CONSTRUCTION NOTES:

- 1. CONCRETE SHALL HAVE 4,000 PSI MIN. COMPRESSIVE
- STRENGTH AT 28 DAYS. 2. REINFORCING BARS SHALL BE GRADE 60 DEFORMED STEEL. 3. METERS SHALL BE APPROVED BY BRUNSWICK COUNTY.
- 4. WHERE WALL MOUNTED STEPS ARE NOT ACCESSIBLE FROM HATCH, A PERMANENTLY MOUNTED LADDER MEETING O.S.H.A. STANDARDS SHALL BE PROVIDED.
- 5. RELOCATE REINFORCEMENT AROUND HATCH TO PROVIDE EQUIVALENT STEEL CROSS-SECTION.
- 6. ALL PIPING SHALL BE DUCTILE IRON.

MIN.	VAULT	DIMENSIONS	
METER SIZE	A	В	С
3"	8'-6"	5'-6"	5'-0"
4"	9'-6"	5'-6"	5'-0"
6"	11'-0"	6'-0"	5'-6"
8"	12'-0"	7'-0"	6'-0"
10"	14'-0"	8'-0"	6'-0"

- (1) AWWA C701 TURBINE METER OR AWWA C702 COMPOUND METER w/ENCODING REGISTER FOR REMOTE READING (SENSUS OR APPROVED EQUAL) METER MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY BRUNSWICK COUNTY ENGINEER
- STRAINER BY METER MANUFACTURER AS DETERMINED BY BRUNSWICK COUNTY, AWWA C508 SWING CHECK VALVE WITH LEVER & WEIGHT, OR SPRING, OR
- FLOMATIC MODEL 848/895 SPLIT DISC (4) AWWA C509 GATE VALVE w/HAND WHEEL AMR ITRON 50W-2 PIT ERT WITH COMPATIBLE REGISTER OR EQUIVALENT-MUST BE APPROVED BY BRUNSWICK COUNTY
- SINGLE OR DOUBLE LEAF ALUMINUM HATCH (7) GRAVITY DRAIN TO DAYLIGHT OR SUMP PUMP WITH FORCE MAIN TO STORM DRAINAGE
- WATERTIGHT GASKET w/HYDRAULIC CEMENT SEAL SOLID MASONRY PIER FIXTURE SUPPORTS
- STEPS SPACED AT 16" O.C.
- (1). IN-LINE TEE OR TAPPING SLEEVE w/VALVE AND BOX TO GRADE WITH LID MARKED "WATER"
- (2). ALL WATER METER VAULTS MUST BE SUBMITTED TO BRUNSWICK COUNTY ENGINEERING DEPARTMENT AS A SHOP SUBMITTAL FOR REVIEW AND APPROVAL

-INSULATED ENCLOSURE -"HOT ROK" OR SIMILAR

(EXTERIOR INSTALLATIONS ONLY) PROVIDE ADEQUATE HEIGHT OF

VALVE BOX

"VALVE BOX ADAPTOR-

II" BY ADAPTOR, INC.

OR EQUAL

PROVIDE POSITIVE

DRAINAGE

W/LID MARKED-

"WATER" (TYP.)

(3). METER VAULT LID SHALL REST ON TOP OF VAULT WALLS-NO JOINTS ARE ALLOWED IN VAULT WALLS- VAULT BOTTOM AND SIDES MAY BE PRECAST BUT TOP SHALL BE PLACED ON TOP OF WALLS.

BLOCKING DIMENSIONS PIPE SIZE UP TO $10" \mid 4' - 0" \mid 2' - 6" \mid 1' - 6"$ 12" TO 16" | 5' - 0" | 4' - 0" | 2' - 0" 18" TO 24" | 8' - 0" | 6' - 0" | 3' - 0"

Prepared in the Office of:

AECOM TECHNICAL SERVICES OF NORTH CAROLINA, INC. 701 CORPORATE CENTER DRIVE, SUITE 475, RALEIGH, NC 27607 919-854-6200 919-854-6259 (fax) F - 0342

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

UC-3C R-5021 DESIGNED BY: TH CAROL DRAWN BY: CHECKED BY: SEAL APPROVED BY: 10666 REVISED: FO WOINEEK NORTH CAROLINA DEPARTMENT OF TRANSPORTATION D. Stephen Scruggs

PHONE: (919)707-6690 UTILITY CONSTRUCTION

SHEET NO.

PLANS ONLY

S

COUNT

UTILITY CONSTRUCTION

UTILITIES ENGINEERING SEC

FAX:(919)250-4151

Revisions

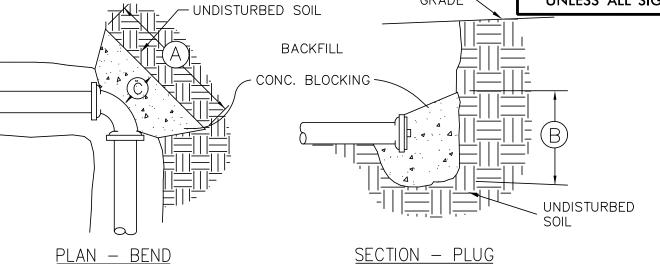
1.1 - DATED 12/8/2016

1.2 - DATED 3/10/2017

Revise Detail W-9

Revise Detail Numbers

PROJECT REFERENCE NO.



SEE SECTION FOR DEPTH B

- 2500 P.S.I. CONC. REMOVE LOOSE EARTH AND POUR AGAINST UNDISTURBED SOIL. BACKFILL TO EXISTING/FINISH GRADE AFTER CONCRETE
- HAS CURED FOR 24 HOURS. 4. CONCRETE SHALL NOT COVER FLANGES, BOLTS, MEGA-LUGS, RODS, ETC.

SEE PLAN FOR LENGTH A

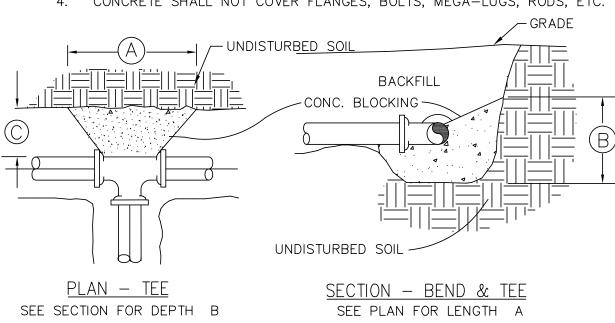
THRUST BLOCKS

36" MIN →

FLOW_

PROVIDE 8" MIN. CRUSHED _

#57 STONE BEDDING



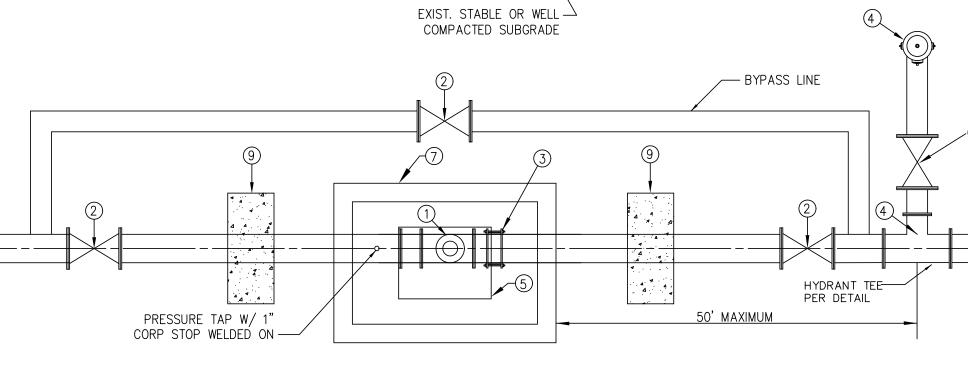
AS DETERMINED BY BRUNSWICK COUNTY AWWA C508 SWING CHECK VALVE WITH LEVER & WEIGHT OR SPRING OR FLOMATIC MODEL 848/895 SPLIT DISC. GATE VALVE WITH VALVE BOX MARKED FLANGED COUPLING ADAPTER HYDRANT ASSEMBLY INSTALLED ON DOWNSTREAM SIDE WITHIN 50' OF CHECK 5. ALUMINUM HATCH W/ COMPRESSION SPRING OPERATORS OR APPROVED Date: <u>06-01-12</u>

FIRE HYDRANT ASSEMBLY DETAIL "VALVE BOX ADAPTOR II" BY ADAPTOR, INC. OR EQUAL "WATER". HYDRANT TEE ALL PIPING SHALL BE DUCTILE IRON

6. STEPS SPACED AT 16" O.C. 7. PRECAST REINFORCED CONCRETE VAULT WITH H20 LOAD RATING AND MIN. INSIDE DIMENSIONS: 6' L x 5' W x 4' D 8. STANDON MODEL S89 OR APPROVED

EQUAL FIXTURE SUPPORT. 9. CONCRETE THRUST COLLAR PER SPECIFICATIONS.

Scale: NTS Drawn By: JDM Checked By: WLP



STANDARD BACKFLOW PREVENTION DEVICE DETAIL W-10

PROVIDE POSITIVE DRAINAGE

ENCLOSURE TO ENSURE A 12" HEIGHT FROM RPZ TO EXISTING GROUND DRAINAGE POINT #1 SHUT-OFF

TEST COCK #3

AIR GAP ` TEST COCK #2 ackslash air gap device -12" MIN

TEST COCK #1-

-BUILDING SEWER OR SIMILAR DRAIN

-DRAIN REQUIRED FOR INTERIOR INSTALLATIONS ONLY

CHECK VALVE VAULT

DETAIL W-11

SEE STANDARD

PER DETAIL

THE BACKFLOW PREVENTION DEVICE MUST BE INSTALLED IN AN

ACCESSIBLE LOCATION TO FACILITATE PERIODIC FIELD TESTING AND THE LOCATION SELECTED SHOULD HAVE ADEQUATE DRAINAGE FOR RELIEF VALVE DISCHARGE. DRAINAGE MAY BE PIPED AWAY, PROVIDING

AN APPROVED AIR GAP DEVICE IS USED. THE DEVICE SHALL NOT BE PLACED WHERE IT MAY BECOME SUBMERGED IN STANDING WATER. INSTALL THE DEVICE IN A HORIZONTAL POSITION WITH ADEQUATE CLEARANCE FROM WALLS AND/OR OBSTRUCTIONS, FOR TESTING AND MAINTENANCE. A 12" TO 30" CLEARANCE BETWEEN THE LOWER MOST

PORTION OF THE DEVICE AND FLOOD GRADE OR FLOOR SHALL BE 4. A "Y" STRAINER MAY BE INSTALLED JUST UPSTREAM OF THE BACKFLOW PREVENTION ASSEMBLY TO ELIMINATE ANY DEBRIS FROM ENTERING THE DEVICE AND FOULING THE CHECK AND/OR RELIEF VALVE.

NO UNDERGROUND INSTALLATIONS ALLOWED.

PRESSURE TAP W/ 1'

CORP STOP WELDED ON -

3 OF 5