

**LEGEND** 

EXIST. GAS VALVE

EXIST. LOCATING STATION

PROP O/H POW- PROP. OVERHEAD POWER (BY OTHERS)

EXIST O/H POW— EXIST. OVERHEAD POWER

-----SS---- EXIST. SANITARY SEWER

T——T—— EXIST. UG TELEPHONE CABLE

UTILITY POLE

TELEPHONE PED

TELEPHONE BOX

TELEPHONE VAULT

FIBER OPTIC PED

RIGHT OF WAY

CENTERLINE R/W

EXIST. PROPERTY LINE

EXIST. SIGN

SHEET NUMBER

STATION

EXIST.

PROPOSED

EXIST. CULVERT

DRIVEWAY (CONCRETE OR ASPHALT)

PARCEL NUMBER DESIGNATION

(SEE EASEMENT SUMMARY SHEET T3)

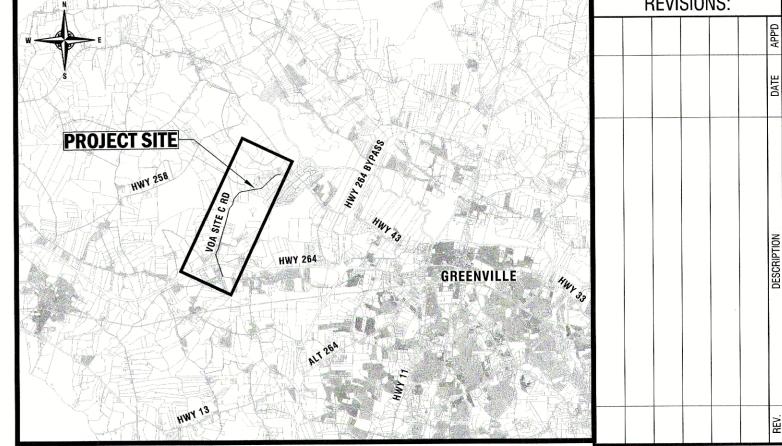
CONTROLLED ACCESS

ELECTRICAL TRANSFORMER

# GREENVILLE UTILITES COMMISSION

GCP-10112 **VOA SITE C ROAD GAS IMPROVEMENTS** PITT COUNTY, NORTH CAROLINA





# **VICINITY MAP**

# SHEET INDEX

**Erosion Control, General Notes ,Bill of Materials, and Easement Summary** 

Plan-Profile - Sta. 0+00 to Sta.17+62

Plan-Profile - Sta. 26+94 to Sta. 43+15

Plan-Profile - Sta. 43+15 to Sta. 61+59

Plan-Profile - Sta. 79+10 to Sta. 97+29

Plan-Profile - Sta. 97+29 to Sta. 115+32

Plan-Profile - Sta. 115+32 to Sta. 132+49

**C14** Plan-Profile - Sta. 195+18 to Sta. 209+33

Miscellaneous Details

Plan-Profile - Sta. 17+62 to Sta. 26+94

Plan-Profile - Sta. 61 + 59 to Sta. 79 + 10

Plan-Profile - Sta. 132+49 to Sta. 149+66

Plan-Profile - Sta. 149+66 to Sta. 168+06

Plan-Profile - Sta. 168+06 to Sta. 176+78

Plan-Profile - Sta. 176+78 to Sta. 185+98

**C13** Plan-Profile - Sta. 185+98 to Sta. 195+18

**D1** Traffic Control Details

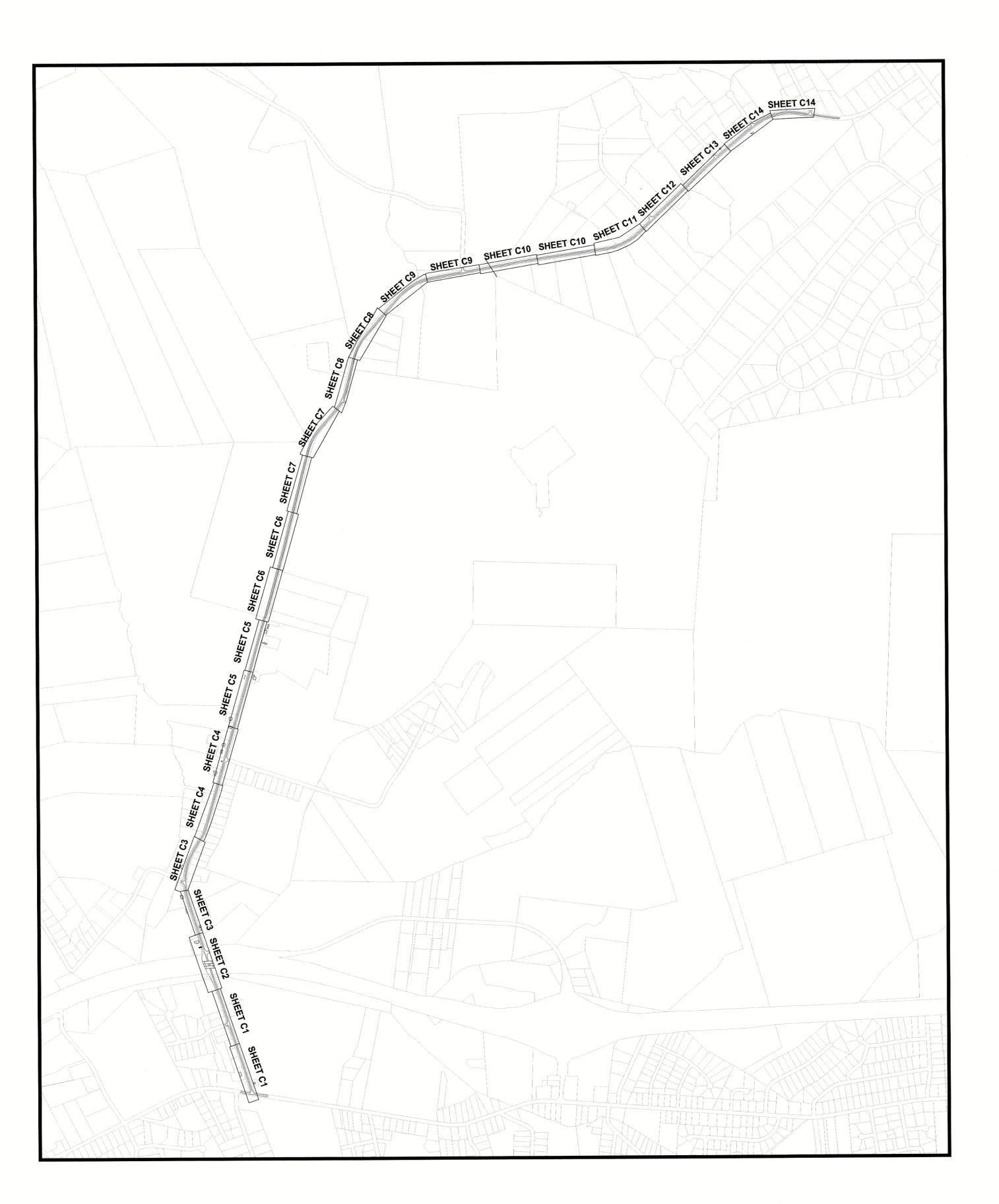
**Erosion Control and Miscellaneous Details** 

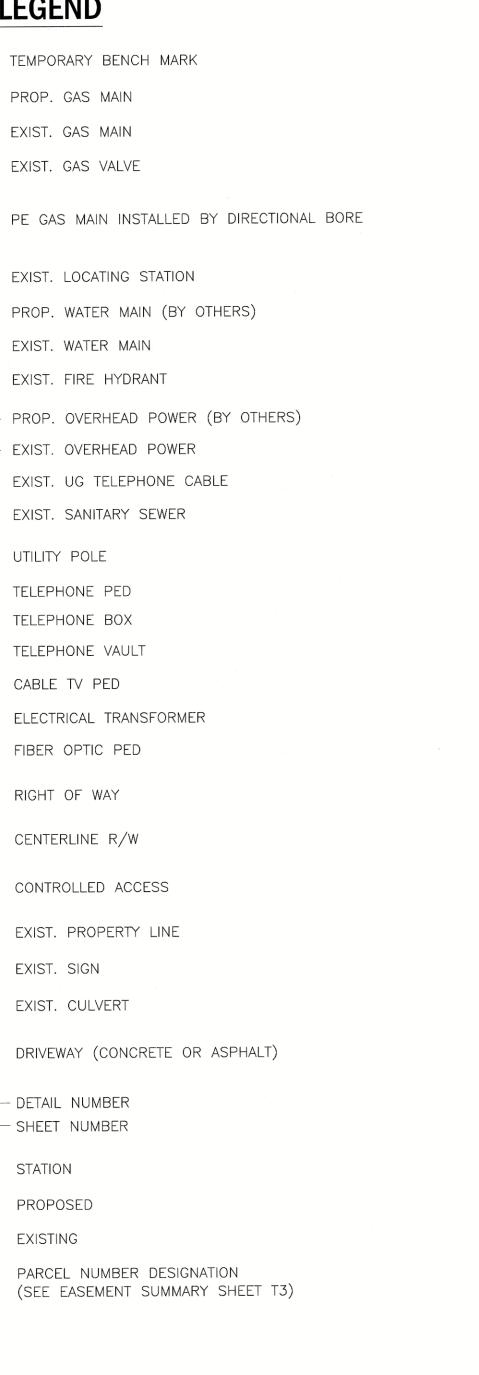
**D4** Miscellaneous Details

**EC1** Erosion Control Notes

GREENVILLE UT GCP-10112 GAS IM

	12			
Survey	-	Draft	JML/RH	W
Design	STA	Chec	k S	ГΑ
Project No.		202	0119	
Drawing No	•	W-	3988	
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# **LEGEND**

INTERMEDIATE CONTOUR EDGE OF VEGETATION ------ GAS LINE (GL) (NCDOT/NC811) —— — — — — WATER LINE (WL) (NCDOT/NC811) 100 YEAR FLOOD LINE (PER NC FRIS WEBSITE) FLOODWAY (PER NC FRIS WEBSITE) TOP OF WALL TOE OF BANK CENTERLINE OF DITCH × 5.0 SPATIAL DATA SPOTS TEMPORARY BENCHMARK ELECTRIC BOX UTILITY POLE NCDOT CARSONITE MARKER FIRE HYDRANT (RIVERS LOCATE) POST HYDRANT IRRIGATION CONTROL VALVE LIGHT POLE FIBER OPTIC MARKER TELEPHONE PEDESTAL WETLANDS POINT AND NUMBER EXISTING IRON PIPE EXISTING RIGHT OF WAY MONUMENT ABOVE GROUND UTILITY FEATURE PARCEL NUMBER NOW OR FORMERLY DEED BOOK PAGE CONC. CONCRETE WITH... CLFCHAIN LINK FENCE WSRF WOOD SPLIT RAIL FENCE WDWOOD WWFWOVEN WIRE FENCE CPCONCRETE PIPE CMPCORRUGATED METAL PIPE PLPHDPE HIGH DENSITY POLYETHYLENE (PIPE) PVCPOLY-VINYL CHLORIDE (PIPE) CORRUGATED PLASTIC (PIPE) ELEVATION CRUSHED ROCK HWHEAD WALL BHWBRICK HEAD WALL CHWCONCRETE HEAD WALL WRFMWOOD REFERENCE MARKER CWVMRK CARSONNITE WATER VALVE MARKER

SDC VEGETATION

BUFFER AREA

WETLANDS AREA

**REFERENCES:** 

M.B. 84 PG. 165 M.B. 57 PG. 60 M.B. 57 PG. 52 M.B. 67 PG. 160 M.B. 57 PG. 196 M.B. 75 PG. 98 M.B. 63 PG 9 M.B. 40 PG. 3 M.B. 85 PG. 143 M.B. 56 PG. 160 M.B. 50 PG. 33 M.B. 32 PG. 165 M.B. 23 PG. 181 M.B. 66 PG. 173 M.B. 43 PG. 177 M.B. 34 PG. 161 M.B. 81 PG. 197 M.B. 77 PG. 55 M.B. 75 PG. 167 M.B. 2 PG. 11 M.B. 23 PG. 80

RIVERS DWG # W-1342 NORTH CAROLINA COUNTY ROAD SURVEY 1930 NCDOT RIGHT OF WAY PLAN PROJECT NO. 8.1187405 D.B. 749 PG. 602 D.B. 792 PG. 249 D.B. 792 PG. 244

PANEL VOA8 (#8) PANEL VOA30 (#30) ŤBM(#125) ▲PANEL VOA23 (#23), EL. 83.13 PANEL VOA22 (#22) PANEL VOA28 (#28) X EL. 82.58 TEL. 82.86 TBM(#119) -----**9** ₩TBM(#114) PANEL VOA27 (#27) EL. 80.95 PANEL VOA20 (#20) JACKIE FIELD RD PANEL VOA21 (#21) PANEL VOA29 (#29) EL. 75.63 PANEL VOA14 (#14) PANEL VOA13 (#13 FEL. 79.57 (NAVD88) APANEL VOA18 (#18) US HWY 264 PANEL VOA26 (#26) 9) UNITS:

STANTONSBURG RD

500' 1000'

1 inch = 1000ft

# SURVEY HORIZONTAL CONTROL

POINT	NORTHING (US FT—GROUND)	EASTING (US FT-GROUND)	ELEVATION (NAVD88)	DESCRIPTION	GRID NORTHING (US FT-NAD 83/2011)	GRID EASTING (US FT-NAD 83/2011
1	694894.36	2454520.28	74.34	PANEL-VOA1	694893.50	2454519.43
2	694012.02	2455071.69	80.57	PANEL-VOA2	694011.25	2455070.79
3	692787.86	2452014.75	76.84	PANEL-VOA3	692787.22	2452014.16
4	692123.80	2452137.36	81.52	PANEL-VOA4	692123.22	2452136.77
5	690442.02	2447764.62	81.45	PANEL-VOA5	690441.63	2447764.48
6	691431.61	2448721.54	75.00	PANEL-VOA6	691431.11	2448721.30
7	691113.11	2450176.58	81.99	PANEL-VOA7	691112.64	2450176.18
8	692154.41	2449441.14	80.42	PANEL-VOA8	692153.84	2449440.82
9	693770.66	2453072.22	78.95	PANEL-VOA9	693769.91	2453071.53
10	693170.29	2453197.94	75.63	PANEL-VOA10	693169.61	2453197.23
11	694065.85	2453845.40	78.77	PANEL-VOA11	694065.07	2453844.62
12	692408.29	2452381.56	80.15	PANEL-VOA12	692407.69	2452380.94
13	681792.52	2444194.45	69.16	PANEL-VOA13	681793.02	2444194.68
14	681914.66	2444975.48	77.49	PANEL-VOA14	681915.15	2444975.63
15	678146.37	2445489.95	77.61	PANEL-VOA15	678147.25	2445490.04
16	678573.03	2446374.61	77.49	PANEL-VOA16	678573.86	2446374.61
17	680704.16	2445099.46	82.26	PANEL-VOA17	680704.77	2445099.59
18	680671.24	2446089.87	73.97	PANEL-VOA18	680671.86	2446089.90
19	679719.77	2445640.86	73.23	PANEL-VOA19	679720.48	2445640.93
20	683718.97	2446219.22	79.91	PANEL-VOA20	683719.27	2446219.24
21	683506.50	2444858.76	66.68	PANEL-VOA21	683506.83	2444858.92
22	688948.91	2447022.27	82.72	PANEL-VOA22	688948.67	2447022.21
23	689250.02	2448074.42	81.64	PANEL-VOA23	689249.74	2448074.24
24	686356.38	2447230.65	81.63	PANEL-VOA24	686356.40	2447230.56
25	686615.16	2446388.58	82.37	PANEL-VOA25	686615.16	2446388.58
26	679454.09	2444885.61	78.42	PANEL-VOA26	679454.84	2444885.77
27	685016.65	2445943.92	79.73	PANEL-VOA27	685016.81	2445943.97
28	688025.42	2446775.82	82.62	PANEL-VOA28	688025.28	2446775.78
29	682835.70	2445331.39	76.18	PANEL-VOA29	682836.09	2445331.50
30	689473.40	2446627.00	80.92	PANEL-VOA30	689473.10	2446626.97

PROJECT CONTROL LOCALIZED TO GROUND AROUND PANEL VOA 25 (#25); CALCULATED GROUND TO GRID COMBINED FACTOR = 0.99989608102976

## **NOTES**

- 1. ALL DISTANCES ARE HORIZONTAL GROUND MEASUREMENTS.
- 2. NO POINTS SET UNLESS OTHERWISE INDICATED.
- 3. PORTION OF THIS SURVEY IS LOCATED WITHIN A "ZONE X"(AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AND ZONE AE (AREAS DETERMINED TO BE WITHIN THE 1% ANNUAL CHANCE FLOODPLAIN (100 YEAR), AS DETERMINED FROM FIRM MAP NUMBER 3720464800K AND 3720464700K, EFFECTIVE 4/16/2013.
- 4. ELEVATIONS AND CONTOURS SHOWN ARE BASED ON NAVD88 DATUM. VERTICAL CONTROL ESTABLISHED MULTIPLE NCGS RTN GPS OBSERVATIONS CLASS C.
- 5. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE COMMITMENT REPORT. RIVERS AND ASSOCIATES DOES NOT CLAIM THAT ALL MATTERS OF RECORD WHICH MAY OR MAY NOT AFFECT THIS PROPERTY ARE SHOWN HEREON.
- 6. PROPERTIES SUBJECT TO ANY AND ALL EASEMENTS, RIGHTS OF WAY, RESTRICTIVE COVENANTS WHICH MAY BE OF RECORD.
- 7. UTILITIES: UNDERGROUND UTILITIES PLOTTED FROM PRIOR SURVEYS AND MAPS PROVIDED BY CITY OF WASHINGTON OR AS NOTED. ACTUAL LOCATIONS MAY VARY. OTHER UTILITIES MAY EXIST. SURVEYOR CANNOT PROVIDED ACCURACY OF UNDERGROUNDUTILITIES. CONTRACTOR SHOULD CONTACT NC811 AT 1-800-632-4949 TO HAVE UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING. NO NC811 TICKETS REQUESTED FOR THIS WORK.
- 8. UTILITIES: THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN ARE COMPRISED OF ALL SUCH UTILITIES IN THE AREA OF SURVEY EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR DOES HEREBY CERTIFY THAT ALL UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY

UNCOVERED AND LOCATED ANY UNDERGROUND UTILITIES.

CLASS A (HORZ.) CLASS C (VERT.)

I, PATRICK HARTMAN, P.L.S., CERTIFY THAT STATE PLANE GRID COORDINATES LISTED ABOVE WERE DERIVED FROM AN ACTUAL GPS SURVEY PERFORMED UNDER MY SUPERVISION; THAT SUPPLEMENTAL HORIZONTAL CONTROL WAS ESTABLISHED BETWEEN THE GPS CONTROL POINTS VIA TRADITIONAL TRAVERSING TO THE CLASS A STANDARD AND THE ELEVATIONS WERE DERIVED FROM DIFFERENTIAL LEVELING AND THE FOLLOWING INFORMATION WAS USED DURING THE PERFORMANCE OF THE WORK:

2 CM (HORZ.)

1/6/2021-3/17/2021

0.99989608102976

US SURVEY FEET

NCGS RTN OR AS NOTED

NCGS RTN

GEOID12B

NAD83/2011

1) CLASS OF SURVEY: 2) POSITIONAL ACCURACY: 3) TYPE OF GPS FIELD PROCEDURE: 4) DATE OF SURVEY WORK:

5) DATUM/EPOCH: 6) PUBLISHED CONTROL/FIXED CONTROL: 7) GEOID MODEL: 8) COMBINED GRID FACTOR:

AND EXISTING TOPOGRAPHIC AND PLANIMETRIC INFORMATION SHOWN HEREON WAS TAKEN FROM AN AERIAL SURVEY PERFORMED BY SPATIAL DATA CONSULTANTS, INC. (SDC REF#21002), DELIVERED ON JANUARY 15TH, 2021, SUPPLEMENTED WITH FIELD SURVEYS BY RIVERS AND ASSOCIATES, INC. AS

NOTED; FIELD SURVEY MADE BY RB FROM 1/6/2021 TO 3/17/2021. PARCEL LINES WERE DEVELOPED USING PITT COUNTY GIS PARCEL INFORMATION; THAT THE RATIO OF PRECISION IS 1:10,000+; AND IN ACCORDANCE WITH THE US NATIONAL MAPPING ACCURACY STANDARDS, THE MAXIMUM VERTICAL ERROR IS NOT GREATER THAN ONE HALF THE CONTOUR INTERVAL EXCEPT AS NOTED; NOTE: NO RELIABILITY IS TO BE PLACED ON TOPOGRAPHY OR PLANIMETRIC DATA WITHIN THE AREAS DEFINED BY THE OBSCURED AREA BOUNDARY. WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER AND SEAL THIS 17 DAY OF MARCH, A.D. 2021.

PROFESSIONAL LAND SURVEYOR

LICENSE NO. L-4262

# **SURVEY VERTICAL CONTROL**

POINT	NORTHING (US FT—GROUND)	EASTING (US FT-GROUND)	ELEVATION (NAVD88)	DESCRIPTION
100	678660	2445978	80.61	TBM TOP FH
101	679103	2445904	80.35	TBM LAG IN PP
102	679627	2445727	79.12	TBM LAG IN PP
103	680163	2445549	69.95	TBM LAG IN PP
105	681119	2445240	68.35	TBM LAG IN PP
106	681540	2445108	79.57	TBM LAG IN PP
107	681996	2444954	77.66	TBM TOP FH
108	682538	2445208	75.63	TBM LAG IN PP
109	682939	2445382	77.42	TBM LAG IN PP
110	683326	2445493	77.94	TBM LAG IN PP
111	683805	2445630	78.62	TBM LAG IN PP
112	684340	2445780	80.23	TBM LAG IN PP
113	684784	2445908	80.95	TBM LAG IN PP
114	685254	2446042	81.62	TBM LAG IN PP
115	685703	2446175	83.73	TBM LAG IN PP
116	686247	2446325	81.81	TBM LAG IN PP
118	686585	2446420	82.99	TBM LAG IN PP
119	687068	2446554	84.28	TBM LAG IN PP
120	687418	2446644	82.86	TBM LAG IN PP
121	687770	2446736	83.22	TBM LAG IN PP
122	688129	2446830	82.58	TBM LAG IN PP
123	688478	2446919	82.55	TBM LAG IN PP
124	688905	2447057	83.20	TBM LAG IN PP
125	689202	2447260	83.13	TBM LAG IN PP
126	689628	2447472	82.90	TBM LAG IN PP
127	689988	2447576	83.68	TBM LAG IN PP
128	690330	2447675	81.80	TBM LAG IN PP
129	690620	2447856	82.41	TBM LAG IN PP
130	691096	2448272	81.44	TBM LAG IN PP
131	691384	2448700	71.17	TBM-X TOP DRIVE PIPE
132	691553	2449077	78.40	TBM LAG IN PP
133	691625	2449451	82.17	TBM TOP FH
134	691680	2449810	82.41	TBM LAG IN PP
135	691741	2450173	82.04	TBM LAG IN PP
136	691781	2450633	81.20	TBM-SMN CL ROAD
137	691836	2451260	82.33	TBM LAG IN PP
138	691967	2451699	82.00	TBM LAG IN PP
139	691994	2451976	82.02	TBM LAG IN PP
141	692666	2452645	81.63	TBM LAG IN PP
142	693053	2453130	76.16	TBM LAG IN PP
143	693532	2453574	80.57	TBM LAG IN PP
144	693860	2453954	81.55	TBM LAG IN PP
145	694014	2454394	79.92	TBM LAG IN PP
146	694075	2454875	81.78	TBM TOP FH

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**REVISIONS:** 

Date:			
Survey	RB/MS	Draft RH	IW/PH/MS
Design	STA	Check	STA
Project I	No.	20201	19
Drawing	No.	W-39	88

1"=1000'

### **EROSION CONTROL NOTES**

- ALL WORK WILL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES. NO LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL THE APPROPRIATE EROSION CONTOL MEASURE MAY PROCEED UNTIL MEASURES ARE INSPECTED AND APPROVED.
- FOLLOWING STRIPPING OF SITE, ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED. SILT FENCES SHALL BE PLACED ALONG PROPERTY LINES AS INDICATED ON PLANS TO PROTECT ADJACENT DEVELOPMENTS. ROCK INLET SEDIMENT TRAPS SHALL BE INSTALLED AROUND ALL DRAINAGE STURCTURES TO COLLECT SURFACE RUNOFF AND CONTROL SILTATION AND RELEASE WATER AT A GRADUAL RATE. ALL DISTURBED AREAS WILL BE GRADED, SEEDED AND MULCHED.
- ALL SHOULDERS SHALL BE SEEDED TO STABILIZE THE SOIL. SEED BED PREPARATION SHALL BE CONDUCTED ACCORDING TO NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (NCDOT). THE GROUND SURFACE SHALL BE CLEARED OF STUMPS, STONES, ROOTS, CABLES, WIRE, GRADE STAKES, AND OTHER MATERIALS THAT MIGHT HINDER PROPER GRADING, TILLAGE, SEEDING OR SUBSEQUENT MAINTENANCE OPERATIONS. GRADES ON THE AREA TO BE SEEDED SHALL BE MAINTAINED IN A TRUE AND EVEN CONDITION. MAINTENANCE SHALL INCLUDE ANY NECESSARY REPAIRS TO PREVIOUSLY GRADED AREAS. ALL GRADED AREAS SHALL BE THOROUGHLY TILLED TO A DEPTH OF AT LEAST FOUR (4) INCHES BY PLOWING, DISKING, HARROWING, OR OTHER APPROVED METHODS UNTIL THE CONDITION OF THE SOIL IS ACCEPTABLE. ON SITES WHERE SOIL CONDITIONS ARE SUCH THAT HIGH CLAY CONTENT AND EXCESSIVE COMPACTION CAUSE DIFFICULTY IN GETTING CLODS AND LUMPS EFFECTIVELY PULVERIZED, THE CONTRACTOR SHALL USE THE ROTARY TILLAGE MACHINERY UNTIL THE MIXING OF THE SOIL IS ACCEPTABLE AND NO CLODS OR CLUMPS REMAIN LARGER THAN 1 1/2 INCHES IN DIAMETER. A FIRM AND COMPACT SEED BED IS REQUIRED AND AFTER BEING GRADED, THE SEED BED SHALL BE LIGHTLY COMPACTED WITH A LAND ROLLER, SUCH AS A CULTIPACKER, BEFORE AND AFTER SEEDING. LIMESTONE SHALL BE DOLOMITIC AGRICULTURE GROUND LIMESTONE CONTAINING NOT LESS THAN 10 PERCENT MAGNESIUM OXIDE. LIME SHALL BE UNIFORMLY APPLIED AT THE RATE OF 2 TONS PER ACRE AS TESTING REQUIRES PER THE SPECIFICATIONS. IF REQUIRED PER SPECIFICATIONS, FERTILIZER SHALL BE INCORPORATED INTO THE UPPER THREE OR FOUR INCHES OF PREPARED SEED BED JUST PRIOR TO THE LAST TILLAGE OPERATION, BUT IN NO CASE SHALL IT BE APPLIED MORE THAN THREE DAYS PRIOR TO SEEDING. FERTILIZER SHALL BE USED IMMEDIATELY AFTER DELIVERY OR STORED IN A MANNER THAT WILL NOT PERMIT IT TO HARDEN OR DESTROY ITS EFFECTIVENESS.

APPLY DOLEMATIC LIMESTONE AT THE RATE OF 2 TONS PER ACRE. IF HYDRATED LIME IS USED, FOLLOW RECOMMENDATION FROM SOIL TEST. COST OF THE TEST SHALL BE BORNE BY THE CONTRACTOR.

APPLY 10-10-10 FERTILIZER OUTSIDE OF NCDOT RIGHT-OF-WAY AT A RATE OF 1,000 POUNDS PER ACRE.

- 20 POUNDS PER ACRE

- 5 POUNDS PER ACRE

APPLY 10-20-20 FERTILIZER WITHIN NCDOT RIGHT-OF-WAY AT A RATE OF 500 POUNDS PER ACRE.

PROVIDE PERMANENT SEEDING IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

OUTSIDE OF NCDOT R/W

(JANUARY 1 - MARCH 31) COMMON BERMUDA GRASS (UNHULLED)

(APRIL 1 - JULY 31)

COMMON BERMUDA GRASS (HULLED) - 15 POUNDS PER ACRE

- 8 POUNDS PER ACRE CENTIPEDE

(AUGUST 1 - DECEMBER 31)

- 15 POUNDS PER ACRE COMMON BERMUDA GRASS (UNHULLED) TALL FESCUE

- 120 POUNDS PER ACRE - 8 POUNDS PER ACRE CENTIPEDE

WITHIN NCDOT R/W

CENTIPEDE

MB 23 / PG 181

RECORDED 02/03/2022

NO SPECIAL CONDITIONS OR REQUIREMENTS

BK 4239 / PG 459-462

STATUS:

**LEASEMENT** 

(JANUARY 1 - DECEMBER 31)

- 25 POUNDS PER ACRE PENSACOLA BAHIAGRASS

## 4. GROUND STABILIZATION (PER NCG010000)

- A. SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES
- HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE: I. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOONS AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- II. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND- DISTURBING ACTIVITY.
- B. CONDITIONS IN MEETING THE STABILIZATION REQUIREMENTS ABOVE, THE FOLLOWING CONDITIONS OR EXEMPTIONS SHALL APPLY:
- I. EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR
- OTHER SITE- SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE. II. ALL SLOPES 50' IN LENGTH OR GREATER SHALL APPLY THE GROUND COVER WITHIN 7 DAYS EXCEPT WHEN THE SLOPE IS FLATTER THAN 4:1. SLOPES LESS THAN 50' SHALL APPLY GROUND COVER WITHIN
- 14 DAYS EXCEPT WHEN SLOPES ARE STEEPER THAN 3:1, THE 7 DAY-REQUIREMENT APPLIES. III. ANY SLOPED AREA FLATTER THAN 4:1 SHALL BE EXEMPT FROM THE 7-DAY GROUND COVER
- REQUIREMENT. IV. SLOPES 10' OR LESS IN LENGTH SHALL BE EXEMPT FROM THE 7-DAY GROUND COVER REQUIREMENT
- **EXCEPT WHEN THE SLOPE IS STEEPER THAN 2:1.**
- V. ALTHOUGH STABILIZATION IS USUALLY SPECIFIED AS GROUND COVER, OTHER METHODS, SUCH AS CHEMICAL STABILIZATION, MAY BE ALLOWED ON A CASE-BY-CASE BASIS.
- VI. FOR PORTIONS OF PROJECTS WITHIN ONE MILE AND DRAINING TO TROUT WATERS AND HIGH QUALITY WATERS AS CLASSIFIED BY THE ENVIRONMENTAL MANAGEMENT COMMISSION, STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS PRACTICABLE BUT IN ANY EVENT ON ALL AREAS OF THE SITE WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACT.
- VII. FOR PORTIONS OF PROJECTS LOCATED IN OUTSTANDING RESOURCE WATERS WATERSHEDS AS CLASSIFIED BY THE ENVIRONMENTAL MANAGEMENT COMMISSION, STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS PRACTICABLE BUT IN ANY EVENT ON ALL AREAS WITHIN 7 CALENDAR DAYS FROM THE LAST LAND- DISTURBING ACT.
- VIII. PORTIONS OF A SITE THAT ARE LOWER IN ELEVATION THAN ADJACENT DISCHARGE LOCATIONS AND ARE NOT EXPECTED TO DISCHARGE DURING CONSTRUCTION MAY BE EXEMPT FROM THE TEMPORARY GROUND COVER REQUIREMENTS IF IDENTIFIED ON THE APPROVED E&SC PLAN OR ADDED BY THE PERMITTING AUTHORITY.

- 5. SELF INSPECTION AND REPORTING REQUIREMENTS (PER NCG010000) MINIMUM SELF INSPECTION AND REPORTING REQUIREMENTS ARE AS FOLLOWS UNLESS OTHERWISE APPROVED IN WRITING BY THE DIVISION OF WATER QUALITY.
- A. A RAIN GAUGE SHALL BE MAINTAINED IN GOOD WORKING ORDER ON THE SITE UNLESS ANOTHER RAIN MONITORING DEVICE HAS BEEN APPROVED BY THE PERMITTING AUTHORITY.
- B. A WRITTEN RECORD OF THE DAILY RAINFALL AMOUNTS SHALL BE RETAINED AND ALL RECORDS SHALL BE MADE AVAILABLE TO DWQ OR AUTHORIZED AGENT UPON REQUEST (NOTE: IF NO RAINFALL OCCURRED, THE PERMITTEE MUST RECORD "ZERO").
- C. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. INSPECTION RECORDS MUST BE MAINTAINED FOR EACH INSPECTION EVENT AND FOR EACH MEASURE. AT A MINIMUM, INSPECTION OF MEASURES MUST OCCUR AT THE FREQUENCY INDICATED BELOW:
- I. ALL EROSION AND SEDIMENTATION CONTROL MEASURES MUST BE INSPECTED BY OR UNDER THE DIRECTION OF THE PERMITTEE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS, AND
- II. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED BY OR UNDER THE DIRECTION OF THE PERMITTEE WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.50 INCHES OF RAIN PER 24 HOUR PERIOD.
- III. TIMES WHEN A DETERMINATION THAT ADVERSE WEATHER CONDITIONS PREVENTED INSPECTIONS SHOULD BE DOCUMENTED ON THE INSPECTION RECORD.
- D. ONCE LAND DISTURBANCE HAS BEGUN ON THE SITE, STORMWATER RUNOFF DISCHARGE OUTFALLS SHALL BE INSPECTED BY OBSERVATION FOR EROSION, SEDIMENTATION AND OTHER STORMWATER DISCHARGE CHARACTERISTICS SUCH AS CLARITY, FLOATING SOLIDS, AND OIL SHEENS. INSPECTIONS OF THE OUTFALLS SHALL BE MADE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.50 INCHES OF RAIN PER 24 HOUR PERIOD.
- E. INSPECTIONS ARE ONLY REQUIRED TO BE MADE DURING NORMAL BUSINESS HOURS. WHEN ADVERSE WEATHER CONDITIONS WOULD CAUSE THE SAFETY OF THE INSPECTION PERSONNEL TO BE IN JEOPARDY, THE INSPECTION CAN BE DELAYED UNTIL IT IS DEEMED SAFE TO PERFORM THESE DUTIES. IF THE INSPECTION CANNOT BE DONE ON THAT DAY, IT MUST BE COMPLETED ON THE FOLLOWING BUSINESS
- F. TWENTY-FOUR HOUR REPORTING FOR VISIBLE SEDIMENT DEPOSITION
- I. THE PERMITTEE SHALL REPORT TO THE DIVISION OF WATER QUALITY CENTRAL OFFICE OR THE APPROPRIATE REGIONAL OFFICE ANY VISIBLE SEDIMENT BEING DEPOSITED IN ANY STREAM OR WETLAND OR ANY NONCOMPLIANCE WHICH MAY ENDANGER HEALTH OR THE ENVIRONMENT. (SEE SECTION IX OF THIS PERMIT FOR CONTACT INFORMATION.) ANY INFORMATION SHALL BE PROVIDED ORALLY OR ELECTRONICALLY WITHIN 24 HOURS FROM THE TIME THE PERMITTEE BECAME AWARE OF THE CIRCUMSTANCES. VISIBLE DISCOLORATION OR SUSPENDED SOLIDS IN THE EFFLUENT SHOULD BE RECORDED ON THE INSPECTION RECORD AS PROVIDED BELOW.
- II. A WRITTEN SUBMISSION SHALL BE PROVIDED TO THE APPROPRIATE REGIONAL OFFICE OF THE DWQ WITHIN 5 DAYS OF THE TIME THE PERMITTEE BECOMES AWARE OF THE CIRCUMSTANCES. THE WRITTEN SUBMISSION SHALL CONTAIN A DESCRIPTION OF THE SEDIMENT DEPOSITION AND ACTIONS TAKEN TO ADDRESS THE CAUSE OF THE DEPOSITION. THE DIVISION OF WATER QUALITY STAFF MAY WAIVE THE REQUIREMENT FOR A WRITTEN REPORT ON A CASE-BY-CASE BASIS.
- G. RECORDS OF INSPECTIONS MADE DURING THE PREVIOUS 30 DAYS SHALL REMAIN ON THE SITE AND AVAILABLE FOR AGENCY INSPECTORS AT ALL TIMES DURING NORMAL WORKING HOURS, UNLESS THE PERMITTING AUTHORITY PROVIDES A SITE-SPECIFIC EXEMPTION BASED ON UNIQUE SITE CONDITIONS THAT MAKE THIS REQUIREMENT NOT PRACTICAL. OLDER RECORDS MUST BE MAINTAINED FOR A PERIOD OF ONE YEAR AFTER PROJECT COMPLETION AND MADE AVAILABLE UPON REQUEST. THE RECORDS MUST PROVIDE THE DETAILS OF EACH INSPECTION INCLUDING OBSERVATIONS, AND ACTIONS TAKEN IN ACCORDANCE WITH THIS PERMIT. THE PERMITTEE SHALL RECORD THE REQUIRED RAINFALL AND MONITORING OBSERVATIONS ON THE "INSPECTION RECORD FOR ACTIVITIES UNDER STORMWATER GENERAL PERMIT NCG010000" FORM PROVIDED BY THE DIVISION OR A SIMILAR INSPECTION FORM THAT IS INCLUSIVE OF ALL OF THE ELEMENTS CONTAINED IN THE DIVISION'S FORM. ELECTRONIC STORAGE OF RECORDS WILL BE ALLOWED IF APPROVED BY THE PERMITTING AUTHORITY.
- H. INSPECTION RECORDS MUST INCLUDE, AT A MINIMUM, THE FOLLOWING:
- I. CONTROL MEASURE INSPECTIONS: INSPECTION RECORDS MUST INCLUDE AT A MINIMUM:
- 1. IDENTIFICATION OF THE MEASURES INSPECTED,
- 2. DATE AND TIME OF THE INSPECTION, 3. NAME OF THE PERSON PERFORMING THE INSPECTION,
- 4. INDICATION OF WHETHER THE MEASURES WERE OPERATING PROPERLY,
- 5. DESCRIPTION OF MAINTENANCE NEEDS FOR THE MEASURE,
- 6. CORRECTIVE ACTIONS TAKEN AND
- 7. DATE OF ACTIONS TAKEN.
- II. STORMWATER DISCHARGE INSPECTIONS: INSPECTION RECORDS MUST INCLUDE AT A MINIMUM:
- 1. IDENTIFICATION OF THE DISCHARGE OUTFALL INSPECTED,
- 2. DATE AND TIME OF THE INSPECTION, 3. NAME OF THE PERSON PERFORMING THE INSPECTION,
- 4. EVIDENCE OF INDICATORS OF STORMWATER POLLUTION SUCH AS OIL SHEEN, FLOATING OR
- SUSPENDED SOLIDS OR DISCOLORATION,

STATUS:

EASEMENT

RECORDED 12/06/2021

BK 4211 / PG 870-873

- 5. INDICATION OF VISIBLE SEDIMENT LEAVING THE SITE,
- 6. ACTIONS TAKEN TO CORRECT/PREVENT SEDIMENTATION AND
- III. VISIBLE SEDIMENTATION FOUND OUTSIDE THE SITE LIMITS: INSPECTION RECORDS MUST INCLUDE:
- 1. AN EXPLANATION AS TO THE ACTIONS TAKEN TO CONTROL FUTURE RELEASES, 2. ACTIONS TAKEN TO CLEAN UP OR STABILIZE THE SEDIMENT THAT HAS LEFT THE SITE LIMITS AND
- 3. THE DATE OF ACTIONS TAKEN.
- IV. VISIBLE SEDIMENTATION FOUND IN STREAMS OR WETLANDS: ALL INSPECTIONS SHOULD INCLUDE **EVALUATION OF STREAMS OR WETLANDS ONSITE OR OFFSITE (WHERE ACCESSIBLE) TO DETERMINE IF** VISIBLE SEDIMENTATION HAS OCCURRED.
- I. VISIBLE STREAM TURBIDITY IF THE DISCHARGE FROM A SITE RESULTS IN VISIBLE STREAM TURBIDITY. INSPECTION RECORDS MUST RECORD THAT EVIDENCE AND ACTIONS TAKEN TO REDUCE SEDIMENT CONTRIBUTIONS. SITES DISCHARGING TO STREAMS NAMED ON THE STATE'S 303(D) LIST AS IMPAIRED FOR SEDIMENT-RELATED CAUSES MAY BE REQUIRED TO PERFORM ADDITIONAL MONITORING. INSPECTIONS OR APPLICATION OF MORE-STRINGENT MANAGEMENT PRACTICES IF IT IS DETERMINED THAT THE ADDITIONAL REQUIREMENTS ARE NEEDED TO ASSURE COMPLIANCE WITH THE FEDERAL OR STATE IMPAIRED-WATERS CONDITIONS. IF A DISCHARGE COVERED BY THIS PERMIT ENTERS A STREAM SEGMENT THAT IS LISTED ON THE IMPAIRED STREAM LIST FOR SEDIMENT-RELATED CAUSES, AND A TOTAL MAXIMUM DAILY LOAD (TMDL) HAS BEEN PREPARED FOR THOSE POLLUTANTS, THE PERMITTEE MUST IMPLEMENT MEASURES TO ENSURE THAT THE DISCHARGE OF POLLUTANTS FROM THE SITE IS CONSISTENT WITH THE ASSUMPTIONS AND MEETS THE REQUIREMENTS OF THE APPROVED TDML. THE DWQ 303(D) LIST CAN BE FOUND AT: HTTP://H20.ENR.STATE.NC.ES/TMDL/GENERAL\_303D.HTM

# **EASEMENT SUMMARY TABLE**

DRAWING NO. G-1259-X DRAWING NO. G-1258-X KHUONG B. HUYNH AND WIFE, LUA THI DO HUYNH MELISSA FAYE STOCKS PARCEL NUMBER: 30878 PARCEL NUMBER: 44949 DB 3787 / PG 736 DB 691 / PG 286

> STATUS: EASEMENT RECORDED 12/08/2021 BK 4212 / PG 817-820

MB 34 / PG 161

NO SPECIAL CONDITIONS OR REQUIREMENTS

DRAWING NO. G-1260-X PARCEL 3 WAREHOUSE SERVICES OF WILSON, INC. PARCEL NUMBER: 25274 DB 1778 / PG 306 MB 26 / PG 45

NO SPECIAL CONDITIONS OR REQUIREMENTS

6. IN THE EVENT OF A CONFLICT BETWEEN THE REQUIREMENTS OF THE SEDIMENTATION POLLUTION CONTROL

REQUIREMENT SHALL PREVAIL. THE LAND-DISTURBING ACTIVITY SHALL BE CONDUCTED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. 7. THE LATEST APPROVED EROSION AND SEDIMENTATION CONTROL PLAN WILL BE USED DURING PERIODIC UNANNOUNCED INSPECTIONS TO DETERMINE COMPLIANCE AND A COPY OF THE PLAN MUST BE ON FILE AT

ACT, THE SUBMITTED PLAN AND/OR THE CONTRACT SPECIFICATIONS, THE MORE RESTRICTIVE

- THE JOB SITE. IF IT IS DETERMINED THAT THE IMPLEMENTED PLAN IS INADEQUATE, THIS OFFICE MAY REQUIRE THE INSTALLATION OF ADDITIONAL MEASURES AND/OR THAT THE PLAN BE REVISED TO COMPLY 8. THE CERTIFICATE OF PLAN APPROVAL MUST BE POSTED AT THE PRIMARY ENTRANCE TO THE JOB SITE AND
- REMAINUNTIL THE SITE IS PERMANENTLY STABILIZED. 9. A BUFFER ZONE, SUFFICIENT TO RESTRAIN VISIBLE SEDIMENTATION WITHIN THE FIRST 25% OF THE WIDTH CLOSEST TO THE LAND DISTURBANCE, MUST BE PROVIDED AND MAINTAINED BETWEEN THE
- LAND-DISTURBING ACTIVITY AND ANY ADJACENT PROPERTY OR WATERCOURSE. 10. IN ORDER TO COMPLY WITH THE INTENT OF THE ACT, THE SCHEDULING OF THE LAND-DISTURBING ACTIVITIES IS TO BE SUCH THAT BOTH THE AREA OF EXPOSURE AND THE TIME BETWEEN LAND
- DISTURBANCE AND PROVIDING GROUND COVER IS MINIMIZED. 11. UNLESS A TEMPORARY, MANUFACTURED, LINING MATERIAL HAS BEEN SPECIFIED, A CLEAN STRAW MULCH MUST BE APPLIED, AT A MINIMUM RATE OF 2 TONS/ACRE, TO ALL SEEDED AREAS. THE MULCH MUST COVER AT LEAST 75% OF THE SEEDED AREA AFTER IT IS EITHER TACKED WITH AN ACCEPTABLE TACKING MATERIAL, OR CRIMPED IN PLACE.
- 12. ADEQUATE AND APPROPRIATE MEASURES MUST BE PROPERLY INSTALLED DOWNSTREAM, WITHIN THE LIMITS OF DISTURBANCE, OF ANY LAND-DISTURBING ACTIVITY TO PREVENT SEDIMENT FROM LEAVING THE LIMITS OF DISTURBANCE, ENTERING EXISTING DRAINAGE SYSTEMS, IMPACTING AN ON-SITE NATURAL
- WATERCOURSE OR ADJOINING PROPERTY. 13. SILT FENCES, INCLUDING OUTLET SECTIONS, ARE NOT APPROPRIATE FOR AREAS OF CONCENTRATED FLOW SUCH AS SWALES OR DITCHES. PROVIDE ADEQUATE AND APPROPRIATE MEASURES FOR ALL CONSTRUCTION WITHIN AREAS OF CONCENTRATED FLOW.
- 14. ALL SLOPES AFFECTED DURING THE INSTALLATION/CLEANUP PROCESS MUST BE PROVIDED ON A GRADE THAT CAN BE RETAINED BY VEGETATIVE OR OTHER APPROPRIATE COVER.
- 15. AT ANY GIVEN TIME WITHIN THE PROJECT AREA, THE MAXIMUM AFFECTED, EXPOSED AND "UNRESTORED" AREA IS LIMITED TO THE LESSER OF 2 (TWO) ACRES OR THE EFFECTIVE LENGTH ALONG ANY GIVEN ROAD SECTION LIMITED TO THE LESSER OF 2 (TWO) ACRES OR THE EFFECTIVE LENGTH ALONG ANY GIVEN ROAD SECTION (APPROXIMATELY 2 MILES). A ROAD SECTION BEING DEFINED AS A CONTINUOUS SECTION OF ROAD HAVING THE SAME SR NUMBER OR ROAD NAME.
- 16. INSTALL SILT FENCE OVER AND AROUND THE TOP OF EXISTING PIPES AND INLETS AT DISTURBED AREAS.
- 17. ALL DISTURBED AREAS SHALL BE GRADED TO MINIMIZE RUNOFF.
- 18. INSTALL SILT FENCE AROUND SPOIL PILES AND ALONG TRENCHES TO MINIMIZE SEDIMENT FROM ENTERING ROADSIDE DITCHES AND EXISTING DRAINAGE OUTLETS. 19. PROVIDE EROSION CONTROL MEASURES AROUND STOCK/WASTE PILES AND STAGING AREAS AS NEEDED OR
- AS DIRECTED BY ENGINEER. 20. PROTECT STORM PIPE INLETS FROM SEDIMENT RUNOFF FROM LAND DISTURBING ACTIVITIES WITH SILT
- FENCE, STONE CHECK DAM, OR ABC FILTER AS APPROPRIATE FOR SITE CONDITIONS. 21. REPLACE DISTURBED STORM PIPE OUTLET PROTECTION WITH EQUAL OR GREATER AMOUNT OF RIP-RAP
- WITHIN 15 DAYS OF DISTURBANCE -OR AS REQUIRED BY NCDENR-DWQ. 22. WHERE THE AREA AROUND AN OUTLET IS DISTURBED AND NO OUTLET PROTECTION EXISTS, CLASS "1"
- RIP-RAP SHALL BE PLACED AROUND PIPE OUTLET AS DIRECTED BY THE ENGINEER. 23. PROVIDE EROSION CONTROL MATTING WHERE INDICATED UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- 24. PROVIDE PERMANENT SEEDING IN ACCORDANCE WITH THE SEEDING SCHEDULE.

- 25. REPORT EROSION CONTROL DEFICIENCIES TO THE ENGINEER IMMEDIATELY.
- 26. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL ALL SEEDING IS ESTABLISHED AND CONSTRUCTION AREAS HAVE BEEN STABILIZED. 27. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. WHEN INSPECTION REVEALS THE TRAP TO BE REDUCED TO 50% OF DESIGN CAPACITY OR THE DEVICE TO BE DEFICIENT IN ITS INTENDED PURPOSE SUCH AS FABRIC

DETERIORATION FOR SILT FENCES THE CONTRACTOR SHALL RESTORE THE DEVICE TO ITS ORIGINAL

A STOP WORK ORDER OR CIVIL PENALTIES UP TO \$5,000.00 PER DAY OF VIOLATION.

CONDITION. FAILURE TO KEEP ALL EROSION CONTROL DEVICES IN PROPER WORKING ORDER MAY RESULT IN

# **GENERAL NOTES**

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE CURRENT SPECIFICATIONS AND STANDARDS OF GREENVILLE UTILITIES AND BE IN CONFORMANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) REQUIREMENTS.
- 2. TEMPORARY DRAINAGE DURING CONSTRUCTION SHALL BE PROVIDED BY THE CONTRACTOR TO RELIEVE AREAS THAT MAY CAUSE DAMAGE TO THE ROADWAYS OR IMPEDE TRAFFIC AS DIRECTED BY THE NCDOT WITHIN THE PROJECT LIMITS.
- PRIOR TO CONSTRUCTION OR EXCAVATION, THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF LOCATING ANY UNDERGROUND UTILITIES (PUBLIC AND/ OR PRIVATE) THAT MAY EXIST IN THE AREA OF CONSTRUCTION. UTILITY OWNERS SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF ANY EXCAVATION IN THE PROXIMITY OF THE UTILITIES. THE CONTRACTOR, AT HIS OWN EXPENSE SHALL BE RESPONSIBLE FOR THE REPAIR OF EXISTING UTILITIES DAMAGED DURING
- 4. THE CONTRACTOR SHALL CONTACT THE NC 811 CENTER AT 1-800-632-4949 72 HOURS IN ADVANCE OF
- 5. ALL DRAINAGE PIPES AND STRUCTURES SHALL BE CLEANED OF DEBRIS AND ERODED MATERIALS RESULTING FROM CONSTRUCTION. THESE PIPES AND STRUCTURES SHALL BE MAINTAINED CLEAN DURING THE PERIOD OF CONSTRUCTION.
- 6. ALL DISTURBED SLOPES SHALL BE RESTORED TO EXISTING GRADES AND STABILIZED WITH SEED & MULCH AND TACKED IF APPROPRIATE.
- THE GAS MAIN SHALL BE INSTALLED SO AS TO PROVIDE A MINIMUM OF TWELVE (12") INCHES OF CLEARANCE TO ALL OTHER UNDERGROUND UTILITIES AND STRUCTURES. WHERE THIS IS NOT POSSIBLE APPROPRIATE PROTECTION SHALL BE PROVIDED. GAS MAINS INSTALLED BY HDD MUST MAINTAIN, AT A MINIMUM, 24" OF CLEARANCE FROM THE BOTTOM OF RCPs 36" AND LARGER.
- 8. ALL EXISTING PAVEMENT DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS BY THE CONTRACTOR ACCORDING TO THE DETAILS PROVIDED IN
- 9. REFERENCE TO DEMLR REFERS TO THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE NORTH CAROLINA DIVISION OF ENERGY, MINERAL AND LAND RESOURCES, EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- 10. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES AS DESCRIBED ON THE PROJECT PLANS AND DETAILS DURING CONSTRUCTION AND SURFACE RESTORATION UNTIL SUCH MEASURES ARE NOT NECESSARY. WHERE ADDITIONAL MEASURES ARE NECESSARY, THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE APPROPRIATE MEASURES ACCORDING TO THE NORTH CAROLINA DIVISION OF ENERGY, MINERAL AND LAND RESOURCES DESIGN MANUAL.
- 11. REFER TO NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES AND/ OR PENALTIES RESULTING FROM ALL NON-COMPLIANCE WITH FEDERAL, STATE, AND LOCAL PERMITS AND ENCROACHMENT
- 13. REPLACE ALL DAMAGED DRAIN CULVERTS WITH NEW CULVERTS OF THE SAME SIZE AND MATERIAL.
- 14. ALL CONCRETE AND ASPHALT DRIVEWAYS WILL BE DRY BORED.

# **VOA Site C Road Gas Improvements (GCP-10112)**

				(Bid Material List)
Item #	Item	Plan Qty.	Unit	Specification
1	4" PE Pipe	20225	FT	Pipe, ASTM D2513 & ASTM D2683, 0.409" min. wall thickness, 4.500" o.d., SDR 11, PE 2046/2708, 40 LF sticks, MARKED DOT SECT. 192.63, ENDS CAPPED
2	2" PE Pipe	20	FT	Pipe, ASTM D2513 & ASTM D2683, 0.216" min. wall thickness, 2.375" o.d., SDR 11, PE 2046/2708, Coil, MARKED DOT SECT. 192.63, ENDS CAPPED
3	4" HDPE Pipe	700	FT	Pipe, ASTM D2513 & ASTM D2683, 0.409" min. wall thickness, 4.500" o.d., SDR 11, PE 4710, 40 LF sticks, MARKED DOT SECT. 192.63, ENDS CAPPED
4	4" PE 45 deg ELL	2	EA	45 deg ELL, ASTM D2513 & ASTM D 2683, SDR 11, Butt Fusion, Injection Molded, Medium Density PE 2406/2708, ASTM MARKED DOT SECT. 192.63
5	4" PE 90 deg ELL	4	EA	90 deg ELL, ASTM D2513 & ASTM D 2683, SDR 11, Butt Fusion, Injection Molded, Medium Density PE 2406/2708, ASTM MARKED DOT SECT. 192.63
6	4" PE Tee	1	EA	Tee , ASTM D2513 & ASTM D 2683, SDR 11, Butt Fusion, Injection Molded, Medium Density PE 2406/2708, ASTM MARKED DOT SECT. 192.63
7	4" PE End Cap	3	EA	End Cap, ASTM D2513& ASTM D2683, SDR 11, Butt Fusion, Injection Molded, Medium Density PE 2406/2708
8	2" PE End Cap	4	EA	End Cap, ASTM D2513& ASTM D2683, SDR 11, Butt Fusion, Injection Molded, Medium Density PE 2406/2708
9	4" PE Electrofusion Coupling	11	EA	Electrofusion Coupling, ASTM D2513 & ASTM D2683, Injection Molded, SDR 11, PE 2406/2710
10	4" PE Ball Valve	5	EA	Polyethylene Valve, Full Port, Ball, SDR 11.5, Butt Fusion, Medium Density PE 2406/2708, Must Meet or Exceed Requirements of USDOT 49CFR-part 192 for Natural Gas Distribution.
11	Tracer Wire	20925	LF	#8 Yellow THHN, Stranded Copper, 500' Hand Spools
12	6" Valve Box	24	EA	Valve Box, Flush Mount, Gas Lid
13	3.75" x 72" Line Markers (Yellow)	41	EA	Line Markers, Fiberglass Post, Yellow Gas Pipeline (Carsonite CRM Or As Approved By Engineer)
14	Concrete Collar	24	EA	Pre-Cast Concrete Collar
15	4" x 2" High Volume Tapping Tee	2	EA	Electrofusion High Volume Tapping Tee, ASTM D 2513 & ASTM D2683, SDR 11, Butt Fusion Outlet, Rectangular Base, Medium Density PE 2406/2708

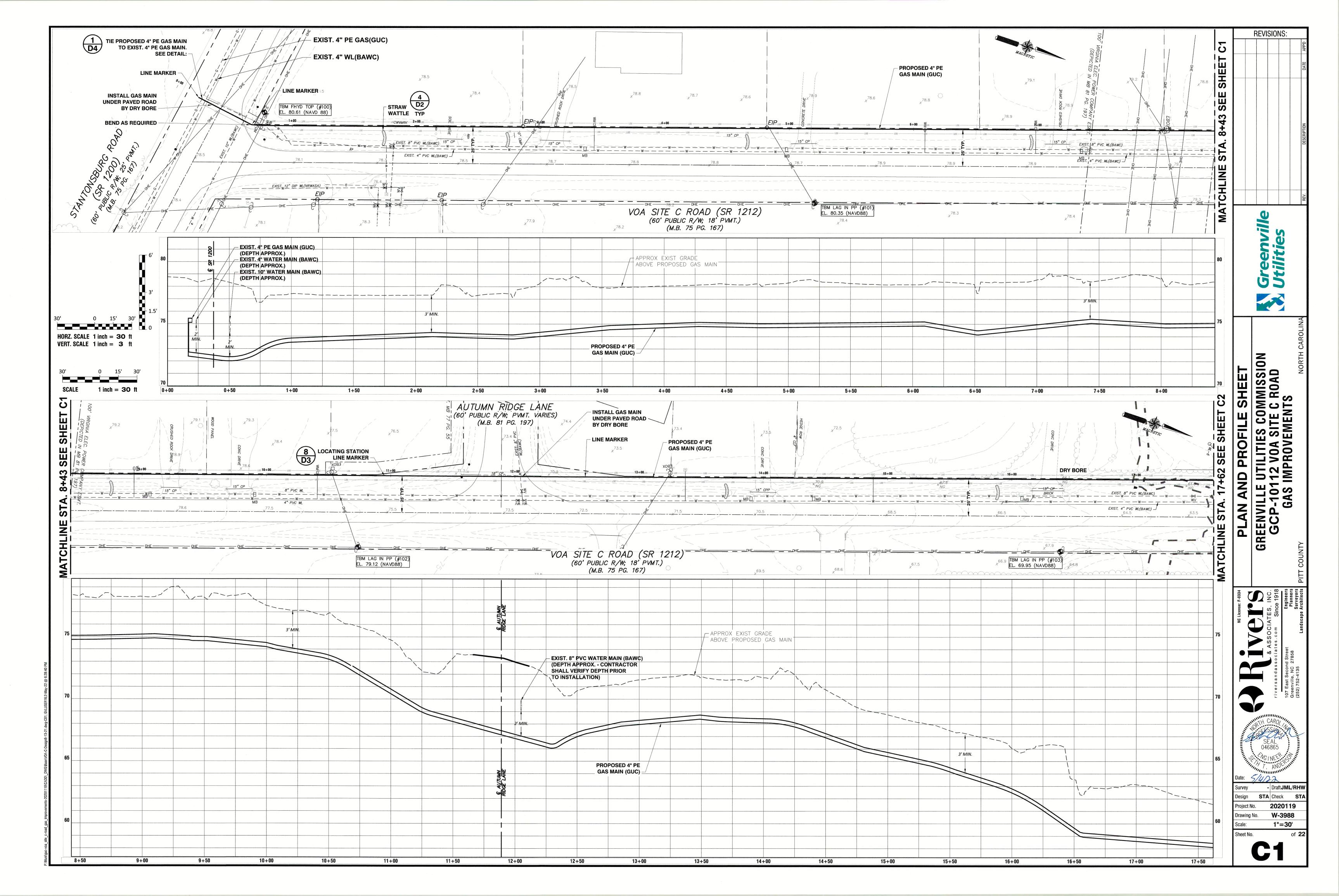
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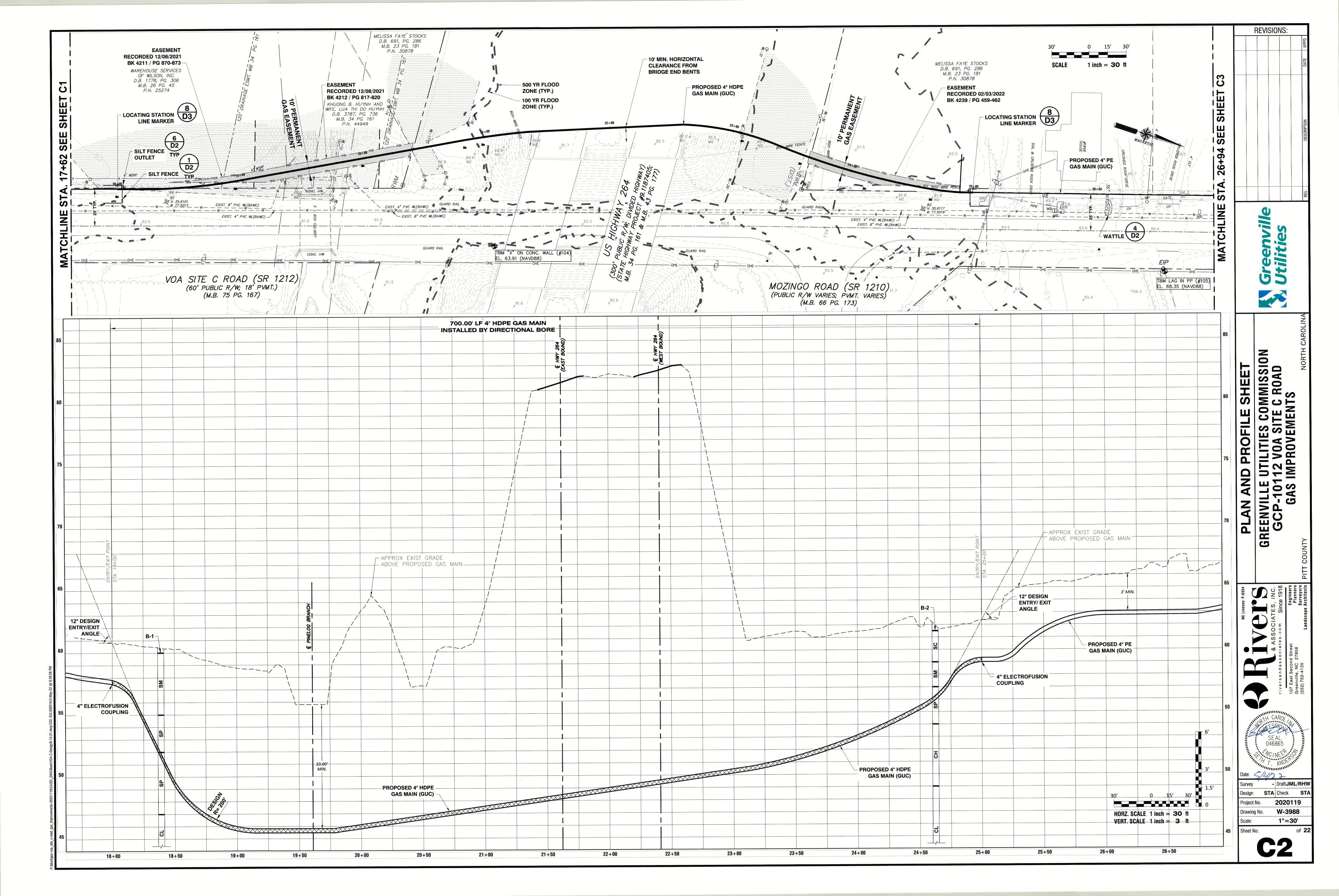
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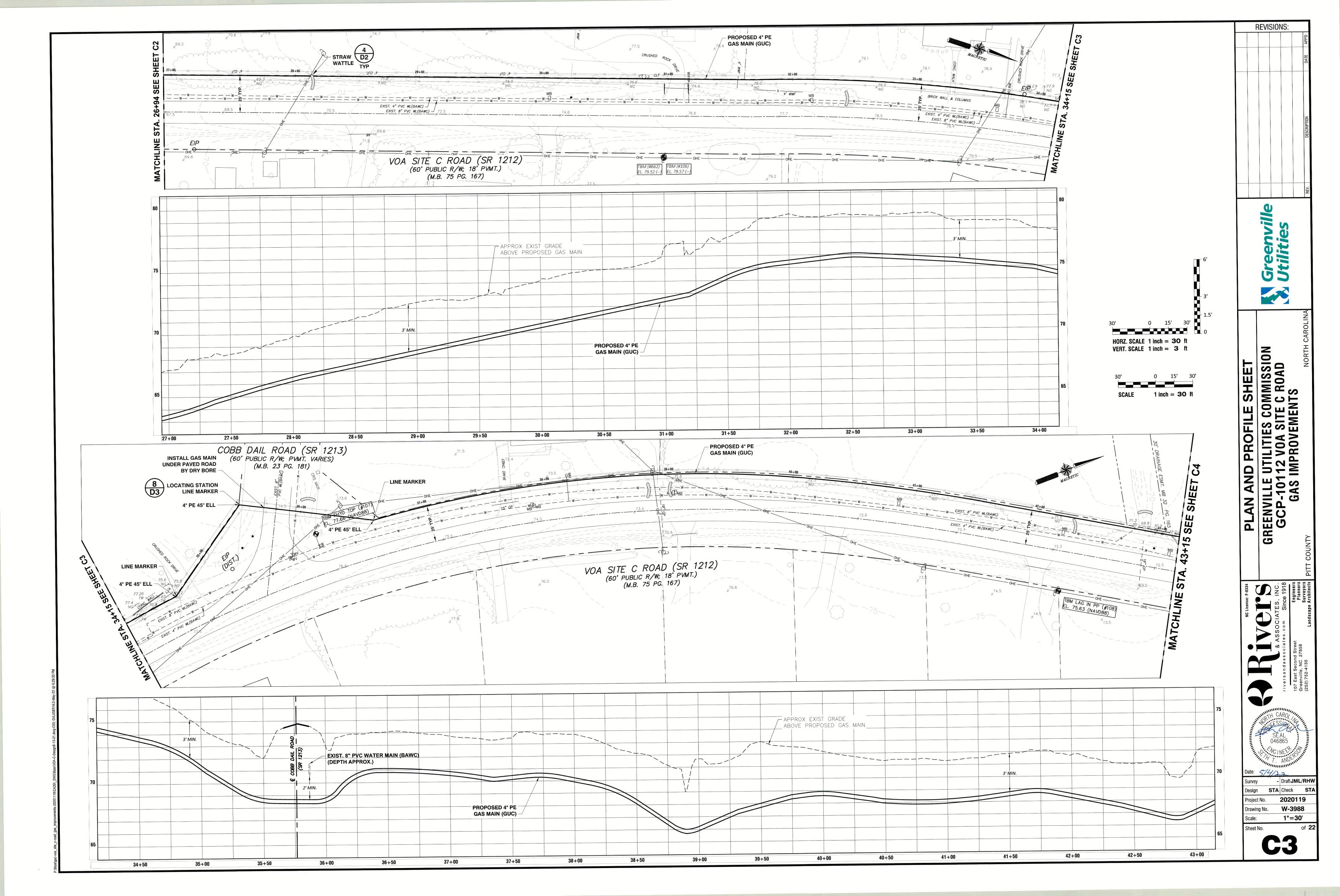
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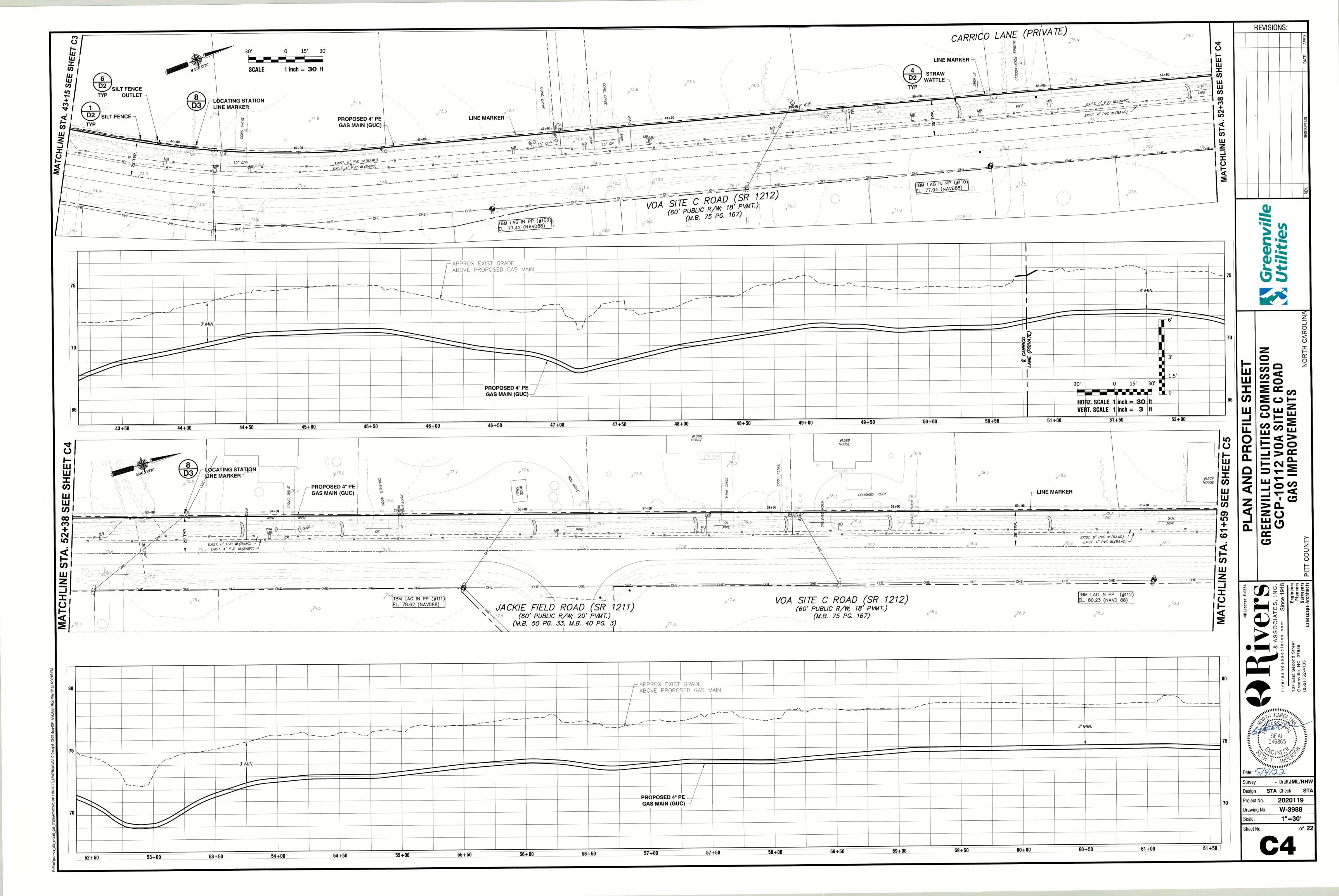
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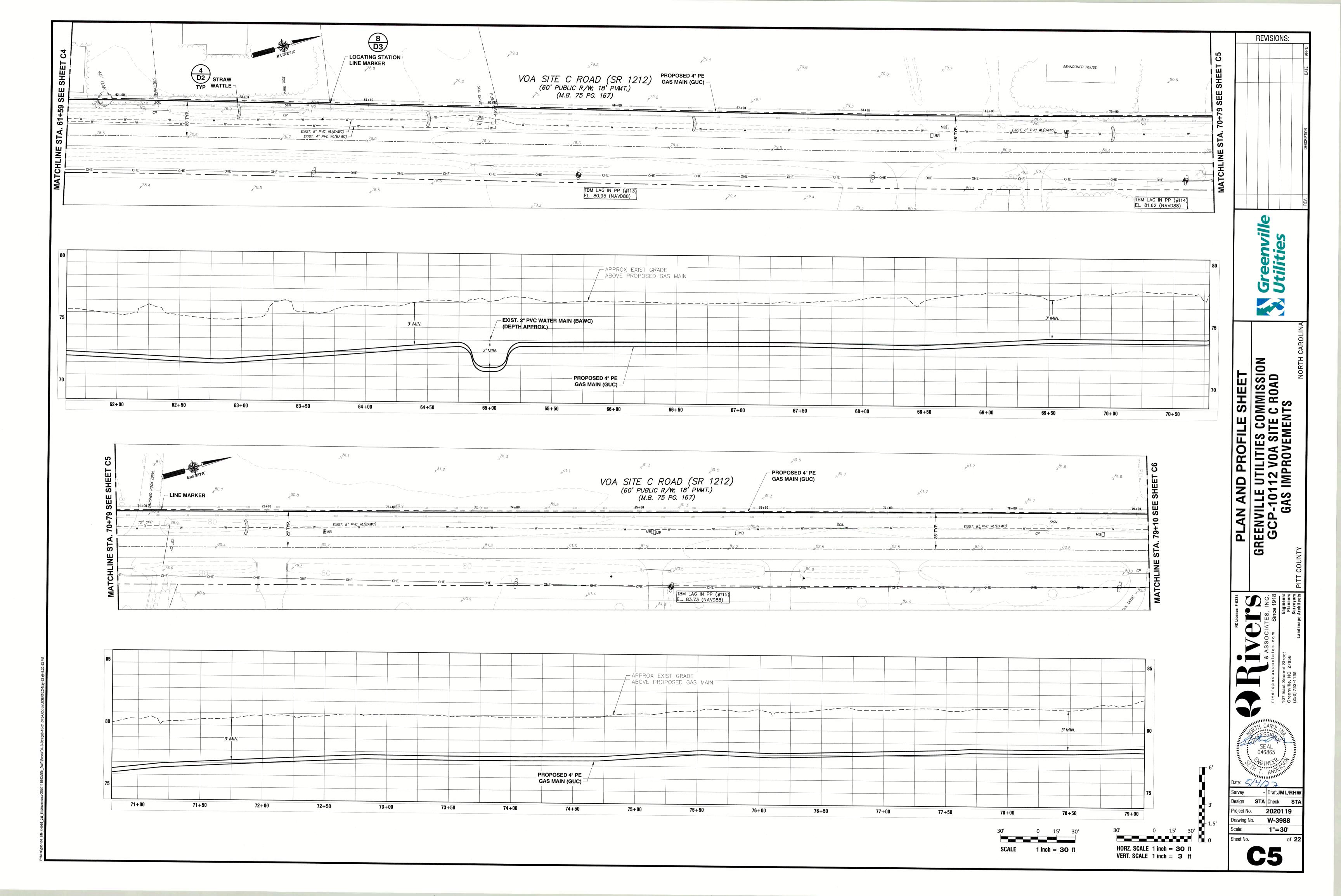
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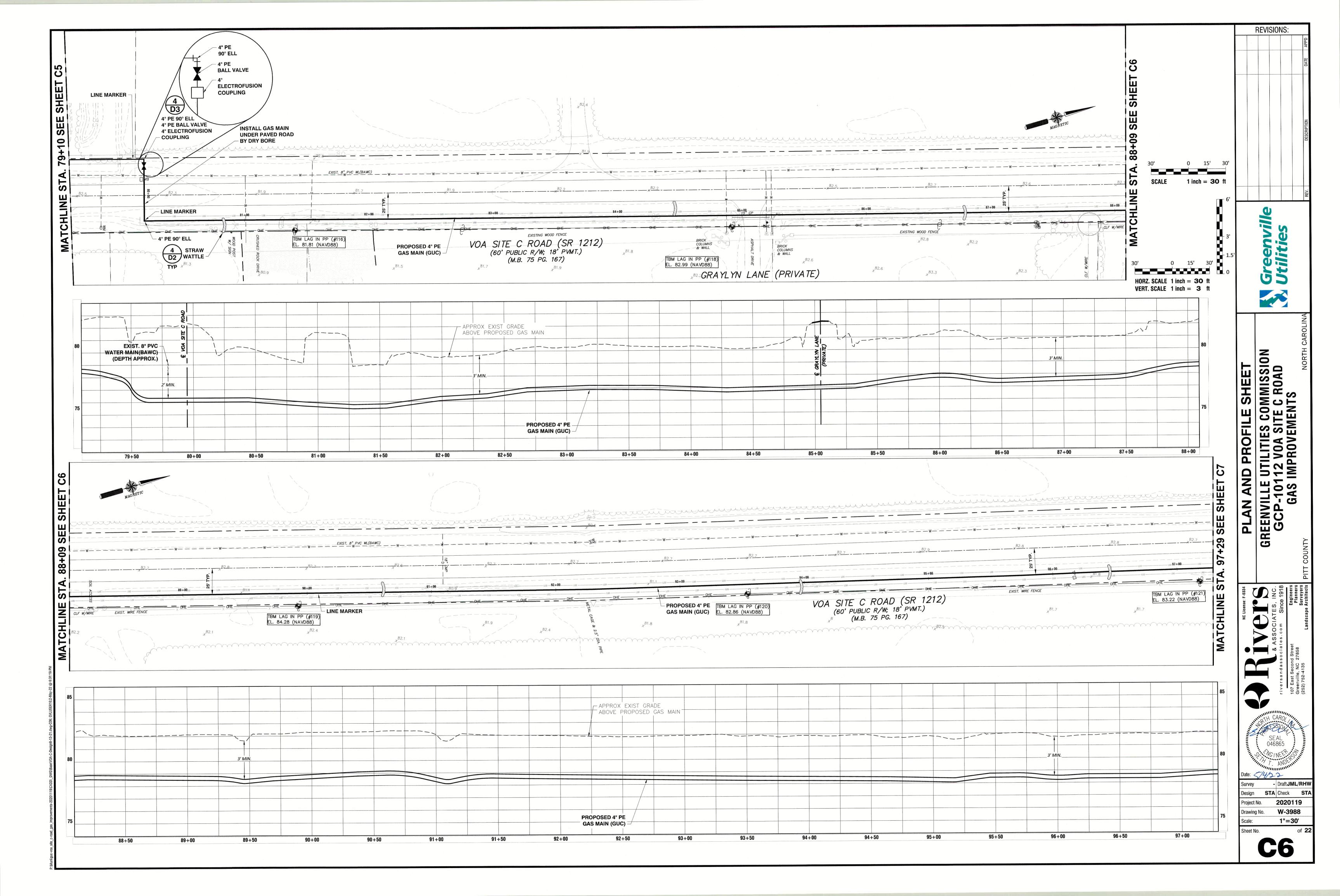


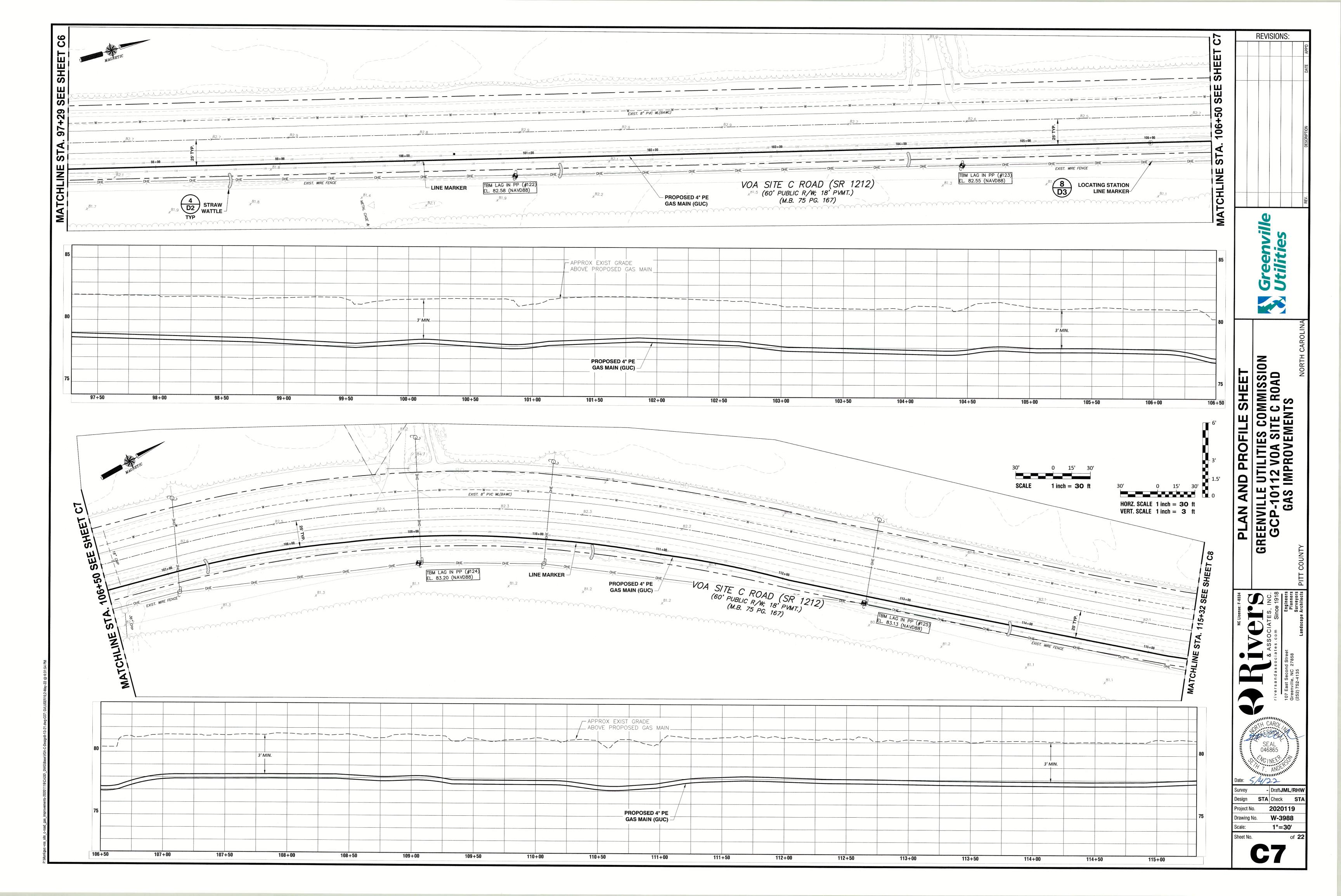


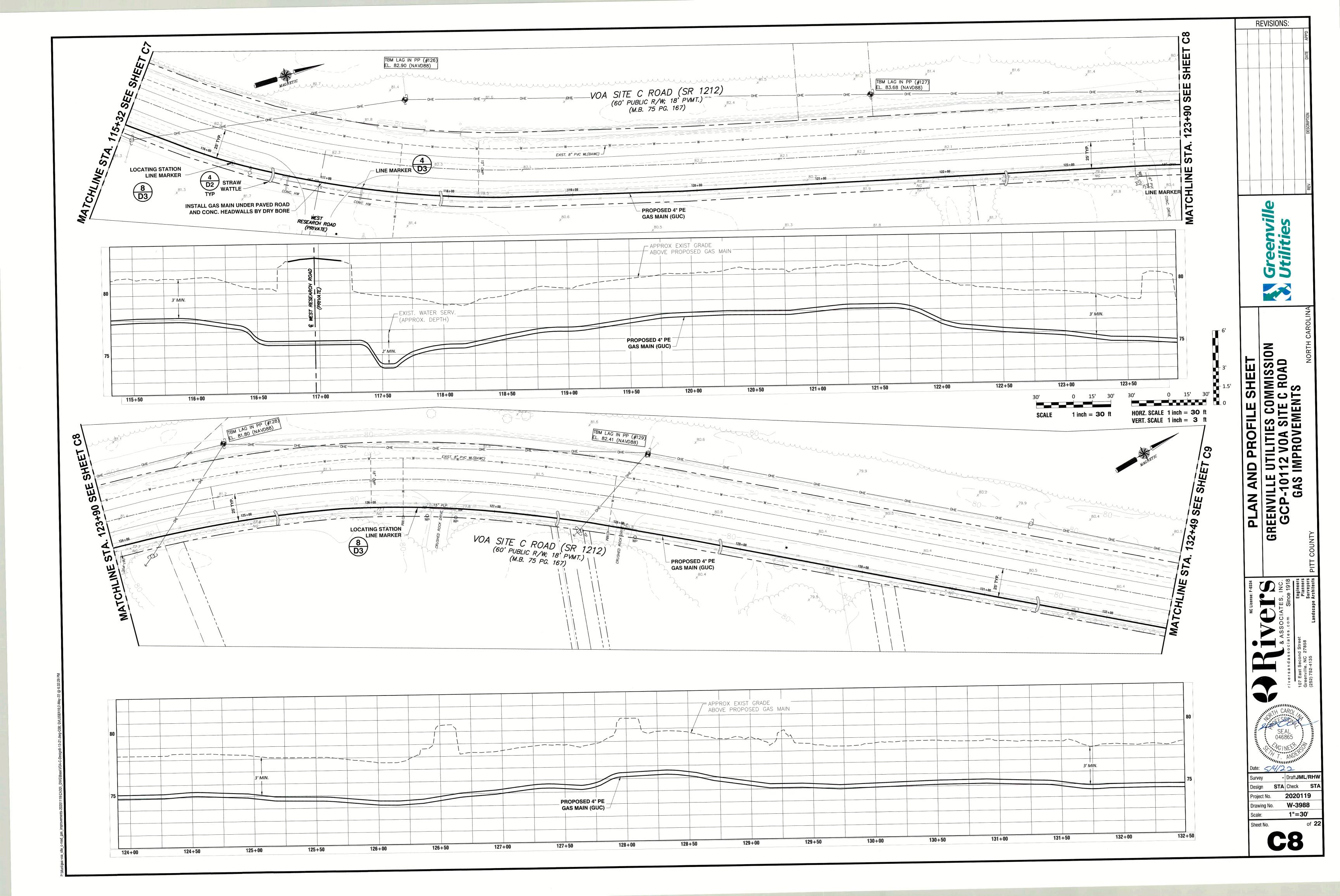


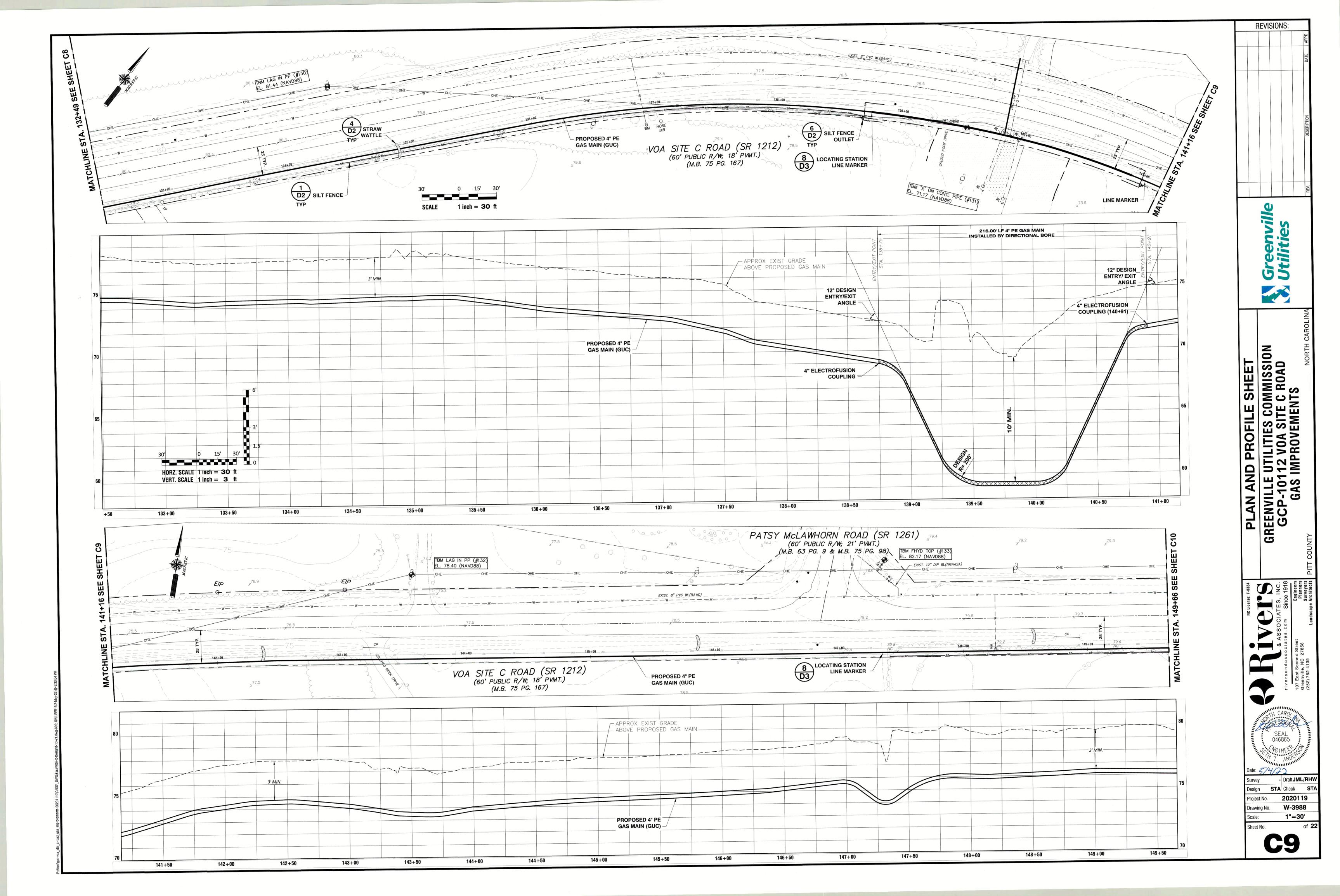


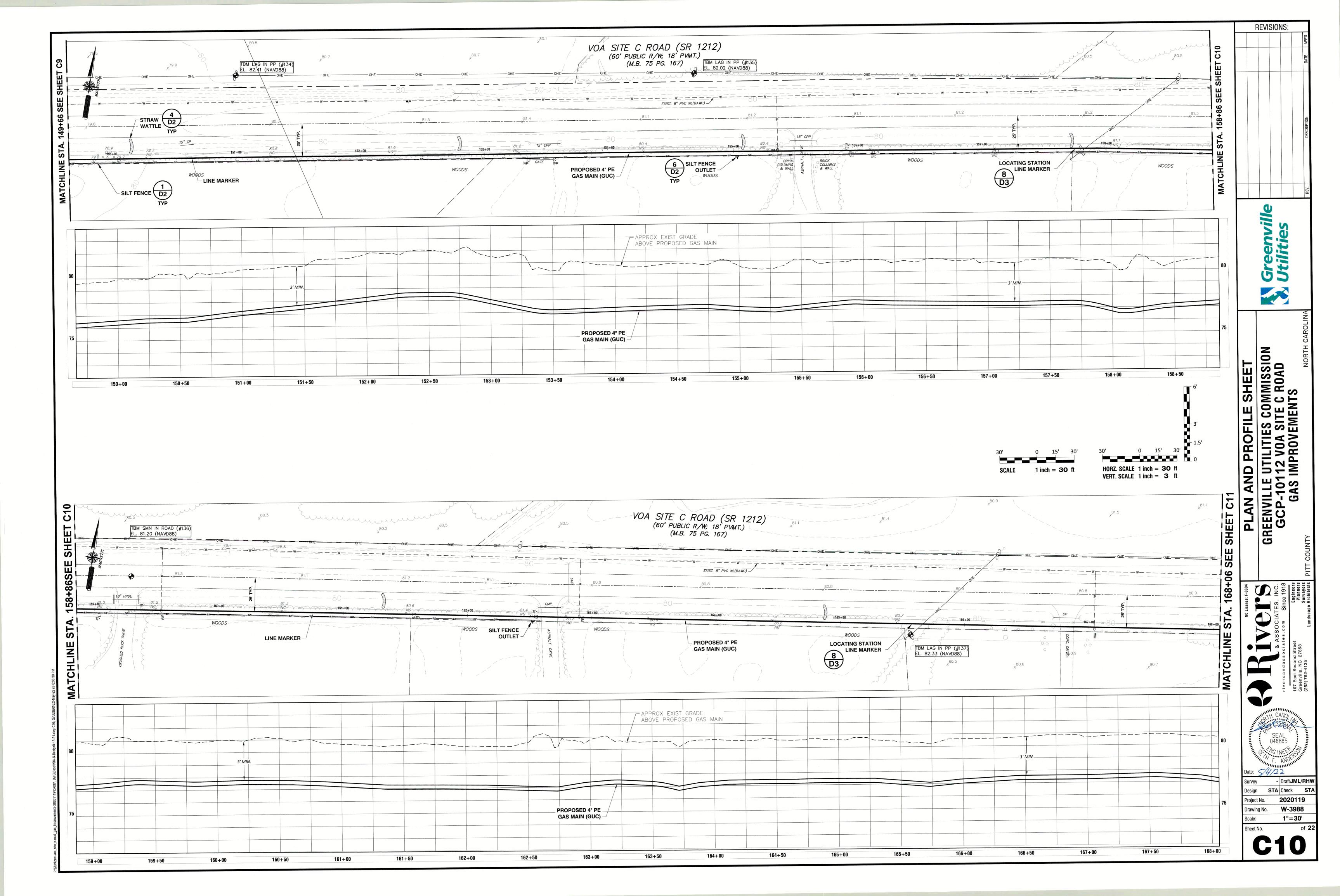


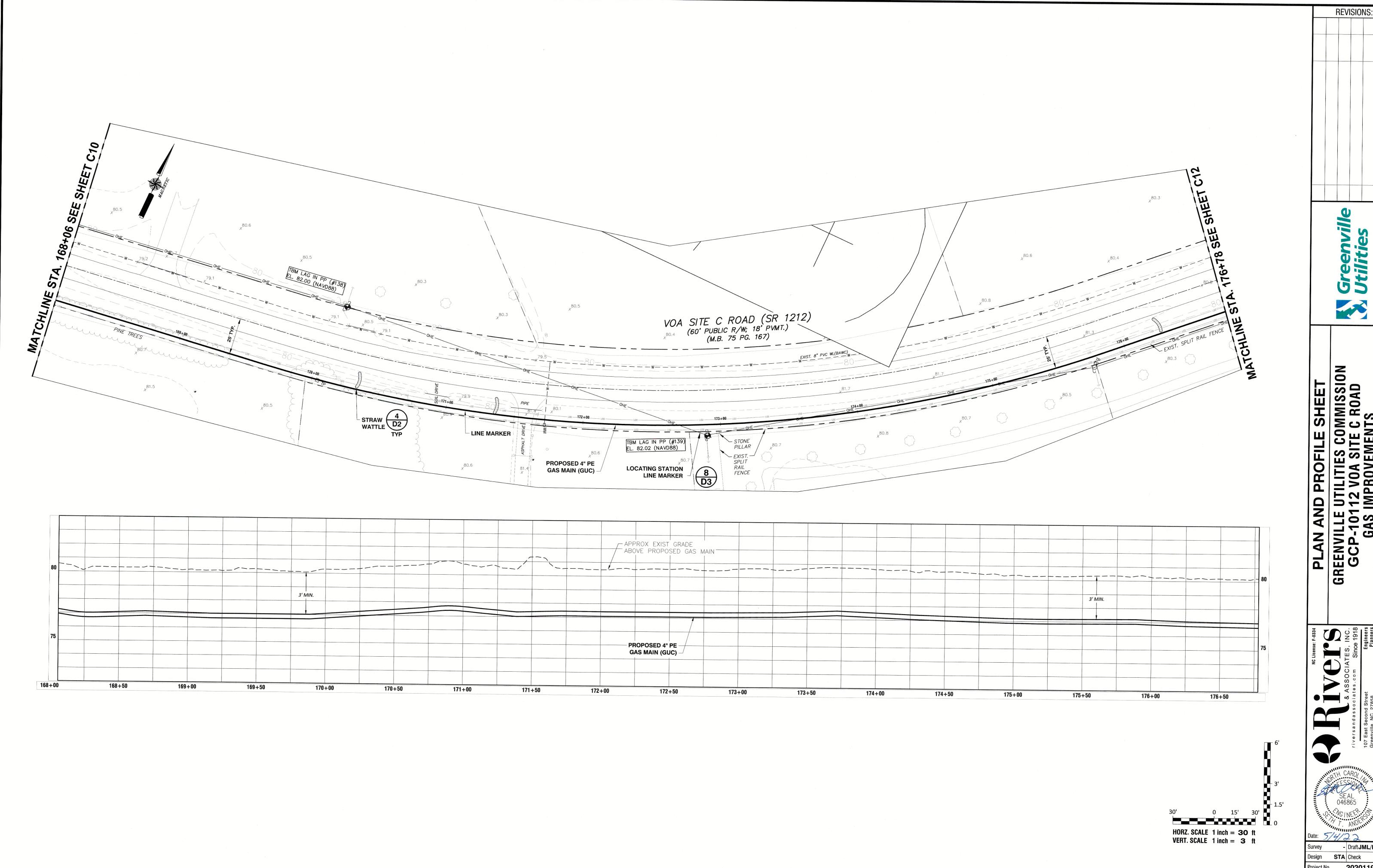








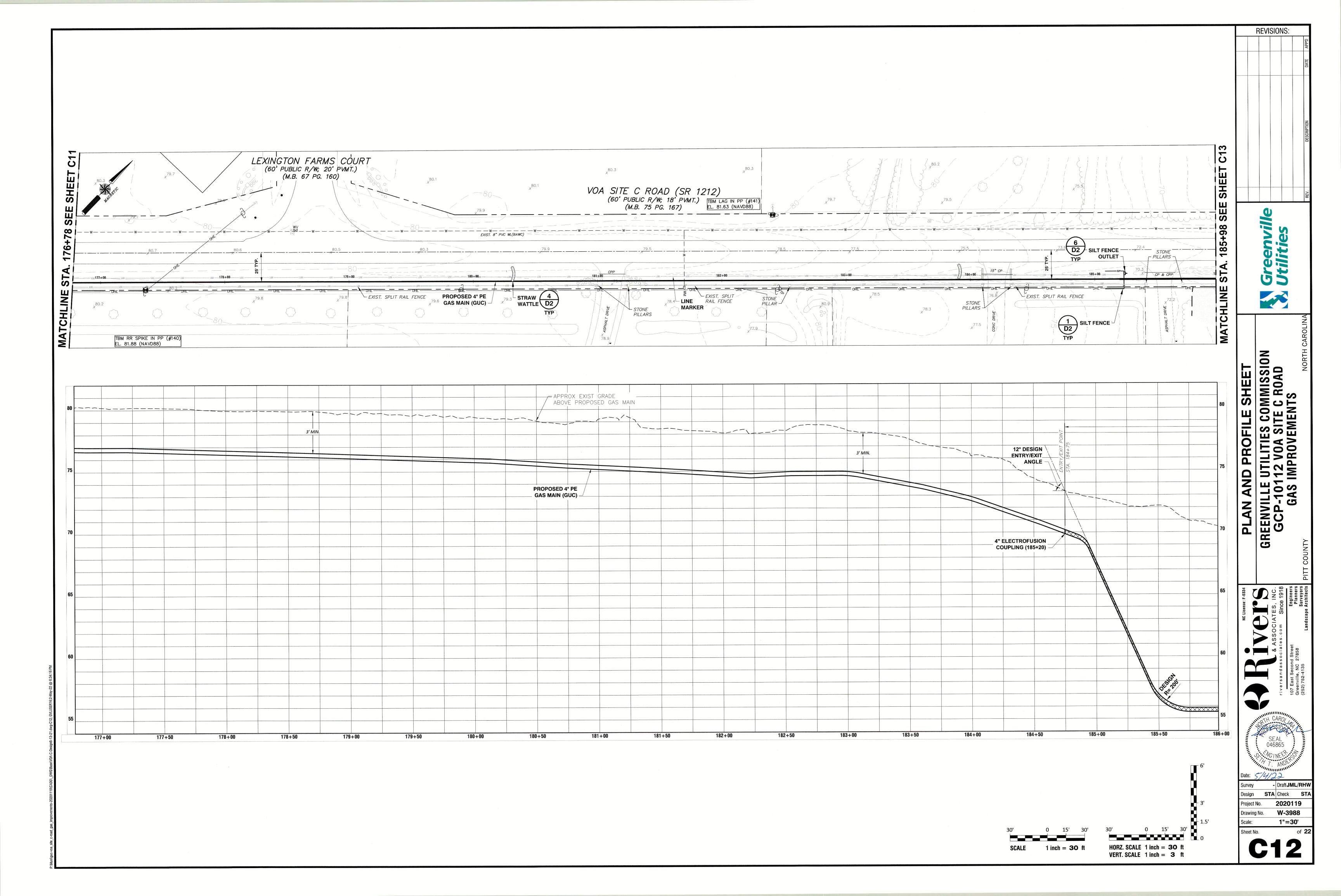


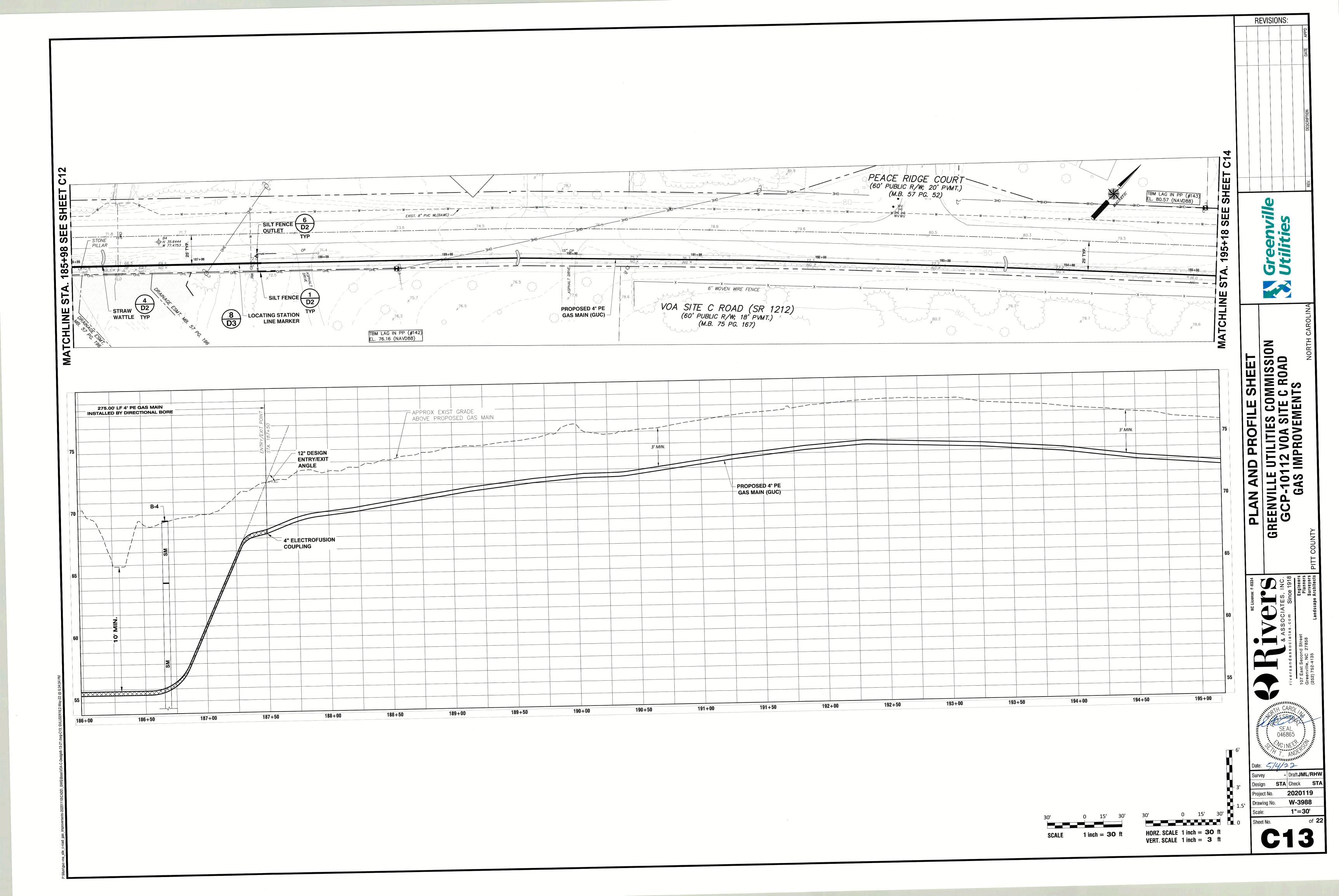


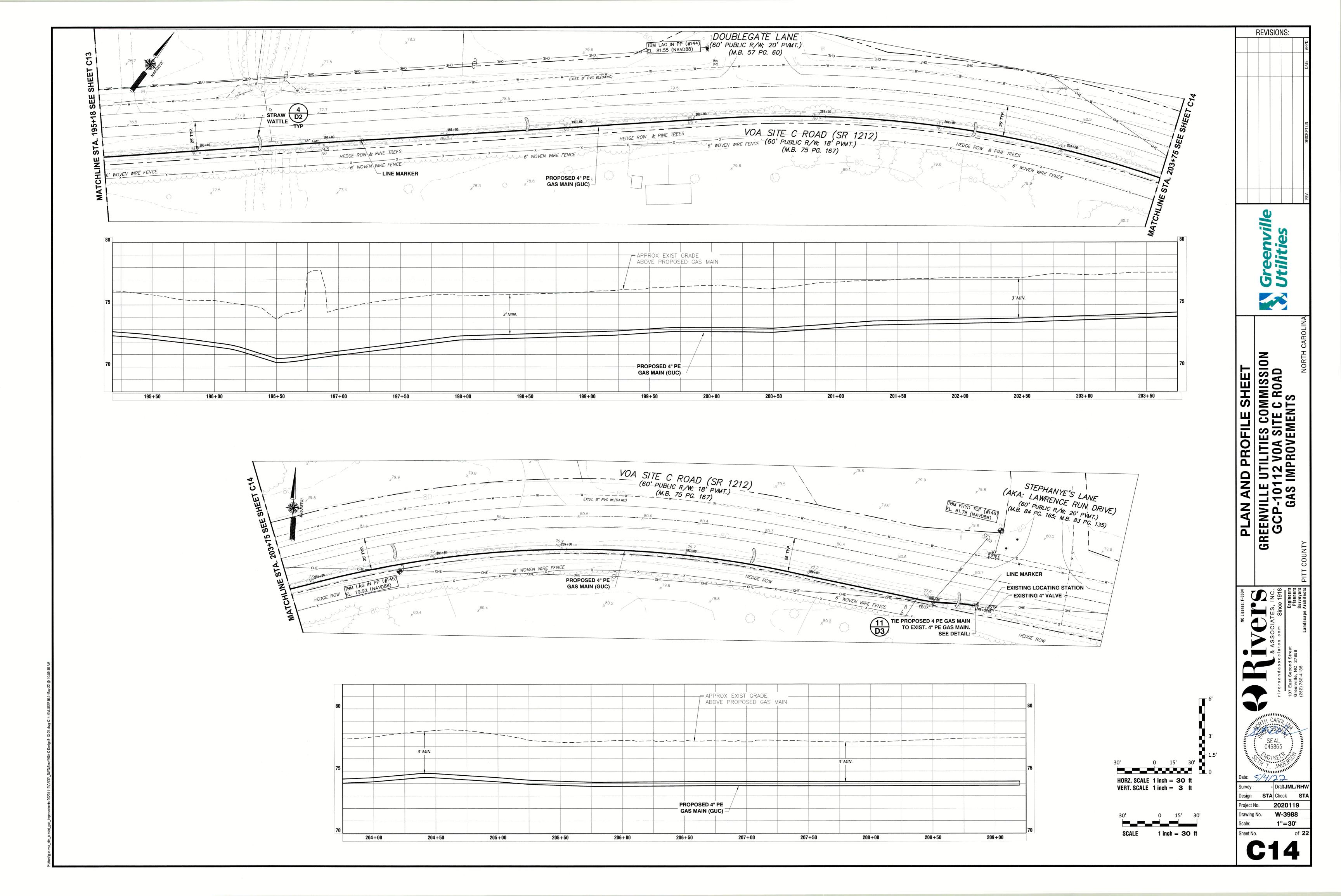
GREENVILLE UTILITIES COMMISSION
GCP-10112 VOA SITE C ROAD
GAS IMPROVEMENTS

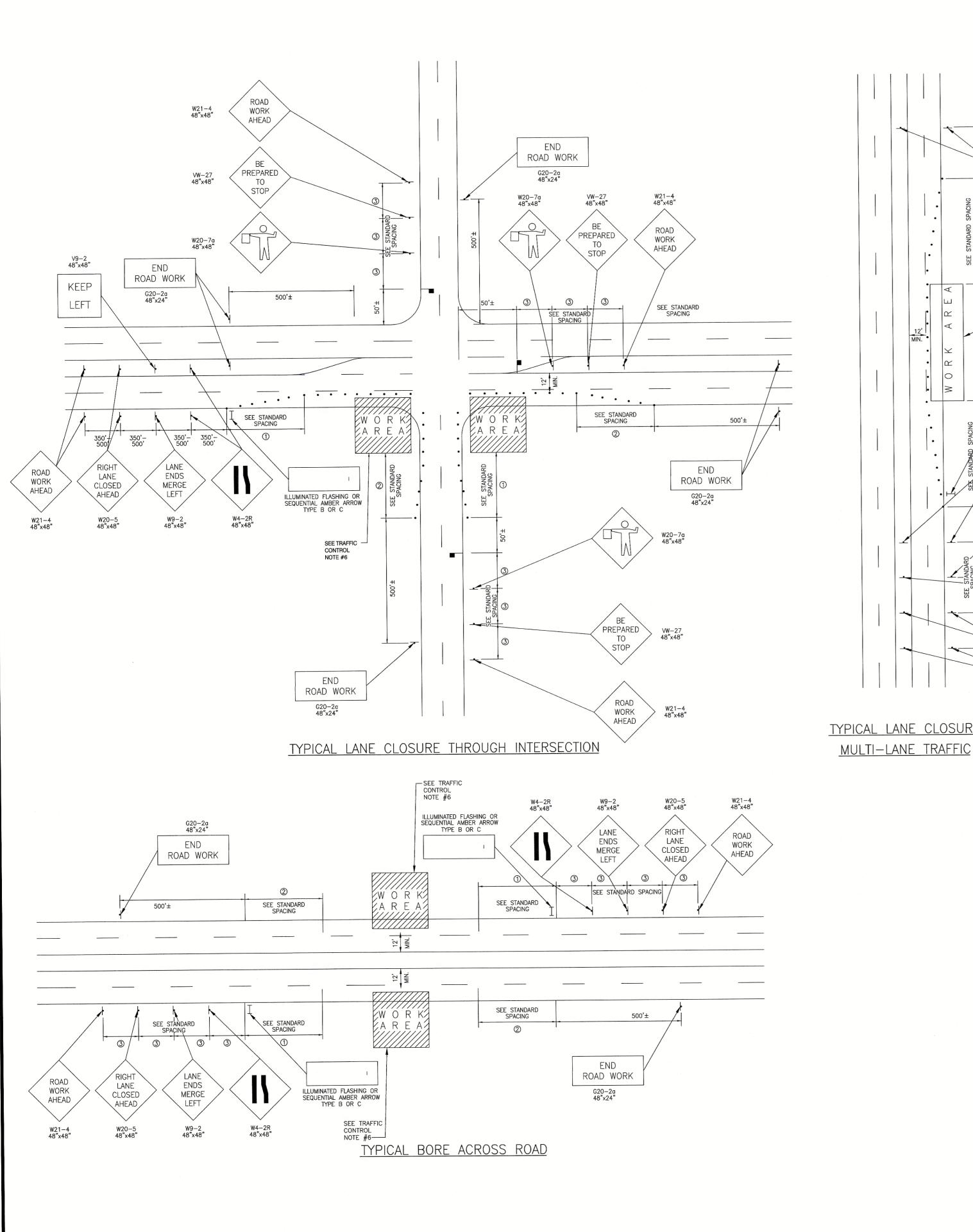
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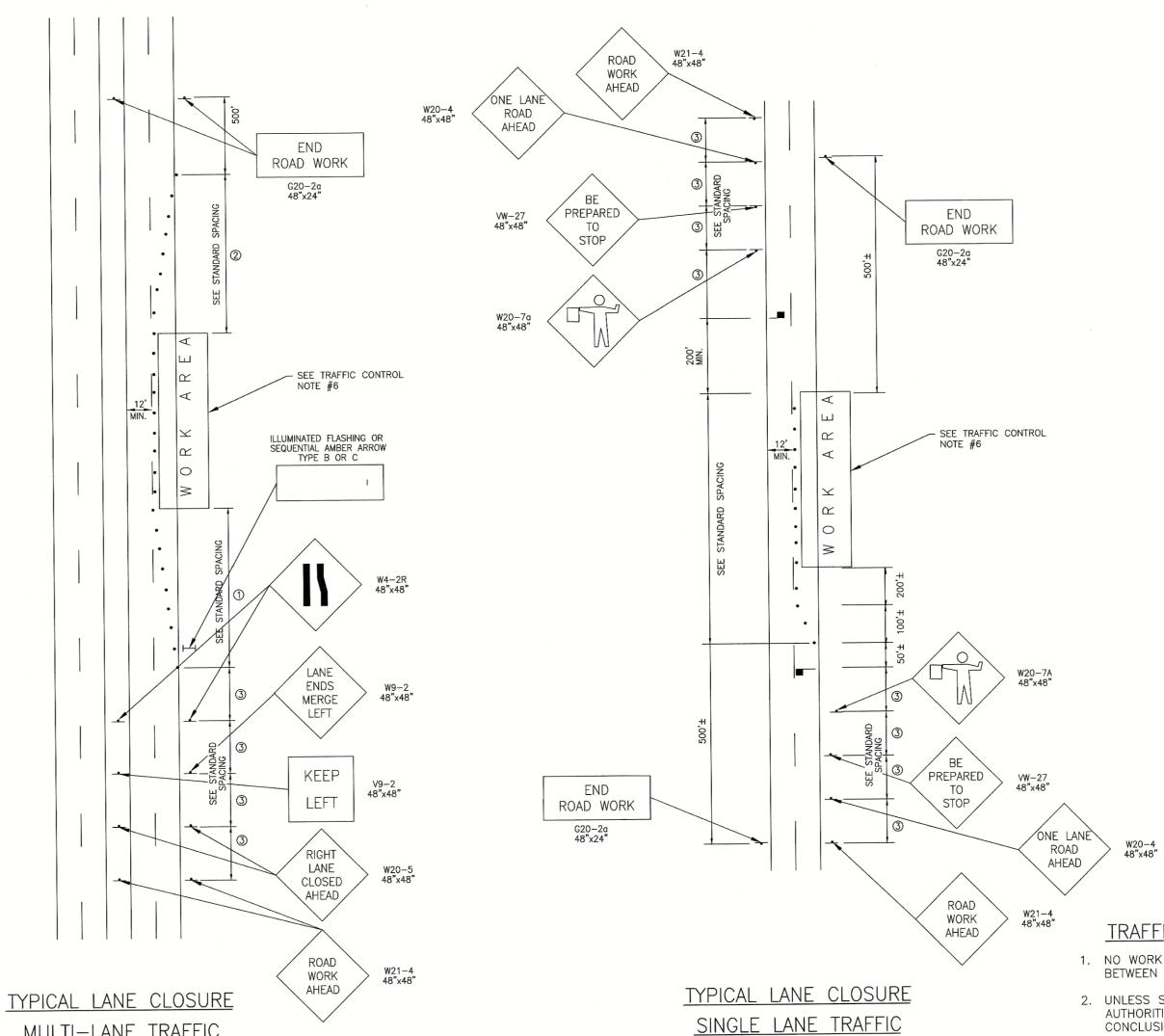
1"=30' of **22** 











LEGEND

WORK AREA

TEMPORARY WARNING SIGN

DIRECTION OF TRAFFIC

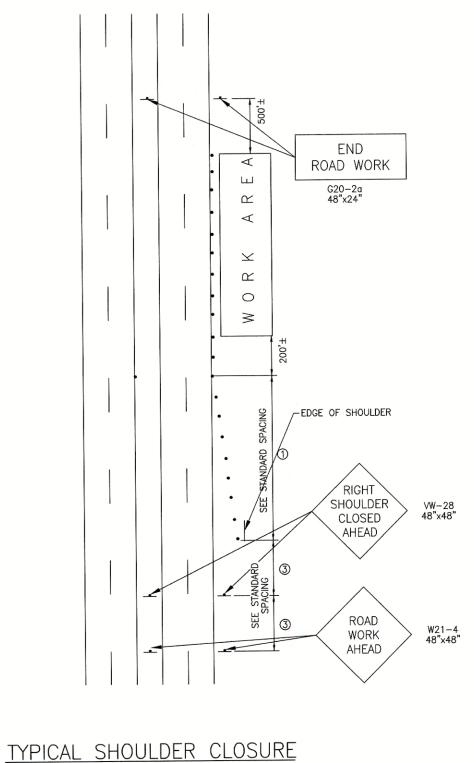
CHANNELING DEVICE (BARREL OR CONE)

FLAGGER STATION

LT. & RT. SIGNS REQ'D. WHERE MEDIAN EXCEEDS 8 FT.

STANDARD SPACING

SPACE TYPE  35 MPH 45 MPH  BARRELS - TRAVELWAY SPACING BARRELS - TRAVELWAY SPACING OF ENTRANCE TAPER SON SPACING SIGN SPACING  35 MPH 45 MPH 46 MPH 47 MPH 480' 80' 80' 80' 80' 350'-500' 350'-500'	STANDAND SIT	101110	
BARRELS - TRAVELWAY SPACING 20' 40'  1 ENTRANCE TAPER 245' 540' 2 EXIT TAPER 80' 80'	SPACE TYPE	35 MPH	45 MPH
	BARRELS — TRAVELWAY SPACING  ① ENTRANCE TAPER  ② EXIT TAPER	20' 245' 80'	40' 540' 80'



TRAFFIC CONTROL NOTES 1. NO WORK SHALL BE DONE WITHIN 300 FEET OF PRIMARY ROAD INTERSECTIONS

BETWEEN THE HOURS OF 7:00 A.M. - 9:00 A.M. AND 4:00 P.M. - 6:00 P.M. 2. UNLESS SPECIAL PERMISSION HAS BEEN GRANTED BY ANY AND ALL CONTROLLING AUTHORITIES, ALL LANES MUST BE RESTORED TO NORMAL WIDTHS AT THE CONCLUSION OF EACH CONSTRUCTION DAY.

3. CHANNELIZING DEVICES MUST SEPARATE THE WORK AREA FROM THE TRAVELED WAY AND BE EXTENDED TO WHERE THEY ARE VISIBLE TO ONCOMING TRAFFIC.

4. SHOULD SPECIAL PERMISSION BE GRANTED TO EXTEND WORKING HOURS SUCH THAT CONSTRUCTION IS CARRIED ON AFTER SUNSET OR BEFORE SUNRISE, THE CONTRACTOR SHALL PROVIDE:

A. FLOODLIGHTS TO MARK FLAGGER STATIONS.

B. STEADY-BURN WARNING LIGHTS ON CHANNELIZING DEVICES.

C. BLINKING LIGHTS ON WARNING SIGNS.

5. ALL TRAFFIC CONTROL METHODS AND DEVICES SHALL CONFORM TO THE MOST CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS ISSUED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION AND THE MOST CURRENT NORTH CAROLINA WORK AREA PROTECTION MANUAL.

6. A TRUCK WITH EITHER AN ARROW BOARD OPERATING IN THE CAUTION MODE, OR AT LEAST ONE ROTATING AMBER LIGHT OR HIGH INTENSITY AMBER STROBE LIGHT SHALL BE PARKED 50'-100' IN ADVANCE OF THE FIRST WORK CREW. WHEN POSTED SPEED LIMIT IS 45 MPH OR GREATER, A TRUCK MOUNTED ATTENUATOR SHALL BE USED.

7. THE CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ANY PAVEMENT MARKINGS DAMAGED BY CONSTRUCTION.

8. ACCESS TO ALL PARCELS AFFECTED BY CONSTRUCTION SHALL BE MAINTAINED AT ALL

9. THE CONTRACTOR SHALL OBTAIN WRITTEN CONSENT FROM THE CONTROLLING AUTHORITY PRIOR TO CLOSING ONE LANE OF A TWO LANE ROADWAY.

10. THIS PLAN IS PROVIDED BY GREENVILLE UTILITIES COMMISSION IN AN EFFORT TO PROVIDE THE CONTRACTOR WITH AN UNDERSTANDING OF THE MINIMUM REQUIREMENTS FOR TRAFFIC CONTROL WHICH MUST BE MET AND TO AID IN THE INCLUSION OF THOSE COSTS IN THE PREPARATION OF HIS BID. THIS PLAN AND THE USE THEREOF DOES NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES OF PROTECTION OF THE WORK AND THE PUBLIC'S SAFETY. IT IS A SPECIFIC CONTRACT REQUIREMENT THAT THE CONTRACTOR INDEMNIFY AND HOLD HARMLESS THE OWNER AND THE ENGINEER AGAINST ALL LOSSES INCURRED IN THE EXECUTION OF THE WORK AND IN THE GUARDING OF IT. THIS REQUIREMENT INCLUDES BUT IS NOT LIMITED TO THE USE OF THIS PLAN.

**REVISIONS:** 

**Greenville Utilities** 

AFFIC CONTROL DETAILS
NVILLE UTILITIES COMMISSION
CP-10112 VOA SITE C ROAD
GAS IMPROVEMENTS TRAFFIC EEN  $\alpha$ 

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046865

Date: 5/4/22 - DraftJML/RHV Design STA Check STA 2020119 Project No.

W-3988 Drawing No. 1"=30'

# CONSTRUCTION SPECIFICATIONS

POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:

**REQUIREMENTS** PHYSICAL PROPERTY ASTM 5141 85% (MIN.) FILTERING EFFICIENCY EXTRA STRENGTH-TENSILE STRENGTH AT 20% (MAX.) ELONGATION 50 LBS./LIN.IN. (MIN.)

ASTM 5141 0.3 GAL./SQ.FT./MIN. (MIN.) FLOW RATE ULTRAVIOLET RADIATION ASTM G-26 90% (MIN.)

SEE DEHNR TABLE 6.62b

STABILITY %

SYNTHETIC FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0°F TO 120°F.

3. IF WOODEN STAKES ARE UTILIZED FOR SILT FENCE CONSTRUCTION, THEY MUST HAVE A DIAMETER OF 2 INCHES WHEN OAK IS USED AND 4 INCHES WHEN PINE IS USED. WOODEN STAKES MUST HAVE A MINIMUM LENGTH OF 5 FEET.

4. IF STEEL POSTS (STANDARD "U" OR "T" SECTION) ARE UTILIZED FOR SILT FENCE CONSTRUCTION, THEY MUST HAVE A MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT AND SHALL HAVE A MINIMUM LENGTH OF 5 FEET AND SHALL HAVE PROJECTIONS FOR FASTENING FABRIC.

5. WIRE FENCE REINFORCEMENT FOR SILT FENCES USING STANDARD-STRENGTH FILTER CLOTH SHALL BE A MINIMUM 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6 INCHES.

NCDOT CLASS A OR B EROSION CONTROL STONE-

NCDOT CLASS A OR B EROSION CONTROL STONE

. THE HEIGHT OF A SILT FENCE SHALL BE A MINIMUM OF 16 INCHES. ABOVE THE ORIGINAL GROUND SURFACE AND SHALL NOT EXCEED 34 INCHES ABOVE GROUND

2. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE UNAVOIDABLE, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-FOOT OVERLAP, AND SECURELY SEALED.

. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 8 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE SIDE OF THE PROPOSED LOCATION OF THE MEASURE.

4. POSTS SHALL BE PLACED A MAXIMUM OF 6 FEET APART. THE FILTER FABRIC SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING ONE INCH LONG (MINIMUM) HEAVY-DUTY WIRE STAPLES OR TIE WIRES AND TWELVE INCHES OF FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.

5. THE 8 INCH BY 4 INCH TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.

6. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

FRONT ELEVATION

SIDE ELEVATION

ROCK CHECK DAM

L = THE DISTANCE SUCH THAT POINTS A AND B

ARE EQUAL ELEVATION

SPACING BETWEEN CHECK DAMS

### MAINTENANCE

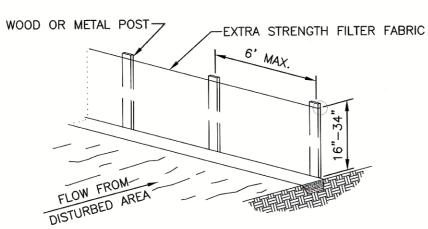
SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET PROPYLENE, NYLON, 1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

> 2. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING.

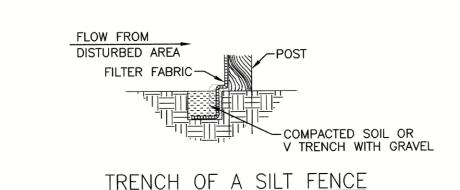
3. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED

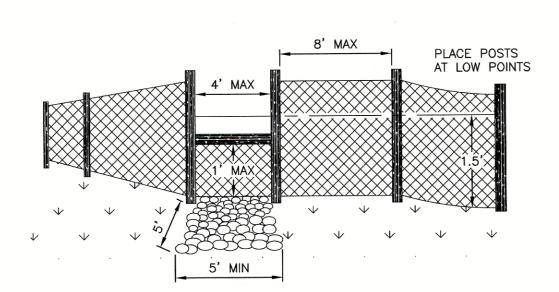
SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.



SHEET FLOW INSTALLATION (PERSPECTIVE VIEW)





TYPICAL SILT FENCES

# **TEMPORARY SILT FENCE**

# CONSTRUCTION SPECIFICATIONS

1. PLACE STONE TO THE LINES AND DIMENSIONS SHOWN IN THE PLAN ON A FILTER FABRIC FOUNDATION.

KEEP THE CENTER STONE SECTION AT LEAST 9 INCHES BELOW NATURAL GROUND LEVEL WHERE THE DAM ABUTS THE CHANNEL BANKS.

EXTEND STONE AT LEAST 1.5 FT. BEYOND THE DITCH BANKS TO KEEP OVERFLOW WATER FROM UNDERCUTTING THE DAM AS IT RE-ENTERS THE

4. SET SPACING BETWEEN DAMS TO ASSURE THAT THE ELEVATION AT THE TOP OF THE LOWER DAM IS THE SAME AS THE TOE ELEVATION OF THE UPPER

PROTECT THE CHANNEL DOWNSTREAM FROM THE LOWEST CHECK DAM, CONSIDERING THAT WATER WILL FLOW OVER AND AROUND THE DAM.

6. MAKE SURE THAT THE CHANNEL REACH ABOVE THE MOST UPSTREAM DAM IS STABLE.

7. ENSURE THAT CHANNEL APPURTENANCES, SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS, ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.

# MAINTENANCE

. INSPECT CHECK DAMS AND CHANNELS FOR DAMAGE AFTER EACH RUNOFF EVENT.

ANTICIPATE SUBMERGENCE AND DEPOSITION ABOVE THE CHECK DAM AND EROSION FROM HIGH FLOWS AROUND THE EDGES OF THE DAM. CORRECT ALL DAMAGE IMMEDIATELY. IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, INSTALL A PROTECTIVE RIPRAP LINER IN THAT PORTION OF THE

3. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION, ALLOW THE CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM, AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. ADD STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

CONSTRUCTION SPECIFICATIONS

1. SILT FENCE DROP INLET PROTECTION

A. SILT FENCE SHALL CONFORM TO THE CONSTRUCTION SPECIFICATIONS FOR "EXTRA STRENGTH" DEHNR 6.51 AND SHALL BE CUT FROM A CONTINUOUS ROLL TO AVOID JOINTS.

B. STAKES SHALL BE 2 x 4-INCH WOOD (PREFERRED) OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.

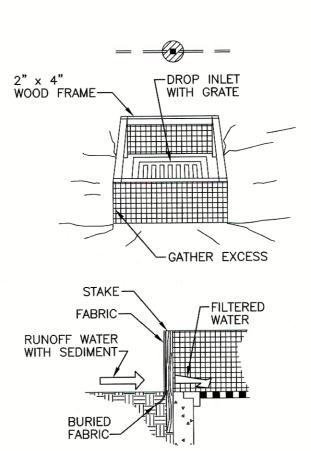
C. SPACE STAKES EVENLY AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3-FEET APART, AND SECURELY DRIVE THEM INTO THE GROUND, APPROXIMATELY 18-INCHES DEEP.

D. TO PROVIDE NEEDED STABILITY TO THE INSTALLATION, FRAME WITH 2 x 4-INCH WOOD STRIPS AROUND THE CREST OF THE OVERFLOW AREA AT A MAXIMUM OF 1 1/2 FEET ABOVE THE DROP INLET CREST.

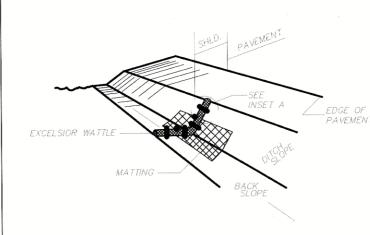
E. PLACE THE BOTTOM 12 INCHES OF THE FABRIC IN A TRENCH AND BACKFILL THE TRENCH WITH 12 INCHES OF COMPACTED SOIL.

F. FASTEN FABRIC SECURELY BY STAPLES OR WIRE TO THE STAKES AND FRAME. JOINTS MUST BE OVERLAPPED TO THE NEXT STAKE.

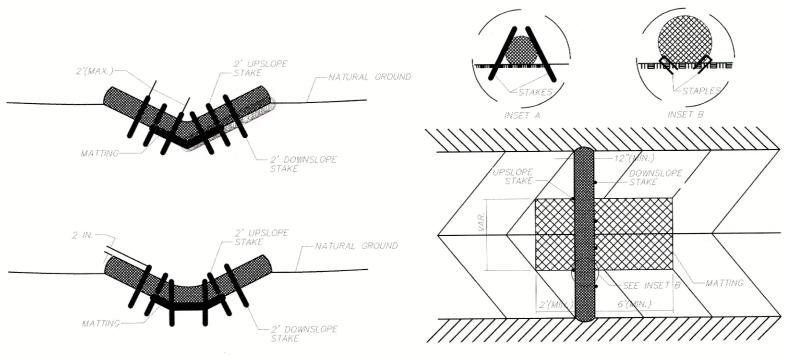
G. IT MAY BE NECESSARY TO BUILD A TEMPORARY DIKE ON THE DOWNSLOPE SIDE OF THE STRUCTURE TO PREVENT BYPASS FLOW.



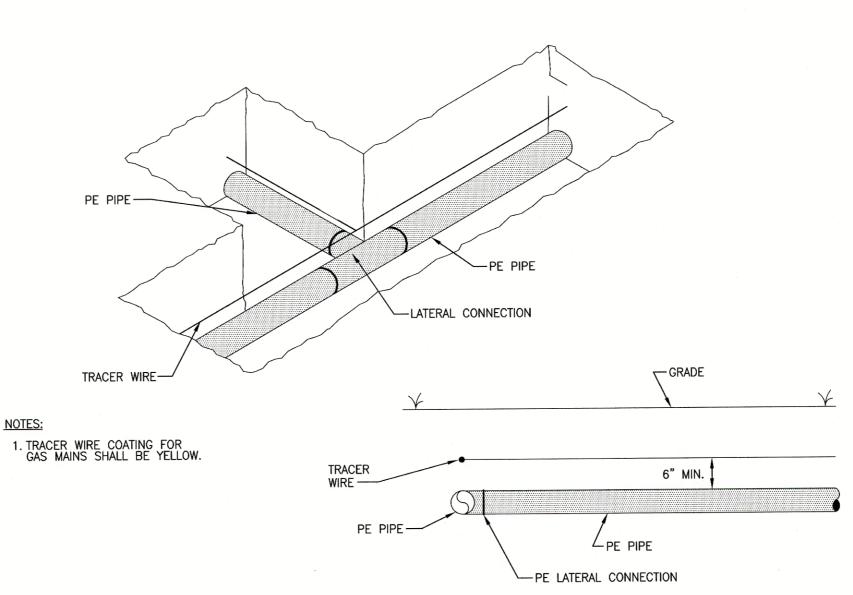
# **STORM DRAIN INLET PROTECTION**



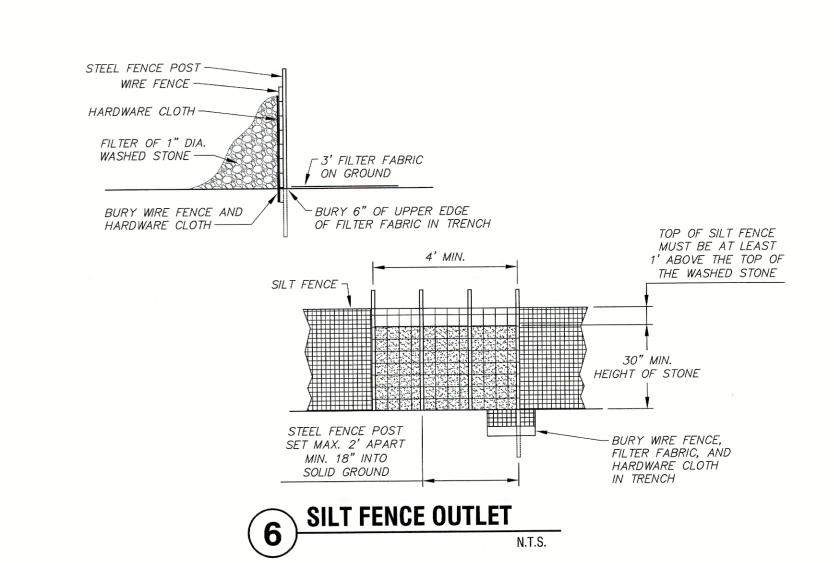
USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE. USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION. ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED. TO WEDGE WATTLE TO BOTTOM OF DITCH. PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A "U" SHAPE NOT LESS THAN 12" IN LENGTH. INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL. INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

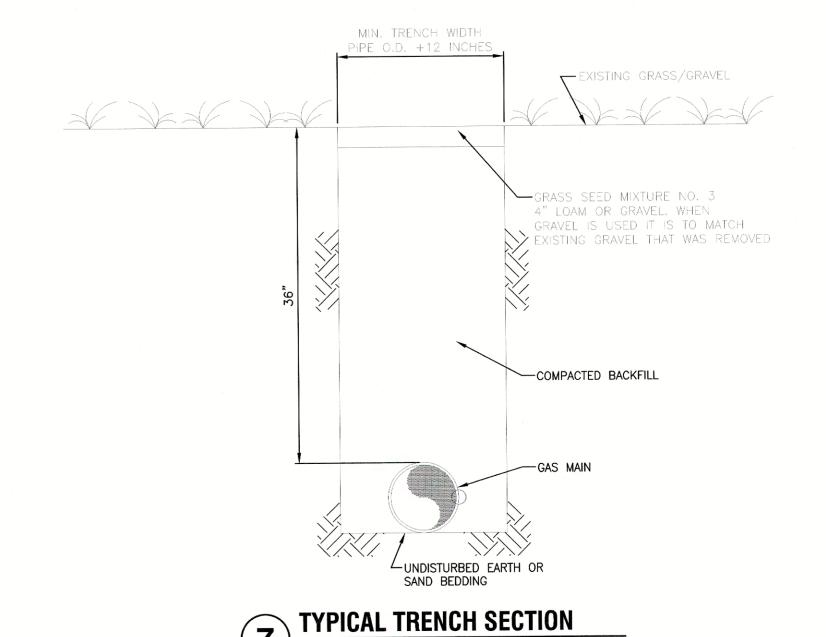


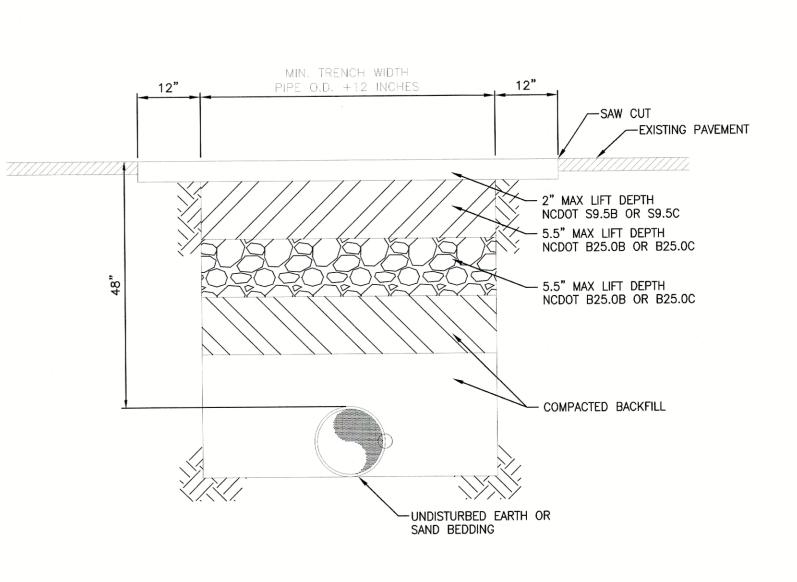
# **EXCELSIOR WATTLE DETAIL**



TYPICAL LOCATING DEVICE INSTALLATION







TYPICAL PAVEMENT REPAIR ON NCDOT MAINTAINED ROADS N.T.S.

REVISIONS

**ELLANEOUS DETA** SION SY COMMIS TE C RO/ IENTS SSI TILITIE 2 VOA S 1PROVE 9 ĕ DZE GCP-101 GAS I SION CONTROL GR RO

Project No. rawing No.

Design STA Check STA

- DraftJML/RH

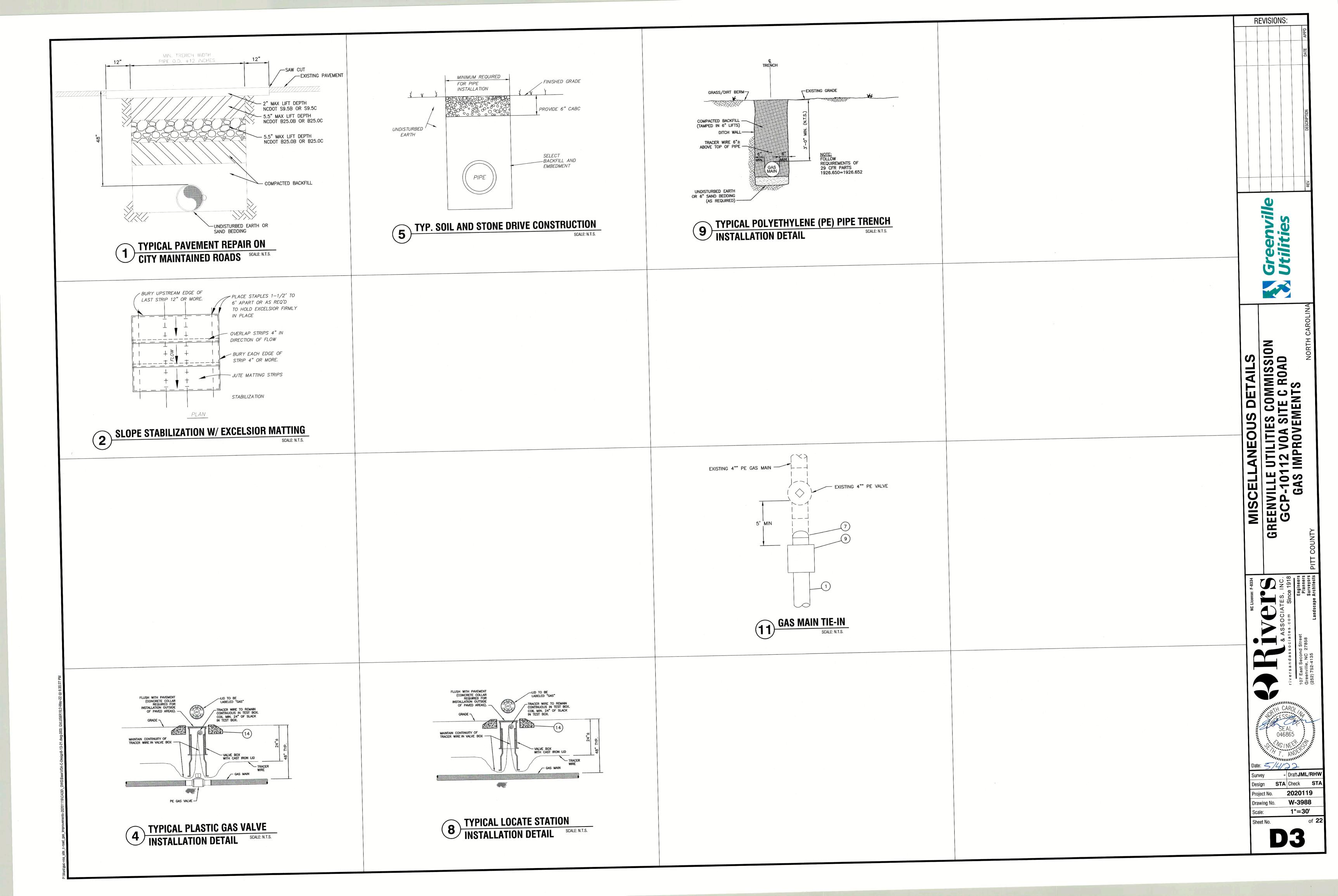
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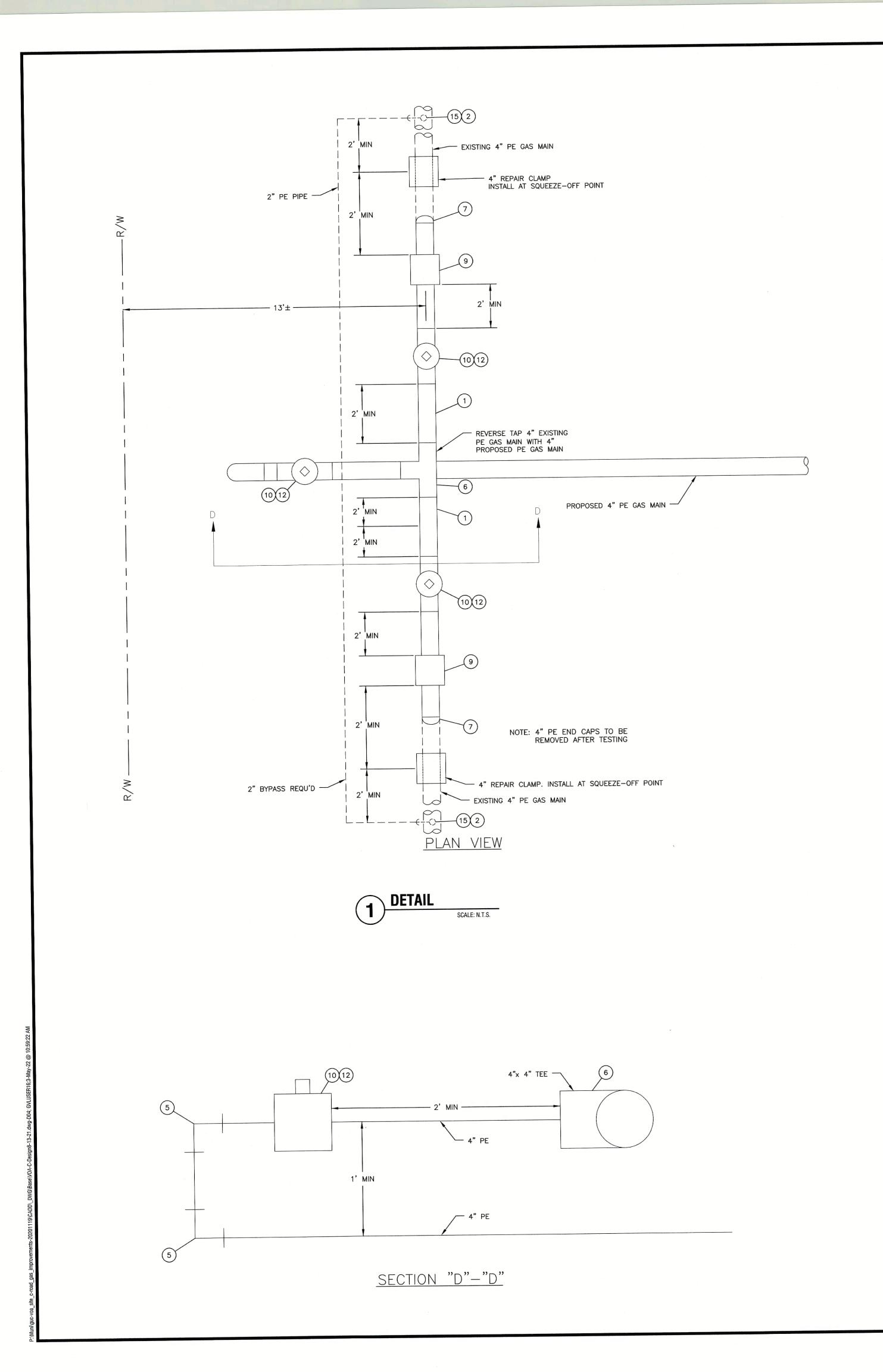
W-3988

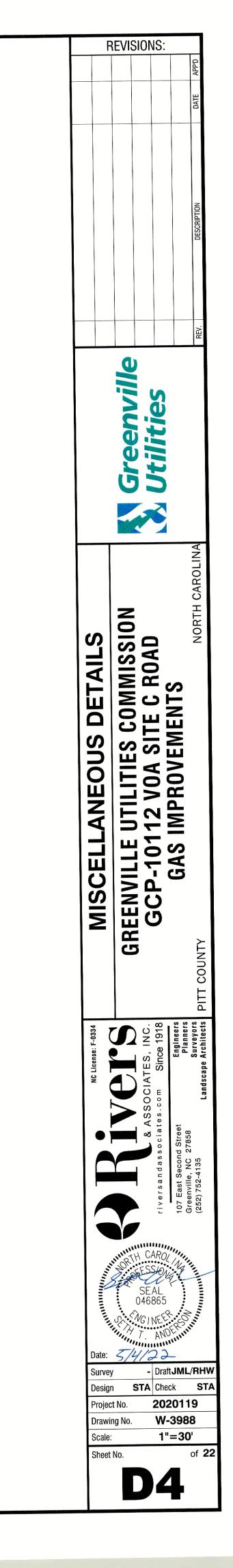
1"=30'

ate: 5/4/2

**TEMPORARY ROCK SILT CHECK DAM** 







mplementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

	Re	quired Ground Stabil	ization Timeframes
Sit	te Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a)	Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b)	High Quality Water (HQW) Zones	7.	None
(c)	Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d)	Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e)	Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zone -10 days for Falls Lake Watershed unless there is zero slope

practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

### GROUND STABILIZATION SPECIFICATION Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the

Temporary Stabilization	Permanent Stabilization
<ul> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> <li>Hydroseeding</li> <li>Rolled erosion control products with or without temporary grass seed</li> <li>Appropriately applied straw or other mulch</li> <li>Plastic sheeting</li> </ul>	<ul> <li>Permanent grass seed covered with straw or other mulches and tackifiers</li> <li>Geotextile fabrics such as permanent soil reinforcement matting</li> <li>Hydroseeding</li> <li>Shrubs or other permanent plantings covered with mulch</li> <li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li> <li>Structural methods such as concrete, asphalt or retaining walls</li> <li>Rolled erosion control products with grass seed</li> </ul>

## POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures. Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging Store flocculants in leak-proof containers that are kept under storm-resistant cover

or surrounded by secondary containment structures.

- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile Provide stable stone access point when feasible
  - Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

# NORTH CAROLINA **Environmental Quality**

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EQUIPMENT AND VEHICLE MAINTENANCE

containers overflow.

PAINT AND OTHER LIQUID WASTE

EARTHEN STOCKPILE MANAGEMENT

ORTABLE TOILETS

Provide drip pans under any stored equipment.

hazardous waste (recycle when possible)

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

8. Dispose waste off-site at an approved disposal facility.

Contain liquid wastes in a controlled area.

on a gravel pad and surround with sand bags.

Maintain vehicles and equipment to prevent discharge of fluids.

to a recycling or disposal center that handles these materials.

receptacle) on site to contain construction and domestic wastes.

waters unless no other alternatives are reasonably available.

Identify leaks and repair as soon as feasible, or remove leaking equipment from the

Remove leaking vehicles and construction equipment from service until the problem

Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products

Never bury or burn waste. Place litter and debris in approved waste containers. Provide a sufficient number and size of waste containers (e.g dumpster, trash

Locate waste containers at least 50 feet away from storm drain inlets and surface

4. Locate waste containers on areas that do not receive substantial amounts of runoff

provide secondary containment. Repair or replace damaged waste containers.

Anchor all lightweight items in waste containers during times of high winds.

7. Empty waste containers as needed to prevent overflow. Clean up immediately if

9. On business days, clean up and dispose of waste in designated waste containers.

1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.

waters unless no other alternatives are reasonably available.

Locate paint washouts at least 50 feet away from storm drain inlets and surface

4. Containment must be labeled, sized and placed appropriately for the needs of site. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from

Install portable toilets on level ground, at least 50 feet away from storm drains,

streams or wetlands unless there is no alternative reasonably available. If 50 foot

Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace

Show stockpile locations on plans. Locate earthen-material stockpile areas at least

and surface waters unless it can be shown no other alternatives are reasonably

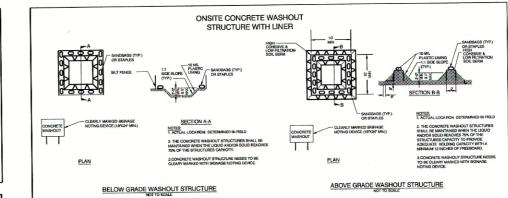
50 feet away from storm drain inlets, sediment basins, perimeter sediment controls

offset is not attainable, provide relocation of portable toilet behind silt fence or place

Provide staking or anchoring of portable toilets during periods of high winds or in high

from upland areas and does not drain directly to a storm drain, stream or wetland. Cover waste containers at the end of each workday and before storm events or

4. Collect all spent fluids, store in separate containers and properly dispose as



- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence. Install temporary concrete washouts per local requirements, where applicable. If an
- alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or
- discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum,
- install protection of storm drain inlet(s) closest to the washout which could receive
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the
- Install at least one sign directing concrete trucks to the washout within the project
- limits. Post signage on the washout itself to identify this location. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- 10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

### HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately. . Do not stockpile these materials onsite.

### HAZARDOUS AND TOXIC WASTE

Create designated hazardous waste collection areas on-site. Place hazardous waste containers under cover or in secondary containment. 3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

**EFFECTIVE: 04/01/19** 

# SELF-INSPECTION, RECORDKEEPING AND REPORTING

## SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts.  If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	<ol> <li>Identification of the measures inspected,</li> <li>Date and time of the inspection,</li> <li>Name of the person performing the inspection,</li> <li>Indication of whether the measures were operating properly,</li> <li>Description of maintenance needs for the measure,</li> <li>Description, evidence, and date of corrective actions taken.</li> </ol>
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made:  Actions taken to clean up or stabilize the sediment that has left the site limits,  Description, evidence, and date of corrective actions taken, and An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made:  1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit of this permit.
(6) Ground stabilization measures	After each phase of grading	<ol> <li>The phase of grading (installation of perimeter E&amp;SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover).</li> <li>Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.</li> </ol>

### PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

### SECTION B: RECORDKEEPING 1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner

Item to Document	Documentation Requirements
(a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan.	Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC Measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC Measures or if the E&SC Measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC Plan.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC Measures.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

## 2. Additional Documentation

requirement not practical:

In addition to the E&SC Plan documents above, the following items shall be kept on the and available for agency inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this

- (a) This general permit as well as the certificate of coverage, after it is received.
- (b) Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

# SELF-INSPECTION, RECORDKEEPING AND REPORTING

### SECTION C: REPORTING 1. Occurrences that must be reported

Permittees shall report the following occurrences: (a) Visible sediment deposition in a stream or wetland.

## (b) Oil spills if:

## They are 25 gallons or more,

- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).
- (a) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

## (b) Anticipated bypasses and unanticipated bypasses.

(c) Noncompliance with the conditions of this permit that may endanger health or the environment.

## **Reporting Timeframes and Other Requirements**

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment	Within 24 hours, an oral or electronic notification.
deposition in a	Within 7 calendar days, a report that contains a description of the
stream or wetland	sediment and actions taken to address the cause of the deposition.
	Division staff may waive the requirement for a written report on a case-by-case basis.
	If the stream is named on the NC 303(d) list as impaired for sediment-
	related causes, the permittee may be required to perform additional
	monitoring, inspections or apply more stringent practices if staff
	determine that additional requirements are needed to assure compliance
	with the federal or state impaired-waters conditions.
(b) Oil spills and	Within 24 hours, an oral or electronic notification. The notification
release of	shall include information about the date, time, nature, volume and
hazardous	location of the spill or release.
substances per Item	
1(b)-(c) above	
(c) Anticipated	A report at least ten days before the date of the bypass, if possible.
bypasses [40 CFR	The report shall include an evaluation of the anticipated quality and
122.41(m)(3)]	effect of the bypass.
(d) Unanticipated	Within 24 hours, an oral or electronic notification.
bypasses [40 CFR	Within 7 calendar days, a report that includes an evaluation of the
122.41(m)(3)]	quality and effect of the bypass.
(e) Noncompliance	Within 24 hours, an oral or electronic notification.
with the conditions	Within 7 calendar days, a report that contains a description of the
of this permit that	noncompliance, and its causes; the period of noncompliance,
may endanger	including exact dates and times, and if the noncompliance has not
health or the	been corrected, the anticipated time noncompliance is expected to
environment[40	continue; and steps taken or planned to reduce, eliminate, and
CFR 122.41(I)(7)]	prevent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6).

case-by-case basis.

Division staff may waive the requirement for a written report on a



**EFFECTIVE: 04/01/19** 

REVISIONS



Design STA Check STA 2020119 roject No. Orawing No.

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