OFFICIAL CONTRACT DOCUMENTS

FOR

West Hickman 7 (WH7) Wet Weather
Storage Facilities Improvements
Contract No.1 New Circle Road Crossing

Wastewater System Improvements
Division of Water Quality
Lexington Fayette Urban County Government

Remedial Measures Plan ID No. WH-1A

LFUCG Bid No. 80-2017

Date: August 2017

PREPARED BY:

HDR Engineering, Inc.

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SECTION 00100 - ADVERTISEMENT FOR BIDS

1.01 INVITATION

Sealed proposals for the following work will be received by the Lexington-Fayette Urban County Government (LFUCG) until 2:00 PM, local time, June 23, 2017 for furnishing all labor and/or materials and performing all work as set forth in the Contract Documents prepared by and for Lexington-Fayette Urban County Government, Division of Water Quality (OWNER). Immediately following the scheduled closing time for reception of Bids, all proposals which have been submitted in accordance with the above will be publicly opened and read aloud.

1.02 DESCRIPTION OF WORK

The project includes providing all construction supervision, labor, materials, tools, test equipment necessary for the construction of the West Hickman 7 (WH7) Wet Weather Storage Facilities – Contract No. 1 New Circle Road Crossing. The project includes but is not limited to a +/- 640 LF of 54-inch or 60-inch casing pipe installed by a trenchless technology with multiple varying sized carrier pipes and +/- LF of 16" C900 PVC gravity sewer, 20" C900 PVC force main and six 4" C900 PVC conduits. The casing pipe will be filled with specialized grout.

1.03 OBTAINING PLANS, SPECIFICATIONS, AND BID DOCUMENTS

Plans, Specifications, and Contract Documents may be obtained from Lynn Imaging, 328 Old Vine Street, Lexington, KY 40507, (859) 255-1021 or (www.lynnimaging.com) and click on plan room for a non-refundable price of reproduction for each full set of plans and documents. Contract Documents may be examined at the following places:

LFUCG Division of Central Purchasing 200 East Main Street Third Floor, Room 338 Lexington, KY 40507 (859) 258-3320 McGraw-Hill Co. / F.W. Dodge 2321 Fortune Drive Suite 112-A Lexington, KY 40509

LFUCG Division of Water Quality 125 Lisle Industrial Avenue Lexington, KY 40511 (859) 425-2400 Builders Exchange 1035 Strader Drive Suite 100 Lexington, KY 40505 (859) 288-0011

1.04 METHOD OF RECEIVING BIDS

Bids will be received from Prime contracting firms on a lump sum basis. Bids shall be submitted in the manner and subject to the conditions as set forth and described in the Information Available to Bidders and Bid Form. Sealed Bids shall be clearly marked on the outside of the envelope as follows: Company Name and Address, Bid Invitation Number, and the Project Name. Bids are to remain sealed until official Bid closure time.

1.05 METHOD OF AWARD

Determination of the successful Bid will be based on the lowest responsive and responsible Bidder whose qualifications indicate the award will be in the best interest of the OWNER and whose Bid/proposal complies with all the prescribed requirements. No Notice of Award will be

given until the OWNER has concluded such investigation as deemed necessary to establish the responsibility, qualifications and financial ability of Bidders to do the work in accordance with the Contract Documents to the satisfaction of the OWNER within the time prescribed. The OWNER reserves the right to reject the Bid of any Bidder who does not pass such investigation to the OWNER's satisfaction. In analyzing Bids, the OWNER may take into consideration alternate and unit prices, if requested by the Bid forms.

1.06 BID WITHDRAWAL

No Bidder may withdraw his Bid for a period of ninety (90) calendar days after the closing date for receipt of Bids. Errors and omissions will not be cause for withdrawal of Bid without forfeit of Bid Bond. Bids may be withdrawn in person prior to the closing date of receipt of Bids.

1.07 BID SECURITY

All Bids shall be accompanied by a Bid Bond of not less than five percent (5%) of the amount of the Bid executed by a Surety Company authorized to do business in the Commonwealth of Kentucky and countersigned by a licensed Kentucky Resident Agent, representing the Surety Company. Certified Check or Bid Bond shall be payable to Lexington-Fayette Urban County Government.

1.08 SUBMISSION OF BIDS

Contractors shall submit their Bids to the Lexington-Fayette Urban County Government, Division of Purchasing, Third Floor, 200 East Main Street, Lexington, Kentucky 40507. Bids shall be submitted in a sealed envelope no later than 2:00 p.m. (local time) June 23, 2017. Sealed proposals shall be marked clearly on the outside of the container "Sealed Proposal for: WH7 - Contract No.1 New Circle Road Crossing to be opened at 2:00 p.m. Local Time, June 23, 2017. Bids received after the scheduled closing time for receipt of Bids will not be considered and will be returned unopened.

1.09 RIGHT TO REJECT

The Lexington-Fayette Urban County Government reserves the right to reject any and all Bids and to waive all informalities and/or technicalities where the best interest of the Lexington-Fayette Urban County Government may be served.

1.10 NOTICE CONCERNING MWDBE GOAL

Notice of requirement for Affirmative Action to ensure Equal Employment Opportunities and Disadvantaged Business Enterprises (DBE), Minority-Owned Business Enterprises (MBE), Veteran-Owned Small Businesses (VOSB) and Woman-Owned Business Enterprises (WBE) Contract participation.

LFUCG has set a goal that not less than ten percent (10%) of the total value of this Contract be subcontracted to MWDBEs. The Lexington Fayette Urban County Government also has set a goal that not less than three percent (3%) of the total value of this Contract be subcontracted to Veteran-owned Small Businesses. The goal for the utilization of MWDBEs as well as Veteran subcontractors is a recommended goal. Contractor(s) who fail to meet such goal will be expected to provide written explanations to the Director of the Division of Purchasing of efforts they have made to accomplish the recommended goal, and the extent to which they are successful in accomplishing the recommended goal will be a consideration in the procurement process.

Depending on the funding source, other MWDBE goals may apply. For assistance in locating MWDBE Subcontractors contact:

Sherita Miller, Division of Central Purchasing LFUCG
200 East Main Street, 3rd Floor, Room 338 Lexington, Kentucky 40507 smiller@lexingtonky.gov

1.11 PRE-BID MEETING

A non-mandatory pre-Bid meeting will be held at 10:00 AM local time, June 9, 2017 at 125 Lisle Industrial Avenue, Suite 180, Lexington, KY 40511. Contractor bid questions must be submitted not later than close of business to Brian Marcum on June 12, 2017.

1.12 STATE REVOLVING LOAN REQUIREMENTS

This project may be partially or entirely funded by the Kentucky Infrastructure Revolving Loan Fund.

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

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

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

The procurement and performance of this contract are subject to the requirements of the Davis-Bacon Act.

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

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

Successful Bidder is required to employ the six "Good Faith Efforts" as listed in EPA's Disadvantaged Business Enterprise Program when soliciting subcontractors and suppliers. Documentation of these efforts will be a required submittal prior to Contract Award. See Supplemental General Conditions for Clean Water State Revolving Fund (Section 00810, page 30) included in the Contract Documents.

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

if requested by the Bid forms.

1.13 CONSENT DECREE REQUIREMENTS

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

The Bidder shall familiarize itself with and shall at all times comply with the CONSENT DECREE, and all federal, state and local laws, ordinances, and regulations that in any manner affect the Agreement (Contract). Time is of the essence in the performance of Agreement (Contract). Bidder is aware that the Owner is subject to penalties for non-compliance with the CONSENT DECREE deadlines.

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

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

An electronic version of the CONSENT DECREE is available on the LFUCG web page for review or to print a copy at no charge.

END OF SECTION

SECTION 00300 - INFORMATION AVAILABLE TO BIDDERS

1.01 RECEIPT AND OPENING OF BIDS

The Lexington-Fayette Urban County Government (herein called the Owner) invites Bids from firms on the project described in the Advertisement for Bids. The Owner will receive Bids at the Division of Purchasing, at the time and in the manner set forth in the Advertisement for Bids, and the Bids will then be publicly opened and read aloud. The Owner may consider informal any Bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all Bids. Any Bid may be withdrawn prior to the scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered. No Bidder may withdraw a Bid within ninety (90) days after the actual time and date of the Bid opening, but Owner may, in its sole discretion, release any Bid and return the Bid Security prior to that date.

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

1.02 PREPARATION OF BID

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

1.03 SUBCONTRACTS

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

1.04 QUALIFICATIONS OF BIDDER

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

In evaluating Bids, Owner shall consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and alternatives and unit or lump sum prices, as requested. Owner may consider maintenance requirements, performance data, and disruption or damage to private property. The contract, if awarded, will be awarded to the lowest, qualified, responsible Bidder based upon Owner's evaluation which indicates that the award will be in the best interest of Owner and the general public.

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

- A. If the Owner requires filling out a detailed financial statement, the Bidder may provide its current certified financial statement(s) for the required time interval.
- B. Corporate firms are required to be registered and in good standing with the requirements and provisions of the Office of the Secretary of State, Commonwealth of Kentucky.
- C. Good standing with Public Works Act any Contractor and/or subcontractors in violation of any wage or work act provisions (KRS 337.510 to KRS 337.550) are prohibited by Statutory Act (KRS 337.990) from bidding on or working on any and all public works contracts, either in their name or in the name of any other company, firm or other entity in which he might be interested. No Bid from a prime contractor in violation of the Act can be considered, nor will any subcontractor in violation of the Act be approved and/or accepted. The responsibility for the qualifications of the subcontractor is solely that of the prime contractor.
- D. Documents Required of Contractor (1) A sworn statement signed by the President or owner of the Company regarding all current work in progress anywhere; (2) A document showing the percent of completion of each project and the total worth of each project; and (3) Documentation showing the percentage of the DBE employment levels on each project of the Bidder's current work force, and DBE participation levels for Subcontractors.
- E. Optional Owner Requirements The Owner, at its discretion, may require the Bidder/Contractor to provide: (1) A current detailed financial statement for a period including up to 3 prior years. (2) Financial security or insurance in amounts and kinds acceptable to the Owner to meet the financial responsibility requirements for the Contractor to indemnify the Owner. (3) Additional information and/or DBE work force data, as well as DBE participation data.
- F. Each Bidder agrees to waive any claim it has or may have against the Owner, the Architect/Engineer, and their respective employees, arising out of or in connection with the administration, evaluation, or recommendation of any Bid.

1.05 BID SECURITY

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

1.06 LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

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

1.07 TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" from the Owner and to fully complete the Project within the time as specified in the Contract Documents. Bidder must agree also to pay liquidated damages for each consecutive calendar day thereafter as specified in the Contract Documents.

1.08 EXAMINATION OF CONTRACT DOCUMENTS AND SITE

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

1.09 ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the Contract Documents will be made to any Bidder orally. Every request for such interpretation should be in writing addressed to the Director of Central Purchasing, who in turn will have an addendum issued for the Lexington-Fayette Urban County Government, and to be given consideration must be received prior to the date fixed for the opening of Bids. Any and all such interpretations and any supplemental instructions will be in the

form of written addenda to the specifications. Acknowledgement of the receipt of addenda must be included with all submitted Bids. Failure of any Bidder to receive any such addendum or interpretation shall not relieve such Bidder from any obligation under his Bid as submitted. All addenda so issued shall become part of the Contract Documents.

All Contractor bid questions shall be submitted to Brain Marcum before close of business on June 12, 2017. Office Phone (859) 258-3320, email: BrianM@lexingtonky.gov.

1.10 SECURITY FOR FAITHFUL PERFORMANCE

- A. Simultaneously with the delivery of the executed Contracts, the Contractor shall furnish Performance, Payment, and Erosion and Sediment Control Bonds as security for the faithful performance of this Contract and for payment of all persons performing labor on the Project under this Contract and furnishing materials in connection with this Contract. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner and authorized to do business in the Commonwealth of Kentucky.
- B. The Contractor shall furnish the Warranty Bond upon completion of the Work, prior to the Owner's release of the final payment.
- C. All bonds required by this Contract and laws of this State shall be placed with agents licensed in the State of Kentucky. When the premium is paid for such coverage's, the full commission shall be paid to such local agent who shall not divide such commission with any person other than a duly licensed resident local agent.
- D. Contractor shall use standard Performance, Payment, Warranty, and Erosion and Sediment Control Bond forms such as documents provided with the Contract Documents or AIA form A312 (latest edition), for the Performance and Payment Bonds only.

1.11 POWER OF ATTORNEY

Attorney-in-fact who signs Bid bonds or Contract bonds must file with each bond a certified and effectively dated copy of their Power of Attorney.

1.12 TAXES AND WORKMEN'S COMPENSATION

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

1.13 LAWS AND REGULATIONS

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

1.14 EROSION AND SEDIMENT CONTROL AND PERMITS

The Contractor and Subcontractors performing Work on projects on behalf of the Owner shall also comply with all applicable federal, state, and local environmental regulations and all requirements and conditions set forth in specifications herein.

1.15 PREVAILING WAGE LAW AND MINIMUM HOURLY RATES

Federal wage rates and regulations, if required for this Project, will be as described in the Section 00820 herein.

1.16 AFFIRMATIVE ACTION PLAN

The successful Bidder must submit with their bid the following items to the Urban County Government (see section 00410 – Bid Form):

- A. Affirmative Action Plan of the firm
- B. Current Work Force Analysis Form
- C. Good Faith Effort Documentation to meet the MWDBE goals.
- D. List of Disadvantaged Business Enterprise Subcontractors and the Dollar Value of each Subcontract

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

All submissions should be directed to:

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

1.17 CONTRACT TIME

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

1.18 SUBSTITUTE OR "OR-EQUAL" ITEMS

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

1.19 EQUIPMENT MANUFACTURERS LIST

The Equipment Manufacturers identified in the Equipment Manufacturers List are the only equipment manufacturers/suppliers to be considered in the Bid. There are and will be no other equals considered during the bidding phase for these equipment items. The Contractor may

select any of the listed manufacturers for each item and must circle the selected manufacturer for each item at the time of Bid submission.

The design was completed based upon the first listed manufacturer, The Contractor, at no cost to the Owner, will be responsible for any changes to the structures, piping, electrical, instrumentation, or other to accommodate any required changes should a vendor other than the first listed be selected in the bid. This will include payment to the Engineer of Record for any required redesign.

1.20 ALTERNATE BIDS

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

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

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

1.21 SIGNING OF AGREEMENT (CONTRACT)

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

1.22 ASSISTANCE TO BE OFFERED TO DISADVANTAGED BUSINESS ENTERPRISE (MWDBE) CONTRACTORS

A. Outreach for MWDBE(s)

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

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

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

B. Bid Bond Assistance for MWDBE(s)

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

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

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

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

D. MWDBE and Veteran Subcontractors

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

For a list of eligible subcontractors, please contact:

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

1.23 MWDBE PARTICIPATION GOALS

A. GENERAL

- The LFUCG request all potential contractors to make a concerted effort to include Minority-Owned (MBE), Woman-Owned (WBE), Disadvantaged (DBE) Business Enterprises and Veteran-Owned Small Businesses (VOSB) as subcontractors or suppliers in their bids.
- Toward that end, the LFUCG has established 10% of total procurement costs as a Goal for participation of Minority-Owned, Woman-Owned and Disadvantaged Businesses on this contract.
- 3. The LFUCG has also established a 3% of total procurement costs as a Goal for participation of Veteran-Owned Small Businesses.
- 4. It is therefore a request of each Bidder to include in its bid, the same goal (10%) for MWDBE participation 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, Woman-Owned or Veteran-Owned subcontractors and suppliers for work done or materials purchased for this contract. (See EPA forms in section 00410 Bid Form).
- Replacement of a Minority-Owned, Woman-Owned or Veteran-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 EPA forms in section 00410 – Bid 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 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

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

D. OBLIGATION OF BIDDER FOR GOOD FAITH EFFORTS

 Bidders are required to employ each of the 6 Good Faith Efforts outlined in the bid documents. <u>These efforts have to be done and documented whether the bidder</u> <u>reached the 10% goal or not.</u>

- 2. Award of Contract shall be conditioned upon satisfaction of the requirements set forth herein.
- 3. See section 00410 Bid Form for the MWDBE Participation Policy and 6 Good Faith Efforts.
- 4. Failure to submit this information as requested may be cause for rejection of bid.

1.24 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

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

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

adopt and implement guidelines and/or policies consistent with the provisions and intent of this resolution by no later than July 1, 2015."

We have compiled the list below to help you locate certified MBE, WBE and DBE certified businesses. Below is a listing of contacts for LFUCG Certified MWDBEs and Veteran-Owned Small Businesses in (https://lexingtonky.ionwave.net)

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	Susan Marston	smarston@tsmsdc.com	502-365-9762		
Small Business Development Council	Shirie Hawkins, UK SBDC	smack@uky.edu	859-257-7666		
Community Ventures Corporation	Phyllis Alcorn	palcorn@cvky.org	859-231-0054		
KY Transportation Cabinet (KYTC)	Melvin Bynes	Melvin.bynes2@ky.gov	502-564-3601		
KYTC Pre-Qualification	Shella Eagle	Shella.Eagle@ky.gov	502-782-4815		
Ohio River Valley Women's Business Council (WBENC)	Sheila Mixon	smixon@orvwbc.org	513-487-6537		
Kentucky MWBE Certification Program	Yvette Smith, Kentucky Finance Cabinet	Yvette.Smith@ky.gov	502-564-8099		
National Women Business Owner's Council (NWBOC)	Janet Harris-Lange	jariet@nwboc.org	800-675-5066		
Small Business Administration	Robert Coffey	robertcoffey@sba.gov	502-582-5971		
LaVoz de Kentucky	Andres Cruz	lavozdeky@yahoo.com	859-621-2106		
The Key News Journal	Patrice Muhammad	paatricem@keynewsjournal.com 859-373-94			

1.25 OWNER PERMITS

Bidder shall refer to Section 00890 regarding permits that have been obtained by the Owner.

1.26 GEOTECHNICAL DATA

Bidder shall refer to Section 00320 regarding available geotechnical data for this Contract.

1.27 BUY AMERICAN PROVISIONS

This project is subject to Division G, Title IV of H.R. 3547 (Appropriations Act) passed by the United States Congress on January 17, 2014. This portion of the act requires that for the construction, alteration, maintenance, or repair of a public water system or treatment works, all of the iron and steel products used in the project be produced in the United States.

In this section, the term "iron and steel products" means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

This requirement shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency finds that (1) applying the requirement would be inconsistent with the public interest; (2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or (3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

Bidder shall refer to Section 00815 for additional information.

END OF SECTION

SECTION 00320 - GEOTECHNICAL DATA

	27		- 1
2:			
			1
			0 2



May 24, 2017

HDR, Inc. 2517 Sir Barton Way Lexington, Kentucky 40509

Attention: Mr. Benton Hanson, PE

RE: Geotechnical Data Summary

West Hickman 7 Wet Weather Storage Facility Project

Dear Mr. Hanson,

HDR, Inc. is pleased to provide the accompanying data, which includes boring logs and laboratory testing results for soils and bedrock for the West Hickman 7 Wet Weather Storage Facility Project.

HDR performed the drilling and sampling operations beginning from April 10, 2017 to April 12, 2017. The laboratory testing was performed after the drilling and sampling operations. The laboratory testing was finalized on May 12, 2017. The drilling and laboratory testing is attached hereto as information to support the proposed bore and jack underneath New Circle Road.

It has been our pleasure to serve you on this very important project. If we can be of further assistance, please call our office.

Sincerely,

HDR ENGINEERING, Inc.

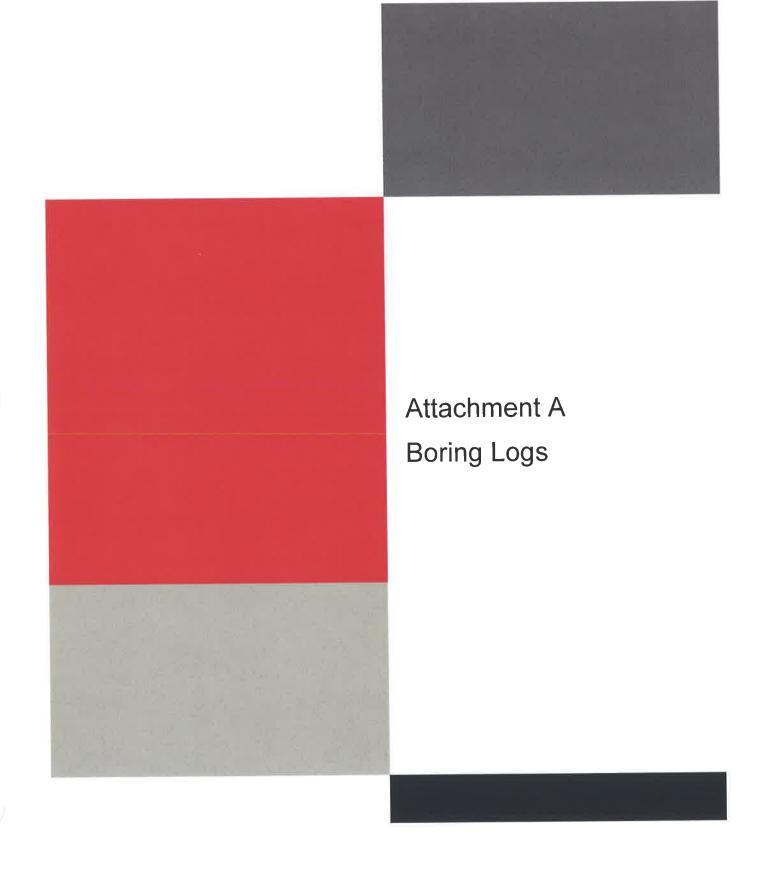
T. Craig Barnett, P.E. Geotechnical Section Manager

Greg Yankey, P.E. Senior Technical Advisor

Enclosures

Appendix A – Boring Logs Appendix B – Laboratory Testing Results

		0.81



		. **
*		

SOIL CLASSIFICATION CHART

M	AJOR DIVISI	ONS	SYMBOLS		TYPICAL	
			GRAPH	LETTER	DESCRIPTIONS	
	GRAVEL AND	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES	
	GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES	
COARSE GRAINED SOILS	MORE THAN 50% OF COARSE	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES	
	FRACTION RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES	
MORE THAN 50% OF MATERIAL IS	SAND AND	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	
LARGER THAN NO. 200 SIEVE SIZE	SANDY SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES	
	MORE THAN 50% OF COARSE	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES	
	FRACTION PASSING ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		sc	CLAYEY SANDS, SAND - CLAY MIXTURES	
				ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY	
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
SOILS				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE				МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS	
SIZE	SILTS LIQ AND GREAT			СН	INORGANIC CLAYS OF HIGH PLASTICITY	
				ОН	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS	
НІ	HIGHLY ORGANIC SOILS				PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS	



<u>SUBSURFACE INVESTIGATION</u> <u>BORING LOG</u>

						Sneet	No. 1 C	71
State _	Kentucky		Latitude 38.0	01437 °	Lon	gitude	84.45955 °	
County	Fayette	2	Location NA	A				
Project	Name L	FUCG - West Hickman 7 Wet Weather Stora	geSurface Elevation	on 983	.6 ft			
Job No.	Job No. <u>10055008</u> Dated Started <u>4/12/2017</u> Completed <u>4/12/2017</u>							
Driller	W. Smit	Logged by B. Cayton	Depth to Water	: Immedia	te NA			
Hole Nu	umber I	Total Depth 20 ft.	Depth to Water	NA_	Date	e Measure	d	
			0 1 1	Sample	D 4	Rec.	DI	
Lith	ology		Overburden	No.	Depth	(ft.)	Blows	Туре
Depth	Symbol	Description	Rock Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
0		Ground Line	Elev. = 983.6 ft					
		Brown clay and boulders (possible fill).	Diev. 705.0 N					
5		Brown, clayey GRAVEL with sand (GC).	5.0	SS-1	5.0	0.8	3-2-3	SPT
					6.5	0.0	323	
10				SS-2	10.0	0.2	50/0.5	SPT
		Auger Refusal at 11.6', Begin Coring in Limes	tone.		10.0 10.5 11:8	0.0	50/0.3	SPT
15		Light gray, gray, fine to medium crystalline, fo bioclastic, calcareous, thin shale beds, fresh, L	ssiliferous with	Core-1		3.6	100	75
		SH=25%.	3-7370,		15.2			
20		Limestone: Dark gray-gray, fine to medium cr bedded with calcareous, bioclastic shale lenses	ystalline, thinly	Core-2		4.7	98	83
_ 20		\18.7'-19.0' & 19.1'-19.2', LS=40%, SH=60%	, clay scallis (6, 20.0)		20.0			
		Boring Terminated at 20.0' (Elev. 963.6).	72					
25		No topsoil, boring located on artificial fill.						
		Note: Low maximum stress failure of RS-F at	16.9'-17.3' due to					
30		near vertical rippled shale laminae intersecting						
		discontinuity.						
35								
33								
40								
45								
50								
55								
55								
60								

CORE PHOTOGRAPHIC RECORD

West Hickman 7 Wet Weather Storage Improvements



B-1 - Box 1 of 1



<u>SUBSURFACE INVESTIGATION</u> <u>BORING LOG</u>

r						Sheet	No. 1 (of 1
State	Kentuck	y	Latitude 38.	.01420 °	Lon	gitude	84.45938 °	
County	Fayett	te	Location NA	4				
Project	Name _1	LFUCG - West Hickman 7 Wet Weather Storag	eSurface Elevati	ion 981	.7 ft			
Job No.			Dated Started	4/12/201		ompleted	4/12/201	7
Driller	W. Smi	th Logged by B. Cayton	Depth to Water	: Immedia				
Hole N	umber	B-2 Total Depth 40 ft.	Depth to Water	. NA	Date	e Measure	ed	
				Sample		Rec.		
Lith	ology		Overburden	No.	Depth	(ft.)	Blows	Type
Depth	Symbol	Description	Rock Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
_ 0		Ground Line	Elev. = 981.7 ft					
		Brown clay with boulders (possible fill).						
5			£ 01					
		Brown & gray, clayey GRAVEL with sand (GC)	5.0	SS-1	5.0 6.5	1.0	5-9-7	SPT
10			9.3%	SS-2	8:3	0.0	50/0.1	0'D.T.
10		Auger Refusal at 9.3', Begin Coring in Limeston Light gray to dark gray, fine to medium crystalling	e. ne. fossiliferous	Core-1	10.8	0.0 1.5	50/0.1 100	SPT 53
1.5		with numerous thin, bioclastic, calcareous shale interbeds, fresh, LS=50%, SH=50%.	partings &	Core-2		4.9	98	63
15		Clay seams 13.1'-13.2', 15.2'-15.5', 19.0'-19.1', 20	0.0'-20.4',		15.8			0.5
		45°-60° joint at 13.9'-14.7' (no stain)		Core-3		4.9	98	59
20			20.8	0010	20.8	419	90	39
		Shale: Medium gray, silty, argillaceous, thinly be occasional thin limestone interbeds, slightly wear	edded with thered,	C 4	20.8			
25		LS=25%, SH=75%. clay seams at 22.5'-22.7'	25.81	Core-4		5.0	100	38
		Limestone: Light gray to dark gray, fine to medi	um crystalline.		25.8			
30		fossiliferous, with numerous thinly bedded, biocl calcareous shale partings and interbeds, fresh wit	lastic, th thin seams	Core-5		4.8	96	44
		highly weathered, LS=70%, SH=30% clay seams at 27.4'-28.1', 29.0'-29.2', 29.5'-29.6',			30.8			
35		30.4'-30.5'; vertical joint at 30.8'-30.9' (no stain)	50.1,	Core-6		4.7	94	35
					35.8			
40			70.00	Core-7	40.0	4.2	100	76
		Boring Terminated at 40.0' (Elev. 941.7).	40.01		40.0			
45		No topsoil, boring located on artificial fill.						
= "7"								
50								
50								
								6.5
55								
60							1	

CORE PHOTOGRAPHIC RECORD

West Hickman 7 Wet Weather Storage Improvements



B-2 - Box 1 of 4



B-2 - Box 2 of 4

CORE PHOTOGRAPHIC RECORD

West Hickman 7
Wet Weather Storage Improvements



B-2 - Box 3 of 4



B-2 - Box 4 of 4

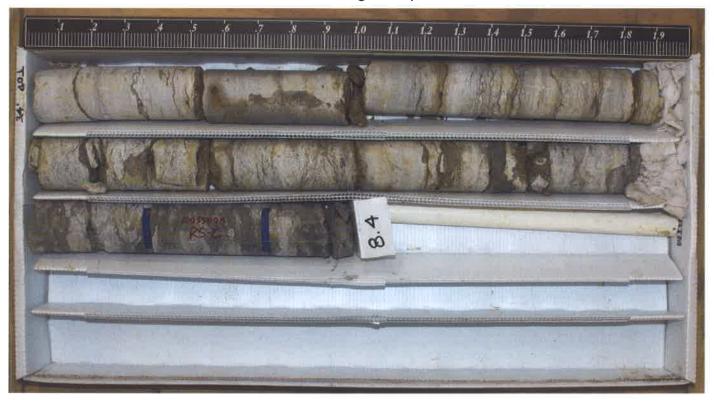


SUBSURFACE INVESTIGATION BORING LOG

Sheet No. of 38.01381 0 Longitude State Kentucky Latitude Location County **Fayette** NA Project Name LFUCG - West Hickman 7 Wet Weather Storage Surface Elevation 987.4 ft Dated Started 4/12/2017 Completed Job No. 10055008 4/12/2017 Logged by Depth to Water: Immediate NA Driller W. Smith B. Cayton Hole Number B-3 Total Depth 8.4 ft. Depth to Water NA Date Measured Rec. Sample Depth **Blows** Overburden Type No. (ft.) Lithology ROD Core Rec Rec. Depth Symbol Rock Core Run No. (%)(%)(ft.) Description Ground Line Elev. = 987.4 ft 0 Topsoil Brown clay with rock fragments (possible fill). 3.4 Auger Refusal at 3.4', Begin Coring in Limestone. 5 Gray, blue-gray, brown stain, fine to coarse grain w/beds whole Core-1 96 4.8 40 fossils, moderately weathered, moderately hard, very thinly 8.4 bedded, clay/shale laminations & beds calcareous, fossiliferous.8/4 clay seams 5.9', 6.4', 6.6', 6.8'-6.9' 10 Limestone: Dark gray, gray, traces black, medium to coarse grain w/silty shale matrix, moderately weathered, moderately to medium hard, pebbles to beds of limestone, fossiliferous, silty 15 shale, calcareous, LS=60%, SH=40%. clay seam 7.2', 8.1'-8.2'; 85° joint (discontinuous); water stain 20 Boring Terminated at 8.4' (Elev. 979.0). RS-C taken from 73.6'-73.9' 25 30 35 40 45 50 55

CORE PHOTOGRAPHIC RECORD

West Hickman 7
Wet Weather Storage Improvements



B-3 - Box 1 of 1



55

SUBSURFACE INVESTIGATION BORING LOG

Sheet No. 1 of 1 38.01372 0 Longitude 84.45884 0 Latitude State Kentucky Location NA County **Fayette** 994.3 ft Project Name LFUCG - West Hickman 7 Wet Weather StorageSurface Elevation Completed _ Dated Started 4/12/2017 4/12/2017 Job No. 10055008 Logged by B. Cayton Depth to Water: Immediate Dry Driller W. Smith Date Measured **B-4** Total Depth Depth to Water NA Hole Number 1.7 ft. Rec. Sample Overburden Depth **Blows** Type (ft.) No. Lithology Rec. RQD Core Rec Run Rock Core Depth Symbol (ft.) (%)No. (%)Description Ground Line Elev. = 994.3 ft 0 Topsoil Brown clay with rock fragments (possible fill). Auger Refusal & Boring Terminated at 1.7' (Elev. 992.6). 5 10 15 20 25 30 35 40 45 50



r						Sheet	No10	of1_
State	Kentuck	y	Latitude 38.	01313 °	Lon	gitude	84.45759 °	
County	Fayett	e	Location NA	4				
Project	Name <u>I</u>	FUCG - West Hickman 7 Wet Weather Stora	ageSurface Elevati	on <u>100</u>	8.1 ft			
Job No.	10055	008	Dated Started	4/12/201	17 Co	mpleted	4/12/201	7
	W. Smit		Depth to Water	: Immedia	te <u>Dry</u>			-
Hole N	umber	B-5 Total Depth 10.7 ft.	Depth to Water	NA NA	Date	Measure	d	
Lith	ology	-	Overburden	Sample No.	Depth	Rec. (ft.)	Blows	Туре
Depth	Symbol	Description	Rock Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
_ 0		Ground Line	Elev. = 1008 ₋ 1 ft					
		Topsoil Brown clay with rock fragments (possible fill)	0,5					
5		The state of the s	•					
10								
		Auger Refusal & Boring Terminated at 10.7' (Elev. 997.4).					140
15								167
_ 20								
_ 25								
30								
_ 35								
40								
_ 45								
50								
55								
60								



						Sheet	No. 1 o	of_1_
State	Kentucky		Latitude 38.0	01314 °	Long	gitude	84.45704 °	
County	Fayette		Location NA					
Project N	Name _LI	FUCG - West Hickman 7 Wet Weather Stor	ageSurface Elevation	on 993	.9 ft			
Job No.	100550	08	Dated Started	4/11/201		mpleted	4/11/201	7
Driller	W. Smith		Depth to Water					
Hole Nu	mber B	Total Depth 8.4 ft.	Depth to Water		Date	Measure	d	
Litho	ology		Overburden	Sample No.	Depth	Rec. (ft.)	Blows	Туре
Depth	Symbol	Description	Rock Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
_ 0		Ground Line Brown clay with boulders (possible fill).	Elev. = 993.9 ft					
_ 5								
10		Auger Refusal & Boring Terminated at 8.4' (Elev. 985.5).					
15								
20								
_ 25								
30								
35								
40								
45								
50								
55								



State	Kentucky	7				Latitude 38	01201 0	Lon		No. 1 84.45700 °	01 1
County						Location N			giiude	84.45/00	
Project	Name L	FUCG -	- West Hicl	kman 7 W	et Weather Sto	rageSurface Elevat		.3 ft			
Job No.	. 100550	008				Dated Started	4/11/20	7 Cc	mpleted	4/11/20	17
	W. Smitl		Log	ged by	B. Cayton	Depth to Water	r: Immedia	te NA			
Hole N	umber <u>F</u>	3-7	Tota	al Depth	8.8 ft.	Depth to Water	r NA	Date	Measure	d	
Lith	ology					Overburden	Sample No.	Depth	Rec. (ft.)	Blows	Туре
Depth	Symbol			Descri	ption	Rock Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
_ 0		Brown	ı clay with b	Ground ooulders (p	Line possible fill).	Elev. = 999.3 ft					
_ 5											
_ 10		Auger l	Refusal & l	Boring Ter	minated at 8.8' (Elev. 990.5).					
15											
20											
25											
30											
35											
40											
45											
50											
55											
60											



Sheet No. __1__ of __1__

State	Kentucky		Latitude 38.0	01266 °	Long	gitude	84.45693 °	
County	Fayette		Location NA					
'	7.	FUCG - West Hickman 7 Wet Weather Stora			.6 ft			
Job No.	100550	08	Dated Started	4/11/201	7 Co	mpleted	4/11/201	7
Driller	W. Smith	Logged by B. Cayton	Depth to Water	: Immedia	te NA			
Hole Nu	mber B	-8 Total Depth 10.2 ft.	Depth to Water	NA_	Date	Measure	d	-
Litho	ology		Overburden	Sample No.	Depth	Rec. (ft.)	Blows	Туре
Depth	Symbol	Description	Rock Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
0		Ground Line Brown clay with boulders (possible fill).	Elev. = 999.6 ft					
_ 5	177	Gray, poorly graded GRAVEL with clay and saclay and sand)(GP-GC).	and (and/or silty 5.2	SS=1	4.7 5.2	0.5	50/0.5	SPT
10		Auger Refusal at 5.2', Begin Coring in Limesto Gray, scattered dark gray, traces brown-orange coarse grain, slight to moderately weathered, n thin bedded, bioclastic, shale/clay beds calcare	, medium to 10.2 noderately hard,	Core-1	10.2	4.8	96	72
15		fossiliferous, shale laminae-some stylolitic. clay seams 6.1', 6.8', 6.9', 7.2'-7.3', 7.4'-7.5', 7.' Boring Terminated at 10.2' (Elev. 989.4).	1					
20								
25								
30								
35								
40								
45								
50								
55								

CORE PHOTOGRAPHIC RECORD

West Hickman 7 Wet Weather Storage Improvements



B-8 - Box 1 of 1



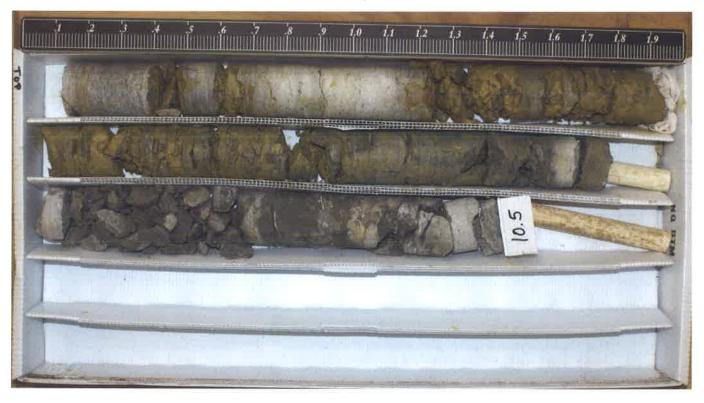
SUBSURFACE INVESTIGATION BORING LOG

Sheet No. 1 of 1

State	Kentucky			01286 °	Long	gitude	84.45660 °	
County Project	Fayette	FUCG - West Hickman 7 Wet Weather Stora	Location NA		.6 ft			
Job No.			Dated Started	4/11/201		mpleted	4/11/201	7
Driller	W. Smith	Logged by B. Cayton	Depth to Water	: Immedia	te NA			
Hole Nu	ımber <u>E</u>	Total Depth 10.5 ft.	Depth to Water	NA	Date	Measure	ed	
Lithe	ology		Overburden	Sample No.	Depth	Rec. (ft.)	Blows	Туре
Depth	Symbol	Description	Rock Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
_ 0		Ground Line Brown clay with boulders (possible fill).	Elev. = 996.6 ft					
_ 5		Brown, sandy elastic SILT (MH).	4.9 5,5 6.6	SS-1	4.9 5.5	0.5	2-50/0.1-	SPT
10		Auger Refusal at 5.5', Begin Coring in Limesto Gray, brown, medium to coarse grain, moderat hard with soft seams, very thinly bedded, biocleacareous, fossiliferous.	ely weathered,	Core-1	10.5	5.0	100	18
15		clay seams 5.8' & 6.0'. Limestone: Gray, dark gray, fine to medium g weathered grading to moderately weathered, so hard, limestone beds, cobbles & pebbles in silt.	oft to moderately					
_ 20		shale material, fossiliferous. clay seams 6.6'-8.3', LS=50%, SH=50% Boring Terminated at 10.5' (Elev. 986.1).						
25								
30								
_ 35								
40								
45								
50								
55								
60				1				

CORE PHOTOGRAPHIC RECORD

West Hickman 7 Wet Weather Storage Improvements



B-9 - Box 1 of 1



Sheet No. 1 of 1

						Sheet	No. 1 C	of 1
State _	Kentucky			01263 °	Long	gitude	84.45662 °	
County	Fayette		Location NA					
Project 1	Name Ll	FUCG - West Hickman 7 Wet Weath	er StorageSurface Elevati	on 999				-
Job No.	100550	008	Dated Started	4/11/201	7 Co	mpleted	4/11/201	.7
Driller	W. Smith	h Logged by B. Cayto	Depth to Water	: Immedia	te NA			
Hole Nu	ımber <u>B</u>	B-10 Total Depth 9.9 ft.	Depth to Water	NA NA	Date	e Measure	d	
Lithe	ology		Overburden	Sample No.	Depth	Rec. (ft.)	Blows	Туре
Depth	Symbol	Description	Rock Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
0		Ground Line Brown clay with boulders (possible file	Elev. = 999.9 ft					
_ 5		Auger Refusal at 4.9', Begin Coring in	1 Limestone.	SS-1	4:8	0.0	50/0.1	SPT
10		Gray, scattered dark gray, traces brown coarse grain, slight to moderately wea w/soft seams, thin bedded, bioclastic,	n-orange stain, medium to thered, medium hard shale/clay beds	Core-1	9.9	4.7	94	64
15		calcareous & fossiliferous, scattered s clay seams 5.0', 5.4', 5.9'-6.0', 6.2'-6.3' 8.3'-8.5' Boring Terminated at 9.9' (Elev. 990.0	', 6.4'-6.5', 6.7'-7.0',					
20			,					
25								
_ 30								
_ 35								
_ 40								
45								
50								
55								
200								

CORE PHOTOGRAPHIC RECORD

West Hickman 7 Wet Weather Storage Improvements



B-10 - Box 1 of 1



SUBSURFACE INVESTIGATION BORING LOG

Sheet No. __1__ of __1 38.01241 0 Longitude 84.45670 ° Latitude _ State Kentucky Location NA County **Fayette** Project Name <u>LFUCG - West Hickman 7 Wet Weather Storage Surface Elevation</u> 1002.5 ft Completed 4/11/2017 Dated Started 4/11/2017 10055008 Job No. Depth to Water: Immediate W. Smith Logged by B. Cayton Driller Date Measured Depth to Water NA Total Depth 10.7 ft. Hole Number ___ B-11 Rec. Sample Blows Type Overburden Depth (ft.) No. Lithology RQD Rec Rec. Core Run Rock Core Depth Symbol (%)(ft.) (%)No. Description Ground Line Elev. = 1002.5 ft 0 Brown clay with gravel and boulders (possible fill). 4:8 5.7 SPT 50/0.1--5 99-1 0.0 Gray limestone fragments Auger Refusal at 5.7', Begin Coring in Limestone. Gray, dark gray, medium to coarse grain, fresh to moderately 74 Core-1 4.8 96 weathered, moderately hard w/soft seams, very thin to thin 10 bedded, bioclastic, shale beds calcareous & fossiliferous, shale 10.7 10.7 clay seams 5.9', 8.3'-8.8', 8.9'-9.1' 15 Boring Terminated at 10.7' (Elev. 991.8). 20 25 30 35 40 45 55

CORE PHOTOGRAPHIC RECORD

West Hickman 7 Wet Weather Storage Improvements



B-11 - Box 1 of 1



SUBSURFACE INVESTIGATION BORING LOG

Sheet No. 1 of 1 38.01277 0 Longitude **84.45625** ⁰ Latitude State Kentucky Location NA County _ **Fayette** Project Name LFUCG - West Hickman 7 Wet Weather Storage Surface Elevation 1000.1 ft 4/11/2017 Dated Started 4/11/2017 Completed Job No. 10055008 Depth to Water: Immediate Driller W. Smith Logged by B. Cayton Date Measured Total Depth 10.9 ft. Depth to Water NA Hole Number B-12 Rec. Sample **Blows** Type Overburden Depth (ft.) No. Lithology Rec Rec. RQD Core Run Rock Core Depth Symbol (%) No. (ft.) (%)Description Ground Line Elev. = 1000.1 ft 0 Brown clay with boulders (possible fill). 5 10 Auger Refusal & Boring Terminated at 10.9' (Elev. 989.2). 15 20 25 30 35 40 45 50 55



						Shee	t No. 1 o	of 1
State County	Kentucky Fayett		Latitude 38. Location NA	.01254 °	Lon	gitude	84.45636 °	
Project	Name <u>I</u>	FUCG - West Hickman 7 Wet Weather Stor	ageSurface Elevati	ion 100	0.5 ft			
Job No.				4/10/201	17 Co	mpleted	4/10/201	7
Driller	W. Smit	Logged by B. Cayton	Depth to Water	r: Immedia		•	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
Hole N	umber	B-13 Total Depth 15 ft.	Depth to Water	. NA	Date	e Measur	ed	
Lith	ology		Overburden	Sample No.	Depth	Rec. (ft.)	Blows	Туре
Depth	Symbol	Description	Rock Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
_ 0		Ground Line Brown clay with gravel (possible fill).	Elev. = 1000.5 ft			(***)	(70)	(70)
5		Brown, elastic SILT with gravel (MH).	5.0	SS-1	5.0 6.4	1.0	2-4-50/0.4	SPT
10		Auger Refusal at 10.0', Begin Coring in Limes		700-7	10:0 11.1	0.0 1.1	50/0.0	SPT 100
15		Gray, blue-gray, medium grain, fresh, hard, th bioclastic, shale bed (10.6'). Limestone: Gray, gray-blue, olive green, fine fresh, moderately hard to hard, limestone beds	to medium grain, 15 /	Core-2	15.0	3.8	97	95
20		pebbles in silty, calcareous shale matrix, fossismall vugs, LS=70%, SH=30% Boring Terminated at 15.0' (Elev. 985.5).	liferous, traces					
25								
_ 30								
35								
40								
45								
_ 50								
55								-
60								

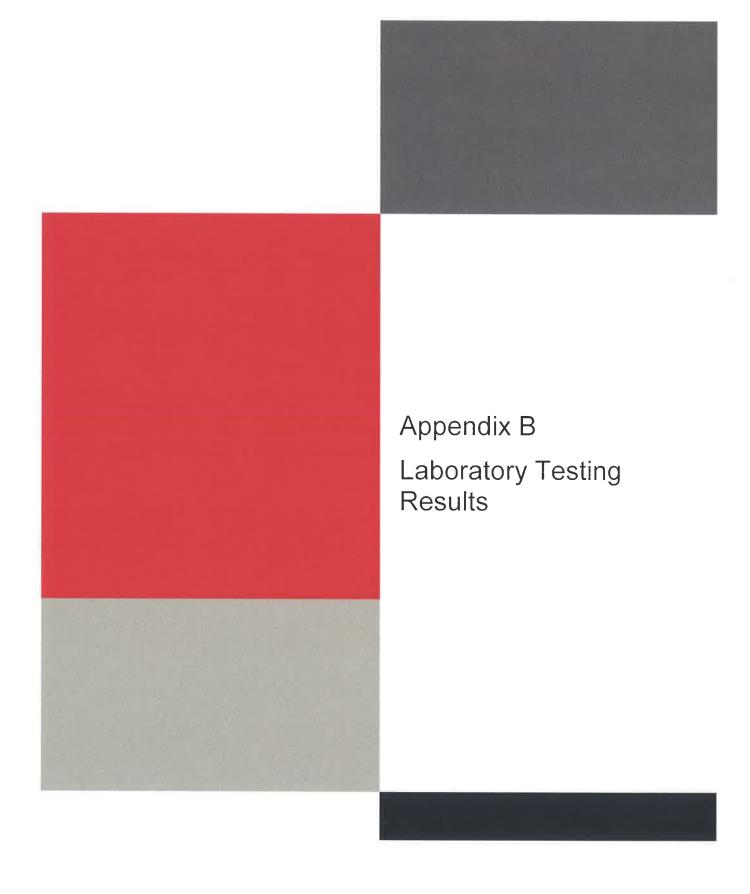
CORE PHOTOGRAPHIC RECORD

West Hickman 7 Wet Weather Storage Improvements



B-13 - Box 1 of 1

	8.7
	187
	5 V



		91



Project Name: LFUCG West Hickman

Location: Fayette County, Kentucky Job Number: 10055008

Moisture Data

(AASHTO T255-T265 / ASTM C566-D2216)

Natural

Proje	ct Job No	.: 10055008						Moisture
Soil	Boring		Sample					Content
No.	No.	Station & Offset	No.	De	pth	Description of Soil	pH_	(%)
1	B-1		SS-1	5.0	6.5	Brown Clayey Gravel with Sand		

No.	No.	Station & Offset	No.	De	pth	Description of Soil	рН	(%)
1	B-1		SS-1	5.0		Brown Clayey Gravel with Sand		
1			SS-2	10.0	10.5	Brown Clayey Gravel with Sand		
1	B-2		SS-1	5.0	6.5	Brown & Gray Clayey Gravel with Sand		22.9
2	B-8		SS-1	4.7	5.2	Gray Poorly Graded Gravel with Clay and Sand (and/or Silty Clay at		13.7
3	B-9		SS-1	4.9	5.5	Brown Sandy Elastic Silt		35.7
4	B-13		SS-1	5.0	6.4	Brown Elastic Silt with Gravel		21.4



SOIL CLASSIFICATION

Project Name :: LFUCG-West Hickman 7 Wet Weather Storage

Project No. 100550088

Sample No. SS-1 Project County : Fayette Sample Loc. Boring No. B-2

Project State : Kentucky Sample Depth § 5.0' to 6.5' Laboratory No. 🔋 100550088 Date Tested § 04/27/17 Submitted By 🗧 HDR Date Reported : 05/05/17

Soil Type: Brown & Gray Clayey Gravel with Sand

AASHTO T27:

				% Passing
4	in.	101.6	mm	
3.5	in.	88.9	mm	
3	in.	76.2	mm	
2.5	in.	63.5	mm	
2	in.	50.8	mm	
1 3/4	in.	45	mm	
1 1/2	in.	38.1	mm	
1 1/4	in.	31.5	mm	
1	in.	25	mm	100.0
3/4	in.	19	mm	86.2
1/2	in.	12.5	mm	
3/8	in,	9.5	mm	64.6
1/4		6.3	mm	
No.4		4.75	mm	51.4
No.6		3.35	mm	
No.10		2	mm	40.8

					% Passing
	No.16		1.18	mm	
	No.30		0.6	mm	
	No.40		0.425	mm	32.3
	No.50		0.3	mm	
	No.60		0.25	mm	
	No.80		0.18	mm	
	No.100		0.15	mm	
1	No.200		0.075	mm	27.5
	No.270		0.053	mm	
I	Hyd. Rd.	# 1		mm	
	Hyd. Rd.	#2		mm	
<u> </u>	Hyd. Rd.	#3		mm	
	⊣yd. Rd.	#4		mm	
	lyd. Rd.	# 5		mm	
	lyd. Rd.	#6		mm	
Ŀ	lyd. Rd.	#7		mm	
7	no no				

 $D_{50} = 4.237 \text{ mm}$

CBR: NA Natural Moisture (%) (AASHTO T265) 1 22.9

Dry Dens. : NA Liquid Limit (AASHTO T89) # 33 Opt. Moist. : NA Plastic Limit (AASHTO T90) 19

Plasticity Index 114

AASHTO Composition of Total Sample: M145 Liquidity Index # 0.30 Gravel (3in. + No.10): 59.2 Activity : NA

Coarse Sand (-No.10 + No.40): 8.5 Sp. Gr. (AASHTO T100) 🚏 NA Fine Sand (-No.40 + No.200): 4.8 AASHTO Classification: M145 A-2-6 (1)

Silt + Clay (-No.200) : 27.5 ASTM Classification: D2487 3 GC

ASTM Composition of Total Sample: D2487

Coarse Gravel (3in. + 3/4in.) : 13.8 Fine Gravel (-3/4in. + No.4): 34.8 Coarse Sand (-No.4 + No.10): 10.6 Medium Sand (-No.10 + No.40): 8.5 Fine Sand (-No.40 + No.200): 4.8 Silt + Clay (-No.200) : 27.5

Approved By: Kan E. Walk Soil No. 1



SOIL CLASSIFICATION

Project Name : LFUCG-West Hickman 7 Wet Weather Storage

Project No. 1 100550088

Sample No. : SS-1 Sample Loc. Boring No. B-8

Project County : Fayette Project State : Kentucky Laboratory No. 100550088

Sample Depth 4.7' to 5.2' Date Tested : 04/27/17

Submitted By HDR Date Reported 5 05/05/17 Soil Type : Gray Poorly Graded Gravel with Clay and Sand (and/or Silty Clay and Sand)

AASHTO T27:

				% Passing
4	in.	101.6	mm	
3.5	in.	88.9	mm	
3	in.	76.2	mm	
2.5	in.	63.5	mm	
2	in.	50.8	mm	
1 3/4	in.	45	mm	
1 1/2	in.	38.1	mm	
1 1/4	in.	31.5	mm	
1	in.	25	mm	100.0
3/4	in.	19	mm	68.1
1/2	in.	12.5	mm	
3/8	in.	9.5	mm	42.1
1/4		6.3	mm	
No.4		4.75	mm	28.7
No.6		3.35	mm	
No.10		2	mm	16.3

					% Passing
-	No.16		1.18	mm	
	No.30		0.6	mm	
	No.40		0.425	mm	10.2
	No.50		0.3	mm	
Ì	No.60		0.25	mm	
ĺ	No.80		0.18	mm	
ì	No.100		0.15	mm	
	No.200		0.075	mm	7.4
	No.270		0.053	mm	
	Hyd. Rd.	# 1		mm	
	Hyd. Rd.	#2		mm	
MAGILIO 100	Hyd. Rd.	#3		mm	
2	Hyd. Rd.	# 4		mm	
MAN	Hyd. Rd.	# 5		mm	
	Hyd. Rd.	#6		mm	
	Hyd. Rd.	#7		mm	
	_				

 $D_{50} = 11.727 \text{ mm}$

Natural Moisture (%) (AASHTO T265) 3 13.7 CBR : NA

Liquid Limit (AASHTO T89) 3 25 Dry Dens. : NA Plastic Limit (AASHTO T90) 3 18 Opt. Moist. : NA

Plasticity Index 3 7

AASHTO Composition of Total Sample: M145 Liquidity Index 3 -0.63

Gravel (3in. + No.10): 83.7

Activity NA

Sp. Gr. (AASHTO T100) 🐎 NA Coarse Sand (-No.10 + No.40): 6.1 AASHTO Classification: M145 A-2-4 (0) Fine Sand (-No.40 + No.200) : 2.8

> Silt + Clay (-No.200): 7.4 ASTM Classification: D2487 : GP-GC

ASTM Composition of Total Sample: D2487

Coarse Gravel (3in. + 3/4in.) : 31.9 Fine Gravel (-3/4in. + No.4): 39.4 Coarse Sand (-No.4 + No.10): 12.4 Medium Sand (-No.10 + No.40) : 6.1 Fine Sand (-No.40 + No.200) : 2.8 Silt + Clay (-No.200): 7.4

Approved By: Kan & Walker Soil No.



SOIL CLASSIFICATION

Project Name : LFUCG-West Hickman 7 Wet Weather Storage

Project No. 100550088 Sample No. SS-1

Project County : Fayette Sample Loc. : Boring No. B-9
Project State : Kentucky Sample Depth : 4.9' to 5.5'
Laboratory No. : 100550088 Date Tested : 04/27/17
Submitted By : HDR Date Reported : 05/05/17

Soil Type : Brown Sandy Elastic Silt

AASHTO T27:

				% Passing
4	in.	101.6	mm	
3.5	in.	88.9	mm	
3	in.	76.2	mm	
2.5	in.	63.5	mm	
2	in.	50.8	mm	
1 3/4	in.	45	mm	
1 1/2	in.	38.1	mm	
1 1/4	in.	31.5	mm	
1	in.	25	mm	
3/4	in.	19	mm	100.0
1/2	in.	12.5	mm	
3/8	in.	9.5	mm	89.2
1/4		6.3	mm	
No.4		4.75	mm	88.1
No.6		3.35	mm	
No.10		2	mm	86.4

				% Passing
No.16		1.18	mm	
No.30		0.6	mm	
No.40		0.425	mm	76.3
No.50		0.3	mm	
No.60		0.25	mm	
No.80		0.18	mm	
No.100		0.15	mm	
No.200		0.075	mm	66.9
No.270		0.053	mm	
Hyd. Rd.	# 1		mm	
Hyd. Rd.	#2		mm	
Hyd. Rd.	#3		mm	
Hyd. Rd.	#4		mm	
Hyd. Rd.	# 5		mm	
Hyd. Rd.	#6		mm	
Hyd. Rd.	#7		mm	

 $D_{50} = 0.014 \text{ mm}$

CBR: NA Natural Moisture (%) (AASHTO T265) 35.7

Dry Dens.: NA Liquid Limit (AASHTO T89): 59
Opt. Moist.: NA Plastic Limit (AASHTO T90): 34

Plasticity Index : 25

AASHTO Composition of Total Sample: M145 Liquidity Index © 0.07 Gravel (3in. + No.10) : 13.6 Activity © NA

Silt + Clay (-No.200): 66.9 ASTM Classification: D2487: MH

ASTM Composition of Total Sample: D2487

Coarse Gravel (3in. + 3/4in.) : 0.0 Fine Gravel (-3/4in. + No.4) : 11.9 Coarse Sand (-No.4 + No.10) : 1.7 Medium Sand (-No.10 + No.40) : 10.1 Fine Sand (-No.40 + No.200) : 9.4 Silt + Clay (-No.200) : 66.9

Approved By: Ken E. Walker Soil No.



AASHTO T27:

SOIL CLASSIFICATION

Project Name: LFUCG-West Hickman 7 Wet Weather Storage

Project No. : 100550088

Project County : Fayette

Project State : Kentucky Laboratory No. : 100550088

Submitted By : HDR

Soil Type: Brown Elastic Silt with Gravel

HDR

ssing % Passing

				% Passing
4	in₌	101.6	mm	
3.5	in.	88.9	mm	
3	in.	76.2	mm	
2.5	in.	63.5	mm	
2	in.	50.8	mm	
1 3/4	in.	45	mm	
1 1/2	in.	38.1	mm	
1 1/4	in.	31.5	mm	
1	in.	25	mm	100.0
3/4	in.	19	mm	85.6
1/2	in.	12.5	mm	
3/8	in.	9.5	mm	83.7
1/4		6.3	mm	
No.4		4.75	mm	82.4
No.6		3.35	mm	
No.10		2	mm	82.0

				70 T G001119
No.16		1.18	mm	
No.30		0.6	mm	
No.40		0.425	mm	79.4
No.50		0.3	mm	
No.60		0.25	mm	
No.80		0.18	mm	
No.100		0.15	mm	
No.200		0.075	mm	74.0
No.270		0.053	mm	
Hyd. Rd.	#1		mm	
Hyd. Rd.	#2		mm	
Hyd. Rd.	#3		mm	
Hyd. Rd.	# 4		mm	
Hyd. Rd.	# 5		mm	
Hyd. Rd.	#6		mm	
Hyd. Rd.	#7		mm	
0 mm				

Sample No. : SS-1

Sample Depth: 5.0' to 6.4'

Date Tested: 04/27/17

Date Reported: 05/05/17

Sample Loc. : Boring No. B-13

 $D_{50} = 0.009 \text{ mm}$

CBR: NA Natural Moisture (%) (AASHTO T265) 22.9

Dry Dens. : NA Liquid Limit (AASHTO T89) : 58

Opt. Moist.: NA Plastic Limit (AASHTO T90): 32

AASHTO Composition of Total Sample: M145

Plasticity Index 2 26

Liquidity Index 1 -0.36

Gravel (3in. + No.10): 18.0 Activity: NA

Fine Sand (-No.40 + No.200) : 5.4 AASHTO Classification: M145 A-7-5 (21)

Silt + Clay (-No.200): 74.0 ASTM Classification: D2487 MH

ASTM Composition of Total Sample: D2487

Coarse Gravel (3in. + 3/4in.) : 14.4 Fine Gravel (-3/4in. + No.4) : 3.2

Coarse Sand (-No.4 + No.10) : 0.4

Medium Sand (-No.10 + No.40) : 2.6

Fine Sand (-No.40 + No.200) : 5.4

Silt + Clay (-No.200) : 74.0

Approved By Kin E. Walker

Soil No. 4



UNCONFINED COMPRESSION TEST (ROCK CORE)

DATE REPORTED : 4/26/2017

PROJECT NAME : LFUCG-West Hickman 7 Wet Weather Storage

PROJECT NO. 10055008

SAMPLE NO. RS-A
PROJECT COUNTY Fayette

PROJECT STATE Kentucky

LABORATORY NO. 10055008

SAMPLE DEPTH 6.0' to 6.3'
DATE TESTED 4/26/2017

ROCK DESCRIPTION: Limestone: medium to coarse grain, bioclastic fresh

Diameter: 1.99 in Area: 3.10 in²
Height: 4.11 in Volume: 0.0074 ft³

RESULTS:

SUBMITTED BY # HDR | ICA

Moisture Air-Dry: NA

Air-Dry Density: 168.34 lbs/ft.3

Maximum Stress: 9233 psi Elapsed Time: 12:03 min. Rate of Loading: 40 lb/sec



Comments :

Approved By: Kan & Walk



UNCONFINED COMPRESSION TEST (ROCK CORE)

PROJECT NAME & LFUCG-West Hickman 7 Wet Weather Storage

PROJECT NO. 10055008

PROJECT COUNTY : Fayette

PROJECT STATE # Kentucky

LABORATORY NO. # 10055008

SUBMITTED BY # HDR | ICA

SAMPLE NO. RS-B SAMPLE LOC. B-10

SAMPLE DEPTH 3 9.0' to 9.4'

DATE TESTED # 4/26/2017

DATE REPORTED \$ 4/26/2017

ROCK DESCRIPTION: Limestone: medium to coarse grain, bioclastic sli. wthd.

Diameter: 1.99 in

Height: 4.10 in

Area:

3.10 in²

Volume :

0.0074 ft³

RESULTS:

Moisture Air-Dry: NA

168.29 lbs/ft.3 Air-Dry Density

Maximum Stress : 6507

Elapsed Time: 9:28 min. Rate of Loading : 40 lb/sec

psi

Comments:

Approved By: Kan & L.) 16.



UNCONFINED COMPRESSION TEST (ROCK CORE)

PROJECT NAME: LFUCG-West Hickman 7 Wet Weather Storage

PROJECT NO. 10055008 SAMPLE NO. : RS-C PROJECT COUNTY : Fayette SAMPLE LOC. : B-3

PROJECT STATE : Kentucky SAMPLE DEPTH: 7.6' to 7.9' LABORATORY NO. 10055008 DATE TESTED : 4/26/2017 SUBMITTED BY ! HDR | ICA DATE REPORTED : 4/26/2017

ROCK DESCRIPTION: Limestone: med. to cse. grain beds,cobbles & pebbles in silty shale matrix mod. wthd.

Diameter: 1.98 in

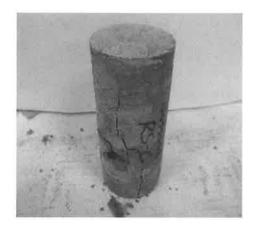
Area: 3.09 in² Height: 3.89 in Volume: 0.007 ft³

RESULTS:

Moisture Air-Dry NA

Air-Dry Density 164.68 lbs/ft.3

Maximum Stress : 4019 psi Elapsed Time : 6:46 min. Rate of Loading: 40 lb/sec



Comments :

Approved By: Kan & Dalk



UNCONFINED COMPRESSION TEST (ROCK CORE)

PROJECT NAME: LFUCG-West Hickman 7 Wet Weather Storage

PROJECT NO. :: 10055008

PROJECT COUNTY Fayette

PROJECT STATE Kentucky

LABORATORY NO. 10055008

SUBMITTED BY : HDR | ICA

SAMPLE NO. : RS-D

SAMPLE LOC. B-13

SAMPLE DEPTH 113.7' to 14.1'

DATE TESTED # 4/26/2017

DATE REPORTED #4/26/2017

ROCK DESCRIPTION: Limestone: fine to med. grain beds, cobbles & pebbles in silty shale matrix fresh

Diameter: 1.98 in

Height : 4.10 in

Area:

3.09 in²

Volume: 0.0073 ft³

RESULTS:

Moisture Air-Dry: NA

Air-Dry Density: 164.48 lbs/ft.3

Maximum Stress 3489 psi Elapsed Time 5:14 min.

Rate of Loading 40 lb/sec

Comments :

Approved By: Ken & Walk



UNCONFINED COMPRESSION TEST (ROCK CORE)

PROJECT NAME : LFUCG-West Hickman 7 Wet Weather Storage

PROJECT NO. # 10055008 SAMPLE NO. # RS-E PROJECT COUNTY Fayette SAMPLE LOC. # B-1

PROJECT STATE Kentucky

LABORATORY NO. 10055008

SUBMITTED BY HDR | ICA

SAMPLE DEPTH 12.9' to 13.4'

DATE TESTED 5/4/2017

DATE REPORTED 5/5/2017

ROCK DESCRIPTION : Limestone: f to med. grain, fossiliferous, in bioclastic calcreous shale matrix fresh

Diameter: 1.99 in Area: 3.10 in²
Height: 3.99 in Volume: 0.0072 ft³

RESULTS:

Moisture Air-Dry NA

Air-Dry Density 166.27 lbs/ft.3

Maximum Stress: 4432 psi Elapsed Time: 4:53 min. Rate of Loading: 40 lb/sec



Comments :

Approved By: Kon & Walk



UNCONFINED COMPRESSION TEST (ROCK CORE)

PROJECT NAME : LFUCG-West Hickman 7 Wet Weather Storage

PROJECT NO. :: 10055008

PROJECT COUNTY Fayette

PROJECT STATE Kentucky

LABORATORY NO. 10055008

SUBMITTED BY # HDR | ICA

SAMPLE NO. 🖫 RS-F

SAMPLE LOC. B-1

SAMPLE DEPTH : 16.9' to 17.3'

DATE TESTED : 5/4/2017

DATE REPORTED § 5/5/2017

ROCK DESCRIPTION: Limestone: f to med. Grain, fossiliferous, bioclastic silty shale matrix fresh

Diameter: 1.98 in

Height: 4.01 in

Area:

3.08 in²

Volume: 0.0071 ft³

RESULTS:

Moisture Air-Dry NA

Air-Dry Density 168.4 lbs/ft.3

Maximum Stress :

715

Elapsed Time : 1:54 min.

Rate of Loading

40 lb/sec

psi



Note: Low maximum stress failure due to near vertical rippled shale laminae intersecting horizontal shale discontinuity.

Comments:

Approved By: Ken & Walker



UNCONFINED COMPRESSION TEST (ROCK CORE)

PROJECT NAME : LFUCG-West Hickman 7 Wet Weather Storage

PROJECT NO. 10055008

PROJECT COUNTY Fayette

PROJECT STATE :: Kentucky LABORATORY NO. :: 10055008 SUBMITTED BY :: HDR | ICA

SAMPLE NO. : RS-G SAMPLE LOC. : B-2

SAMPLE DEPTH :: 16.7' to 17.2'

DATE TESTED :: 5/4/2017

DATE REPORTED :: 5/5/2017

ROCK DESCRIPTION: Limestone: f to med. Crystalline, fossiliferous, cacareous, bioclastic silty shale matrix fresh

Diameter: 1.99 in

Height: 4.07 in

Area: 3

Volume :

3.10 in² 0.0073 ft³

RESULTS:

Moisture Air-Dry: NA

Air-Dry Density: 167.02 lbs/ft.3

Maximum Stress: 6265 psi Elapsed Time: 8:54 min. Rate of Loading: 40 lb/sec



Comments :

Approved By: Kin E. Walker



UNCONFINED COMPRESSION TEST (ROCK CORE)

PROJECT NAME :: LFUCG-West Hickman 7 Wet Weather Storage

PROJECT NO. 10055008

PROJECT COUNTY : Fayette

PROJECT STATE : Kentucky

LABORATORY NO. 10055008

SUBMITTED BY : HDR | ICA

SAMPLE NO. RS-H

SAMPLE LOC. B-2

SAMPLE DEPTH @ 26.7' to 27.2'

DATE TESTED 5/4/2017

DATE REPORTED # 5/5/2017

ROCK DESCRIPTION: Limestone: f to med. Grain, fossiliferous, cacareous, bioclastic silty shale matrix fresh

Diameter: 1.99 in

Height: 4.14 in

Area:

3.10 in²

Volume: 0.0074 ft³

RESULTS:

Moisture Air-Dry NA

Air-Dry Density 166.41 lbs/ft.3

Maximum Stress

2169 psi

Elapsed Time : 2:44 min. lb/sec

Rate of Loading : 40

Comments::

Approved By: King Walk



UNCONFINED COMPRESSION TEST (ROCK CORE)

Area:

PROJECT NAME :: LFUCG-West Hickman 7 Wet Weather Storage

PROJECT NO. : 10055008 SAMPLE NO. : RS-I PROJECT COUNTY : Fayette SAMPLE LOC. : B-2

PROJECT STATE : Kentucky

LABORATORY NO. : 10055008

SUBMITTED BY : HDR | ICA

SUBMITTED BY : HDR | ICA

SAMPLE DEPTH : 36.3' to 36.9'

DATE TESTED : 5/4/2017

DATE REPORTED : 5/5/2017

ROCK DESCRIPTION: Limestone: f to med. Grain, fossiliferous, calcareous, bioclastic silty shale matrix fresh

Diameter 1.99 in

Height: 4.05 in Volume: 0.0073 ft³

RESULTS:

Moisture Air-Dry 1 NA

Air-Dry Density 167.19 lbs/ft.3

Maximum Stress: 5852 psi Elapsed Time: 19:57 min. Rate of Loading: 40 lb/sec



3.10 in²

Comments:

Approved By: King Wille

SECTION 00410A - BID FORM

West Hickman 7 (WH7) Wet Weather Storage Facilities Improvements

Contract No. 1 New Circle Road Crossing

Division of Water Quality Lexington-Fayette Urban County Government

LFUCG Bid No. 80-2017

GENERAL 1.01 Date: <u>6-27-20</u>J7 Place: Lexington, Kentucky The following Bid Form shall be followed exactly in submitting a Bid for this Work. Midwest Mole Inc. This Bid Form Submitted by 6814 W 350 N, Greenfield, IN 46140 (Name and Address of Bidder) (Hereinafter called "Bidder"), organized and existing under the laws of the State of INDIANA, doing a Corporation "a corporation," "a partnership", or an "individual" as applicable To: Lexington-Fayette Urban County Government (Hereinafter called "Owner" Office of the Director of Central Purchasing 200 East Main Street, Room 338 Lexington, KY 40507 The Bidder, in compliance with your Advertisement for Bids for the WH7 Wet Weather Storage -Contract No. 1 New Circle Road Crossing; Lexington, Kentucky, having examined the Contract Documents including the Plans and Specifications with related documents, having examined the site for proposed Work, and being familiar with all of the conditions and any and all addendums surrounding the construction of the proposed Project, including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the Project in accordance with the Contract Documents, within the time set forth therein, and at the lump sum] stated hereinafter. These prices are to cover all expenses incurred in performing the Work required under the Contract Documents, of which this Bid is a part. This bid includes the Pump Station, Pump Station site work and access road. The Bidder hereby agrees to commence Work under this Contract on a date to be specified in a written "Notice to Proceed" of the Owner and to substantially complete the Project within 120 consecutive calendar days. Bidder further agrees to pay liquidated damages, the sum of eight hundred dollars and no cents (\$500.00) for each consecutive day thereafter. The Bidder hereby acknowledges receipt of the following addenda: Addendum No. ____ Date ____ Addendum No. #1 Date 6/15/2017; Addendum No. ____ Date ____ Addendum No. #2 Date __6/20/2017; Addendum No. ____ Date ____ Addendum No. <u>#3</u> Date <u>6/21/2017</u>; Addendum No. ____ Date _____ Addendum No. ____ Date _____;



TODD SLATIN DIRECTOR CENTRAL PURCHASING

ADDENDUM #1

Bid Number: #80-2017

Date: June 15, 2017

Subject: WH7 Wet Weather Storage Improvements-

New Circle Road Crossing

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

TO ALL PROSPECTIVE SUBMITTERS:

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

	Questions	Answers
1	Will Resident Project Representative (RPR) overtime charges be applied to this project?	
2	Can the Contractor use the available city property to stage construction activities?	Yes. Contractor can use the Pump Station site and the Ground Storage Tank site for construction staging. Contractor shall submit proposed staging areas for approval by Owner and Engineer.
3	Can the "rescue pit" be added as a separate bid item?	The rescue pit is shown on the drawings as a possible location in the KYTC permit request. If the Contractor does not need to retrieve equipment then it will not be used. A separate bid item is not needed.
4	Would LFUCG entertain the installation of the 60" casing/liner plate using drill and blast, hand mine tunneling	Yes



	method?	
5	What type of backfill is required at the bore pits?	Backfill shall meet the
		requirements of
		Specification Section 02200
		(included in Addendum No. 1).
		Testing shall be provided and paid
		by the Owner.

SPECIFICATIONS

- 1. Section 00600, page 16: 1.h. blank shall be \$ 5,000,000.
- i. Point of change is to include the amount of umbrella liability endorsement to the CGL policy.
- 2. Section 00800, page 13: 17.10 is deleted in its entirety.
- 3. Section 02200: Add the attached specification section 02200, Earthwork.
- 4. Section 02402, pages 11 and 12: Replace Section 02402 pages 11 and 12 with the attached 11 and 12.
- i. Point of change was the Casing Insulators/Spacers (Rack) and Tolerances requirements.
- 5. Section 02531, page 1: Replace Section 02531, page 1 with the attached page 1.
- i. Point of change is the requirement to require restrained joints and all pipe ends to be capped.
- 6. Section 02532, page 1: Replace Section 02532, page 1 with the attached page 1.
 - i. Point of change is the requirement for all pipe ends to be capped.

CLARIFICATIONS

 Old KYTC plans from 1968 construction of the Lexington Circle Expressway (New Circle Road) at Richmond Road (US 25) are attached. All information is for informational purposes only.

Todd Slatin, Director
Division of Central Purchasing

Told Slate

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



COMPANY NAME:	Midwest Mole Inc.	
ADDRESS: 6814 W 3	50N Greenfield, IN 46140	
SIGNATURE OF BIDDER:	× 025	/ Jason D Miller



MAYOR JIM GRAY



TODD SLATIN
DIRECTOR
CENTRAL PURCHASING

ADDENDUM #2

Bid Number: #80-2017

Subject: WH7 Wet Weather Storage Improvements-

New Circle Road Crossing

Date: June 20, 2017

Address inquiries to: Brian Marcum

(859) 258-3320

TO ALL PROSPECTIVE SUBMITTERS:

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

Bid date has been extended to June 27, 2017 opening at 2:00 PM.

	Questions	Answers
1	Can additional geotechnical information be provided?	Attached is additional geotechnical information (bore log) for Bore #3.

DRAWINGS

- Sheet 01C-01 shall be revised by adding Note 6: Contractor shall replace 170 linear foot of the
 existing paved shoulder of the New Circle Road Exit Ramp per the attached Detail "S" upon the
 completion of work. Assume the shoulder width is a 7-foot paved shoulder and a 4-foot
 stabilized shoulder. The replacement of the shoulder is unclassified and shall be included in the
 base bid.
- 2. If surface damage occurs in the ramp lanes the surface shall be milled and paved. If structural damage occurs in the ramp lanes the entire pavement shall be removed and paved per the attached Detail "R". This includes pavement striping and shoulder rumble strip replacement. All



- work and materials shall follow KYTC installation requirement and standards. All costs are unclassified and shall be included in the base bid. Determination of type of repair and area shall be determined by the Owner and Engineer.
- 3. Sheet 01C-01 shall be revised by adding Note 7: The traffic control plan, required in the General Notes, shall include a W21-5a sign (Right Shoulder Closed) set about 500 feet up the ramp from construction, a W21-7 sign (Utility Work Ahead) set about 250 feet up the ramp, and reflective cones (3 foot height) across the temporary entrance. All costs are unclassified and shall be included in the base bid.
- 4. Sheet 01C-01 shall be revised by adding Note 8: Construction/employee vehicles shall not be allowed to enter or exit the work site from the New Circle Road Exit Ramp weekdays between the hours of 7 to 9 am and 3 to 6 pm.
- 5. Sheet 01C-01 shall be revised by adding Note 9: The non-paved Right-of-Way (ROW) shall be restored to preconstruction contours at the conclusion of construction. Restoration shall be per Method B, General Notes, Non-paved Site Restoration. Erosion and sediment controls shall remain in place until the site is deemed 70% vegetated by the Engineer at which time the erosion and sediment controls shall be removed the Contractor.

CLARIFICATIONS

- 1. The Answer to Question 4 in Addendum No. 1 shall be revised as follows:
 - Yes, blasting is allowed but is restricted to hand mine tunneling only. Blasting will not be allowed for bore pits or other types of excavation.

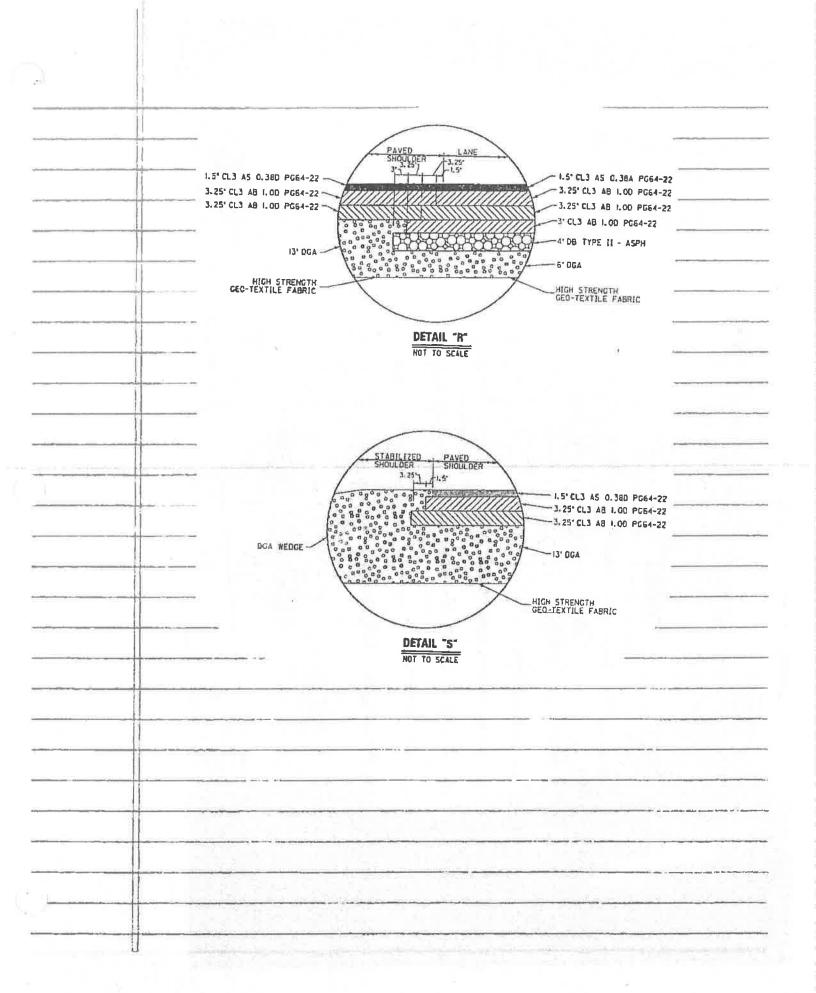
Todd Slatin, Director Division of Central Purchasing

Todal Setin

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

COMPANY NAME: Midwest Mole Inc.	
ADDRESS: 6814 W 350 N. Greenfield. IN 46140	
SIGNATURE OF BIDDER:	/ Jason D Miller





2.4 Rec. ₹: (%) Blows (270) 444-9681 • IAA (4-1-) n. Date Measured Rec. (ft.) 5,0 Completed 500 記記記 Depth Run 500 Rock Core Overburden Tio, Auger / Muid Rotary /- Casing Total Depth Change.

MAYOR JIM GRAY



TODD SLATIN DIRECTOR CENTRAL PURCHASING

ADDENDUM #3

Bid Number: #80-2017

Subject: WH7 Wet Weather Storage Improvements-

New Circle Road Crossing

Date: June 21, 2017

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

TO ALL PROSPECTIVE SUBMITTERS:

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

Questions	Answers
1 Can additional geotechnical information be provided?	Attached is additional geotechnical information (bore logs with photographic record) for Bore #3A and #5A.

Todd Slatin, Director Division of Central Purchasing

Lodd States

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

COMPANY NAME: Midwest Mole Inc.

ADDRESS: 6814 W 350 N. Greenfield, IN 46140

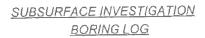
SIGNATURE OF BIDDER: / Jason D Miller/ President



SOIL CLASSIFICATION CHART

N/	AJOR DIVIS	IONS	SYMI	BOLS	TYPICAL
14	AJOK DIVIS	10145	GRAPH	LETTER	-
	GRAVEL AND	CLEAN GRAVELS	0 0 0	GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
COARRE	GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS. GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
COARSE GRAINED SOILS	MORE THAN 50% OF COARSE FRACTION	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN	SAND AND	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
NO. 200 SIEVE SIZE	SANDY SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
	PASSING ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
				ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE				МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
_	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		СН	INORGANIC CLAYS OF HIGH PLASTICITY
i i				ОН	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIG	HLY ORGANIC SO	OILS		PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

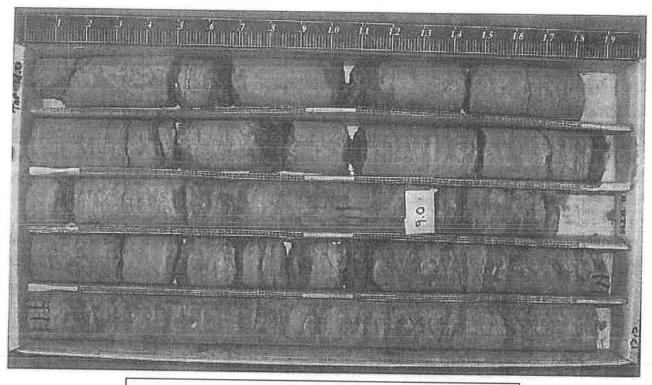




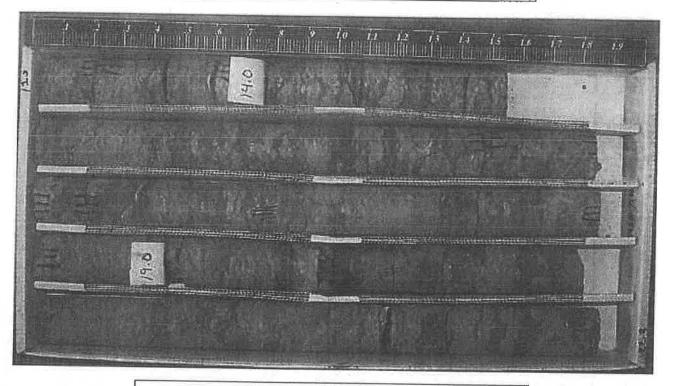
						Sheet	No. 1 0	of1
State	Kentucky		Latitude 38.0	01381 0	Long	gitude	84.45914 °	
_	Fayette		Location NA					
		FUCG - West Hickman 7 Wet Weather Stora	geSurface Elevation	on <u>987</u>	.4 ft			
1	100550		Dated Started			mpleted	6/20/201	.7
Driller	F. Wood	ard Logged by F. Woodard	Depth to Water	: Immedia	te NA			/.
Hole N	umberE	1-3A Total Depth 24 ft.	Depth to Water	NA	Date	Measure	d	
Lith	ology		Overburden	Sample No.	Depth	Rec. (ft.)	Blows	Туре
Depth	Symbol	Description	Rock Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
_ 0		Ground Line	Elev. = 987.4 ft					
		Brown clay with rock fragments (possible fill)						
5		Auger Refusal at 4.0', Begin Coring in Limest Gray, gray-blue, brown stain near discontinuit medium grain, slightly weathered seams (clay	ies, fine to	Core-1	4.0	5.0	100	44
_ 10		very thin to thinly bedded, clay seams, calcare laminae, fossiliferous (fragmented). clay seams 4.2', 4.5', 4.7', 5.0'-5.1', 5.5', 6.3', 6.	ous shale .6'-6.7', 6.9',	Core-2	9.0	5.0	100	68
15		7.3'-7.4', 7.7'-7.8', 7.9'; 3 0°-10° bedding disc Limestone: Dark gray, gray, black, medium beds & pebbles w/silty shale matrix, very fos	ontinuities to coarse grain siliferous, shale	Core-3	14.0	5.0	100	90
_ 20		matrix calcareous & whole fossils, shale beds texture, fresh w/seams severely weathered (c. SH=40%. clay seams 9.1', 10.5'-10.6', 19.5'-19.6', 21.6';	lay), LS=60%,	Core-4	19.0	5.0	100	78
	出生	bedding discontinuities; mechanical break at Boring Terminated at 24.0' (Elev. 963.4).	24.5' 24.0		24.0	3.0	100	70
_ 25		Boring Terminated at 24.0 (Elev. 903.4).						
30		1						
_ 35								
_ 40								
45								
_ 50								
55								
40		4						

CORE PHOTOGRAPHIC RECORD

West Hickman 7
Wet Weather Storage Improvements



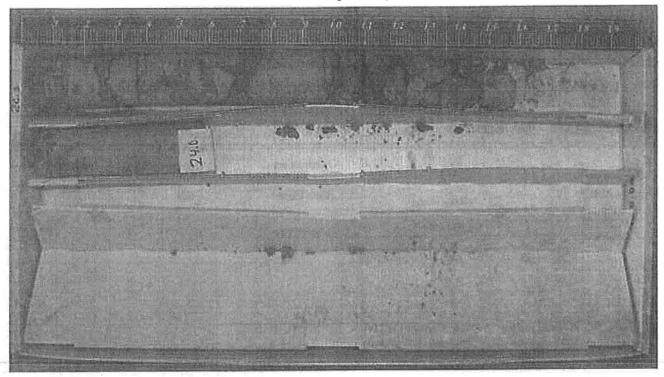
B-3A - Box 1 of 3



B-3A - Box 2 of 3

CORE PHOTOGRAPHIC RECORD

West Hickman 7 Wet Weather Storage Improvements



B-3A - Box 3 of 3

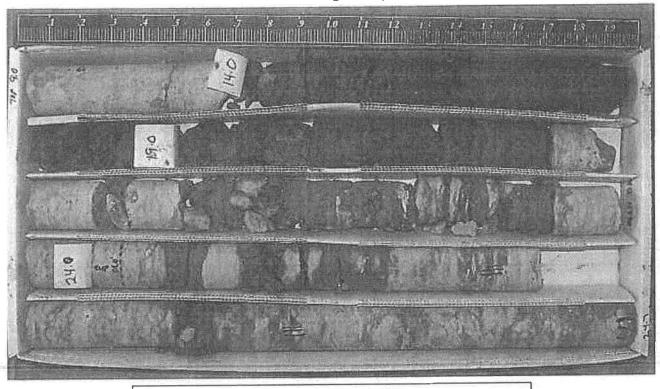


SUBSURFACE INVESTIGATION BORING LOG

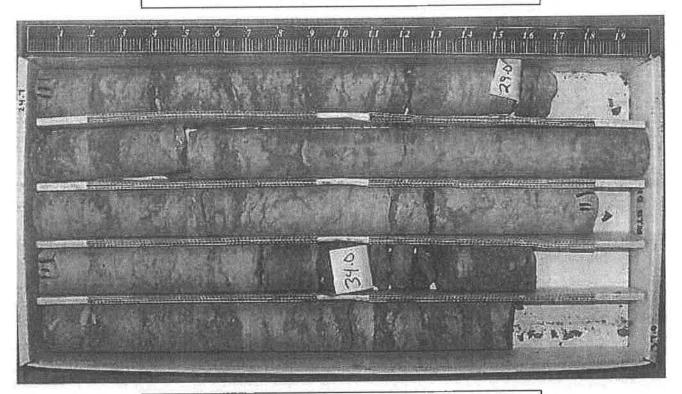
						Sileet	No	01_1
State	Kentuc	ky Latitud	38	3.01313 °	Lor	igitude _	84.45759 °	
County	Fayet	tte Locatio	n N	IA			-	
Project	t Name _	LFUCG - West Hickman 7 Wet Weather Storage Surface	Eleva	tion 100	08.1 ft			
Job No	1005						6/20/20	
11						_	0/20/20	
11								
		Tom Deput in Deput in) wate		Dat	e Measure	rd	
Lith	nology	Overt	ourden	190.	Depth	Rec. (ft.)	Blows	Туре
Depth	Symbol	Description Rock	Core	Core No.	Run	Rec (ft.)	Rec. (%)	RQD (%)
0		Ground Line	37					
- 0	Annual Control	Topsoil	1008.1 n	7				
		Brown clay with rock fragments (possible fill).					1	
_ 5								
10	1777	Auger Refusal at 9.0', Begin Coring in Fill.	9.0		9.0			
		Limestone cobble (8" diameter), fossiliferous.		Core-1		0.7	14	0
15		Clay: Brown-orange-red, firm to stiff, low to medium plasticity, grains & granules.			14.0		and the same	
					14.0			
				Core-2		1.8	36	0
20					19.0			
	HH	Limestone: Coarse gravel & cobbles with clay, fossiliferor	21.7 IS. 22.7	Core-3		3.7	74	0
25		Artificial fill base at 22.7'. Limestone: Brown, severely weathered shale (clay) with gr	/		24.0			
		fine grain limestone laminations grading into gray, dark or	v.	Core-4		5.0	100	68
30		black, fine to coarse grain beds & cobbles in shale matrix, with few severely weathered shale (clay) seams, shale matr	rech		29.0	3.0	100	Qd
50		calcareous & fossiliferous.	- 1		27.0			
		clay seams 22.7'-23.63', 24.2'-24.3', 24.4'-24.5', 24.7'-24.9', 25.9'-26.0'; 5 0°-10° bedding discontinuities	,	Core-5		5.0	100	90
_ 35		2010 ; 5 0 10 bedding discontinuities			34.0			
			20.24	Core-6		5.0	100	80
40		Shale: Dark gray, calcareous, fresh to moderately weathere fossiliferous, limestone pebbles.	d, 39 pt		39.0		1	1
		clay seam 38.7'-38.8'						
_ 45		Boring Terminated at 39.0' (Elev. 969.1).					1	
_ 13					1			- 1
			- 1		1			1
_ 50							1	
		-						
_ 55					1			1
60								
- 44	-							- 11

CORE PHOTOGRAPHIC RECORD

West Hickman 7
Wet Weather Storage Improvements



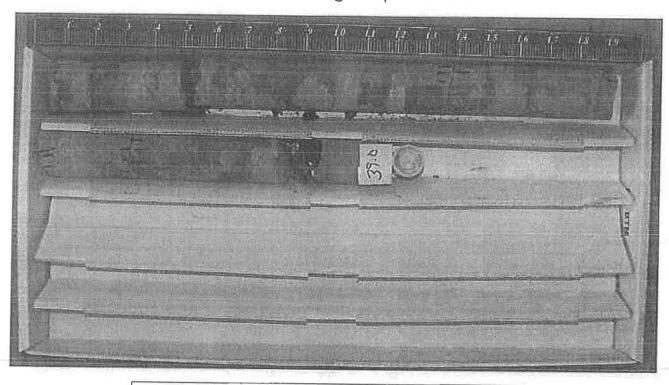
B-5A - Box 1 of 3



B-5A - Box 2 of 3

CORE PHOTOGRAPHIC RECORD

West Hickman 7
Wet Weather Storage Improvements



B-5A - Box 3 of 3

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

1.02	LEGAL STATUS OF BIDDER	
Bidder_	Midwest Mole Inc.	_
Date	6-27-2017	
	A. A corporation duly organized and doing business under the laws of the State of <u>INDIANA</u>	_1
	for whom, bearing the	
	official title of, whose signature is	3
	affixed to this Bid is duly authorized to execute contracts.	
	BK AXENTHENENIK, YEN KIMINENIH ENERGIA KANTAKAN KANTAKAN KANTAKAN YENENGAN KANTAKAN	, , ,
		_
	X ANDUVINELXWINERSHIPMENTER IN A TRIBET X STILL BULL RUNX NEW MENTER IN A STILL BULL BULL RUNX NEW MENTER IN A STILL BULL BULL BULL BULL BULL BULL BULL B	

^{*} The Bidder shall fill out the appropriate form and strike out the other two.

1.03 BIDDERS AFFIDAVIT

	Co	comes the Affiant, <u>[ason D Miller/President</u> , and	after being first
	du	uly sworn, states under penalty of perjury as follows:	
	A.	. His/her name is <u>Jason D Miller</u> he/she is the individual submitting the Bid or is the authorized representative.	and
		Midwest Mole Inc.	entity submitting
		the Bid (hereinafter referred to as "Bidder").	oracy odomating
	B.	Bidder will pay all taxes and fees, which are owed to the Lexington-Fayette Government at the time the Bid is submitted, prior to award of the Agreement maintain a "current" status in regard to those taxes and fees during the life	ent and will
	C.	 Bidder will obtain a Lexington-Fayette Urban County Government business applicable, prior to award of the Agreement. 	license, if
	D.	Bidder has authorized the Division of Central Purchasing to verify the above information with the Division of Revenue and to disclose to the Urban Courtaxes and/or fees are delinquent or that a business license has not been ob-	ity Council that
	E.	Bidder has not knowingly violated any provision of the campaign finance law Commonwealth of Kentucky within the past five (5) years and the award of the Bidder will not violate any provision of the campaign finance laws of the	an Agreement to
	F.	Bidder has not knowingly violated any provision of Chapter 25 of the Lexing County Government Code of Ordinances, known as the "Ethics Act."	ton-Fayette Urban
	G.	Bidder acknowledges that "knowingly" for purposes of this Affidavit means, conduct or to circumstances described by a statute or ordinance defining ar person is aware or should have been aware that his/her conduct is of that no circumstance exists.	offense that a
Further	, Affi	fiant sayeth naught. Affiant Signature	ending.
STATE	OF	INDIANA	
COUNT	ΥO		
The fore	egoir	ing instrument was subscribed, sworn to and acknowledged before me by	
Jas	on	D Miller, President on this the 27rd day of June	_, 20 <u>17</u> .
My Corr	nmis	NOTARY PUBLIC, STATE AT LARGE	. 17
		HOTAIT TOBLIC, OTATEAT LANGE	

1.04 BID SCHEDULE

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

if a lump sum total price is illegible or is omitted, the bid may be determined nonresponsive.

For a lump sum based bid, the Item total is the bid amount the Owner uses for bid comparison.

The Owner's decision on the bid amount is final.

WH7 CONTRACT No.1 NEW CIRCLE ROAD CROSSING - BID SCHEDULE

A.	WH7 Cont.No.1 New Circle Road Crossing:	and the state of t		The second secon	
A1	Base Bid for Construction of the WH7 Contract 1 New Circle Road Crossing per the Contract Documents and Exclusive of the Following Items	1	LS	\$1,321,760.	\$1,321,760.
В.	Allowances:				
B1	Miscellaneous Site Improvements	1	EA	\$200,000	\$200,000
82	N/a			1	
Вз	N/a	ļ .			
84	N/a				

usand Seven Hundred Sixty .
Dollars (\$1,521,760.

DATE: June 27rd, 2017
BY: () (Sustained) Jason D Miller
(must be original signature)
TITLE: President
PHONE: 317-545-1335 FAX: 317-545-1558 (area code, number & extension)
EMAIL ADDRESS:jason@midwestmole.com
OFFICIAL ADDRESS AND PHONE:
Midwest Mole Inc.
6814 W 350 N , Greenfield, IN 46140
Phone: 317-545-1335 (Seal if Bid is by Corporation)
By signing this form you agree to all of the terms and associated forms.

The following statement of the Bidder's qualifications is required to be filled in, executed, and submitted with the Bid: A. Name of Bidder: B. Permanent Place of Business: C. When Organized: D. Where Incorporated: E. Financial Condition: If specifically requested by the Owner, the apparent low Bidder is required to submit its latest three (3) years audited financial statements to the Owner's Division of Central Purphasing within seven (7) calendar days following the Bid opening. Ocknowleged F. In the event the Agreement is awarded to the undersigned, Performance, Payment, Erosion and Sediment Control, and Warranty bonds will be furnished by: Continental Casualty Company (Surety) Signed: (Representative of Surety) Sheree Hsien, Attorney-in-Fact G. The following is a list of similar projects performed by the Bidder: (Attach separate sheet if necessary). NAME LOCATION CONTRACT SUM H. The Bidder has now under contract and bonded the following projects: NAME LOCATION **CONTRACT SUM**

1.05

STATEMENT OF BIDDER'S QUALIFICATIONS



Midwest Mols, Inc. Similar Projects Completed

Prime Contractor

Owner

Location

Clarke

Contact Person

Description of Work

Солгаст Атоил

GRO Long Term Control Plan - Cles Planna Town Tarvel	John II.	Cay of John II. 150 Vest Jahernon Street Jahan, II. 100422 Alteon Swetcer, Prin 8/3-7724-4000	JJ Hunderson, & Sorte, Inc. 4286 Ord Grand Ave. Gurner, IL 60031	Dec 2016	Jamo Pausoph, SSF PM JJ Henderson B47-244-3222 J B47-244- 9672 J#SONFEEL-PHYSPEROLSOM	BAC of 120° under Das Plant River	36 955,000 00
Staylar Run Segment 'C' Edwer Replacement	Chement Co. CH	Clement County Board of Compassiones 4400 Heakel) Lune Botione, CH 451722	Mcteed Mole Inc	2010-2011	Lye Bloom PE 613-722-8860	9500 of 22. Rock turnel in 7 turns for 42" HOBAS server 6 x-ork chafts and record membries ranges from 30" to 50" depth	514 572 689 00
Notin Grange, Setton 5 Santary Truk Sewar	Delawate Co., OH	Paribal Commandes	Parformero S3a Merepernent		Larry Memotr Performers S&e Morre (614) 445-7799	795 of 96 'urangasad tunner by TBN: Rock Turnel 75' tours by 4D deep work stuff:	61,163,370,31
Fiel Brands Pumb Station & Force Main	Managasa, VA	Upper Occopiant Severge Authority 14631 Campoon Rd Camp	Fitz Con Construction Corp 7434 Bart Lornand Park Dr Mannestea, VA 20111 P. 703-556-0100	Spired 2010	Osama Madkoul Fou-Con Construction 703-586-9100	3 runs kitainny 960 of 84° county uning Rock TBM for a 36° Dife, 2 werk statis-32 and 16° damater	\$1,169.712,00
Parriers Rut	Starben 49e, OH	Coty of Staubern-Re. 100 N Weber St. Stauberwebe. Chr. 43652 740-285-8000	AWWH Constructors 789 N Water St, Sadie 430 Milweudse, WI 63202	8002	Tom Machinab 1950 CF 64" Roy Bear Tochel G Machingla Tradhelbe HOBAS Sewer in Rock 800" of 86" Ray Bearn 1 7 work stalled 55-18" on	1920 Of 64" Roy Beam & Lagging Turne (b. 43 PrOBAS Seven in Rock in Lagging Turnel for 42" HOBAS Seven Power at 86" Roy Beam & Lagging Turnel for 42" HOBAS Seven Power stalls 25"-19" steep and one Junction Chamber	\$4.96.1 652 66
OM Powertrain	Buiderd, IN	General Molens. 200 N Jackson St Biodorg, IN 47425	Argario (atrate Construction Company	Wunta 2006	Michael A. Debtes. Avoido Infrasa Cond. Co. (248) 240-5501	610 LF of 65° th and board turnel under a targe hin for a 45° O HDPE Storm Sewer	20 27272 00
Statistical Internetation Patient Server	Locavita, KV	HSD Louiwha 700 W Liberly St Louisvide, NY	MAC Comprustion		Travis Unruh 812-841-7865	Skift of 60 Hobbus or RDP under N&S RR, Hilles Laths and Newburg Road for a earthary serve	\$1 034 167 00
Cooper Creek Representant Sene	Consormati, OH	MSD of Greater Greinval: 1900 Gest St. Grecimin, Ort 45204	Sumths Construction	Winter 2005	Corbn Lewis Surseas Communition (513) 33%-6000	521' of 46" steller count 218 of 54" seller count 417' of 54" seller count	\$2 481,451 00
UOSA Pretury Curt lers	Contraville, VA	Upper Occoquan Sewaga Authorey 14631 Compan Rd Certifornia LA 201731	PC Construction formerly Pizzagatii Comstruction	Wurter 2010	Jos Chartos	400 of 42 fact lumpling for a SE D.P saws	\$568.271.00
Alan Fati Canadan System Prase 1	Direman, Orl	Samiabon Deliver (1901) 1045 Eaton Dr Fort Vriight, KY, 41017	Howall Contractor, Inc.	Virtue 2036	Paid Bridging Howall Contribution, Inc (869) 331-5457	313 of 34 with steet consires - Roch. Turkel.	1974 Edit of
Billionn Interceptor Overity Seven	Louisville, KY	MSD Laurelle 700 W Liberty St. Louteylle, KY	Flyro Brothers		Fiynn Brothers Jeson Rice 502-364-9100	347 of 54" n. 685" WSG under a road for a 30" granty same	SOCIAL DECK



Midwest Mole, Jun-17

in	311/		-	919 N N	COOL STREET	
	Job #	Customer		Original Contract	Percent Complete	Estimated Completion
1	10034	William Charles	\$	5,608,713	40.00%	8/31/2017
2	Multiple	Isolux Corsan	\$	9,842,700	98.00%	7/1/2017
3	20218	Bowen Engineering	\$	468,635	0.00%	8/25/2017
4	20235	IN American Water	\$	740,000	97.00%	6/30/2017
5	20239	FA Wilhelm Construction	\$	3,385,000	95.00%	6/26/2017
6	20245	Bowen Engineering	\$	610,000	70.00%	6/30/2017
7	20247	Bowen Engineering	\$	170,078	0,00%	7/17/2017
8	20251	Bowen Engineering	\$	264,315	68.00%	6/15/2017
9	20254	Bowen Engineering	\$	1,000,000	0.00%	9/8/2017
10	20257	Town of Pittsboro	\$	7,500	0.00%	10/8/2017
11	20258	Calumet Civil	\$	98,660	35.00%	6/30/2017
12	20260	IN Dept of Transportation	\$	337,387	0.00%	9/7/2017
13	20261	Gradex, Inc.	\$	125,000	5.00%	9/1/2017
14	20262	Bowen Engineering	\$	197,000	20.00%	6/27/2017
15	20265	IN Dept of Transportation	\$	889,805	0.00%	11/25/2017
16	20266	Walsh Construction	\$	501,024	0.00%	5/1/2018
17	20267	TSW Utility Solutions	\$	10,150	100.00%	6/1/2017
18	30035	Sanitary District No 1	\$	1,274,000	0.00%	3/16/2018
19	50032	Rack & Ballauer	\$	207,205	58.00%	7/14/2017
20	50033	Building Crafts, Inc.	\$	513,692	0.00%	9/22/2017
21	60099	JB James Construction - LA	\$	1,018,548	87.00%	6/25/2017
22	60107	Corinthian Contractors - DC	\$	36,800	0.00%	11/25/2017
23	60108	HRI, (nc PA	\$	778,860	0.00%	9/1/2017
24	60109	Milani Construction - MD	\$	202,354	0.00%	11/25/2017
25	60110	William B. Hopke - MD	\$	598,444	0,00%	3/15/2018

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

NAME	POSITION DESCRIP	NO. OF YEARS WITH BIDDER	
Jason D Miller	President	20years	
Gary Gagliardi	Safety Director		9years
Josh Miller	Superintendent		18years
Darryl Dean	General Superintendent		25years
Jose Ortega	Foreman		20years
J. MWDBE Participation on current bonded projects under contract:			
SUBCONTRACTORS (LIST)	PROJECT (SPECIFIC TYPE)	MWDBE	% of WORK
		<u>MWDBE</u>	% of WORK
(LIST)	(SPECIFIC TYPE)		
(LIST) Indi <u>ana Sign & Barricad</u> e	(SPECIFIC TYPE) Jack and Bore	DBE	9%
(LIST) Indi <u>ana Sign & Barricad</u> e	(SPECIFIC TYPE) Jack and Bore	DBE	9%
(LIST) Indi <u>ana Sign & Barricad</u> e	(SPECIFIC TYPE) Jack and Bore	DBE	9%
(LIST) Indi <u>ana Sign & Barricad</u> e	(SPECIFIC TYPE) Jack and Bore	DBE	9%

(USE ADDITIONAL SHEETS IF NECESSARY)

K. We acknowledge that, if we are the apparent low Bidder, we may be required to submit to the Owner within seven (7) calendar days following the Bid Opening, a sworn statement regarding all office management and field management personnel. Additionally, if requested by the Owner, we will within seven (7) days following the request submit audited financial statements and loss history for insurance claims for the three (3) most recent years (or a lesser period if stipulated by the Owner) Acknowledged

1.06 LIST OF PROPOSED SUBCONTRACTORS

The following list of proposed subcontractors is required by the Owner to be executed, completed and submitted with the Bid Form. All subcontractors are subject to approval of the Lexington-Fayette Urban County Government. Failure to submit this list completely filled out may be cause for rejection of Bid.

BRANCH OF WORK** (List each major item)	SUBCONTRACTOR	MWDBE (yes/no)	% of <u>WORK</u>
1. Seeding	Name: Somthin Bloomin	YES	36%
	Address: 1045 Highee Mill Rd Lexington, KY		
2. Construction Staking	Name: Allen Engineering	_Yes_	38%
	Address: 2509 Lenlake Ct. Lexington, KY		
3. <u>Hauling</u>	Name: SLI Contracting	_Yes_	76%
	Address: 1141 Red Mile Rd Suite 201 Lexington, KY 40504		
4	Name:	-	
	Address:		
5	Name:		
	Address:		
6	Name:		·
	Address:		

^{**} Such as: Grading, bituminous paving, concrete, seeding and protection, construction staking, etc.

1.07 AUTHENTICATION OF BID AND STATEMENT OF NON-COLLUSION AND NON-CONFLICT OF INTEREST

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

- A. That I am the Bidder (if the Bidder is an individual), a partner of the Bidder (if the Bidder is a partnership), or an officer or employee of the Bidding corporation having authority to sign on its behalf (if the Bidder is a corporation);
- B. That the attached Bid has been arrived at by the Bidder independently, and has been submitted without collusion with, and without any agreement, understanding or planned common course of action, with any other contractor, vendor of materials, supplies, equipment or services described in the Advertisement for Bid, designed to limit independent bidding or competition;
- C. That the contents of the Bid or Bids have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder or its surety on any bond furnished, with the Bid or Bids, and will not be communicated to any such person, prior to the official opening of the Bid or Bids;
- That the Bidder is legally entitled to enter into the contracts with the Lexington-Fayette Urban County Government, and is not in violation of any prohibited conflict of interest;
- E. (Applicable to corporation only) That as a foreign corporation, we are registered with the Secretary of State, Commonwealth of Kentucky, and authorized to do business in the State_____ or, that as a domestic corporation, we are in good standing with the Secretary of State, Commonwealth of Kentucky____ X____. [Check the statement applicable.]
- F. This offer is for ninety (90) calendar days from the date this Bid is opened. In submitting the above, it is expressly agreed that, upon proper acceptance by the Lexington-Fayette Urban County Government of any or all items Bid above, an Agreement shall thereby be created with respect to the items accepted.
- G. That I have fully informed myself regarding the accuracy of the statements made in this statement.
- H. That I certify that Subcontractors have not and will not be awarded to any firm(s) that have been debarred from noncompliance with the Federal Labor Standards, Title VI of the Civil Rights Act of 1964 As Amended, Executive Order 11246 As Amended or any other Federal Law.

Midwest Mole Inc. Company	6-27-2017 Date	Représentative
		Representative

1.08 STATEMENT OF EXPERIENCE

NAME OF INDIVIDUAL:	Jason D Miller	
POSITION/TITLE:	President	
STATEMENT OF EXPERIENCE:	See Attached Resume	
	*	14
NAME OF INDIVIDUAL:	Gary Gagliardi	
POSITION/TITLE:	Safety Director	
STATEMENT OF EXPERIENCE:	See Attached Resume	***************************************

	Josh Miller	
POSITION/TITLE:	Supperintendent	
STATEMENT OF EXPERIENCE:	See Attached Resume	
NAME OF INDIVIDUAL:	Darryl Dean	
POSITION/TITLE:	General Superintendent	
STATEMENT OF EXPERIENCE:	See Attached Resume	

^{*} Include all officers, office management, Affirmative Action officials, and field management personnel. Attach separate sheets if necessary.

1.08 STATEMENT OF EXPERIENCE

NAME OF INDIVIDUAL:	Joe Butor
POSITION/TITLE;	Operations Manager
STATEMENT OF EXPERIENCE: _	See Attached Resume
NAME OF INDIVIDUAL:	Steve Abernathy
POSITION/TITLE:	Vice President of Operations/ Project Manager
STATEMENT OF EXPERIENCE:	See Attached Resume
NAME OF INDIVIDUAL:	Jose Ortega
POSITION/TITLE:	Foreman
STATEMENT OF EXPERIENCE:	See Attached Resume
NAME OF INDIVIDUAL:	N/A
POSITION/TITLE:	
STATEMENT OF EXPERIENCE:	

^{*} Include all officers, office management, Affirmative Action officials, and field management personnel. Attach separate sheets it necessary.



Jason Miller President

Experience Summary:

With over 20 years of experience in the Trenchless Industry, Mr. Miller is an authority in trenchless technology with hands on experience in almost every trenchless method available. He has been involved in numerous aspects of the industry from laborer to management and often serves as consultant on Design/Build projects throughout the nation. His analysis of means and methods and strategic planning has proven to be beneficial to various private owners and municipalities with effective and economical solutions.

Professional Experience:

- President 2012 to Present. Mr. Miller supervises all aspects of operations from bid preparation to review
 of all completed jobs. He directs and coordinates all field operations and the infrastructure which supports
 them
- Vice President Midwest Mole, Inc. 2003 to 2012. Mr. Miller was responsible for the overall operations of
 the company to include; directing the preparation of estimates, direction of all field activities, review and
 inspection of proposed jobsites, project coordination and assisting the Project Managers with ongoing
 projects.
- Estimator, Midwest Mole, Inc. 1998- 2003. Mr. Miller was responsible for analyzing blueprints, specifications, proposals, and other documentation to prepare bids for projects. He remained knowledgeable about new technology and innovations in the trenchless industry. Mr. Miller assisted the Project Managers during projects.
- Laborer, Midwest Mole, Inc., 1995 1998. Mr. Miller gained hands on experience in multiple aspects of
 the Trenchless Industry in the field. He worked on crews performing hand tunneling, machine tunneling,
 auger boring, pipe hammering, pipe rehab and more.

Work Experience:

Design/Build and Value Engineering Projects:

- Oakley Station CSO 551 and 553 Separation Sewer, Cincinnati, OH Design Build Storm Sewer Project: 1,933' of 92" rib & board tunnel with 60" Hobas FRP Liner, 300' 72" Jacked RCP HWY Crossing, 120' 72" and 76' 60" RCP Open Cut. 72" Outfall, 6 Storm 72" 120" manholes, Work pit shoring and excavation, and 40' deep 10' and 11' diameter shafts for tunnel access and manholes, MOT and restoration Project Value \$5.2M
- Shayler Run Segment "C" Sewer Replacement, OH: This project consisted of 9500' of 72" rock tunnel in 7 runs for a 42" HOBAS sewer; 8 work shafts and related manholes ranging from 25' to 45' deep. It was originally proposed as 10 runs. Mr. Miller and other key company personnel worked with

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the engineer and owner to obtain new easement rights, change the alignment, and reduce the number of bores to 7 which resulted in substantial savings for the owner.

- Thermal Utility Corridor for New Midfield Terminal, Indianapolis Airport: After the engineer of this project presented 90% drawings Midwest Mole was contacted to propose cost saving ideas. Mr. Miller along with the GC proposed major design changes that were approved which resulted in a savings of roughly \$20M for the owner. The end result was a project consisting of 2000' of 108" tunnel liner plates for multiple utilities under the existing runways and taxiways and installation of over 3000 CY of grout to fill annular spaces. Midwest Mole won the Project of the Year for Trenchless Technology in 2007 for this project.
- Delphi Delco Storm Drainage Project, Kokomo, IN: 800' of 57" OD Steel Casing pipe was installed beneath the assembly plant. There were 2 work shafts. The receiving pits were initially designed under the plant for 2 tunnels. Mr. Miller assisted in designing cost saving methods to retrieve TBM's from under the plant floors without disruption of plant production resulting in substantial cost savings for the owner.
- Permars Run Relief, OH. The project consisted of installing 1,300' of 84" beam and lagging tunnel, 770' of 66" beam and lagging tunnel, 170' of 54" casing bore, 450' of 48" open cut. There were 7 work shafts with associate MH's and structures ranging from 20' to 45' depth. A cast in place concrete junction structure was erected around an existing 42" live sewer to tie in new pipeline. Mr. Miller and other key personnel worked to get the alignments changed and give recommendations on pit locations and other key project design issues.
- Chilled Water Expansion to Eli Lilly, IN: The project consisted of 400' of 58" steel casing by jacking method, 580' of 54" steel casing by handmine method, three main pits and three receiving pits- up to 30' depth. Mr. Miller was presented with concepts for what needed to be accomplished with this project and worked with the engineer to determine the best methodology including the determination of shaft alignment, location and size, line and grade, and settlement requirements.
- CSX Barr Yard, Riverdale, IL: This project was a complete design/build consisting of 6500' of 18" and 1000' of 36" CMP installed via primarily open cut. There were 3 bores and numerous manholes. Mr. Miller and other key personnel worked with CSX Railroad to address drainage issues in their Chicago area rail yard proposing all necessary steps and measures to correct the problems including the type, size, location and depth of pipe needed.

Mr. Miller has also worked as Project Manager on the following notable projects:

- Latonia Sewer Project, KY. Mr. Miller was responsible for all aspects of this project. The project consisted of 740' of 84" ring beam and lagging tunnel for a 60" sanitary sewer.
- North Orange, Section 5 Sanitary Trunk Sewer, OH. Mr. Miller was responsible for all aspects of this
 project. The project consisted of 795' of 66" tunnel liner plate by TBM rock tunnel and 25' round by 40'
 deep work shaft. Tunnel for new 36" sanitary sewer.

Professional Organization:

NUCA National Trenchless Technology Committee Board Member, Committee Chair NUCA of Indiana.

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TRENCHIESS SECONALIST.



Gary Gagliardi, CFPS Corporate Safety Director

Experience Summary:

Mr. Gagliardi has 24 years of safety experience in the areas of regulatory compliance, best practices, safety management, and training. A Certified Fire Protection Specialist, he is also an authorized OSHA Outreach Instructor in both Construction and General Industry.

Professional Experience:

- Corporate Safety Director, Midwest Mole, Inc. 2008 to Present. Mr. Gagliardi is responsible for directing and implementing all aspects of Midwest Mole's safety program, policies, and procedures. His responsibilities include site inspections to ensure safety compliance, maintaining the substance abuse program, workers compensation, insurance claims, safety committee, and employee training.
- Vice President, Safety Resources, Inc. 1999-2008. Mr. Gagliardi was responsible for providing clients multi-level services in all aspects of safety in both the construction and industrial fields. He directed operations, managed business functions, provided supervision, mentored and provided guidance to junior consultants. Mr. Gagliardi developed relationships with many associations including SMACNA, and Indiana Construction Association, serving on the ICA safety counsel for several years.
- Safety Consultant, Midwest Consulting, 1997–1999. Mr. Gagliardi conducted site safety supervision, performed audits, site safety inspections, and safety training. He also provided site safety supervision during the construction of a major grain processing plant and an industrial steel processing plant.
- Safety and Security Manager, Gulfport Job Corps Center, 1992-1997. Mr. Gagliardi was responsible for the safety and security of 100 staff members and 350 students in a campus environment with vocational classes in numerous construction trades. His duties included developing safety policies and procedures, conducting staff and student safety training.
- Trainer/Researcher, GE Leadership Center, 1991-1992. Mr. Gagliardi developed training in management and leadership. Conducted research for new and innovative leadership training material. He also wrote executive summaries.
- Military Career, United States Air Force, 1971-1991. Mr. Gagliardi served in the United States Air Force. He held many positions in a variety of disciplines including: Director of Quality Management, Alarm Specialist, Electronic Control Systems, and HVAC Technician. His hands-on experience in skills including electrical, pipefitting and HVAC provides him with an understanding of the worker perspective in their performance of work.



Professional Achievements/Associations:

- University of Maryland, Business Administration
- Certified Fire Protection Specialist #1925
- National Fire Protection Association
- Indiana Construction Association Safety Director committee
- Metro Indianapolis Coalition for Construction Safety, Inc (MICCS) Director's committee
- Speaker at the XIX International Occupational Ergonomics & Safety Conference on the topic of tribometry.
- Published research paper titled "The Integration of the Science of Slips and Falls in a
 Comprehensive Program to Affect Change." in the Journal of the International Society
 for Occupational Ergonomics & Safety.
- Frequent presenter for BLR (Business and Legal Reports) teleconferences and webinars on various safety topics.
- Published articles in the Trenchless Technology magazine,
- Featured in Los Angeles Times article on safety.
- Midwest Mole Safety Awards:
 - o 2014 MICCS Safety Leadership Award
 - o 2012 MICCS Safety Leadership Award
 - o 2011 UCA Safety Award
 - o 2011 ICA Golden Summit Safety Award
 - o 2010 NRC/RT&S Contractor Safety Award
 - o 2010 ICA Golden Summit Safety Award
 - o 2009 MICCS Safety Leadership Award
 - o 2008 ICA Golden Summit Safety Award
- OSHA Course #500, Trainer Course in Occupational Safety and Health for Construction
- OSHA Course #501, Trainer Course in Occupational Safety and Health in General Industry
- OSHA Course #225, Principals of Ergonomics
- OSHA Course #210A, Hazardous Materials
- OSHA Course #309A, Electrical Standards
- OSHA Course #204A, Machinery and Machine Guarding Standards
- OSHA Course #510, Occupational Safety and Health Standards in the Construction Industry
- OSHA Course #503, Update for General Industry
- Certified CPR and AED Instructor
- Life Safety Code Seminar
- Fire and Life Safety in Health Care Occupancies
- Radiation Safety
- Advanced Fire Alarm Systems

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. TRENCHLESS SPECIALISE .



Josh Miller has over 19 years of experience in the trenchless industry with multiple bore and tunnel projects.

SUPERINTENDENT, Midwest Mole Inc, 2005 - Present Job duties include all aspects of the mobilization, execution, and demobilization of projects, planning details of the working procedure by determining the needed labor and supplies and develop a logical approach to completing the work to ensure performance in a safe and productive manner, constantly monitoring the job sites in search of ways to improve methods, equipment, and the quality of the jobs, advise estimating in job costing bids.

FOREMAN/SHOP FOREMAN, Midwest Mole Inc, 1998-2005 Job duties included ensuring that all jobsites had the equipment and supplies they needed in a timely manner to prevent downtime, maintaining company equipment; repairing excavators, cranes, and all the tunneling equipment, design and fabrication for special equipment that may be needed, field fabrication of needed parts/equipment, assisting the superintendents with allocation of manpower and equipment needs on projects, planning, assigning, and directing work flow, maintaining time and production records, training employees, and coordination and evaluation projects.

CURRENT PROJECTS:

- Duke Energy WR 106 Ph 2, Vigo, Co, IN 2 runs totaling 1100' of 87.5inch Rib and Lagging for 60" HOBAS under multiple RR; 2 runs totaling 286' of 72" under a levee.
- Brownsburg Sanitary Sewer Improvement CR900, Brownsburg, IN 135' of 66" casing
- Crawfordsville POTW GSC, Crawfordsville, IN 100' of 60" steel casing for 36" ADS carrier storm sewer

HIGHLIGHT OF PAST PROJECTS:

- Shayler Run Segment "C" Sewer Replacement, Clermont County, OH. Project Superintendent: 9,450 linear feet of 72-inch ring beam and lagging tunnel in solid rock in segments ranging from 816' to 2,000' for a 42 inch HOBAS sewer line; construction of 8 work shafts and manholes ranging from 37' to 84' in depth. Mr. Miller commissioned a new Robbins RH72 Rock TBM on this project.
- Permars Run Relief, Steubenville, OH. The project consisted of 1300' of 84" beam and lagging tunnel, 770' of 66" beam and lagging tunnel in solid rock, 170' of 54" casing bore, 450' of 48" open cut and connecting existing structures. The project had 7 shafts ranging from 30' to 50' in depth.
- GM Powertrain, Bedford, IN. 610' of 60" rib and board tunnel in solid rock under a large hill for a 48" OD HDPE storm sewer
- Southeastern Interceptor Relief Sewer, Louisville, KY 540' of 72" casing in solid rock for a 60" sewer under NS RR, Hikes Lane, and Newburg Road for a sanitary sewer.
- Mounds Creek Culverts, Mound City, IL. Mr. Miller supervised the installation of two 260' lines of 92" steel casing under a levee where the Ohio River meets the Mississippi River
- New Indianapolis Airport Midfield Terminal Utility Corridor, Indianapolis, IN. Mr. Miller was responsible for the installation of 2,018' of 102" tunnel liner plate, and EPB tunnel under runways and taxiways for multiple utilities.





Darryl Dean has over 28 years of experience in the trenchless industry supervising and assisting in the completion of various types of work including pipe hammering, pipe jacking, pipe boring, and conventional tunneling of various lengths and sizes.

Midwest Mole, Inc., 1991- Present. Present job duties include all aspects of the mobilization, execution, and demobilization of projects, planning details of the working procedure by determining the needed labor and supplies and develop a logical approach to completing the work to ensure performance in a safe and productive manner, constantly monitoring the job sites in search of ways to improve methods, equipment, and the quality of the jobs, advise estimating in job costing bids, and acts as a liaison between the company and the general contractor.

CURRENT PROJECTS:

- Fuller Creek Trunk Sewer Phase C, Rockford, IL 1,830' (3 x 500' runs & 1 x 330') of 54" casing for a new 24" sewer and grout - solid rock work and (1) mixed face ground crossing
- Riviera Dr Sewer Replacement Project, Bellevue, KY 350' of 54" HOBAS
- Riverside Drive CSO Repair, Cincinnati, OH 240' of 72" HOBAS under RR and road for storm sewer tunnel at 0.75% max grade

HIGHLIGHT OF PAST PROJECTS:

- Des Plaines River CSO Overslow Tunnel, Joliet, IL 840' of 120" solid rock tunnel under the Des Plaines River for dual 24" HOBAS lines and a 60" HOBAS overflow. 22' diameter shaft in solid rock at 60' depth. Tunnel was under an Army Corp regulated area of the Des Plaines river (Corp regulated concrete walls).
- North Orange, Section 5 Sanitary Trunk Sewer, Delaware County, OH. Mr. Dean was responsible for all aspects of the field work. The project consisted of 795' of 66" liner plate tunnel by TBM in solid rock. Tunnel with 25' round by 40' deep work shaft in solid rock.
- Flat Branch Pump Station and Force Main, Manassas, VA 3 runs totaling 950' of 54" casing using solid rock TBM for 36" DIP; 2 work shafts - 16' and 32' diameter
- Permars Run Relief, Steubenville, OH. 1,300' of 84" beam and lagging tunnel, 770' of 66" beam and lagging tunnel in solid rock, 170' of 54" casing bore, 450' of 48" open cut and connecting existing structures; 7 shafts ranging from 30'-50' in depth.
- Cooper Creek Replacement Sewer, Cincinnati, OH 521' of 48", 218' of 54" and 497' of 54" steel casing, all in solid
- UOSA Primary Curifiers, Centreville, VA 400' of 60" solid rock tunnel for a 36" DIP sewer
- Laflin Street System #4A, Chicago, IL. Tunneling 992' of 66" RCP and 291' of 60" RCP by jacking method.
- Latonia Sewer Project, Latonia, KY. 740' of 84" ring beam and lagging tunnel for a 60" future pipe sanitary sewer.
- Bliss Run Trunk Sewer Phase 3, Columbus, OH 362' of 108" ribs and lagging for an 84" HOBAS pipe under Main Street to be used as a storm sewer.
- Des Plaines Tunnel System, Chicago, IL. 3,318' of 54" to 96" RCP with the longest runs being 935' of 72" and 972' of 52" using the jacking method for the tunneling.
- Maple/Berkshire Sanitary Sewer Improvements, Mount Prospect, IL. 345' of 12" O.D. RCP jack pipe in two (2) runs of 153' and 192' of 38" round shaft at 35' deep, 24" round shaft at 30' deep and two (2) 16' round shafts at 25' deep.

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Jose Ortega has over 18 years of experience in the Trenchless Industry. As Lead Foreman on countless tunneling, boring, and grouting projects, Mr. Ortega has led several crews on successful crossings of various sizes utilizing several different methods of installation.

Midwest Mole, Inc., 1999— Present. Jose Ortega started as a laborer gaining valuable hands on experience assisting Management in expediting successful jobs with duties including mobilization, job site preparation, running Auger Boring Machines, Tunnel Boring Machines, haul units, and grouting. His attention to detail and ability to lead crew members led to his eventual position as Lead Foreman in which he is responsible for assisting the Superintendent in expediting successful jobs by planning the work procedure, allocating manpower and equipment, and oversight of laborers and subcontractors to ensure work is being performed in a safe and productive manner. Mr. Ortega is also bilingual.

HIGHLIGHT OF PAST PROJECTS:

- Des Plaines River CSO Overflow Tunnel, Joliet, IL 840' of 120" solid rock tunnel under the Des Plaines River for dual 24" HOBAS lines and a 60" HOBAS overflow. 22' diameter shaft in solid rock at 60' depth. Tunnel was under an Army Corp regulated area of the Des Plaines river (Corp regulated concrete walls).
- GM Powertrain, Bedford, IN. Mr. Ortega was responsible for all aspects of the field work. The project consisted of tunneling 610' of 60" rib and board under a large hill for a storm sewer.
- Cooper Creek Replacement Sewer, Cincinnati, OH 521' of 48", 218' of 54" and 497' of 54" steel casing, all in solid
- Allen Fork Collection System Phase 1, Cincinnati, OH 313' of 54" steel casing in rock
- Billtown Interceptor Gravity Sewer, Louisville, KY 382' of 54" in rock under a road for a 30" gravity sewer
- Oakley Station CSO 551 and 553 Separation Sewer, Cincinnati, OH Design Build Storm Sewer Project: 1,933' of 92" rib & board tunnel with 60" Hobas FRP Liner, 300' 72" Jacked RCP HWY Crossing, 120' 72" and 76' 60" RCP Open Cut. 72" Outfall, 6 Storm 72" 120" manholes, Work pit shoring and excavation, and 40' deep 10' and 11' diameter shafts for tunnel access and manholes, MOT and restoration Project Value \$5.2M
- CEG White River CCS Phase 1, Indianapolis, IN Project included 168' of 72" RCP jack pipe installed via handmine and 88' of 108" RCP jack pipe installed via excavator shield
- Cayuga Pedestrian Tunnel, Cayuga, IN. 206' of 140" ID casing under 5 sets of railroad spurs
- EPCO, Indianapolis, IN. 60' of 72" RCP under a fuel line for a storm sewer
- White River CCS Phase 1, Indianapolis, IN. 168' of 72" direct jack RCP. 88' of 108" direct jack RCP
- B-38000-A, Floyd County, IN. Replaced 278' of 60" RCP
- IL-25 at 1-90 Interchange. Cook, DuPage, and Kane Counties, IL. 6 crossings totaling 1826' of casing ranging from 15" to 54".
- New Indianapolis Airport Midfield Terminal Utility Corridor, Indianapolis, IN. Mr. Ortega supervised the installation of 2,018' of 102" tunnel liner plate, and EPB tunnel under runways and taxiways for multiple utilities.
- SE Brookside Drive & Covert Ave, Evansville, IN. 282' of 84" jackable RCP under US 41 for a gravity sewer.
- VDOT Route 7 Westbound Truck Climing Lane, Leesburg, VA. 205' of 36"; 235' of 48"; 275' of 54"; 130' of 66" RCP pipe jacking; 180' of 60-66" RCP. Pipe jacking total of 10 crossing
- Square 737 and 739 Sewer Relocation, Washington DC. Project included 918' of 48" Hobas jack pipe in 4 runs at 40 50 foot depth for sanitary sewer relocation; 2 rib and board work shafts 26' diameter; 3 rib and board receiving shafts 32' diameter, 3 CIP and 2 Precast manholes and associated temporary passive sewer bypass.

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PHONE 317.545.1335 • FAX 317.545.1558

SAFETY FIRST, QUALITY SECOND, PRODUCTION THIRD,
WWW.mldwestmole.com



Stephen D. Abernathy
Vice President of Operations / Project Manager

Experience Summary:

Mr. Abernathy has over 25 years experience in Heavy Civil Construction and Municipal Infrastructure. Working as a general contractor and a subcontractor, he has directed numerous underground utility, roadway, bridge, site and other projects in the capacity of a project manager and as a company executive. Currently he oversees and coordinates major project operations and assists the President and Vice President of the company in making crucial decisions to enhance our services to our customers.

Professional Experience:

- Project Manager, Vice President Midwest Mole, Inc. 2009 to Present. Mr. Abernathy is responsible for
 overall management and the construction field operations for major company projects including: Direction of
 construction operations, Area operations management, and Project management.
- General Manager Bray-Arnsperger Excavating, Inc. 2005-2008. The GM of a \$20M+ commercial
 excavation, utility and site development contractor that employed approximately 95 people. Mr. Abernathy
 managed and oversaw all company operations including estimating, project management, field operations,
 personnel, safety and equipment management with profit and loss responsibility.
- Vice President Sunesis Construction Co. 1992 to 2005. Started his position as project manager to manage roadway, underground utility, bridge and other construction projects as company grew from revenue \$2mill to \$7mill per year. In 1995, he was promoted to Vice President. Mr. Abernathy led the diversified public works and infrastructure business in growth from \$7M to \$34M+ in annual revenue and from 40 to 150 employees performing work in three states. Directed field operations and project management staff to fulfill the company's contractual obligations. Implemented and updated organizational structure and systems to facilitate profitable growth and increase operational efficiency.

Education:

Purdue University, W. Lafayette, IN Bachelor of Science – Mechanical Engineering Graduate 1988

Professional Organizations:

American Society of Civil Engineers; ASCE Society for Mining, Metallurgy, and Exploration; SME

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. TR. NCHIESS SPECIALIST .

Selected Project Experience:

- Des Plaines River CSO Overflow Tunnel, Joliet, IL 840' of 120" rock tunnel under the Des Plaines River for dual 24" HOBAS lines and a 60" HOBAS overflow. 22' diameter shaft at 60' depth.
- Shayler Run Segment "C" Sewer Replacement, Clermont Co, OH. The project consisted of approximately 9500 LF of 72" Rock Tunnel in 7 runs for a 42" HOBAS sewer, 8 work shafts and related manholes ranging from 30' to 55' depths. Project Value \$15M
- Flat Branch Pump Station & Force Main, Manassas, VA 3 runs totaling 909' of 54" casing using Rock TBM for a 36" HOBAS sanitary sewer; 2 work shafts-32' and 16' diameter Project Value \$1.1M
- Permars Run Relief, Steubenville, OH. 1,300' of 84" beam and lagging tunnel, 770' of 66" beam and lagging tunnel in solid rock, 170' of 54" casing bore, 450' of 48" open cut and connecting existing structures; 7 shafts ranging from 30'-50' in depth
- Southeastern Interceptor Relief Sewer, Louisville, KY 540' of 60" under NS RR, Hikes Lane, and Newburg Road for a sanitary sewer.
- Cooper Creek Replacement Sewer, Cincinnati, OH 521' of 48", 218' of 54" and 497' of 54" steel casing, all
 in solid rock
- UOSA Primary Curifiers, Centreville, VA 400' of 60" solid rock tunnel for a 36" DIP sewer
- IL Tollway I-13-4104, Cook, Dupage and Kane Co, IL. The project consisted of 227' of 24", 649' of 30", 609' of 72", 95' of 48", 57' of 66" pipe hammered under highway.
- Shadow Wood WWTP Decommission, Louisville, KY 2 runs totaling 485' of 36"-44" walled steel casing under Harrods Creek for a 15" PVC Sewer
- Queen City Ave Sewer Separation Phase 1, Cincinnati, OH 90' of 84"ID/87"OD fiberglass jacking pipe under utilities for a sewer
- ODOT 236, Toledo, OH 2,143' of 57" ID/60"OD Hobas Slipliner pipe inside an existing deteriorated 66" RCP
- sewer; install one manhole; bulkhead the ends of the liner, and fill the annular space with lighweight cellular grout.
- US Coast Guard Headquarters, Washington DC 2,539' of 90" Slipline pipe inside an existing 102" x 114" brick and concrete sanitary sewer. Both Straight and curved sections were lined
- ENRF Enhanced Nitrogen Removal Facility Phase 2, Washington DC 238' of 144"ID/170" OD RCP Jack Pipe under existing tanks and roads for gravity sewer.
- M Street Diversion Sewer, Washington DC Rehab East Side Interceptor: 1,121' of existing 75" concrete and brick sliplined with 60" and 63" Flow-tite for a gravity sewer.
- South Forced Lower Capacity Improvements, Baton Rouge, LA 6 runs totaling 1,939' of 24" Hobas jack pipe for a sanitary sewer, 7 work shafts, 5 manholes set via Vermeer Axis System (Pilot tube Microtunnel)
- Square 737 and 739 Sewer Relocation, Washington DC. The project consisted of 918' of 48" HOBAS jack pipe in 4 runs at 40-50 foot depth for a sanitary sewer relocation. 2 rib and board shafts 26 feet in diameter and 3 rib and board receiving shafts 32 feet in diameter. 3 CIP and 2 Precast manholes and associated temporary passive sewer bypass. Value \$4.2M
- Oakley Station CSO 551 and 553 Separation Sewer, Cincinnati, OB Design Build Storm Sewer Project: 1,933' of 92" rib & board tunnel with 60" Hobas FRP Liner, 300' 72" Jacked RCP HWY Crossing, 120' of 72" and 76' of 60" RCP Open Cut. 72" Outfall structure, 6 Storm manholes 72" 120", Work pit shoring and excavation, 10' and 11' diameter shafts 40' deep for tunnel access and manholes, MOT and restoration Project Value \$5.2M
- Wood River CORE Project, Roxanna, IL. 900' of 30" casing in three runs via GBM; installation of 20" and 30" steel petroleum line with wax fill; 2 work pits 25 feet in depth-25x40 and 12x40 Project Value \$3M

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Joseph D. Butor, P.E. Operations Manager

Experience Summary:

Mr. Butor has been involved with various types of construction projects in several parts of the country. He has over 12 years of experience in the construction industry, including bridge construction, office buildings, parking structures, and tunneling. Mr. Butor has experience in the role of Subcontractor as well as General Contractor. He has had a wide range of responsibilities throughout his career, functioning as Field Engineer, Estimator, Project Manager, and Field Operations Manager.

Professional Experience:

- Field Operations Manager, Midwest Mole, Inc., June 2010-Present. Mr. Butor is responsible for the management of all field operations. Responsibilities include contract negotiation and management, scheduling overall company operations, resource allocation, dispute resolution, overall cost control, equipment selection, oversight of daily operations as well as technical/engineering support for project management.
- Project Manager/Estimator, Midwest Mole, Inc., February 2005-June 2010. Mr. Butor's responsibilities include: Reviewing Plans, Specifications and Geotechnical Information, determining method of installation, preparing estimate, coordination with Owner, Engineer, and General Contractor, material procurement, equipment selection, preparing submittals, managing schedule and budget, union negotiations, document control, and contract negotiations on projects up to \$8.1M.
- Field Engineer, Charles Pankow Builders, Los Angeles, CA., June 2004 December 2004. Mr. Butor was the Field Engineer on the LA County Department of Public Social Services Project. This was a 4-story office building with adjacent 500 vehicle parking structure. The Project value was approximately \$35M. Mr. Butor was responsible for: Submittal Review, Generating RFI's, Detailing Shop Drawings, Coordination with Subcontractors and County Inspectors, ensuring all work was in compliance with Plans, Specifications, and Building Codes, material takeoffs and procurement.
- Intern, Flatiron Structures Company, May 2001-August 2003. Mr. Butor held three
 internships at Flatiron Structures Company as part of his Bachelor of Science in Construction
 Engineering and Management during summer months. As part of his internship Mr. Butor was
 involved in the following projects:
 - o Logan Terminal Area Runways

Scope: 6000 L.F. of post-tensioned cast-in-place box girder viaduct

Valuation: \$87M

o US 64 Knightdale Bypass

Scope: 11 miles of six-lane highway and 23 bridge structures

Valuation: \$131M



Work Experience:

• Shively Interceptor Project, Louisville, KY

Valuation: \$4.4 Million

Scope: Approximately 10,000 LF of Pilot Tube Microtunnel sizes ranging from 15" to 20" VCP.

• Shayler Run Segment "C" Sewer Replacement, Clermont Co, OH

Valuation: \$15 Million

Scope: 9500 LF of 72" Rock Tunnel in 7 runs for a 42" HOBAS sewer, 8 work shafts and related manholes ranging from 25' to 5' depths.

Lemay WWTP Wet Weather Expansion, St. Louis, MO

Valuation: \$5.1 Million

Scope: Install 560 LF of 16' diameter circular and horseshoe steel liner plate tunnel utilizing roadheader for excavation. Thread 132" PCCP effluent sewer inside tunnel and backfill with lightweight cellular grout.

CEP-IMC Utility Connector, Indianapolis, IN

Valuation: \$8.1 Million

Scope: Install 2,000 LF of 8.5' diameter steel liner plate tunnel utilizing Earth Pressure Balance Tunnel Boring Machine. Backfilled tunnel with 3,000 cubic yards of lightweight cellular grout.

• South Stormwater Collection Station Bypass Sewer, Bedford, IN

Valuation: \$1.3 Million

Scope: Install 610 LF of 5.2' diameter Steel Ribs and Wood Lagging utilizing a Robbins Rockhead Double Shield TBM. Tunnel was through limestone with UCS of 25,000 psi and impacted material.

Education:

Bachelor of Science in Construction Engineering and Management Purdue University, West Lafayette, IN Graduated May 2004

Professional Organizations:

Member of American Society of Civil Engineers

Member of Deep Foundation Institute

Member of Society of Mining, Metallurgy, and Exploration

NASTT

MSTT (former President)

Licensed Professional Engineer State of Indiana

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1.09 EQUAL OPPORTUNITY AGREEMENT

The Law

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

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

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

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

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

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

Bidders

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

Signature

Midwest Mole Inc.
Name of Business

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

The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any 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.

In the case of an Agreement exceeding \$250,000, the Contractor will be required within seven (7) days following the Bid Opening to furnish evidence that its work-force in Kentucky is representative of the available work-force in the area from which it draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the Contract.



Matthew G. Bevin Governor

COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET

Frankfort, Kentucky 40622 www.transportation.ky.gov/

October 27, 2016

Greg Thomas Secretary

Ms. Danette Wilder and Ms. Gwendolyn Wilder SLI Contracting 1141 Red Mile Road Suite 201 Lexington, Kentucky 40504

Subject: DBE Certification for SLI Contracting

Ladies:

SLI Contracting is certified as a Disadvantaged Business Enterprise (DBE) as outlined in 49 C.F.R. Part 26. Once a firm is certified it shall remain certified until and unless it is removed from the program for cause. As a result, we no longer issue certificates as proof of DBE Certification. We will continue to issue certification letters to firms, and the DBE firm should retain the letter as proof of DBE Certification. In addition, the DBE Directory confirms the continued certification status of a firm including the business activities or services it renders.

If companies wish to verify your firm's status with us directly, please do not hesitate to have them contact the Office for Civil Rights and Small Business Development at 502-564-3601.

Sincerely,

Jamie Clifton

Program Investigative Officer

Small Business Development Branch



An Equal Opportunity Employer M/F/D





SLI Contracting 1141 Red Mile Rd., Suite 201, Lexington, KY 40504 Ph: 859-977-6640 Fax: 859-977-6644 info@slicontracting.com DATE: JUNE 26, 2017 QUOTE # 20170626-1

EXPIRATION DATE: JULY 26, 2017

TO

Midwest Mole Inc. 6814 W 350 N Greenfield, IN 46140 317-545-1335 Customer ID: MWMI

SALESPERSON.	JOB	PAYMENT	TIMMS	DAUE
G. WILDER	Hauling- West Hickman	Net 15 day		
OUV	DESCRIPTION		(exp)	ONE LINE PRICE TOTAL
Hauling Service	es (dirt, gravel, rock, etc)			
Haul Rate (dirt, gravel, etc.)			HR	90.00
Haul Rate (shot rock, slabs, etc.)			HR	125.00

SUBTOTAL

Acceptance of Proposal: The above prices, specification and conditions above are satisfactory and hereby accepted as a contract for work. The undersigned hereby agrees that SLI Contracting LLC is authorized to do the work as specified and agrees to payment terms above.

TOTAL

Thank you for your business!



6/26/17

Quotation prepared by: ______

To accept this quotation, sign here and return:



OMB Control No: 2090-0030 Approved: 8/13/2013 Approval Expires: 8/31/2015

Disadvantaged Business Enterprise (DBE) Program DBE Subcontractor Performance Form

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 93.302 (c).

Prime Contractor Signature	Print Name	
200 00	Jason D Miller	
Title	Date	
President	6/23/2017	

Subcontractor Signature	Print Name
	Danette J. Wilder
Title	Date
President	6/26/17

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

1.11 MWDBE SUBCONTRACTOR PERFORMANCE FORM



OMB Control No: 2090-0030 Approved: 8/13/2013 Approval Expires: 8/31/2015

Disadvantaged Business Enterprise (DBE) Program

DBE Subcontractor Performance Form

This form is intended to capture the DBE¹ subcontractor's² description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractors bid or proposal package.

Subcontractor Name SLI Contracting,	LLC	Project Name V Pacilities Improve	West Hickman 7(WH7) Wet Weather Storage ements- Contract No. 1 New Circle Road Crossing.
Bid/Proposal No. 80-2017	Assistance Agreement ID	No. (if known)	Point of Contact Danette Wilder
Address 1141 Red Mile Rd	., Suite 201, Lexington	n. KY 40504	4
Telephone No. 859-977-6640		Email Address	
Prime Contractor Name Midwest Mole Inc.		Issuing/Fundir	

Contract Item Number	Description of Wor	k Submitted to the Prime Contractor	Price of Work
	Involving Construct	ion, Services, Equipment or Supplies	Submitted to the Prime Contractor
	Hauling (dirt, gravel etc.)		90.00 hr
	Hauling (shot ro	ock, slabs, etc.)	125.00 hr
Puna da Na V			
DBE Certified By: X DOT	SBA	Meets/exceeds EPA certification standar	ds?
Other:		YESNOUnknown	

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

Subcontractor is defined as a company, firm, Joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.



COMMONWEALTH OF KENTUCKY

Matthew G. Bevin Governor

April 20, 2016

Lilli Allen, President ALLEN ENGINEERING, INC. 2509 Lenlake Court Lexington, KY 40513

Dear Mrs. Allen:

The Kentucky Transportation Cabinet's DBE Certification Committee has determined that ALLEN ENGINEERING, INC. continues to meet the eligibility requirements of a woman-owned Disadvantaged Business Enterprise (DBE) and remains program-eligible pursuant to 49 C.F.R., Part 26. Along with your DBE continuation, your Small Business Enterprise (SBE) certification has been reciprocally renewed.

ALLEN ENGINEERING, INC. is DBE/SBE certified to perform the below NAICS codes, which include the following items of work:

NAICS code(s) for which DBE/SBE status is recognized: 237310, 237990, 238110

Items of Work: construction staking, preparing development plans, small civil engineering design projects, erosion control projects, storm, sanitary sewer, highway, street and bridge construction, civil engineering construction, and poured and structure concrete

Absent a finding of regulatory non-compliance, a change in the majority ownership and/or control, or a successful third party challenge, this certification will be eligible for review on April 30, 2019.

In accordance with 49 C.F.R. §26.83(j), this firm will be required to submit an affidavit annually to determine whether your firm continues to meet the standards as set forth in 49 C.F.R., Part 26.

Sincerely,

Tony Youssefi DBE Branch Manager Small Business Development Branch

mrt/TY



An Equal Opportunity Employer M/E/D

Invitation to Bid

Project Name: _West Hickman 7(WH7)Wet Weather Storage Facilities-Contract #1 New Circle Road Crossing
Project Location:Lexington, KY
Bid Date:6/23/2017 Invitation To Bid Sent Via: Email
Project Description: 60 inch pipe installed by trenchless technology
Bids/Quotes Due:6/21/2017
Are you a certified MBE/WBE: YES or NO
Plans are available for review at: https://midwestmole.box.com/s/ur7td5e7e34hl8dubsa0598l6vv7g0q4
For further information or coordination regarding your proposal please contact: Ryan Barkdull 317-545-1335 ext 134 or email plandesk@midwestmole.com
Scopes Requested For Bid
Erosion Control Suppliers Shoring Traffic Control Temp Access Roads Landscape/Restoration Your Scope Construction Staking
Bid Fax Response
Bidding (Check): YES NO
Company Name: Allen EngineeringContact Person: Lilli Allen
Phone 859-229-7362 Fax: 859-223-1948
Email mallen 2509 Scope(s) Bidding: Construction Staking Oyahoo. Gom



OMB Control No: 2090-0030 Approved: 0/13/2010 Approval Expires: 8/31/2015

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Participation Form

An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE¹ subcontractor² the opportunity to describe work received and/or report any concerns regarding the EPA-funded project (e.g., in areas such as termination by prime contractor; late payments, etc.). The DBE subcontractor can, as an option, complete and submit this form to the EPA DBE Coordinator at any time during the project period of performance.

Subject to Name Hilen Engli	neering In		West Firek man 200/47) War Worther Steady vements - Contract No. 1 New Circle Road Grossings
Biol/ Proposal No. 80-2017	Assistance Agreement	ID No. (If knowa)	Point of Centaer Liff, A164
Address 2509 L	onlako Ct	Lexingto	1 Ky 40513
Telephona No. 859- Z	29-73 62	Email Address	len 2509@yahoo.com
Fritte Contractor Name Midwest Mole Inc.		lasulng/Funci	ng Entity:

	Contractor
onstruction Staking	5000 50 lump
Includes all labor, supplies,	Sum
and insorence, but not bonding	
	Encludes all labor, supplies, and insorance, but not bonding

TA DBE is a Disadvamaged, Minurity, or Woman Business Enterprise that has been cardited by an entity from which EPA accepts certifications as described in 40 CFR 33 204-33,205 or certified by EPA. EPA accepts certifications from another that meet or exceed EPA certification standards as described in 40 CFR 33,202.

EPA FORM 6100-2 (DBE Subcontractor Participation Form)

² Subcontractor is defined as a company. Here, joint venture, or individual who enters into an agreement with a contractor to provide pervices pursuant to an EPA award of financial Assistance.

1.11 MWDBE SUBCONTRACTOR PERFORMANCE FORM



OMB Control No: 2090-0030 Approved: 8/13/2013 Approved: Expires: 8/31/2015

Disadvantaged Business Enterprise (DBE) Program DBE Subcontractor Performance Form

This form is intended to capture the DBE¹ subcontractor's description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractors bid or proposal package.

Allon Engine			eat Hickman (WE7) Wet Weather Storage ments- Contract No. 1 New Circle Road Crosting.
80-2617	Assistance Agreement ID No. (II	knowa)	Point of Contact Lilli Allon
23092	enlako Ct. Lexing	ton 6	KV 40513
Telephone No. 859-2	29-7362 Engl	il Address	Man 2509 Q yahoo. C
Prime Contractor Name Midwest Mole Inc.		og/Funding	Entity: 49700.0

ing	Contract Item Number	Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the
1			Prime Contractor
		Construction Staking lump sum price includes all labor, supplies, and insurance	\$5000 ⁰⁹
-		br+ not bonding	
	Other: KDAT		ds?

² A DBE is a D sadvantaged, Minority, or Woman Business Enterprise that has been cartified by an entity from which FPA accepts cartifications as described in 40 CFR 33,204-93,205 or certified by EPA EPA accepts cartifications from entries that meet or exceed EPA certification standards as described in 40 CFR 33,202.

Subcontractor is defined as a company, Print, Joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.



OMB Control No. 2090-6030 Approved: 8/13/2013 Approval Expires: 8/31/2015

Disadvantaged Business Enterprise (DHE) Program
DBE Subcontractor Performance Form

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	Print Name
J. O Car	Jason D Miller
President	6/23/2017

Subcontractor Signature	Print Name
Leeo Cellen	Lilli A167
Title	Date
President	6-20-17

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pernsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the compreted form to this address.



OMB Control No. 2090-0030 Approved: 8/13/2013 Approval Expires: 8/31/2015

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Participation Form

Subcontractor Signature	Print Name
	1 111
Lelleallen	Lilli Allen
Lelle Olden	Lilli VIII-en Date

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460, include the OM8 control number in any correspondence, Do not send the completed form to this address.

EPA FORM 6100-2 (DBE Subcontractor Participation Form)

teven L. Beshea

Michael W. Hancock, P.E.



certifies that

has met all eligibility requirements

Disadvantaged Business Enterprise Program to participate in the

This certificate is issued pursuant to 49 CFR Part 26 and is subject to suspension

Renewal Date

