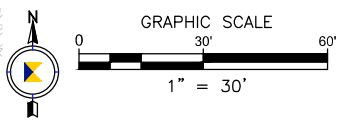
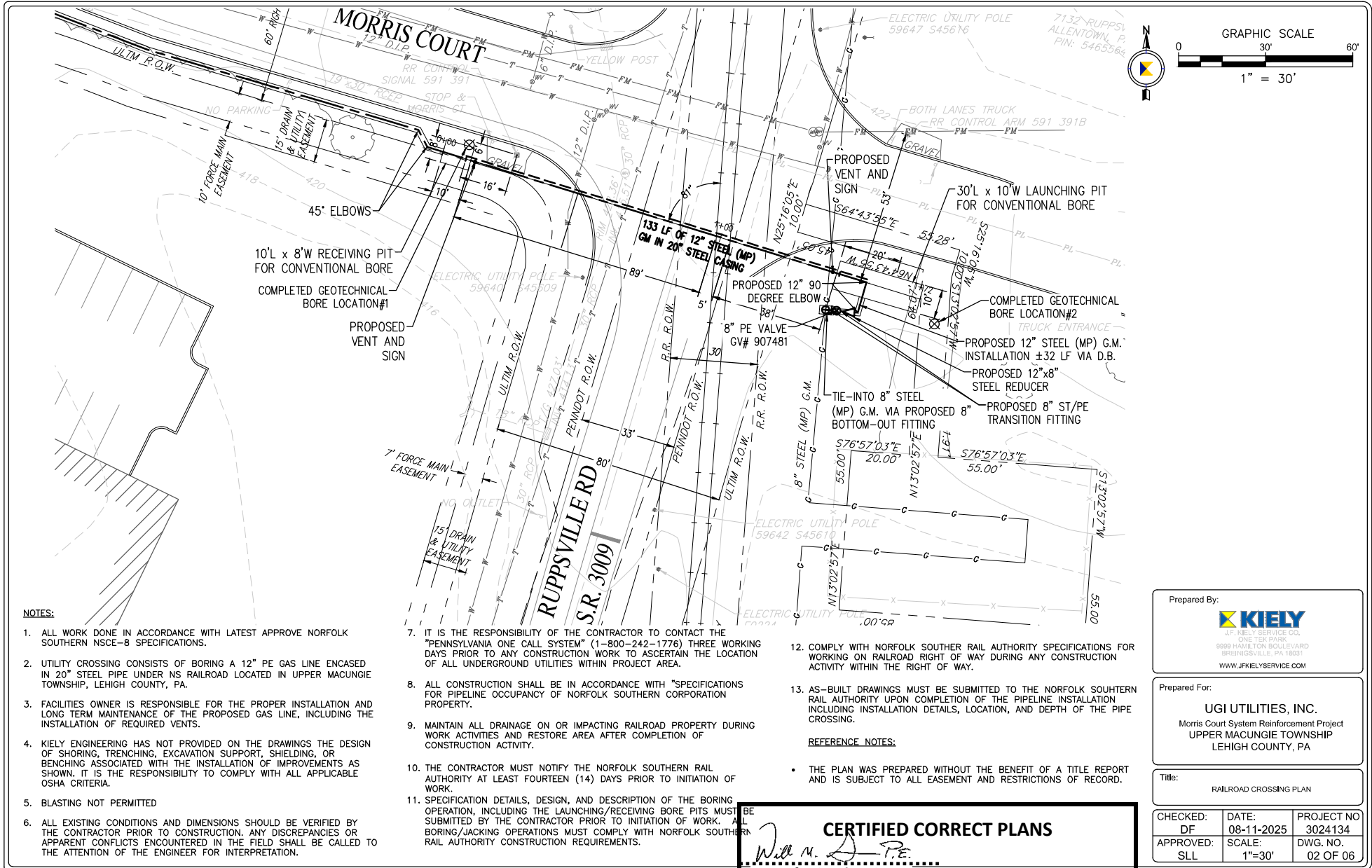


N:\UGI\24-00156 (3024134) UGI Morris Court\300 Design Drawings\310 Working Folder\Railroad Set - 2025-05-13.dwg Oct 01, 2025-11:13pm



**CERTIFIED CORRECT PLANS**

*Will M. J. P.E.*

Professional Engineer  
Approved by **Bureau of Technical Utility Services**

**PA PUBLIC UTILITY COMMISSION**

ATTEST *Matthew L. Hunsicker*  
Secretary

Prepared By:

**KIELY**  
J.F. KIELY SERVICE CO.  
ONE TEB PARK  
9999 HAMILTON BOULEVARD  
BRENNISVILLE, PA 18031  
WWW.JFKIELYSERVICE.COM

Prepared For:

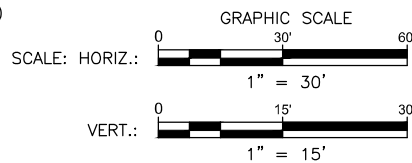
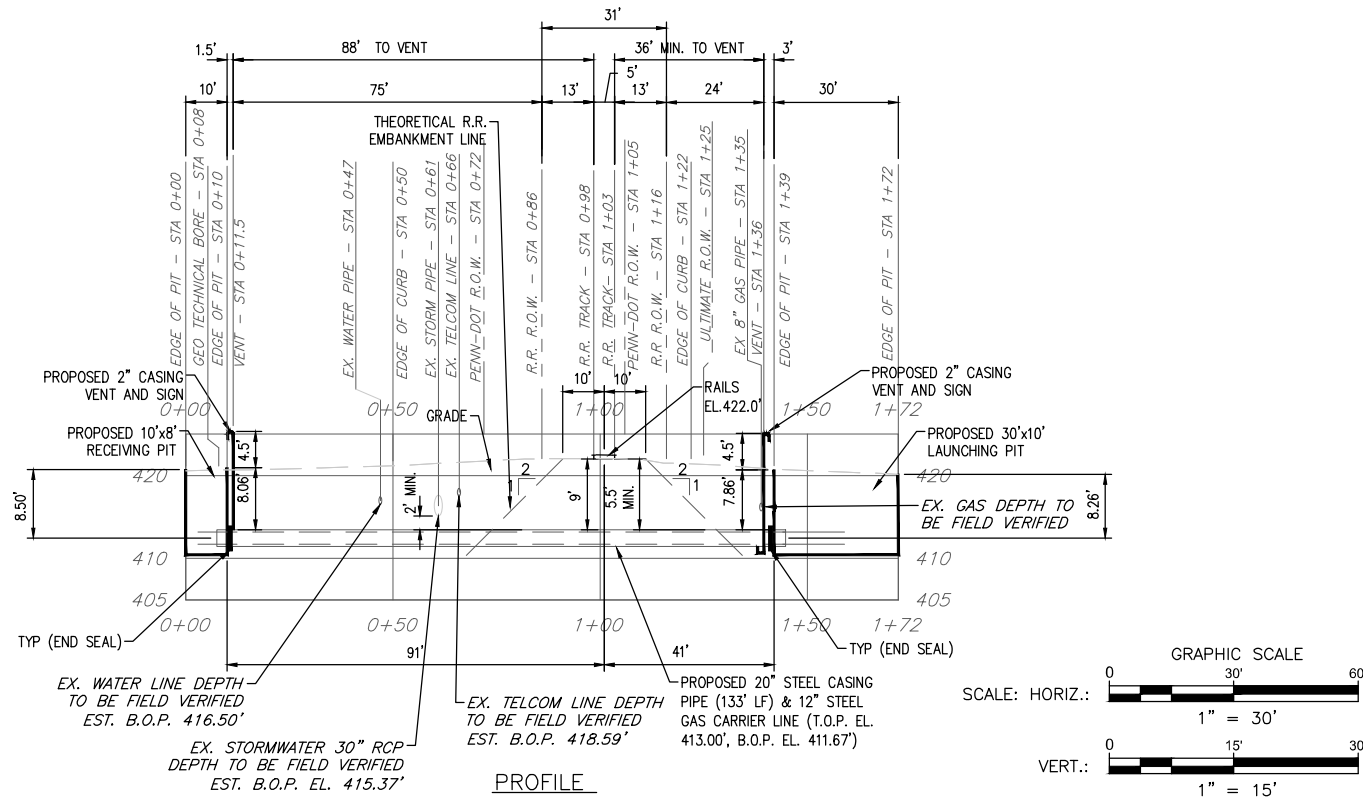
**UGI UTILITIES, INC.**  
Morris Court System Reinforcement Project  
UPPER MACUNGIE TOWNSHIP  
LEHIGH COUNTY, PA

Title:

RAILROAD CROSSING PLAN

CHECKED: DF	DATE: 08-11-2025	PROJECT NO 3024134
APPROVED: SLL	SCALE: 1"=30'	DWG. NO. 02 OF 06

N:\UGI\24-00156 (3024134) UGI Morris Court\300 Design Drawings\310 Working Folder\Railroad Set - 2025-05-13.dwg



**GENERAL NOTES:**

1. ALL EXISTING CONDITIONS AND DIMENSIONS SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES OR APPARENT CONFLICTS ENCOUNTERED IN THE FIELD SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER FOR INTERPRETATION.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE "PENNSYLVANIA ONE CALL SYSTEM" (1-800-242-1776) THREE WORKING DAYS PRIOR TO ANY CONSTRUCTION WORK TO ASCERTAIN THE LOCATION OF ALL UNDERGROUND UTILITIES WITHIN PROJECT AREA.
3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "SPECIFICATIONS FOR PIPELINE OCCUPANCY OF NORFOLK SOUTHERN RAIL AUTHORITY PROPERTY.
4. MAINTAIN ALL DRAINAGE ON OR IMPACTING RAILROAD PROPERTY DURING WORK ACTIVITIES AND RESTORE AREA AFTER COMPLETION OF CONSTRUCTION ACTIVITY.
5. THE CONTRACTOR MUST NOTIFY THE NORFOLK SOUTHERN RAIL AUTHORITY AT LEAST FOURTEEN (14) DAYS PRIOR TO INITIATION OF WORK.

6. SPECIFICATION DETAILS, DESIGN, AND DESCRIPTION OF THE BORING OPERATION, INCLUDING THE LAUNCHING/RECEIVING BORE PITS MUST BE SUBMITTED BY THE CONTRACTOR PRIOR TO INITIATION OF WORK. ALL BORING/JACKING OPERATIONS MUST COMPLY WITH NORFOLK SOUTHERN RAIL AUTHORITY CONSTRUCTION REQUIREMENTS.

7. COMPLY WITH NORFOLK SOUTHERN RAIL AUTHORITY SPECIFICATIONS FOR WORKING ON RAILROAD RIGHT OF WAY DURING ANY CONSTRUCTION ACTIVITY WITHIN THE RIGHT OF WAY OF THE NORTH SHORE RAILROAD.

8. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE NORFOLK SOUTHERN RAIL AUTHORITY UPON COMPLETION OF THE PIPELINE INSTALLATION INCLUDING INSTALLATION DETAILS, LOCATION, AND DEPTH OF THE PIPE CROSSING.

**REFERENCE NOTES:**

1. THE PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ALL EASEMENT AND RESTRICTIONS OF RECORD.

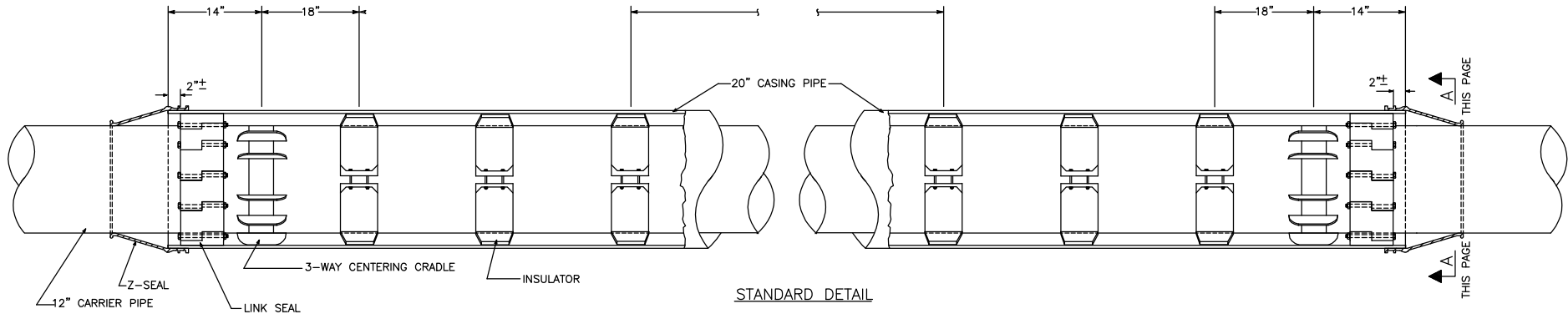
Prepared By:  
  
 J.F. KIELY SERVICE CO.  
 ONE TEK PARK  
 9999 HAMILTON BOULEVARD  
 BRENNIGSVILLE, PA 18031  
 WWW.JFKIELYSERVICE.COM

Prepared For:  
**UGI UTILITIES, INC.**  
 Morris Court System Reinforcement Project  
 UPPER MACUNGIE TOWNSHIP  
 LEHIGH COUNTY, PA

Title:  
 RAILROAD PROFILE PLAN

CHECKED: DF	DATE: 08-11-2025	PROJECT NO 3024134
APPROVED: SLL	SCALE: AS NOTED	DWG. NO. 03 OF 06

N:\UGI\24-00156 (3024134) UGI Morris Court\300 Design Drawings\310 Working Folder Railroad Set - 2025-05-13.dwg  
Oct 01, 2025-1:15pm

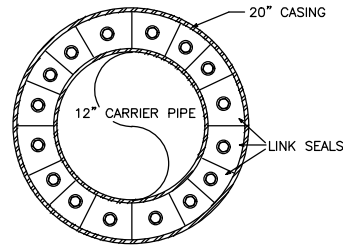


STANDARD DETAIL

**CASING INSTALLATION:**

IF CASING IS REQUIRED, THE FOLLOWING STEPS SHALL BE TAKEN TO PROTECT THE CARRIER PIPE AND PREVENT CASING SHORTS:

1. INSPECT CASING PIPE TO INSURE THAT IT IS FREE OF WELD PROTRUSIONS OR OTHER OBSTRUCTIONS THAT MIGHT CAUSE DAMAGE TO THE COATING OR PIPE DURING INSERTION.
2. INSTALL CASING BY BORING.
3. INSTALL 2" WELDED CASING VENT CONNECTIONS TO EACH END OF THE CASING. ATTACH ONE VENT TO THE TOP OF THE CASING AT THE HIGHER ELEVATION AND THE OTHER TO THE BOTTOM OF THE CASING AT THE LOWER ELEVATION. THE ABOVEGROUND PORTION OF THE PIPE VENT MUST BE PROTECTED IN SUCH A MANNER SO AS TO PREVENT FOREIGN MATERIAL OR WATER FROM ENTERING THE VENT PIPE. EXTEND VENTS ABOVE THE FLOOD PLAIN WHENEVER THIS FEASIBLE.
4. CLEAR THE CASING OF MUD, WATER AND DEBRIS TO PREVENT DAMAGE TO THE CARRIER PIPE ITS COATING AND SPACER DURING INSERTION.
5. INSTALL CASING SPACERS UNIFORMLY AT A SPACING OF APPROXIMATELY 8 FEET OR AT A INTERVAL APPROVED BY ENGINEERING. ALSO PLACE ON SPACER NEAR EACH END OF THE CASING, A FOOT OR TWO FROM THE LINK SEALS. CONTINUITY TESTS SHALL BE MADE BY A CORROSION TECHNICIAN TO VERIFY THAT THE CASING IS ELECTRICALLY ISOLATED FROM THE CARRIER PIPE. IF THE CASING IS SHORTED, CLEAR THE CASING SHORT.
6. PLACE PROPERLY SIZED LINK SEALS AND "Z" TYPE CASING END SEALS AT THE ENDS OF EACH CASING.
7. CHECK THE END-SEALS LINK SEALS FOR TIGHTNESS BY APPLYING AN AIR TEST OF 5 PSIG FOR 15 MINUTES, USING ON CASING VENT TO APPLY THE TEST, PRIOR TO BACK FILLING. SECURE THE OTHER VENT WITH AN END CAP.
8. TO PREVENT SETTLING OF THE CARRIER PIPE, PLACE SANDBAGS OR OTHER SUPPORT UNDER EACH END THE CARRIER PIPE, NEAR THE ENDS OF THE CASING. BACKFILL THE CASING AND PERFORM A CONTINUITY TEST TO VERIFY THAT THE PIPE IS NOT SHORTED TO THE CASING. IF THE PIPE IS SHORTED, CONTACT ENGINEERING FOR REMEDIAL MEASURES TO BE TAKEN.



SECTION "A-A"

Prepared By:



J.F. KIELY SERVICE CO.  
ONE TEB PARK  
9999 HAMILTON BOULEVARD  
BRENNISVILLE, PA 18031  
WWW.JFKIELYSERVICE.COM

Prepared For:

**UGI UTILITIES, INC.**  
Morris Court System Reinforcement Project  
UPPER MACUNGIE TOWNSHIP  
LEHIGH COUNTY, PA

Title:

RAILROAD DETAILS

CHECKED: DF	DATE: 08-11-2024	PROJECT NO 3024134
APPROVED: SLL	SCALE: NTS	DWG. NO. 04 OF 06