AUGUSTA SUPPLY LINE PROJECT

FOR THE BRACKEN COUNTY WATER DISTRICT

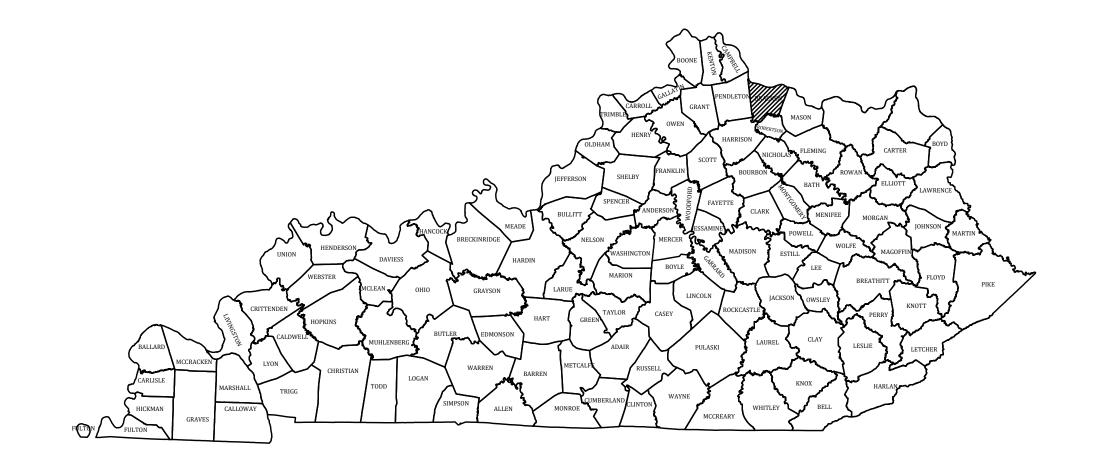
JUNE 2020

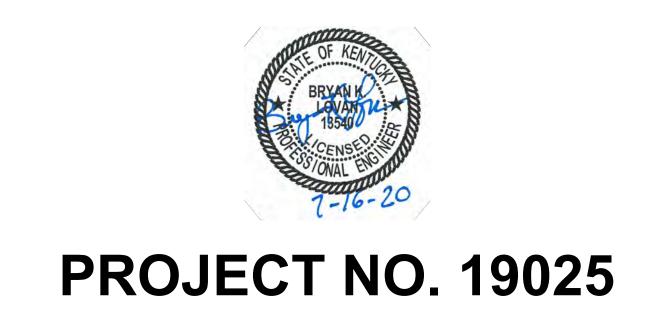
PREPARED BY:

COMMISSIONERS:

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







GENERAL NOTES

COUNTY AND STATE REQUIREMENTS.

- CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND THE ENGINEER TWO WORKING DAYS (MINIMUM) BEFORE BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC IN ACCORDANCE WITH CITY,
- THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION PLANS ON THE JOB SITE DURING ALL PHASES OF CONSTRUCTION.
- EXISTING UTILITIES, ESPECIALLY GAS LINES AND OIL LINES, MAY BE CATHODICALLY PROTECTED. THEREFORE, DUCTILE IRON PIPE, FITTINGS, GATE VALVES, AND/OR BOXES LAID WITHIN 100' OF LINES WITH CATHODIC PROTECTION SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT. MATERIALS AND INSTALLATION SHALL MEET THE REQUIREMENTS OF AWWA'S LATEST REVISION.
- ALL CONSTRUCTION AND INSTALLATION OF MATERIALS BEING USED SHALL BE IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. SUBSTITUTIONS AND DEVIATION SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
- SHOP DRAWINGS OF ALL MATERIALS BEING USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- EXISTING UTILITIES HAVE BEEN SHOWN IN THEIR APPROXIMATE LOCATION. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH A REPRESENTATIVE WHEN WORKING NEAR EXISTING UTILITIES.
- THE CONTRACTOR SHALL PROTECT ALL UTILITIES AND OTHER IMPROVEMENTS SHOWN ON THESE PLANS AND ALL OTHER UTILITIES AND OTHER IMPROVEMENTS NOT SHOWN. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR REPAIRS OF UTILITIES AND OTHER IMPROVEMENTS DAMAGED DURING CONSTRUCTION.
- UNLESS OTHERWISE NOTED, A SEPARATE BID ITEM HAS NOT BEEN ESTABLISHED FOR FITTINGS. THE FITTINGS INCLUDED BUT NOT LIMITED TO ARE: TEES, BENDS, PLUGS, REDUCERS, CROSSES, COUPLINGS, ETC. CONTRACTORS SHALL INCLUDE THE COST OF THESE ITEMS IN THE BID PRICE FOR THE PIPE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY REMOVAL/RELOCATION OF TRAILERS, BUILDINGS, FENCES, TREES, SHRUBS, ETC. AND REPLACEMENT OF SAID ITEMS AFTER CONSTRUCTION ACTIVITIES.
- CONTRACTOR IS TO COORDINATE WITH THE PROPERTY OWNERS AS TO WHETHER OR NOT TEMPORARY FENCING IS REQUIRED AND CONSTRUCT IF NECESSARY.
- ALL PIPING SHALL HAVE 30" MINIMUM COVER, 36" MINIMUM COVER W/ IN KYTC R/W.
- WHERE UNSTABLE MATERIAL IS ENCOUNTERED OR WHERE THE DEPTH OF EXCAVATION IN EARTH EXCEEDS FIVE (5) FEET, THE SIDES OF THE TRENCH OR EXCAVATION SHALL BE SUPPORTED BY SUBSTANTIAL SHEETING, BRACING, SHORING OR THE TRENCH SIDES SLOPED. SLOPING THE SIDES OF THE DITCH WILL NOT NOT BE PERMITTED IN STREETS, ROADS, NARROW RIGHTS-OF-WAY OR OTHER CONSTRICTED AREAS UNLESS OTHER WISE SPECIFIED. THE STANDARDS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT AND THE KENTUCKY LABOR CABINET SHALL BE FOLLOWED.
- ALL EXCAVATION IS UNCLASSIFIED. COMPENSATION FOR ALL EXCAVATION SHALL BE INCLUDED IN LUMP
- REGRADE OF SITE SHALL BE SUCH THAT DRAINAGE IS AWAY FROM ALL STRUCTURES.
- BACKFILL AROUND ALL STRUCTURES SHALL BE SUFFICIENTLY COMPACTED TO PRECLUDE SETTLEMENT AND PONDING OF WATER AROUND STRUCTURES AND GRADED TO DIVERT RUNOFF AWAY FROM THE STRUCTURES.
- DIMENSIONS, DETAILS AND REINFORCEMENT MAY VARY WITH MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR SHALL OBTAIN AND MAINTAIN ON SITE, APPROVED SHOP DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
- ALL VALVES & HYDRANTS SHALL BE LOCATED AT THE BACKSIDE OF THE DITCHLINE.
- FINAL LOCATION OF SERVICES, VALVES, & HYDRANT ORIENTATION ARE TO BE FIELD LOCATED DURING CONSTRUCTION & APPROVED BY THE ENGINEER.
- NO PAY ITEM FOR EXTRA TRENCH DEPTH HAS BEEN SET UP. CONTRACTOR SHALL INCLUDE THE COST OF THE ADDITIONAL DEPTH IN HIS BID PRICE.
- ROCK SOUNDINGS WERE NOT PERFORMED BY THE ENGINEER, THE CONTRACTOR SHALL TAKE APPROPRIATE ACTION TO DETERMINE SUBSURFACE CONDITIONS.
- CONTRACTOR TO DIG/EXPOSE EXISTING WATER MAIN FAR ENOUGH AHEAD OF NEW WATER MAIN CONSTRUCTION TO AVOID DAMAGE TO EXISTING WATER MAIN AND/OR INTERRUPTION OF EXISTING CUSTOMER SERVICES.
- CONNECTIONS TO EXISTING DISTRIBUTION SYSTEM SHALL BE MADE AS FOLLOWS:
- A. CONNECT TO EXISTING (SIZE) W.M. (WET TAP) CONTRACTOR SHALL PROVIDE, FURNISH AND INSTALL ALL FITTINGS, VALVES AND APPURTENANCES TO CONNECT THE PROPOSED WATER MAIN TO THE EXISTING WATER MAIN UNDER PRESSURE.
- B. CONNECT TO EXISTING (SIZE) W.M. CONTRACTOR SHALL PROVIDE, FURNISH AND INSTALL ALL FITTINGS AND APPURTENANCES TO CONNECT THE PROPOSED WATER MAIN TO THE EXISTING WATER MAIN. VALVES ARE A SEPARATE PAY ITEM.
- NO BLASTING WILL BE PERMITTED ON THIS PROJECT
- GRIP RINGS AND PLASTIC WRAP SHALL BE INSTALLED ON ALL FITTINGS
- ALL PVC CASING SHALL BE MINIMUM OF 4" LARGER THAN CARRIER PIPE

GENERAL NOTES (CONTINUED)

- COPIES OF ALL BAC-T RESULTS MUST BE PROVIDED TO THE ENGINEER PRIOR TO RECONNECTS OF ANY
- A NO. 12 AWG INSULATED COPPER LOCATOR WIRE SHALL BE PLACED IN THE TRENCH SIX INCHES ABOVE ALL PLASTIC LINES. THE INSULATION SHALL BE BLUE FOR WATER. THE WIRE SHALL TAPED TO THE TOP OF PIPE AND BE LOOPED INTO ALL VALVE BOXES W/ ENOUGH SLACK TO ALLOW ACCESS TO
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PLUMBING PERMITS NECESSARY TO RELOCATE OR RECONNECT ANY CUSTOMERS METER SERVICE OR SERVICE LINE. THE CONTRACTOR SHALL OBTAIN ALL PERMITS, PAY ALL FEES AND EMPLOY THE NECESSARY LICENSED PLUMBER.

FINAL CLEANUP AND RESTORATION

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

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

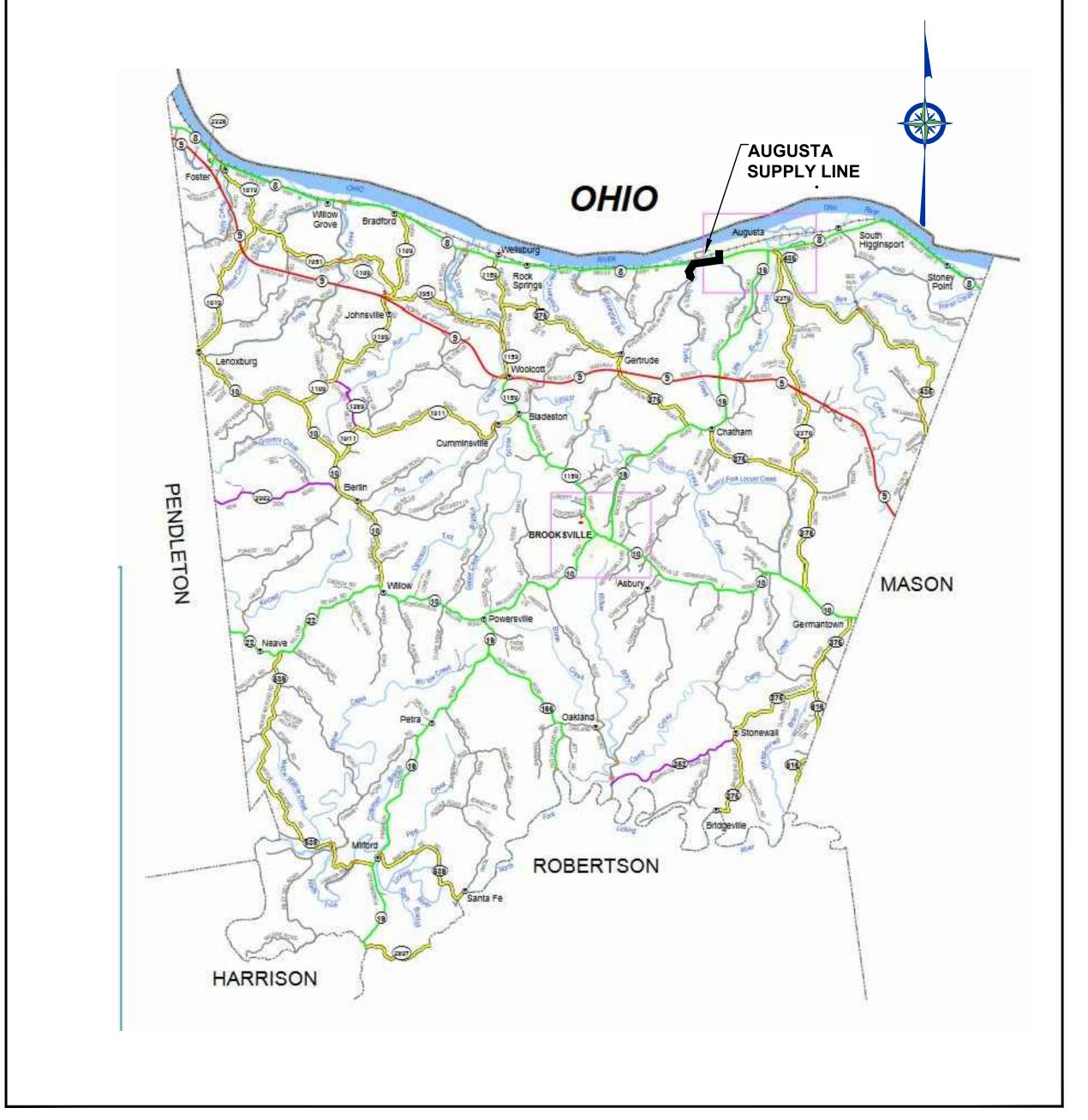
DEPARTMENT OF HIGHWAYS - GENERAL NOTES

- ALL EFFECTED KYTC DITCHLINES SHALL REMAIN FREE OF EXCESS SILT OR EROSION AND CONSTRUCTED TO THE NORMAL TYPICAL SECTION OF THE ROADWAY WITH A MINIMUM DEPTH OF 18 INCHES FROM THE SHOULDER BREAK POINT.
- ALL NECESSARY STEPS SHALL BE TAKEN TO PREVENT EROSION OR SILTATION OF THE PUBLIC RIGHT-OF-WAY, ADJOINING PROPERTY AND WATERWAYS.
- ALL VALVES TO BE FLUSH W/ EXISTING GRADE

DISTRICT PERMITS ENGINEER.

- ALL WATER LINE LOCATED WITHIN STATE HIGHWAY R.O.W. SHALL BE CONSTRUCTED OUT AND AROUND THE END OF ALL EXISTING CULVERTS AND HEADWALLS.
- UNDERGROUND UTILITIES INSTALLED INSIDE STATE RIGHT-OF-WAY SHALL BE LOCATED WITHIN 3-5 FEET FROM THE EDGE OF THE RIGHT-OF-WAY UNLESS OTHERWISE SHOWN ON THE PLANS.
- UNDERGROUND UTILITIES SHOWN MORE THAN 5 FEET FROM THE EDGE OF THE RIGHT-OF-WAY SHALL BE INSTALLED WITH A MINIMUM DEPTH OF COVER OF 36 INCHES WITH PRIOR APPROVAL ON A CASE BY CASE BASIS.
- UNDERGROUND UTILITIES CROSSING ANY ENTRANCE OR CROSSROAD PAVED WITH CONCRETE OR ASPHALT SURFACE INSIDE STATE RIGHT-OF-WAY SHALL BE INSTALLED BY BORING UNLESS WRITTEN PERMISSION TO OPEN CUT IS OBTAINED FROM THE PROPERTY OWNER AND APPROVED BY THE KYTC
- UNDERGROUND UTILITIES SHALL NOT BE INSTALLED IN EMBANKMENT FILLS OR BETWEEN EDGE OF PAVEMENT AND DITCHLINE UNLESS SPECIFICALLY NOTED ON PERMITTED PLANS.
- FIRE HYDRANTS OR UTILITY SERVICE BOXES SHALL BE LOCATED WITHIN 2 FEET FROM THE EDGE OF RIGHT-OF-WAY LINE, OR OFF RIGHT-OF-WAY.

SHEET LOCATION MAP



INDEX OF DRAWINGS

SHEET LOCATION MAP, INDEX OF DRAWINGS, UTILITIES and LEGEND

02-03 AUGUSTA SUPPLY LINE

STANDARD DETAILS

| PVC | PVC | POLYVINYL CHLORIDE |
|-----------|-------------------|----------------------------|
| DIP | DIP | DUCTILE IRON PIPE |
| WM | WM | WATER MAIN |
| Ŷ | ~ | HYDRANT ASSEMBLY |
| ₽ | F | FLUSHING/BLOWOFF ASSEMBL |
| Δ | | AIR RELEASE VALVE (ARV) |
| \otimes | \otimes | GATE VALVE (GV) |
| —— w—— | | WATER MAIN (WM) |
| -== | | SPECIAL CROSSING OR CASING |
| | | PIPE |
| | (TO BE ABANDONED) | WATER MAIN TO BE ABANDON |
| R/W | R/W | RIGHT-OF-WAY LINE |
| I | | |

EXISTING PROPOSED DESCRIPTION

LEGEND

— - — CENTERLINE — - - — PROPERTY LINE OWNER EASEMENT ACQUIRED OWNER

UTILITIES

BUD - Before You Dig 1-800-752-6007 or DIAL 811

IN ACCORDANCE WITH KENTUCKY STATE LAW, ANY ACTIVITY THAT RESULTS IN MOVEMENT, PLACEMENT, BORING, PROBING OR DIGGING IN OR ON THE GROUND SHALL CONTACT THE ONE CALL CENTER FOR UNDERGROUND UTILITY LOCATIONS.

CITY OF AUGUSTA

PHONE: 606-756-3305 FAX: 606-756-2185 CITY OF BROOKSVILLE PHONE: 606-735-2501 FAX: 606-735-2619

WATER DISTRICT

PHONE: 606-735-3513 FAX: 606-735-3017

BRACKEN COUNTY WATER DISTRICT

PROJECT #: JUNE 2020 PROJECT MGR: PBR DRAWN BY:

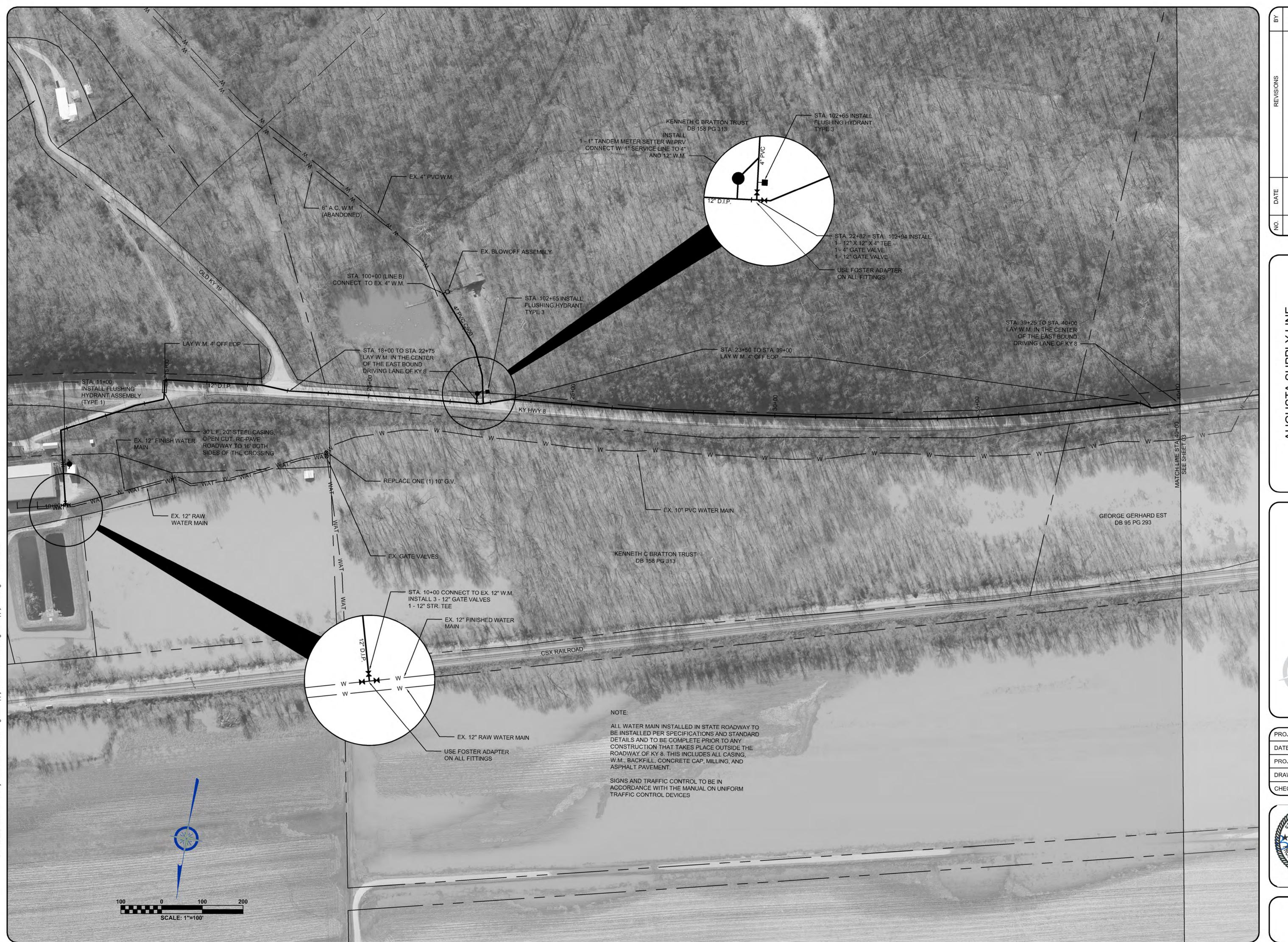
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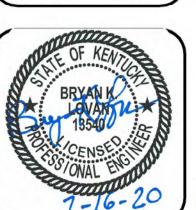
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AUGUSTA

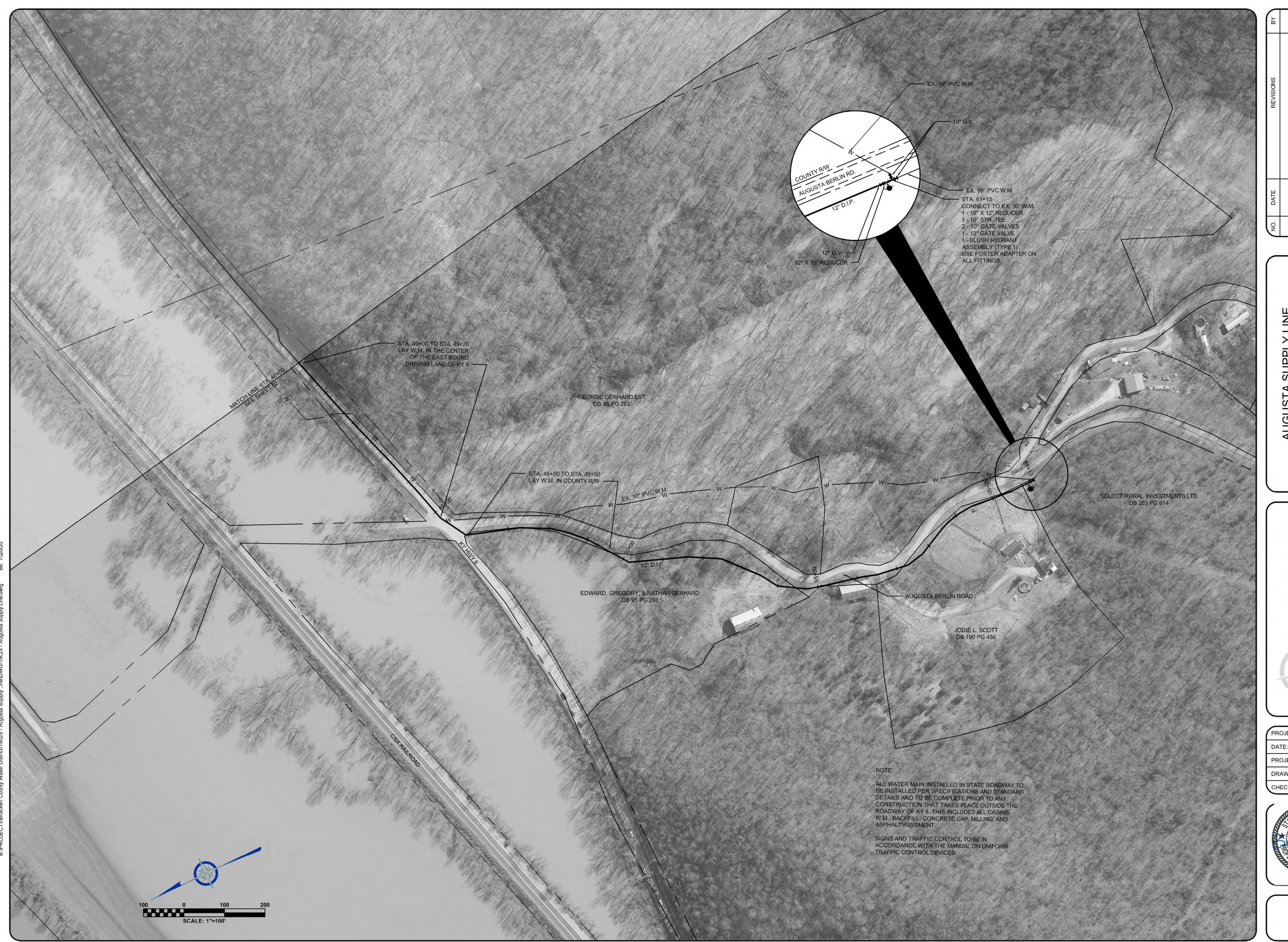
PLAN VIEW TO STA. 40+ ERIAL 10+00



| PROJECT#: | 19025 |
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| DATE: | JUNE 2020 |
| PROJECT M | GR: PBR |
| DRAWN BY: | CBW |
| CHECKED B | y. MRC |







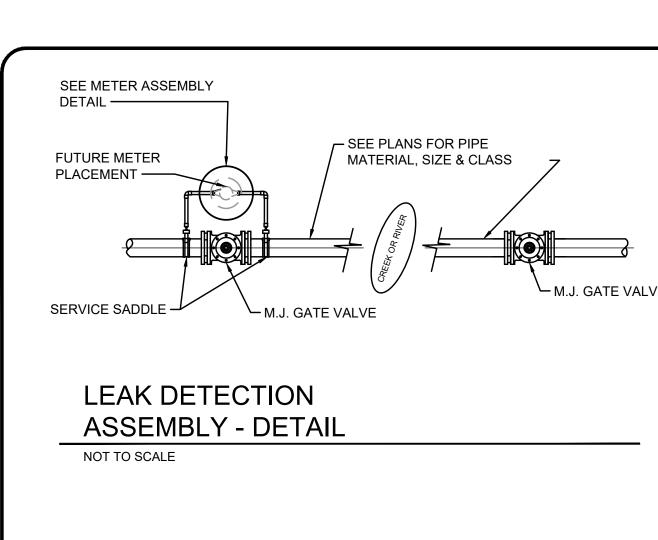
PLAN VIEW TO STA. 61+ AUGUSTA ERIAL 40+00

PROJECT #: DATE: JUNE 2020 PROJECT MGR: PBR

DRAWN BY: CHECKED BY: MRC







METER MATERIAL SCHEDULE

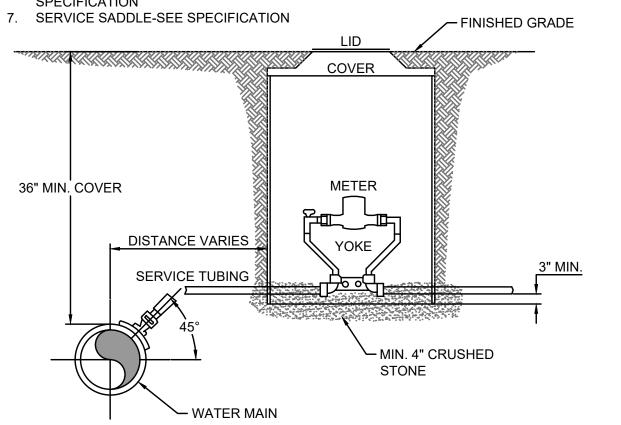
YOKE-SEE SPECIFICATIONS

- METER BOX-SEE SPECIFICATIONS 3. COVER-SEE SPECIFICATIONS
- 4. METER-SEE SPECIFICATIONS
- (IPRV)-SEE SPECIFICATIONS 6. CORPORATION STOP-SEE **SPECIFICATION**

PERMITS & ASSOCIATED COSTS. 2. SEE SPECIFICATIONS REGARDING SPECIFIC MAKE, MODEL, TYPE & STYLE OF FITTINGS, METER, METER BOX, COPPER SETTERS, IPRVs, BOX LID, ETC. 3. INDIVIDUAL PRESSURE REDUCING VALVES REQUIRED ON ALL METERS WHERE PRESSURE EXCEEDS 90 PSI. 5. INDIVIDUAL PRESSURE REDUCING VALVE
4. TRACER WIRE TO BE CONNECTED TO WATER MAIN

1. CONTRACTOR IS RESPONSIBLE FOR ALL PLUMBING

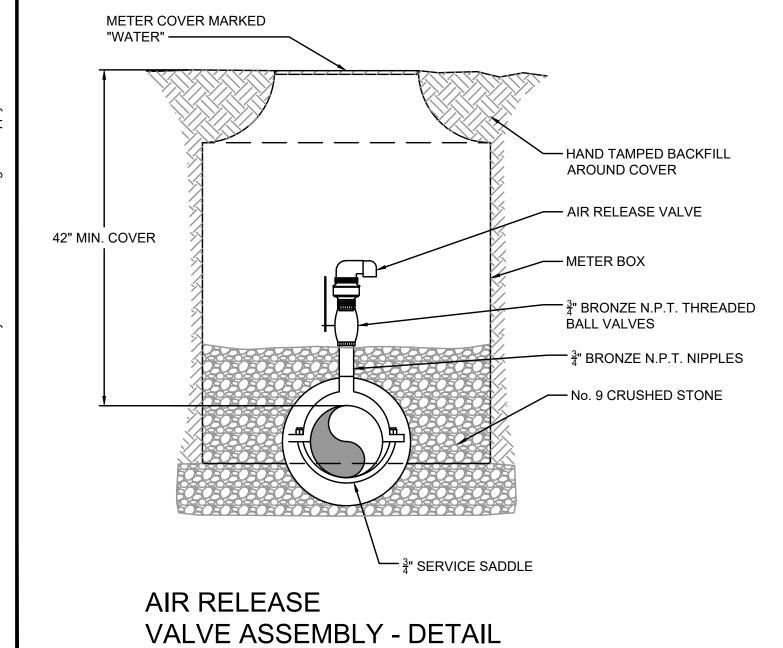
TRACER WIRE AND RAN ON NEW SERVICE TUBING AND TERMINATING IN THE METER BOX.

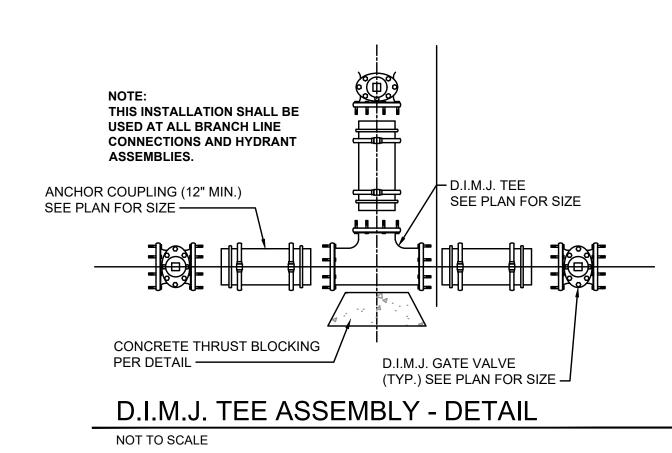


METER ASSEMBLY - DETAIL

NOT TO SCALE

NOT TO SCALE

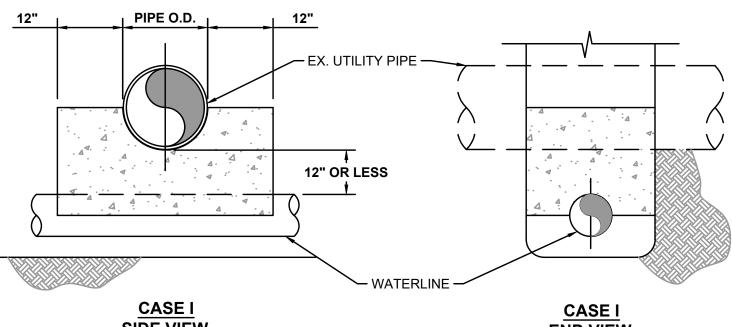


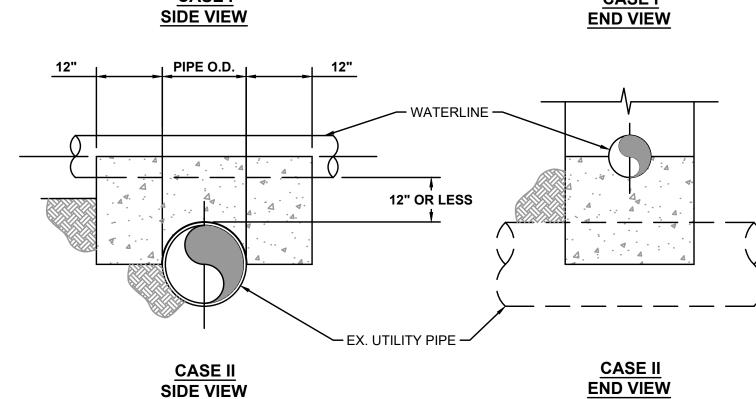


NOTES: 1. THIS DETAIL IS ONLY FOR NON-CONTAMINATE PIPE/CONDUIT. UTILITY PIPE IS DEFINED AS WATER, NATURAL GAS, TELEPHONE, ELECTRICAL CONDUITS OR STORM SEWER.

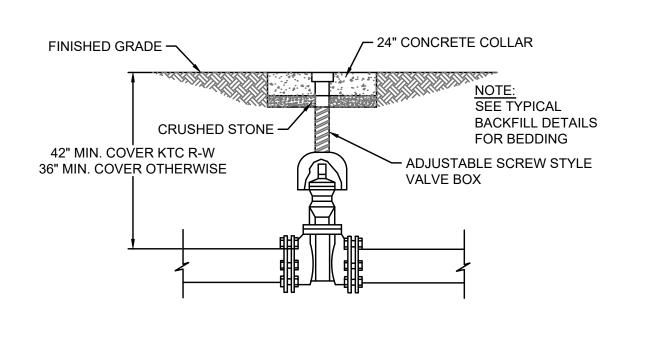
2. IF "UTILITY PIPE" IS A SANITARY SEWER PIPE (FORCE MAIN OR GRAVITY) SEE DETAIL FOR POTABLE WATER & FORCE MAIN CROSSING.

3. CONCRETE SEPARATOR SHALL BE USED WHEN CLEARANCE BETWEEN NEW WATERLINE & EXISTING UTILITY PIPE/CONDUIT IS LESS THAN 12".

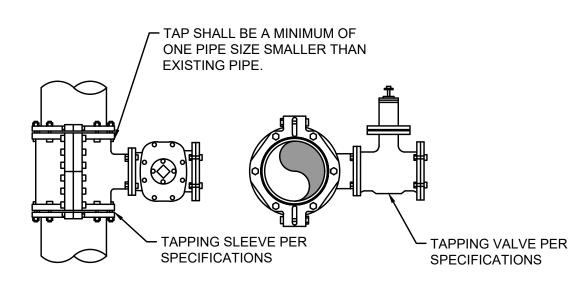




UTILITY CROSSING CONCRETE ASSEMBLY - DETAIL NOT TO SCALE



GATE VALVE ASSEMBLY - DETAIL NOT TO SCALE



SIDE VIEW

TOP VIEW

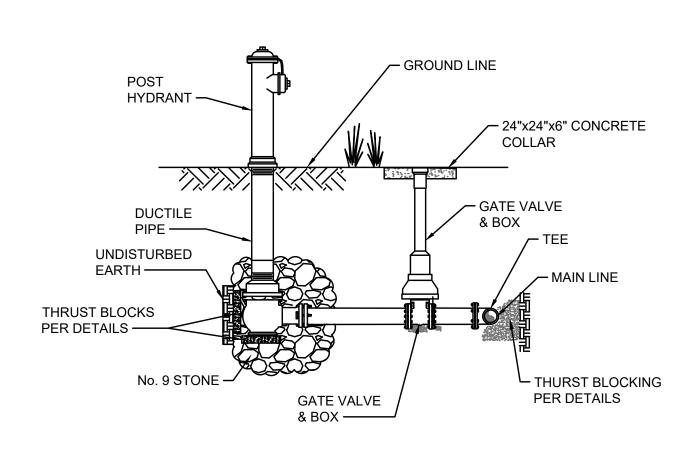
WET TAP ASSEMBLY - DETAIL NOT TO SCALE

TYPE 1 FLUSHING HYDRANT NOTE: BEFORE FINAL INSPECTION TWO (2) 21/2" CONNECTIONS AND 1. ENSURE ADEQUATE VOLUME OF OIL AS SHIPPED BY THE MANUFACTURER ONE (1) 4½" CONNECTION 2. HYDRANT SHALL BE CLEANED, WIRE BRUSHED AND TYPE 2 FLUSHING HYDRANT TOUCHED UP WITH "KROMIK PRIMER E4INI" OR ENGINEER TWO (2) 21/2" CONNECTIONS APPROVED EQUAL 3. HYDRANT SHALL RECEIVE TWO FINISHING COATS OF SONNEBORN'S HYDRANT ENAMEL PAINT, COLOR TO MATCH EXISTING HYDRANTS OR AS SPECIFIED BY OWNER FLUSHING HYDRANT ASSEMBLY — GATE VALVE & BOX CONCRETE COLLAR REDUCER TEE IF REQUIRED WELL COMPACTED EARTH FILL —— MAIN LINE HYDRANT WASTE ORIFICE KEEP FREE OF CONCRETE THRUST BLOCK PER DETAIL CONCRETE THRUST No. 9 STONE (TYP.)

FLUSHING HYDRANT ASSEMBLY TYPE 1 & 2 - DETAIL

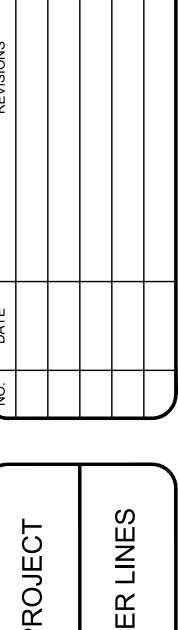
BLOCK (TYP.) ———

NOT TO SCALE



FLUSHING HYDRANT ASSEMBLY, TYPE 3 - DETAIL

NOT TO SCALE



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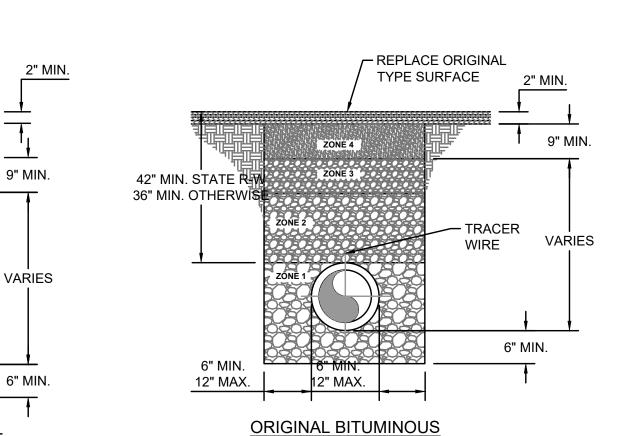


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DETAIL NOTES:

- 1. COVER UP TO AND INCLUDING ZONE 4 SHALL BE ESTABLISHED BEFORE TRENCH EXCAVATION.
- WIRE TAPED 2. ZONE 4 6" MIN. CONSOLIDATION EARTH BACKFILL INCLUDING TOPSOIL, NO ROCK ALLOWED.
 - 3. ZONE 3 CONSOLIDATED SOIL, (NO ROCK GREATER THAN 6" DIAMETER) NO. 9, 57 OR 78 STONE
 - 4. ZONE 2 FROM THE SPRINGLINE OF THE PIPE TO A DISTANCE 12 INCHES ABOVE THE PIPE, THE CONTRACTOR SHALL USE THE SAME MATERIAL AS SPECIFIED FOR BEDDING. COMPACTION IS REQUIRED IN AREAS SUBJECT TO TRAFFIC.
 - 5. ZONE 1 BEDDING MATERIAL, IN EARTH EXCAVATION AREAS, SHALL BE CLEAN EARTH, FREE FROM ROCKS, DEBRIS OR OTHER FOREIGN MATERIAL. THE CONTRACTOR SHALL USE CRUSHED STONE, SAND OR GRAVEL AS BEDDING MATERIAL WHERE ROCK EXCAVATION IS ENCOUNTERED.



SURFACING 2" OR LESS AND TRAFFIC BOUND MACADAM

ZONE 4 - COMPACTED DGA ZONE 3 - NO. 9, 57, OR 78 STONE ZONE 2 - 12" MIN. NO. 9 STONE ZONE 1 - NO. 9 STONE

PIPE BACKFILL - DETAIL

ZONE 4

PIPE LAID IN ROCK OR EARTH

TRENCH

ZONE 4

ORIGINAL BITUMINOUS

SURFACING OVER 2"

__ 2" (MIN.) NEW

SURFACE

BITUMINOUS

- TRACER

6" MIN.

12" MAX.

42" MIN. STATE R-W

36" MIN. OTHERWISE

12" MIN. OR TO END OF DAMAGED

42" MIN. STATE R-W

36" MIN. OTHERWISE

REPLACE BITUMINOUS

PAVEMENT W. SAME TYPE & DEPTH AS

12" MAX.

EXISTING PAVEMENT

6" MIN.

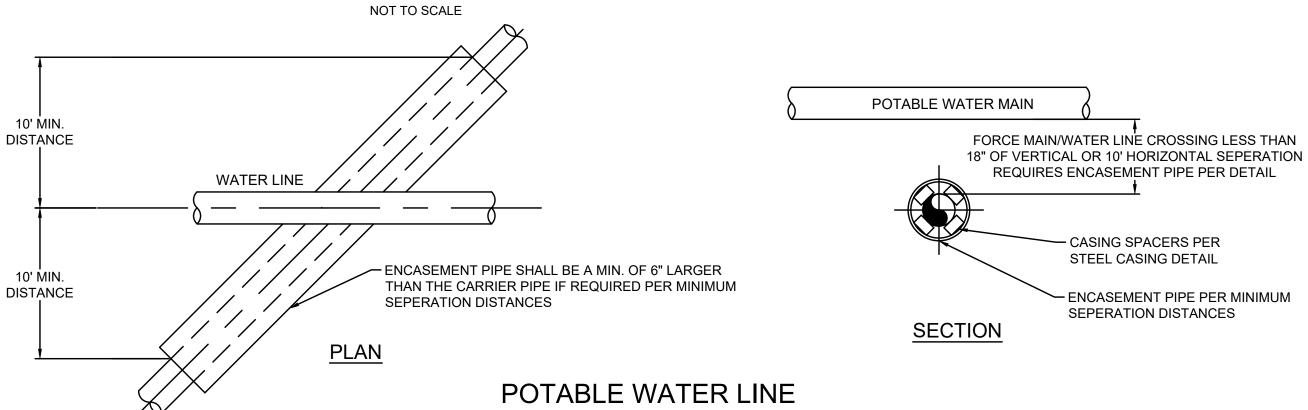
12" MAX.

— TRACER

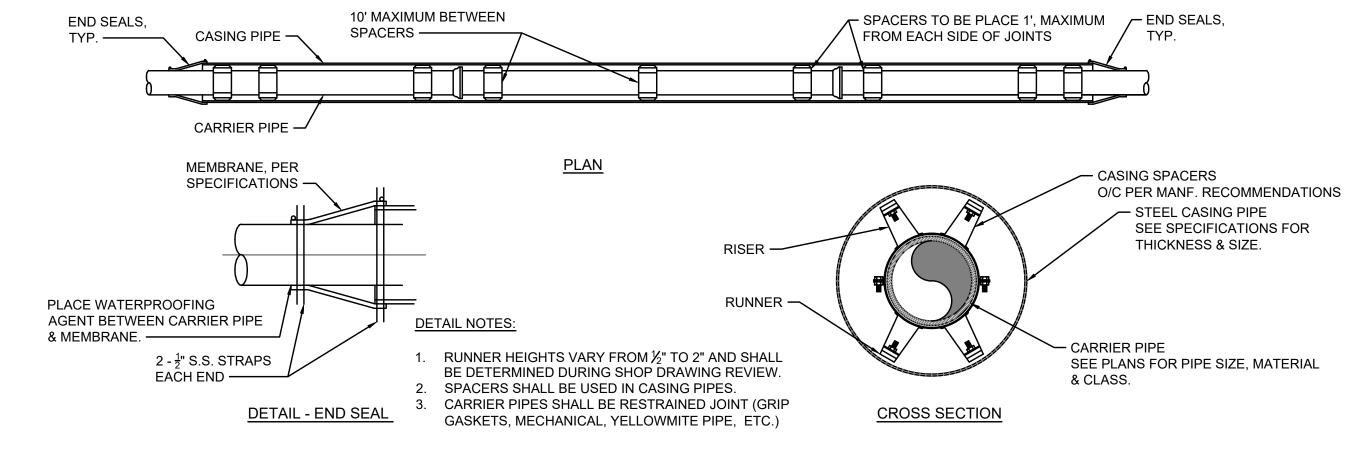
6" MIN.

12" MAX.

TO TOP OF

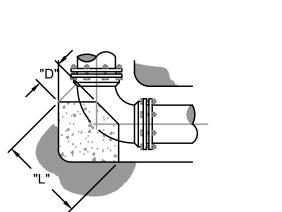


& FORCE MAIN CROSSING - DETAIL NOT TO SCALE

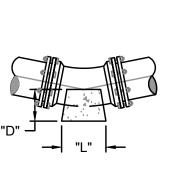


STEEL CASING - DETAIL NOT TO SCALE

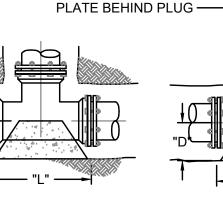
SOIL TYPE - SAND & GRAVEL THRUST BLOCK SCHEDULE BEARING STRENGTH = 3000 PSF 90 BEND 45 BEND 22 ½ BEND 11 1/4 BEND TEE & DEAD ENDS YDS OF CONCRETE D W L SIZE 6 2.250 18 | 14 | 1.000 | .500 12 5.000 30 | 18 | 2.000 7.500 12 9.000 10" 24 | 36 | 24 | 3.000 20.000 1.48 | 24 | 60 | 48 | 10.500 42 | 36 | 6.000 | 18 | 24 | 18 | 14.000 | 12" 78 | 72 | 20.000 | 2.22 | 36 | 60 | 48 | 10.500 |



90° & 45° BENDS

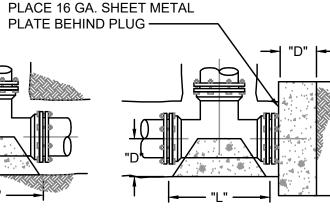


22.5° & 11.25° BENDS



<u>TEES</u>

1.81

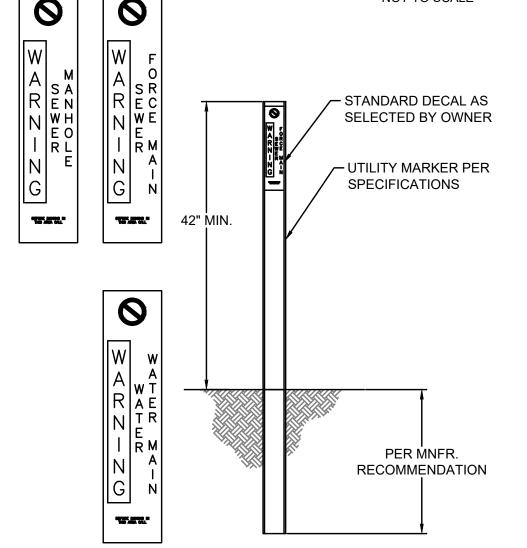


- ALL CONCRETE SHALL BE A MIN. OF 3,5000 PSI SEE PLAN SHEETS FOR SIZE, MATERIAL & LOCATION OF PIPE. SIDES OF ALL TRENCHES TO BE UNDISTURBED SOIL. SEE THIS SHEET FOR BACK FILL DETAILS.
- DEPTH "D: MAY NOT BE SMALLER THAN SPECIFIED. PIERS SHALL BE PLACED AGAINST UNDISTURBED SOIL. M.J. FITTING(S) SHALL BE WRAPPED IN PLASTIC WRAP
- PLACE CONCRETE ANCHORS 25' C/C. GRIP RINGS SHALL BE USED ON ALL FITTINGS

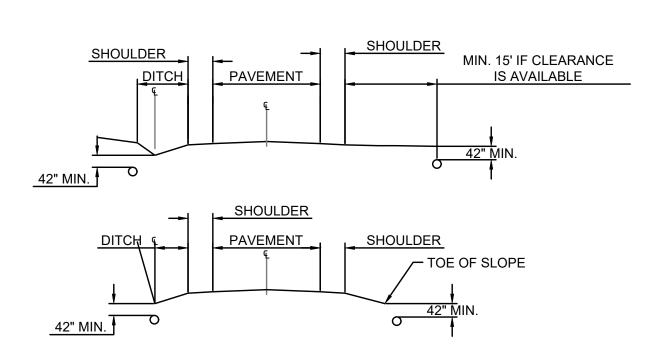
PLACE 16 GA. SHEET METAL PLATE BEHIND PLUG — $-\frac{1}{4}$ " x 3" S.S. STAP DRILLED TO ACCOMMODATE ANCHOR BOLTS -TYP. SECTION VERTICAL BENDS END OF MAIN

CONCRETE

THRUST BLOCK - DETAIL NOT TO SCALE



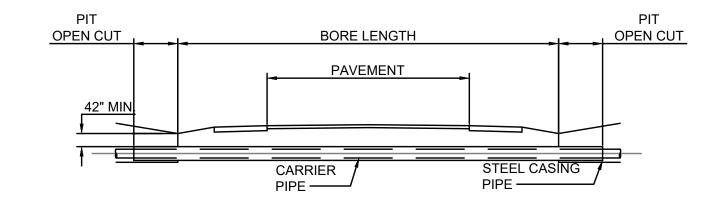
UTILITY MARKER - DETAIL NOT TO SCALE



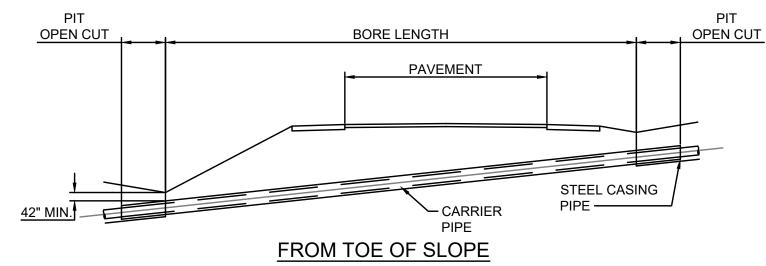
UTILITY PIPELINE WITHIN KTC ROW - DETAIL NOT TO SCALE

NOTE:

- 1. ALL JOINTS OF STEEL CASING SHALL BE SOLIDLY WELDED. END OF CASING SHALL BE SEALED AFTER LINE HAS BEEN INSTALLED AND TESTED.
- 2. MINIMUM DEPTHS MAY INCREASE IN AREAS WHICH REQUIRE MINIMUM SEPARATION WITH OTHER FACILITIES.
- 3. OPEN TRENCH NO CLOSER THAN THE DITCHLINE OR TOE OF FILL FROM THE EGDE OF THE PAVEMENT OR AS DIRECTED BY THE SPECIFICATIONS.
- 4. HIGHWAY CROSSINGS SHALL UTILIZE STEEL CASING PIPE. STEEL CASING PIPES WALL THICKNESS & DIAMETER PER SPECIFICATIONS. ALL BORED AND JACKED ENCASEMENT PIPE SHALL BE INSTALLED IN BORE HOLES NO LARGER THEN THE OUTSIDE DIA-METER OF THE ENCASEMENT PIPE.
- 5. SEE CASING SPACER DETAIL FOR PLACEMENT OF SPACER.



OFFSET FROM EDGE OF PAVEMENT

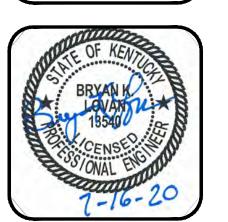


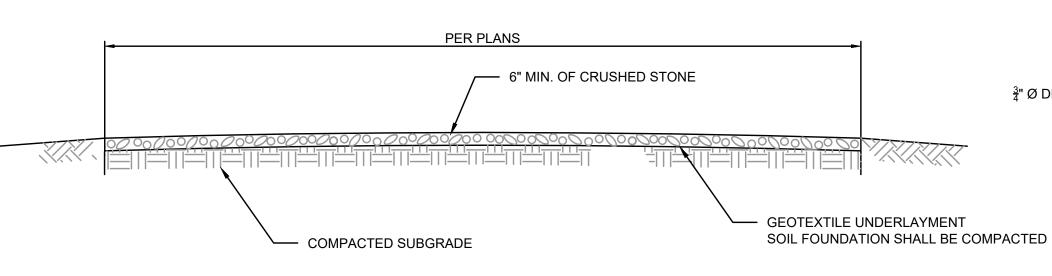
KTC CROSSING - DETAIL NOT TO SCALE

SUP

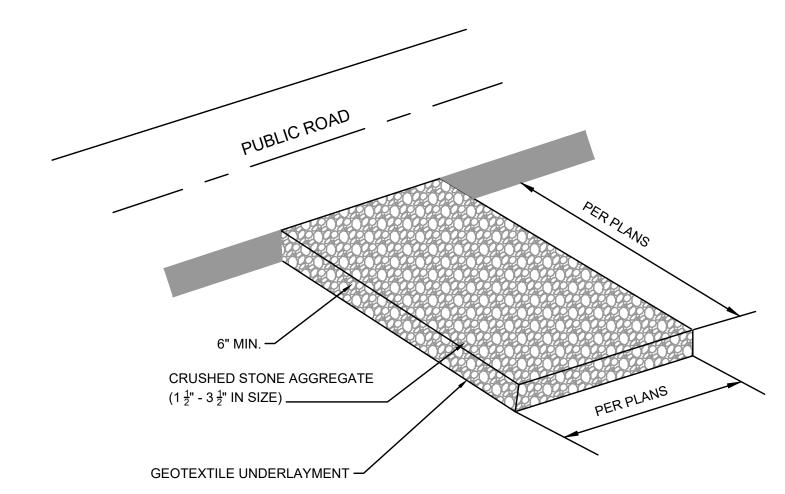


PROJECT #: JUNE 2020 DATE: PROJECT MGR: PBR DRAWN BY: CHECKED BY:





STABILIZED CONSTRUCTION ENTRANCE - SECTION



- 1. A STABILIZED ENTRANCE PAD OF CRUSHED STONE SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
- GEOTEXTILE (KYTC TYPE III) SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE. 3. TREES, STUMPS, ROOTS, BRUSH, WEEDS, AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED FROM THE
- UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE ROADBED AND PARKING AREAS.

NOT TO SCALE

- GRADING, SUBGRADE PREPARATION, AND COMPACTION SHALL BE DONE AS NEEDED. FILL MATERIAL SHALL BE DEPOSITED IN LAYERS NOT TO EXCEED 9 INCHES AND COMPACTED WITH THE CONTROLLED MOVEMENT OF COMPACTING AND EARTH MOVING EQUIPMENT.
- 6. THE ROADBED SHALL BE GRADED TO THE ELEVATION AS SHOWN. SUBGRADE PREPARATION AND PLACEMENT OF
- THE SURFACE COURSE SHALL BE IN ACCORDANCE WITH SPECIFICATIONS
- ALL CUT AND FILLS SHALL BE 2:1 OR FLATTER TO THE EXTENT POSSIBLE. 8. WATER BREAKS OR BARS MAY BE USED TO CONTROL SURFACE RUNOFF.

STABILIZED

CONSTRUCTION ENTRANCE - DETAIL

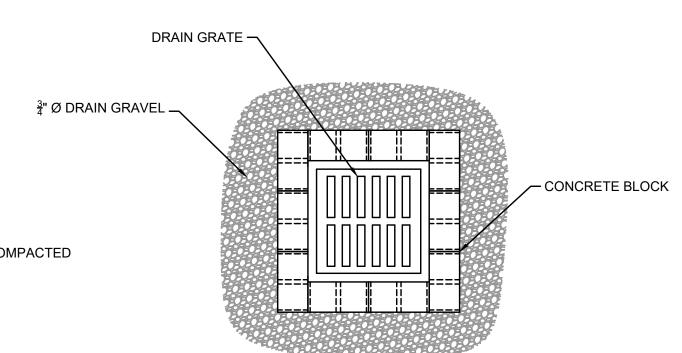
1. A KPDES STORMWATER PERMIT IS REQUIRED. COVERAGE STARTS WHEN THE KY DIVISION OF WATER ACKNOWLEDGES RECEIPT OF A NOTICE OF INTENT FOR

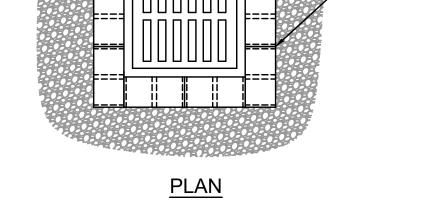
- 2. FINAL STABILIZATION SHALL BEGIN WITHIN 14 DAYS ON AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR HAVE BEEN SUSPENDED FOR MORE THAN 180 DAYS. WHEN SNOW COVER CAUSES DELAYS, STABILIZATION SHALL BEGIN AS SOON AS POSSIBLE. STABILIZATION PRACTICES INCLUDE SEEDING, MULCHING, PLACING SOD, PLANTING TREES OR SHRUBS, AND USING GEOTEXTILE FABRICS AND OTHER APPROPRIATE MEASURES. SEEDING RATES, DATES, AND MATERIALS MAY BE OBTAINED FROM THE LOCAL NATURAL RESOURCES CONSERVATION SERVICE FIELD OFFICE.
- 3. FOR ALL CRITICAL AREAS (WITHIN 25' OF A STREAM), SOIL STABILIZATION TECHNIQUES SHALL BE IMPLEMENTED WITHIN 24 HOURS OR AS SOON AS PRACTICAL AFTER COMPLETION OF GRADING OR DISTURBANCE. TEMPORARY STABILIZATION PRACTICES SHALL BE INITIATED WITHIN 14 DAYS OF CESSATION OF
- A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE DEVELOPED AND IMPLEMENTED AS OUTLINED IN THE KPDES STORMWATER PERMIT KYR 10.
- SEDIMENT BASINS (DEBRIS BASINS, DESILTING BASINS, OR SEDIMENT TRAPS) SHALL BE PROPERLY DESIGNED. SEDIMENT BASINS (DEBRIS BASINS, DESILTING BASINS, OR SEDIMENT TRAPS) SHALL BE INSTALLED DURING THE INITIAL GRADING AT LOCATIONS THAT WILL PROVIDE THE BEST PROTECTION FROM OFF-SITE DAMAGES.
- ALL SLOPES EXCEEDING 3:1 SHALL HAVE EXTRA SLOPE PROTECTION SUCH AS NETTING.
- INLET PROTECTION IS REQUIRED TO MINIMIZE DISCHARGE OF SEDIMENT LADEN WATER.
- 9. SITE PERIMETER CONTROLS ARE REQUIRED AND SHALL BE INSTALLED TO PREVENT THE DEPOSIT OF SOIL AND DEBRIS FROM GRADED SURFACES ONTO PUBLIC STREETS, INTO DRAINAGE CHANNELS OR SEWERS, OR ONTO ADJOINING LAND.
- 10. EROSION CONTROL MEASURES SHOWN ARE THE MINIMUM REQUIRED, CONTRACTOR SHALL PROVIDE ADDITIONAL CONTROL AND REVISE THE CONTROLS AS NEEDED.

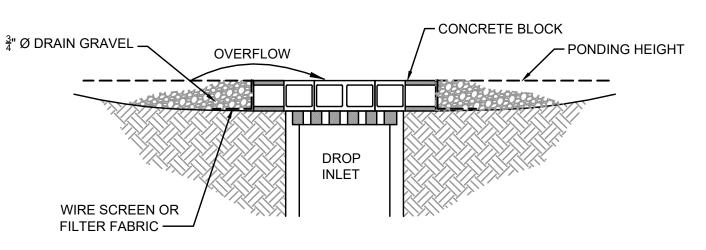
INSPECTIONS AND MAINTENANCE

EROSION CONTROL NOTES:

- 1. ALL EROSION CONTROL MEASURES, DISCHARGE LOCATIONS, VEHICLE EXITS, DISTURBED AREAS OF THE SITE, AND MATERIALS STORAGE AREAS SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER. EACH INSPECTION MUST BE DOCUMENTED IN ACCORDANCE WITH THE KPDES GENERAL PERMIT FOR STORMWATER POINT SOURCE DISCHARGES FROM CONSTRUCTION ACTIVITIES (KYR10).
- 2. SEDIMENT ACCUMULATED AT THE SILT FENCES, INLET PROTECTION AREAS, AND OTHER SILT CHECK DEVICES SHOULD BE REMOVED NO LATER THAN WHEN IT REACHES 1/3 HEIGHT OF THE FENCE OR 9 INCHES MAXIMUM.
- SEDIMENT MUST BE REMOVED FROM ANY SEDIMENT BASINS WHEN THE NO MORE THAN 1/3 VOLUME HAS BEEN FILLED WITH COLLECTED SEDIMENT 4. ALL REQUIRED REPAIRS ARE TO BE MADE IMMEDIATELY.
- 5. REMOVED SEDIMENT MUST BE SPREAD AND VEGETATED OR OTHERWISE STABILIZED IN A MANNER THAT DOES NOT RESULT IN MUDDY RUNOFF TO NEARBY
- 6. INSPECT THE CONSTRUCTION ENTRANCE DAILY TO ENSURE NO TRACKING OR DIRT ONTO LOCAL ROADWAYS. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS MUST BE REMOVED IMMEDIATELY. SEE NOTE 3 FOR HANDLING OF REMOVED SEDIMENT.
- 7. MAINTAIN THE ENTRANCE AS NECESSARY TO PREVENT TRACKING OF DIRT.







NOTES:

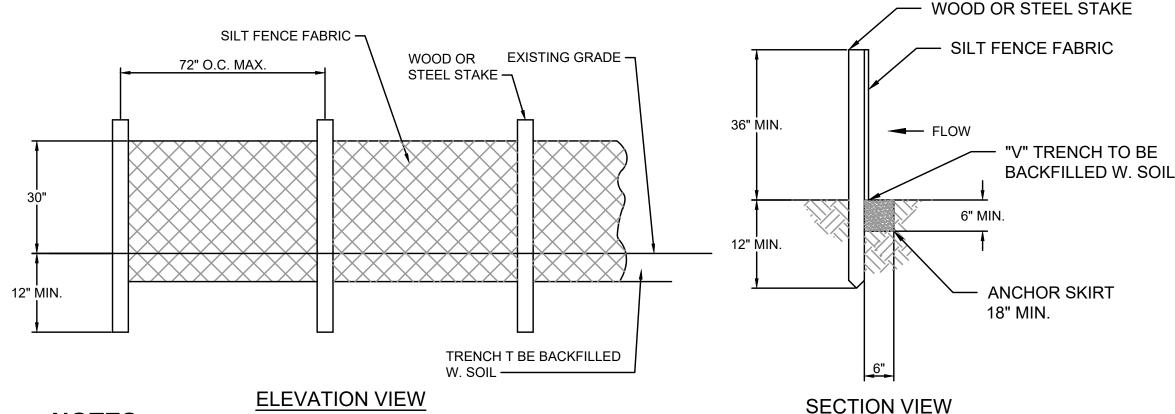
1. DROP INLET PROECTION ARE TO BE USED FOR NEARLY LEVEL DRAINAGE AREAS.

SECTION

2. EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET 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



NOTES:

- 1. SILT FENCE FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL AND CUT TO THE LENGTH OF THE OF THE BARRIER. WHEN JOINTS CANNOT BE AVOID, SILT FENCE FABRIC SHALL BE SPLICED TOGETHER ONLY AT A POST WITH 3 FOOT MIN. OVERLAP, AND SECURELY SEALED.
- POSTED SHALL BE AT LEAST 5 FEET IN LENGTH.

NOT TO SCALE

- 3. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE AND FABRIC.
- 4. WOOD POSTS SHALL BE 2 INCHES BY 2 INCHES OR EQUIVALENT. STEEL POSTS SHALL BE 1/33 LBS PER LINEAR FOOT
- 5. IF REQUIRED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH IN LENGTH, WIRE TIES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND **SURFACE**
- TURN SILT FENCE UP SLOPE AT ENDS.



L = DISTANCE WHERE ELEVATION "A" = "B" CATCH BASIN -CURB INLET BACK OF CURB 2" x 4" WOOD STUD_ SECTION 2" x 4" WOOD STUD 9" (TYP.) FILTER FABRIC -#57 GRAVEL — - CONCRETE BLOCK **PLAN VIEW** PONDING HEIGHT -- CONCRETE BLOCK #57 GRAVEL ¬ - CURB INLET **OVERFLOW** FILTER FABRIC -24" (MIN.) - CATCH BASIN 2" x 4" WOOD STUD **SECTION VIEW**

NOTES:

- 1. USE BLOCK AND GRAVEL TYPE SEDIMENT BARRIER WHEN CURB INLET IS LOCATED IN GENTLY SLOPING STREET SEGMENT WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
- 2. BARRIER SHALL ALLOW FOR OVERFLOW FROM SEVERE STORM EVENT.
- 3. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

CURB INLET SEDIMENT BARRIER - DETAIL

NOT TO SCALE

- 1. ROCK CHECK DAMS SHOULD BE CONSTRUCTED OF GRADED 5 TO 10 INCH STONE. MECHANICAL OR HAND PLACEMENTS SHALL BE REQUIRED TO ENSURE COMPLETE COVERAGE OF THE ENTIRE WIDTH OF DITCH OR SWALE AND THAT THE CENTER OF THE DAM IS LOWER THAN THE EDGES.
 - 2. INSPECT BEHIND RIPRAP CHECKDAM DAILY AND CLEAN WHEN COLLECTED DEBRIS EXCEEDS HALF OF ITS DEPTH.

ROCK CHECK DAM - DETAIL NOT TO SCALE

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AND,



PROJECT #: JUNE 2020 DATE: PROJECT MGR: PBR DRAWN BY: CHECKED BY: MRC

