

# **COMMISSIONERS:**

ANTHONY HABERMEHL - CHAIRMAN DALE APPELMAN LOUIE KING EDDIE KERN TIMOTHY SWEENEY DIANA MORAN - OFFICE MANAGER MICHAEL BROTHERS - FIELD MANAGER

# AUGUSTA SUPPLY LINE PROJECT CHANGE ORDER #1

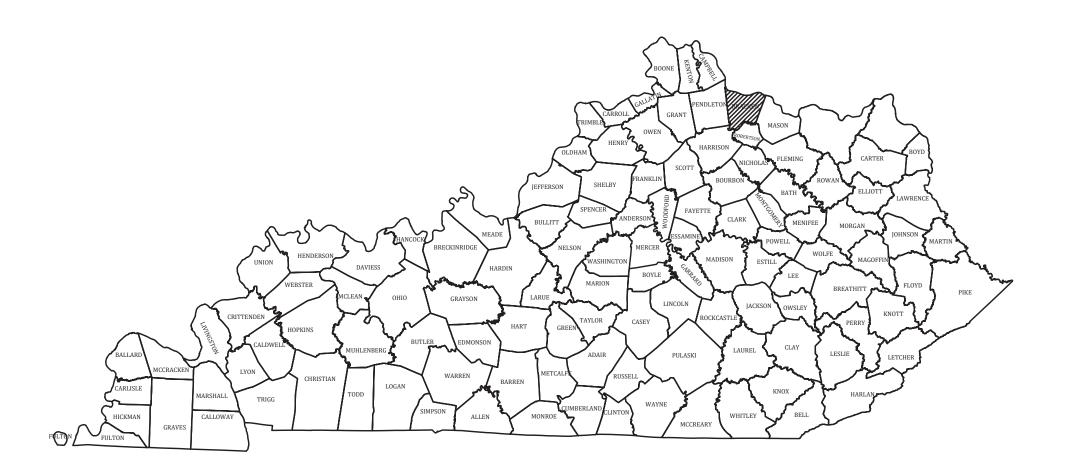
# FOR THE **BRACKEN COUNTY WATER DISTRICT**

# **OCTOBER 2021**

**PREPARED BY:** 



222 East Main Street, Ste. 1 · Georgetown, KY 40324



**RECORD DRAWINGS** 

TO THE BEST OF OUR KNOWLEDGE. INFORMATION A E ASSUMED RELIABLE, THE DESIGN PROFESSIONA ANNOT AND DOES NOT WARRANT THEIR ACCURACY

Y: BLUEGRASS ENGINEERING, PLLC

## **PROJECT NO. 19025**

| MINE THE  | $\left( \right)$ |   |   |
|---|------------------|---|---|
| DETER   |                  |   | GENER   |
| BAR SHALL BE USED TO DETERMINE  |                  | • | CONTRACT(<br>(MINIMUM) E  |
| L BE U  |                  | • | CONTRACTO<br>COUNTY AN  |
| R SHAL  |                  | • | THE CONTR   |
| C SCALE BA  |                  | • | EXISTING U<br>THEREFORE<br>CATHODIC F   |
| GRAPHI  |                  | • | ALL CONSTI<br>PLANS AND<br>APPROVAL   |
| THE.  |                  | • | SHOP DRAV   |
| LISTED SCALE. THE GRAPHIC SCALE   |                  | • | EXISTING U<br>RESPONSIB<br>REPRESENT  |
| S OF THE  |                  | • | THE CONTR<br>AND ALL OT<br>RESPONSIB<br>CONSTRUC                                |
| CCURACI   |                  | • | UNLESS OTI<br>FITTINGS IN<br>ETC. CONTF   |
| INTRODUCE INACCURACIE<br>ACTUAL SCALE.  |                  | • | CONTRACTO<br>BUILDINGS,<br>ACTIVITIES.  |
| INTRO<br>ACTU,  |                  | • | CONTRACTO   |
|   |                  | • | ALL PIPING  |
| ALTER THIS DRAWING WITHOUT WRITTEN PERMISSION<br>TING UNDER THE DIRECTION OF A LICENSED ENGINEER.<br>22   |                  | • | WHERE UNS<br>FIVE (5) FEE<br>SHEETING,<br>NOT NOT BE<br>UNLESS OT<br>ACT AND TH |
| WRITTE<br>A LICEN   |                  | • | ALL EXCAVA<br>SUM BID.  |
| HOUT<br>N OF  |                  | • | REGRADE C   |
| ING WIT   |                  | • | BACKFILL A<br>AND PONDII<br>STRUCTURE   |
| 'HIS DRAW<br>DER THE D  |                  | • | DIMENSION<br>CONTRACTO<br>CONSTRUC  |
| LTER T<br>NG UN   |                  | • | ALL VALVES  |
| N TO AL<br>D ACTIN<br>7/01/22   |                  | • | FINAL LOCA  |
| PERSON<br>LLC ANE<br>BE   |                  | • | NO PAY ITEI<br>THE ADDITIO  |
| )R ANY<br>RING, P<br>01.dwg   |                  | • | ROCK SOUN   |
| IT IS A VIOLATION OF LAW FOR ANY PERSON TO<br>FROM BLUEGRASS ENGINEERING, PLLC AND AC<br>rd Drawings\Change Order\19025-01.dwg BE 7/01/   |                  | • | CONTRACTO<br>CONSTRUC<br>CUSTOMER   |
| ION O<br>RASS I<br>nge Or   |                  | • | CONNECTIO   |
| VIOLAT<br>BLUEGI<br>ings\Cha  |                  |   | A. CON<br>INST<br>TO T  |
| IT IS A<br>FROM<br>ecord Draw   |                  |   | B. CON<br>FITT<br>WAT   |
| WG\R6   |                  | • | NO BLASTIN  |
| Line\D  |                  | • | GRIP RINGS  |
| Supply  |                  | • | ALL PVC CA  |
| IT IS A VIOLATION OF LAW FOR ANY<br>FROM BLUEGRASS ENGINEERING, F<br>ECTS\Bracken County Water District\19025 - Augusta Supply Line\DWG\Record Drawings\Change Order\19025-01.dwg |                  |   |   |
| n County W  |                  |   |   |
| S\Bracke  |                  |   |   |
| ECTS  |                  |   |   |

| AL NOTES   | GEN  |
|--|--|
|  | COPI<br>METE                               |
|  | A NC<br>ABO                                |
| RACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION PLANS ON THE JOB SITE DURING   | THE<br>THE                                 |
|  | THE<br>OR R<br>ALL F                       |
| TRUCTION AND INSTALLATION OF MATERIALS BEING USED SHALL BE IN CONFORMANCE WITH THE<br>D SPECIFICATIONS. SUBSTITUTIONS AND DEVIATION SHALL BE PERMITTED ONLY WHEN WRITTEN<br>L HAS BEEN ISSUED BY THE ENGINEER.   |  |
| INISTALLATION  | NAL C                                      |
| UN<br>JTILITIES HAVE BEEN SHOWN IN THEIR APPROXIMATE LOCATION. CONTRACTOR SHALL BE<br>BLE FOR LOCATING ALL UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH A<br>MANUAL WHEN WORKING NEAR EXISTING UTILITIES  | NLESS<br><u>KEP</u><br>NGE<br>ATER<br>HALL |
| RACTOR SHALL PROTECT ALL UTILITIES AND OTHER IMPROVEMENTS SHOWN ON THESE PLANS<br>THER UTILITIES AND OTHER IMPROVEMENTS NOT SHOWN. THE CONTRACTOR SHALL ASSUME ALL<br>BUILTY FOR REPAIRS OF UTILITIES AND OTHER IMPROVEMENTS DAMAGED DURING  | DJACE<br>HE TR<br>RENC<br>EASO             |
|  | EAN<br>PECIF                               |
| TOR SHALL BE RESPONSIBLE FOR THE TEMPORARY REMOVAL/RELOCATION OF TRAILERS,<br>5, FENCES, TREES, SHRUBS, ETC. AND REPLACEMENT OF SAID ITEMS AFTER CONSTRUCTION<br>5.  |  |
| TOR IS TO COORDINATE WITH THE PROPERTY OWNERS AS TO WHETHER OR NOT TEMPORARY<br>S REQUIRED AND CONSTRUCT IF NECESSARY.   |  |
| G SHALL HAVE 30" MINIMUM COVER, 36" MINIMUM COVER W/ IN KYTC R/W.  | )EF  |
| ET, THE SIDES OF THE TRENCH OR EXCAVATION SHALL BE SUPPORTED BY SUBSTANTIAL<br>, BRACING, SHORING OR THE TRENCH SIDES SLOPED. SLOPING THE SIDES OF THE DITCH WILL<br>BE PERMITTED IN STREETS, ROADS, NARROW RIGHTS-OF-WAY OR OTHER CONSTRICTED AREAS<br>THER WISE SPECIFIED. THE STANDARDS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH | ALL<br>CON<br>INCI<br>ALL<br>RIGI          |
|  | ALL  |
|  | ALL<br>THE                                 |
|  | UNE<br>FRC                                 |
| NS, DETAILS AND REINFORCEMENT MAY VARY WITH MANUFACTURER'S RECOMMENDATIONS.<br>TOR SHALL OBTAIN AND MAINTAIN ON SITE, APPROVED SHOP DRAWINGS PRIOR TO BEGINNING<br>CTION.  | UNE<br>BE I<br>CAS                         |
| S & HYDRANTS SHALL BE LOCATED AT THE BACKSIDE OF THE DITCHLINE.  | UNE<br>ASF<br>PEF                          |
| ATION OF SERVICES, VALVES, & HYDRANT ORIENTATION ARE TO BE FIELD LOCATED DURING<br>CTION & APPROVED BY THE ENGINEER.   | DIS  |
| EM FOR EXTRA TRENCH DEPTH HAS BEEN SET UP. CONTRACTOR SHALL INCLUDE THE COST OF<br>TONAL DEPTH IN HIS BID PRICE.   | UNI<br>PA\                                 |
|  | FIRI<br>RIG                                |
| TOR TO DIG/EXPOSE EXISTING WATER MAIN FAR ENOUGH AHEAD OF NEW WATER MAIN<br>CTION TO AVOID DAMAGE TO EXISTING WATER MAIN AND/OR INTERRUPTION OF EXISTING<br>R SERVICES.  |  |
| ONS TO EXISTING DISTRIBUTION SYSTEM SHALL BE MADE AS FOLLOWS:  |  |
| NNECT TO EXISTING (SIZE) W.M. (WET TAP) - CONTRACTOR SHALL PROVIDE, FURNISH AND<br>TALL ALL FITTINGS, VALVES AND APPURTENANCES TO CONNECT THE PROPOSED WATER MAIN<br>THE EXISTING WATER MAIN UNDER PRESSURE.   |  |
| NNECT TO EXISTING (SIZE) W.M CONTRACTOR SHALL PROVIDE, FURNISH AND INSTALL ALL<br>TINGS AND APPURTENANCES TO CONNECT THE PROPOSED WATER MAIN TO THE EXISTING<br>TER MAIN. VALVES ARE A SEPARATE PAY ITEM.  | ND   |
| NG WILL BE PERMITTED ON THIS PROJECT   | SHT.                                       |
|  | 01<br>02                                   |
| ASING SHALL BE MINIMUM OF 4" LARGER THAN CARRIER PIPE  | 03-06                                      |
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## RAL NOTES (CONTINUED)

OF ALL BAC-T RESULTS MUST BE PROVIDED TO THE ENGINEER PRIOR TO RECONNECTS OF ANY

2 AWG INSULATED COPPER LOCATOR WIRE SHALL BE PLACED IN THE TRENCH SIX INCHES ALL PLASTIC LINES. THE INSULATION SHALL BE BLUE FOR WATER. THE WIRE SHALL TAPED TO P OF PIPE AND BE LOOPED INTO ALL VALVE BOXES W/ ENOUGH SLACK TO ALLOW ACCESS TO OPS.

NTRACTOR SHALL BE RESPONSIBLE FOR ANY PLUMBING PERMITS NECESSARY TO RELOCATE ONNECT ANY CUSTOMERS METER SERVICE OR SERVICE LINE. THE CONTRACTOR SHALL OBTAIN RMITS, PAY ALL FEES AND EMPLOY THE NECESSARY LICENSED PLUMBER.

#### ANUP AND RESTORATION

PECIFICALLY APPROVED BY THE OWNER AND ENGINEER, <u>CLEANUP OF DISTURBED AREAS SHALL</u> URRENT WITH CONSTRUCTION AND RESTORATION EFFORTS BY THE CONTRACTOR INITIATED NO HAN SEVEN (7) DAYS AFTER THE TRENCH EXCAVATION WORK HAS STARTED. ALL EXCAVATED NOT REQUIRED FOR BACKFILLING OF THE TRENCH AND ANY LARGE ROCKS, STONES OR DEBRIS REMOVED FROM THE SITE, AND SHALL NOT BE A BURDEN TO THE PROPERTY OWNER(S) AND/OR PROPERTIES. THE CONTRACTOR MAY WINDROW OR TRACK-IN THE EXCAVATED MATERIAL OVER CH PRIOR TO FINAL CLEANUP TO ALLOW FOR AND TO ASSIST IN THE INITIAL SETTLEMENT OF THE LL DISTURBED AREAS MUST BE SEEDED AT LEAST WITH A TEMPORARY SEED MIX IF FOR SOME HE AREA CANNOT BE PERMANENTLY SEEDED WITHIN TWO (2) WEEKS.

RESTORATION OF ALL DISTURBED AREAS OF KYTC ROADWAY SHALL BE COMPLETED PER KYTC TIONS PRIOR TO SHUTDOWN OF LOCAL ASPHALT PLANTS FOR THE WINTER 2020 YEAR.

#### RTMENT OF HIGHWAYS - GENERAL NOTES

ECTED KYTC DITCHLINES SHALL REMAIN FREE OF EXCESS SILT OR EROSION AND RUCTED TO THE NORMAL TYPICAL SECTION OF THE ROADWAY WITH A MINIMUM DEPTH OF 18 FROM THE SHOULDER BREAK POINT.

CESSARY STEPS SHALL BE TAKEN TO PREVENT EROSION OR SILTATION OF THE PUBLIC F-WAY, ADJOINING PROPERTY AND WATERWAYS.

\_VES TO BE FLUSH W/ EXISTING GRADE.

TER LINE LOCATED WITHIN STATE HIGHWAY R.O.W. SHALL BE CONSTRUCTED OUT AND AROUND D OF ALL EXISTING CULVERTS AND HEADWALLS.

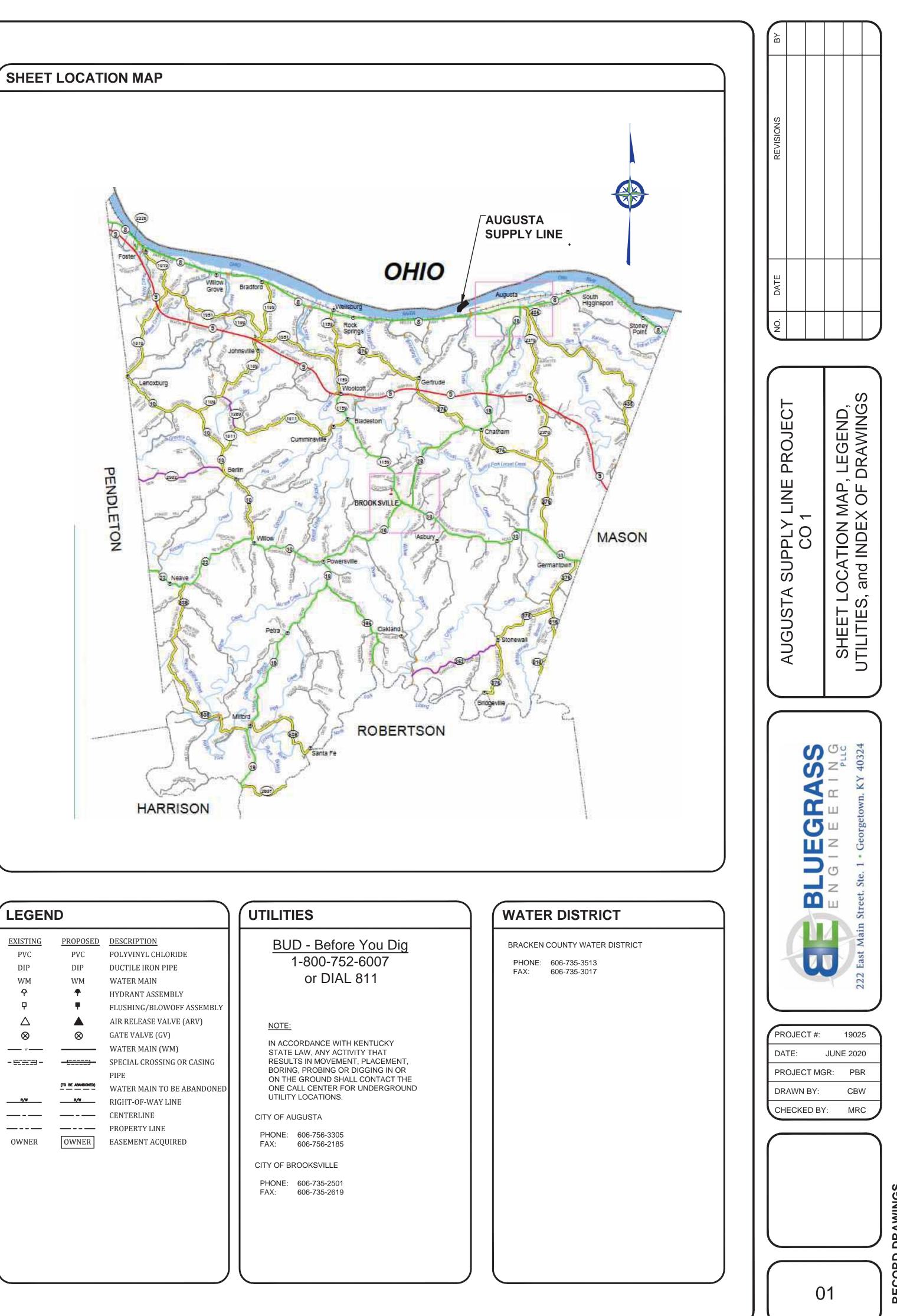
GROUND UTILITIES INSTALLED INSIDE STATE RIGHT-OF-WAY SHALL BE LOCATED WITHIN 3-5 FEET HE EDGE OF THE RIGHT-OF-WAY UNLESS OTHERWISE SHOWN ON THE PLANS.

GROUND UTILITIES SHOWN MORE THAN 5 FEET FROM THE EDGE OF THE RIGHT-OF-WAY SHALL ALLED WITH A MINIMUM DEPTH OF COVER OF 36 INCHES WITH PRIOR APPROVAL ON A CASE BY ASIS.

GROUND UTILITIES CROSSING ANY ENTRANCE OR CROSSROAD PAVED WITH CONCRETE OR SURFACE INSIDE STATE RIGHT-OF-WAY SHALL BE INSTALLED BY BORING UNLESS WRITTEN SION TO OPEN CUT IS OBTAINED FROM THE PROPERTY OWNER AND APPROVED BY THE KYTC T PERMITS ENGINEER.

GROUND UTILITIES SHALL NOT BE INSTALLED IN EMBANKMENT FILLS OR BETWEEN EDGE OF ENT AND DITCHLINE UNLESS SPECIFICALLY NOTED ON PERMITTED PLANS.

DRANTS OR UTILITY SERVICE BOXES SHALL BE LOCATED WITHIN 2 FEET FROM THE EDGE OF DF-WAY LINE, OR OFF RIGHT-OF-WAY.



## **OF DRAWINGS**

NO. COVER

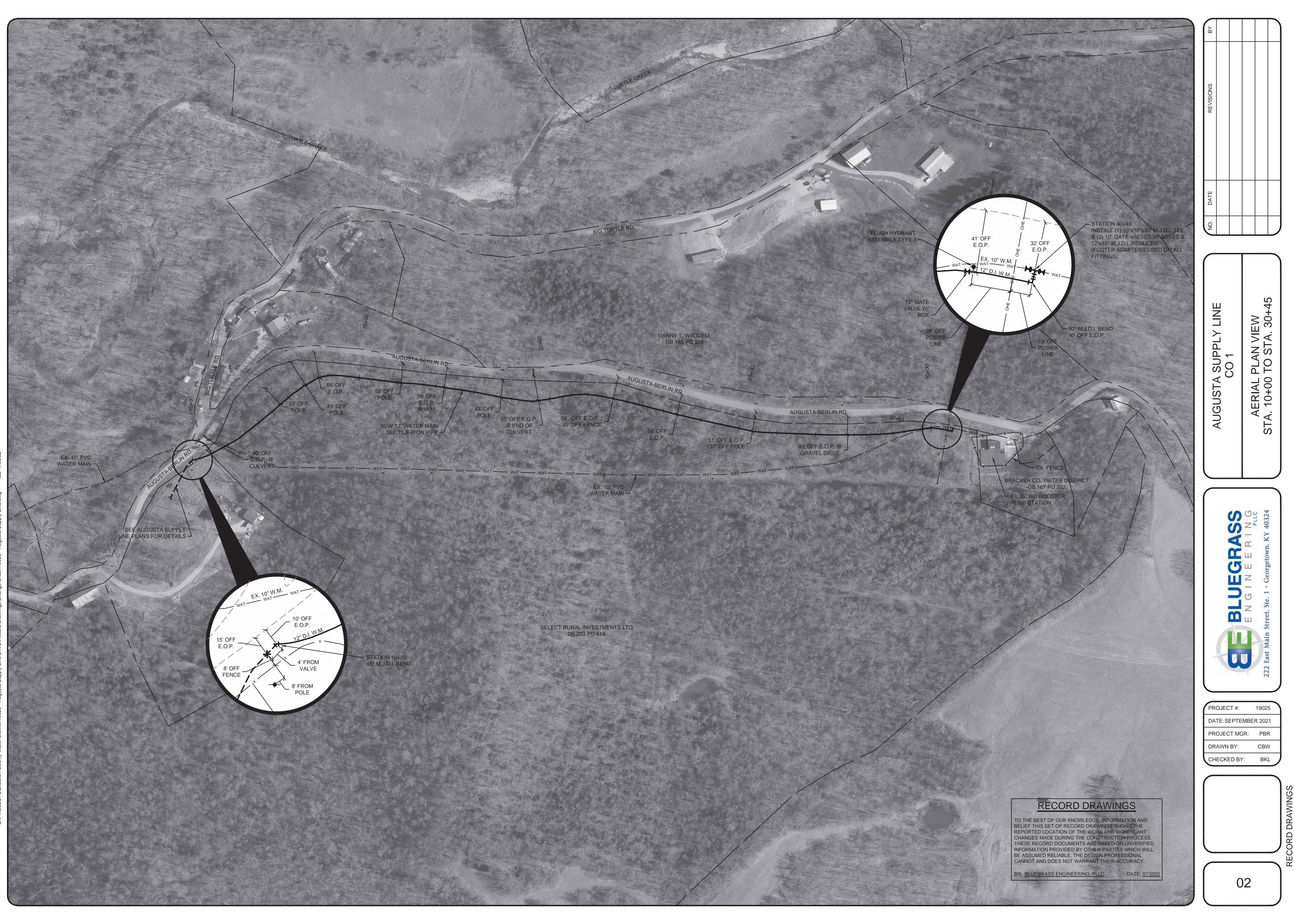
SHEET LOCATION MAP, INDEX OF DRAWINGS, UTILITIES and LEGEND AUGUSTA SUPPLY LINE CO 1 STANDARD DETAILS

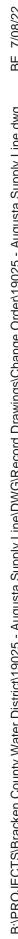
## **RECORD DRAWINGS**

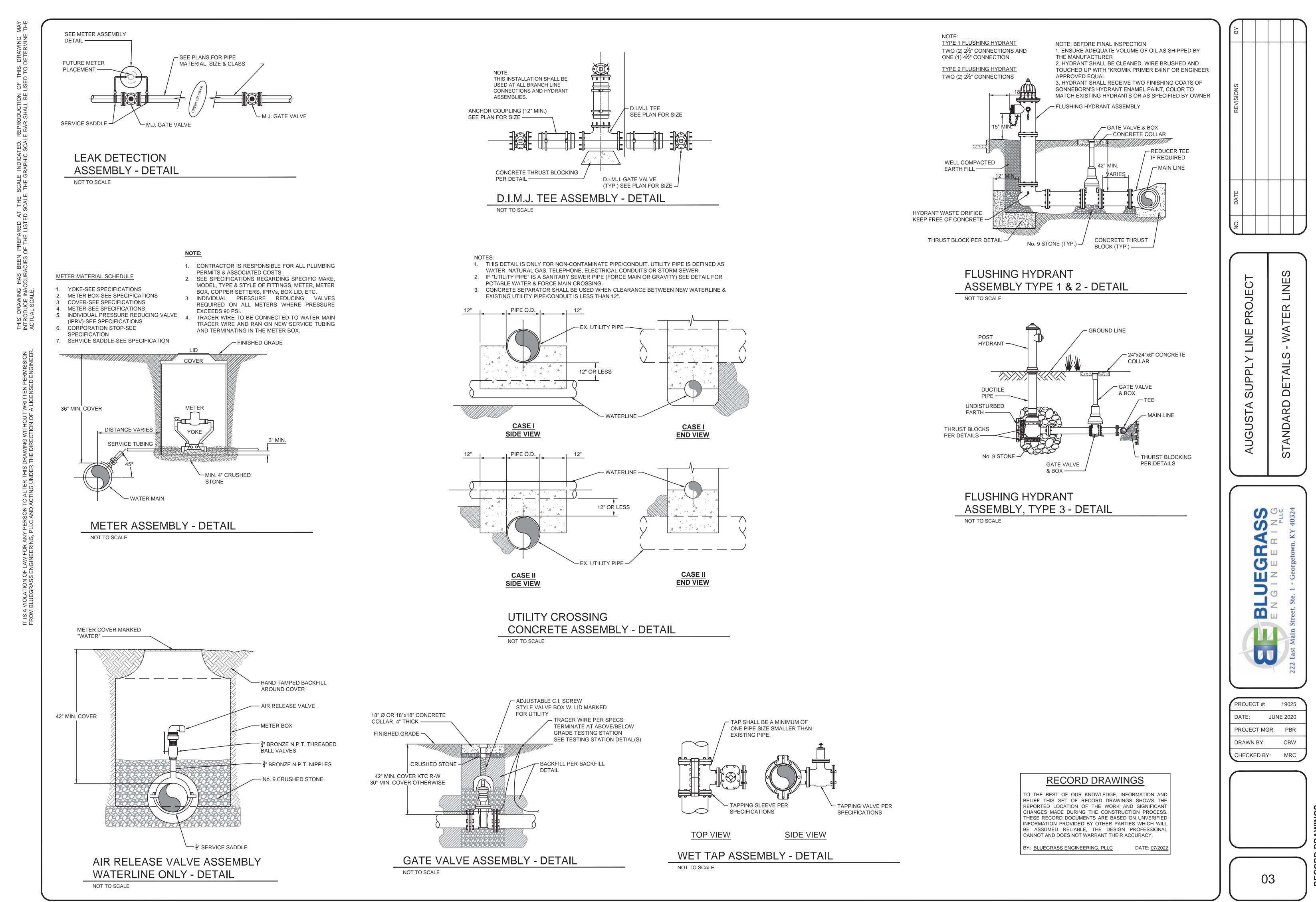
TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF THIS SET OF RECORD DRAWINGS SHOWS THE REPORTED LOCATION OF THE WORK AND SIGNIFICANT CHANGES MADE DURING THE CONSTRUCTION PROCESS. THESE RECORD DOCUMENTS ARE BASED ON UNVERIFIED INFORMATION PROVIDED BY OTHER PARTIES WHICH WILL BE ASSUMED RELIABLE, THE DESIGN PROFESSIONAL CANNOT AND DOES NOT WARRANT THEIR ACCURACY.

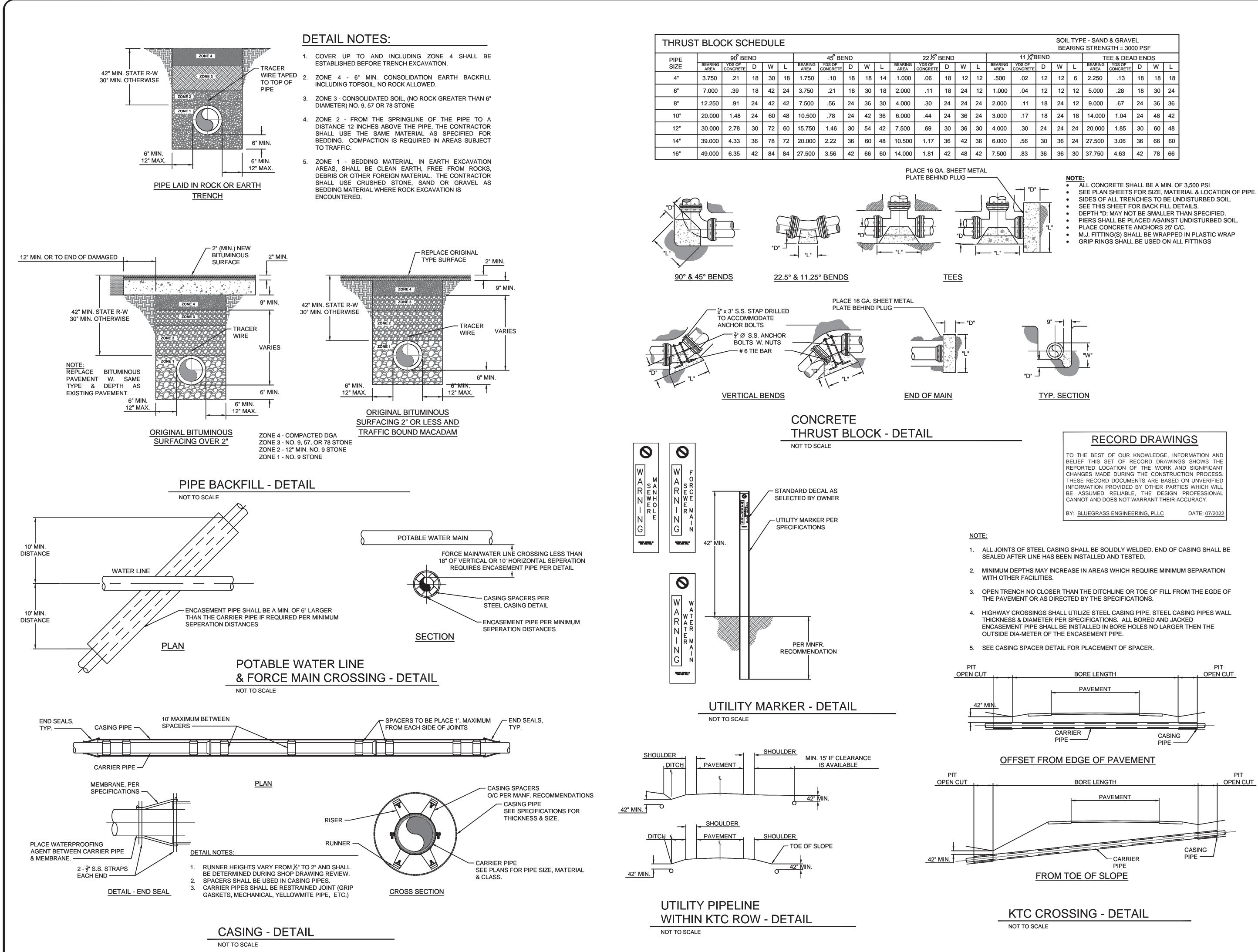
BY: BLUEGRASS ENGINEERING, PLLC DATE: <u>07/2022</u>

| PVC       PVC       POLYVINYL CHLORIDE         DIP       DIP       DUCTILE IRON PIPE         WM       WM       WATER MAIN         ◆       •       HYDRANT ASSEMBLY         □       •       FLUSHING/BLOWOFF ASSEMBLY         △       ▲       AIR RELEASE VALVE (ARV)         ⊗       ⊗       GATE VALVE (GV)         ·····       ·····       SPECIAL CROSSING OR CASING         ·····       ·····       ·····         ·····       ·····       ·····         ·····       ·····       ·····         ·····       ·····       ·····         ·····       ·····       ·····         ·····       ·····       ····· <th>EXISTING</th> <th>PROPOSED</th> <th>DESCRIPTION</th>  | EXISTING         | PROPOSED          | DESCRIPTION                |
|---|------------------|-------------------|----------------------------|
| WM       WM       WATER MAIN         ♀       •       HYDRANT ASSEMBLY         □       •       FLUSHING/BLOWOFF ASSEMBLY         △       ▲       AIR RELEASE VALVE (ARV)         ⊗       ⊗       GATE VALVE (GV)         W       WATER MAIN (WM)         SPECIAL CROSSING OR CASING         PIPE         (***       ***         •       •  | PVC              | PVC               | POLYVINYL CHLORIDE         |
| Ŷ       Ŷ       HYDRANT ASSEMBLY         ╿       I       FLUSHING/BLOWOFF ASSEMBLY         △       ▲       AIR RELEASE VALVE (ARV)         ⊗       ⊗       GATE VALVE (GV)         ✓       ✓       WATER MAIN (WM)         ✓       ✓       SPECIAL CROSSING OR CASING         PIPE       ✓       WATER MAIN TO BE ABANDONED         ✓       KW       RIGHT-OF-WAY LINE         ✓       ✓       PROPERTY LINE  | DIP              | DIP               | DUCTILE IRON PIPE          |
| □         | WM               | WM                | WATER MAIN                 |
| ▲       AIR RELEASE VALVE (ARV)         ⊗       ⊗         W       GATE VALVE (GV)         WATER MAIN (WM)         SPECIAL CROSSING OR CASING         PIPE         (****         ******         ***** <tr< td=""><td>Ŷ</td><td><b>•</b></td><td>HYDRANT ASSEMBLY</td></tr<>  | Ŷ                | <b>•</b>          | HYDRANT ASSEMBLY           |
| Image: Second Control of | P                | Ŧ                 | FLUSHING/BLOWOFF ASSEMBLY  |
| W       WATER MAIN (WM)         V       SPECIAL CROSSING OR CASING         PIPE       (TO BE ADMONED)         WATER MAIN TO BE ABANDONED       WATER MAIN TO BE ABANDONED         R/W       R/W         R/W       RIGHT-OF-WAY LINE         CENTERLINE       PROPERTY LINE  | $\bigtriangleup$ |                   | AIR RELEASE VALVE (ARV)    |
| SPECIAL CROSSING OR CASING<br>PIPE<br>(TO BE ADMODINED)<br>WATER MAIN TO BE ABANDONED<br>WATER MAIN TO BE ABANDONED<br>WATER MAIN TO BE ABANDONED<br>CONTERLINE<br>PROPERTY LINE  | $\otimes$        | $\otimes$         | GATE VALVE (GV)            |
| PIPE (TO BE ABNOONED) WATER MAIN TO BE ABANDONED WATER MAIN TO BE ABANDONED R/W R/W RIGHT-OF-WAY LINE PROPERTY LINE PROPERTY LINE   | w                |                   | WATER MAIN (WM)            |
| (TO BE ABNOONED)       WATER MAIN TO BE ABANDONED   | - ===== -        |                   | SPECIAL CROSSING OR CASING |
| WATER MAIN TO BE ABANDONED           RIGHT-OF-WAY LINE           CENTERLINE           PROPERTY LINE   |                  |                   | PIPE                       |
| CENTERLINE  |                  | (TO BE ABANDONED) | WATER MAIN TO BE ABANDONED |
| PROPERTY LINE   | R/W              | R/W               | RIGHT-OF-WAY LINE          |
|   |                  |                   | CENTERLINE                 |
| OWNER OWNER EASEMENT ACQUIRED   |                  |                   | PROPERTY LINE              |
|   | OWNER            | OWNER             | EASEMENT ACQUIRED          |
|   |                  |                   |                            |

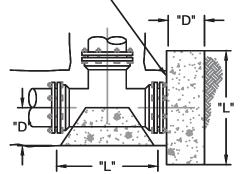


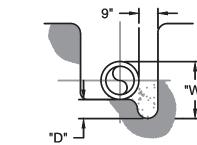




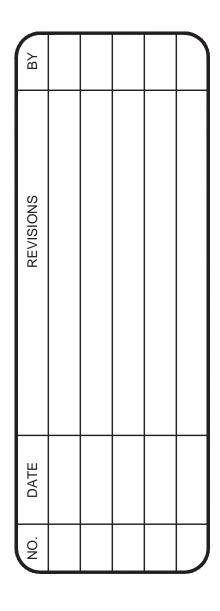


|     |    |    | SOIL TYPE - SAND & GRAVEL<br>BEARING STRENGTH = 3000 PSF |                    |    |    |                 |                 |                    |    |    |    |
|-----|----|----|--|--------------------|----|----|-----------------|-----------------|--------------------|----|----|----|
| END |    |    |  | 11 <b>1/</b> 4BEND |    |    | TEE & DEAD ENDS |                 |                    |    |    |    |
| D   | W  | L  | BEARING<br>AREA  | YDS OF<br>CONCRETE | D  | W  | L               | BEARING<br>AREA | YDS OF<br>CONCRETE | D  | W  | L  |
| 18  | 12 | 12 | .500   | .02                | 12 | 12 | 6               | 2.250           | .13                | 18 | 18 | 18 |
| 18  | 24 | 12 | 1.000  | .04                | 12 | 12 | 12              | 5.000           | .28                | 18 | 30 | 24 |
| 24  | 24 | 24 | 2.000  | .11                | 18 | 24 | 12              | 9.000           | .67                | 24 | 36 | 36 |
| 24  | 36 | 24 | 3.000  | .17                | 18 | 24 | 18              | 14.000          | 1.04               | 24 | 48 | 42 |
| 30  | 36 | 30 | 4.000  | .30                | 24 | 24 | 24              | 20.000          | 1.85               | 30 | 60 | 48 |
| 36  | 42 | 36 | 6.000  | .56                | 30 | 36 | 24              | 27.500          | 3.06               | 36 | 66 | 60 |
| 42  | 48 | 42 | 7.500  | .83                | 36 | 36 | 30              | 37.750          | 4.63               | 42 | 78 | 66 |





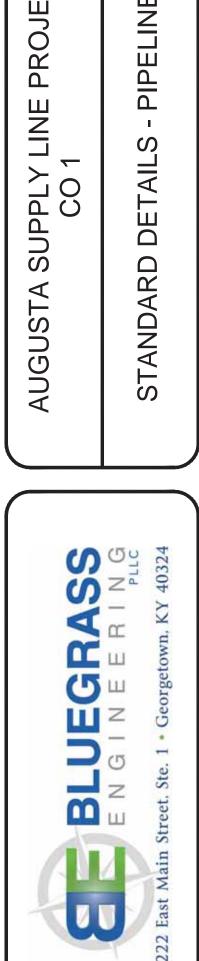


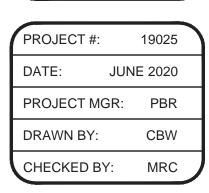


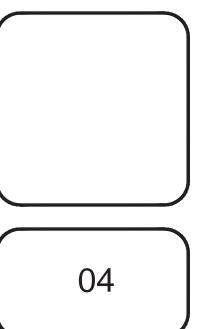
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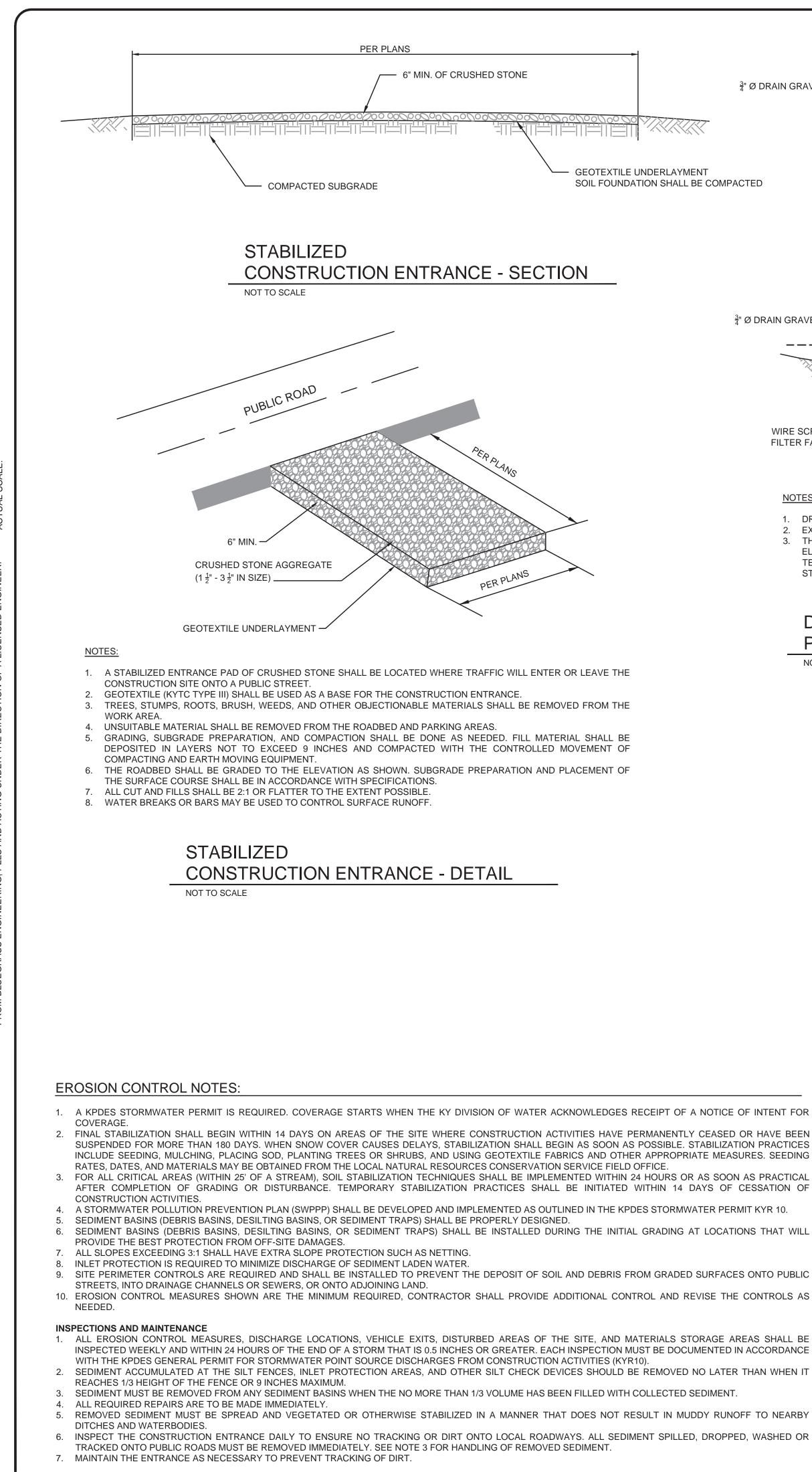
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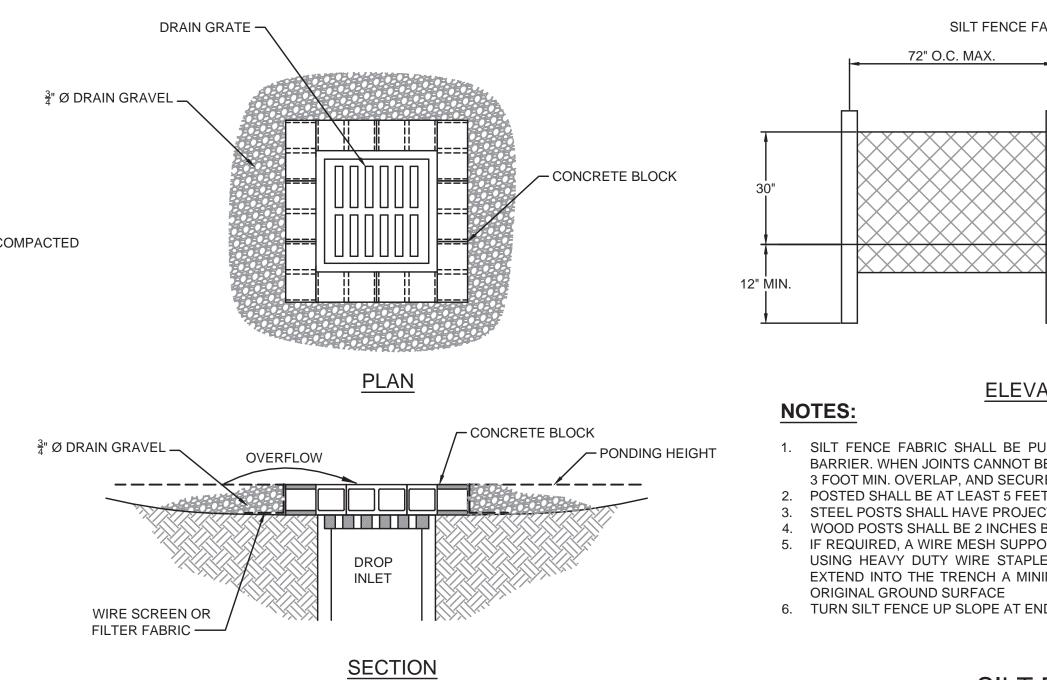
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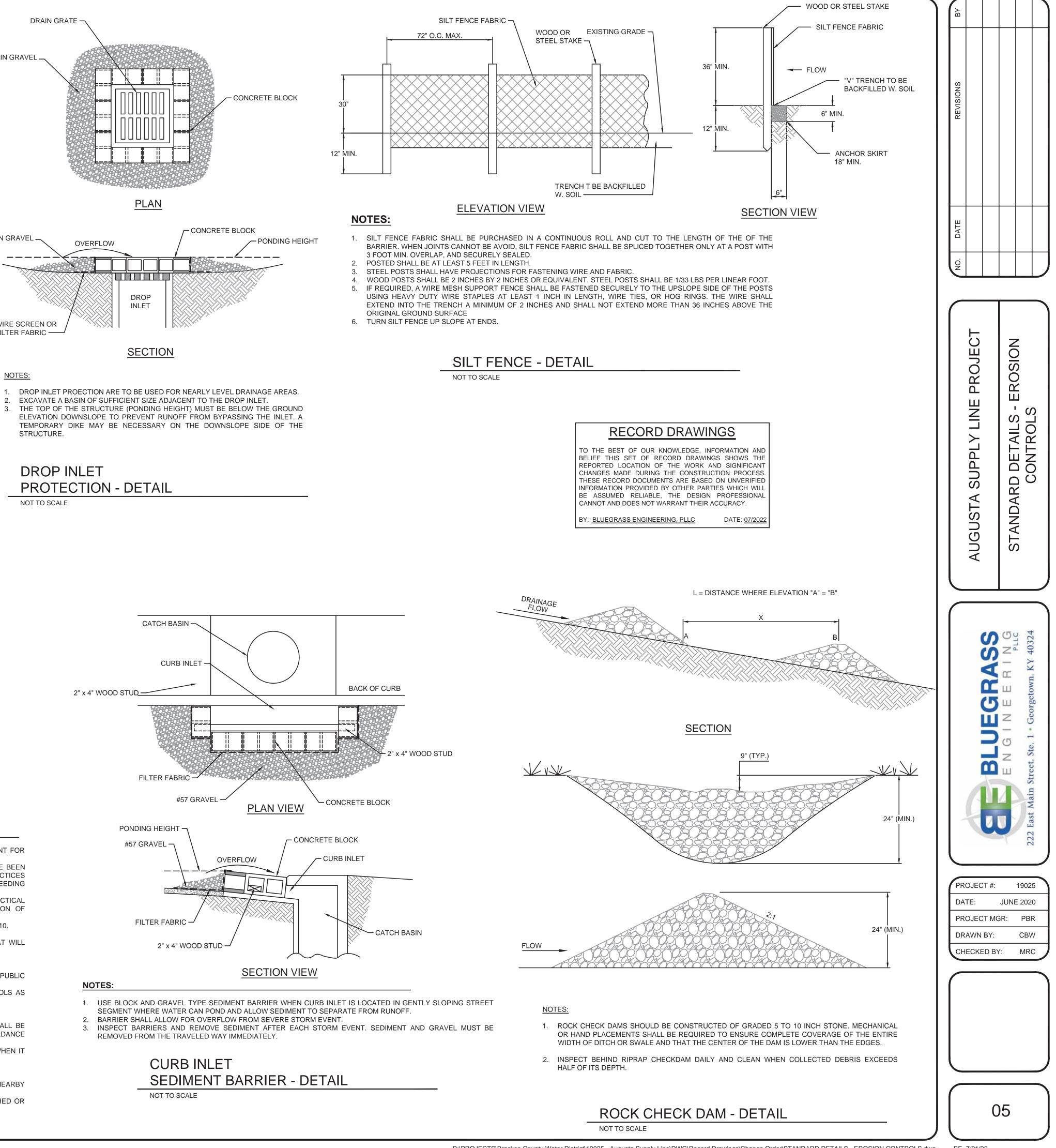


#### NOTES:

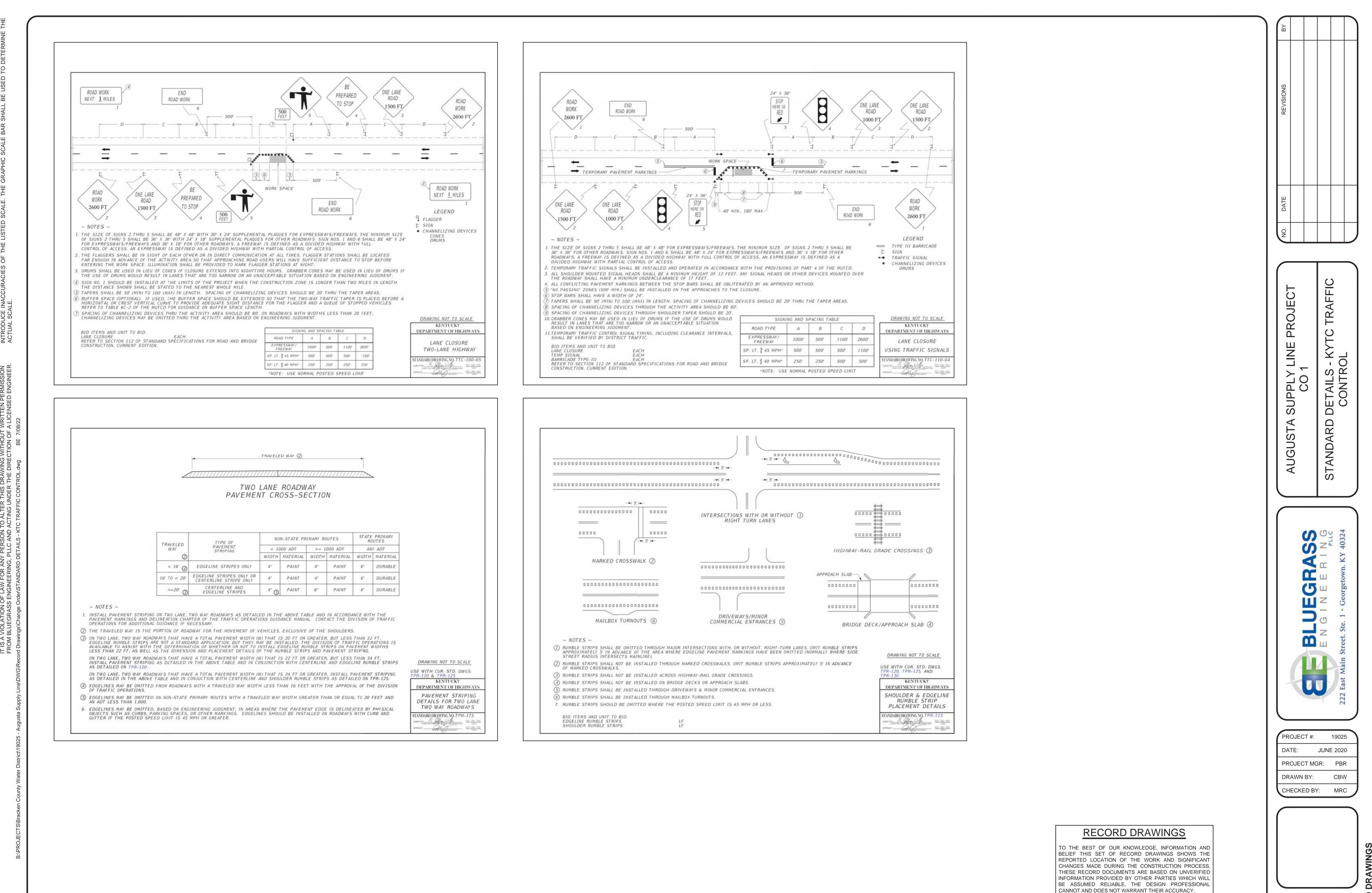
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- 1. DROP INLET PROECTION ARE TO BE USED FOR NEARLY LEVEL DRAINAGE AREAS.
- 3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

### **DROP INLET PROTECTION - DETAIL** NOT TO SCALE



B:\PROJECTS\Bracken County Water District\19025 - Augusta Supply Line\DWG\Record Drawings\Change Order\STANDARD DETAILS - EROSION CONTROLS.dwg BE 7/01/22



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> BY: BLUEGRASS ENGINEERING, PLLC DATE: <u>07/2022</u>

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