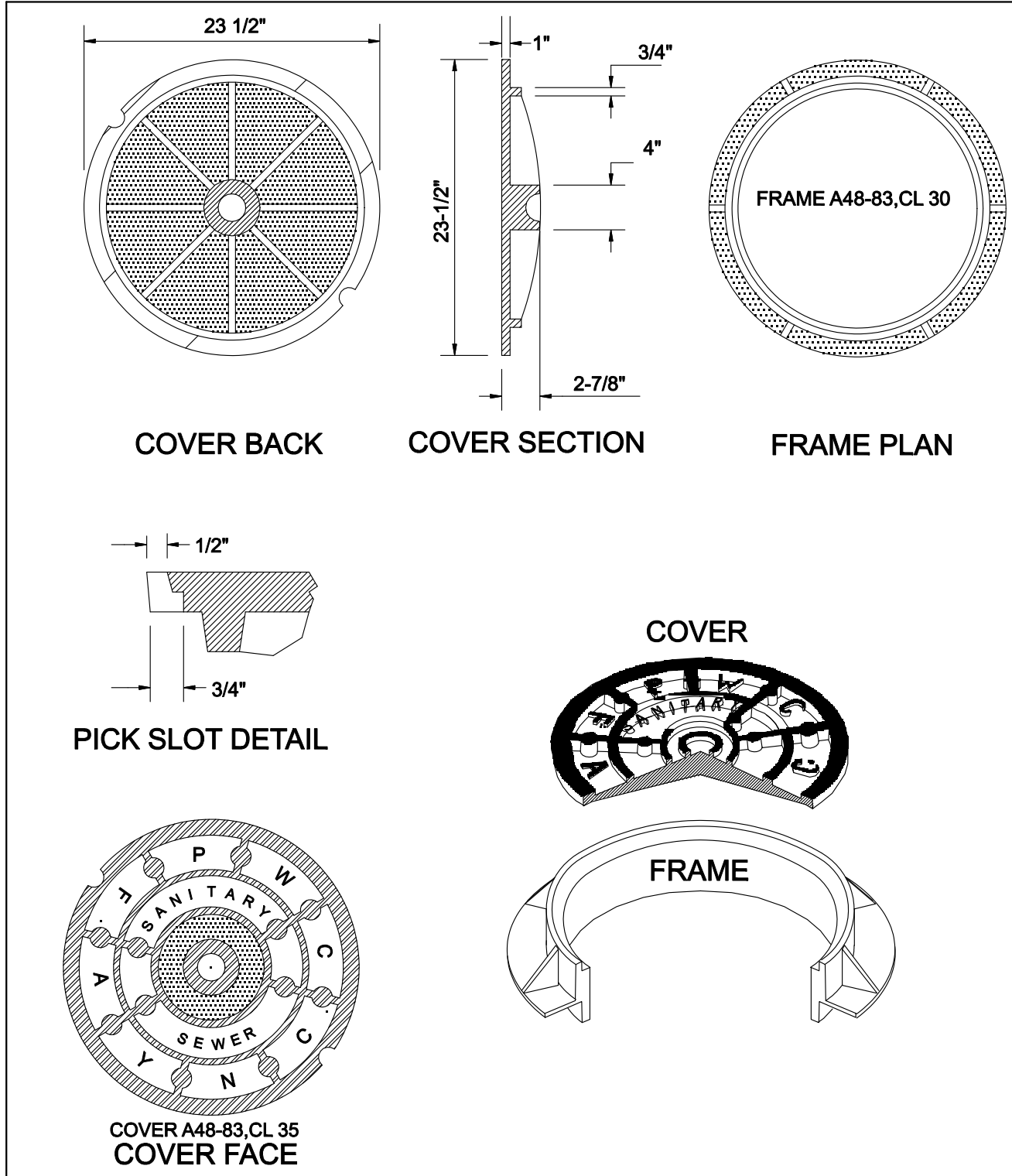


DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO. B-4490	SHEET NO. UC-31
DESIGNED BY:	
DRAWN BY: NONE	
CHECKED BY:	
APPROVED BY:	
REVISED:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151

UTILITY CONSTRUCTION



NOTES:

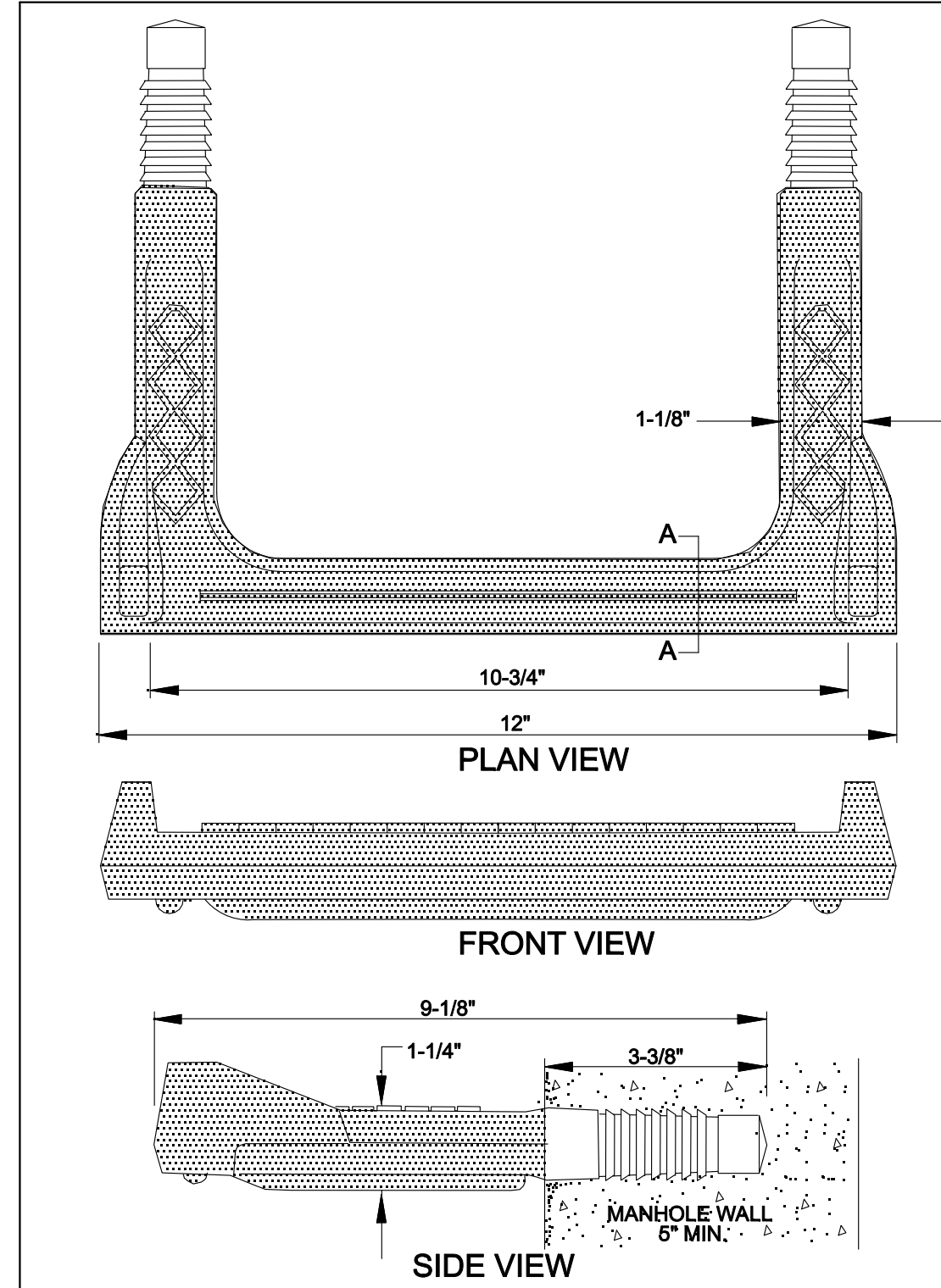
- DETAIL TO BE USED IN PAVED AREAS ONLY. ALL OTHER MANHOLES SHALL BE IN ACCORDANCE WITH DETAIL S.6, UNLESS OTHERWISE APPROVED.
- MANHOLE FRAME AND COVER SHALL BE MADE OF GRAY CAST IRON CONFORMING TO ASTM SPEC. A48-83 CL 30/35 RESPECTIVELY, MANUFACTURED BY SAME MANUFACTURER. ALL CASTINGS SHALL CONFORM TO THE SHAPE AND DIMENSIONS SHOWN. THEY SHALL BE CLEAN AND PERFECT, WITHOUT BLOW OR SAND HOLES OR DEFECTS OF ANY KIND, TENDING TO IMPAIR THEIR STRENGTH. NO PLUGGING OR STOPPING OF DEFECTIVE HOLES WILL BE PERMITTED.
- CASTINGS SHALL BE UNPAINTED AND SHALL HAVE THE LETTERS "PWC-FAY-NC" AND "SANITARY SEWER" CAST INTO COVER. LETTERS SHALL BE RAISED AND CLEARLY VISIBLE.
- MANHOLE RING AND COVER SHALL WITHSTAND H-20 VEHICULAR TRAFFIC. ROCKING COVERS SHALL NOT BE ACCEPTABLE.
- MINIMUM AVERAGE WEIGHT: PLUS OR MINUS 5% RING 175 LBS., COVER 135 LBS., UNIT 310 LBS.
- PERFORATED COVERS WILL NOT BE ALLOWED.

8" MIN THICKNESS 3000 PSI CLASS "A" CONCRETE COLLAR 3-5% AIR ENTRAINMENT ALL AROUND FRAME. (WHEN UTILIZING CONCRETE GRADE RINGS THE CONCRETE COLLAR SHALL EXTEND TO 2" MIN BELOW THE TOP OF CONE.)

STANDARD TRAFFIC AREA MANHOLE RING AND COVER N.T.S.		PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.	
SHEET NO. 1 OF 1	DWG. NO. S.7 DATE: JULY 01, 2015	DWG. BY: FAYPWC APPROVED BY: JEG	WATER RESOURCES ENGINEERING DEPARTMENT

NO.	DATE	REVISION
1	JAN 05	CHANGED NON TRAFFIC DETAIL
2	JULY 06	ADDED NOTE ON CONC. COLLAR
3	FEB 07	REMOVED NON TRAFFIC AREA REVISED NOTES
4	JULY 08	REVISED ASPHALT THICKNESS

2015-S7 RING COVER.dwg



NOTES:

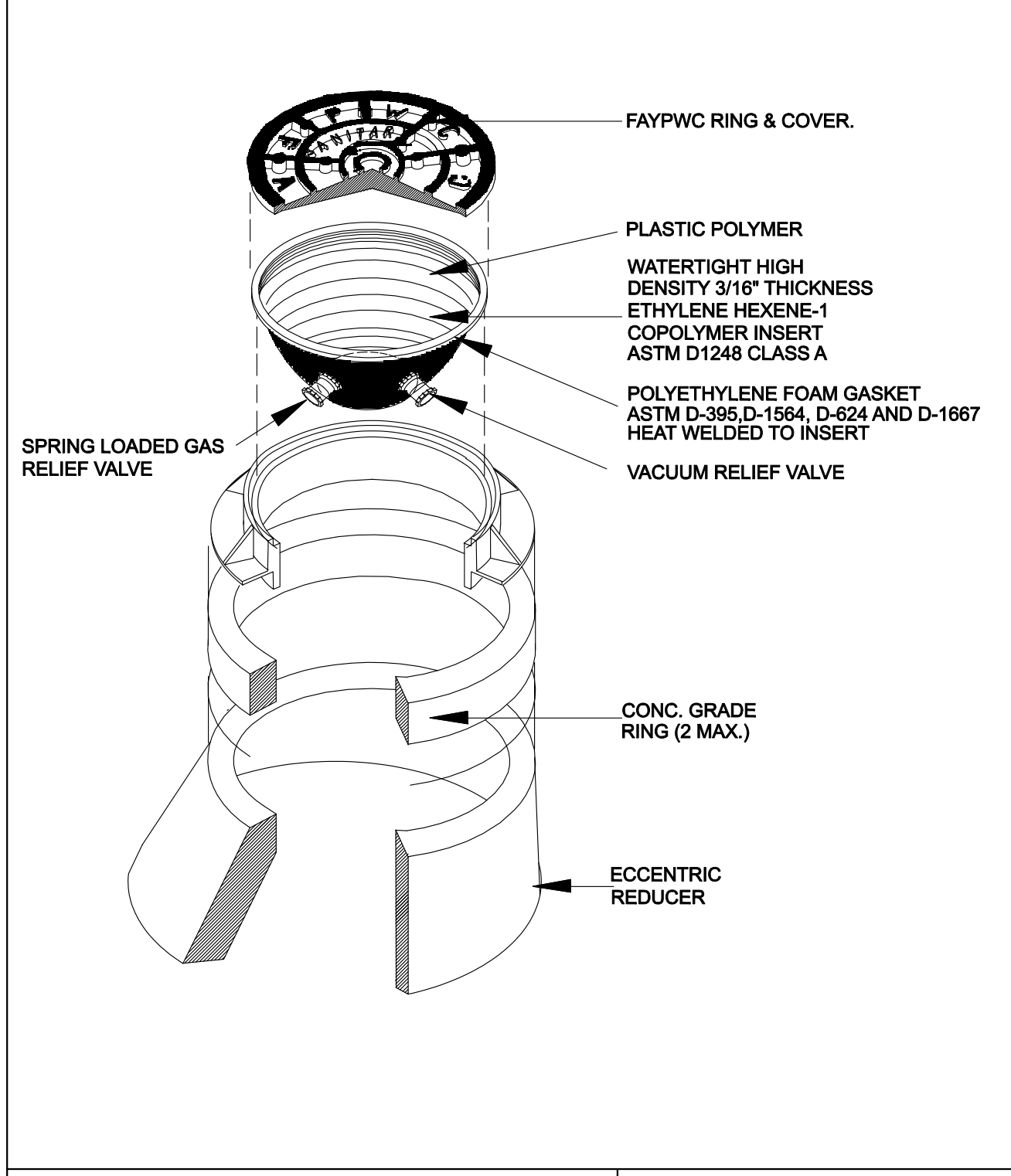
- COPOLYMER POLYPROPYLENE PLASTIC STEP SHALL BE PLACED 16" O.C. IN ALL STRUCTURES 5' DEPTH OR GREATER.
- STEPS SHALL BE INSTALLED BY MANUFACTURER AND SHALL BE ALIGNED OVER STRUCTURE INVERT OUT.
- DIMENSIONS SHOWN ARE TO CONVEY THE DESIRED SIZE OF THE STEP. STEPS OF SIMILAR SIZE AND CONSTRUCTION MAY BE ACCEPTABLE PROVIDED MATERIAL SUBMITTAL IS APPROVED BY FAYPWC.
- MATERIALS OF CONSTRUCTION AND METHOD OF INSTALLATION SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND ASTM C-478.

SERRATED TREADS WIDE ENOUGH TO STAND ON WITH BOTH FEET

STRUCTURE STEP N.T.S.		PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.	
SHEET NO. 1 OF 1	DWG. NO. S.8 DATE: JULY 01, 2015	DWG. BY: FAYPWC APPROVED BY: J.E.G.	WATER RESOURCES ENGINEERING DEPARTMENT

NO.	DATE	REVISION

2015-S8 STEP.dwg



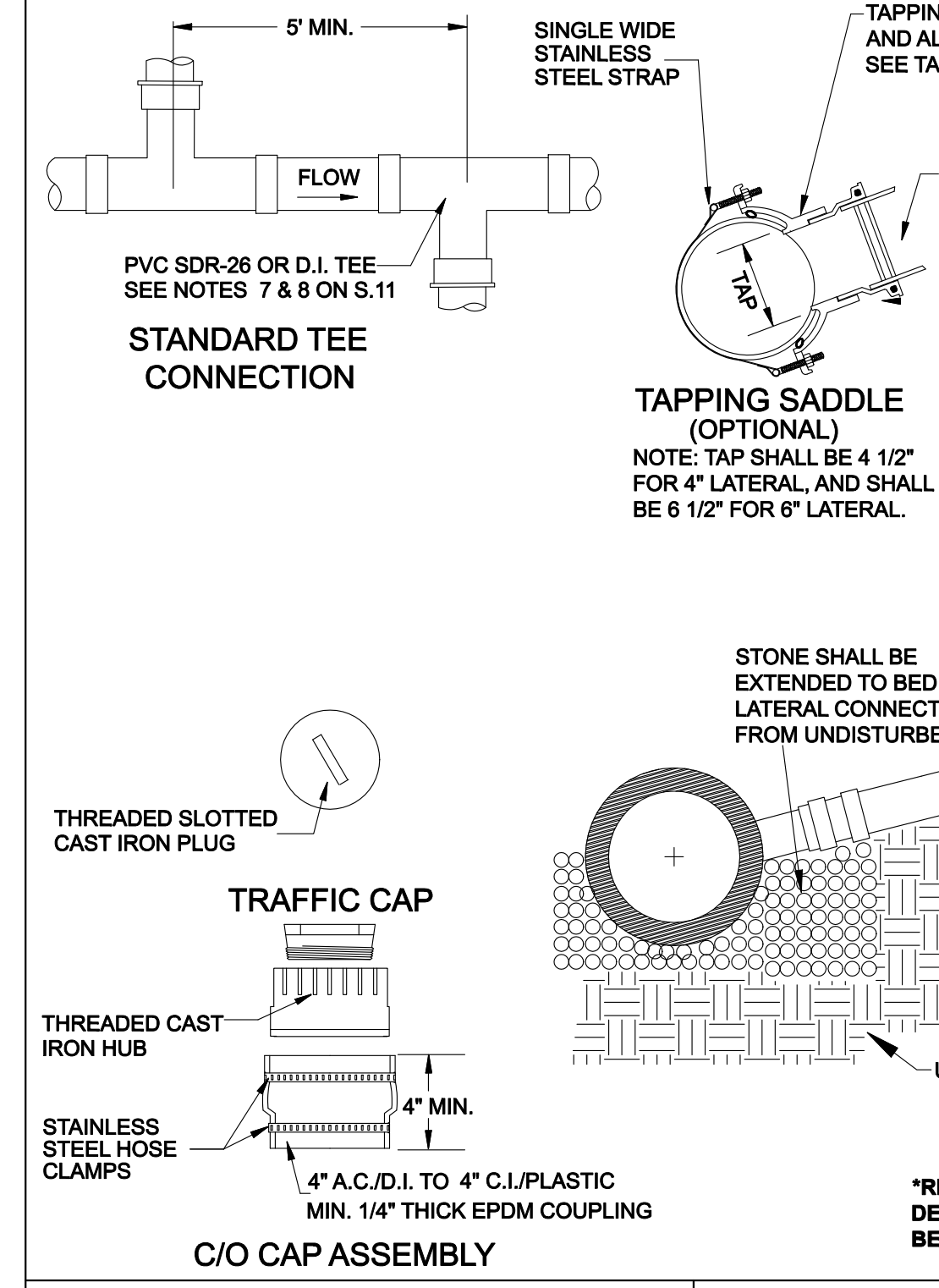
NOTES:

- THE SPRING-LOADED GAS RELIEF VALVE SHALL RELIEVE THE GAS PRESSURE BUILD-UP. THE VALVE IS AUTOMATICALLY ACTIVATED WHEN THE GAS PRESSURE DIFFERENTIAL IN THE MANHOLE REACHES APPROXIMATELY 1/2 psi.
- THE SPRING-LOADED VACUUM RELIEF VALVE RELIEVES VACUUM PRESSURE BUILD-UP. THIS VALVE IS ACTIVATED WHEN THE VACUUM PRESSURE DIFFERENTIAL REACHES APPROXIMATELY 2.25 psi.
- THE BOWL SHAPE SHALL BE DESIGNED TO PROTECT THE INSERT VALVES WHEN THE MANHOLE COVER IS REMOVED.
- THE INSERT SHALL NOT BE SUSCEPTIBLE TO CORROSION OR BE DAMAGED BY SEWER GASES OR ROAD OILS.
- A POLYETHYLENE GASKET, HEAT-WELDED UNDER THE LIP, CONFORMS TO IRREGULARITIES IN THE FRAME, AND FORMS A TIGHT, VIRTUALLY LEAK PROOF SEAL.
- BOTH VALVES SHALL BE SELF-CLEANING, AND MADE OF NON-CORRODIBLE MATERIAL.
- INSERT SHALL NOT BE INSTALLED UNTIL MANHOLE AND SEWER LINES ARE INSPECTED AND ACCEPTED BY OWNER.

WATERTIGHT MANHOLE INSERT N.T.S.		PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.	
SHEET NO. 1 OF 1	DWG. NO. S.9 DATE: JULY 01, 2015	DWG. BY: FAYPWC APPROVED BY: J.E.G.	WATER RESOURCES ENGINEERING DEPARTMENT

NO.	DATE	REVISION

2015-S9 INSERT.dwg



TAPPING SADDLE WITH STRAP AND ALIGNMENT FLANGE SEE TABLE ON S.11

EXTEND STACK 18" MIN. ABOVE GRADE WITH GLUE CAP FOR TESTING. AFTER TEST ARE ACCEPTED ADJUST STACK TO PROPER GRADE AND INSTALL PERMANENT CLEANOUT CAP ASSEMBLY

1'-6" (TYP.) (SEE NOTE 22 DETAIL S.11)

GLUE CAP FOR AIR TESTING (TO REMAIN)

PROPERTY LINE

4" TO 6" UNLESS OTHERWISE APPROVED BY FAYPWC

PERMANENT ASS'Y SEE CLEANOUT CAP ASS'Y

RISER SHALL BE 4" SDR-26 PVC EXCEPT IT SHALL BE 4" D.I. IF THE LATERAL ITSELF IS DUCTILE IRON

MIN. SLOPE 2% FOR 4" 1% FOR 6"

SEE NOTE 3 DETAIL S.11

45° BEND. FOR PVC LATERALS, UTILIZE SDR-26 GASKETED FITTINGS. FOR DI LATERALS, UTILIZE MJ FITTING WITH TRANSITION GASKET OR PUSH-ON DI x PVC FITTING.

EXTEND SS TO R/W OR PROPERTY LINE (D.I. OR PVC, DEPENDING ON LATERAL MATERIAL)

STONE SHALL BE EXTENDED TO BED LATERAL CONNECTION FROM UNDISTURBED SOIL

UNDISTURBED SOIL

PVC SDR-26 GASKETED COMBINATION (SEE NOTE 18 ON S.11) OR MECH JOINT FITTINGS, IF D.I. LATERAL.

*REFER TO FAYPWC DETAIL S.12 REGARDING BENDS IN LATERAL.

FOR SEWER SERVICE LATERAL NOTES SEE DETAIL S.11

SEWER SERVICE LATERAL (4-INCH AND 6-INCH)		PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.	
SHEET NO. 1 OF 1	DWG. NO. S.10 DATE: JULY 01, 2015	DWG. BY: FAYPWC APPROVED BY: JEG	WATER RESOURCES ENGINEERING DEPARTMENT

NO.	DATE	REVISION
1	JAN. 13	REVISED NOTES
2	JAN. 14	ADDED TAILPIECE, NOTES
3	JAN. 15	REVISED NOTES RE: TAILPIECE

2015-S10 resslat.dwg

Prepared by:

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DATE: 6/22/2016
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