DocuSign Envelope ID: 1D127F2A-8F73-447D-90DC-FC29E281D461

UTILITY DETAILS B-4593

PROJECT REFERENCE NO.

B-4593

UC-3A

DESIGNED BY: JV

DRAWN BY:

CHECKED BY: CB

APPROVED BY: JV

REVISED:

HDR Engineering Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, NC 27601 (919) 232-6600

SHEET NO.

SHEET NO.

SHEET NO.

SHEET NO.

SHEET NO.

UC-3A

UC-3A

VS-AR

VARIANTALIAN

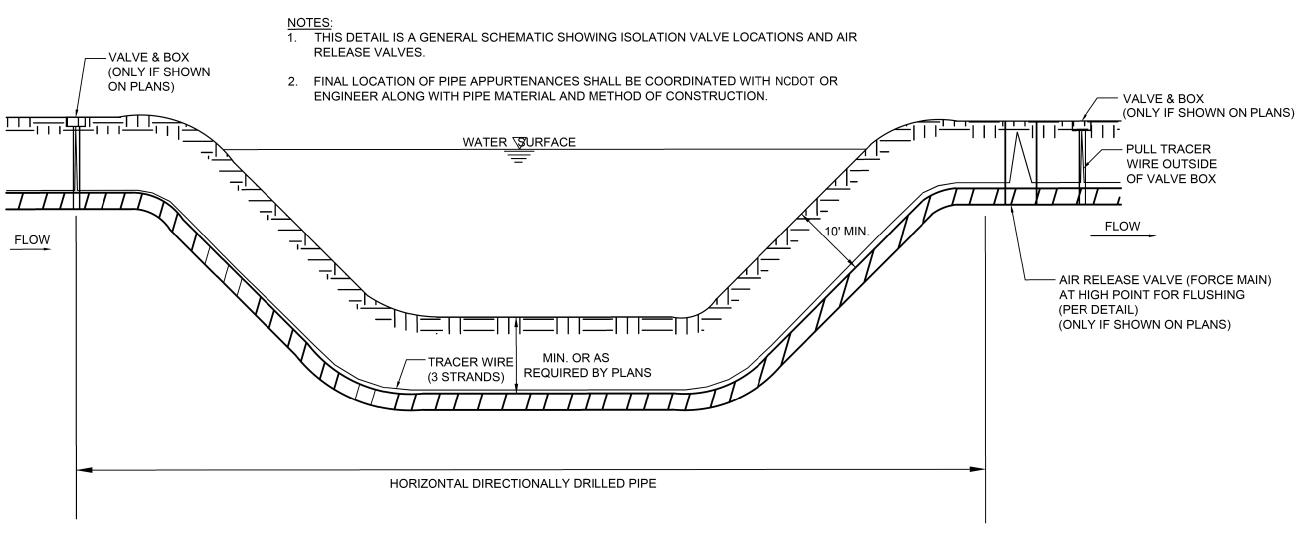
SEAL

15370

WGINEER

WG

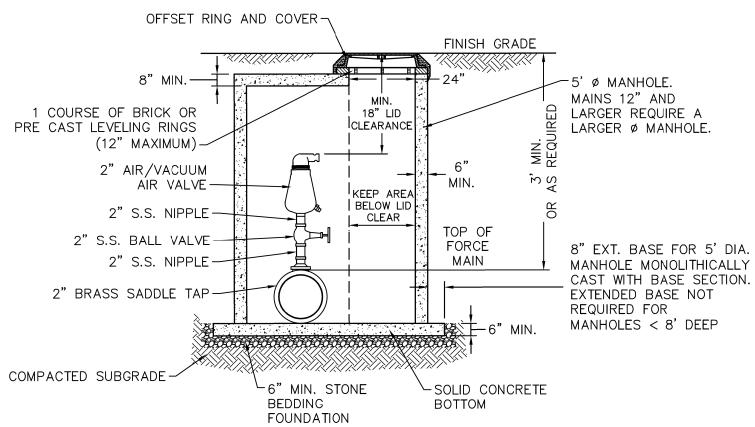
7/1/2019



DIRECTIONAL DRILL UNDER WETLANDS/WATER BODY NOT TO SCALE

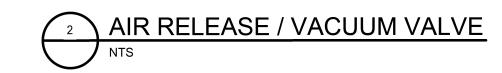
NOTES:

- 1. ALL BORE SECTIONS SHALL BE HYDROSTATICALLY TESTED PER NCDOT STANDARDS AFTER INSTALLATION, AND PRIOR TO CONNECTION TO THE OPEN CUT WATER/SEWER LINE. A FINAL TEST WILL BE A PART OF THE TOTAL MAIN LINE SYSTEM TEST.
- 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 ENGINEER PRIOR TO ANY START OF WORK.
- 3. 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 ANY START OF WORK.
- 4. 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 7 DAYS OR THE AMOUNT OF TIME RECOMMENDED BY THE MANUFACTURER PRIOR TO MAKING CONNECTIONS.
- 5. SEE PLAN FOR RESTRAINED PIPE REQUIRED UPSTREAM AND DOWNSTREAM OF DIP/HDPE/FUSIBLE PVC MJ ADAPTER ON EACH END OF THE HORIZONTAL DIRECTIONALLY DRILLED PIPE UNLESS OTHERWISE APPROVED BY ENGINEER.



NOTES: 1. CONTRACTOR TO INSTALL VALVE & MANHOLE AT SUFFICIENT DEPTH TO ALLOW FOR ACCESS. 2. FORCE MAIN TO BE OFFSET IN MANHOLE TO KEEP AREA BELOW LID CLEAR.

3. USE CAST IN RUBBER BOOT WITH SST. CLAMPS FOR ALL MH CONNECTIONS, INCLUDING FORCE MAIN.



..\280_007_B4593_ut_dtl_UC03A_psh.dgn