



Lexington-Fayette Urban County Government

Lexington, Kentucky
Horse Capital of the World

Division of Central Purchasing

Date of Issue: March 11, 2016

INVITATION TO BID #35-2016 Storm Sewer Trenchless Rehabilitation & Repair Services

Bid Opening Date: March 24, 2016

Bid Opening Time: 2:00 PM

Address: 200 East Main Street, 3rd Floor, Room 338, Lexington, Kentucky 40507

Type of Bid: Price Contract

Pre Bid Meeting: N/A

Pre Bid Time: N/A

Address: N/A

Sealed bids will be received in the office of the Division of Central Purchasing, 200 East Main Street, Lexington, Kentucky, until **2:00 PM**, prevailing local time on **03/24/2016**. Bids must be received by the above-mentioned date and time. Mailed bids should be sent to:

**Division of Central Purchasing
200 East Main Street, Room 338
Lexington, KY 40507, (859) 258-3320**

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.** All bids must be signed and have the company name and address, bid invitation number, and the name of the bid on the outside of the envelope.

Bids are to include all shipping costs to the point of delivery located at: VARIOUS LOCATIONS, Lexington, KY

Bid Security Required: Yes No *Cashier Check, Certified Check, Bid Bond (Personal checks and company checks will not be acceptable).*

Performance Bond Required: Yes No

Check One: <input type="checkbox"/> Bid Specifications Met <input type="checkbox"/> Exceptions to Bid Specifications. <i>Exceptions shall be itemized and attached to bid proposal submitted.</i>	Proposed Delivery: <input type="checkbox"/> days after acceptance of bid.
Procurement Card Usage —The Lexington-Fayette Urban County Government may be using Procurement Cards to purchase goods and services and also to make payments. Will you accept Procurement Cards? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Submitted by: Uretex Holdings, Inc.
Firm Name

4759 Drake Field Rd.
Address

Lake land, FL 33811
City, State & Zip

Bid must be signed:
(original signature)

CFD
Signature of Authorized Company Representative - Title

Aaron Hall
Representative's Name (Typed or printed)

863-984-8727
Area Code - Phone - Extension *Fax #*

ahall@uretexholdings.com
E-Mail Address

(for original signature)
Aaron Rogers
Sales Engineer
502-314-5817

The Affidavit in this bid must be completed before your firm can be considered for award of this contract.

AFFIDAVIT

Comes the Affiant, Aaron Hall, and after being first duly sworn under penalty of perjury as follows:

1. (His/her name is Aaron Hall and he/she is the individual submitting the bid or is the authorized representative of Uredek Holdings, Inc. 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 "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.

STATE OF

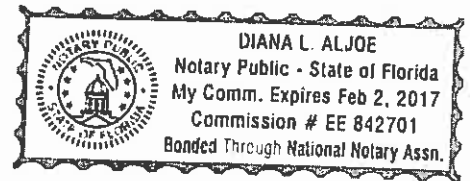
FLORIDA

COUNTY OF

POLK

The foregoing instrument was subscribed, sworn to and acknowledged before me by AARON HALL on this the 23RD day of MARCH, 2016

My Commission expires: FEB. 2, 2017



Diana L. Aljoe
NOTARY PUBLIC, STATE AT LARGE

Please refer to Section II. Bid Conditions, Item "U" prior to completing this form.

I. GREEN PROCUREMENT

A. ENERGY

The Lexington-Fayette Urban County Government is committed to protecting our environment and being fiscally responsible to our citizens.

The Lexington-Fayette Urban County Government mandates the use of Energy Star compliant products if they are available in the marketplace (go to www.Energystar.gov). If these products are available, but not submitted in your pricing, your bid will be rejected as non-compliant.

ENERGY STAR is a government program that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations.

Key Benefits

These products use 25 to 50% less energy
Reduced energy costs without compromising quality or performance
Reduced air pollution because fewer fossil fuels are burned
Significant return on investment
Extended product life and decreased maintenance

B. GREEN SEAL CERTIFIED PRODUCTS

The Lexington-Fayette Urban County Government is also committed to using other environmentally friendly products that do not negatively impact our environment. Green Seal is a non-profit organization devoted to environmental standard setting, product certification, and public education.

Go to www.Greenseal.org to find available certified products. These products will have a reduced impact on the environment and on human health. The products to be used must be pre-approved by the LFUCG prior to commencement of any work in any LFUCG facility. If a Green Seal product is not available, the LFUCG must provide a signed waiver to use an alternate product. Please provide information on the Green Seal products being used with your bid response.

C. GREEN COMMUNITY

The Lexington-Fayette Urban County Government (LFUCG) serves as a principal, along with the University of Kentucky and Fayette County Public Schools, in the Bluegrass Partnership for a Green Community. The Purchasing Team component of the Partnership collaborates on economy of scale purchasing that promotes and enhances environmental initiatives. Specifically, when applicable, each principal is interested in obtaining best value products and/or services which promote environment initiatives via solicitations and awards from the other principals.

If your company is the successful bidder on this Invitation For Bid, do you agree to extend the same product/service pricing to the other principals of the Bluegrass Partnership for a Green Community (i.e. University of Kentucky and Fayette County Schools) if requested?

Yes _____ No ✓

II. Bid Conditions

- A. No bid may be withdrawn for a period of sixty (60) days after the date and time set for opening.
- B. No bid may be altered after the date and time set for opening. In the case of obvious errors, the Division of Central Purchasing may permit the withdrawal of a bid. The decision as to whether a bid may be withdrawn shall be that of the Division of Central Purchasing.
- C. Acceptance of this proposal shall be enactment of an Ordinance by the Urban County Council.
- D. The bidder agrees that the Urban County Government reserves the right to reject any and all bids for either fiscal or technical reasons, and to award each part of the bid separately or all parts to one vendor.
- E. Minor exceptions may not eliminate the bidder. The decision as to whether any exception is minor shall be entirely that of the head of the requisitioning Department or Division and the Director of the Division of Central Purchasing. The Urban County Government may waive technicalities and informalities where such waiver would best serve the interests of the Urban County Government.
- F. Manufacturer's catalogue numbers, trade names, etc., where shown herein are for descriptive purposes and are to guide the bidder in interpreting the standard of quality, design, and performance desired, and shall not be construed to exclude proposals based on furnishing other types of materials and/or services. However, any substitution or departure proposed by the bidder must be clearly noted and described; otherwise, it will be assumed that the bidder intends to supply items specifically mentioned in this Invitation for Bids.
- G. The Urban County Government may require demonstrations of the materials proposed herein prior to acceptance of this proposal.
- H. Bids must be submitted on this form and must be signed by the bidder or his authorized representative. Unsigned bids will not be considered.
- I. Bids must be submitted prior to the date and time indicated for opening. Bids submitted after this time will not be considered.
- J. All bids mailed must be marked on the face of the envelope:

"Bid on #35-2016 Storm Sewer Trenchless Rehabilitation & Repair Services

and addressed to: Division of Central Purchasing
 200 East Main Street, Room 338
 Lexington, Kentucky 40507

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.

- K. Bidder is requested to show both unit prices and lot prices. In the event of error, the unit price shall prevail.
- L. A certified check or Bid Bond in the amount of NA percent of the bid price must be attached hereto. This check must be made payable to the Lexington-Fayette Urban County Government, and will be returned when the material and/or services specified herein have been delivered in accordance with specifications. In the event of failure to perform within the time period set forth in this bid, it is agreed the certified check may be cashed and the funds retained by the Lexington-Fayette Urban County Government as liquidated damages. Checks of unsuccessful bidders will be returned when the bid has been awarded.
- M. The delivery dates specified by bidder may be a factor in the determination of the successful bidder.
- N. Tabulations of bids received may be mailed to bidders. Bidders requesting tabulations must enclose a stamped, self-addressed envelope with the bid.
- O. The Lexington-Fayette Urban County Government is exempt from Kentucky Sales Tax and Federal Excise Tax on materials purchased from this bid invitation. Materials purchased by the bidder for construction projects are not

tax exempt and are the sole responsibility of the bidder.

- P. All material furnished hereunder must be in full compliance with OSHA regulations.
- Q. If more than one bid is offered by one party, or by any person or persons representing a party, all such bids shall be rejected.
- R. Signature on the face of this bid by the Bidder or his authorized representative shall be construed as acceptance of and compliance with all terms and conditions contained herein.
- S. 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.
- T. The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any county, 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 contractor 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 to 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 above quoted 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.

- U. Any party, firm or individual submitting a proposal pursuant to this invitation must be in compliance with the requirements of the Lexington-Fayette Urban County Government regarding taxes and fees before they can be considered for award of this invitation and must maintain a "current" status with regard to those taxes and fees throughout the term of the contract. The contractor must be in compliance with Chapter 13 from the Code of Ordinances of the Lexington-Fayette Urban County Government. The contractor must be in compliance with Ordinance 35-2000 pursuant to contractor registration with the Division of Building Inspection. If applicable, said business must have a Fayette County business license.

Pursuant to KRS 45A.343 and KRS 45A.345, the contractor shall

- (1) *Reveal any final determination of a violation by the contractor within the previous five year period pursuant to KRS Chapters 136 (corporation and utility taxes), 139 (sales and use taxes), 141 (income taxes), 337 (wages and hours), 338 (occupational safety and health of employees), 341 (unemployment and compensation) and 342 (labor and human rights) that apply to the contractor; and*
- (2) *Be in continuous compliance with the above-mentioned KRS provisions that apply to the contractor for the duration of the contract.*

A contractor's failure to reveal the above or to comply with such provisions for the duration of the contract shall be grounds for cancellation of the contract and disqualification of the contractor from eligibility for future contracts for a period of two (2) years.

- V. Vendors who respond to this invitation have the right to file a notice of contention associated with the bid process or to file a notice of appeal of the recommendation made by the Director of Central Purchasing resulting from this invitation.

Notice of contention with the bid process must be filed within 3 business days of the bid/proposal opening by (1) sending a written notice, including sufficient documentation to support contention, to the Director of the Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his/her contention with the bid process. After consulting with the Commissioner of Finance the Chief Administrative Officer and reviewing the documentation and/or hearing the vendor, the Director of Central Purchasing shall promptly respond in writing findings as to the compliance with bid processes. If, based on this review, a bid process irregularity is deemed to have occurred the Director of Central Purchasing will consult with the Commissioner of Finance, the Chief

Administrative Officer and the Department of Law as to the appropriate remedy.

Notice of appeal of a bid recommendation must be filed within 3 business days of the bid recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Central Purchasing shall in writing, affirm or withdraw the recommendation.

III. Procurement Contract Bid Conditions

- A. The terms of this agreement shall be for 1 year(s) from the date of acceptance of this contract by the Lexington-Fayette Urban County Government. This agreement may be automatically extended for an additional 2-1 year(s) renewal. This contract may be canceled by either party thirty (30) days after delivery by cancelling party of written notice of intent to cancel to the other contracting party.
- B. Price Changes (**Space Checked Applies**)
 - (xx) 1. Prices quoted in response to the Invitation shall be firm prices for the first 90 days of the Procurement Contract. After 90 days, prices may be subject to revision and such changes shall be based on general industry changes. Revision may be either increases or decreases and may be requested by either party. There will be no more than one (1) price adjustment per quarter. Requests for price changes shall be received in writing at least twenty (20) days prior to the effective date and are subject to written acceptance before becoming effective. Proof of the validity of a request for revision shall be responsibility of the requesting party. The Lexington-Fayette Urban County Government shall receive the benefit of any decline that the seller shall offer his other accounts.
 - () 2. No provision for price change is made herein. Prices are to be firm for the term of this contract.
 - () 3. Procurement Level Contract
- C. If any contract item is not available from the vendor, the Lexington-Fayette Urban County Government, at its option, may permit the item to be back-ordered or may procure the item on the open market.
- D. All invoices must bear reference to the Lexington-Fayette Urban County Government Purchasing document numbers which are being billed.
- E. 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.
- F. No substitutions for articles specified herein may be made without prior approval of the Division of Central Purchasing.
- G. Any job over \$50,000 will require the contractor to obtain a 100% performance and payment bond.

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 sub-contractor 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 disability.
- 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 contractors 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, veteran status, disability and age.



Signature

Urrutko Holdings, Inc

Name of Business

GENERAL PROVISIONS OF BID CONTRACT

By signing the below, bidder acknowledges that it understands and agrees with the following provisions related to its bid response and the provision of any goods or services to LFUCG upon selection by LFUCG pursuant to the bid request:

1. Bidder shall comply with all Federal, State & Local regulations concerning this type of service or good.
2. Failure to submit ALL forms and information required by LFUCG may be grounds for disqualification.
3. Addenda: All addenda, if any, must be considered by the bidder in making its response, and such addenda shall be made a part of the requirements of the bid contract. Before submitting a bid response, it is incumbent upon bidder to be informed as to whether any addenda have been issued, and the failure of the bidder to cover any such addenda may result in disqualification of that response.
4. Bid Reservations: LFUCG reserves the right to reject any or all bid responses, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
5. Liability: LFUCG is not responsible for any cost incurred by bidder in the preparation of its response.
6. Changes/Alterations: Bidder may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the bid response, and received by LFUCG prior to the scheduled closing time for receipt of bids, will be accepted. The bid response when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of bid response".
7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from any bidder.
8. Bribery Clause: By his/her signature on its response, bidder certifies that no employee of his/hers, any affiliate or subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.
9. Additional Information: While not necessary, the bidder may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the bid response. Additional documentation shall not serve as a substitute for other documentation which is required by the LFUCG to be submitted with the bid response.
10. Ambiguity, Conflict or other Errors: If a bidder discovers any ambiguity, conflict, discrepancy, omission or other error in the bid request of LFUCG, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
11. Agreement to Bid Terms: In submitting its bid response, the bidder agrees that it has carefully examined the specifications and all provisions relating to LFUCG's bid request, including but not limited to the bid contract. By submission of its bid response, bidder states that it understands the meaning, intent and requirements of LFUCG's bid request and agrees to the same. The successful bidder shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to bidder shall be authorized for services, expenses, or goods reasonably covered under these provisions that the bidder omits from its bid response.
12. Cancellation: LFUCG may unilaterally terminate the bid contract with the selected bidder(s) at any time, with or without cause, by providing at least thirty (30) days advance written notice unless a different advance written notice period is negotiated prior to contract approval. Payment for services or goods received prior to termination

shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

13. **Assignment of Contract:** The selected bidder(s) shall not assign or subcontract any portion of the bid contract with LFUCG without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
14. **No Waiver:** No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this bid proposal or bid contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
15. **Authority to do Business:** Each bidder must be authorized to do business under the laws of the Commonwealth of Kentucky and must be in good standing and have full legal capacity to provide the goods or services specified in the bid proposal. Each bidder must have all necessary right and lawful authority to submit the bid response and enter into the bid contract for the full term hereof including any necessary corporate or other action authorizing the bidder to submit the bid response and enter into this bid contract. If requested, the bidder will provide LFUCG with a copy of a corporate resolution authorizing this action and/or a letter from an attorney confirming that the proposer is authorized to do business in the Commonwealth of Kentucky. All bid responses must be signed by a duly authorized officer, agent or employee of the bidder.
16. **Governing Law:** This bid request and bid contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this matter, the bidder agrees that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division and that the bidder expressly consents to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to these matters or any rights or obligations arising thereunder.
17. **Ability to Meet Obligations:** Bidder affirmatively states that there are no actions, suits or proceedings of any kind pending against bidder or, to the knowledge of the bidder, threatened against the bidder before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of bidder to perform its obligations under this bid response or bid contract, or which question the legality, validity or enforceability hereof or thereof.
18. Bidder understands and agrees that its employees, agents, or subcontractors are not employees of LFUCG for any purpose whatsoever. Bidder is an independent contractor at all times related to the bid response or bid contract.
19. If any term or provision of this bid contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.



Signature

7-23-16

Date

WORKFORCE ANALYSIS FORM

Name of Organization: Uretik Holdings, Inc

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	12	12														12	-
Superintendents	2	1		1												2	-
Supervisors																	
Foremen	8	6		1		1										8	-
Technicians	16	12		2		3										16	-
Protective Service																	
Para-Professionals																	
Office/Clerical	4	2	2													2	2
Skilled Craft																	
Service/Maintenance																	
Total:	47	36	3	4		4										44	3

Prepared by: Aaron Hall, CFO Date: 3/22/16
 (Name and Title)

Revised 2015-Dec-15

**DIRECTOR, DIVISION OF CENTRAL PURCHASING
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
200 EAST MAIN STREET
LEXINGTON, KENTUCKY 40507**

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE
EQUAL EMPLOYMENT OPPORTUNITIES AND DBE CONTRACT PARTICIPATION**

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 MBE/WBE's. The goal for the utilization of certified MBE/WBE's as subcontractors are recommended goals. Contractors who fail to meet such goals will be expected to provide written explanations to the Director of the Division of Central Purchasing of efforts they have made to accomplish the recommended goals and the extent to which they are successful in accomplishing the recommended goals will be a consideration in the procurement process.

For assistance in locating MBE/WBE Subcontractors contact Sherita Miller at 859/258-3320 or by writing the address listed below:

Sherita Miller, Division of Central Purchasing
Lexington-Fayette Urban County Government
200 East Main Street – Room 338
Lexington, Kentucky 40507

Lexington-Fayette Urban County Government
MWDBE PARTICIPATION GOALS

A. GENERAL

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

- e. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms
- f. Requested a list of MWDBE subcontractors or suppliers from LFUCG Economic Engine 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 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 to determine their level of interest.
- j. Provided the interested MWDBE firm 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 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 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 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 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 quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE goals.
- o. Made an effort to offer assistance to or refer interested MWDBE firms 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 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 participation.

Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement. Documentation of Good Faith Efforts are to be submitted with the Bid, if the participation Goal is not met.



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 LFUCG 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 LFUCG 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

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 in Economic Engine (<https://lfucg.economicengine.com>)

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
Tri-State Minority Supplier Diversity Council	Sonya Brown	sbrown@tsmsdc.com	502-625-0137
Small Business Development Council	Dee Dee Harbut UK SBDC	dharbut@uky.edu	859-257-7668
	Shirie Hawkins	smack3@email.uky.edu	859-257-7666
Community Ventures Corporation	James Coles	jcoles@cycky.org	859-231-0054
KY Department of Transportation	Melvin Bynes	Melvin.bynes@ky.gov	502-564-3601
Ohio River Valley Women’s Business Council (WBENC)	Rea Waldon	rwaldon@gcul.org	513-487-6534
Kentucky MWBE Certification Program	Yvette Smith, Ken Finance Cabir	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	lavozydeky@yahoo.com	859-621-2106
The Key News Journal	Patrice Muhamma	paatricem@keynewsjournal.com	859-373-9428



LFUCG MWDBE PARTICIPATION FORM

Bid/RFP/Quote Reference # 35-2016

The MWDBE 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.

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1.				
2.				
3.				
4.				

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.

Uretek Holdings, Inc
Company

Aarn Hall
Company Representative

3-23-16
Date

CEO
Title



LFUCG MWDBE SUBSTITUTION FORM

Bid/RFP/Quote Reference # 35-2016

The substituted MWDBE 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.

Uretek Holdings, Inc
Company

Aaron Hall
Company Representative

1-21-16
Date

CEO
Title



MWDBE QUOTE SUMMARY FORM

Bid/RFP/Quote Reference # 35-2016

The undersigned acknowledges that the minority subcontractors listed on this form did submit a quote to participate on this project.

Company Name <u>Uretek Holdings, Inc.</u>	Contact Person <u>Anna Hall / Aaron Rogers</u>
Address/Phone/Email <u>4759 Drone Field Rd Lakeland, FL 33811 863-984-8727</u> <u>ahall@uretekholdings.com arogers@uretekholdings.com</u>	Bid Package / Bid Date <u>Storm Sewer Trenchless Rehabilitation and Repair Services</u> <u>3-24-16</u>

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

(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.

Uretek Holdings, Inc.
Company

Anna Hall
Company Representative

3-23-16
Date

CFD
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. 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 # 35-2016
 Total Contract Amount Awarded to Prime Contractor for this Project _____

Project Name/ Contract #	Work Period/ From: _____ To: _____
Company Name: <u>Uratch Holdings, Inc.</u>	Address: <u>4757 Drove Field Rd. Lakeland, FL 33811</u>
Federal Tax ID: <u>27-4875234</u>	Contact Person: <u>Aaron Hall</u>

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.

Uratch Holdings, Inc.

Company

Aaron Hall

Company Representative

3-23-16

Date

CFO

Title

LFUCG STATEMENT OF GOOD FAITH EFFORTS

Bid/RFP/Quote # 35216

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 business enterprises 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 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 of subcontracting opportunities
- _____ Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms
- _____ Requested a list of MWDBE subcontractors or suppliers from LFUCG Economic Engine 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 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 to determine their level of interest.
- _____ Provided the interested MWDBE firm 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 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 participation, even when the prime contractor may otherwise perform these work items with its own workforce
- _____ Negotiated in good faith with interested MWDBE firms 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 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 quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE goals.
- _____ Made an effort to offer assistance to or refer interested MWDBE firms 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 MWDBE firms 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 participation.

Failure to submit any of the documentation requested in this section may be cause for rejection of bid. Bidders may include any other documentation deemed relevant to this requirement. Documentation of Good Faith Efforts are to be submitted with the Bid, if the participation Goal is not met.

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.

Unitek Holdings, Inc

 Company

Adam Hall 

 Company Representative

3-23-16

 Date

CEO

 Title

**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) 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 demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions prior to final acceptance of its bid and the commencement of any work or provision of goods.

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 (Insurance Services Office Form CG 00 01)	\$1 million per occurrence, \$2 million aggregate or \$2 million combined single limit
Commercial Automobile Liability (Insurance Services Office Form CA 0001)	combined single, \$1 million per occurrence
Worker's Compensation	Statutory
Employer's Liability	\$500,000

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 Products and Completed Operations coverage and Premises and Operations coverage unless it is deemed not to apply by LFUCG.
- d. The General Liability Policy shall include a Pollution liability and/or Environmental Casualty endorsement unless it is deemed not to apply by LFUCG.
- e. The General Liability Policy shall include Explosion-Collapse Underground (XCU) coverage or an 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.

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

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.

00512818

Request for Qualifications and Pricing for Storm Sewer Trenchless Rehabilitation and Repair Services

SCOPE

Lexington-Fayette Urban County Government (LFUCG) is accepting qualification statements and bids from interested Contractors to establish a price contract for trenchless rehabilitation of storm sewer pipe (defined here as one or more ends having a limited access structure) and culvert (open to natural grade at each end) services. Trenchless Rehabilitation and Repair Services shall include complete solutions to failing stormwater pipes to provide for restored or improved function for an agreeable service life at expected structural loading conditions (expected service life to be determined through assessment process). Individual Rehabilitation Service Projects shall be completed according to the specifications below or to “industry standards” and may include the following services: detailed assessment and reporting of existing conditions; repair of major/minor defects in pipe materials or end-treatments; invert repair or re-shape; slipline or reline existing piping, individual joint repair; pipe surface treatment-coatings; and/or stabilize culvert fill envelope with pressure grouting or epoxy injection.

1. Contract Type and Process

This request for qualifications and pricing is to establish a prequalified list of Contractors able to perform the repair and rehabilitation services noted above on an “as needed” basis at various locations in Fayette County, Kentucky. LFUCG reserves the right to award contracts to multiple, qualified Bidders. Each rehabilitation project under this contract shall be completed on a lump sum basis determined by lowest and best quote solicited individually from all pre-qualified contractors. If selected to complete a project, the Contractor shall complete all work and furnish all management, supervision, labor, materials, tools, equipment, excavation, cleaning, de-watering, worksite erosion and pollution control, worksite restoration (excluding pavement), permitting and incidentals necessary for performance and completion of the rehabilitation project.

If determined necessary by LFUCG, it is required that the Contractor be available to meet with the Project Manager or his representative(s) **within ten (10) working days** of being notified of a proposed project, to discuss the project. The Project Manager and Contractor or his representative(s) shall determine the extent of work to be performed and the Contractor shall, **within ten (10) working days** following initial contact, provide the Project Manager with a written cost estimate (lump sum) and work schedule, including the starting and completion date. Time of completion for such projects(s) will be determined with the approval of the

Project Manager. If the Contractor does not respond to either the initial notification or does not provide a written cost estimate response (either “not interested” or “unable to complete” the work is an acceptable response) during the given time frames, the Contractor may be excluded on future solicitation of quotes.

All cost estimates prepared by the Contractor shall be at no cost to the LFUCG. The Contractor agrees that the lump sum cost estimates provided will be the **not-to-exceed maximum** project cost if accepted by the LFUCG and that LFUCG shall bear no liability or responsibility to the Contractor for the payment of any costs or charges in excess of the amount identified in the written cost estimates, unless additional work is agreed to (in writing) prior to work being performed. All projects shall be completed within the time period specified unless a time extension has been approved by the Project Manager.

2. Project Assessment

Contractor shall thoroughly familiarize him or herself with all aspects of the project, the defect to be repaired, potential cause of defect, plans if available, specifications, provisions, and special requirements, and is responsible for bringing any discrepancies, potential problems or unknown factors to the attention of the Project Manager. Assessment shall start with identification of existing materials and best determination of original design function including drainage or structural function. LFUCG may provide documentation of original design or drainage function, if available. A complete assessment may require some or all of the components listed below as determined during the initial review meeting with the Project Manager.

- Meet applicable OSHA requirements including, but not limited to, confined space entry. Review of weather forecasting in relation to flash flooding and any other necessary safety precautions.
- Cleaning of pipe system or culvert as necessary for review.
- Record measurements of shape, diameter, deflections, cross section area, cracking, and settlement along with location documentation.
- Provide follow-up inspection to compare data or determine trends in noted defect.
- Provide determination of extent of damage/defect, the potential for failure and/or best estimate of service life remaining and potential service life with repair.
- Identify and provide measurement of relational object defects or irregularities which could determine the magnitude of the defect; such as roadway surface, sinkholes or material deposition.
- Excavation, coring or sampling of existing materials.

- Determination of pipe hydraulic performance. Completed work may require certification of hydraulic equivalency to existing conditions.
- Identification of existing or potential safety hazards or public safety issues.
- Video inspection services.

*Note that some of the components above may require verification to be provided by a qualified Professional. This shall be determined at the initial review meeting and provided at no additional cost to LFUCG unless determined otherwise during the initial review meeting.

3. Scheduling

Contractor shall coordinate assessment and repair work with other utilities or public or private entities affected by the work. Contractor shall remain informed of construction progress of all other Contractors or subcontractors working on the project and shall coordinate work of others to ensure efficient and orderly progress of the work. Contractor shall provide the LFUCG Project Manager notice of potential changes to the project schedule.

4. Warranties/Guarantees

For a period of one year from the date of issuance of the final payment for the work, the Contractor shall furnish and install, without cost to the LFUCG, any and all work which, in the judgement of the LFUCG, proves defective in materials and/or workmanship. This shall include, but is not limited to, surface defects due to pipe fill envelope settlement or related surface feature defects.

5. Bidder Minimum Submittal for Qualification

- a. Executive summary identifying the Contractors qualifications to complete these type projects. This summary should include: general information about the Contractor and any subcontractors or professional affiliates related to this work; a summary of experience completing this type of work; and at least one detailed example of a past storm sewer or culvert rehabilitation project describing the typical approach to completion of a project.
- b. A list of at least three references for projects completed in the past two (2) years that are similar in scope to the work required under this contract. Include the names and specific contact information for each reference. Projects and contacts local to the Lexington, Kentucky area are preferred.
- c. Written Specifications typical for Trenchless Rehabilitation method most often used or preferred by the Contractor, including but not limited to the following; materials

specifications, installation procedures, ASTM testing references, Field Testing and Inspection and General Warranty.

d. General pricing information (Dollar amount per lineal foot repaired) for full rehabilitation of the following culvert rehabilitation project examples. **Note that this pricing is to be used for general project planning and the Contractor will not be held to individual pricing for use in future solicited lump sum bid quotes.**

<u>Pipe ID or Eq. ID (any type)</u>	<u>Rehabilitation Price (\$/LF, 50 LF or greater)</u>
15"	<u> </u> / LF
30"	<u>\$ 210</u> / LF
48"	<u>\$ 340</u> / LF
60"	<u>\$ 420</u> / LF

FAILURE OF A BIDDER TO SUBMIT THE REQUIRED INFORMATION OUTLINED ABOVE OR TO POSSESS THE MINIMUM EXPERIENCE AS DETERMINED BY VERIFICATION MAY RENDER SUCH BID NON-RESPONSIVE AND SUCH BID MAY NOT BE CONSIDERED FOR AWARD.

The LFUCG does not guarantee the amount of work to be performed or that any work will be performed under this contract.

Please pay close attention to the submittal requirements of this request, all things needed to evaluate your process and materials need to be clearly defined in you submittal.

5.a.

1. Polyurethane Grout Experience

Uretek Holdings covers 31 states and has completed over 85,000 projects in the past 25 years. We work with cities, counties, DOTs, DoD, USACE, etc. Almost 100% of our work over the past 25 years has been rehab. See attached "Capabilities Statement" that outlines this and discusses in more detail.

2. Centripipe Liner Experience

The first Centripipe liner was installed in 2003. Since then, projects have been completed all over the country. We became a licensed Centripipe installer over a year ago. Our experience with polyurethane rehab translated well into Centripipe. We have been through extensive training in Centripipe and have our first install beginning of April. Centripipe's construction manager will be directing and monitoring construction with us over the next few months.

3. Detailed Install Summary

The project was completed on 128 by 83 in. CMP for Indiana DOT beneath the interstate. The liner was 1.5 in. in thickness. The process began with setting up bypass. Then, the pipe was cleaned and pressure washed. The invert was in good condition so the spin-casting process began (in some scenarios, a new concrete invert is placed). A bi-directional spinner head attached to a sled was placed in the pipe. The sled was then pulled by a computerized winch through the length of the pipe, placing .5" lifts as it went. Generally, a .5" lift is placed a day. A curing compound was then placed over the last lift. This project took a total of 2.5 weeks.

5.b.

Centripipe References

1. Indiana DOT, Jane Twaddle, 812-524-3945, Contractor: Indiana Reline
2. ODOT (Cincinnati area), Doug Grouver, 513-933-6606, Contractor: Indiana Reline
3. City of Warsaw, IN, Lacy Francis, 574-372-9595, Contractor: Proform Pipe Lining
4. City of Dayton, OH, Ben Swaine, 937-333-3747, Contractor: Indiana Reline

Polyurethane Grout Joint/Void Fill Repair Reference

5. Campbell County, KY, Luke Mantle, 859.635.9100

5.c.

Specifications for Centripipe & Polyurethane grout are attached



ADDENDUM #1

Bid Number: **35-2016**

Date: March 23, 2016

Subject: Storm Sewer Trenchless Rehabilitation & Repair Services

Address inquiries to:
Brian Marcum
(859) 258-3320

TO ALL PROSPECTIVE SUBMITTERS:

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

Are the pipe sizes existing pipe sizes or what size hdpe liner you want quoted?

They are existing, but generic, pipe sizes and the cost quote should be for a complete solution for that size culvert.

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: Uretek Holdings

ADDRESS: 118 N. Fort Thomas Ave. Fort Thomas KY

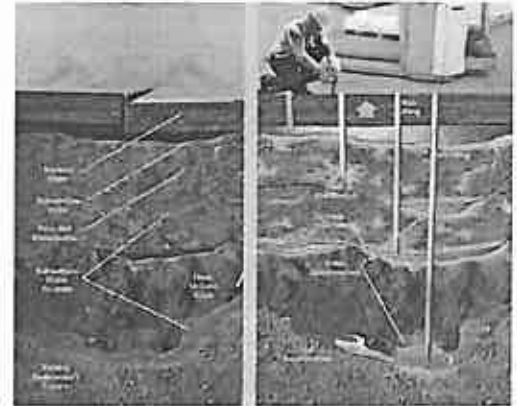
SIGNATURE OF BIDDER: [Handwritten Signature]



What We Do

URETEK assists government agencies in stabilizing their infrastructure and structural assets with fast and cost effective soil stabilization, seepage management, sealing of pipes and concrete lifting for a variety of project types including:

- Water Control Structures
- Dams and Levees
- Airbase Runways and Aprons
- Transportation Facilities
- Underground Utilities and Drainage Systems
- Bridge Approaches
- Building Foundations



Proven Experience and Technology

URETEK specializes in the injection of high density expanding polymer for *in-situ* soil stabilization, non-destructive seepage management of water control structures, dams and levees, airbase runway and apron depression correction, transportation facilities stabilization, underground utilities and drainage system seepage management, shoring and stabilization of bridge approaches and stabilization of pavement structures and buildings.

We actively serve the US Army Corps of Engineers, Department of Defense, Airport and Transit Authorities, Departments of Transportation, Counties, Cities and the private sector. With over 25 years of experience, URETEK has successfully provided solutions to complex soil/infrastructure support problems on more than 85,000 projects including:

- Seepage mitigation for water control structures, dams and levees
- Sealing tunnels and joints
- Sealing, stabilizing and lifting storm drains
- Stabilizing and correcting pavement subsidence in airbase runways and aprons
- Stabilizing weak soils
- Filling voids
- Establishing base support for bridge structures
- Lifting approach slabs and building foundations
- Increase load-bearing capacity of soil, at depth



URETEK Holdings, Inc.

4759 Drane Field Drive, Lakeland, FL 33811

Toll Free 888-490-1085, Info@UretekHoldings.com

www.UretekHoldings.com

Case Studies

- USACE Addicks and Barker Reservoirs
- NAS Corpus Christi Runway Repair Project
- Lackland Air Force Base Apron Repair
- Andrews Air Force Base Airfield Repair
- NAVFAC Runway Repair
- Lake Ponchartrain
- Port of Houston Barbours Cut Container Terminal
- Culvert Rehabilitation Ohio DOT

"We are pleased with the URETEK product. It did what we needed it to do under adverse conditions. The outlet structure stability is improved at both Addicks and Barker and risks to the public are reduced."

Lori Thomas, P.E.

Chief, Geotechnical/Structural Section
Engineering and Construction Division
Galveston District
U.S. Army Corps of Engineers

"The URETEK product offered us something that we haven't used in the past. When we discovered the effectiveness and evaluated the cost savings we were astounded. We're basically restoring this road, gaining another 20 years of life with 1/4 of the investment that we would have spent otherwise."

Steven P. Harris

District Engineer, District 3, NM

"This new airfield repair system incorporates a two-part, high expansion polyurethane foam to compact sub-grade soil in bomb craters...This means airfields can be quickly repaired and returned to service, ensuring continuous air support for our warfighters."

Gregory J. Zielinski, Captain, USN

Commanding Officer
Naval Facilities Engineering
Service Center (NFESC)

"...turned the project from out of the park to a walk in the park."

Centerline Construction

"...it was too good to pass up and the technology made sense."

Thomas G. Wendorf, P.E.

Missouri City Public Works Director

USACE Addicks and Barker Reservoirs



After issuing an "Urgent and Compelling" status due to the instability of these 1940s outfall structures, USACE hired URETEK to stabilize both the Addicks and Barker Reservoirs. URETEK's unique process stabilized both outlet structures in less than three weeks making them structurally stable, safe and capable of staying in service for the City of Houston and surrounding communities.

Lackland Air Force Base Apron Repair



URETEK engineers were able to stabilize and correct faulted and prematurely cracked airbase taxiways using URETEK's Deep Injection® (UDI) Soil Stabilization process in 26 working days with minimal mission disruption.

Vital Information

Organization: Small Business Designation
NAICS Codes: 237990, 238110, 238190, 238990
DUNS: #183724124
Cage Code: 6G9G6
EIN Number: 27-4875234

URETEK Holdings, Inc.

4759 Drane Field Drive, Lakeland, FL 33811

Toll Free 866-9-URETEK, Info@UretekHoldings.com

www.uretekholdings.com

S-1 (2501) LINING CULVERT PIPE

The work specified herein consists of the repair of culverts by the installation of a cementitious lining centrifugally cast in place for the waterproofing, sealing, structural reinforcement and corrosion protection of existing concrete culvert pipe, corrugated steel culvert pipe, and other material culvert pipe. The centrifugally cast concrete pipe (CCCP) liner should extend over the specified length forming a continuous concrete pipe within a pipe.

S-1.1 These repair means and methods may be engineered for the depth, diameter, shape, traffic loading, groundwater pressures and condition of each pipe segment.

S-1.2 This specification references the following ASTM standards which are made a part hereof by such reference and shall be the latest edition and revision thereof. In the event that there are found to be conflicting requirements between this specification and these referenced documents, this specification will govern.

ASTM C-76	ASTM C-76 - Standard Specification for Fly ash content in Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe not to exceed 10% by weight (Fly ash is unstable and less predictable batch to batch)
ASTM C-109	Standard Test Method for Compressive Strength of Hydraulic Cement Mortars
ASTM C-157	Modified Standard Test Method for Length Change of Hardened Hydraulic Cement Mortar and Concrete
ASTM C-293	Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Center-Point Loading)
ASTM C-309	Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C-403	Standard Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance
ASTM C-469	Standard Test Method for Static Modulus of Elasticity should be no greater than 5,000,000 psi. (To avoid overly brittle liner) and Poisson's Ratio of Concrete in Compression
ASTM C-496	Standard Test Method for Splitting Tensile Strength of Cylindrical Concrete Specimens
ASTM C-882	Standard Test Method for Bond Strength of Epoxy Systems Used with Concrete by Slant Shear
ASTM C-666	Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing
ASTM C-1090	Standard Test Method for Measuring Changes in Height of Cylindrical Specimens of Hydraulic-Cement Grout 0 change in 28 days. (Eliminates concern over shrinkage)
ASTM D-4783	Standard Test Methods for Resistance of Adhesive Preparations in Container to Attack by Bacteria, Yeast, and Fungi (Modified)

S-1.3 Safety: The Contractor shall carry out his operations in strict accordance with all applicable OSHA standards. Particular attention is drawn to those safety requirements involving entering confined spaces.

S-1.4 Flow Control: The Contractor, when required, shall provide for the flow of water around the culvert where the rehabilitation is located. The bypass shall be made by damming the line at the upstream end and diverting the flow into an adjacent pipe barrel or by pumping.

S-1.5 TV Inspection: Inspection of pipelines shall be performed by experienced personnel trained in locating breaks and obstacles by closed-circuit television. The interior of the pipeline shall be carefully inspected to determine the location of any conditions which may prevent proper installation, and it shall be noted so that these conditions can be corrected. A videotape and suitable log shall be kept for later reference by the owner.

S-1.6 Obstruction Removal: It shall be the responsibility of the Contractor to clear the line of obstructions such as solids, dropped joints, roots or collapsed pipe that will prevent installation of the liner. If an internal inspection reveals an obstruction that cannot be removed by conventional cleaning equipment, then the Contractor shall notify the Project Engineer. The Project Engineer may delete the work, or instruct the Contractor to make a point repair excavation to remove or repair the obstruction. Such excavation shall be approved in writing by the Project Engineer prior to the commencement of the work and shall be considered as a separate pay item.

S-1.7 Infiltration Control: Areas of water seepage shall be sealed off with Spetec polyurethane grout. Pools of water shall be removed; however, a dry surface is not required. The owner or general contractor shall patch holes and fill voids in and around existing pipe as directed by the Engineer.

an approved method. Pools of water shall be removed; however, a dry surface is not required. The Contractor shall patch holes and fill voids in and around existing pipe as directed by the Engineer.

S-1.8 Cleaning: It shall be the responsibility of the owner to remove all debris from the sewer. The interior surface shall be cleaned with a high-pressure water-blast sufficient to remove all laitance and loose material and flush debris from the pipe. Upon final inspection the pipe shall be free of sand, dirt and all other laitance that may impeded the placement of the lining material.

S-1.9 The materials of the cementitious lining work shall meet the following requirements:

(A) **Invert Repair Mortar**

The material used in the repair of the missing or deteriorated pipe invert shall be an ultra-high strength, high build, abrasion resistant and corrosion resistant mortar, based on advanced cements and additives including rust inhibitors. This material shall be PERMACAST PL-12,000, or an approved equal. It shall be mixed with the appropriate amount of water to create a self-consolidating free flowing material that develops a high 24-hour compressive strength and adhesion.

The finished, hardened material shall be dense and highly impermeable; the result of a complex formulation of mineral, organic and densifying agents and sophisticated chemical admixtures. Graded quartz sands shall be used to enhance particle packing and further improve the fluidity and hardened density. The composition shall possess excellent thin-section toughness, a high modulus of elasticity in flexure and strong self-bonding capability.

Physical Properties

Set Time at 70 °F ASTM C-403	
Initial Set	Approx. 150 minutes
Final Set	Approx. 240 minutes
Flexural Strength ASTM C-293	
24 hours	min. 800 psi
28 days	min. 1200 psi
Compressive Strength ASTM C-109	
24 hours	5,000 psi
28 days	11,500 psi
Split Tensile Strength ASTM C-496	700 psi
Shear Bond ASTM C-882	1,720 psi
Modulus of Elasticity ASTM C-469	
28 days	min. 3.48 10 ⁶ psi
Freeze Thaw ASTM C-666	300 Cycle Pass

(B) **Pipe Lining Mortar**

The pipe lining material shall be a high strength, high build, abrasion resistant and corrosion resistant mortar, based on advanced cements and additives. When mixed with the appropriate amount of water, a paste-like material which can be sprayed, cast or pumped into areas ¼ inch and larger shall be obtainable. The pipe lining material shall be the PERMACAST PL-8,000 material, or approved equal that has at least five state dot approvals one of which must include NYS DOT.

The hardened, finished liner shall be a dense and highly impermeable pipe within a pipe. The above stated performance shall be achieved by a complex formulation of mineral, organic and densifying agents and sophisticated chemical admixtures including rust inhibitors. Graded quartz sands are to be used to enhance particle packing

and further improve the fluidity and hardened density. The resultant composition shall possess excellent thin-section toughness, a high modulus of elasticity in flexure and strong self-bonding capabilities. Fibers are to be added as an aid to the centrifugal casting process, for increased cohesion and to enhance flexural strength.

The water content shall be adjusted to achieve consistencies ranging from plastic to modeling clay. The lining mortar shall be capable of being cast against soil, metals, wood, plastic or other normal construction materials.

The physical properties of the lining mortar shall be as follows:

Physical Properties

Set Time at 70 °F ASTM C-403	
Initial Set	Approx. 150 minutes
Final Set	Approx. 240 minutes
Flexural Strength ASTM C-293	
24 hours	min. 600 psi
28 days	min.1,080 psi
Compressive Strength ASTM C-109	
24 hours	3,000 psi
28 days	8,000 psi
Split Tensile Strength ASTM C-496	682 psi
Shear Bond ASTM C-882	2,100 psi
Modulus of Elasticity ASTM C-469	
28 days	min. 3.56 10 ⁶ psi
Freeze Thaw ASTM C-666	300 Cycle Pass

S-1.10 Wall Thickness Design

The wall thickness design shall be based upon the compressive and bending strength of the liner material. The design loading shall be the sum of any changes in the cover depth after the liner's installation and the appropriate highway truck loading for the culvert pipe taking into account the type of soil used for the road's fill and the type of pavement structure (rigid or flexible). The calculated minimum finished thickness of the liner shall be based on a maximum possible crack width of 0.0625-inches with a factor of safety of 2.0.

The Liner thickness shall be applied to the thickness specified by the engineer but at no point shall it be less than the required minimum of ½-inch. For structural plate culvert materials, the cover over the projecting bolts shall be a minimum of ½-inch, making the minimum applied thickness for these culverts 1.0-inches. As Per ASTM A979 this thickness is to be measured from the I.D. of the pipe, or top of the inward corrugation's crest.

S-1.11 Centrifugally Cast Concrete Pipe (CCCP) Installation

Equipment

Mortar mixers, compressors and pumps are standard commercial models. The high-speed, rotating applicator device is used to provide a densely compacted liner of uniform thickness and thorough coverage.

Mixing

The Contractor shall combine 50 pounds of the packaged dry mix with the Manufacturer's specified amount of potable water with mixing to be accomplished with a high-speed shear type mixer until proper consistency is obtained. The Contractor shall continue to agitate the mortar to prevent thickening beyond the desired fluidity. The working time is approximately 30 minutes depending upon the ambient conditions.

Application

The Contractor shall position the bi-directional rotating casting applicator within the culvert pipe as required by the Manufacturer and commence pumping the mortar. As the mortar begins to be centrifugally cast evenly around the interior, the Contractor shall retrieve the applicator head at the best speed for applying the thickness that has been specified. If the mortar flow is interrupted for any reason, the Contractor shall arrest the retrieval of the ap-

plicator head until the mortar flow is restored. Throughout the application process the Contractor shall verify the thickness using an appropriate tool.

Hot Weather Application (Above 80°F)

The Contractor shall not apply the mortars when the ambient air and/or surface temperature of the culvert pipe is 100° F or higher. Shade the material and prepared the surface to keep it cool.

To extend the working time of the mortar when the ambient air temperature is 80°F or higher, but below 100°F, the Contractor is advised to combine the mortar mix material with cool or ice-cooled water. When working at these elevated temperatures, the Contractor shall make certain that the substrate is saturated surface-dry (SSD) before the mortar lining application begins.

Cold Weather Application (Above 45°F):

The Contractor shall not apply the mortars when ambient air temperatures are expected to fall below 45°F within 72 hours of placement. Both the ambient air and substrate temperatures must be at least 45°F at the time of placement.

Low substrate and ambient air temperatures will slow down the rate of set and strength development. At temperatures below 65°F, the Contractor is advised to warm the material, water, and substrate. Properly ventilate the area when heating. Protect the new liner from freezing.

Curing/Finishing

The Contractor shall use an ASTM C309 conforming curing compound such as 1315 Sealer or other approved equal.

S-1.12 Submittals

All submittals shall conform to the requirements in this and other sections of the Contract Documents. If not required elsewhere, the following minimum submittals shall be required:

Reference submittals

- Contractor certification verifying 5 years of experience
- Lining System certification; including third-party references

Materials data submittals

- Repair mortar material; including technical data sheet
- Lining mortar material; including technical datasheet and third-party testing completed.

S-1.13 Materials Handling

The bags of the mortar materials shall be stored in a cool, dry location until the Contractor is ready to use the material.

S-1.14 Quality Assurance and Acceptance

A minimum of two test cubes of the mortar material shall be taken randomly as directed by the inspector at owner's expense to verify strengths. Thickness can be verified with a wet gage at any random point of the new interior surface. Any areas found to be thinner than the specified minimum shall immediately receive additional material. Visual inspection should verify a leak-free, uniform appearance.

S-1.15 Measurement for Payment

Payment will be made under Item 2501.603 (Lining Culvert Pipe __") at the Contract bid price per meter [linear foot], which shall be payment in full for all costs to complete the installation in place, including but not limited to excavation, cleaning, pipe liner, liner reinforcement, fittings, seals, specified joint system, filling embank-

ment voids and backfilling, which shall be compensation in full for all removal, excavation, material and labor costs relative thereto, including restoration of existing structure bottoms..

SEALING UNDERGROUND UTILITY SYSTEMS WITH POLYURETHANE MATERIAL
SOIL DENSIFICATION WITH POLYURETHANE MATERIAL

General. This specification describes the materials and methods for sealing underground drainage systems including Utility Vaults, Storm and Wastewater Systems, and densification of surrounding soils.

1.0 Description. This work shall consist of sealing, undersealing, raising, or filling voids at underground utility vaults, storm and wastewater structures and pipes, or densification of surrounding soils by furnishing, hauling and injecting polyurethane material at utility piping, utility structures, concrete or into the base soils at locations shown on the plans or as directed by the engineer.

2.0 Material Requirements.

2.1 The material used for sealing and soil densification at underground storm and wastewater structures and pipes shall be water blown, closed cell, hydro-insensitive, high density polyurethane system with the following physical characteristics and properties.

Technical Property	Requirement
Density, min., per ASTM D1622 (air rise)	3.69 lbs / ft ³
Compressive strength, min., per ASTM D 1621	60 psi
Density, max., per ASTM D1622 (air rise)	4.2 lbs / ft ³
Volume Change, max. shrinkage (10 years)	5.0 percent
Curing Rate	90 percent of compressive strength within 15 minutes after injection

2.2 The material used shall be a high-density polyurethane material, such as URETEK 486 STAR or equivalent, as approved by the engineer. The material shall be a polyurethane-forming mixture, having a water insoluble diluent, which permits the formation of polyurethanes in excess water. The presence of these water insoluble diluents provides polyurethane foam with improved dimensional stability properties. This formula and these characteristics must be certified by the manufacturer.

2.3 All stored polyurethane material shall be sealed and protected from contamination of dust or any foreign material.

3.0 Contractor Pre-Qualification Requirements.

3.1 The contractor shall have a minimum of three years of experience in performing this type of work and a minimum of 50 projects on which the contractor has successfully done this type of work.

4.0 Equipment Requirements. The contractor shall provide at a minimum, the following equipment:

- (a) A vehicle-mounted pumping unit capable of injecting the high density polyurethane material beneath the concrete slabs. The pumping unit shall be equipped with a dial gauge in increments of 1/10 pound (45 g) and shall be capable of controlling the rate of flow of material as well as the rate of rise of the pavement.

- (b) Pressure and temperature control devices capable of maintaining proper temperature and proportionate mixing of the polyurethane component materials.
- (c) Pneumatic or electric drills capable of efficiently drilling 9/16 to 3/4-inch (14-19 mm) diameter injection holes through the pavement without damaging the structural integrity of the existing pavement.
- (d) Laser levels or dial indicator devices capable of monitoring and verifying that the pavement is raised to an even plane and to the required elevation.
- (e) All necessary electric generators, compressors, heaters, hoses, containers, valves and gauges to efficiently conduct and control the work.
- (f) Personnel safety apparatus including harnesses, lanyards, man-hoists, breathing masks, gas monitoring equipment, vent blowers, hazardous material suits, etc., as necessary

5.0 Construction Requirements.

- 5.1 As necessary, polyurethane material shall first be injected through a series of 5/8" drilled holes until all known or encountered voids under the structures and pipes are filled. Depending on the diameter, location and accessibility of the repair area, the repair may be made from within the pipe or from grade (outside the pipe). The rate and amount of material injection shall be determined by the contractor.
- 5.2 Injection nozzles shall prevent leakage during injection and shall be removed at completion of the injection or driven into the injection hole to a minimum of 3/4 inches below the surface. Any excessive material on the pavement surface shall be removed from the area and the holes shall be sealed with polyurethane material or a non-expansive cementitious grout approved by the engineer.
- 5.3 All drill tailings, excess polyurethane material and other debris shall be cleaned up and removed at the end of each working day. All removed material shall be disposed of in an environmentally acceptable manner in accordance with all federal, state and local regulations.
- 5.4 For sealing underground utility structures and piping, or soil densification and compaction of unconsolidated base soils, stabilization of asphalt and composite pavement, a series of 5/8" – 3/4" holes (as required for tube placement) shall be drilled at approximately 3-4 foot spaced intervals through the area requiring soil remediation. The polyurethane material shall then be injected through injection tubes inserted into the drilled holes to the proper depth or depths as required. The exact location, spacing, hole size and depth shall be selected by the contractor. The rate and amount of material injected shall be determined by the contractor to obtain proper densification of the base and sub-base soils.
- 5.5 The Polyurethane material shall be injected through injection tubes inserted into the drilled holes to the proper depth or depths as determined by on-site soils analysis, or dynamic cone penetrometer testing. The rate and amount of material injected shall be determined by the contractor.
- 5.6 Continuous laser level or dial indicator micrometer readings shall be in place and monitored by the contractor during injection as a means of determining sufficient material usage and soils densification as indicated by surface movement of 1-2 mm. Material will be injected until surface movement, predetermined quantity calculations, or as determined by onsite project foreman.

- 5.7 The contractor will be responsible for any structure or pavement blowouts, excessive lifting or damage that may occur as a result of the contractor's work. The contractor shall repair any subject areas to the satisfaction of the engineer at the contractor's expense.
- 6.0 **Method of Measurement.** Polyurethane material will be measured to the nearest tenth of a pound.
- 7.0 **Basis of Payment.** The quantities of polyurethane material injected will be paid for at the contract unit price.