed by prime CONTRACTOR

The CONTRACTOR shall perform on site, and with its own organization, Work equivalent to at least fifty one (51%) percent of the total amount of Work to be performed under the Contract. This percentage may be reduced by a supplemental agreement to this Contract if, during performing the Work, the CONTRACTOR requests a reduction and the ENGINEER determines that the reduction would be to the advantage of the OWNER.

15.5 Clean-up

Cleanup shall progress, to the greatest degree practicable, throughout the course of the Work. The Work will not be considered as completed, and final payment will not be made, until the right-of-way and all ground occupied or affected by the Contractor in connection with the Work has been cleared of all rubbish, equipment,

excess materials, temporary structures, and weeds. Rubbish and all waste materials of whatever nature shall be disposed of, off of the project site, in an acceptable manner. All property, both public and private, which has been damaged in the prosecution of the Work, shall be restored in an acceptable manner. All areas shall be draining, and all drainage ways shall be left unobstructed, and in such a condition that drift will not collect or scour be induced.

15.6 General

The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 12.1, 12.3.5, 13.3, and 15.2 and all of the rights and remedies available to OWNER and ENGINEER thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, warranties and guarantees made in the Contract Documents will survive final payment and termination or completion of the Agreement.

15.7 Debris Disposal

For all LFUCG projects any trash, construction demolition debris, yard waste, dirt or debris of any kind that is removed from the project site must be disposed of in accordance with local, state, and federal regulations. The disposal site or facility must be approved in advance by the LFUCG and disposal documentation is required. The Contractor will be responsible for payment of any fines associated with improper disposal of material removed from the project site.

END OF SECTION

PART VI
CONTRACT AGREEMENT

INDEX

1. SCOPE OF WORK
2. TIME OF COMPLETION AND LIQUIDATED DAMAGES
3. ISSUANCE OF WORK ORDERS
4. THE CONTRACT SUM
5. PROGRESS PAYMENTS
6. ACCEPTANCE AND FINAL PAYMENT
7. THE CONTRACT DOCUMENTS
8. EXTRA WORK
9. CONSENT DECREE REQUIREMENTS
10. ENUMERATION OF SPECIFICATIONS AND DRAWINGS

PART VI

CONTRACT AGREEMENT

THIS AGREEMENT, made on the 17th day of May, 2018, by and between **Lexington-Fayette Urban County Government**, acting herein called "OWNER" and **Leak Eliminators, LLC**, doing business as *(an individual) (a partnership) (a corporation) located in the City of Lexington, County of Fayette, and State of Kentucky, hereinafter called "CONTRACTOR."

WITNESSETH: That the CONTRACTOR and the OWNER in consideration of quantities needed by the Lexington Fayette Urban County Government Eleven million, seven hundred forty three thousand, three hundred and seventy Dollars and 0 Cents (\$11,743,370.00) quoted in the proposal by the CONTRACTOR, dated March 23, 2018, hereby agree to commence and complete the construction described as follows:

1. SCOPE OF WORK

The CONTRACTOR shall furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Proposal, the General Conditions, and the Special Conditions of the Contract, the Specifications and Contract Documents therefore as prepared by [REDACTED] for the [REDACTED].

2. TIME OF COMPLETION AND LIQUIDATED DAMAGES

The time period estimated and authorized by the OWNER for the proper execution of the Work by the Contract, in full, is hereby fixed as [REDACTED] calendar days. The time shall begin [REDACTED] days after the CONTRACTOR is given the Notice to Proceed with the Work. **TIME IS OF THE ESSENCE IN THE PERFORMANCE OF THIS AGREEMENT AND CONTRACTOR SHALL BE LIABLE AND RESPONSIBLE FOR DAMAGES SUFFERED BY OWNER AS A RESULT OF THE DELAY CAUSED BY CONTRACTOR.**

Should the contractor fail or refuse to complete the work within the time specified in his Proposal and/or Contract (or extension of time granted by the owner), the Contractor shall pay liquidated damages in an amount of [REDACTED] per day. The amount of liquidated damages shall in no event be considered as a penalty, nor other than an amount agreed upon by the Contractor and the Owner for damages, loses, additional engineering, additional resident representation and other cost that will be sustained by the owner, if the Contractor fails to complete the work within the specified time. Liquidated damages will be applied on a rate per day for each and every calendar day (Sundays and holidays included) beyond the Contract expiration date stipulated in the Contract Documents, considering all time extension granted. **These Liquidated Damages are in addition to any other damages/fees/penalties that are incurred as a result of Consent Decree requirements.**

3. ISSUANCE OF WORK ORDERS

Notice to begin Work will be given in whole or for part of the Work as determined by the OWNER pending the availability of funds. The order of construction will be as determined by the Engineer after consultation with the CONTRACTOR and the OWNER.

4. THE CONTRACT SUM

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the Contract, as quoted in the proposal, subject to any additions and deductions, as provided therein.

5. PROGRESS PAYMENTS

The OWNER shall make payments on account of the Contract, as provided in accordance with the General Conditions, as estimated by the Engineer, less the aggregate of previous payments.

6. ACCEPTANCE AND FINAL PAYMENT

Final payment shall be due within ninety (90) days after completion of the Work, provided the Work be then fully completed and the Contract fully accepted.

Before issuance of final certificate, the CONTRACTOR shall submit evidence satisfactory to the Engineer that all payrolls, material bills, and other indebtedness connected with the Work has been paid.

If, after the Work has been substantially completed, full completion thereof is materially delayed through no fault of the CONTRACTOR, and the ENGINEER so certifies, the OWNER shall upon certificate of the ENGINEER, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

7. THE CONTRACT DOCUMENTS

The Advertisement for Bids, Information for Bidders, the General Conditions, Performance and Payment Bonds, Contract Agreement, Special Conditions, Technical Specifications, any and all Addenda, and Proposal, and Plan Drawings form the Contract, and they are fully a part of the Contract as if hereto attached or herein repeated.

8. EXTRA WORK

The OWNER, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the Work, the Contract Sum being adjusted accordingly. All such Work shall be executed and paid for in accordance with the General Conditions, which is a part of this Contract.

9. CONSENT DECREE REQUIREMENTS

9.1 OWNER, the United States Environmental Protection Agency, and the Commonwealth of Kentucky have entered into a Consent Decree in a case styled *United States, et al. v. Lexington-Fayette Urban County Government*, United States District Court for the Eastern District of Kentucky, Case No. 5:06-CV-00386 (“CONSENT DECREE”), that requires OWNER to complete numerous projects related to its sanitary sewer system and stormwater management program within specific periods of time.

9.2 TIME IS OF THE ESSENCE IN THE PERFORMANCE OF THIS AGREEMENT. CONTRACTOR is aware that the OWNER is subject to penalties for non-compliance with the CONSENT DECREE deadlines. The CONTRACTOR shall be specifically liable and responsible for payment of any and all penalties, fines, or fees assessed against or incurred by the OWNER as a result of any delay in, or non-performance of, any of the CONTRACTOR’s obligations or responsibilities under this Contract, or for any other damages suffered by OWNER as a result of such delay or non-performance. This shall specifically include, but shall not be limited to, any penalty, fine, fee, or assessment against the OWNER by the U.S. Department of Justice, U.S. Environmental Protection Agency, and/or the Kentucky Energy and Environment Cabinet related to the Consent Decree.

9.3 The provisions of this Section and the various rates of compensation for CONTRACTOR’s services provided for elsewhere in this Agreement have been agreed to in anticipation of the orderly and continuous progress of the PROJECT through completion.

9.4 If delays result by reason of acts of the OWNER or approving agencies, which are beyond the control of the CONTRACTOR, an extension of time for such delay will be considered. If delays occur, the CONTRACTOR shall immediately notify the OWNER, and within five (5) business days from the date of the delay apply in writing to the OWNER for an extension of time for such reasonable period as may be mutually agreed upon between the parties, and if approved, the PROJECT schedule shall be revised to reflect the extension. Such extension of time to the completion date shall in no way be construed to operate as a waiver on the part of the OWNER of any of its rights in the Agreement. Section 9.6 of this Agreement (Disputes) shall apply in the event the parties cannot agree upon an extension of time.

In the event that the overall delay resulting from the above-described causes is sufficient to prevent complete performance of the Agreement within six (6) months of the time specified herein, the fees to be paid to CONTRACTOR shall be subject to adjustment as agreed upon by the parties. Section 9.6 of this Agreement shall apply in the event the parties cannot agree upon an adjustment of fee.

9.5 If delays result solely by reason of acts of the CONTRACTOR, the CONTRACTOR shall be held liable for any financial penalties incurred by the OWNER as a result of the delay, including but not limited to those assessed pursuant to the CONSENT DECREE as provided in Section 9.2, above. Section 9.6 of this Agreement (Disputes), shall apply in the event the parties cannot mutually agree upon the cause(s) associated with delays

in completing project deliverables. The CONTRACTOR must immediately notify the OWNER in the event of such delay, and provide the OWNER a written action plan within five (5) business days on how it will attempt to resolve the delay.

9.6 DISPUTES

Except as otherwise provided in this Agreement, any dispute hereunder may be resolved by agreement of the OWNER's Agent (Charles H. Martin, P.E., Director of Water Quality) and the CONTRACTOR. In the absence of such an agreement, the dispute shall be submitted to the OWNER's Commissioner, Department of Environmental Quality, whose decision shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, capricious, arbitrary, or so grossly erroneous as necessarily to imply bad faith. Pending a final decision of a dispute hereunder, the CONTRACTOR shall proceed diligently with the performance of the Agreement in accordance with the directions of the OWNER.

10. THE FOLLOWING IS AN ENUMERATION OF THE SPECIFICATIONS AND DRAWINGS (CONTRACT DOCUMENTS):

SPECIFICATIONS

SECTION NO.	TITLE	PAGES
I	Advertisement for Bids	AB 1 thru 6
II	Information for Bidders	IB 1 thru 10
III	Form of Proposal	P 1 thru 35
IV	General Conditions	GC 1 thru 50
V	Special Conditions	SC 1 thru 7
VI	Contract Agreement	CA 1 thru 6
VII	Performance and Payment Bonds	PB 1 thru 7
VIII	Addenda	AD 1 thru 11
IX	Technical Specifications	TS 1 thru 94

IN WITNESSETH WHEREOF, the parties hereto have executed this Contract as of the date and year above written.

(Seal)

Lexington-Fayette Urban County Government.
Lexington, Kentucky

(Owner)

ATTEST:

[Signature]
Deputy
Clerk of the Urban County Council

BY:

[Signature]
MAYOR

(Witness)

(Title)

(Seal)

[Signature]
Helen Lawrence
(Secretary)*

BY:

[Signature]
Richard Lawrence

(Contractor)

[Signature]
Brandi Morse
(Witness)

President

(Title)

330 Lisle Industrial Ave, Lexington Ky 40511
(Address and Zip Code)

IMPORTANT: *Strike out any non-applicable terms.

Secretary of the Owner should attest. If the CONTRACTOR is corporation, Secretary should attest. Give proper title of each person-executing Contract.

PART VII

PERFORMANCE AND PAYMENT BONDS

1. PERFORMANCE BOND
2. PAYMENT BOND

THE AMERICAN INSTITUTE OF ARCHITECTS



Bond No. 9689305

AIA Document A312

Payment Bond

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

Leak Eliminators LLC
330 Lisle Industrial Ave.
Lexington, KY 40511

OWNER (Name and Address):

LFUCG Office of the Director Purchasing
200 East Main St. 3rd Floor
Lexington, KY 40507

CONSTRUCTION CONTRACT

Date:

Amount: (\$2,000,000.00) Two Million Dollars and 00/100

Description (Name and Location): FY 2019 Sanitary Sewer Rehab.

SURETY (Name and Principal Place of Business):

Ohio Farmers Insurance Company
P.O. Box 5001
Westfield Center, OH 44251-5001

BOND

Date (Not earlier than Construction Contract Date):

Amount: (\$2,000,000.00) Two Million Dollars and 00/100

Modifications to this Bond:

None

See Page 6

CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

Leak Eliminators LLC

Signature: Bruce Whitaker

Name and Title: Bruce Whitaker G.M

SURETY

Company: (Corporate Seal)

Ohio Farmers Insurance Company

Signature: Deborah Davis

Name and Title: Deborah Davis
Attorney-in-Fact

(Any additional signatures appear on page 6)

(FOR INFORMATION ONLY—Name, Address and Telephone)

AGENT or BROKER:

BB&T Insurance Services, Inc.
200 W. Vine Street, Suite 300
Lexington, KY 40507

859-422-3766

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.

2 With respect to the Owner, this obligation shall be null and void if the Contractor:

2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2 Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.

3 With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.

4 The Surety shall have no obligation to Claimants under this Bond until:

4.1 Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2 Claimants who do not have a direct contract with the Contractor:

.1 Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

.2 Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and

.3 Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.

5 If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.

6 When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

6.1 Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2 Pay or arrange for payment of any undisputed amounts.

7 The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

9 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

11 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the work or part of the work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this

Bond shall be construed as a statutory bond and not as a common law bond.

14 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15 DEFINITIONS

15.1 Claimant: An Individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the

Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

15.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL
Company: _____ (Corporate Seal)

SURETY
Company: _____ (Corporate Seal)

Signature: Richard Lawrence
Name and Title: Richard Lawrence, President
Address: 330 Lisle Industrial Ave
Lexington Ky 40511

Signature: _____
Name and Title: _____
Address: _____

THIS POWER OF ATTORNEY SUPERCEDES ANY PREVIOUS POWER BEARING THIS SAME POWER # AND ISSUED PRIOR TO 05/25/16, FOR ANY PERSON OR PERSONS NAMED BELOW.

POWER NO. 1673512 01

General Power of Attorney

Westfield Insurance Co. Westfield National Insurance Co. Ohio Farmers Insurance Co. Westfield Center, Ohio

CERTIFIED COPY

Know All Men by These Presents, That WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, corporations, hereinafter referred to individually as a "Company" and collectively as "Companies," duly organized and existing under the laws of the State of Ohio, and having its principal office in Westfield Center, Medina County, Ohio, do by these presents make, constitute and appoint CHARLES G. PEDEN, CAROL B. HAMBY, HOWARD A. SEE, JR., DEBORAH DAVIS, NICHOLAS R. BAUER, CANDACE D. PLYBON, JOINTLY OR SEVERALLY

of LEXINGTON and State of KY its true and lawful Attorney(s)-in-Fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings, or other instruments or contracts of suretyship-

LIMITATION: THIS POWER OF ATTORNEY CANNOT BE USED TO EXECUTE NOTE GUARANTEE, MORTGAGE DEFICIENCY, MORTGAGE GUARANTEE, OR BANK DEPOSITORY BONDS.

and to bind any of the Companies thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the applicable Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney(s)-in-Fact may do in the premises. Said appointment is made under and by authority of the following resolution adopted by the Board of Directors of each of the WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY:

"Be It Resolved, that the President, any Senior Executive, any Secretary or any Fidelity & Surety Operations Executive or other Executive shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

The Attorney-in-Fact may be given full power and authority for and in the name of and on behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements of indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed by the President and sealed and attested by the Corporate Secretary."

"Be it Further Resolved, that the signature of any such designated person and the seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signatures or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached." (Each adopted at a meeting held on February 8, 2000).

In Witness Whereof, WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY have caused these presents to be signed by their National Surety Leader and Senior Executive and their corporate seals to be hereto affixed this 25th day of MAY A.D. 2016 .

Corporate Seals Affixed



WESTFIELD INSURANCE COMPANY WESTFIELD NATIONAL INSURANCE COMPANY OHIO FARMERS INSURANCE COMPANY

By: Dennis P. Baus

Dennis P. Baus, National Surety Leader and Senior Executive

State of Ohio County of Medina ss.:

On this 25th day of MAY A.D. 2016 , before me personally came Dennis P. Baus to me known, who, being by me duly sworn, did depose and say, that he resides in Wooster, Ohio; that he is National Surety Leader and Senior Executive of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, the companies described in and which executed the above instrument; that he knows the seals of said Companies; that the seals affixed to said instrument are such corporate seals; that they were so affixed by order of the Boards of Directors of said Companies; and that he signed his name thereto by like order.

Notarial Seal Affixed



David A. Kotnik

David A. Kotnik, Attorney at Law, Notary Public My Commission Does Not Expire (Sec. 147.03 Ohio Revised Code)

State of Ohio County of Medina ss.:

I, Frank A. Carrino, Secretary of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Companies, which is still in full force and effect; and furthermore, the resolutions of the Boards of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Westfield Center, Ohio, this day of A.D.



Frank A. Carrino Secretary Frank A. Carrino, Secretary

THE AMERICAN INSTITUTE OF ARCHITECTS



Bond No. 9689305

AIA Document A312

Performance Bond

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

Leak Eliminators LLC
330 Lisle Industrial Ave.
Lexington, KY 40511

OWNER (Name and Address):

LFUCG Office of the Director Purchasing
200 East Main St. 3rd Floor
Lexington, KY 40507

CONSTRUCTION CONTRACT

Date:

Amount: (\$ 2,000,000.00) Two Million Dollars and 00/100

Description (Name and Location): FY 2019 Sanitary Sewer Rehab.

SURETY (Name and Principal Place of Business):

Ohio Farmers Insurance Company
P.O. Box 5001
Westfield Center, OH 44251-5001

BOND:

Date (Not earlier than Construction Contract Date):

Amount: (\$ 2,000,000.00) Two Million Dollars and 00/100

Modifications to this Bond:

None

See Page 3

CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

Leak Eliminators LLC

Signature: B. Whitaker

Name and Title: Bruce Whitaker G.M.

SURETY

Company: (Corporate Seal)

Ohio Farmers Insurance Company

Signature: Deborah Davis

Name and Title: Deborah Davis
Attorney-in-Fact

(Any additional signatures appear on page 3)

(FOR INFORMATION ONLY—Name, Address and Telephone)

AGENT or BROKER:

BB&T Insurance Services, Inc.
200 W. Vine Street, Suite 300
Lexington, KY 40507
859-422-3766

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.

3 If there is no Owner Default, the Surety's obligation under this Bond shall arise after:

3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and

3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and

3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.

4 When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

4.1 Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or

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

4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or

4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

.1 After investigation, determine the amount for

which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or

.2 Deny liability in whole or in part and notify the Owner citing reasons therefor.

5 If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

6 After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:

6.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

6.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and

6.3 Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

7 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators or successors.

8 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

9 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation avail-

able to sureties as a defense in the jurisdiction of the suit shall be applicable.

10 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

11 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12 DEFINITIONS

12.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Con-

tractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

12.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.

12.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.

12.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

Company:

(Corporate Seal)

SURETY

Company:

(Corporate Seal)

Signature: Richard Lawrence

Name and Title: Richard Lawrence, President

Address: 330 Lisle Industrial Ave
Lexington Ky 40511

Signature: _____

Name and Title: _____

Address: _____

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 04/27/2018

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 have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER: BB&T Insurance Services, Inc. 200 W Vine Street, Suite 300 Lexington, KY 40507 859 224-8899. CONTACT NAME: BB&T Insurance Services, Inc. PHONE (A/C, No, Ext): 859 224-8899 FAX (A/C, No): 8666432260. INSURER(S) AFFORDING COVERAGE: INSURER A: Selective Insurance Co of America NAIC #: 12572. INSURER B: Kentucky Associated Gen. Contract SIF. INSURER C: INSURER D: INSURER E: INSURER F:

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Table with columns: INSR LTR, TYPE OF INSURANCE, ADDL INSR, SUBR WVD, POLICY NUMBER, POLICY EFF (MM/DD/YYYY), POLICY EXP (MM/DD/YYYY), LIMITS. Rows include Commercial General Liability, Automobile Liability, Umbrella Liability, Workers Compensation and Employers' Liability, and Leased & Rented.

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Lexington Fayette Urban Co. Government is listed as an Additional Insured in regards to General Liability per written contract or agreement.

CERTIFICATE HOLDER: Lexington Fayette Urban Co. Government 200 E. Main St. Lexington, KY 40507. CANCELLATION: SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE: Charles S. Pedersen

PART VIII

ADDENDA

All addenda issued during the bidding of the Project will be reproduced in the signed Contract Documents, on the pages following this heading sheet.

<u>Addendum Number</u>	<u>Title</u>	<u>Date</u>
1.	<u>Bid Schedule</u>	<u>3/2/18</u>
2.	<u>Specifications from Ionwave</u>	<u>3/5/2018</u>
3.	<u>Procurement Website</u>	<u>3/5/2018</u>
4.	<u>Q and A from the Prebid</u>	<u>3/15/2018</u>
5.	<u></u>	<u></u>

Part A: Administrative Bid Items

Item	Unit	Description	Estimated	Unit Price	Subtotal
A1	LS	Bonds and Insurance	1	50,000.00	50,000
A2	LS	General Requirements	1	50,000.00	50,000
Grand Total Part A (Items A1 through A2)					\$100,000

Part B: Pipeline Rehabilitation & Replacement

Item	Unit	Description	Estimated	Unit Price	Subtotal
B1	EA	Point Repair, 6 to 8-inch pipe (depth 0 to 6.0 ft)	10	2,400.00	24,000
B2	EA	Point Repair, 6 to 8-inch pipe (depth 6.1 to 10.0 ft)	10	2,750.00	27,500
B3	EA	Point Repair, 6 to 8-inch pipe (depth 10.1 to 15.0 ft)	5	3,300.00	16,500
B4	EA	Point Repair, 6 to 8-inch pipe (depth 15.1 to 20.0 ft)	3	4,900.00	14,700
B5	LF	Line Replacement, 6 to 8-inch PVC pipe>10 LF (depth 0 to 6.0 ft)	3,000	120.00	360,000

B6	LF	Line Replacement, 6 to 8-inch PVC pipe> 10 LF (depth 6.1 to 10.0 ft)	3,000	135.00	405,000
B7	LF	Line Replacement, 6 to 8-inch PVC pipe> 10 LF (depth 10.1 to 15.0 ft)	1,000	150.00	150,000
B8	LF	Line Replacement, 6 to 8-inch PVC pipe> 10 LF (depth 15.1 to 20.0 ft)	200	220.00	44,000
B9	LF	Line Replacement, 6 to 8-inch DI pipe>10 LF (depth 0 to 6.0 ft)	3,000	135.00	405,000
B10	LF	Line Replacement, 6 to 8-inch DI pipe> 10 LF (depth 6.1 to 10.0 ft)	3,000	145.00	435,000
B11	LF	Line Replacement, 6 to 8-inch DI pipe> 10 LF (depth 10.1 to 15.0 ft)	1,000	170.00	170,000
B12	LF	Line Replacement, 6 to 8-inch DI pipe> 10 LF (depth 15.1 to 20.0 ft)	200	240.00	48,000
B13	EA	Point Repair, 10 to 12-inch pipe (depth 0 to 6.0 ft)	10	2,500.00	25,000
B14	EA	Point Repair, 10 to 12-inch pipe (depth 6.1 to 10.0 ft)	10	2,800.00	28,000
B15	EA	Point Repair, 10 to 12-inch pipe (depth 10.1 to 15.0 ft)	10	3,200.00	32,000
B16	LF	Line Replacement, 10 to 12-inch PVC pipe> 10 LF (depth 0 to 6.0 ft)	200	130.00	26,000
B17	LF	Line Replacement, 10 to 12-inch PVC pipe> 10 LF (depth 6.1 to 10 ft)	200	145.00	29,000
B18	LF	Line Replacement 10 to 12-inch PVC pipe> 10 LF (depth 10.1 to 15.0 ft)	50	160.00	8,000
B19	LF	Line Replacement, 10 to 12-inch PVC pipe> 10 LF (depth 15.1 to 20.0 ft)	200	220.00	44,000
B20	LF	Line Replacement 10 to 12-inch DI pipe> 10 LF (depth 0 to 6.1 ft)	700	150.00	105,000
B21	LF	Line Replacement 10 to 12-inch DI pipe> 10 LF (depth 6.1 to 10 ft)	700	160.00	112,000
B22	LF	Line Replacement 10 to 12-inch DI pipe> 10 LF (depth 10.1 to 15 ft)	200	175.00	35,000
B23	LF	Line Replacement 10 to 12-inch DI pipe> 10 LF (depth 15.1 to 20 ft)	200	200.00	40,000
B24	EA	Point Repair, 15 to 18-inch pipe (depth to 6.0 ft)	7	3,500.00	24,500
B25	EA	Point Repair, 15 to 18-inch pipe (depth 6.1 to 10.0 Ft)	8	3,750.00	30,000
B26	EA	Point Repair, 15 to 18-inch pipe (depth 10.1 to 15.0 ft)	5	4,300.00	21,500
B27	LF	Line Replacement, 15 to 18-inch PVC pipe > 10 LF (depth 0 to 6.0 ft)	700	160.00	112,000

B28	LF	Line Replacement, 15 to 18-inch PVC pipe > 10 LF (depth 6.1 to 10.0 ft)	200	170.00	34,000
B29	LF	Line Replacement, 15 to 18-inch PVC pipe > 10 LF (depth 10.1 to 15.0 ft)	200	195.00	39,000
B30	LF	Line Replacement, 15 to 18-inch PVC pipe > 10 LF (depth 15.1 to 20 ft)	200	240.00	48,000
B31	LF	Line Replacement, 15 to 18-inch DI pipe > 10 LF (depth 0 to 6.0 ft)	200	190.00	38,000
B32	LF	Line Replacement, 15 to 18-inch DI pipe > 10 LF (depth 6.1 to 10.0 ft)	200	200.00	40,000
B33	LF	Line Replacement, 15 to 18-inch DI pipe > 10 LF (depth 10.1 to 15.0 ft)	200	225.00	45,000
B34	LF	Line Replacement, 15 to 18-inch DI pipe > 10 LF (depth 15.1 to 20 ft)	200	250.00	50,000
B35	LF	Line Replacement, 24 to 36-inch PVC pipe > 10 LF (depth 0 to 6.0 ft)	200	195.00	39,000
B36	LF	Line Replacement, 24 to 36 inch PVC pipe > 10 LF (depth 6.1 to 10.0 ft)	200	210.00	42,000
B37	LF	Line Replacement, 24 to 36 inch PVC pipe > 10 LF (depth 10.1 to 15.0 ft)	200	250.00	50,000
B38	LF	Line Replacement, 24 to 36 inch PVC pipe > 10 LF (depth 15.1 to 20 ft)	200	300.00	60,000
B39	LF	Line Replacement, 24 to 36-inch DI pipe > 10 LF (depth 0 to 6.0 ft)	200	270.00	54,000
B40	LF	Line Replacement, 24 to 36 inch DI pipe > 10 LF (depth 6.1 to 10.0 ft)	200	300.00	60,000
B41	LF	Line Replacement, 24 to 36 inch DI pipe > 10 LF (depth 10.1 to 15.0 ft)	200	340.00	68,000
B42	LF	Line Replacement, 24 to 36 inch DI pipe > 10 LF (depth 15.1 to 20 ft)	200	390.00	78,000
B43	LF	6-inch HDPE Lateral installed by Pipe Bursting	250	80.00	70,000
B44	LF	8-inch HDPE Sewer Installed by Pipe Bursting	1,000	65.00	65,000
B45	LF	10-inch HDPE Sewer Installed by Pipe Bursting	1,000	80.00	80,000
B46	LF	12-inch HDPE Sewer Installed by Pipe Bursting	1,000	100.00	100,000
B47	LF	CIPP, 8 inch Pipe	15,000	38.00	570,000
B48	LF	CIPP, 10 inch Pipe	2,000	42.00	84,000
B49	LF	CIPP, 12 inch Pipe	2,000	50.00	100,000

B50	LF	CIPP, 15 inch Pipe	2,000	70.00	140,000
B51	LF	CIPP, 18 inch Pipe	2,000	90.00	180,000
B52	LF	CIPP, 21 inch Pipe	1,000	95.00	95,000
B53	LF	CIPP, 24 inch Pipe	1,000	110.00	110,000
B54	LF	CIPP, 30 inch Pipe	2,000	140.00	280,000
B55	LF	CIPP, 36 inch Pipe	3,000	210.00	630,000
B56	LF	CIPP, 42 inch Pipe	1,000	250.00	250,000
B57	LF	CIPP, 48 inch Pipe	1,000	290.00	290,000
B58	LF	CIPP, 54 inch Pipe	1,000	360.00	360,000
B59	LF	CIPP Lateral, 4 inch Pipe	1,000	48.00	48,000
B60	LF	CIPP Lateral, 6 inch Pipe	1,000	70.00	70,000
B61	EA	CIPP Point Repair, 6 to 8 inch, Pipe	10	1,800.00	18,000
B62	EA	CIPP Point Repair, 10 to 12 inch Pipe	10	2,000.00	20,000
B63	EA	CIPP Point Repair, 15 to 18 inch, Pipe	5	2,200.00	11,000
B64	EA	CIPP Service Connection Repair	50	2,000.00	100,000
B65	EA	Replace Service Connection 4 or 6 inch (depth 0 to 6.0 ft) w Cleanout	100	3,600.00	360,000
B66	EA	Replace Service Connection 4 or 6-inch (depth 6.1 to 10.0 ft) w Cleanout	110	3,850.00	423,500
B67	EA	Replace Service Connection 4 or 6-inch (depth 10.1 to 15.0 ft) w Cleanout	25	4,050.00	101,250
B68	EA	Replace Service Connection 4 or 6-inch (depth 15.1 to 20 ft) w Cleanout	20	4,400.00	88,000
B69	EA	Abandoned Point Repair or Service Connection Excavation	5	1,500.00	7,500
B70	EA	Demolish Manhole	10	1,200.00	12,000
B71	EA	Install 4-inch Cleanout	50	600.00	30,000

B72	EA	Install 6-inch Cleanout	50	1,000.00	50,000
B73	EA	Remove Protruding Tap or Obstruction	50	800.00	40,000
B74	EA	Shallow Manhole, 4-foot diameter (depth < 4.0 ft)	50	3,900.00	195,000
B75	EA	Standard Manhole, 4-foot diameter (depth 4.1 to 6.0 ft)	50	4,300.00	215,000
B76	EA	Standard Manhole, 5-foot diameter (depth to 6.0 ft)	25	5,900.00	147,500
B77	VF	Manhole Rehabilitation, 4' MH	400	400.00	160,000
B78	VF	Manhole Rehabilitation, 5' MH	100	600.00	60,000
B79	VF	Manhole Rehabilitation, 6' MH	100	700.00	70,000
B80	EA	Reset and Seal Manhole Ring	5	600.00	3,000
B81	EA	Time and Materials	5	Cost Plus 15%	NA
B82	EA	Reimbursement	5	Cost Plus 15%	NA
B83	EA	Replace Standard Frame and Lid in Grass	25	1,100.00	27,500
B84	EA	Replace Watertight Frame and Lid in Grass	25	1,200.00	30,000
B85	EA	Replace HDPE Composite frame and Lid in Grass	25	1,500.00	37,500
B86	EA	Install Initial Chimney Seal (up to 7.5 inches)	10	300.00	3,000
B87	EA	Chimney Seal Extensions (up to 7 inches each)	10	200.00	2,000
B88	EA	Raise Manhole to Grade in Pavement, < 12 inches	50	1,400.00	70,000
B89	EA	Raise Manhole to Grade non-Paved Area, < 12 inches	50	1,100.00	55,000
B90	VF	Manhole Barrel Extensions, 4 ft. diameter	50	450.00	22,500
B91	VF	Manhole Barrel Extensions, 5 ft. diameter	20	750.00	15,000
B92	EA	Inside Manhole Drop Connection	20	500.00	10,000
B93	EA	Mr. Manhole Quantity less than 10	50	1,475.00	73,750

B94	EA	Mr. Manhole Quantity greater than 10	50	1,400.00	70,000
GRAND TOTAL: Part 8 (Items 81 through B94)					\$ 9,402,700

Part C: Sewer Line Investigation Bid Items

Item	Unit	Description	Estimated	Unit Price	Subtotal
C1	EA	Locate Manhole	10	800.00	8,000
C2	LF	Clean and CCTV 8-inch Pipe	80,000	1.25	100,000
C3	LF	Clean and CCTV 10 to 12-inch Pipe	20,000	1.75	35,000
C4	LF	Clean and CCTV 15 10 18-inch Pipe	5,000	2.00	10,000
C5	LF	Clean and CCTV 24 to 30-inch Pipe	2,500	3.00	7,500
C6	LF	Clean and CCTV >30-inch Pipe	3,000	4.00	12,000
C7	LF	CCTV Lateral 4 to 6-inch Pipe	10,000	1.00	10,000
C8	LF	CCTV 8-inch Pipe	6,000	1.00	6,000
C9	LF	CCTV 10 to 12-inch Pipe	2,000	1.50	3,000
C10	LF	CCTV 15 to 18-inch Pipe	1,000	1.75	1,750
C11	LF	CCTV 24 to 30-inch Pipe	2,000	2.25	4,500
C12	LF	CCTV >30-inch Pipe	1,000	3.00	3,000
C13	EA	CCTV Reverse Set-Up	80	100.00	8,000
C14	LF	Routine Cleaning, ≤ 12-inch Pipe	2,000	1.50	3,000
C15	LF	Routine Cleaning, >12-inch Pipe	1,000	2.00	2,000
C16	LF	Smoke Testing, Main Lines	10,000	1.50	25,000
C17	HR	Smoke Testing, 3-Man Crew with Equipment	100	295.00	29,500

C18	HR	Heavy Cleaning, ≤ 12-inch Pipe	120	275.00	33,000
C19	HR	Heavy Cleaning, > 12-inch Pipe	100	275.00	27,500
C20	LF	Mechanical Root Removal, 6 to 8-inch Pipe	1,800	2.75	4,950
C21	LF	Mechanical Root Removal, 10 to 12-inch Pipe	500	3.50	1,750
C22	LF	Mechanical Root Removal, 15 to 18-inch Pipe	200	4.60	920
GRAND TOTAL: Part C (Item, C1 through C22)					\$326,370

Part D: General Civil Bid Items

Item	Unit	Description	Estimated Quantity	Unit Price (\$)	Subtotal
D1	CY	Rock Removal	300	240.00	72,000
D2	EA	Tree Removal, 6.1 to 12 inch in diameter	10	1,600.00	16,000
D3	EA	Tree Removal, > 12.1 to 24 inch in diameter	5	2,200.00	11,000
D4	EA	Tree Removal, > 24 inch Dia.	5	3,500.00	17,500
D5	SY	Site Restoration, Paved, Bituminous Surface	5,000	50.00	250,000
D6	SY	Site Restoration, Paved, Concrete Surface (up to 6-inch thickness)	5,000	40.00	200,000
D7	SY	Site Restoration, Paved, Concrete Surface (>6-inch thickness)	1,000	90.00	90,000
D8	SY	Site Restoration, Paved, Temporary Winter Repair	1,000	50.00	50,000
D9	SY	Site Restoration, Seeding with Straw Mulch and Net	1,500	10.00	15,000
D10	SY	Site Restoration, Seeding with Coconut Matting	500	8.00	4,000
D11	SY	Site Restoration, Sod	500	25.00	12,500
D12	SY	Creek Bank Restoration, Channel Lining	200	45.00	9,000

D13	SY	Creek Bank Restoration, Rip-Rap	200	40.00	8,000
D14	SY	Creek Bank Restoration, Coconut Matting	200	24.00	4,800
D15	LF	Monolithic Concrete Curb & Gutter Replacement	2,000	55.00	110,000
D16	LF	Concrete Curb Replacement	2,000	50.00	100,000
D17	LF	Bituminous Curb Replacement	100	20.00	2,000
D18	TON	No.9 Crushed Stone	1,000	25.00	25,000
D19	TON	DGA, Class II	1,000	25.00	25,000
D20	CY	Flowable (Controlled Density) Fill	100	135.00	13,500
D21	TON	Asphalt Pavement Milling, 1 1/2 - inch Depth	200	30.00	6,000
D22	TON	Bituminous Pavement Overlay, 1 1/2 - inch Thickness	200	80.00	16,000
D23	TON	No. 2 Crushed Stone	200	30.00	6,000
D24	TON	Class II Chanel Lining	200	50.00	10,000
D25	TON	Asphalt Base	200	75.00	15,000
GRAND TOTAL: Part D (Items D1 through D21)					\$1,088,300

Part E: Manpower & Equipment Bid Items

Item	Unit	Description	Estimated	Unit Price	Subtotal
E1	EA	Bypass Pumping SetUp, <12-inch Sewer Line	50	750.00	37,500
E2	EA	Bypass Pumping SetUp, ≥12-inch Sewer Line	20	1,800.00	36,000
E3	HR	Bypass Pumping, 2-inch Pump, <500 LF Discharge Line	50	40.00	2,000
E4	HR	Bypass Pumping, 2-inch Pump, 501 to 1000 LF Discharge Line	50	50.00	2,500
E5	HR	Bypass Pumping, 2-inch Pump, 1001 to 1500 LF Discharge Line	50	60.00	3,000

E6	HR	Bypass Pumping, 4-inch Pump, <500 LF Discharge Line	200	120.00	24,000
E7	HR	Bypass Pumping, 4-inch Pump, 501 to 1000 LF Discharge Line	200	145.00	29,000
E8	HR	Bypass Pumping, 4-inch Pump, 1001 to 1500 LF Discharge Line	200	170.00	34,000
E9	HR	Bypass Pumping, 6-inch Pump, <500 LF Discharge Line	50	210.00	10,500
E10	HR	Bypass Pumping, 6-inch Pump, 501 to 1000 LF Discharge Line	50	235.00	11,750
E11	HR	Bypass Pumping, 6-inch Pump, 1001 to 1500 LF Discharge Line	50	250.00	12,500
E12	HR	Bypass Pumping, 8-inch Pump, <500 LF Discharge Line	50	350.00	17,500
E13	HR	Bypass Pumping, 8-inch Pump, 501 to 1000 LF Discharge Line	50	380.00	19,000
E14	HR	Bypass Pumping, 8-inch Pump, 1001 to 1500 LF Discharge Line	50	420.00	21,000
E15	HR	SSO Site Cleanup	50	90.00	4,500
E16	HR	Combination Vacuum/Hydraulic Jet/Hydro Excavator	50	295.00	14,750
E17	HR	Backhoe/Extend-a-hoe	150	125.00	18,750
E18	HR	Hoe Ram	50	225.00	11,250
E19	HR	Dump Truck, Single Axle	50	100.00	5,000
E20	HR	Dump Truck, Tandem or Tri-Axle	50	125.00	6,250
E21	HR	Large Track Hoe, CAT 311 or Equivalent	50	180.00	9,000
E22	HR	Small Track Hoe, CAT 301.6C or Equivalent	500	140.00	70,000
E23	HR	Skid-Steer Loader	200	125.00	25,000
E24	HR	All-Terrain Vehicle, Gator or Equivalent	50	80.00	4,000
E25	HR	Supervisor/Supintendent	50	90.00	4,500
E26	HR	Crew Foreman	150	90.00	13,500
E27	HR	Laborer	2000	70.00	140,000

E28	HR	Air Compressor (Jack Hammer), 125 cfm or larger	50	110.00	5,500
E29	HR	Roller/Compactor	50	110.00	5,500
E30	HR	Pull-Behind Paver	50	60.00	3,000
E31	HR	Traffic Maintenance -Type 1 (Flagger)	2,000	60.00	120,000
E32	HR	Electronic Arrow Board	200	40.00	8,000
E33	WK	Electronic Message Board	10	1,100.00	11,000
E34	HR	Investigation Crew	200	400.00	80,000
E35	HR	D5 Dozer or Equivalent	50	125.00	6,250.
GRAND TOTAL: Part E (Items E1 through E35)					

Total \$11,743,370



ADDENDUM #1

Bid Number: #18-2018

Date: March 5, 2018

Subject: Sanitary Sewer Rehabilitation

Inquiries to:
Brian Marcum
brianm@lexingtonky.gov
(859) 258-3325

TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarification to the above referenced Bid:

Addendum #1 is a revised bid form in Addendum#2 specifications.


Todd Statin, Director
Division of Central Purchasing

All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.

COMPANY NAME: Leak Eliminators, LLC

ADDRESS: 330 Lisle Industrial Ave, Lexington, KY 40511

SIGNATURE OF BIDDER: 



ADDENDUM #2

Bid Number: #18-2018

Date: March 5, 2018

Subject: Sanitary Sewer Rehabilitation

**Inquiries to:
Brian Marcum
brianm@lexingtonky.gov
(859) 258-3325**

TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarification to the above referenced Bid:

Addendum #1 is a revised bid form in the attached Specifications and Addendum#2 is the issuance of the specifications on lonwave, these are available at Lynn Imaging but do not have to be purchased as these documents are the same.

Todd Statin
Todd Statin, Director
Division of Central Purchasing

**All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.**

COMPANY NAME: Leak Eliminators, LLC

ADDRESS: 330 Lisle Industrial Ave, Lexington, KY 40511

SIGNATURE OF BIDDER: *Brian Marcum*



ADDENDUM #3

Bid Number: #18-2018

Date: March 5, 2018

Subject: Sanitary Sewer Rehabilitation

**Inquiries to:
Brian Marcum
brianm@lexingtonky.gov
(859) 258-3325**

TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarification to the above referenced Bid:

In order to save cost to the contractors this bid will only be available on the LFUCG Procurement site and not from Lynn Imaging. We are sorry for the confusion.

**Todd Slatin, Director
Division of Central Purchasing**

**All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.**

COMPANY NAME: Leak Eliminators, LLC

ADDRESS: 330 Lisle Industrial Ave, Lexington, KY 40511

SIGNATURE OF BIDDER: Rickard Lawrence



ADDENDUM #4

Bid Number: #18-2018

Date: March 15, 2018

Subject: Sanitary Sewer Rehabilitation

**Inquiries to:
Brian Marcum
brianm@lexingtonky.gov
(859) 258-3325**

TO ALL PROSPECTIVE SUBMITTERS:

Please be advised of the following clarification to the above referenced Bid:

1. Pre-bid sign-in sheet is attached.
2. This is a price contract for one year with four-(one) year automatic renewals.
3. No bid bond is required with bid.
4. A \$2M P&P bond will be required from Contractor each year of contract.
5. Note changes to the following specs (not all-inclusive):
 - a. Right of way requirements.
 - b. New standard drawings.
 - c. New erosion and sediment control specs.
6. Contractor is responsible for OSHA compliance.
7. Response time is 4 hours, 24 hours to complete unless extension is granted.
8. Lateral installation shall include 10 foot of main line pipe, plus 10 foot of lateral pipe.

Q&A

Q1: Is ductile iron pipe to have 401 protecto?

A1: All ductile iron pipe shall be cementitious lined unless 401 protecto is required by owner. If required the 401 protecto shall be paid for as an additional cost.

Q2: Are lateral reinstates an additional charge not included in lining cost?

A2: Lateral reinstates are included in the liner installation costs and is not an additional charge unless it is required due to a situation, based on case by case.



Q3: Are maps provided for each project?

A3: Yes.

Todd Slatin (handwritten signature)

Todd Slatin, Director
Division of Central Purchasing

All other terms and conditions of the Bid and specifications are unchanged.
This letter should be signed, attached to and become a part of your Bid.

COMPANY NAME: Leak Eliminators, LLC

ADDRESS: 330 Lisle Industrial Ave, Lexington, KY 40511

SIGNATURE OF BIDDER: *Patricia Lawrence*

PART IX

TECHNICAL SPECIFICATIONS

INDEX

SECTION 1 GENERAL SCOPE AND SPECIAL PROVISIONSTS1-1 – TS1-12

SECTION 2 CLEANING AND INTERNAL INSPECTIONTS2-1 – TS2-9

SECTION 3 SEWER FLOW CONTROL.....TS3-1 – TS3-2

SECTION 4 MAIN LINE REPAIR OR REPLACEMENTTS4-1 – TS4-14

SECTION 5 POINT REPAIRSTS5-1 – TS5-3

SECTION 6 SEWER MANHOLE REHABILITATIONTS6-1 – TS6-6

SECTION 7 PIPE BURSTING OF SEWERSTS7-1 – TS7-5

SECTION 8 SMOKE TESTING.....TS8-1 – TS8-2

SECTION 9 CURED-IN-PLACE LINING OF SEWERS.....TS9-1 – TS9-9

SECTION 10 MEASUREMENT AND PAYMENTTS10-1 – TS10-19

SECTION 11 SAMPLE FORMS AND STANDARD DRAWINGSTS11-1 – TS11-9

TECHNICAL SPECIFICATIONS
SECTION 1
GENERAL SCOPE & SPECIAL PROVISIONS

1.01 GENERAL SCOPE OF WORK PERFORMED UNDER THIS CONTRACT

A. PURPOSE

The purpose of this section is to define inspection methods and repairs required to reduce storm water inflow and groundwater infiltration into the Lexington-Fayette Urban County Government's sanitary sewer system.

B. The Contractor shall provide all materials, labor, supervision, and equipment necessary for completion of the Contract. The Contractor shall perform a minimum of 51% of the work towards completion of the Contract. The Contract Documents are intended to provide the basis for proper completion of the work suitable for the intended use of the Owner. Anything not expressly set forth but which is reasonably implied or necessary for proper performance of the Project shall be included.

C. Continuous Operations: The existing system must be maintained in continuous operation in such a manner that it meets all local, state, and federal requirements. The contractor is responsible not to deactivate, demolish, or interfere with any system component required for continuous operation until a new or temporary permanent-like system has been installed and is operational. The Contractor is responsible for payment of all fines resulting from any action or inaction on his part or the part of his subcontractors during performance of the Work that causes the facility/facilities to operate in an illegal manner or fail to operate in a legal manner.

1.02 SCOPE OF WORK

A. This contract provides for the following correction measures:

1. Cleaning – Clean lines as identified by work order from Engineer.
2. Internal Inspection – TV and videotape all lines identified by work order from Engineer.
3. Main Line Point Repairs – Excavate and repair mainline by work order from Engineer.
4. Pipe Bursting Existing Sewers – pipe busting all sewers identified by work order from Engineer.
5. Mechanical Root Removal – Remove all roots in those sewers identified by work order from Engineer.
6. Smoke Testing – Smoke test those sewers where identified by work order from Engineer.

7. Manhole Repair – Repair those manholes where identified by work order from Engineer.
8. Cured-In-Place (CIP) – CIP all sewers where identified by work order from Engineer.
9. Dig and Replace – Dig and Replace mainline sewers from manhole to manhole.

1.03 DESIGNATION OF PARTIES

All references in the specifications, contract documents and drawings to “Owner” shall mean the Lexington-Fayette Urban County Government (LFUCG); all references to “Engineer” shall mean the LFUCG Division of Water Quality or authorized representative.

1.04 ACCESS TO AND INSPECTION OF WORK

Representatives of the Kentucky Department of Health, the Kentucky Department for Natural Resources and Environmental Protection and the local public health agencies shall at all times have full access to the project sites for inspection of the work accomplished under this contract and for inspection of all materials intended for use under this contract. The contractor shall provide proper facilities for such access and inspection.

1.05 UTILITIES REQUIRED BY CONTRACTOR

All water, electric current and/or utility service required by the Contractor shall be furnished at his own expense.

1.06 TAXES, WORKMEN’S COMPENSATION AND PREVAILING WAGE

Proposals shall be made to include any applicable taxes on payrolls, materials, equipment, vehicles, utilities, etc., including the Kentucky Sales Taxes and shall include compensation for such taxes on all work under this contract.

The Contractor will be required to accept liability for payment of all payroll taxes, sales and use tax, and all other taxes or deductions required by local, state or federal law, such as social security. The Contractor shall carry Workmen’s Compensation Insurance to the full amounts as required by Statutes and shall include the cost of all foregoing items in the proposal. The Contractor will not otherwise be reimbursed or compensated for such tax payments. The Contractor is urged to ascertain at his own risk and actual tax liability in connection with the execution or performance of this contract.

- * Federal or state wage rates and regulations, if required for this Contract, will be as described in the Special Conditions Section. State Wage Scale is not required on this contract.

1.07 WORK ON PRIVATE PROPERTY

- A. Private property is defined as property other than that belonging to the Owner. Highway and railroad rights-of-way, public parks, schoolyards and other such properties shall be considered private properties for the purpose of this contract.
- B. In connection with sewer lines or other work performed on "private property", the Contractor shall confine his equipment, the storage of materials and the operations of his workmen to rights-of-way provided for the project by the Owner, and shall take every precaution to avoid damage to the buildings, grounds and facilities of the owners of private property. The Contractor shall be responsible for any damages to public and/or private property resulting from any work under this contract. If, in the Engineer's judgment, prior to or during a repair, it becomes evident that resultant damage will occur, the Engineer shall have the option to change the repair to a Time and Materials basis.
- C. Other responsibilities involving access to work shall be as provided for in the General Conditions Part IV, 12.2.
- D. No work shall take place on private property until the property owner has been contacted and a person spoken to. Door hangers are not an acceptable means of contact. At the time of contact, the scope of work shall be discussed and a time frame for the work to occur shall be set. Restoration of site shall also be discussed and an agreement met on restoration at this time. If this schedule cannot be met, the property owner must be contacted again and a new schedule set. Pictures and video shall be taken before work is initiated. Fences, walls, hedges, shrubs, etc., shall be carefully removed, preserved, and replaced when the construction work is completed. No separate payment shall be allowed for removal and replacement of fencing as necessary, to restrain livestock or domestic pets. Grassed areas, other than lawns, shall be graded, fertilized and sodded or seeded when construction is completed in accordance with the requirements of these Technical Specifications and is included in price of repairs.
 1. The Contractor must inform the property owners of the proper method of care for the sod once the sod has been replaced, (see Section 1.22).
 2. Trees and shrubs shall be replaced under separate contract or time and material. The Contractor shall inform the Engineer prior to any construction that may damage or destroy trees on private property. The Contractor shall also provide a list of destroyed trees to the LFUCG prior to or during planting season.
 3. Care shall be taken by the Contractor to remove only the trees, brush, shrubs, etc., necessary for pipeline installation while working on private property. All cleared and grubbed materials shall be removed from the site and disposed of at the Contractor's expense.

4. When construction is completed, the facilities and grounds of the private property owners shall be restored to as good or better condition than found within 5 working days at the Contractor's expense. Pictures taken prior to work shall be referenced for pre and post assessments.
- E. Foundation shoring and bracing is a separate pay item to be paid on a time and materials basis when approved by the Engineer. Excavations to be made below the bottom of the foundation, shall be supported by shoring, bracing or underpinning as long as the excavation shall remain open or thereafter if required to insure the stability of the foundation, and the Contractor shall be held strictly responsible for any damage to said foundations.
1. As the primary objective, this project is to make cost effective reductions of infiltration and inflow. The Engineer will, in most cases, direct the contractor to not perform repairs adjacent to foundations.
- F. It shall be the Contractor's responsibility to notify private property owners **A MINIMUM OF ONE WEEK** in advance prior to any site access. **Contractor must speak to a person.** Repair notices must be distributed to these property owners. These repair notices will inform the resident the type of work being conducted and area will be sodded when done in grassy areas. The names and addresses of notified private property owners shall be recorded on distribution logs and said logs shall be delivered to the Division of Water Quality 48 hours prior to the commencement of work. **If not received work cannot begin.** Sample of notice and log forms are in Section 11.
- G. In an effort to minimize potential restoration disagreements with private property owners, **the Contractor shall be required to take "Pre-Build" record digital photographs and video of the work sites a copy of these photos are to be submitted to the Engineer and are not a separate pay item.** It shall also be the Contractor's responsibility to maintain said photographs for future use.

1.08 RIGHT-OF-WAY REQUIREMENTS

- A. Public Right-of-Way shall be maintained on state and LFUCG highways and streets at all times during inspection and/or construction of pipelines across or alongside said highways and streets. On LFUCG maintained streets and alleys, the Contractor shall abide by Chapter 17C of the Lexington Fayette County Urban County Government concerning Public Rights of Way. The Contractor shall obtain any permits related to or required by, the Work in this Contract. The initial LFUCG ROW permit fee will be paid for by DWQ for this contract, but any extension or fine shall be paid by the Contractor. A copy of the Public Right-of-Way Ordinance can be found at https://library.municode.com/ky/lexington-fayette_county/codes/code_of_ordinances?nodeId=COOR_CH17CPURI-W.

B. It shall be the Contractors responsibility to notify the LFUCG Police Department's Safety Officer (859) 258-3600 prior to performing any construction work, which might interfere with traffic or compromise the public welfare or safety.

C. Access to all existing subdivisions and private residences shall also be maintained unless otherwise directed.

1.09 EROSION AND SEDIMENT CONTROL

All excavation activities involved in this contract shall comply with Chapter 11 of the LFUCG's Stormwater Manual. A copy of the Stormwater Manual can be found at https://drive.google.com/file/d/0B_VhcJmdL_nhTThoZnJsWIBmZkk/view

1.10 SCHEDULING OF WORK AND REPORTING

On a weekly basis, the Contractor shall provide the Engineer with a tentative one-week work schedule. **This schedule shall be completed and delivered to the Engineer by Thursday morning of each week.** The Contractor shall make every effort to thoroughly plan his work and shall adhere to the schedule as closely as possible. **Daily work logs will be turned in the day following the day the work is performed except for weekends and Holidays, in which case the daily's shall be turned in on the next work day.**

1.11 RECORD DRAWINGS

The Contractor shall keep accurate records on the construction progress (type of work performed, extent of repairs, location, etc.) on a day-to-day basis. A qualified representative of the Contractor shall enter these into a construction logbook. Entries and notations shall be made in a neat and legible manner, and these logs delivered to the Engineer upon completion of construction. Approval for final payment will be contingent upon compliance with this provision.

1.12 DRAWINGS AND INFORMATION TO BE FURNISHED BY THE CONTRACTOR

A. The Contractor shall review and check shop drawings and submittals. He shall indicate his review by initials and date, and shall also reference each of the applicable items, section or division of the specifications. If the drawings or submittals deviate from the Standard Drawings or these Technical Specifications, the Contractor shall advise the Engineer, in writing, of the deviation and the reasons therefore.

B. In the event the Contractor obtains the Engineer's acceptance for the use of material or equipment other than that which is shown on the Standard Drawings or these Technical Specifications, the Contractor shall, at his own expense, and using methods acceptable to the Engineer, make any changes to structures, piping, electrical work, etc., that may be necessary to accommodate this equipment.

- C. Review by the Engineer of shop drawings or submittals of material and equipment shall not relieve the Contractor from the responsibility of furnishing same of proper dimension, size, quality, quantity, materials, and all performance characteristics to efficiently perform the requirements and intent of the Standard Drawings and these Technical Specifications. Review shall not relieve the Contractor from responsibility for errors of any kind on the shop drawings. Review is intended only to assure conformance with the design concept of the project and compliance with the information in the Standard Drawings and these Technical Specifications.

1.13 COMPLIANCE WITH SAFETY REGULATIONS

- A. The equipment items and work furnished shall comply with all governing federal and state laws regarding safety, including all requirements of the Occupation Health and Safety Act of 1970 (OSHA). **It shall be the contractor's responsibility to provide signs, traffic control devices, and all equipment and devices needed to comply with OSHA rules and regulations throughout the duration of this contract and is to be included in the cost of work to be done, except for flaggers or arrow boards which must be approved by the Engineer and will be a separate pay item. Flaggers shall be trained and equipped to regulate traffic when construction operations or traffic encroach on public traffic lanes. CONTRACTOR's foreman shall be OSHA certified as a competent person.**
- B. Contractor shall abide by OSHA, County and State regulations governing utility construction work, and LFUCG Engineering Construction Manuals.
- C. Traffic control shall be provided according to the Kentucky Department of Highways Manual on Uniform Traffic Control devices for Streets and Highways.

1.14 MAINTENANCE AND OPERATIONS MANUAL

- A. Every piece of equipment furnished and installed shall be furnished with complete maintenance and operations manuals. These shall be detailed in instructions to the Owner's personnel.
- A. All bulletins, brochures, instructions, parts lists, and warranties packaged with and accompanying materials and products delivered and installed on the project shall be saved and transmitted to the Owner through the Engineer.

1.15 PERFORMANCE BONDS AND PAYMENT BONDS

- A. Performance bonds and payment bonds, as specified in Article 10, of Part II INFORMATION FOR BIDDERS, shall continue for a period of one (1) year after acceptance of the work by the Owner and Engineer. These bonds shall be executed on the forms provided as part of the Contract Documents.

- B. If the Contract is extended for additional years, the Performance and Payment bonds must be renewed prior to the extension.

1.16 CONCRETE PAVEMENT REMOVAL

- A. Some excavations for mainline point repairs, sewer line removal and replacement, will require concrete pavement removal. The Contractor shall furnish all Supervision, labor, equipment, and materials for this work.
- B. Removal of Portland cement concrete is not a separate pay item.

1.17 ROCK REMOVAL

No rock blasting is anticipated for this project. Any necessary rock removal shall be accomplished by mechanical means. Rock removal will be paid by the cubic yard and shall include the cost of all equipment necessary for removal. (Bid item D1). Concrete filled ditches as well as concrete encased around pipe shall be considered trench rock and paid by the cubic yard.

1.18 OBSTRUCTIONS

- A. In cases where storm sewers, sanitary sewers, gas lines, water lines, telephone lines, electric lines, or other underground structures are encountered, they shall not be displaced or disturbed unless necessary, in which case they shall be replaced in as good condition as found as quickly as possible. All such lines or underground structures damaged or disturbed by the construction shall be replaced at the Contractor's expense, unless in the opinion of the Engineer, such damage was caused through no fault of the Contractor.
- B. The Contractor shall notify the utility companies a minimum of 72 hours prior to any excavation adjacent to their facilities, and shall locate all such facilities with their assistance.
- C. Utility markings are the responsibility of the Contractor and he shall follow all requirements associated to BUD/ utility markings. Any fines given out because of failure to comply with requirements will be paid for by the Contractor at his own expense.

1.20 WARRANTY AND ACCEPTANCE

- A. The Contractor shall warranty all work to be free of defects in workmanship or materials for a period of one year from the date of completion of all construction. If work meets these specifications, a letter of acceptance, subject to the one-year warranty period, shall be given at the time of completion. A final acceptance letter shall be given upon final inspection at

the end of the warranty period, provided the work still complies with these specifications. In the event deficiencies are discovered during the warranty period, they shall be corrected by the Contractor before the final acceptance. The determination of the necessity during the warranty period for the Contractor to repair or replace the work in whole or in part shall rest with the Owner whose decision in the matter shall be final and obligatory upon the Contractor.

- B. All work covered by the Public Right-of-Way Ordinance (see Section 13) shall be warranted by the Contractor for a period of two years from the date of completion of work.

1.21 EMERGENCIES

The Contractor shall provide the Owner and Engineer with an emergency telephone number where he or his coordinator may be reached on a 24 hour, daily basis. The Contractor, upon notification by the Owner of needed emergency repairs, shall start such work within four hours and complete such work within twelve hours of said notification by telephone. If repairs are not started or completed within the above time limits, the Owner, at its option, shall make such repairs and invoice the Contractor the actual cost of labor, equipment, and materials plus actual overhead. The Contractor shall also be liable for costs of pumping sewage, if done by the Owner, as an emergency measure.

1.22 SEEDING, SODDING AND TOPSOIL

- A. All sod and seed work required from work in this contract is included in the cost of the work to be done. There is no separate pay item for sod, seeding or any other work associated with sod or seeding listed herein.
- B. The work covered by this section shall include the establishment or restoration of all ground cover including areas to be sodded. This work consists of furnishing all labor, equipment, and materials and all operations in connection with the placement of sod on all finished graded areas not occupied by structures, roads, curbs and gutters, sidewalks, and concrete slab walls, etc., and including grassed areas destroyed or damaged by the Contractor.
- C. Sod shall be bluegrass or fine fescue sod strongly rooted and free of pernicious weeds. It shall be a uniform thickness of not more than 1-1/2 inches and shall have not less than 3/4 inches of soil. All sod shall be grown on a commercial turf farm and no pasture sod shall be acceptable. The source of the sod must be approved by the Engineer before it is cut for delivery.
- D. The sod shall be delivered and installed within 48 hours of being harvested by the producer.
- E. The areas where sod is to be placed shall be thoroughly tilled to a m depth of at least 4 inches by discing, harrowing, or other approved methods until the condition of the soil is acceptable to the Engineer. After harrowing or discing, the sod bed shall be dragged and/or hand raked to 1/2 inch below finish grade.

- F. The incorporation of the fertilizer shall be a part of the tillage operation and shall be applied not less than 24 hours nor more than 48 hours before the sod is to be placed. The entire area to be sodded shall be fertilized with 5-10-5 at the rate of 5 pounds per 1,000 square feet.
- G. Prior to the sod being placed, the area to be sodded shall be lightly watered to moisten the soil surface. The sod shall be carefully unrolled and trimmed to fit irregular areas, with the edges of the sod strips placed tightly together in such a manner as to conceal the joints between the strips. Weed roots shall be removed as the sod is laid. Following placement, the sod shall be lightly watered (approximately a 1/4" application) and rolled with a medium weight lawn roller to minimize any ridging at the seams. The finished surface shall true to grade, even and equally firm at all points. Well-screened topsoil shall be lightly sprinkled over the sodded areas and shall be raked to ensure sealing of the sod joints. Contractor shall be required to thoroughly water sod twice weekly for a period of 30 days and shall be included in the price of the repair. If private property owner's water is to be used Contractor must get permission from owner/s and their name submitted to Engineer to keep in his records. Logs shall be turned in on a weekly basis showing point repairs where lawns were watered to allow tracking to avoid missing yards needing attention. If sod is neglected by contractor and it fails to live the contractor will be required to replace the sod at their cost.
- H. Sod may be placed whenever the sod is not dormant, and the ground is not frozen or muddy. Sod may not be placed at any other time. When the weather does not permit sod to be placed the area should be covered with winter fescue and straw until the conditions change to the point when sod work can be done.
- I. In the event a resident does not want sod but would rather have seed and straw the Contractor must do the following. For seed and straw all graded areas shall be left smooth and thickly sown with a mixture of grasses as are specified by the Engineer, at a rate of not less than one pound of seed per 1,000 square feet. Unless otherwise specified, the mixture shall consist of 60 percent Italian Rye Grass, 20 percent Kentucky Fescue #31 and 20 percent Kentucky Bluegrass by weight. When the final grading has been completed, the entire area to be seeded shall be fertilized with 5-10-5 at the rate of five pounds per 1,000 square feet. After the fertilizer has been distributed, the Contractor shall rake, disc or harrow the ground to thoroughly work the fertilizer into the soil. The seed shall then be broadcast either by hand or by approved sowing equipment at the rate specified. After the seed has been distributed, the Contractor shall then lightly cover the seed by use of a drag or other approved device. All seed shall be certified. The seeded area shall then be covered with straw to a depth of approximately 1-1/2 inches. The Contractor prior to final acceptance shall accomplish any necessary reseeding or repairing.
- J. If the construction work is brought to completion when, in the opinion of the Engineer, the season is not favorable for seeding, then the Contractor shall put down a winter fescue with straw until the conditions change to the point when they can seed it as stated above in this section. Temporary seeding is not a pay item and is incidental to the final sod or seeding.

1.23 COMMUNICATIONS

The Contractor shall also provide, for the duration of the contract, for the Engineer and/or the Owner's representative(s) a means of direct communication acceptable to the Engineer. This may be in the form of a cell phone number or email address. The form of communication and pertinent information related to the mode of communication must be provided to the Engineer and/or the Owner prior to start of construction.

1.24 HIGHWAY RIGHT-OF-WAY MARKERS

The Contractor shall accurately reference all highway right-of-way markers and LFUCG survey monuments that are destroyed or displaced by construction under this Contract, and shall restore and replace all such destroyed or displaced right-of-way markers in kind accurately and complete in place. This replacement shall be coordinated with the Engineer prior to completion.

1.25 FLOW CONTROL

- A. The Contractor shall furnish and install all sewer plugs, bypass piping and pumping equipment where necessary to adequately handle existing flow rates during the inspection, testing, sealing and repair processes. The Contractor will also provide monitoring of bypass or plugging until such time they can be removed and flow restored to normal operation. Any overflow shall be reported to the Engineer and the Kentucky Division of Water. (See Section 4: SEWER FLOW CONTROL.)
- B. In general, the pumping equipment shall be positioned in or near the upstream end of the sewer section with piping laid to the next downstream manhole. Sewage shall only be bypassed to a downstream sanitary manhole or adjacent sanitary sewers. No overflow will be permitted.
- C. Whenever flows in a sewer line are blocked or plugged, sufficient precautions shall be taken by the Contractor to protect the sewer lines from damage that might be inflicted by excessive sewer surcharging. Further, precautions shall be taken by the Contractor to insure that sewer flow control operations do not cause flooding or damage to public or private property being served by the sewers involved. If such damage occurs, it shall be the Contractor's responsibility to clean, disinfect, and replace, where appropriate, any and all damaged public or private property as quickly as possible. The Contractor shall be available or make the necessary arrangements to perform work of this nature.
- D. Whenever bypass pumping is included in a pay item this being main lines 12" or below, (main line point repairs, pipe bursting, removing and replacing mains, etc...) it includes set up and the hourly time and employee to monitor equipment to avoid damage caused by equipment failure or other factors that may lead to property damage.

1.26 STANDARD DRAWINGS

Any reference to Standard Drawings herein refers to the "Standard Drawings 2017" and "The Division of Engineering Manuals" issued by the Lexington-Fayette Urban County Government, Department of Environmental Quality, and Division of Engineering. The Contractor is advised to obtain a copy of all these documents prior to the commencement of any contract work. https://www.lexingtonky.gov/sites/default/files/2017-11/LFUCG%20Standard%20Drawings%202017_Optimized_0.pdf

1.27 DAILY CLEAN UP

At the end of each working day, the Contractor shall conduct a daily clean up of trash, product containers, and misc. debris, at the individual work sites where he has performed or is performing repairs, as directed by the Engineer.

1.28 TEMPORARY TRENCH PROTECTION

In the event that repairs cannot be completed by the end of the normal working day, this being between the hours of 7:30am to 4:00 pm temporary fencing and flash barricades shall be installed around the open trench as necessary to ensure that the open pit is highly visible and to impede access. In streets that must be opened to traffic prior to completion of the repair, the trench shall be covered with steel plates capable of bearing traffic loads. At no time shall traffic be allowed to run on DGA or any other stone backfill. If plates are not utilized, temporary blacktop or cold patch may be substituted at no additional cost.

1.29 FINAL CLEAN UP

The work will not be considered as completed and payment will not be made until all final cleanup is complete and the Contractor has effected site restoration in a manner satisfactory to the Engineer. The final cleanup of each individual work site shall be performed within 5 working days of the sewer repair work. Any excess material shall be removed from site at no additional cost and shall be incidental to the line item work being performed.

1.30 FEDERAL, STATE, AND LOCAL LAWS

It shall be the Contractor's responsibility to research, understand, and comply with all federal, state, and local laws, codes, regulations, ordinances, etc., which relate to performing the work as described within this contract.

1.31 LOCATION OF WORK SITES

- A. In general, the work sites contained in this contract are separated by moderate to large distances, as compared with many other rehabilitation projects.
- B. It shall be the Contractor's responsibility to locate all work sites, including individual manholes. Manholes should be numbered in the field with spray paint in accordance with the numbering system used. On the drawings. The Contractor shall verify his

locations with the Engineer prior to commencement of any work. The Engineer will provide the drawings.

1.32 COORDINATION MEETINGS:

The Contractor's project coordinator shall be required to attend any scheduled meetings with the Owner and Engineer. The Engineer will announce the location, date and time of any meeting scheduled. The purpose of these meetings will be to insure proper communication between all parties, convey pertinent information, and to discuss the status of the project.

END OF SECTION

TECHNICAL SPECIFICATIONS
SECTION 2
CLEANING AND INTERNAL INSPECTION

1.01 CLEANING

A. GENERAL INFORMATION

Furnish all Supervision, labor, materials, and equipment to remove grit, grease and debris from sanitary sewer lines using high-velocity jet (hydro cleaning) equipment. The Contractor is responsible for debris removal and proper disposal in accordance with federal, state, and local standards. Sanitary sewer service must be maintained during cleaning operations.

All cleaning, including heavy, for lines ten inches and smaller is incidental to the line item and shall be not be a separate pay item. All heavy cleaning of lines twelve inches in diameter and larger shall be part of line item price. If heavy cleaning for lines twelve inches and greater is required, request must be made prior to cleaning being performed for approval. This includes routine cleaning.

All cleaning, root removal, and CCTV work associated with CIPP work shall be incidental to the CIPP.

B. METHODS

1. The designated sewer line and sewer manhole sections shall be cleaned using a high-velocity jet. Selection of the equipment used shall be based on the conditions of the sewers at the time the work commences. The equipment and methods selected shall be satisfactory to the Engineer. The equipment shall be capable of removing dirt, grease, rocks, sand, and other materials and obstructions from the sewer lines and manholes. If cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be set up on the other manhole and cleaning again attempted. Extreme care should be taken to prevent flooding of public/private property. If, again successful cleaning cannot be performed or the equipment fails to traverse the entire manhole section, it will be assumed that a major blockage exists and the cleaning effort shall be abandoned and the Engineer notified.
2. Heavy cleaning is defined as cleaning necessary to remove grit or other material deposits exceeding 25% of the pipe diameter at the pipe invert for the entire reach of pipe, or to remove grease deposits at a depth past the spring line of the pipe.

C. EQUIPMENT

1. High-Velocity Jet (Hydrocleaning) Equipment: All high-velocity sewer cleaning equipment shall be constructed for ease and safety of operation. The equipment shall have a selection of two or more high-velocity nozzles. The nozzles shall be capable of producing a scouring action from 15 to 45 degrees in all size lines designated to be cleaned. Equipment shall also include a high-velocity gun for washing and scouring manhole wall and floors. The gun shall be capable of producing flows from a fine spray to a solid stream. The equipment shall have minimum of 500 feet of 1-inch ID high-pressure hose, a minimum capacity of 60 gallons per minute (GPM), and a working pressure of at least 1,200 pounds per square inch (PSI). The equipment shall carry its own water tank capable of holding a minimum of 900 gallons, auxiliary engines, pumps and hydraulically driven hose reel. The equipment may be either truck or trailer mounted as long as it adequately accomplishes the cleaning.
2. All controls shall be located so that the equipment can be operated above ground with minimal interference to traffic and/or danger to the operator.

D. MECHANICAL ROOT REMOVAL

1. Roots shall be removed in the designated sections where root intrusion is a problem. Special attention should be used during the cleaning operation to assure complete removal of roots from joints. Any roots that could prevent the proper installation of cured-in-place liners shall be removed. Procedures shall include the use of mechanical equipment such as root augers, porcupine drags or similar equipment. Line segments requiring root cutting shall be verified by CCTV inspection.
2. The root auger equipment shall be approximately the same diameter as the sewer being cleaned. The auger(s) shall be kept sharp and have an attachment mounted ahead of the cutter that will permit the tool to "ride into" the next length of pipe rather than be stopped by an irregularity or offset in the pipe wall.
3. The porcupine drag shall be of a smaller diameter than the sewer being cleaned. The porcupine shall have stiff wire bristles that project an adequate distance so as to contact the sewer walls and effectively remove the majority of roots encountered.

E. MATERIAL REMOVAL

1. All sand, rocks, roots, grease, and other solid or semisolid material resulting from the cleaning operation shall be removed at the downstream manhole of the section being cleaned. Passing material from manhole section to downstream manhole sections could cause line stoppages, accumulations of sand in wet wells, or damage pumping equipment and shall not be permitted. **If it is observed by the Engineer or his representative that materials have been allowed to be passed to the next downstream section, the Contractor will be required to both clean**

and CCTV that section at their cost with an inspector present to verify line is cleaned.

2. The Contractor shall furnish all equipment and appurtenances required for removal of the debris from the sewer system. No extra payment will be made for removing or disposing of the debris since this is considered a part of the cleaning scope of work.
3. All materials shall be removed from the site no less often than at the end of each workday. Under NO circumstances will the Contractor be allowed to accumulate debris, etc., on the site of work except in totally enclosed containers approved by the Engineer.

F. DISPOSAL OF DEBRIS

1. Unit prices for cleaning shall include the cost of trapping and removing any and all roots, sediments, and residual wastes from sewer systems and manholes as cleaning progresses. Where a hydraulic jet sewer cleaner is used to scour and flush sewer lines, a vacuum unit or other suitable method as approved by the Engineer shall be used in conjunction with the hydraulic jet cleaner to remove and dewater the suspended matter from the downstream manhole.
2. The Contractor shall provide for adequate transportation and satisfactory disposal of the debris removed from the system. Debris shall be disposed of at LFUCG's Town Branch Wastewater Treatment Plant (WWTP) or other locations designated by LFUCG.

G. ACCESSIBILITY OF WATER FOR CLEANING

The Contractor shall be required to obtain all fresh water necessary for performance of work under this contract.

H. PROTRUDING TAP REMOVAL

Protruding taps shall be removed in the designated sections where service lateral pipe intrusion is a problem and protruding tap removal is specifically requested by the Engineer. A power driven cutting device shall be used to cut the service lateral pipe to a length of ¼ inch or less intrusion. Monitoring of this process through CCTV is necessary to prevent damage to the sewer pipe and/or service lateral pipe. If damage does result from operator negligence, the Contractor will be responsible for making any repairs. The Contractor should take every precaution to prevent accidental damage to the sewer pipe. The CCTV inspection is to be included in the Protruding Tap Removal line item price and the DVD shall be submitted to the Engineer within one week after the repairs is completed.

J. FINAL ACCEPTANCE

1. Acceptance of this portion of the work shall be made upon the successful completion of the subsequent internal television inspection and shall be to the satisfaction of the Engineer. Where cleaning is not found to be satisfactory, additional cleaning, up to three passes may be required by the Engineer at no cost to the Owner.
2. If cured-in-place liner is to follow the television inspection, particular attention shall be given to the adequacy of the cleaning to insure that the condition of the host pipe shall be acceptable for liner installation.

2.02 INTERNAL INSPECTION

A. GENERAL

All lines designated by the Engineer shall be internally inspected. The purpose of the inspection is to locate structural damage that may be present in the collection pipe. CCTV shall be performed using software that is PACP approved by an operator that is PACP certified. **This data must be submitted in PACP version 4.4.2 unless otherwise requested.** This allows for the data to be used in the ACCELA database. If any other method is used and submitted it shall be rejected and a new survey using appropriate software shall be submitted. Cumulative merged CCTV submittals shall be made twice per year for data collected between January 1 and June 30 and data collected between July 1 and December 31 for EPA reporting. Data shall be delivered no later than 10 calendar days from the last CCTV collection date.

All CCTV work associated with CIPP work shall be incidental to the CIPP.

If the contractor is using more than 1 CCTV truck, the data shall be combined into one database before submittal to LFUCG for review. The Contractor should also check the data for errors and make sure that the data is consistent. Some of the errors include making sure that the Pipe ID's match GIS. The Contractor should be able to take a list of valid GIS manhole and pipe ID's and find the ones in their database that don't match GIS.

1. After cleaning, the collection pipe shall be visually inspected by means of closed circuit television (CCTV). The inspection will be done one pipe section at a time and the flow in the section being inspected will be suitably controlled as specified. (See Section 3: SEWER FLOW CONTROL.)
2. Any structural damage found in the collection pipe impairing the CCTV inspection, shall be documented and the Engineer should be notified immediately. The Engineer and Owner will evaluate the damage and, if cost-effective, the

Engineer will notify the Contractor in writing to proceed with additional repairs. These repairs will be made at the unit prices shown on the Contractor's Bid Proposal.

3. The Owner makes no guarantee that all of the sanitary sewers to be entered are clear for the passage of a camera (This includes possible utilities accidentally passing through). The methods used for securing passage of the camera are to be at the option of the Contractor, and the costs must be included in the bid price for television inspection. The cost of retrieving the television camera, under all circumstances, when it becomes lodged during inspection, shall be incidental to this portion of the work.

B. EQUIPMENT:

1. The self-Propelled Lateral Inspection / Pan and Tilt Mainline Inspection System shall be designed to operate in a 6" - 30" mainline sewer pipes and lateral pipes 2" and larger in diameter. The system shall be able to accomplish pan and tilt inspection of the mainlines and view the lateral services, and a second camera will be supplied to enter the lateral service from the mainline to inspect up a maximum of 80 ft. into the lateral. The multi-conductor system shall operate a 0'-1000' cable utilizing dual cable reels only and shall have the ability to display both mainline and lateral footage. The self-propelled lateral inspection / pan and tilt mainline inspection system shall be compatible with additional main line television inspection equipment.
2. Cameras shall be "waterproofed" with capability of operating in underwater conditions up to 5 psi. Cameras shall be operable in 100% humidity conditions. The equipment shall have a built-in inclinometer to measure the slope and grade of the sewer line.
3. The Engineer and Owner shall have access to view the television monitor at all times. Video shall be DVD and mpeg format and shall be recorded at standard speed.

C. REQUIRED METHOD FOR INTERNAL INSPECTION

1. A PACP certified technician shall control the operation of the equipment from a control panel located in the vehicle and shall have control of the movement of the television camera at all times. This may be accomplished by means of a self-propelled camera unit, remote-control winches, by telephone or other suitable means of communications between the winches at either end of the line segment being inspected.
2. CCTV inspection shall meet all PACP requirements, including recording of slope and distance. **The PACP certified technician must record all defects.** A failure to pass Quality Control reviews including both adherence to PACP and ACCELA

compatibility of televised lines shall result in Contractor performing another CCTV inspection of lines at the Contractors expense.

3. The camera shall be moved through the sewers in the downstream direction at a uniform rate not to exceed 30 ft/min., stopping when necessary to ensure proper documentation of the sewer's condition. Manual winches, power winches, TV cable and power rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions may be used to move the camera through the sewer line.
4. The camera will stop at each service connection and use the pan and rotate controls of the camera to inspect the condition of the service lateral. The camera operator shall perform a 360-degree rotation around each service connection and a full center view down the centerline of the lateral opening. The minimum time frame spent at each lateral location is 15 seconds. Additional time may be required for defective laterals. This is not a separate pay item.
5. If during the inspection operation, the television camera will not pass through the entire manhole section, the Contractor shall set up his equipment so that the inspection can be performed from the opposite manhole. If the camera again fails to pass through the entire manhole section, the Contractor shall notify the Engineer of the situation.

D. INSPECTION LOGS AND CD/DVDS

1. All CD/DVDS, and logs shall be labeled with the Contractors Name, Contract number, DVD number (logs must match that number) and with each Contractor the DVD/ logs must start at number 1 and progress upward till the end of this contract (this does not include any lateral CCTV work). The contractor shall supply the LFUCG 2 CD/DVDs copies of each submittal of CCTV work. **No Pay for CCTV until an acceptable copy of the DVD and logs are received by the engineer.**
2. A log approved by the Engineer shall be provided for all line inspections listing the watershed, line segment ID, line segment location, upstream manhole depth, downstream manhole depth, pipe diameter, pipe material, defects and defect ratings, also see notes above. Printed and digital records shall be kept by the Contractor and will clearly show the location of each infiltration point observed during inspection. In addition, other points of significance such as locations of service connections, unusual conditions, roots, storm sewer connections, damaged pipe, presence of scale and corrosion and other discernable features will be recorded and a copy of such records in both hard copy and digital format will be supplied to the Engineer on a weekly basis. **The digital records must be submitted in PACP version 4.4.2 unless otherwise requested.** A key to all observations used shall be included on each log sheet.
3. The locations of all the defective areas to be repaired will be identified by logging the distance frame at each defect or point of interest measured from the center of

the starting manhole to the plane of focus of the camera. The importance of accurate distance measurements is emphasized. Confirmation of measurement for location of defects shall be above ground by means of a meter device. Accuracy of the distance meter shall be checked by use of a walking meter, roll-a-tape or other suitable device, and the accuracy shall be satisfactory to the Engineer. Marking on the cable or the like, which would require interpolation for depth of manhole, will not be allowed.

4. The purpose of DVD recording shall be to supply a visual and audio record of problem areas of the lines that may be replayed. DVD recording playback shall be at the same speed that it was recorded. DVDs shall be considered property of the Owner and the Contractor shall possess backup copy of all DVDs until completion of the Contract. All CCTV work must be recorded on DVD's using a PACP approved software operated by a PACP certified operator and the Contractor must supply the LFUCG a readable copy of said software to view these DVD's.

E. FINAL ACCEPTANCE

Acceptance of this portion of work shall be made upon the successful review of the DVD submitted to the LFUCG. If the DVDs are of such poor quality and/or the sewer line needs additional cleaning that the Owner is unable to evaluate the condition of the sewer line or to locate service connections, the Contractor shall be required to re-televis and provide a suitable DVD of the line at no additional cost. If a suitable DVD cannot be provided of such quality that the Owner can review it, no payment shall be made for additional cleaning and/or closed circuit television (CCTV). Also, no payment shall be made for portions of lines not televised or portions where manholes cannot be negotiated with the television camera.

F. MISCELLANEOUS

The Contractor's Project Coordinator shall provide the Engineer with a tentative weekly schedule, and shall also provide daily notification of those areas to be investigated.

2.03 CCTV LATERAL INSPECTION

A. GENERAL

1. All CD/DVDS, and logs shall be labeled as a lateral inspection with the Contractors Name, Contract number, (logs must match that number) and with each Contractor the DVD/ logs must start at number 1 and progress upward till the end of this contract.
2. All lines requiring repair shall be internally inspected prior to performing repair work. The purpose of the inspection is to locate structural damage that may be present in the service pipe. **No pay for CCTV of laterals until an acceptable**

copy of the DVD and logs are received by Engineer. Any laterals submitted for payment that does not have a video and log will not be paid for. All data must be in PACP format which will allow for it to be incorporated into the ACCELA database.

3. The service pipe shall be visually inspected by means of closed circuit television. The inspection will be done one pipe section at a time and the flow in the section being inspected will be suitably controlled as much as possible.
4. Any structural damage found in the service pipe shall be documented and the Engineer should be notified immediately. The Engineer and Owner will evaluate the damage and, if cost-effective, the Engineer will notify the Contractor in writing to proceed with additional repairs. These repairs will be made at the unit prices shown on the Contractor's Bid Proposal.
5. The Owner makes no guarantee that all of the sanitary sewers to be entered are clear for the passage of a camera. The methods used for securing passage of the camera are to be at the option of the Contractor, and the costs must be included in the bid price for television inspection. Pay for CCTV of laterals will be approved once an acceptable copy of the DVD and Logs are received and approved by the Engineer. The cost of retrieving the television camera, under all circumstances, when it becomes lodged during inspection, shall be incidental to this portion of the work. It is the Contractors responsibility to verify locations of any repairs resulting from said televising of these service lines.

B. INSPECTION LOGS AND VIDEO

1. Logs must meet PACP standards and shall be provided for all line inspections listing the watershed, the house address, line segment, pipe diameter, pipe material, defects and defect ratings. Recorded DVD's shall be kept by the Contractor with a copy of logs showing the location of each infiltration point observed during inspection. In addition, other points of significance such as locations of any connections, unusual conditions, roots, storm sewer connections, damaged pipe, presence of scale and corrosion and other discernable features will be recorded and a copy of such records in both hard copy and DVD format will be supplied to the Engineer on a weekly basis. A key to all observations used shall be included on each log sheet. **This data must be submitted in PACP version 4.4.2 unless otherwise requested.**
2. The locations of all the defective areas to be repaired will be identified by logging the distance frame at each defect or point of interest measured from the center of the entry point to the plane of focus of the camera. The importance of accurate distance measurements is emphasized. Confirmation of measurement for location of defects shall be above ground by means of a meter device. Accuracy of the distance meter shall be checked by use of a walking meter, roll-a-tape or other suitable device, and the accuracy shall be satisfactory to the Engineer.

-
3. The purpose of tape recording shall be to supply a visual and audio record of problem areas of the lines that may be replayed. Videotape recording playback shall be at the same speed that it was recorded. Slow motion or stop-motion playback features may be supplied at the option of the Contractor. Videotapes shall be considered property of the Owner and the Contractor shall possess backup copy of all videotapes until completion of the Contract.

C. FINAL ACCEPTANCE

Acceptance of this portion of work shall be made upon the successful review of the DVD's submitted to the LFUCG. **If the DVD's are of such poor quality and/or the Owner is unable to evaluate the condition of the sewer line or to locate service defects, or be in PACP format which will allow the data to be used in the ACCELA database, the Contractor shall be required to re-televis and provide a suitable DVD of the line at no additional cost.** If a suitable DVD cannot be provided of such quality that the Owner can review it, no payment shall be made for additional cleaning and/or closed circuit television (CCTV).

END OF SECTION

TECHNICAL SPECIFICATIONS
SECTION 3
SEWER FLOW CONTROL

3.01 SEWER FLOW CONTROL

A. GENERAL INFORMATION

When sewer line depth of flow at the upstream manhole of the manhole section being worked is above the maximum allowable for television inspection and repairs, the flow shall be reduced to the level shown below by operation of pump stations, plugging or blocking of the flow, or by pumping and bypassing of the flow as specified.

B. ALLOWABLE DEPTH OF FLOW

Depth of flow shall not exceed that shown below for the respective pipe sizes as measured in the manhole when performing television inspection, and repairs.

<u>Maximum Depth of Flow</u>	<u>Television Inspection/Repairs</u>
6" – 10" Pipe	20% of pipe diameter
12" – 24" Pipe	25% of pipe diameter
27" & up Pipe	30% of pipe diameter

C. PLUGGING OR BLOCKING

1. A sewer line plug shall be inserted into the line upstream of the section being worked. The plug shall be so designed that all or none of the sewage can be released. During (CCTV) inspection, and repairs, the flow shall be reduced to within the limits specified above. After the work has been completed, flow shall be restored to normal.
2. Plugging or blocking is considered incidental to the work performed and is not a separate pay item.

D. PUMPING AND BYPASSING

1. Pumping and bypassing set-ups require approval from the Engineer. When conditions found in Section 3.01 B are encountered, the Contractor shall notify the Engineer prior to commencement of work.
2. When pumping and bypassing is required, the Contractor shall supply all hoses, conduits, pumps, piping, adapters, check valves, and other equipment and appurtenances to divert the flow of sewage around the sewer line section in which work is to be performed. If traffic control is required, Contractor shall furnish signs, cones, and other approved traffic control devices as needed. The bypass system shall be of sufficient capacity to handle existing flow plus additional flow that may occur during a rainstorm. **The Contractor will be responsible for furnishing the necessary labor and supervision to set up, operate, and**

..... **monitor the pumping and bypass system.** The equipment should be in good condition and not allow sewage or oil to leak onto the ground or pavement. If pumping is required on a 24-hour basis, engines shall be equipped in a manner to keep noise to a minimum.

3. Bypass pumping, monitoring, set up, and take down when required for sewer lines 10 inches and less is not a separate pay item and is considered incidental to the work.

E. FLOW CONTROL PRECAUTIONS

When flow in a sewer line is plugged, blocked, or bypassed; sufficient precautions must be taken to protect the sewer lines from damage that might result from sewer surcharging. Further, precautions must be taken to insure that sewer flow control operations do not cause flooding or damage public or private property being served by the sewers involved. **If such damage occurs, it shall be the Contractors responsibility to clean, disinfect, and replace, where appropriate, any and all damaged public or private property as quickly as possible.** Any overflow shall be reported to the Engineer and the Kentucky Division of Water.

END OF SECTION

TECHNICAL SPECIFICATIONS
SECTION 4
MAIN LINE REPAIR OR REPLACEMENT

4.01 GENERAL CONDITIONS:

- A. The work to be accomplished under this section of the Specifications consists of the furnishing of all labor, supervision, materials, equipment, and services necessary for the repair or replacement of the sewage collection system requested by the Owner and more fully described hereinafter. All areas disturbed by the Contractor, including pavements, shall be restored to original or better condition. All excess material shall be removed from the work site and disposed of at no additional cost. After all repairs are accomplished between two manholes, **the Contractor will be required by the Engineer to clean and televise the line to verify the adequacy of the repair at no cost to the Owner.** Payment for main line point repairs will be approved upon complete restoration as agreed upon by the Engineer and Contractor. **NOTE: method used for excavation shall be at the Contractor's discretion and must be included in the cost of repair. (i. e. hyro-excavation, backhoe, etc.).**
- B. Reasonable care shall be exercised during the initial excavation of the defective pipe so as not to disturb existing pipe that is still acceptable. After the defective pipe has been exposed, only as much additional pipe shall be uncovered as is necessary to allow space for workmen and the installation of new pipe. The defective pipe shall be cut out in such a way that the ends are straight and smooth and free of chips or cracks. After the defective pipe has been removed from the trench, the trench shall be excavated and bedded as specified hereinafter.
- C. After the trench bottom has been prepared as specified, the replacement pipe shall be cut to a length one inch (1") less than the overall length of the section being replaced. The pipe shall then be placed in the trench and the compression couplings installed. After installation, the work shall be checked to insure that the replacement pipe is vertically and horizontally aligned with the existing pipe and that the compression couplings are tight and evenly fitted. The coupling shall be designed to resist shear loads.
- D. Repairs to lines shall be made with sections of replacement pipe closely matching the existing pipe type and diameter. The replacement pipe shall be as specified hereinafter. The Contractor shall provide manufacturer's literature certifying that the pipe meets the standards described hereinafter.
- E. **THE CONTRACTOR WILL BE REQUIRED TO VERIFY LOCATIONS OF REPAIRS PRIOR TO BEGINNING ANY WORK.** If new defects are encountered during internal inspection, the camera shall be stopped for evaluation. The Contractor

will log the location and type of defect. Repairs described in Section 10, BID SCHEDULE DESCRIPTION, shall be performed unless otherwise directed by the Engineer. No new repairs shall be performed unless specifically requested by the Engineer in writing. New repairs will be at the unit prices shown in the BID SCHEDULE, PART B FORM OF PROPOSAL.

- a. By-pass pumping will be included in the price of repairs on main lines 10 inch diameter pipes or less in size, this includes removing and replacing lines. Lines larger that require by-pass pumping is a separate pay item and must be approved by the Engineer.
- b. The Contractor shall provide all Dust, Erosion, and Sediment controls when needed as set forth by these specifications.

4.02 PIPE

B. POLYVINYL CHLORIDE (PVC) PLASTIC SEWER PIPE

PVC sewer pipe shall be solid wall PVC, SDR 35, conforming to ASTM D3034, with ASTM D3212 integral bell and spigot rubber gasketed joints. As indicated in the Standard Drawings, SDR 26 pipe will be required for certain placement depths or as directed by the Engineer. Gasketed fittings shall conform to the same specifications and be supplied with the pipe.

C. DUCTILE IRON PIPE AND DUCTILE FITTINGS

1. Ductile iron pipe shall be of the bell and spigot push-on, single rubber gasket or mechanical joint type, conforming to the latest revision of ANSI A21.51 with standard thickness as designated for thickness classes as listed herein. Each piece of pipe shall bear the manufacturer's name or trademark, the year in which it was produced, and the letter "DI" or the word "Ductile." Ductile iron pipe shall be Class 250 minimum for gravity sewer lines.
2. Pipe fittings shall be cast or ductile iron, minimum pressure class 150, meeting the requirements of ANSI A21.10. In addition, ductile iron compact fittings, minimum pressure class 350, meeting the requirements of ANSI A21.53 will also be acceptable.
3. All ductile iron pipe and fittings shall have the manufacturers outside asphaltic coating and an interior lining of coal tar epoxy. Protecto 401 lining when required by the Owner will necessitate additional pay. Fittings shall be 60 mils nominal thickness.

C. REINFORCED CONCRETE PIPE

Reinforced concrete pipe shall be ASTM C-76, Class III, bell and spigot or tongue and groove, with ASTM C-443 rubber gasket joints.

D. A-2000 PIPE

A-2000 Pipe is no longer an accepted material for pipe installation. If, however an existing line consisting of A-2000 is found to need a point repair or tee replacement the line and tee if needed shall be replaced with the same material. Gasketed fittings shall conform to the same specifications and be supplied with the pipe.

4.03 PIPE JOINTING

All joint surfaces shall be cleaned immediately before joining the pipe. The bell or groove shall be lubricated in accordance with the manufacturer's recommendation. Each pipe unit shall then be carefully pushed into place without damage to pipe or gasket. All pipe shall be provided with home marks to insure proper gasket seating. Details of gasket installation and joint assembly shall follow the direction of the manufacturers of the joint material and of the pipe. The resulting joints shall be watertight and flexible. **No solvent cement joints shall be allowed.**

4.04 MANHOLES

Manholes of the form and dimensions shown on the LFUCG Standard Drawings shall be built as per LFUCG Standard Drawings 2008. Shop drawings shall be furnished to the Engineer for review prior to fabrication. The manhole shall be constructed of precast concrete sections. They shall be constructed on Class "BB" (3000 psi) concrete foundations. Precast concrete manhole bottom sections may be substituted subject to the Engineer's review.

A. PRECAST CONCRETE MANHOLE SECTIONS

Precast concrete manhole sections (risers and grade rings) shall conform to ASTM C 478.

B. PRECAST CONCRETE ECCENTRIC CONES

Precast concrete eccentric cones shall be of the size and shape shown on the LFUCG Standard Drawings and shall conform to ASTM C 478.

C. PRECAST MANHOLE SECTION JOINTS

Precast manhole section joints shall be mortared or grouted; joined with ASTM C 443 rubber gaskets; joined with AASHTO M-198-75 preformed flexible butyl type joint sealant, Hamilton-Kent "Kent-Seal No. 2", K.T. Snyder Co., "Rub'-r-Nek", "Conseal", or equal; or joined with bituminous mastic joint sealing compound meeting Kentucky Department of Transportation Specification 807.02.04. When making joints with mastic compound prime, and seal all joints with primer supplied with the joint compound. Manhole section joints shall be watertight.

D. MANHOLE INVERTS

1. Manhole inverts shall be formed with Class "BB" concrete as shown on LFUCG Standard Drawings. Inverts for a "straight-through" manhole may be formed by laying the pipe straight through the manhole, pouring the concrete invert, and then cutting the top half of the pipe. Curved invert shall be constructed of concrete, as shown, and shall form a smooth, even half-pipe section as shown. The inverts shall be constructed when the manhole is being built using prefabricated forms.
2. The excavation shall be kept free of water while the manhole is being constructed and the manhole shall not be backfilled until inspected by the Engineer.

E. MANHOLE STEPS

1. Copolymer polypropylene plastic covered #4 rebar (grade 60) manhole steps shall be of the pattern shown on the LFUCG Standard Drawings, type 1, having corrugated treads. The steps shall be resistant to rust and corrosion. Steps shall be manufactured by M.A. Industries, Inc. or equal.
2. Steps shall be driven into specially sized holes cast into the manhole section. Holes shall be formed in the manhole section using an insert plug, which is removed upon curing.
3. Steps shall be aligned vertically above the outlet in line with the flow trough. Step spacing shall be 15" as indicated on the LFUCG Standard Drawings.

F. MANHOLE FRAMES AND COVERS

Manhole castings shall be constructed in accordance with the LFUCG Standard Drawings.

G. WATERTIGHT BOLT DOWN MANHOLE COVERS

Watertight manhole covers shall be constructed in accordance with the LFUCG Standard Drawings.

H. DROPS INTO STANDARD MANHOLES

Drops into standard manholes shall be constructed in accordance with the LFUCG Standard Drawings.

I. PIPE CONNECTIONS INTO MANHOLES

1. Sewer pipe shall be sealed in the manhole section pipe openings with a resilient connector meeting the requirements of ASTM C 923, Dura-Seal III gasket by Dura-Tech Inc., Dayton, Ohio; GHA Lock Joint flexible Manhole Sleeves; Kor-N-Seal boot by National Pollution Control Systems, Inc., Nashua, New Hampshire; PSX Gasket by

Press-Seal Gasket Corporation, Fort Wayne, Indiana; A-Lok by A-Lok Products, Inc., Tullytown, PA, or equal. Resilient connector shall be cast integrally into the wall of the manhole section at time of manufacture, or, shall be installed by mechanical means in openings cut into manhole wall per ASTM C 923.

2. Wherever plastic sewer pipe is to be field grouted into manhole openings, pipe-to-manhole connector seal shall be A-Lock Concrete Manhole Adapters manufactured by A-Lock, or equal. Adapter shall be mounted on pipe and shall be positioned about the center of the manhole wall.
3. Whenever a new connection is to be installed into an existing manhole it shall be done by means of core drilling (the use of chipping hammers, jackhammers or the likes will not be allowed to make new holes into manholes).

J. PRECAST CONCRETE MANHOLE BASE SECTIONS

1. Precast concrete manhole base sections, if provided in lieu of cast-in-place foundations shall be "monolithic", consisting of base slab and base riser section only, with the floor invert channel and apron to be placed and formed in the field. All precast base sections with pipe openings shall be furnished with ASTM C 923 pipe-to-manhole connector gaskets, as specified in these Technical Specifications. Precast base sections shall be furnished with an integral anti-flotation footing, in these Technical Specifications as specified hereinafter, with 4" projection. Precast base sections shall be set on a 6" deep pad (compacted thickness) of dense graded aggregate, placed to proper elevation and leveled. The Engineer reserves the right to inspect precast manhole base sections at the manhole manufacturing facility prior to delivery, and to reject the use of such sections if the Engineer determines the products unsuitable for the Owner's installation.
2. Precast concrete manhole base slab thickness shall comply with the following schedule:

0' - 10'	Vertical Height - 6"	Slab
10.1' - 15'	Vertical Height - 8"	Slab
15.1' - 20'	Vertical Height - 10"	Slab
20.1' - 25'	Vertical Height - 12"	Slab

4.05 SERVICE LINES & CLEANOUTS

- A. Service lines that are to be reconnected to replace pipe and service connections shall be PVC pipe and fittings for gravity sewers (as specified in these Technical Specifications) unless the line segment has been slated to be rehabilitated with cured-in-place lining, in which place a Ductile Iron tee is to be used. The connection between the PVC pipe and existing service shall be connected with a suitably designed adaptor as required by the Engineer. There is no extra payment for this adaptor.

- B. When replacing service line and/or service connections to main line, the replacement line and/or service connection shall be 6" in size regardless of the main line size to be replaced unless otherwise directed by the Engineer. This includes the service lateral to the right-of-way or easement line. All measurements on service lines for payment will be done by horizontal footage. If the house line is smaller in size a PVC reducer will be used to reduce the size pipe (and when a clean out is installed the reducer shall be on the house side of clean out) then the connection of the new and old service line will be made with a Strongback Fernco or equal adaptor. If this is not to the property or LFUCG easement the Engineer may either inform the Contractor of the length of service line to be replaced or have them televise it to check condition, and then direct them of any more service line to be replaced. Any additional service line over the 6 linear feet to be replaced, is a separate pay item.
- C. A cleanout constructed of PVC pipe and PVC fittings shall be installed with a cast iron casting and lid making the final adjustment to finished grade. This can include up to 5 linear feet of pipe on the customer's side of clean out. When needed a PVC reducer will be used to match existing private line then make the connection with a PVC coupling or a Strongback Fernco or equal connector. The cleanout shall be a PVC bi-directional tee installed as close to minimal grade as possible, when the line has too much grade fittings must be used before and after tee to achieve this. The Engineer shall approve the location of where the clean out will be installed. At the ground surface a metal casting and lid shall be used and to make any adjustments to make finished grade a level as possible the casting and lid shall be a Sigma Corporation #MB-344 or approved equal.
- D. When making the tee branch connection at the main, the Contractor will be instructed by work order as to what type connection shall be used but not limited to, PVC or cast iron tee, fused-on saddle (HDPE pipe) or saddle sealed with approved method with two stainless steel bands. Branches not to be used immediately shall be closed with approved stoppers to withstand all test requirements. No service lines shall be connected to the top 1/3 of the collection pipe. The Engineer may require the use of an approved sealant to make an airtight joint.
- E. To repair or replace a service connection, which upon the judgment of the Engineer is the source of the leak, the service shall be properly connected in conformance with the pipe manufacturer's recommendations and specifications and applicable ASTM specifications, for the service connection and for installation of such. The material of the connection shall be compatible with the sewer pipe it will connect to.
- F. After joints have been completed, they shall be visually inspected and accepted by the Engineer before they are covered. Any leak or defect discovered at any time after completion of the work shall be repaired immediately. Any pipe that has been disturbed after joints were formed, shall be taken up, the joints cleaned and remade and the pipe re-laid at the contractor's expense. All pipes in place shall be carefully protected from damage until the bedding and backfill operations have been completed.
- G. Backfilling of trenches shall not be started until the pipe in place has been inspected and approved by the Engineer.

4.06 COMPRESSION COUPLINGS

When joining PVC pipe to existing clay pipe, the contractor shall use Strongback Fernco compression couplings, or equal, that are resistant to corrosion by soil and sewage and that will provide a permanent watertight joint. When connecting PVC pipe to PVC, a PVC rigid coupling shall be used. The compression coupling shall meet the physical test and joint-leak requirements specified in ASTM C-594. The bands for attaching pipes shall be stainless steel conforming to ASTM C-594. Each coupling shall bear the manufacturer's name and an indication of its size. The Engineer may require the use of butyl rubber sealant to make an airtight joint.

4.07 EXCAVATION FOR PIPELINE TRENCHES

- A. Unless otherwise directed by the Engineer, trenches in which pipes are to be laid shall be excavated in open cuts to the depths required by field conditions and as specified in the LFUCG Standard Drawings.
- B. Trenches shall be of sufficient width to provide working space on each side of the pipe and to permit proper backfilling around the pipe. Unless specifically authorized by the Engineer, trenches shall not be excavated or permitted to become wider than 2'-0" plus the nominal diameter of the pipe at the level of or below the top of the pipe. If the trench does become wider than 2'-0" at the level of or below the top of the pipe, special precautions may be necessary, such as providing compacted, granular fill up to top of the pipe or providing pipe with additional crushing strength as determined by the Engineer after taking into account the actual trench loads that may result and the strength of the pipe being used. The Contractor shall bear the cost of such special precautions as are necessary.
- C. All excavated materials shall be placed a safe distance back from the edge of the trench. **Excess material shall be removed from the jobsite at no additional charge.**
- D. Backfilling shall be as set out hereinafter.
- E. Installation shall be in accordance with ASTM D 2321 except as modified herein.
- F. All OSHA rules and regulations shall be strictly followed. CONTRACTOR's foreman shall be OSHA certified.

4.08 DISPOSITION OF EXCAVATED MATERIALS

Excess material not needed for sewer line trench backfilling purposes shall be disposed of at the contractor's expense.

4.09 PIPE BEDDING

A. Piping for gravity sewers and force mains shall be supported as follows:

1. All piping shall be laid on a bed of granular material except when a concrete encasement situation occurs. All pipe bedding material shall be crushed stone aggregate in accordance with the Standard Drawings and shall be placed to a depth of six inches. Aggregate bedding shall be graded to provide for a uniform and continuous support beneath the pipe at all points.
- B. After each pipe has been brought to grade, aligned, and placed in final position, bedding material shall be deposited and densified under the pipe haunches and on each side of the pipe up to the spring line of the pipe to prevent lateral displacement and hold the pipe in proper position during subsequent pipe jointing, bedding, and backfilling operations. Densified bedding material shall be mechanically tamped in approximately 8-inch layers to obtain maximum possible compaction.
- C. In wet, yielding and mucky locations where pipe is in danger of sinking below grade or floating out of grade or line, or where backfill materials are of such a fluid nature that such movements of pipe might take place during the placing of the backfill, the pipe must be weighted or secured permanently in place by such means as will prove effective.
- D. Where an unstable (i.e., water, mud, etc.) trench bottom is encountered, stabilization of the trench bottom is required. This is to be accomplished by undercutting the trench depth and replacing to grade with a foundation of crushed stone aggregate.
- E. The depth of the foundation is dependent upon the severity of the trench bottom. The size of stone aggregate used in the foundation will be determined by the condition of the unstable material. Once the trench bottom has been stabilized, the required Class I bedding material can be placed.
- F. It should be noted that no pipe shall be laid on solid or blasted rock.
- G. Pipe bedding, as required in Paragraphs A, B, C, and D of this Subpart, is **not** considered a separate pay item.

4.10 LAYING PIPE

- A. The laying of sewer pipe in finished trenches shall be commenced at the lowest point so that the spigot end points in the direction of flow.
- B. All pipes shall be laid with ends abutting and true to line and grade. They shall be fitted and matched so that when laid in the trench they will form a sewer with a smooth and uniform invert. Supporting of pipes shall be as set out hereinbefore under 4.09 PIPE BEDDING and in no case shall the supporting of pipes on blocks be permitted.

- C. Before each piece of pipe is lowered into the trench, it shall be thoroughly inspected to ensure the pipe is clean. Each piece of pipe shall be lowered separately unless special permission is given otherwise by the Engineer. No pipe or fittings, which is known to be defective, shall be installed. Any defective pipe or fitting discovered after the pipe is laid, shall be removed and replaced with a satisfactory pipe or fitting without additional charge. In case a length of pipe is cut to fit in a line, it shall be cut as to leave a smooth end at right angles to the longitudinal axis of the pipe.
- D. Irregularities in sub grade in an earth trench shall be corrected by use of granular materials (as specified in Section 4.09) at the Contractor's expense—a supply of which shall be available at trench site whenever pipe is being laid.
- E. When laying of pipe is stopped for any reason, the exposed end of such pipe shall be closed with a manufactured plug fitted into the pipe bell, so as to exclude earth or other material from entering the pipe, and precautions taken to prevent flotation of pipe by run off into trench.
- F. No backfilling (except for securing pipe in place) over pipe will be allowed until the Engineer has had an opportunity to make an inspection of the joints, alignment and grade in the section laid, but such inspection shall not relieve the Contractor of further liability in case of defective joints, misalignment caused by backfilling, and other such deficiencies that are noted later.
- G. Installation shall be in accordance with ASTM D 2321 except as modified herein.

4.11 BACKFILLING PIPELINE TRENCHES

Backfilling of pipeline trenches shall be accomplished in accordance with the details set forth hereinafter.

In all cases walking or working on the completed pipelines except as may be necessary in tamping or backfilling will not be permitted until the trench has been backfilled to a point one foot above the top of the pipe. The filling of the trench and the tamping of the backfill shall be carried on simultaneously on both sides of the pipe in such a manner that the completed pipeline will not be disturbed and injurious side pressures do not occur. The methods of backfilling shall be as follows:

A. METHOD "A" – BACKFILLING IN UNPAVED AREAS

Backfilling of pipeline trenches in unpaved areas shall be accomplished in the following manner:

1. The lower portion of the trench, from a point 6 inches below the bottom of the pipe to a point 12 inches above the top of the pipe, shall be bedded and backfilled with No. 9 stone. This material shall be placed in a manner approved by the Engineer, and shall be carefully compacted to avoid displacement of the pipe. Compaction shall be

accomplished by hand tamping or by approved mechanical methods. Materials used and compaction are considered incidental.

2. The middle portion of the trench, from a point 12 inches above the top of the pipe to a point 12 inches below the surface grade, shall be backfilled with material that is free from large rock. Incorporation of rock having a diameter exceeding 6 inches is prohibited. Backfilling this portion of the trench shall be done by a means (tamping, puddling, or other method) to prevent settlement and must be approved by the Engineer. Material and the placement of material for backfilling this portion of the trench is considered incidental.
3. The upper most 12 inches of the trench shall be backfilled with consolidated earth material (including topsoil) that is free from rock. Backfilling this portion of the trench may be accomplished by any means approved by the Engineer. Material and the placement of the material for backfilling this portion of the trench is considered incidental.

B. METHOD "B" – BACKFILLING UNDER SIDEWALKS & UNPAVED DRIVEWAYS

Backfilling of pipeline trenches under sidewalks and unpaved driveways shall be accomplished in the following manner:

1. The lower portion of the trench, from a point 6 inches below the bottom of the pipe to a point 12 inches above the top of the pipe, shall be bedded and backfilled with No. 9 stone. This material shall be placed in a manner approved by the Engineer, and shall be carefully compacted to avoid displacement of the pipe. Compaction shall be accomplished by hand tamping or by approved mechanical methods. Materials used and compaction are considered incidental.
2. The middle portion of the trench, from a point 12 inches above the top of the pipe to the point 6 inches below the subgrade, shall be backfilled with # 9 stone. This material shall be placed and compacted in layers of approximately 6 inches; the #9 stone is not a separate pay item.
3. The upper most portion of the trench shall be temporarily backfilled and maintained with dense grade aggregate (stone) until such time as the sidewalk is constructed or the driveway surface is restored. Backfill for the upper portion of the trench is considered incidental. Concrete for sidewalk replacement is a pay item.

C. METHOD "C" – BACKFILLING UNDER PAVED AREAS

1. Backfilling of pipeline trenches under streets, roads, and paved driveways shall be accomplished in accordance with LFUCG Standard Drawings, Right-of-Way Ordinance 166-2002, and Kentucky Transportation Cabinet/Department of Highways Standard Specifications.

2. Trenches outside existing sidewalks, driveways, streets and highways shall be backfilled in accordance with Method "A". Trenches within the limits of sidewalks and unpaved driveways shall be backfilled in accordance with Method "B". Trenches within paving limits of existing streets, highways and driveways shall be backfilled in accordance with Method "C". The DGA (dense grade aggregate) used in the upper portion of the trench from a point 6 inches below pavement in the subgrade to the pavement subgrade is considered to be included in pavement replacement for Method "C". The Contractor shall backfill material to assure maximum compaction. Existing pavement shall be saw cut as indicated on the Standard Drawings.
3. Before final acceptance, the Contractor will be required to level off all trenches or to bring the trench up to grade. The Contractor shall also remove from roadways, rights-of-way and/or private property all excess earth or other materials resulting from construction.
4. In the event that pavement is not placed immediately following trench backfilling in streets and highways, the Contractor shall be responsible for maintaining the trench surface in a level condition at proper pavement grade at all times. Cold patch or temporary asphalt may be used as temporary restoration, but is not a pay item. **At no time shall traffic run on DGA or other stone backfill.**

4.12 SETTLEMENT OF TRENCHES

Wherever sewer lines are in (or cross) yards, driveways and streets, the Contractor shall be responsible for any trench settlement which within one year from the time of final acceptance of the work, except for Streets or areas in the public right of way which have 2 year maintenance. If pavement requires replacement because of trench settlement within this time, the Contractor shall replace it at no extra cost to the Owner. Repair of settlement damage shall meet the approval of the Engineer.

4.13 BITUMINOUS CONCRETE HIGHWAY, STREET, DRIVEWAY AND CONCRETE SIDEWALK REPLACEMENT

- A. The Contractor shall replace those sections of existing roads, streets, driveways, and sidewalk required to be removed to install the pipelines under this contract. The Contractor shall construct as required by the latest Standard Drawings and Chapter 17C of the Code of Ordinances.
- B. Backfilling of the trench shall be in accordance with Method "C" as described hereinbefore. Base course for the paving shall be dense graded crushed limestone furnished and placed in accordance with the current requirements of the Standard Specifications for Road and Bridge Construction of the Kentucky Department of Transportation, Bureau of Highways and LFUCG Right-of-Way Ordinance.
- C. The wearing surface of roads, streets and driveways shall be surface mix bituminous concrete, furnished and placed in accordance with the current requirements of Section 402

of the Standard Specifications for the Road and Bridge Construction of the Kentucky Department of Transportation, Bureau of Highways, and Right-of-Way Ordinance.

- D. Sidewalk shall be replaced with 4 ½" depth of Class "A" concrete having a minimum 28 day compressive strength of PSI 3500.
- E. Seasonal effects may require a temporary modification of pavement replacement. In this case, the Contractor shall backfill the trench per Right-of-Way Ordinance and it shall be allowed to stand until such time as the adverse seasonal effects end. The Contractor shall then complete the repair as described herein when not in right-of-way. The Contractor shall notify affected property owners using a form supplied by the LFUCG. A sample form is included in Section 11. The Contractor shall maintain the trench until such time that the trench is paved. No separate payment shall be made for maintenance gravel, temporary blacktop, or cold patch.

4.14 ABANDON MANHOLE IN PLACE

- A. When the Engineer determines a manhole to be abandoned in place, the Contractor shall furnish all labor, supervision, equipment, and materials required for this work.
- B. The manhole frame, cover, grade rings, and cone (or corbel) shall be carefully removed and stockpiled (if in reusable condition subject to Engineer's approval). Any component, which is not reusable, shall be disposed of properly by the Contractor.
- C. The manhole to be abandoned in place shall have all lines plugged up and then be filled with sand or #9 gravel to the top of the remaining barrel section. Backfill shall then be placed in accordance with Section 4.11. Final grading and restoration shall be in accordance with Section 4.16.

4.15 CLEAN UP AND PROPERTY RESTORATION

- A. Upon completion of the installation of the sewer lines and appurtenances, the Contractor shall remove all debris and surplus construction materials resulting from the work. The Contractor shall grade the ground along each side of the pipe trench in a uniform and neat manner, leaving the construction area in a shape as near as possible to the original ground level.
- B. If dirt, gravel or other debris entered the sewer during repairs, the Contractor will be required to clean the affected line segments at no cost to the Owner.
- C. Final surface restoration in these areas will be the responsibility of the Contractor. He shall restore the affected property to a condition as good as, or better, than the original.
- D. All disturbed lawn shall be sodded, except where seeding is requested by the property owner and approved by the Engineer, to restore it to a condition as good as, or better than, the original. Disturbed concrete or asphalt driveways shall be repaired with concrete or asphalt

...respectively to restore them to a condition as good as, or better than, the original. All displaced mailboxes shall be restored to the same or as nearly the same as possible, and shall be in as good as, or better than, the original.

4.16 TESTING OF GRAVITY SEWER LINES

- A. Low pressure air tests shall be made using equipment specifically designed and manufactured for the purpose of testing sewer lines using low pressure air. The equipment shall be provided with an air regulator valve or air safety valve so set that the internal pressure in the pipeline cannot exceed 8 psig.
1. The test shall be made on each manhole-to-manhole section of pipeline after placement of the backfill. The Owner or his designated representative must be present to witness each satisfactory air test before it will be accepted as fulfilling the requirements of these Specifications.
 2. Pneumatic plugs shall have a sealing length equivalent to or greater than the diameter of the pipe to be tested. Pneumatic plugs shall resist internal test pressures without requiring external bracing or blocking.
 3. Low pressure air passing through a single control panel, shall be introduced into the sealed line until the internal air pressure reaches 4 psig greater than the maximum pressure exerted by groundwater that may be above the invert of the pipe at the time of test. However, the internal air pressure in the sealed line shall not be allowed to exceed 8 psig. When the maximum pressure exerted by the groundwater is greater than 4 psig, the Contractor shall conduct only an infiltration test.
 4. At least two minutes shall be allowed for the air pressure to stabilize in the section under test. After the stabilization period, the low-pressure air supply hose shall be quickly disconnected from control panel. The time required in minutes for the pressure in the section under test to decrease from 3.5 to 2.5 psig (greater than the maximum pressure exerted by groundwater that may be above the invert of the pipe) shall not be less than that shown in the following table:

Pipe in Diameter in Inches	Minutes
4	2.0
6	3.0
8	4.0
10	5.0
12	5.5
15	7.5
18	8.5
21	10.0
24	11.5
30 & larger	13

5. When the sewer section to be tested contains more than one size of pipe, the minimum allowable time shall be based on the largest diameter pipe in the section, and shall be the time shown in the table reduced by 0.5 minutes.
 6. Reinforced concrete pipe shall be tested in accordance with ASTM C 924 (joint testing shall be in accordance with ASTM C 1103). Test time shall be a function of pipe diameter and the length of installed line to be tested as provided in ASTM C 924.
- B. The Contractor shall furnish suitable test plugs, water pumps, and appurtenances, and all labor required to properly conduct the tests. Suitable bulkheads shall be installed, as required, to permit the test of the sewer. The Contractor shall construct weirs or other means of measurements as may be necessary.
- C. Should the sections under test fail to meet the requirements, the Contractor shall do all work of locating and repairing the leaks and retesting as the Engineer may require without additional compensation.
- D. If in the judgment of the Owner, it is impracticable to follow the foregoing procedures for any reason, modifications in the procedures shall be made as required and as acceptable to the Owner, but in any event, the Contractor shall be responsible for the ultimate tightness of the line within the above test requirements.

END OF SECTION

TECHNICAL SPECIFICATIONS
SECTION 5
POINT REPAIRS

5.01 WORK INCLUDED

- A. A point repair shall be defined as a repair made at a specified location on a sanitary sewer line. Locations shall be as designated by the Engineer. A single point repair shall include up to 10 lineal feet (LF) of pipe.
- B. Classification of a Point Repair: A point repair shall be classified by the inside diameter of the pipe and the invert depth of the pipe, as indicated on the Bid Schedule.

5.02 MATERIALS FOR POINT REPAIRS

- A. Materials for point repairs shall conform to the product specifications listed in the following sections: Section 4 – Main Line Repair or Replacement.
- B. Contractor shall submit shop drawings of materials to be used for review and approval of the Engineer. Only new materials shall be used.

5.03 METHODS OF REPAIR

- A. Point repairs shall be accomplished by the following methods:
 - 1. Dig a trench deep enough to uncover a sanitary sewer line, wide enough to work in, and long enough to uncover up to 10 LF of sewer pipe.
 - 2. Remove any fences, base material, storm sewers, etc., that interfere with the repair made at each specified point, and for the replacement of said fences, base material, storm sewer, etc., in the same or better condition than found, determined by the Owner.
 - 3. Replace and reshape the bottom of the trench so that the grade of the pipe replaced will match that required for the existing sewer line. Any material replaced in the bottom of the trench shall be tamped so as to prevent sags in the sewer line due to settlement of the trench material. If the material in the bottom of the trench is of such consistency that it is not stable, then the Contractor shall replace the material.
 - 4. Repair and replace at least one joint and not more than four joints, between 3 and 10 LF of the existing sewer pipe with the properly sized pipe as specified.
 - 5. Repair and replace any service wye or tee encountered within the required 3 to 10 LF of uncovered pipe with the properly sized service wye or tee as specified and with enough sewer pipe to reconnect to the service line where it was severed. If the remainder of the service line is judged by the Owner to be a source of infiltration/inflow, and if authorized by the Owner, it shall be replaced to the

property or easement line in accordance with the specifications at the unit price bid for the size service replaced. All service lines broken by the Contractor shall be replaced at the Contractor's expense.

6. Tie all newly laid sewer pipe to existing sewer pipe, main sewer lines and service lines, so that no possible source of infiltration/inflow (a leak in the line) may be created. Any sewer pipe broken by the Contractor, outside the required 10 LF of pipe, shall be replaced or repaired at the Contractor's expense at the determination of the Owner. All such occurrences shall be pointed out by the Contractor to the Owner when they happen.
7. Backfill the hole so that the ground elevation will most nearly match the ground elevation prior to excavation. Proper backfilling procedures shall be followed in order that no ponding area will exist after settlement of the backfill material has taken place.
8. Clean up the area so that no trash or salvaged pipe is left lying around.

5.04 ALTERNATIVES FOR A POINT REPAIR

A. The following items shall be considered as one point repair each, where applicable.

1. Any point repair location which when uncovered reveals the end of the sewer line as evident by a cap or stopper in the line, shall be repaired by removing the cap or stopper and replacing with a clean out. Installation of the cleanout is a separate pay item.
2. Replace up to 10 LF of defective sewer pipe at the locations specified, and reconnect any existing laterals to the new pipe sections.
3. Seal any open joints uncovered by the excavation which, upon the judgment of the Owner, is the source of a leak (the barrel of the pipe being good). Any and all roots in an open joint shall be removed prior to sealing. Only approved joint sealing materials shall be used.

5.05 FLOW INTERRUPTION

A. Where necessary to complete the work, the Contractor shall be responsible for bypassing and/or blocking of the flow in the sewer line. Bypassing and/or blocking of flow shall be done only with prior approval of the Owner.

1. The Contractor shall bypass upstream sewage flow around the location designated for repair and convey the sewage to a downstream manhole or adjacent sewage system.
2. Provisions shall be made to maintain all existing services to prevent sewage backflow into structures.

3. The Contractor shall be responsible for maintaining the integrity of the sewage bypass system and shall be wholly responsible for conveying the sewage out from and back into the LFUCG system. At no time shall sewage be allowed to bypass or leave the system.
4. If sewage does escape the system, the Division of Water Quality shall be contacted immediately.
5. The Contractor shall be liable for all damages resulting from the Contractor's work or nonperformance of work as specified.

END OF SECTION

TECHNICAL SPECIFICATIONS
SECTION 6
SEWER MANHOLE REHABILITATION

6.01 GENERAL INFORMATION

- A. All work done for the LFUCG by the Contractor must meet OSHA standards in regards to safety. CONTRACTOR's foreman shall be OSHA certified.
- B. The Contractor shall repair manholes at required locations. These manhole repairs shall consist of one or more of the following:
 - 1. Rehabilitation of manhole walls and bases by plugging, patching, and coating with mortars, coatings, and sealants to improve the structural condition, eliminate infiltration, and provide corrosion protection.
 - 2. Repair of manhole chimney and corbel (cone) to improve structural condition, eliminate infiltration, and reconstruct to the desired elevation.
 - 3. Reinstallation or replacement of manhole frames casting, covers and precast adjustment rings to adjust manhole to grade, eliminate infiltration under frame and eliminate inflow through cover.
 - 4. Installation of external or internal manhole frame-chimney seals to eliminate infiltration under frame.

6.02 MATERIALS

- A. The materials used shall be designed, manufactured and intended for sewer manhole rehabilitation and the specific application in which they are used. The materials shall be supplied in factory-labeled containers. All materials shall be mixed and applied in accordance with the manufacturer's written instructions.
- B. Cementitious repair materials may be used for mild or moderate H₂S environments, as approved by the Engineer. Cementitious repair materials may include calcium aluminate mortar, microsilica mortar, or other repair mortars as approved by the Engineer. Acceptable manufacturers include Strong Seal or approved equivalent.
- C. Chemical resistant coatings or linings shall be used in corrosive environments where concrete/mortar attack from H₂S or other gases is likely. These locations shall be as designated by the Engineer. **There shall be no additional charge for grouting and sealing in preparation for coating.** Chemical resistant coatings or linings include the following:
 - 1. Epoxy mortar with epoxy top coat: acceptable manufacturers include Tnemec, Sherwin Williams or approved equivalent.

2. Elastomeric polyurethane: acceptable manufacturers Carboline or approved equivalent.

- D. The end product for product for Manhole Rehabilitation must include a structural component, watertight, and Hydrogen Sulfide resistant. This can be achieved through a combination of products, but must be approved by the Owner. At the option of the Engineer, the Contractor shall apply the material on a sample area not less than four square feet in size. When approved, the sample area shall serve as a standard of acceptance for all further work.
- E. All mixing and application of the material shall be done in strict accordance with the printed instructions of the approved manufacturer and as directed by the Engineer. The Contractor shall submit to the Engineer (when requested) evidence indicating that the proposed applicators are fully qualified to perform the work, and any proposed application found not to be qualified shall (at the written request of the Engineer) be removed forthwith by the Contractor.

6.03 SUBMITTALS

- A. The Contractor shall submit his proposed coating/lining system for the Engineer's review and approval. The submittal shall include the following:
1. Material specifications.
 2. Samples of material.
 3. Project references.
 4. Laboratory/testing certificates if requested by the Engineer.

6.04 METHODS

A. MANHOLE INSPECTION

The Employees performing the inspection must be MACP trained and certified. During manhole inspection, the Contractor will physically enter the manhole, following OSHA requirements for confined space entry, to look for defects and sources of inflow and infiltration. The Contractor will mark the sections(s) of the manhole where inflow and infiltration is observed. The Contractor will fill out a manhole inspection form in accordance with these specifications. The Contractor shall submit a copy of the Manhole Inspection/Repair Form to the Engineer for approval. No manhole repairs shall be performed without review from the Engineer. **This data must be submitted in MACP version 4.4 unless otherwise requested.** This allows for the data to be used in the ACCELA database. If any other method is used and submitted it shall be rejected and a new survey using appropriate software shall be submitted.

If the contractor is using more than 1 crew for manhole inspection, the data shall be combined into one database before submittal to LFUCG for review. The Contractor should also check the data for errors and make sure that the data is consistent. Some of the errors include making sure that the Manhole ID's matches

GIS. The Contractor should be able to take a list of valid GIS manhole ID's and find the ones in their database that don't match GIS.

B. PREPARATORY CLEANING OF MANHOLES

1. Manholes that are to be plugged, patched, or coated internally shall first be cleaned by high-velocity water cleaning equipment (minimum 1,500 psi) in order to remove all foreign matter from the manhole walls and bench. Cleaning shall be incidental to the manhole rehabilitation.
2. Place covers over the invert to prevent extraneous material from entering sewer lines.
3. All interior surfaces of the manhole shall be cleaned and free from oil, grease, loose mortar, protruding bricks, paints, protective coatings, efflorescence, laitance, and curing compounds. Remove contaminants and foreign materials to sound material.

C. PLUGGING, PATCHING, AND COATING MANHOLES

1. After manhole surfaces have been cleaned, infiltrating holes and cracks shall be plugged prior to applying the coating sealant, if required at no additional charge.
2. Application of the materials shall be in accordance with the material manufacturer's recommendations and as defined in this specification.
3. Provide factory-trained personnel approved by the manufacturer for application of the specified products.

D. REPAIR OF MANHOLE CHIMNEY AND CORBEL

1. Any repair that is done within the LFUCG Right-of-Way shall adhere to Chapter 17C of the Code of Ordinances and shall adhere to current Standard Drawings.
2. Excavation and Replacement of Pavement:
 - a. The removal of the manhole frame (ring) shall be accomplished by making a square cut in the pavement of sufficient size.
 - b. Material in the exposed area shall be dug out to a sufficient depth to permit the required repairs.
 - c. Suitable materials (stockpiled) shall be tamped in place to form the sub-base for the pavement as specified in the Standard Drawings. If additional material is needed, suitable material shall be added before the pavement is replaced.
 - d. The surfacing used to cover the exposed area (concrete or asphalt) shall conform to the existing pavement. It shall be placed to the same elevation and grade as the existing pavement and meet the specifications in the LFUCG Right-of-Way Ordinance.

- e. Pavement replacement not satisfactorily completed by the Contractor shall be replaced by the Contractor at no additional cost to the Owner.
3. Excavation and Replacement of Backfill in Unpaved Areas:
 - a. Only necessary excavation around the manhole shall be performed.
 - b. Backfill shall be replaced and compacted to prevent settlement and to restore the setting to a condition equal to or better than that found. Backfill shall not cover the manhole.
 - c. Any private property, which is removed for access to the manhole, shall be replaced by the Contractor in existing or better condition. If this replacement is not to the satisfaction of the Engineer, it shall be redone at no additional cost to the Owner.
 4. The Contractor shall take all necessary precautions to prevent falling debris from damaging the manhole trough and/or entering the sewer.
 5. The manhole frame and the deteriorated portions of the existing manhole riser and cone shall be removed.
 6. The riser and cone shall be repaired or rebuilt with sound material, as appropriate to reconstruct the manhole to the desired elevation in accordance with the Standard Drawings.

E. INJECTION GROUTING OF MANHOLE

All work related to injection grouting of manholes must be performed in accordance with the latest edition of NASSCO/ASTM specifications.

F. MANHOLE REHABILITATION, CEMENTITIOUS LINING OR OTHER APPROVED METHODS:

All work related to manhole rehabilitation, cementitious lining or other approved methods must be performed in accordance with the latest edition of NASSCO/ASTM specifications.

G. MANHOLE FRAME (RING) AND COVER REINSTALLATION OR REPLACEMENT

1. Excavation and site restoration in paved and unpaved areas shall adhere to Chapter 17C of the Code of Ordinances and adhere to the current Standard Drawings when applicable.
2. The contractor shall remove the existing manhole frame and cover. If the frame and cover are to be replaced, the Contractor will dispose of them as directed by the Owner's Representative.
3. Replacement frames and covers shall be as specified in the contract documents. The frame shall be first cleaned and then installed.

4. As directed by the Engineer, manhole frames unsuitable for reuse shall be taken to a recycling operation. If the recycler pays a fee for the material, the fee belongs to the Owner. If a recycling fee is charged, it can be billed as time and material.
5. Where leveling brick manholes in existing pavement, contractor is to remove all rings of damaged bricks so as to a point where manhole is structurally sound, pour a concrete base, raise manhole to grade with precast grade rings. If frame and lid are damaged it needs to be brought to the attention of the Engineer, and then replaced with new frame and lid. Concrete no less than 6 inches thick at 4000 psi must be used to finish surface area to make as smooth as possible the transition from existing pavement to repair and back to existing pavement. If manhole to be adjusted is precast then raise according to the direction of the Engineer. There is a drawing available which can be given to the contractor upon their request.

H. EQUIPMENT FOR MANHOLE REPAIR ON TIME AND MATERIALS

1. The following equipment shall be furnished. It shall be considered incidental to "Laborer".
2. High Pressure washer and high-velocity gun for washing and scouring manhole walls and floors capable of at least 2,400 PSI. The gun shall be capable of producing flows from a fine spray to a solid stream. The equipment may be either truck or trailer mounted as long as it adequately accomplishes the cleaning and contains a water tank with a capacity of at least 250 gallons.
3. The following are considered equipment but not limited to which a Contractor would supply as incidental equipment at the job site and are to be sledge hammer, pry bars, screw drivers, socket wrenches, hack saw, trowel, putty knife, bucket (5 gallon), chisels, water barrel, hose, trash barrel, shovel, measuring tape, knives, broom, tarp, rope, chain, spud bar, rake, manhole hooks, pliers, hand held mirror, portable air tank and/or hand air pump, pipe plugs (4", 6", 8"), cones, traffic signs, traffic flags, safety vests, fire extinguisher, first aid kit, drinking water jug, a portable generator, extension cords, trouble lights, grinder, electric drill (for paint mixer), quickie saw, and hammer drill.

6.05 MANHOLE DOCUMENTATION

A. MANHOLE INSPECTION/REPAIR FORM

The Contractor shall use a Manhole Inspection/Repair Form MACP approved that contains manhole number, manhole type, manhole location, manhole depth, pipe diameter(s), pipe material, manhole defects, date manhole inspected, date manhole repairs performed, and a sketch showing the location of the inlet pipe(s) including any service laterals and outlet pipe.

B. RECORDS

1. The Contractor shall submit a Daily Report to the Engineer listing the manholes inspected and/or type of repairs made on each manhole.
2. On a monthly basis, the Contractor shall submit a hardcopy and digital copy to the Engineer containing a list of the manholes inspected, repairs needed, repairs made, and manholes that cannot be located. The digital records must be in a Microsoft Database format (.mdb file extension) or other format approved by the Engineer.

END OF SECTION

TECHNICAL SEPCIFICATIONS
SECTION 7
PIPE BURSTING PROCESS

7.01 GENERAL

A. WORK INCLUDED

1. Rehabilitation of existing sanitary sewers by the pipe bursting method.
2. The work shall include:
 - a. Furnishing all labor, supervision, tools, and equipment required to perform pipe bursting and installation of the replacement pipe, at the locations requested by work orders from the LFUCG Engineer.
 - b. Providing, installing, operating and maintaining all equipment required to perform by-pass pumping as required, for the duration of the project.
 - c. Installation of HDPE pipe by means of pipe bursting shall be performed by fully trained, experienced installers in compliance with the manufactures recommendations.
 - d. Acceptable CCTV record in PACP/ACCELA format after completion to approve for payment.

7.02 SUBMITTALS

- A. The Contractor shall submit a pipe bursting plan, to include the following:
1. Pipe material and specifications.
 2. Equipment to be used.
 3. Method and materials for lateral connections.
 4. Anticipated location and number of insertion or launching pits.

7.03 WARRANTY

The Contractor shall warrant that the equipment used on this Project, where covered by patents or license agreements, is furnished in accordance with such agreements and that the prices bid for the work on the Project cover all applicable royalties and fees in accordance with such license agreements. The Contractor shall defend, indemnify and hold the Owner and Engineer harmless from and against any and all cost, loss, or damage or expense arising out of or in any way connected with any claim of infringement of patent, trademark, or violation of license agreement.

6.03 MATERIALS

A. HIGH DENSITY POLYETHYLENE (HDPE) PIPE

1. Solid wall HDPE pipe referred to as Drisco 1000, Drisco 8600, Quail Pipe, Poly Pipe, and Plexco Pipe that is in conformance with ASTM F714 and ASTM requirements

stated herein are considered approved for this project. HDPE pipe on this project will further be required to have a minimum pipe stiffness of 46 psi for 12 inch to 48 inch diameter pipe and 115 psi for 8 inch to 10 inch diameters.

2. All pipe and fittings will be high-density polyethylene pipe and made of virgin material. No rework except that obtained from the manufacturer's own production of the same formulation will be used. The liner material will be manufactured from High Density High Molecular weight polyethylene compound which conforms to ASTM D 1248 and meet the requirements for Type III, Class C, Grade P-34, Category 5, and has PPI rating of PE 3408.
3. The pipe produced from this resin will have a minimum cell Classification of 345434C under ASTM D3350. A higher number cell classification limit, which gives a desirable higher primary property, per ASTM D 3350, may also be accepted by the Engineer at no extra cost to the Owner. The value for Hydrostatic Design basis will not be less than 1600 PSI (11.03 MPA) per ASTM D 2837. Pipe will have ultraviolet protection.
4. All pipes will be free of visible cracks, holes, foreign material, foreign inclusions, blisters, or other deleterious or injurious faults or defects. Pipe and fittings shall be as uniform as commercially practical in color, opacity, density, and other physical properties. For interior lined pipe, the liner will be a minimum of 10 mils thick and co-extruded. The bond between the layers will be strong and uniform. It will not be possible to separate the two layers with a probe or point of a knife blade so that the layers do not separate cleanly at any point, nor will separation of the bond occur, between layers, during testing performed under the requirements of this specification.
5. Polyethylene Plastic Pipe will meet the applicable requirements of ASTM F714 Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter, ASTM D 1248, and ASTM D 3550. Internal diameter of the pipe indicated on the Contract Drawings will be the minimum allowable pipe size.
6. The minimum wall thickness of the polyethylene pipe will meet the following listing, as based on the deepest portion of a particular pipe pull, typically between manholes:

Depth of Cover (Feet)	Minimum SDR of Pipe
0 - 16.0	19
>16.1	17

7. Wall thickness shall be as indicated on the plans and will be in accordance with Chevron Plexco Industrial Piping System Pipe Data and Pressure Rating Bulletin 301, or approved equivalent.
- B. Solid wall pipe shall be produced with plain end construction for heat joining (butt fusion) conforming to ASTM D 2657.
1. The polyethylene pipe will be assembled and joined at the site using the thermal butt-fusion method to provide a leak proof and structurally sound joint. Threaded or solvent-

cement joints and connections are not permitted. All equipment and procedures used will be used in strict compliance with the manufacturer's recommendations. Fusing will be accomplished by personnel certified as fusion technicians by manufacturer of polyethylene pipe and/or fusing equipment.

2. The butt-fused joint will be true alignment and will have uniform roll back beads resulting from the use of proper temperature and pressure. The joint surfaces will be smooth. The fused joint will be watertight and will have tensile strength equal to that of the pipe. All joints will be subject to acceptance by the Engineers and/or his representative prior to insertion. All defective joints will be cut out and replaced at no cost to the Owner. Any section of the pipe with a gash, blister, abrasion, nick, scar, or other deleterious fault greater in depth than ten percent (10%) of the wall thickness, will not be used and must be removed from the site. However, a defective area of the pipe may be cut out and the joint fused in accordance with the procedures stated above. In addition, if in the opinion of the Engineers and/or his representative any section of pipe has other defects, including those hereinafter listed, that may indicate damaged, improperly manufactured, faulty, or substandard pipe, said pipe will be discarded and not used. Defects warranting pipe rejection include the following: concentrated ridges, discoloration, excessive spot roughness, and pitting; insufficient or variable wall thickness; pipe damage from bending, crushing, stretching or other stress; pipe damage that impacts the pipe strength, the intended use, the internal diameter of the pipe, internal roughness characteristics; or any other defect of manufacturing or handling.
- C. Where applicable, solid wall pipe for sanitary sewer force mains shall have a minimum working pressure rating of 150 psi, and an inside diameter equal to or greater than the nominal pipe size indicated on the Drawings.
- D. HDPE pipe is not approved in applications requiring augering of sewer pipe.
- E. Each standard and non-standard length of pipe or fitting shall be clearly marked with pipe size, pipe class, production code, material designation and other relevant identifying information.
- F. The Engineer reserves the right to inspect pipes or witness pipe manufacturing. Such inspection shall in no way relieve the manufacturer of the responsibilities to provide products that comply with the applicable standards and these Specifications. Should the Engineer wish to witness the manufacture of specific pipes, the manufacturer shall provide the Engineer with adequate advance notice of when and where the production of those specific pipes will take place. Approval of the products or tests is not implied by the Engineer's decision not to inspect the manufacturing, testing, or finished pipes.

7.05 PRE-INSTALLATION TELEVISION INSPECTION

Prior to the initiation of pipe bursting work on any line segment, the work required under Section 2, Cleaning and Internal Inspection, shall have been completed. No pay for pre CCTV or cleaning prior to pipe bursting. CCTV and Cleaning shall be incidental to the installation.

7.06 PIPE BURSTING AND INSTALLATION

- A. Location and number of insertion or launching pits will be chosen by the Contractor, and will typically be located near existing or proposed manholes or at locations to comply with access or maintenance requirements. Pits shall be placed and located to minimize the total number of pulls and maximize the length of pipe replaced per pull, within the constraints of maintaining service and access and other requirements. [Use excavations at point repair locations for insertion pits where possible.]
- B. Pipe shall be assembled and fused on the ground in sections equivalent to the length of the anticipated pull. During installation, all bending and loading the pipe shall be in conformance with manufacturers recommendations and shall not damage pipe.
- C. Manholes shall be prepared so as to provide pipe installation at the lines and grades indicated on the plans. The invert in the manholes shall be removed as required to allow for pipe installation activities and to accommodate invert replacement. Manhole inverts shall be restored upon completion with 3000 PSI grout so as to establish a minimum 4 inch thick bottom on the manhole after shaping per drawings.

7.07 SEALING REPLACEMENT PIPE IN MANHOLE

- A. Allow liner pipe to normalize to ambient temperatures as well as recover from imposed stretch before cutting to fit between manholes, sealing at manholes, and manhole invert shaping. Normalization usually takes at least 12 hours for polyethylene.
- B. Cut liner so that it extends four inches into manhole. Make a smooth, vertical cut and slope area over top of exposed liner using non-shrink grout.
- C. Seal the annular space between liner and sanitary sewer main at each manhole with a chemical seal and non-shrink grout. Place strips of oakum soaked in sealer (Scotchseal 5600 as manufactured by 3M Corporation, or equal) in a band to form an effective water-tight gasket in the annular space between liner and existing opening in manhole. Make width of the sealing band a minimum of eight inches or the thickness of the manhole wall, whichever is greater. No pay will be approved until seal is complete and inspected by owner.
- D. Finish seal with a non-shrink grout placed around annular space from inside manhole. Apply grout in a band not less than six inches wide.
- E. Reshape and smooth the manhole invert. Form a smooth transition with a reshaped invert and a raised manhole bench to eliminate sharp edges of liner pipe, concrete bench, and channeled invert. Build up and smooth invert of manhole to match flow line of new liner.

7.08 FIELD TESTING

- A. After the existing sewer is completely replaced, the Contractor shall perform a post-installation television inspection. Copies of the inspection DVD in PACP/ACCELA format shall be provided to the Owner for review and acceptance prior to final acceptance. Post-installation CCTV is not a separate pay item.
- B. For pipelines with an inside diameter 27-inches and greater, a method approved by the Engineer shall be used to test for vertical deflections. The approved method shall provide a precision of \pm two tenths of one percent (0.2%) deflection. The test shall be conducted after the final backfill at all locations has been in place at least 30 days. No pipe shall exceed a deflection of five percent.
 - 1. If a pipe should fail to pass the deflection test, the problem shall be corrected at no additional cost and a second test shall be conducted after the final backfill has been in place an additional 30 days. The tests shall be performed without mechanical pulling devices.

7.09 GASKETED ELECTROFUSION SEWER SADDLES FOR SERVICE CONNECTIONS

- A. The Contractor shall install a 6" (4" when approved by the Engineer) gasketed electrofusion sewer saddle per the manufactures recommendation when a service connection is reinstated. The gasket will be to connect SDR35 pipe (unless otherwise directed to be another type by the Engineer) sewer pipe of size requested by the Engineer. Then the Contractor will follow the specifications on service connections listed in Section 2 Main line point repairs. The electrofusion saddle will be a separate pay item and shall comply with all related specification listed in this contract such as but not limited too Section 4.05 Service Connections and Cleanouts (payment for this type of a service connection does not include a main line point repair and should reflect that cost associated installing this saddle). There will be a service connection bid item associated with the installation of this saddle.
- B. The electrofusion saddle shall be Central Plastics #5750819 or approved equal, and they must meet these related specifications ASTM F1336, ASTM F1055, ASTM D1599, and ASTM D3350.

END OF SECTION

TECHNICAL SPECIFICATIONS
SECTION 8
SMOKE TESTING

8.01 GENERAL

This specification shall govern the use of smoke testing as a method of detecting structural deficiencies in existing sanitary sewers and as a means of inspecting the sanitary sewer system rehabilitation work performed by the contractor.

8.02 AREA OF WORK

The area of work shall be as directed by the Engineer. All work shall be confined to those sections of sewer between manholes designated for smoke testing, and shall only be performed in the presence of the Engineer.

8.03 EQUIPMENT

- A. Smoke testing blowers shall have a circular flange or plate for mounting on an open manhole and have a gasoline driven engine capable of producing a free-air delivery of at least 1700 CFM.
- B. Liquid smoke shall be non-explosive, generate a highly visible white/colored smoke that is non-hazardous and non-staining, and be capable of sustaining indefinite duration.

8.04 METHODS

- A. Pipe sections designated for smoke testing shall be isolated by using either sewer plugs, sand bags, or other approved method.
- B. The Contractor shall complete a smoke test form approved by the Engineer for each line segment containing the date, line segment ID, manhole depth, pipe diameter, defect codes, location codes, and smoke rate. An example smoke test form is included in Section 11.
- C. The Contractor shall walk the area under test, locating, photographing and documenting the structural deficiencies indicated by emerging smoke. Documentation shall be referenced to the sewer section being tested.

8.05 ADVANCED NOTICES:

- A. A minimum of 5 days prior to performing smoke testing of sewers, the Contractor shall notify residents of the purpose and approximate time of the work. The Owner shall provide notification forms to the Contractor for this purpose. An example of a smoke test notice is included in Section 11.

B. It shall be the Contractor's responsibility to daily advise the Owner (859/425-2401) and LFUCG Fire and Police Departments (859/254-1120 and 859/258-3600 respectively) of the areas to be tested on a street-to-street basis.

8.06 FINAL REPORT:

The Contractor shall provide to the Engineer, a written report, which will include sketches, field notices, and photographs, referencing the sewer sections tested.

END OF SECTION

TECHNICAL SPECIFICATIONS
SECTION 9
CURED-IN-PLACE PIPE (CIPP) LINER

9.01 WORK INCLUDED

A. SCOPE

1. Furnish all labor, supervision, material, and equipment required to complete cured-in-place lining of existing pipelines as described in the Contract Documents.
 - a. The CIPP liner shall be polyester, vinyl ester, or epoxy vacuum impregnated flexible woven or non-woven tube. The tube shall be inverted into position by the means of a hydrostatic head or pulled-in-place by a mechanical winch or other method once approved by the Engineer as long as liner is installed per manufactures recommendation. The tube, once installed, shall be cured to form a hard impermeable pipe, by circulating hot water or introducing steam and or air through the entire length of the tube. When cured the liner shall extend over the entire length of the existing sewer in a continuous, tight fitting and watertight pipe-within-a-pipe.
 - b. The cured in place pipe (CIPP) shall be fabricated from materials that after curing are chemically resistant to withstand internal exposure to domestic sewage and shall be a minimum of 6 mil in thickness.
 - c. Where steam and or air is requested to be used, contractor must submit to the Engineer for approval, the manufactures recommendation as to installation , curing process, and all other information to ensure finished product meets all standards including, Manufactures, ASTM, and OSHA's.

2. The work shall include:
 - a. Replacement of service connections and point repairs on existing sewer lines prior to lining, as directed. Replacement of service connections and point repairs are separate pay items. A point repair associated with a service connection shall not be billed as both a point repair and service connection repair. Ductile iron tees required for lateral point repairs on lines to be CIPP'd shall be a separate pay item.
 - b. Thorough cleaning and television inspection of the existing sewers in accordance with Section 2. CCTV and Cleaning shall be incidental to the installation and is not a separate pay item.
 - c. By-pass pumping, including set up, take down, and monitoring of 10 inch or smaller sewer main is included in the installation cost and is not a separate pay item. Lateral flows are included in the lining price if needed during the construction period. Bypass pumping of lines greater than 12 inches will be a separate pay item.
 - d. Restoration of Sod, Asphalt, and concrete surface is included in the installation price and is not a separate pay item.

- (1) The Contractor shall by-pass upstream sewage flow around the line segment or segments designated for repair and convey the sewage to a downstream manhole or adjacent sewage system.
- (2) Provisions shall be made to maintain all existing services of the span(s) to be repaired to prevent sewage backflow into structures.
- (3) The Contractor shall be responsible for maintaining the integrity of the entire sewage by-pass system out of and back into the Lexington-Fayette Urban County Government's (LFUCG's) sewage collection system. At no time shall sewage be allowed to escape the system.
- (4) If sewage should escape LFUCG's system, contact the Engineer and the LFUCG Division of Water Quality immediately.
- (5) Contractor shall be liable for all damages resulting from Contractor's work and for any and all damages, including fines, due to failure of a sewage by-pass system.

- e. Insertion of the liner into the existing sewer lines without excavation.
- f. Television inspection in PACP/ACCELA format and testing of the completed lining system. Opening and sealing the liner at lateral connections.
- g. Reconstruction of service laterals by installation of a cured-in-place pipe liner ("Top Hat" method), where specified by the Engineer.
- h. Restoration of Sod, Asphalt, or concrete surface is included in the installation price.

3. Line segments to be rehabilitated by cured-in-place lining shall be indicated on the Contract Documents.

B. DEFINITIONS

1. Liner: When used in this specification in a nonspecific application, liner shall apply to any approved lining regardless of material or technique used to install the liner. The phrase "new pipe" is also used synonymously with the phrase "liner" and both reference the same item.
2. Installer: In this specification, installer is used interchangeably with Contractor and refers to the same party, regardless of the actual contractual relationship the Contractor may have established with any and all other parties.
3. Manufacturer: The intent of this specification is that the "manufacturer" shall refer to the party that manufactures the lining using specialized equipment and techniques and is distinct from the Contractor or installer that operates and installs the liner.

9.02 JOB CONDITIONS

Contractor shall coordinate the work and inspect the condition of the sewers and determine the requirements for lining by recorded televised sewer inspection techniques.

9.03 SUBMITTALS

- A. The Contractor shall submit the following data to the Engineer for review:

1. List of reference projects completed by the Contractor/Subcontractors. List shall include the name and phone number of a contact person for each project. The Contractor shall supply verifiable references indicating that he/she has successfully completed a minimum of three cured-in-place lining projects.
2. Certification by letter of recommendation stating that the Contractor/Subcontractor is trained and considered qualified by the product manufacturer to install the cured-in-place lining projects.
3. Shop Drawings:
 - a. Product data covering all materials of construction.
 - b. Resin data, including properties, characteristics, proposed methods of application, and recommended curing cycle.
 - c. Description of installation procedure and equipment proposed for use. Include curing water temperatures, locations of monitors, etc.
4. Inspection report for the sewer lines, documenting conditions of sewer, lateral connections and joints. Document the internal inspection before and after lining on DVD accompanied by type-written logs of the internal inspection.
5. Sample "Notification of Sewage Service Disruption" forms, to be issued by Contractor, for review and approval.
6. Proposed by-pass pumping techniques, equipment, procedures, and emergency response plan including detailed plans for by-passing flow from sections of pipe and laterals to be replaced prior to start of work.
7. Curing temperature/time log sheet, to be submitted immediately after the curing is complete for each line segment that is rehabilitated.
8. Report showing services reconnected after lining, to be submitted with 24 hours after reconnection of services for each line segment.

9.04 HEAT CURED LINER

A. Technical Requirements:

1. Resin Content: 85% resin to 15 % felt volume ration with a 5% tolerance.
2. Liner Size: Liner mil thickness shall be equal to one half (1/2) of pipe ID with a minimum thickness of six (6) mil unless requested different by owner.
3. Length: Provide liner length necessary to effectively carry out the insertion and seal the liner at the inlet and outlet ends. Contractor shall verify the lengths in the field before cutting the liner to length.

B. Acceptable Manufacturers:

1. Insituform, Inc.
2. In-Liner Technologies, Inc.
3. UniLiner.
4. Leak Eliminators

5. The contractor is not limited to these Four manufacturers. He may select others as long as their product meets the material specifications for this contract and is approved by the Engineer.

9.05 GENERAL CLEANING AND INSPECTION:

- A. All pre-lining repairs noted on the Drawings must be satisfactorily completed prior to starting the liner installation.
- B. Prior to starting the lining process, the Contractor shall clean the existing pipeline of any obstructions, grease, grit, debris, and roots to sure a good lining installation. The condition of the cleaned existing pipe shall be approved by the Engineer prior to the insertion of the liner.
- C. Inspection of Sewer Line: Inspection of pipelines shall be performed by experienced personnel who are PACP certified and trained in identifying breaks, obstacles and service connections using remote controlled radial view cameras. The interior of the pipeline shall be carefully inspected. The purposes of this inspection are to:
 1. Confirm the pipe is clean.
 2. Confirm the locations of active service laterals.
 3. Determine the location of any conditions which may prevent proper installation the liner.

All such conditions shall be logged and brought to the attention of the Engineer immediately so these conditions can be corrected. The Contractor shall submit a copy of the pre-inspection DVD and inspection logs to the Owner.

- D. By-passing Sewage: The installer shall provide for the flow of sewage around the section or sections of pipe designated for lining. The by-pass shall be made by plugging the line at an existing manhole and pumping the flow into a downstream manhole or adjacent sewage system. The pump and by-pass lines shall be of an adequate capacity and size to handle peak hourly flows and shall be monitored and maintained by the installer whenever by-passing is planned. By-pass pumping, monitoring, and set up and take down shall be included in the price of cured-in-place lining of lines 10" and smaller and is not a separate pay item.
- E. Line Obstructions:
 1. It shall be the responsibility of the installer to clear the line of obstructions such as solids, dropped joints and protruding service connections or collapsed pipe that will prevent the insertion of the liner pipe. Service connections or other protrusions shall be removed such that the protruding dimension is less than 1/4-inch. Sags and reverse or flat grades shall be eliminated by point repairs.
 2. If inspection reveals an obstruction that cannot be removed by conventional sewer cleaning equipment, then the installer shall make a point repair excavation to uncover

and remove or repair the obstruction. Such excavation shall be approved in writing by the Owner's representative prior to the commencement of the work and shall be considered a separate pay item. Pipe shall be repaired as directed by the Engineer. Use new pipe of the same type, rating, and dimensions of the existing pipe, except replace vitrified clay pipe with adequately sized PVC of sufficient strength and capacity. In no case shall new pipe be installed that is less than the minimum acceptable to the local authority having jurisdiction.

- F. The Contractor is responsible for locating and determining the suitability of the insertion manhole to be used for installation of the liner.
- G. Five days prior to disruption of service, notify property owners, public, residents, and all who may be affected in person (**A person must be spoken to not just a door Hanger**) and by using an approved notification form. Contractor shall provide documentation to the Owner's representative verifying notifications as stated above.
- H. If the liner fails to form a tight seal at the manhole wall. The installer shall apply a seal at the manhole wall. The seal shall be approved by the Engineer.
- I. After the pipe has been lined and tested, all existing service connections shall be reconnected. The reconnection of services shall be done without excavation, unless otherwise specified by Owner; this will be accomplished from the interior of the pipeline by a radial view camera directed cutting device. All re-cut service connections shall be free of burrs and frayed edges and any restriction preventing free wastewater flow. Location of the service shall be made by inspection of the pre-construction TV tape and other proven detection methods.
- J. If directed by the Engineer, service laterals shall be reconstructed by installation of a cured-in-place pipe liner ("Top Hat" method). The process uses a flexible flange that must have a tight-fitting connection and seal at the main.

9.06 HEAT CURED LINER INSTALLATION:

A. General:

1. The Contractor shall deliver the uncured resin impregnated liner to the site, provide all equipment required to place and invert the liner into the conduit and cure it once in place.
2. The Contractor shall designate a location where the liner will be impregnated ("wet out") with resin using distribution rollers and vacuum to thoroughly saturate the felt tube to its dispatch for installation. A catalyst system of additive(s) compatible with the resin and tube may be used as per the manufacturer's recommendation and the Engineer's approval. The wet out inversion and heating schedule/plan shall be submitted 72 hours in advance to the Owner.
3. Impregnate liner with resin not more than 24 hours before the proposed time of installation and store out of direct sunlight at a temperature of less than 70 degrees F or as recommended by the manufacturer.
4. Provide temporary covers as required to protect the impregnated liner from light and heat exposure in conformance with the resin manufacturer's recommendations.

5. Transport impregnated liner to the site just prior to inversion in a suitable light-proof container with the temperature maintained at a maximum of 70 degrees F or as recommended by the manufacturer.

B. Liner Installation by Inversion:

1. Invert liner into the conduit from a suitable platform located above the manhole or any other point of inversion. The free open end of the folded liner shall be passed down a suitably reinforced column to an inversion chute or elbow bend.
2. The protruding end of the liner shall then be folded back over the chute or elbow, and each layer, if a multiple layer liner, shall be firmly secured to the inversion chute by means of a stainless steel strap.
3. After the liner is secured to the chute, the chute shall be positioned in the inversion locations so that the inverting portion of the liner is properly aligned with the open end of the pipe to be lined.
4. Clean water at ambient water main temperature shall be provided by the Contractor to the inversion platform at a rate sufficient to cause controlled inversion of the liner into the conduit.
5. The liner inversion rate shall not exceed 32 feet/minute (10 meters/minute), and the liner or the tag rope shall be suitably restrained to prevent inversion rates in excess of that stipulated above.

C. Liner Curing:

1. The Contractor shall supply a suitable heat source and water re-circulation equipment capable of delivering hot water to the far end of the liner to quickly and uniformly raise the water temperature in the entire liner, above the temperature required to commence the exothermic reaction of the resin as determined by the catalyst system employed.
2. Water used for the curing process shall be obtained and transported to the site by the Contractor.
3. The heat source shall be fitted with suitable monitors to gauge the temperature of the incoming and outgoing water supply to determine when uniform temperature is achieved throughout the length of the liner.
4. Water temperature in the liner during the initial and post cure period shall not be less than 120 degrees F or more than 200 degrees F.
5. In addition to the gauges on the incoming and outgoing water supply, there shall be a thermocouple placed between the liner and the invert of the pipe at the manhole to accurately monitor the outside liner temperature during the curing process. For CIPP of pipes 12 inches in diameter and greater, a fiber optic cable located in the 6 o'clock position shall be used for monitoring curing temperature.

- D. The cured-in-place liner shall extend the full length of the pipeline segment being rehabilitated and shall provide a structurally sound, impermeable, jointless, close-fitting pipe that, when cured, is mechanically bonded to the host pipe.

E. Post Curing:

1. The initial cure shall be deemed to be completed when a uniform temperature, as determined by the water temperature monitors on the heat source, is achieved throughout the length of the liner and visual inspection of the exposed portions of the liner appear to be hard and sound.
 2. The Contractor shall submit curing time/temperature chart to the Owner immediately upon completion of cure and shall note any discrepancies between recommended cure cycle and actual cure cycle.
 3. The post cure period shall commence with the heat source shut down, but with continued re-circulation of the water to maintain the temperature in the liner at or just below a maximum temperature of 190 degrees F, but above 140 degrees F during the initial exothermic reaction period.
 4. Hot water may be bled out of the system and replaced by clean water at ambient water main temperature to control post-cure water temperature.
 5. A minimum period of post-cure (as recommended for liner diameter and thickness) under an inversion head to provide a minimum hoop tension in the liner felt shall be maintained.
 6. The ends of the pipe shall not be fully opened until intake and discharge temperatures of the heat source are less than 100 degrees F (38 degrees C).
 7. Care shall be taken in the release of the static head so that a vacuum will not be developed that could damage the newly installed liner.
- F. Finished Pipe: The cured-in-place liner shall be continuous over the entire length of the inversion run and be as free as commercially practicable from visual defects such as foreign inclusions, dry spots, pinholes and delamination.
- G. Process Limitations: Though it may be a licensed process, the Contractor or the franchisee shall not change any materials, design values or procedural matters stated or approved herein without the Owner's prior knowledge and approval. The Contractor shall submit, in writing, full details about component materials, their properties and installation procedures and shall abide by them fully during the entire course of the project.

9.07 RESTORATION OF SERVICE AND CLEANUP

A. Restoration of Service:

1. After the pipe has been reconstructed, tested, and accepted by the Engineer, all existing service connections shall be immediately reconnected. The reconnection of the services shall be done without excavation, unless otherwise specified by Owner; this shall be accomplished from the interior of the pipeline by a radial view camera-directed cutting device. Location of the service shall be made by inspection of the pre-construction TV tape and other proven detection methods. The Contractor is responsible for confirming and identifying locations of all active connections within a lined section.
2. A report identifying lateral cuts shall be provided to the Engineer within 24 hours after reconnection of services for each line segment.

3. All re-cut service connections shall be uniform and free of butts, sharp or frayed edges, or any restriction preventing free wastewater flow. Any remedial work to restore or correct a deficient cut shall be completed by the Contractor without delay, at no additional expense to the Owner. All work shall be completed to the satisfaction of the Engineer. Restoration of Sod, Asphalt, and concrete surface is included in the installation price and is not a separate pay item.
 4. If directed by the Engineer, service laterals shall be reconstructed using the "Top Hat" process for CIPP lining. The process uses a polyester felt tube with flexible flange to create a tight-fitting connection at the main.
- B. Sealing at Manholes: The cured-in-place liner shall make a tight fitting seal with the existing pipe(s) in the manhole. Half-inch diameter activated oakum, soaked in Scotch Seal 5600, or low expansion foam, or an approved hydrophilic elastic gasket or sealant such as Hydrotite or approved equivalent, shall be applied circumferentially near the annular space touching the end of the existing pipe and encased with a cementitious mortar, Strong-Seals Systems QSR or equivalent as required by Owner. The top half of the pipe shall be neatly cut off and not broken or sheared off at least 4 inches away from the walls. The channel in the manhole shall be a smooth continuation of the pipe(s) and shall be merged with other lines or channels, if any.

9.08 FINAL INSPECTION AND CLEANUP

- A. Clean-up:
1. All construction material and debris including lateral cutouts shall be removed from the pipe.
 2. All excess material and debris not incorporated into the permanent installation shall be disposed of by the Contractor offsite.
- B. Final TV Inspection Prior to Acceptance: Upon completion of liner insertion and service pipe re-connections, the Contractor shall perform a post-installation inspection of the line segment using remote-controlled closed circuit television equipment as described previously. DVD recording and TV inspection log records shall be delivered to the Engineer. Any defects identified shall be corrected as required. No payment for CIPP will be made until the Engineer or his representative has reviewed the DVD and logs and is satisfied the work has been completed and is of good quality. Post TV shall be downstream direction only.
- C. Defects, which, in the opinion of the Engineer, will affect the liner's structural integrity, strength, hydraulic performance, future maintenance access, and overall line performance, shall be repaired or the sewer replaced at the Contractor's expense. Any lined section of segment (from manhole to manhole) exhibiting these defects will be rejected for payment until such time repairs have been made to the defective liner to the satisfaction of the Engineer. The following methods of repair shall be implemented by the Contractor to resolve defects unless otherwise approved by the Engineer.

Defects	Repair Method
Annular space or infiltration at lateral opening	Re-seal with structural grout or point repair
Damaged lateral caused by overly ground tap	Repair with structural grout or point repair
Annular space or infiltration at manhole wall and liner termination	Re-grout liner termination
Cracked, missing pipe or voids caused by the cleaning operation	Repair with structural grout, thicken liner, or point repair
Dropped pipe or shape loss caused by the cleaning operation	Point repair
Wrinkles or ridges in liner greater than 5% of the pipe diameter	Grinding allowed if not part of structural component of liner. If grinding would require removal of structural component, then Contractor must make point repair.
Re-installed bulkheaded tap or inactive service connection	Re-seal with structural grout or point repair
Lined over debris	Point repair
Soft spots or lifts in the liner	Point repair
Final liner thickness less than required thickness bid	Replace inadequate liner

NOTES:

1. Grout must be structural grout system such as the KA-TE, SIKA or approved equivalent system and may be robotically-applied or hand-applied as conditions dictate.
2. The Engineer shall review the Contractor's inspection DVD to determine if there is an annular space at the lateral opening or manhole terminations. The Engineer's determination shall be considered final. The burden of proof shall be on the Contractor to prove that the annular space does not exist. The Contractor may submit a method of "snug-fit" verification for approval by the Engineer. An annular space shall be any separation of the liner and the host pipe that will allow water to flow through it. Where water is not actively flowing, the Engineer shall use a separation distance of 1/8-inch between the host pipe or manhole wall and the liner.

END OF SECTION

TECHNICAL SPECIFICATIONS
SECTION 10
MEASUREMENT AND PAYMENT

10.01 WORK INCLUDED

The Contractor shall furnish all Supervision, labor, machinery, tools, apparatus, equipment and vehicles, materials, services and other supplies necessary to perform all work shown on the Drawings and/or described in the Specifications and Contract Documents at the unit prices for the items enumerated in Part 2 of this Section.

All scrap material and its disposal, and disposal of all spoil material is incidental to the Contract.

A 15% Contractor mark-up is allowable for all special materials and subcontractors approved by the Owner. Contractor shall submit copies of all invoices for which 15% markup is requested.

All dress up, site restoration and sod is incidental to the pay item work being performed.

10.02 BID SCHEDULE DESCRIPTION

A. ADMINISTRATIVE BID ITEMS

A1. BONDS AND INSURANCE

Payment for bonds and insurance will be made at the Contract lump sum price, and shall include the costs of all bonds provided under the Contract, and the premiums for insurance required under the Contract, for the duration of the contract term (one year). Bonds and Insurance is a single pay item per Contract term (one year).

A2. GENERAL REQUIREMENTS

Payment for general requirements will be made at the Contract lump sum price distributed over the initial term of the Contract and shall include field supervision and support staff, office supervision and support staff, costs associated with maintaining the field operation, and other items required by the general requirements and conditions of the Contract. General Requirements is a single pay item per Contract term (one year).

B. SEWER LINE REPAIR/CONSTRUCTION BID ITEMS

Note: Cost of equipment and vehicles are incidental to all pay items.

All couplings shall be rigid. Fernco couplings shall only be used on Clay lines and shall be Strongback shielded.

B1. – B4. POINT REPAIR

Payment for point repairs (on main lines or laterals) shall be made at the Contract unit price each based on the pipe size and invert depth of the pipe, as indicated on the Bid Schedule. Payment shall include connections to manholes, excavation, bedding, pipe (up to and including 10 lineal feet), jointing, rigid couplings, temporary trench shoring, initial and final backfill, clean-up, any and all appurtenances necessary for a complete installation.

Rock removal if required, is a separate pay items.

If the Contractor replaces a service connection in conjunction with a point repair, payment will be made for the service connection and point repair based on a single line item. The single repair shall include both the point repair and the service connection.

B5. – B12. LINE REPLACEMENT BY THE LINEAL FOOT

Payment for lengths greater than 10 lineal feet (LF) at point repairs, or sewer line installation requiring excavation and replacement shall be made at the Contract unit price per LF based on the pipe size and invert depth of the pipe, as indicated on the Bid Schedule. Payment shall include Supervision, labor, excavation, bedding, pipe (exceeding 10 LF), jointing, rigid couplings, temporary trench shoring, initial and final backfill, clean-up, site restoration, and all appurtenances necessary for a complete installation.

Testing is required if a line segment is replaced from manhole to manhole. Testing is not a separate pay item.

Rock removal if required, is a separate pay items.

If the Contractor replaces a service connection in conjunction with a point repair, payment will be made for the service connection and point repair based on line item.

B36. - B38. The single repair shall include both the point repair and the service connection.

B13. – B15. POINT REPAIR

(See B1. – B4.)

B16. – B23. LINE REPLACEMENT

(See B5. – B12.)

B24. – B26. POINT REPAIR

(See B1. – B4.)

B27. – B42. LINE REPLACEMENT

(See B5. – B12.)

B43. LATERAL REPLACEMENT BY PIPE BURSTING

Lateral is defined as that portion of the service line between the service connection and the home or structure.

Payment for replacement of existing laterals by pipe bursting shall be made at the Contract unit price per LF in place. This payment shall include compensation for pipe, fittings, lateral service connections, and all appurtenances necessary to complete the work. The Contractor shall replace the existing pipe with 6-inch pipe from the service connection to the easement or property line. A cleanout shall be installed at the property or easement line. Installation of the cleanout is a separate pay item. Post-installation CCTV inspection of the completed gravity sewer lateral is included in this pay item.

B44. – B46. SEWER REPLACEMENT BY PIPE BURSTING

Payment for replacement of existing sewer lines by pipe bursting shall be made at the Contract unit price per LF in place based on the pipe size as indicated on the Bid Schedule. This payment shall include excavation as necessary, pipe, lateral connections, cleaning, bypass pumping including set up and take down and monitoring, fittings and appurtenances, backfill, cleanout, site restoration, and all incidentals necessary to complete the work.

Rock removal if required is a separate pay items.

B47. – B58. CIPP

Payment for cured-in-place lining of gravity sewers shall be made at the Contract price per LF completed and accepted, based on the line size as indicated on the Bid Schedule. **Restoration of Sod, Asphalt, and concrete surface is included in the installation price and is not a separate pay item.**

Payment for preparation and insertion of liner including cleaning of lines, dismantle, reassembly, and sealing of existing manhole, sealing of pipe in manholes, cleanup, and site restoration shall be included in the unit price. Measurement shall be made

from the center of manholes. Reinstatement of service connections by remote cutting is included in this pay item.

If any connection other than a factory TEE is found, a point repair shall be made at the connection and a Ductile Iron tee installed. This point repair shall be made and paid under line items B-36. – B38. The cost of the Ductile Iron lateral connection (TEE) shall be incidental to the pay item.

Pre- and post-lining TV inspections (TVI) are the responsibility of the Contractor and are included in the unit price for this item. No additional payment will be made for pre- or post-lining TVI. **Post CCTV data must be submitted in PACP version 4.4.2 unless otherwise requested.**

By-pass pumping, including set up and take down of the bypass system, will be included in the line item price on main lines 10 inches in diameter or less in size. This includes removing and replacing lines. Lines larger that require by-pass pumping is a separate pay item and must be approved by the Engineer.

The Contractor will be paid for 50% of the CIPP quantity upon installation of the lining. The additional 50% will be paid when the following are complete:

1. Post-lining TVI is complete.
2. TVI DVD has been delivered to LFUCG.
3. Defects detected by post-lining TVI are repaired.
4. TVI DVD showing the repair has been satisfactorily completed.
5. All pipes into manholes have been properly sealed.

B59. – B60. CIPP LATERAL

Lateral is defined as that portion of the service line between the service connection and the house or structure. Laterals shall be lined from the service connection to the easement or property line.

Payment for cured-in-place lining of laterals will be made at the contract price per linear foot completed and accepted. Payment for equipment and set-up, cleaning, preparation and insertion of liner, and connecting to existing pipe shall be included in the unit price. Pre- and post-lining TV inspections are the responsibility of the Contractor and are included in the unit price for this item. **Post CCTV data must be submitted in PACP version 4.4.2 unless otherwise requested.**

The Contractor will be paid for 50% of the CIPP quantity upon installation of the liner. The additional 50% will be paid when the following are complete:

1. Post-lining TV inspection is complete.

2. The TV inspection DVD has been delivered to LFUCG.
3. Defects shown by post-lining TV inspection are repaired.
4. A TV inspection DVD shows the repair has been satisfactorily completed.

B61. – B63. CIPP POINT REPAIR

Payment for cured-in-place point repairs to existing gravity sewers shall be made at the Contract unit price each based on the line size, as indicated on the Bid Schedule.

Payment shall include equipment and set-up, cleaning of line, bypass pumping for lines 10 inches and less, preparation and insertion of liner, liner pipe (up to and including 10 LF), jointing, couplings, testing, clean-up, and all appurtenances necessary for a complete installation.

Reinstatement of service connections by remote cutting, if required, is included in this pay item. Pre- and post-lining TV inspections (TVI) are the responsibility of the Contractor and are included in the unit price for this item.

B64. CIPP SERVICE CONNECTION REPAIR

Payment for non-disruptive repair of service connections on cured-in-place pipe by the “top hat” or equivalent method will be made at the Contract unit price each. Cleaning and inspection of the service lateral prior to installation will be included in the unit price for this item and not billed as a separate pay item. Preparation and insertion of the liner, CCTV and cleaning of lines, testing, clean-up, and all appurtenances necessary for a complete installation are included in this pay item.

B65. – B68. REPLACE SERVICE CONNECTION, WITH CLEANOUT

Service connection is defined as the connection of the lateral piping to the LFUCG collector line, including the service tee and up to 10 LF of pipe from the collector line towards the adjacent easement or property line.

Payment for replacement of gravity sewer service connections will be made at the Contract unit price each based on the invert depth of the connection at the sewer main, as indicated on the Bid Schedule. Payment shall include compensation for furnishing pipe, fittings, Supervision, labor, trenching, Class I bedding material, laying, jointing, temporary trench shoring, sheeting and bracing, initial backfill of Class I material over top of pipe, installation of a cleanout, clean-up, and all other appurtenances and procedures needed for a complete installation.

Payment for replacement of service connections will include up to 10 LF of pipe. Service connections shall be replaced to the property or easement line, whichever is applicable, and a cleanout installed there. Pipe beyond 10 LF from the LFUCG collector line shall be paid for by the LF under “Lateral Relocation or Replacement (B43).”

**B69. ABANDONED POINT REPAIR OR SERVICE CONNECTION
EXCAVATION**

Payment shall be made for excavations made at designated locations for point repairs and service connections where the repair cannot be completed. This pay item shall be limited to instances where the location of the defect is misidentified and where the Contractor is not required to verify the location. Locations within 10 LF of the published distance from an existing manhole are considered accurate and are not subject to compensation for additional excavation under this pay item.

This pay item, where applicable, shall include excavation, initial and final backfill, and cleanup. Site restoration is a separate pay item.

B70. DEMOLISH MANHOLE

Payment for manhole demolition will be made at the Contract unit price each and shall include removal of the manhole frame and lid, removing the top 30 inches of the manhole structure, sealing all pipes, breaking holes in the bottom of the manhole structure, filling the structure with crushed stone, backfilling to grade with acceptable material, and clean-up. Site restoration is a separate pay item.

B71. – B72. CLEANOUT

This pay item is for cleanout installations requiring excavation, i.e., in areas where an excavation has not been made for replacement of the service connection. Payment for installation of cleanouts on gravity sewer service connections shall be made at the Contract unit price each which shall include Supervision, labor, excavation, two-way cleanout tee, rigid couplings, vertical stack, piping, reducer (if necessary), threaded plug, backfill, cleanout frame and cover, concrete pad, and all other fittings and appurtenances necessary to complete the installation to finished grade. Connection to the existing service piping, including up to five (5) LF of lateral piping on the customer side of the cleanout, is included in this pay item. Additional repair of customer's lateral piping, if required, shall be paid for under "Lateral Relocation or Replacement (B38)." Cleanout locations are subject to adjustment by LFUCG in the field during construction.

B73. REMOVE PROTRUDING TAP OR OBSTRUCTION

Payment for removal of existing protruding taps (service connections) or rebar, or other obstructions in sewer lines shall be made at the Contract unit price each, regardless of size or depth. Payment shall include all labor, materials, and equipment required to complete the work. Any TV inspection required to perform or verify the repair shall be included in this pay item.

B74. SHALLOW MANHOLE, 4 FEET OR LESS IN DEPTH

Payment for replacement of shallow manholes (4 feet or less in depth) will be made at the Contract unit price each. Payment shall include excavation, backfill, precast concrete base, barrels, flat top section, steps, flexible pipe to manhole gasket, cast iron frame and cover, reinstatement of pipe connections to the manhole (including core drilling), and other appurtenances necessary for a complete installation.

B75. - B76. STANDARD MANHOLE

Payment for replacement of standard manholes (6 feet or less in depth) will be made at the Contract unit price each, based on the manhole diameter as indicated in the Bid Schedule. Payment shall include excavation, backfill, precast concrete base, barrels, eccentric cone top section, steps, flexible pipe to manhole gasket, cast iron frame and cover, reinstatement of pipe connections to the manhole (including core drilling), and other appurtenances necessary for a complete installation. Additional manhole depth greater than 6 feet will be paid under "Manhole Barrel Extensions (B56, B57)."

B77. -B79. MANHOLE REHABILITATION

Payment for manhole rehabilitation will be made at the Contract unit price per vertical foot based on the depth to invert. Payment shall include Supervision, labor, cleaning, plugging, patching, sealing, and coating of manhole walls, base, chimney, and cone. Manhole rehabilitation shall include the application of coatings to provide structural integrity, waterproof the manhole, and protect against hydrogen sulfide corrosion. Payment shall include all cleaning and surface preparation necessary for proper application of the coating materials. Vacuum testing of rehabilitated manholes shall be included in the unit price and is not a separate pay item.

B80. RESET AND SEAL MANHOLE RING

Payment to reset and seal existing manhole rings to the manhole top section (for manholes already at grade) shall be made at the Contract unit price each.

B81. TIME AND MATERIALS

This item shall be used to secure needed products and activities not foreseen within limits of contract. Time shall be on an hourly basis. An invoice shall be provided with a 15% markup.

B82. REIMBURSEMENT

This item shall be used to reimburse homeowners or as needed when work by others or materials are needed that are not included in other line items associated with this contract. Reimbursement shall be for cost plus 15% markup.

B83. – B85. REPLACE LID AND FRAME

Payment to replace existing manhole frame and lids according to the Bid Schedule shall include all Supervision, labor, materials, and equipment necessary to complete the work in accordance with the Contract Documents.

B86. INITIAL CHIMNEY SEAL

Payment to install initial section of Chimney Seal installed in manhole Chimney. Payment shall include all Supervision, labor, materials, and equipment necessary to complete the work in accordance with the Contract Documents.

B87. CHIMNEY SEAL EXTENSIONS

Payment to additional section of Chimney Seal installed in manhole Chimney. Payment shall include all Supervision, labor, materials, and equipment necessary to complete the work in accordance with the Contract Documents.

B88. – B89. RAISE MANHOLE TO GRADE

Payment to raise existing manholes to grade shall be made at the Contract unit price each based on whether the surface is paved or non-paved, according to the Bid Schedule. Payment shall include all Supervision, labor, materials, and equipment necessary to complete the work in accordance with the Contract Documents. The maximum vertical distance the Contractor will be required to raise the manhole rim under this pay item will be 12 inches. Site restoration is a separate pay item.

B90. – B91. MANHOLE BARREL EXTENSIONS

For manhole replacements greater than 6 feet in depth, and for raising manholes to grade in excess of 12 inches, payment for the additional manhole barrel will be made at the Contract unit price per vertical foot of additional depth, in place, based on the manhole diameter as indicated in the Bid Schedule. The manhole barrel is defined as that portion of the manhole with a fixed diameter between the base and the cone sections.

B92. INSIDE MANHOLE DROP CONNECTION

Payment for inside manhole drop connection will be made at the Contract unit price each, complete in place, and shall include all Supervision, labor, fittings, piping,

excavation, concrete, core drilling, connection to manhole and all incidentals necessary for a complete installation.

B93. – B94. MR. MANHOLE

Payment for Mr. Manhole will be made at the Contract unit price each, complete in place, and shall include all Supervision, labor, equipment, excavation, concrete, core drilling and all incidentals necessary for a complete installation.

C. SEWER LINE INVESTIGATION BID ITEMS

C1. LOCATE MANHOLE

Payment for locating existing manholes shall be made at the Contract unit price each. Manholes shall be located by CCTV inspection or other non-destructive means. Existing structures shall not be moved or damaged to locate manholes without prior approval of the Owner.

C2. – C6. CLEAN AND CCTV SANITARY SEWER

Payment for cleaning and closed-circuit television inspection of sanitary sewers will be made at the Contract unit price per LF completed, based on the line size as indicated on the Bid Schedule. Measurement shall be made from the center of the manholes. Cleaning shall include all passes with high-velocity jet (hydro cleaning) equipment as necessary to remove grit, grease and debris from the pipeline. Required deliverables, including CCTV inspection reports and DVDs, are included in this pay item. Plugging and blocking of sewer lines, if required, is included in this pay item. Bypass pumping, if required, is a separate pay item. **CCTV data must be submitted in PACP version 4.4.2 unless otherwise requested.**

All heavy cleaning for lines ten inches and smaller is incidental to the CCTV and shall be not be a separate pay item. All heavy cleaning of lines twelve inches in diameter and larger shall be part of line item price (C18-C19). If heavy cleaning for lines greater than twelve inches is required, request must be made prior to cleaning being performed for approval.

C7. CCTV LATERAL

Payment for closed-circuit television inspection of sewer laterals (4-inch or 6-inch) will be made at the Contract unit price per LF. This requires a mini camera to be launched from the main line through an active lateral. If cleaning using high velocity jet (hydro cleaning) equipment is required to complete the CCTV inspection, such cleaning shall be included in this pay item. Required deliverables, including CCTV inspection reports and DVDs, are included in this pay item. Plugging and blocking of sewer lines and bypass pumping if required, is included in this pay item.

C8. – C12. CCTV SANITARY SEWER

Payment for closed-circuit television inspection of sanitary sewers will be made at the Contract unit price per LF completed, based on the line size as indicated on the Bid Schedule. Measurement shall be made from the center of the manholes. Payment shall include all Supervision, labor, materials, and equipment required to complete the work. Required deliverables, including CCTV inspection reports and DVDs, are included in this pay item. Plugging and blocking of sewer lines, if required, is included in this pay item. Bypass pumping for lines 10 inches and smaller is included in line item. Bypass pumping for lines greater than 12 inches if required, is a separate pay item and must be approved prior to CCTV.. **CCTV data must be submitted in PACP version 4.4.2 unless otherwise requested.**

C14. – C15. ROUTINE CLEANING OF SANITARY SEWERS

Payment for routine cleaning of sanitary sewers will be made at the Contract unit price per LF completed, based on the line size as indicated on the Bid Schedule. Cleaning shall include all passes with high-velocity jet (hydro cleaning) equipment as necessary to remove grit, grease and debris from the pipeline. Measurement shall be made from the center of the manholes. Plugging and blocking of sewer lines, if required, is included in this pay item.

All heavy cleaning for lines ten inches and smaller is incidental and shall be not be a separate pay item. All heavy cleaning of lines twelve inches in diameter and larger shall be part of line item price (C18-C19). If heavy cleaning for lines greater than twelve inches is required, request must be made prior to cleaning being performed for approval.

C16. SMOKE TESTING, MAIN LINES

Payment for smoke testing main lines will be made at the Contract unit price per LF of lines completed. Payment shall include all setup costs, property owner notifications, plugging as necessary, all field work, and submitting smoke test reports with photographs in accordance with LFUCG requirements.

C17. SMOKE TESTING, 3-MAN CREW WITH EQUIPMENT

Payment for smoke testing areas other than main lines will be made at the Contract unit price per hour for a 3-man crew with equipment. Payment shall include setup costs, property owner notifications, plugging as necessary, all field work, and submitting smoke test reports with photographs in accordance with LFUCG requirements.

C18. – C19. HEAVY CLEANING

Payment for heavy cleaning of sanitary sewer lines shall be made at the Contract unit price per hour required, based on the line size as indicated on the Bid Schedule. Heavy cleaning is defined as cleaning necessary to eliminate a line blockage, or to remove grit or other material deposits exceeding two inches in depth at the pipe invert for the entire reach of pipe, or to remove grease deposits at a depth past the spring line of the pipe.

NOTE; There shall be no payment for Heavy cleaning of lines 8 inches and smaller at any time or for any reason. Heavy cleaning is only considered for pay on lines 12 inches and greater and must be approved prior to work beginning.

C20. – C22. MECHANICAL ROOT REMOVAL

Payment for mechanical root removal will be made at the Contract unit price per LF based on the pipe size as indicated in the Bid Schedule. Measurement shall be made from manhole to manhole completed. Extent of root removal is that necessary for completion of cured-in-place lining of the pipeline in accordance with the Contract Documents.

D. GENERAL CIVIL BID ITEMS

D1. ROCK REMOVAL

Payment for rock removal will be made at the Contract unit price per cubic yard of material removed. Payment shall include all costs for excavation including all equipment, removal, hauling and disposal of rock material.

Concrete encasement removal around pipes shall be billed as Rock removal and shall include all costs including but not limited to all equipment, supervision, and labor associated with removal.

D2. – D4. TREE REMOVAL

Payment for removal of trees or stumps shall be made at the Contract unit price based on the tree diameter, as indicated in the Bid Schedule. Tree diameter shall be measured at a point three (3) feet above the ground.

D5. SITE RESTORATION, PAVED, BITUMINOUS SURFACE

Payment for site restoration and pavement repair of bituminous surfaces shall be made at the Contract unit price per square yard which shall include saw cutting the existing pavement, subbase preparation, concrete, base material, temporary patching or plating (if necessary), placement of pavement surface material, compaction, cleanup, site restoration, sod, and all incidentals necessary for a complete installation.

D6. SITE RESTORATION, PAVED, CONCRETE SURFACE (UP TO 6-

INCH THICKNESS)

Payment for site restoration and pavement repair of concrete surfaces (up to 6-inch thickness) shall be made at the Contract unit price per square yard which shall include saw cutting the existing pavement, subbase preparation, base material, temporary patching or plating (if necessary), placing and finishing concrete, cleanup, site restoration, sod, and all incidentals necessary for a complete installation. Replacement of concrete driveway aprons is included in this pay item.

D7. SITE RESTORATION, PAVED, CONCRETE SURFACE (>6-INCH THICKNESS)

Payment for site restoration and pavement repair of concrete surfaces (greater than 6-inch thickness) shall be made at the Contract unit price per square yard which shall include saw cutting the existing pavement, subbase preparation, base material, temporary patching or plating (if necessary), placing and finishing concrete, cleanup, site restoration, sod, and all incidentals necessary for a complete installation.

D8. SITE RESTORATION, PAVED, TEMPORARY WINTER REPAIR

Payment for site restoration and pavement repair of bituminous surfaces shall be made at the Contract unit price per square yard which shall include saw cutting the existing pavement, subbase preparation, base material, temporary patching or plating (if necessary), temporary concrete cap, placement of pavement surface material, compaction, and all incidentals necessary for a complete installation.

This pay item is for site restoration completed during the time of year when asphalt surface material is unavailable. The Contractor shall install a concrete cap, cold patch, or temporary blacktop in lieu of the final asphalt surface material. The concrete cap, cold patch, or temporary blacktop shall be removed and replaced with final asphalt surface material when available. Installation of and materials for the concrete cap, cold patch, or temporary blacktop is not a separate pay item.

NOTE: At no time shall traffic run on DGA or any other stone base unless approved.

D9. SITE RESTORATION, SEEDING WITH STRAW MULCH AND NET

Payment for restoration of areas requiring seeding, straw mulch and net will be made at the Contract unit price per square yard. Payment shall include all labor, equipment, materials and incidental costs to complete finish grading, fertilizing, seeding, mulching with straw, netting material, and watering the area in accordance with the Contract Documents. Re-seeding as necessary to obtain a uniform stand is included in this pay item.

D10. SITE RESTORATION, SEEDING WITH COCONUT MATTING

Payment for restoration of areas requiring seeding with coconut matting will be made at the Contract unit price per square yard. Payment shall include all labor, equipment, materials and incidental costs to complete finish grading, fertilizing, seeding, installation/staking of matting, and watering the area in accordance with the Contract Documents. Re-seeding as necessary to obtain a uniform stand is included in this pay item.

D11. SITE RESTORATION, SOD

Payment for restoration of areas requiring sod will be made at the Contract unit price per square yard. Payment shall include all costs to complete finish grading, fertilizing, placing sod, and watering the area in accordance with the Contract Documents. Maintenance of sod is included in this pay item. Sod is only a pay item when not associated with a pay item and requested by LFUCG.

D12. CREEK BANK RESTORATION, CHANNEL LINING

Payment for creek bank restoration with channel lining will be made at the Contract unit price per square yard in place. Payment shall include all costs to install the channel lining in accordance with the Drawings and Contract Documents.

D13. CREEK BANK RESTORATION, RIP-RAP

Payment for creek bank restoration with rip-rap will be made at the Contract unit price per square yard in place. Payment shall include all costs to install the rip-rap in accordance with the Drawings and Contract Documents.

D14. CREEK BANK RESTORATION, COCONUT MATTING

Payment for creek bank restoration with coconut matting will be made at the Contract unit price per square yard in place. Payment shall include all costs to install the matting in accordance with the Drawings and Contract Documents.

D15. MONOLITHIC CONCRETE CURB AND GUTTER REPLACEMENT

Payment for monolithic concrete curb and gutter replacement shall be made at the Contract unit price per linear foot which shall include base, forms, reinforcement, placement of concrete, finishing, and all incidentals necessary for a complete installation. Replacement shall match existing curb and gutter.

D16. CONCRETE CURB REPLACEMENT

Payment for concrete curb replacement shall be made at the Contract unit price per linear foot which shall include base, forms, reinforcement, placement of concrete,

finishing and all incidentals necessary for a complete installation including site restoration and sod. Replacement shall match existing curb.

D17. BITUMINOUS CURB REPLACEMENT

Payment for bituminous curb replacement shall be made at the Contract unit price per linear foot which shall include all incidentals necessary for a complete installation including site restoration and sod. Replacement shall match existing curb.

D18. #9 CRUSHED STONE

Payment for #9 crushed stone will be made at the Contract unit price per ton, delivered, placed, and compacted.

D19. DENSE GRADED AGGREGATE (DGA)

Payment for DGA will be made at the Contract unit price per ton, delivered, placed and compacted.

D20. FLOWABLE (CONTROLLED DENSITY) FILL

Payment for flowable (controlled density) fill will be made at the Contract unit price per cubic yard acceptably placed. Fill will be measured in place, after compaction, using the three dimensional method. Note: Trench width for payment shall be limited to the nominal size of the pipe plus 24 inches.

D21. ASPHALT MILLINGS

Payment will be made at the Contract unit price per ton, delivered, placed and compacted.

D22. BITUMINUS PAVEMENT OVERLAY

Payment will be made at the Contract unit price per ton, delivered, placed and compacted.

D23. #2 CRUSHED STONE

Payment for #2 Crushed Stone will be made at the Contract unit price per ton, delivered and placed.

D24. CLASS II CHANNEL LINING

Payment for Class II Channel Lining will be made at the Contract unit price per ton, delivered and placed.

D25. ASPHALT BASE

Payment for Asphalt Base will be made at the Contract unit price per ton, delivered, placed, and compacted.

E. MANPOWER AND EQUIPMENT BID ITEMS

Note: For all equipment bid items, the cost of the equipment Operator, fuel, equipment set-up and removal, and transportation to the site including trailer shall be included in the hourly rate. Travel time shall be considered incidental and shall not be paid for separately.

Section E items are for TIME AND MATERIAL work only.

E1. – E2. BYPASS PUMPING SETUP

Payment for bypass pumping setup shall be made at the Contract unit price each based on the pipe size, as listed in the Bid Schedule. Payment shall include mobilization and all costs related to setting up the bypass pumping operation. Actual bypass pumping of wastewater is paid separately on an hourly basis.

NOTE; Bypass pumping and setup and take down of lines 10 inches and smaller is incidental to the line item it is associated with. Bypass pumping and setup of lines 10 inches and smaller if required for an unknown situation may be used but must be approved by OWNER prior to work beginning. Payment shall be made at Contract unit price.

E3. – E14. BYPASS PUMPING

Payment for bypass pumping shall be made at the Contract unit price per hour based on the pump discharge size and the distance from the pump suction to the discharge point, as indicated on the Bid Schedule. Payment shall include suction hose and screen, all piping, adapters, check valve, pumps, and all other appurtenances necessary for the bypass pumping operation including supervision, maintenance, and monitoring personnel.

NOTE; Bypass pumping and setup and take down of lines 10 inches and smaller is incidental to the line item it is associated with. Bypass pumping and setup of lines 10 inches and smaller if required for an unknown situation may be used but must be approved by OWNER prior to work beginning. Payment shall be made at Contract unit price.

E15. SSO SITE CLEANUP

Payment for site cleanup following sanitary sewer overflows (SSOs) will be made at the Contract unit price per hour, with a minimum of two hours. Cleanup activities include, but are not limited to, removal of visual residue including solids, paper, rags, etc., proper disposal of waste materials, washing down the affected areas (including proper disposal of wash water), and applying lime or other disinfectant and deodorizing agents. Other cleanup activities that may be required are listed in the technical specification.

E16. COMBINATION VACUUM/JET RODDER/HYDRO EXCAVATOR

Payment for combination vacuum/jet rodder with crew will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable. Price includes operator, one laborer, and proper disposal of vacuumed or excavated materials.

E17. BACKHOE/EXTEND-A-HOE

Payment for backhoe/extend-a-hoe will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable. Price includes operator.

E18. HOE RAM

Payment for hoe ram will be made at the Contract unit price per hour when work is authorized on a time and materials basis. If a HOE RAM is needed in relation to a pay item such as ROCK REMOVAL, it shall be incidental to the pay item. Price includes operator.

E19. DUMP TRUCK, SINGLE AXLE

Payment for single axle dump truck will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable. Cost of CDL Driver included in this pay item.

E20. DUMP TRUCK, TANDEM OR TRI-AXLE

Payment for tandem or tri-axle dump truck will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable. Cost of CDL Driver included in this pay item.

E21. LARGE TRACK HOE, CAT 311 OR EQUIVALENT

Payment for large track hoe (Cat 311D or equivalent) will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable.

E22. SMALL TRACK HOE, CAT 301.6C OR EQUIVALENT

Payment for small track hoe (Cat 301.6C or equivalent) will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable. Price includes operator.

E23. SKID-STEER LOADER

Payment for skid-steer loader (Cat 216B series or equivalent) will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable. Price includes operator.

E24. ALL-TERRAIN VEHICLE, GATOR OR EQUIVALENT

Payment for all-terrain vehicle (JD Gator T or equivalent) will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable. Price includes operator.

E25. SUPERVISOR/SUPERINTENDENT

Payment for Supervisor/Superintendent will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Includes all personal protective equipment (PPE), vehicle, and vehicle mileage.

E26. CREW FOREMAN

Payment for Crew Foreman will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Includes all personal protective equipment (PPE), vehicle, and vehicle mileage.

E27. LABORER

Payment for Laborer will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Includes all personal protective equipment (PPE), vehicle, and vehicle mileage.

E28. AIR COMPRESSOR (JACK HAMMER), 125 CFM OR LARGER

Payment for air compressor (jack hammer), 125 cfm or larger, will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable.

E29. ROLLER/COMPACTOR

Payment for roller/compactor will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable.

E30. PULL-BEHIND PAVER

Payment for pull-behind paver will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable.

E31. TRAFFIC MAINTENANCE – TYPE I (FLAGGER)

Payment for Traffic Maintenance – Type I will be made at the Contract unit price per hour. Two flaggers are required for traffic maintenance. Flaggers shall be dedicated to flagging only and can perform no other duties.

E32. ELECTRONIC ARROW BOARD

Payment for Electronic Arrow Board will be made at the Contract unit price per hour and shall include traffic control signage (flashing arrow panel) in accordance with the KTC Manual on Uniform Traffic Control Devices (MUTCD). Upon approval of the Owner, where an arrow board is required for 24 hour use due to safety, payment for arrow board will be based on current weekly rates plus 15%.

E33. ELECTRONIC MESSAGE BOARD

When authorized by the Owner, payment for electronic message board will be based on weekly rental prices plus 15%. Contractor shall provide all personnel to transport, setup and maintain the equipment while it is needed.

E34. INVESTIGATION CREW

Payment for Investigation Crew will be made at the Contract unit price per hour when work is authorized. The Investigation crew shall consist of one vector truck with two operators plus one camera truck with two drivers/operators. The camera truck shall have lateral launching capabilities and both camera crew members shall be PCAP and MACP Certified Technicians. Investigation crew must also have the ability to do Dye water flooding and to plug lines up to and including 36". Supervision shall be included as part of hourly rate.

The Contractor shall furnish all smoke testing and dye testing equipment including door hangers, dye, liquid smoke, smoke bombs, traffic control, or any other device required to achieve final testing data. Traffic control flaggers shall be paid at a separate laborer hourly rate. Excessive amounts of dye and smoke will be required for all investigations. Failure to produce excessive and adequate dye or smoke shall require retesting at the Contractors expense. Investigation Crew shall be responsible

for the actual smoke and dye testing as well as notification of appropriate authorities prior to and conclusion of tests taking place.

Investigation crew shall respond to written directives from the LFUCG Representative to find/locate problems and issues in the sewer lines and shall be under the direction of a LFUCG representative. Finding shall consist of locating a problem identified by the LFUCG representative sufficiently to allow for the repair by a work crew. Investigation Crew must be able to respond within 72 hours. Contractor (not the Investigation Crew) shall be responsible for distributing door hangers where necessary.

E35. D5 DOZER OR EQUIVALENT

Payment for a D5 DOZER OR EQUIVALENT will be made at the Contract unit price per hour when work is authorized on a time and materials basis. Minimum of two hours payable.

10.03 ESTIMATED QUANTITIES OF WORK

Wherever the estimated quantities of work to be done and materials to be furnished under this Contract are shown in any of the documents, including the Bid Proposal, they are given for use in comparing bids and the right is specifically reserved, except as otherwise limited by the Contract Documents, to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the Work contemplated by this Contract. Such increase or diminution shall be accompanied by an adjustment in the Contract Amount in accordance with the Contract Conditions, and shall not give cause for claims or liability for damages against the Owner or the Engineer, due to such increase or diminution.

END OF SECTION

TECHNICAL SPECIFICATIONS
SECTION 11
SAMPLE FORMS AND STANDARD DRAWINGS

11.01 SAMPLE FORMS:

- A. A major emphasis of this project is to cause a minimal amount of disruption to the community and its individuals. To achieve this goal, various notification forms have been prepared by the LFUCG in an effort to inform property owners of the nature of the work being performed.
- B. Prior to working on private property the contractor shall give the owner or resident of such property a minimum of 5 days notice. The notice shall be in both person and writing. A sample of such notice is included in the construction documents. The notice shall be given directly to the owner or resident and placed as a door hanger. If the work is not started at the agreed time of the notice with the owner / resident must be notified again.
- C. It shall be the Contractor's responsibility to contact and distribute these forms, at no additional cost to the Owner, to all potentially affected property owners as defined in the preceding sections of this document.
- D. Following are examples of some of the various forms. NOTE: The forms included in this section are not inclusive of all forms, which the Owner may deem necessary. All forms are subject to change.

11.02 STANDARD DRAWINGS:

- A. Much of the repair work specified herein, is required to comply with the "Standard Drawings 2017" and "The Division of Engineering Manuals" issued by the Lexington-Fayette Urban County Government, Department of Environmental Quality, Division of Engineering. The Contractor is advised to obtain a copy of all these documents prior to the commencement of any contract work. The Contractor is strongly urged to purchase and have in his or his Project Coordinators possession, at all time, a complete set of LFUCG Standard Drawings.

(Date)

(Repair)

Dear Resident,

Because the temperature is below that recommended for placement of asphalt or concrete, the area disturbed by the recent sanitary sewer construction cannot be completed at this time. This spring, the contractor will return between mid-March and mid-May and properly restore the area at that time. Until then, all paved areas disturbed by construction will be filled with gravel and allowed to settle over the winter.

If you have any questions, concerns or special problems, please call the sewer rehabilitation contractor _____, or my office at the numbers listed below.

Sincerely,

Rick Day, P.E.
Construction Manager
Office: 425-2401

**Lexington-Fayette Urban County Government
Division of Water Quality**



Manhole Inspection Form

Manhole ID _____

Manhole Location _____ **Surface** _____ **Down Pipe Cover** _____ **Date and Time** _____

Street	AP – Asphalt	A – Asphalt	Project _____
Parking Lot	CC – Concrete	C – Concrete	
Driveway	GS – Grass/Soil	G – Grass/Soil	
Sidewalk	FD – Field	DR – Drainage Way	Address _____
Front Yard	BD – Buried	CK – Creek/Stream	
Side Yard		NC - No Cover	Inspection Team _____
Backyard			
Field			

<p>Manhole Lid & Ring Grade, B – Below Grade</p> <p>Raise MH? <u>Y</u> <u>N</u></p> <p>Lid Type: _____ V – Vented S – Solid Deteriorated <u>Y</u> <u>N</u> B – Bolted O – Other _____ Other _____</p> <p>No. of Vent Holes: _____ Full Pipe _____ No. of Pick Slots: _____ <u>N</u></p> <p>Surcharge? <u>Y</u> <u>N</u> Ring Condition: _____ G – Good M – Missing C – Crack A – Misaligned</p> <p>B – Broke</p> <p>Inflow Preventer? <u>Y</u> <u>N</u> Poor _____</p>	<p>Manhole Materials</p> <p>Chimney: _____</p> <p>Cone: _____</p> <p>Wall: _____</p> <p>Bench: _____</p> <p>Lid Condition: _____</p> <p>B – Brick C – Concrete I – CIP F – Fiberglass P – Precast M – CMU Block</p> <p>O – Other (Explain)</p> <p>MH Diameter: _____ (ft)</p>
--	---

Structure Grade _____
X - At Grade, A – Above
Grade: _____ (inches)

Manhole Steps: Number _____
Fiberglass _____ Cast _____ Steel _____

Bench Depth: None _____ ½ Pipe _____

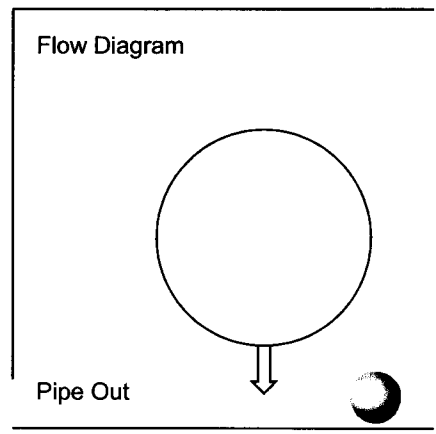
Debris/Grease Deposits? Y

Invert: _____ **Signs of**

Manhole Depth: _____

Manhole Condition: Good ___ Fair ___

	1	2	3	Downstream
Upstream Pipe:				
Connection	_____	_____	_____	_____
MH	_____	_____	_____	_____
Pipe Size:	_____	_____	_____	_____
Pipe Mtr'l	_____	_____	_____	_____
Invert Depth	_____	_____	_____	_____
Flow Depth	_____	_____	_____	_____
Drop	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>
Protruding Pipe	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>	<u>Y</u> <u>N</u>



Comments: _____

Manhole Defects					Photo	Location	For Office Use
Only:	Num	Location	Code	Rating	I/I	ID	
							Suggested
Rehabilitation Methods							
1.	_____	_____	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____	_____	Designer Review: _
4.	_____	_____	_____	_____	_____	_____	Date: _____
5.	_____	_____	_____	_____	_____	_____	_____
Priority Ranking: _____						COL - Collapse	LO - Loose

MBR - Missing Bricks/Mortar

Comments: _____
Potential Failure

1. Structural Defect,
2. Significant I/I or
3. Intermediate I/I or
4. Minor I/I Problem,
5. No I/I, Minor

Rating:
Maintenance Issue

I/I:

- | | |
|------------------|--------------|
| A - Severe | A - Active |
| B - Intermediate | E - Evidence |
| C - Minor | N - None |

_____ Maintenance Issue
Evidence of I/I
_____ Maintenance Issue

(Date)

(Repair)

Dear Resident,

Since the planting season is over, the area disturbed by recent construction cannot be restored to its original condition at this time. This spring, the contractor will return between mid-March and mid-May to complete the yard restoration work. Any mature plantings that were damaged as a result of construction will be replaced. Until then, the disturbed area will be covered with straw and allowed to settle over the winter.

If you have any questions, concerns or special problems, please call the sewer rehabilitation contractor _____, or my office at the numbers listed below.

Sincerely,

Rick Day, P.E.
Construction Manager
Office: 425-2401

WATER QUALITY REPAIR PROJECT NOTICE

Dear Resident:

This is to let you know that the Lexington-Fayette Urban County Government will be conducting repairs on the sanitary sewer in your area. The sanitary sewer rehabilitation contractor _____ is performing the work.

We are attempting to reduce both the sanitary sewer overflows and operating cost at the treatment plant. These expenditures are paid from the Sanitary Sewer User's Fee.

In order to do this, we will be doing the following item(s) checked below:

_____ We may need to access our sanitary sewer easement by way of your property on or about ____/____/____/.

_____ We may need to temporarily relocate your fence, shrub, or _____
In the area marked on or about ____/____/____/.

_____ We will make a line repair in the area marked on or about ____/____/____/. If disturbed, your lawn, sidewalk, or driveway will be returned to its original state or better.

Please the owner of this property of this letter if you are not the owner.

If you have any questions, concerns or special problems, please call the rehabilitation contractor _____, or my office at the numbers listed below.

Sincerely,

Rick Day, P.E.
Construction Manager
Office: 425-2401

Lexington-Fayette Urban County Government
 Division of Water Quality
 301 Lisle Industrial Avenue Lexington, Ky 40511

Smoke Test Form

Date: _____ Crew: _____

Line Segment ID: _____ Manhole Depth: _____ Pipe Diameter: _____

- Defect Codes:
- AS Abandoned Service
 - CB Catch Basin
 - CD Cleanout Defective
 - CM Cleanout Cap Missing
 - DP Downspout
 - EP Exposed Pipe
 - LN Lateral, Non-Ponding Area
 - LP Lateral, Ponding Area
 - MN Manhole Lid, Non-Ponding Area
 - MP Manhole Lid, Ponding Area
 - SN Manhole Structure, Non-Ponding Area
 - SP Manhole Structure, Ponding Area
 - PN Pipe Defect, Non-Ponding Area
 - PP Pipe Defect, Ponding Area
- Location Codes:
- FY Front Yard
 - SY Side Yard
 - BY Back Yard
 - SW Sidewalk
 - DW Driveway
 - PL Parking Lot
 - ST Street

Smoke Rate:
 A Heavy
 B Medium
 C Light
 No Defects _____

Did All Plumbing Vents Smoke? _____

Defect Code	Location Code	Rate	Photo Number	Address	Comments

WATER QUALITY SMOKE TEST NOTICE

Dear Resident:

The Division of Water Quality is trying to reduce the groundwater and rainwater entering the sanitary sewer system. This will reduce the operating cost at the wastewater treatment plants and restore capacity to the sanitary sewer collection system. These expenditures are paid from the Sanitary Sewer User's Fee.

We will be working in your area in the next couple of days. Smoke testing will be used to locate leaks and improper connections. The sanitary sewer rehabilitation contractor _____ is performing the work.

Smoke should not enter the premises unless there is a leak or an unused water tap. To minimize this possibility, water should be run in all drains, sinks, and outlets that have not been used for some time. The smoke is non-staining to interiors and should only last 10-30 minutes.

Any presence of smoke within the house should be reported to the workers conducting the tests or by calling the LFUCG 425-2401.

Avoid unnecessary exposure to the smoke. The smoke is deemed harmless, but any smoke may be irritating to nasal passages. Any irritation by the smoke should be temporary and should quickly disappear after exposure has ceased.

If you have any questions, concerns or special problems, please call the sewer rehabilitation contractor _____, or my office at the numbers listed below.

Sincerely,

Rick Day, P.E.
Construction Manager
Office: 425-2401

WATER QUALITY REPAIR PROJECT UPDATE

Dear Resident:

The purpose of this document is to update you on the ongoing sanitary sewer rehabilitation work in your neighborhood. These repairs are paid from the LFUCG Sanitary Sewer User's Fee. The sanitary sewer system Contractor _____ is performing the work. We are attempting to reduce both the sanitary sewer overflows and operating cost at the treatment plant.

In the next several days, the contractor will be removing any excess dirt from your property. After the disturbed area has had time to settle, final surface restoration will consist of the placement of sod. If you would prefer seed and straw, please notify us at the numbers listed below.

Sod requires more maintenance (watering) than seed/straw, which is the responsibility of the resident/property owner. It is very important that the sod is maintained and that the ground has finished settling. The LFUCG will not pay for a second placement of sod due to improper watering. If the ground should sink after sod has been placed, topsoil will be placed and area will be resoded.

If you have any questions, concerns or special problems, please call the rehabilitation Contractor _____, or my office at the numbers listed below.

Sincerely,

Rick Day, P.E.
Construction Manager
Office: 425-2401

Sharon A Jones

From: Todd Slatin
Sent: Thursday, June 14, 2018 3:36 PM
To: Sharon A Jones
Cc: Martha Allen
Subject: RE: Leak Eliminators Contract

That is correct. I'm surprised Martha explained it so well.

From: Sharon A Jones
Sent: Thursday, June 14, 2018 2:43 PM
To: Todd Slatin <tslatin@lexingtonky.gov>
Cc: Martha Allen <mallen@lexingtonky.gov>
Subject: Leak Eliminators Contract

Hey, Todd, I just wanted to verify my understanding of why we got a hard copy contract on this even though the legislation calls it a price contract. My understanding from Martha is that because they are bonded, Law has determined that we need a written contract and that \$11,743,370 is an appropriate amount.

Sharon A. Jones
Deputy Council Clerk
Council Clerk's Office

859.258.3242 office
lexingtonky.gov

