PROJECT TYPICAL DETAILS

NOTE:

1.AN AS-BUILT PLAN AND PROFILE SHALL BE PROVIDED FROM ENTRY TO EXIT FOR EACH DIRECTIONAL BORE SECTION BY THE DIRECTIONAL BORE CONTRACTOR. THIS SHALL INCLUDE ACCURATE HORIZONTAL AND VERTICAL DIMENSIONS AND SHALL MEET OR EXCEED NCDOT VERTICAL REQUIREMENTS FROM HDD PIPE TO EDGE OF PAVEMENT.

2.ALL BORE SECTIONS SHALL BE HYDROSTATICALLY TESTED PER SPECIFICATIONS AFTER INSTALLATION, AND PRIOR TO CONNECTION TO THE OPEN CUT WATER/SEWER LINE. A FINAL TEST WILL BE A APRT OF THE TOTAL MAIN LINE SYSTEM TEST.

3.LENGTH OF CROSSING, LOCATION OF INSPECTION/OBSERVATION EXCAVATION, NUMBER OF HDD PIPE JOINTS, LOCATION OF DRILL MACHINE, AUGER ENTRANCE LOCATION AND TIE-IN POINTS ARE TO BE APPROVED BY THE ENGINEER PRIOR TO ANY START OF WORK.

4.THE BORE DEVELOPED FOR THE DIRECTIONALLY DRILLED PIPE SHALL BE KEPT AT A MINIMUM DIAMETER FOR THE PIPE INSTALLATION. THE AUGER HEAD SIZE SHALL BE APPROVED BY THE ENGINEER.PRIOR TO THE START OF ANY WORK.

5.THE CONTRACTOR SHALL ALLOW SUFFICIENT LENGTHS OF PIPE TO EXTEND PAST THE TERMINATION POINT TO ALLOW FOR CONTRACTION. PULLED HDD PIPE SHALL BE ALLOWED TO RELAX FOR 2 DAYS OR THE AMOUNT OF TIME RECOMMENDED BY THE MANUFACTURER PRIOR TO MAKING ANY CONNECTIONS.

6.FUSIBLE PVC HAS BEEN APPROVED FOR USE WITHIN NCDOT RIGHT-OF-WAYS.

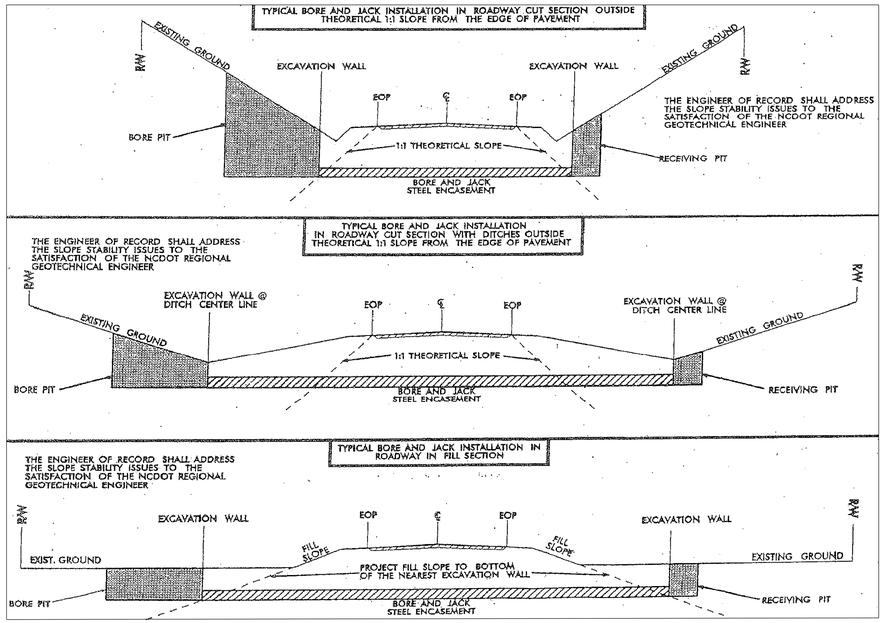
7.MINIMUM OF THREE(3) RESTRAINED JOINTS ARE REQUIRED UPSTREAM AND DOWNSTREAM OF FUSIBLE PVC MJ ADAPTER ON EACH END OF THE HORIZONTAL DIRECTIONALLY DRILLED PIPE UNLESS OTHERWISE APPROVED BY THE ENGINEER.

PROJECT REFERENCE NO.	SHEET NO.
U-5312	UC-3A
DESIGNED BY: B.DIXON	
DRAWN BY: R.MOSS	
CHECKED BY: B.DIXON	
APPROVED BY:	
REVISED:	
MUNICIPAL ENGINEERING SERVICES COMPANY, PA.	
P.O. BOX 97 GARNER, NC.27529 (919)772-5393	

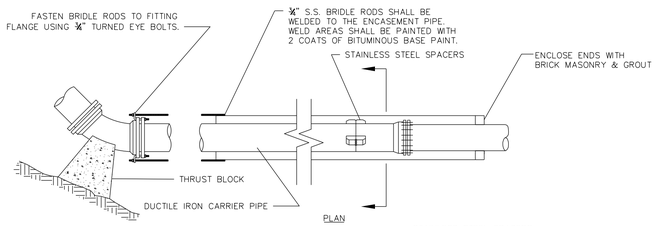
NORTH CAROLINA PROFESSIONAL SEAL ENGINEER BENJAMIN D. DIXON
3-17-23

UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

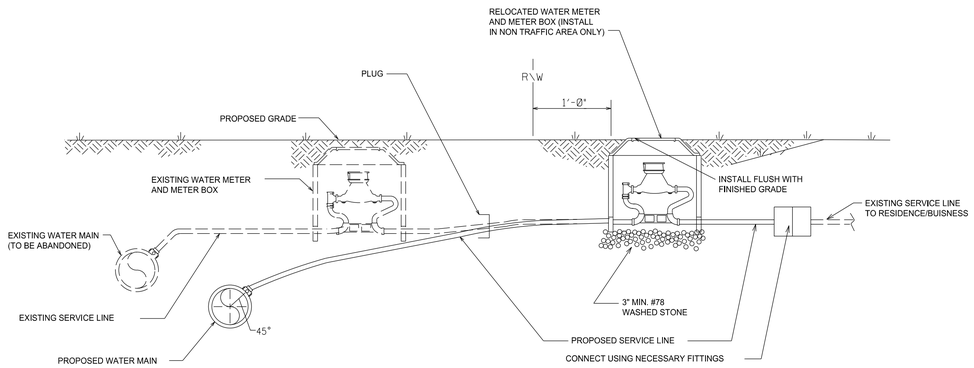


PROPOSED SECTIONS



NOTES:
1. STAINLESS STEEL SPACERS SHALL BE USED. NO TIMBER SKIDS ARE ALLOWED.
2. TWO SPACERS PER JOINT SHALL BE USED FOR D.I.P. CARRIER PIPE.
3. ENCASED BORES ALONG GRAVITY COLLECTION SYSTEMS SHALL NOT REQUIRE BRIDLE RODS.
4. 2 EA. ¾" S.S. BRIDLE RODS SHALL BE REQUIRED ON ALL LINES 8"Ø AND SMALLER. 4 EA. ¾" S.S. BRIDLE RODS SHALL BE REQUIRED ON ALL LINES 10"Ø AND LARGER.
5. CARRIER PIPE SHALL BE INSTALLED USING 'FIELD LOK' GASKETS OR APPROVED EQUAL.

STANDARD BORE ENCASEMENT



WATER METER RELOCATION DETAIL

NOTES:

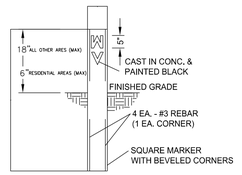
1. RELOCATION SHALL INCLUDE THE REMOVAL AND INSTALLATION AT THE SPECIFIED LOCATION OF THE WATER METER, METER SETTER AND YOKE, METER VALVES, AND METER BOX WITH LID, AND CONNECTION TO PROPOSED WATER MAIN AND EXISTING SERVICE.

2.THE NEW WATER SERVICE LINE SHALL BE OF THE SAME TYPE AND GRADE AS THE EXISTING WATER SERVICE LINE UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.

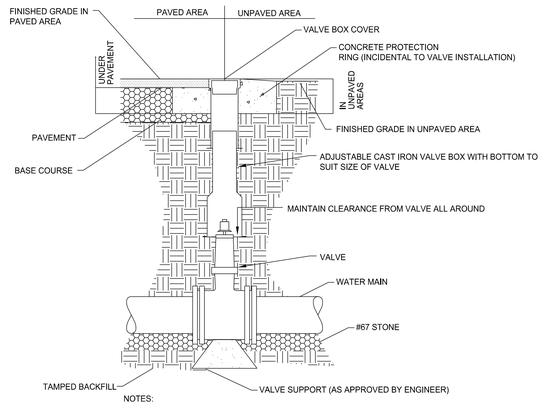
3. THE NEW WATER SERVICE LINE SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER BELOW FINISHED GRADE.

4. WHEN SPECIFIED, DRY BORE UNDER PAVEMENT SHALL BE INCIDENTAL TO SERVICE LINE INSTALLATION.

NOTES:
1. VALVE MARKERS SHALL BE PLACED AT R/W, (INCIDENTAL TO VALVE INSTALLATION)
2. LETTERS "WV" SHALL FACE TOWARDS VALVE.
3. MARKER SHALL HAVE BRASS OR BRONZE EMBED ON TOP OR SIDE.
4. CONTRACTOR SHALL STAMP DISTANCE TO CENTER OF VALVE INTO EMBED.
5. BLOW-OFF ASSEMBLY SHALL INCLUDE 1 EA. MARKER W/ "BO" OR "MV" CAST.



VALVE MARKER DETAIL



NOTES:
1. DIP MAY BE USED FOR VALVE BOX EXTENSION
2. VALVE BOX SHALL NOT CONTACT WATERMAIN OR VALVE
3. CONCRETE PROTECTION RING SHALL BE USED IN ALL UNPAVED AREAS
4. VALVE BOX AND COVER INCIDENTAL TO VALVE INSTALLATION

TYPICAL VALVE DETAIL