



Andy Beshear
Governor

COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
Department of Highways, District 5 Office
8310 Westport Road
Louisville, Kentucky 40242
(502) 210-5400
www.transportation.ky.gov/

Jim Gray
Secretary

August 18, 2023

Louisville Gas & Electric
Ambreen Quereshi
6900 Enterprise Drive
Louisville, Kentucky 40214

Subject: Permit #: 05-2023-00926
Permit Type: Utilities - Gas
Approval

Dear Applicant:

Attached is your permit approval and documentation for the subject permit.

Be advised that all work must be done in conformity with permit and application conditions. If you have any questions, please contact the Permits Section at this office.

Sincerely,

Jason Richardson
D5 Permits - Supervisor

Attachments



An Equal Opportunity Employer M/F/D



APPLICATION FOR ENCROACHMENT PERMIT

KYTC KEPT #: 05-2023-00926

SECTION 1: APPLICANT CONTACT INFORMATION

APPLICANT Louisville Gas & Electric	ADDRESS 6900 Enterprise Dr		
EMAIL lge-permits@lge-ku.com	CITY Louisville	STATE KY	ZIP 40214
CONTACT NAME 1 Ambreen Quereshi	EMAIL ambreen.quereshi@lge-ku.com	PHONE # 502-537-7083	CELL #
		CONTACT NAME 2 (if applicable) Stephen Beatty	EMAIL stephen.beatty@lge-ku.com

SECTION 2: PROPOSED WORK LOCATION

ADDRESS 760 Deatsville Rd	CITY Shepherdsville	STATE Kentucky	ZIP 40165	
COUNTY Bullitt	ROUTE # KY-1604	MILE POINT 5.153	LONGITUDE (X) -85.620075	LATITUDE (Y) 37.964321

ADDITIONAL LOCATION INFORMATION:

Between Colyer Ln and Cedar Grove Rd. Approx 110' North of Colyer Ln.

FOR KYTC USE ONLY

PERMIT TYPE: Air Right Entrance Utilities Vegetation Removal Other: _____

ACCESS: Full Partial by Permit **LOCATION:** Left Right Crossing

SECTION 3: GENERAL DESCRIPTION OF WORK

Application to work in ROW of KY-1604. Application to install 12.75" OD X 0.375" WT 5L52 HFW FBE and ARO coated natural gas pipe to a min. cover of 5'. Crews will be parked in the shoulder on the Westernmost and Easternmost side of Deatsville Rd to perform work. Job will take approx (4) weeks in total to complete. We do not currently have a set construction date but one will be determined upon receiving approved permit. Any traffic control will be done between the hours of 9:00am and 3:00pm to avoid peak traffic hours. All signing will be done in accordance with the MUTCD.

THE UNDERSIGNED APPLICANT(s), being duly authorized representative(s) or owner(s), DO AGREE TO ALL ORIGINAL UNEDITED TERMS AND CONDITIONS ON THE TC 99-1A, pages 1-4.

Ambreen Quereshi

SIGNATURE

8/10/23

DATE

This is not a permit unless and until the applicant(s) receives an approved TC 99-1B from KYTC. This application shall become void if not approved by the cancellation date. The cancellation date shall be a minimum of one year from the date the applicant submits their application.



APPLICATION FOR ENCROACHMENT PERMIT

TERMS AND CONDITIONS

1. The permit, including this application and all related and accompanying documents and drawings making up the permit, remains in effect and is binding upon the Applicant/Permittee, its successors and assigns, as long as the encroachment(s) exists and also until the permittee is finally relieved by the Department of Highways from all its obligations.
2. Applicant shall meet all requirements of the Clean Water Act if the project will disturb one acre or more, the applicant shall obtain a KPDES KYR10 Permit from the Kentucky Division of Water. All disturbed areas shall meet the requirements of the Department of Highway's Standard Specifications, Sections 212 and 213, as amended.
3. **INDEMNITY:**
 - A. **PERFORMANCE BOND:** The permittee shall provide to the Department a performance bond according to the Permits Manual, Section PE-203 as a guarantee of conformance with the Department's Encroachment Permit requirements.
 - B. **PAYMENT BOND:** At the discretion of the department, a payment bond shall be required of the permittee to ensure payment of liquidated damages assessed to the permittee.
 - C. **LIABILITY INSURANCE:** Liability insurance shall be required of the permittee (in an amount approved by the department) to cover all liabilities associated with the encroachment.
 - D. It shall be the responsibility of the permittee, its successors and assigns, to maintain all indemnities in full force and effect until the permittee is authorized to release the indemnity by the Department.
4. A copy of this application and all related documents making up the approved permit shall be given to the applicant and shall be made readily available for review at the work site at all times.
5. Perpetual maintenance of the encroachment is the responsibility of the permittee, its successors and assigns, with the approval of the Department as required, unless otherwise stated.
6. Permittee, its successors and assigns, shall comply with and agree to be bound by the requirements and terms of (a) this application and all related documents making up the approved permit, (b) by the Department's Permits Manual, and (c) by the Manual on Uniform Traffic Control Devices, both manuals as revised to and in effect on the date of issuance of the permit, all of which documents are made a part thereof by this reference. Compliance by the permittee, its successors and assigns, with subsequent revisions to applicable provisions of either manual or other policy of the Department may be made a condition of allowing the encroachment to persist under the permit.
7. Permittee agrees that this and any encroachment may be ordered removed by the Department at any time, and for any reason, upon thirty days written notice to the last known address of the applicant or to the address at the location of the encroachment. The permittee agrees that the cost of removing and of restoring the associated right-of-way is the responsibility of the permittee, its successors and assigns.
8. Permittee, its successors and assigns, agree that if the Department determines that motor vehicular safety deficiencies develop as a result of the installation or use of the encroachment, the permittee, its successors and assigns, shall provide and bear the expenses to adjust, relocate, or reconstruct the facilities, add signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department within a reasonable time after receipt of a written notice of such deficiency. The period within which such adjustments, relocations, additions, modifications, or other corrective measures must be completed will be specified in the notice.
9. Where traffic signals are required as a condition of granting the requested permit or are thereafter required to correct motor vehicular safety deficiencies, as determined by the Department, the costs for signal equipment and installation(s) shall be borne by the permittee, its successors and assigns and the Department in its reasonable discretion and only in accordance with the Department's current policy set forth in the Traffic Operations Manual and Permits Manual. Any modifications to the permittee's entrance necessary to accommodate signalization (including necessary easement(s) on private property) shall be the responsibility of the permittee, its successors and assigns, at no expense to the Department.



APPLICATION FOR ENCROACHMENT PERMIT

10. The requested encroachment shall not infringe on the frontage rights of an abutting owner without their written consent as hereinafter described. Each abutting owner shall express their consent, which shall be binding on their successors and assigns, by the submission of a notarized statement as follows, "I (we), _____, hereby consent to the granting of the permit requested by the applicant along Route _____, which permit does affect frontage rights along my (our) adjacent real property." By signature(s) _____, subscribed and sworn by _____, on this date _____.
11. The permit, if approved, is subject to the agreement that it shall not interfere with any similar rights or permit(s) previously granted to any other party, except as otherwise provided by law.
12. Permittee shall include documentation which describes the facilities to be constructed. Permittee, its successors and assigns, agree as a condition of the granting of the permit to construct and maintain any and all permitted facilities or other encroachments in strict accordance with the submitted and approved permit documentation and the policies and procedures of the Department. Permittee, its successors and assigns, shall not use facilities authorized herein in any manner contrary to that prescribed by the approved permit. Only normal usage as contemplated by the parties and by this application and routine maintenance are authorized by the permit.
13. Permittee, its successors and assigns, at all times from the date permitted work is commenced until such time as all permitted facilities or other encroachments are removed from the right-of-way and the right-of-way restored, **shall defend, protect, indemnify and save harmless** the Department from any and all liability claims and demands arising out of the work, encroachment, maintenance, or other undertaking by the permittee, its successors and assigns, related or undertaken pursuant to the granted permit, due to any claimed act or omission by the permittee, its servants, agents, employees, or contractors. This provision shall not inure to the benefit of any third party nor operate to enlarge any liability of the Department beyond that existing at common law or otherwise if this right to indemnity did not exist.
14. Upon a violation of any provision of the permit, or otherwise in its reasonable discretion, the Department may require additional action by the permittee, its successors and assigns, up to and including the removal of the encroachment and restoration of the right-of-way. In the event additional actions required by the Department under the permit are not undertaken as ordered and within a reasonable time, the Department may in its discretion cause those or other additional corrective actions to be undertaken and the Department shall recover the reasonable costs of those corrective actions from the permittee, its successors and assigns.
15. Permittee, its successors and assigns, shall use the encroachment premises in compliance with all requirements of federal law and regulation, including those imposed pursuant to Title VI of the Civil Right Act of 1964 (42 U.S.C. § 2000d et seq.) and the related regulations of the U.S. Department of Transportation in Title 49 C.F.R. Part 21, all as amended.
16. Permittee, its successors and assigns, agree that if the Department determines it is necessary for the facilities or other encroachment authorized by the permit to be removed, relocated or reconstructed in connection with the reconstruction, relocation or improvement of a highway, the Department may revoke permission for the encroachment to remain under the permit and may order its removal, relocation or reconstruction by the permittee, its successors and assigns, at the expense of the permittee, except where the Department is required by law to pay any or all of those costs.



APPLICATION FOR ENCROACHMENT PERMIT

- 17. Permittee agrees that the authorized permit is personal to the permittee and shall remain in effect until such time as (a) the permittee's rights to the adjoining real property to have benefitted from the requested encroachment have been relinquished, (b) until all permit obligations have been assumed by appropriate successors and assigns, and (c) unless and until a written release from permit obligations has been granted by the Department. The permit and its requirements shall also bind the real property to have benefitted from the requested encroachment to the extent permitted by law. The permit and the related encroachment become the responsibility of the successors and assigns of the permittee and the successors and assigns of each property owner benefitting from the encroachment, or the encroachment may not otherwise permissibly continue to be maintained on the right-of-way. (Does not apply to utility encroachments serving the general public.)
- 18. If work authorized by the permit is within a highway construction project in the construction phase, it shall be the responsibility of the permittee to make personal contact with the Department's Engineer on the project in order to coordinate all permitted work with the Department's prime contractor on the project.
- 19. This permit is not intended to, nor shall it, affect, alter or alleviate any requirement imposed upon the permittee, its successors and assigns, by any other agency.
- 20. Permittee, its successors and assigns, agree to contain and maintain all dirt, mud, and other debris emanating from the encroachment away from the surrounding right-of-way and the travel way of the highway hereafter and at all times that its obligations under the permit remain in effect.
- 21. Before You Dig: The contractor is instructed to call 1-800-752-6007 to reach KY 811, the One-Call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that the owners of underground facilities are not required to be members of the KY 811 One-Call Before U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Clerk to determine what utility companies have facilities in the area.
- 22. The undersigned Utility acknowledges ownership and control of the facilities proposed to be installed, modified, or extended by the Applicant/Permittee and agrees to be bound by the requirements and terms of this application and all related documents making up the approved permit, by the Department's Permits Guidance Manual, and by all applicable regulations and statutes in effect on the date of issuance of the permit. This information and application is certified correct to the best knowledge and belief of the undersigned Utility.

UTILITY

NAME (Utility Representative)

TITLE (Utility Representative)

SIGNATURE (Utility Representative)

DATE



To Submit a Locate Request
24 Hours a Day, Seven Days a Week:
Call 811 or 800-752-6007



ENCROACHMENT PERMIT

KEPTS No.: 05-2023-00926

Permittee: LG&E

Latitude: 37.964335

Longitude: -85.620081

Completion Date: 8/11/2024

Coordinates provided on the TC 99-1(B) are the approved location for this permit.

Indemnities		
Type	Amount Required	Tracking Number
Performance Bond	\$3,000.00	0032196
Payment Bond		
Liability Insurance		

This permit has been:

APPROVED DENIED

<p>Jason Richardson</p> <hr/> <p>NAME</p> <p><i>Jason Richardson</i></p> <hr/> <p>SIGNATURE</p>	<p>Traffic Engineer Supervisor</p> <hr/> <p>TITLE</p> <p>Digitally signed by Jason Richardson</p> <p>Date: 2023.08.18 09:29:52 -04'00'</p> <hr/> <p>DATE</p>
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The TC 99-1(B), including the application TC-99 1(A) and all related and accompanying documents and drawings make up the permit. It is not a permit unless both the TC 99-1(A) and TC 99-1(B) are both present.

ENCROACHMENT PERMIT GENERAL NOTES & SPECIFICATIONS

I. SAFETY

A. General Provisions

- All signs and control of traffic shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways, latest edition, Part 6, and safety requirements shall comply with the KYTC Permits Manual. Federal law requires that traffic control shall be implemented in accordance with MUTCD standards, KYTC's Standard Specifications for Road and Bridge Construction (KYTC SSRBC), current edition and under the supervision of a certified Work Zone Traffic Control Supervisor.
- All work necessary in shoulder or ditch line areas of a state highway shall be scheduled to be promptly completed so that hazards adjacent to the traveled way are kept to an absolute minimum.
- No more than one (1) traveled-lane shall be blocked or obstructed during normal working hours. All signs, flaggers and other devices during lane closures shall conform to the MUTCD. The traveled-way and shoulders shall be kept clear of mud and other construction debris at all times during construction of the permitted facility. No non-construction equipment or vehicles or office trailers shall be allowed on the right of way during working hours. The right of way shall be left free and clear of equipment, material, and vehicles during non-working hours.
- When necessary to block one (1) traveled-lane of a state highway, the normal working hours shall be as directed by the Department. No lanes shall be blocked or obstructed during adverse weather conditions (rain, snow, fog, etc.) without specific permission from the Department.
- Normal working hours for lane closures shall be between **9:00 A.M.—3:00 P.M., weekdays**. All exceptions regarding lane closures and working hours must be submitted and approved in advance by the Department.
- All materials and methods of construction shall be in accordance with the latest edition of the KYTC SSRBC.
- Date and time restrictions pertaining to this permit are as follows:

B. Explosives

- No explosive devices or explosive material shall be used within state right of way without proper license and approval of the Kentucky Department of Mines and Minerals, Explosive Division.

C. OSHA

- Kentucky Occupational Safety and Health Standards for the construction industry, which has the effect of law, states in part: (Page 52, 1926.651, Specific Excavation Requirements) "Prior to opening an excavation, effort shall be made to determine whether underground installations, (sewer, telephone, water, fuel, electric lines, etc.) will be encountered, and if so, where such underground installations are located. When the excavation approaches the estimated location of such an installation, the exact location shall be determined, and when it is uncovered, proper supports shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation."

D. Archaeological

- Whenever materials of an archaeological nature are discovered during the course of construction work or maintenance operations, contact shall be made immediately with the Division of Environmental Analysis, which maintains an archaeologist on staff, or with the Office of the State Archaeologist located at the University of Kentucky. Following this consultation, further action shall be decided on a case-by-case basis by the State Highway Engineer or the Transportation Planning Engineer or their designated representative.

E. Environmental

- If the activity to which this permit related disturbs one acre or more of land, you must obtain a KPDES KYR10 permit. Information can be found at <http://water.ky.gov/permitting/Pages/GeneralPermits.aspx>

II. UTILITIES

- The permittee shall be responsible for any damage to existing utilities. Any utility modifications or relocations within state right of way necessary, as determined by the Department or by the owner of the utility, shall be at the expense of the permittee and subject to the approval of the Department.
- All existing manholes and valve boxes shall be adjusted to be flush with finished grade.
- Encasement pipe shall conform to current standards for highway crossings in accordance with the KYTC Permits Manual. Pipe encasing shall not be required if the pipe interior diameter is 2" or less.
- Parallel utilities shall be constructed between back slope of ditch line and right-of-way line and shall have a minimum of 30" cover above top of pipe or conduit.
- All pavement cuts shall be restored per KYTC SSRBC and the District 5 Pavement Restoration drawing.
- Aerial crossing of utility lines shall have a minimum clearance of 18' from the high point of the roadway to the low point of the line.
- The clear zone requirement shall be met to the extent possible in accordance with the AASHTO Roadside Design Guide.
- The minimum depth for underground utilities is 42" under roadways, ramps, and ditch lines, and a minimum depth of 30" in all other areas within state right of way except for natural gas and petroleum fraction lines.
- Natural gas and petroleum fraction lines require a minimum depth of 60" under roadways, ramps, and ditch lines and a minimum depth of 42" cover when located outside of ditch lines.
- Any excavation within 3' of edge of pavement will require flowable fill as backfill. Flowable fill shall be in accordance with the KYTC SSRBC.

Utility notes specific to fully-controlled access highways ONLY:

- All work necessary within the right-of-way shall be performed behind a temporary woven wire fence erected prior to the start of work. The temporary fence shall be removed immediately upon completion of work on the right-of-way, and the control of access immediately restored to original condition, in accordance with the KYTC SSRBC. All vents, valves, manholes, etc., shall be located outside of the right-of-way. Encasement pipe shall extend from right-of-way line to right-of-way line and shall be one continuous run of pipe. The encasement pipe shall be welded at all joints. The boring pit and tail ditch shall extend past the existing toe of slope or bottom of ditch line and shall be a minimum of 42" deep. Work in interstate right-of-way requires approval from Federal Highway Administration (FHWA).

III. DRAINAGE

- Any negative impact to existing drainage will be the applicant's responsibility to repair in accordance with the KYTC SSRBC.
- All pipe shall be laid in a straight alignment, to proper grades, and with all materials and methods of installation including bedding and joint seating.
- Ensure no standing water on or along any new construction, regardless of existing conditions. This includes, but is not limited to: curb & gutter, header curb, entrances, sidewalk ramps, etc. If pooling water or evidence of such is found during the final inspection, the Permittee will be required to remedy prior to release of the permit.
- All drainage structures and appurtenances (manholes, catch basins, curbing, inlet basins, etc.) shall conform to the KYTC SSRBC and shall be constructed in accordance with the KYTC Standard Drawings.

IV. PAVING

- No bituminous pavement shall be installed within the right of way between November 15 and April 1, nor when the temperature is below 40 degrees Fahrenheit, without the express written consent of the Department. No bituminous pavement shall be installed when the underlying course is wet.
- Paving within the right of way shall be as follows:
 - Base (Type): _____, (Thickness) _____
 - Base (Type): _____, (Thickness) _____
 - Base (Type): _____, (Thickness) _____
 - Finished Surface (Type) _____, (Thickness) _____
- ***Paving requirements specific to this permit:***

- Any permittee performing road cuts must restore the pavement to pre-existing conditions. Pictures/videos are recommended to ensure proper placement of signs and pavement markings that are temporarily removed for paving operations. In some cases, a pre-work inventory may be requested from the Department. Per Section 713 of the KYTC SSRBC, prepare and keep a written record of the locations of existing pavement markings, and furnish a copy to the Department before removing or obliterating the markings. Notify the Department a minimum of 14 calendar days prior to re-installing the final markings to verify if any modifications are needed.
- Existing pavement and shoulder material shall be removed to accommodate the above paving specifications. Existing pavement shall be removed until full depth mainline pavement is encountered to prevent any deficient sections. If field conditions do not match the plan and additional removal is required to ensure full depth pavement, contact the Department for approval of removal limits.
- The finished surface of all new pavement within the right-of-way shall be true to the required slope and grade, uniform in density and texture, free of irregularities, and equivalent in riding qualities to the adjacent highway pavement or as determined by KYTC or the KYTC SSRBC.
- All materials and methods of construction, including base and subgrade preparation, shall be in accordance with KYTC's Standard Specifications. Notify the Department a minimum of 48 hours prior to beginning paving operations.

Phone: 502-210-5400; Permits Section

- Existing edge of pavement shall be saw-cut to provide a straight and uniform joint for new pavement. An approved joint sealer, in accordance with the KYTC SSRBC (latest edition), shall be applied between new and existing pavements. Ensure the remaining pavement section is sufficient and matches the planned section. If the existing pavement section is thinner, contact the Department prior to continuing construction to determine if additional pavement needs to be removed.

V. ENTRANCES

- KYTC does not take responsibility for any plans associated with an approved permit. All plans shall be reviewed and stamped by a Professional Engineer and shall conform to all KYTC and any other applicable standards. Even after approval of the permit, if the Department finds any of the construction requires modification to meet standards or if a design or construction flaw is discovered, direction will be given to the Permittee and the change performed at no cost to the Department.
- Encroachment permits issued by KYTC in no way supersede local planning/zoning requirements or subdivision regulations. KYTC has no authority with zoning changes.
- Commercial entrances must be paved to the right-of-way line. Any deviations must be approved by KYTC before installation.
- KYTC can dictate drainage improvement installation during construction or after the entrance is at final grade. The permit release does not release the permit applicant from drainage maintenance.
- Signs (ground-mounted and span-mounted), stop bars, crosswalk, and proper lane markings must be in-place before the entrance is open for traffic. Lane width modifications must be approved by the Department.

VI. TRAFFIC

- Any contractor performing work within the vicinity of KYTC roadway lighting / school zone flashers or any Intersection with a traffic signal must specifically request traffic signal locates at least **two (2)** weeks prior to starting work in the right of way. For work near roadway lighting, request locates from the KYTC District 5 Traffic section at 502-338-5273. For work near traffic signals or school flashers in Jefferson County, contact Tammy Baum at 502-574-3261. For work near traffic signals or school flashers outside Jefferson County, request locates from the KYTC District 5 Traffic section at 502-550-0803.
- The applicant must document the condition of all KYTC Roadway signage that is within the work area, prior to beginning work. The applicant must ensure that any signs impacted by the permitted work remain in place, whenever possible and remain undamaged. In the event that any signs have to be removed, it is the applicant's responsibility to document the sign's location before removal and to install the original or new sign per KYTC Standards for sign installation at the same or approximate location. If any questions arise about sign placement, the applicant must contact the District 5 Traffic section for comments.
- Any thermoplastic or striping damaged during the encroachment must be restored in a timely manner per KYTC SSRBC. Stop bars, arrows, words and crosswalks shall be thermoplastic material and all markings must be replaced / refreshed in their entirety. This work must be performed by a KYTC pre-qualified contractor.
- Any work within 10' of a pole, pole base or traffic facility must receive prior approval from the District 5 Traffic Engineer. Excavating near a signal, lighting pole or anchoring facility must be done so that it does not impact the structural integrity of the pole or base. The applicant must show calculations and plans for the excavation before receiving approval.
- If the scope of the permit involves a signal build or rebuild, it is the applicant's responsibility to apply for any required electrical service & pay for any associated fees, as well as request a field inspection and activation from the KYTC District 5 Traffic section. If the signal modifications require timing or phasing changes, this must be requested at least **two (2)** weeks in advance of the desired change. Applicant will be required to provide variable message boards for all approaches to notify motorists of the signal's activation, at least **two (2)** weeks prior to the turn on date. KYTC will not take ownership of permitted signals until the electrical inspection is formally accepted and approved.
- Work which impacts traffic loops requires 48-hour notice to the KYTC District 5 Traffic signal section at 502-550-0803. Accidental damage of a traffic loop must be reported immediately to the KYTC District 5 Traffic signal section at 502-550-0803 (Evenings / Weekends - 502-564-2080). Traffic loops out of operation for more than five working days will subject the applicant to the possible cancellation of the permit and a claim against the bond for the cost of the repairs. Loop repair must be performed by a KYTC pre-qualified contractor and must be coordinated with the KYTC District 5 Traffic section.

VII. SIDEWALK SPECIFICATIONS

A. New Sidewalks

- Sidewalks shall be constructed of Class A concrete (3,500 psi.), shall be a minimum of 5' in width, 8" in thickness across the bituminous entrance, and 4" in thickness across the remaining sections. The width of the sidewalk must meet current ADA (Americans with Disabilities Act) guidelines.
- Sidewalks shall have tooled joints not less than 1" in depth at five (5') foot intervals, and pre-molded expansion joints extending entirely through the sidewalk at intervals not to exceed 50'. See more in Section 505 of the KYTC SSRBC for information relating to this requirement.
- All new sidewalk construction shall demonstrate a cross-slope less than or equal to 2.0% in accordance with ADA standards. Constructing sidewalk with a cross-slope of 1.5% is recommended.
- All new sidewalk construction will be inspected utilizing a 24" long digital inclinometer, with data measured to the **tenth of a percent-grade accuracy**.

B. Existing Sidewalks

- Use of the sidewalk shall not be blocked or obstructed and a usable walkway shall be maintained across the construction area at all times per ADA requirements and MUTCD specifications. Sidewalk closures must be approved by the Department before implementation.
- The location and design of ADA ramps (truncated domes/tactile warnings/etc.) will need to be field verified by the Department before installation. Any retrofitting will require the adherence to current ADA guidelines. If field conditions do not match the plans, contact the Department for approval of any modifications.
- Any section of sidewalk that becomes damaged shall be entirely replaced to match existing sections.

VIII. RIGHT OF WAY RESTORATION

- All disturbed portions of the right of way shall be restored to grass as per KYTC SSRBC (latest edition). A satisfactory turf, as determined by the Department, shall be established by the permittee prior to release of indemnity. Sodding or seeding shall be as follows:

Lawn or High Maintenance Situation: 70% Lawn Fescue (e.g., variety - Falcon) and 30% Bluegrass or 70% Lawn Rye (e.g., variety - Derby) and 30% Bluegrass

Right of Way Lawn Maintenance Situation: 70% KY 31 Fescue and 30% Perennial Rye Grass or 100% KY Fescue

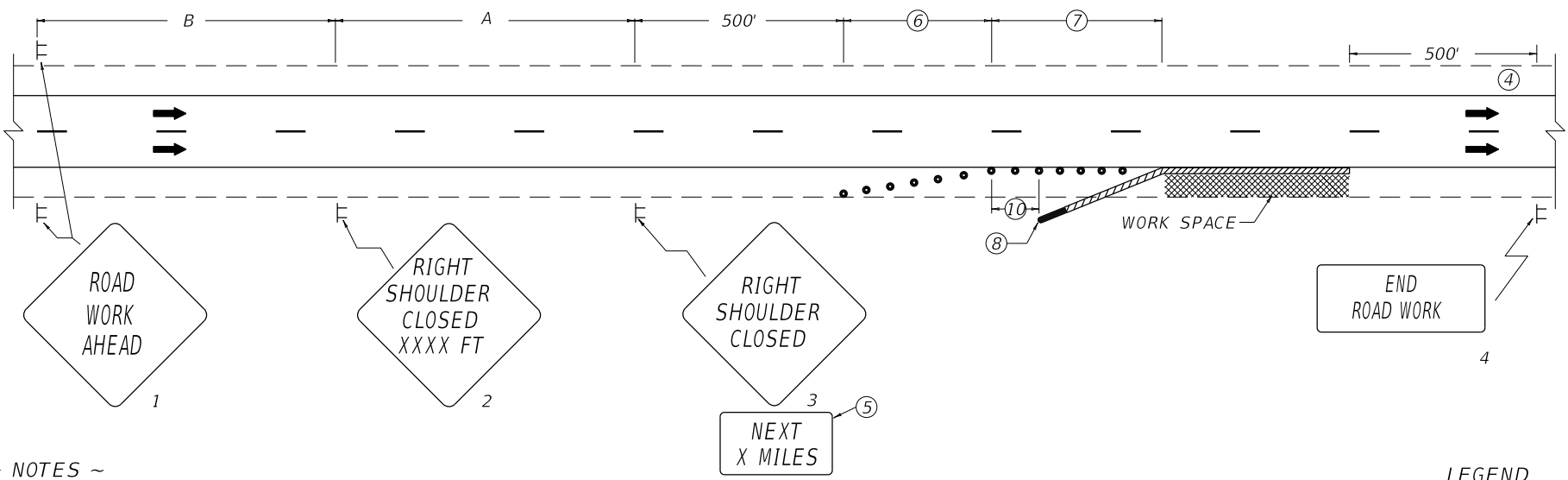
- Two tons of clean straw mulch per acre of seeding.
- Prior to seeding, the ground shall be prepared in accordance with the KYTC SSRBC (latest edition).
- Substitutes for sod such as artificial turf, rocked mulch, or paved areas may be acceptable if they are aesthetically pleasing and receive prior approval from KYTC.
- All ditch-flow lines and all ditch-side slopes shall be sodded.
- Existing concrete right of way markers shall not be disturbed. If damaged in any way, they shall be entirely replaced by the permittee with new concrete markers to match the original markers, in accordance with Kentucky Department of Highways Standard Drawing for Right-Of-Way Monuments (current version). Markers that are entirely removed shall be re-established in the proper locations by the permittee and to the satisfaction of the Department. All right of way monuments must be installed by a licensed Land Surveyor.

IX. RIGHT OF WAY FENCE RESTORATION

- The replacement fence shall be a height of at least 48" and shall be of sufficient density to contain all animals (if applicable).
- The replacement fence shall be a minimum of 1' and a maximum of 2' outside the right-of-way line.
- The fence materials and design shall meet accepted industry standards and be treated as paintable. Durable finish materials such as vinyl are also acceptable.
- The permittee shall be required to maintain the fence in a high state of service. Access from the roadway for the purpose of maintenance will not be allowed. All work on the fence must be accessed from private property.
- The existing fence shall be removed by permittee and stored at the Department's maintenance storage yard for future reuse by the Department. If not, the Department must be reimbursed for the cost of the fence removed from the site.

NOTICE TO PERMITTEE

THE PERMITTEE AGREES THAT ALL WORK WITHIN THE EXISTING RIGHT OF WAY SHALL BE DONE IN ACORDANCE WITH THE PLANS AS APPROVED AND PERMITTED BY AN ENCROACHMENT PERMIT. ANY CHANGES OR VARIANCES MADE AT THE TIME OF CONSTRUCTION WITHOUT WRITTEN APPROVAL FROM THE DEPARTMENT OF HIGHWAYS SHALL BE REMOVED BY THE PERMITTEE AT NO EXPENSE TO THE DEPARTMENT OF HIGHWAYS AND SHALL BE REDONE BY THE PERMITTEE TO CONFORM WITH THE APPROVED PLANS.



~ NOTES ~

1. THE SIZE OF SIGNS 1 THRU 3 SHALL BE 48" X 48" WITH 30" X 24" SUPPLEMENTAL PLAQUES FOR EXPRESSWAYS/FREEWAYS. THE MINIMUM SIZE OF SIGNS 1 THRU 3 SHALL BE 36" X 36" WITH 24" X 18" SUPPLEMENTAL PLAQUES FOR OTHER ROADWAYS. SIGN NO. 4 SHALL BE 48" X 24" FOR EXPRESSWAYS/FREEWAYS AND 36" X 18" FOR OTHER ROADWAYS. A FREEWAY IS AS A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS. AN EXPRESSWAY IS DEFINED AS A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.
2. SIGN 1 SHALL NOT BE DUAL-MOUNTED ON TWO-LANE, TWO-DIRECTION HIGHWAYS OR ON MULTI-LANE HIGHWAYS WHERE MEDIAN IS NOT WIDE ENOUGH TO MAINTAIN LATERAL CLEARANCES SHOWN IN THE MUTCD. SIGNS 2 AND 3 SHALL BE INSTALLED ONLY ON THE SIDE OF THE AFFECTED SHOULDER.
3. DRUMS SHALL BE USED IN LIEU OF CONES IF CLOSURE EXTENDS INTO NIGHTTIME HOURS. GRABBER CONES MAY BE USED IN LIEU OF DRUMS IF THE USE OF DRUMS WOULD RESULT IN LANES THAT ARE TOO NARROW OR AN UNACCEPTABLE SITUATION BASED ON ENGINEERING JUDGMENT.
- ④ ON TWO-LANE TWO-DIRECTION HIGHWAYS, SIGNS 1 THRU 3 SHALL BE INSTALLED ON THE APPROACH WITH THE RIGHT SHOULDER CLOSED. A "ROAD WORK AHEAD" AND "SHOULDER WORK" SIGN SHALL BE INSTALLED ON THE OPPOSITE APPROACH. THE "SHOULDER WORK" SIGN SHALL BE MOUNTED IN ADVANCE OF THE CLOSURE AT A SPACING OF "A" (SEE SIGNING AND SPACING TABLE). AN ADDITIONAL "ROAD WORK AHEAD" SIGN SHALL BE INSTALLED IN ADVANCE OF THE "SHOULDER WORK" SIGN AT A SPACING OF "B".
- ⑤ WHEN THE END OF THE CLOSURE CANNOT BE SEEN BY ROAD USERS, A "NEXT X MILES" PLAQUE SHALL BE INSTALLED BELOW THE "SHOULDER CLOSED" SIGN. THE PLAQUE SHALL BE 36" X 30" FOR EXPRESSWAYS/FREEWAYS AND 24" X 18" FOR OTHER ROADWAYS.
- ⑥ TAPER LENGTH SHALL BE 0.33 L. SPACING OF CHANNELIZING DEVICES THROUGH THE SHOULDER TAPER SHOULD BE 40'.
- ⑦ SPACING OF CHANNELIZING DEVICES THROUGH THE REMAINDER OF THE CLOSURE SHOULD BE 80'.
- ⑧ TEMPORARY TRAFFIC BARRIER SHALL BE REQUIRED ONLY IF DESIGNATED ELSEWHERE IN THE PLANS. IN ORDER TO MITIGATE THE EFFECT OF STRIKING THE END OF A TEMPORARY TRAFFIC BARRIER, THE END SHALL BE INSTALLED IN ACCORDANCE WITH THE ROADSIDE DESIGN GUIDE BY FLARING (SEE TABLE) UNTIL THE END IS OUTSIDE THE ACCEPTABLE CLEAR ZONE OR BY PROVIDING CRASHWORTHY END TREATMENTS. FLATTER FLARE RATES MAY BE USED.
9. THE COLOR OF BARRIER WALL DELINEATORS SHALL MATCH THE COLOR OF THE EDGE LINE THAT THEY SUPPLEMENT.
10. BUFFER SPACE (OPTIONAL). REFER TO TABLE 6C-2 OF THE MUTCD FOR GUIDANCE ON BUFFER SPACE LENGTH.

BID ITEMS AND UNIT TO BID
 REFER TO SECTION 112 OF STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.

MAXIMUM FLARE RATES FOR TEMPORARY TRAFFIC BARRIER			
DESIGN SPEED	70 MPH	60 MPH	50 MPH
FLARE RATE	15:1	14:1	11:1

SIGNING AND SPACING TABLE			
ROAD TYPE	A	B	L
EXPRESSWAY/FREEWAY	1000'	1600'	840'
SP. LT. ≥ 45 MPH*	500'	500'	680'
SP. LT. ≤ 40 MPH*	500'	500'	320'

*NOTE: USE NORMAL POSTED SPEED LIMIT

LEGEND

- TEMPORARY TRAFFIC BARRIER
- SIGN
- CHANNELIZING DEVICES
CONES
DRUMS
- CRASH CUSHION

DRAWING NOT TO SCALE

KENTUCKY
 DEPARTMENT OF HIGHWAYS

SHOULDER CLOSURE

STANDARD DRAWING NO. TTC-135-03
 SUBMITTED *B. Allen Wolf* 02-26-20
DIRECTOR OF PUBLIC SAFETY OPERATIONS DATE
 APPROVED *[Signature]* 02-26-20
STATE HIGHWAY ENGINEER DATE



**TYPICAL HIGHWAY BORE DETAIL
 - FOR NON-FULLY CONTROLLED HIGHWAYS -**

KYTC KEPT #: 05-2023-00926

SECTION 1: HIGHWAY INFORMATION

COUNTY Bullitt Co	ROUTE KY-1604	MILE POINT 5.153	PAVEMENT WIDTH 22' +/-
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SECTION 2: UTILITY INFORMATION

UTILITY TYPE Gas	PIPE TYPE Plastic STEEL	DIAMETER 12"
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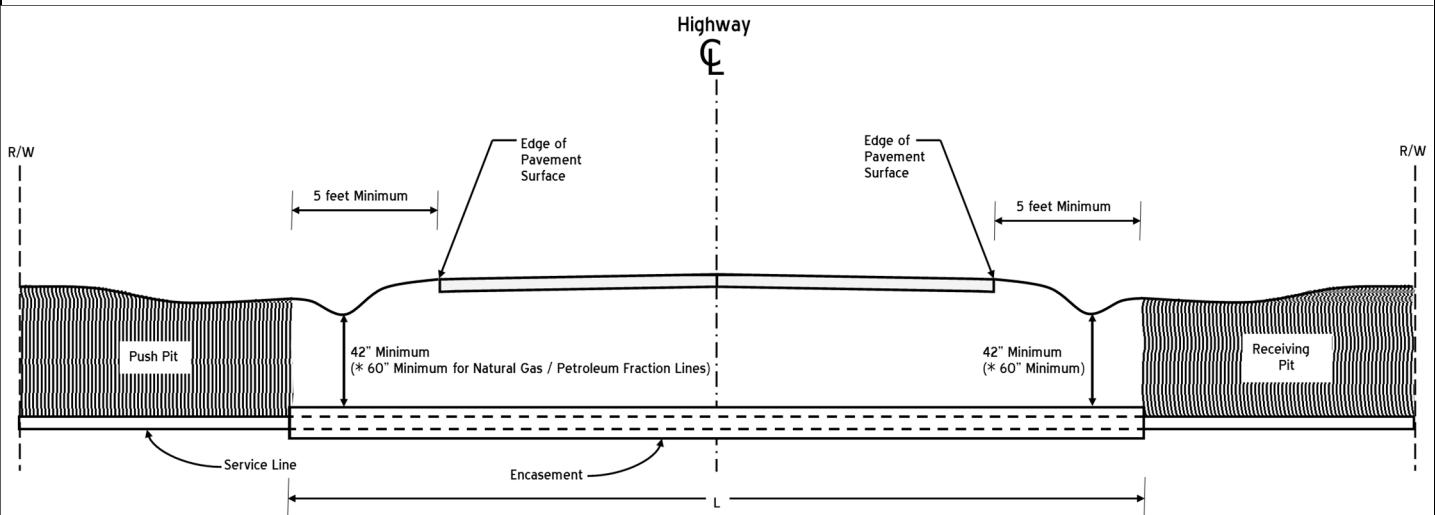
SECTION 3: ENCASEMENT INFORMATION

ENCASEMENT TYPE	DIAMETER
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SECTION 4: BORE INFORMATION

BORE TYPE Direct	LENGTH (L) 1366'	DIAMETER 12.75"
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SECTION 5: DETAIL FOR NON-FULLY CONTROLLED HIGHWAYS



SECTION 6: GENERAL NOTES

- Push Pit and Receiving Pit shall be backfilled and thoroughly compacted.
- All ditch lines are to remain open at all times and restored to original condition.
- Shape, Seed and Straw all disturbed areas immediately after completing the work.
- Provide traffic control as required to insured the safety of the traveling public in accordance with the current edition of the *Manual on Uniform Traffic Control Devices*.
- The minimum depth for underground utilities is **42"** under roadways, ramps, and ditch lines, except for natural gas and petroleum fraction lines which shall have a minimum of **60"** cover.
- See [KYTC Permits Manual](#) for all requirements and specifications.

GAS PIPELINE CROSSING - ALL WORK WILL BE ON PRIVATE PROPERTY - WILL HAVE A BORE UNDER DEATSVILLE RD. SHOULDER WORK ONLY.



760 DEATSVILLE RD



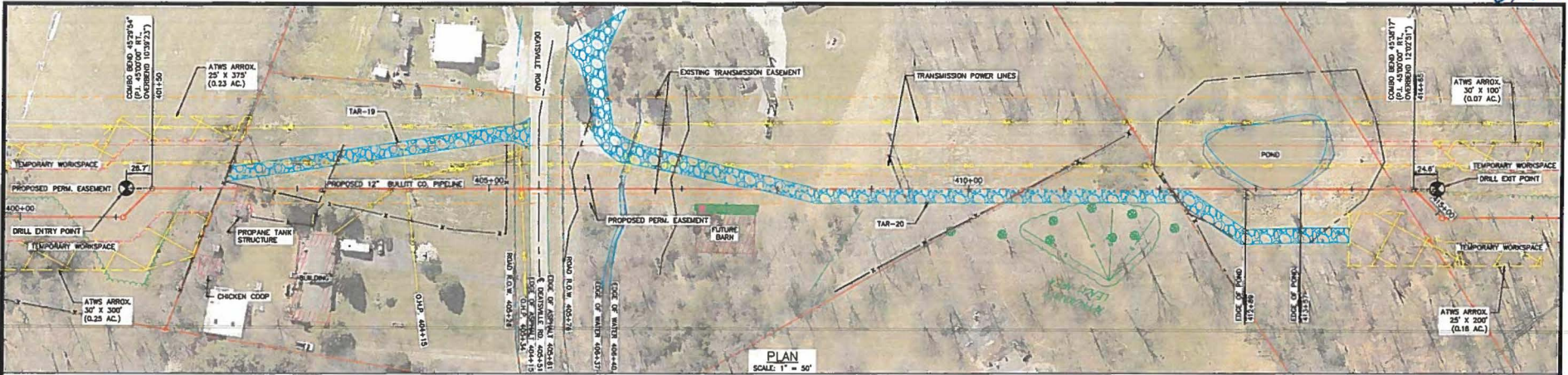
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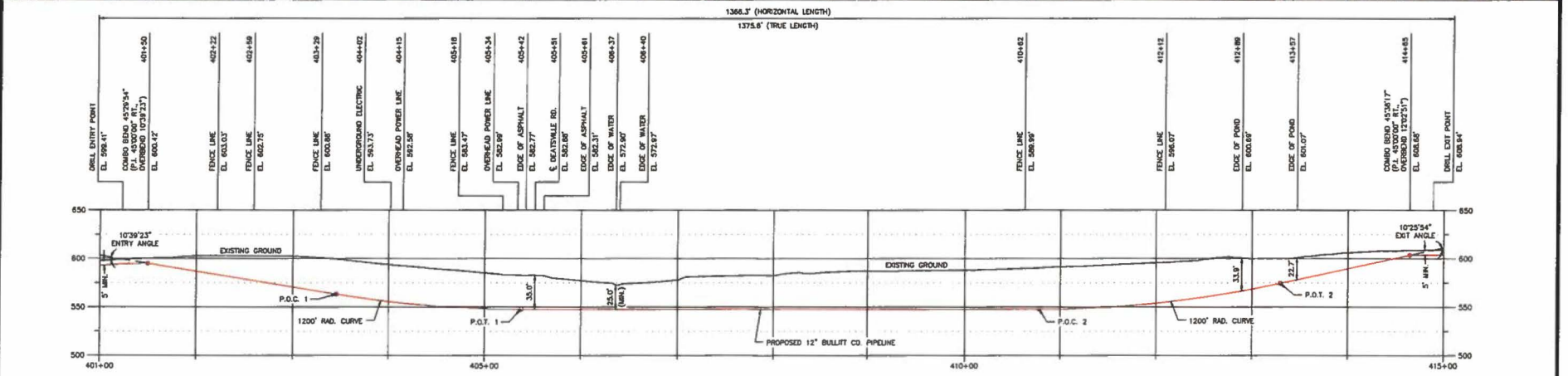


Louisville Metro, MSD, LWC & PVA © 2023
This map is not a legal document and should only be used for general reference and identification.

01571



PLAN
SCALE: 1" = 50'



PROFILE
SCALE: 1" = 50'

HORIZONTAL DIRECTIONAL DRILL DATA	
DESCRIPTION	STA. ELEV.
ENTRY ANGLE @ 10°39'23"	599.41'
POINT OF CURVATURE (P.O.C. 1) (1200 FT. RADIUS)	403+46 563.33'
POINT OF TANGENCY (P.O.T. 1) (BEGIN STRAIGHT SECTION)	405+37 547.90'
POINT OF TANGENCY (P.O.T. 2) (BEGIN HORIZONTAL SECTION)	413+29 574.84'
EXIT ANGLE @ 10°25'54"	608.94'

HORIZONTAL DIRECTIONAL DRILL PARAMETERS	
DESCRIPTION	VALUE
1.) MAXIMUM OPERATING PRESSURE:	220 P.S.I.G.
2.) PIPE: 12" O.D. X 0.375" W.T.:	API-5L X-52
3.) DESIGN FACTOR:	0.50
4.) PIPE COATING:	F.B.P. (14 MILS)
5.) EXTERNAL COATING:	LOW-TEMPERATURE EPDM (40 MILS MIN.)
6.) TRUE LENGTH OF PIPE:	1375'
7.) TYPE OF PIPE JOINT:	WELDED X 40' LG.
8.) HORIZ. LENGTH OF CROSSING:	1366'

NOTES:
1. VOID BETWEEN PIPE AND NATIVE SOIL TO BE COMPLETELY FILLED WITH BENTONITE

NO.	DATE	BY	DESCRIPTION	CHK.	DATE	BY
A	08/15/18	JAL	ISSUED FOR BID REVIEW	ELW	08/15/18	MDW

ENEngineering
28100 TORCH PARKWAY
WARRENVILLE, IL 60555
TEL. 630.353.4000
FAX 630.353.7777
WWW.ENENGINEERING.COM

DWG NUMBER	TITLE

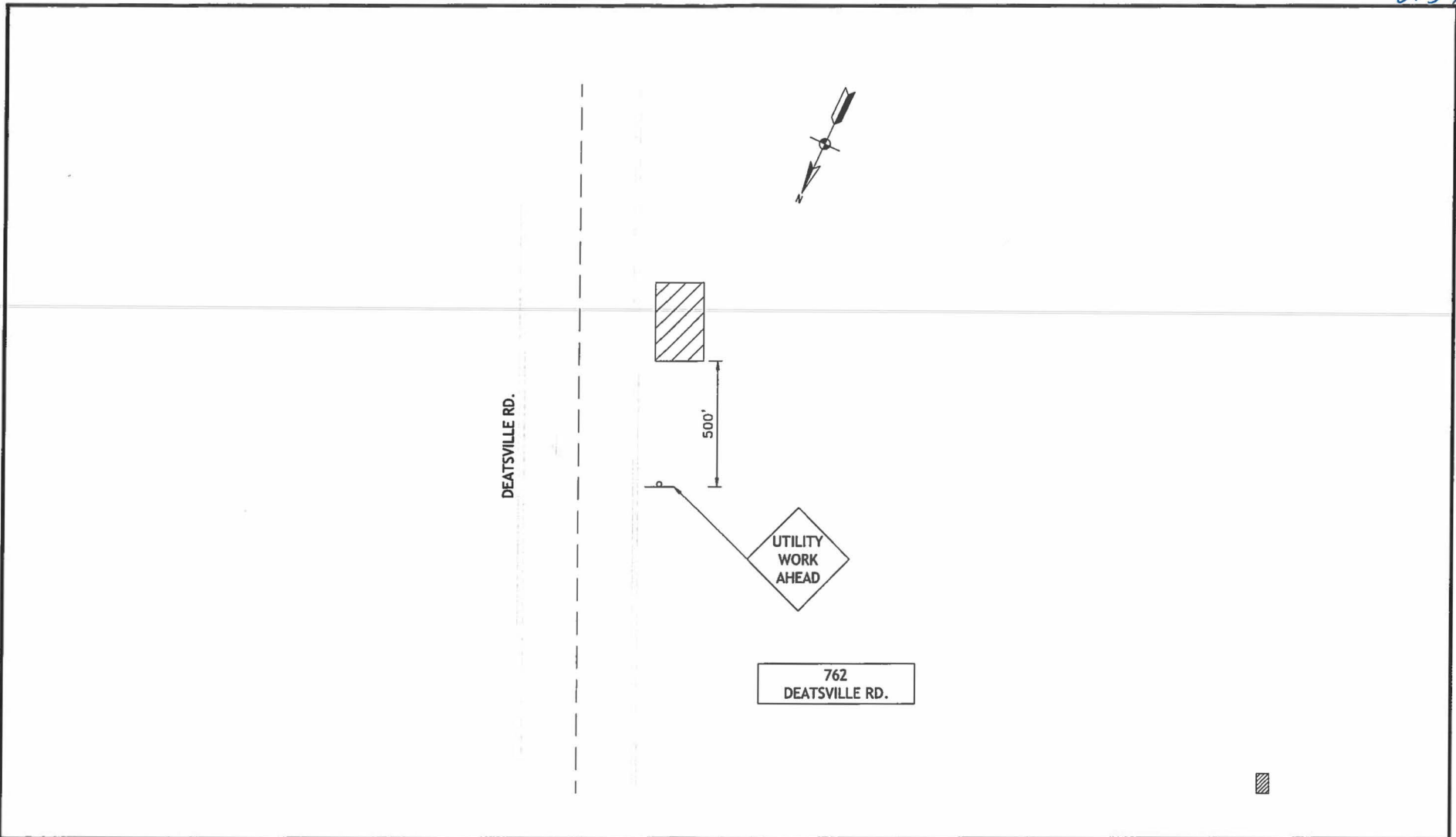
LGE
a PPL company

**12" BULLITT COUNTY PIPELINE
HDD CROSSING DEATSVILLE RD.
PLAN AND PROFILE**

BULLITT COUNTY KY

ISSUED FOR BID	PROJECT I.D.	BK	DRK BY:	ELW	SCALE	1" = 50'	DATE	07/09/17
ISSUED FOR CONSTRUCTION	DRAWING SIZE	D	PROJECT ENGR. / PROJECT MGR.	ELW	MDW	FILE NO.	LGE-BC-HC-E4	
							24 OF 89	

01571



DATE	BY	CHKD	BY	DESCRIPTION	DATE	BY
ISSUED	IN CHARGE					
REVISIONS						

ENEngineering

28100 TORCH PARKWAY
WARRENVILLE, IL 60555
TEL. 630.353.4000
FAX 630.353.7777
WWW.ENENGINEERING.COM

DWG NUMBER	TITLE
	REFERENCE DRAWINGS



ISSUED FOR BID	PROJECT I.D.
ISSUED FOR CONSTRUCTION	DRAWING SIZE D

**12" BULLITT COUNTY PIPELINE
DEATSVILLE RD
TEMPORARY TRAFFIC CONTROL PLAN**

BULLITT COUNTY		DATE	08/23/18
DESIGNER	CHKD BY	FILE NO.	
JM	JML	LGE-BC-KYTC-X2	
PROJECT ENGR. / PROJECT MGR	PROJECT MGR	1 OF 1	
ELW	MDW		