

WEST CITY VIEW DR. @ RIVERSIDE DR.

SANITARY SEWER REHABILITATION

(PROJECT NO. 2024020)

MSD OF BUNCOMBE COUNTY

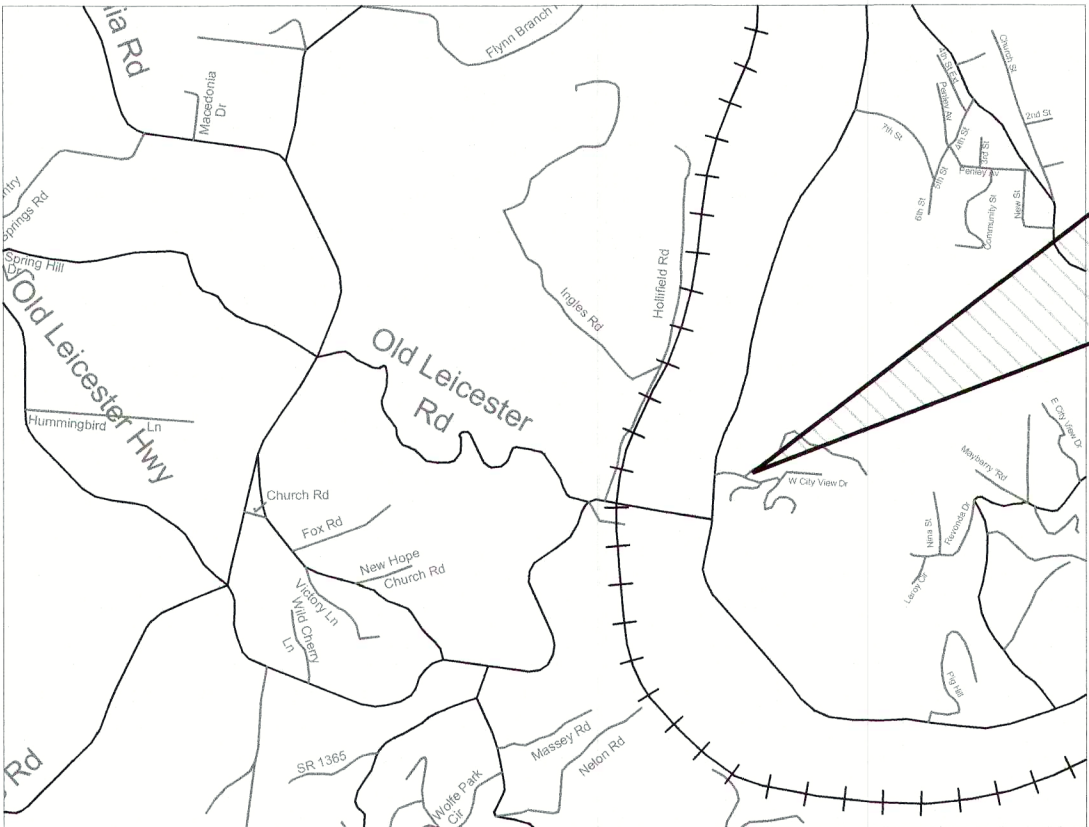


INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
C-1	INDEX OF DRAWINGS AND VICINITY MAP
PL-1	SANITARY SEWER PLAN & PROFILE
D-1	SANITARY SEWER DETAILS
D-2	EROSION CONTROL DETAILS

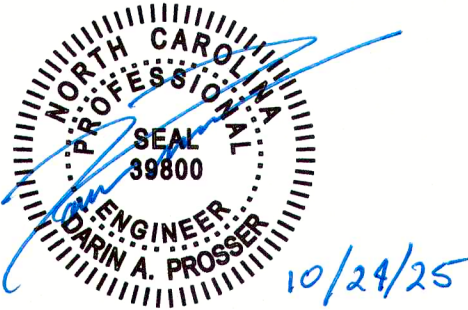
GENERAL NOTES:

- LENGTHS SHOWN ARE NOT ACTUAL PIPE LENGTHS BUT ARE DISTANCES STATION TO STATION. SLOPES SHOWN ON THE PROFILE ARE CALCULATED USING LENGTHS FROM INSIDE EDGES OF MANHOLE.
- ALL WORK ON THIS PROJECT SHALL COMPLY WITH THE CURRENT STANDARD DETAILS AND SPECIFICATIONS OF THE METROPOLITAN SEWERAGE DISTRICT OF BUNCOMBE COUNTY. SPECIAL CONDITIONS AND SPECIAL PROVISIONS MAY APPLY TO THIS PROJECT - SEE SPECIFICATIONS.
- ALL WORK SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS, AS MAY BE APPLICABLE TO THIS PROJECT AND THE WORK DONE HEREUNDER.
- WHERE FEDERAL, STATE, OR LOCAL LAWS REQUIRE THAT A PERMIT BE ISSUED AND OBTAINED FOR WORK DONE UNDER THIS PROJECT, ALL WORK PERFORMED BY THE CONTRACTOR SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE TERMS AND CONDITIONS SET FORTH IN THE PERMIT.
- ANY MODIFICATIONS TO THESE CONSTRUCTION PLANS OR SPECIFICATIONS SHALL BE APPROVED BY THE MSD PROJECT ENGINEER.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO KEEP THE SEWER AND ALL OTHER UTILITIES IN SERVICE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR REPAIRS OF ANY KIND FOR DAMAGES RESULTING FROM THE CONTRACTOR'S CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL LOCATE ALL SERVICES CURRENTLY SERVED BY THE EXISTING SEWER (WHETHER SHOWN OR NOT SHOWN ON THE PLANS) AND RECONNECT TO THE NEW SEWER, INSTALLING A CLEANOUT ASSEMBLY AS REQUIRED (SEE DETAIL).
- THE CONTRACTOR SHALL RESTORE ALL STREETS, PROPERTIES, AND IMPROVEMENTS TO AS GOOD OR BETTER CONDITION THAN EXISTED PRIOR TO CONSTRUCTION.
- PROPERTY LINES SHOWN ON PLANS ARE APPROXIMATE ONLY. PROPERTY MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE RESET BY A LICENSED NC PROFESSIONAL LAND SURVEYOR.
- DESIGN BASED ON SURVEY INFORMATION PROVIDED BY COLE SURVEYING & DESIGN, PA (828) 251-7025.



VICINITY MAP

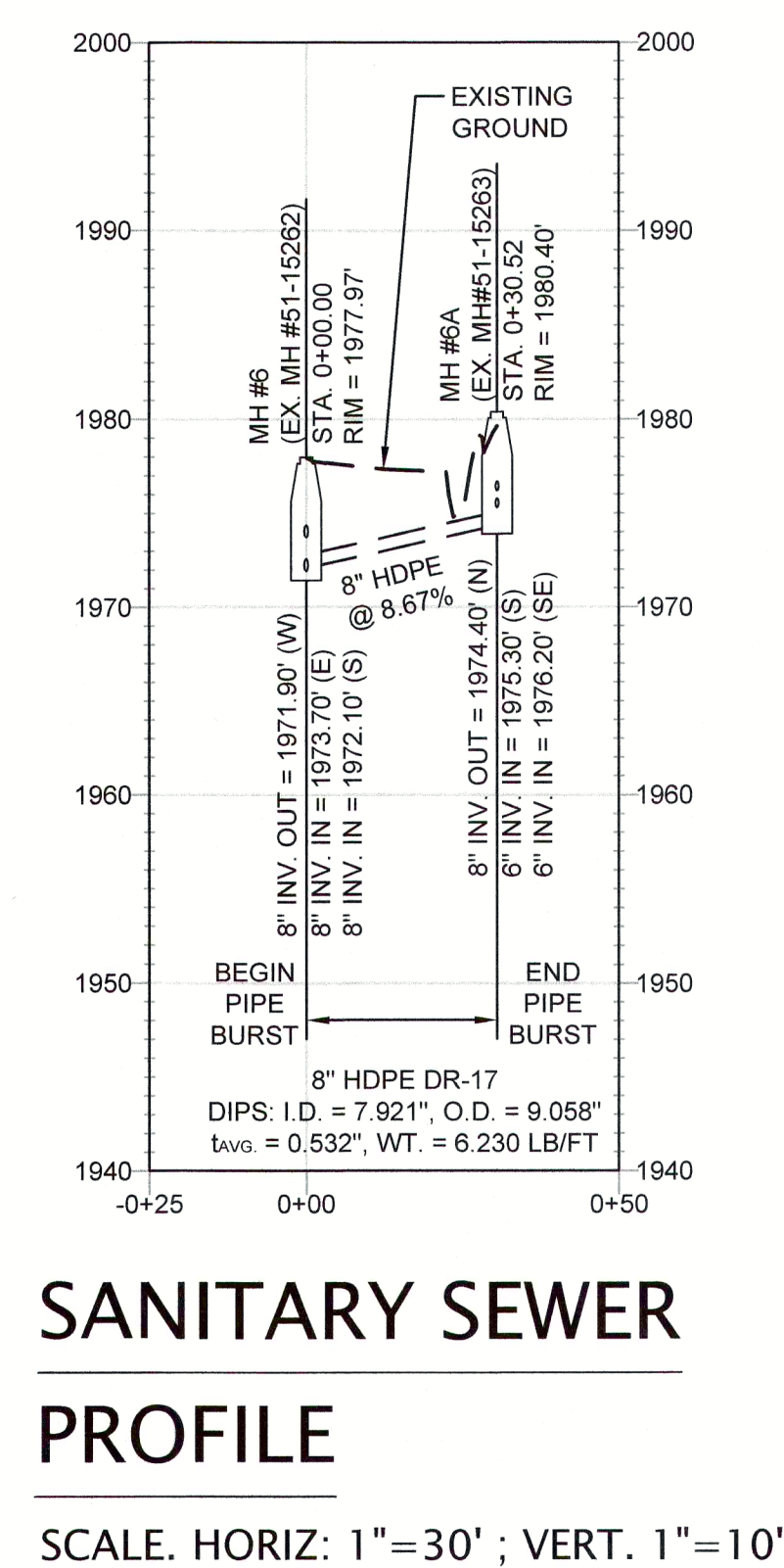
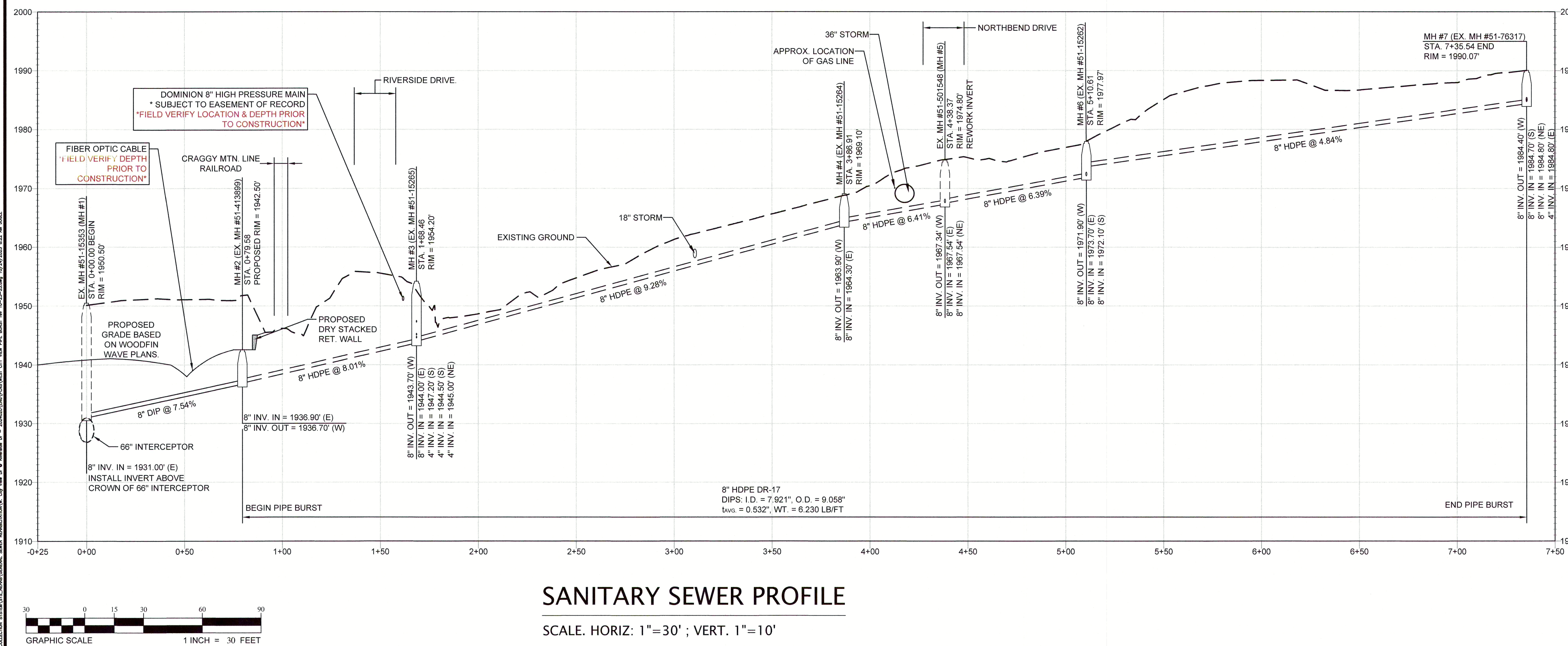
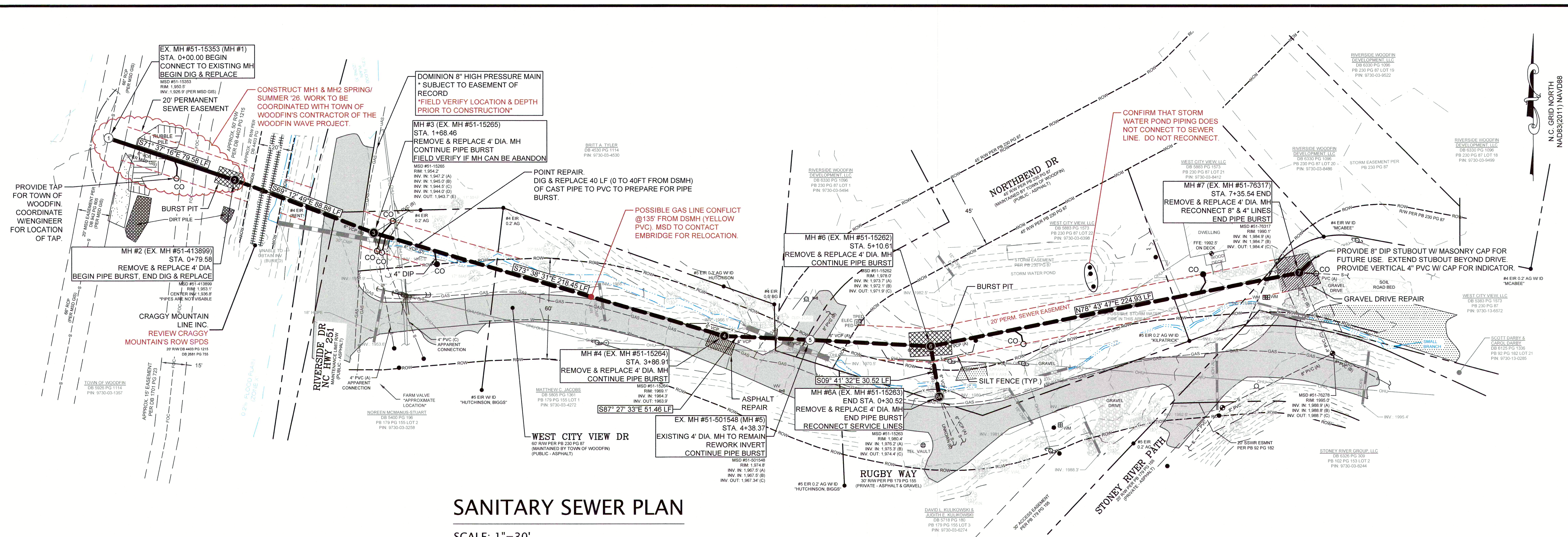
Scale: NTS

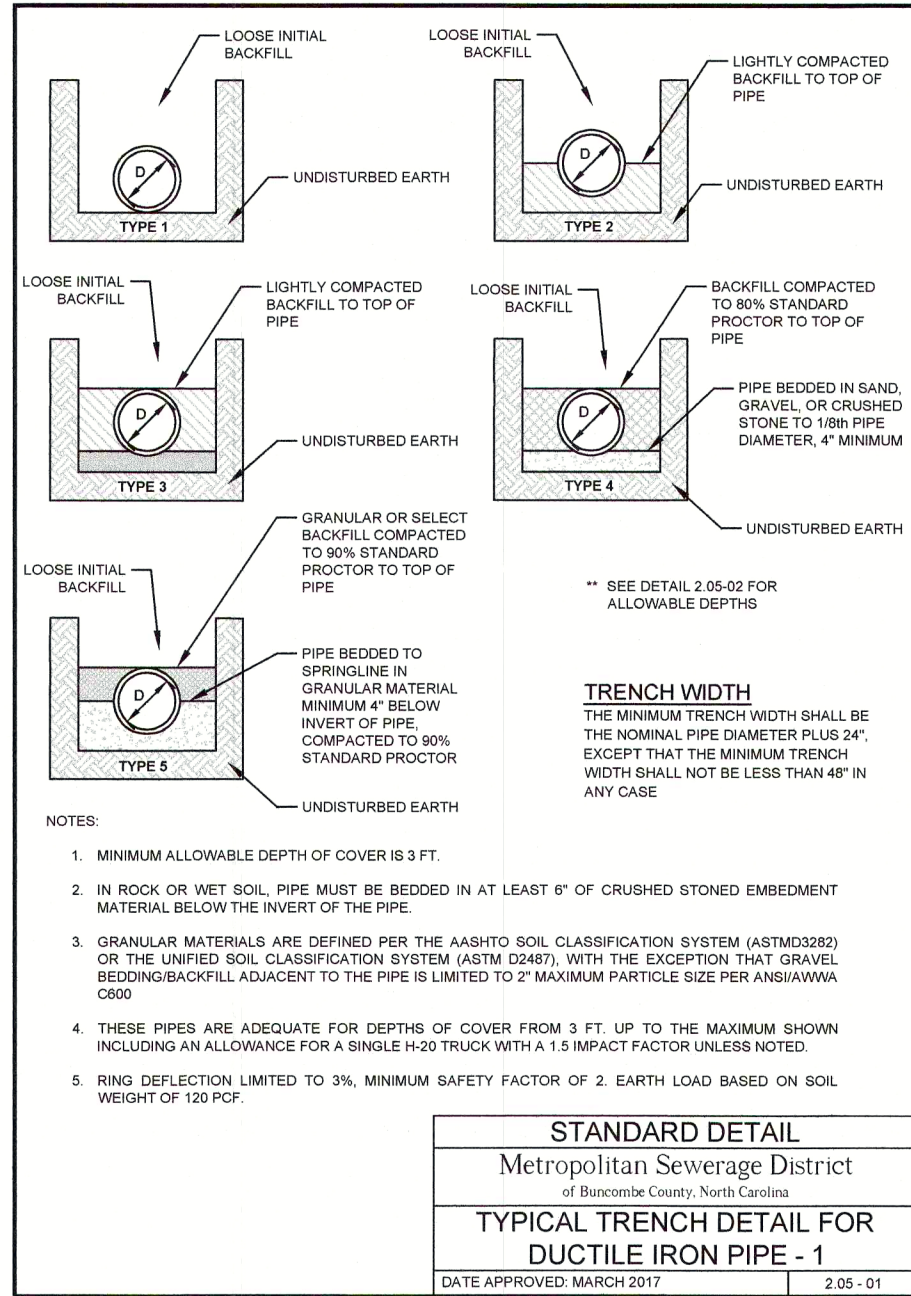
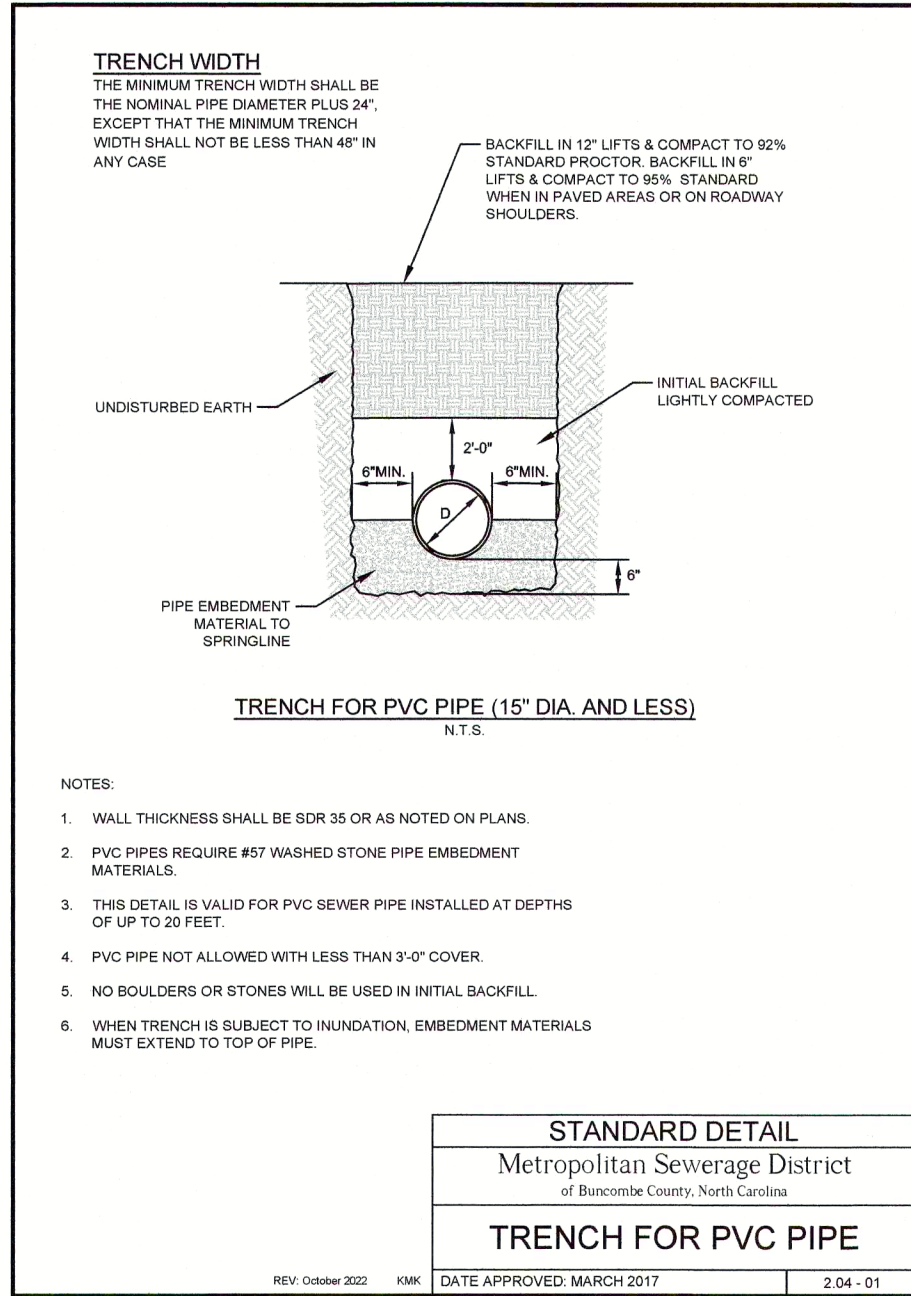
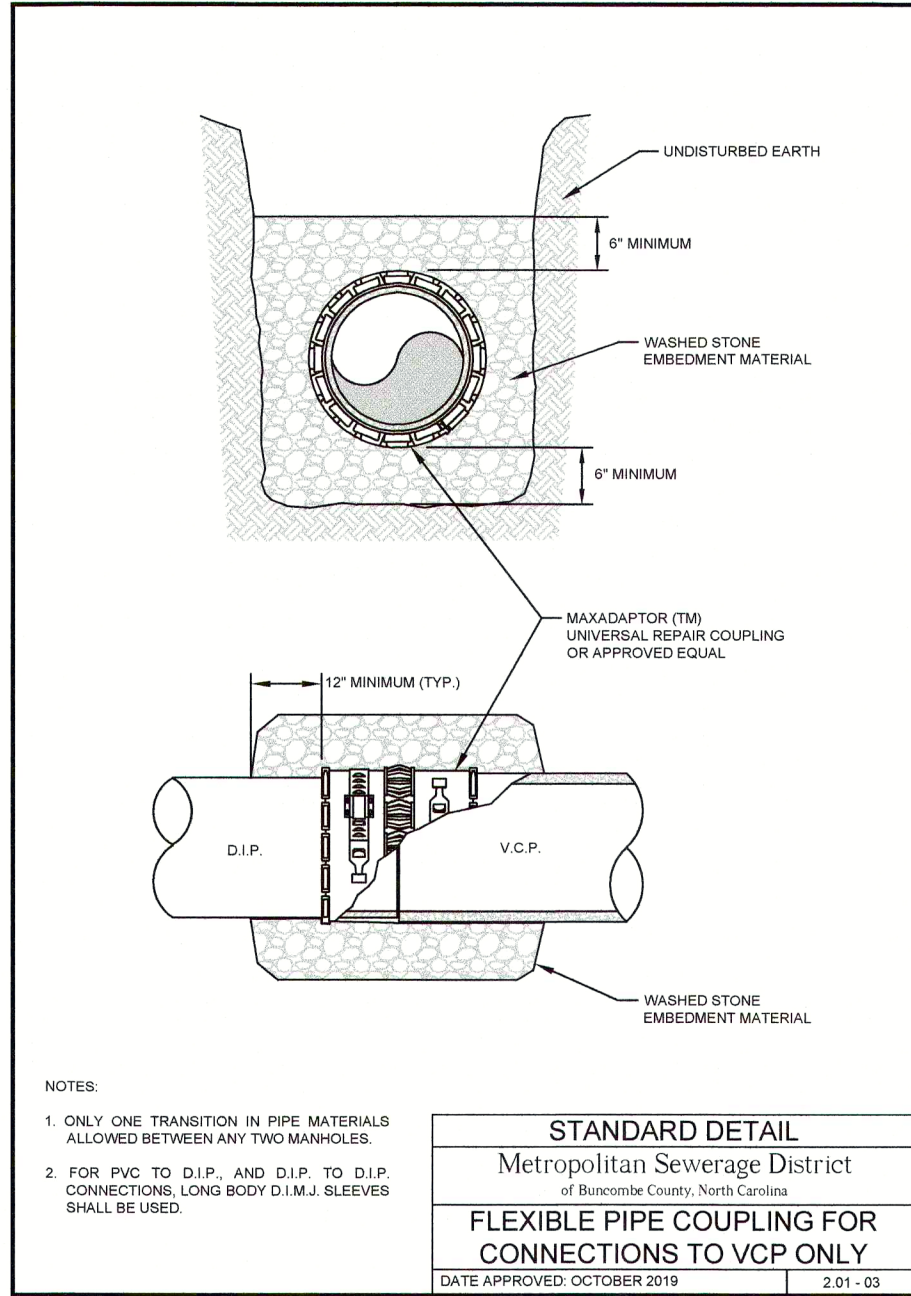
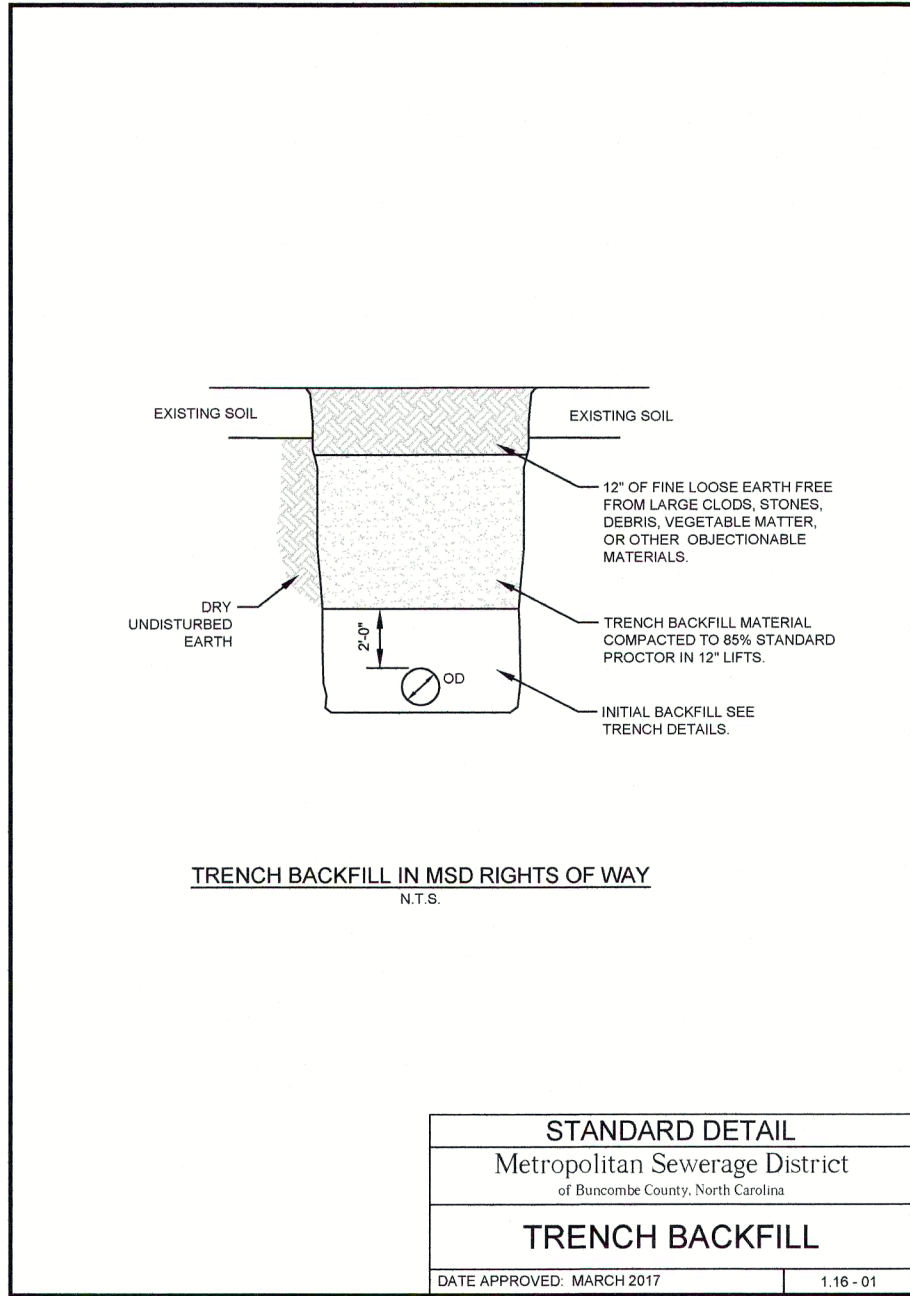


LEGEND

◆ FFE	FINISHED FLOOR ELEVATION	1	PROPOSED ABANDON PLUG
■ CM	CONCRETE MONUMENT	2	PROPOSED MANHOLE NUMBER
■ CMRW	CONCRETE MONUMENT RIGHT-OF-WAY	3	PROPOSED ABANDON SEWER MANHOLE
□ DOT	DEPT. OF TRANSPORTATION MONUMENT	4	PROPOSED CLEANOUT
● PK FND	PK NAIL FOUND	5	SANITARY SEWER MANHOLE
● EP FND	EXISTING IRON PIN FOUND	6	EXISTING CLEANOUT
● RBF	REBAR FOUND	7	WATER VALVE
△ GAV	SIGN	8	WELL
● GVM	GAS VALVE	9	FIRE HYDRANT
△ GMI	GAS METER	10	WATER METER
△ T	TRAVERSE	11	SPIGOT
■ CI	CURB INLET	12	UTILITY POLE
■ CB	STORM MANHOLE	13	GUY WIRE
■ CB	CATCH BASIN	14	ELECTRICAL JUNCTION BOX
■ S	SHRUB	15	ELECTRIC MANHOLE
■ T	TREE	16	LIGHT POLE

— S — S —	PROPOSED SANITARY SEWER LINE
— — — — —	EXISTING SANITARY SEWER LINE
— — — — —	EXISTING PERMANENT EASEMENT
— — — — —	PROPOSED PERMANENT EASEMENT
— — — — —	PROPOSED TEMPORARY EASEMENT
— X — X — X —	PROPOSED SILT FENCE LINE
— — — — —	PROPOSED ASPHALT SURFACE REPAIR
— — — — —	EXISTING PROPERTY LINE
— — — — —	EXISTING RIGHT-OF-WAY LINE
— — — — —	EXISTING WATER LINE
— — — — —	EXISTING ROCK WALL LINE
— — — — —	EXISTING STREAM/CREEK
— — — — —	EXISTING FEMA LINE (100 yr)
— — — — —	EXISTING FEMA LINE (500 yr)
— — — — —	EXISTING GAS LINE
— — — — —	EXISTING OVER HEAD UTILITY LINE
— — — — —	EXISTING UNDERGROUND UTILITY
— — — — —	EXISTING STORM DRAINAGE PIPE
— — — — —	EXISTING FENCE LINE
— — — — —	EXISTING DITCH LINE
— — — — —	EXISTING TOE/TOP OF SLOPE
— — — — —	EXISTING TREE LINE
— — — — —	EXISTING SHRUB LINE
— — — — —	EXISTING CONCRETE
— — — — —	EXISTING GRAVEL AREA (RIP-RAP)
— — — — —	EXISTING ASPHALT ROADWAY
— — — — —	EXISTING BUILDING
— — — — —	EXISTING MAJOR CONTOUR
— — — — —	EXISTING MINOR CONTOUR



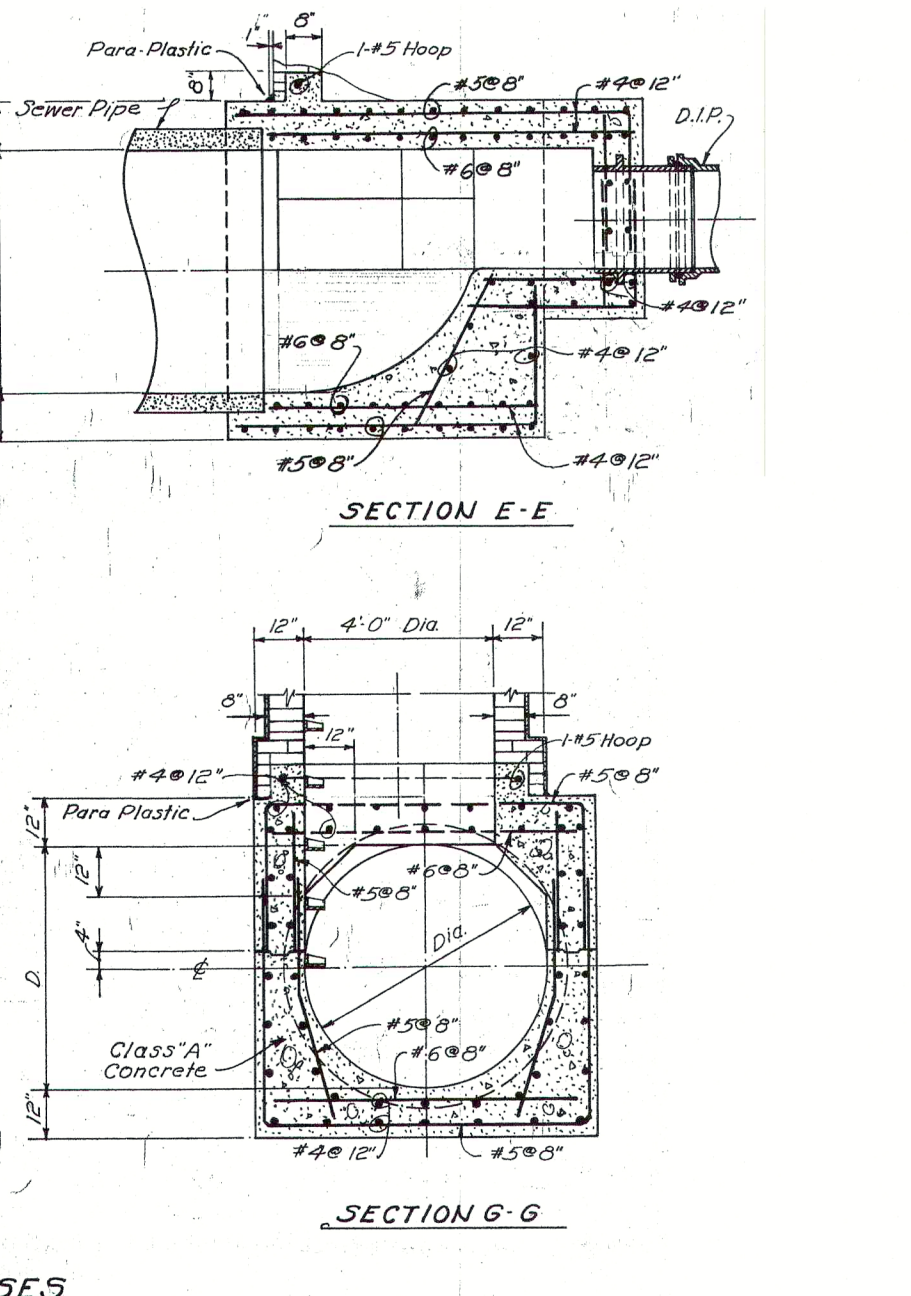
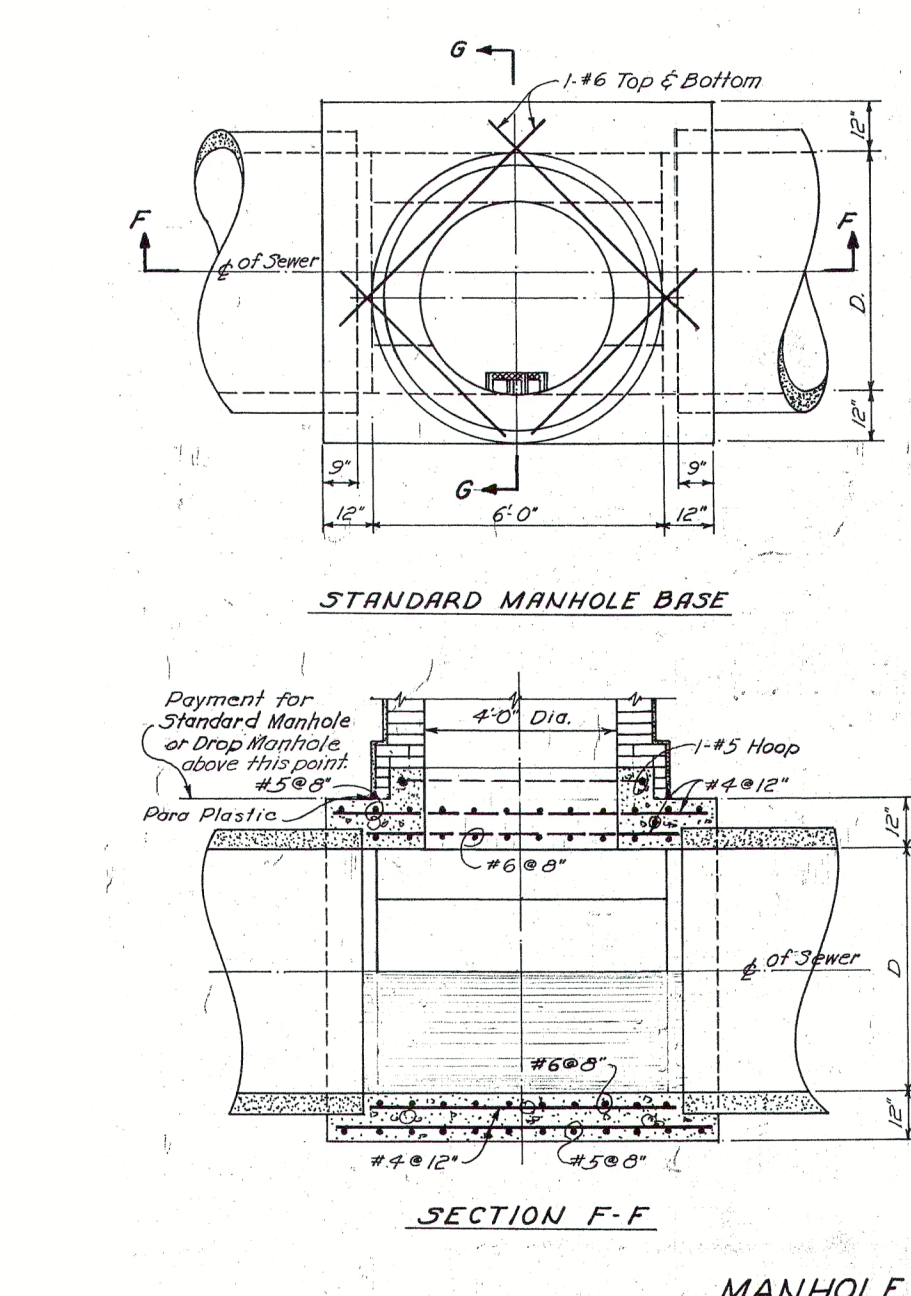
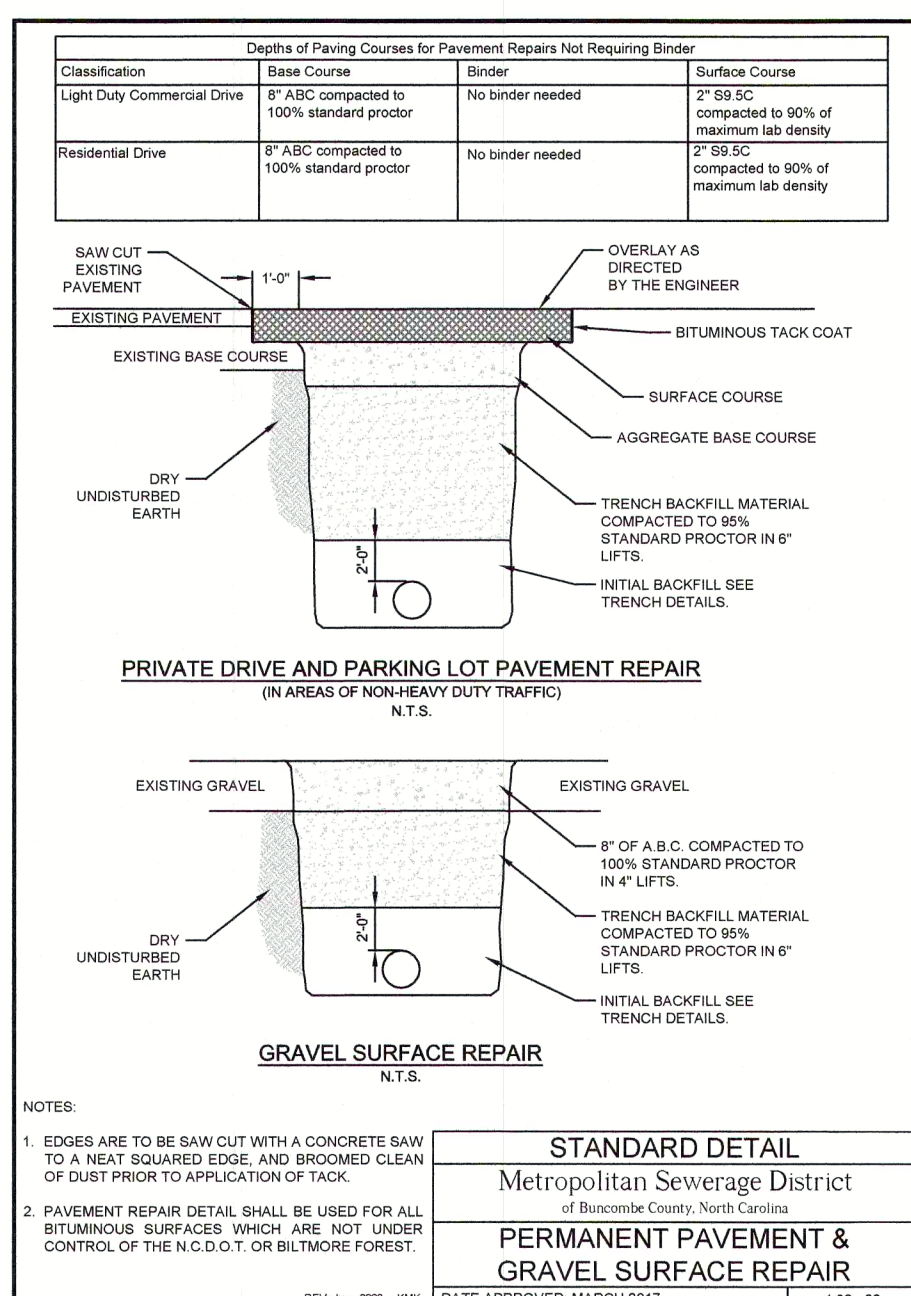
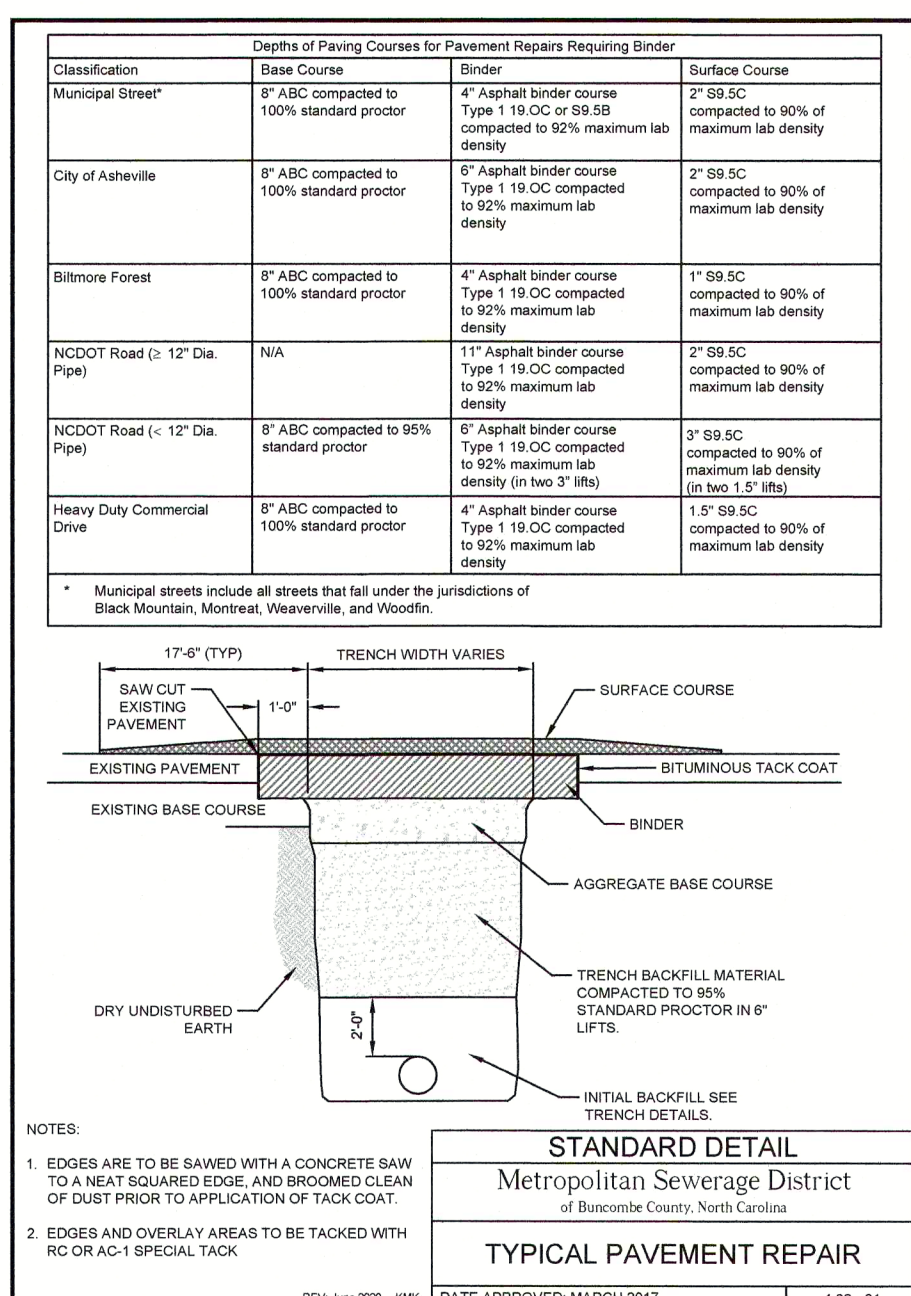
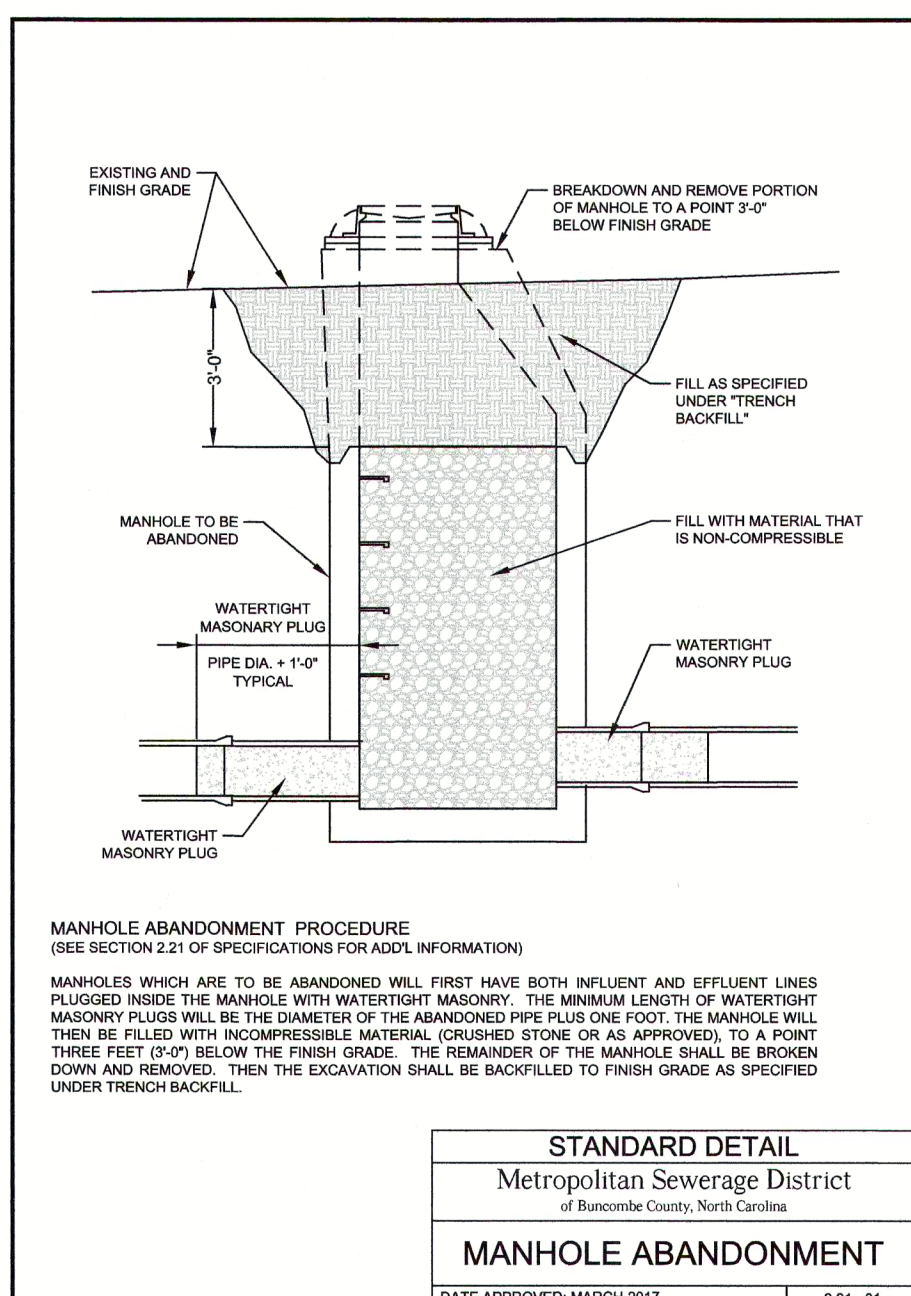
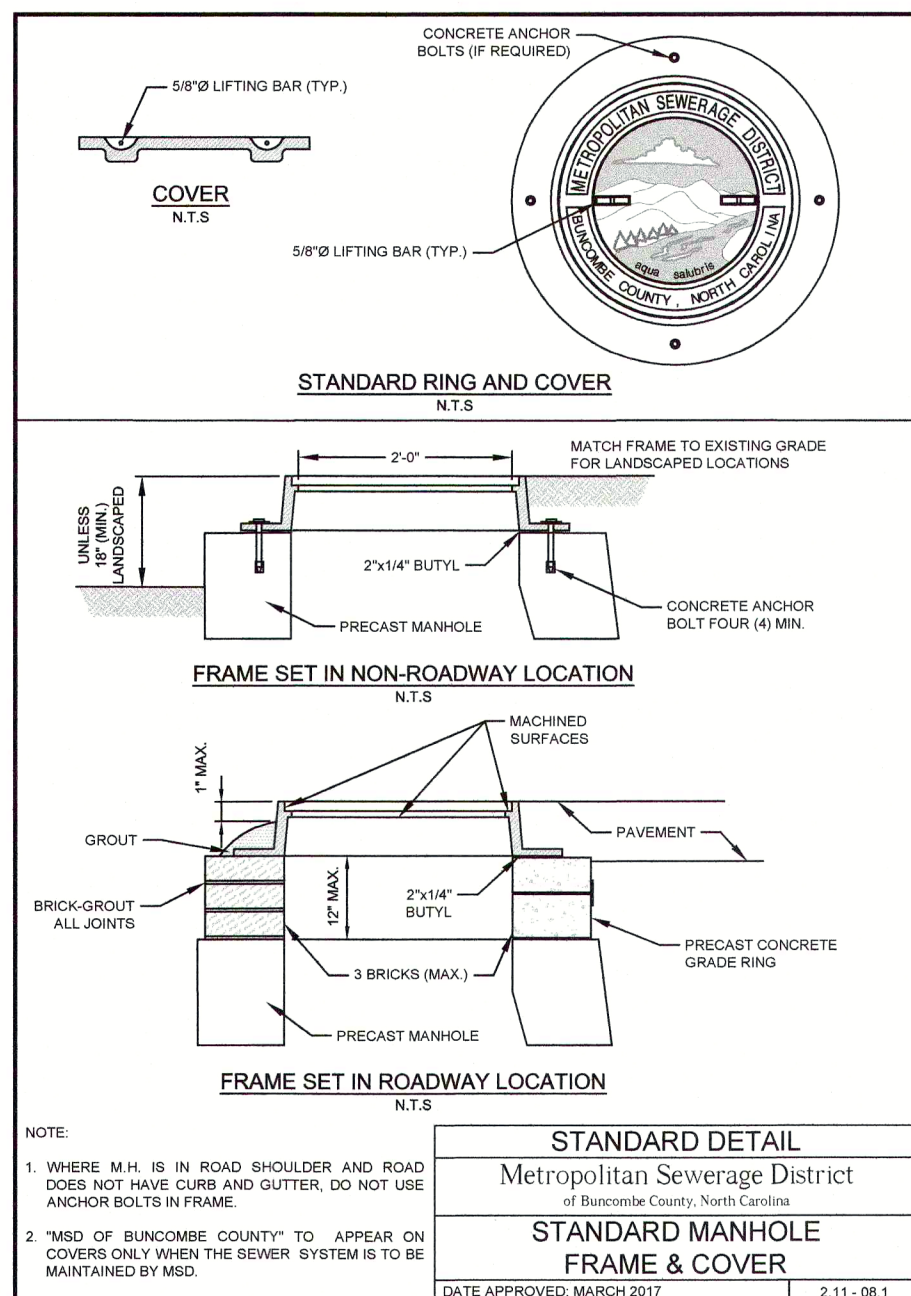
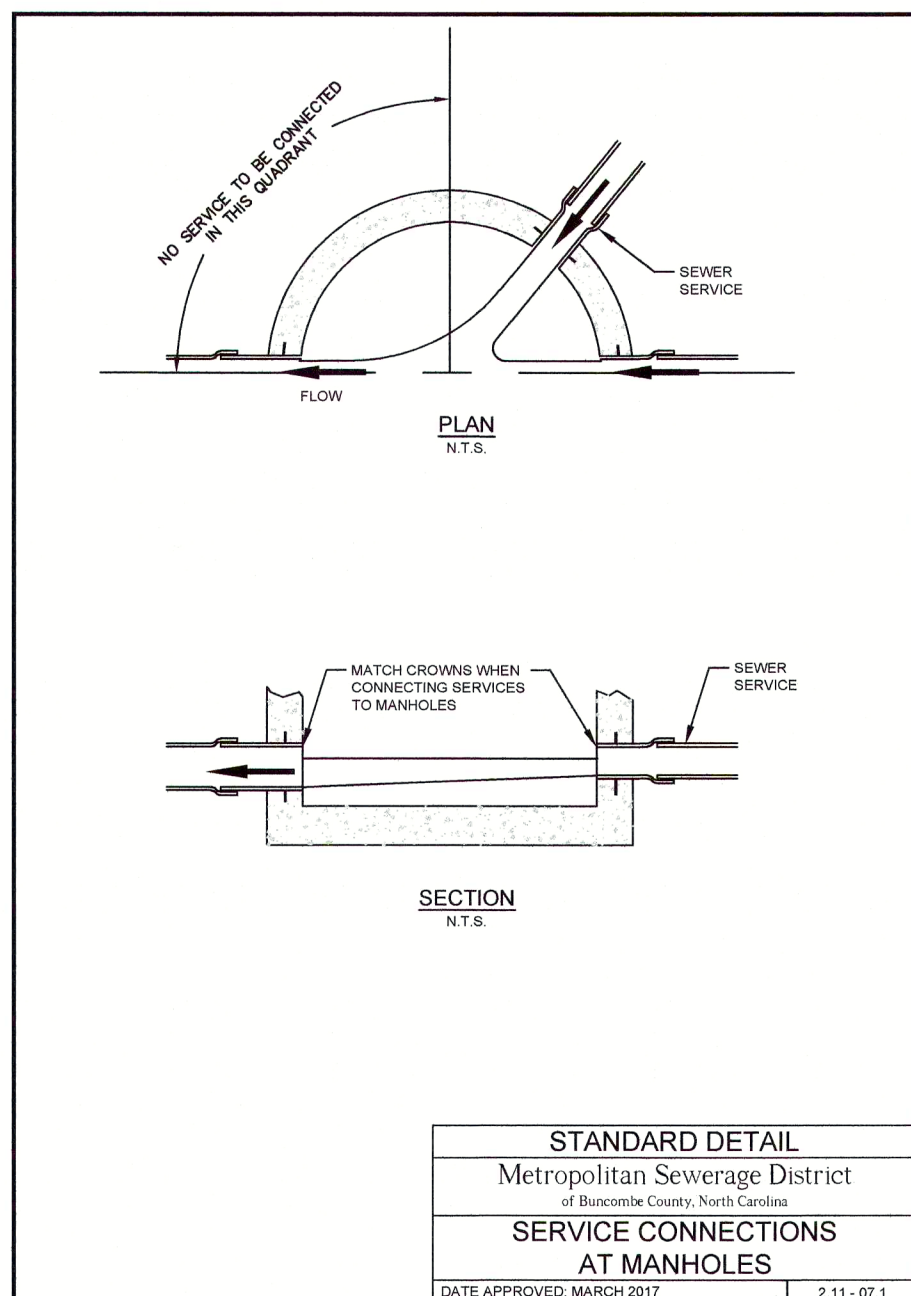
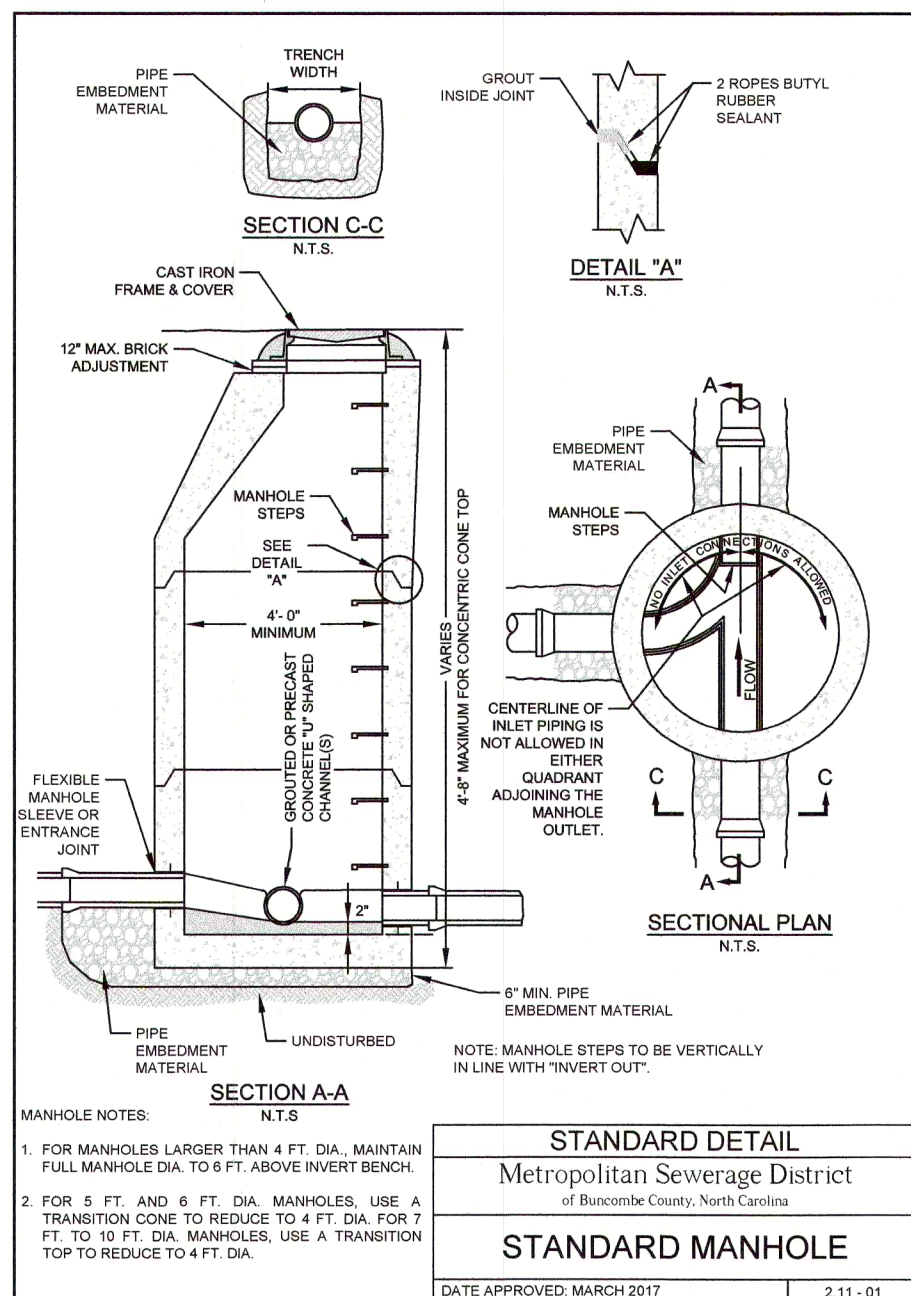
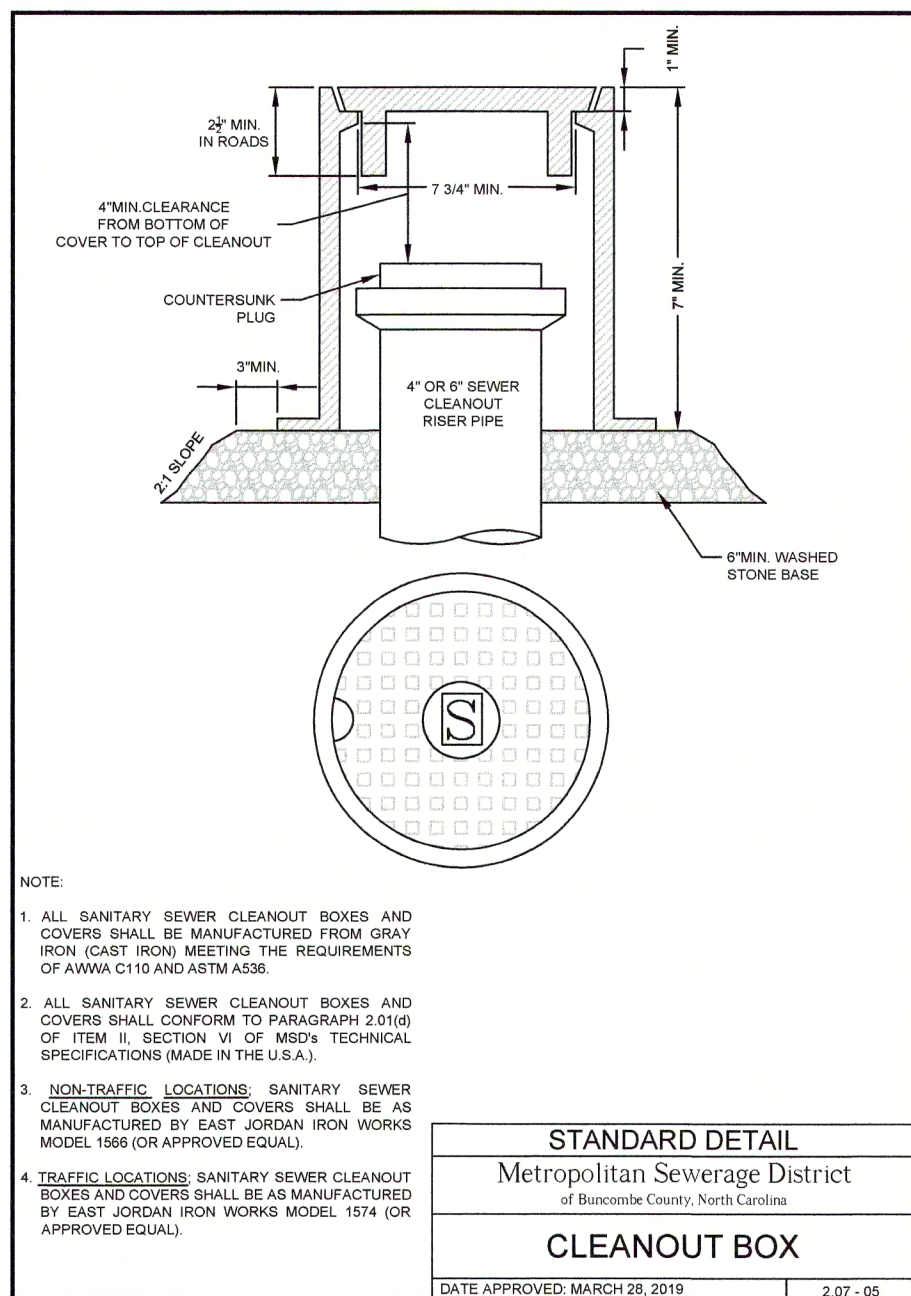
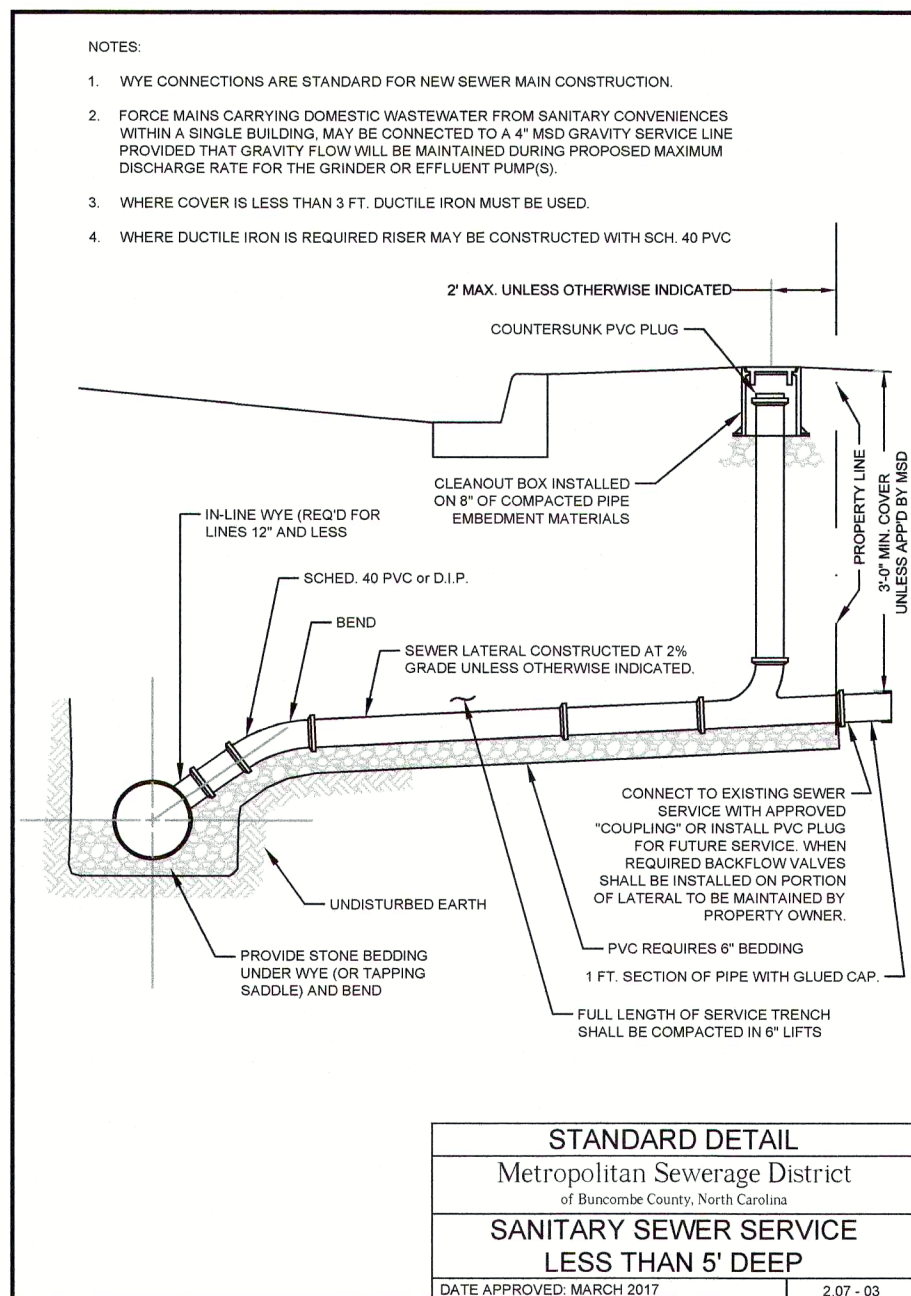
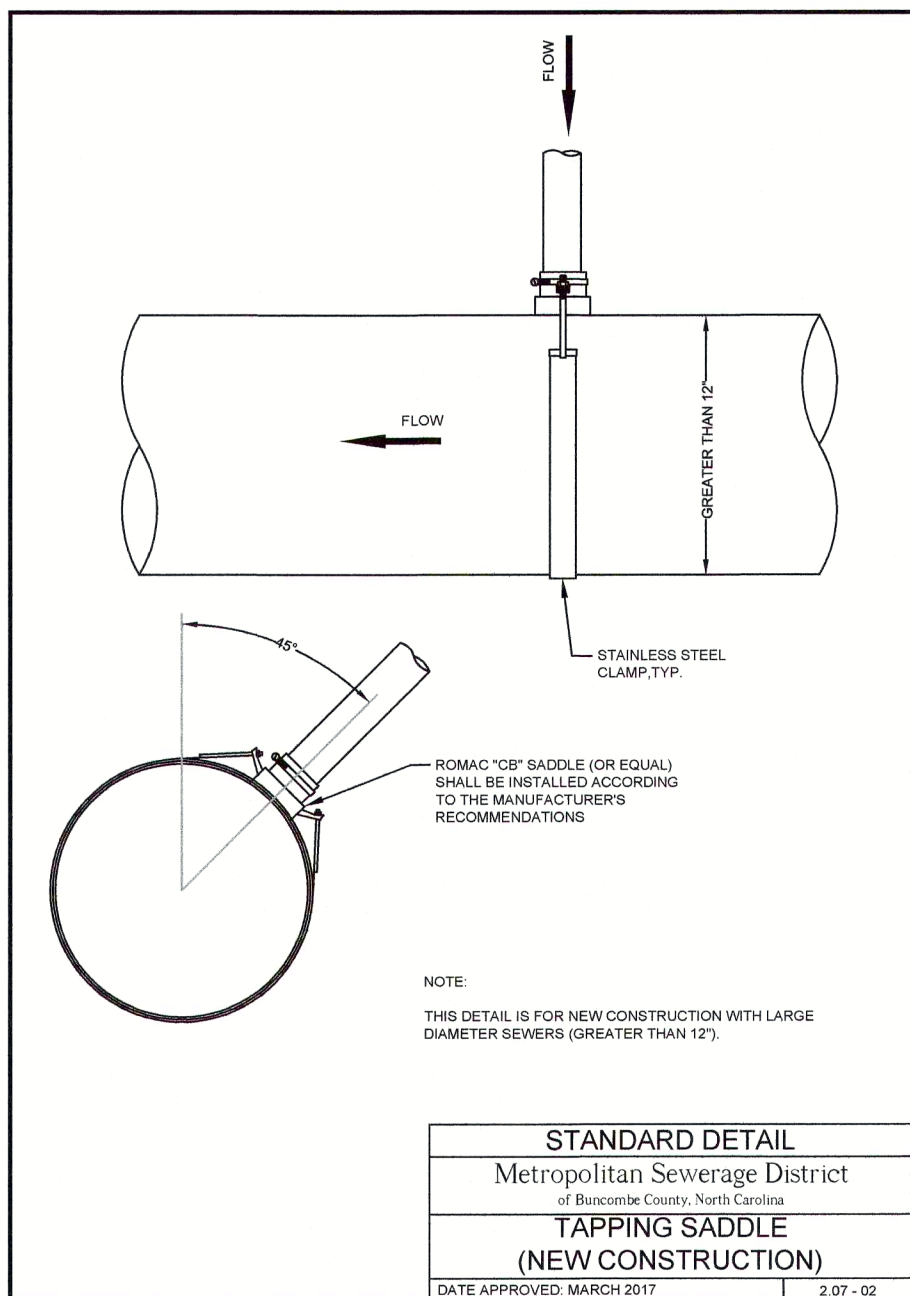
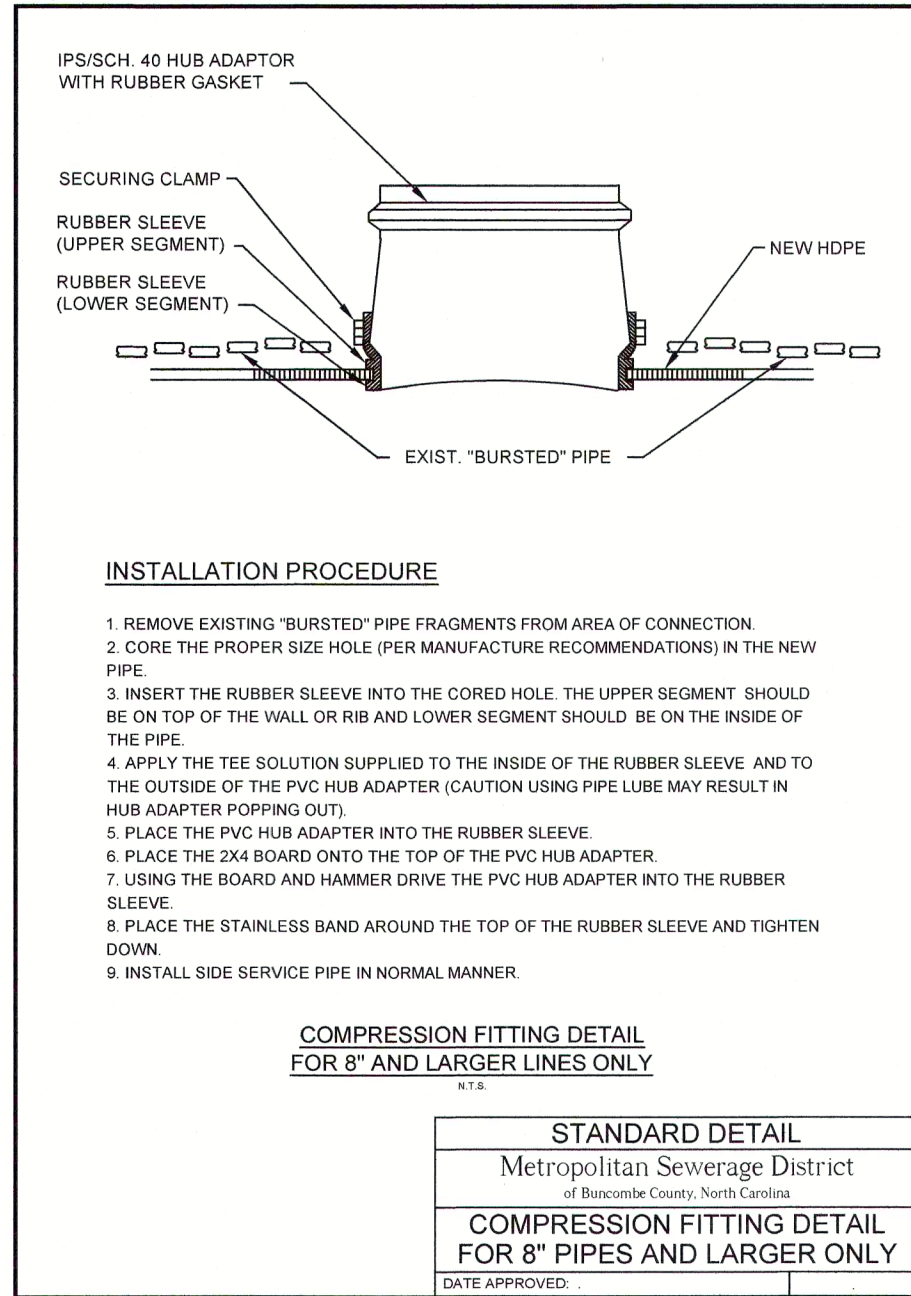


STANDARD DETAIL
Metropolitan Sewerage District
of Buncombe County, North Carolina
TYPICAL TRENCH DETAIL FOR DUCTILE IRON PIPE - 2
DATE APPROVED: MARCH 2017 2.05 - 02

Pipe Size	Class	Type 1	Type 2	Type 3	Type 4	Type 5
4	350	13	49	49	49	49
6	350	29	31	37	47	60
8	350	16	20	25	34	50
10	350	11	9	19	28	43
12	350	10	15	19	28	44
14	250	11	15	23	35	48
16	250	13	17	28	42	54
18	250	15	17	28	38	50
20	250	15	17	28	38	49
22	250	15	17	28	38	49
24	250	15	17	28	38	49
26	250	15	17	28	38	49
28	250	15	17	28	38	49
30	250	15	17	28	38	49
32	250	15	17	28	38	49
34	250	15	17	28	38	49
36	250	15	17	28	38	49
38	250	15	17	28	38	49
40	250	15	17	28	38	49
42	250	15	17	28	38	49
44	250	15	17	28	38	49
46	250	15	17	28	38	49
48	250	15	17	28	38	49
50	250	15	17	28	38	49
52	250	15	17	28	38	49
54	250	15	17	28	38	49
56	250	15	17	28	38	49
58	250	15	17	28	38	49
60	250	15	17	28	38	49
62	250	15	17	28	38	49
64	250	15	17	28	38	49
66	250	15	17	28	38	49
68	250	15	17	28	38	49
70	250	15	17	28	38	49
72	250	15	17	28	38	49
74	250	15	17	28	38	49
76	250	15	17	28	38	49
78	250	15	17	28	38	49
80	250	15	17	28	38	49
82	250	15	17	28	38	49
84	250	15	17	28	38	49
86	250	15	17	28	38	49
88	250	15	17	28	38	49
90	250	15	17	28	38	49
92	250	15	17	28	38	49
94	250	15	17	28	38	49
96	250	15	17	28	38	49
98	250	15	17	28	38	49
100	250	15	17	28	38	49

NOTE: SEE DETAIL 2.05-02 FOR ALLOWABLE DEPTHS

SOURCE: Ductile Iron Pipe for Wastewater Application, DIPRA 2006



Metropolitan Sewerage District
of Buncombe County

WEST CITY VIEW DR. @ RIVERSIDE DR.
Sanitary Sewer Details

DRAWN: JO
CHECKED BY: KMK
DATE: 10/13/2025
APPROVED: DAP

D-1

10/14/25

10-24-25
DATE

1. BID SET
No.

DESCRIPTION

REVISIONS

Engineering Division

- 1) OBTAIN LAND DISTURBANCE PERMIT (BY MSD)
- 2) INSTALL CONSTRUCTION ENTRANCES AS NEEDED.
- 3) INSTALL DRAIN INLET PROTECTION AT ALL EXISTING CATCH BASINS AS SHOWN ON PLANS PRIOR TO CLEARING AND EXCAVATION.
- 4) INSTALL TEMPORARY SEDIMENT TRAPS, SILT FENCES AND CHECK DAMS PRIOR TO CLEARING AND EXCAVATING.
- 5) INSTALL EROSION CONTROL FEATURES IN CLEARING PROGRESSES.
- 6) PROVIDE TEMPORARY SEEDING IF CLEARING IS MORE THAN 14 DAYS AHEAD OF PIPELINE CONSTRUCTION.
- 7) FINE GRADE, SEED AND MULCH IMMEDIATELY BEHIND PIPELINE CONSTRUCTION.
- 8) MAINTAIN EROSION CONTROL FEATURES IN GOOD WORKING ORDER UNTIL SITE IS STABILIZED.
- 9) THE LOCATION OF EROSION CONTROL, FEATURES SHOWN ON THE PLANS AND DESCRIBED IN THE SPECIFICATIONS IS SUBJECT TO FIELD MODIFICATION TO PROVIDE THE MOST EFFECTIVE PROTECTION.
- 10) EROSION CONTROL FEATURES MAY BE REMOVED AFTER PERMANENT VEGETATION IS ESTABLISHED AND THE SITE IS STABILIZED.

STANDARD DETAIL	
Metropolitan Sewerage District of Buncombe County, North Carolina	
EROSION CONTROL SEQUENCE	
DATE APPROVED: MARCH 2017	5.01 - 01

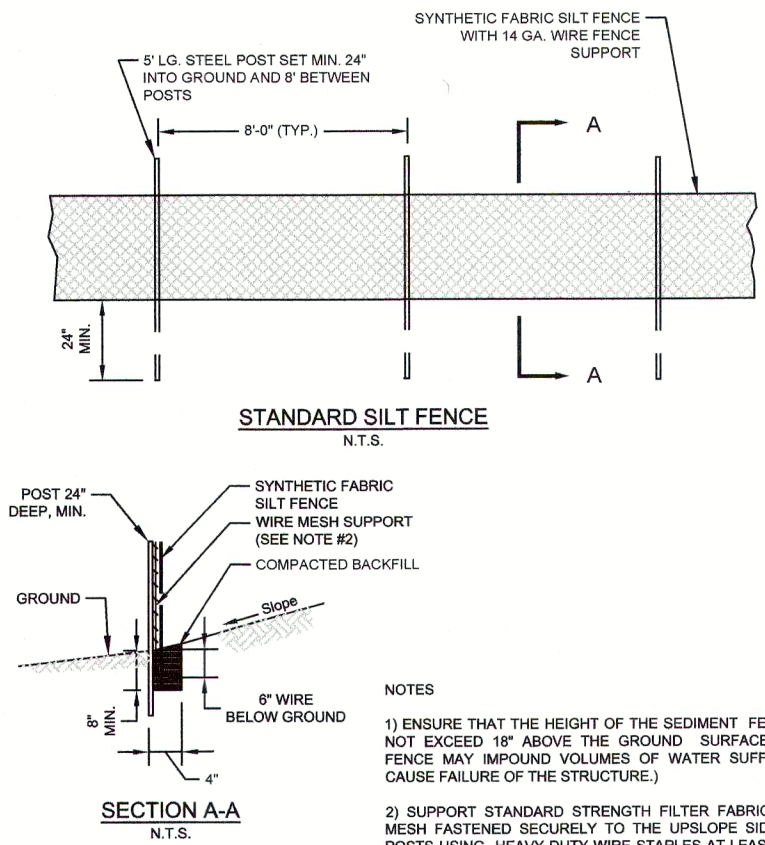
- 1) ALL R/RP/SP SHALL BE IN DOT SPECIFICATION CLASS 1 AND SHALL CONSIST OF WEAR GRADER OR EQUIVALENT TO IT NO MORE THAN 2.0% OF THE MATERIAL FURNISHED CAN BE LESS THAN THE MINIMUM SIZE SPECIFIED NOR MORE THAN 10.0% OF THE MATERIAL CAN EXCEED THE MAXIMUM SIZE SPECIFIED.
- 2) WASHED STONE SHALL CONFORM TO N.C.D.O.T. # 7 STONE SPECIFICATION.
- 3) FILTER FABRIC SHALL BE TREVIRA BUNDA TYPE 1125 AS MANUFACTURED BY HOECHST CHEMICAL OR APPROVED EQUAL AND SHALL HAVE A MIN. TENSILE STRENGTH OF 200 POUNDS. PUNCTURE STRENGTH OF 100 POUNDS.
- 4) SILT FENCE SHALL BE WOVEN POLYPROPYLENE FABRIC 36" WIDE. GRAB STRENGTH SHALL BE 120 LBS., ELONGATION 20%. TRAP WATER CAPACITY 85 LBS. SURFACE TENSION 250 PSI. UV RESISTANCE 90% AND SLOOT FLOW RATE 0.5 GPM/FT.
- 5) ALL CURB SHALL BE PROVIDED AT ALL INLETS DETAIL BY THE CONTRACTOR (SEE DETAIL).
- 6) CONSTRUCTION ENTRANCES SHALL BE PROVIDED AT ALL PORTS OF ACCESS TO PUBLIC HIGHWAYS.

STANDARD DETAIL	
Metropolitan Sewerage District of Burcombe County, North Carolina	
EROSION CONTROL NOTES	
DATE APPROVED: MARCH 2017	5.01 - 0

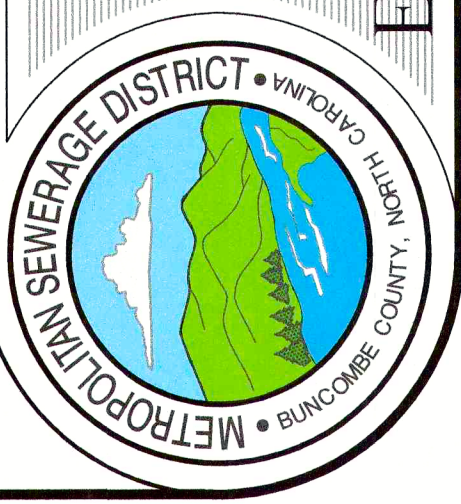
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TEMPORARY SEEDING SPECIFICATIONS		
TIME OF YEAR	WINTER-EARLY SPRING: FALL FEBRUARY THROUGH MAY; AUG-DEC	SUMMER MAY THROUGH AUGUST
SEED TYPE	RYE (GRASS)	GERMAN MILLET
LINE APPLICATION	2,000 LB/AC, (GROUND AG)	2,000 LB/AC, (GROUND AG)
FERTILIZER	750 LB/AC, (10-10-10)	750 LB/AC, (10-10-10)
MULCH	3,000 - 4,000 LB/AC STRAW	3,000 - 4,000 LB/AC STRAW

STANDARD DETAIL	
Metropolitan Sewerage District of Buncombe County, North Carolina	
SEEDING SCHEDULES	
DATE APPROVED: MARCH 2017	5.04



STANDARD DETAIL	
Metropolitan Sewerage District of Buncombe County, North Carolina	
STANDARD SILT FENCE	
DATE APPROVED: MARCH 2017	5.12 -



MSD

Engineering Division

Metropolitan Sewerage District
of Buncombe County

WEST CITY VIEW DR. @ RIVERSIDE DR.
Erosion Control Sewer Details

D-2

1.	BID SET	10-24-25
No.	DESCRIPTION	DATE
REVISIONS		

REVISIONS	DESCRIPTION
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