

NORTHWEST WALTERBORO SEWER IMPROVEMENTS PHASE II- PUMP STATION AND FORCE MAIN

FOR

COLLETON COUNTY

PREPARED FOR:

COLLETON COUNTY

109 BENSON STREET WALTERBORO, SC 29488

TM# MULTIPLE

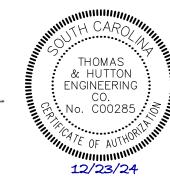
JANUARY 2, 2024

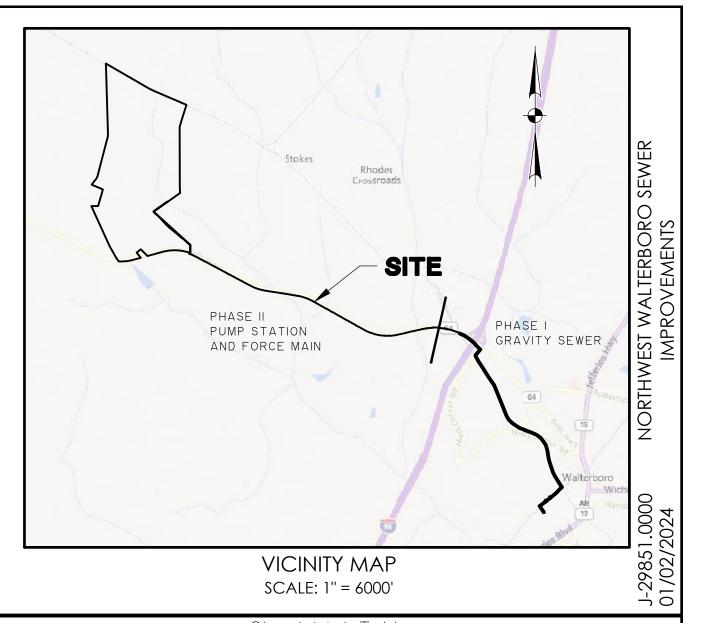
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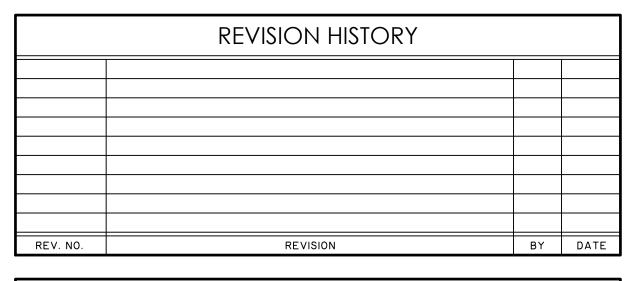








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SUBMITTAL HISTORY	
SUBMITTED TO	DATE





1501 Main Street • Suite 760 Columbia, SC 29201 p.803.451.6789

	<u>ABBREVIATIONS</u>												
DBL	DOUBLE	FM	FORCE MAIN (SANITARY SEWER)	PC	POINT OF CURVE		тс	TOP OF CURB					
вот	воттом	FP	FINISH PAD	PH	POST HYDRANT		TH	THROAT ELEVATION					
СВ	CATCH BASIN	FR	FRAME	PT	POINT OF TANGENT		TG	TOP OF GUTTER					
CI	CURB INLET	GI	GRATE INLET	PVC	POLYVINYL CHLORIDE		TP	TOP OF PAVEMENT					
со	CLEAN OUT	GV	GATE VALVE	RCF	REINFORCED CONCRETE PIPE		TW	TOP OF WALK					
CPP	CORRUGATED PLASTIC PIPE	HDPE	HIGH DENSITY POLYETHYLENE	RC	ROLL CURB INLET		TYP	TYPICAL					
DBL	DOUBLE	н	HOODED INLET	RCF	REINFORCED CONCRETE PIPE		VI	VALLEY INLET					
DI	DITCH INLET	INV	INVERT ELEVATION	RI	ROOF INLET		w	WATER					
DIP	DUCTILE IRON PIPE	JB	JUNCTION BOX	RJP	RESTRAINED JOINT PIPE		W/	WITH					
EL	ELEVATION	LF	LINEAR FEET	R/V	RIGHT-OF-WAY		wv	WATER VALVE					
ES	END SECTION	MAX	MAXIMUM	SD	STORM DRAINAGE		YI	YARD INLET					
FES	FLARED END SECTION	MIN	MINIMUM	SDN	H STORM DRAINAGE MANHOLE		YI	YARD INLET					
FG	FINISH GRADE	мн	MANHOLE	SF	SQUARE FEET								
FH	FIRE HYDRANT	ос	ON CENTER	ss	SANITARY SEWER								

DRAI	NAGE LEGI	<u>END</u>
DESCRIPTION	EXISTING	PROPOSED
PIPE		
DITCH		
CURB INLET (CI) CATCH BASIN (CB)		•
CURB INLET - RIGHT (CI) OR CATCH BASIN - RIGHT (CB)	OR OR	OR OR
CURB INLET - LEFT (CI) OR CATCH BASIN - LEFT (CB)	OR O	OR •
CURB INLET - BOTH (CI) OR CATCH BASIN - LEFT (CB)	OR O	OR •
CONTROL STRUCTURE (CS)		
DITCH INLET (DI)		
GRATE INLET (GI)		
HOODED INLET (HI)	OR	OR (m)
JUNCTION BOX (JB)		
MANHOLE (SDMH)	0	•
ROLL CURB INLET (RC)		
ROOF INLET (RI)		
YARD INLET (YI)	®	®
FLARED END SECTION (FES)		

<u>ESCRIPTION</u>	EXISTING	PROPOSED
ATER MAIN	10"W	10"W
INGLE SERVICE LATERAL		
OUBLE SERVICE LATERAL	<u>></u>	>
ALVE AND BOX	\otimes	•
RE HYDRANT W/VALVE & BOX	\otimes - \diamondsuit -	ۥ
OST HYDRANT)	>
EDUCER		■
CKFLOW PREVENTOR		
oss	1_1	1_1
EE	-	1-1
0° BEND - HORIZONTAL		
S BEND - HORIZONTAL	/	/1
2-½° BEND - HORIZONTAL	/	/
4° BEND - HORIZONTAL	1	/
ND - VERTICAL		1.1
AP.		

	<u>SEWER LEGEN</u>	<u>D</u>
<u>DESCRIPTION</u>	EXISTING	PROPOSED
GRAVITY PIPE	ss	
SINGLE SERVICE LATERAL		
DOUBLE SERVICE LATERAL		—
MANHOLE		•
CLEANOUT	Ot .	• +
FORCEMAIN	10"FM 10"FM	IO"FM IO"FM
VALVE AND BOX	\otimes	$oldsymbol{\Theta}$
FLUSH HYDRANT	<u>)</u>)
REDUCER		•
BACKFLOW PREVENTOR		
CROSS	I <u></u> I	1_1
TEE	<u> </u>	1-1
90° BEND - HORIZONTAL		
45° BEND - HORIZONTAL	/	/
22-½° BEND - HORIZONTAL	/	/
II-¼° BEND - HORIZONTAL	1	1
BEND - VERTICAL	11	
PLUG \ CAP		

DESCRIPTION	EXISTING	<u>PROPOSED</u>
ATER MAIN	10"W	IO"W
SINGLE SERVICE LATERAL		
OOUBLE SERVICE LATERAL	<u></u>	<u>></u>
VALVE AND BOX	\otimes	•
FIRE HYDRANT W/VALVE & BOX	\otimes - φ -	ۥ
POST HYDRANT) \	—
REDUCER		4
BACKFLOW PREVENTOR		
CROSS	I <u></u> I	1_1
TEE	<u> </u>	1-1
90° BEND - HORIZONTAL	_	7
45° BEND - HORIZONTAL	/	/1
22-½° BEND - HORIZONTAL	/	/
I-¼° BEND - HORIZONTAL	1-1	11
BEND - VERTICAL	[]	1.1
CAP		

TESTS AND INSPECTIONS.

BEGINNING ANY REMOVAL OPERATION.

9. ALL ELEVATIONS SHOWN ARE BASED ON NAVD88.

IO. TOPOGRAPHIC SURVEY BY THOMAS AND HUTTON.

UTILITIES PRIOR TO BEGINNING NEW CONSTRUCTION.

DISTURBED AREA AT NO ADDITIONAL COST TO THE OWNER.

SATISFACTION OF THE COUNTY ENGINEER AND THE PROJECT ENGINEER.

8. SURVEYING AND BOUNDARY INFORMATION BY THOMAS AND HUTTON

I. CONTRACTOR SHALL COORDINATE TIE-IN OF NEW SEWER FACILITIES TO CITY OF WALTERBORO.

2. CONTRACTOR SHALL MAINTAIN MINIMUM COVER OVER THE WATER MAIN PIPE BARREL OF 4'-O" UNLESS OTHERWISE INDICATED. TOP OF PIPE ELEVATIONS ARE SHOWN FOR CASES WHERE FUTURE STORM SEWERS

ARE TO BE INSTALLED. IN NO CASE SHALL THE WATER MAIN BE INSTALLED AT A LOWER ELEVATION THAN

BECAUSE PIPELINE WAS NOT INSTALLED TO THE ALIGNMENT AND PROFILE SHOWN, THEN THE CONTRACTOR

IS RESPONSIBLE FOR OBTAINING THOSE NECESSARY MATERIALS AND PROVIDING THE EQUIPMENT AND LABOR

3. SHOULD PIPE, FITTINGS, AND OTHER MATERIALS BE NEEDED IN ADDITION TO THAT SHOWN ON THE DRAWINGS

TO INSTALL THEM TO MEET THE DESIGN INTENT OF THE WATERMAIN AT NO ADDITIONAL COST TO THE

4. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER 48 HOURS IN ADVANCE OF ALL REQUIRED

5. THE CONTRACTOR WILL NOTIFY THE ENGINEER IF UNSUITABLE MATERIAL IS DISCOVERED PRIOR TO

6. ALL FORCE MAINS SHALL BE POLYVINYL CHLORIDE (PVC C900 DR 18) UNLESS OTHERWISE INDICATED.

7. ALL GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE (PVC SDR 26) UNLESS OTHERWISE INDICATED.

II. CONTRACTOR IS TO VERIFY ACCURACY OF ANY TEMPORARY BENCHMARKS SHOWN PRIOR TO UTILIZING THEM

CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES OTHER

ADDITIONALLY, THE CONTRACTOR SHALL CONFIRM THE CONNECTION POINTS OF NEW UTILITIES TO EXISTING

THAN THOSE SHOWN ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE

13. IF WORK IS SUSPENDED OR DELAYED FOR 14 DAYS, THE CONTRACTOR SHALL TEMPORARILY STABILIZE THE

SPECIFICATIONS UNLESS SPECIFIED ELSEWHERE AND APPROVED IN WRITING BY THE COUNTY ENGINEER.

14. THE CONTRACTOR SHALL INSTALL ANY BARRICADES PRIOR TO BEGINNING CONSTRUCTION

15. ANY DAMAGE TO EXISTING PAVEMENT MUST BE REPAIRED AT CONTRACTORS EXPENSE AND TO THE

IG. ALL RIGHT-OF-WAY AND DRAINAGE EASEMENT CONSTRUCTION SHALL MEET SCDOT STANDARD

17. WHERE FIELD INSPECTIONS ARE REQUIRED BY THE COUNTY, THE CONTRACTOR SHALL NOTIFY THE

ENGINEERING DIVISION A <u>MINIMUM OF 48 HOURS</u> IN ADVANCE TO SCHEDULE SUCH INSPECTIONS.

19. ANY REVISIONS DURING CONSTRUCTION WHICH ALTER THE ROAD LAYOUT, CONSTRUCTION METHODS,

18. A COMPLETE SET OF APPROVED DRAWINGS AND SPECIFICATIONS MUST BE MAINTAINED ON SITE AT ALL

TIMES THAT THE CONTRACTOR IS PERFORMING WORK. THESE DRAWINGS SHALL BE MADE AVAILABLE UPON

RIGHT-OF-WAY LOCATION OR DRAINAGE MUST BE SUBMITTED AND APPROVED IN WRITING BY THE COUNTY

20. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS NECESSARY FROM OTHER

ENGINEER IMMEDIATELY AND TAKE STEPS TO PROTECT THE LINE(S) AND ENSURE CONTINUED SERVICE. DAMAGE CAUSED TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR.

12. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE

GENERAL NOTES

OTHER UTILITIES LEGEND

EXISTING

DESCRIPTION

UNDERGROUND TELEPHONE

UNDERGROUND ELECTRICITY

NATURAL GAS

TELEPHONE

ELECTRICITY

- 21. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL AND PREVENTION STRUCTURES SHOWN ON THE PLANS. BOTH MUST BE APPROVED BY COLLETON COUNTY PRIOR TO BEGINNING ANY LAND DISTURBING
- 22. CONTRACTOR WILL BE REQUIRED TO ADJUST MANHOLE FRAMES TO MATCH FINAL GRADE AT NO ADDITIONAL
- 23. THE FOLLOWING NOTES ARE SPECIFIED BY THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL - OFFICE OF OCEAN AND COASTAL RESOURCES MANAGEMENT (SCDHEC-OCRM) AND ARE TO BE EXECUTED BY THE CONTRACTOR:
- ALL SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF PRECIPITATION DURING ANY 24-HOUR PERIOD. ALL SEDIMENT CONTROL FEATURES SHALL BE MAINTAINED UNTIL FINAL STABILIZATION HAS BEEN OBTAINED.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED, UNLESS ACTIVITY IN THAT PORTION OF THE SITE WILL RESUME WITHIN 14 DAYS.
- 25. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED SIMULTANEOUSLY WITH THE DISTURBANCE OF THE LAND AND SHALL REMAIN FUNCTIONAL UNTIL THE CONTRIBUTING DISTURBED AREAS ARE STABILIZED. SILT BARRIERS WILL BE INSTALLED AS NECESSARY TO PREVENT EXCESSIVE SEDIMENTATION OF DOWNSTREAM AREAS. DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL OF "EROSION AND SEDIMENT CONTROL PRACTICES FOR DEVELOPING AREAS" BY THE S.C. LAND RESOURCES CONSERVATION COMMISSION.
- 26. CONTRACTOR SHALL GRADE AREAS TO DRAIN FOR POSITIVE FLOW PRIOR TO FINAL APPROVAL.
- 27. ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND "SOUTH CAROLINA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BOTH CURRENT EDITIONS.
- 28. ALL AREAS DISTURBED WILL BE GRASSED IMMEDIATELY AFTER THE INSTALLATION. GRASSING SHALL BE IN ACCORDANCE WITH SECTION 810 OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION CURRENT EDITION. PAYMENT SHALL BE AS SHOWN IN THE BID FORM AND SHALL BE COMPENSATION FOR ALL NECESSARY WORK AND MATERIALS TO COMPLETE THE SEEDING IN ACCORDANCE WITH THESE SPECIFICATIONS. (SEE SPECIFICATIONS BELOW)
- 29. ALL DRAINAGE WILL BE MADE FUNCTIONAL DAILY AS WORK PROGRESSES.
- 30. EACH EXISTING ROAD WILL BE CLEANED UP AND RESTORED DAILY.

GENERAL INFORMATION

COUNTY TOWN

ZONING

CITY OF WALTERBORO 242 HAMPTON STREET (843) 782-1015

ENGINEER: THOMAS & HUTTON **ISOI MAIN STREET**, SUITE 400 COLUMBIA, SC 29201 (803) 451-6789

31. NEW PAVEMENT TO BE FLUSH WITH EDGE OF EXISTING PAVEMENT. 32. ALL STORM DRAIN PIPE INVERTS IN AND OUT ARE THE SAME AS THE BOX INVERT UNLESS OTHERWISE

INDEX

SCALE: I" = 4000'

GRAVITY SEWER

Crossroads

PHASE II
PUMP STATION AND FORCE MAIN

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- NOTED ON THE PLAN SHEETS AND/OR PROFILES.
- 33. ALL SEWER INSTALLATION AND MATERIALS SHALL COMPLY WITH SECTION 30.30.00 OF THE THOMAS AND HUTTON STANDARDS AND SPECIFICATIONS.
- 34. IF ARCHEOLOGICAL MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION WORK SHALL IMMEDIATELY CEASE. THE PROCEDURES CODIFIED AT 36 CFR 800.13(B) WILL APPLY AND EDA, THE SOUTH CAROLINA STATE HISTORIC PRESERVATION OFFICE, AND THE CATAWBA INDIAN NATION SHALL BE CONTACTED IMMEDIATELY. ARCHEOLOGICAL MATERIALS CONSIST OF ANY ITEMS, FIFTY YEARS OR OLDER WHICH WERE MADE OR USED BY MAN. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO, STONE PROJECTILE POINTS (ARROWHEADS), CERAMIC SHERDS, BRICKS, WORKED WOOD, BONE AND STONE, METAL AND GLASS OBJECTS, AND HUMAN SKELETAL REMAINS.

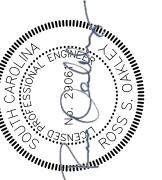
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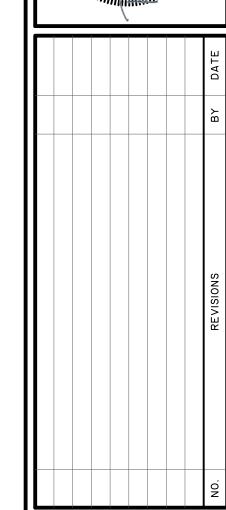
COLLETON WALTERBORO

INDUSTRIAL

THOMAS & HUTTON 50 PARK OF COMMERCE WAY SAVANNAH, GA 31405 (912) 234-5300

CITY OF WALTERBORO 242 HAMPTON STREET (843)782-1015





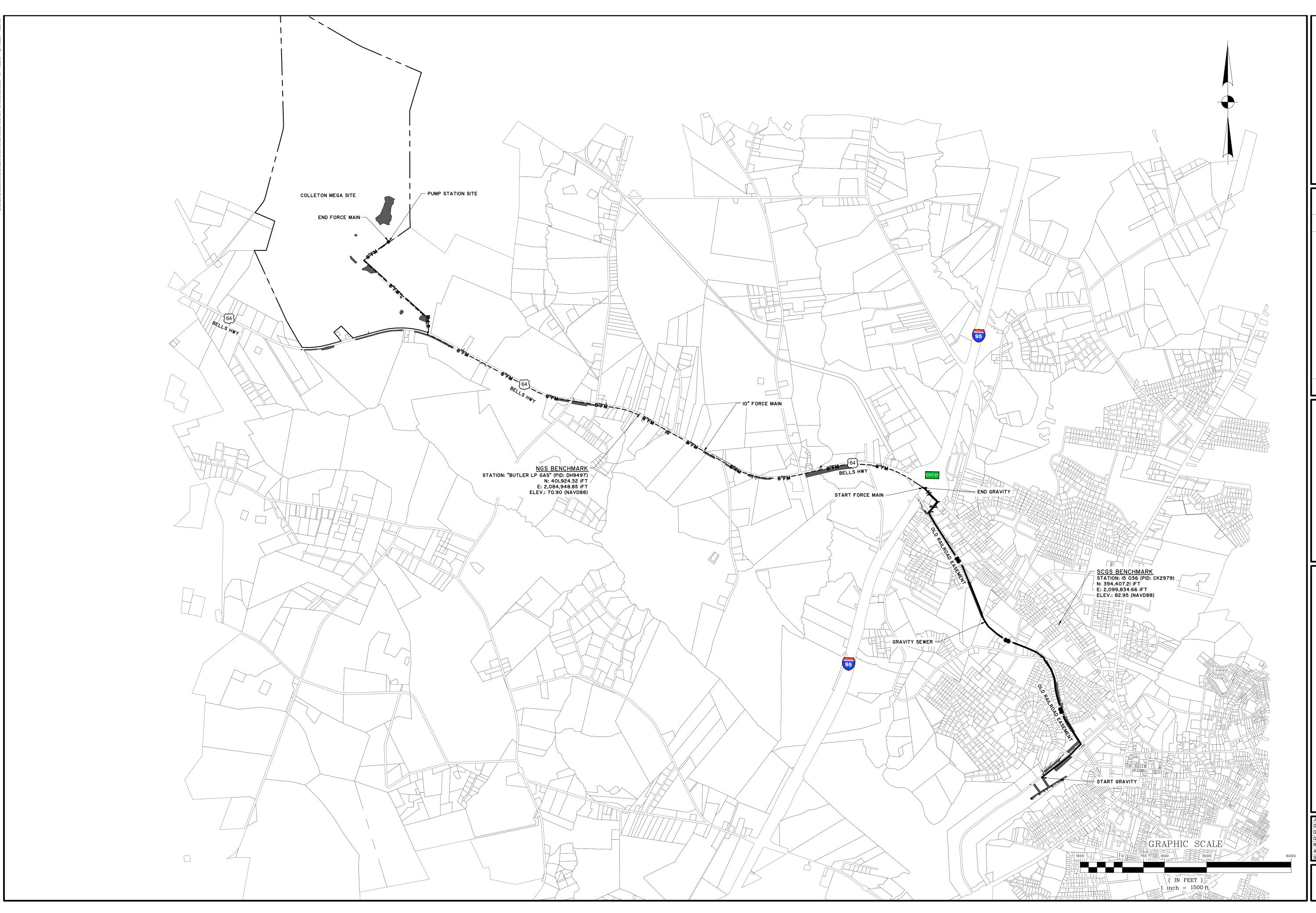
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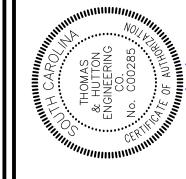
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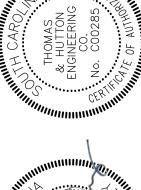
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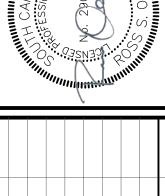
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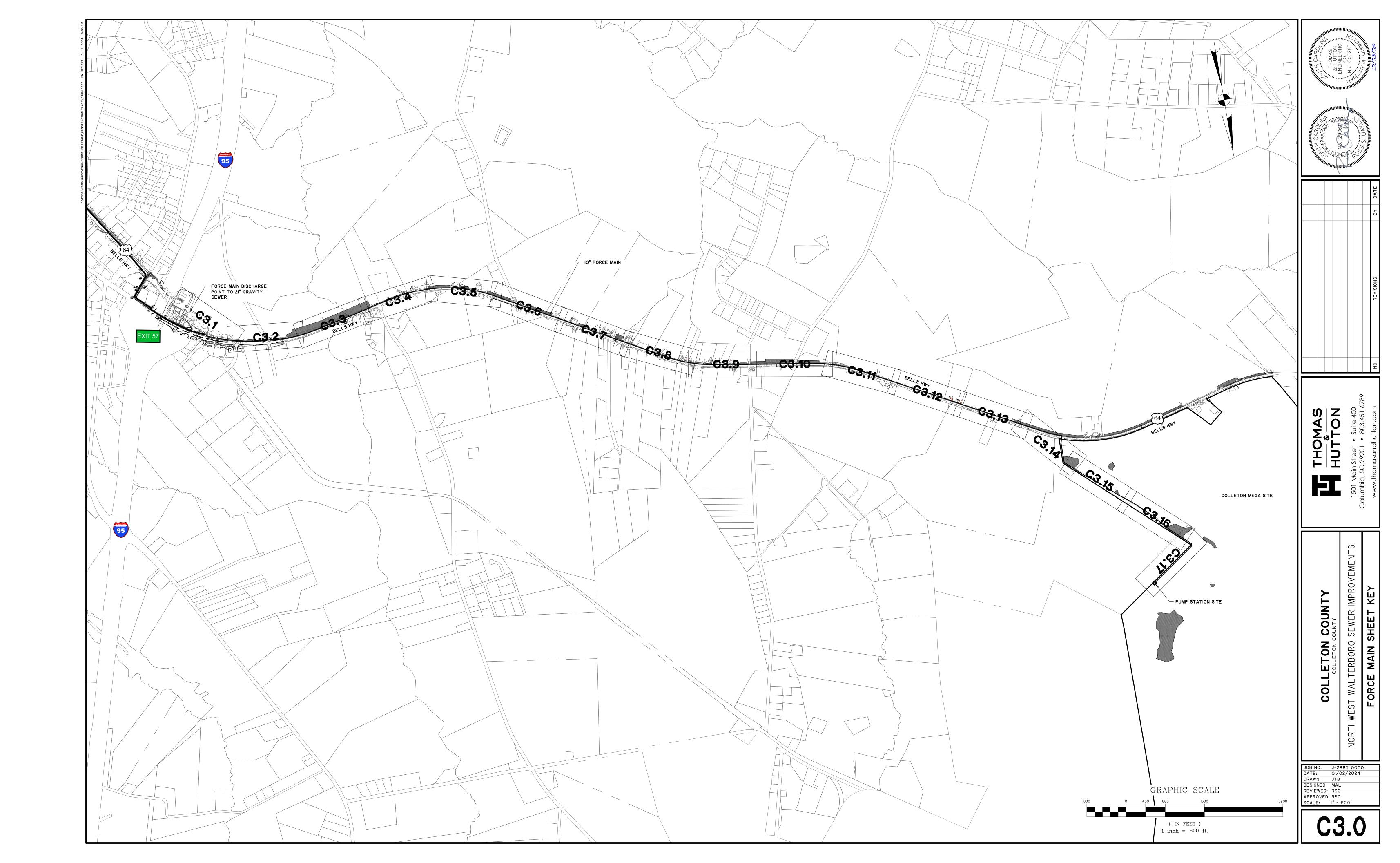


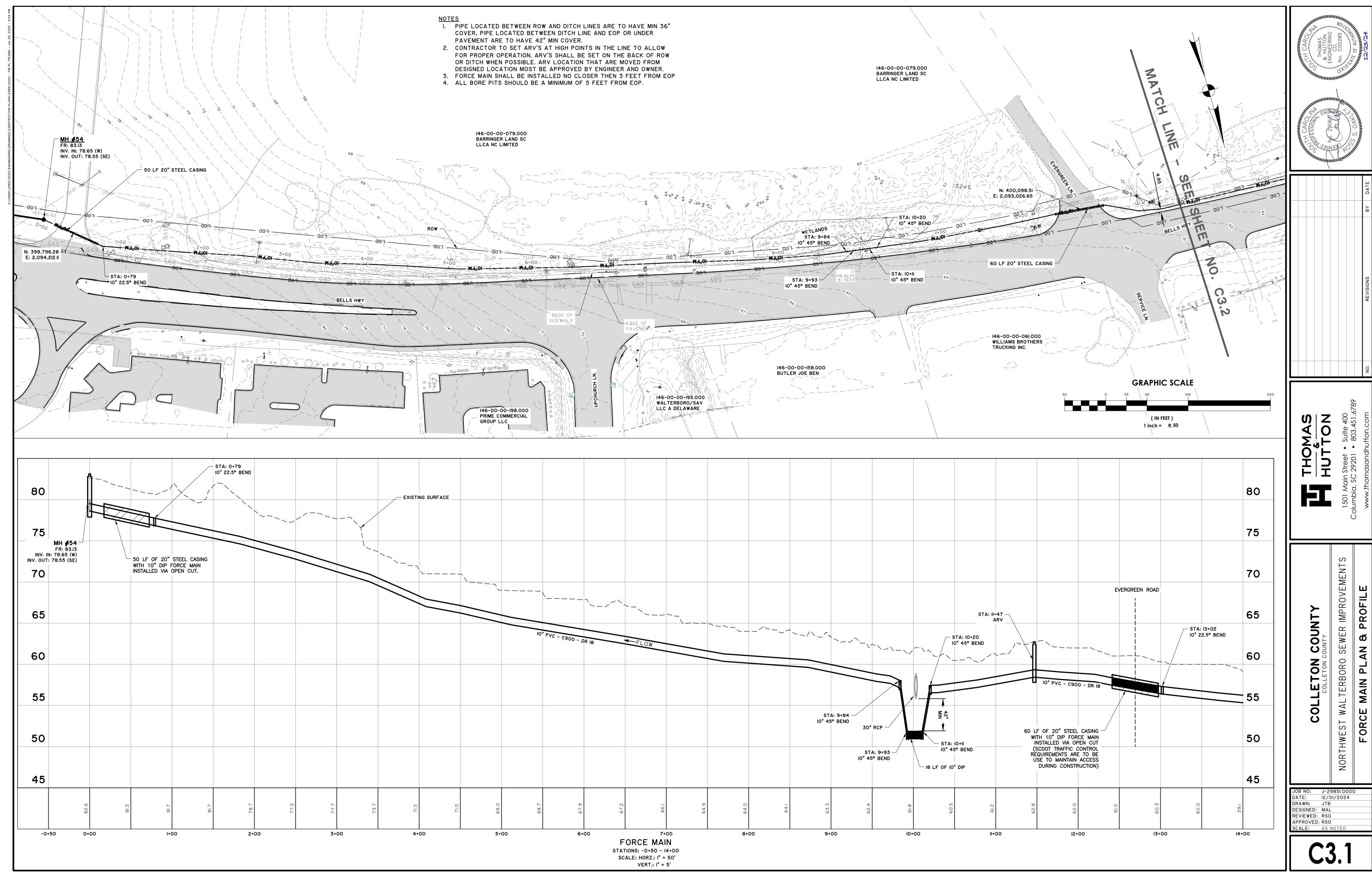


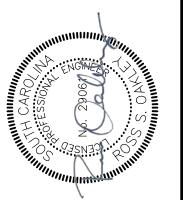
NORTHWEST WALTERBORO SEWER IMPROVEMENTS

OVERALL SITE PLAN COLLETON CO

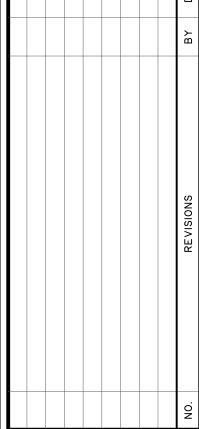
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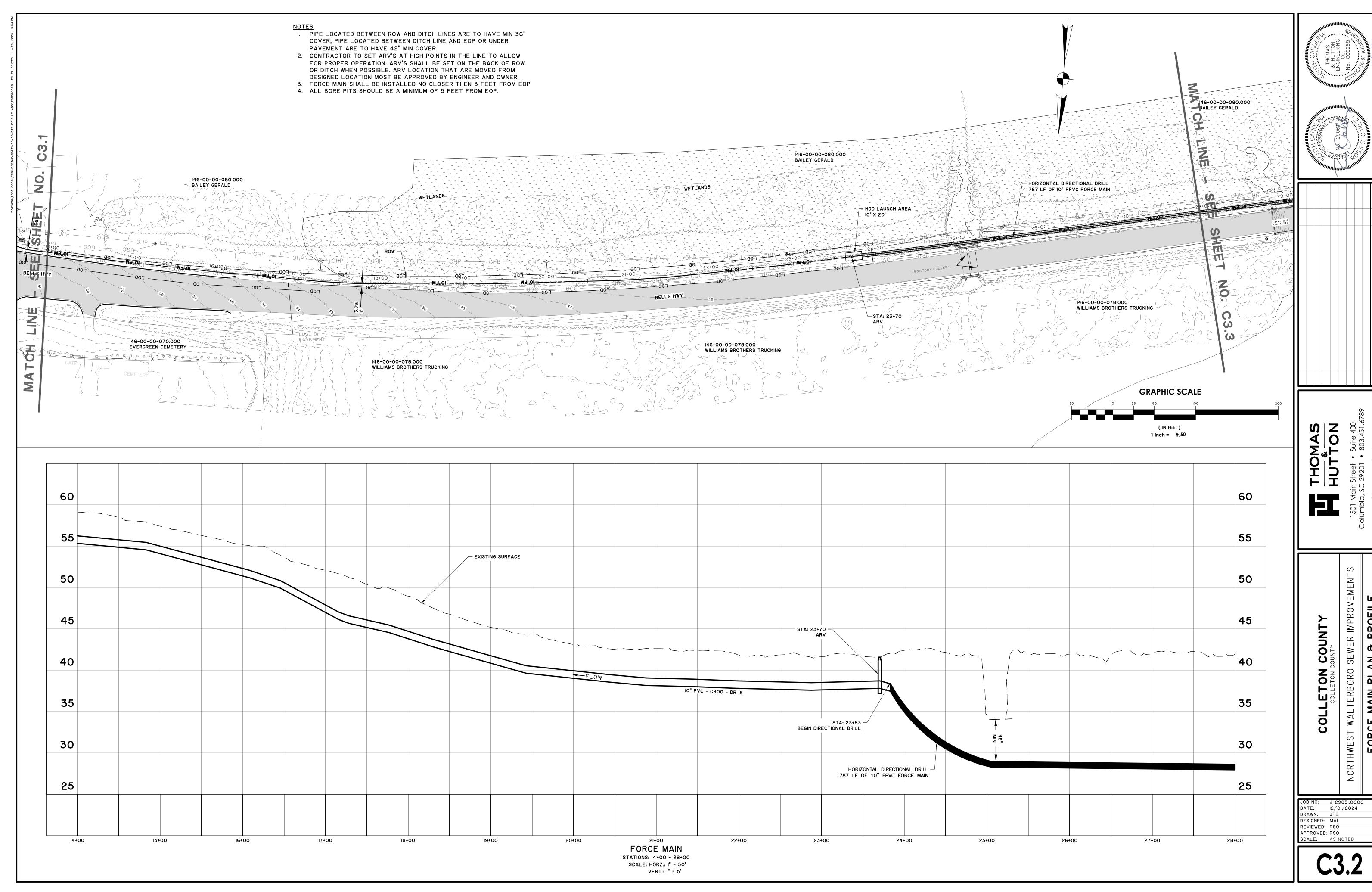




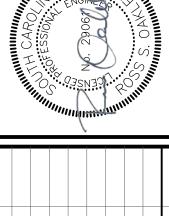


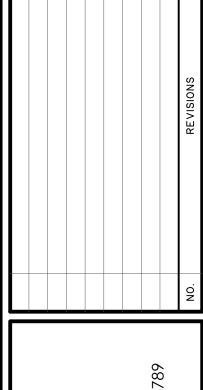


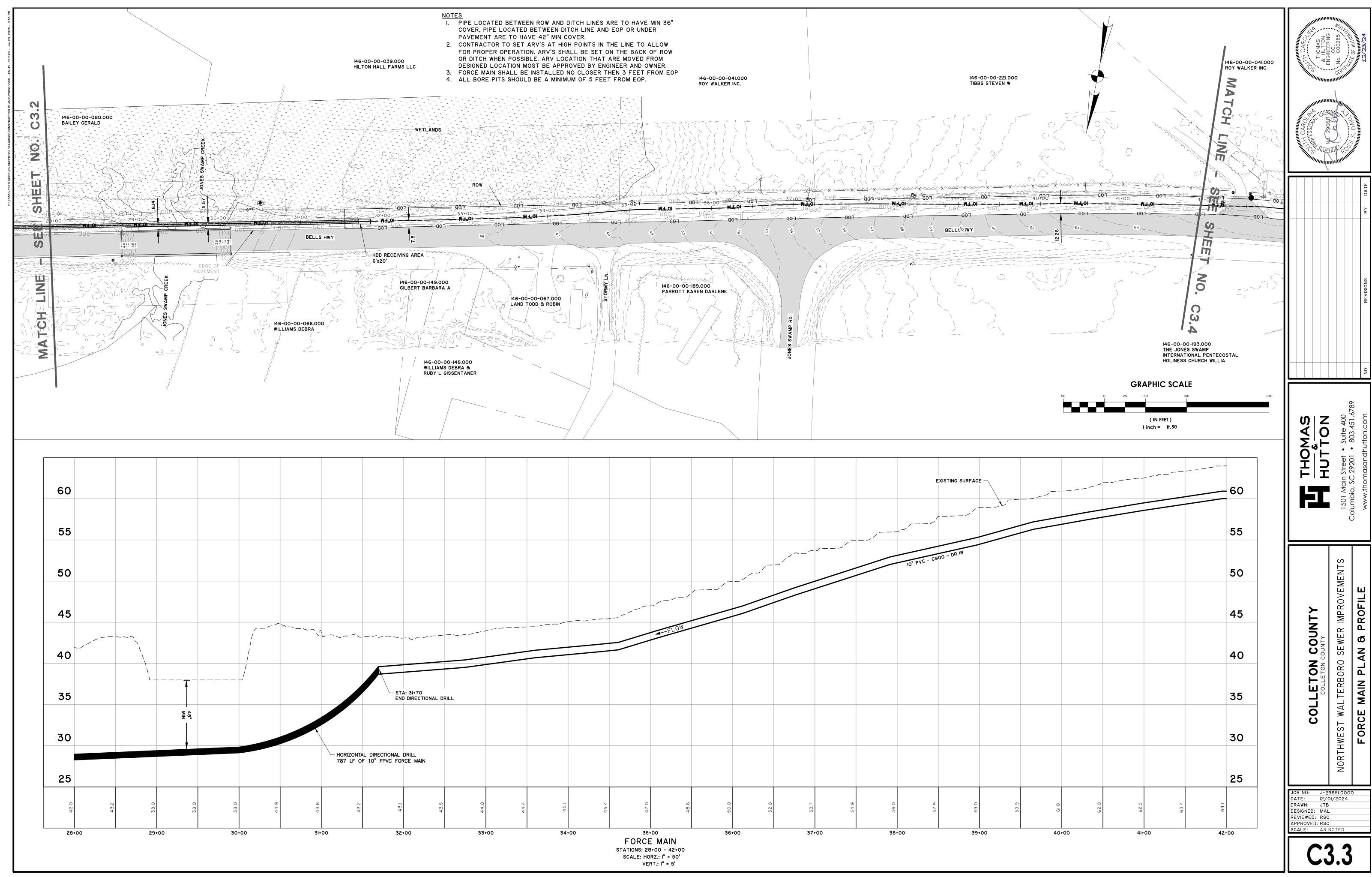


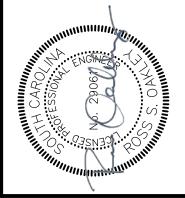


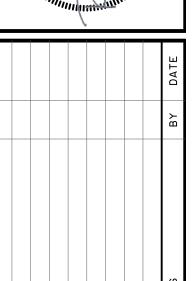


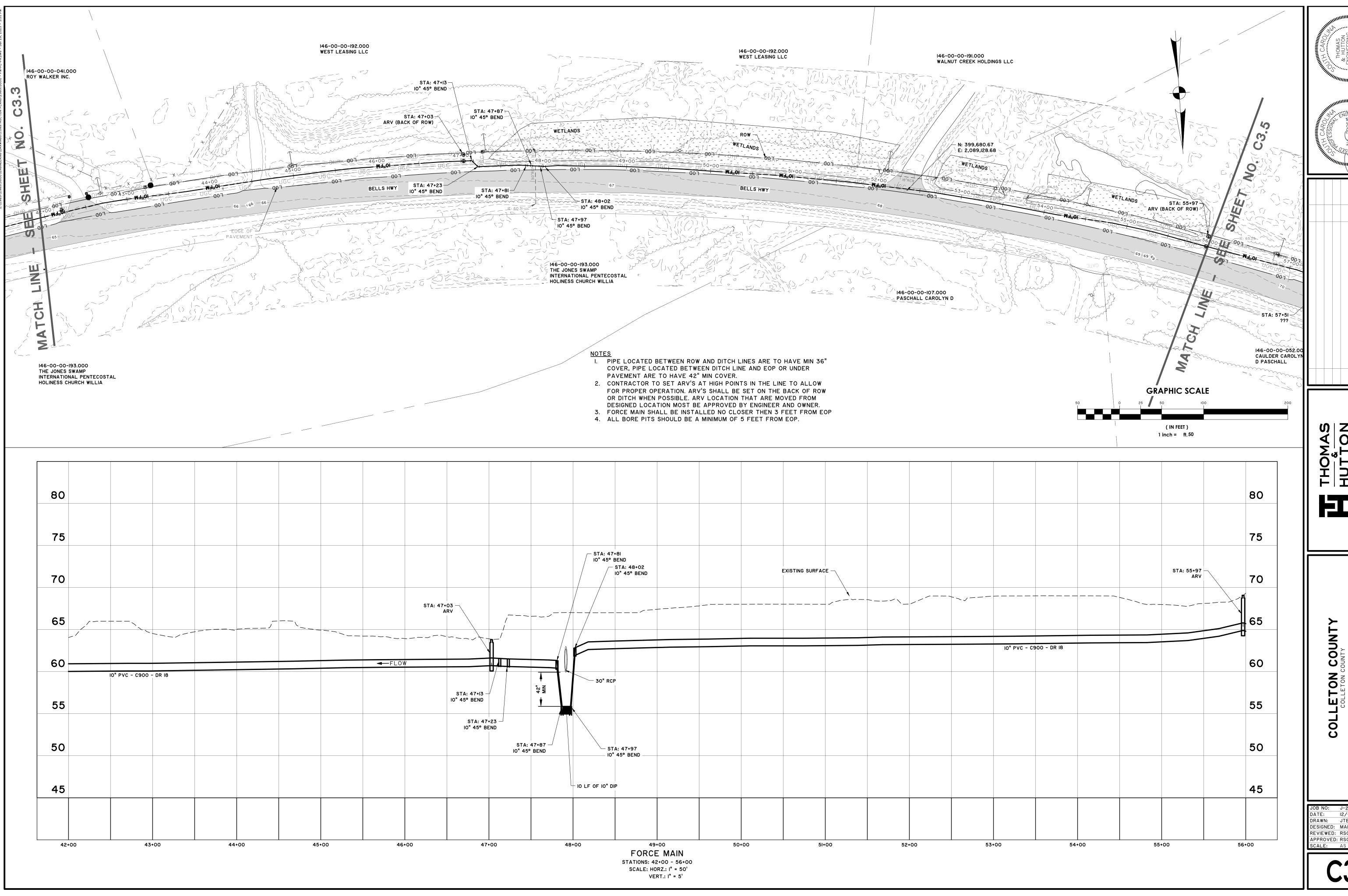


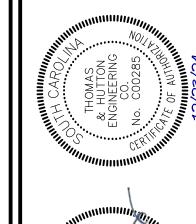










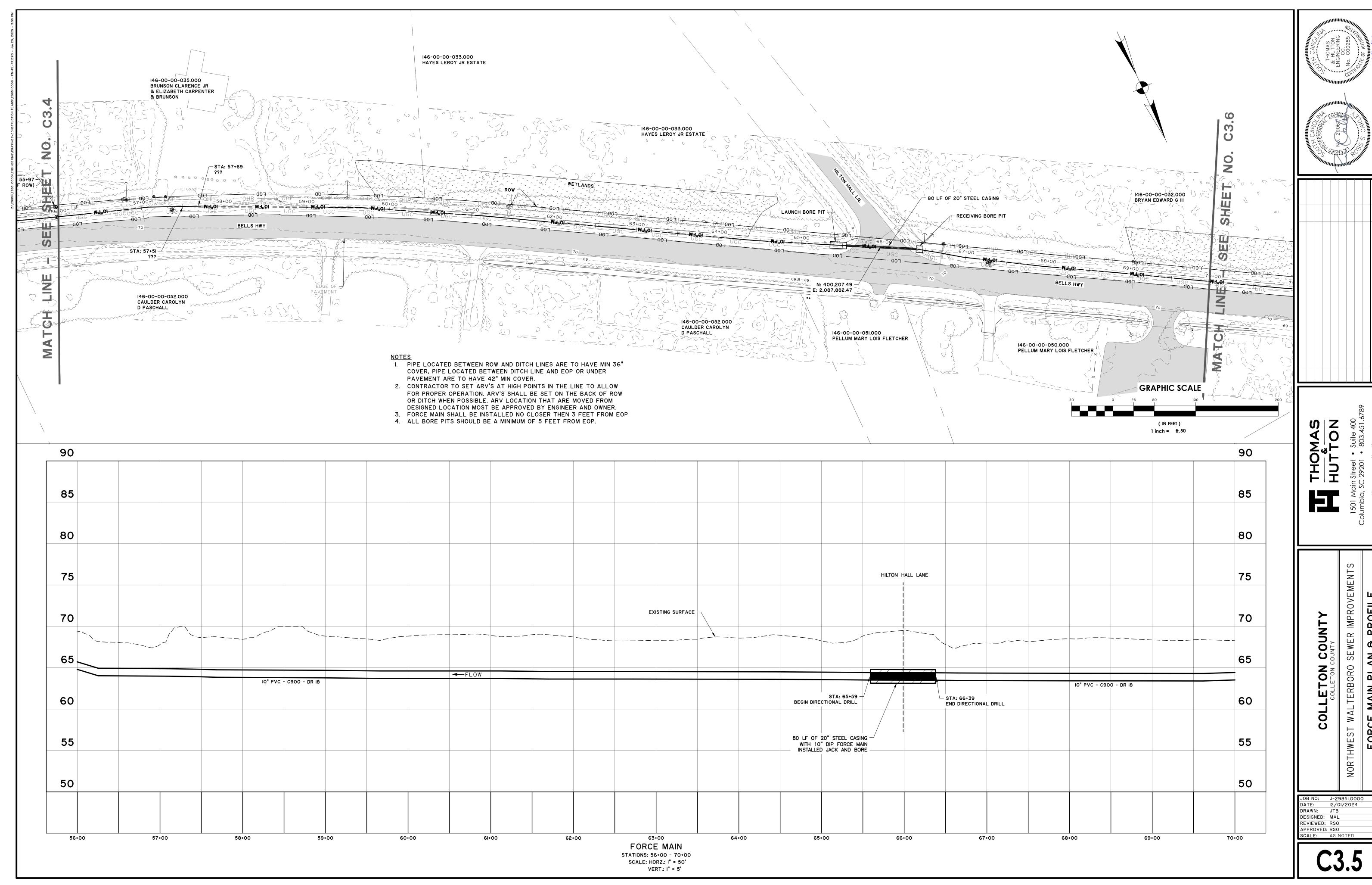




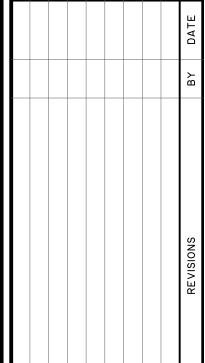


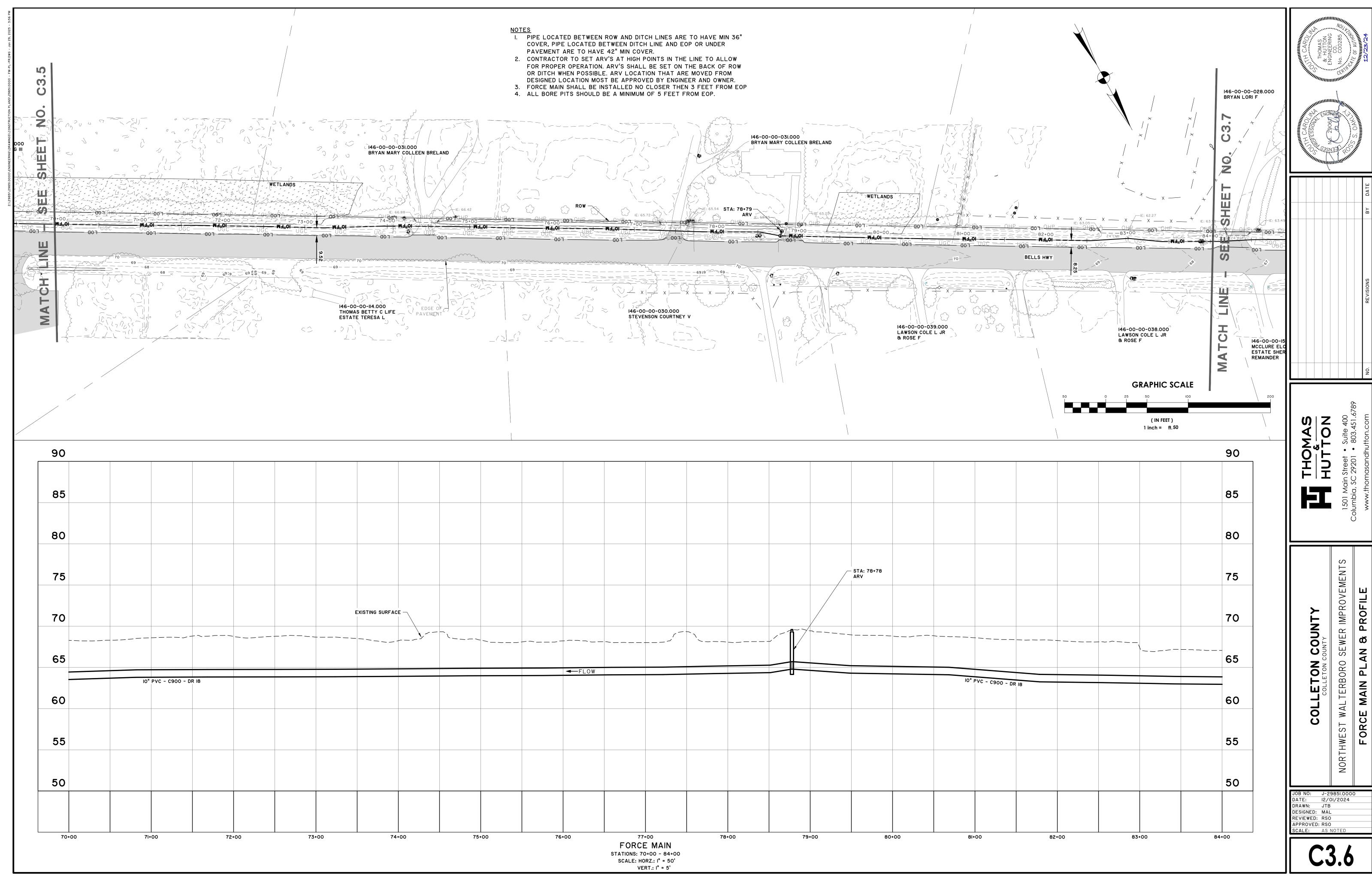
NORTHWEST WALTERBORO S FORCE MAIN PLAN

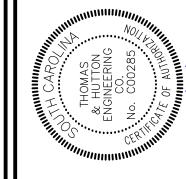
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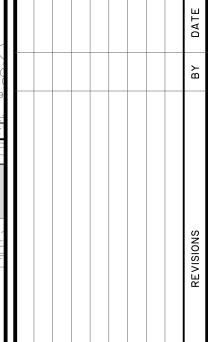


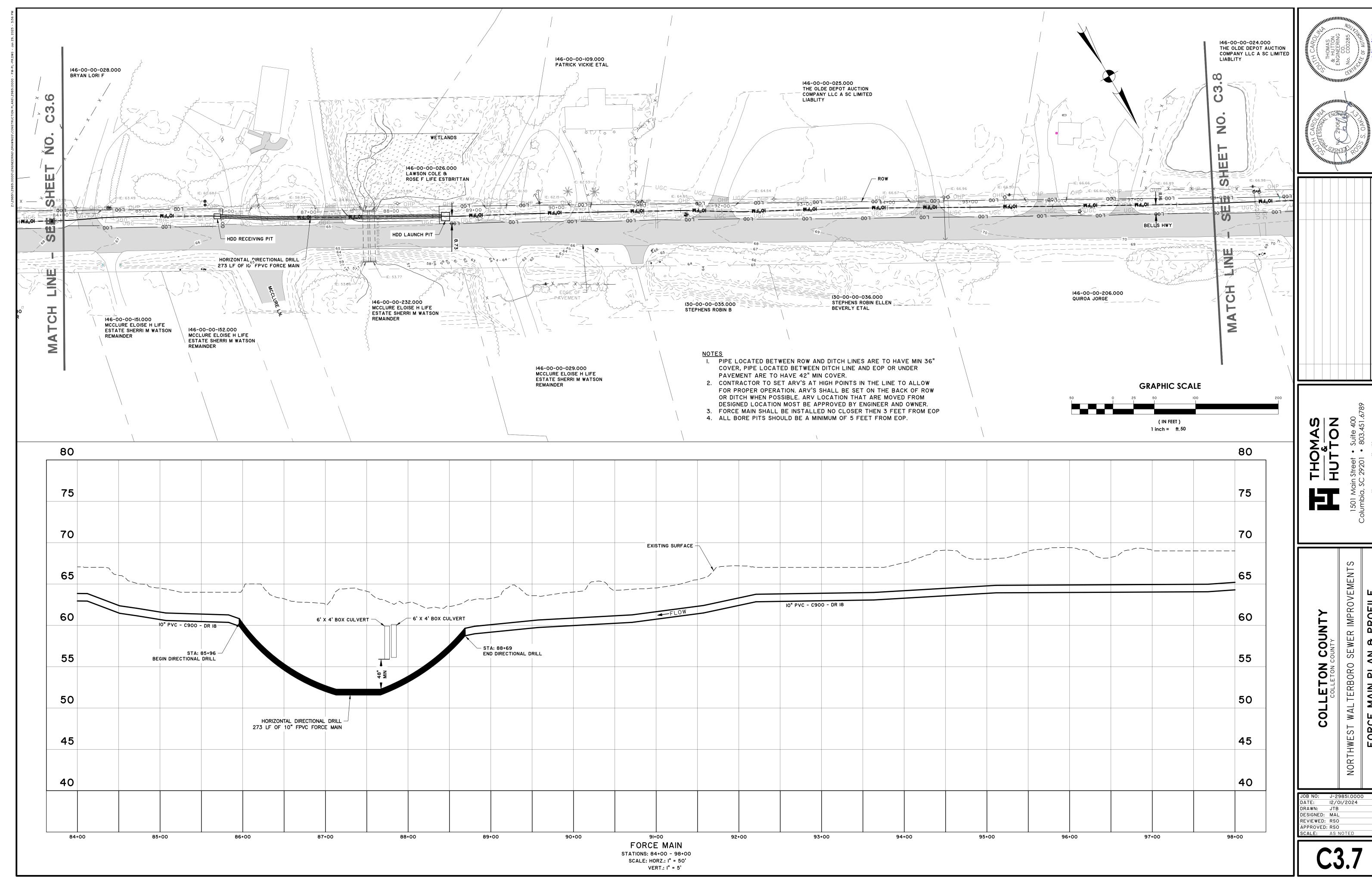


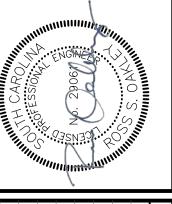


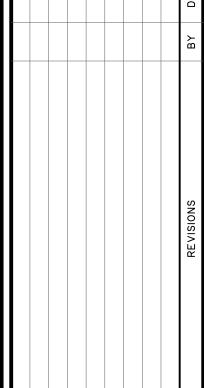


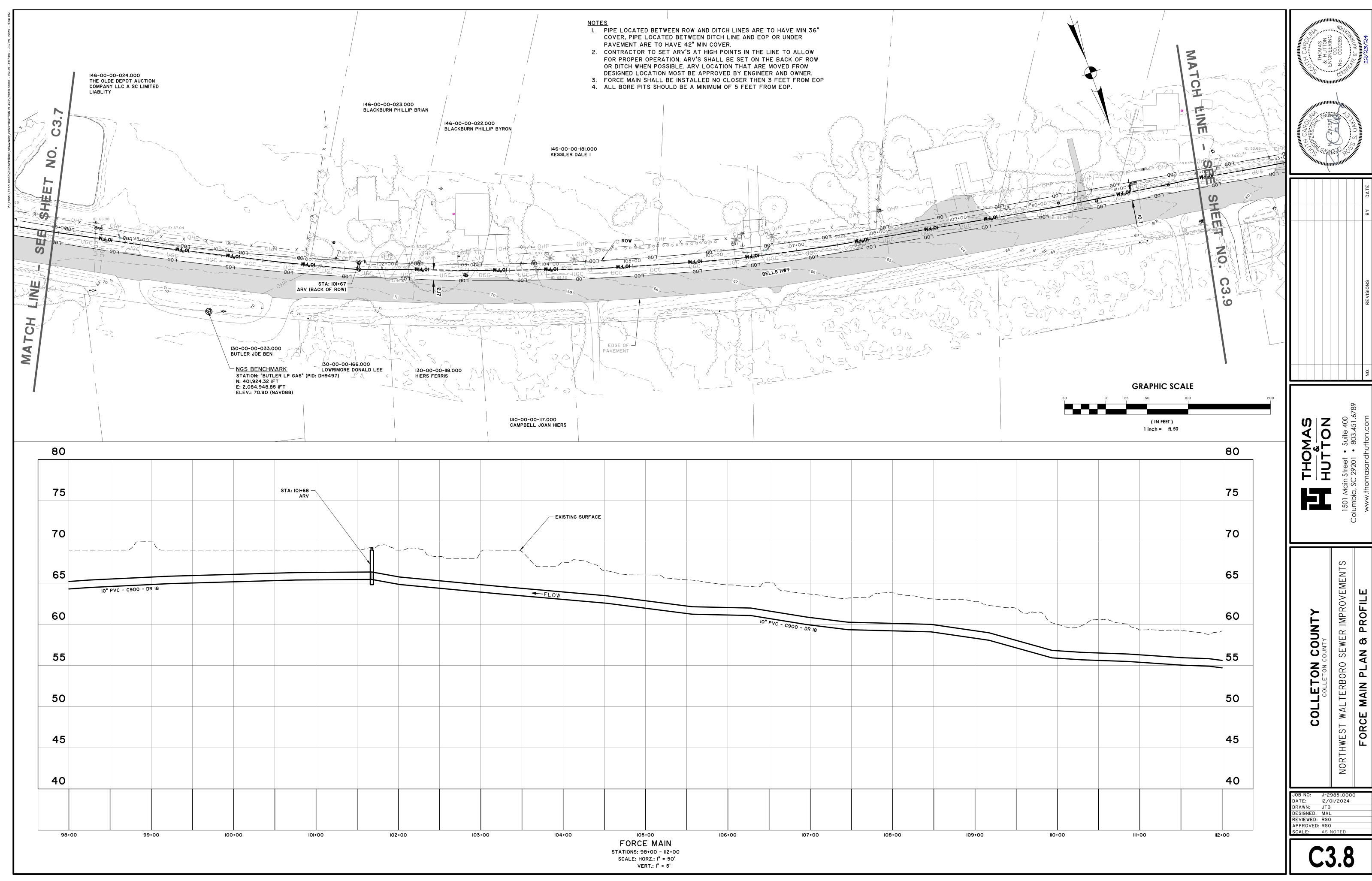


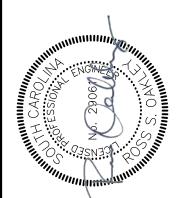


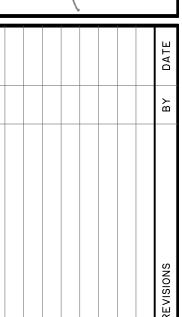


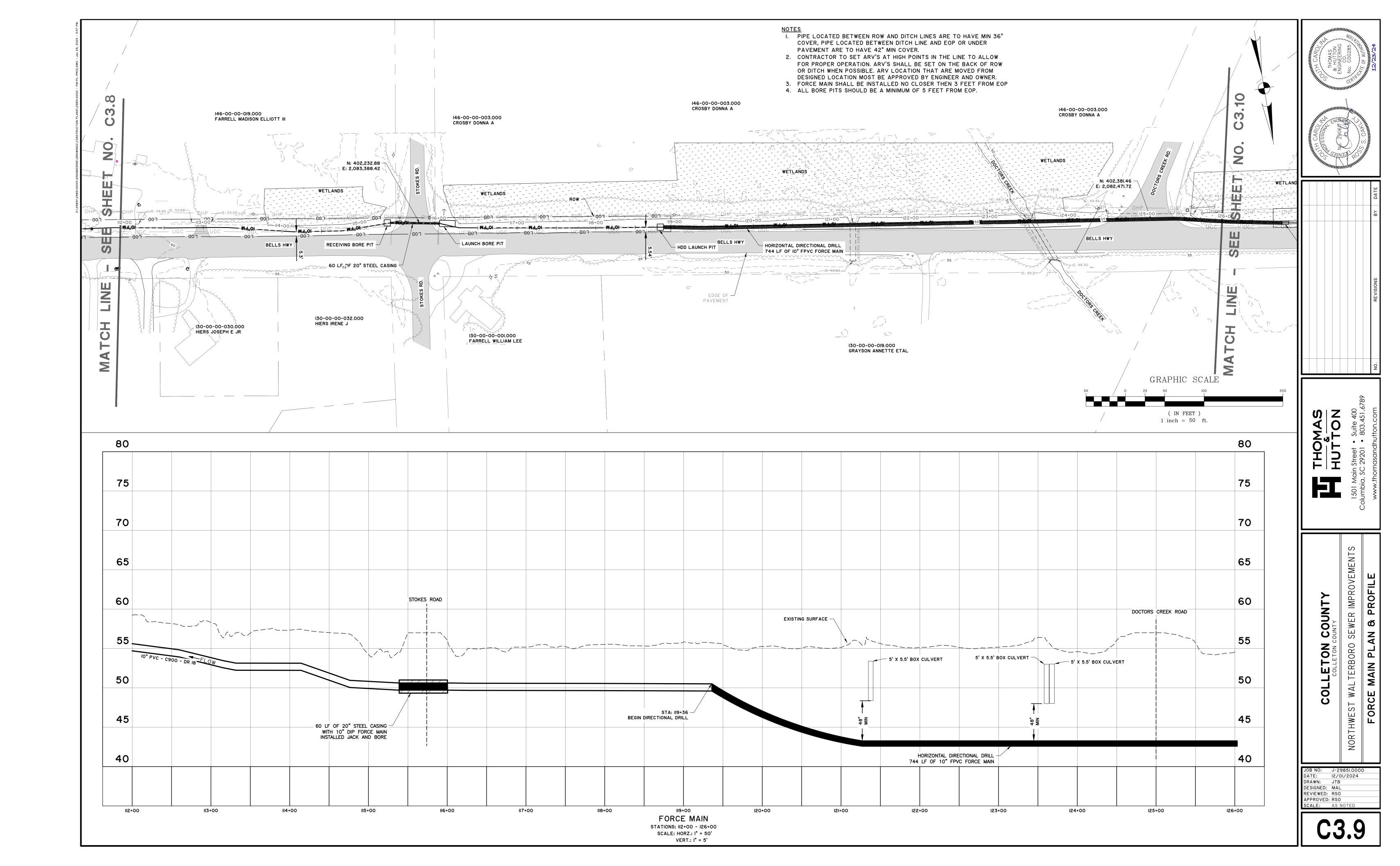


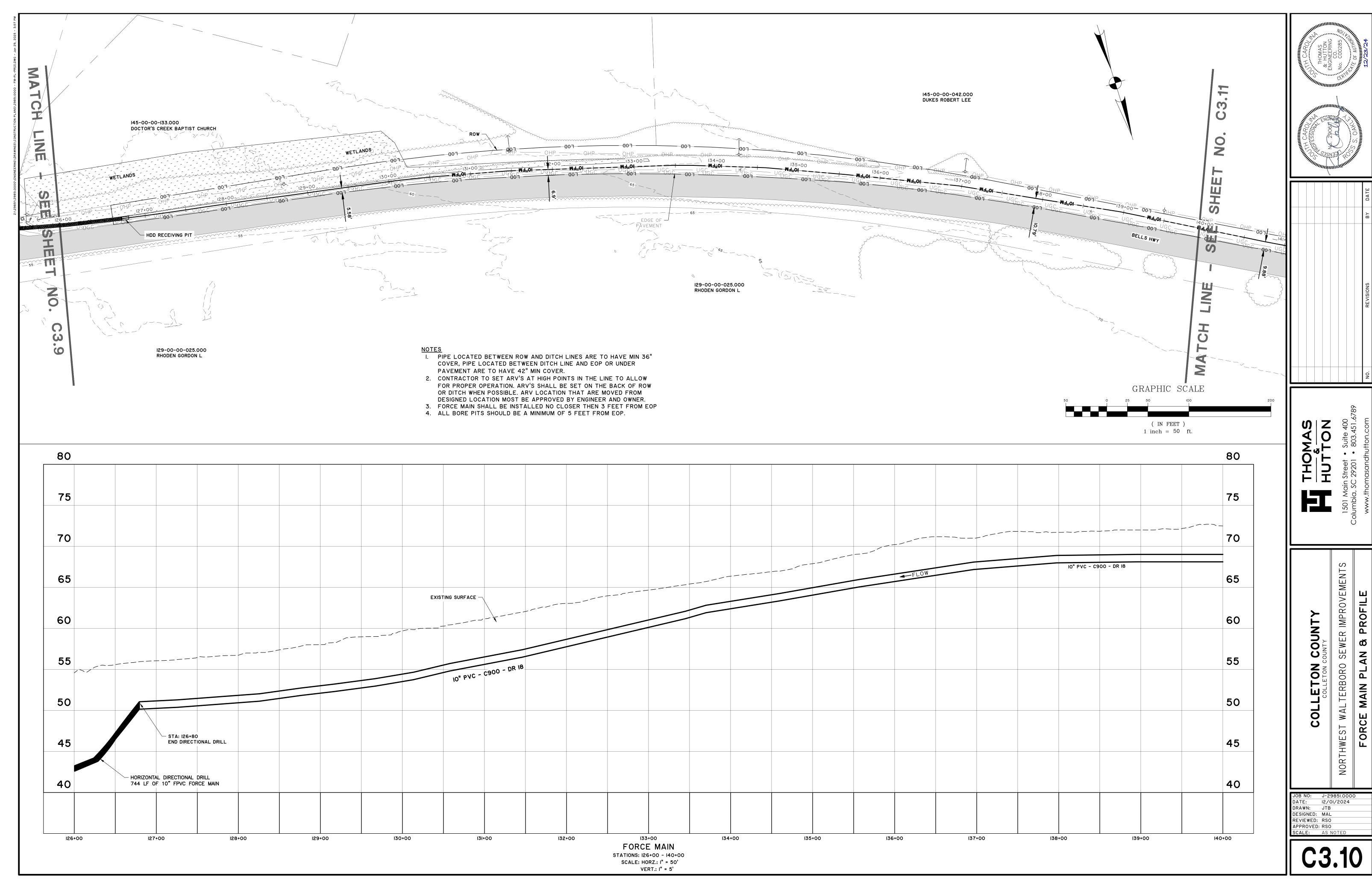




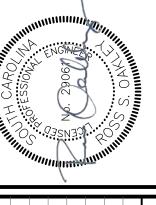


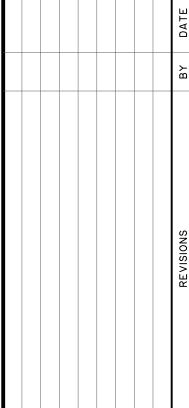


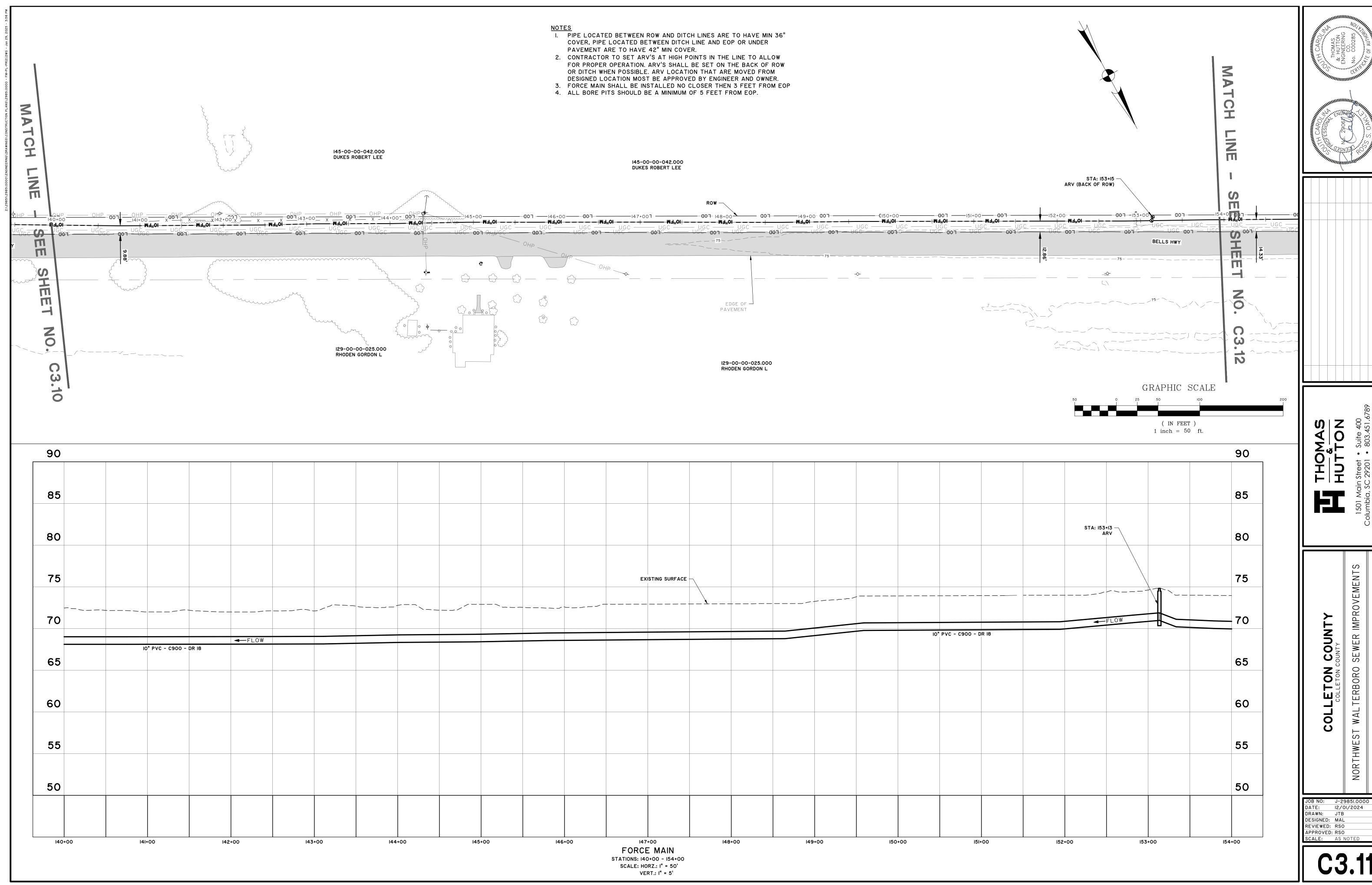


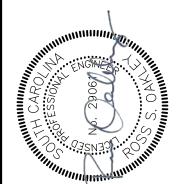


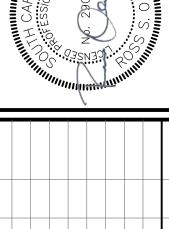


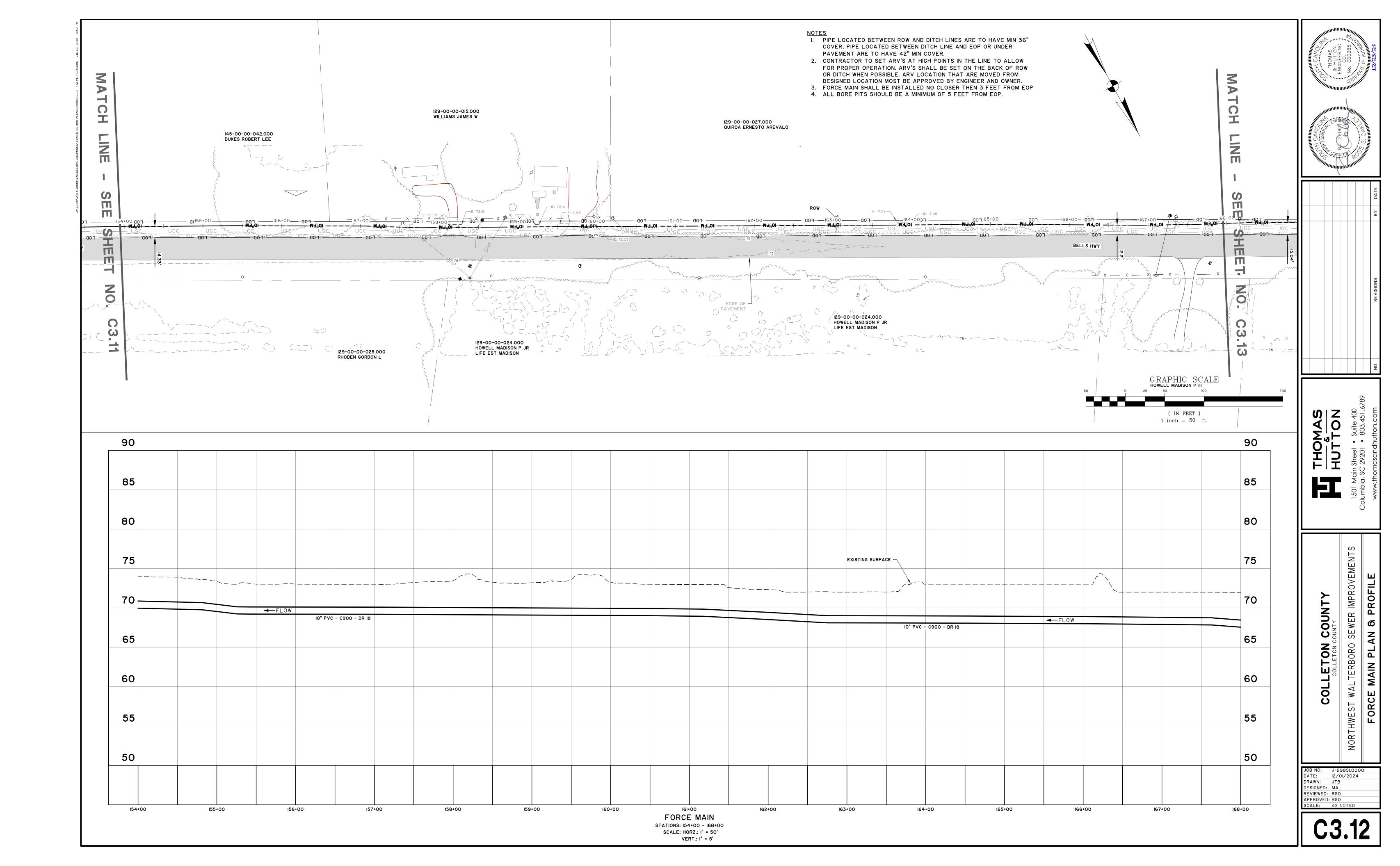


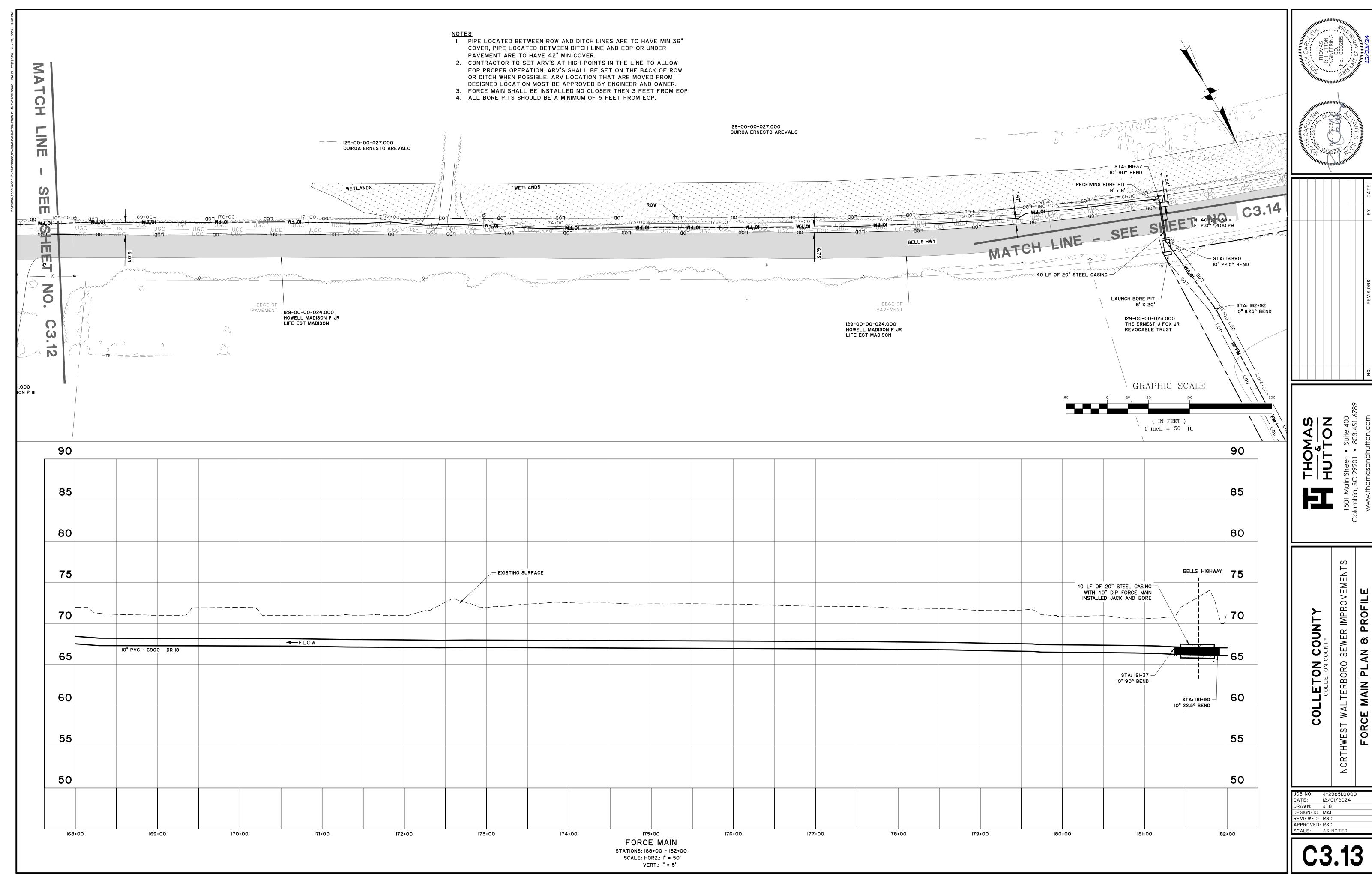




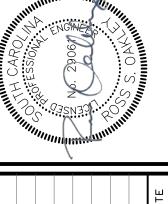


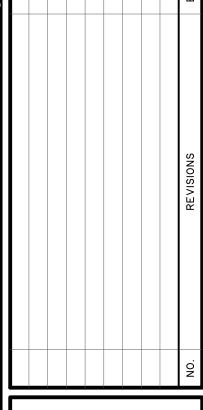


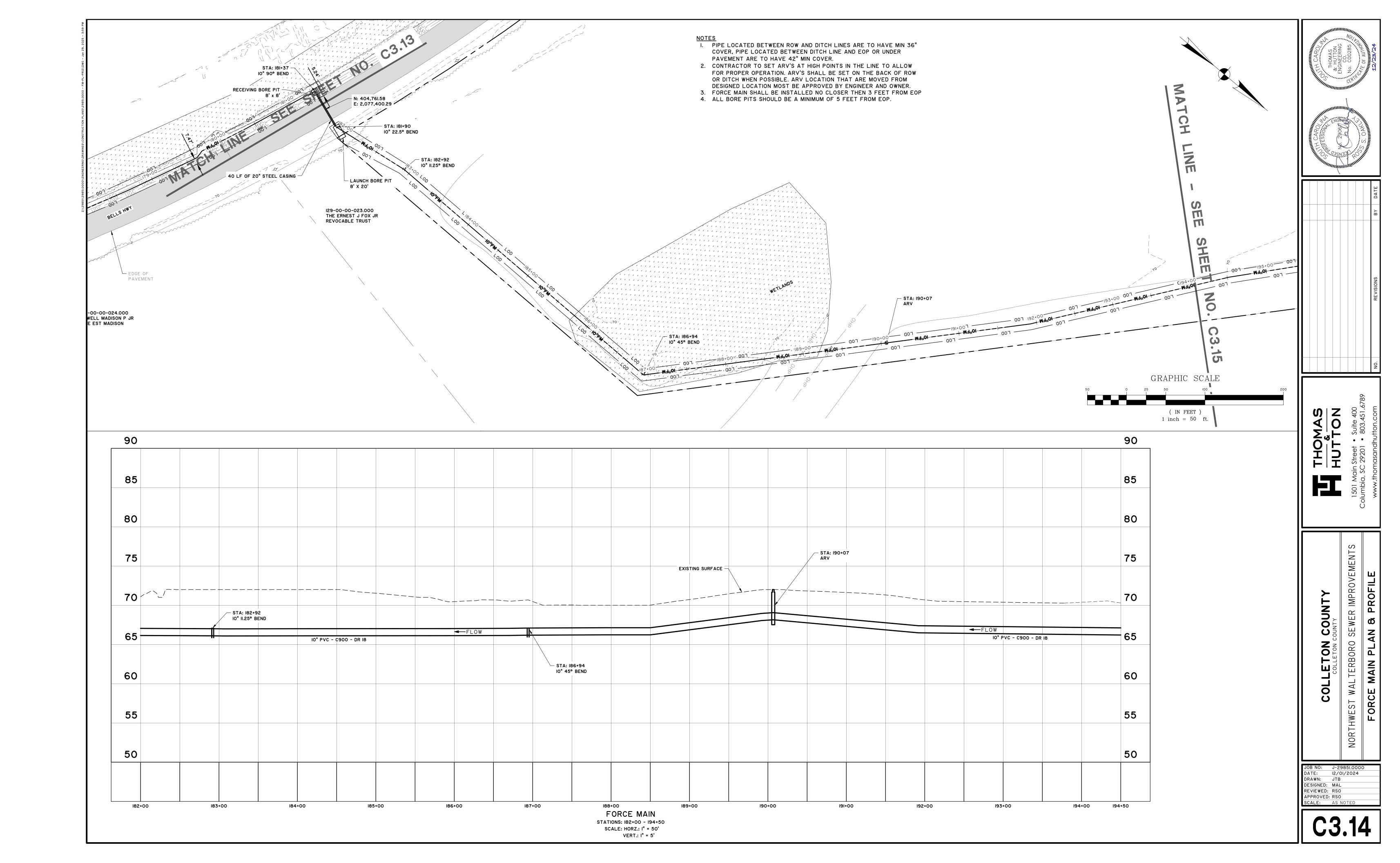


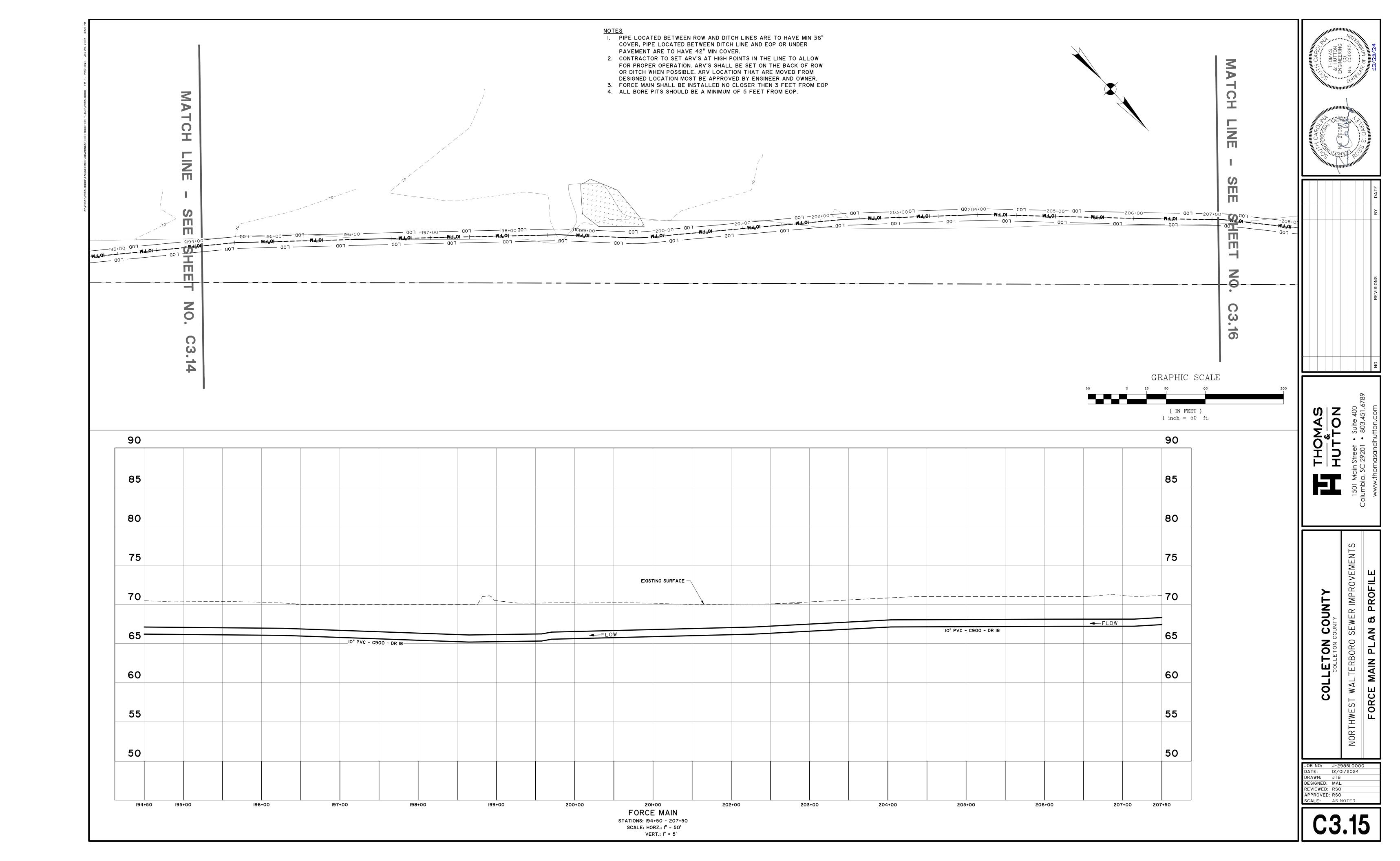


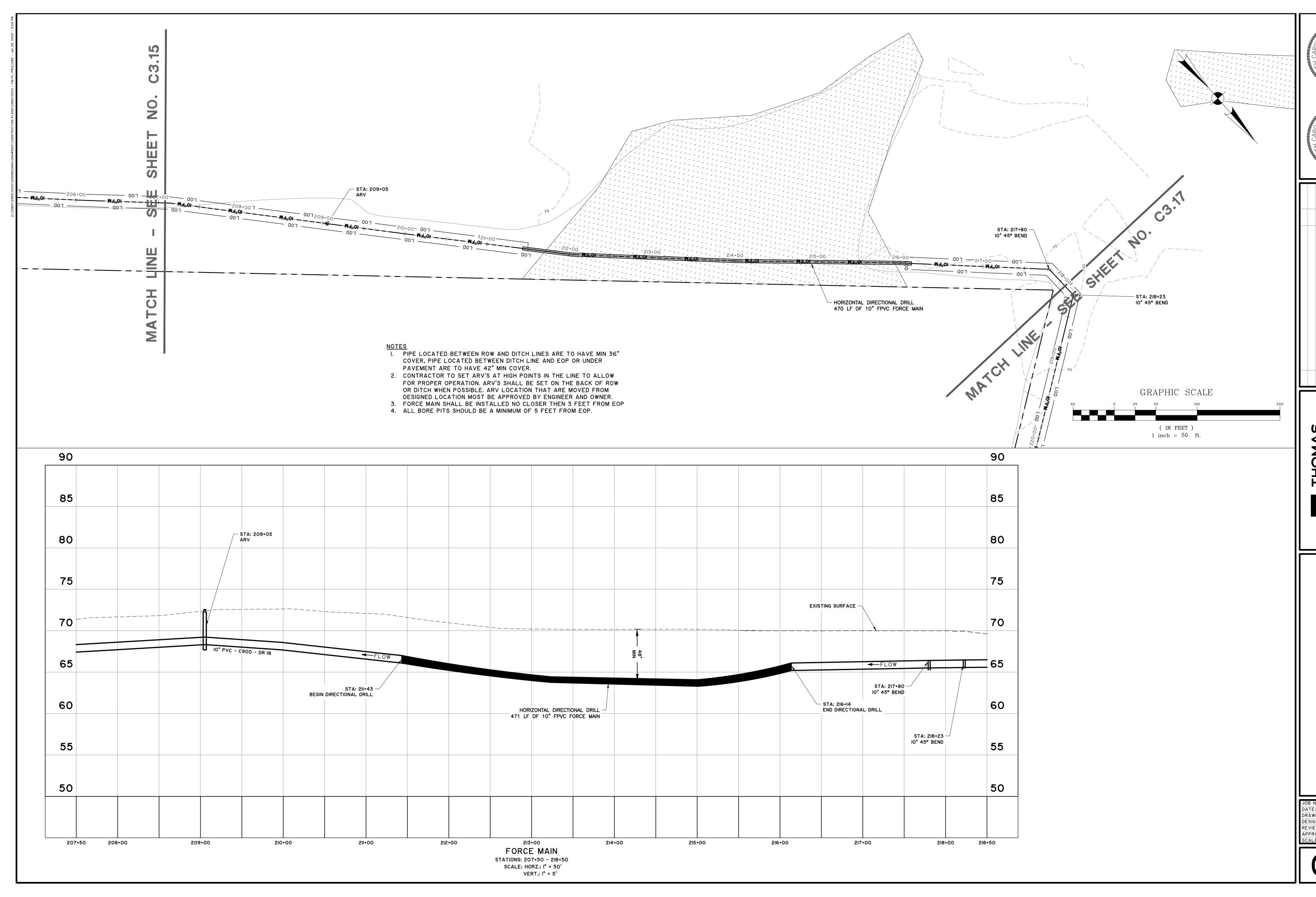


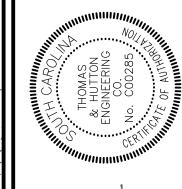


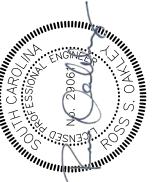




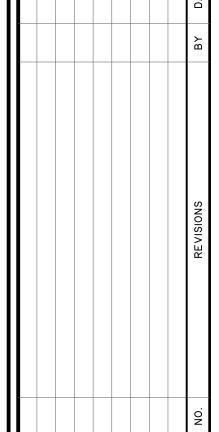




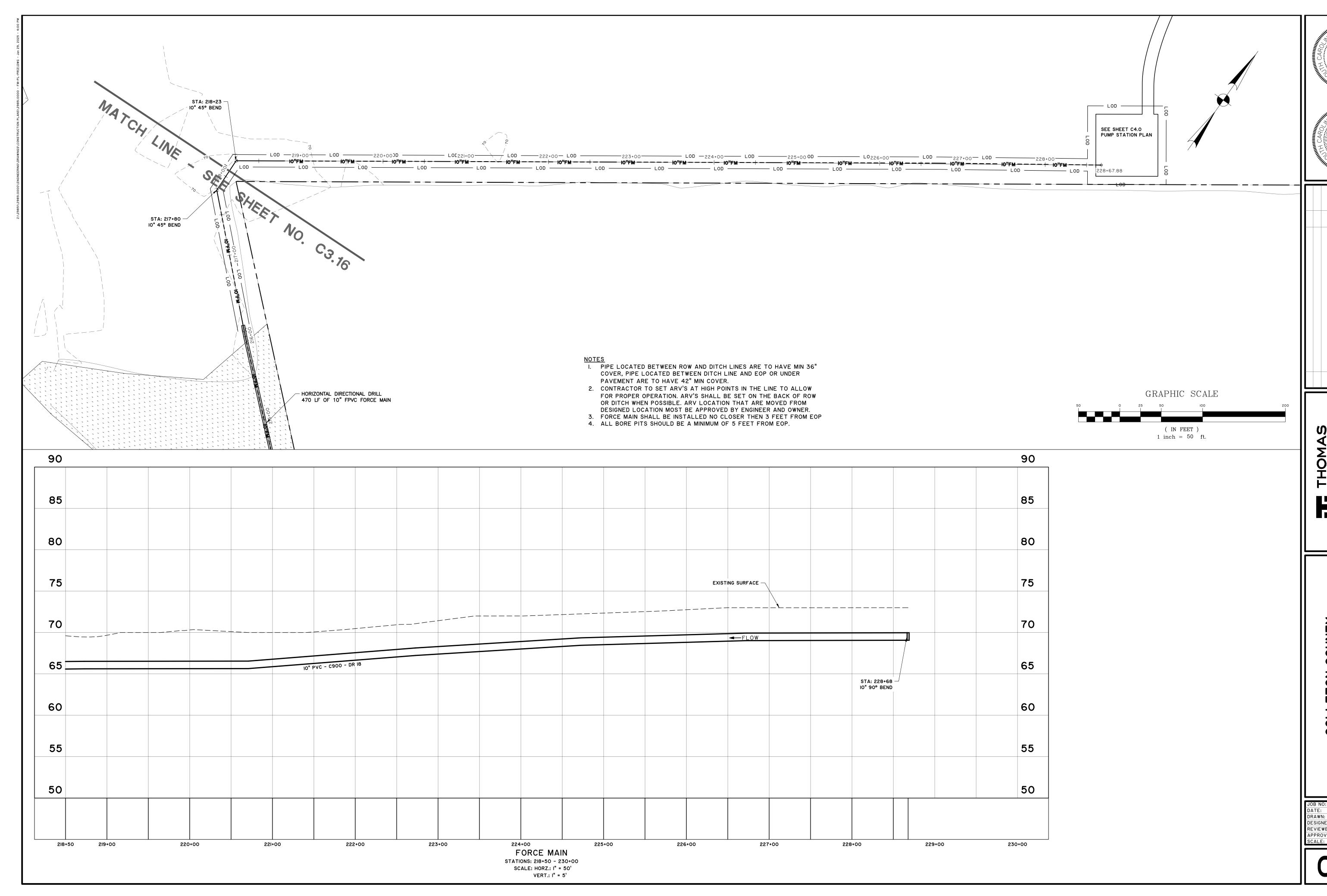


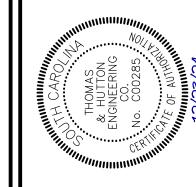


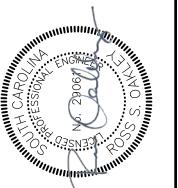


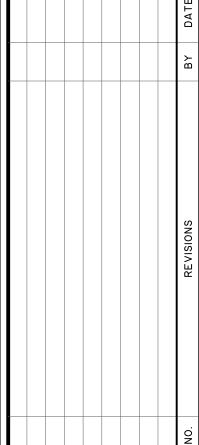


DRAWN: JTB
DESIGNED: MAL
REVIEWED: RSO APPROVED: RSO
SCALE: AS NOTED









THOMAS

THOMAS

HUTTON

Ol Main Street • Suite 400

1501 Main Street • S Columbia, SC 29201 • 8

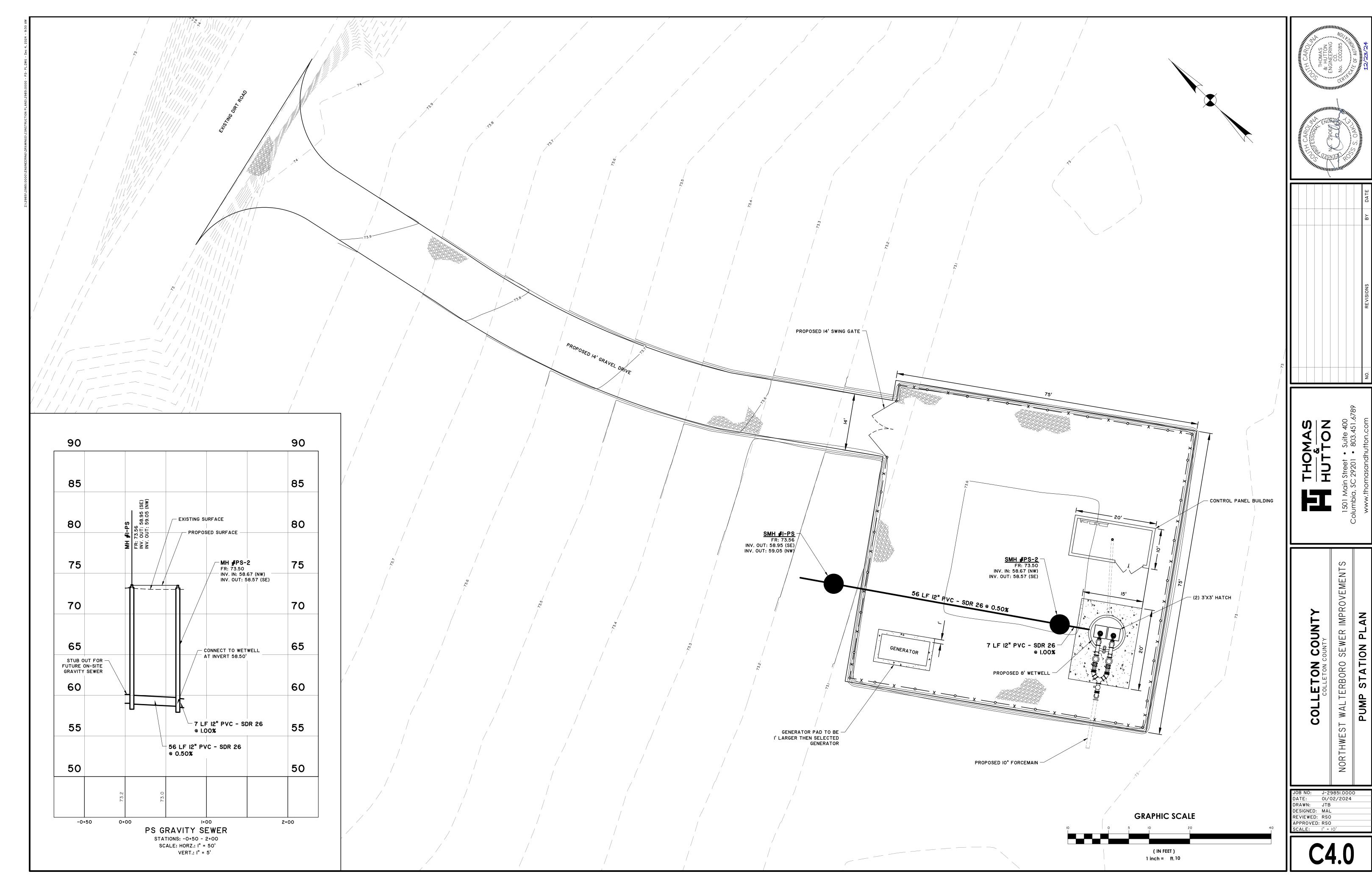
> O SEWER IMPROVEMENTS -AN & PROFILE

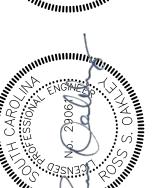
WEST WALTERBORO SEWER

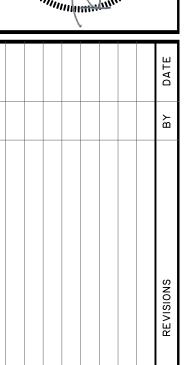
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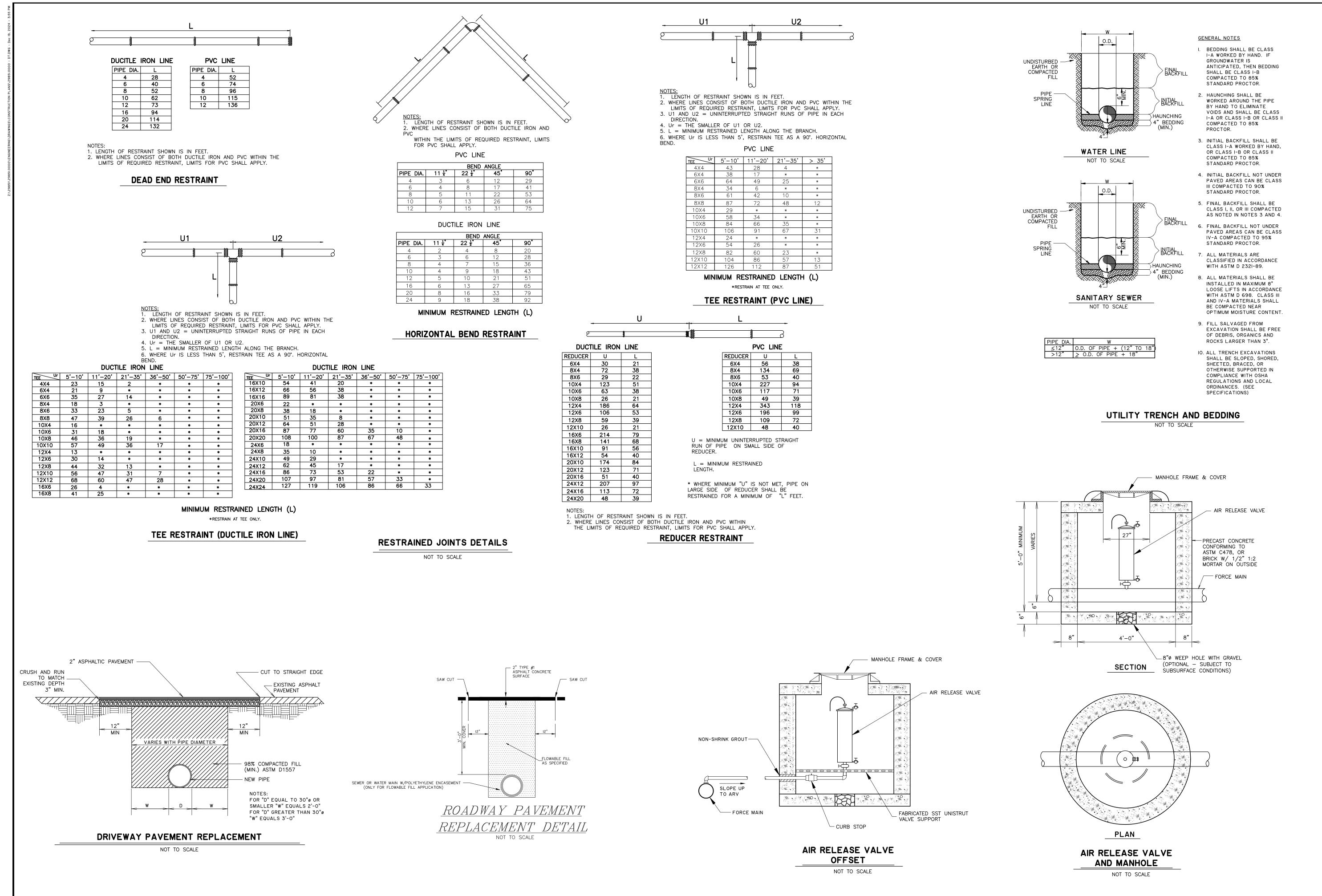
DATE: 12/01/20
DRAWN: JTB
DESIGNED: MAL
REVIEWED: RSO
APPROVED: RSO
SCALE: AS NOTE

C3.17



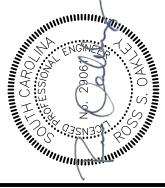






THOMAS THOMAS & HUTTON ENGINEERING CO. CO. 285.08





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					REVISIONS

HUTTON

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a, SC 29201 • 803.451.6789

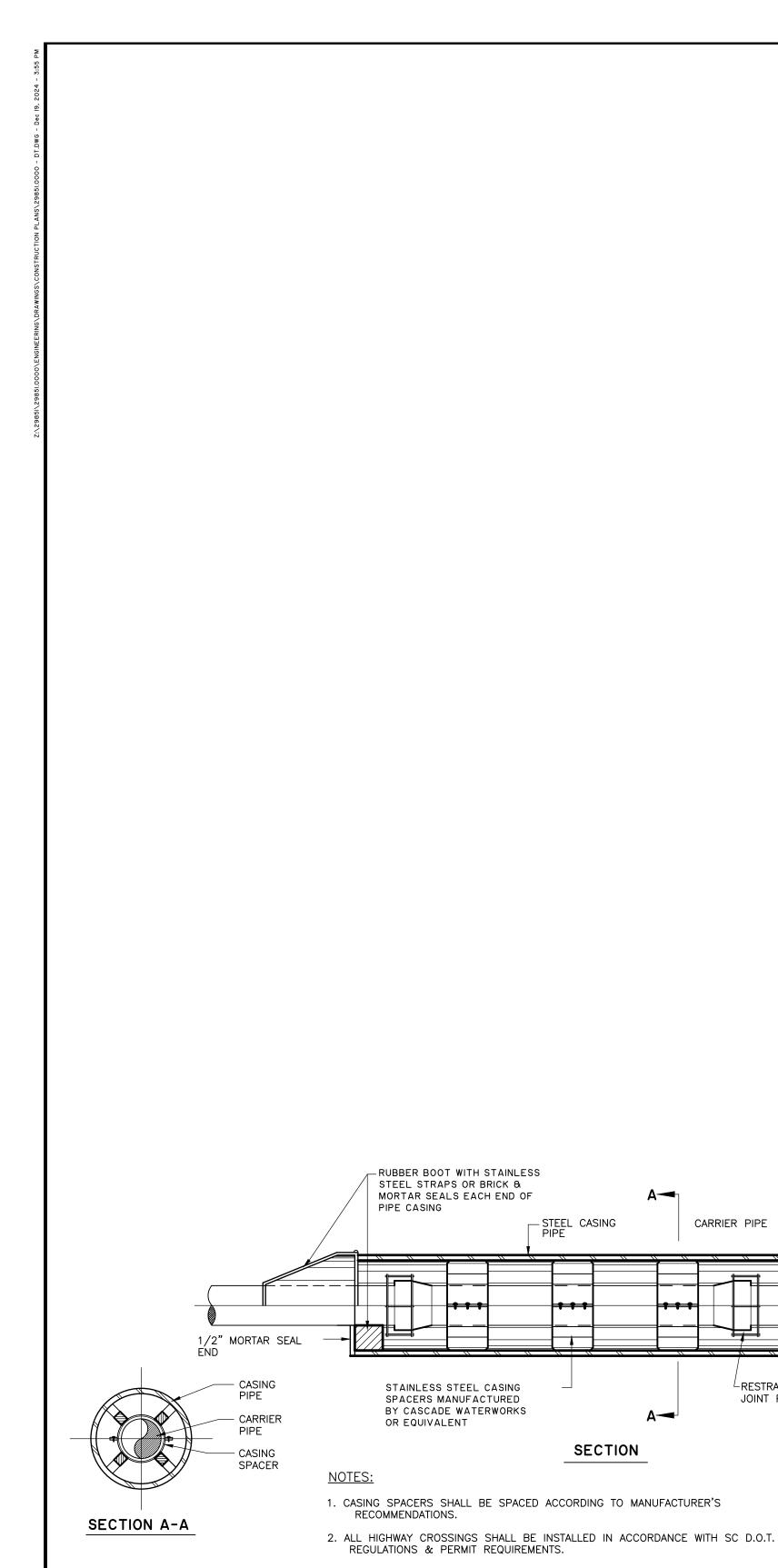
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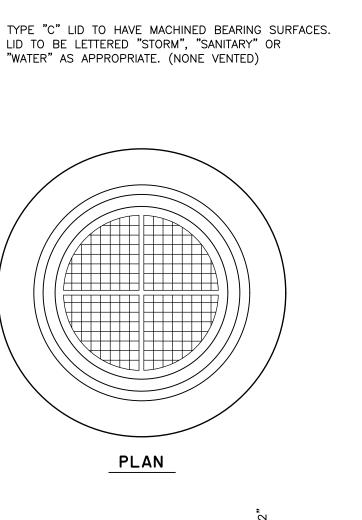
OLLETON COUNTY
COLLETON COUNTY
WALTERBORO SEWER IMPROVEMENT

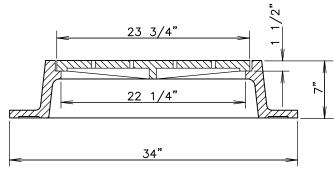
NORTHWEST W

JOB NO: J-2985I.0000
DATE: OI/O2/2024
DRAWN: JTB
DESIGNED: MAL
REVIEWED: RSO
APPROVED: RSO
SCALE: N/A 37'

C5.0



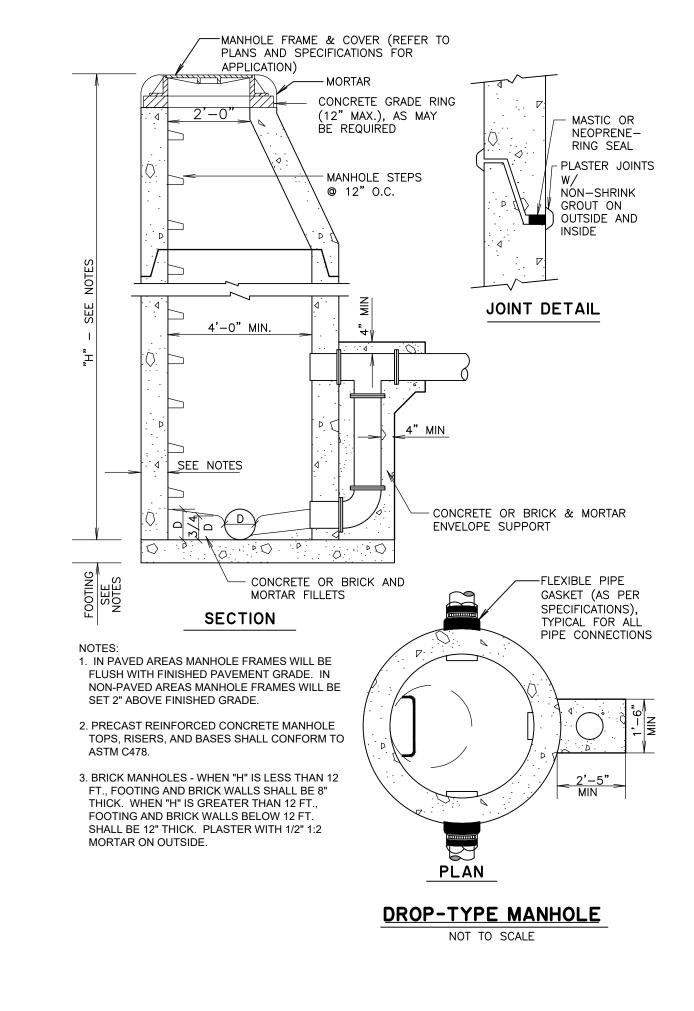


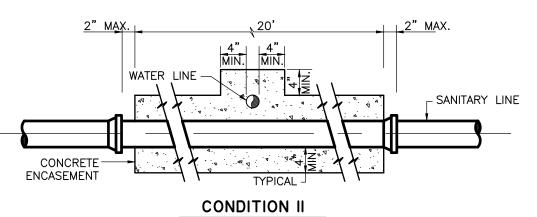


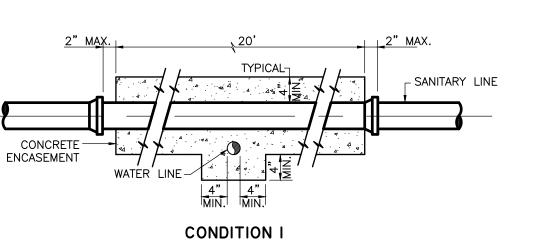
MANHOLE FRAME AND COVER DETAIL

SECTION

NOT TO SCALE



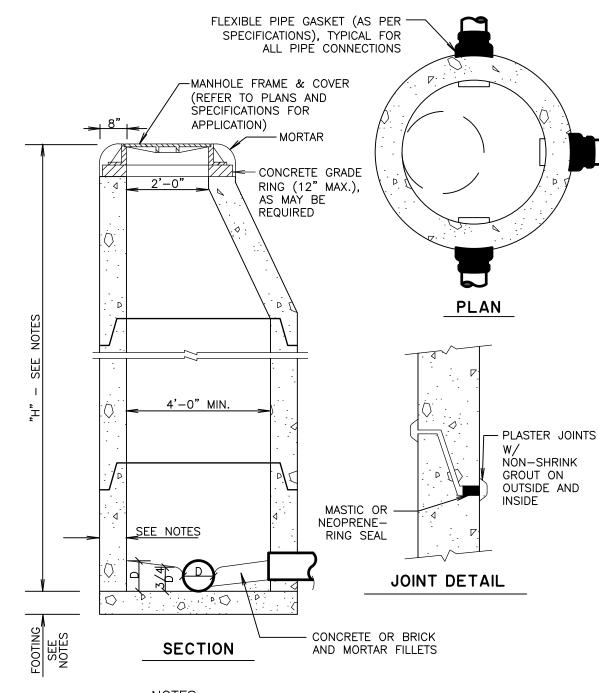




1. CONCRETE ENCASEMENT AS DETAILED ABOVE SHALL BE USED AT ALL SEWER & WATER MAIN CROSSINGS THAT HAVE LESS THAN 18" CLEARANCE BETWEEN THE O.D. OF THE PIPES. WHERE WATER & SEWER MAINS CROSS WITH LESS THAN 18" VERTICAL CLEARANCE, THE SEWER SHALL CONSIST OF 20' OF CONCRETE ENCASED PVC PIPE CENTERED ON THE POINT OF CROSSING.

2. WHERE WATER LINE CROSSES BELOW SEWER, ENCASEMENT IS MANDATORY, REGARDLESS OF VERTICAL SEPARATION.

> WATER & SEWER **CROSSING DETAIL** NOT TO SCALE



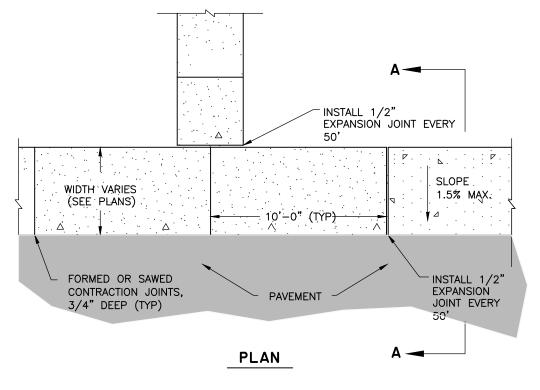
1. IN PAVED AREAS MANHOLE FRAMES WILL BE FLUSH WITH FINISHED PAVEMENT GRADE. IN NON-PAVED AREAS MANHOLE FRAMES WILL BE SET 2" ABOVE FINISHED GRADE.

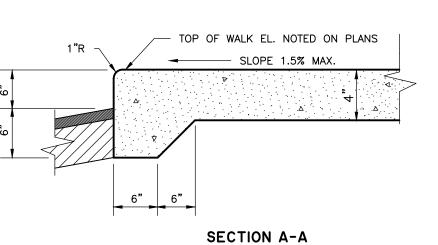
2. PRECAST REINFORCED CONCRETE MANHOLE TOPS, RISERS, AND BASES SHALL CONFORM TO ASTM C478.

3. BRICK MANHOLES - WHEN "H" IS LESS THAN 12 FT., FOOTING AND BRICK WALLS SHALL BE 8" THICK. WHEN "H" IS GREATER THAN 12 FT., FOOTING AND BRICK WALLS BELOW 12 FT. SHALL BE 12" THICK. PLASTER WITH 1/2" 1:2 MORTAR ON OUTSIDE.

STANDARD MANHOLE

NOT TO SCALE





SIDEWALK AND WALKWAY REPAIR DETAILS NOT TO SCALE

DATE: 01/02/2024 DRAWN: JTB DESIGNED: MAL REVIEWED: RSO APPROVED: RSO SCALE: N/A

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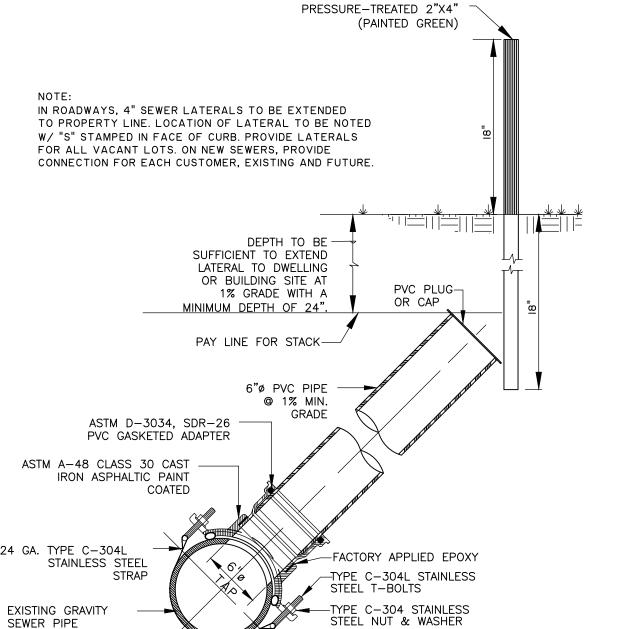
S

SEWER IMPROVEMENT

WALTERBORO

S

NORTHWE



24 GA. TYPE C-304L STAINLESS STEEL

3. ALL RAILROAD CROSSINGS SHALL BE INSTALLED IN ACCORDANCE TO AMERICAN RAILWAY ENGINEERING ASSOCIATION REGULATIONS, UNDER PART 5, PIPELINES (LATEST EDITION) AND PERMIT REGULATIONS.

— STEEL CASING PIPE

SECTION

CARRIER PIPE

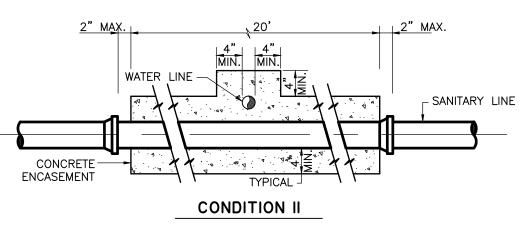
LRESTRAINED OR LOCK

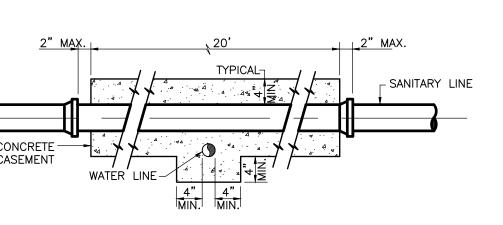
JOINT PIPE (TYP)

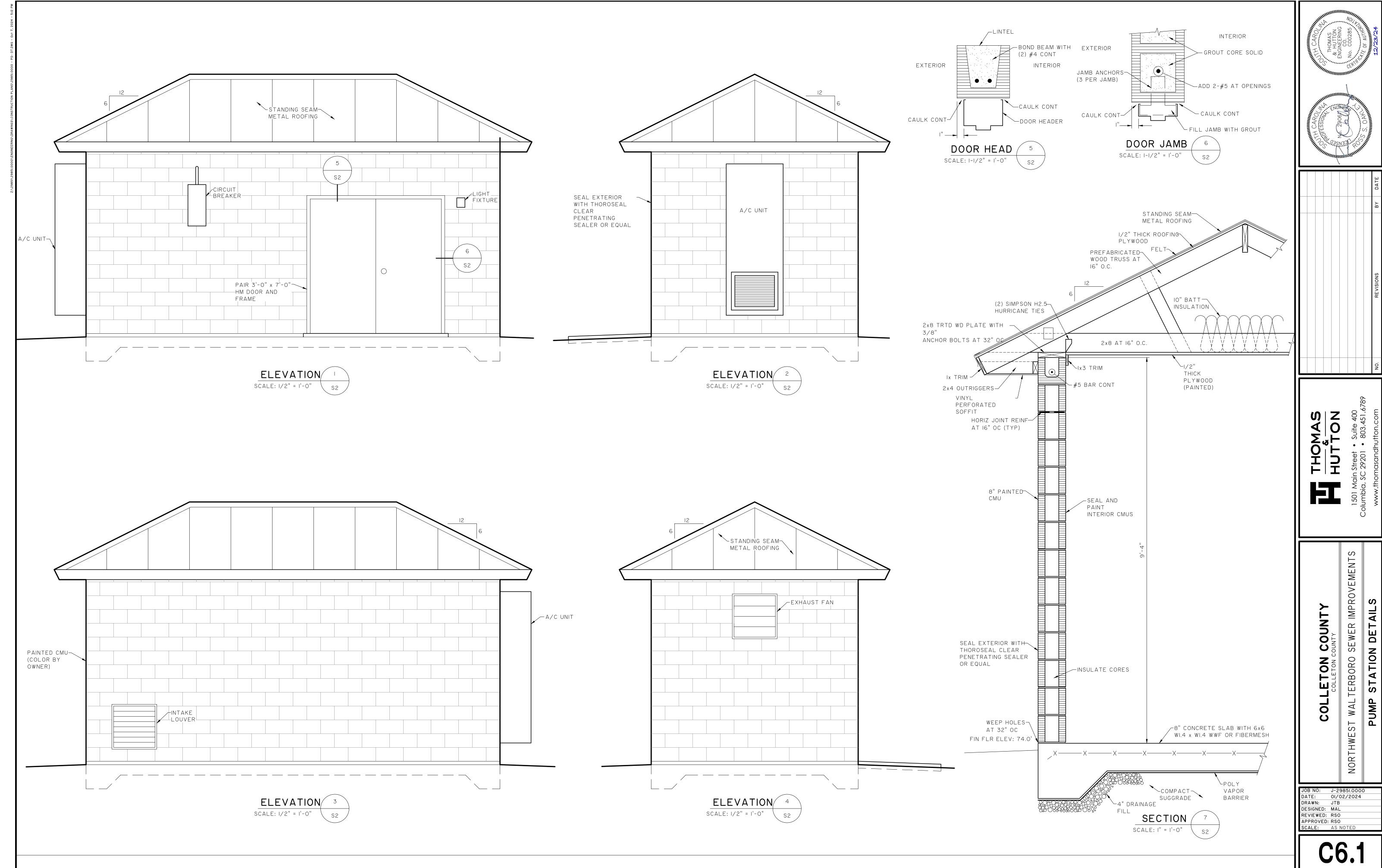
CASING PIPE DETAIL

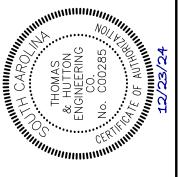
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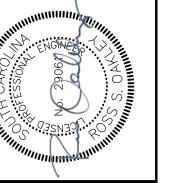


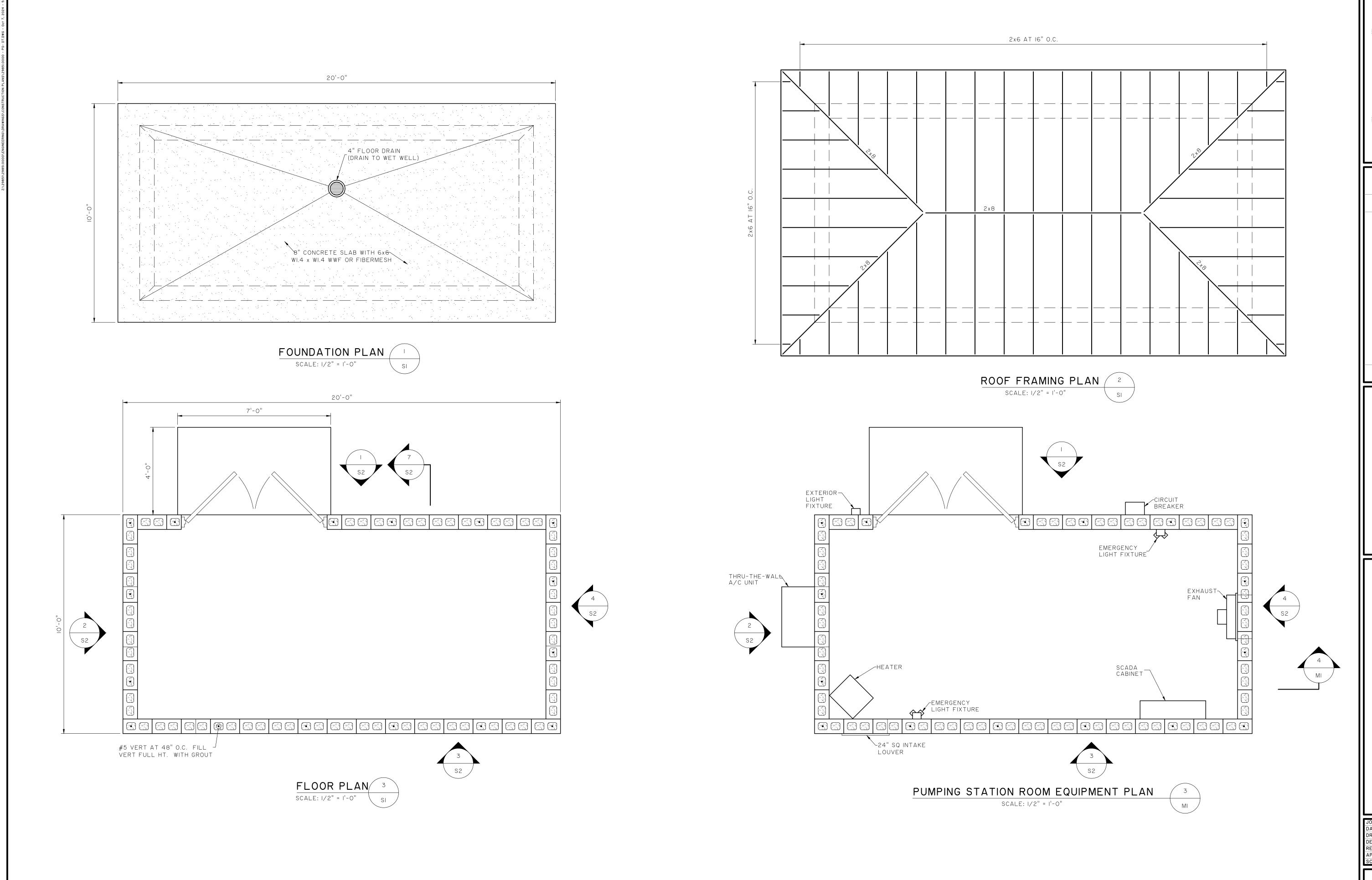


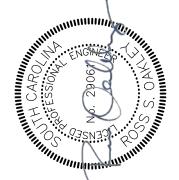








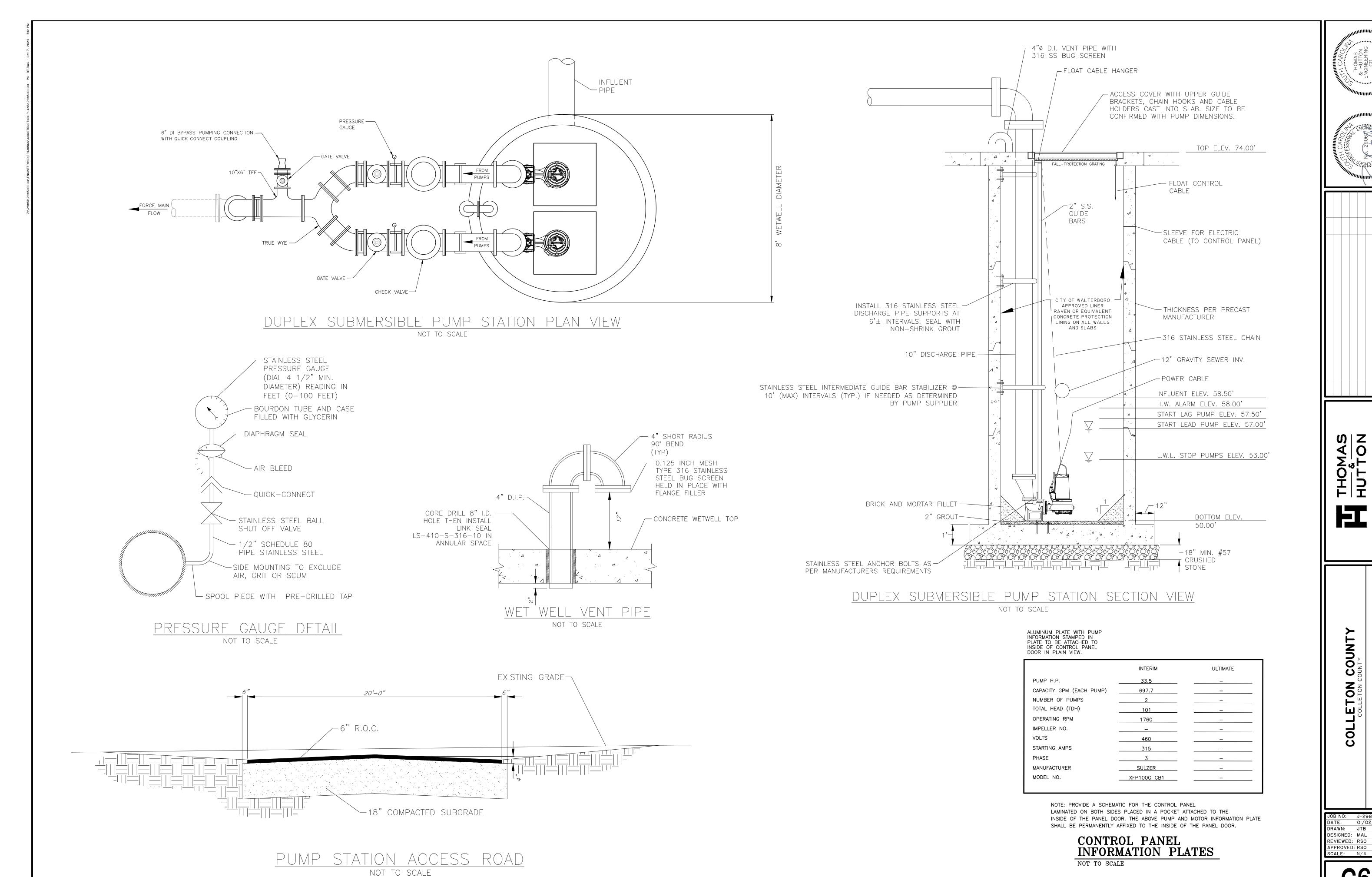




NORTHWEST WALTERBORO SEWER IMPROVEMENTS
PUMP STATION DETAILS

JOB NO: J-2985I.0000
DATE: OI/O2/2024
DRAWN: JTB
DESIGNED: MAL
REVIEWED: RSO
APPROVED: RSO
SCALE: AS NOTED

C6.2



J-29851.0000 01/02/2024

NORTHWEST WALTERBORO SEWER IMPROVEMENTS
PUMP STATION DETAILS

C6.3

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PUMP STATION NOTES:

- 1. ALL HINGES, GUIDE RAILS, CHAIN HOLDERS, CHAIN, CABLE, NUTS, BOLTS, WASHERS, OTHER FASTENERS, AND ANY EQUIPMENT THAT MAY ENTER THE WETWELL SHALL BE 316 STAINLESS STEEL.
- 2. ALL ELECTRICAL ENCLOSURES SHALL BE CONSTRUCTED OF 316 STAINLESS STEEL.
- 3. ALL PIPING SHALL BE PRESSURE CLASS 350 DUCTILE IRON PIPE AND ALL FITTINGS SHALL BE CLASS 160 DUCTILE IRON. ALL PIPE AND FITTINGS SHALL CONFORM TO PROTECTO 401 FOR INTERNAL LINING. PIPE AND FITTINGS THAT ARE LOCATED ABOVE GRADE OR ARE INSIDE OF THE WETWELL SHALL BE PAINTED CONFORMING TO TNEMEC SPECIFICATIONS. ALL PIPE AND FITTINGS THAT ARE BURIED SHALL HAVE A BITUMASTIC EXTERNAL COATING. SANDBLAST ABOVE—GROUND PIPE TO SSPC—SP6 BEFORE PAINTING.
- 4. EACH DISCHARGE LINE SHALL BE EQUIPPED WITH FITTINGS, PETCOCK AND A FOUR INCH (4") DIAMETER GLYCERIN—FILLED PRESSURE GAUGE. THE GAUGE SHALL HAVE READINGS IN PSI AND THE NORMAL OPERATING PRESSURE FOR THE PUMPS SHALL FALL IN THE MIDDLE OF THE MEASUREMENT RANGE. FITTINGS, PETCOKS, AND GAUGE SHALL BE EITHER STAINLESS STEEL OR BRASS.
- 5. ALL WETWELL HARDWARE SHALL BE MOUNTED SUCH THAT ANY COMPONENT MAY BE REMOVED.
- 6. ALL EXPOSED CONCRETE WITHIN THE WETWELL SHALL RECEIVE A HYDROGEN SULFIDE INHIBITING COATING, RAVEN 405 OR APPROVED EQUAL.
- 7. THE ELECTRIC METER SHALL BE INSTALLED WITH A FUSED DISCONNECT AND IN SUCH A MANNER THAT THE METER MAY BE READ WITH OUT ENTERING THE FENCED AREA.
- 8. THE CONTROL PANEL SHALL BE FREE STANDING. CONTROL PANEL SHALL BE NEMA 4X.
- 9. A WEATHERPROOF BREAKER PANEL SHALL BE PROVIDED. THE PANEL SHALL HAVE SPACE FOR 6 SINGLE POLE BREAKERS.
- 10. AN EXTERNAL DRY TRANSFORMER SHALL BE PROVIDED FOR 460V STATIONS, TO PROVIDE POWER TO NOTE 9 ABOVE.
- 11. SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR DESCRIPTION OF SITE LIGHTING.
- 12. SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR DESCRIPTION OF SCADA CONTROLS.
- 13. ALL GROUND ROD CONNECTIONS SHALL BE CAD WELDED. ALL GROUND ROD CONNECTIONS ARE TO BE INSPECTED BY LCWSC PRIOR TO BURIAL AND SHALL BE BURIED.
- 14. A HIGH WATER AUDIBLE AND VISIBLE ALARM SHALL BE INSTALLED. THE HIGH LEVEL ALARM SHALL BE ACTUATED BY A FLOAT AND HAVE ITS OWN 12VDC BATTERY BACKUP AND CHARGER.
- 15. THE POWER CABLE IS TO BE WIRED NONSTOP FROM THE PUMP MOTOR TO THE MOTOR STARTER WITH NO JUNCTION BOXES OR SPLICES.
- 16. STAINLESS STEEL KELLUMS GRIPS SHALL BE INSTALLED ON POWER CABLES FOR THE PUMPS.
- 17. PUMPS SHALL BE ABS (SULZER) OR APPROVED EQUAL BY CITY OF WALTERBORO.
- 18. PUMPS AND MOTORS SHALL HAVE STAINLESS STEEL CHAIN FOR LIFTING. THE LENGTH OF THE CHAIN SHALL REACH THE TOP OF THE WETWELL PLUS SIX FEET (6'). A COMBINATION OF SS CHAIN AND SS WIRE ROPE MAY BE UTILIZED AS LONG AS THE BOTTOM THREE FEET (3') IS CHAIN.
- 19. ALL METAL STRUCTURES SHALL BE GROUNDED, INCLUDING BUT NOT LIMITED TO THE HOIST, CONTROL PANEL, AND GENERATOR.
- 20. A METAL PLATE SIGN SHALL BE PROVIDED THAT DISPLAYS THE EMERGENCY PHONE NUMBERS AND FACILITY NUMBER. A METAL PLATE SIGN SHALL BE PROVIDED THAT DISPLAYS THE SITE ADDRESS.
- 21. SPRAY HERBICIDE PRIOR TO PLACEMENT OF ROC.
- 22. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING LOCATION WITH ELECTRIC PROVIDER AND ALL CONDUITS / WIRES NECESSARY FROM TRANSFORMER TO CONTROL PANEL.
- 23. AIR RELEASE VALVES TO BE ARI MODEL #D-0251.
- 24. WHERE IN DUPLICATE OR CONFLICT, INFORMATION PROVIDED IN ELECTRICAL SHEETS AND SPECIFICATIONS SHALL SUPERSEDE INFORMATION PROVIDED ON THIS SHEET.

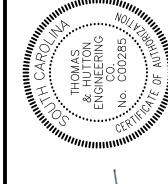
ELECTRICAL NOTES

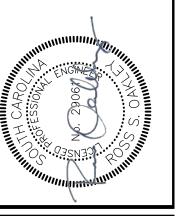
- ELECTRICAL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR WITH A LOCAL BUSINESS LICENSE.
- 2. ELECTRICAL PERMITS SHALL BE OBTAINED FROM AND FEES PAID TO THE AUTHORITY HAVING JURISDICTION.
- 3. ELECTRICAL CONTROLS SHALL BE MOUNTED ABOVE THE 100 YEAR FLOOD ELEVATION.
- 4. ALL CONDUITS INTO THE CONTROL PANEL MUST BE SEALED.
- 4. ALL CONDUITS INTO THE CONTROL PANEL MUST BE SEALED.
- 5. ELECTRICAL CONTROLS TO BE LABELED WITH 1" X 3" BLACK PLACARD WITH 1/2" LETTERS FOR LABELING ALL CONTROLS.
- 6. ALL TERMINATIONS SHALL BE WITH LUGS.
- CONTRACTOR IS RESPONSIBLE FOR APPLYING TO REGULATORY AGENCIES AND SERVICE PROVIDER FOR ELECTRICAL SERVICE.
 - 8. CONTRACTOR IS RESPONSIBLE TO ESTABLISH AND PROVIDE PERMANENT ELECTRICAL SERVICE TO THE STATION.

 CONTRACTOR SHALL PAY FOR ELECTRIC SERVICE UNTIL THE STATION IS ACCEPTED FOR OPERATION BY LCWSC.
- 9. CONTRACTOR IS RESPONSIBLE TO VERIFY SIZE OF GENERATOR PAD, AND LOCATION OF CONDUIT ENTRANCE PER GENERATOR SUPPLIED. CONTRACTOR SHALL ALSO ENLARGE GENERATOR PAD IF NEEDED TO ENSURE A MIN. OF 18" OF CONCRETE AROUND THE GENERATOR ENCLOSURE.
- 10.MOTOR STARTERS SHALL BE SOFT START.
 ACROSS THE LINE, SPLIT WINDING, AND OTHER REDUCED VOLTAGE
 STARTERS ARE NOT ACCEPTABLE.
- 11.AUTOMATIC TRANSFER SWITCH SHALL BE MOUNTED ON THE GENERATOR.
- 12.CONTRACTOR TO PROVIDE ONE 15A, 2P, 480V BREAKER TO FEED EXTERNAL TRANSFORMER.
- 13.WHERE IN DUPLICATE OR CONFLICT, INFORMATION PROVIDED IN ELECTRICAL SHEETS AND SPECIFICATIONS SHALL SUPERSEDE INFORMATION PROVIDED ON THIS SHEET.

GENERAL NOTES:

- 1. CONTRACTOR TO INSTALL LINK SEAL OR EQUIVALENT AT DISCHARGE LINE PENETRATIONS OF TOP SLAB. THE LINK SEAL SHALL BE SUPPLIED WITH 316 STAINLESS STEEL HARDWARE.
- 2. PAINT ALL ALUMINUM SURFACES IN CONTACT W/ CONCRETE WITH ASPHALTIC PAINT (BITUMASTIC)
- CONTRACTOR SHALL SUBMIT COMPACTION TEST RESULTS INSIDE PUMP STATION FENCE AREA AND AT LEAST TEN TEST RESULTS IMMEDIATELY ADJACENT TO CONCRETE SLAB PRIOR TO INSTALLING ROC.
- 4. PROVIDE DUAL 500 WATT METAL HALIDE LIGHT TO ILLUMINATE CONTROL PANEL, WET WELL, AND GENERATOR WITH SWITCH CONTROL (12 FT AFG).
- 5. WHERE IN DUPLICATE OR CONFLICT, INFORMATION PROVIDED IN ELECTRICAL SHEETS AND SPECIFICATIONS SHALL SUPERSEDE INFORMATION PROVIDED ON THIS SHEET.





NO. REVISIONS BY DA'

HUTTON

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VEMENTS

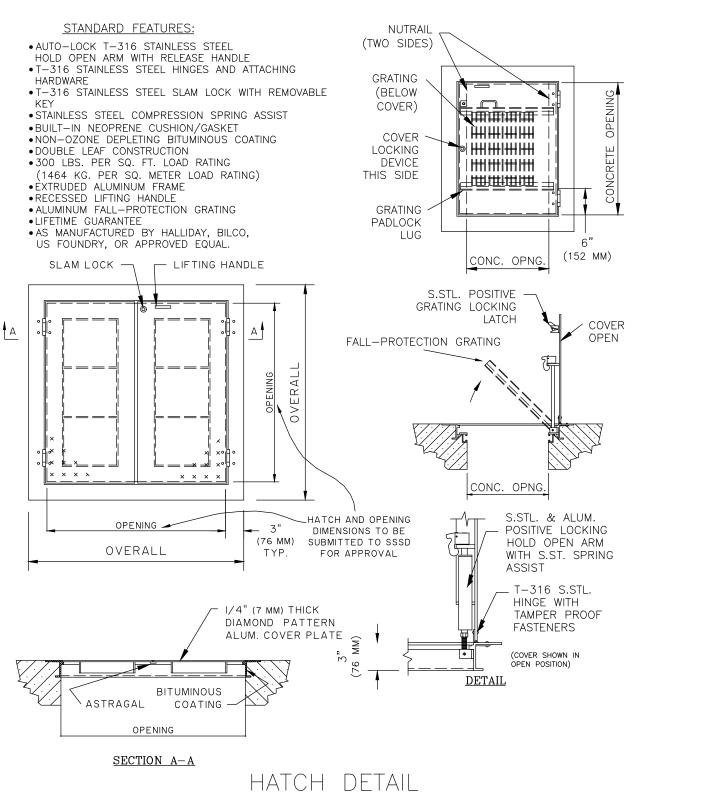
ORO SEWER IMPROVEMENT

NORTHWEST WALTERBORO

JOB NO: J-29851.00
DATE: OI/O2/202
DRAWN: JTB
DESIGNED: MAL
REVIEWED: RSO

APPROVED: RSO SCALE: N/A

C6.4



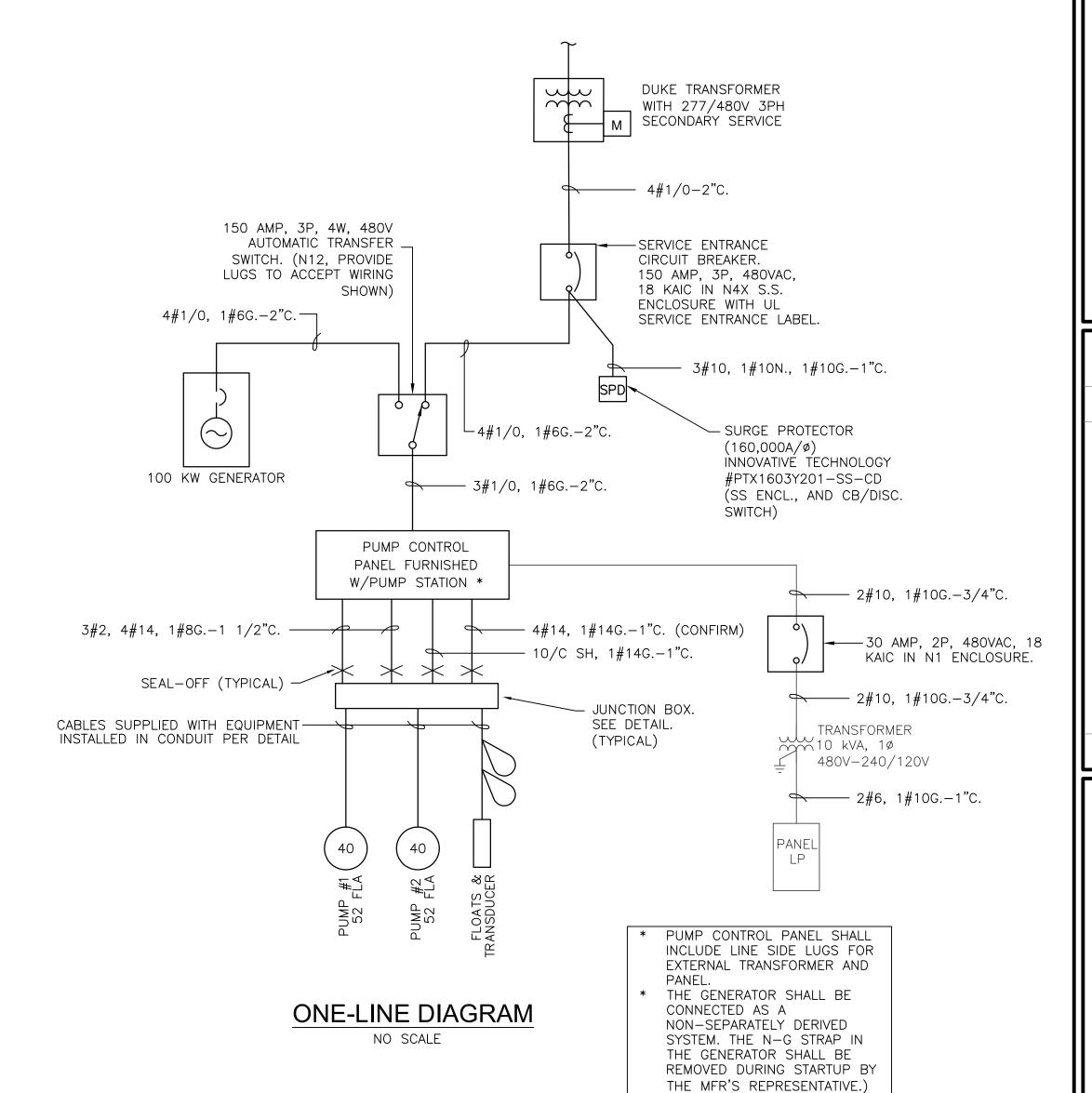
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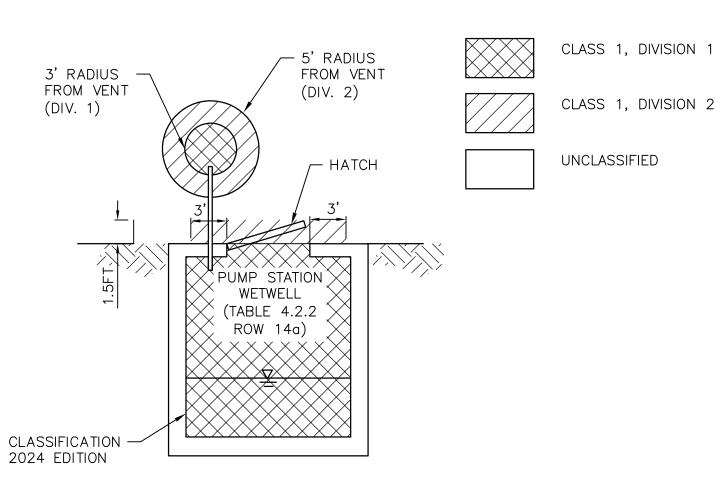
(x) JUNCTION BOX DETAIL NOTES:

- 1. 3" X 2" 316 ALUMINUM TUBING. COAT PORTIONS OF RACK IN CONTACT WITH CONCRETE WITH TWO COATS OF BITUMASTIC.
- 2. 1 1/2" X 1 1/2" STAINLESS STEEL CROSS MEMBERS & SS HARDWARE.
- 3. PUMP CABLE JUNCTION BOX. 24" X 24" X 8" DEEP NEMA 4X 316 STAINLESS STEEL ENCLOSURE WITH STAINLESS STEEL INNER PANEL.
- POWER DISTRIBUTION BLOCKS WITH COVERS FOR PUMP CABLES. VERIFY SIZE TO ACCOMMODATE CABLE.
- 5. STAINLESS STEEL CORD CONNECTOR W/STAINLESS STEEL STRAIN RELIEF GRIP (TYPICAL EACH CABLE).
 PROVIDE ADDITIONAL GRIPS WHERE MOTOR MONITORING LEADS ARE FURNISHED IN SEPARATE CABLE.
- CABLE FURNISHED WITH EQUIPMENT. (TYPICAL)
- 7. TERMINAL BLOCKS FOR FLOATS. PROVIDE 6 SPARE TERMINALS. PROVIDE 6" SEPARATION BETWEEN POWER AND FLOAT CABLES.

(X) <u>ELECTRICAL SITE PLAN NOTES:</u>

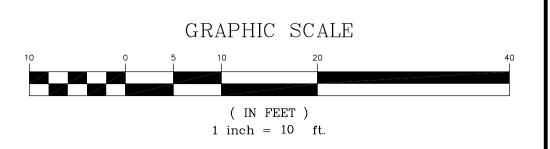
- 1. ELECTRICAL BUILDING. SEE SH. E1.1.
- 2. PUMP CONTROL PANEL.
- 3. AUTOMATIC TRANSFER SWITCH.
- 4. MAIN CIRCUIT BREAKER.
- 5. STUB CONDUITS INTO WETWELL AND INSTALL BUSHING.
- 6. WETWELL JUNCTION BOX. SEE DETAIL SHEET E-2.
- 7. SECONDARY SERVICE. SEE ONE-LINE DIAGRAM.
- GENERATOR. CONNECT TO OUTPUT BREAKER, BATTERY CHARGER, BLOCK HEATER AND FOR CONTROL STATUS AND ALARM. VERIFY CONNECTIONS FROM SUPPLIER'S SHOP DRAWINGS. INSTALL ON REINFORCED CONCRETE PAD.
- GROUNDING ELECTRODE SYSTEM CONSISTING OF THREE 10' X 3/4"ø COPPERCLAD GROUND RODS SPACED IN A 10' TRAINAGLE. BOND TO WATERLINE IN ACCESSIBLE LOCATION. BOND TO GROUNDING ELECTRODE CONDUCTOR WITH EXOTHERMIC WELDS.
- 10. #2 AWG GROUNDING ELECTRODE CONDUCTOR.
- 11. LED WIDE AREA FLOOD ON 20' TREATED POLE. CREE #C-FL-A-LCF-6L-4K-FT-DB. PROVIDE MOUNTING BOX AS REQUIRED. COORDINATE LOCATION WITH OWNER.
- 12. 2#12, 1#12G.-3/4°C.
- 13. 3#10, 1#10G.-3/4°C. (SHORE POWER. VERIFY REQUIREMENTS)
- 14. 4#14, 1#14G.-3/4"C. (GENERATOR STATUS, ALARM)
- 15. 480V WIRING. SEE ONE-LINE DIAGRAM.
- 16. RTU. SEE RISER DIAGRAM.
- 17. GENERATOR FOUNDATION. SEE DETAIL.
- 18. BACKUP FLOAT CONTROLS. SEE ONE-LINE DIAGRAM.
- 19. PUMP 480V FEEDERS AND MONITORING SENSORS. SEE ONE-LINE DIAGRAM.
- 20. LEVEL SENSOR WIRING. SEE ONE-LINE DIAGRAM.
- 21. 4#14, 1#14G.-3/4"C. (GEN. CONTROL FROM ATS)
- 22. EXTEND GROUNDING ELECTRODE IN 1" SCH. 80 PVC UNTIL BELOW GRADE.
- 23. PANEL BOARD LP
- 24. PAD MOUNTED TRANSFORMER. PROVIDE REINFORCED CONCRETE PAD PER DUKE SPECIFICATIONS. COORDINATE LOCATION WITH DUKE ENERGY.





AREA CLASSIFICATIONS NOT TO SCALE





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COUNTY WER COLLETON WAL

OR

JOB NO: J-298
DATE: 01/02
DRAWN: JTB
DESIGNED: MAL J-29851.0000 01/02/2024 REVIEWED: RSO APPROVED: RSO SCALE: 1" = 10

2"SLEEVE FOR -FLOATS JUNCTION BOX DETAIL NO SCALE

FLOATS

6

INSTALL BUSHING. -FILL WITH DUCT SEAL

- FILL WITH DUCT SEAL

- SEAL-OFF (S)

- CONDUITS TO

PANEL. SEE

QUANTITY.

3" SLEEVE FOR

PUMP CONTROL

SITE PLAN FOR

ELECTRICAL BUILDING 1/2"=1'-0"

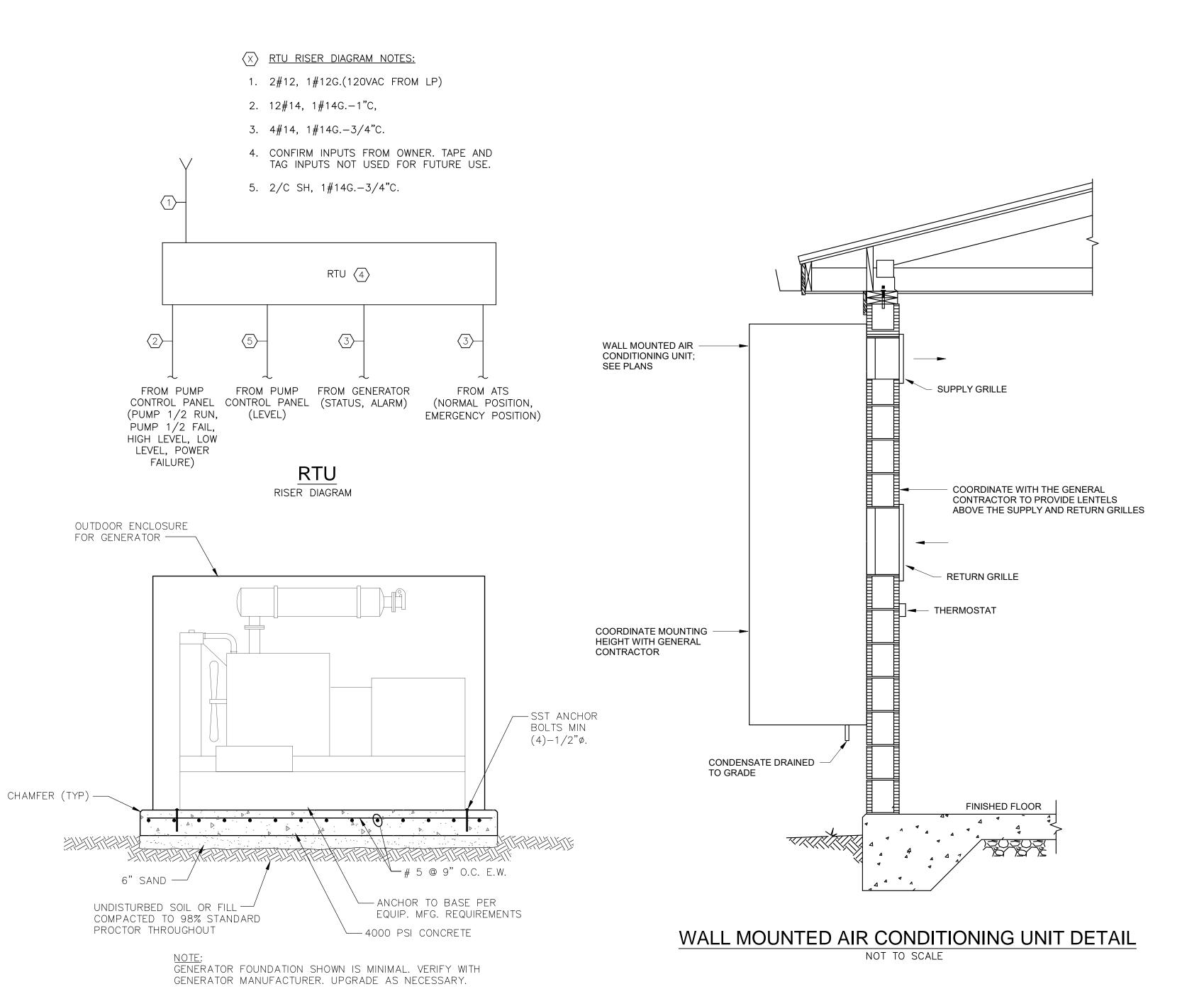
PANEL SCHEDULE

PHA	ASE	PANELBOARD: "LP"	BU	IS: COP	PER				MAINS: 50 AMP, 2P BREAKER	PH	ASE
"L1"	"L2"	SERVICE: 120/240V, 1PH, 3W, S/N	NE	MA 1 E	NCLO	SURE	Ē		WINDSONG	"L1"	"L2"
V.A.	V.A.		10H	KAIC						V.A.	V.A.
		LOAD	Р	P BKR CKT# BKR P		LOAD					
200		LIGHTS	1	30	1	2	30	2	GENERATOR BLACK HEATER		
	540	RECEPTACLES	1	15	3	4			AND BATTERY CHARGER		1000
540		RECEPTACLES	1	15	5	6	30	2	WMAC-1	2500	
		SPARE	1	15	7	8					2500
500		RTU	1	30	9	10	20	1	SPARE		
	100	SITE LIGHT	1	15	11	12	20	1	SPARE		
		SPARE	1	15	13	14	20	1	SPARE		
			1	15	15	16	20	1	SPARE		
1240		TOTAL "L1"	61		47	40			TOTAL "L1"	3500	
	640 TOTAL "L2"					40			TOTAL "L2"		3500
		TOTAL LOA	D =		88	80					

WHERE NOT SCHEDULED OR SHOWN ON THE DRAWINGS, 20 AMP BREAKERS SHALL BE FED BY 2#12, 1#12G.-3/4"C. WHERE NOT SCHEDULED OR SHOWN ON THE DRAWINGS, 30 AMP BREAKERS SHALL BE FED BY 2#10, 1#10G.-3/4"C.

FIXTURE SCHEDULE

TYPE	DESCRIPTION	MOUNTING	LA	MPS	MANUFACTURER *	VOLTAGE	REMARKS	
			TYPE	WATTS				
Α	4' INDUSTRIAL LED	SURFACE	LED	52	H.E. WILLIAMS	120		
					#82-4-L64/840-DRV-UNV			
В	DIE CAST ALUMINUM HOUSING WALL	WALL	LED	30	JADEMAR	120		
	PACK (WET LOCATION)				#JWP-FC-CPS-80W-PC-BZ-			
					EM4			
EMX	EMERGENCY EXIT FIXTURE WITH TWO	WALL	LED	9	EMERGILITE	120	TO POWER REMOTE HEAD	
	HEADS				ELXN400R-2LED-R			
RH	EMERGENCY REMOTE HEAD	WALL	PAR	5.4	EMERGILITE	120		
	(WEATHERPROOF)				EF44D-LED-WP			



GENERATOR FOUNDATION DETAIL NOT TO SCALE

	WALL MOUNTED AIR CONDITIONING UNIT SCHEDULE													
EQUIPMENT	MANUFACTURER'S MODEL #	SERVES	VES SUPPLY	OUTDOOR AIRFLOW	INDOOR FAN MOTOR HP	APPROX WEIGHT (LBS)	TOTAL COOLING @ 80°F/67°F/95°F		ELECTRIC HEATER DATA			SEER/EER	VOLTAGE	REMARKS
TAG			AIRFLOW				GROSS MBH	SENSIBLE MBH	HEATER KW OUTPUT MBH NO. C		NO. OF STAGES			
WMAC-1	W24AY-C05SPXXXE	ELEC. BLDG.	800	0	1/3	336	23.2 17.7		5.0	15.7	1	11.0 EER		1,2,3,4,5,6,7
SELECTIONS B.	ASED ON: BARD	-			•		•	-						

. INSTALL PER MANUFACTURER'S RECOMMENDED CLEARANCES AND GUIDLINES.

2. FURNISH WITH MC4002 CONTROLLER FOR LEAD/LAG OPERATION.

3. FURNISH WITH SG-2 & RG-2 GRILLES. 4. FURNISH WITH TWO SETS OF 2" DISPOSABLE MERV 8 FILTERS.

5. FURNISH WITH LOW AMBIENT COOLING CONTROL. 6. PROVIDE WITH STANDARD BEIGE BAKED ENAMEL FINISH. 7. PROVIDE WITH ENTHALPY CONTROLLED ECONOMIZER.

HOWARD ENGINEERING

ELECTRICAL · MECHANICAL · CONTROLS

SOUTH CAROLINA --- (864 - 836 0440) ----

JOB NO: J-29851.00
DATE: 01/02/202
DRAWN: JTB
DESIGNED: MAL
REVIEWED: RSO
APPROVED: RSO
SCALE: 1" = 24'

SEWER IMPROVEMENTS

ING AND DETAILS

WALTERBORO

NORTHWEST

A.4. RUNOFF COEFFICIENT BEFORE CONSTRUCTION A.5. PERCENT IMPERVIOUS AREA AFTER CONSTRUCTION A.6. RUNOFF COEFFICIENT AFTER CONSTRUCTION

B. DESCRIPTION OF CONSTRUCTION ACTIVITY WORK CONSISTS OF OPEN CUT OF APPROXIMATELY 14,000 LF OF 21-INCH GRAVITY MAIN WITH MANHOLES AND APPROXIMATELY 23,000 LF OF 10-INCH FORCE MAIN.

C. RUNOFF DATA C.1. SOIL CLASSIFICATIONS:

(HSG) A, A/D, B, B/D, C C.2. LAND USE(S): RESIDENTIAL, WOODED, ROAD RIGHT OF WAY D. RECEIVING WATERS

D.1. CLOSEST RECEIVING WATERS: D.2. ULTIMATE RECEIVING WATERS:

E.2. FEMA FLOOD INSURANCE MAP(S):

45029C0300G, 45029C0305G, 45029C0315G,

45029C0316G, and 45029C0318G

ASHEPOO RIVER

JONES SWAMP CREEK AND DOCTORS CREEK

21.78 %

73.0 CN

II. CONTROL MEASURES

1. EROSION AND SEDIMENT CONTROLS

E.1. FEMA FLOOD ZONE(S):

PRIOR TO START OF CONSTRUCTION, ALL EXTERIOR SILT FENCE WILL BE INSTALLED AS SHOWN ON THE PLANS.

1.1. CLEARING

- 1.1.1. AS CLEARING IS COMPLETED, ADDITIONAL SILT FENCE WILL BE INSTALLED WHERE NECESSARY, SUCH AS POINTS WHERE FLOWS BECOME CHANNELIZED, AND OTHER POINTS WHERE EXCESSIVE RUNOFF VELOCITIES MAY OCCUR.
- 1.1.2. INSTALL CONSTRUCTION ENTRANCES / EXITS BEFORE BEGINNING CLEARING
- 1.1.3. CONSTRUCTION DELAYS IN ANY ONE AREA GREATER THAN 14 DAYS PRIOR TO START OF ROUGH GRADING WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.
- 1.1.4. MAINTAIN EXISTING VEGETATION WHENEVER POSSIBLE AND MINIMIZE THE AREA OF DISTURBANCE. RETAIN AND PROTECT TREES TO ENHANCE FUTURE LANDSCAPING EFFORTS AND REDUCE RAINDROP IMPACT
- 1.1.5. INSTALL ALL SEDIMENT CONTROL PRACTICES PRIOR TO ANY UP-SLOPE SOIL DISTURBING
- 1.1.6. PHASE CONSTRUCTION ACTIVITIES TO MINIMIZE THE AREAS DISTURBED AT ONE TIME. THIS WILL ALSO ALLOW COMPLETED AREAS TO BE STABILIZED AND RE-VEGETATED BEFORE DISTURBING ADJACENT SITES. THE NEED FOR TEMPORARY EROSION CONTROL MEASURES MAY BE AVOIDED BY COMPLETING A PHASE AND INSTALLING PERMANENT EROSION CONTROL MEASURES WHEN THE FINAL GRADE IS ATTAINED.
- 1.1.7. MAINTAIN AND PROTECT ALL NATURAL WATERWAYS. RETAIN AT LEAST A 35-FOOT UNDISTURBED BUFFER OF NATURAL VEGETATION ALONG ALL WATERWAYS TO FILTER OUT SEDIMENT AND OTHER POLLUTANTS. MAINTAIN A 45-FOOT UNDISTURBED BUFFER AROUND SENSITIVE WATERS.
- 1.1.8. INSTALL SILT FENCE (OR BIO ROLLS/ROCK SOCK PRODUCTS) ON THE DOWN-SLOPE PERIMETER OF ALL DISTURBED AREAS PRIOR TO ANY SOIL DISTURBING ACTIVITIES (INCLUDING CLEARING AND GRUBBING). SILT FENCE CAN TREAT A MAXIMUM OF 100 SQUARE FEET PER LINEAL FOOT OF FENCE. INSTALL SILT FENCE IN SHORTER REACHES ON THE CONTOUR WITH EACH END TURNED UP-SLOPE . SWALES AND SHORELAND AREAS SHOULD ALSO BE PROTECTED WITH SILT FENCE, BIO ROLLS, OR ROCK SOCKS.
- 1.1.9. IN AREAS OF CONCENTRATED FLOW INSTALL STRAW BALE CHECKS, ROCK CHECK DAMS, TRIANGULAR DIKES, BIO ROLL BLANKETS, OR ROCK SOCKS TO SLOW RUNOFF AND TRAP
- 1.1.10. USE TEMPORARY SLOPE DRAINS OR ROCK CHUTES TO MOVE WATER DOWN STEEP SLOPES.
- 1.1.11. CONSTRUCT SEDIMENT BASINS FOR DRAINAGE AREAS GREATER THAN 10 ACRES

1.2. ROUGH GRADING

- 1.2.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING ROUGH GRADING, DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING
- 1.2.2. ALL AREAS NOT SUBJECT TO FURTHER CONSTRUCTION (DRAINAGE, SANITARY SEWER, ROADS, WATER DISTRIBUTION SYSTEMS, OR STORM WATER FACILITIES) SHALL BE GRASSED WITH A PERMANENT COVER
- 1.2.3. COVER ANY STOCK PILED TOPSOIL WITH PLASTIC (OR OTHER IMPERVIOUS COVERING) OR USE A TEMPORARY SEED MIX. USE STOCKPILED TOPSOIL AS EARTHEN BERMS TO SERVE AS

1.3. DRAINAGE

- 1.3.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING DRAINAGE INSTALLATION.
- 1.3.2. CONSTRUCTION DRAINAGE WILL BE ROUTED THROUGH LAKES, WHICH WILL ACT AS SEDIMENT BASINS OR OTHER ACCEPTABLE SEDIMENT BASINS/TRAPS.
- 1.3.3. STORM DRAIN INLET PROTECTION AS SHOWN ON DETAIL SHEET SHALL BE INSTALLED ON ALL CURB INLETS, STORM DRAIN MANHOLES, JUNCTION BOXES, AND GRATE INLETS.
- 1.3.4. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF THE NEXT CONSTRUCTION SEQUENCE WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.
- 1.3.5. ALL STORM LINES NOT IN STREETS OR OTHER PAVED AREAS ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL.

1.4. WASTE DISTRIBUTION SYSTEM INSTALLATION

- 1.4.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING INSTALLATION OF THE WATER
- 1.4.2. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

1.5. WASTEWATER COLLECTION SYSTEM INSTALLATION

- 1.5.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING INSTALLATION OF THE WASTEWATER
- 1.5.2. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

1.6. CONSTRUCTION OF ROADS

- 1.6.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING ROAD CONSTRUCTION. 1.6.2. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.
- 1.7. GRASSING
- 1.7.1. ALL EXISTING CONTROLS WILL BE MAINTAINED UNTIL GRASSING IS ESTABLISHED 1.7.2. ANY AREAS THAT ERODE OR WHERE GRASS DOES NOT ESTABLISH ITSELF SHALL BE RE-GRADED AND RE-GRASSED.

2. STORM WATER MANAGEMENT

RUNOFF FROM THIS PROJECT WILL DISCHARGE INTO A STORM WATER MANAGEMENT SYSTEM TREATMENT WILL OCCUR IN STORM WATER DETENTION PONDS.

3. OTHER CONTROLS

3.1. WASTE DISPOSAL

- 3.1.1. NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED TO ANY RECEIVING WATERS
- 3.1.2. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE
- 3.1.3. THIS PLAN SHALL COMPLY WITH STATE AND/OR LOCAL WASTE DISPOSAL, SANITARY SEWER
- OR SEPTIC SYSTEM REGULATIONS. 3.1.4. DUST CONTROL ON DISTURBED AREAS - CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITE AND HAUL ROUTES. THE PURPOSE OF THE MEASURE IS TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES, WHICH MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE OR SAFETY, OR TO ANIMALS OR PLANT LIFE.

III. MAINTENANCE

- 1.1. THE SITE SUPERINTENDENT, OR HIS/HER REPRESENTATIVE, SHALL MAKE VISUAL INSPECTIONS OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREAS (I.E. SEEDED AND MULCHED AND/OR SODDED AREAS) ON A DAILY BASIS; ESPECIALLY AFTER HEAVY RAINFALL EVENT TO INSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE WORK DAY INCLUDING RE-SEEDING AND MULCHING OR RE-SODDING IF NECESSARY.
- 1.2. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE. ALL DRAINAGE SWALES, POCKETS, DEPRESSION, LOW LINES, AND OUTLET DITCHES SHALL DRAIN EFFECTIVELY AT ALL TIMES. SETTLEMENT OR WASHING THAT MAY OCCUR SHALL BE REPAIRED BY THE CONTRACTOR. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN AN EFFECTIVE BARRIER. MAINTAIN THE CONSTRUCTION EXIT IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TACKED ONTO PUBLIC ROADWAYS, RESEED AND MULCH AREA WHERE SEEDING EMERGENCE IS POOR, OR WHERE EROSION OCCURS. PROTECT FROM TRAFFIC AS MUCH AS POSSIBLE. INSPECT ALL MULCHES PERIODICALLY, AND AFTER RAINSTORMS TO CHECK FOR EROSION, DISLOCATION OR FAILURE. IF WASHOUT OCCURS, REPAIR THE SLOPE GRADE, RESEED AND REINSTALL MULCH. FOLLOW THE CONSTRUCTION SEQUENCE THROUGHOUT THE PROJECT DEVELOPMENT. WHEN CHANGES IN CONSTRUCTION ACTIVITIES ARE NEEDED, AMEND THE SEQUENCE SCHEDULE IN ADVANCE TO MAINTAIN MANAGEMENT CONTROL. IF MAJOR CHANGES ARE NECESSARY, SEND A COPY OF THE MODIFIED SCHEDULE TO THE ENGINEER, SEDIMENT AND EROSION CONTROL MEASURES WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE DISTURBED AREAS ARE STABILIZED.

SILT FENCES WILL BE MONITORED DURING CONSTRUCTION. ANY SILT FENCE WHICH IS NOT FUNCTIONING PROPERLY WILL BE PROMPTLY REPAIRED. CLEAN OUT THE SILT FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE OR REPLACE WITH FUNCTIONAL SILT FENCE WITHIN 24 HOURS. USE OF HOSES AND WATER TO FLUSH THE SEDIMENT INTO THE STORM INLETS IS UNACCEPTABLE.

SEDIMENTATION BASINS

- SEDIMENTATION BASINS WHICH ARE AT 50% USED CAPACITY OR APPROACHING SUCH CAPACITY SHALL BE RE-EXCAVATED TO ORIGINAL DIMENSIONS AND THE SILT PROPERLY DISPOSED OF.
- SEDIMENT LOGS/ROLLS OR OTHER CONTROL MEASURES WHICH BEGIN TO DISINTEGRATE OR FUNCTION INEFFECTIVELY SHALL BE PROMPTLY REPLACED.
- 5. VEGETATION COVER
- SHALL IMMEDIATELY BE REPLACED. CONSTRUCTION ENTRANCE

MAINTAIN ROCK CONSTRUCTION ENTRANCE AND CLEAN ADJACENT ROADS OF ANY MUD TRACKED ONTO THEM.

ANY VEGETATION COVER SERVING TO STABILIZE DISTURBED SOILS WHICH IS ITSELF DISTURBED

- QUALIFIED PERSONNEL WILL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS. WHERE SITES HAVE BEEN FINALLY STABILIZED SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY
- DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.
- 3. A WRITTEN REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION (OR SINCE COMMENCEMENT OF CONSTRUCTION ACTIVITY) INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION OF EACH STORM EVENT, APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES) AND WHETHER ANY DISCHARGES OCCURRED, LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE, LOCATION(S) OF BMP'S THAT NEED MAINTENANCE, LOCATION(S) OF BMP'S THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, LOCATION(S) WHERE ADDITIONAL BMP'S ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION AND ANY CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES TO SWPPP NECESSARY AND IMPLEMENTATION DATES.
- 4. THE REPORT SHALL BE MAINTAINED AT LEAST THREE YEARS FROM THE DATE THE SITE IS FINALLY STABILIZED. THE REPORT MUST BE SIGNED AND SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN AND THE NPDES PERMIT REFERENCED ABOVE. THE CONTRACTOR SHALL MAINTAIN THIS REPORT. THE REPORT SHALL BE SUBMITTED TO THE ENGINEER AND OWNER.

V. LONG TERM MAINTENANCE OF DRAINAGE AND STORM WATER MANAGEMENT SYSTEM

THE ROADS AND DRAINAGE SYSTEM WILL BE OWNED AND MAINTAINED BY THE CITY OF WALTERBORO AFTER CONSTRUCTION IS COMPLETE.

VI. SC DHEC STANDARD NOTES

- 1. IF NECESSARY, SLOPES WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS. IN ADDITION TO GRASSING / HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED
- 2.1. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
- 2.2. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- 3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF

STORMWATER POLLUTION PREVENTION PLAN

- 4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL COVER. AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED INTO ANY WATERS OF THE STATE.
- 5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION, ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- 6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT AS MAY BE REQUIRED.
- 7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN
- 8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

ACCORDANCE WITH S.C. REG. 72-300 AND SCR100000.

- ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN NOT BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND
- 10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES
- 11. A COPY OF THE SWPPP, INSPECTION RECORDS AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- 12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- 13. MINIMIZE SOIL COMPACTION IN AREAS NOT UNDER PAVEMENTS AND /OR STRUCTURES AND, UNLESS INFEASIBLE. PRESERVE TOPSOIL.
- 14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUAL OR BETTER TREATMENT PRIOR TO DISCHARGE.
- 15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).
- 16. THE FOLLOWING DISCHARGES ARE PROHIBITED:
- 16.1. WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE
- CONTROL: 16.2. WASTEWATER FROM WASHOUT AND CLEANOUT OF OF STUCCO, PAINT, FORM RELEASE OILS,
- CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS; 16.3. FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE: AND
- 16.4. SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- 18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF PERMIT SCR100000 AND/OR SC'S WATER QUALITY STANDARDS IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
- 19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE, THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE

. EROSION, SEDIMENTATION & POLLUTION CONTROL NOTES

- THE IMPLEMENTATION OF THESE EROSION SEDIMENT CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.
- 3. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE
- 4. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
- 5. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A MAJOR STORM EVENT.
- . AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING AND PRIOR TO FINAL INSPECTION. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM
- 7. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF
- 8. BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY, THE EXISTING STORM WATER INLET(S) THAT RECEIVING RUNOFF FROM THE PROPOSED WORK AREA SHALL BE PROTECTED. THE TEMPORARY INLET PROTECTION MUST REMAIN IN PLACE UNTIL THE CONSTRUCTION ACTIVITY IS COMPLETED. THE STREET HAS BEEN SWEPT AND ANY EXPOSED SOILS ARE STABILIZED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REMOVING ANY TEMPORARY INLET PROTECTION INSTALLED; AFTER ALL DISTURBED AREAS ARE STABILIZED. TEMPORARY PROTECTION OF THE INLETS MAY BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING:
- USE A BAG MADE OF GEOTEXTILE FABRIC (NOT BURLAP) AND FILL WITH EITHER 3/4 INCH ROCK OR 1/4 INCH PEA GRAVEL 8.2. USE OF SEDIMENT LOGS TO FILTER THE SEDIMENT FROM ANY RUNOFF (AVAILABLE THROUGH

8.1. USE OF GRAVEL BAGS TO FILTER THE SEDIMENT FROM ANY RUNOFF. TO MAKE A GRAVEL BAG,

- LOCAL EROSION CONTROL SUPPLIERS). 8.3. USE OF ABOVE OR UNDER-GRATE FILTER BAGS OR DEVICES TO FILTER THE SEDIMENT FROM ANY RUNOFF (AVAILABLE THROUGH EROSION CONTROL SUPPLIERS).
- 9. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION, SEDIMENTATION, OR FLOODING ON THE SITE ON DOWNSTREAM PROPERTIES IN THE RECEIVING CHANNELS OR IN ANY STORM WATER INLET. WHEN SITE DEWATERING, WATER PUMPED FROM THE SITE, INCLUDING TRENCHES, SHALL BE TREATED BY ONE OF THE FOLLOWING:
- 9.1. TEMPORARY SEDIMENTATION BASINS 9.2. SEDIMENT FILTERING BAGS

- 10. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL EXISTING UTILITIES. EXISTING UTILITIES ARE ALL UTILITIES THAT EXIST ON THE PROJECT IN AN ORIGINAL RELOCATED OR NEWLY INSTALLED POSITION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGED UNDERGROUND OR OVERHEAD FACILITIES, EVEN IF THE UTILITY IS NOT SHOWN ON THE SITE DEVELOPMENT PLANS. THE CONTRACTOR SHALL CONTACT THE LOCAL UTILITIES PROTECTION CENTER TO COORDINATE THE MARKING OF EXISTING UTILITY LINES A MINIMUM OF 96 HOURS PRIOR TO COMMENCEMENT OF ANY WORK.
- 11. THE CONTRACTOR SHALL FLUSH ALL INLETS AND PIPE AT THE COMPLETION OF CONSTRUCTION TO REMOVE SILT AND DEBRIS. THE CLEANING AND FLUSHING OF INLETS AND PIPE (EXISTING AND PROPOSED) SHALL BE CONSIDERED PART OF THE COST FOR THE PROJECT.
- 12. EGRESS FROM THE SITE SHALL BE CONTROLLED SUCH THAT VEHICLES LEAVING THE SITE MUST
- TRAVERSE CONSTRUCTION EXITS TO REMOVE MUD FROM TIRES.
- 13. SCHEDULE CONSTRUCTION ACTIVITIES TO MINIMIZE THE EXPOSED AREA AND DURATION OF EXPOSURE. IN SCHEDULING, TAKE INTO ACCOUNT THE SEASON AND THE WEATHER FORECAST
- 14 FROSION CONTROL MEASURES ARE THE MINIMUM REQUIRED. THE CONTRACTOR SHALL PROVIDE ADDITIONAL CONTROL MEASURES AS DICTATED BY ACTUAL FIELD CONDITIONS AT THE TIME OF CONSTRUCTION IN ORDER TO PREVENT EROSION AND CONTROL SEDIMENT. EROSION AND SEDIMENT CONTROL MEASURES WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE ENTIRE PROJECT IS TERMINATED OR SUSPENDED FOR AND INDEFINITE LENGTH OF TIME, ALL DISTURBED AREAS SHALL BE PLANTED WITH PERMANENT VEGETATION.
- 15. THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS, OR IN ANY WAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, IS BASED UPON FIELD INVESTIGATIONS AND IS BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME IS SHOWN AS INFORMATION ONLY, IS NOT GUARANTEED AND DOES NOT BIND THOMAS & HUTTON, OR THE OWNER IN ANY WAY.
- 16. CONTRACTOR SHALL MAINTAIN SITE ON A DAILY BASIS TO PROVIDE FOR POSITIVE DRAINAGE. CONTRACTOR, AT HIS COST, SHALL GRADE SITE AND PROVIDE NECESSARY TEMPORARY DRAINAGE SWALES TO INSURE STORM WATER DOES NOT POND ON SITE.
- 17. SITE DRAINAGE SHALL BE ESTABLISHED TO PREVENT ANY PONDED WATER CONDITIONS WITHIN THE CONSTRUCTION AREA AND TO FACILITATE STORM WATER DISCHARGE.
- 18. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.

19. LIME RATES AND ANALYSIS:

19.1. AGRICULTURAL LIME SHALL BE APPLIED AT THE RATE SHOWN IN THE SEEDING SECTION UNLESS SOIL TESTS INDICATE OTHERWISE. GRADED AREAS REQUIRE LIME APPLICATION. IF LIME IS APPLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED. AGRICULTURAL LIME APPLICATION SHALL BE WITHIN THE SPECIFICATIONS OF THE SOUTH CAROLINA DEPARTMENT OF AGRICULTURE.

20. MULCHING:

- MULCHING IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:
- 20.1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF TWO TONS PER ACRE. DRY HAY SHALL BE APPLIED AT THE RATE OF 2 1/2 TONS PER ACRE.
- 20.2. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT A RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
- 20.3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER.
- 20.4. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF 3 TONS 20.5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE
- 20.6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLACK SOD, MULCH IS NOT
- 20.7. ON SLOPES GREATER THAN 10 FEET IN LENGTH AND 4:1 OR STEEPER, USE THE FOLLOWING EROSION CONTROL BLANKETS THAT HAVE BEEN PROPERLY ANCHORED TO THE SLOPE ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS:

ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR

- 2:1 SLOPES OR STEEPER: STRAW/COCONUT BLANKET OR HIGH VELOCITY WOOD BLANKET
- 3:1 SLOPES OR STEEPER: WOOD OR STRAW BLANKET WITH NET ON BOTH SIDES • 4:1 SLOPES OR FLATTER: - WOOD OR STRAW MULCH BLANKET WITH NET ON ONE SIDE

VIII. HOUSEKEEPING

REQUIRED.

- 1. PETROLEUM PRODUCTS: INCLUDING OIL, GASOLINE, LUBRICANTS AND ASPHALTIC SUBSTANCES.
- 1.1. HAVE EQUIPMENT TO CONTAIN AND CLEAN UP PETROLEUM SPILLS IN FUEL STORAGE AREAS
- OR ON MAINTENANCE AND FUELING VEHICLES 1.2. STORE IN COVERED AREAS PROTECTED WITH DIKES
- 2. SPILLS: PREVENTION AND RESPONSE.

THESE PERFORMANCE STANDARDS APPLY TO ALL SITES

- 2.1. STORE AND HANDLE MATERIALS TO PREVENT SPILLS 2.2. TIGHTLY SEALED CONTAINERS, NEAT AND SECURE STACKING, ETC.
- 2.3. REDUCE STORM WATER CONTACT IF SPILL OCCURS 2.3.1. CLEANUP PROCEDURES SHOULD BE CLEARLY POSTED.
- 2.3.2. CLEANUP MATERIALS SHOULD BE READILY AVAILABLE 2.3.3. STOP THE SOURCE
- 2.3.4. CONTAIN THE SPILL
- 3. NON-STORM WATER DISCHARGES
- THE FOLLOWING NON-STORMWATER DISCHARGES MUST BE PROTECTED FROM CAUSING POLLUTION OR EROSION:
- 3.1. DISCHARGES FROM FIRE-FIGHTING ACTIVITIES
- 3.2. FIRE HYDRANT FLUSHINGS
- 3.3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED 3.4. WATER USED TO CONTROL DUST
- 3.5. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHINGS 3.6. ROUTINE EXTERNAL BUILDING WASH DOWN THAT DOES NOT USE DETERGENTS 3.7. PAVEMENT WASH WATERS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED) AND WHERE

4. CONSTRUCTION WASTES: DEMOLITION RUBBLE, PACKAGING MATERIALS, SCRAP BUILDING

- DETERGENTS ARE NOT USED 3.8. UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE
- 3.9. UNCONTAMINATED GROUND WATER OR SPRING WATER 3.10. FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS
- 3.11. UNCONTAMINATED EXCAVATION DEWATERING 3.12. LANDSCAPE IRRIGATION
- 3.13. DECHLORINATED SWIMMING POOL DISCHARGES.
- 4.1. SELECT A DESIGNATED WASTE COLLECTION AREA 4.2. PROVIDE LIDS FOR WASTE CONTAINERS 4.3. WHEN POSSIBLE LOCATE CONTAINERS IN COVERED AREA

4.4. MAINTAIN CONSISTENT REMOVAL SCHEDULE FOR WASTE

- PESTICIDES: REDUCE THE AMOUNT OF PESTICIDES AVAILABLE FOR CONTACT WITH STORM WATER
- 5.1. STORE IN A DRY COVERED AREA 5.2. INSTALL CURBS OR DIKES AROUND STORAGE AREA TO PROTECT AGAINST SPILLS
- 5.3. STRICTLY FOLLOW RECOMMENDED APPLICATION RATES
- FERTILIZERS AND DETERGENTS: REDUCE THE AMOUNT OF FERTILIZERS AND DETERGENTS
- AVAILABLE FOR CONTACT WITH STORM WATER.
- 6.1. LIMIT APPLICATION OF FERTILIZERS TO THE MINIMUM NEEDED
- 6.2. APPLY MORE FREQUENTLY BUT AT LOWER APPLICATION RATES
- 6.3. LIMIT USE OF DETERGENTS ON-SITE
- 6.5. MAINTAIN STRUCTURAL AND VEGETATIVE BMP'S 6.6. APPLY ACCORDING TO SOIL TEST RECOMMENDATIONS PRIOR TO SEEDING.

6.4. DO NOT DISCHARGE WASH WATER INTO STORM WATER SYSTEM

IX. GRASSING NOTES

ALL SOD SHALL BE NURSERY GROWN AS CLASSIFIED IN THE ASPS GSS. MACHINE CUT SOD AT A UNIFORM THICKENS OF 3/4" WITHIN A TOLERANCE OF 1/4". EXCLUDING TOP GROWTH AND THATCH EACH INDIVIDUAL SOD PIECE SHALL BE STRONG ENOUGH TO SUPPORT ITS OWN WEIGHT WHEN LIFTED BY THE ENDS. BROKEN PODS, IRREGULARLY SHAPED PIECES, AND TORN OR UNEVEN ENDS WILL BE REJECTED. WOOD PEGS AND / OR WIRE STAPLES SHALL REPLACE SOD WITH AN EQUAL SOD COMPOSITION AS THAT WHICH IS EXISTING. IF NO SOD TYPE EXIST. THEN THE FOLLOWING SO COMPOSITION SHALL BE USED.

SODDING SCHEDULE:

4. MISCELLANEOUS:

LAY SOD FROM MAY 1 TO SEPTEMBER 15 FOR SPRING PLANTING AND FROM SEPTEMBER 15 TO NOVEMBER 1 FOR FALL PLANTING.

SEED:

ALL SEED SHALL CONFORM TO ALL STATE LAWS AND TO ALL REQUIREMENTS AND REGULATIONS OF THE SOUTH CAROLINA DEPARTMENT OF AGRICULTURE. THE SEVERAL VARIETIES OF SEED SHALL BE INDIVIDUALLY PACKAGED OR BAGGED, AND TAGGED TO SHOW NAME OF SEED, NET WEIGHT, ORIGIN, GERMINATION, LOT NUMBER, AND OTHER INFORMATION REQUIRED BY THE DEPARTMENT OF AGRICULTURE.

3.1. PENNISETUM GLAUCIUM (BROWNTOP MILLET): TESTING 98 PERCENT PURITY AND 85 PERCENT GERMINATION.

BERMUDA COMMON: TESTING 98 PERCENT PURITY AND 85 PERCENT GERMINATION.

3.3. DOMESTIC ITALIAN RYE: TESTING 98 PERCENT PURITY AND 90 PERCENT GERMINATION.

- 4.1. PERMANENT SEEDING SHALL COVER ALL DISTURBED AREA NOT TO BE COVERED BY LANDSCAPE PLANTING BEDS, STRUCTURE, OR PAVEMENT.
- SEED ALL DISTURBED AREAS WITHIN SEVEN DAYS OF FINAL GRADING AND TEMPORARY SEED/MULCH ALL AREAS THAT WILL BE LEFT INACTIVE FOR MORE THAN FOURTEEN (14) DAYS. 4.3. ALL PERMANENT GRASS PLANTINGS SHALL BE MULCHED
- 4.4. CENTIPEDE SOD CAN BE USED AS PERMANENT COVER ANYTIME EXCEPT JUNE THRU OCTOBER 4.5. IF GRASSING OCCURS DURING A MONTH REQUIRING TEMPORARY COVER, THE CONTRACTOR SHALL APPLY PERMANENT COVER (IN ADDITION TO THE TEMPORARY COVER) AT THE APPROPRIATION TIME AT NO NO ADDITIONAL COST. THE CONTRACTOR MUST ACHIEVE A STRAND OF PERMANENT GRASS WITH AT LEAST 95% COVER. BARE SPOTS CAN NOT BE MORE THAN 1 INCH SQUARE IN ANY

X. PERMANENT STABILIZATION

NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL ESTABLISHED. NECESSARY, AREAS MUST BE RE-WORKED AND RE-STABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY ,OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO THE SITE.

4.1. SEEDED AREAS FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED.

TOPSOIL.

4.2. SODDED AREAS

FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOI

AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE

ROOTS INTO THE APPROVED MULCH MATERIAL 4.3. PERMANENT MULCH

FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL.

PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP.

FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT SLOPES

4.5. DITCHES, CHANNELS, AND SWALES FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIPRAP LINING OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THERE

MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR

STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF AN APPROVED GEOTEXTILE TO

DOWN CUTTING OF THE CHANNEL. XI. FERTILIZER REQUIREMENTS

1. TEMPORARY SEEDING FERTILIZER

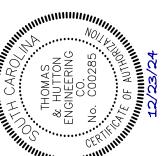
APPLY A MINIMUM OF 500 LBS PER ACRE OF A COMPLETE 10-10-10 FERTILIZER (11.5 POUNDS PER 1000 SQUARE FEET) OR EQUIVALENT DURING TEMPORARY SEEDING OF GRASSES UNLESS A SOIL TEST INDICATES A DIFFERENT REQUIREMENT. INCORPORATE FERTILIZER AND LIME (IF USED) INTO THE TOP 4-6 INCHES OF THE SOIL BY DISKING OR OTHER MEANS WHERE CONDITIONS ALLOW. LIME IS NOT REQUIRED FOR TEMPORARY SEEDING UNLESS A SOIL TEST SHOWS THAT THE SOIL PH IS BELOW 5.0. IT IS DESIRABLE TO APPLY LIME DURING THE TEMPORARY SEEDING OPERATION TO BENEFIT THE LONG-TERM PERMANENT SEEDING. APPLY A MINIMUM OF 1.5 TONS OF LIME / ACRE (70LBS. / 1000 SQ. FT.).

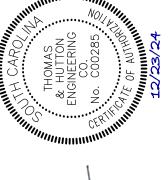
PERMANENT SEEDING FERTILIZER

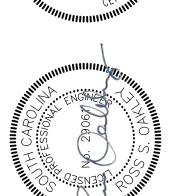
APPLY A MINIMUM OF 1000 LBS PER ACRE OF A COMPLETE 10-10-10 FERTILIZER (23 POUNDS PER 1000 SQUARE FEET) OR EQUIVALENT DURING PERMANENT SEEDING OF GRADES UNLESS A SOIL TEST INDICATES A DIFFERENT REQUIREMENT. INCORPORATE FERTILIZER AND LIME (IF USED) INTO THE TOP 4-6 INCHES OF THE SOIL BY DISKING OR OTHER MEANS WHERE CONDITIONS ALLOW. DO NOT MIX THE LIME AND THE FERTILIZER PRIOR TO THE FIELD APPLICATION. UNLESS A SPECIFIC SOIL TEST INDICATES OTHERWISE, APPLY 1 & 1/2 TONS OF GROUND COARSE TEXTURED AGRICULTURAL LIMESTONE PER ACRE (70 LBS. / 1000 SQ.FT.).

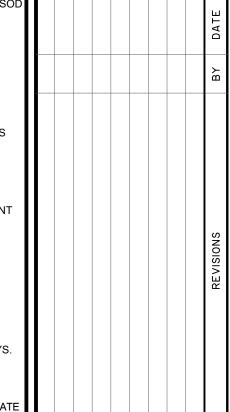
XII. SWPP PREPARER CERTIFICATION

I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48. CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEC (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCR100000.









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ORO

01/02/2024 DRAWN: JTB DESIGNED: MAL REVIEWED: RSO APPROVED: RSO CALE: N/A

STORMWATER POLLUTION PREVENTION PLAN

				TEN	IPORARY	SEEDING	- COASTA	۸L					
SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
			•	<u> </u>	SANDY, D	ROUGHT	Y SITES						
BROWNTOP MILLET	40												
RYE, GRAIN	56												
RYEGRASS	50												
		•	•	WELL	DRAINED,	CLAYEY/I	OAMEY S	ITES	•	•			•
BROWNTOP MILLET	40			_									
JAPANESE MILLET	40												
RYE, GRAIN	56												
OATS	75												
RYEGRASS	50												

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC
					SANDY, D	 ROUGHT`	/ SITES						
BROWNTOP MILLET	10	1										1	
BAHIAGRASS	40												
BROWNTOP MILLET	10												
BAHIAGRASS	30												
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
ATLANTIC COASTAL	15							.					
PANICGRASS	PLS												
BROWNTOP MILLET	10												
SWITCHGRASS	8												
(ALAMO)	PLS							ı					
LITTLE BLUESTEM	4												
SERICEA LESPEDEZA	20												
BROWNTOP MILLET	10												
WEEPING LOVEGRASS	8							•					
				WFI I	DRAINED	CLAYEY/L	 .OAMEY SI	 TES					
BROWNTOP MILLET	10						OT WILL OF						
BAHIAGRASS	40												
RYE, GRAIN	10												
	40												
BAHIAGRASS CLOVER, CRIMSON (ANNUAL)													
	10												
BROWNTOP MILLET	30												
BAHIAGRASS	40												
SERICEA LESPEDEZA	10												
BROWNTOP MILLET	10			_									
BERMUDA, COMMON													
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
BERMUDA, COMMON	12												
KOBE LESPEDEZA (ANNUAL)	10												
BROWNTOP MILLET	10												
BAHIAGRASS	20												
BERMUDA, COMMON	6												
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
SWITCHGRASS	8												
LITTLE BLUESTEM	PLS												

INDIANGRASS

DESCRIPTION	PLAN SYMBOL
SILT FENCE	
CLEARING LIMITS	CL
DIVERSION DIKE	⇒DD⇒
DIVERSION BERM	⇒DB⇒
TEMPORARY DIVERSION	⇒TD⇒
PERMANENT DIVERSION	→ PD-→
SUBSURFACE DRAIN	(ssd (
VEGETATED CHANNEL	.u. ⁻ -autus .u.
RIP RAP LINED CHANNEL	
ECB OR TRM LINED CHANNEL	
PAVED CHANNEL	PC
TREE PROTECTION	
SURFACE ROUGHENING	OR LG
TOP SOILING	
TEMPORARY SEEDING	TS
PERMANENT SEEDING	PS
MULCHING	M

EROSION CONTROL LEGEND

DESCRIPTION	PLAN SYMBOL
EROSION CONTROL BLANKET OR TURF REINFORCEMENT MAT	
FLEXIBLE GROWTH MATRIX	FGM
BONDED FIBER MATRIX	BFM
SODDING	so
SLOPED SODDING	
STAKED SOD	* * * * * * * * * * * * * * * * * * *
STAKED SOD AROUND INLET	OR X
RIPRAP	
OUTLET PROTECTION - RIP RAP	
OUTLET PROTECTION - ECB OR TRM	
DUST CONTROL	DC
POLYACRYLAMIDE (PAM)	PAM
SEDIMENT BASIN	
SEDIMENT BASIN WITH SKIMMER	
SEDIMENT TRAP	
ROCK SEDIMENT DIKE	
SEDIMENT TUBE	

EROSION CONTROL LEGEND

<u>- ND</u>	EROSION CONT	<u>R0</u>	<u>L L</u>	<u> </u>	<u> </u>	<u>D</u>
<u>DL</u>	DESCRIPTION		PLAN	SYMB	<u>OL</u>	
	ROCK CHECK DAM			OR		
	POROUS BAFFLES					
	STABILIZED CONSTRUCTION ENTRANCE					
	CONCRETE WASHOUT					
	STORM DRAIN INLET PROTECTION - TYPE A FILTER FABRIC		Ī	Α		
	STORM DRAIN INLET PROTECTION - TYPE A SEDIMENT TUBE		(A		
	STORM DRAIN INLET PROTECTION - TYPE B HARDWARE FABRIC AND STONE			B		
	STORM DRAIN INLET PROTECTION - TYPE C BLOCK AND GRAVEL		# # #	C		
	STORM DRAIN INLET PROTECTION - TYPE D RIGID INLET FILTER					
	STORM DRAIN INLET PROTECTION - TYPE E SURFACE COURSE CURB INLET FILTER			E		
	STORM DRAIN INLET PROTECTION - TYPE F INLET TUBE			F		
	STORM DRAIN INLET PROTECTION - TYPE G IMPERVIOUS AREA			G		
	STORM DRAIN INLET PROTECTION - CATCH BASIN INSERT			I		
	PIPE SLOPE DRAINS					
	TEMPORARY STREAM CROSSING			Т		
	LEVEL SPREADER					

CONSTRUCTION SEQUENCE

LEVEL SPREADER

11 BUILDING CONSTRUCTION- BUILDINGS UTILITIES,

12 LANDSCAPING AND FINAL STABILIZATION -TOPSOILING, TREES AND SHRUBS, PERMANENT

SEEDING, MULCHING, SODDING, RIP RAP.

ROADS, ETC.

	CONSTRUCT	TION SEQUENCE	, I
	CONSTRUCTION ACTIVITY	SCHEDULE CONSIDERATION	
1	OBTAIN COPIES OF ALL PLAN APPROVALS AND OTHER APPLICABLE PERMITS.	CONTRACTOR TO HAVE ONSITE AT ALL TIMES DURING CONSTRUCTION.	
2	FLAG THE WORK LIMITS AND WETLANDS.	FLAGGING TO HELP IDENTIFY PROJECT BOUNDARIES AND WETLANDS AREAS TO HELP PROVIDE SURFACE WATER PROTECTION AND MINIMIZE WETLAND IMPACTS	
3	HOLD PRE CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION.	REVIEW SEDIMENT AND EROSION PROTECTION AREAS AND BMPS WITH OWNER AND CONTRACTOR.	
4	INSTALL CONSTRUCTION ACCESS AND LAY DOWN AREAS	STABILIZE BARE AREAS IMMEDIATELY AND INSTALL CONSTRUCTION EXITS / ENTRANCES.	
5	CONSTRUCT SEDIMENT TRAPS AND BARRIERS - BASIN TRAPS, SEDIMENT FENCES, AND OUTLET PROTECTION.	INSTALL PRINCIPAL BASINS AFTER CONSTRUCTION SITE IS ACCESSED. INSTALL ADDITIONAL TRAPS AND BARRIERS AS NEEDED.	
6	ESTABLISH RUNOFF CONTROL - DIVERSIONS, PERIMETER DIKES, WATER BARS, AND OUTLET PROTECTION.	INSTALL KEY PRACTICES AFTER PRINCIPAL SEDIMENT TRAPS AND BEFORE LAND GRADING. INSTALL ADDITIONAL RUNOFF-CONTROL MEASURES DURING GRADING.	
7	LAND CLEARING AND GRADING-SITE PREPARATION CUTTING, FILLING AND GRADING, SEDIMENTATION TRAPS, BARRIERS, DIVERSIONS, DRAINS, SURFACE ROUGHENING.	BEGIN MAJOR CLEARING AND GRADING AFTER PRINCIPAL SEDIMENT AND KEY RUNOFF-CONTROL MEASURES ARE INSTALLED. CLEAR BORROW AND DISPOSAL AREAS ONLY AS NEEDED. INSTALL ADDITIONAL CONTROL MEASURES AS GRADING PROGRESSES. MARK TREES AND BUFFER AREAS FOR PRESERVATION.	
8	RUNOFF CONVEYANCE SYSTEM- INSTALL STORM DRAINS, STABILIZE BANKS, CHANNELS, INSTALL INLET AND OUTLET PROTECTION, SLOPE DRAINS.	WHERE NECESSARY, STABILIZE BANKS AS EARLY AS POSSIBLE. INSTALL PRINCIPAL RUNOFF CONVEYANCE SYSTEM WITH RUNOFF- CONTROL MEASURES. INSTALL REMAINDER OF SYSTEM AFTER GRADING.	
9	INSTALL WASTEWATER COLLECTION, WATER DISTRIBUTION, AND STORM DRAINAGE SYSTEMS	APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETE WETLAND AREAS TO BE FILLED WITH NATIVE SOIL WHEN POSSIBLE AND SEEDED WITH NATIVE WETLAND MIX.	
10	SURFACE STABILIZATION-TEMPORARY AND PERMANENT SEEDING, MULCHING, SODDING, RIP	APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETE	

WORK IS DELAYED OR COMPLETE.

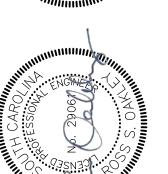
PRACTICES AS WORK TAKES PLACE.

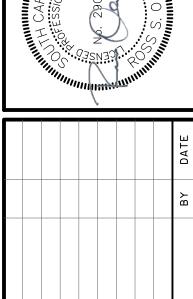
INSTALL NECESSARY EROSION AND SEDIMENTATION CONTROL

LAST CONSTRUCTION PHASE--STABILIZE ALL OPEN AREAS,

INCLUDING BORROW AND SPOIL AREAS. REMOVE AND

STABILIZE ALL TEMPORARY CONTROL MEASURES.





NORTHWEST WALTERBORO SEWER IMPROVEMENT
EROSION CONTROL CHARTS

DRAWN: JTB DESIGNED: MAL REVIEWED: RSO APPROVED: RSO SCALE: N/A

LIST OF ACRONYMS FOR SEDIMENT AND EROSION CONTROL

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

SEDIMENT TUBE

ACRYLAMIDE POLYMER BFM BONDED FIBER MATRIX BEST MANAGEMENT PRACTICE(S) CUBIC FEET PER SECOND CMP CORRUGATED METAL PIPE

DEPARTMENT OF HEATH AND ENVIRONMENTAL CONTROL ECB

EROSION CONTROL BLANKET

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY EROSION PREVENTION AND SEDIMENTATION CONTROL

UNITED STATES FOOD AND DRUG ADMINISTRATION FLEXIBLE GROWTH MATRIX

HIGH DENSITY POLYETHYLENE MS4 MUNICIPAL SEPARATE STORM SEWER SYSTEM

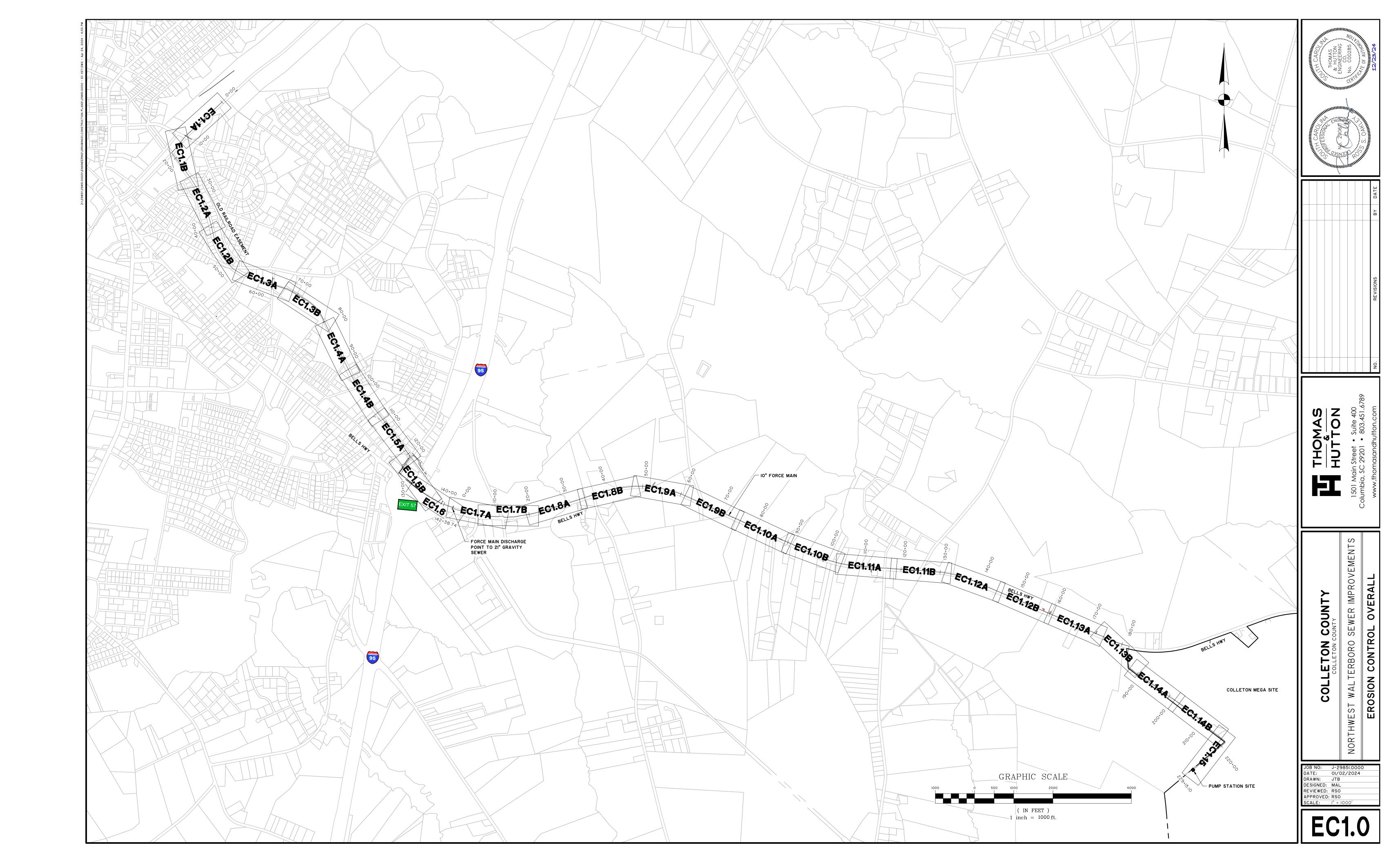
MATERIAL SAFETY DATA SHEETS NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

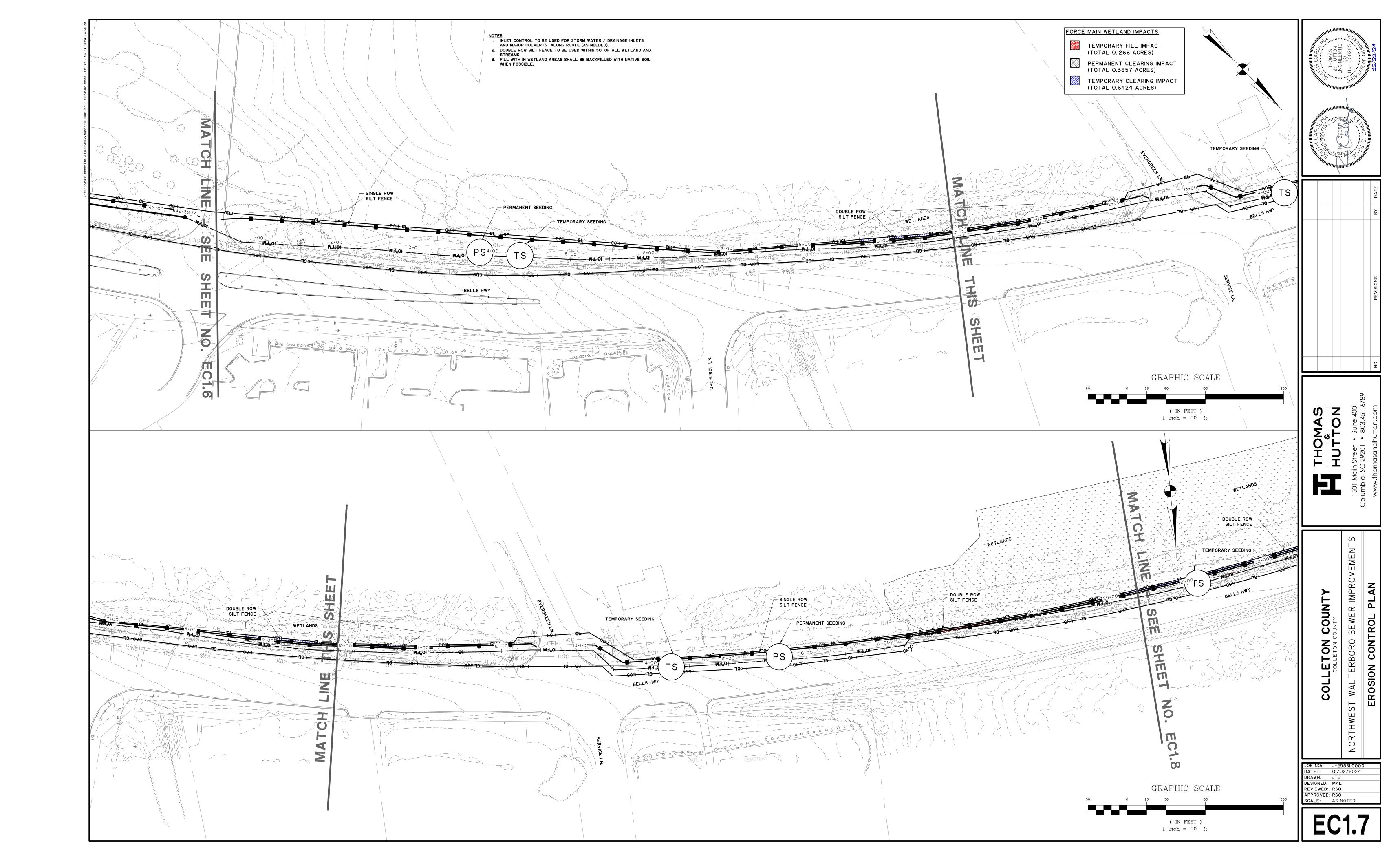
POLYACRYLAMIDE OR POLYMER REINFORCED CONCRETE PIPE

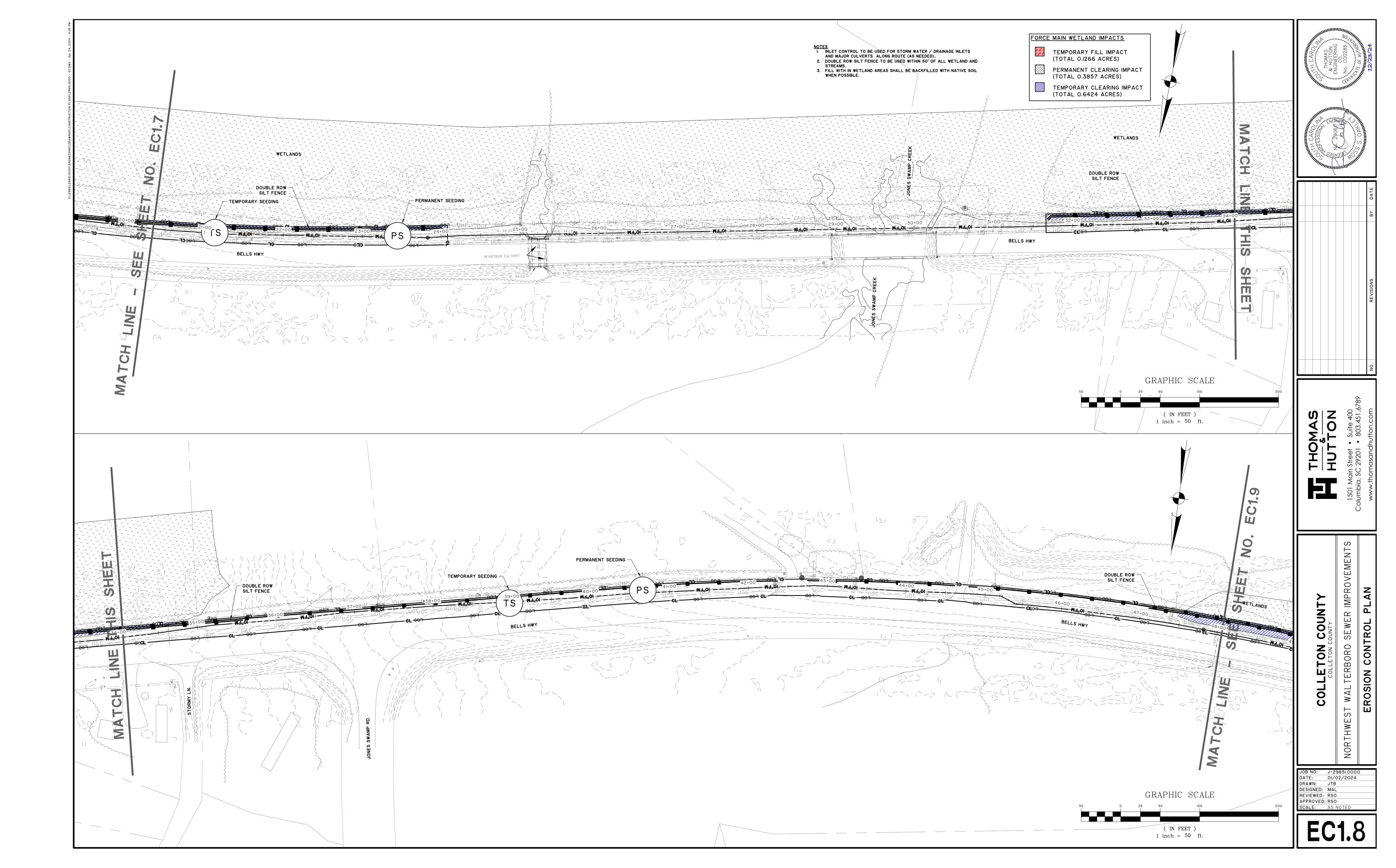
SOIL CONSERVATION SERVICE

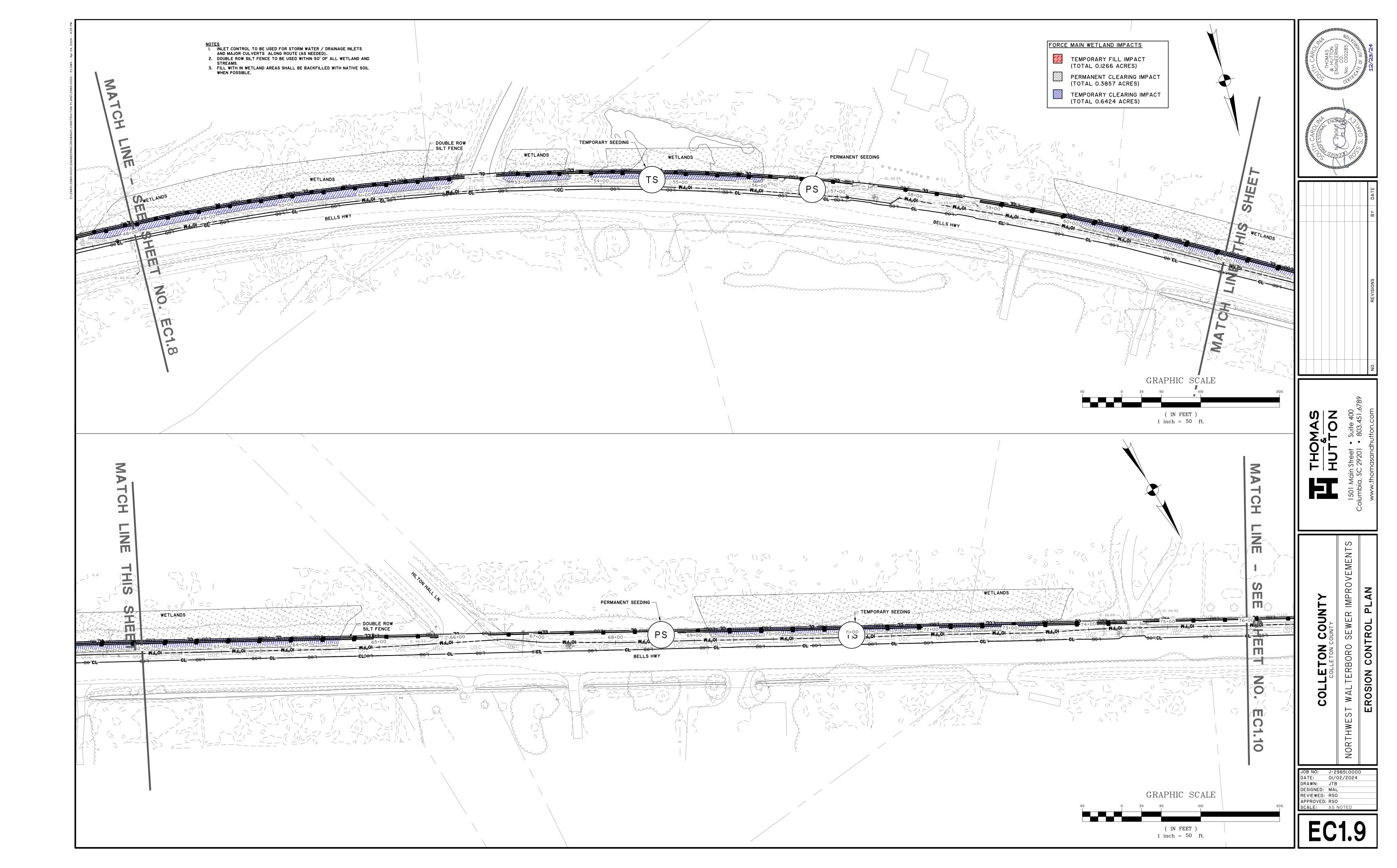
STORMWATER POLLUTION PREVENTION PROGRAM TURF REINFORCEMENT MAT

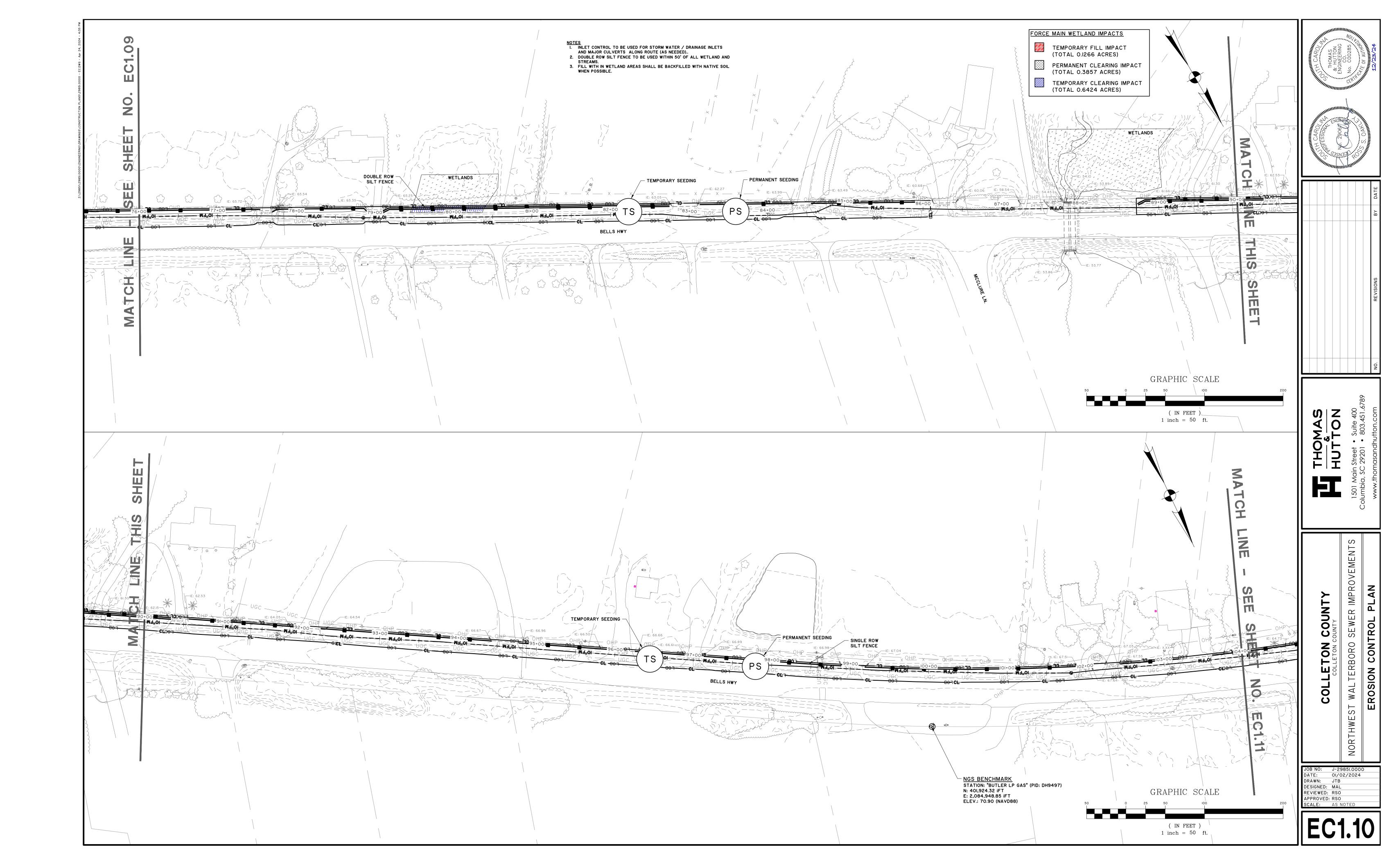
VEGETATED FILTER STRIP

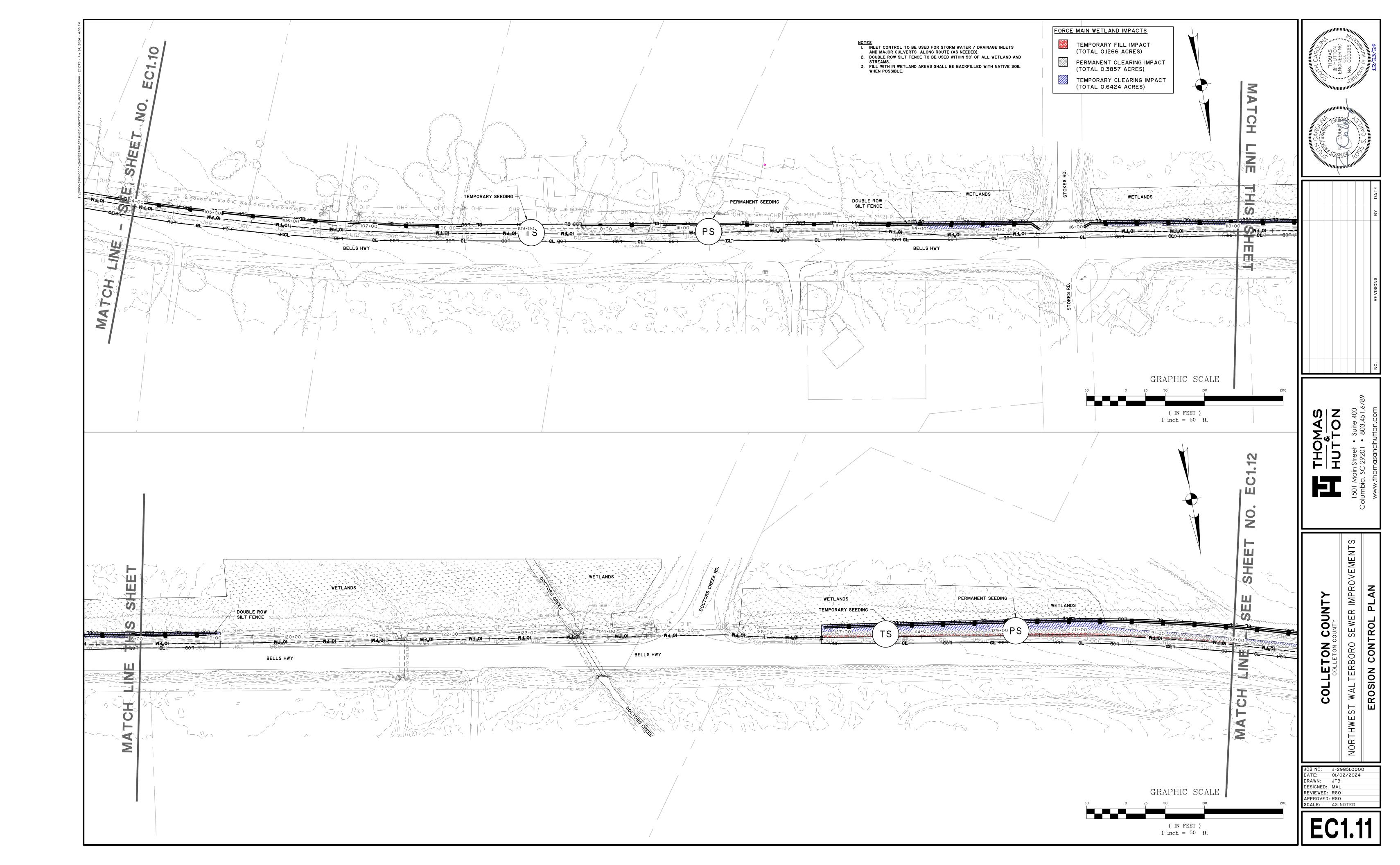


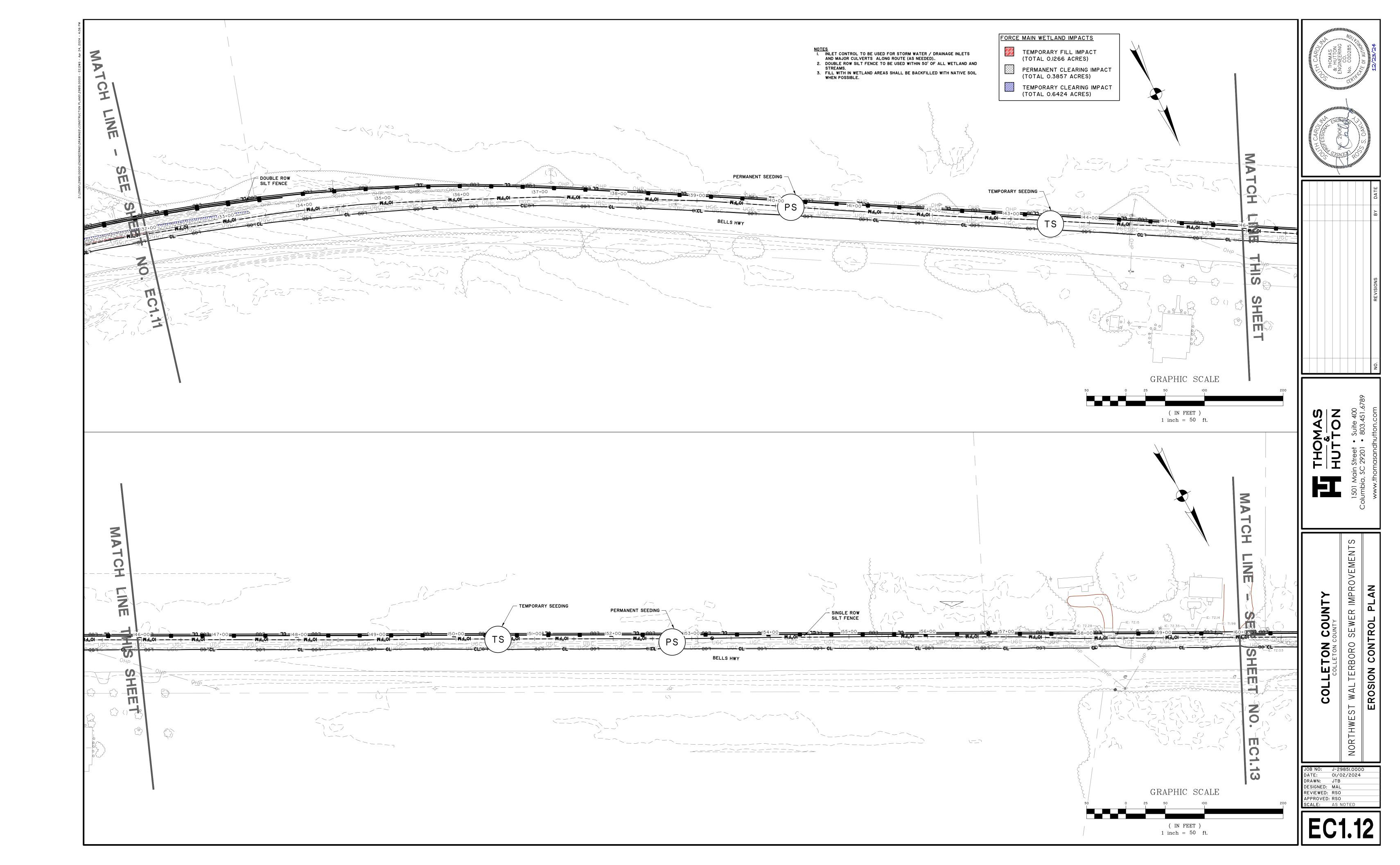


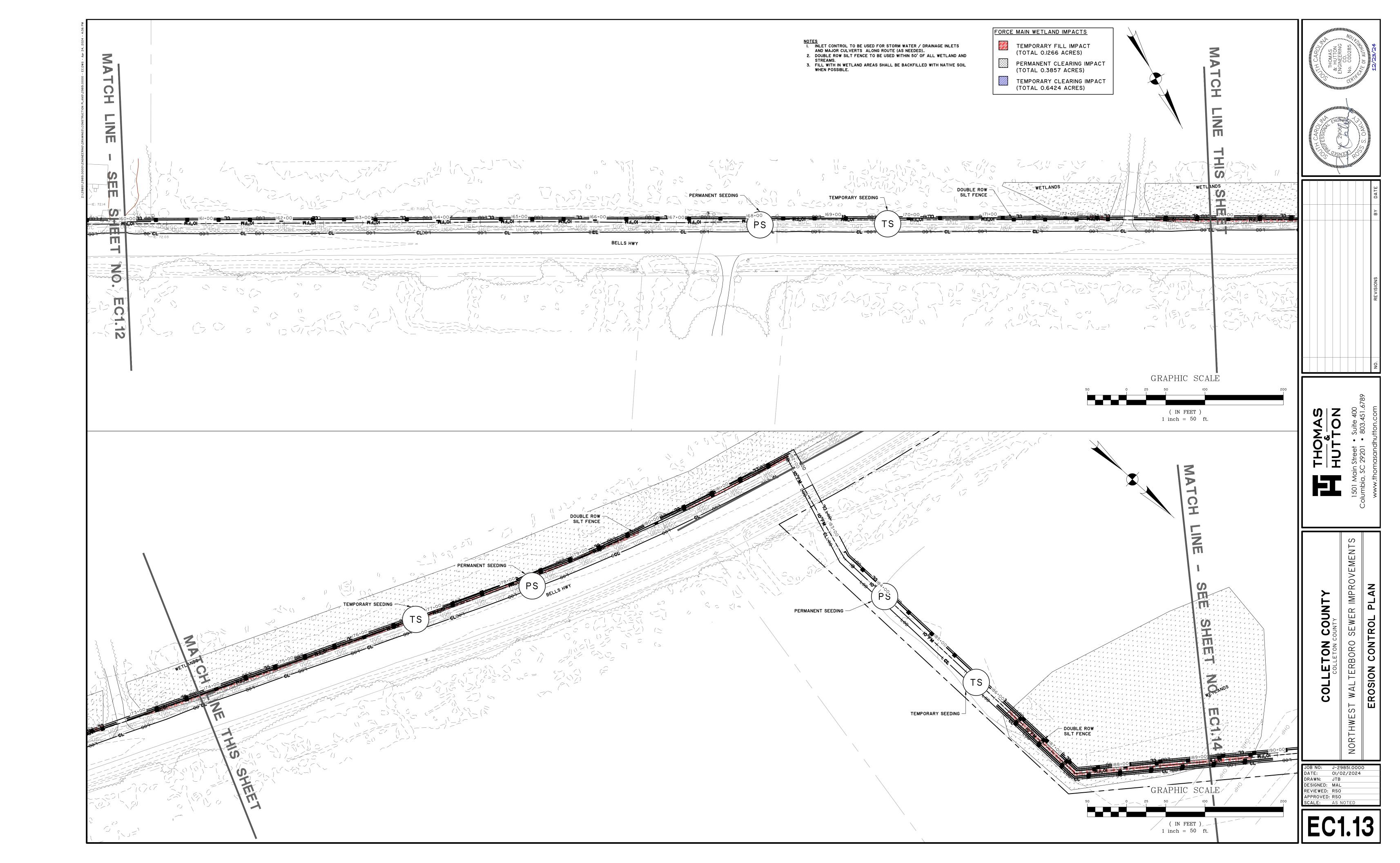


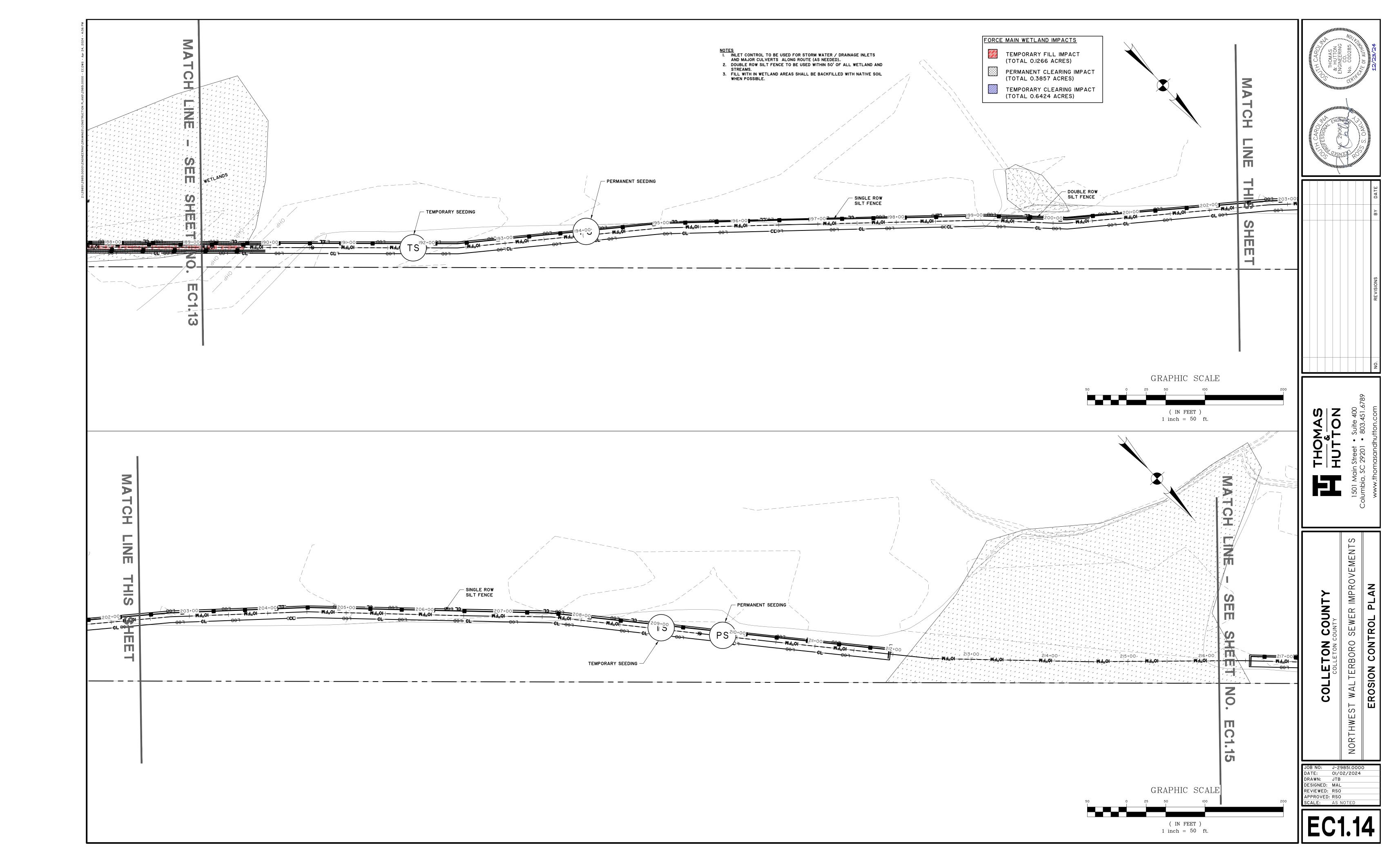


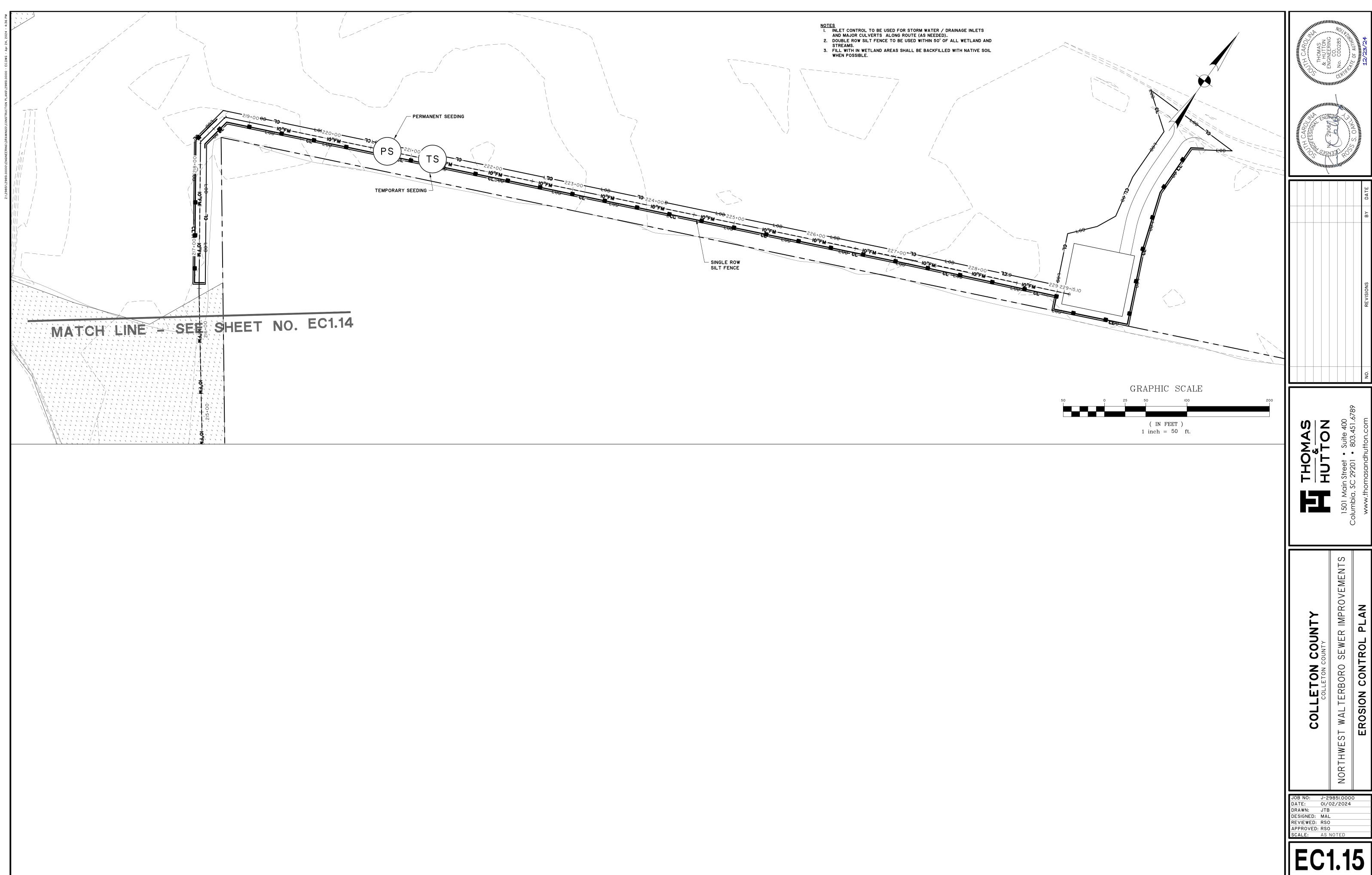


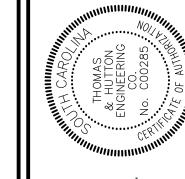


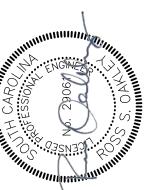


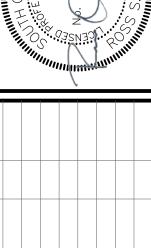






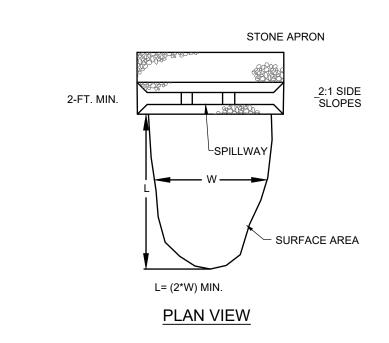


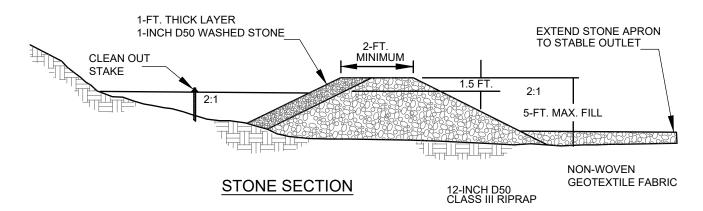


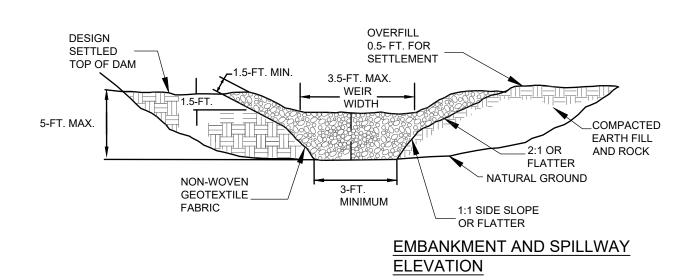


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DATE: 01/02/2024
DRAWN: JTB
DESIGNED: MAL
REVIEWED: RSO
APPROVED: RSO
SCALE: AS NOTED

SEDIMENT TRAP ROCK OUTLET							
ROCK OUTLET	HEIGHT (ft)	BOTTOM WIDTH (ft)	INSIDE SIDE SLOPES (XH:IV)	TOP WEIR WIDTH (ft)	BOTTOM RIPRAP FLOW LENGTH (ft)	TOP RIPRAP FLOV LENGTH (ft)	
ST-I							







SEDIMENT TRAPS SHOULD NOT BE PLACED IN WATERS OF THE STATE OR USGS BLUE-LINE STREAMS

ROCK OUTLET STRUCTURE REQUIREMENTS:

THE MAXIMUM SEDIMENT TRAP HEIGHT SHALL BE 5-FEET.

THE MAXIMUM STONE HEIGHT OF THE OUTLET WEIR SHALL BE 3.5-FEET. THE MINIMUM BOTTOM FLOW WIDTH OF THE STRUCTURE SHALL BE 3-FEET.

THE MINIMUM TOP FLOW LENGTH OF THE STRUCTURE SHALL BE 2-FEET.

THE MAIN BODY OF THE OUTLET STRUCTURE SHALL CONSIST OF 12-INCH D50 CLASS III RIPRAP. THE UPSTREAM FACE OF THE OUTLET STRUCTURE SHALL CONSIST OF A 1-FOOT THICK LAYER OF 1-INCH D50 WASHED STONE. THE MAXIMUM SIDE SLOPE OF THE ROCK STRUCTURE

INSTALL A NON-WOVEN GEOTEXTILE FILTER FABRIC BEFORE INSTALLING THE STONE FOR THE OUTLET STRUCTURE. ALLOW THE STONE TO EXTEND

DOWNSTREAM PAST THE TOE OF THE EMBANKMENT.

ALL INSIDE SEDIMENT TRAP SLOPES SHOULD BE 3:1 OR FLATTER.

MARK THE SEDIMENT CLEANOUT LEVEL OF TRAP WITH A STAKE IN THE FIELD. SEED AND MULCH ALL DISTURBED AREAS.

CONTRACTOR SHALL PROVIDE CONTINUAL MONITORING, REGULAR MAINTENANCE AND REGULAR SEDIMENT REMOVAL.

REMOVE SEDIMENT WHEN IT REACHES 50% OF STORAGE VOLUME OR REACHES THE TOP OF CLEANOUT STAKE.

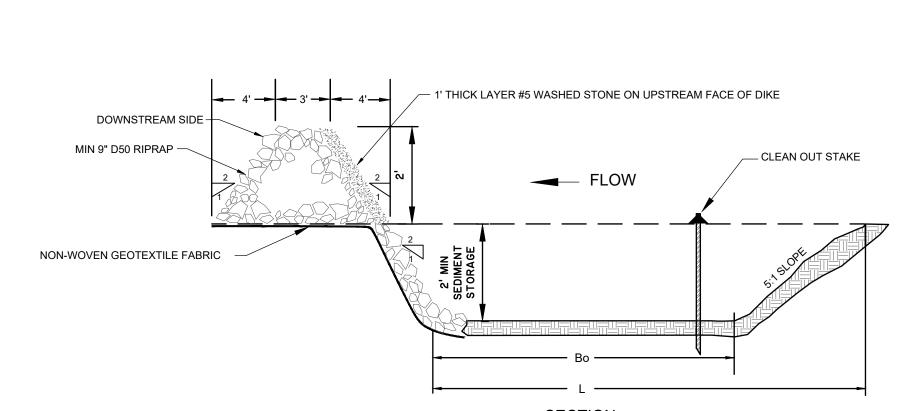
ALL TEMPORARY SEDIMENT TRAPS SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER IT IS NO LONGER NEEDED. TRAPPED SEDIMENT SHOULD BE REMOVED FROM, OR STABILIZED ON SITE.

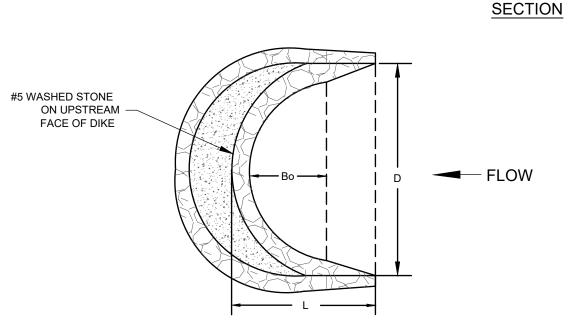
DISTURBED AREAS RESULTING FROM THE REMOVAL OF THE SEDIMENT TRAP SHOULD BE PERMANENTLY STABILIZED.



TEMPORARY SEDIMENT TRAP

NOT TO SCALE





D	L	Во	PEAK FLOW (CFS)	TOTAL STORAGE VOL. (CU. FT.)	SEDIMENT STORAGE VOLUME (CU. FT.)
15'	17.5'	3.5'	24.1	838	250
20'	20.0'	6.0'	32.1	1263	406
25'	22.5'	8.5'	40.1	1766	601
30'	25.0'	11.0'	48.2	2348	836

TYPICAL ROCK DIKE PLAN DIMENSIONS

ROCK SEDIMENT DIKES ARE MOST EFFECTIVE IN AREAS WHERE SEDIMENT CONTROL IS NEEDED WITH MINIMAL DISTURBANCE. THEY CAN BE USED AS SEDIMENT CONTROL STRUCTURES FOR THE OUTFALLS OF DIVERSION SWALES, DIVERSION DIKES, IN LOW AREAS OR OTHER AREAS WHERE CONCENTRATED SEDIMENT LADEN FLOW IS EXPECTED. ROCK SEDIMENT DIKES SHOULD NOT BE PLACED IN WATERS OF THE STATE OR ANY OTHER STREAMS THAT HAVE A BASE FLOW. MAXIMUM 2 - ACRE DRAINAGE AREA TO DIKE.

A NON-WOVEN GEOTEXTILE FABRIC SHALL BE INSTALLED OVER THE SOIL SURFACE WHERE THE ROCK SEDIMENT DIKE IS TO BE PLACED.

THE BODY OF THE ROCK SEDIMENT DIKE SHALL BE COMPOSED OF MINIMUM 9-INCH D50 RIPRAP.

THE UPSTREAM FACE OF THE ROCK SEDIMENT DIKE SHALL BE COMPOSED OF A 1-FOOT THICK LAYER OF 3/4-INCH TO 1-INCH D50 WASHED STONE PLACED AT A SLOPE OF 2H:1V.

ROCK SEDIMENT DIKES SHALL HAVE A MINIMUM TOP FLOW LENGTH OF 3-FEET (2-FOOT FLOW LENGTH THROUGH THE RIPRAP AND 1-FOOT FLOW LENGTH THROUGH THE WASHED STONE).

THE ROCK MUST BE PLACED BY HAND OR MECHANICAL PLACEMENT (NO DUMPING OF ROCK TO FORM THE SEDIMENT DIKE) TO ACHIEVE THE PROPER

A SEDIMENT SUMP SHALL BE LOCATED ON THE UPSTREAM SIDE OF THE STRUCTURE TO PROVIDE SEDIMENT STORAGE. THE UPSTREAM SIDE OF THE SEDIMENT SUMP SHALL HAVE A SLOPE OF 5H:1V TO INHIBIT EROSION OF THE SEDIMENT STORAGE AREA. THE MINIMUM DEPTH OF THE SEDIMENT SUMP SHALL BE 2-FEET. MARK THE SEDIMENT CLEANOUT LEVEL OF THE SEDIMENT DIKE WITH A STAKE IN THE FIELD.

SEED AND MULCH ALL DISTURBED AREAS.

INSPECTION AND MAINTENANCE:

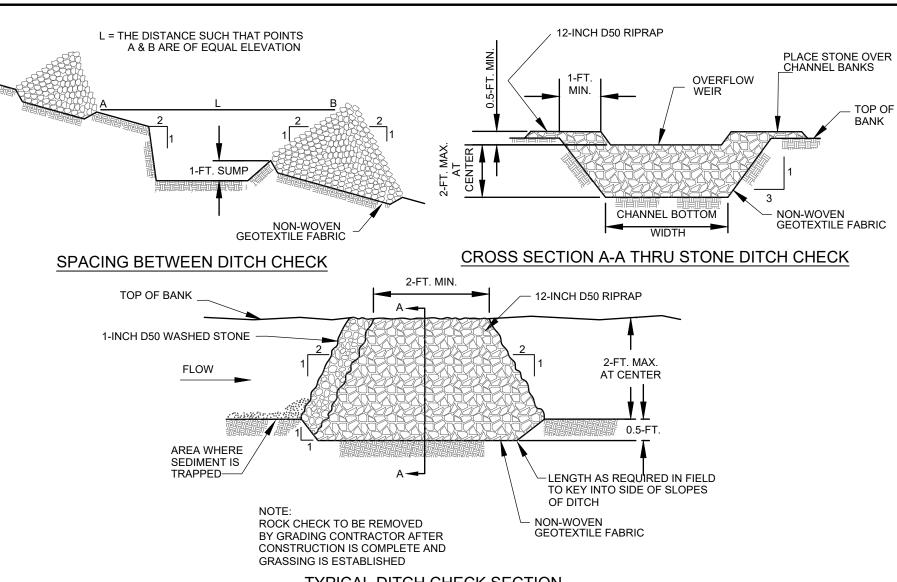
CONTRACTOR SHALL PROVIDE CONTINUAL MONITORING, REGULAR MAINTENANCE AND REGULAR SEDIMENT REMOVAL.

REMOVE SEDIMENT WHEN IT REACHES 50% OF THE SEDIMENT STORAGE VOLUME OR WHEN REACHES THE TOP OF CLEANOUT STAKE. REMOVED SEDIMENT FROM THE SUMP SHOULD BE REMOVED FROM, OR STABILIZED ON SITE.

ALL ROCK SEDIMENT DIKES SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THEY ARE NO LONGER NEEDED. DISTURBED AREAS RESULTING FROM THE REMOVAL OF ROCK SEDIMENT DIKES SHOULD BE PERMANENTLY STABILIZED.







TYPICAL DITCH CHECK SECTION

A ROCK DITCH CHECK SHOULD BE INSTALLED IN STEEPLY SLOPED SWALES, OR IN SWALES WHERE ADEQUATE VEGETATION CANNOT BE ESTABLISHED. ROCK DITCH CHECKS SHOULD BE USED ONLY IN SMALL OPEN CHANNELS. ROCK DITCH CHECKS SHOULD NOT BE PLACED IN WATERS OF THE COMMONWEALTH OR USGS BLUE-LINE STREAMS.

A NON-WOVEN GEOTEXTILE FABRIC SHALL BE INSTALLED OVER THE SOIL SURFACE WHERE THE ROCK DITCH CHECK IS TO BE PLACED.

THE BODY OF THE ROCK DITCH CHECK SHALL BE COMPOSED OF 12-INCH D50 RIPRAP.

ROCK DITCH CHECKS SHOULD HAVE A MINIMUM TOP FLOW LENGTH OF 2-FEET.

THE UPSTREAM FACE OF THE ROCK DITCH CHECK MAY BE COMPOSED OF 1-INCH D50 WASHED STONE.

ROCK DITCH CHECKS SHOULD NOT EXCEED A HEIGHT OF 2-FEET AT THE CENTERLINE OF THE CHANNEL.

STONE SHOULD BE PLACED OVER THE CHANNEL BANKS TO PREVENT WATER FROM CUTTING AROUND THE DITCH CHECK.

THE ROCK MUST BE PLACED BY HAND OR MECHANICAL PLACEMENT (NO DUMPING OF ROCK TO FORM DAM) TO ACHIEVE COMPLETE COVERAGE

OF THE DITCH OR SWALE AND TO ENSURE THAT THE CENTER OF THE CHECK IS LOWER THAN THE EDGES. THE MAXIMUM SPACING BETWEEN THE DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM CHECK IS AT THE SAME ELEVATION AS

THE TOP OF THE DOWNSTREAM CHECK.

INSPECTION AND MAINTENANCE: INSPECT FOR SEDIMENT AND DEBRIS ACCUMULATION. INSPECT DITCH CHECK EDGES FOR EROSION AND REPAIR

SEDIMENT SHOULD BE REMOVED WHEN IT REACHES 1/3 THE ORIGINAL CHECK HEIGHT.

TO PROTECT THE DITCH OR SWALE UNLESS THE SLOPE OF THE SWALE IS GREATER THAN 4%.

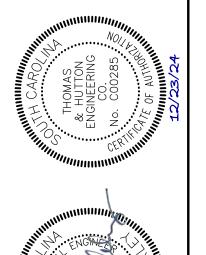
IN THE CASE OF GRASS-LINED DITCHES AND SWALES, ROCK DITCH CHECKS SHOULD BE REMOVED WHEN THE GRASS HAS MATURED SUFFICIENTLY

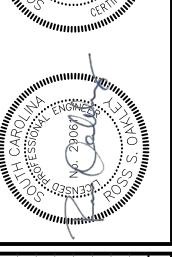
AFTER CONSTRUCTION IS COMPLETE, ALL STONE SHOULD BE REMOVED BY THE GRADING CONTRACTOR IF VEGETATION WILL BE USED FOR

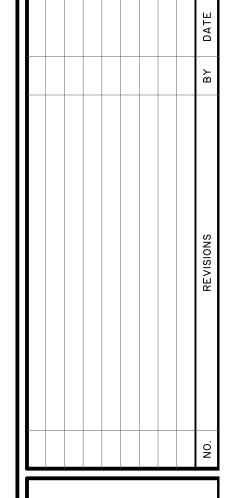
PERMANENT EROSION CONTROL MEASURES. THE AREA BENEATH THE ROCK DITCH CHECKS SHOULD BE SEEDED AND MULCHED IMMEDIATELY AFTER ROCK CHECK DAM REMOVAL



ROCK DITCH CHECK





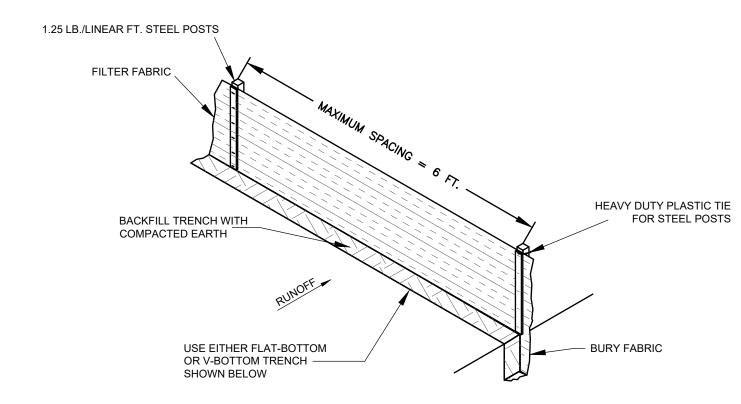


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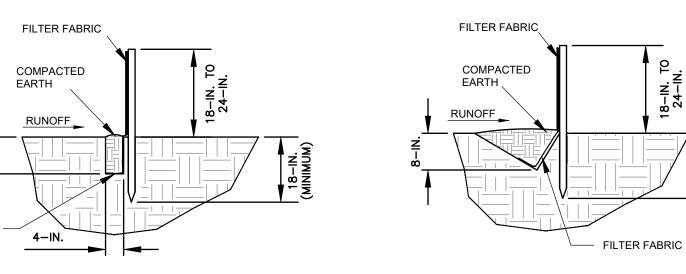
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DRAWN: JTB DESIGNED: MAL REVIEWED: RSO APPROVED: RSO



SILT FENCE INSTALLATION



V-SHAPED TRENCH DETAIL

WHERE THE MAXIMUM SHEET OR OVERLAND FLOW PATH LENGTH TO THE FENCE IS 100-FEET. WHERE THE MAXIMUM SLOPE STEEPNESS (NORMAL [PERPENDICULAR] TO FENCE LINE) IS 2H:1V.

DO NOT PLACE SILT FENCE ACROSS CHANNELS OR USE IT AS A VELOCITY CONTROL BMP.

FLAT-BOTTOM TRENCH DETAIL

USE 48-INCH LONG STEEL POSTS THAT MEET THE FOLLOWING MINIMUM PHYSICAL REQUIREMENTS: COMPOSED OF HIGH STRENGTH STEEL WITH MINIMUM YIELD STRENGTH OF 50,000 PSI.

HAVE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND NOMINAL "T" LENGTH OF 1.48-INCHES. WEIGH 1.25 POUNDS PER FOOT (± 8%).

HAVE A SOIL STABILIZATION PLATE WITH A MINIMUM CROSS SECTION AREA OF 17-SQUARE INCHES ATTACHED TO THE STEEL POSTS. PAINTED WITH A WATER BASED BAKED ENAMEL PAINT. USE STEEL POSTS WITH A MINIMUM LENGTH OF 4-FEET, WEIGHING 1.25 POUNDS PER LINEAR FOOT (± 8%) WITH PROJECTIONS TO

AID IN FASTENING THE FABRIC. EXCEPT WHEN HEAVY CLAY SOILS ARE PRESENT ON SITE, STEEL POSTS WILL HAVE A METAL SOIL STABILIZATION PLATE WELDED NEAR THE BOTTOM SUCH THAT WHEN THE POST IS DRIVEN TO THE PROPER DEPTH, THE PLATE WILL BE BELOW THE GROUND LEVEL FOR ADDED STABILITY.

THE SOIL PLATES SHOULD HAVE THE FOLLOWING CHARACTERISTICS: BE COMPOSED OF MINIMUM 15 GAUGE STEEL.

HAVE A MINIMUM CROSS SECTION AREA OF 17-SQUARE INCHES.

COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS COMPOSED OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS, FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER. FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY ALTER ITS PHYSICAL PROPERTIES AFTER INSTALLATION.

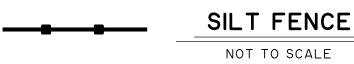
FREE OF DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES. CUT TO A MINIMUM WIDTH OF 36 INCHES.

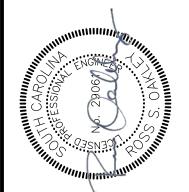
USE ONLY FABRIC APPEARING ON SCDOT APPROVAL SHEET #34 MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

INSTALLATION:
EXCAVATE A TRENCH APPROXIMATELY 6-INCHES WIDE AND 6-INCHES DEEP WHEN PLACING FABRIC BY HAND. PLACE 12-INCHES OF GEOTEXTILE FABRIC INTO THE 6-INCH DEEP TRENCH, EXTENDING THE REMAINING 6-INCHES TOWARDS THE UPSLOPE SIDE OF THE TRENCH. BACKFILL THE TRENCH WITH SOIL OR GRAVEL AND COMPACT. BURY 12-INCHES OF FABRIC INTO THE GROUND WHEN PNEUMATICALLY INSTALLING SILT FENCE WITH A SLICING METHOD. PURCHASE FABRIC IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, WRAPPED THE FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 6-INCH MINIMUM OVERLAP. INSTALL POSTS TO A MINIMUM DEPTH OF 24-INCHES. INSTALL POSTS A MINIMUM OF 1- TO 2- INCHES ABOVE THE FABRIC, WITH NO MORE THAN 3-FEET OF THE POST ABOVE THE GROUND. SPACE POSTS TO MAXIMUM 6-FEET CENTERS. ATTACH FABRIC TO WOOD POSTS USING STAPLES MADE OF HEAVY-DUTY WIRE AT LEAST 1-1/2-INCH LONG, SPACED A MAXIMUM OF 6-INCHES APART. STAPLE A 2-INCH WIDE LATHE OVER THE FILTER FABRIC TO SECURELY FASTEN IT TO THE UPSLOPE SIDE OF WOODEN POSTS. ATTACH FABRIC TO THE STEEL POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED AND PLACED IN A MANNER TO PREVENT SAGGING OR TEARING OF THE FABRIC. IN CALL CASES, TIES SHOULD BE AFFIXED IN NO LESS THAN 4 PLACES. INSTALL THE FABRIC A MINIMUM OF 24-INCHES ABOVE THE GROUND. WHEN NECESSARY, THE HEIGHT OF THE FENCE ABOVE GROUND MAY BE GREATER THAN 24-INCHES. IN TIDAL AREAS, EXTRA SILT FENCE HEIGHT MAY BE REQUIRED. THE POST HEIGHT WILL BE TWICE THE EXPOSED POST HEIGHT. POST SPACING WILL REMAIN THE SAME AND EXTRA HEIGHT FABRIC WILL BE 4-, 5-, OR 6-FEET TALL. LOCATE SILT FENCE CHECKS EVERY 100 FEET MAXIMUM AND AT LOW POINTS. INSTALL THE FENCE PERPENDICULAR TO THE DIRECTION OF FLOW AND PLACE THE FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND

INSPECTION AND MAINTENANCE:
CHECK FOR SEDIMENT BUILDUP AND FENCE INTEGRITY. CHECK WHERE RUNOFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED BY FENCE OVERTOPPING. IF THE FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE SECTION OF FENCE IMMEDIATELY. REMOVE SEDIMENT ACCUMULATED ALONG THE FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE. REMOVE SILT FENCE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR

AFTER TEMPORARY BEST MANAGEMENT PRACTICES (BMPS) ARE NO LONGER NEEDED. PERMANENTLY STABILIZE DISTURBED AREAS RESULTING FROM FENCE REMOVAL.





IMPROVEMENTS SEWER I

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01/02/2024 DRAWN: JTB DESIGNED: MAL REVIEWED: RSO APPROVED: RSO

SCALE: N/A

WHEN AND WHERE TO USE IT:

STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND MOVING DIRECTLY ONTO A PUBLIC ROAD.

IMPORTANT CONSIDERATIONS:

IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFFSITE. WASHDOWN FACILITIES SHALL BE REQUIRED AS DIRECTED BY SCDHEC AS NEEDED. WASHDOWN AREAS IN GENERAL MUST BE ESTABLISHED WITH CRUSHED GRAVEL AND DRAIN INTO A SEDIMENT TRAP OR SEDIMENT BASIN.

CONSTRUCTION ENTRANCES SHOULD BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF MUD PICKED UP BY VEHICLES.

REMOVE ALL VEGETATION AND ANY OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA.

DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM STONES TO A SEDIMENT TRAP OR BASIN.

INSTALL A NON-WOVEN GEOTEXTILE FABRIC PRIOR TO PLACING ANY STONE.

INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.

THE ENTRANCE SHALL CONSIST OF 1-INCH TO 3-INCH D50 STONE PLACED AT A MINIMUM DEPTH OF 6-INCHES.

MINIMUM DIMENSIONS OF THE ENTRANCE SHALL BE 24-FEET WIDE BY 100-FEET LONG, AND MAY BE MODIFIED AS NECESSARY TO ACCOMMODATE SITE CONSTRAINTS.

THE EDGES OF THE ENTRANCE SHALL BE TAPERED OUT TOWARDS THE ROAD TO PREVENT TRACKING OF MUD AT THE EDGE OF THE ENTRANCE.

INSPECTION AND MAINTENANCE:

CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING PERIODS OF WET WEATHER. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET WEATHER CONDITIONS. RESHAPE THE STONE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.

WASH OR REPLACE STONES AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF-SITE BY VEHICLES.

FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE.

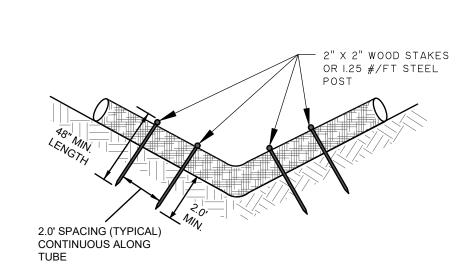
IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED WHEN THE WATER CAN BE DISCHARGED TO A SEDIMENT TRAP OR BASIN.

REPAIR ANY BROKEN PAVEMENT IMMEDIATELY.



STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



- STAKES PLACED A 2' MINIMUM SPACING TOP VIEW OF DITCH

END VIEW OF DITCH

SEDIMENT TUBES ARE ELONGATED TUBES OF COMPACTED GEOTEXTILES, CURLED EXCELSIOR WOOD, NATURAL COCONUT FIBER OR HARDWOOD MULCH.

PINE NEEDLE AND LEAF MULCH-FILLED SEDIMENT TUBES ARE NOT PERMITTED UNDER THIS SPECIFICATION.

WHEN AND WHERE TO USE IT: INSTALL SEDIMENT TUBES ALONG CONTOURS, IN DRAINAGE CONVEYANCE SWALES, AND AROUND INLETS TO HELP REDUCE THE EFFECTS OF SOIL EROSION BY ENERGY DISSIPATION AND RETAIN SEDIMENT.

SEDIMENT TUBES FOR DITCH CHECKS AND TYPE A INLET STRUCTURE FILTERS EXHIBIT THE FOLLOWING PROPERTIES: PRODUCED BY A MANUFACTURER EXPERIENCED IN SEDIMENT TUBE MANUFACTURING.

COMPOSED OF COMPACTED GEOTEXTILES, CURLED EXCELSIOR WOOD, NATURAL COCONUT FIBERS, HARDWOOD MULCH OR A MIX OF THESE MATERIALS ENCLOSED BY A FLEXIBLE NETTING MATERIAL.

STRAW, STRAW FIBER, STRAW BALES, PINE NEEDLES AND LEAF MULCH ARE NOT ALLOWED UNDER THIS SPECIFICATION. UTILIZES OUTER NETTING THAT CONSISTS OF SEAMLESS, HIGH-DENSITY POLYETHYLENE PHOTODEGRADABLE MATERIALS TREATED WITH ULTRAVIOLET STABILIZERS OR A SEAMLESS, HIGH-DENSITY POLYETHYLENE NON-DEGRADABLE MATERIALS. DIAMETER RANGING FROM 18-INCHES TO 24-INCHES. CURLED EXCELSIOR WOOD, OR NATURAL COCONUT ROLLED EROSION CONTROL PRODUCTS (RECPS) THAT ARE ROLLED UP TO CREATE A SEDIMENT TUBE ARE NOT ALLOWED UNDER THIS SPECIFICATION.

INSTALLATION:
INSTALL OVER BARE SOIL, MULCHED AREAS OR EROSION CONTROL BLANKETS.
BE COMPOSED OF GEOTEXTILES, CURLED EXCELSIOR WOOD, NATURAL COCONUT FIBER OR HARDWOOD MULCH ENCLOSED BY A FLEXIBLE NETTING MATERIAL.

THE MINIMUM DIAMETER SHOULD BE 18 INCHES. SEDIMENT TUBES SHOULD BE STAKED USING WOODEN STAKES (2-INCH X 2-INCH) OR STEEL POSTS (STANDARD "U" OR "T" SECTIONS WITH A MINIMUM WEIGHT OF 1.25 POUNDS PER FOOT) A MINIMUM OF 48-INCHES IN LENGTH PLACED ON 2-FOOT CENTERS.

STAKES SHOULD BE INTERTWINED WITH THE OUTER MESH ON THE DOWNSTREAM SIDE AND DRIVEN IN THE GROUND TO A MINIMUM DEPTH OF 1.5 FEET LEAVING LESS THAN 1 FOOT OF STAKE EXPOSED ABOVE THE SEDIMENT TUBE. ALWAYS REFER TO THE MANUFACTURER'S RECOMMENDATIONS FOR THE STAKING DETAIL, INSTALL ALL SEDIMENT TUBES INSURING THAT NO GAPS EXIST BETWEEN THE SOIL AND THE BOTTOM OF THE SEDIMENT TUBE. THE ENDS OF ADJACENT SEDIMENT TUBES SHOULD BE LAPPED 6-INCH TO PREVENT FLOW AND SEDIMENT FROM PASSING THROUGH THE FIELD JOINT. IN NO SITUATIONS SHOULD SEDIMENT TUBES BE STACKED ON TOP OF ONE ANOTHER.

CONSTRUCT A TRENCH THAT IS 20% OF THE TUBE DIAMETER TO INSTALL THE TUBE IN.

AVOID DAMAGE TO SEDIMENT TUBES WHILE INSTALLING THEM. IF THE SEDIMENT TUBE BECOMES DAMAGED DURING INSTALLATION, A STAKE SHOULD BE PLACED ON BOTH SIDES OF THE DAMAGED AREA TERMINATING THE TUBE SEGMENT AND A NEW TUBE SEGMENT SHOULD BE INSTALLED. SHOULD BE INSTALLED IN SWALES OR DRAINAGE DITCHES PERPENDICULAR TO THE FLOW OF WATER. SEDIMENT TUBES SHOULD CONTINUE UP THE SIDE SLOPES A MINIMUM OF 1 FOOT ABOVE THE DESIGN FLOW DEPTH. SEDIMENT TUBES SHOULD BE SPACED ACCORDING TO THE FOLLOWING TABLE.

SEDIMENT TUBE SPACING						
SLOPE	MAXIMUM SEDIMENT TUBE SPACING					
ESS THAN 2%	150-FEET					
2%	100-FEET					
3%	75-FEET					
4%	50-FEET					
5%	40-FEET					
6%	30-FEET					
EATER THAN 6%	25-FEET					

SEDIMENT TUBE LENGTH SELECTED SHOULD MINIMIZE THE NUMBER OF SEDIMENT TUBES NEEDED TO SPAN THE WIDTH OF THE DRAINAGE CONVEYANCE. IF THE DITCH CHECK LENGTH (PERPENDICULAR TO THE WATER FLOW) IS 15 FEET, THEN ONE 15 FOOT SEDIMENT TUBE IS PREFERRED COMPARED TO TWO OVERLAPPING 10 FOOT SEDIMENT TUBES.

SEDIMENT TUBES FOR DITCH CHECKS SHOULD REMAIN IN PLACE UNTIL FULLY ESTABLISHED VEGETATION AND ROOT SYSTEMS HAVE COMPLETELY DEVELOPED AND CAN SURVIVE ON THEIR OWN.

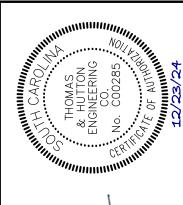
LARGE DEBRIS, TRASH, AND LEAVES SHOULD BE REMOVED.

IF EROSION CAUSES THE EDGES TO FALL TO A HEIGHT EQUAL TO OR BELOW THE HEIGHT OF THE CENTER, REPAIRS SHOULD BE MADE IMMEDIATELY. REMOVE ACCUMULATED SEDIMENT FROM THE UPSTREAM SIDE OF THE SEDIMENT TUBE WHEN THE SEDIMENT HAS REACHED A HEIGHT OF APPROXIMATELY ONE-THIRD OF THE EXPOSED HEIGHT OF THE TUBE (MEASURED AT THE CENTER).

ACCUMULATED SEDIMENT SHOULD BE REMOVED PRIOR TO REMOVING SEDIMENT TUBES.

SEDIMENT TUBE REMOVAL SHOULD BE COMPLETED ONLY AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETELY STABILIZED. PERMANENT VEGETATION SHOULD REPLACE AREAS FROM WHICH GRAVEL, STONE, SEDIMENT TUBES, OR OTHER MATERIALS HAVE BEEN REMOVED.







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