

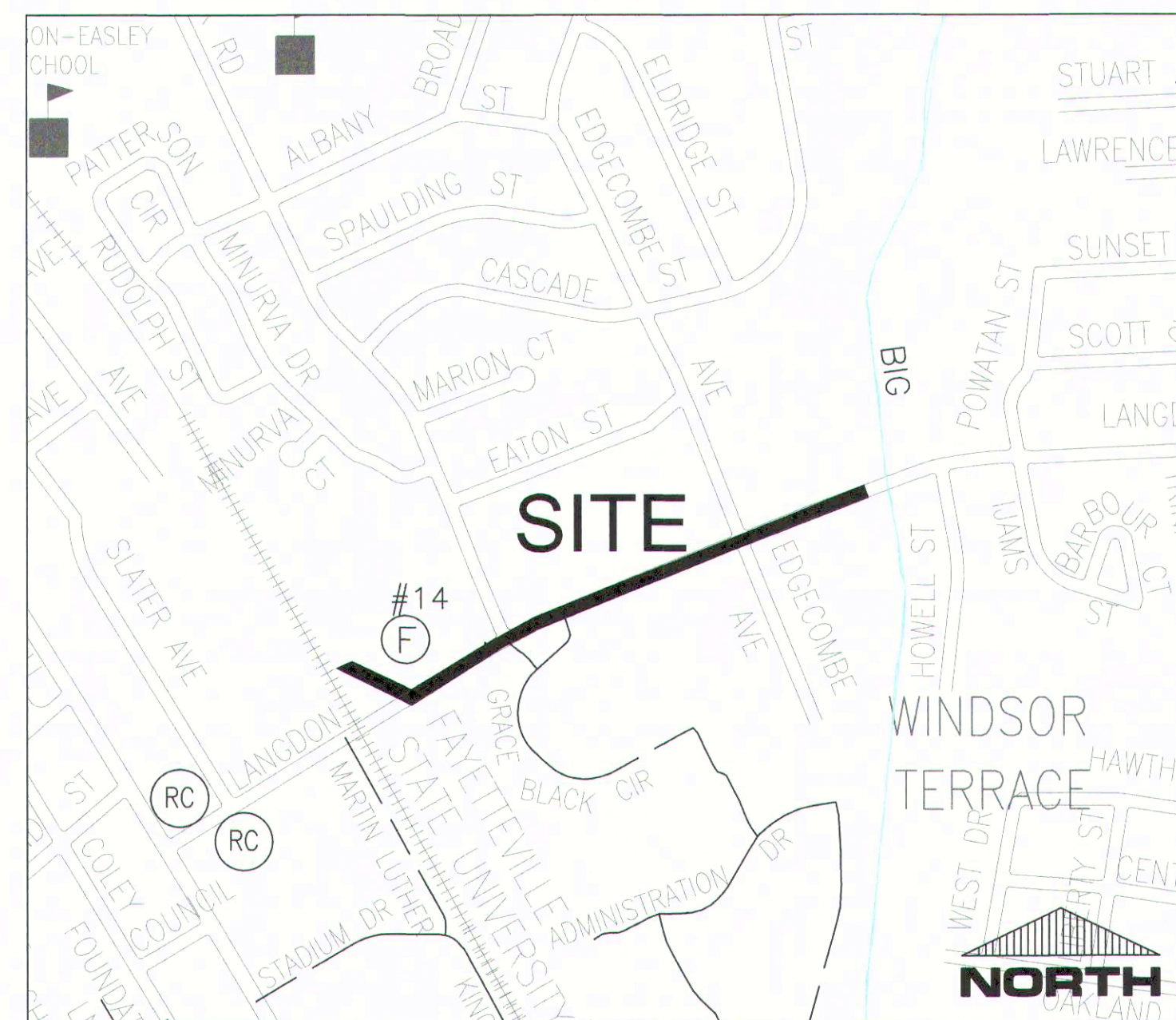
Fayetteville's
HOME TOWN UTILITY

FAYETTEVILLE, N.C.

JASPER TO LANGDON

8" SANITARY SEWER MAIN RELOCATION

LANGDON STREET SEWER REALIGNMENT



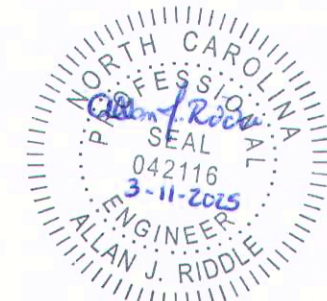
VICINITY MAP
N.T.S.



Know what's below.
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SHEET INDEX

1	PWC COVER SHEET
2	EC - EROSION CONTROL NOTES AND SPECIFICATIONS
3	UP1 (UTILITY PLAN 1, STA. 0+00 - STA. 11+00)
4	UP2 (UTILITY PLAN 2, STA. 11+00 - STA. 24+32)
5	S1 (PLAN AND PROFILE 1, 0+00 - STA. 11+00)
6	S2 (PLAN AND PROFILE 2, STA. 11+00 - STA. 24+32)
7	D1 (STANDARD DETAILS)
8	D2 (STANDARD DETAILS)
9	D3 (COF DETAILS)



PWC FAYETTEVILLE PUBLIC
WORKS COMMISSION
WATER RESOURCES ENGINEERING
APPROVED FOR CONSTRUCTION
Date: 02/28/2025

\\V:\ACTIVE_PROJECTS\LANGDON - STREET FSU SEWER RELOCATION - PROJECT ALIGN - REVISION.dwg, 2/28/2025, 8:22:25 AM

GENERAL NOTES

1. THE CONTRACTOR SHALL LIMIT THEIR OPERATIONS TO THE EXISTING EASEMENTS, PUBLIC ROW, AND CONSTRUCTION LIMITS AS SHOWN.
2. ACCESS POINTS TO THE EXISTING PWC UTILITY EASEMENT ARE BASED ON THE PUBLIC WORKS COMMISSION'S BEST AVAILABLE INFORMATION. THE SUCCESSFUL CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THEIR ACCESS POINTS AND NEGOTIATING WITH THE INDIVIDUAL PROPERTY OWNERS AND/OR OTHER CONTRACTORS WORKING IN THE AREA.
3. ALL ROADS ARE OWNED AND MAINTAINED BY THE CITY OF FAYETTEVILLE OR NCDOT, UNLESS OTHERWISE NOTED.
4. THE CONTRACTOR IS REQUIRED TO EXAMINE EXISTING CONDITIONS AND FAMILIARIZE THEMSELVES WITH THE SITE PRIOR TO SUBMITTING A BID.
5. THE CONTRACTOR SHALL REPLACE ANY FENCING DISTURBED AS PART OF THEIR OPERATIONS FOR THE WORK DESCRIBED WITHIN THESE CONTRACT DOCUMENTS AND PLANS. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY FENCING AS REQUIRED. FENCES SHALL BE REMOVED AND REPLACED WITH NEW MATERIALS TO RESTORE THE ITEM TO ITS ORIGINAL CONDITION OR BETTER. NO ADDITIONAL PAYMENT WILL BE MADE.
6. ONCE CONSTRUCTION HAS BEEN COMPLETED, THE CONTRACTOR IS RESPONSIBLE FOR RESTORING THE SITE TO ITS ORIGINAL CONDITION OR BETTER.

CONSTRUCTION SEQUENCE:

1. OBTAIN PLAN APPROVAL AND ALL OTHER APPLICABLE PERMITS.
2. FLAG LIMITS OF CONSTRUCTION.
3. HOLD PRE-CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO BEGINNING CONSTRUCTION.
4. INSTALL CONSTRUCTION ENTRANCES / EXITS AS INDICATED ON PLANS.
5. INSTALL TEMPORARY SEDIMENT FENCE AS INDICATED ON PLANS.
6. INSTALL UTILITIES IN ACCORDANCE WITH PWC REQUIREMENTS.
7. COMPLETE FINAL GRADING OF AREAS DISTURBED BY CONSTRUCTION OF THE PROPOSED UTILITIES.
8. COMPLETE SEEDING/GROUND STABILIZATION.

DISTURBED AREA NOTES:

1. ALL DISTURBED AREA(S) AND PARTICULARLY EXPOSED SLOPES SHALL BE SEEDED, FERTILIZED AND MULCHED TO ENSURE THAT GROUND COVER IS PROVIDED WITHIN 7 TO 14 CALENDAR DAYS, FOLLOWING COMPLETION OF ANY PHASE OF GRADING; PERMANENT GROUND COVER FOR ALL DISTURBED AREA(S) WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION. (SEE TABLE BELOW.)
2. THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. SLOPES LEFT EXPOSED WILL BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION WITHIN 7 TO 14 CALENDAR DAYS OF COMPLETION DEPENDING ON SLOPE. (SEE TABLE BELOW.)

GROUND STABILIZATION (temporary)		
SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES & SLOPES	7 CALENDAR DAYS	NONE
HIGH QUALITY WATER ZONES (HOW)	7 CALENDAR DAYS	NONE
SLOPES STEEPER THAN 3:1	7 CALENDAR DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 CALENDAR DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 CALENDAR DAYS	NONE (EXCEPT FOR PERIMETERS AND HOW ZONES)

TURFING NOTES:

1. THE CONTRACTOR SHALL RE-SEED DISTURBED AREAS WITH THE SAME TYPE OF GRASS AS FOUND ON THE SITE. ALL HIGHWAY RIGHTS-OF-WAY, AND PRIVATE YARDS DISTURBED SHALL BE RE-SEEDED OR RE-SODDED WITH THE SAME TYPE OF GRASS PREVIOUSLY FOUND. THE SEED MIXTURE SPECIFICATION SHALL BE USED AS A GUIDE AND THE CONTRACTOR IS CHARGED WITH THE RESPONSIBILITY OF SEEDING OR SODDING AREAS WITH THE PROPER TYPE OF GRASS THAT MATCHES THE EXISTING.
2. THE CONTRACTOR SHALL CONSULT THE REGIONAL STATE EROSION CONTROL OFFICER FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDATED AREAS. THE LISTED VEGETATIVE RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

SOIL AMENDMENTS:

1. LIME SHALL BE APPLIED AT THE RATE OF 1,000 POUNDS PER ACRE. 10-20-20 COMMERCIAL FERTILIZER SHALL BE APPLIED AT THE RATE OF 1,000 POUNDS PER ACRE AND WORKED IN TO THE TOP FOUR INCHES (4") OF TOP SOIL. IF HYDRO-SEEDING, USE 500 POUNDS PER ACRE OF 10-10-10 FERTILIZER ON SLOPES STEEPER THAN 1/2 HORIZONTAL TO 1 VERTICAL, UNLESS A SOILS TEST STATES OTHERWISE.

MULCH:

1. ALL SEEDED AREAS SHALL BE MULCHED WITH TWO (2) TONS PER ACRE OF SMALL GRAIN STRAW OR WOOD CELLULOSE FIBER SPREAD UNIFORMLY. APPROXIMATELY ONE-QUARTER (1/4) OF THE GROUND SHOULD BE VISIBLE TO AVOID SMOTHERING SEEDLINGS. ASPHALT EMULSION (IN ACCORDANCE WITH ASTM D-977 AND ASTM D-2028) SHALL BE USED TO ANCHOR THE STRAW APPLIED AT 150 GALLONS PER TON OF STRAW, OR CRIMPED TO STABILIZE. ASPHALT EMULSION SHALL BE REQUIRED FROM NOVEMBER 1ST TO MARCH 31ST. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT MULCH FROM ENTERING DRAINAGE STRUCTURES AND PROMPTLY REMOVE ANY BLOCKAGE WHICH MAY OCCUR.

MAINTENANCE:

1. THE CONTRACTOR SHALL PROTECT AND MAINTAIN GRASSED AREAS AS NECESSARY TO ESTABLISH A UNIFORM TURF COMPRISED OF THE GRASSES SPECIFIED. THE CONTRACTOR SHALL PROMPTLY RE-SEED OR RE-SOD ANY BARE AREAS AND REPAIR ALL ERODED AREAS, AT NO ADDITIONAL COST TO PWC.
2. WATERING OF SEEDED AND SODDED AREAS WILL BE REQUIRED DURING PERIODS OF DRY WEATHER TO PROMOTE MAXIMUM GROWTH. THE CONTRACTOR SHALL SUPPLEMENT NATURAL RAINFALL TO ENSURE A MINIMUM OF ONE INCH OF WATER WEEKLY.
3. MAINTENANCE OF LAWNS BEGINS IMMEDIATELY AFTER THE AREA IS PLANTED AND CONTINUES FOR THE PERIOD REQUIRED TO ESTABLISH ACCEPTABLE LAWNS, BUT NOT LESS THAN SIXTY (60) CALENDAR DAYS AFTER INITIAL SEEDING, OR UNTIL FINAL ACCEPTANCE BY THE FAYETTEVILLE PUBLIC WORKS COMMISSION. THE CONTRACTOR SHALL MAINTAIN SEEDED AREAS BY WATERING, FERTILIZING, MOWING, WEEDING AND OTHER OPERATIONS SUCH AS ROLLING, RE-GRAIDING, REPLANTING, AERATING, AND MULCHING AS REQUIRED TO ESTABLISH AN ACCEPTABLE LAWN FREE OF ERODED OR BARE AREAS.

TURFING SCHEDULE:

SEED SHALL BE CERTIFIED TO BE THE LATEST SEASON'S CROP AND SHALL BE DELIVERED IN ORIGINAL SEALED PACKAGES BEARING THE PRODUCER'S GUARANTEED ANALYSIS FOR PERCENTAGES OF MIXTURES AND PURE LIVE SEED. THE PRODUCER'S SEED LABEL SHALL INDICATE THE MINIMUM PERCENT OF PURE LIVE SEED (WHICH SHALL BE 82.45 FOR BERMUDA, 88 FOR RYE GRAIN); THE MINIMUM PERCENT OF GERMINATION IN HARD SEED, AND MAXIMUM PERCENT OF WEED SEED (NO MORE THAN 1 PERCENT FOR BERMUDA, 0.5 PERCENT FOR RYE GRAIN). SEED SHALL BE LABELED IN CONFORMANCE WITH U.S. DEPARTMENT OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT AND APPLICABLE STATE SEED LAWS. SEED THAT HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED SHALL NOT BE ACCEPTABLE.

THE FOLLOWING SEED MIXTURE SHALL BE USED:

TEMPORARY SEED MIXTURE

DATE	TYPE	PLANTING RATE
APRIL 15 - SEPT. 1	GERMAN MILLET	120 LBS/ACRE
AUG. 15 - NOV. 15	GRAIN RYE	120 LBS/ACRE
NOV. 1 - APRIL 1	GRAIN RYE	120 LBS/ACRE

PERMANENT SEED MIXTURE

DATE	TYPE	PLANTING RATE
APRIL 15 - SEPT. 1	K-31 FESCUE COMMON BERMUDA CENTIPEDE	70 LBS/ACRE 60 (HULLED) LBS/ACRE 5 LBS/ACRE
AUG. 15 - NOV. 15	K-31 FESCUE COMMON BERMUDA CENTIPEDE	120 LBS/ACRE 25 (HULLED) LBS/ACRE 5 LBS/ACRE
NOV. 1 - APRIL 1	K-31 FESCUE COMMON BERMUDA CENTIPEDE	120 LBS/ACRE 25 (HULLED) LBS/ACRE 5 LBS/ACRE

GENERAL NOTES SEDIMENT POLLUTION CONTROL ACT

MINIMUM REQUIREMENTS FOR EROSION CONTROL ARE SHOWN ON THE DRAWINGS, BASED ON THE PWC PROJECT ENGINEER'S ANTICIPATED CONSTRUCTION METHODS AND SEQUENCES. INDIVIDUAL CONTRACTORS SHALL SUPPLEMENT OR PROVIDE ADDITIONAL MEASURES TO COMPLEMENT THEIR TYPE OF CONSTRUCTION TO PREVENT TRANSMITTAL OF SILT. INDIVIDUAL CONTRACTORS ARE REQUIRED TO MAINTAIN MINIMUM STANDARDS FOR EROSION CONTROL AS REQUIRED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY. ALL FEES, PENALTIES, AND/OR FINES, FOR NONCOMPLIANCE AND ALL CIVIL ACTIONS RESULTING THEREFROM SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL IN NO WAY INVOLVE THE FAYETTEVILLE PUBLIC WORKS COMMISSION. THE CONTRACTOR MAY BE REQUIRED TO MODIFY OR SUPPLEMENT MEASURES AT NO ADDITIONAL COST TO THE FAYETTEVILLE PUBLIC WORKS COMMISSION. ALL EROSION CONTROL MEASURES SHALL REMAIN SERVICEABLE UNTIL THE SITE IS RESTORED AND STABILIZED, UPON SUCH TIME THE MEASURES SHALL BE REMOVED BY THE CONTRACTOR. THE SITE MUST BE RESTORED AND STABILIZED PRIOR TO THE FAYETTEVILLE PUBLIC WORKS COMMISSION RELEASING FINAL PAYMENT.

1. MINIMUM MONITORING AND REPORTING REQUIREMENTS

- ALL SEDIMENTATION AND EROSION CONTROL FACILITIES SHALL BE INSPECTED BY THE CONTRACTOR AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT.
- STORM WATER RUNOFF DISCHARGES SHALL BE INSPECTED BY VISUAL OBSERVATION AT THE FREQUENCY OUTLINED ABOVE. IF ANY SEDIMENTATION IS LEAVING THE SITE, CORRECTIVE ACTION SHALL BE IMMEDIATELY TAKEN TO ELIMINATE THE DISCHARGE OF SEDIMENTS.

2. MAINTENANCE AND INSPECTIONS

- THE CONTRACTOR SHALL KEEP ALL EROSION CONTROL DEVICES AND MATERIALS IN GOOD REPAIR AND OPERATING AT OPTIMUM EFFICIENCY. THE FAYETTEVILLE PUBLIC WORKS COMMISSION RESERVES THE RIGHT, WITH 24 HOURS PRIOR NOTICE, TO REPAIR ANY EROSION CONTROL MEASURES OR MATERIALS AS REQUIRED, AND DEDUCT THE COST OF THOSE REPAIRS FROM THE CONTRACTOR'S REQUEST FOR PAYMENT.
- THE FAYETTEVILLE PUBLIC WORKS COMMISSION AND/OR NCDEQ REPRESENTATIVES MAY PERIODICALLY EVALUATE THE PROJECT FOR COMPLIANCE WITH THESE REQUIREMENTS.

THE CONTRACTOR SHALL ENSURE THAT THE STREETS WITHIN THE PROJECT ARE PROTECTED FROM MUD, SAND, STONE, LITTER OR DEBRIS IN ANY FORM. ALL MUD COLLECTED ON VEHICLE WHEELS SHALL BE REMOVED BEFORE LEAVING THE CONSTRUCTION SITE. SHOULD ANY MUD OR DEBRIS FROM THE PROJECT COLLECT ON THE STREETS, IT SHALL BE REMOVED IMMEDIATELY TO PREVENT ANY HAZARDS TO VEHICULAR OR PEDESTRIAN TRAFFIC. THE CONTRACTOR IS REQUIRED TO CLEAN THE STREETS DAILY OF CONSTRUCTION RELATED DEBRIS, DUST, AND MUD. THE CONTRACTOR SHALL CLEAN THE STORM DRAINAGE SYSTEM (AND DOWNSTREAM SYSTEMS) AFFECTED BY CONSTRUCTION RUNOFF PRIOR TO FINAL ACCEPTANCE AND PAYMENT. THE FAYETTEVILLE PUBLIC WORKS COMMISSION RESERVES THE RIGHT TO PROCEED WITH STREET CLEANING SHOULD THE CONTRACTOR FAIL TO COMPLY WITH THIS REQUIREMENT AND DEDUCT THE COSTS FROM THE CONTRACTOR'S REQUEST FOR PAYMENT.

EQUIPMENT UTILIZED DURING CONSTRUCTION ACTIVITY MUST BE OPERATED AND MAINTAINED IN A MANNER TO PREVENT THE POLLUTION OF SURFACE OR GROUND WATERS. FUELS, LUBRICANTS, COOLANTS, HYDRAULIC FLUIDS, OR ANY OTHER PETROLEUM PRODUCTS SHALL NOT BE DISCHARGED ON THE GROUND OR INTO SURFACE WATERS. SPENT FLUIDS SHALL NOT ENTER GROUND OR SURFACE WATERS. FLUIDS SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. ANY SPILLED FLUIDS SHALL BE IMMEDIATELY CLEANED UP AND DISPOSED OF TO PREVENT ENTRY INTO SURFACE OR GROUND WATERS, STORM SEWERS, OR DRAINS ON PRIVATE OR PUBLIC PROPERTY. THE CONTRACTOR SHALL PROVIDE PRIMARY AND SECONDARY CONTAINMENT SYSTEMS FOR FLUID STORAGE, FUELING AND SERVICING EQUIPMENT.

THE CONTRACTOR, HIS SUBCONTRACTORS, AND MATERIAL SUPPLIERS ARE PROHIBITED FROM DISCHARGING ANY WASTE PRODUCTS OR OTHER UNSUITABLE MATERIALS INTO THE STORM SEWER SYSTEM OR ONTO PRIVATE PROPERTY.

THE CONTRACTOR SHALL CONTROL THE MANAGEMENT AND DISPOSAL OF LITTER AND SANITARY WASTE FROM THE SITE TO ENSURE THAT NO ADVERSE IMPACTS TO WATER QUALITY OCCUR.

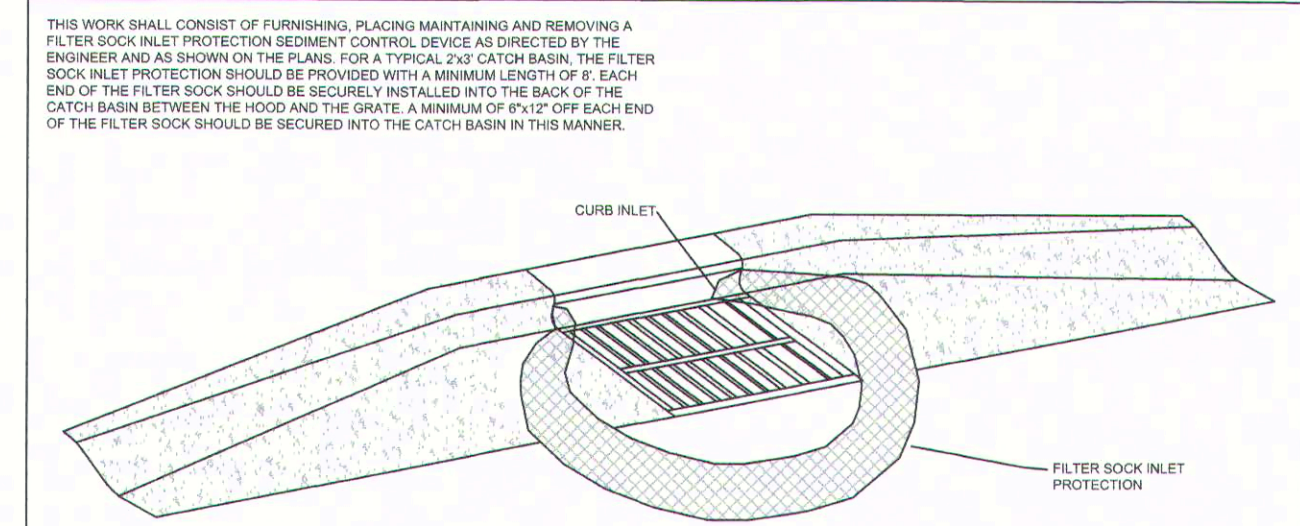
THE CONTRACTOR SHALL PAY ALL COSTS OF THE CLEAN UP AND REMOVAL OF ANY SUCH UNAUTHORIZED DISCHARGE AND PAY ANY AND ALL FINES, PENALTIES, AND/OR DAMAGES.

NOTE:

Pursuant to G.S.113A-57(2), the angle for graded slopes and fills shall be not greater than the angle that can be retained by vegetative cover or other adequate erosion-control devices or structures. In any event, slopes left exposed will, within 7 calendar days of completion of any phase of grading, be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion. Pursuant to G.S.113A(3), provisions for permanent ground cover sufficient to restrain erosion must be accomplished for all disturbed areas within 15 working days or 90 calendar days (whichever is shorter) following completion of construction or development.

EROSION CONTROL NOTES:

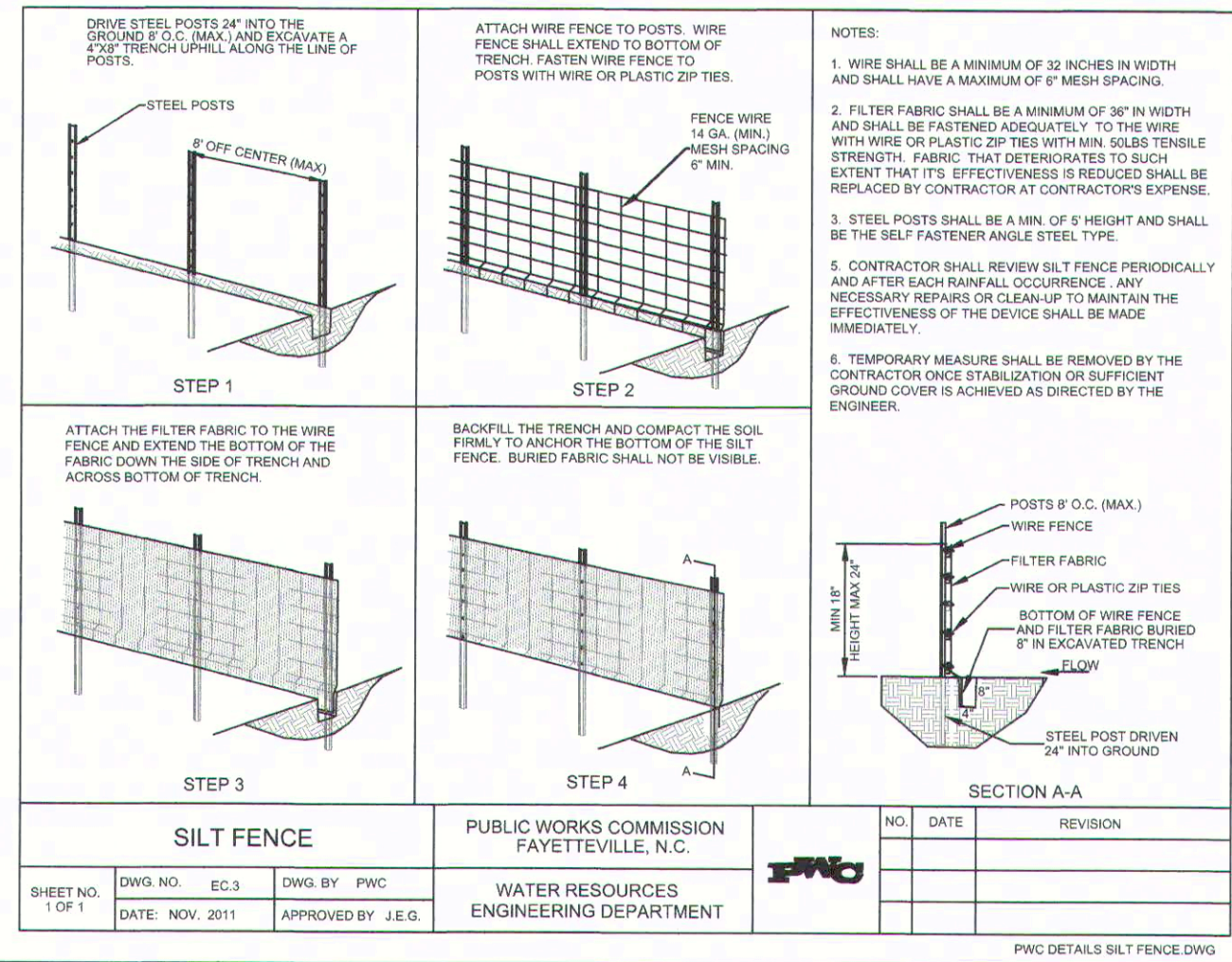
1. LIMITS OF CONSTRUCTION: ±0.095 AC
2. TOTAL DISTURBED AREA: ±0.095 AC



MAINTENANCE:

1. THE FILTER SOCK SHOULD BE INSPECTED AFTER EACH RUNOFF PRODUCING RAINFALL, AFTER EACH SIGNIFICANT RAINFALL EVENT (1/2" OR GREATER), AND AT LEAST ONCE PER WEEK.
2. THE FILTER SOCK SHALL BE REPLACED IF CLOGGED OR TORN.
3. IF FODDER BECOMES EXCESSIVE, THE FILTER SOCK SHALL BE REPLACED WITH A LARGER DIAMETER FILTER SOCK.
4. THE FILTER SOCK SHALL BE REINSTALLED IF UNDERMINED OR DISLOADED.
5. THE FILTER SOCK SHALL BE INSPECTED UNTIL DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE FILTER SOCK HAS BEEN PERMANENTLY STABILIZED.

FILTER SOCK INLET PROTECTION		FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		NO.	DATE	REVISION
SHEET NO. 1 OF 1	DWG. NO.	DWG. BY	DWG. BY			
	DATE	APPROVED BY	WATER RESOURCES ENGINEERING DEPARTMENT			



Know what's below.
Call before you dig.

FAYETTEVILLE PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
APPROVED FOR CONSTRUCTION
Date: 02/28/2025

DATE	REVISIONS	BY

SHEET SERIES-

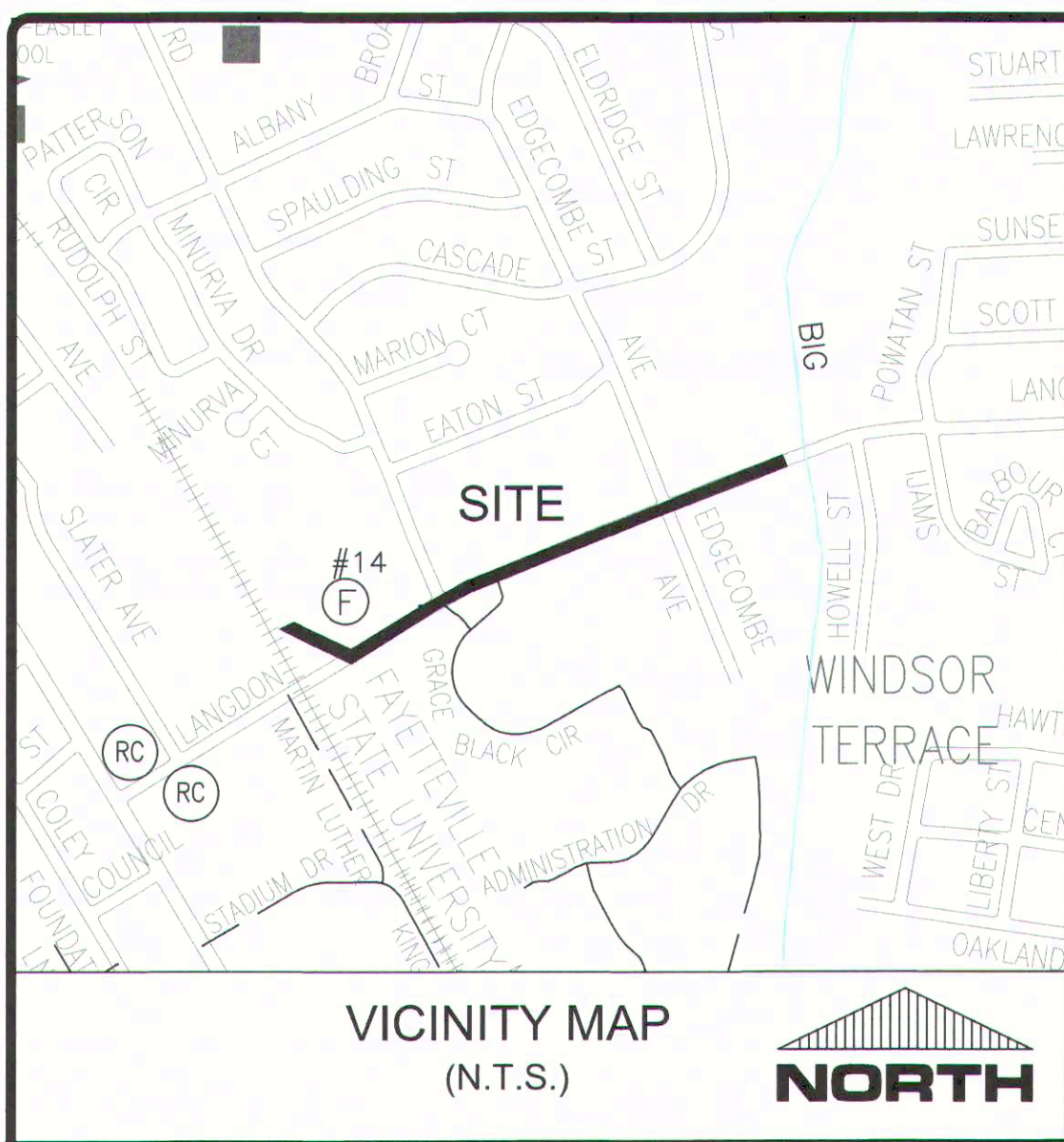
SURVEY/GCS BY: FAYPWC	SCALE: 1"= 1' N/A
DRAWN BY: WDJ	VERT: 1"= 1' N/A
CHECKED BY: JRC	



JASPER TO LANGDON
8" SANITARY SEWER MAIN RELOCATION
LANGDON STREET SEWER REALIGNMENT

FAYETTEVILLE PUBLIC WORKS COMMISSION
FAYETTEVILLE WATER RESOURCES ENGINEERING
P.O. Box 1985 Fayetteville, NC 28302
955 Old Wilmington Road, Fayetteville, NC 28301
Director & Water Utilities
DS-15887

V:\VACUINE PROJECTS\LANGDON STREET OPTION\DWG\LANGDON STREET FSU SEWER RELOCATION PROJECT ALIGN REVISIONS.DWG, 2/28/2025 9:22:26 AM



- NOTES:
1. ALL SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH PWC STANDARDS.
 2. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PWC STANDARDS.
 3. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
 4. CONTRACTOR SHALL NOTIFY PWC A MINIMUM OF 48 HOURS IN ADVANCE FOR CONSTRUCTION STAKING. CONTRACTOR SHALL MAINTAIN A COPY OF THE CUT SHEET ON THE JOB SITE.
 5. CONTRACTOR SHALL COORDINATE TESTING AND INSPECTION WITH THE PWC PROJECT COORDINATOR.
 6. ALL NEW SEWER MAINS AND LATERALS SHALL BE DUCTILE IRON PIPE.
 7. ALL DUCTILE IRON PIPE IN SANITARY SEWER SERVICE SHALL HAVE AN INTERIOR LINING OF PROTECTO 401 OR APPROVED EQUAL.
 8. ALL NEW MANHOLES ARE TO BE VACUUM-TESTED IN ACCORDANCE WITH PWC STANDARDS.
 9. CONTRACTOR SHALL REPLACE ALL DAMAGED WATER SERVICES FROM MAIN TO METER, UTILIZING 1" COPPER. WATER SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH PWC DETAIL W.24.
 10. WATER METERS SHALL BE LOCATED 18" INSIDE THE RIGHT-OF-WAY, UNLESS OTHERWISE DIRECTED BY PWC.
 11. CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL OF THE TRAFFIC CONTROL REQUIREMENTS OF THE CITY OF FAYETTEVILLE, N.C.D.O.T., AND THESE CONTRACT DOCUMENTS.
 12. CONTRACTOR SHALL SAWCUT AND PATCH ALL ASPHALT AND CONCRETE DISTURBED BY CONSTRUCTION.
 13. ALL NON-PAVED AREAS SHALL HAVE SOD INSTALLED, UNLESS OTHERWISE NOTED.
 14. CONTRACTOR SHALL INSTALL AND MAINTAIN ALL NECESSARY EROSION CONTROL DEVICES IN ORDER TO PREVENT ANY SEDIMENT FROM ENTERING STORM DRAINS, DITCHES, ETC. ALL EROSION CONTROL DEVICES SHALL BE IN ACCORDANCE WITH N.C. DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS. NO SEPARATE PAYMENT.

DATE: 2/27/2025

SURVEY/GRS BY: FAYPWC

DRAWN BY: WDJ

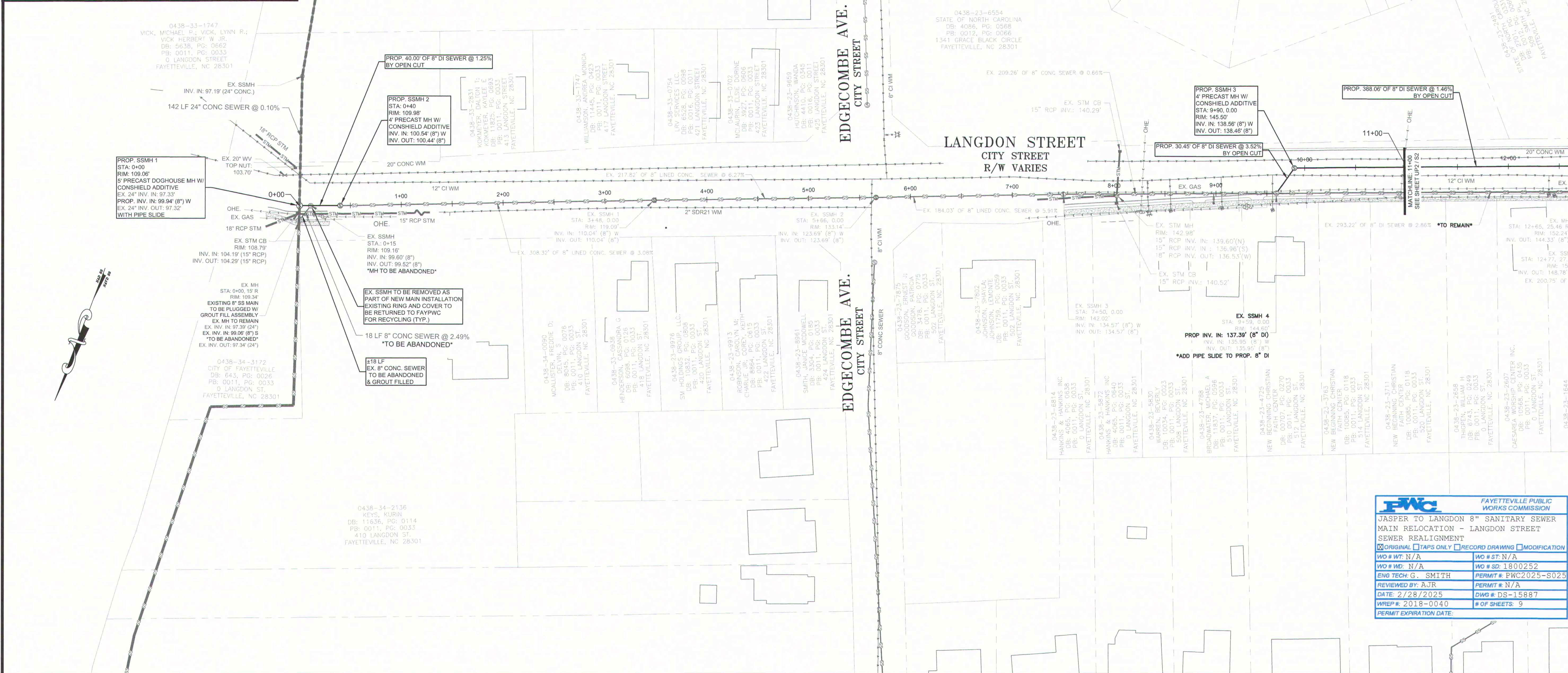
CHECKED BY: JRC

SCALE: HOB: 1"=50'
VERT: 1"=10'

UP

3 OF 9

SEWER RELOCATION PROJECT



FAYETTEVILLE PUBLIC WORKS COMMISSION

JASPER TO LANGDON 8" SANITARY SEWER MAIN RELOCATION - LANGDON STREET SEWER REALIGNMENT

ORIGINAL TAPS ONLY RECORD DRAWING MODIFICATION

WO # WT: N/A WO # ST: N/A

WO # WD: N/A WO # SD: 1800252

ENG TECH: G. SMITH PERMIT # PWC2025-S025

REVIEWED BY: AJR PERMIT # N/A

DATE: 2/28/2025 DWG # DS-15887

WREP #: 2018-0040 # OF SHEETS: 9

PERMIT EXPIRATION DATE:

811 Know what's below. Call before you dig.

LANGDON STREET SEWER STA. 0+00 - 11+00

LEGEND

PROPERTY LINE
EDGE OF PAVEMENT
BACK OF CURB
STORM PIPE
EX. WATER MAIN
EX. SS MAIN
PROP. SS MAIN
PROP. WATER MAIN
EASEMENT
FENCE
WOOD FENCE
EX. UTIL. LINES
TREE LINE

DITCH
EX. PROP. GATE VALVE
AIR RELEASE VALVE
CATCH BASIN/DROP INLET
EX. PROP. SSMH
EX. PROP. STORM MH
EX. PROP. UTILITY MH
GAS VALVE
EX. PROP. PLUG
EX. PROP. BLOW-OFF

POWER & LIGHT POLE/UTILITY WIRE
EX. PROP. WATER METER
EX. PROP. FIRE HYDRANT
UTILITY PEDESTALS
EX. PROP. CLEAN OUT
SIGNAL TRAFFIC BOX
MAILBOX
TREE/SHRUB

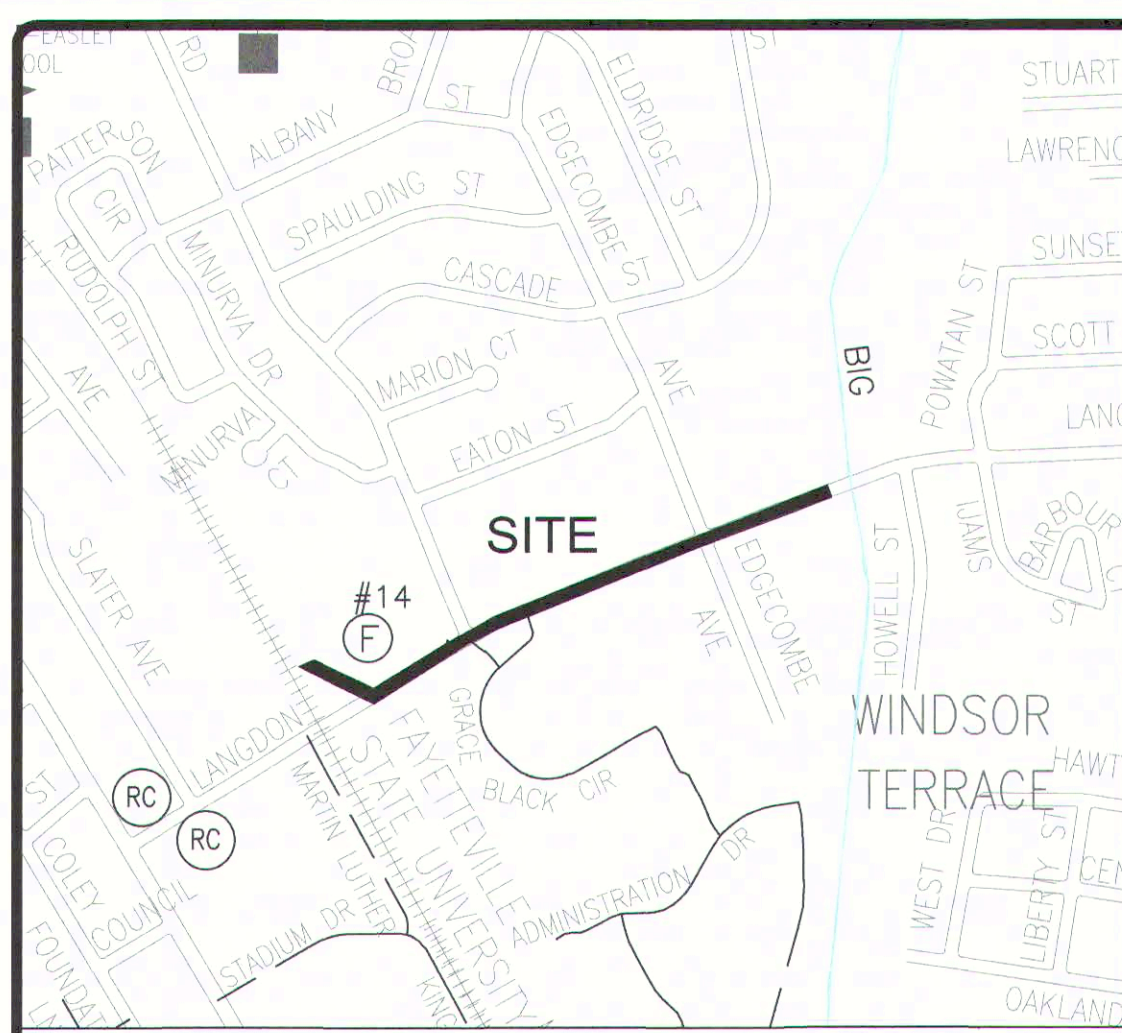
FAYETTEVILLE PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
APPROVED FOR CONSTRUCTION
Date: 02/28/2025

GRAPHIC SCALE
(IN FEET)
HORIZ.: 1 inch = 50 ft.
VERT.: 1 inch = N/A ft.

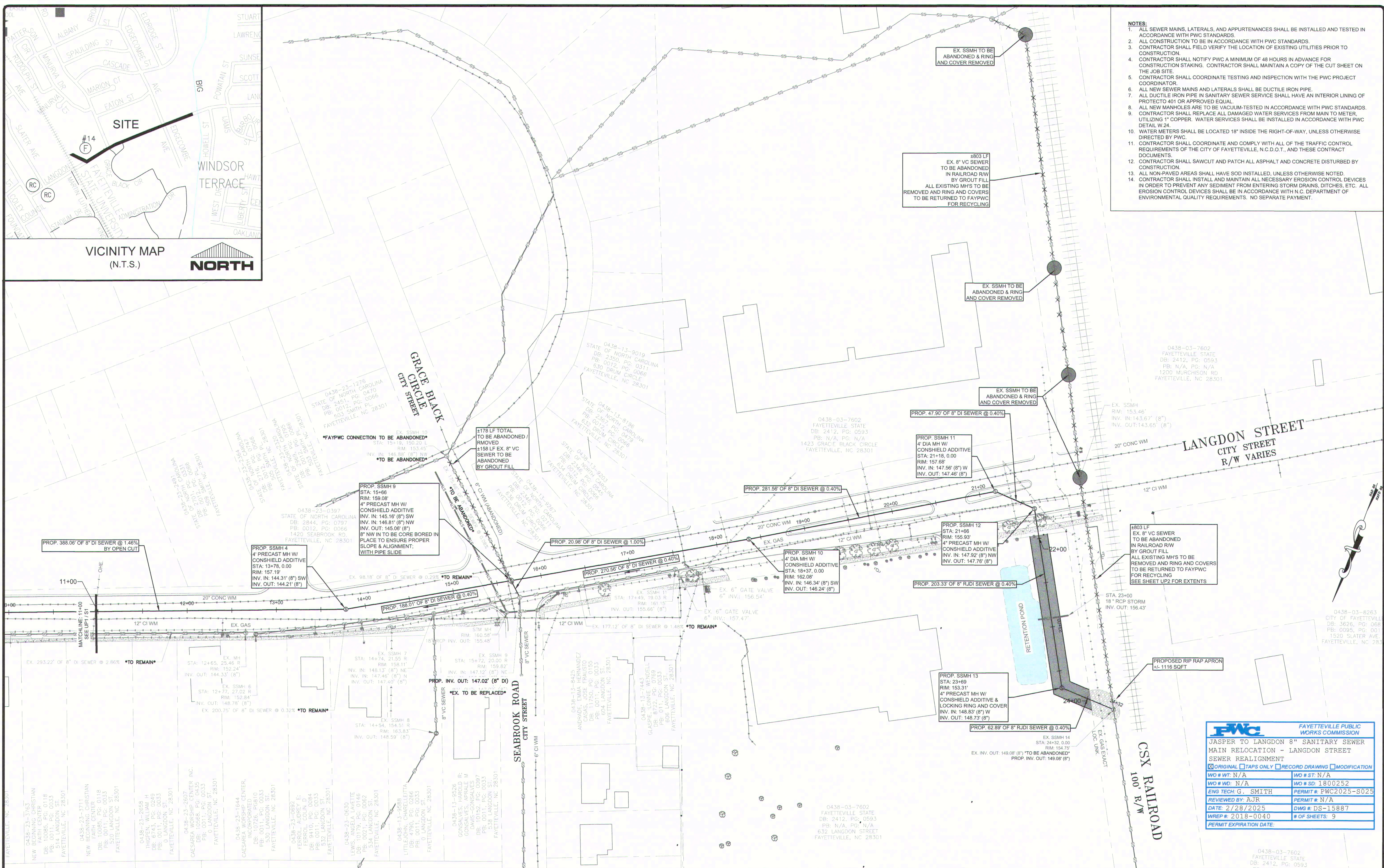
JASPER TO LANGDON
8" SANITARY SEWER MAIN REPLACEMENT
LANGDON STREET SEWER REALIGNMENT

FAYETTEVILLE PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
P.O. Box 1089 Fayetteville, NC 28402
855 Old Wilmington Road, Fayetteville, NC 28301

DS-15887



VICINITY MAP
(N.T.S.)



- NOTES:**
1. ALL SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH PWC STANDARDS.
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DATE	REVISIONS	BY
2/27/2025		

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DRAWN BY: WDJ	SCALE: HORIZ: 1"=50'
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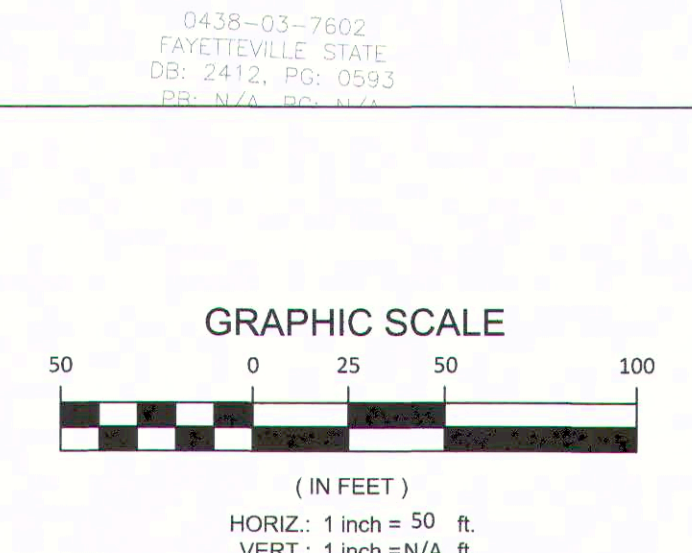
UP2



JASPER TO LANGDON

8" SANITARY SEWER MAIN RELOCATION
LANGDON STREET SEWER REALIGNMENT

FAYETTEVILLE PUBLIC WORKS COMMISSION	
JASPER TO LANGDON 8" SANITARY SEWER MAIN RELOCATION - LANGDON STREET SEWER REALIGNMENT	
<input checked="" type="checkbox"/> ORIGINAL	<input type="checkbox"/> TAPS ONLY
<input type="checkbox"/> RECORD DRAWING	<input type="checkbox"/> MODIFICATION
WO # WT: N/A	WO # ST: N/A
WO # WD: N/A	WO # SD: 1800252
ENG TECH: G. SMITH	PERMIT #: PWC2025-S025
REVIEWED BY: AJR	PERMIT #: N/A
DATE: 2/28/2025	DWG #: DS-15887
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PERMIT EXPIRATION DATE:	



LANGDON STREET SEWER

STA. 11+00 - STA. 24+32

LEGEND	
PROPERTY LINE	DITCH
EDGE OF PAVEMENT	EX. PROP. GATE VALVE
BACK OF CURB	AIR RELEASE VALVE
STORM PIPE	CATCH BASIN/ROOF INLET
EX. WATER MAIN	EX. PROP. SSMH
EX. SS MAIN	EX. PROP. STORM MH
PROP. SS MAIN	EX. PROP. UTILITY MH
PROP. WATER MAIN	GAS VALVE
EASEMENT	EX. PROP. PLUG
FENCE	EX. PROP. BLOW OFF
WOOD FENCE	
EX. UTIL. LINES	
TREELINE	

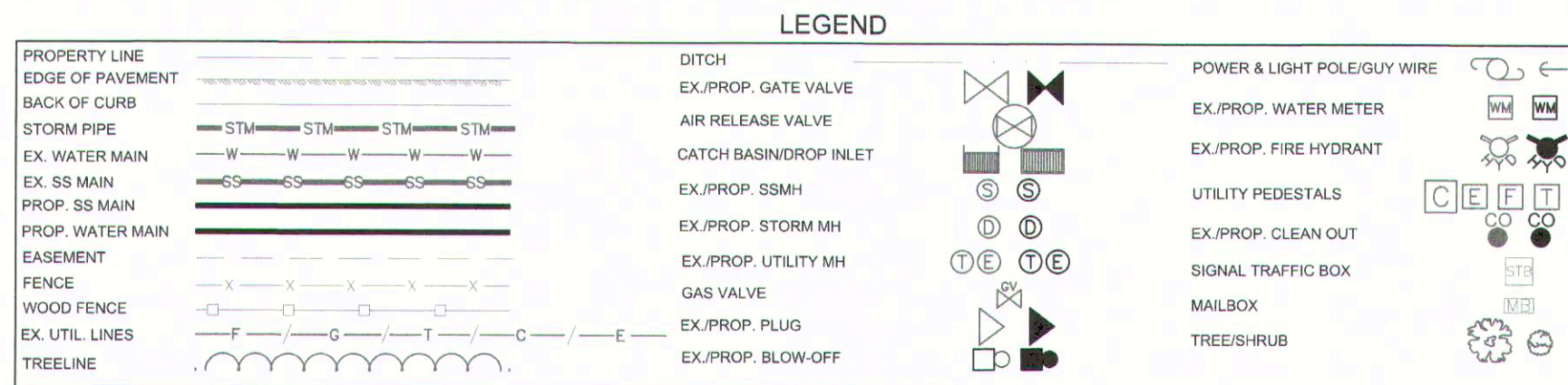
FAYETTEVILLE PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
APPROVED FOR CONSTRUCTION
Date: 02/28/2025

V:\ACTIVE PROJECTS\LANGDON STREET OPTION.DWG\LANGDON STREET FSU SEWER RELOCATION PROJECT ALIGN REVISION.dwg, 2/26/2025 8:22:33 AM

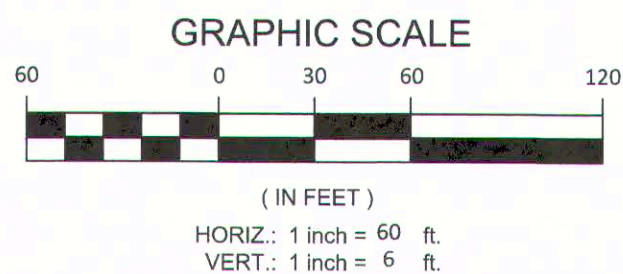


Know what's below.
Call before you dig.

LANGDON STREET SEWER STA. 0+00 - 11+00



FAYETTEVILLE PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
APPROVED FOR CONSTRUCTION
Date: 02/28/2025



FAYETTEVILLE PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
P.O. Box 1085, Fayetteville, NC 28302
955 Old Wilmington Road, Fayetteville, NC 28301

DS-15887

JASPER TO LANGDON
8" SANITARY SEWER MAIN REPLACEMENT
LANGDON STREET SEWER REALIGNMENT



S1

5 of 9

DATE: 2/27/2025

SURVEY/GIS BY: FAYPWC

DRAWN BY: WDJ

CHECKED BY: IRC

SCALE: HORIZ: 1"=60'
VERT: 1"=6'

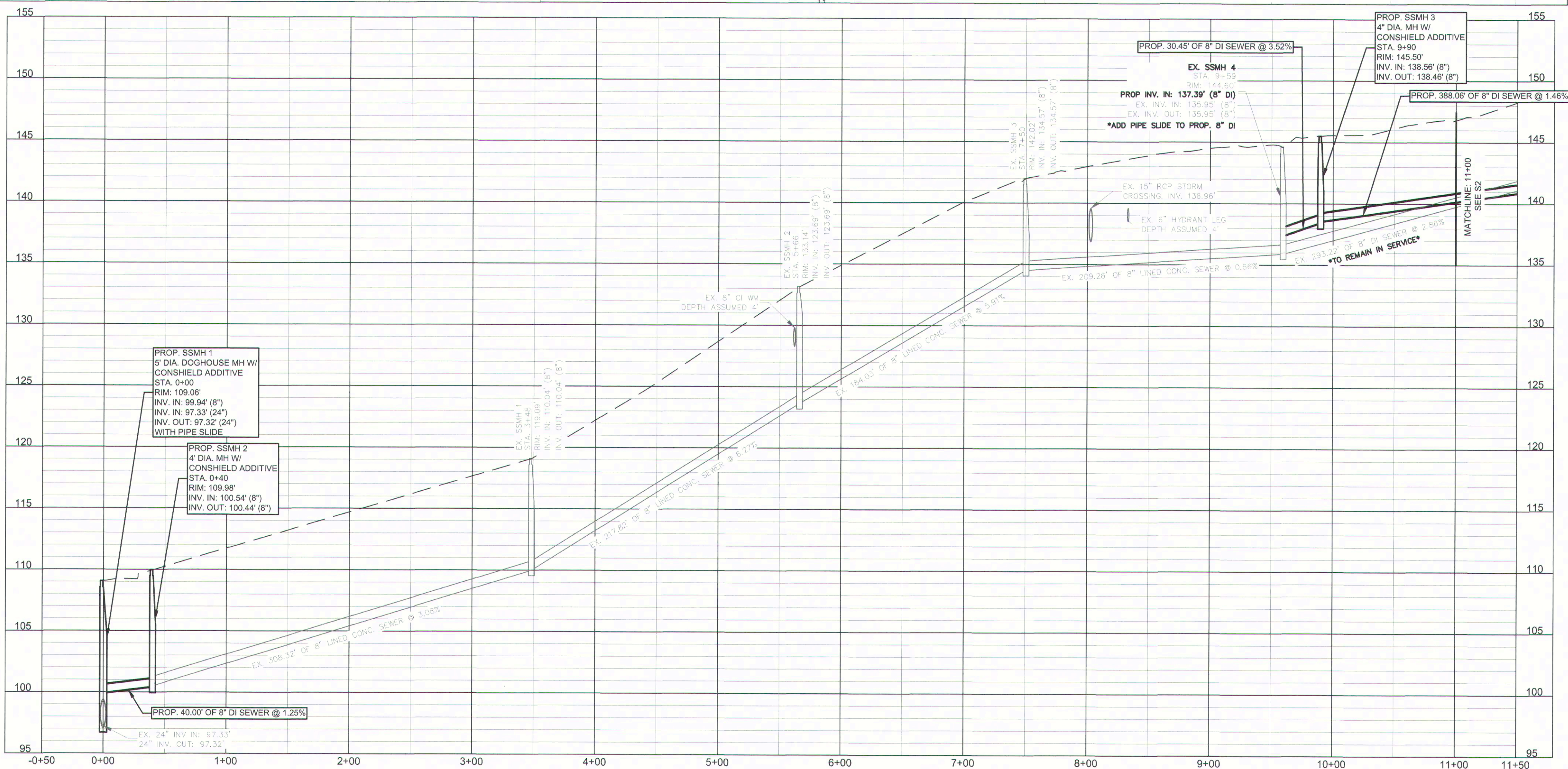
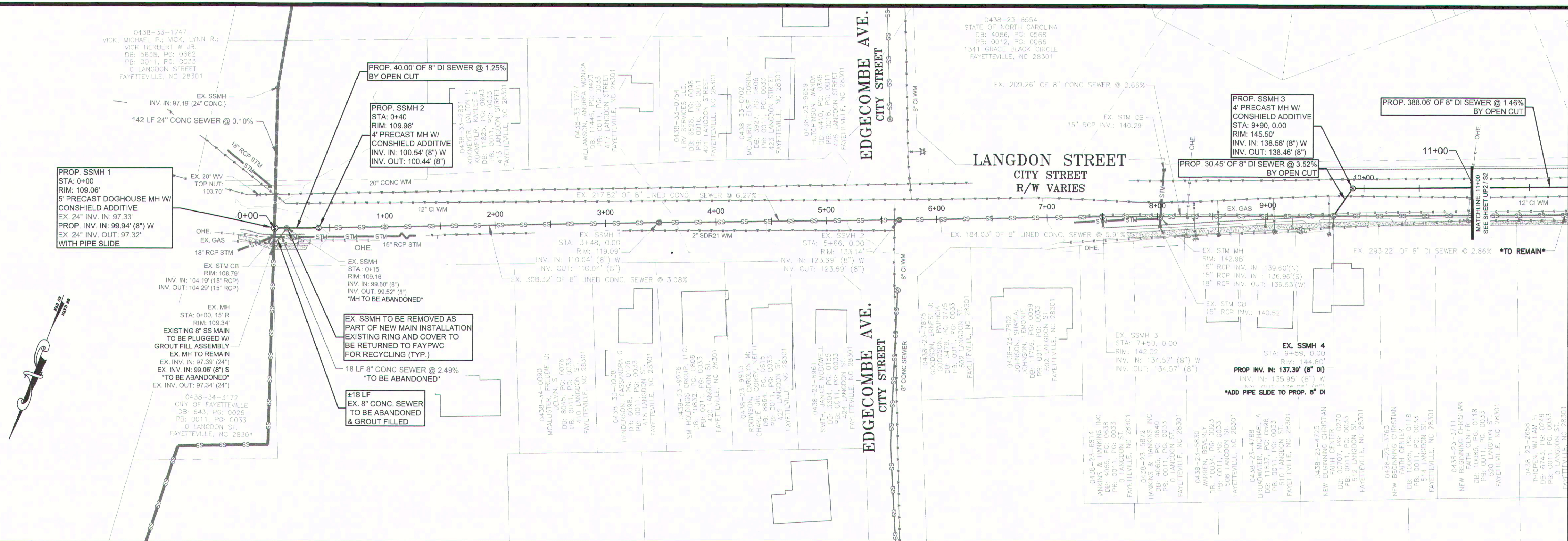
REVISIONS

BY

DATE

DESCRIPTION

SHEET SERIES-

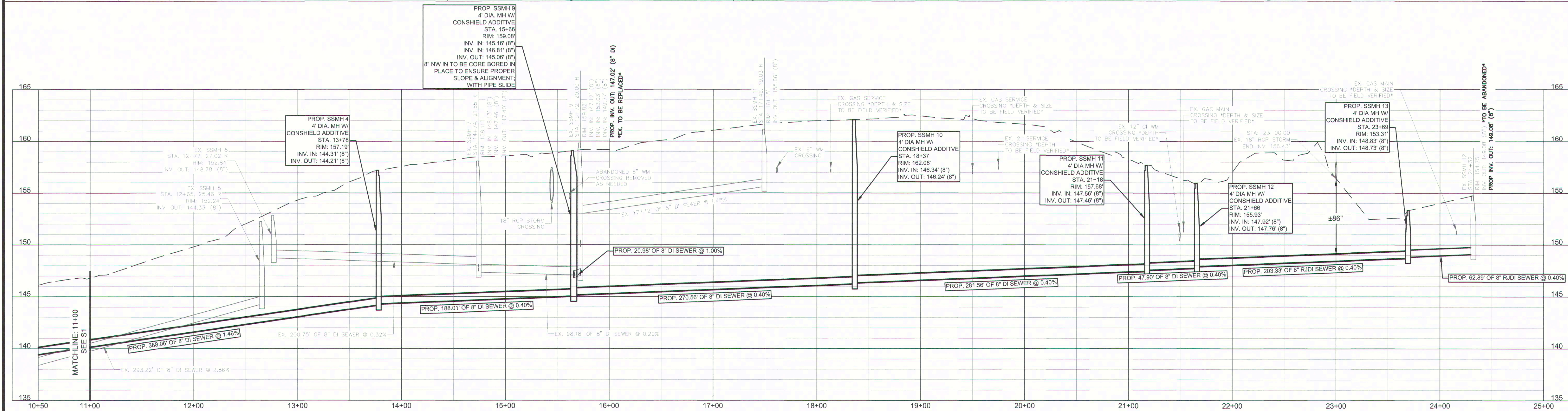
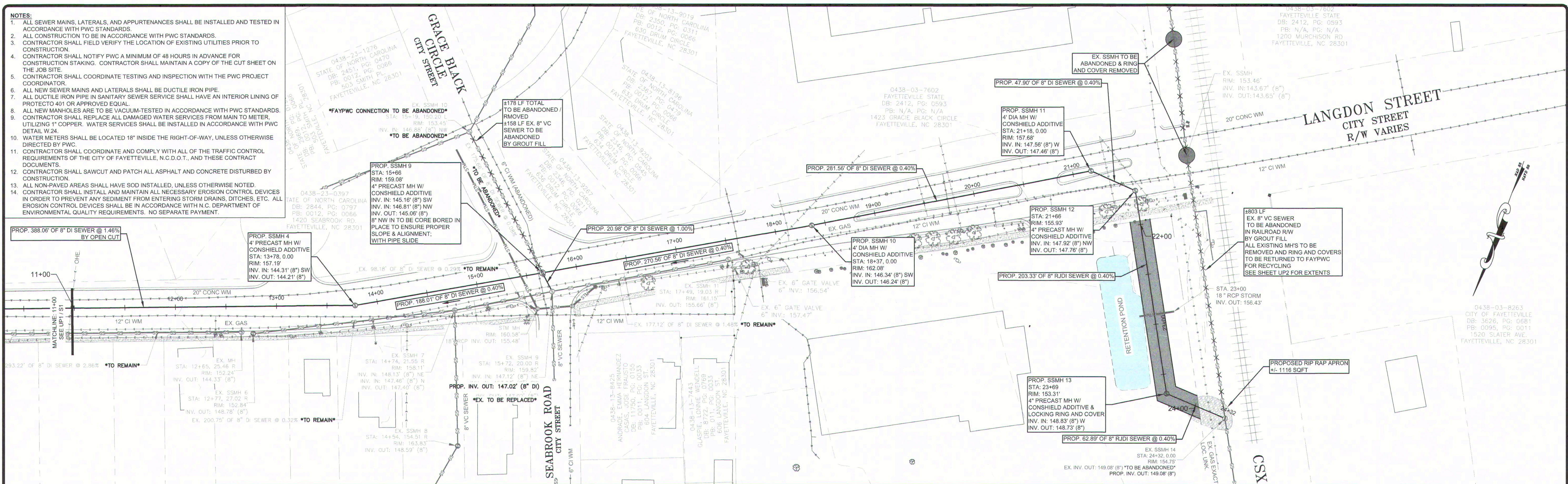


NOTES:

- ALL SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH PWC STANDARDS.
- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PWC STANDARDS.
- CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY PWC A MINIMUM OF 48 HOURS IN ADVANCE FOR CONSTRUCTION STAKING. CONTRACTOR SHALL MAINTAIN A COPY OF THE CUT SHEET ON THE JOB SITE.
- CONTRACTOR SHALL COORDINATE TESTING AND INSPECTION WITH THE PWC PROJECT COORDINATOR.
- ALL NEW SEWER MAINS AND LATERALS SHALL BE DUCTILE IRON PIPE.
- ALL DUCTILE IRON PIPE IN SANITARY SEWER SERVICE SHALL HAVE AN INTERIOR LINING OF PROTECTO 401 OR APPROVED EQUAL.
- ALL NEW MANHOLES ARE TO BE VACUUM-TESTED IN ACCORDANCE WITH PWC STANDARDS.
- CONTRACTOR SHALL REPLACE ALL DAMAGED WATER SERVICES FROM MAIN TO METER, UTILIZING 1" COPPER. WATER SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH PWC DETAIL W-24.
- WATER METERS SHALL BE LOCATED 18" INSIDE THE RIGHT-OF-WAY, UNLESS OTHERWISE DIRECTED BY PWC.
- CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL OF THE TRAFFIC CONTROL REQUIREMENTS OF THE CITY OF FAYETTEVILLE, N.C. D.O.T., AND THESE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL SAWCUT AND PATCH ALL ASPHALT AND CONCRETE DISTURBED BY CONSTRUCTION.
- ALL NON-PAVED AREAS SHALL HAVE SOD INSTALLED, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL INSTALL AND MAINTAIN ALL NECESSARY EROSION CONTROL DEVICES IN ORDER TO PREVENT ANY SEDIMENT FROM ENTERING STORM DRAINS, DITCHES, ETC. ALL EROSION CONTROL DEVICES SHALL BE IN ACCORDANCE WITH N.C. DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS. NO SEPARATE PAYMENT.

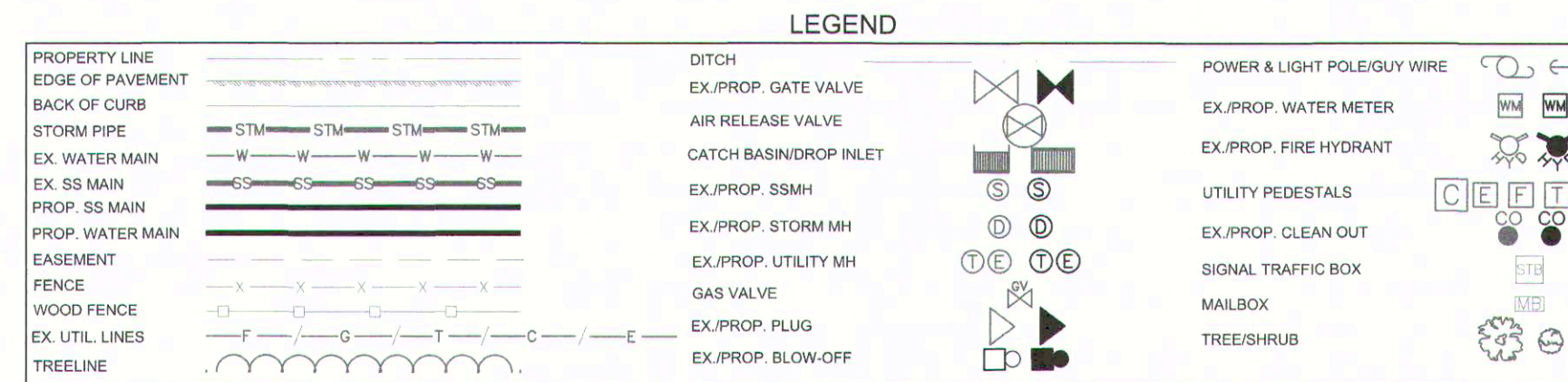
VA ACTIVE PROJECTS\LANGDON STREET FSU OUTFALL\LANGDON STREET FSU SEWER RELOCATION PROJECT ALIGH REVISION.dwg, 2/28/2025 8:22:35 AM

- NOTES:
1. ALL SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH PWC STANDARDS.
 2. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PWC STANDARDS.
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 4. CONTRACTOR SHALL NOTIFY PWC A MINIMUM OF 48 HOURS IN ADVANCE FOR CONSTRUCTION STAKING. CONTRACTOR SHALL MAINTAIN A COPY OF THE CUT SHEET ON THE JOB SITE.
 5. CONTRACTOR SHALL COORDINATE TESTING AND INSPECTION WITH THE PWC PROJECT COORDINATOR.
 6. ALL NEW SEWER MAINS AND LATERALS SHALL BE DUCTILE IRON PIPE.
 7. ALL DUCTILE IRON PIPE IN SANITARY SEWER SERVICE SHALL HAVE AN INTERIOR LINING OF PROTECTO 401 OR APPROVED EQUAL.
 8. ALL NEW MANHOLES ARE TO BE VACUUM-TESTED IN ACCORDANCE WITH PWC STANDARDS.
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 12. CONTRACTOR SHALL SAWCUT AND PATCH ALL ASPHALT AND CONCRETE DISTURBED BY CONSTRUCTION.
 13. ALL NON-PAVED AREAS SHALL HAVE SOD INSTALLED, UNLESS OTHERWISE NOTED.
 14. CONTRACTOR SHALL INSTALL AND MAINTAIN ALL NECESSARY EROSION CONTROL DEVICES IN ORDER TO PREVENT ANY SEDIMENT FROM ENTERING STORM DRAINS, DITCHES, ETC. ALL EROSION CONTROL DEVICES SHALL BE IN ACCORDANCE WITH N.C. DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS. NO SEPARATE PAYMENT.

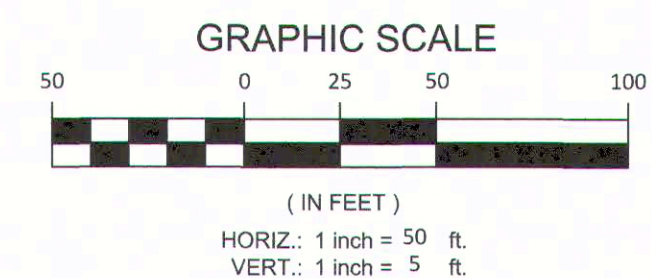


Know what's below.
Call before you dig.

LANGDON STREET SEWER STA. 11+00 - STA. 24+32



FAYETTEVILLE PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
APPROVED FOR CONSTRUCTION
Date: 02/28/2025





DATE	2/27/2025	SURVEY/GS BY	FAYPWC
BY		DRAWN BY	WDJ
REVISIONS		CHECKED BY	JRC
		SCALE	HOR: 1"=50' VERT: 1"=5'
		SHEET	S2
			6 OF 9


JASPER TO LANGDON
8" SANITARY SEWER MAIN REPLACEMENT
LANGDON STREET REALIGNMENT

FAYETTEVILLE PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
P.O. Box 1889, Fayetteville, NC 28302
955 Old Wilmington Road, Fayetteville, NC 28301

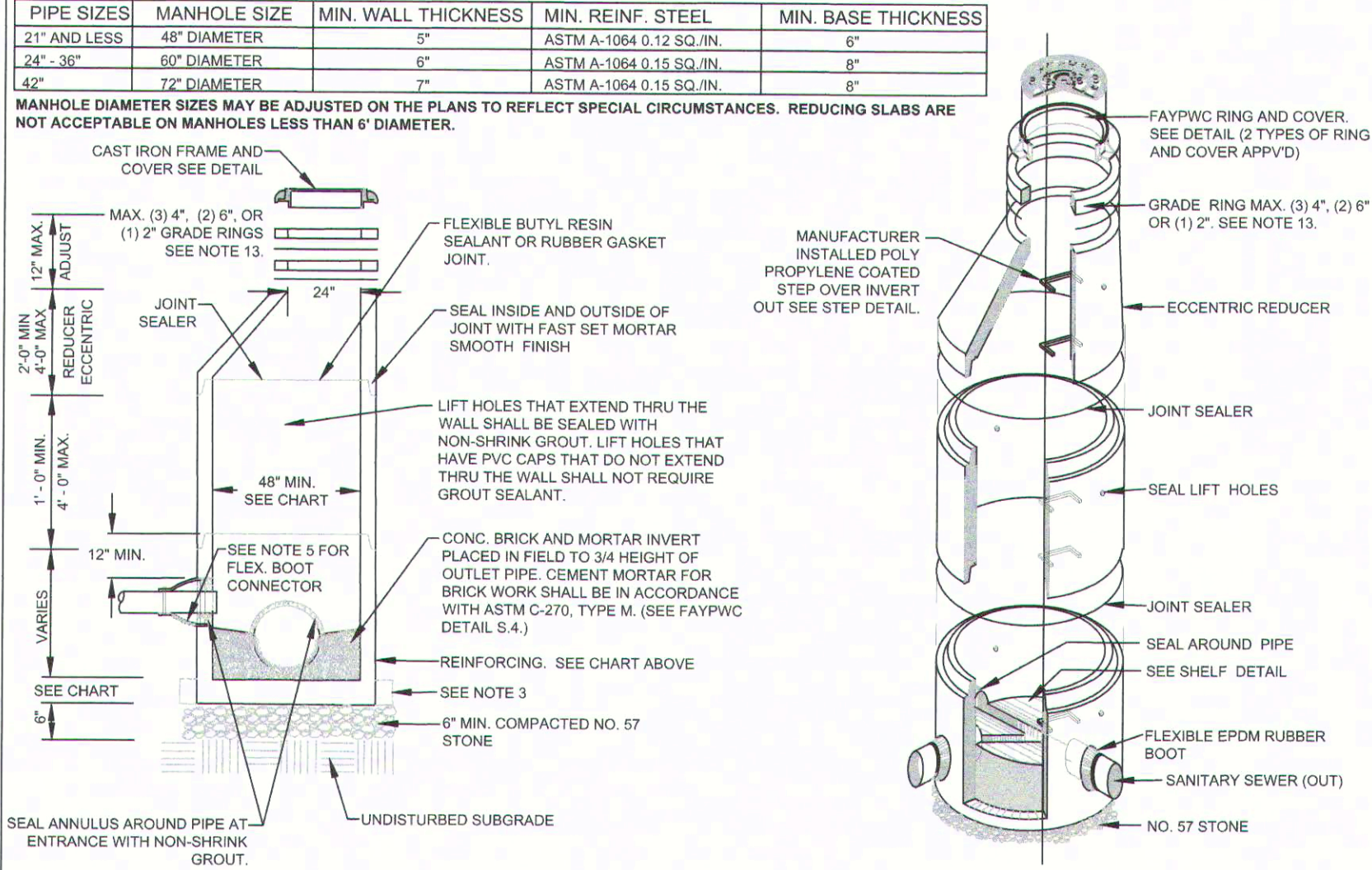
DS-15887


GENERAL NOTES SANITARY SEWER UTILITY				FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.			NO.	DATE	REVISION
SHEET NO. 1 OF 1	DWG. NO.	S.1	DWG. BY: FAY/PWC	WATER RESOURCES ENGINEERING DEPARTMENT			1	01/16	ADDED NOTES 5, 8
	DATE: JAN. 01, 2025		APPROVED BY: K.A.H.				2	09/21	ADDED NOTES 1-4 AND RENUMBERED
						3	11/23	REVISED NOTE 1.5	


DOGHOUSE MANHOLE (MAINS 1/2" OR LESS)			FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N. C.		MORTAR	
SHEET NO. 2 OF 2	DWG. NO. S.3	DWG. BY: FAYFWC		NO. DATE REVISION		
	DATE: JAN 01, 2025	APPROVED BY: K.A.H.		1 11/25/08 MADE CHANGES TO NOTES		
			WATER RESOURCES ENGINEERING DEPARTMENT		2 07/16 ADDED SHEET 2	


STANDARD NON-TRAFFIC AREA MANHOLE RING AND COVER WITH WIPER GASKET AND CAM LOCK N.T.S.		FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		NO. DATE		REVISION
SHEET 1 OF 1	DWG. NO. S.6	DWG. BY: FAYPMC		1	07/09	REVISION NOTES ON FRAME 3 SECTION/REVISION NOTE 3
	DATE: JAN. 01, 2025	APPROVED BY: K.A.H.		2	07/17	ADDED NOTE ON WEDGE CAM LOCKS
				3	08/11	UPDATED NOTES 7 AND 8

- [illegible]






STANDARD MANHOLE N.T.S.			FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		NO.	DATE	REVISION
SHEET NO. 1 OF 2	DWG. NO.	S2	DWG. BY: FAYPWC		1	02/07	CREATED S.2A ADDED NOTES 13-17
	DATE: JAN. 01, 2025		WATER RESOURCES ENGINEERING DEPARTMENT		2	07/13	ADDED SHEET 2 OF 2
	APPROVED BY: K.A.H.				3	01/01/2025	CLARIFIED NOTES REGARDING MORTAR FOR BENCH AND INVERT.
S2: STANDARD-MANHOLE.dwg							


SANITARY SEWER				SECTION B-B			
DOGHOUSE MANHOLE (MAINS 16" OR LARGER) N.T.S.		FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.					
DWG. NO. S.3		DWG. BY: KAYPWC		NO.	REVISION		
DATE: JAN. 01, 2025		APPROVED BY: K.A.H.		1	11/25/08 MADE CHANGES TO NOTES		
				2	07/16 ADDED SHEET 2		
				3	01/11/18 ADDED MH CHART		

STANDARD TRAFFIC AREA MANHOLE RING AND COVER N.T.S.			FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.		NO. DATE REVISION	
SHEET NO. 1 OF 1	DWG. NO.	S.7	WATER RESOURCES ENGINEERING DEPARTMENT		1	01/05 CHANGED NON TRAFFIC DETAIL
	DATE	JAN 01 2005			2	07/06 ADDED NOTE ON CONCRETE COLLAR
	APPROVED BY:	K. A. H.			3	02/07 REMOVED NON TRAFFIC AREA AND REVISED NOTES

- | | | |
|--------|--|--|
| NOTES: | <p>1. PRECAST REINFORCED CONCRETE MANHOLES SHALL BE IN ACCORDANCE WITH ASTM C478.</p> <p>2. MINIMUM COMPRESSION STRENGTH SHALL BE 4,000PSI.</p> <p>3. MANHOLES GREATER THAN 12" DEPTH SHALL HAVE MINIMUM 6" EXTENDED BASE.</p> <p>4. FLEXIBLE BUTYL RESIN JOINT SEALANT SHALL BE IN ACCORDANCE WITH ASTM C990. RUBBER GASKET JOINTS SHALL BE IN ACCORDANCE WITH ASTM C-443.</p> <p>5. FLEXIBLE DRAIN RUBBER BOOT CONNECTORS SHALL BE IN ACCORDANCE WITH ASTM D2922. INSTALL BY THE MANUFACTURER WITH STAINLESS STEEL COMPRESSION RING AND TAKE-UP CLAMP. THE FLEXIBLE BOOT CONNECTOR SHALL BE TIGHTENED ON THE MAIN BY MEANS OF A SINGLE STAINLESS STEEL PIPE CLAMP.</p> <p>6. CONNECTIONS TO EXISTING MANHOLES SHALL BE BY CORING MANHOLE AND FIELD INCLUDING A FLEXIBLE EPDM RUBBER BOOT CONNECTOR. DO NOT ALLOW DEBRIS TO ENTER SYSTEM.</p> <p>7. MORTAR USED FOR SEALING JOINTS AND LIFT HOLES SHALL BE QUICK SETTING, NON-SHRINK GROUT MIXED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. MORTAR USED TO CONSTRUCT INVERTS AND SLOPE SHALL BE IN ACCORDANCE WITH ASTM C-702, TYPE II, IN ACCORDANCE WITH FAYATF SPECIFICATION SECTION 03301.</p> <p>8. MANHOLE STEPS SHALL BE IN ACCORDANCE WITH ASTM C478 AND OSHA REGULATIONS. ALIGN STEPS WITH INVERT OUT.</p> <p>9. PRECAST INVERTS ARE NOT ALLOWED.</p> <p>10. VERTICAL DROPS BETWEEN THE INFLOW PIPES AND OUTFLOW PIPES SHALL FOLLOW THE FOLLOWING:
 A. GREATER THAN 2' SET DROP STRUCTURE
 DETAIL (MIN. 5" DIAMETER MIN REQUIRED)
 B. LESS THAN 2.5' SEE PIPE SLOPE DETAIL.</p> <p>11. AN ECCENTRIC CONE SHALL BE UTILIZED ON ALL MANHOLES, UNLESS OTHERWISE APPROVED BY FAYATF.</p> <p>12. INVERT ON PLANS IS TO MANHOLE CENTERLINE.</p> <p>13. GRADE RINGS SHALL NOT BE USED FOR ABOVE GRADE ADJUSTMENTS (IE: CUTOFF WALLS). USE GRADE ADJUSTERS IN YARD AREAS AND PAVEMENT, WHERE THE RING AND COVER ARE AT GROUND LEVEL. GRADE RINGS CAN BE </p> | <p>EITHER CONCRETE OR HDPE. HOPE GRADE RINGS SHALL MEET THE REQUIREMENTS OF ASTM #796 FOR MATERIAL, QUALITY AND PERFORMANCE. HOPE GRADE RINGS SHALL BE MANUFACTURED BY LATDHECK, INC. OR APPROVED EQUAL.</p> <p>14. THE MINIMUM SLOPE ACROSS THE INVERT OF THE MANHOLE SHALL BE 1%, UNLESS OTHERWISE APPROVED BY FAYATF. STANDING WATER IN INVERT OF MANHOLE IS NOT ACCEPTABLE.</p> <p>15. THE EXTERIOR MANHOLE RISER JOINTS, INCLUDING THE JOINT AT THE CONE, SHALL BE SEALED ON THE OUTSIDE BY AN APPROVED JOINT WRAP. THE WRAP SHALL BE IN ACCORDANCE WITH FAYATF SPECIFICATIONS.</p> <p>16. MANHOLE BOOT FOR 4-INCH LATERALS, SHOULD IT BE NECESSARY TO INSTALL A 4-INCH LATERAL INTO A MANHOLE, THE RUBBER BOOT THAT THE LATERAL IS INSERTED INTO SHALL BE SECURELY FASTENED TO THE CORE HOLE BY UTILIZING A STAINLESS STEEL BAND THAT IS TIGHTENED USING A JACK OR A TORQUE WRENCH (DIRECT DRIVE), BOTH STANDARD SIZE AND STEP DOWN BOOTS ARE ALLOWED. THE TORQUE WRENCH SHALL BE SUPPLIED BY THE MANUFACTURER. NO OTHER TYPE BANDS OR METHOD OF SECURING THE BOOT TO THE MANHOLE SHALL BE ACCEPTED.</p> <p>FOR FOUR (4) 3-INCH BO 26 LATERALS, THE PIPE OUTSIDE DIAMETER RANGE OF THE BOOT SHALL BE 4.1 INCH SLOES TO 4.25 INCHES.</p> <p>FOR FOUR (4) 4-INCH DUCTILE IRON B 26 LATERALS, THE PIPE OUTSIDE DIAMETER RANGE OF THE BOOT SHALL BE EITHER AS FOR VC OR 4.25 INCHES TO 4.81 INCHES.</p> <p>IN ALL CASES, THE BOOT SHALL BE TIGHTENED ON THE LATERAL BY MEANS OF A SINGLE STAINLESS STEEL PIPE CLAMP.</p> <p>THE LATERAL INVERT SHALL BE AT THE TOP O F THE S' FHELF.</p> <p>17. NO MORE THAN 4, FOUR-INCH LATERALS OR 3, SIX-INCH LATERALS SHALL ENTER A 4' DIAMETER TERMINAL MANHOLE. NO MORE THAN 2 LATERALS (REGARDLESS OF SIZE) SHALL ENTER ALL OTHER DIAMETER MANHOLES. ALL LATERALS SHALL HAVE AN INDIVIDUAL, THROU, 5" DIAMETER MANHOLE SHALL BE USED IF THE ABOVE CONDITIONS ARE NOT MET.</p> <p>NO MORE THAN 5 LATERALS SHALL ENTER A 6" DIAMETER MANHOLE.</p> <p>18. USE OF TEE-YEES ON LATERALS IS NOT ALLOWED.</p> <p>19. ALL MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH FAYATF STANDARDS.</p> |
|--------|--|--|

STANDARD MANHOLE			FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.			NO.	DATE	REVISION
SHEET NO. 2 OF 2	DWG. NO. S.2	DWG. BY: FAYPWC	WATER RESOURCES ENGINEERING DEPARTMENT			1	07/13	REVISED NOTES 9, 10, 11, 15 CONVERTED TO S.2 SHEET 2 OF 2
	DATE: JAN. 01, 2025	APPROVED BY: K.A.H.				2	01/10/19	REVISED NOTES 10, 18
						3	01/10/24	REVISED NOTES 5, 7, 16.
S2 STANDARD MANHOLE								

PIPE SLIDE AND SHELF DETAILS N.T.S.			FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.				NO.	DATE	REVISION
SHEET NO. 1 OF 1	DWG. NO.	S.4	DWG. BY:	FAYPCW		1	01/05	ADDED NOTE 8	
	DATE:	JAN. 04, 2005	APPROVED BY:	K.A.M.			2	02/07	REVISED NOTE 8, SLIDE DETAIL. ADDED NOTES 10, 11, 12
			WATER RESOURCES ENGINEERING DEPARTMENT						

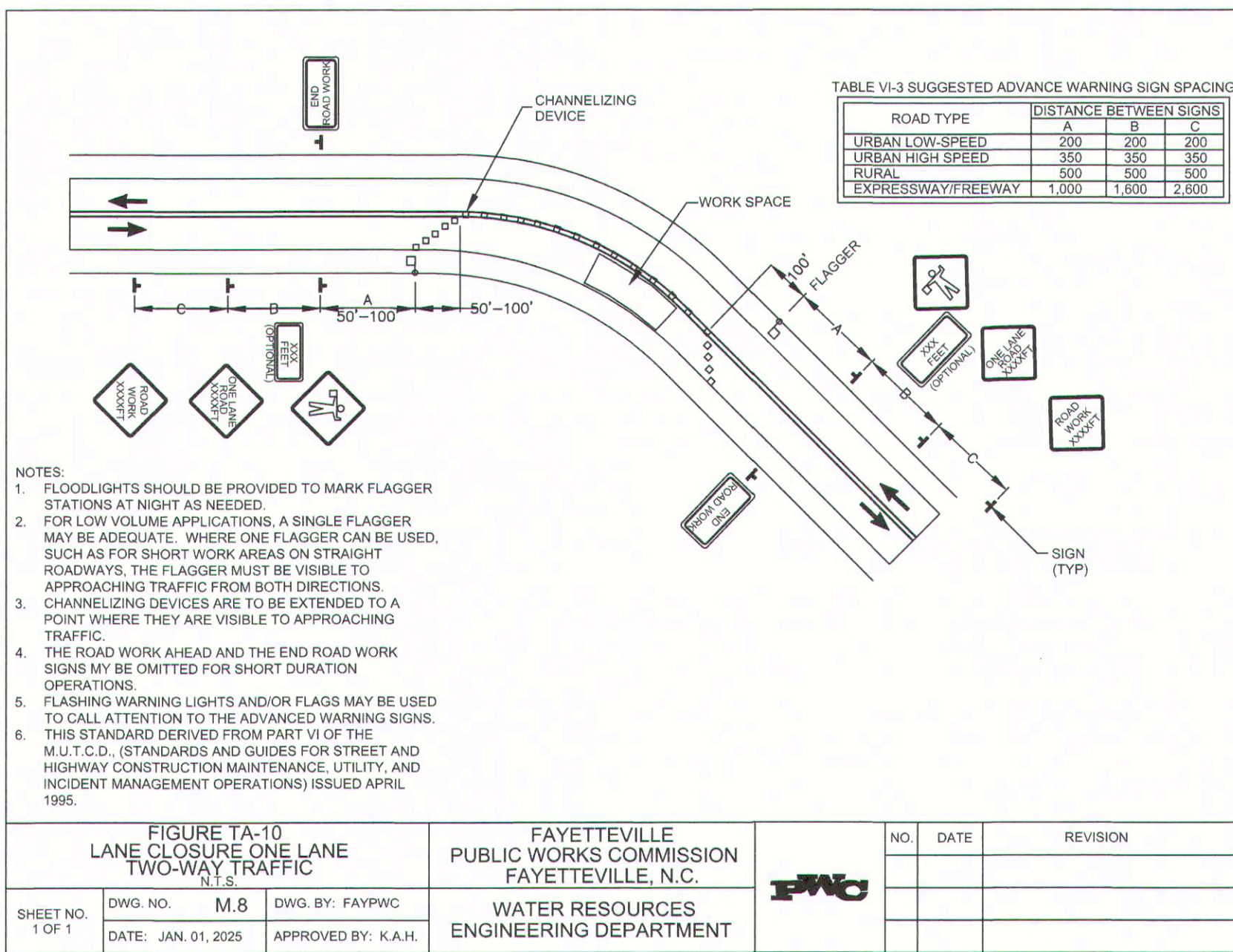
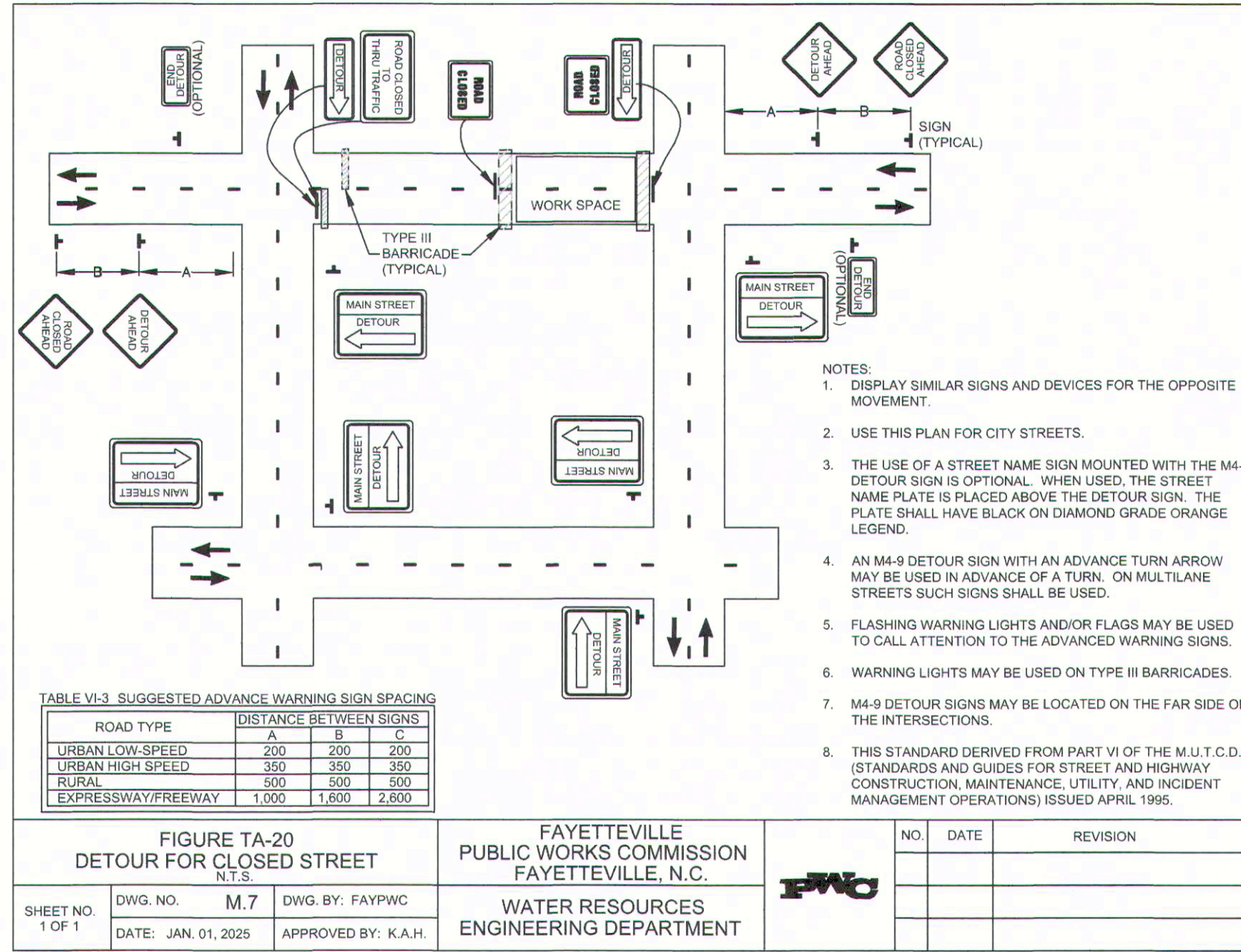
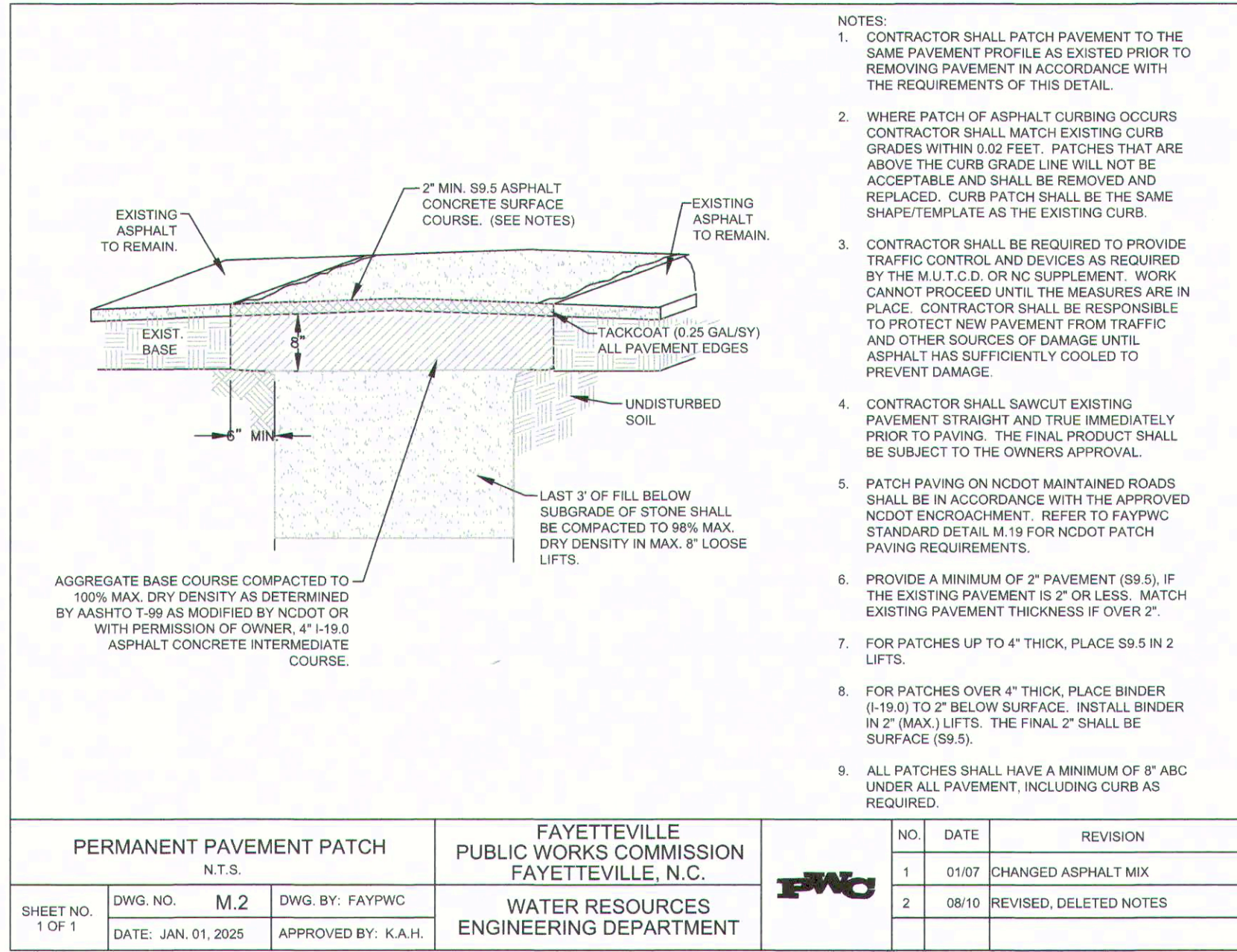
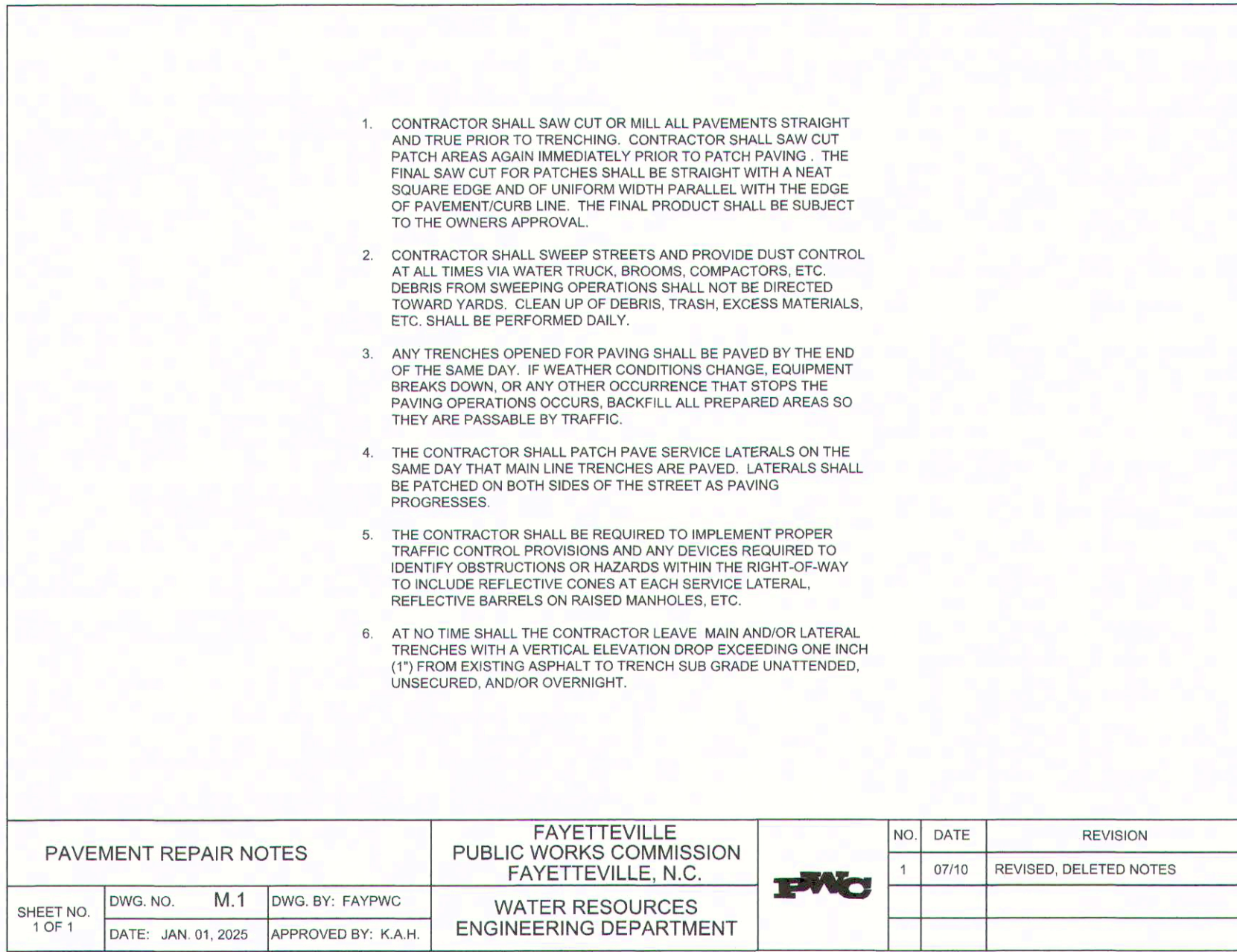
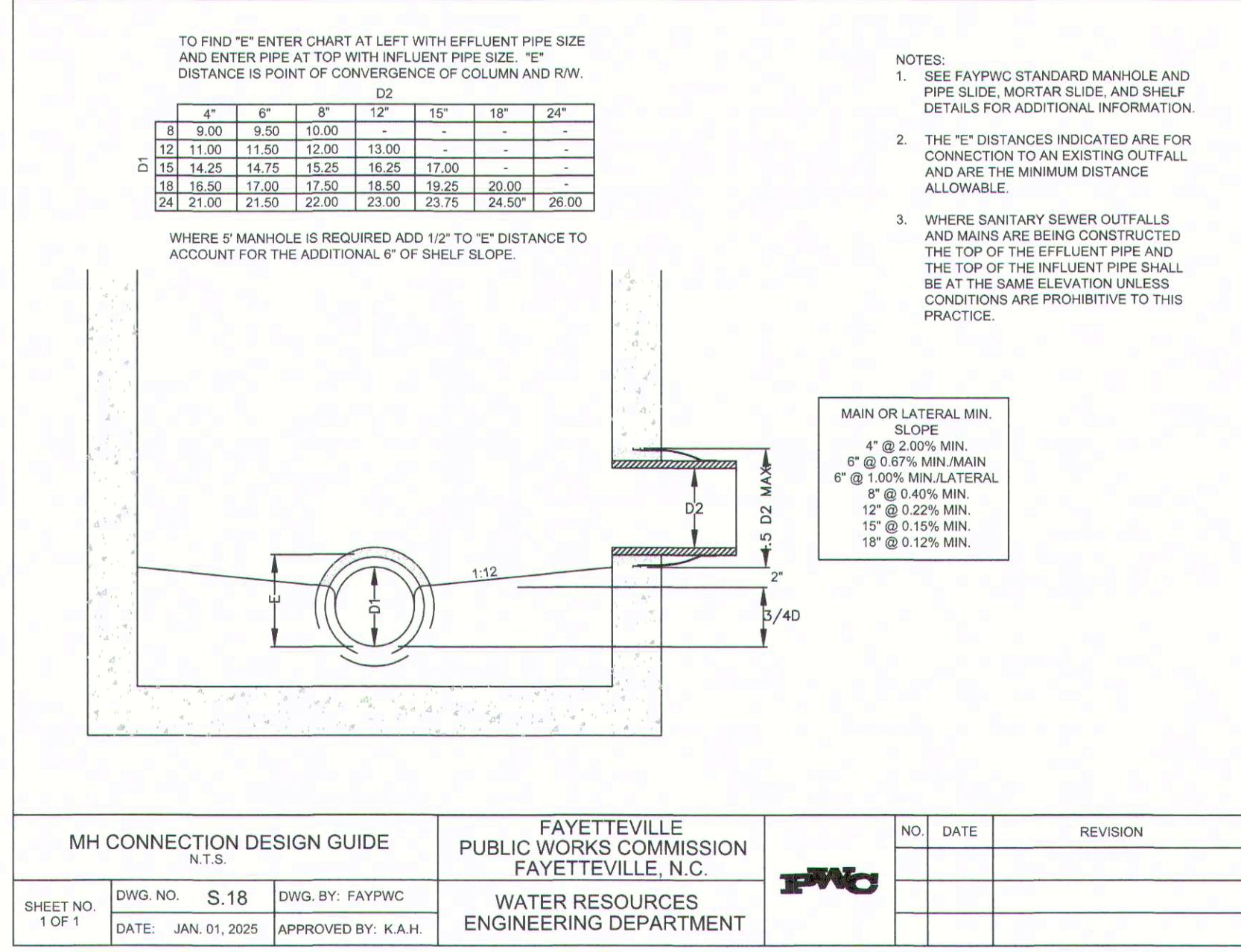
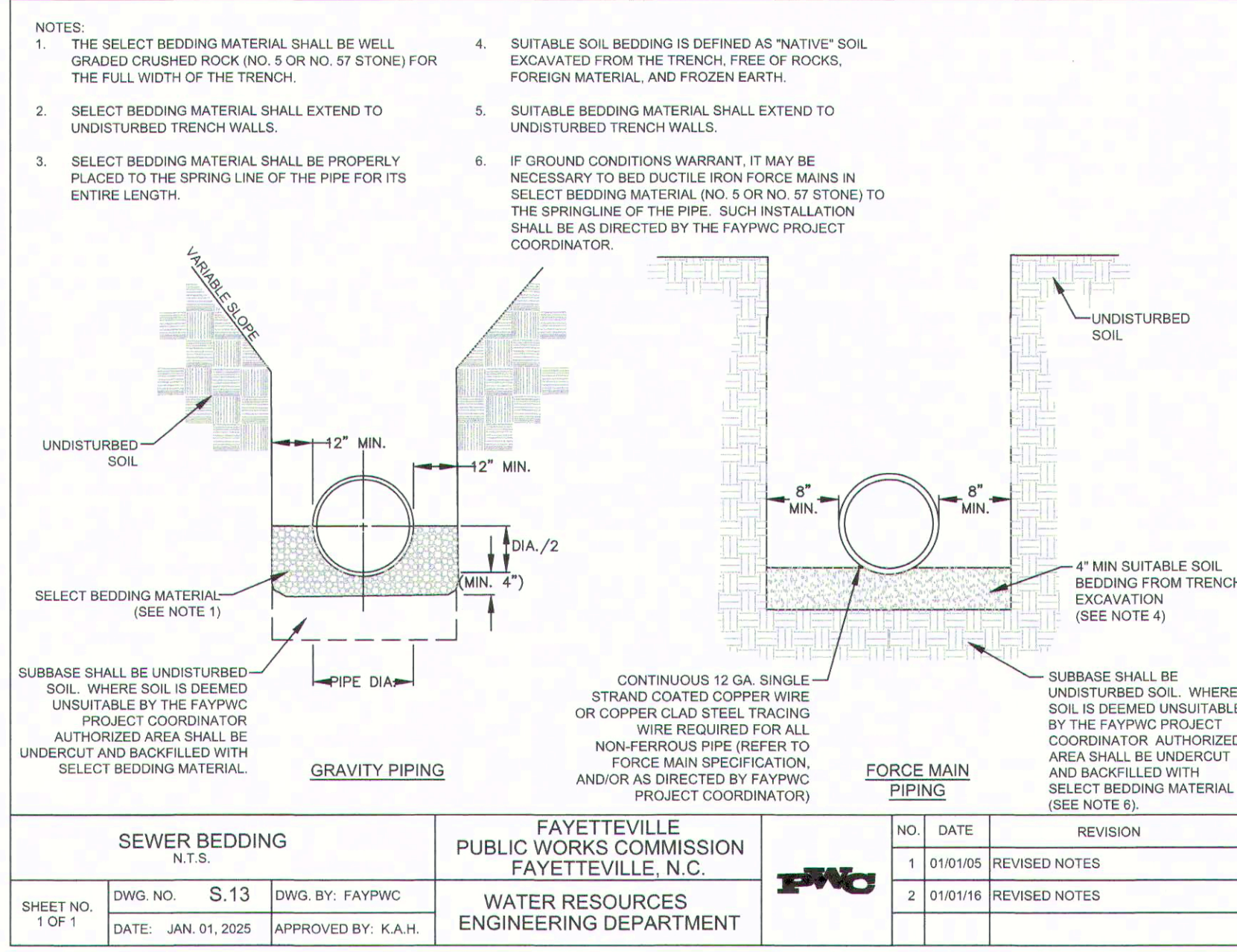
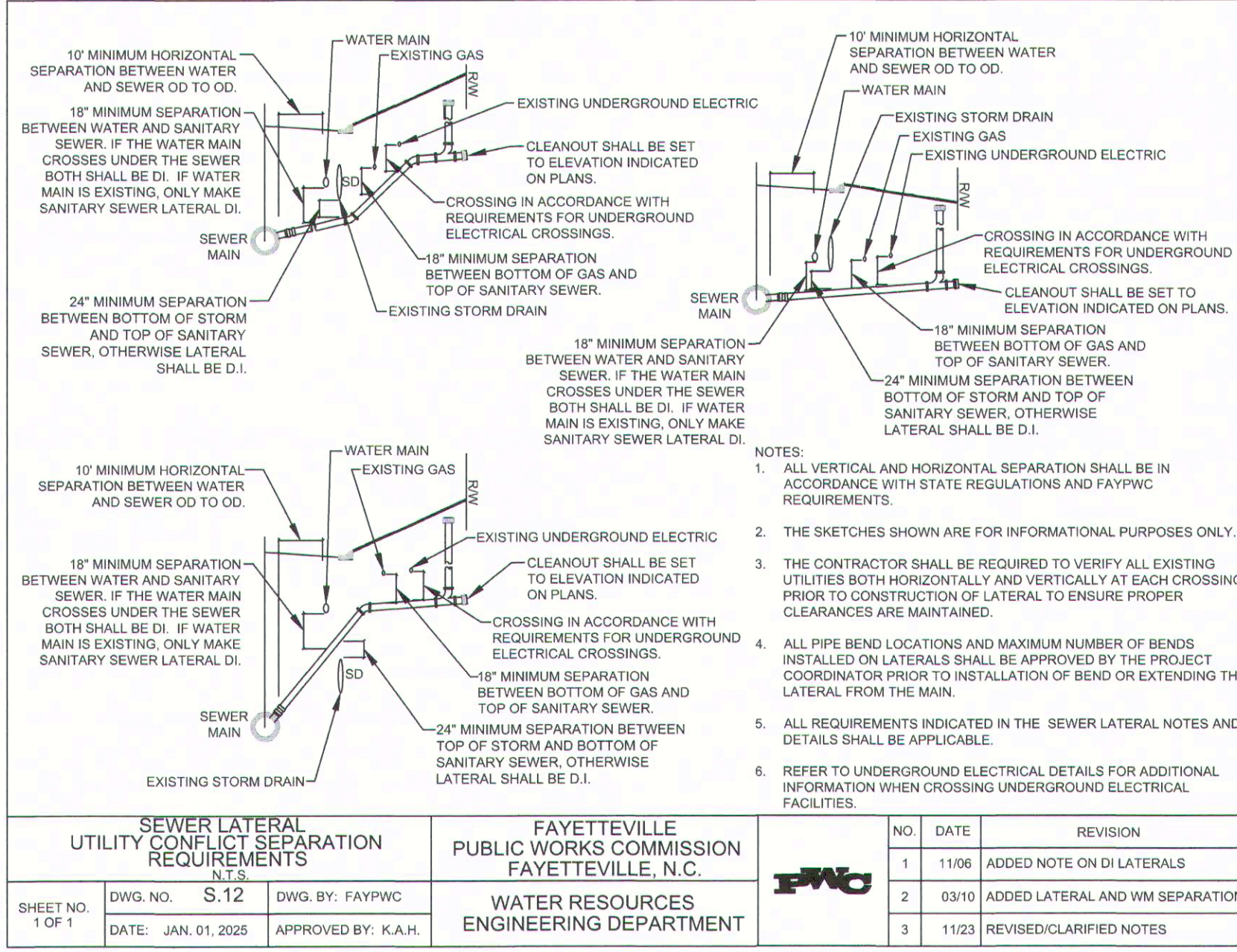
SIDE VIEW				ISOMETRIC VIEW OF STEP			
STRUCTURE STEP N.T.S.		FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.			NO.	DATE	REVISION
SHEET NO. 1 OF 1	DWG. NO. S.8	DWG. BY: FAYPWC	WATER RESOURCES ENGINEERING & DESIGN				

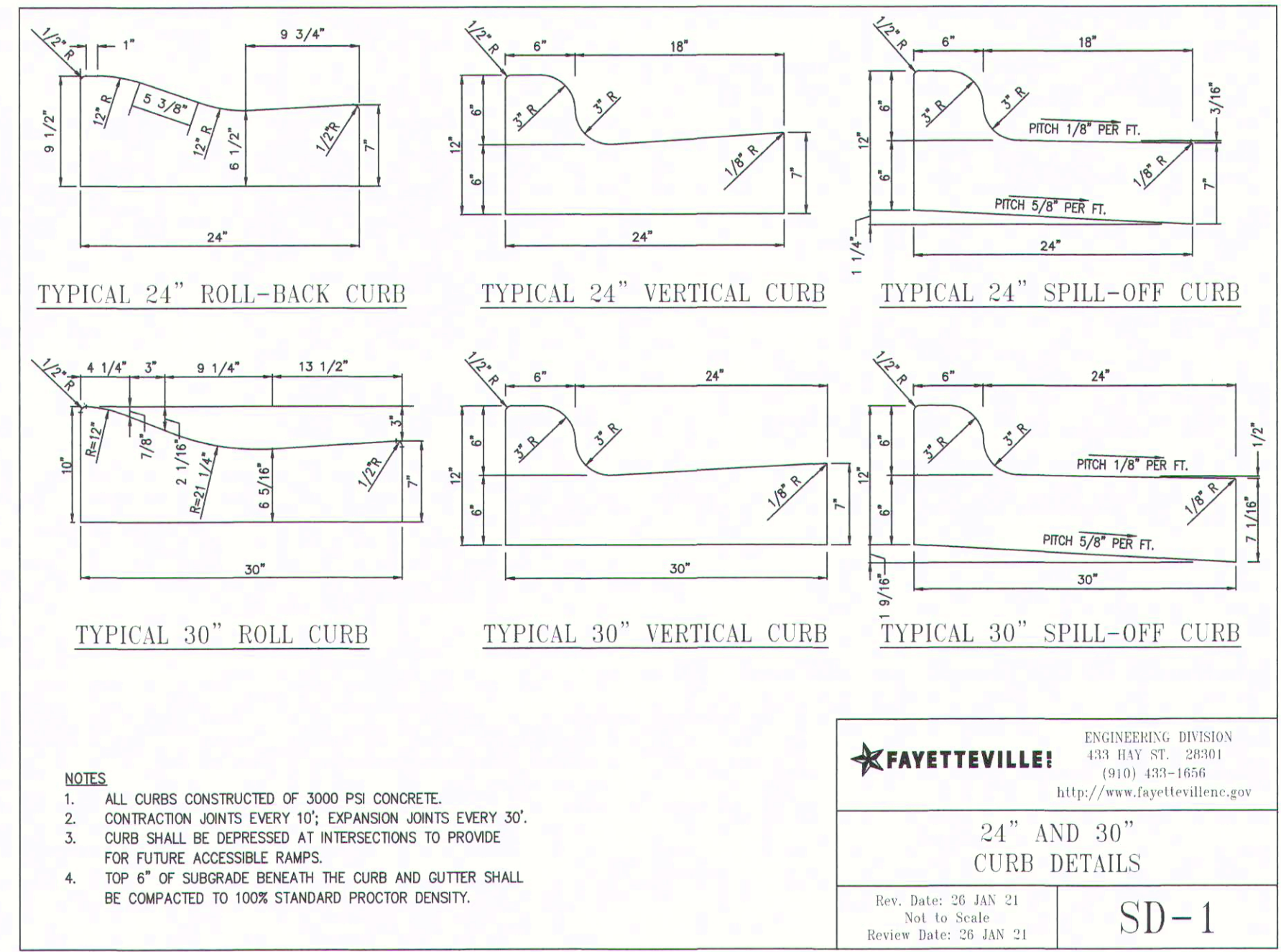
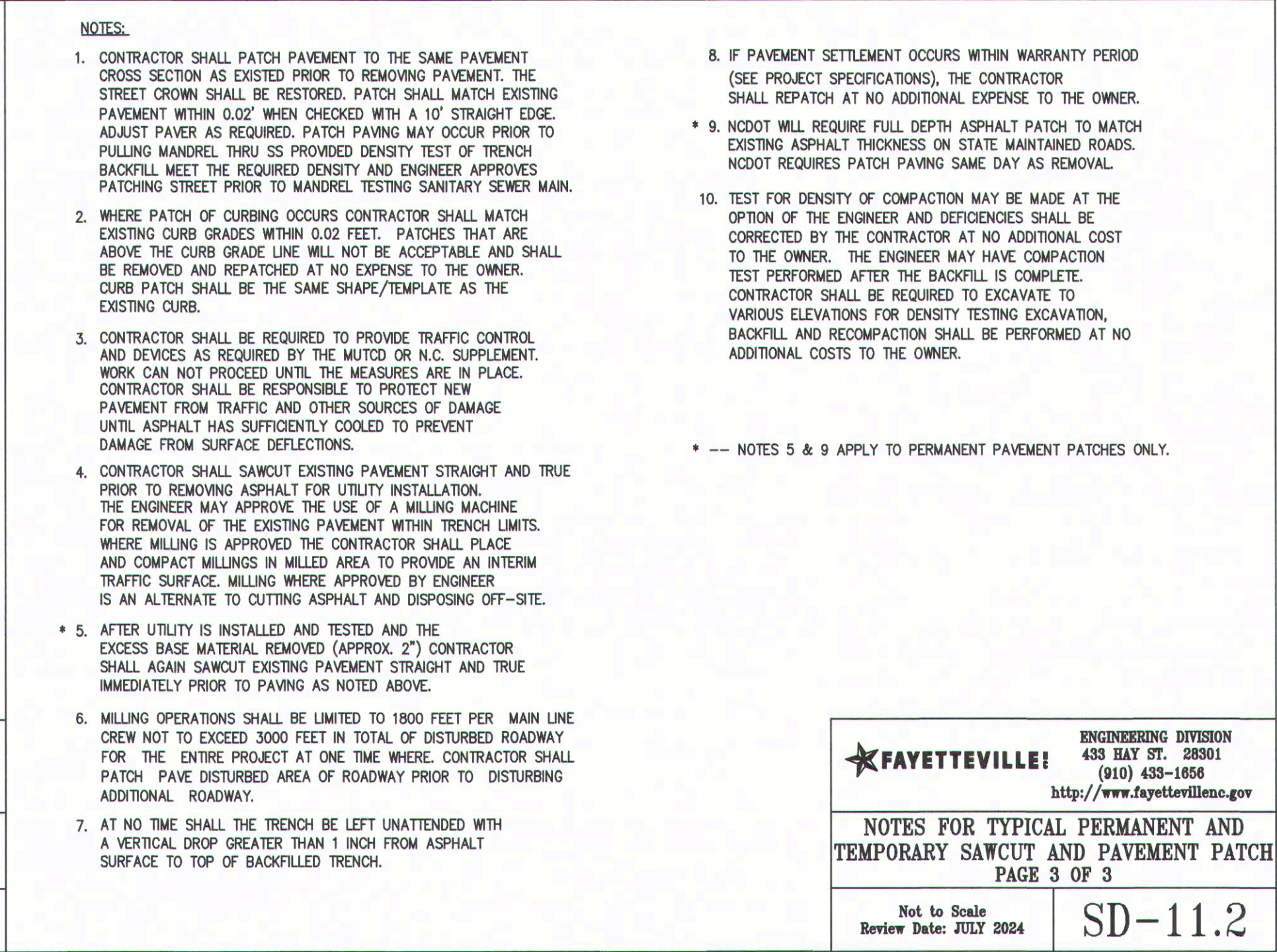
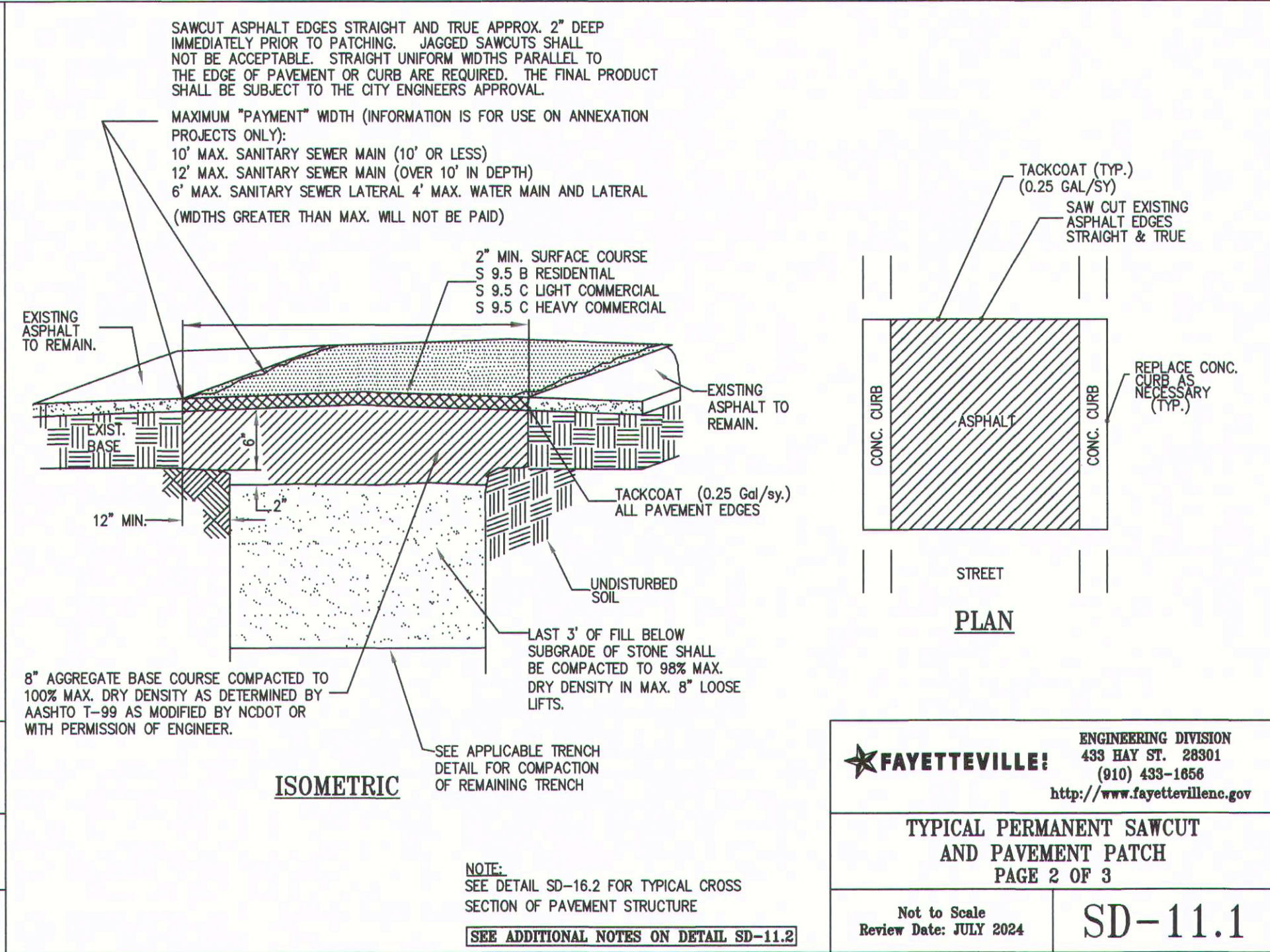
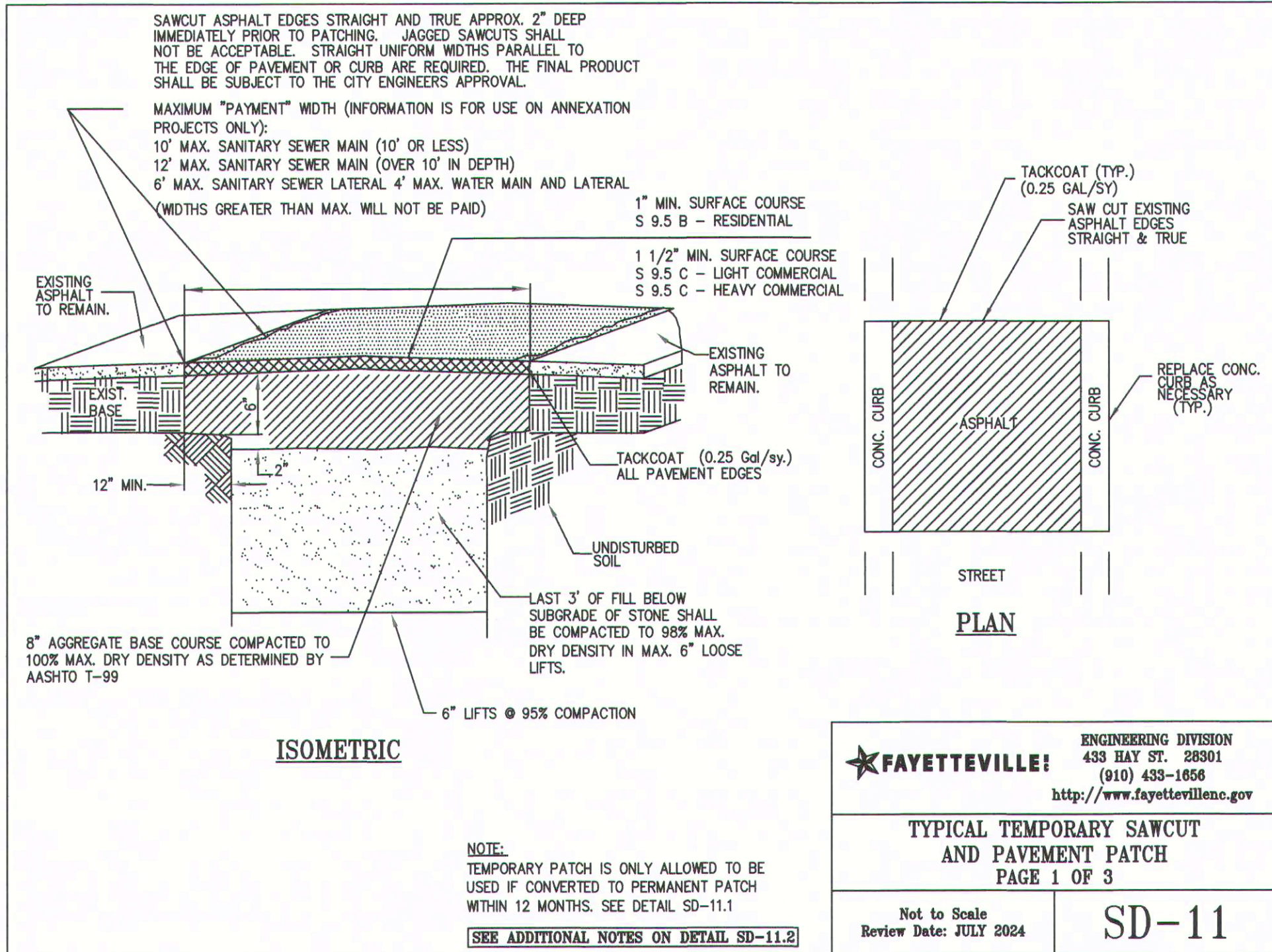
1. COPOLYMER POLYPROPYLENE PLASTIC STEP SHALL BE PLACED 16" OC IN ALL STRUCTURES 5' DEPTH OR GREATER.
2. STEPS SHALL BE INSTALLED BY MANUFACTURER AND SHALL BE ALIGNED OVER STRUCTURE INVERT OUT.
3. DIMENSIONS SHOWN ARE TO CONVEY THE DESIRED SIZE OF THE STEP AND CONSTRUCTION MAY BE ACCEPTABLE PROVIDED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

READS WIDE ENOUGH TO
WITH BOTH FEET.

METRIC VIEW OF STEP

PWC FAYETTEVILLE PUBLIC
WORKS COMMISSION
WATER RESOURCES ENGINEERING
APPROVED FOR CONSTRUCTION
Date: 02/28/2025





DATE	BY	REVISIONS
2/27/2025	FAFPMC	
	WDJ	
	JRC	
	N/A	
	N/A	

SHEET SERIES-

D3

9 OF 9

JASPER TO LANGDON
8" SANITARY SEWER MAIN REPLACEMENT
LANGDON STREET SEWER REALIGNMENT

FAFPMC
PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
P.O. Box 1088 Fayetteville, NC 28302
Electric & Water Utilities
955 Old Wilmington Road, Fayetteville, NC 28301

DS-15887