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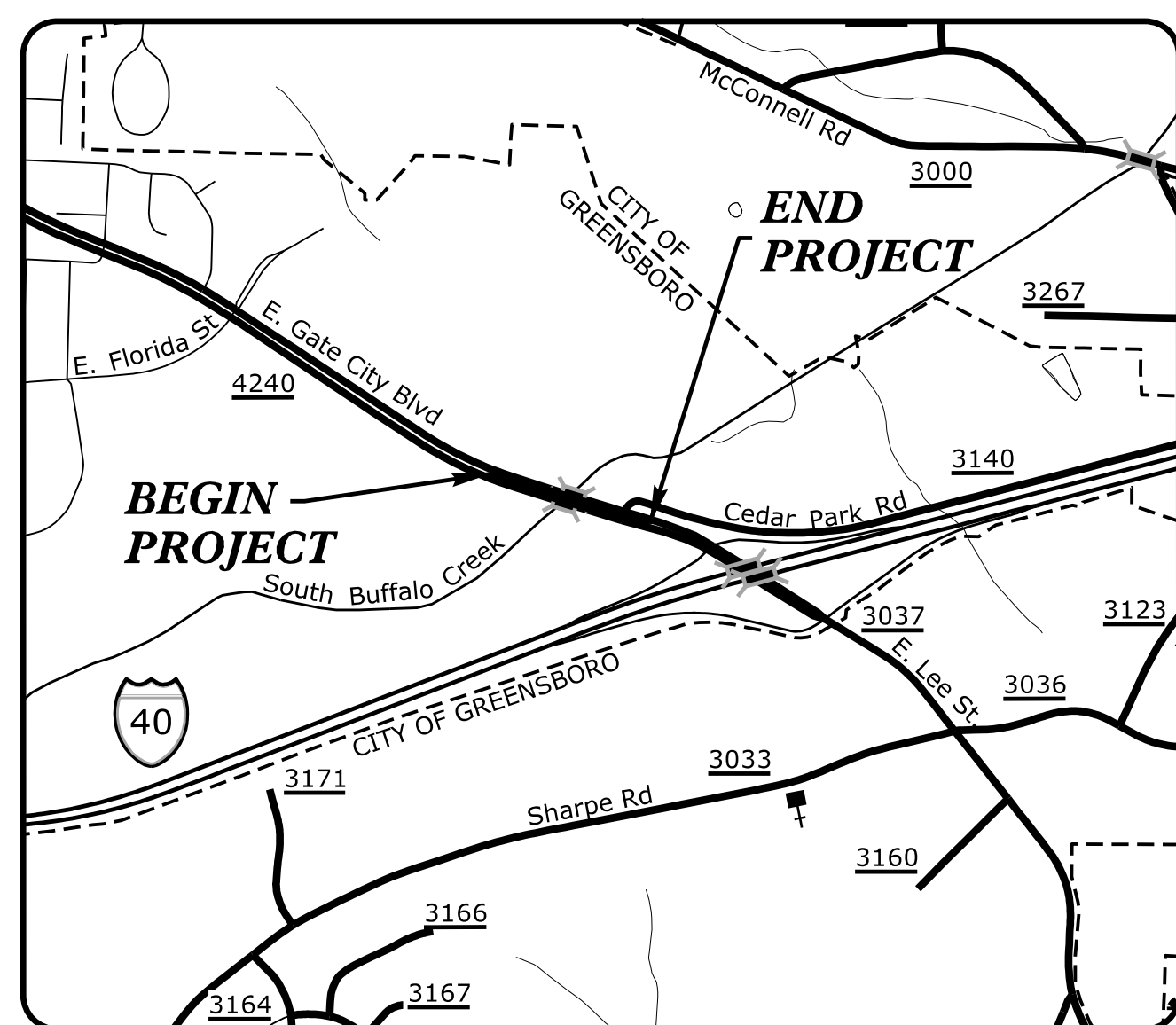
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09/08/2022

TIP PROJECT: B-5717

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

T.I.P. NO.	SHEET NO.
B-5717	UC-1

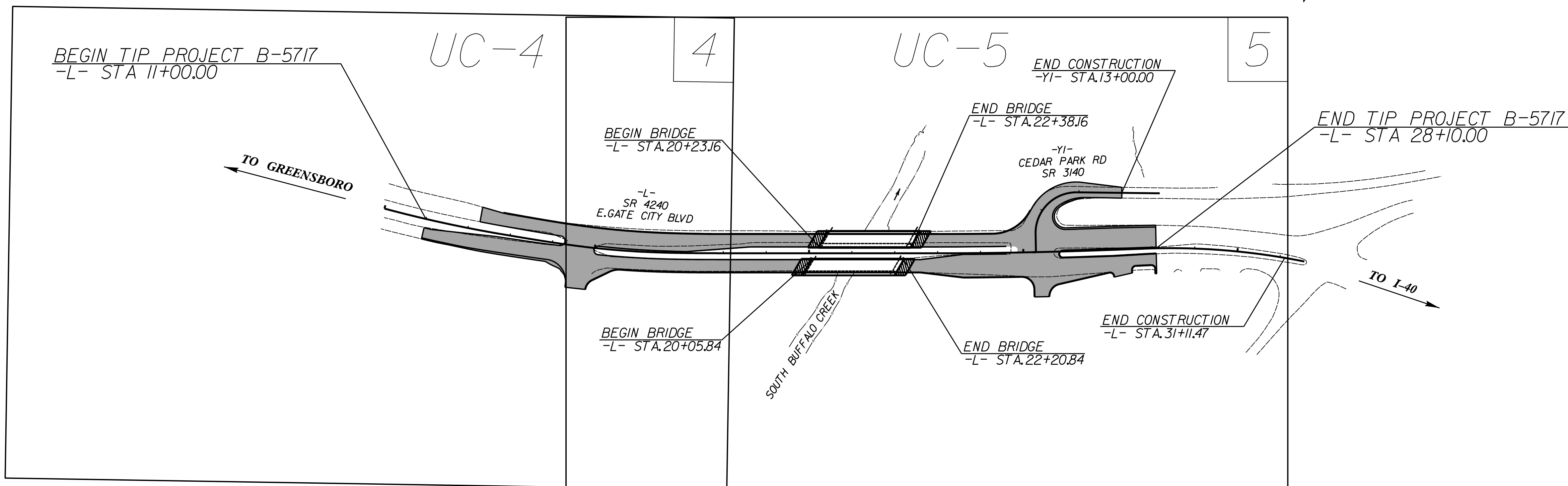
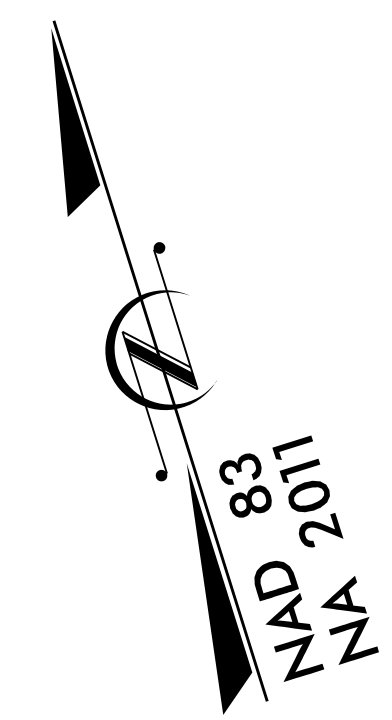


VICINITY MAP
NOT TO SCALE

UTILITY CONSTRUCTION PLANS GUILFORD COUNTY

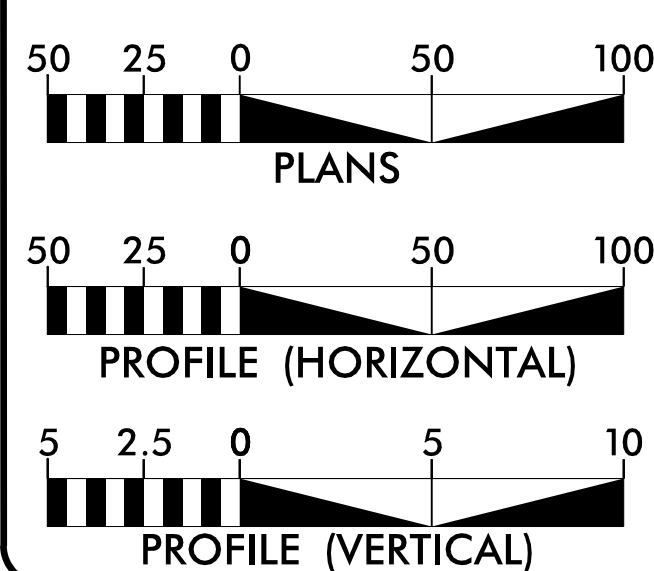
LOCATION: BRIDGES 109 AND 121 ON SR 4240 (E. GATE CITY BLVD)
OVER SOUTH BUFFALO CREEK

TYPE OF WORK: UTILITY CONSTRUCTION



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	NOTES
UC-3A THRU UC-3B	DETAILS
UC-4 THRU UC-5	UTILITY CONSTRUCTION SHEETS
UC-6	PROFILE SHEET

WATER AND SEWER OWNERS ON PROJECT

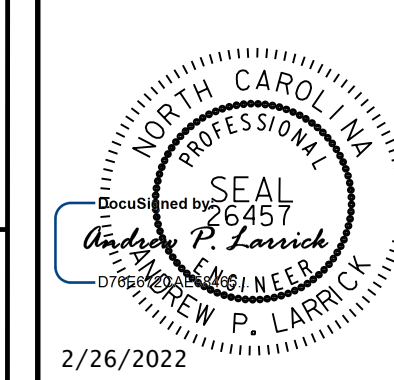
- A) WATER - CITY OF GREENSBORO
- B) SEWER - CITY OF GREENSBORO

PREPARED IN THE OFFICE OF:

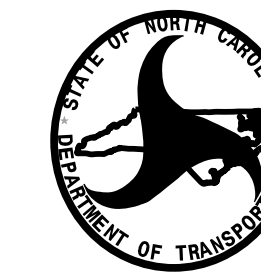
DAVIS • MARTIN • POWELL **dmp**
ENGINEERS & SURVEYORS
6415 OLD PLANK RD., HIGH POINT, NC 27265
PHONE: (336)898-4821 FAX: (336)898-4458
WWW.DMP-INC.COM LICENSE: F-0245

- Andy Larrick, P.E. CONSULTANT CONTACT #1
- Steve McKee, P.E. CONSULTANT CONTACT #2
- Ralph Lowe CONSULTANT CONTACT #3

SEAL



2/26/2022



DIVISION OF HIGHWAYS
UTILITIES UNIT
1555 MAIL SERVICE CENTER
RALEIGH, NC 27699-1555
PHONE (919) 707-6690
FAX (919) 250-4151

- Amy York CENTRAL UTILITIES MANAGER
- Ali Kouchehi, PE REGIONAL UTILITIES ENGINEER
- Jon Loughry SENIOR UTILITIES ENGINEER
- Dayton Martin REGIONAL UTILITY COORDINATOR
- Jon Gaillard UTILITY COORDINATOR

\$\$\$\$\$ SYSTEM \$\$\$\$\$\$ DGN \$\$\$\$\$\$ USERNAME \$\$\$\$\$\$

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11 1/4 Degree Bend	
22 1/2 Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	
Water Meter	
Relocate Water Meter	
Remove Water Meter	
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement by Open Cut	
Encasement	

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

NOTE
PAY ITEM

EXISTING UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Utility Pole	
Utility Pole with Base	
H-Frame Pole	
Power Transmission Line Tower	
Water Manhole	
Power Manhole	
Telephone Manhole	
Sanitary Sewer Manhole	
Hand Hole for Cable	
Power Transformer	
Telephone Pedestal	
CATV Pedestal	
Gas Valve	
Gas Meter	
Located Miscellaneous Utility Object	
Abandoned According to Utility Records	
End of Information	

*Underground Power Line	
*Underground Telephone Cable	
*Underground Telephone Conduit	
*Underground Fiber Optics Telephone Cable	
*Underground TV Cable	
*Underground Fiber Optics TV Cable	
*Underground Gas Pipeline	
Aboveground Gas Pipeline	
*Underground Water Line	
Aboveground Water Line	
*Underground Gravity Sanitary Sewer Line	
Aboveground Gravity Sanitary Sewer Line	
*Underground SS Forced Main Line	
Underground Unknown Utility Line	
SUE Test Hole	
Water Meter	
Water Valve	
Fire Hydrant	
Sanitary Sewer Cleanout	

*For Existing Utilities
Utility Line Drawn from Record (Type as Shown)
Designated Utility Line (Type as Shown)

5/14/99
REV: 2/1/2012

8/17/2022

UTILITY CONSTRUCTION

GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2018.
2. THE EXISTING WATER AND SEWER UTILITIES BELONG TO THE CITY OF GREENSBORO.
3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT QUALITY, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.
4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.
5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.
7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.
8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.
9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

PROJECT SPECIFIC NOTES:

1. UNLESS OTHERWISE NOTED, PIPE AND FITTINGS FOR PROPOSED WATER MAINS 12" DIAMETER AND SMALLER SHALL BE DUCTILE IRON, PC 350.
2. UNLESS OTHERWISE NOTED, PIPE AND FITTINGS FOR PROPOSED SEWER MAINS SHALL BE DUCTILE IRON, PC 350.
3. WATER LINE VALVES SHALL BE RESILIENT-SEAT GATE VALVES CONFORMING TO ANSI/AWWA C509 OR ANSI/AWWA C515, AND SHALL BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI.
4. TEMPORARY BYPASS PUMPING OF FLOW IN EXISTING SEWER LINES WILL BE REQUIRED WHEN INSTALLING NEW SEWER LINES IN THE SAME HORIZONTAL ALIGNMENT AS THE EXISTING SEWER LINES, AND WHEN TYING PROPOSED MH'S INTO EXISTING SEWER LINES. SEE DIVISION 15, SECTION 1520-3-A-1 OF THE NCDOT STANDARD SPECIFICATIONS. COSTS FOR TEMPORARY BYPASS PUMPING SHALL BE INCIDENTAL TO THE CONTRACT.
5. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.
6. THE CONTRACTOR SHALL CONTACT THE CITY OF GREENSBORO WATER RESOURCES DEPARTMENT AT LEAST TWO (2) WEEKS IN ADVANCE OF ANY WORK INVOLVING SHUT-DOWNS OF EXISTING WATER MAINS. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER SERVICE TO CUSTOMERS WHEN EXISTING WATER MAINS HAVE TO BE SHUT DOWN FOR MORE THAN 8 HOURS.
7. THE CONTRACTOR SHALL REPLACE ANY DAMAGED SEWER LATERALS AND/OR CLEANOUTS AS DIRECTED BY THE ENGINEER. ESTIMATED QUANTITIES HAVE BEEN ADDED TO THE CONTRACT TO FACILITATE THIS PROCEDURE.

LIST OF STANDARD DRAWINGS

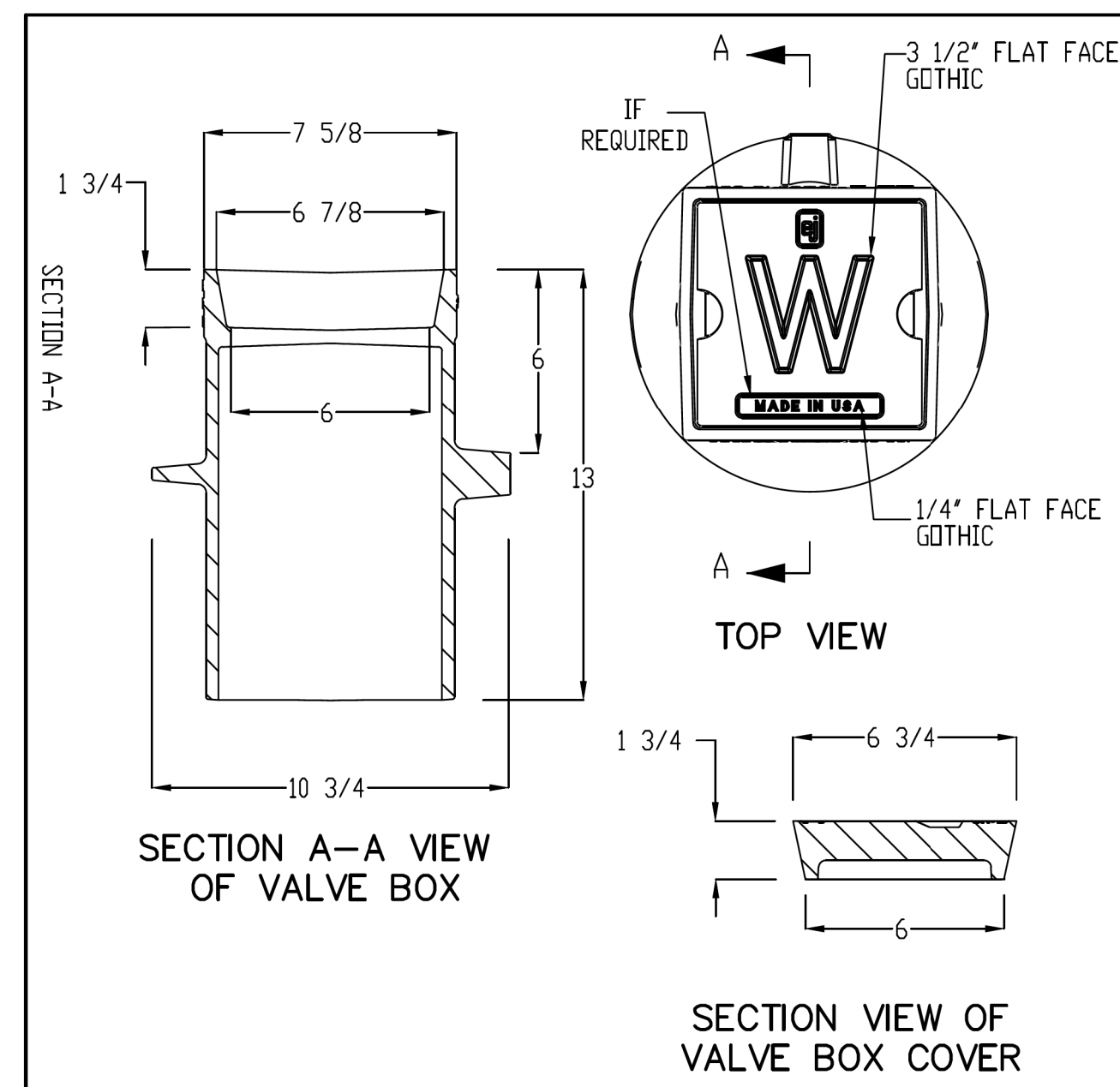
- 1515.01 WATER METER
- 1515.02 FIRE HYDRANT
- 1520.01 SEWER CLEAN OUT

PROJECT REFERENCE NO. B-5717	SHEET NO. UC-3
DESIGNED BY: DMP	
DRAWN BY: DMP	
CHECKED BY: DMP	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	2/26/2022
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

B.17/99



SECTION A-A VIEW OF VALVE BOX

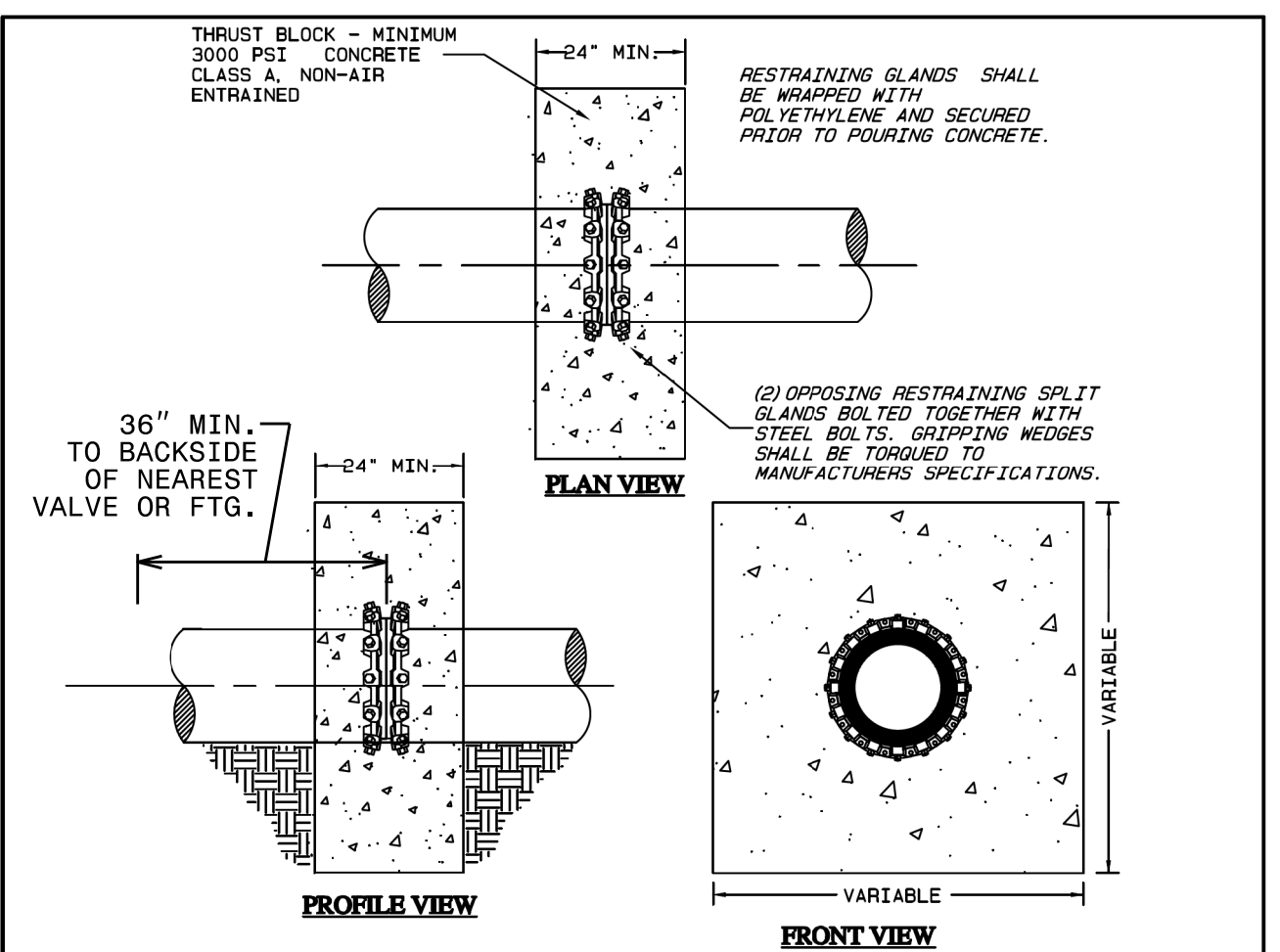
TOP VIEW

SECTION VIEW OF VALVE BOX COVER

NOTES:

- VALVE BOX EXTENSION SHALL BE EITHER 6" DIA. SOIL PIPE OR SCH. 40 PVC PIPE.
- EXTENSION TO BE ONE SOLID PIECE OF PIPE UNLESS BURIAL DEPTH IS GREATER THAN STANDARD LENGTH OF PIPE. A BELL OR COUPLING SHALL BE UTILIZED AT THE TOP OF VALVE CONNECTION (SEE COG STD #101).
- LETTER HEIGHT 3-1/2"
- COUNTERSINK LETTERS 3/16"
- TO BE USED IN PAVED OR NON-PAVED AREAS.
- ALL CASTINGS SHALL MEET THE REQUIREMENTS OF AASHTO M306.
- DUE TO VARIATIONS IN CASTINGS OF DIFFERENT MANUFACTURERS, DIMENSIONS SHALL BE WITHIN REASONABLE TOLERANCES AS PRE-APPROVED BY GREENSBORO WATER RESOURCES DEPARTMENT AND/OR FIELD INSPECTOR PRIOR TO INSTALLATION.
- VALVE BOX MAY BE REQUIRED TO BE "MADE IN U.S.A." IF FEDERAL FUNDS ARE INVOLVED.

CITY OF GREENSBORO		
WATER VALVE BOX AND EXTENSION	STD. NO. 102	REV. 03-83 03-12 08-12 10-13 03-15



THrust BLOCK - MINIMUM 3000 PSI CONCRETE CLASS 4, NON-AIR ENTRAINED.

RESTRAINING GLANDS SHALL BE WRAPPED WITH POLYETHYLENE AND SECURED PRIOR TO POURING CONCRETE.

(2) OPPOSING RESTRAINING SPLIT GLANDS BOLTED TOGETHER WITH STEEL BOLTS. GRIPPING NUTS SHALL BE TORQUED TO MANUFACTURERS SPECIFICATIONS.

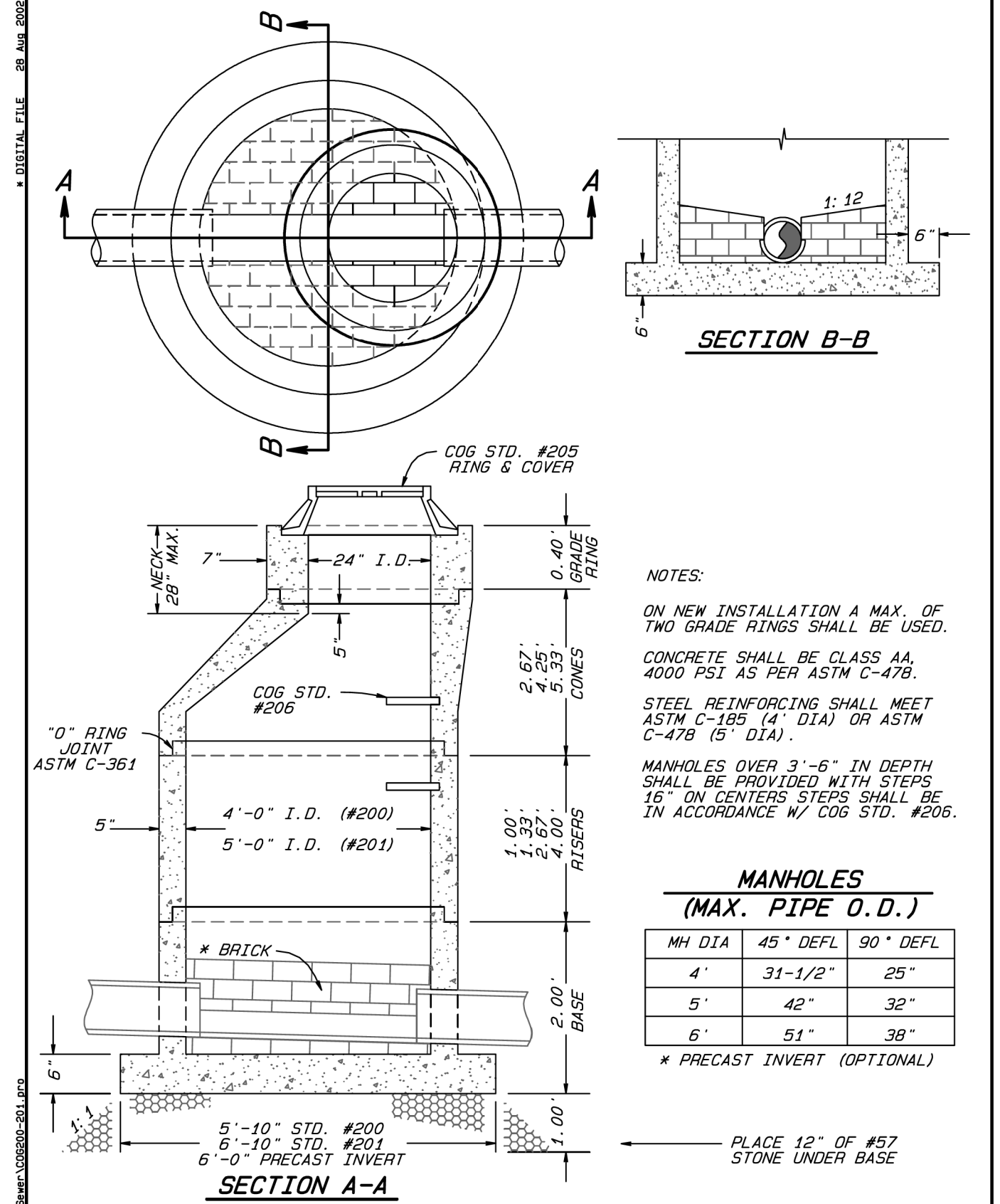
36" MIN. TO BACKSIDE OF NEAREST VALVE OR FTG.

NOTES:

- SEE CITY OF GREENSBORO - WATER LINE AND SEWER LINE STANDARD CONSTRUCTION SPECIFICATIONS, SUB-ARTICLE 3.02 & 3.03 FOR (TRENCH AND BACK-FILL) AND (TRENCH STABILIZATION) REQUIREMENTS.
- THRUST BLOCK SHALL BE ORIENTED APPROXIMATELY CENTER OF PIPE JOINT.
- OPTIONAL #4 WELDED COLLAR (INSTALLED BY PIPE MANUFACTURER) MAY BE USED IN LIEU OF RESTRAINING GLANDS. ALL OTHER DESIGN REQUIREMENTS SHALL APPLY AS SHOWN.
- FOR PIPES LARGER THAN 16" DIAMETER, THE DEADMAN THRUST RESTRAINT WITH BLOCKING MUST BE DESIGNED AND SEALED BY A N.C. PROFESSIONAL ENGINEER.
- ANY PROPOSED MODIFICATIONS TO THIS STANDARD BASED ON THE FIELD CONDITIONS MUST BE PRE-APPROVED BY THE CITY OF GREENSBORO FIELD INSPECTOR AND/OR THE ENGINEER OF RECORD.
- QUANTITIES SHOWN BELOW ARE TO THE NEAREST QUARTER YARD AND ARE BASED ON MINIMUM MASS WEIGHT REQUIREMENTS OF THE TEST PRESSURES SHOWN.

PIPE DIAMETER	MINIMUM CUBIC YARDS OF CONCRETE REQUIRED		
	100 PSI TEST PRES.	200 PSI TEST PRES.	250 PSI TEST PRES.
6"	0.75	1.0	1.25
8"	1.5	2.0	2.25
10"	2.0	3.0	3.5
12"	3.0	4.0	5.0
16"	5.5	7.25	9.0

CITY OF GREENSBORO		
DEADMAN THRUST RESTRAINT WITH MASS WEIGHT BLOCKING	STD. NO. 118	REV. 06-13 08-15



NOTES:

ON NEW INSTALLATION A MAX. OF TWO GRADE RINGS SHALL BE USED.

CONCRETE SHALL BE CLASS AA, 4000 PSI AS PER ASTM C-478.

STEEL REINFORCING SHALL MEET ASTM C-475 (4" DIA) OR ASTM C-478 (5" DIA).

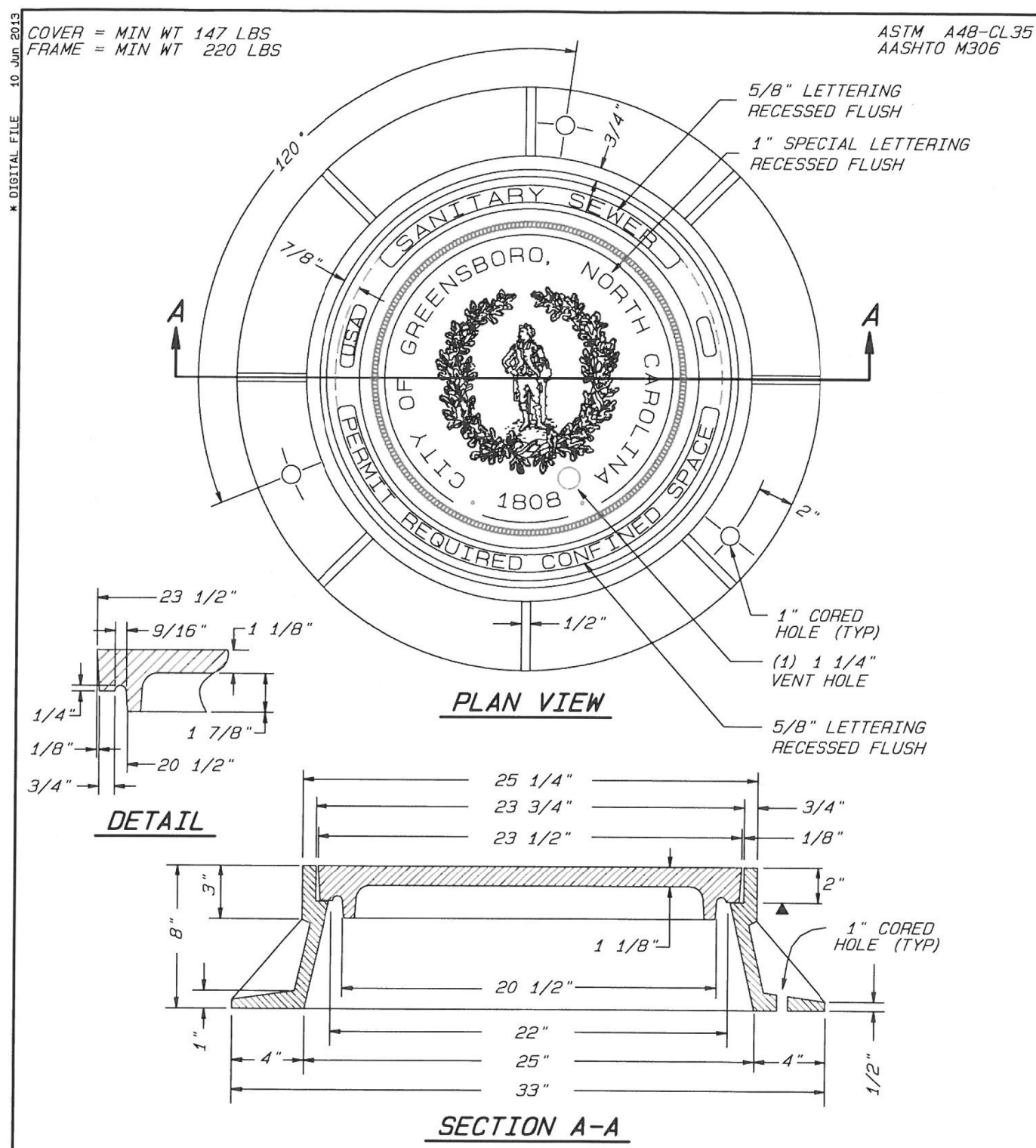
MANHOLES OVER 3'-6" IN DEPTH SHALL BE PROVIDED WITH STEPS 15" ON CENTERS STEPS SHALL BE IN ACCORDANCE W/ COG STD. #206.

MANHOLES (MAX. PIPE O.D.)

MH DIA	45° DEFL	90° DEFL
4'	31-1/2"	25"
5'	42"	32"
6'	51"	38"

* PRECAST INVERT (OPTIONAL)

CITY OF GREENSBORO		
STANDARD 4' I.D. & 5' I.D. ECCENTRIC PRECAST CONCRETE SANITARY MANHOLE WITH EXPANDED BASE	STD. NO. 200/201	REV. 05-88 03-98 11-93 08-02 09-95



PLAN VIEW

DETAIL

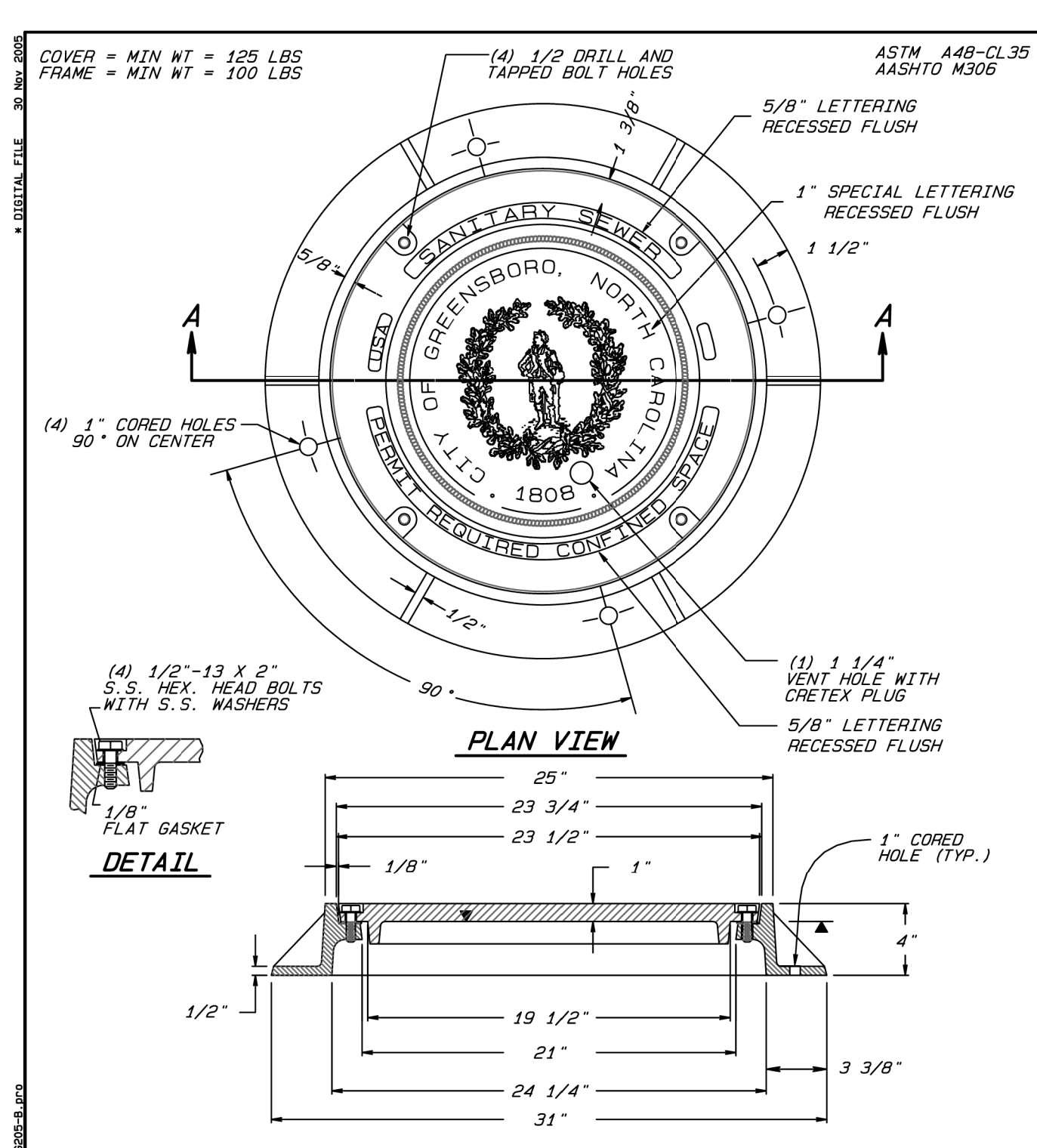
SECTION A-A

NOTES:

ALL DIMENSIONS AND TOLERANCES ARE TO BE CONCENTRIC AND WILL SUPERSEDE ANY ASTM STANDARDS WITH A MAXIMUM VARIATION ± 1/16" ON ALL DIMENSIONS.

MANHOLE RING TO BE ANCHORED WITH 1/2" REDHEAD STAINLESS STEEL ANCHORS AND SEALED BETWEEN RING AND CONE WITH BITUMASTIC SEALER.

CITY OF GREENSBORO		
STANDARD MANHOLE RING AND COVER	STD. NO. 205	REV. 12-05 06-13



PLAN VIEW

DETAIL

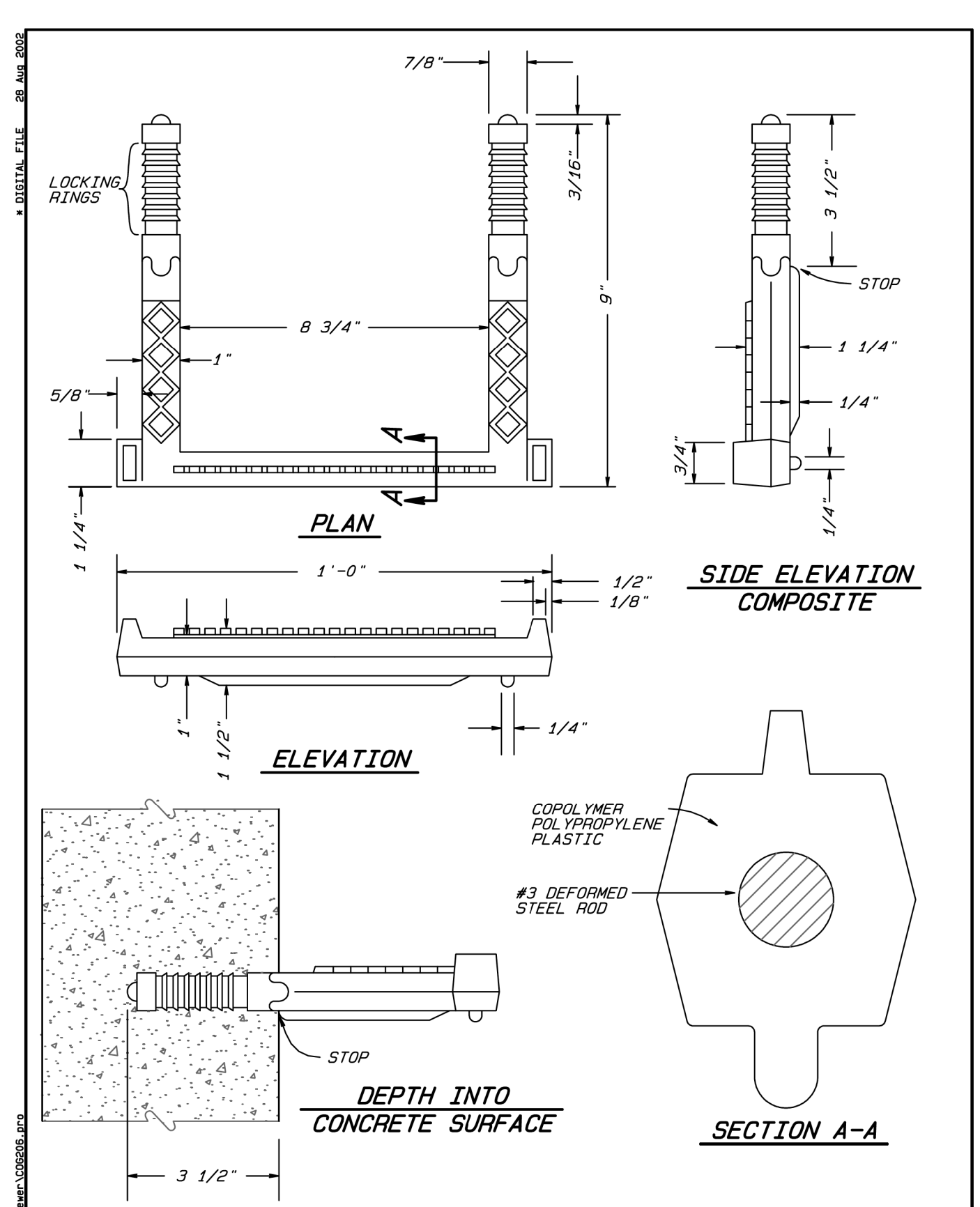
SECTION A-A

NOTES:

ALL DIMENSIONS AND TOLERANCES ARE TO BE CONCENTRIC AND WILL SUPERSEDE ANY ASTM STANDARDS WITH A MAXIMUM VARIATION ± 1/16" ON ALL DIMENSIONS.

MANHOLE RING TO BE ANCHORED WITH 1/2" REDHEAD STAINLESS STEEL ANCHORS AND SEALED BETWEEN RING AND CONE WITH BITUMASTIC SEALER.

CITY OF GREENSBORO		
STANDARD WATERTIGHT MANHOLE RING AND COVER	STD. NO. 205-B	REV. MAR-97 DEC-05 MAR-99 MAR-01



PLAN

SIDE ELEVATION COMPOSITE

ELEVATION

DEPTH INTO CONCRETE SURFACE

SECTION A-A

CITY OF GREENSBORO		
STANDARD MANHOLE STEP FOR PRECAST CONCRETE MANHOLE	STD. NO. 206	REV.

PROJECT REFERENCE NO. B-5717	SHEET NO. UC-3A
DESIGNED BY: DMP	
DRAWN BY: DMP	
CHECKED BY: DMP	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 2/26/2022	UTILITY CONSTRUCTION PLANS ONLY
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

UTILITY CONSTRUCTION PLANS PREPARED BY:

DAVIS • MARTIN • POWELL

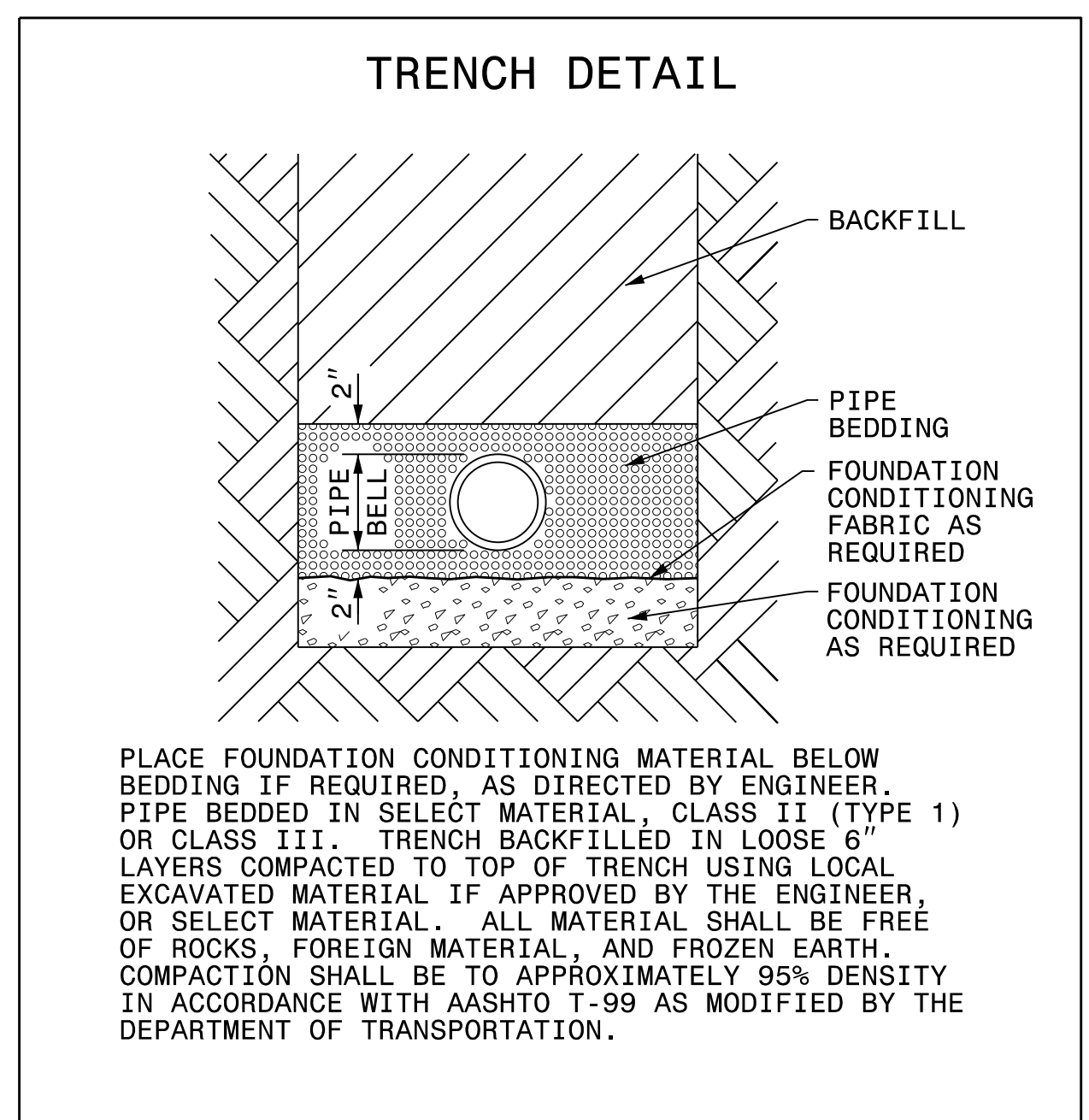
ENGINEERS & SURVEYORS

6415 OLD PLANK RD., HIGH POINT, NC 27265
PHONE: (336) 886-4821 FAX: (336) 886-4458
WWW.DMP-INC.COM LICENSE: P-2425

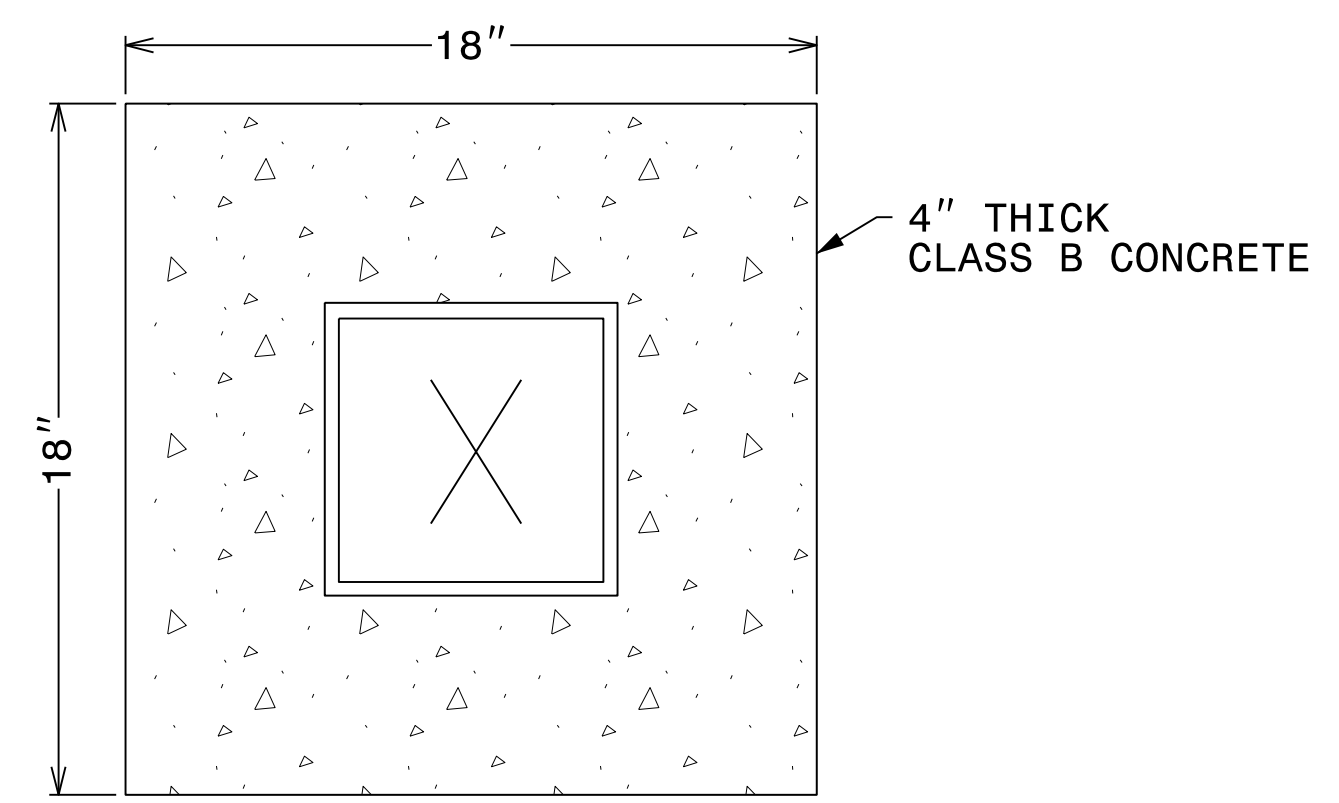
PROJECT REFERENCE NO.	SHEET NO.
B-5717	UC-3B
DESIGNED BY: DMP	
DRAWN BY: DMP	
CHECKED BY: DMP	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	2/26/2022
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

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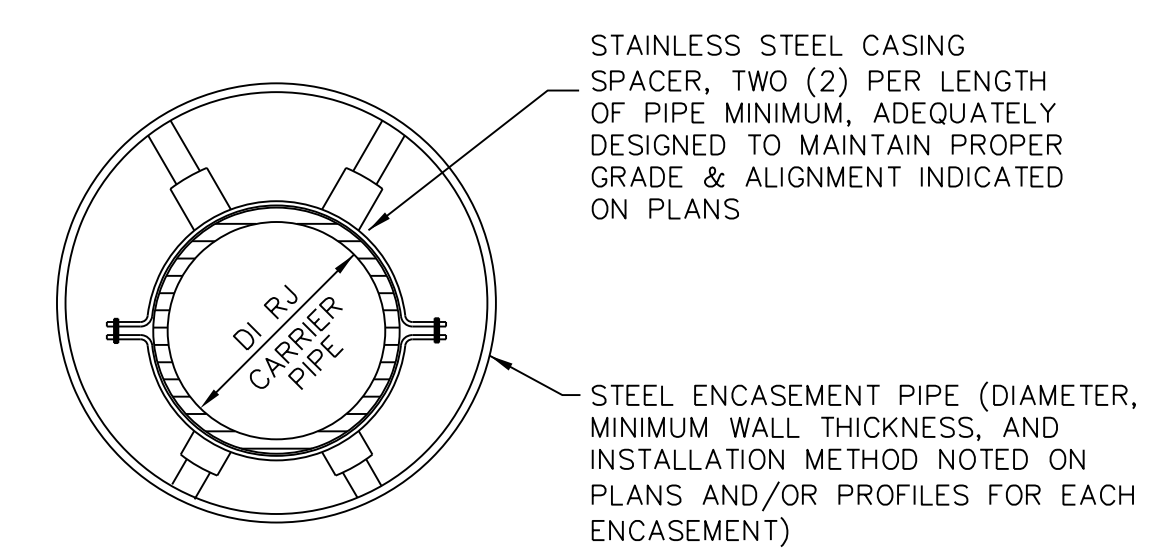


MAXIMUM TRENCH WIDTH AT TOP OF PIPE			
NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)	NOMINAL PIPE SIZE (INCHES)	TRENCH WIDTH (INCHES)
4	28	20	44
6	30	24	48
8	32	30	54
10	34	36	60
12	36	42	66
14	38	48	72
16	40	54	78
18	42	60	84



CONCRETE COLLAR FOR VALVE BOX

- NOTES:
1. PROVIDE CONCRETE COLLARS FOR ALL VALVE BOXES THAT ARE NOT IN PAVED AREAS.
 2. VALVE BOX LIDS SHALL HAVE THE LETTER "W" FOR WATER VALVES, OR "S" FOR SEWER VALVES.



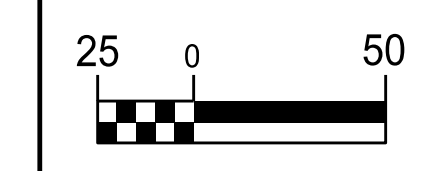
- NOTES:
1. ENCLOSE ENDS WITH BRICK MASONRY.
 2. PROVIDE 2" WEEP HOLE AT LOW END OF ENCASEMENT.
 3. SEE 2018 NCDOT STANDARD SPECIFICATIONS, DIVISION 15, SECTIONS 1540 AND 1550, FOR OTHER REQUIREMENTS.

TYPICAL ENCASEMENT PIPE SECTION
N.T.S.

5/14/99

-L-

PI Sta 11+38.60 Δ = 5° 20' 27.8" (LT) D = 1° 55' 41.5" L = 277.00' T = 138.60' R = 2,971.46'	PIs Sta 14+10.35 Θs = 2° 51' 53.2" Ls = 200.00' LT = 133.35' ST = 66.68'	PI Sta 15+45.26 Δ = 3° 54' 35.5" (LT) D = 2° 51' 53.2" L = 136.48' T = 68.27' R = 2,000.00' e = 0.04 FT/FT R.O. = 200'	PIs Sta 16+80.16 Θs = 2° 51' 53.2" Ls = 200.00' LT = 133.35' ST = 66.68'
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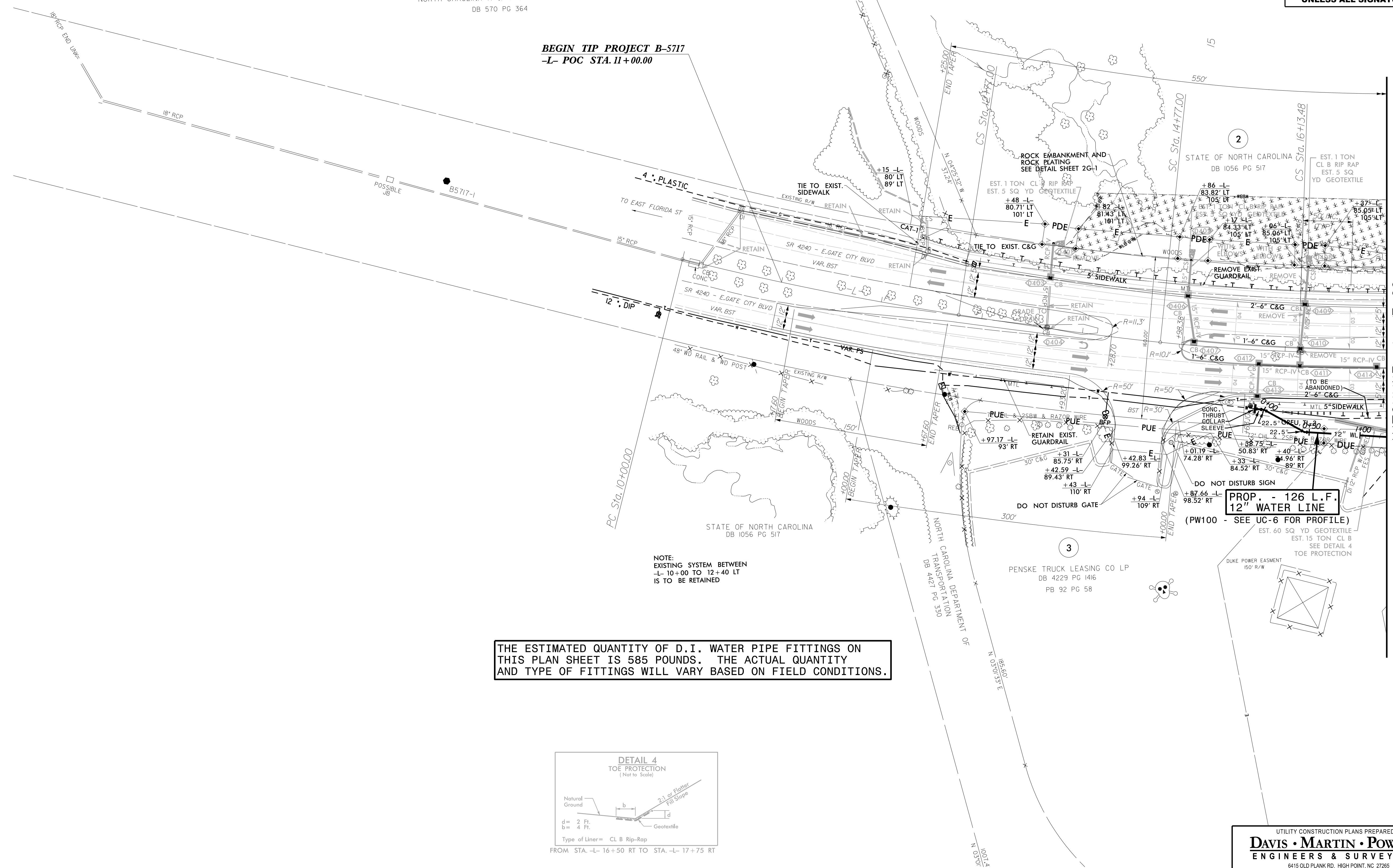


PROJECT REFERENCE NO. B-5717	SHEET NO. UC-4
DESIGNED BY: DMP	
DRAWN BY: DMP	
CHECKED BY: DMP	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151 UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

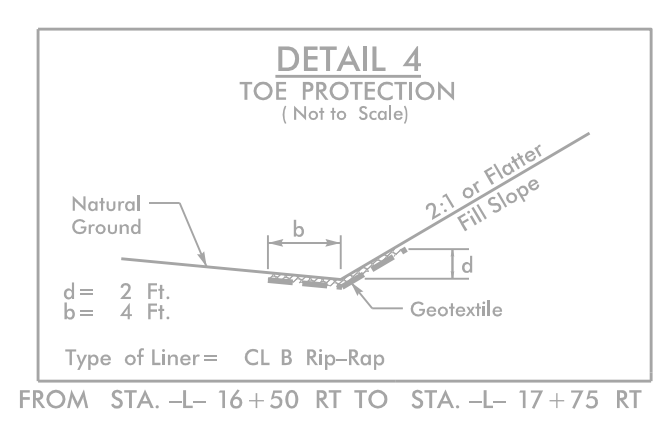
1
NORTH CAROLINA A & T STATE UNIVERSITY
DB 570 PG 364

BEGIN TIP PROJECT B-5717
-L- POC STA. 11+00.00



NOTE:
EXISTING SYSTEM BETWEEN
-L- 10+00 TO 12+40 LT
IS TO BE RETAINED

THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON THIS PLAN SHEET IS 585 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.



REVISIONS

MATCHLINE -L- 17+00
SEE SHEET UC-5

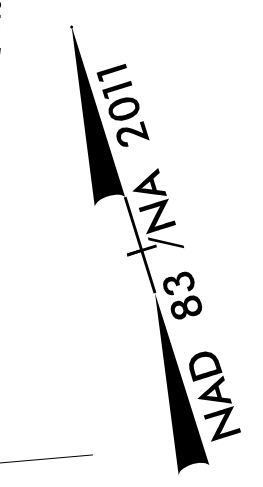
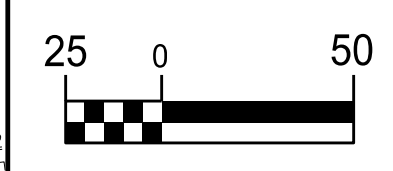
Pls Sta 16+80.16
 $\Delta s = 2' 51" 53.2"$
 $L_s = 200.00'$
 $LT = 133.35'$
 $ST = 66.68'$

Pls Sta 24+44.47
 $\Delta = 1' 35" 19.6" (LT)$
 $D = 0' 34" 22.6"$
 $L = 277.29'$
 $T = 138.65'$
 $R = 10,000.00'$
 $e = NC$

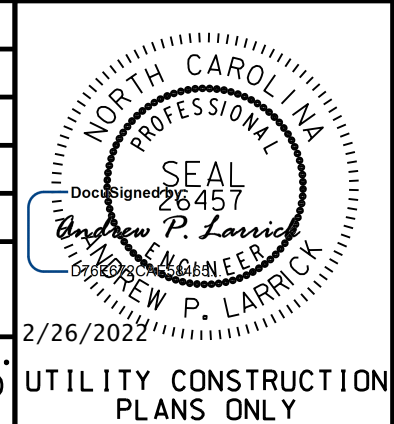
Pls Sta 26+49.78
 $\Delta s = 0' 34" 22.6"$
 $L_s = 200.00'$
 $LT = 133.33'$
 $ST = 66.67'$

Pls Sta 29+71.34
 $\Delta = 1' 32" 43.3" (RT)$
 $D = 3' 36" 53.6"$
 $L = 374.71'$
 $T = 188.23'$
 $R = 1,585.00'$

-YI-
 Pls Sta 11+40.76
 $\Delta = 9' 57" 38.2" (RT)$
 $D = 60' 18" 40.8"$
 $L = 152.48'$
 $T = 98.31'$
 $R = 95.00'$
 $e = 0.04 FT/FT$
 $R.O. = 68'$



PROJECT REFERENCE NO.	SHEET NO.
B-5717	UC-5
DESIGNED BY: DMP	
DRAWN BY: DMP	
CHECKED BY: DMP	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	2/26/2024
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY



UTILITY CONSTRUCTION
 DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

THE ESTIMATED QUANTITY OF D.I. WATER PIPE FITTINGS ON THIS PLAN SHEET IS 4,430 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

PROP. - 150 L.F. OF 24" ENCASEMENT PIPE (STEEL, MIN. W.T.=0.250"), 150 L.F. OF BORE AND JACK OF 24"

ABANDON 270 LF OF 12" UTILITY PIPE

ABANDON UTIL. MH

PROP. - 1 12" VALVE

PROPOSED WM'S AND BFP'S TO BE INSTALLED BY CONTRACTOR FOR NEW STATE EMPLOYEES CREDIT UNION

PROP. - 405 L.F. 8" SANITARY GRAVITY SEWER (PS100 - SEE UC-6 FOR PROFILE)

PROP. - 1 FIRE HYDRANT, 1 - 6" VALVE, 11 L.F. FIRE HYDRANT LEG

PROP. - 539 L.F. 12" WATER LINE (PW200 - SEE UC-6 FOR PROFILE)

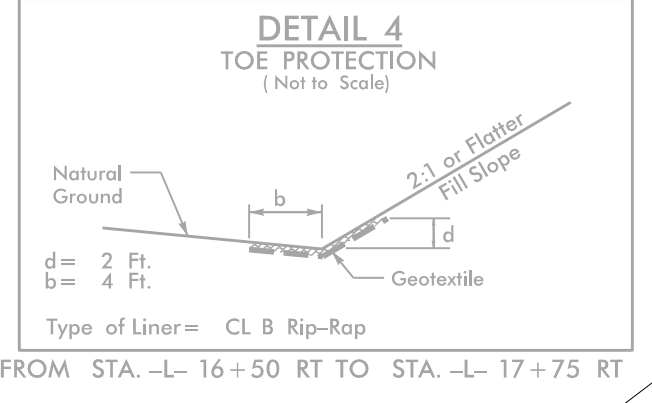
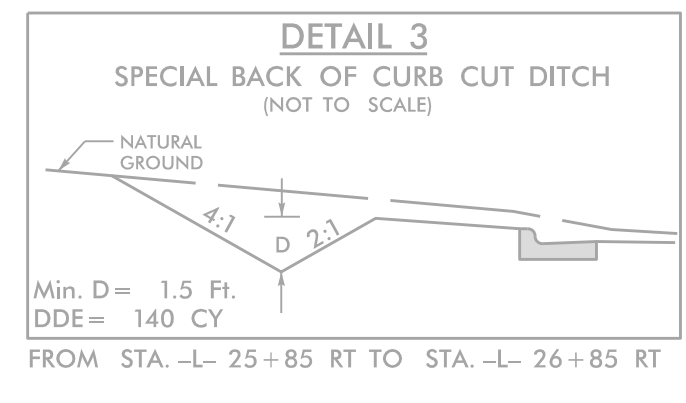
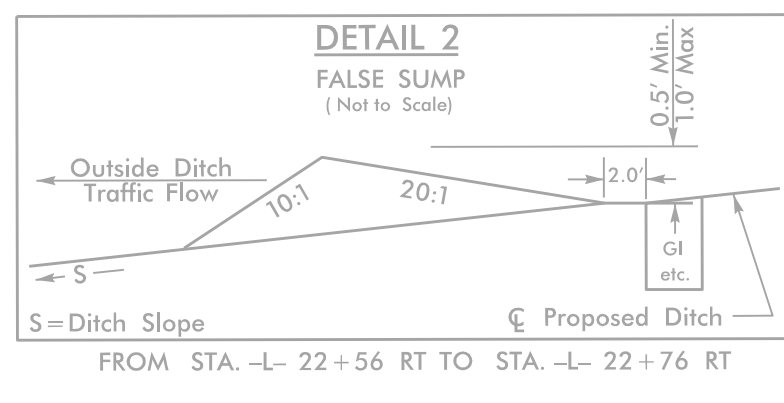
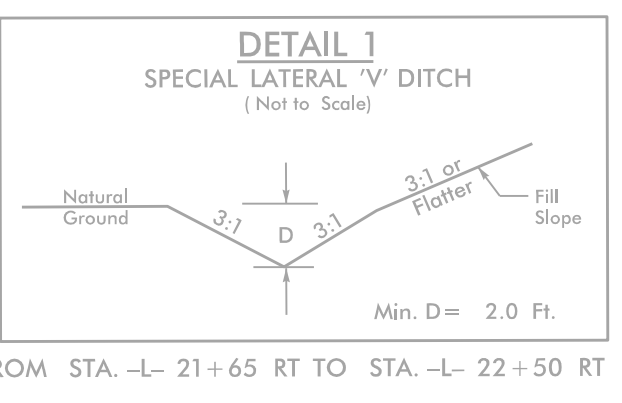
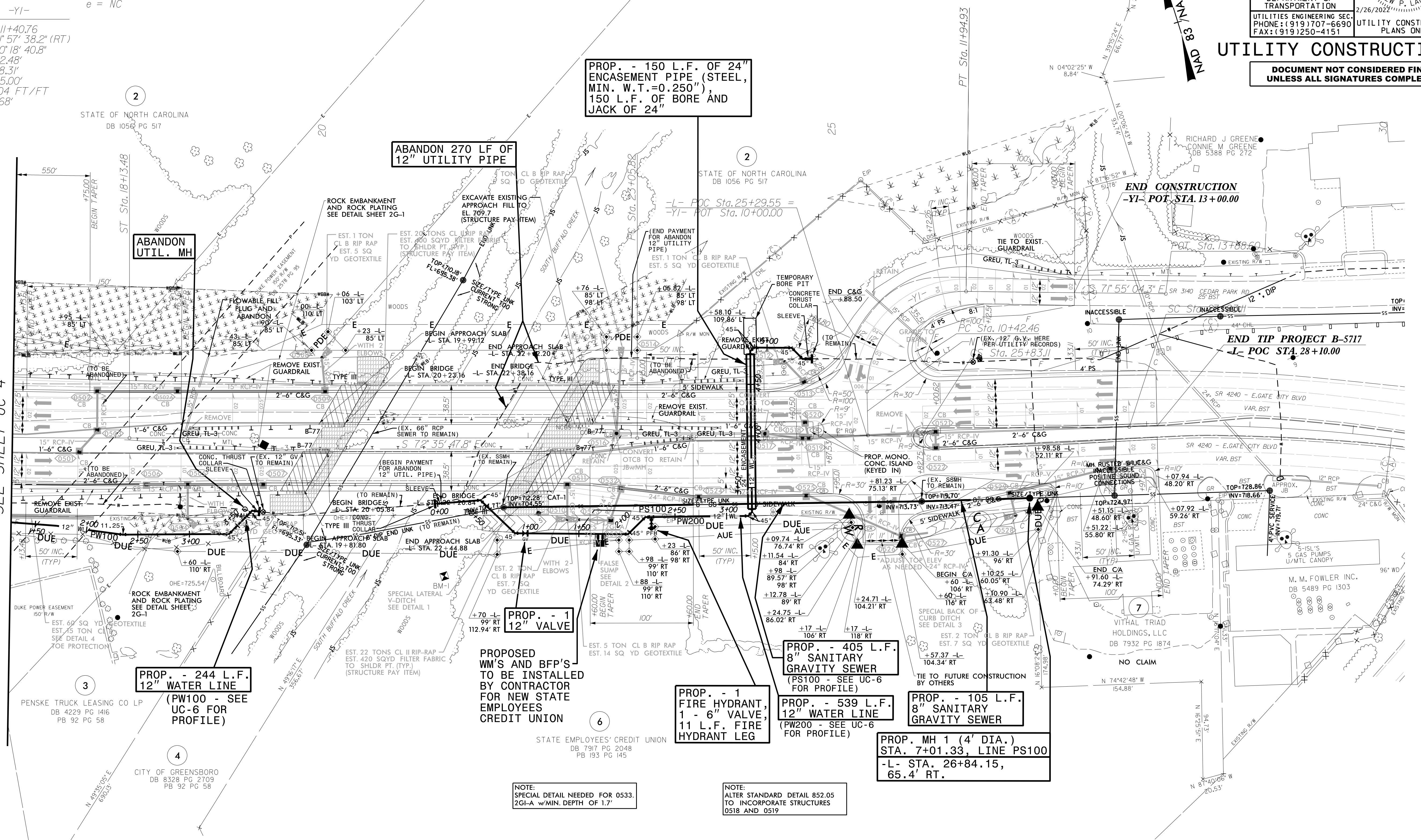
PROP. - 105 L.F. 8" SANITARY GRAVITY SEWER

PROP. MH 11 (4' DIA.) STA. 7+01.33, LINE PS100 -L- STA. 26+84.15, 65.4' RT.

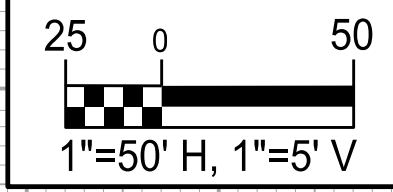
NOTE: SPECIAL DETAIL NEEDED FOR 0533. 2GI-A w/ MIN. DEPTH OF 1.7'

NOTE: ALTER STANDARD DETAIL 852.05 TO INCORPORATE STRUCTURES 0518 AND 0519

MATCHLINE -L- 17+00 SEE SHEET UC-4

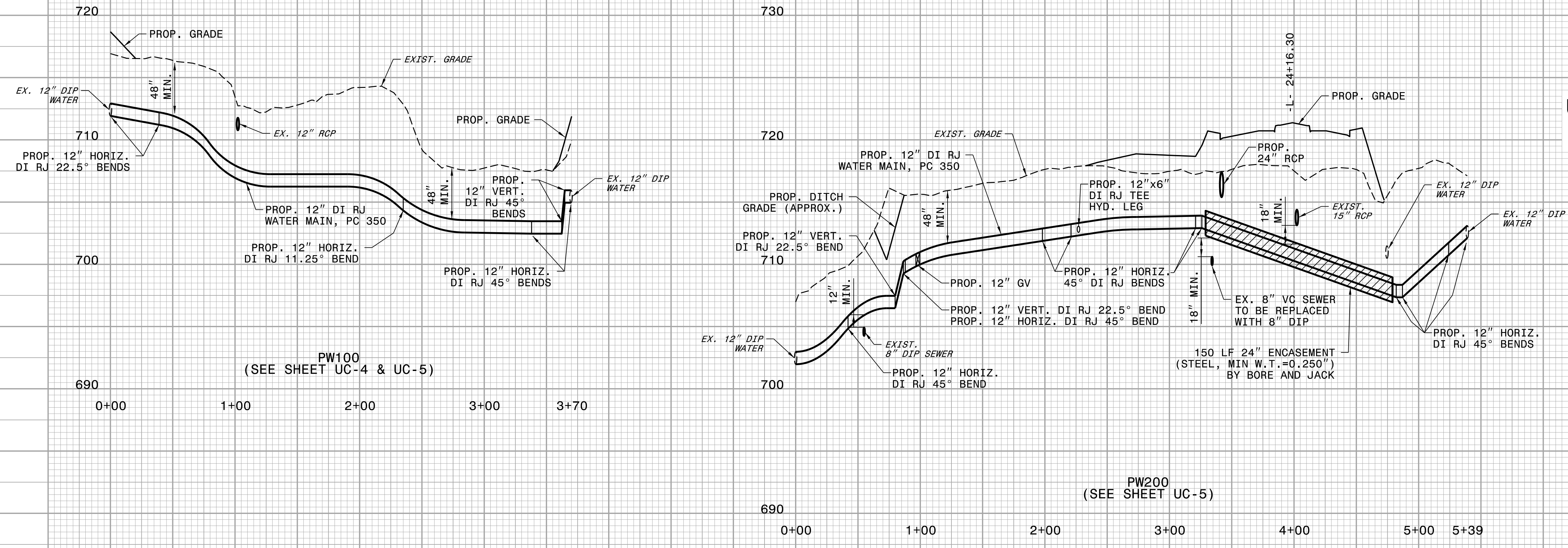


5/14/2022



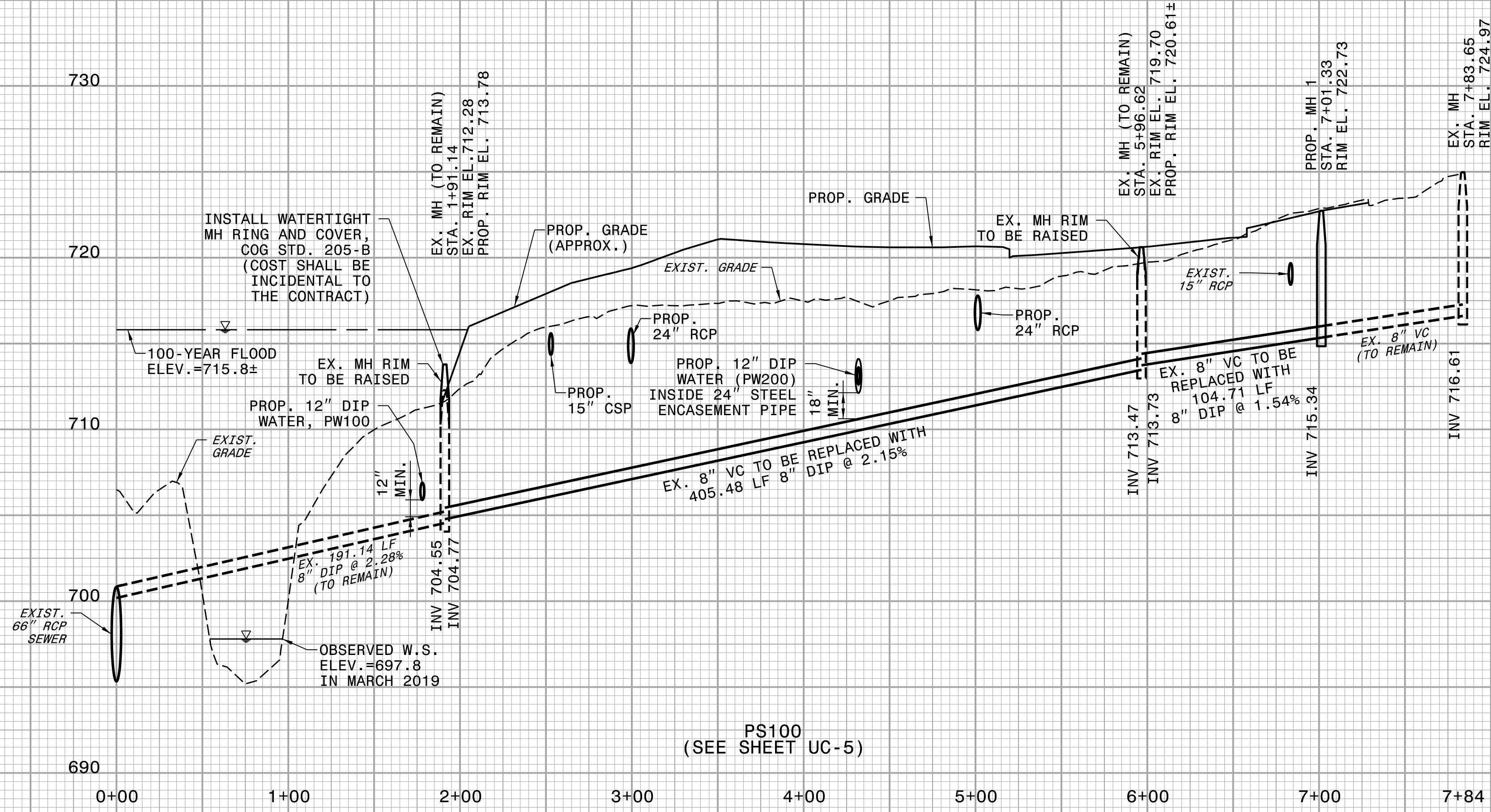
PROJECT REFERENCE NO. B-5717	SHEET NO. UC-6
DESIGNED BY: DMP	
DRAWN BY: DMP	
CHECKED BY: DMP	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

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PW100 (SEE SHEET UC-4 & UC-5)

PW200 (SEE SHEET UC-5)



PS100 (SEE SHEET UC-5)

REVISIONS

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