

# PROPOSED PLANS FOR

GEORGETOWN COUNTY

EAST ANDREWS DRAINAGE IMPROVEMENTS

EDA PROJECT NUMBER: 04-79-07486

## UTILITY CONTACT INFORMATION

Owner	Contact	Phone #	Email
Frontier Communications (formerly Verizon)	E.A. Benton	843-455-5396 (C)	everett.benton@ftr.com
Dominion Energy Gas - SCG94	David Ethridge	843-833-2460	david.ethridge@dominionenergy.com
Duke Energy Progress (Formerly Progress Energy	Jerry Harrington	843-319-4952	jerry.harrington@duke-energy.com
Horry Telephone (HTC)	Frankie Moore	843-369-8198	frankie.moore@htcinc.net
Santee Cooper	Chris Mahoney	843-761-8000 ext. 5918	chris.mahoney@santeecooper.com
Santee Electric Co-Op	Rob Higbe	843-355-0533	rhigbe@Santee.org
Segra Communications - SGRAZ01	John Pearson	843-270-5573	jd@eganbrothersinc.com
Town of Andrews	Jawana McCray	843-485-1288	JMcCray@townofandrews.sc.gov
Georgetown County Water and Sewer	Richard Poston	843-907-1521	richardp@gcwsd.com
Charter Spectrum	Stephen Susak		stephen.susak@charter.com
Farmers Telephone Cooperative	Mark Brown	843-372-1535	brownm@ftc.org

	ENVIRONMENTAL PERMIT INFORMATION											
(	JSACE PERMIT	X YES	NO									
	NEPA DOCUMENT	YES	_X_NO									
	401 CERTIFICATION	X YES	NO									
	OCRM CAP	YES	_X_NO									
	NAVIGABLE WATERSSC	USCG	USACE	_X_N/A								

LAYOUT GEORGETOWN COUNTY MAP

REFERENCE THE FOLLOWING FOR RAILWAY STANDARDS:

CSX: DESIGN & CONSTRUCTION
STANDARD SPECIFICATIONS

CSX: STANDARD SPECIFICATIONS FOR THE DESIGN & CONSTRUCTION OF PRIVATE SIDETRACKS

**CALL 811** 

3 DAYS BEFORE DIGGING IN SOUTH CAROLINA

SOUTH CAROLINA 811 (SC811)

WWW.SC811.COM

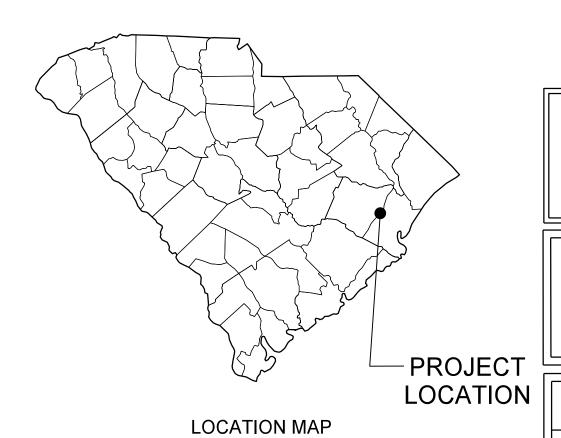
ALL UTILITIES MAY NOT BE A MEMBER OF SC811

RAILROAD INVOLVEMENT? (YES)/ NO

	LESTE	R CREEK	TOTAL				
NET LENGTH OF ROADWAY	0.000	MILES	0.000	MILES			
NET LENGTH OF BRIDGES	0.000	MILES	0.000	MILES			
NET LENGTH OF PROJECT	1.250	MILES	1.250	MILES			
LENGTH OF EXCEPTIONS	0.000	MILES	0.000	MILES			
GROSS LENGTH OF PROJECT	1.250	MILES	1.250	MILES			

(NOT TO SCALE)

NOTE: EXCEPT AS MAY OTHERWISE BE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP ON THIS PROJECT SHALL CONFORM TO THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2007 EDITION) AND THE STANDARD DRAWINGS FOR ROAD CONSTRUCTION IN EFFECT AT THE TIME OF LETTING.



N.T.S.

**BEGIN CONSTRUCTION** 

**END CONSTRUCTION** 

Design Reference for these plans is the: 2021

SCDOT Roadway Design Manual

Hydraulic Design Reference for these plans is the: 2009

Edition of SCDOT's "Requirements for

Hydraulic Design Studies"

NPDES PERMIT INFORMATION

Disturbed Area = \_\_\_\_\_ 0.40 Acre(s)

Project Area = 2.40 Acre(s)

Approximate Location of Roadway is

Begin

de 33° 27' 19.54" N tude 79° 32' 50.16" W

End

Latitude 33° 26' 50.16" N Longitude 79° 32' 39.51" W

Hydraulic and NPDES Design provided by:

DAVIS & FLOYD, INC.

CODOT DEVIEW	RIGHT-C	F-WAY	CONSTRI	JCTION	
SCDOT REVIEW	INITIAL	DATE	INITIAL	DATE	
PRECONSTRUCTION SUPPORT - ROAD					
PRECONSTRUCTION SUPPORT - STRUCTURES					
RPG - DESIGN MANAGER					
RPG - PROGRAM MANAGER					

THE INITIALS ABOVE DO NOT RELIEVE THE ENGINEER OF RECORD OF THE RESPONSIBILITY TO DESIGN THIS PROJECT IN ACCORDANCE WITH ALL APPLICABLE CRITERIA.

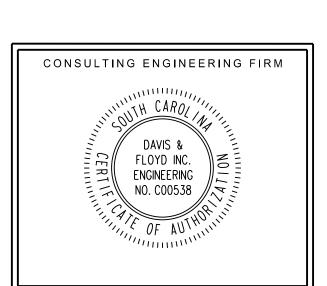
For Right Of Way Acquisition:

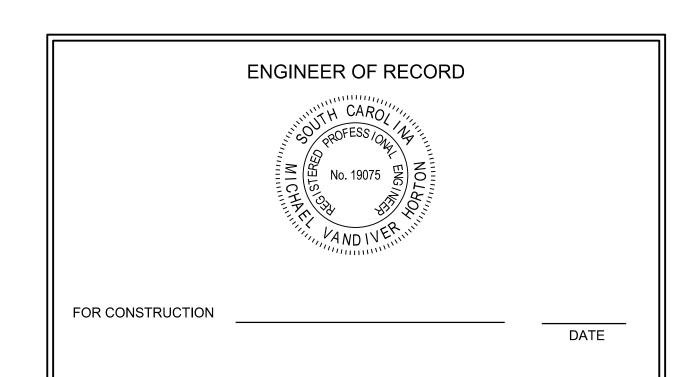
Consultant Engineer of Record

Date

County Representative

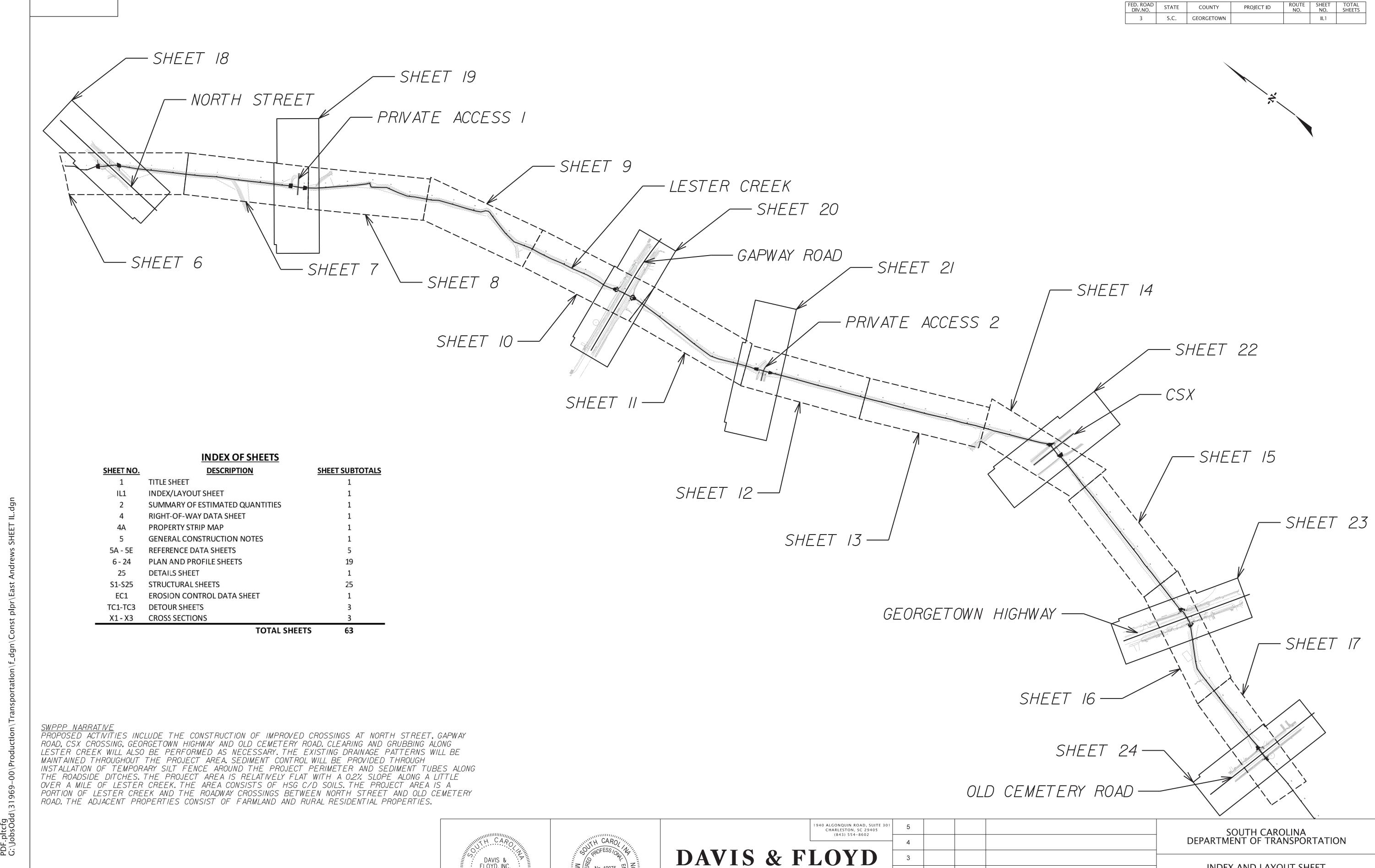
Date

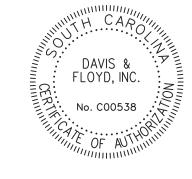




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PEN TABLE:
PLOT DRIVER:
FILE:
5/11/2023







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DESCRIPTION OF REVISION

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INDEX AND LAYOUT SHEET EAST ANDREWS DRAINAGE IMPROVEMENTS

SCALE 1"= 200'

PLOT SIZE =  $22" \times 34"$ 

ITEM NO.	PAY ITEM	QUANTITY PAY UNIT	ITEM NO.	PAYITEM	QUANTITY	PAY UNIT
				MOBILIZATION	NEC	LS
			1050800	CONSTRUCTION STAKES, LINES & GRADES	1.000	EA
			250704045400005 1007042445	TRAFFIC CONTROL	1.000	LS
			1071401	CSX RAILROAD INSURANCE AND FLAGGING	1.000	LS
			1090200	AS-BUILT CONSTRUCTION PLANS	1.000	LS
			2023000	REMOVAL & DISPOSAL OF EXISTING PAVEMENT	115.000	SY
			2031000	UNCLASSIFIED EXCAVATION BORROW EXCAVATION	210.000 376.000	CY
			2033000	GEOTEXTILE FOR SEPARATION OF SUBGRADE&SUBBASE/BASE CR	910.000	SY
			2036000 2041000	STRUCTURE EXCAVATION FOR CULVERTS	868.000	CY
			3050104	GRADED AGGREGATE BASE COURSE (4" UNIFORM)	100.000	SY
				GRADED AGGREGATE BASE COURSE (4" UNIFORM)	469.000	SY
			4010005	PRIME COAT	31.050	GAL
			4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	779.000	SY
			4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	83.000	TON
			5021011	FULL DEPTH CONCRETE PAVEMENT PATCH - 8"	115.000	SY
				PERMANENT CONSTRUCTION SIGNS (GROUND MOUNTED)	584.000	SF
			6062000	CONSTRUCTION ZONE ELECTRIC CHANGEABLE MESSAGE SIGN (TRAILER-MOUNTED)	2.000	EA
				4" WHITE SOLID LINES (PVT. EDGE LINES)-FAST DRY PAINT	730.000	LF
				4"YELLOW SOLID LINE(PVT.EDGE&NO PASSING ZONE)-FAST DRY PAINT	730.000	LF
			6271010	4" WHITE SOLID LINES (PVT. EDGE LINES) THERMO 90 MIL.	730.000	LF
			6271074	4" YELLOW SOLID LINES(PVT.EDGE LINES) THERMO-90 MIL.	730.000	LF
			6301100	PERMANENT YELLOW PAVEMENT MARKERS BI-DIR 4"X4"	18.000	EA
			7011402	CONC. FOR STRUCTURES - CLASS 4000(CULVERT)	74.200	CY
			7031100	REINF. STEEL FOR STRUCTURES (ROADWAY)	12595.000	LB
			7120195	CONSTRUCTION CASING - 66" DIAMETER	50.000	LF
			7141114	24" RC PIPE CULCLASS III	246.000	LF
			7141146	29"X 45" HORIZONTAL ELLIPTICAL(HE) RC PIPE CULCLASS HE-III	100.000	LF
			7141891	48" REINFORCED CONCRETE PIPE (CLASS V SPECIAL)TRENCHLESS	50.000	LF
			8011450	AGGREGATE UNDERDRAIN (AGGR.NO. 57)	555.000	TON
			8041020	RIP-RAP (CLASS B)	410.000	TON
			8042800	GEOTEXTILE FABRIC FOR EROSION CONTROL UNDER RIPRAP (CLASS 2)	524.000	SY
			8100100	PERMANENT COVER	0.363	ACRE
			8151102	TURF REINFORCEMENT MATTING (TRM) TYPE 2	0.239	MSY
			8151112	TEMPORARY EROSION CONTROL BLANKET (CLASS B)	4.153	MSY
			S000001	CLEARING DITCHES	5750.000	LF
				6" STEEL NATURAL GAS VERTICAL OFFSET (N. ROW OF GAPWAY RD)	1.000	LS
				2" STEEL (ASSUMED) NATURAL GAS VERTICAL OFFSET (N. ROW OF US521)	1.000	LS
				16" DIP SEWER FORCE MAIN VERTICAL OFFSET (N. ROW OF GAPWAY RD)	1.000	LS
			S000005	12" PVC GRAVITY SEWER MAIN REPLACEMENT WITH C900 PVC (N. ROW OF GAPWAY RD)	1.000	LS
				12" PVC GRAVITY SEWER HORIZONTAL OFFSET (S. ROW OF GAPWAY RD)	1.000	LS
				8" PVC (ASSUMED) GRAVITY SEWER HORIZONTAL OFFSET (N. ROW OF OLD CEMETARY RD)	1.000	LS
				8" PVC (ASSUMED) GRAVITY SEWER HORIZONTAL OFFSET (S. ROW OF OLD CEMETARY RD)	1.000	LS
				8" PVC (ASSUMED) GRAVITY SEWER HORIZONTAL OFFSET (S. ROW OF US521)	1.000	LS
				UGT RELOCATION COORDINATION (S. ROW OF OLD CEMETARY RD)	1.000	LS
				10" DIP (ASSUMED) DOMESTIC WATERVERTICAL OFFSET (N. ROW OF GAPWAY RD)	1.000	LS
			100000000000000000000000000000000000000	10" DIP (ASSUMED) DOMESTIC WATER VERTICAL OFFSET (N. ROW OF US521)	1.000	LS
				UTILITY COORDINATION	1.000	LS
				5'X4' PRECAST DOUBLE BOX CULVERT	48.000	LF
				7'X6' PRECAST BOX CULVERT 6'X3' PRECAST DOUBLE CULVERT	56.000 100.000	LF
				6'X3' PRECAST DOUBLE COLVERT  6'X3' PRECAST DOUBLE HEADWALLS/WINGWALLS	4.000	LF EA
			S000017 S000018	7'x3' PRECAST CULVERT	36.000	LF
			S000018 S000019	7'x3' PRECAST CULVERT HEADWALLS/WINGWALLS	2.000	EA
			S000019 S000020	5' CLEARING ADJACENT TO DITCH BANK	7410.000	LF
			S000020 S000021	REMOVAL & DISPOSAL OF DELETERIOUS ITEMS	5.000	TON
			5555521		5.555	1014

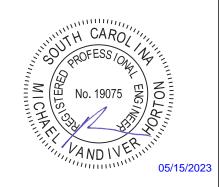
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DAVIS & FLOYD, INC.

No. C00538

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# DAVIS & FLOYD

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SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION

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SUMMARY OF ESTIMATED QUANTITIES SHEET EAST ANDREWS DRAINAGE IMPROVEMENTS

PLOT SIZE = 22" x 34"

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1940 ALGONQUIN ROAD, SUITE 301 CHARLESTON, SC 29405 (843) 554-8602 DAVIS & FLOYD **SINCE 1954** 

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SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION RICHT OF WAY DATA SHEET **MENTS** 

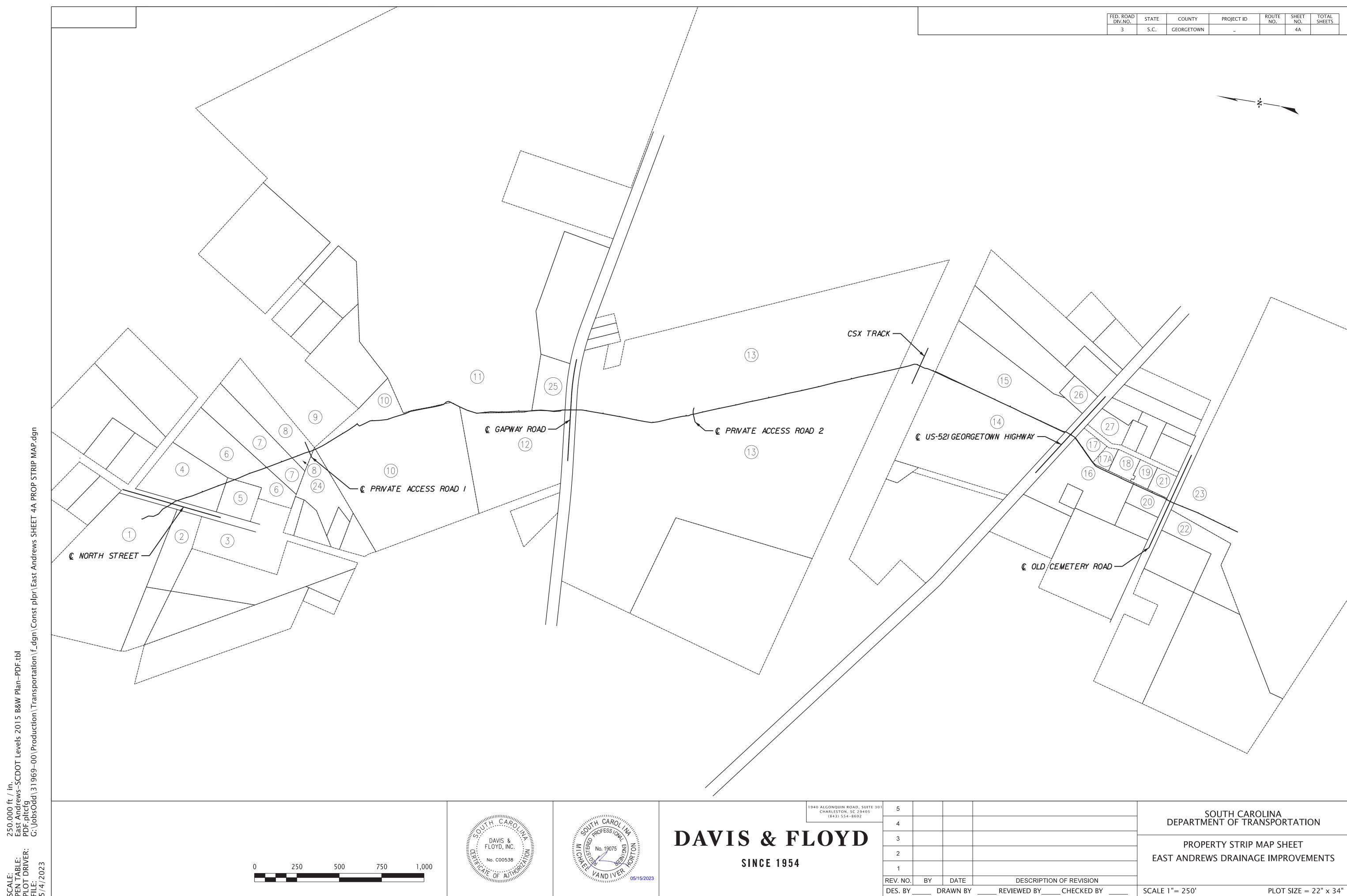
PLOT SIZE = 22" x 34"

				RIGHT OF WAY DATA SHEET
				EAST ANDREWS DRAINAGE IMPROVEME
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SCALE: NTS

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NO.	PROPERTY OWNER	REFERENCE	TRACT ACRES	OUTFALL DITCH	LEFT	RIGHT	TOTAL	LEFT ACRES A	RIGHT ACRES A	ACQUIRED	INSTRUMENT	TRU	SLOPE	RUCT	ROSI ONTR TRAI	REMARKS							
												CONSTRUC		STE	EROSION CONTROL ENTRANCE CONSTRUCTION								
1	MORRIS JOHN M	02-0414-013-06-00	0 11.75		1157 SF		1157 SF	11.72				YES				CONSTRUCTION PERMISSION = 1,166 SF							
2	MCKENZIE CLARK RABON	02-0414-013-04-00	1.83		(0.03 AC)		(0.03 AC)																
	FREEMAN TIMOTHY CLINTON	02-0414-013-02-00																					
	POSTON WALTER ALLEN JR	02-0414-015-16-00	10. 50.00			952 SF	952 SF		2.63			YES				CONSTRUCTION PERMISSION = 8,460 SF							
-	POSTON W A JR	02-0414-015-02-00				(0.02 AC)	(0.02 AC)					YES				CONSTRUCTION PERMISSION = 1,625 SF							
	POSTON JAMES RICHARD	02-0414-015-15-00	1.2.5.4.66.66.65									YES				CONSTRUCTION PERMISSION = 6,102 SF							
1996.5	POSTON JAMES R II	02-0414-015-14-00	82/4/9/7									YES				CONSTRUCTION PERMISSION = 4,814 SF							
	POSTON JAMES RICHARD	02-0414-015-13-00										YES				CONSTRUCTION PERMISSION = 4,005 SF							
-	POSTON JAMES R	02-0414-015-08-00										YES				CONSTRUCTION PERMISSION = 26 SF							
	WOODARD KIM COOK	02-0414-016-01-01										YES				CONSTRUCTION PERMISSION = 23,213 SF							
	WEYERHAEUSER COMPANY	02-0414-018-00-00										YES				CONSTRUCTION PERMISSION = 12,532 SF							
	COOK FRANCIS KEVIN	02-0414-016-01-00			472 SF		472 SF	6.50				YES				CONSTRUCTION PERMISSION = 8,151 SF							
	GREEN ROYCE ALTON III	02-0126-003-00-00	-		(0.01 AC)	1212 SF	(0.01 AC) 1212 SF	0.50	51.70			YES				CONSTRUCTION PERMISSION = 205,246 SF							
	MARTIN FREDDIE	02-0128-020-00-00	+		211 SF	(0.03 AC)	(0.03 AC) 211 SF	9.13	31.70			YES				CONSTRUCTION PERMISSION = 53,014 SF							
	BODIFORD CHARLIE H JR	02-0128-021-00-00			(0.00 AC) 608 SF		(0.00 AC) 608 SF	4.72				YES				CONSTRUCTION PERMISSION = 12,147 SF							
	BONE DAPHNEYT	01-0103-003-00-00			(0.01 AC)	328 SF	(0.01 AC) 328 SF	4.72	2.85			YES				CONSTRUCTION PERMISSION = 9,062 SF							
56	WINSTON MCKENZIE RENTALS LLC	01-0103-005-06-00				(0.01 AC) 365 SF	(0.01 AC) 365 SF		0.37			YES				CONSTRUCTION PERMISSION = 9,062 SF							
						(0.01 AC)	(0.01 AC)		0.37			0.000											
	WINSTON MCKENZIE RENTALS LLC	01-0103-005-06-01										YES				CONSTRUCTION PERMISSION = 827 SF							
	LAMBERT ERVIN WAYNE SR TRUSTEE	01-0103-005-07-00										YES				CONSTRUCTION PERMISSION = 983 SF							
200	LONG GLENDA J	01-0103-005-08-00			739 SF		739 SF	0.51				YES				CONSTRUCTION PERMISSION = 802 SF							
-	CROSBY ANGEL NACOLE	01-0103-005-01-01			(0.02 AC) 348 SF		(0.02 AC) 348 SF	0.51				YES				CONSTRUCTION PERMISSION = 4,339 SF							
	SMITH ASHLEY L	01-0103-005-00-00			(0.01 AC)		(0.01 AC)	0.35				YES				CONSTRUCTION PERMISSION = 876 SF							
	MARSH ARTHUR J B ET AL	01-0402-009-01-01				923 SF	923 SF																
14.5789	113 CALHOUN LLC	01-0402-010-00-00	50 00.0 0000 000			(0.02 AC)	(0.02 AC)		44.40			YES				CONSTRUCTION PERMISSION = 3,883 SF							
	POSTON JAMES RICHARD	02-0414-014-06-00			532 SF		532 SF					YES				CONSTRUCTION PERMISSION = 393 SF							
	HURELL MINNIE ANNA	02-0414-017-00-00			(0.01 AC)		(0.01 AC)	1.24				YES				CONSTRUCTION PERMISSION = 2,180 SF	R/W NOTE:						
	BODIFORD CHARLIE H JR	02-0128-021-01-01															THE D		WILL UTILIZE T				
27	BRUORTON PAMELA TISDALE ET AL	01-0103-005-05-00	0.69														ROAD / R		FILE		R/W WIDTH		CO'D
																	NO.						
			-																				
			-														NOTES:	REMAINDE	R IN SQUARE F	FET WHEN	LESS THAN	0 25 ACRE	
																	A GHOW		IN IN OQUARET		LLOO IIIAN	0.20 AONE.	
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ITEM NO	DAVITEM	OHANTITY	DAVIINIT	LICE DESCRIPTION	
ITEM NO.	PAY ITEM	QUANTITY	PAY UNIT	USE DESCRIPTION	
1031000	MOBILIZATION	NEC	LS	PER CONTRACT DOCUMENTS	
1050800	CONSTRUCTION STAKES, LINES & GRADES	1.000	EA	PER CONTRACT DCCUMENTS	
1071000	TRAFFIC CONTROL	1.000	LS	PER CONTRACT DCCUMENTS	
1071401	CSX RAILROAD INSURANCE AND FLAGGING	1.000	LS	PER CSX REQUIREMENTS	
1090200	AS-BUILT CONSTRUCTION PLANS	1.000	LS	PER CONTRACT DOCUMENTS	
2031000	UNCLASSIFIED EXCAVATION	134.000	CY	WHERE DIRECTED BY ENGINEER	
2033000	BORROW EXCAVATION	188.000	CY	WHERE DIRECTED BY ENGINEER	
8100100	PERMANENT COVER	0.400	ACRE	WHERE DIRECTED BY ENGINEER	
8151112	TEMPORARY EROSION CONTROL BLANKET (CLASS B)	4.200	MSY	WHERE DIRECTED BY ENGINEER	
S000002	6" STEEL NATURAL GAS VERTICAL OFFSET (N. ROW OF GAPWAY RD)	1.000	LS	AS NECESSARY	
S000003	2" STEEL (ASSUMED) NATURAL GAS VERTICAL OFFSET (N. ROW OF US521)	1.000	LS	AS NECESSARY	
S000004	16" DIP SEWER FORCE MAIN VERTICAL OFFSET (N. ROW OF GAPWAY RD)	1.000	LS	AS NECESSARY	
S000005	12" PVC GRAVITY SEWER MAIN REPLACEMENT WITH C900 PVC (N. ROW OF GAPWAY RD)	1.000	LS	AS NECESSARY	
S000006	12" PVC GRAVITY SEWER HORIZONTAL OFFSET (S. ROW OF GAPWAY RD)	1.000	LS	AS NECESSARY	
S000007	8" PVC (ASSUMED) GRAVITY SEWER HORIZONTAL OFFSET (N. ROW OF OLD CEMETARY RD)	1.000	LS	AS NECESSARY	
S000008	8" PVC (ASSUMED) GRAVITY SEWER HORIZONTAL OFFSET (S. ROW OF OLD CEMETARY RD)	1.000	LS	AS NECESSARY	
S000009	8" PVC (ASSUMED) GRAVITY SEWER HORIZONTAL OFFSET (S. ROW OF US521)	1.000	LS	AS NECESSARY	
S000010	UGT RELOCATION COORDINATION (S. ROW OF OLD CEMETARY RD)	1.000	LS	AS NECESSARY	
S000011	10" DIP (ASSUMED) DOMESTIC WATERVERTICAL OFFSET (N. ROW OF GAPWAY RD)	1.000	LS	AS NECESSARY	
S000012	10" DIP (ASSUMED) DOMESTIC WATER VERTICAL OFFSET (N. ROW OF US521)	1.000	LS	AS NECESSARY	
S000013	UTILITY COORDINATION	1.000	LS	AS NECESSARY	
S000021	REMOVAL & DISPOSAL OF DELETERIOUS ITEMS	5.000	TON	AS NECESSARY	

## SCDHEC STANDARD NOTES:

- 1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS. IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE
- 2. 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 BELOW.
- WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
- 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 INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- 4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING DRAINAGE CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE STORM DRAINAGE INSTALLATION, IF WATER IS ENCOUNTERED WHILE TRENCHING. THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK 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 PAVED ROADWAY(S) 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 ACCORDANCE WITH S.C. REG. 72-300 ET SEQ.
- 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.
- 9. 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'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
- 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 STORMWATER MUST BÉ PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORMWATER DISCHARGES.
- 11. A COPY OF THE SWPPP. INSPECTIONS 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 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 EQUIVALENT 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 FROM SITES ARE PROHIBITED: - WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL:
- WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS; - FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
- 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 THIS PERMIT 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.

## **SCDOT STANDARD NOTES:**

- 1. THERE CAN BE NO WORK PERFORMED IN THE SCDOT R/W BEFORE AN ENCROACHMENT PERMIT HAS BEEN ISSUED AND A PRECONSTRUCTION MEETING HAS BEEN HELD. THE PROPERTY OWNER AND CONTRACTOR MUST SCHEDULE AND ATTEND THE PRECONSTRUCTION MEETING.
- 2. ANY WORK PERFORMED BEFORE THE PRECONSTRUCTION MEETING WILL HAVE TAKEN PLACE WITHOUT SCDOT KNOWLEDGE, OVERSIGHT, AND CONSENT AND SHALL BE SUBJECT TO REMOVAL BY THE APPLICANT AND/OR AT THE APPLICANT'S EXPENSE.
- 3. ANY REVISIONS TO THIS APPROVED PLAN SET MUST HAVE PRIOR, WRITTEN APPROVAL FROM SCDOT OR ARE SUBJECT TO REMOVAL AT THE APPLICANT'S EXPENSE.
- 4. THE CONSTRUCTION ENTRANCE MUST BE ESTABLISHED AT THE LOCATION DESIGNATED IN THIS PLAN SET AND ACCORDING TO SCDOT TYPICAL 815-505-00. NO ADDITIONAL ENTRANCES OR LOCATIONS OTHER THAN SHOWN IN THIS PLAN SET ARE ALLOWED WITHOUT WRITTEN NOTICE FROM SCDOT. APPROVED CONSTRUCTION ENTRANCE SHALL BE INSTALLED PROPERLY AND SHALL BE MAINTAINED AT ALL TIMES. KEEP ROADWAY PROTECTED AND SWEPT OFF AT ALL TIMES. ANY ADDITIONAL, EXISTING DRIVEWAYS OR CONSTRUCTION ENTRANCES, IF ANY, SHALL BE REMOVED FROM SCDOT RIGHT OF WAY AT NO EXPENSE TO SCDOT.
- 5. NO DEWATERING ACTIVITIES SHALL BE PERFORMED WITHIN SCDOT R/W OR BRING FORTH WATER TO THE SCDOT RIGHT OF WAY BY DIRECT OR INDIRECT METHODS.
- 6. POST DEVELOPMENT STORMWATER FLOWS TO THE SCDOT R/W CANNOT EXCEED PREDEVELOPMENT FLOW RATES AT ANY TIME FOR ANY REASON.
- 7. THE APPLICANT IS SOLELY RESPONSIBLE FOR REPAIRS OF ANY AND ALL DAMAGE TO THE TRAVEL WAY DUE TO ANY WORK ALONG THE FRONTAGE OF THIS SITE. AT NO EXPENSE TO SCDOT AND ALL REPAIRS MUST MEET CURRENT SCDOT STANDARDS.
- 8. ANY DAMAGE TO THE TRAVEL LANE WILL REQUIRE A FULL DEPTH ASPHALT PATCH AND TOTAL ROADWAY (ALL ADJACENT TRAVEL LANES) ASPHALT OVERLAY. PATCHES LARGER THAN A FEW SQUARE FEET OR EXTENDING PAST 1 FOOT INTO THE TRAVEL LANE SHALL REQUIRE AN OVERLAY OF THE ENTIRE WIDTH OF THE EXISTING TRAVEL WAY FOR 50 FEET BEYOND EACH SIDE OF THE FULL DEPTH PATCH. ALL OF THIS WORK WILL BE SOLELY AT THE EXPENSE OF THE APPLICANT AND MUST MEET CURRENT SCDOT STANDARDS.
- 9. BEFORE INSTALLATION OF ANY NEW DRIVEWAY, THE EXISTING TRAVEL EDGE MUST BE SAW CUT TO PROVIDE A STRAIGHT AND UNIFORM EDGE ALONG THE MOUTH OF THE PROPOSED DRIVEWAY. CARE MUST BE TAKEN TO NOT TO DAMAGE THE EDGE ONCE CUT ANY DAMAGE TO THE TRAVEL LANE MUST BE REPAIRED AT THE APPLICANT'S EXPENSE.
- 10. PAVEMENT SECTION IN THE SCDOT R/W SHALL BE, AT A MINIMUM: a. 6 INCHES OF COMPACTED GABC
  - b. 4 INCHES OF COMPACTED TYPE B BINDER COURSE HOT MIX ASPHALT
  - c. 2 INCHES OF COMPACTED TYPE B SURFACE COURSE HOT MIX ASPHALT
  - SEE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION FOR SURFACE COURSE HOT MIX ASPHALT INSTALLATION TIME AND TEMPERATURE RESTRICTIONS AND THERMO PLASTIC TIME AND TEMPERATURE RESTRICTIONS.

  - d. 8 INCHES OF COMPACTED GABC
  - e. 4 INCHES OF 4,000 PSI CONCRETE
  - NO REINFORCEMENT WIRE, REBAR, OR METAL OF ANY KIND IS PERMITTED
- 11. DRIVEWAY LANES SHALL BE A MINIMUM OF 12 FEET IN WIDTH MEASURED FROM EDGE TO EDGE OF ASPHALT.
- 12. DRIVEWAY RADII SHALL BE 30 FEET. (UNLESS NOTED OTHERWISE ON THE SCDOT APPROVED PLANS.)
- 13. PAVEMENT MARKINGS SHALL BE THERMOPLASTIC WITH REFLECTIVE BEADS PER SECTION 627 OF THE SCDOT STANDARD SPECIFICATIONS:
- a. ALL WHITE MARKINGS SHALL BE 125 MIL MINIMUM THICKNESS b. ALL YELLOW MARKINGS SHALL BE 90 MIL MINIMUM THICKNESS

No. C00538

DAVIS & FLOYD, INC.



# (843) 554-8602 DAVIS & FLOYD

**SINCE 1954** 

FED. ROAD DIV.NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.	TOTA SHEET
3	S.C.	GEORGETOWN			5	

14. ALL PERMANENT SIGNAGE SHALL BE INSTALLED ON BREAKAWAY POSTS PER SCDOT STANDARD DRAWING 651-110-00 AND SHALL HAVE A 7 VERTICAL FOOT CLEARANCE FROM THE GROUND TO THE BOTTOM OF THE SIGN.

NAME

Darren Rolston

Mike Horton

TELEPHONE

843-833-1181

843-554-8602

- 15. DRIVEWAYS SHALL BE CONSTRUCTED TO HAVE A MINIMUM OF A 2 FOOT GRASSED SHOULDER ON EACH SIDE OF THE DRIVEWAY THROAT.
- 16. DITCH SLOPES SHALL BE NO STEEPER THAN 3H:1V

PROJECT CONTACTS

Project Manager

Design Engineer

- 17. ALL DRIVEWAY CULVERTS SHALL BE INSTALLED AND SEALED ACCORDING TO SCDOT TYPICAL 714-205-01 DETAIL 4 AND 5 WITH AN AASHTO M 315 RUBBER GASKET SEAL, ON PROPER GRADE TO ALLOW FOR POSITIVE STORM WATER FLOW WITHIN THE PIPE AND TO/FROM ADJACENT PIPES/CROSS LINES.
- 18. ALL CULVERTS INSIDE OF THE SCDOT R/W ARE TO BE INSTALLED WITH BEVELED ENDS PER SCDOT STANDARD DRAWING 719-610-00 AND SEALED PER SCDOT STANDARD DRAWING 714-205-01 AND CANNOT BE COVERED UNTIL AFTER AN INSPECTION BY THE SCDOT INSPECTOR ASSIGNED TO THE PROJECT AT THE REQUIRED SCDOT PRECONSTRUCTION MEETING.
- 19. LANE CLOSURES ARE REQUIRED FOR ALL WORK WITHIN ONE FOOT OF THE TRAVEL WAY. SEE SCOOT LOCAL MAINTENANCE WORK RESTRICTIONS FOR ADDITIONAL INFORMATION.
- 20. SHOULDER CLOSURES ARE REQUIRED FOR ALL WORK IN THE SCDOT R/W BEYOND ONE FOOT FROM THE TRAVEL WAY.
- 21. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE ALL REQUIRED INSPECTIONS IN ADVANCE, IF WORK REQUIRING INSPECTION IS PERFORMED WITHOUT PRIOR NOTICE BEING GIVEN TO SCDOT. THAT INSTALLATION SHALL BE SUBJECT TO REMOVAL AT THE APPLICANT'S EXPENSE. SEVERAL MEANS OF CONTACT WILL BE GIVEN AT THE PRECONSTRUCTION MEETING. FAILURE TO OBTAIN CONTACT IS NOT AN APPROVAL TO PROCEED WITH ANY WORK.
- 22. NO VEGETATION INSTALLED ON PRIVATE PROPERTY SHALL BLOCK THE SCDOT SIGHT TRIANGLES OR SIGHT DISTANCES FOR MOTORISTS INGRESS OR EGRESSING FROM APPROVED DRIVEWAYS AND OR ROADWAY INTERSECTIONS. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR KEEPING OFFSITE LANDSCAPINGS PROPERLY MAINTAINED TO IMPROVE ALL SIGHT DISTANCES. THE PROPERTY OWNER SHALL ALSO BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGES TO SIDEWALK, DRIVEWAY OR ROADWAY, UTILITY, DRAINAGE OR OTHER STRUCTURES DAMAGED DUE TO THE INSTALLATION OR EXISTENCE OF OFFSITE LANDSCAPING.
- 23. THE DEPARTMENT SHALL NOT BE RESPONSIBLE FOR DAMAGE TO ANY UTILITY STRUCTURES LOCATED WITHIN THE RIGHT-OF-WAY AS A RESULT OF ROUTINE HIGHWAY MAINTENANCE OPERATIONS. THESE STRUCTURES INCLUDE BUT ARE NOT LIMITED TO ARV, METERS, VALVES, MANHOLES, ALL TYPE OF PEDESTALS AND UTILITY LINES (OVERHEAD AND/OR UNDERGROUND). THE APPLICANT SHOULD USE MECHANICAL MOWERS TO CUT AROUND THESE TYPE STRUCTURES TO INCREASE VISIBILITY FOR HIGHWAY MAINTENANCE WORKERS.
- 24. APPLICANT IS RESPONSIBLE FOR THE INSTALLATION AND SECURING OF ANY VALVE OR MANHOLE RISERS AS NEEDED.
- 25.THE DEPARTMENT SHALL BE HELD HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS, DAMAGES AND LOSSES ASSOCIATED WITH WORK AS APPROVED UNDER THIS PERMIT APPLICATION. ANY SUCH DAMAGE CLAIMS RECEIVED BY THE DEPARTMENT SHALL BE THE RESPONSIBILITY OF THE APPLICANT TO PROCESS ACCORDINGLY. THE HOLD HARMLESS AGREEMENT SHALL BE FOR THE LIFE OF THE FACILITY, STRUCTURE(S) OR ENCROACHMENT AS IT REMAINS WITHIN PUBLIC RIGHT-OF-WAY.
- 26.APPLICANT IS RESPONSIBLE FOR THE REPAIR OF ANY TRAFFIC SIGNAL LOOPS/WIRES/HEAD/CABINETS IF DAMAGED DUE TO THIS INSTALLATION. ALL WORK SHALL BE APPROVED UNDER THE DIRECTION OF THE SCDOT DISTRICT SIGNAL SHOP AND PERFORMED BY A SCDOT APPROVED SIGNAL CONTRACTOR, AT NO EXPENSE TO THE DEPARTMENT.
- 27. IF REQUIRED UNDER THE APPROVED SCDOT ENCROACHMENT PERMIT, A THIRD PARTY TESTER SHALL BE REQUIRED AT THE APPLICANT'S EXPENSE TO PERFORM COMPACTION ANALYSIS AND WITNESS A PASSING PROOF ROLL ON ALL SUB-GRADE BASE, AND ASPHALT. ONE THIRD PARTY INSPECTOR SHALL TAKE DENSITY READINGS AT RANDOM STATION NUMBERS. A SECOND (2ND) THIRD PARTY INSPECTOR/TESTER SHALL BE AT THE ASPHALT PLANT TESTING THE ASPHALT AT THE TIME THAT SURFACE ASPHALT IS BEING PRODUCED AND PUT DOWN ON THE JOB. ONE CORE SAMPLE (LOCATIONS TO BE DETERMINED) SHALL BE TAKEN AND WEIGHED BY THE THIRD PARTY INSPECTOR. ALL RESULTS TO BE SUBMITTED IN WRITING TO SCDOT FOR REVIEW THE FOLLOWING DAY. WINTER WORK RESTRICTIONS AND HOLIDAY WORK RESTRICTIONS MUST BE ADHERED TO. SEE PERMIT FOR MORE DETAILS.
- 28. AN INSPECTION DATE SHALL BE SET UP IN ADVANCE FOR WHICH THE INSPECTOR WILL COME OUT AND INSPECT THE SIDEWALK FORMS BEFORE POURING CONCRETE. DO NOT LEAVE MORE THAN A 2" DROP OFF UNATTENDED. NO MORE THAN A 2" DROP OFF OR A 3:1 DITCH SLOPE IS PERMITTED ANYWHERE WITHIN THE RIGHT OF WAY DUE TO THE CONSTRUCTION ASSOCIATED WITH THIS SIDEWALK. THE INSTALLATION OF SIDEWALK SHALL BE FLUSH WITH SHOULDER OR HAVE A DRAINAGE INLET BUILT UNDERNEATH TO ALLOW FOR PROPER STORM WATER FLOW. NO WATER SHALL POND IN SHOULDER, ROADWAY, DRIVEWAYS, OR RIGHT OF WAY DUE TO THIS INSTALLATION.
- 29. ADA MATS (RAISED DETECTABLE WARNING PADS) SHALL BE INSTALLED AS WET INSETS AND AT ROADWAY INTERSECTIONS ONLY.
- 30. NO VALVES OR OTHER APPURTENANCES IN ROADWAY ASPHALT, WITHIN 5 FEET OF EDGE OF PAVEMENT, OR WITHIN DITCH LINE OR SWALE LINE. APPLICANT SHALL INSTALL 8-16 FEET OF NEW, UNDAMAGED RCP ON PROPER GRADE, FACING THE PROPER DIRECTION, MATCHING THE DIAMETER OF DRIVEWAY AND/OR CROSS LINE UPSTREAM, BUT NOT EXCEEDING THE PIPE DIAMETER DOWNSTREAM, IF THE ABOVE CANNOT BE AVOIDED. INSTALL RIP RAP AROUND ANY EXPOSED PIPES, COVER AND SOD TO MEET SCDOT MINIMUM STANDARDS. CALL SCDOT ENCROACHMENT OFFICE FOR INSPECTION OF PIPE BEFORE COVERING.
- 31. PROPOSED UTILITY INSTALLATION LOCATED IN SHOULDER AREA SHALL HAVE A MINIMUM COVER OF 42" ACCORDING TO FIGURE 6 OF APPENDIX B. ANY EXPOSED ROOTS TO BE REMOVED OR TRIMMED FLUSH WITH SHOULDER/DITCH.

1940 ALGONQUIN ROAD, SUITE 301

DRAINAGE NOTES:

ALL EXISTING DRAINAGE PIPING NOT SPECIFIED TO BE REPLACED AS A PART OF THIS PROJECT WHICH IS DAMAGED, DESTROYED, OR DISPLACED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED IN LIKE SIZE WITH CLASS III WALL B RCP OR CLASS III WALL BE RCEP IF THE DAMAGED PIPE IS ELLIPTICAL.ALL REINFORCED CONCRETE PIPE (RCP) SHALL MEET ASTM C76 SPECIFICATIONS. ALL JOINTS SHALL SHALL HAVE GASKETS MEETING ASTM C443 SPECIFICATIONS, AND ALL JOINTS SHALL BE WRAPPED WITH FILTER FABRIC, MINIMUM 24" IN WIDTH, UNLESS NOTED OTHERWISE.ALL CONNECTIONS BETWEEN STORMWATER PIPELINES AND NEW DRAINAGE STRUCTURES OR BOX CULVERTS, SHALL BE MADE WITH A BOOT MEETING ASTM C923. BOOTS SHALL PROVIDE A WATER-TIGHT SEAL BETWEEN THE PIPE AND THE STRUCTURE OR BOX CULVERT.AS REQUIRED, GRAVITY STORM SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SCDOT SPECIFICATIONS AND REQUIREMENTS. THE GRADE OF THE GRAVITY STORM SEWER SHALL BE MAINTAINED AT A CONSTANT SLOPE BETWEEN THE GIVEN INVERT ELEVATIONS SHOWN ON THE PLAN/PROFILE AS APPLICABLE.

## **UTILITY NOTES:**

CONTRACTOR IS TO CONTACT UTILITY OWNERS PRIOR TO CONSTRUCTION.

COST OF UTILITY LINES IS TO BE FULLY INCLUSIVE, ACCOUNTING FOR CONNECTIONS, FITTINGS, ETC.

## **GEORGETOWN COUNTY NOTES:**

WITHIN 30 DAYS OF CONSTRUCTION COMPLETION AND FINAL STABILIZATION, PROVIDE GEORGETOWN COUNTY WITH THE COMPLETED CLOSEOUT APPLICATION, SITE AS-BUILTS, AS-BUILT CERTIFICATION FORM, AND SCDHEC NOT.

## **AS-BUILT NOTES:**

DRAINAGE DITCHES AND SWALES WITH CROSS SECTION ELEVATIONS AT MAXIMUM 100-FOOT INTERVALS.

PROVIDE AN AUTOCAD DIGITAL DWG AND PDF FILE OF THE AS-BUILT DRAWING ON SC STATE PLANE COORDINATE SYSTEM NAD 83 DATUM.

PROVIDE A COPY OF THE SCDOT RELEASE LETTER WHERE ENCROACHMENT PERMIT(S) WERE ISSUED.

ADDITIONAL INFORMATION MAY BE NECESSARY AS DEEMED APPROPRIATE BY GEORGETOWN COUNTY STORMWATER MANAGER.

UPON COMPLETION OF THE WORK, A FINAL INSPECTION WILL BE CONDUCTED BY THE DEPARTMENT TO DETERMINE IF THE COMPLETED WORK HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE STORMWATER PLAN.

NOTE: AS-BUILT SURVEY AND/OR ANALYSIS MUST BE SUBMITTED AND ACCEPTED BY THE DEPARTMENT BEFORE NOTICE OF TERMINATION (NOT) IS SUBMITTED.

## **CLEARING NOTES:**

CONTRACTOR IS TO CONTACT THE COUNTY PRIOR TO CHANNEL CLEARING/CLEANING.

ALL DEBRIS FROM CLEARING WITHIN CHANNEL AND OUTSIDE OF BANKS SHALL BE MULCHED IN-PLACE, ALONG, AND OUTSIDE OF CHANNEL, OR REMOVED AND DISPOSED OF OFF-SITE IN AN APPROVED MANNER. ALL COSTS ASSOCIATED WITH MULCHING IN-PLACE OR HAULING AND DISPOSAL SHALL BE INCLUDED IN PRICE OF CLEARING.

NO GRUBBING IS TO BE PERFORMED.

## **CULVERT STAGING NOTES:**

CONTRACTOR TO SUBMIT MAINTENANCE OF TRAFFIC CONTROL AND CONSTRUCTION STAGING PLANS TO THE COUNTY FOR REVIEW AND APPROVAL TO INSTALL BOX CULVERT FOR NORTH STREET CROSSING.

## **EDA NOTES:**

IF ARCHAEOLOGICAL MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, THE PROCEDURES CODIFIED AT 36 CFR 800.13(b) WILL APPLY AND THE SC DEPARTMENT OF ARCHIVES AND HISTORY AND THE EDA SHALL BE CONTACTED IMMEDIATELY. ARCHAEOLOGICAL MATERIALS CONSIST OF ANY ITEMS, FIFTY YEARS OLD 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 MATERIALS.

NO EXCAVATED MATERIAL SHALL BE PLACED WITHIN AREAS OF MAPPED 100-YEAR OR 500-YEAR FLOODPLAIN.

## SCDOT GENERAL CONSTRUCTION NOTES:

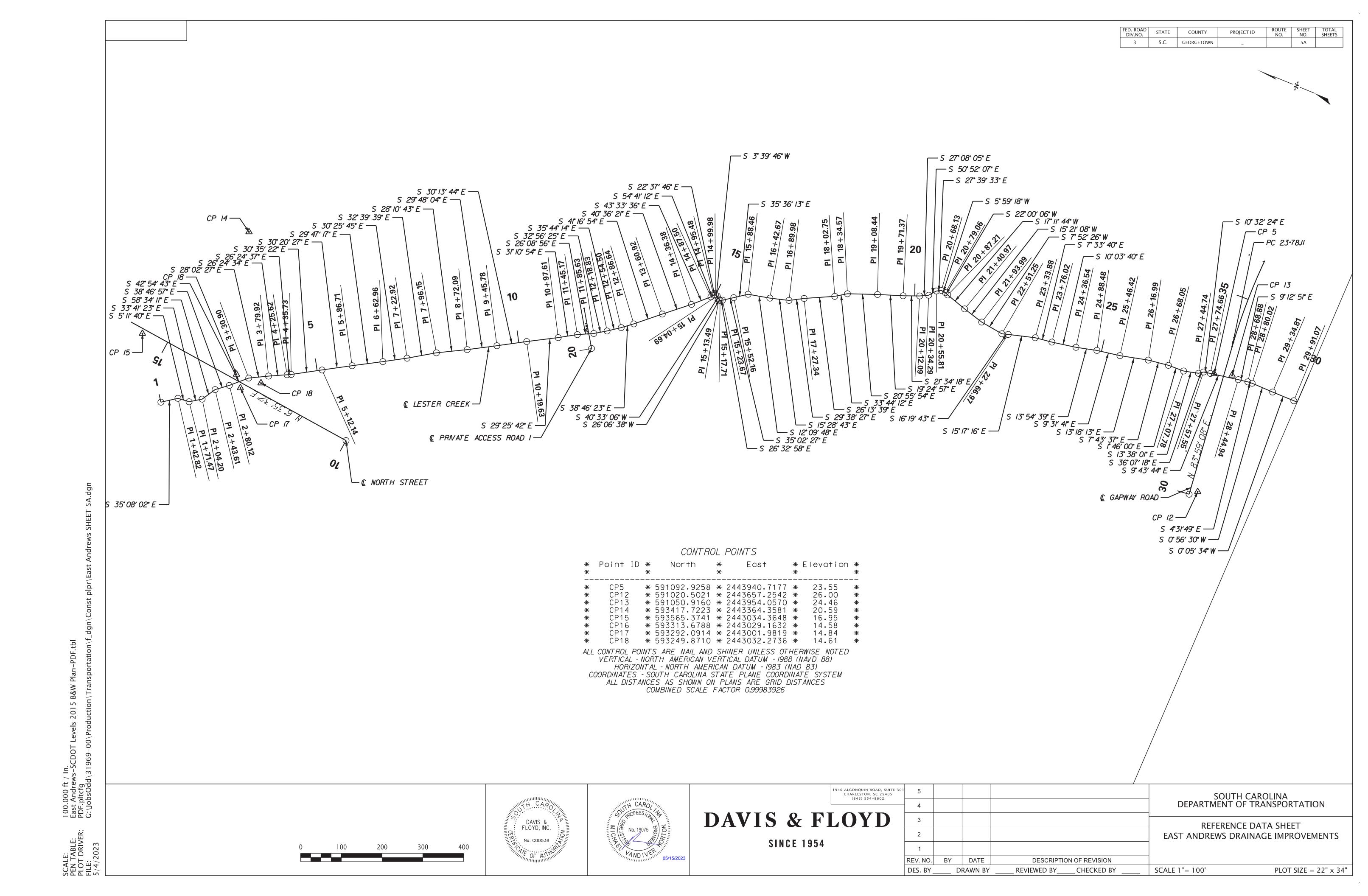
THE DEPUTY SECRETARY FOR ENGINEERING MUST SPECIFICALLY AUTHORIZE CHANGES INVOLVING INCREASED COST OF THE PROJECT OR CHANGES IN ALIGNMENT THE DISTRICT ENGINEERING ADMINISTRATOR IS PERMITTED UNDER THE DIRECTION OF THE DEPUTY SECRETARY FOR ENGINEERING TO AUTHORIZE MINOR ALTERATIONS NOT IN CONFLICT WITH THE STANDS PRACTICES OF THE DEPARTMENT. FORWARD INFORMATION ON ANY PROPOSED CHANGES IN ALIGNMENT TO THE COLUMBIA OFFICE AS SOON AS POSSIBLE.

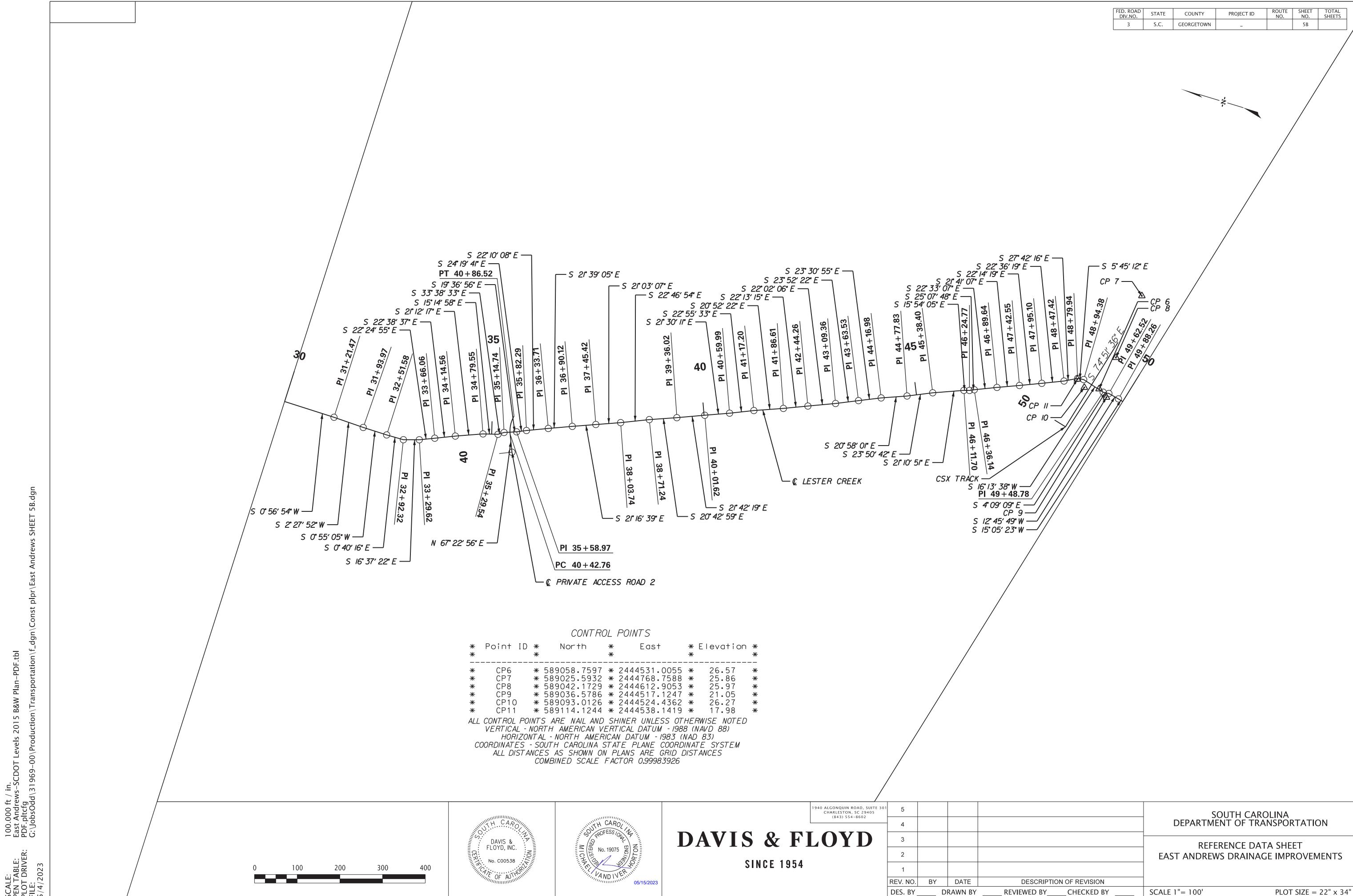
SEE INDIVIDUAL CURVES ON REFERENCE DATA SHEET FOR SUPERELEVATION RATE AND DESIGN SPEED, AS APPLICABLE.

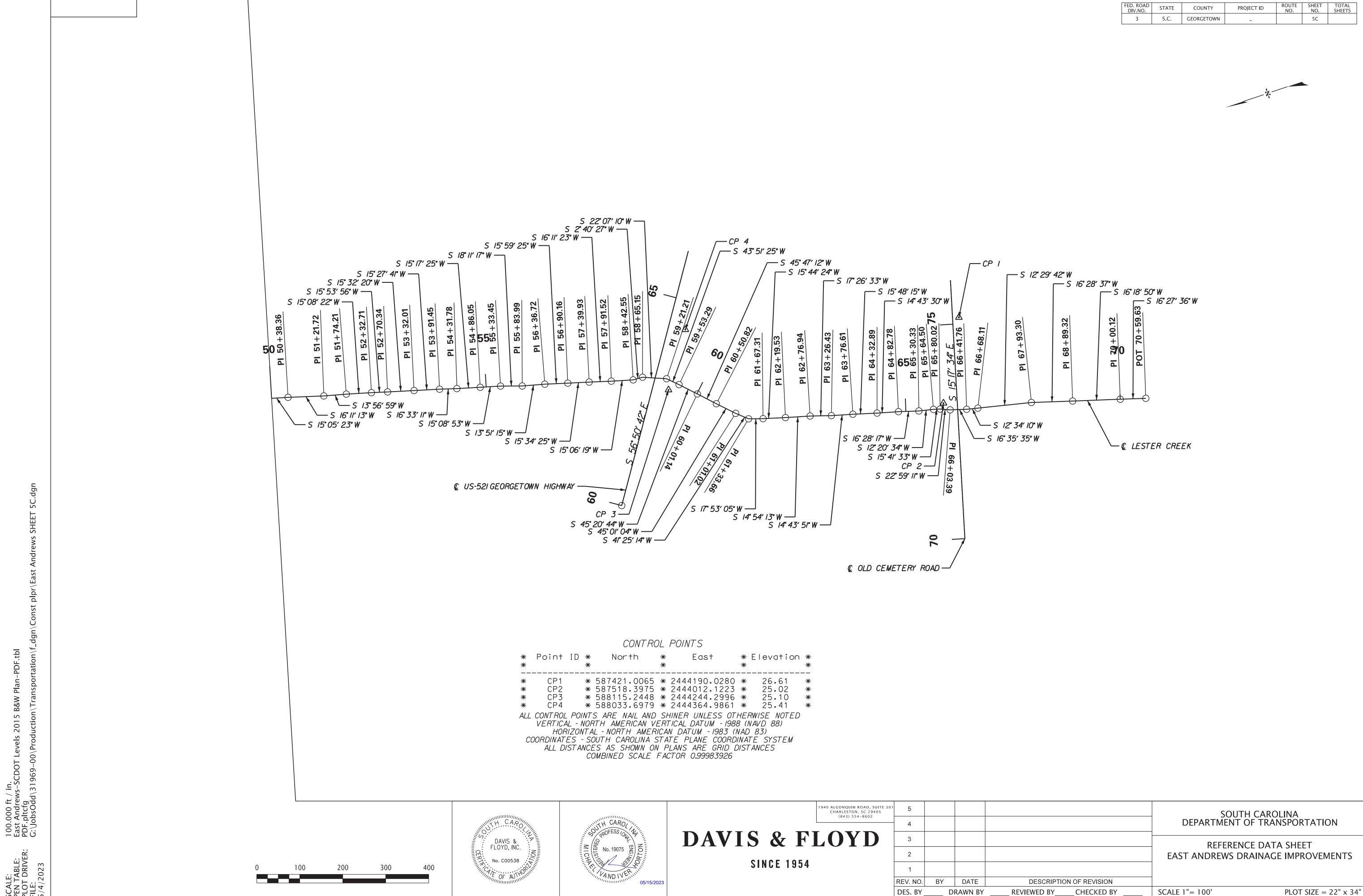
THE FOLLOWING QUANTITIES ARE NOT SHOWN IN DETAIL ON THE PLANS BUT ARE INCLUDED IN THE SUMMARY OF ESTIMATED QUANTITIES AND MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER.

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION GENERAL CONSTRUCTION NOTES EAST ANDREWS DRAINAGE IMPROVEMENTS BY DATE DESCRIPTION OF REVISION REV. NO. DRAWN BY REVIEWED BY CHECKED BY N.T.S. PLOT SIZE =  $22" \times 34"$ DES. BY

=: ABLE: DRIVE







Point LC0007 N 593,319.6230 E 2,442,997.5049 Sta 2+80.12 Course from LC0007 to LC0008 S 42° 54' 43.19" E Dist 50.7795 N 593,282.4321 E 2,443,032.0794 Sta 3+30.90 Point LC0008 Course from LC0008 to LC0009 S 28° 02' 27.25" E Dist 49.0149 N 593,239.1709 E 2,443,055.1214 Sta 3+79.92 Point LC0009 Course from LC0009 to LC0010 S 26° 24' 34.03" E Dist 45.7078 Point LC0010 N 593,198.2333 E 2,443,075.4514 Sta 4+25.62 Course from LC0010 to LC0011 S 26° 24' 37.30" E Dist 10.1081 N 593,189.1801 E 2,443,079.9475 Sta Point LC0011 N 593,189.1801 E 2,443,079.9475 Sta Point LC0012 Course from LC0012 to LC0013 S 30° 35' 22.16" E Dist 76.4121 Point LC0013 N 593,123.4019 E 2,443,118.8323 Sta 5+12.14 Course from LC0013 to LC0014 S 30° 20' 26.87" E Dist 74.5677 N 593,059.0472 E 2,443,156.4997 Sta Point LC0014 Course from LC0014 to LC0015 S 29° 47' 17.45" E Dist 76.2499 Point LC0015 N 592,992.8724 E 2,443,194.3802 Sta 6+62.96 Course from LC0015 to LC0016 S 30° 25' 44.92" E Dist 59.9588 Point LC0016 N 592,941.1726 E 2,443,224.7477 Sta 7+22.92 Course from LC0016 to LC0017 S 32° 39' 38.81" E Dist 73.2320 Point LC0017 N 592,879.5200 E 2,443,264.2684 Sta 7+96.15 Course from LC0017 to LC0018 S 28° 10' 43.29" E Dist 75.9420 Point LC0018 N 592,812.5787 E 2,443,300.1299 Sta 8+72.09 Course from LC0018 to LC0019 S 29° 48' 03.98" E Dist 73.6896 Point LC0019 N 592,748.6342 E 2,443,336.7530 Sta 9+45.78 Course from LC0019 to LC0020 S 30° 13' 43.51" E Dist 73.8508 Point LC0020 N 592,684.8255 E 2,443,373.9334 Sta 10+19.63 Course from LC0020 to LC0021 S 29° 25' 42.25" E Dist 77.9759 Point LC0021 N 592,616.9108 E 2,443,412.2457 Sta 10+97.61 Course from LC0021 to LC0022 S 31° 10' 54.38" E Dist 47.5554 Point LC0022 N 592,576.2257 E 2,443,436.8678 Sta 11+45.17 Course from LC0022 to LC0023 S 26° 08' 56.03" E Dist 40.4625 N 592,539.9045 E 2,443,454.6998 Sta 11+85.63 Point LC0023

Beginning chain LESTER CREEK description

Equation: Sta 1+37.70 (BK) = Sta 1+00.00 (AH)

Point LC0002

Point LC0003

Point LC0004

Point LC0005

Point LC0006

Point LC0001 N 593,484.0597 E 2,442,867.0838 Sta 1+00.00

End Region 1

Begin Region 2

N 593,395.8712 E 2,442,922.8500 Sta 1+71.47

N 593,368.6366 E 2,442,941.0062 Sta 2+04.20

N 593,348.0850 E 2,442,974.6352 Sta 2+43.61

1+00.00

1+42.82

4+35.73

4+35.73

N 593,459.4189 E 2,442,895.6154 Sta

N 593,424.4028 E 2,442,920.2562 Sta

Course from LC0001 to LC0002 S 49° 11' 06.07" E Dist 37.6991

Course from LC0002 to LC0003 S 35° 08' 02.33" E Dist 42.8170

Course from LC0003 to LC0004 S 5° 11' 40.37" E Dist 28.6492

Course from LC0004 to LC0005 S 33° 41' 23.10" E Dist 32.7318

Course from LC0005 to LC0006 S 58° 34' 11.10" E Dist 39.4116

Course from LC0006 to LC0007 S 38° 46' 57.31" E Dist 36.5117

Point LC0024 N 592,512.0400 E 2,443,472.7539 Sta 12+18.83 Course from LC0024 to LC0025 S 35° 44' 14.44" E Dist 35.6675 N 592,483.0886 E 2,443,493.5863 Sta 12+54.50 Course from LC0025 to LC0026 S 38° 46' 23.06" E Dist 32.1400 N 592,458.0312 E 2,443,513.7136 Sta 12+86.64 Course from LC0026 to LC0027 S 41° 16' 54.04" E Dist 74.2782 N 592,402.2129 E 2,443,562.7195 Sta 13+60.92 Course from LC0027 to LC0028 S 40° 36' 20.61" E Dist 75.4656 N 592,344.9190 E 2,443,611.8363 Sta 14+36.38 Course from LC0028 to LC0029 S 43° 33' 35.84" E Dist 51.1137 N 592,307.8793 E 2,443,647.0594 Sta 14+87.50 Course from LC0029 to LC0030 S 54° 41' 12.43" E Dist 7.9829 N 592,303.2648 E 2,443,653.5735 Sta 14+95.48 Course from LC0030 to LC0031 S 22° 37' 46.24" E Dist 4.4979 N 592,299.1132 E 2,443,655.3041 Sta 14+99.98 Course from LC0031 to LC0032 S 3° 39' 46.41" W Dist 4.7144 N 592,294.4085 E 2,443,655.0030 Sta 15+04.69 Course from LC0032 to LC0033 S 40° 33' 06.22" W Dist 8.8029 N 592,287.7198 E 2,443,649.2799 Sta 15+13.49 Course from LC0033 to LC0034 S 26° 06' 38.22" W Dist 4.2178 N 592,283.9324 E 2,443,647.4236 Sta 15+17.71 Course from LC0034 to LC0035 S 26° 32' 58.36" E Dist 5.9631 N 592,278.5981 E 2,443,650.0889 Sta 15+23.67 Course from LC0035 to LC0036 S 35° 02' 27.23" E Dist 28.4822 N 592,255.2785 E 2,443,666.4423 Sta 15+52.16 Course from LC0036 to LC0037 S 35° 36' 12.90" E Dist 36.3067 N 592.225.7589 E 2.443.687.5791 Sta 15+88.46 Course from LC0037 to LC0038 S 12° 09' 47.87" E Dist 54.2097 N 592,172.7661 E 2,443,699.0010 Sta 16+42.67 Course from LC0038 to LC0039 S 15° 28' 42.84" E Dist 47.3026 N 592,127.1791 E 2,443,711.6250 Sta 16+89.98 Course from LC0039 to LC0040 S 29° 38' 27.27" E Dist 37.3604 N 592,094.7077 E 2,443,730.1020 Sta 17+27.34 Course from LC0040 to LC0041 S 26° 13' 39.08" E Dist 75.4174 N 592.027.0548 E 2.443.763.4318 Sta 18+02.75 Course from LC0041 to LC0042 S 33° 44' 12.37" E Dist 31.8155 N 592,000.5971 E 2,443,781.1014 Sta 18+34.57 Course from LC0042 to LC0043 S 20° 55' 54.35" E Dist 73.8707 N 591,931.6014 E 2,443,807.4921 Sta 19+08.44 Course from LC0043 to LC0044 S 19° 24' 57.28" E Dist 62.9337 N 591,872,2467 E 2,443,828,4127 Sta 19+71.37 Course from LC0044 to LC0045 S 21° 34' 17.89" E Dist 40.7142 N 591,834.3842 E 2,443,843.3819 Sta 20+12.09 Course from LC0045 to LC0046 S 27° 08' 04.67" E Dist 22.1985 N 591,814.6289 E 2,443,853.5062 Sta 20+34.29 Course from LC0046 to LC0047 S 50° 52' 07.46" E Dist 21.5269 N 591,801.0433 E 2,443,870.2047 Sta 20+55.81 Course from LC0047 to LC0048 S 27° 39' 33.26" E Dist 12.3166

Point LC0048 N 591,790.1342 E 2,443,875.9222 Sta 20+68.13 Course from LC0048 to LC0049 S 5° 59' 18.24" W Dist 10.9343 N 591,779.2595 E 2,443,874.7815 Sta 20+79.06 Course from LC0049 to LC0050 S 22° 00' 05.70" W Dist 8.1436 N 591,771.7090 E 2,443,871.7306 Sta 20+87.21 Point LC0050 Course from LC0050 to LC0051 S 17° 11' 44.27" W Dist 53.7634 N 591,720.3488 E 2,443,855.8363 Sta 21+40.97 Course from LC0051 to LC0052 S 15° 21' 07.80" W Dist 53.0199 Point LC0052 N 591,669.2208 E 2,443,841.7992 Sta 21+93.99 Course from LC0052 to LC0053 S 7° 52' 25.89" W Dist 57.2573 N 591,612.5033 E 2,443,833.9554 Sta 22+51.25 Course from LC0053 to LC0054 S 16° 19' 43.26" E Dist 15.7234 N 591,597.4140 E 2,443,838.3760 Sta 22+66.97 Course from LC0054 to LC0055 S 15° 17' 16.33" E Dist 66.9049 N 591,532.8766 E 2,443,856.0167 Sta 23+33.88 Course from LC0055 to LC0056 S 7° 33' 40.48" E Dist 42.1394 N 591.491.1037 E 2.443.861.5617 Sta 23+76.02 Course from LC0056 to LC0057 S 10° 03' 40.13" E Dist 60.5203 Point LC0057 N 591,431.5141 E 2,443,872.1345 Sta 24+36.54 Course from LC0057 to LC0058 S 13° 54' 39.26" E Dist 51.9434 N 591,381.0942 E 2,443,884.6224 Sta 24+88.48 Course from LC0058 to LC0059 S 9° 31' 41.12" E Dist 57.9381 N 591,323.9554 E 2,443,894.2129 Sta 25+46.42 Point LC0059 Course from LC0059 to LC0060 S 13° 18' 12.63" E Dist 70.5730 N 591,255.2762 E 2,443,910.4524 Sta 26+16.99 Course from LC0060 to LC0061 S 7° 43' 37.49" E Dist 51.0618 N 591,204.6781 E 2,443,917.3179 Sta 26+68.05 Course from LC0061 to LC0062 S 1° 45' 59.51" E Dist 39.7295 N 591,164.9675 E 2,443,918.5427 Sta 27+07.78 Course from LC0062 to LC0063 S 13° 38' 01.07" E Dist 36.9614 N 591,129.0476 E 2,443,927.2549 Sta Course from LC0063 to LC0064 S 36° 07' 17.70" E Dist 12.8067 N 591,118.7028 E 2,443,934.8045 Sta 27+57.55 Course from LC0064 to LC0065 S 10° 32' 24.14" E Dist 17.1142 N 591,101.8773 E 2,443,937.9350 Sta 27+74.66 Course from LC0065 to LC0066 S 9° 43' 44.14" E Dist 70.2794 N 591,032.6086 E 2,443,949.8114 Sta 28+44.94 Course from LC0066 to LC0067 S 9° 12' 50.71" E Dist 23.9398 N 591,008.9777 E 2,443,953.6447 Sta 28+68.88 Course from LC0067 to LC0068 S 4° 31' 49.16" E Dist 11.1401 N 590,997.8724 E 2,443,954.5246 Sta 28+80.02 Point LC0068 Course from LC0068 to LC0069 S 0° 56' 29.55" W Dist 54.7863 N 590,943.0935 E 2,443,953.6243 Sta 29+34.81 Course from LC0069 to LC0070 S 0° 05' 34.40" W Dist 56.2579 N 590,886.8356 E 2,443,953.5331 Sta 29+91.07 Point LC0070 Course from LC0070 to LC0072 S 0° 56' 54.27" W Dist 130.4043 N 590,756.4491 E 2,443,951.3747 Sta 31+21.47 Course from LC0072 to LC0073 S 2° 27' 52.02" W Dist 72.4998 1940 ALGONQUIN ROAD, SUITE 30

(843) 554-8602

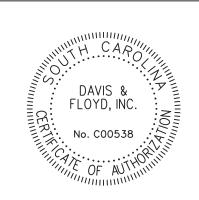
N 590,684.0164 E 2,443,948.2572 Sta 31+93.97 Point LC0073 Course from LC0073 to LC0074 S 0° 55' 05.48" W Dist 57.6127 Point LC0074 N 590,626.4111 E 2,443,947.3340 Sta 32+51.58 Course from LC0074 to LC0075 S 0° 40' 15.72" E Dist 40.7321 N 590,585.6818 E 2,443,947.8110 Sta 32+92.32 Course from LC0075 to LC0076 S 16° 37' 22.04" E Dist 37.3030 N 590,549.9377 E 2,443,958.4823 Sta 33+29.62 Course from LC0076 to LC0077 S 22° 24' 55.06" E Dist 36.4378 N 590,516.2530 E 2,443,972.3766 Sta 33+66.06 Course from LC0077 to LC0078 S 22° 38' 37.06" E Dist 48.4979 N 590,471.4934 E 2,443,991.0482 Sta 34+14.56 Course from LC0078 to LC0079 S 21° 12' 17.34" E Dist 64.9940 N 590,410.8999 E 2,444,014.5568 Sta 34+79.55 Course from LC0079 to LC0080 S 15° 14' 57.85" E Dist 35.1895 N 590.376.9495 E 2.444.023.8123 Sta 35+14.74 Course from LC0080 to LC0081 S 33° 38' 33.08" E Dist 14.8032 N 590.364.6257 E 2.444.032.0135 Sta 35+29.54 Course from LC0081 to LC0082 S 19° 36' 56.39" E Dist 29.4241 N 590,336.9091 E 2,444,041.8914 Sta 35+58.97 Course from LC0082 to LC0083 S 24° 19' 41.16" E Dist 23.3248 N 590,315.6555 E 2,444,051.5003 Sta 35+82.29 Course from LC0083 to LC0084 S 22° 10' 07.92" E Dist 51.4214 N 590,268.0354 E 2,444,070.9035 Sta 36+33.71 Course from LC0084 to LC0085 S 21° 39' 04.82" E Dist 56.4058 N 590,215.6093 E 2,444,091.7149 Sta 36+90.12 Course from LC0085 to LC0086 S 21° 16' 38.63" E Dist 55.3039 N 590,164.0751 E 2,444,111.7838 Sta 37+45.42 Course from LC0086 to LC0087 S 21° 03' 07.45" E Dist 58.3145 N 590,109.6529 E 2,444,132.7313 Sta 38+03.74 Course from LC0087 to LC0088 S 22° 46' 54.13" E Dist 67.5026 N 590,047.4163 E 2,444,158.8698 Sta 38+71.24 Course from LC0088 to LC0089 S 20° 42' 59.11" E Dist 64.7797 N 589,986.8251 E 2,444,181.7851 Sta 39+36.02 Course from LC0089 to LC0090 S 21° 42' 18.75" E Dist 65.6042 N 589,925.8724 E 2,444,206.0476 Sta 40+01.62 Course from LC0090 to LC0091 S 21° 30' 11.44" E Dist 58.3708 N 589,871,5643 E 2,444,227,4436 Sta 40+59,99 Course from LC0091 to LC0092 S 22° 55′ 32.98″ E Dist 57.2089 N 589,818.8743 E 2,444,249.7287 Sta 41+17.20 Course from LC0092 to LC0093 S 20° 52' 22.00" E Dist 69.4080 N 589,754.0213 E 2,444,274.4583 Sta 41+86.61 Course from LC0093 to LC0094 S 22° 13' 14.96" E Dist 57.6524 N 589,700.6506 E 2,444,296.2612 Sta 42+44.26

FED. ROAD STATE

COUNTY

S.C. GEORGETOWN

PROJECT ID







REV. NO.

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION REFERENCE DATA SHEET EAST ANDREWS DRAINAGE IMPROVEMENTS BY DATE **DESCRIPTION OF REVISION** DRAWN BY REVIEWED BY CHECKED BY SCALE 1"= 100' PLOT SIZE =  $22" \times 34"$ DES. BY

Course from LC0094 to LC0095 S 22° 02' 06.49" E Dist 65.1008

Course from LC0095 to LC0096 S 23° 52' 21.74" E Dist 54.1659

Course from LC0096 to LC0097 S 23° 30' 55.47" E Dist 53.4454

N 589,640.3051 E 2,444,320.6854 Sta 43+09.36

N 589,590.7733 E 2,444,342.6066 Sta 43+63.53

**SINCE 1954** 

ile: | TABLE: |T DRIVER:

LESTER CREEK description continued \_\_\_\_\_\_ Point LC0097 N 589,541.7664 E 2,444,363.9311 Sta 44+16.98 Course from LC0097 to LC0098 S 20° 58' 01.21" E Dist 60.8499 Point LC0098 N 589,484.9455 E 2,444,385.7051 Sta 44+77.83 Course from LC0098 to LC0099 S 23° 50' 41.64" E Dist 60.5750 Point LC0099 N 589,429.5410 E 2,444,410.1932 Sta 45+38.40 Course from LC0099 to LC0100 S 21° 10' 50.91" E Dist 73.3020 Point LC0100 N 589,361.1909 E 2,444,436.6781 Sta 46+11.70 Course from LC0100 to LC0101 S 15° 54' 04.83" E Dist 13.0703 Point LC0101 N 589,348.6207 E 2,444,440.2592 Sta 46+24.77 Course from LC0101 to LC0102 S 25° 07' 47.66" E Dist 11.3651 N 589,338.3314 E 2,444,445.0856 Sta 46+36.14 Point LC0102 Course from LC0102 to LC0103 S 22° 33' 06.74" E Dist 53.5062 Point LC0103 N 589,288.9167 E 2,444,465.6063 Sta 46+89.64 Course from LC0103 to LC0104 S 21° 41' 06.80" E Dist 52.9071 Point LC0104 N 589,239.7539 E 2,444,485.1558 Sta 47+42.55 Course from LC0104 to LC0105 S 22° 14' 19.00" E Dist 52.5521 Point LC0105 N 589,191.1109 E 2,444,505.0449 Sta 47+95.10 Course from LC0105 to LC0106 S 22° 36' 19.38" E Dist 52.3201 N 589,142.8104 E 2,444,525.1558 Sta 48+47.42 Point LC0106 Course from LC0106 to LC0107 S 27° 42' 16.30" E Dist 32.5154 Point LC0107 N 589,114.0226 E 2,444,540.2726 Sta 48+79.94 Course from LC0107 to LC0108 S 5° 45' 11.52" E Dist 14.4432 N 589,099.6522 E 2,444,541.7205 Sta 48+94.38 Point LC0108 Course from LC0108 to LC0109 S 16° 13' 37.72" W Dist 54.4008 Point LC0109 N 589,047.4186 E 2,444,526.5184 Sta 49+48.78 Course from LC0109 to LC0110 S 4° 09' 09.26" E Dist 13.7418 Point LC0110 N 589,033.7129 E 2,444,527.5135 Sta 49+62.52 Course from LC0110 to LC0111 S 12° 45' 49.23" W Dist 25.7397 Point LC0111 N 589,008.6093 E 2,444,521.8268 Sta Course from LC0111 to LC0112 S 15° 05' 22.57" W Dist 50.0930 Point LC0112 N 588,960.2434 E 2,444,508.7861 Sta 50+38.36 Course from LC0112 to LC0113 S 16° 11' 12.67" W Dist 83.3583 Point LC0113 N 588,880.1896 E 2,444,485.5482 Sta 51+21.72 Course from LC0113 to LC0114 S 13° 56' 58.74" W Dist 52.4920 Point LC0114 N 588,829.2457 E 2,444,472.8940 Sta 51+74.21 Course from LC0114 to LC0115 S 15° 08' 22.47" W Dist 58.5026 Point LC0115 N 588,772.7736 E 2,444,457.6148 Sta 52+32.71 Course from LC0115 to LC0116 S 15° 53' 56.43" W Dist 37.6274 Point LC0116 N 588,736.5856 E 2,444,447.3071 Sta 52+70.34 Course from LC0116 to LC0117 S 15° 32' 19.78" W Dist 61.6681 Point LC0117 N 588,677.1716 E 2,444,430.7867 Sta 53+32.01 Course from LC0117 to LC0118 S 15° 27' 41.20" W Dist 59.4426 Point LC0118 N 588,619.8802 E 2,444,414.9400 Sta 53+91.45 Course from LC0118 to LC0119 S 16° 33' 10.89" W Dist 40.3278 Point LC0119 N 588,581.2238 E 2,444,403.4505 Sta 54+31.78 Course from LC0119 to LC0120 S 15° 17' 25.16" W Dist 54.2780 Point LC0120 N 588,528.8671 E 2,444,389.1368 Sta 54+86.05

Course from LC0120 to LC0121 S 15° 08' 52.71" W Dist 47.3934

N 588,483.1204 E 2,444,376.7523 Sta 55+33.45 Point LC0121 Course from LC0121 to LC0122 S 18° 11' 17.06" W Dist 50.5406 Point LC0122 N 588,435.1050 E 2,444,360.9767 Sta 55+83.99 Course from LC0122 to LC0123 S 13° 51' 14.97" W Dist 52.7316 N 588,383.9075 E 2,444,348.3501 Sta 56+36.72 Course from LC0123 to LC0124 S 15° 59' 25.02" W Dist 53.4380 Point LC0124 N 588,332.5371 E 2,444,333.6293 Sta 56+90.16 Course from LC0124 to LC0125 S 15° 34' 24.96" W Dist 49.7742 N 588,284.5902 E 2,444,320.2661 Sta 57+39.93 Course from LC0125 to LC0126 S 16° 11' 22.73" W Dist 51.5888 N 588,235.0472 E 2,444,305.8822 Sta 57+91.52 Course from LC0126 to LC0127 S 15° 06' 19.48" W Dist 51.0326 N 588,185.7779 E 2,444,292.5833 Sta 58+42.55 Course from LC0127 to LC0128 S 2° 40' 26.53" W Dist 22.5948 Point LC0128 N 588,163.2077 E 2,444,291.5292 Sta 58+65.15 Course from LC0128 to LC0129 S 22° 07' 09.87" W Dist 56.0597 N 588,111.2740 E 2,444,270.4206 Sta 59+21.21 Course from LC0129 to LC0130 S 43° 51' 24.77" W Dist 32.0835 N 588,088.1394 E 2,444,248.1913 Sta 59+53.29 Course from LC0130 to LC0131 S 45° 20' 44.04" W Dist 47.8503 N 588,054.5089 E 2,444,214.1526 Sta 60+01.14 Course from LC0131 to LC0132 S 45° 47' 12.12" W Dist 49.6757 N 588,019.8684 E 2,444,178.5476 Sta 60+50.82 Course from LC0132 to LC0133 S 45° 01' 03.86" W Dist 50.2076 N 587,984.3773 E 2,444,143.0344 Sta 61+01.02 Course from LC0133 to LC0134 S 41° 25' 14.31" W Dist 32.6372 Point LC0134 N 587,959.9035 E 2,444,121.4423 Sta 61+33.66 Course from LC0134 to LC0135 S 17° 53' 05.41" W Dist 33.6497 Point LC0135 N 587,927.8799 E 2,444,111.1083 Sta 61+67.31 Course from LC0135 to LC0136 S 15° 44' 24.47" W Dist 52.2165 N 587,877.6214 E 2,444,096.9432 Sta 62+19.53 Course from LC0136 to LC0137 S 14° 54' 13.49" W Dist 57.4130 Point LC0137 N 587.822.1398 E 2.444.082.1768 Sta 62+76.94 Course from LC0137 to LC0138 S 17° 26' 32.81" W Dist 49.4861 Point LC0138 N 587,774.9291 E 2,444,067.3435 Sta 63+26.43 Course from LC0138 to LC0139 S 14° 43' 50.77" W Dist 50.1795 N 587,726.3990 E 2,444,054.5840 Sta 63+76.61 Course from LC0139 to LC0140 S 15° 48' 15.07" W Dist 56.2831 N 587,672.2434 E 2,444,039.2552 Sta 64+32.89 Course from LC0140 to LC0141 S 14° 43' 30.41" W Dist 49.8899 N 587,623,9921 E 2,444,026.5741 Sta 64+82.78 Course from LC0141 to LC0142 S 16° 28' 16.53" W Dist 47.5508 Point LC0142 N 587,578.3927 E 2,444,013.0919 Sta 65+30.33 Course from LC0142 to LC0143 S 12° 20' 34.38" W Dist 34.1711 N 587,545.0115 E 2,444,005.7874 Sta 65+64.50 Course from LC0143 to LC0144 S 15° 41' 33.36" W Dist 15.5153 Point LC0144 N 587,530.0745 E 2,444,001.5909 Sta 65+80.02

Point LC0145 N 587,508.5607 E 2,443,992.4649 Sta 66+03.39 Course from LC0145 to LC0146 S 16° 35' 35.02" W Dist 38.3732 N 587,471.7854 E 2,443,981.5066 Sta 66+41.76 Course from LC0146 to LC0147 S 12° 34' 10.49" W Dist 26.3537 N 587,446.0633 E 2,443,975.7713 Sta 66+68.11 Point LC0147 Course from LC0147 to LC0148 S 12° 29' 41.83" W Dist 125.1823 N 587,323.8459 E 2,443,948.6877 Sta 67+93.30 Course from LC0148 to LC0149 S 16° 28' 36.82" W Dist 96.0222 Point LC0149 N 587,231.7670 E 2,443,921.4530 Sta 68+89.32 Course from LC0149 to LC0150 S 16° 18' 50.07" W Dist 110.8061 N 587,125.4223 E 2,443,890.3277 Sta 70+00.12 Course from LC0150 to LC0151 S 16° 27' 36.25" W Dist 59.5016 N 587,068.3592 E 2,443,873.4680 Sta 70+59.63 Ending chain LESTER\_ CREEK description

#### Beginning chain NORTH description

N 593,003.1194 E 2,442,980.7089 Sta 10+00.00 Course from 1 to 2 N 6° 35' 31.75" E Dist 602.4992 N 593,601.6353 E 2,443,049.8765 Sta 16+02.50 

#### Beginning chain PRIVATE\_\_1 description

Ending chain NORTH description

N 592,531.0180 E 2,443,418.5515 Sta 20+00.00 Course from PVT100 to PVT101 N 57° 13' 24.48" E Dist 99.7814 N 592.585.0360 E 2.443.502.4465 Sta 20+99.78 Ending chain PRIVATE 1 description

\_\_\_\_\_\_

#### Beginning chain CSX description

Point CSX001 N 589,108.6868 E 2,444,423.5482 Sta 50+00.00 Course from CSX001 to CSX002 S 74° 51' 35.52" E Dist 233.0056 N 589,047.8303 E 2,444,648.4661 Sta 52+33.01 Point CSX002 \_\_\_\_\_\_ Ending chain CSX description

#### Beginning chain GT\_\_HWY description

N 588,303.9376 E 2,444,023.6014 Sta 60+00.00 Course from GTH001 to GTH002 S 56° 50' 42.00" E Dist 612.4990 Point GTH002 N 587,968.9584 E 2,444,536.3819 Sta 66+12.50 \_\_\_\_\_\_ Ending chain GT HWY description

### Beginning chain OLD\_CEMETERY description

N 587,571.1823 E 2,443,697.2161 Sta 70+00.00 Course from OC001 to OC002 S 74° 42' 25.74" E Dist 602.4990 Point OC002 N 587,412.2716 E 2,444,278.3808 Sta 76+02.50 \_\_\_\_\_\_

1940 ALGONQUIN ROAD, SUITE 30

(843) 554-8602

DES. BY

Ending chain OLD\_CEMETERY description

FED. ROAD STATE COUNTY PROJECT ID S.C. GEORGETOWN

Beginning chain PRIVATE\_2 description \_\_\_\_\_\_

Curve PRIVATE 21

Point PVT200 N 590,333.5161 E 2,443,993.0435 Sta 40+00.00

Course from PVT200 to PC PRIVATE\_\_21 N 67° 22' 55.54" E Dist 42.7590

#### Curve Data

590,358.6724 E 2,444,053.4244 P.I. Station 40+65.41 N = 36° 33' 30.13" (RT) = 83° 32' 50.13" 22.6527 Tangent 43.7577 68.5789 Radius 3.6444 External = 43.0192 Long Chord = 3.4605 Mid. Ord. = 40+42.76 N P.C. Station 590,349.9605 E 2,444,032.5139 590,353.2150 E 2,444,075.4099 P.T. Station 40+86.52 N N 590,286.6560 E 2,444,058.8883 = N 67° 22' 55.54" E Ahead =  $S 76^{\circ} 03' 34.33'' E$ Chord Bear = N 85° 39' 40.61" E

\_\_\_\_\_\_ Ending chain PRIVATE\_2 description

#### Beginning chain GAPWAY description

N 591,037.6846 E 2,443,643.6437 Sta 30+00.00 Point GAP001

Course from GAP001 to PC GAPWAY1 N 83° 59' 08.30" E Dist 378.1074

#### Curve Data

Curve GAPWAY1 34+91.03 N 591,089.1338 E 2,444,131.9730 P.I. Station 9° 00' 44.66" (RT) Degree =  $3^{\circ} 59' 55.30''$ Tangent = 112.9248 225.3837 Length = 1,432.8620 Radius = External = 4.4429 Long Chord = 225.1514 4.4292 Mid. Ord. = 33+78.11 N 591,077.3018 E 2,444,019.6698 P.C. Station 36+03.49 N 591,083.2277 E 2,444,244.7433 P.T. Station N 589,652.3268 E 2,444,169.8019 = N 83° 59' 08.30" E Ahead =  $S 87^{\circ} 00' 07.04'' E$ Chord Bear = N 88° 29' 30.63" E

### Curve Data

37+16.42 N 591.089.1338 E 2.444.131.9730 P.I. Station 9° 00' 44.66" (LT) = 3° 59' 55.30" Degree 112.9248 Tangent 225.3837 Length 1,432.8620 Radius 4.4429 External = 225.1514 Long Chord = Mid. Ord. = 36+03.49 N 591,083.2277 E 2,444,244.7433 P.C. Station P.T. Station 38+28.87 N 591,077.3018 E 2,444,019.6698 N 589,652.3268 E 2,444,169.8019 = N 87° 00' 07.04" W Back Ahead = S 83° 59' 08.30" W Chord Bear = S 88° 29' 30.63" W

Course from PT GAPWAY2 to GAP002 S 83° 59' 08.30" W Dist 378.1074

N 591,037.6846 E 2,443,643.6437 Sta 42+06.98 Course from GAP002 to GAP003 N 6° 00' 51.70" W Dist 6.0000

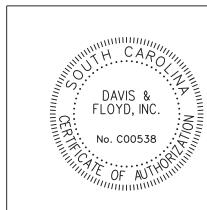
Point GAP003 N 591,043.6516 E 2,443,643.0150 Sta 42+12.98

SCALE 1"= 100'

\_\_\_\_\_\_ Ending chain GAPWAY description

CHECKED BY

Curve GAPWAY2



Course from LC0144 to LC0145 S 22° 59' 10.66" W Dist 23.3693





BY DATE **DESCRIPTION OF REVISION** REV. NO.

**REVIEWED BY** 

DRAWN BY

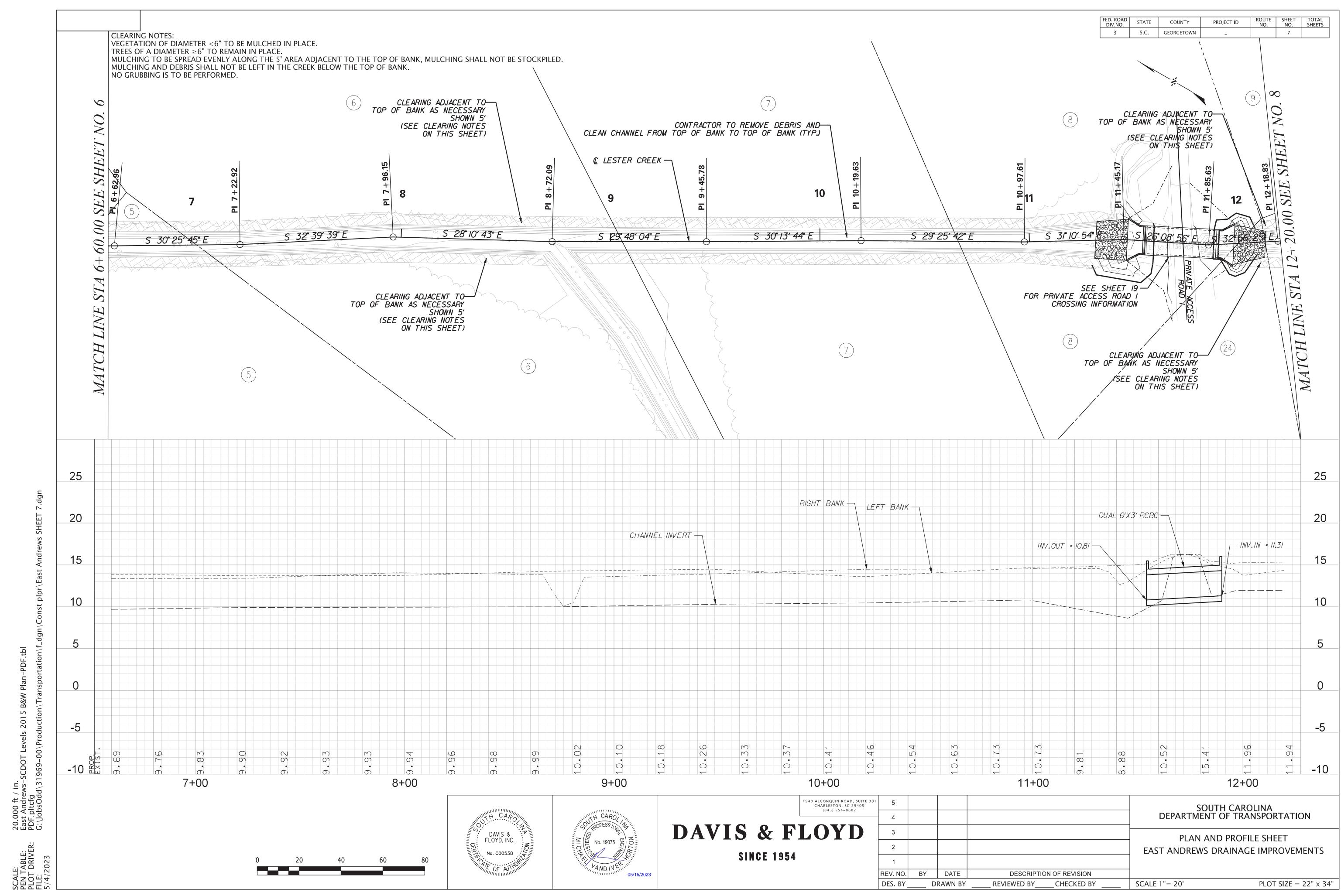
DEPARTMENT OF TRANSPORTATION REFERENCE DATA SHEET EAST ANDREWS DRAINAGE IMPROVEMENTS

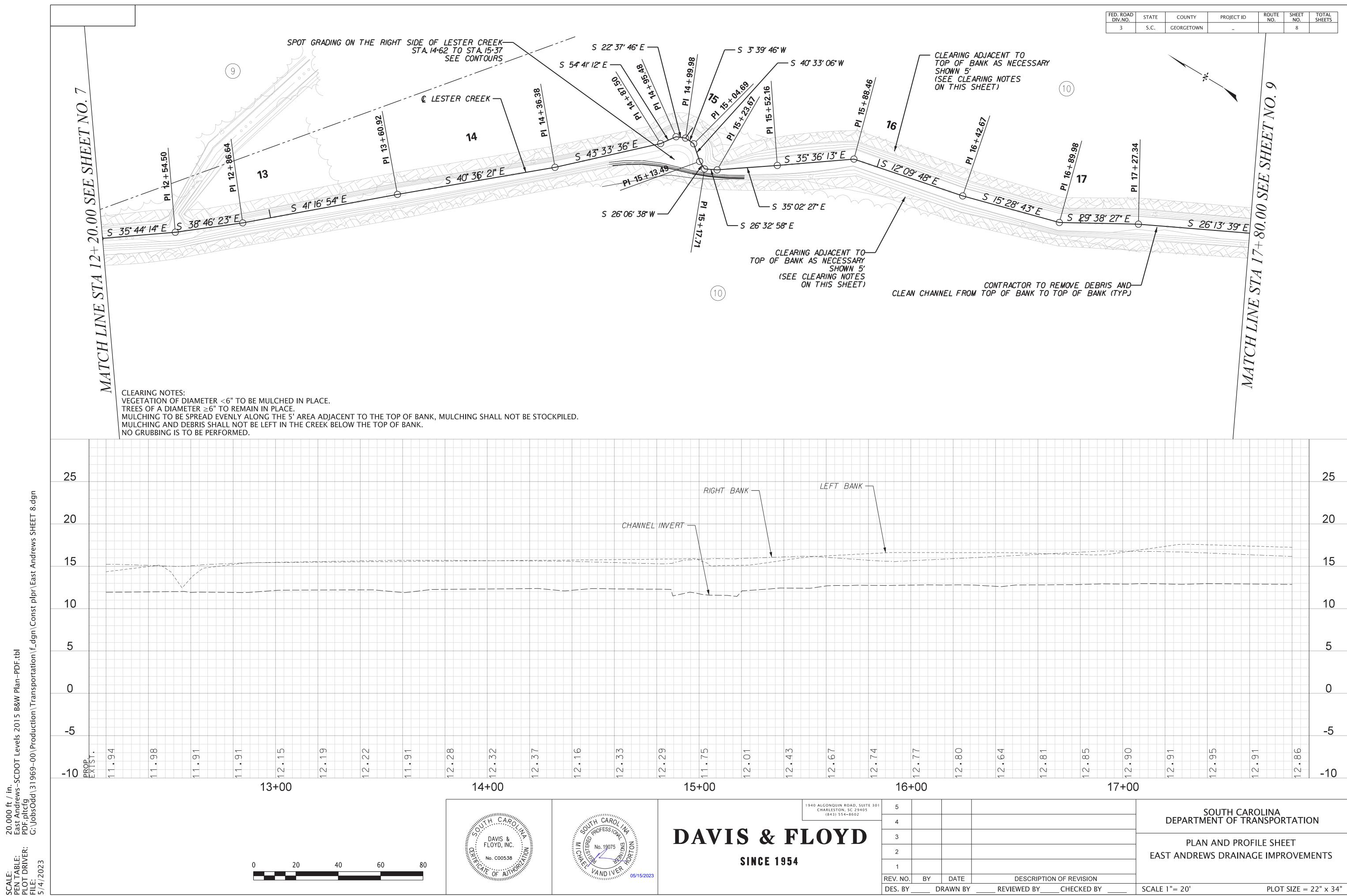
SOUTH CAROLINA

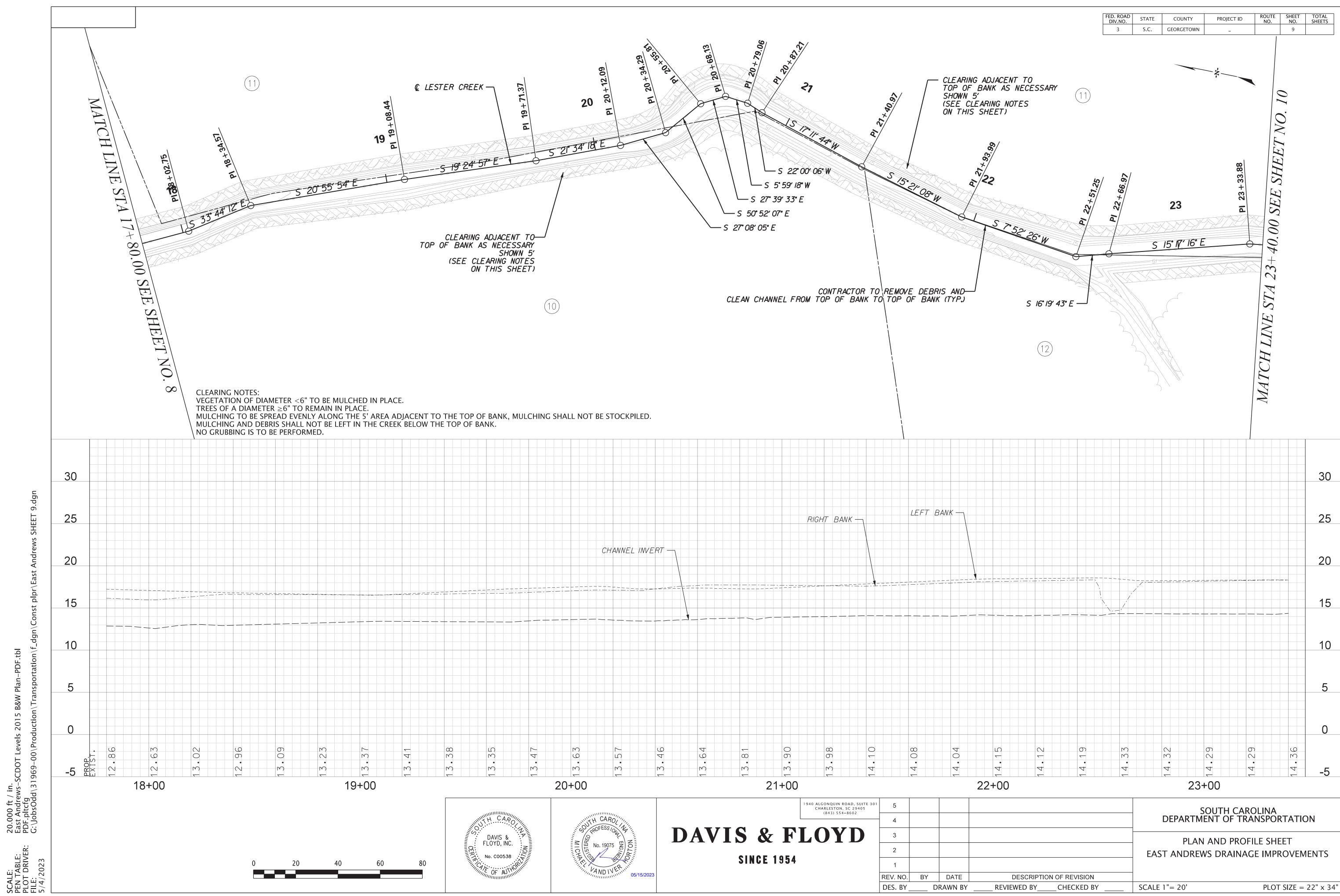
PLOT SIZE =  $22" \times 34"$ 

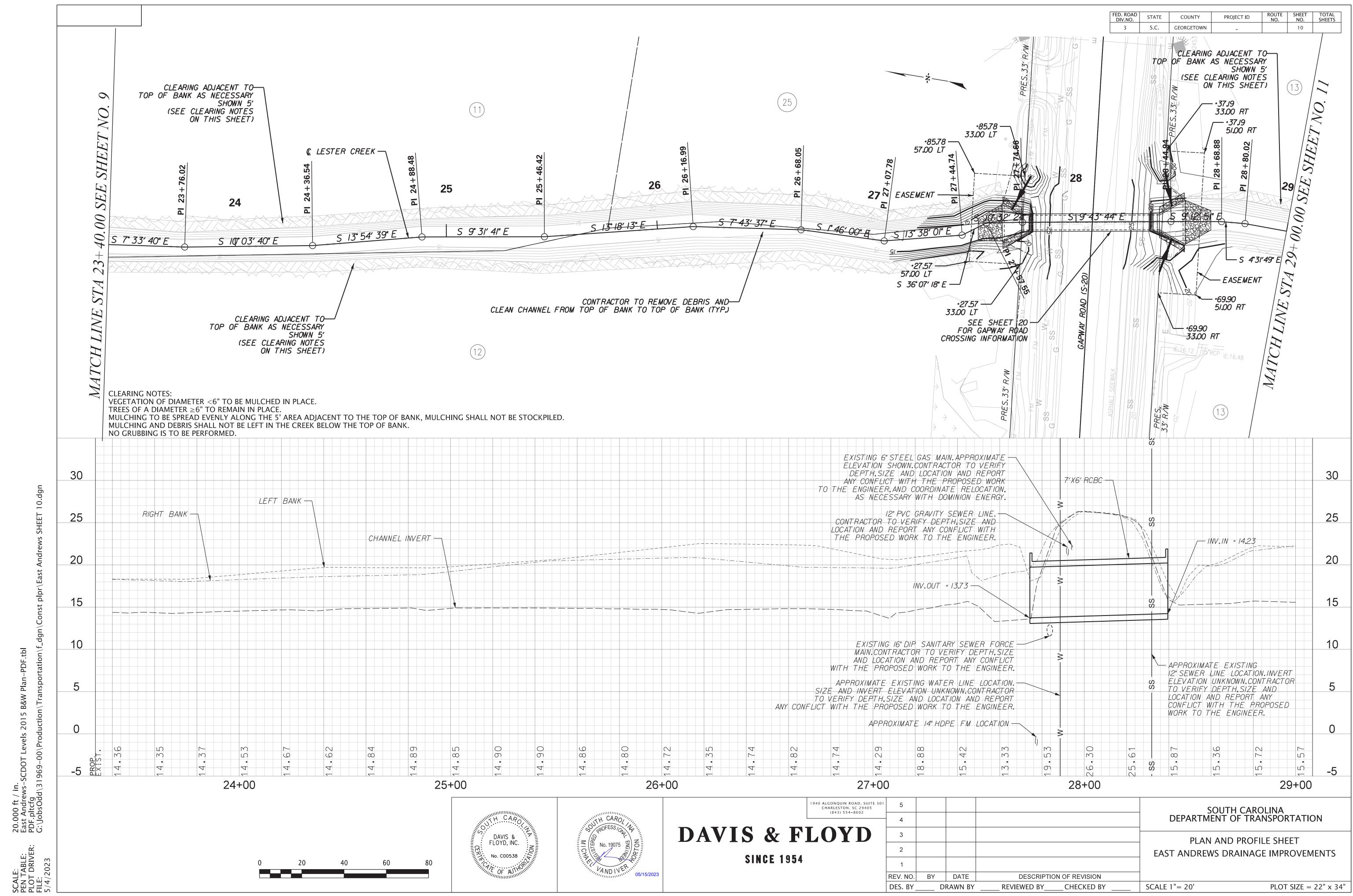
**SINCE 1954** 

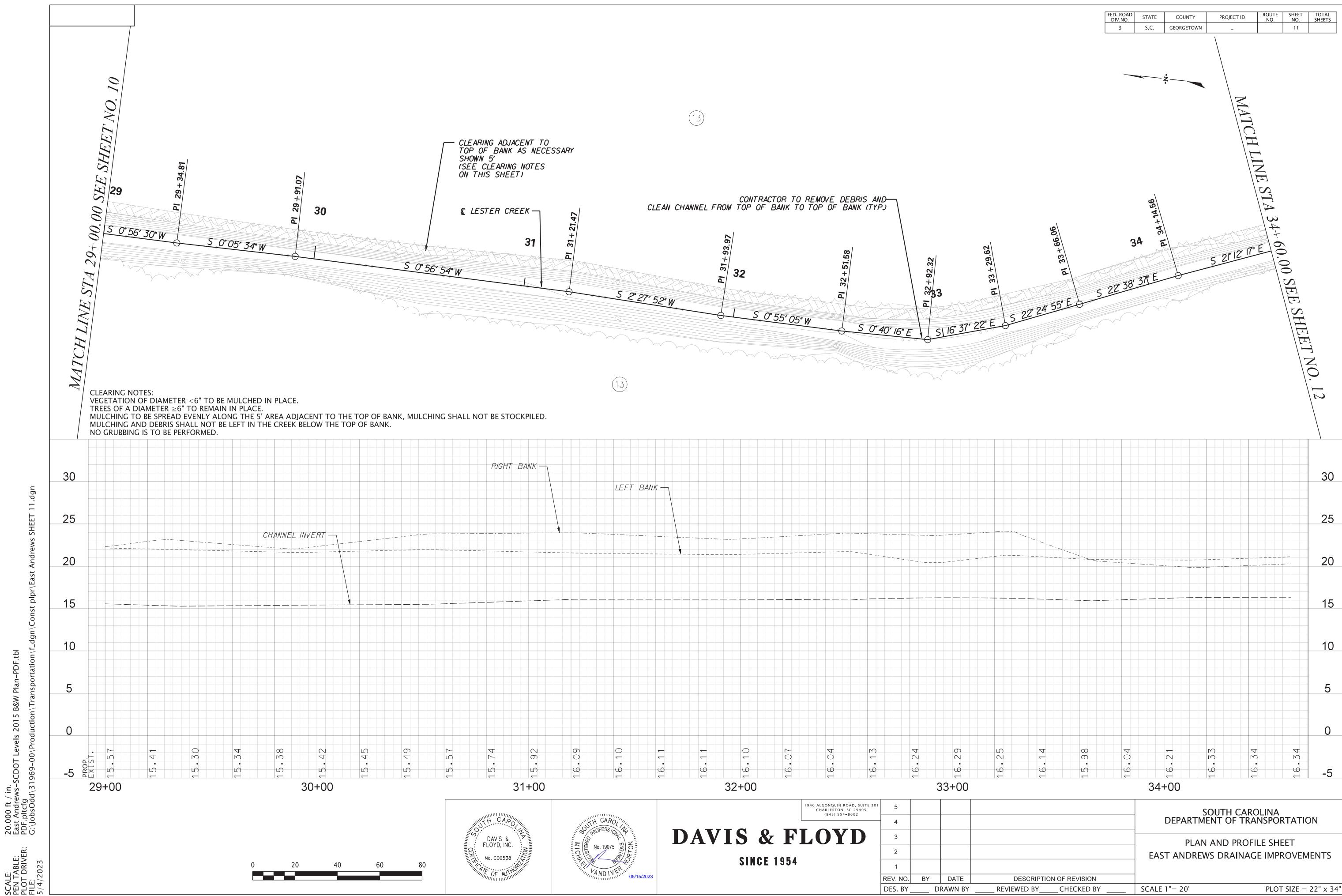
SCALE:
PEN TABLE:
PLOT DRIVER:
FILE:
5/4/2023

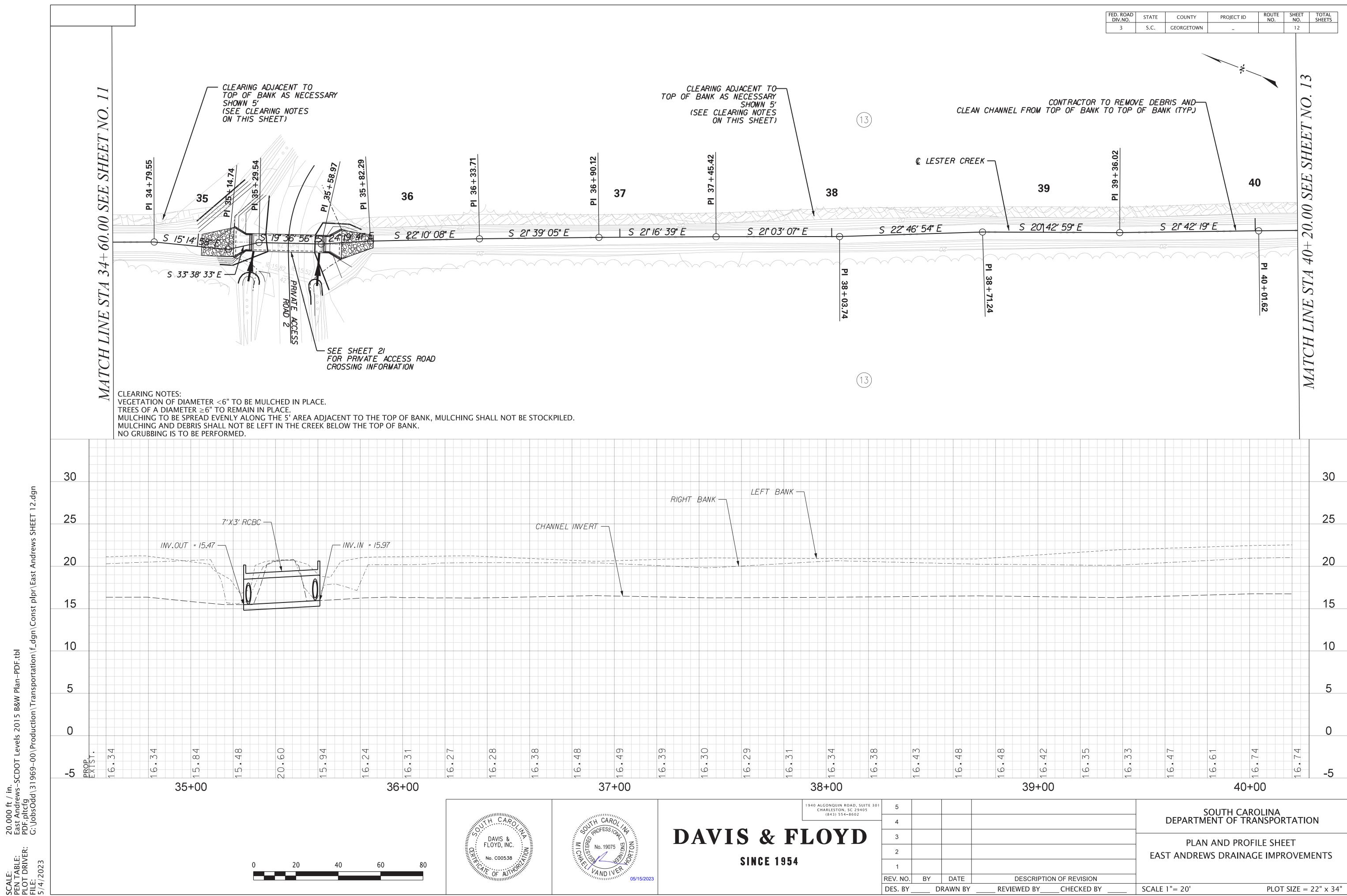


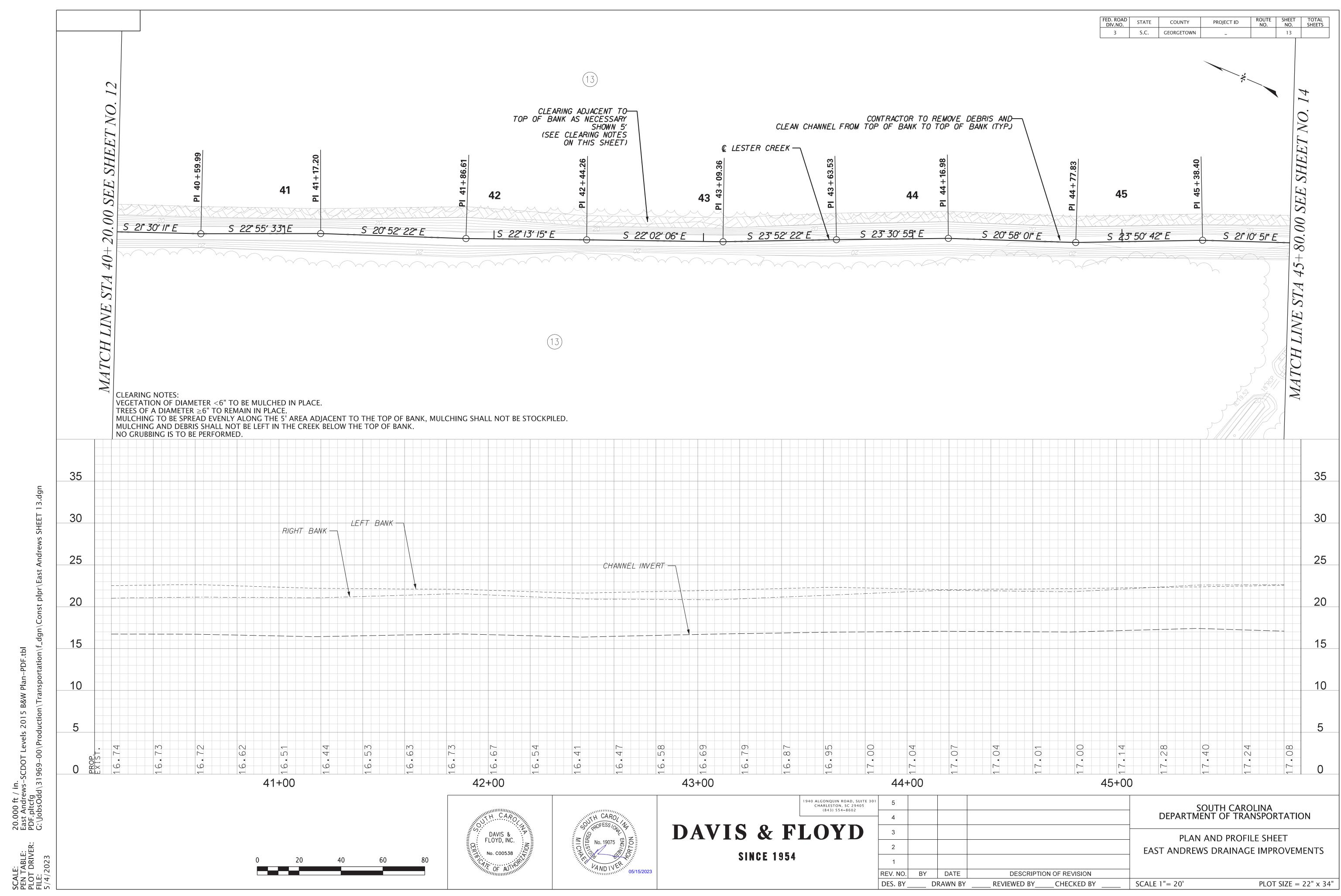


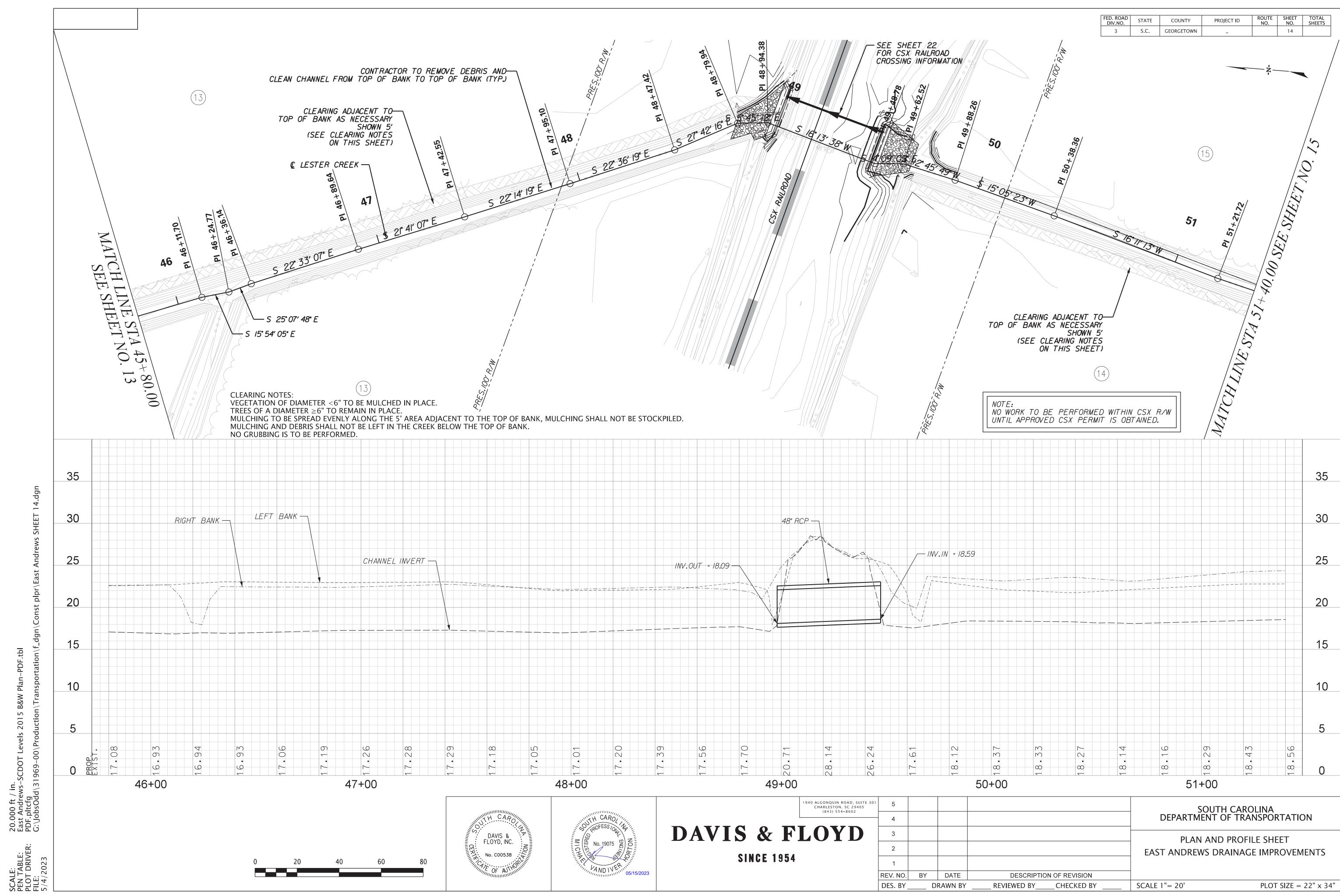


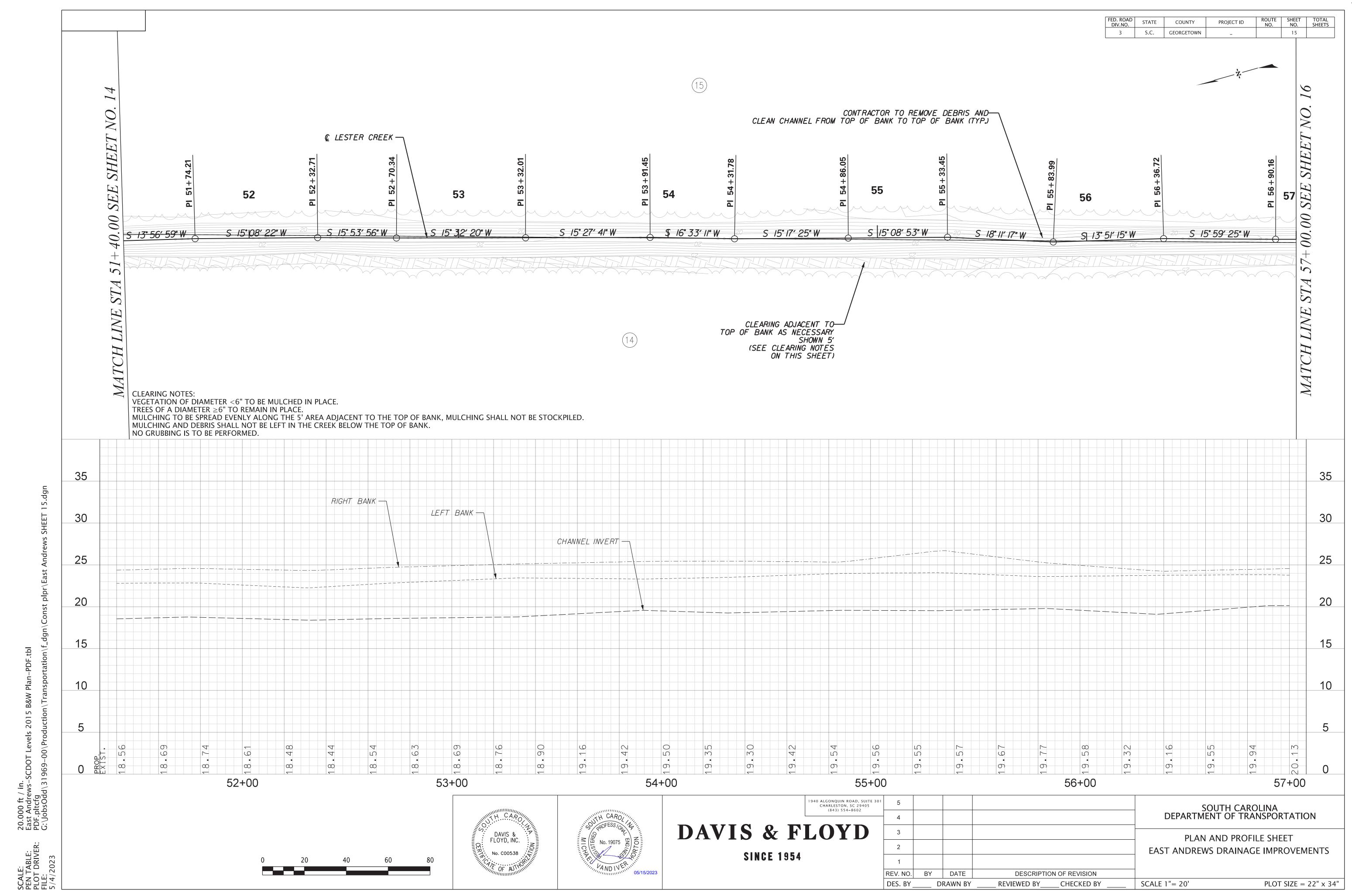


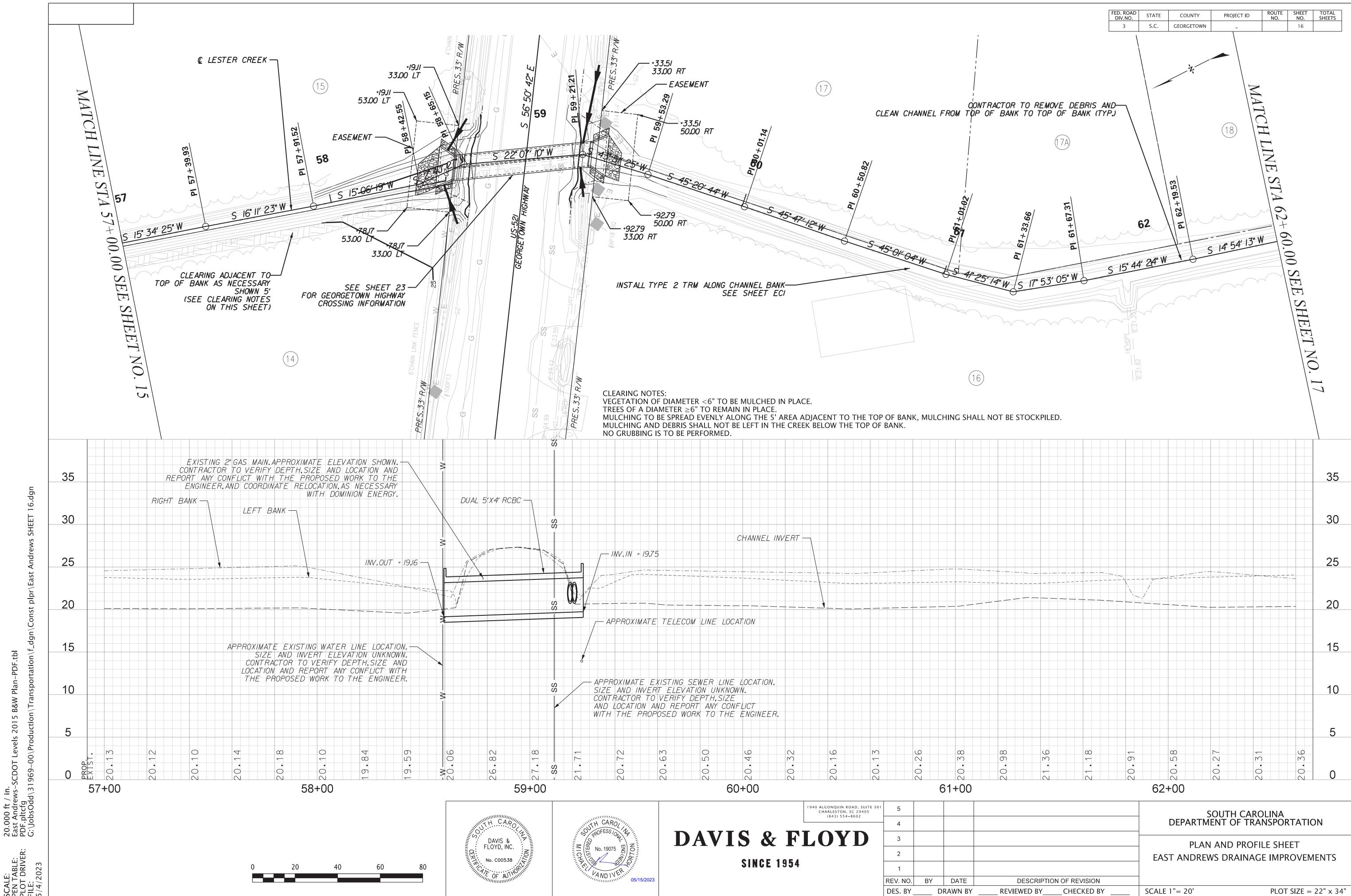




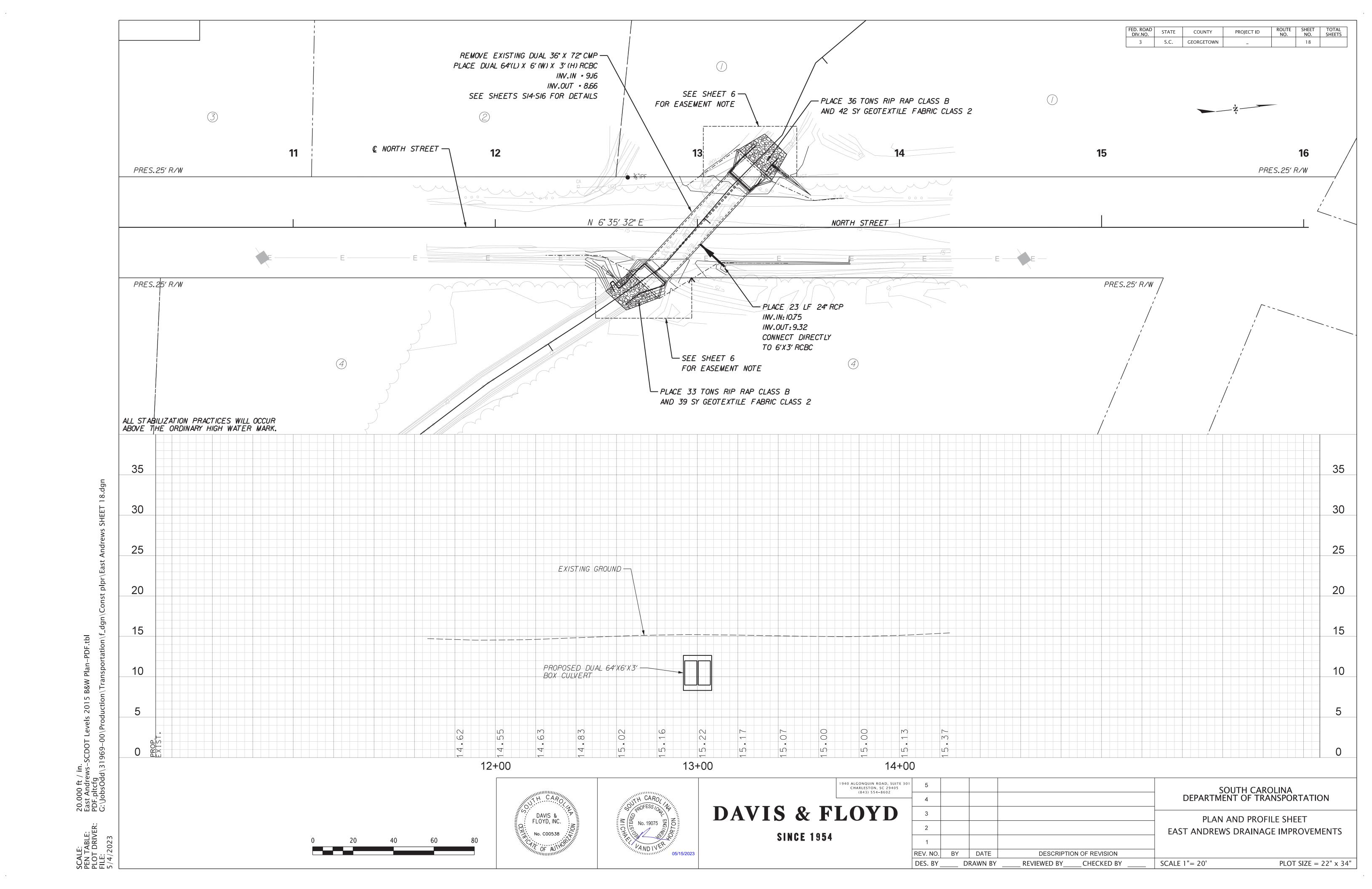


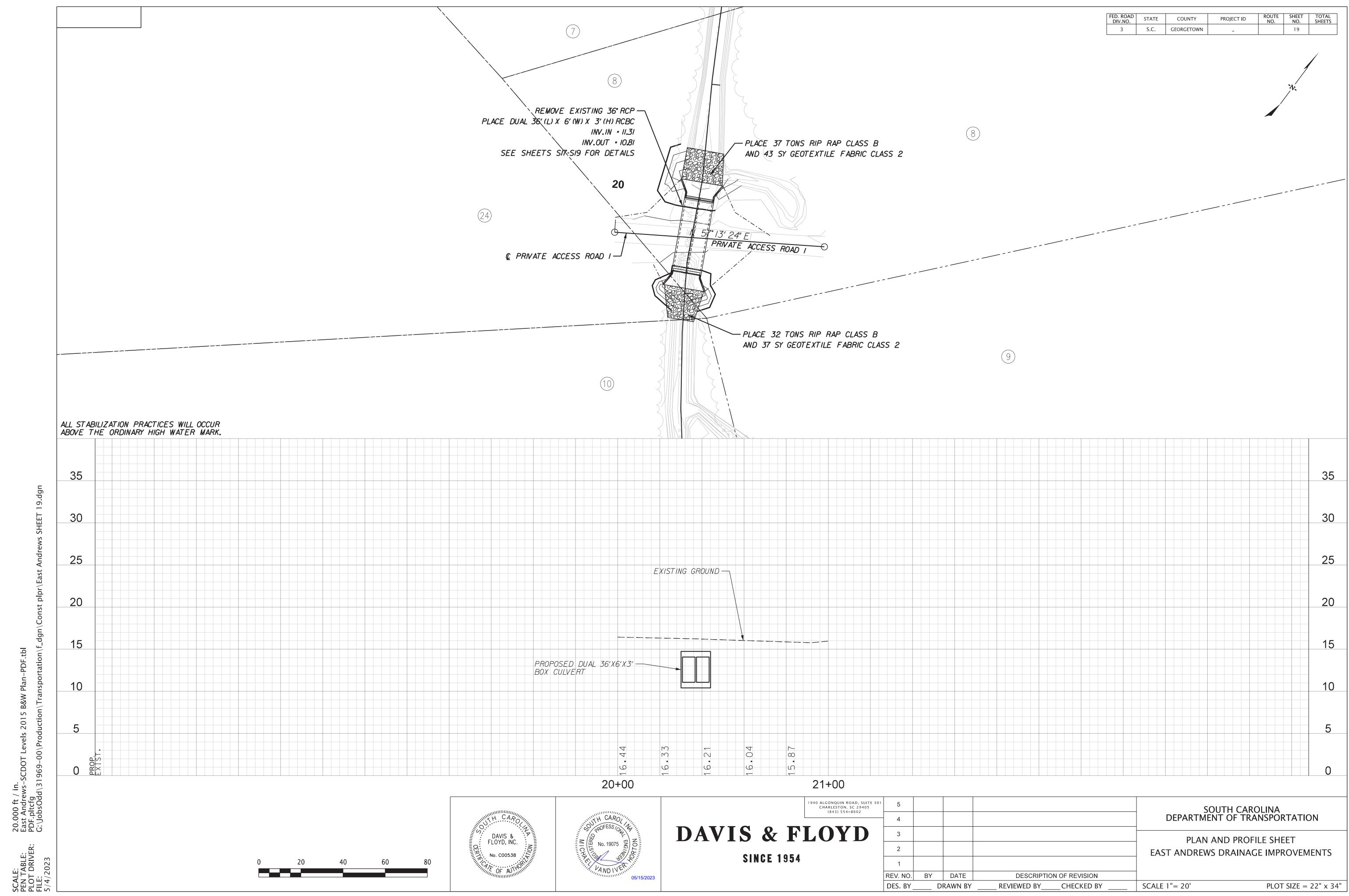


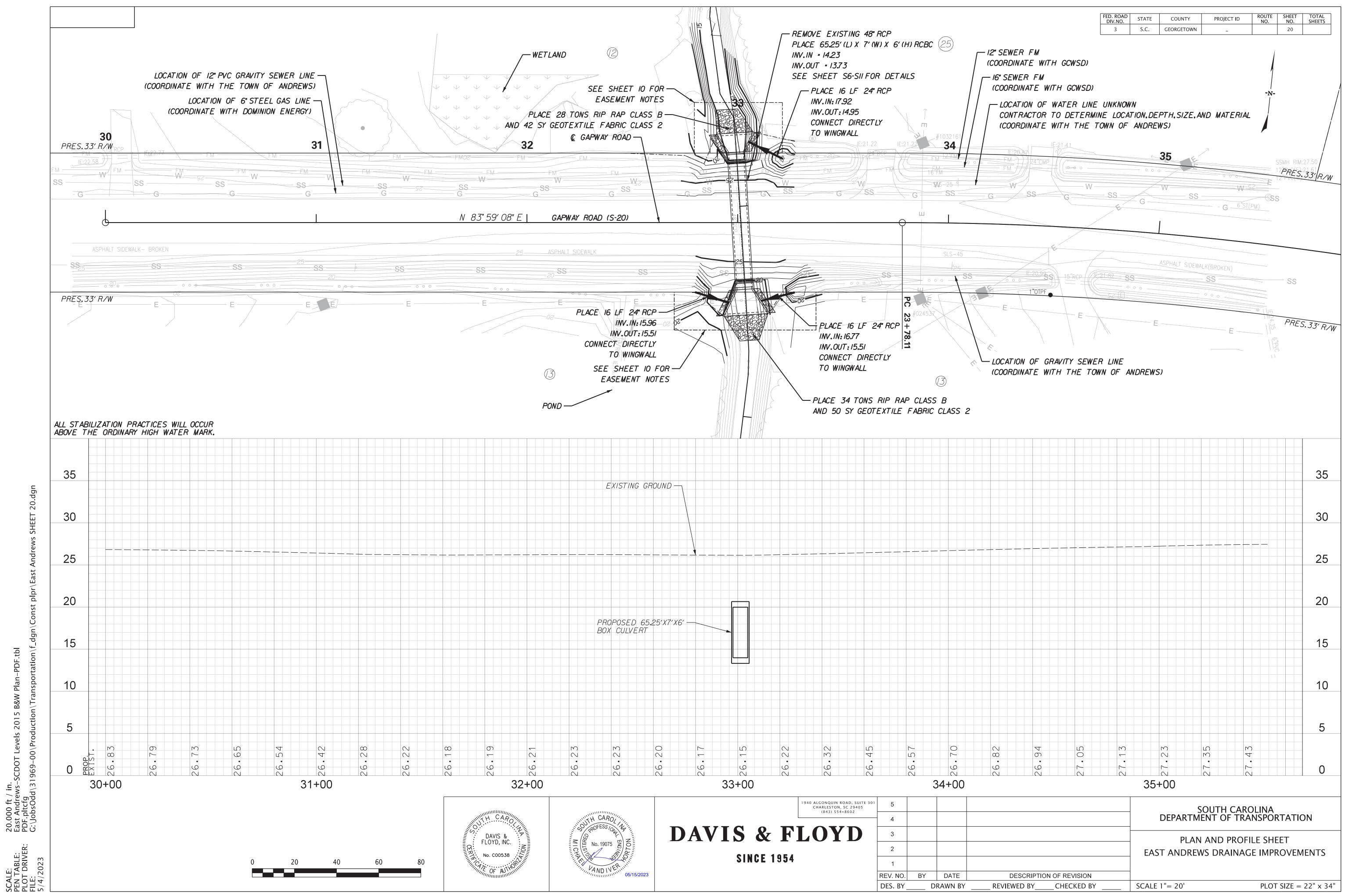




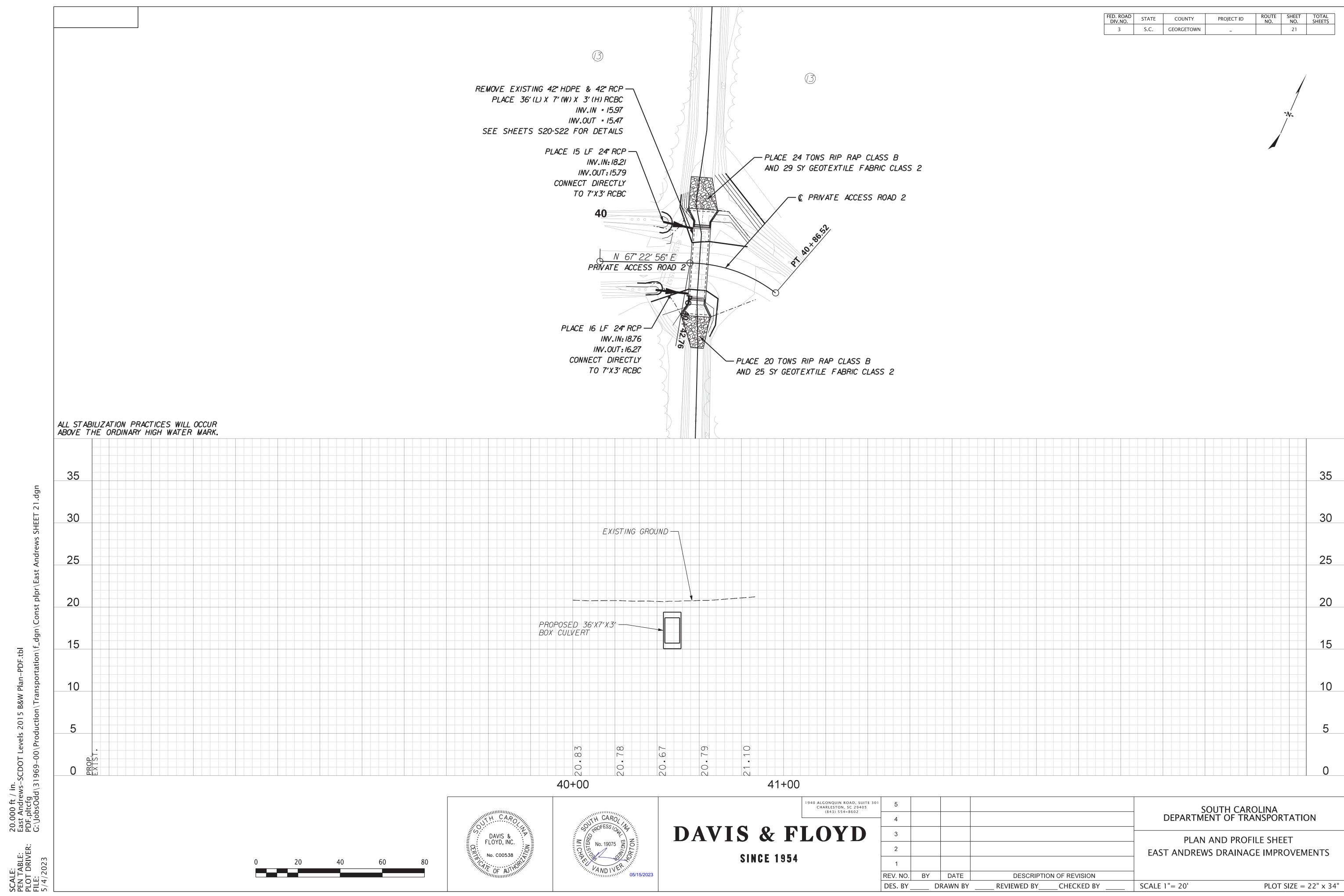
FED. ROAD STATE COUNTY PROJECT ID S.C. GEORGETOWN INSTALL TYPE 2 TRM ALONG CHANNEL BANK-(18) SEE SHEET ECI - •27.37 25.00 RT *•27,*16 — 25.00 LT -- •27.37 43.00 RT 45.00 LT SHEET (19)SEE\_\_\_S\_16° 28′ 37" W 63 S 12° 29′ 42" W S 12° 20′ 34" W S 16° 28′ 17" W S 14° 43′ 30" W S 15° 48′ 15" W S 14° 43′ 51" W S 17° 26′ 33" W S 15° 41′ 33" W - EASEMENT *- •76.*J0 EASEMENT 43.00 RT -*.*•76,10 CONTRACTOR TO REMOVE DEBRIS AND CLEAN CHANNEL FROM TOP OF BANK TO TOP OF BANK (TYP.) 25.00 RT ·72.89 -45.00 LT •72.89 – 25.00 LT — SEE SHEET 24 FOR OLD CEMETERY CROSSING INFORMATION RIP RAP NOTE: ALL STABILIZATION PRACTICES WILL OCCUR ABOVE THE ORDINARY HIGH WATER MARK. 35 35 DUAL 29"X45" H.E.RCP -LEFT BANK -RIGHT BANK 30 CHANNEL INVERT INV.OUT = 21.20 -25 25 - INV. IN = 21.70 20 - EXISTING 4" HDPE GAS MAIN. CONTRACTOR TO VERIFY SIZE, DEPTH, AND LOCATION AND REPORT ANY CONFLICT WITH PROPOSED WORK TO THE ENGINEER. 15 - EXISTING UNDERGROUND TELECOMMUNICATIONS LINE. CONTRACTOR TO VERIFY SIZE, DEPTH AND LOCATION, AND REPORT ANY CONFLICT WITH PROPOSED WORK APPROXIMATE EXISTING SEWER LINE LOCATION. SIZE AND INVERT ELEVATION UNKNOWN. CONTRACTOR TO VERIFY DEPTH, SIZE AND LOCATION AND REPORT ANY CONFLICT WITH THE PROPOSED WORK TO THE ENGINEER. TO THE ENGINEER, AND COORDINATE RELOCATION WITH FRONTIER COMMUNICATIONS AS NECESSARY. 10 APPROXIMATE EXISTING SEWER LINE LOCATION. SIZE AND INVERT ELEVATION UNKNOWN. CONTRACTOR TO VERIFY DEPTH. SIZE AND LOCATION AND REPORT ANY CONFLICT WITH THE PROPOSED WORK 20.000 ft / in. East Andrews–SCDOT Level PDF.pltcfg G:\JobsOdd\31969–00\Pro TO THE ENGINEER. 55 PROP. EXIS 20. Ö 20 0 63+00 64+00 65+00 66+00 1940 ALGONQUIN ROAD, SUITE 301 CHARLESTON, SC 29405 (843) 554–8602 SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION DAVIS & FLOYD DAVIS & FLOYD, INC. PLAN AND PROFILE SHEET EAST ANDREWS DRAINAGE IMPROVEMENTS **SINCE 1954** BY DATE DESCRIPTION OF REVISION REV. NO. PLOT SIZE =  $22" \times 34"$ DRAWN BY CHECKED BY DES. BY REVIEWED BY\_\_\_ SCALE 1"= 20'

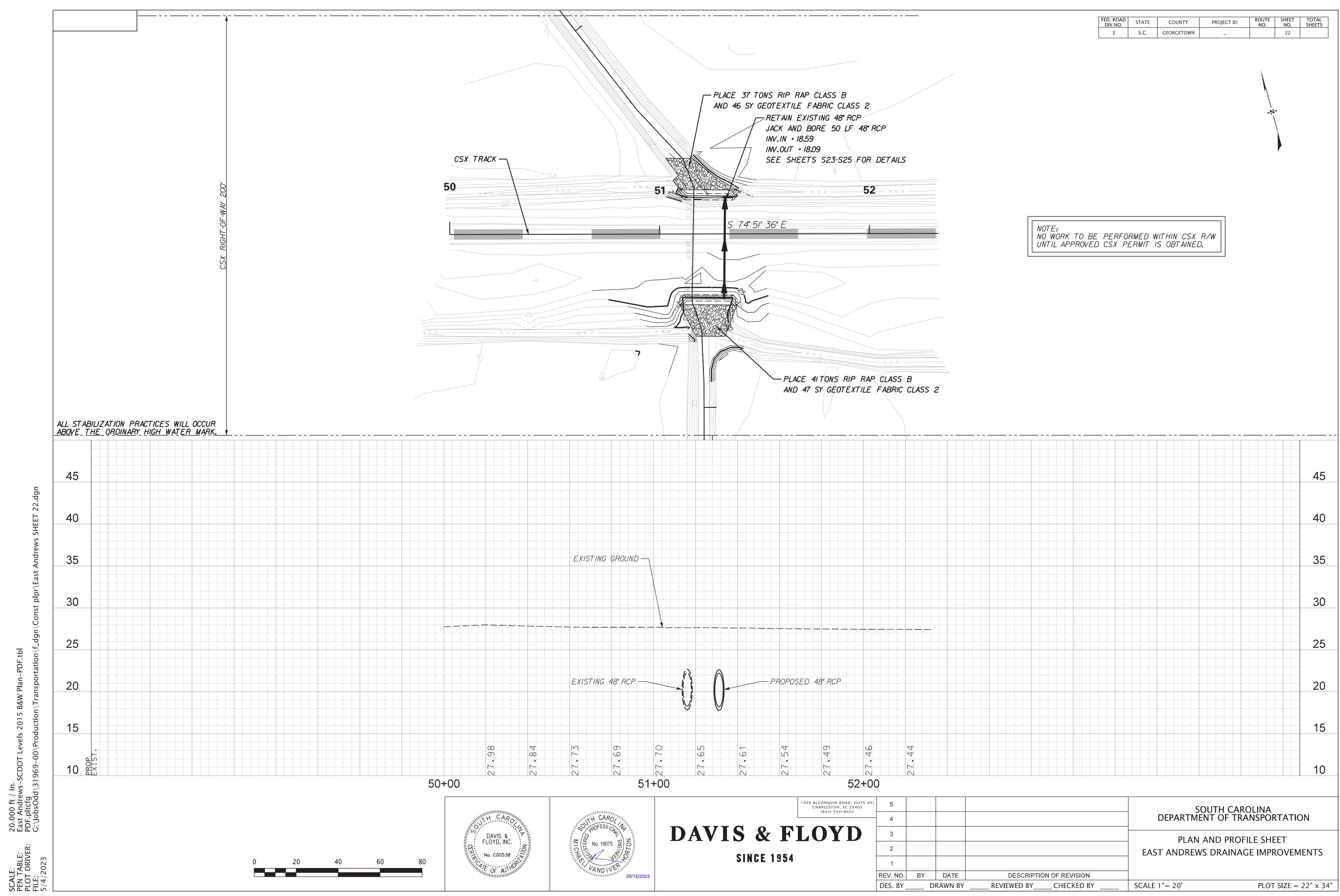


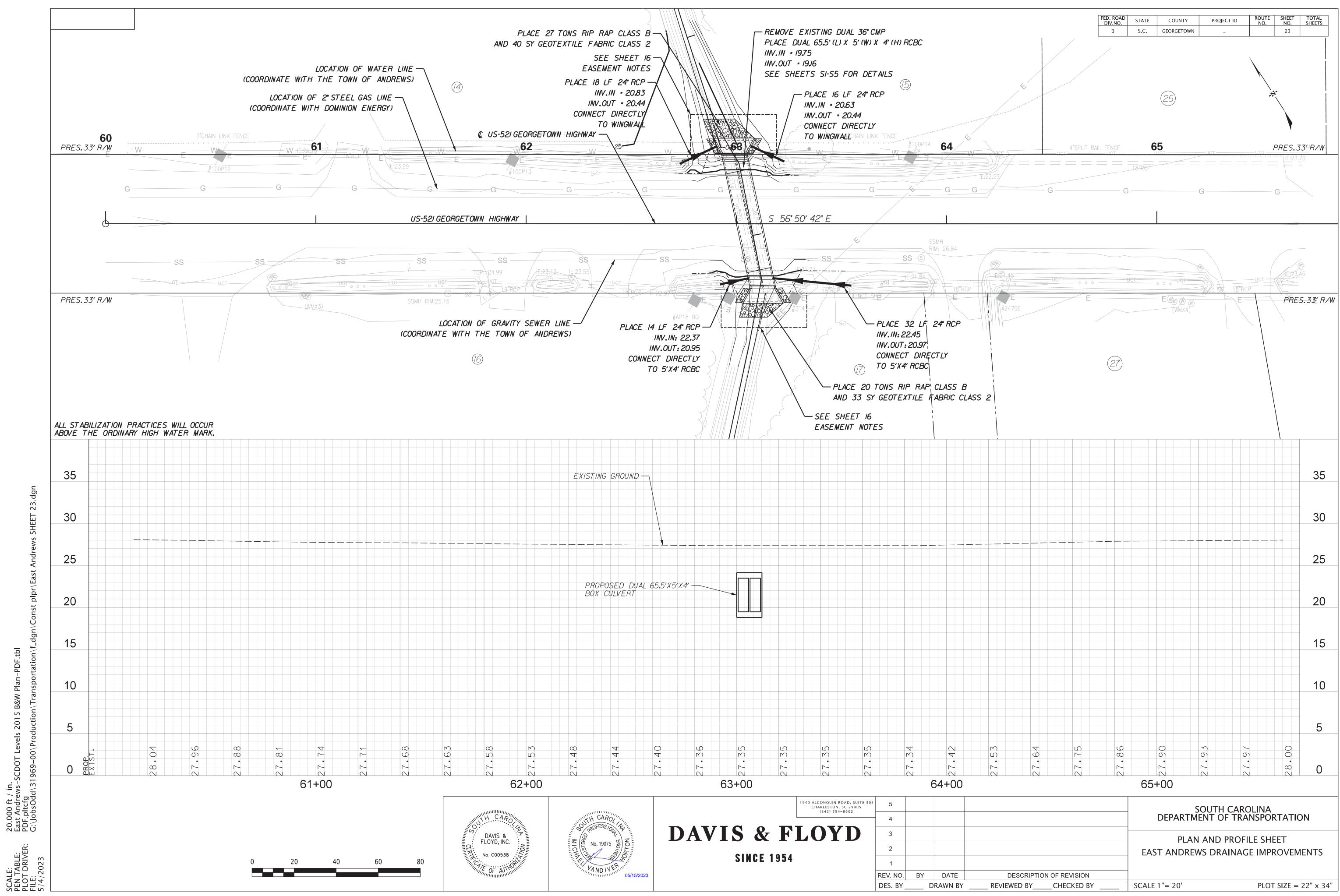


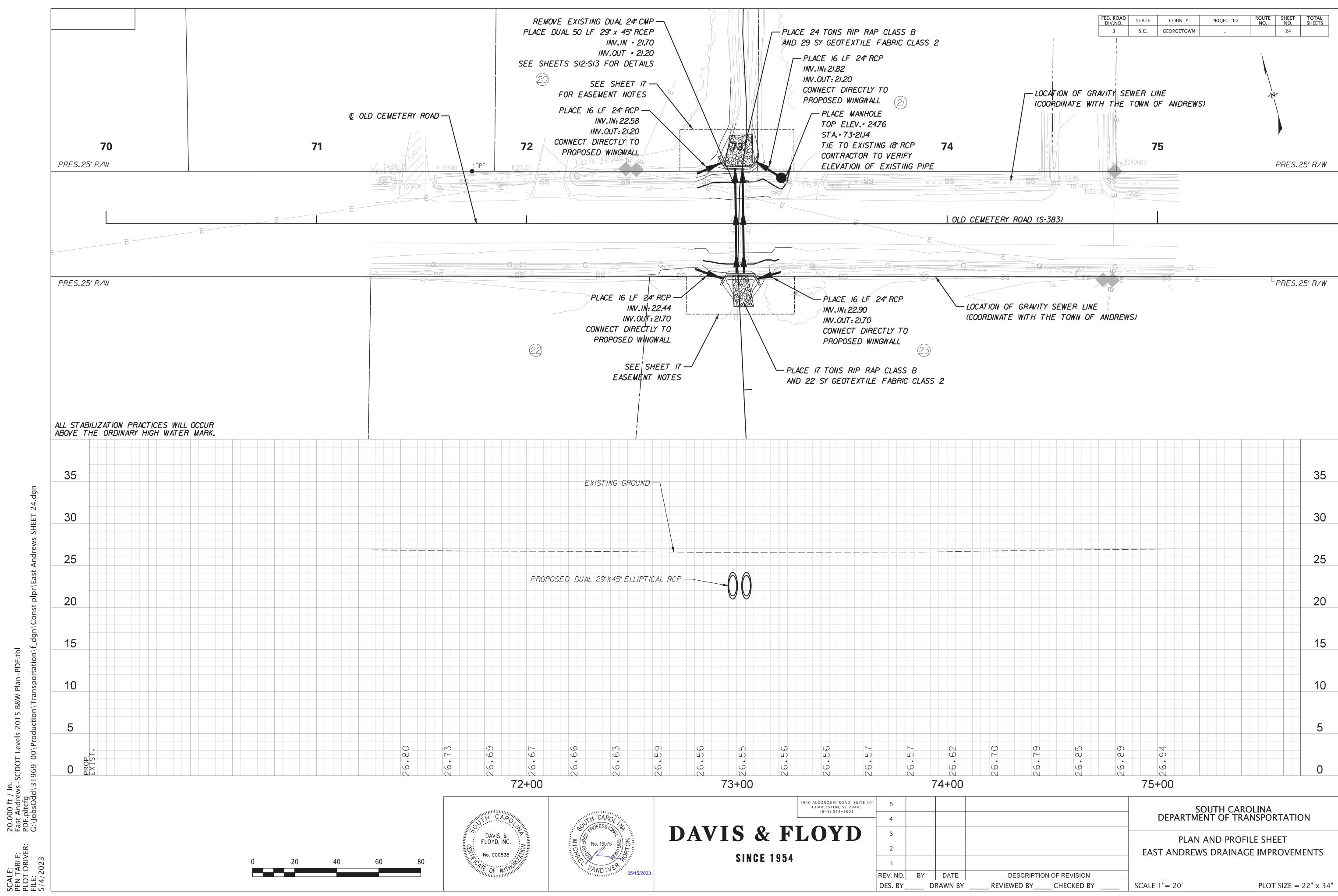


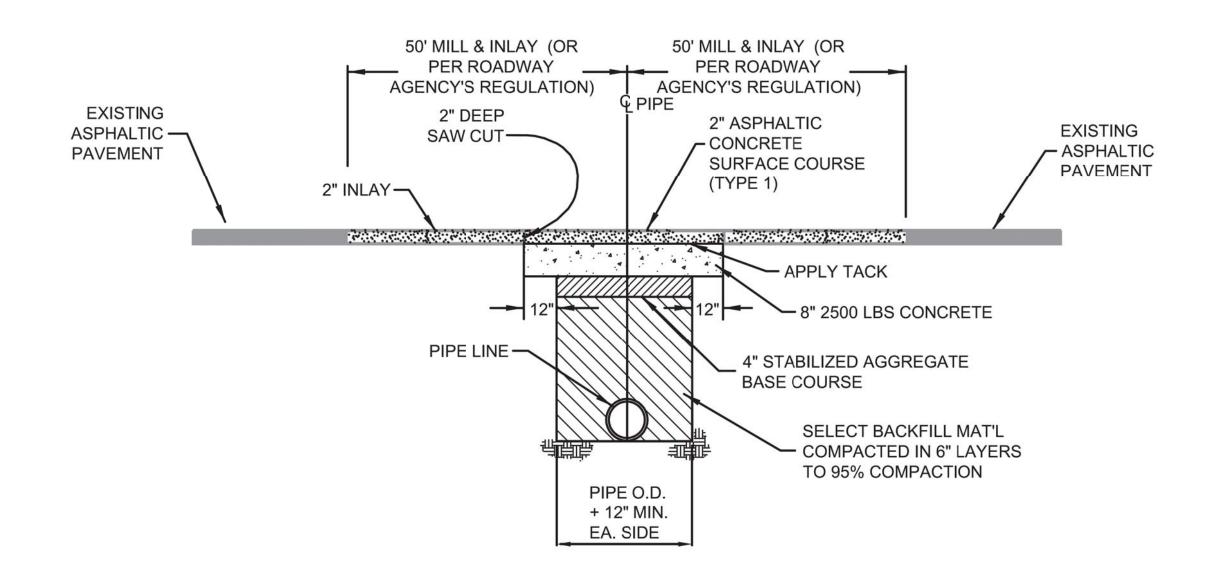
20.000 ft / in. East Andrews-SCDOT Levels 2015 B&W Plan-PDF.tbl PDF.pltcfg G:\JobsOdd\31969-00\Production\Transportation\f











#### NOTES:

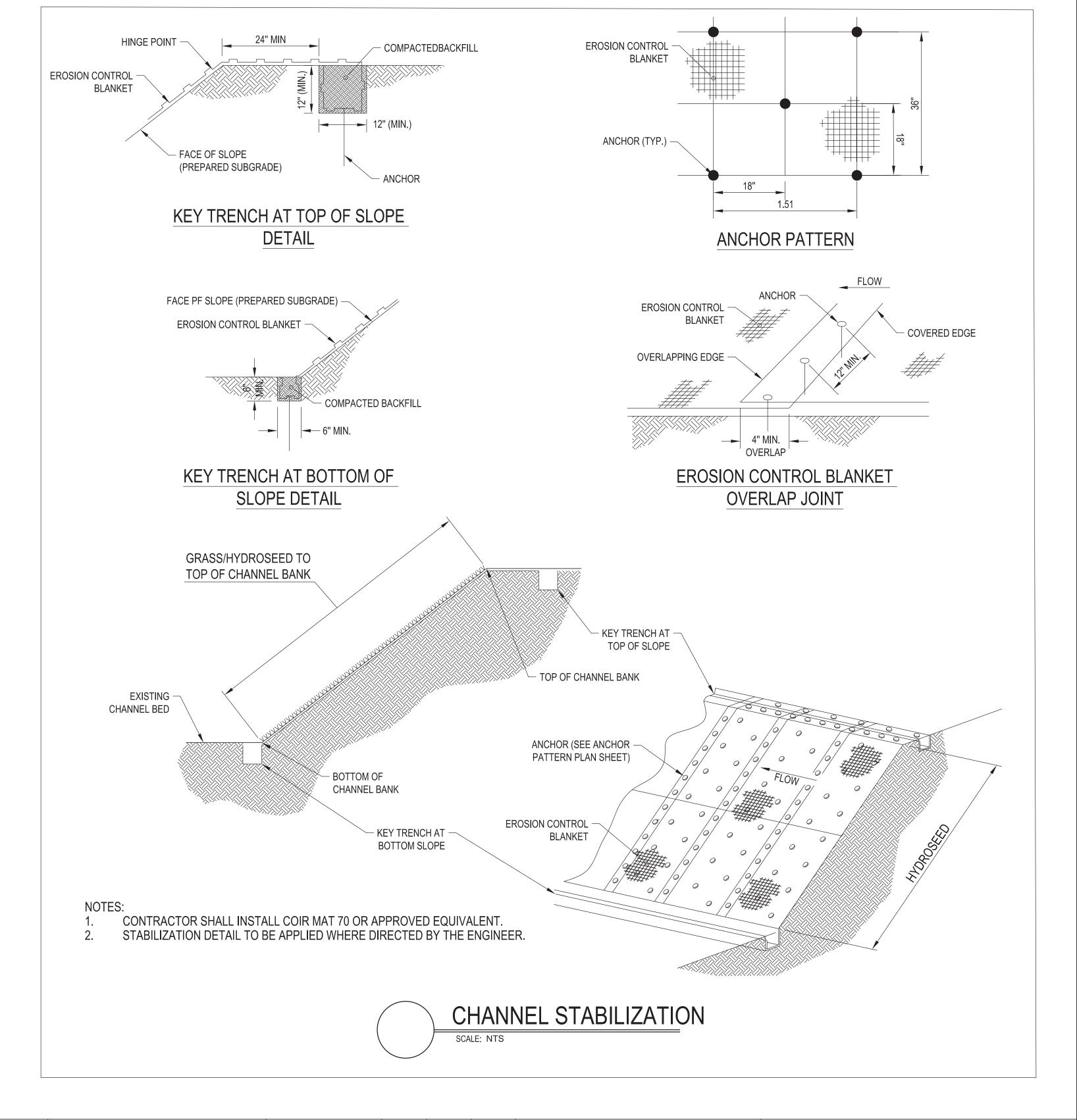
- PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH AS SHOWN. PAVEMENT SHALL BE CUT TO TRUE LINE AND REMOVED BEFORE TRENCH IS CUT. ALL PAVEMENT REPAIRS TO BE IN ACCORDANCE WITH ROAD AGENCY SPECS.
- 2. IF PAVEMENT CUT IS ON A HIGH VOLUME MAIN ROAD NEAR A PAVED INTERSECTION, AND THE EDGE OF THE INTERSECTING ROAD IS ONLY A FEW FEET BEYOND THE NORMAL 50' (ONE SIDE DIMENSION) INLAY, THE INLAY IS TO BE EXTENDED TO THE EDGE OF THE INTERSECTING ROAD.

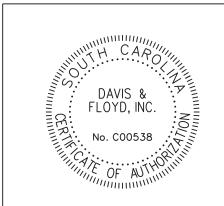
## OPEN CUT REPAIR FOR HIGH VOLUME ASPHALT PAVEMENT

SCDOT STD DWGS:
RIPRAP DETAILS 804-205-00, 804-310-00
BOX CULVERT DETAILS 722-105-01, 722-105-02, 722-305-00
HEAD WALL DETAILS 719-605-00
MANHOLE DETAILS 719-505-01, 719-505-03, 719-505-04
PERMANENT CONSTRUCTION SIGNING 605-010-01, 605-010-02
LANE & SHOULDER CLOSURES SECTION 610

SEE SC-M-714-1 FOR TRENCHLESS PIPE INSTALLATION (JACK & BORE)

PERMANENT CONSTRUCTION SIGNS					
ROAD	SCHEME	ASSEMBLIES	QUANTITY (SF)		
NORTH STREET	E	2	48		
PRIVATE CROSSING 1	E	2	48		
GAPWAY	С	2	152		
GEORGETOWN HIGHWAY	С	2	184		
OLD CEMETERY ROAD	С	2	152		









REVIEWED BY\_\_\_

CHECKED BY

N.T.S.

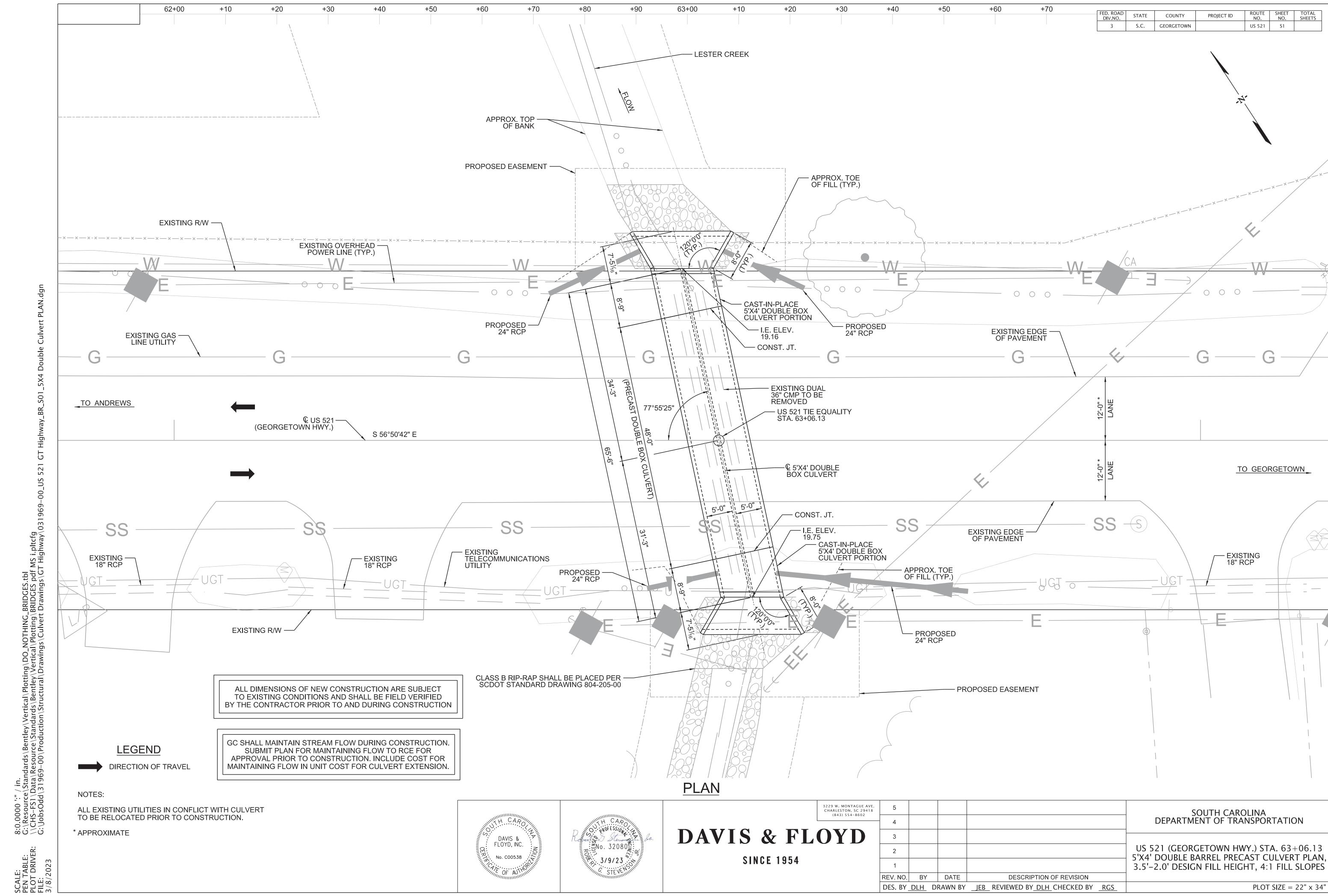
DRAWN BY

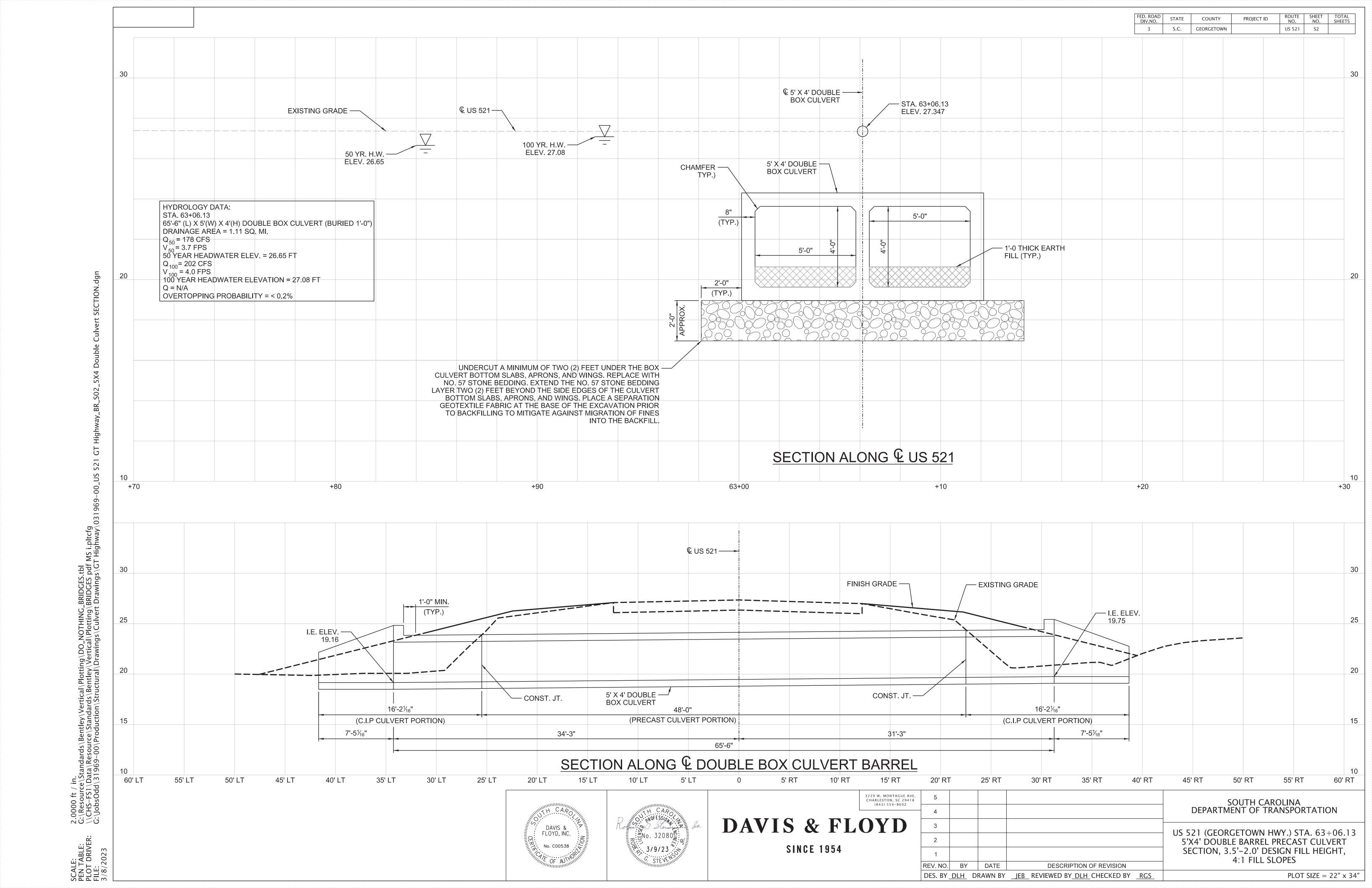
DES. BY

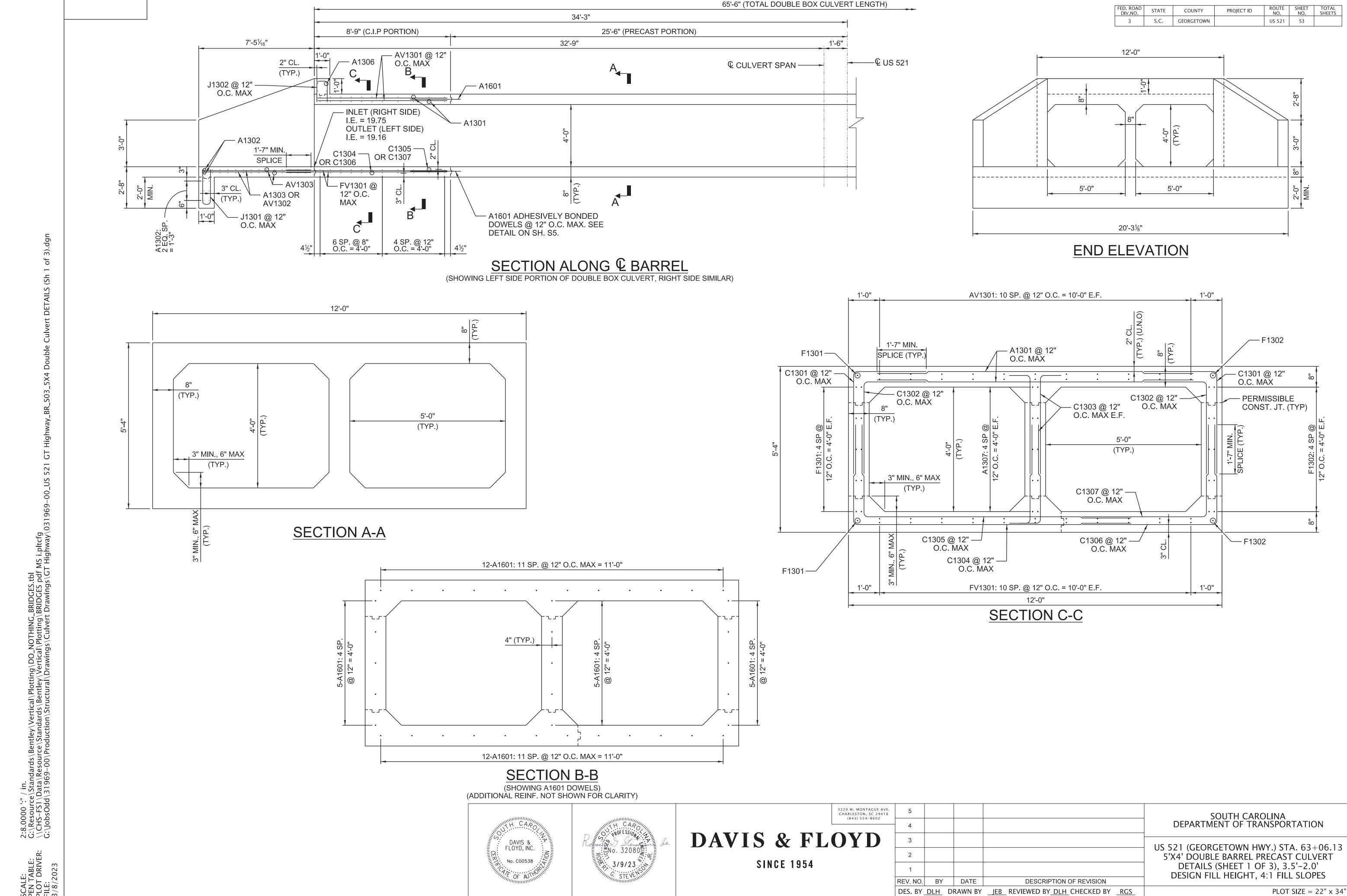
SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DETAIL SHEET

DETAIL SHEET
EAST ANDREWS DRAINAGE IMPROVEMENTS

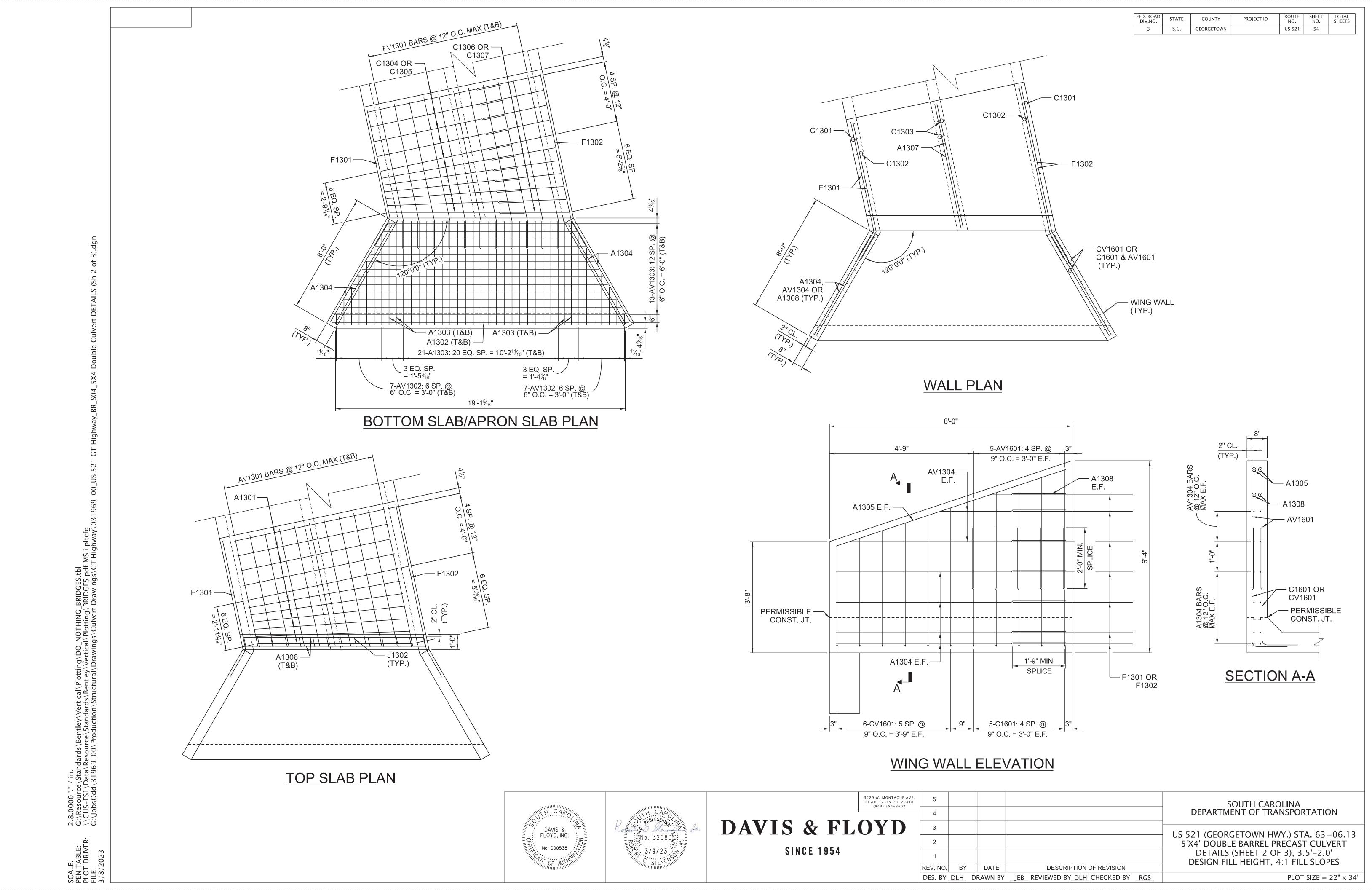
PLOT SIZE =  $22" \times 34"$ 



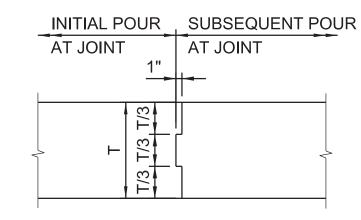




SCALE:
PEN TABLE:
PLOT DRIVER:
FILE:
3/8/2023

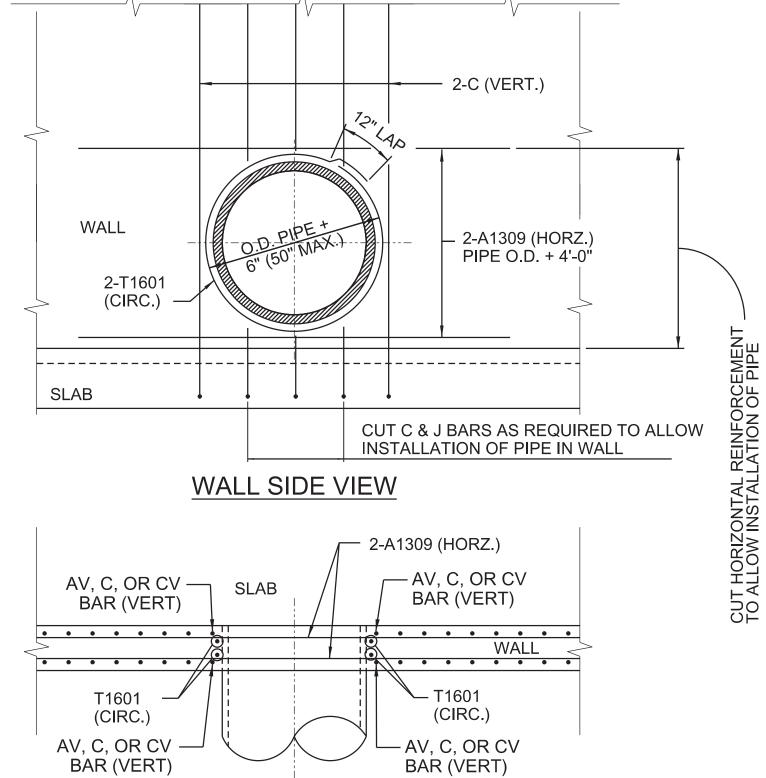


- 1.1 REFER TO SCDOT STANDARD DRAWINGS 722-105-01, 722-105-02, & 722-305-00 FOR ADDITIONAL NOTES & DETAILS
- 1.2 BAR DIMENSIONS SHOWN ARE OUT-TO-OUT AND STANDARD C.R.S.I. BENDING DETAILS SHALL APPLY, EXCEPT AS NOTED.
- 2.0 PAY ITEM 2041000 IS STRUCTURE EXCAVATION FOR CULVERTS:
- 2.1 INCLUDE THE COST OF ANY SOIL EXCAVATION AND REPLACEMENT OF UNSUITABLE SOIL COST IN THE UNIT BID PRICE FOR STRUCTURE EXCAVATION FOR CULVERT.
- 2.2 SOIL EXCAVATION IS TO INCLUDE THE REMOVAL OF ALL VEGETATION, TOPSOIL, AND ANY OTHER SOFT OR UNSUITABLE MATERIALS FROM AREAS WITHIN 2 FEET OF THE CULVERT AND 2 FEET BEYOND THE TOE OF STRUCTURAL FILLS. IT IS EXPECTED THAT APPROXIMATELY 2 FEET OF UNDERCUTTING WILL BE REQUIRED TO COMPLETELY REMOVE THE SOFT SOILS BELOW THE CULVERT. THE SOFT SOILS ARE TO BE REPLACED WITH NO. 57 STONE.
- 2.3 THE FINAL FOOTING ELEVATION IS TO BE EVALUATED BY A GEOTECHNICAL ENGINEER TO DOCUMENT THAT THE BEARING SOILS ARE CAPABLE OF SUPPORTING THE RECOMMENDED NET ALLOWABLE BEARING PRESSURE AND ARE SUITABLE FOR FOUNDATION CONSTRUCTION. THESE EVALUATIONS SHOULD INCLUDE VISUAL OBSERVATIONS, HAND ROD PROBING, AND DYNAMIC CONE PENETROMETER TESTING, OR OTHER APPROVED METHODS. AT INTERVALS NOT TO EXCEED 25 FEET
- 2.4 INCLUDE THE COST OF DEWATERING COST IN THE UNIT BID PRICE FOR STRUCTURE EXCAVATION FOR CULVERT.



## CONST. JT. DETAIL

BEFORE MAKING SUBSEQUENT POUR, WAIT EITHER A MINIMUM OF 96 HOURS AFTER PLACEMENT OF THE INITIAL POUR OR UNTIL THE INITIAL POUR CONCRETE HAS ATTAINED A MINIMUM OF 75% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH AS VERIFIED BY TESTING EXTRA CYLINDERS.



WALL CROSS SECTION

## WALL PIPE PENETRATION DETAIL

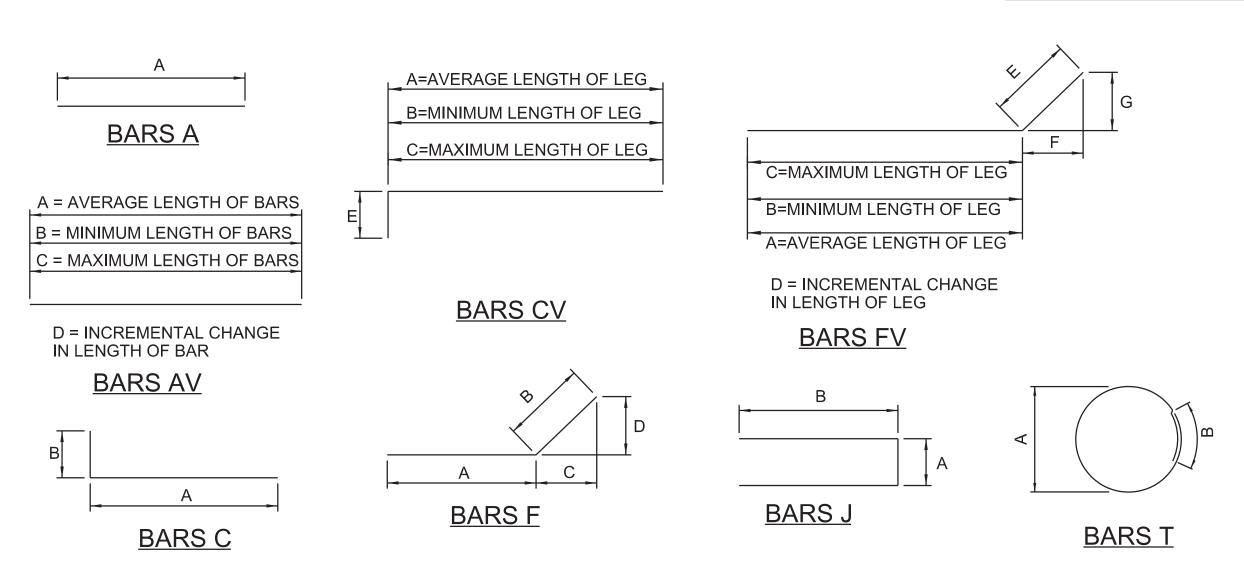
FOR PIPES NOT SHOWN ON CIP CULVERTS AND PRECAST CULVERTS, THE RCE IS TO SET LOCATION OF THOSE PIPES IN THE FIELD.

ALL PIPES ARE TO BE PLACED AND WRAPPED IN TWO LAYERS OF TAR PAPER BEFORE THE SURROUNDING CONCRETE IS POURED.

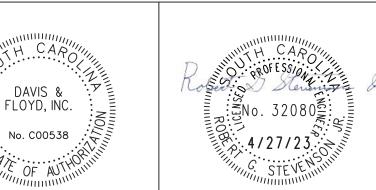
VERTICAL C BARS AND J BARS ARE TO MATCH MAIN C BARS AND J BARS IN WALL IN CIP CULVERTS.

REINFORCEMENT SHOWN ON CULVERT DETAILS SHALL BE CUT TO A MAXIMUM OF 3" CLEAR OF OPENING.

\*\*T1601 BAR DIMENSIONS ARE DETAILED ASSUMING PIPE IS 24" DIA. RCP WITH 3" WALL THICKNESS. MODIFY HOOP DIAMETER IF OD OF PIPE IS DIFFERENT THAN DETAILED.



# REINFORCEMENT BENDING DETAILS



DAVIS & FLOYD

				5
D				4
115 52				3
US 52 5'X4				2
DI				1
וט	DESCRIPTION OF REVISION	DATE	BY	REV. NO.
	<u>JEB</u> REVIEWED BY <u>DLH</u> CHECKED BY <u>RGS</u>	RAWN BY	DLH D	DES. BY

**SOUTH CAROLINA** DEPARTMENT OF TRANSPORTATION

21 (GEORGETOWN HWY.) STA. 63+06.13 (4' DOUBLE BARREL PRECAST CULVERT DETAILS (SHEET 2 OF 3), 3.5'-2.0' ESIGN FILL HEIGHT, 4:1 FILL SLOPES

PLOT SIZE =  $22" \times 34"$ 

031 2:8.0000 ':" / in. G:\Resource\Standards\Bentley\Vertical\Plotting\DO\_NOTHING\_BRIDGES.tbl \\CHS-FS1\Data\Resource\Standards\Bentley\Vertical\Plotting\BRIDGES pdf MS i.pltcfg G:\JobsOdd\31969-00\Production\Structural\Drawings\Culvert Drawings\GT Highway\

SCALE:
PEN TABLE:
PLOT DRIVER
FILE:
4/27/2023

**SINCE 1954** 

CHARLESTON, SC 29418 (843) 554-8602

**LOCATION** 

**APRON SLAB** 

WING WALL

WING WALL

HEADWALL

WING WALL

**CULVERT BARREL** 

**CULVERT BARREL** 

PIPE PENETRATION

**CULVERT BARREL** 

PIPE PENETRATION\*\*

RIP-RAP (CLASS B)

**CUT OFF WALL** 

**HEADWALL** 

WING WALL

WING WALL

**APRON SLAB** 

**APRON SLAB** 

WING WALL

WING WALL

APRON SLAB/CUT OFF WALL

MARK

A1301

A1302

A1303

A1304

A1305

A1306

A1307

A1308

A1309

A1601

AV1301

AV1302

AV1303

AV1304

AV1601

C1301

C1302

C1303

C1304

C1305

C1306

C1307

C1601

CV1601

F1301

F1302

FV1301

J1301

J1302

T1601

GEOTEXTILE FOR SEPERATION OF SUBGRADE/BASE COURSE MATERIAL

GEOTEXTILE FOR EROSION CONTROL UNDER RIP-RAP (CLASS B ) TYPE D

CONC. FOR STRUCTURES CLASS 4000 (CULVERT)

AGGREGATE UNDERDRAIN (AGGREGATE NO. 57)

5'X4' PRECAST DOUBLE BOX CULVERT

STRUCTURE EXCAVATION FOR CULVERTS

REINFORCING STEEL FOR STRUCTURES (ROADWAY)

REQ'D

44

100

32

20

16

78

44

56

52

40

44

88

22

22

22

22

40

24

24

44

42

28

"a"

10'-2"

19'-7"

6'-10%"

7'-7"

| 7'-11<sup>15</sup>/<sub>16</sub>"

11'-10"

8'-4"

2'-6%"

6'-6"

3'-3"

8'-3<sup>15</sup>/<sub>16</sub>" |

15'-7<sup>1</sup>/<sub>16</sub>" | 12'-2<sup>1</sup>/<sub>8</sub>"

3'-4<sup>5</sup>/<sub>16</sub>"

5'-7%"

3'-4%"

3'**-**3½"

2'-11½"

3'-2"

8'-11"

8'-7"

4'-7"

4'-3"

3'-6"

7'-4¾"

9'-10%"

8'-9"

6"

8¾<sub>6</sub>"

3'-0"

CONCRETE

3'-11%" 3'-3%"

## - REINF. BAR JUNCTION OF NEW AND OLD CONCRETE ADHESIVELY BONDED DOWEL DETAIL

DIMENSION SHOWN IN REINF. STEEL SCHED.

STATE

S.C.

DIMENSION

2<sup>9</sup>/<sub>16</sub>"

10%"

3½6"

3'-0"

3"

1'-4<sup>1</sup>/<sub>16</sub>"

7½<sub>16</sub>"

2¾<sub>16</sub>"

DIV.NO.

REINFORCING STEEL SCHEDULE

"b"

7'-3¼"

93/16"

4'-1%"

2'-10%"

2'-6"

2'-2"

3'-2½"

2'-11½"

3'-2½"

2'-11½"

1'-0"

2'-1"

2'-0"

7'-8%"

2'-3"

1'-4"

1'-0"

**QUANTITIES** 

9'-4%"

19'-1¼"

5'-11½"

7'-1%"

| 3'-10%"

4'-6%"

1'-6%<sub>16</sub>"

| 1'-10<sup>13</sup>⁄<sub>16</sub>'

9'-9¾''

COUNTY

GEORGETOWN

"e"

\_

\_

\_

1'-8%<sub>16</sub>"

4%"

UNIT

CY

LB

LF

CY

SY

TON

TON

SY

1'-0"

1'-9"

US 521 S5

**LENGTH** 

10'-2"

19'-7"

6'-11"

7'-7"

8'-0"

11'-10"

8'-4"

2'-7"

6'-6"

3'-3"

8'-4"

3'-5"

15'-8"

5'-8"

3'-5"

5'-10"

5'-2"

3'-10"

12'-2"

11'-7"

7'-10"

7'-3"

4'-6"

5'-0"

9'-6"

11'-11"

10'-6"

5'-0"

3'-5"

10'-6"

QTY.

29.1

5,312

48

252.0

210

130

47

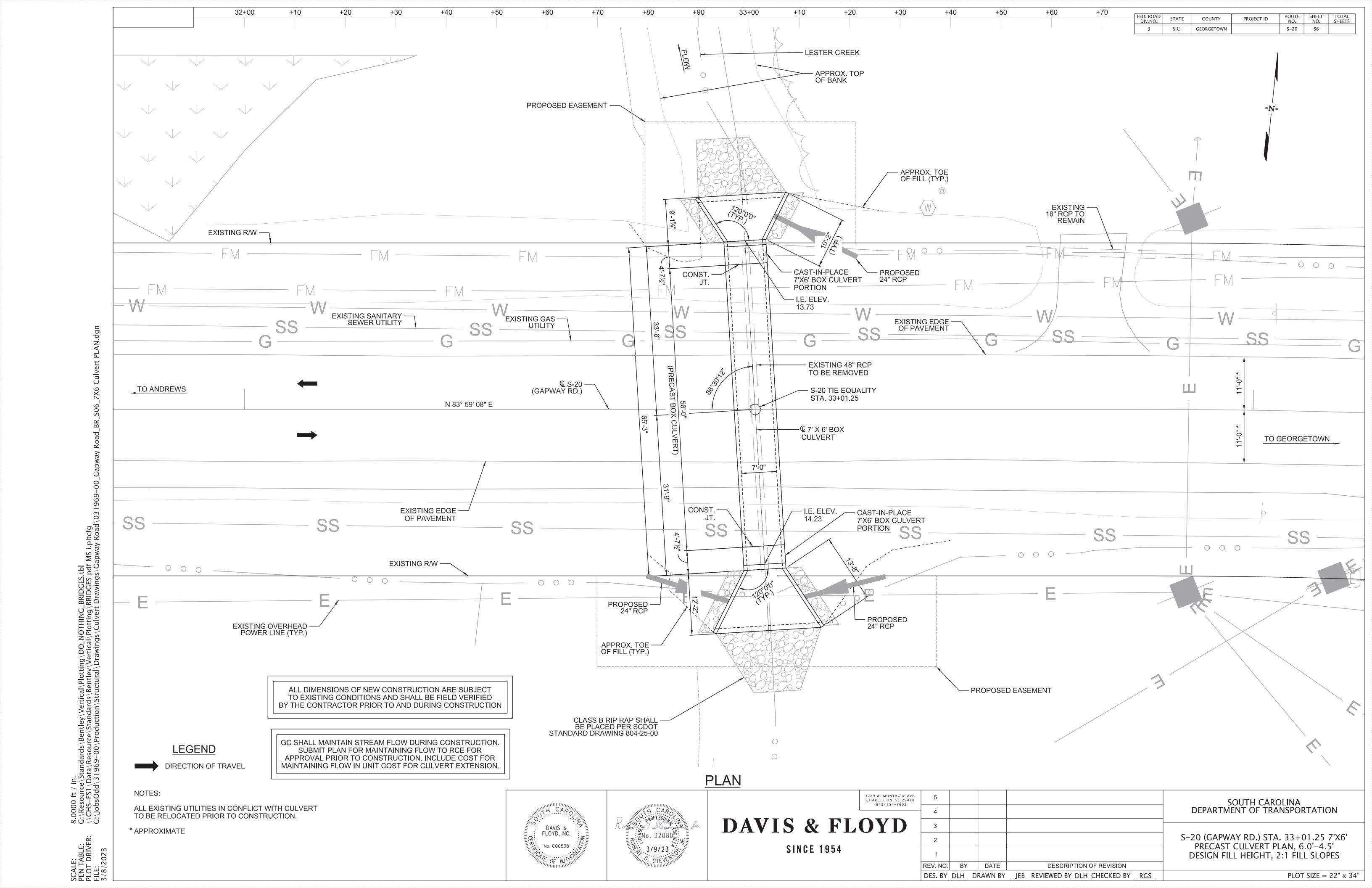
73

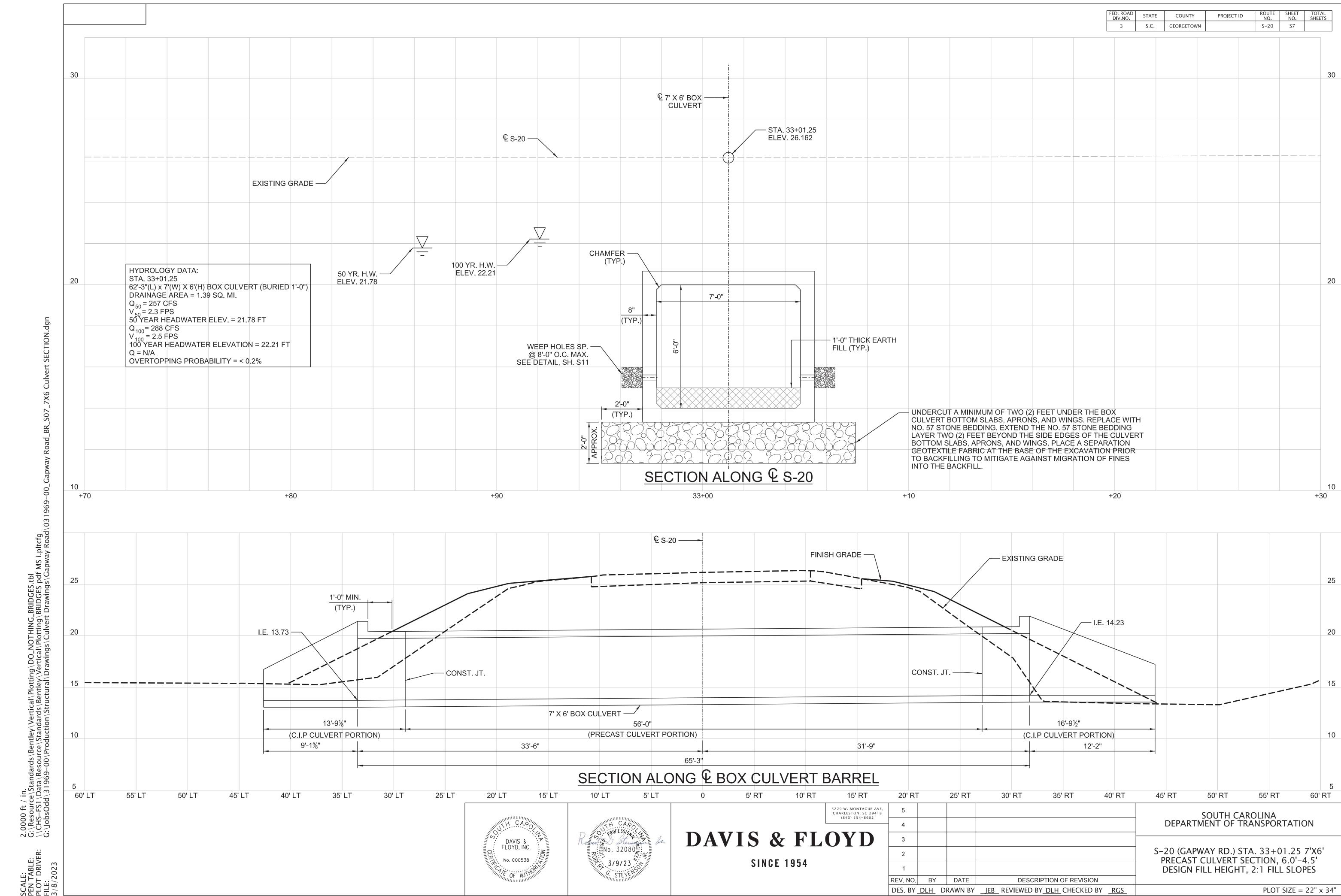
CONCRETE

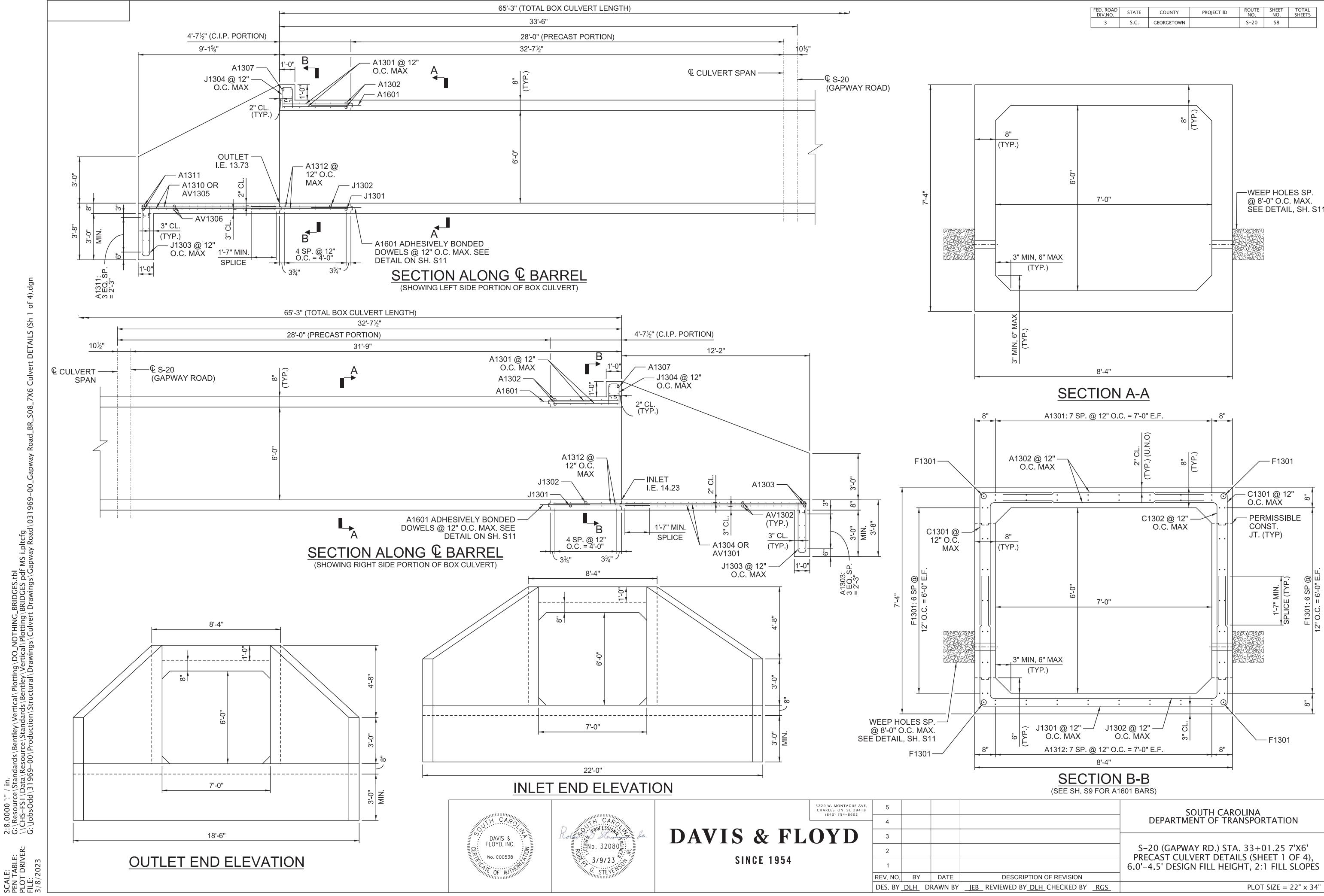
CLEAN CONTACT SURFACE OF OLD CONCRETE. ENSURE THAT THE SURFACE IS FREE OF LAITANCE AND ROUGHEN THE SURFACE TO AN AMPLITUDE OF 1/4".

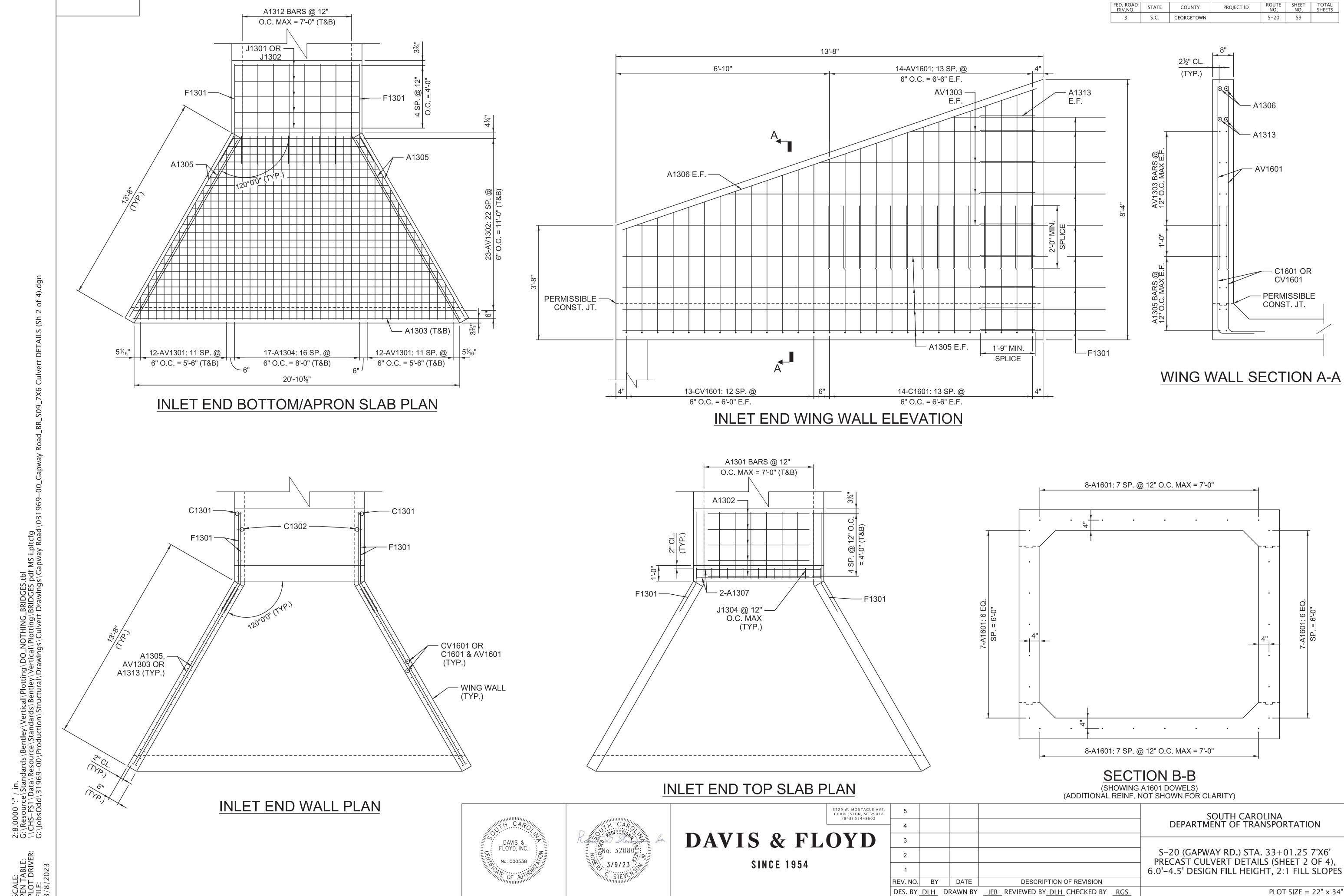
PROVIDE AND INSTALL ANCHORAGES IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION FOR ADHESIVELY BONDED ANCHORS AND DOWELS. USE AN ADHESIVE BONDING SYSTEM THAT HAS A MINIMUM BOND STRENGTH OF 1.5 KSI. FIELD TESTING OF THE ANCHORAGES IS NOT REQUIRED.

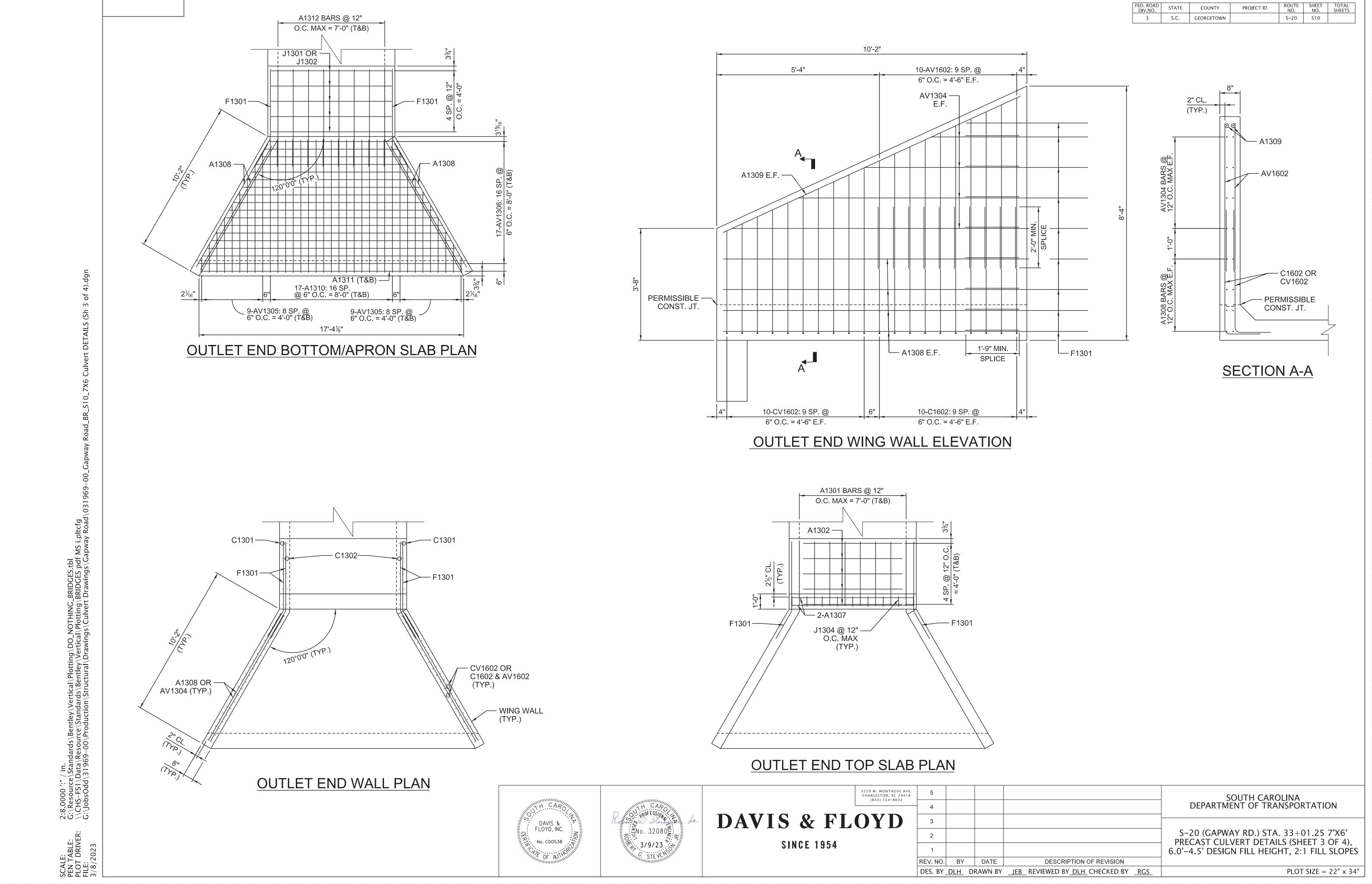
INCLUDE ALL COSTS OF ADHESIVELY BONDED DOWELS IN THE CONTRACT UNIT PRICE BID FOR REINFORCING STEEL. INCLUDE ALL COSTS OF CLEANING AND ROUGHENING THE EXISTING CONCRETE SURFACE IN THE CONTRACT UNIT PRICE BID FOR CLASS 4000 CONCRETE.











1.2 BAR DIMENSIONS SHOWN ARE OUT-TO-OUT AND STANDARD C.R.S.I. BENDING DETAILS SHALL APPLY, EXCEPT AS NOTED.

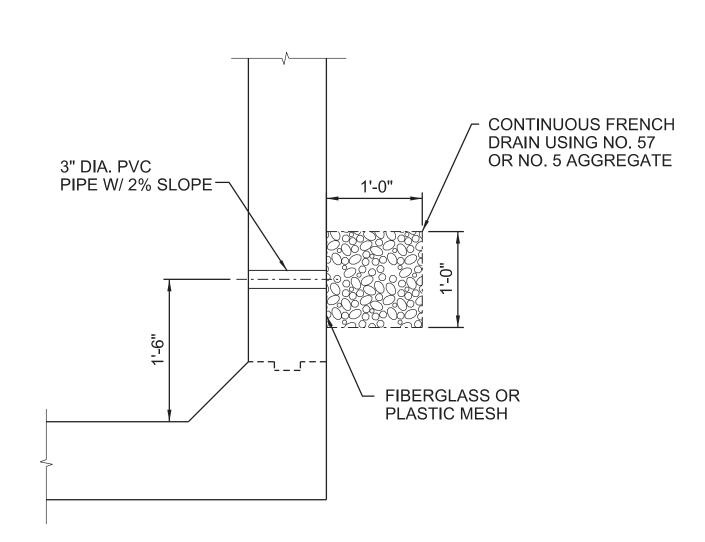
2.0 PAY ITEM 2041000 IS STRUCTURE EXCAVATION FOR CULVERTS:

2.1 INCLUDE THE COST OF ANY SOIL EXCAVATION AND REPLACEMENT OF UNSUITABLE SOIL COST IN THE UNIT BID PRICE FOR STRUCTURE EXCAVATION FOR CULVERT.

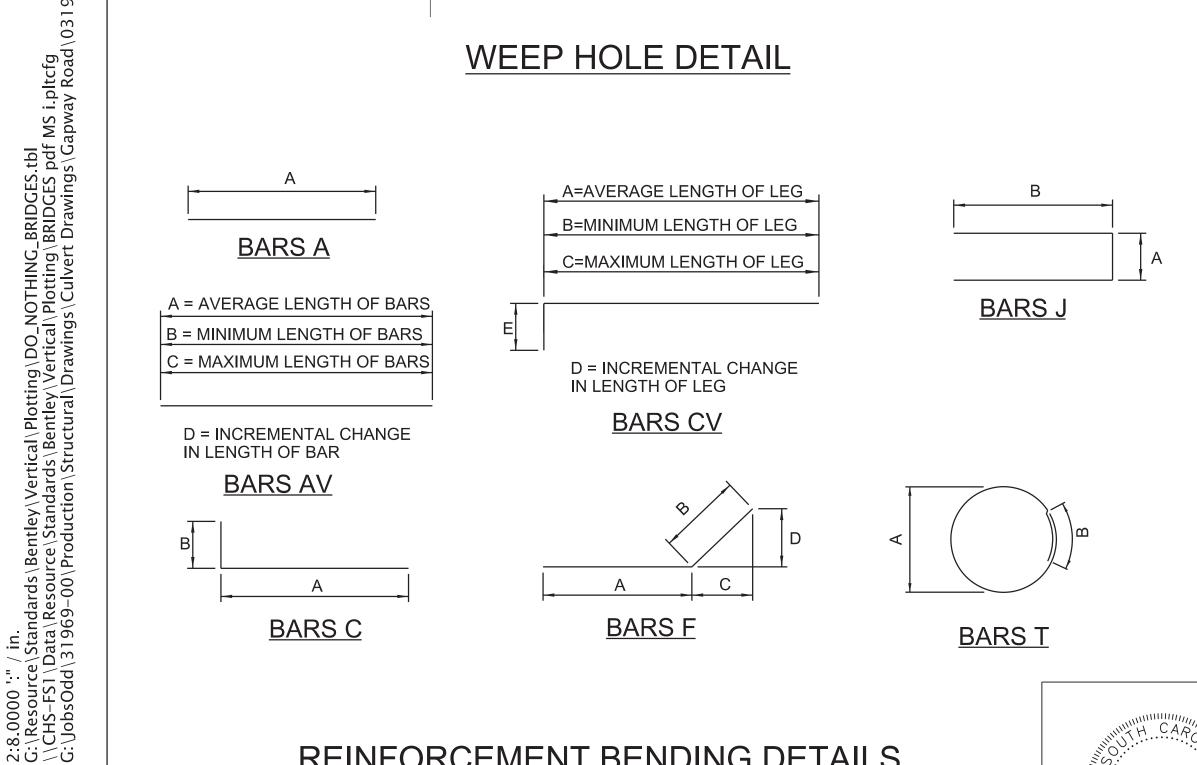
2.2 SOIL EXCAVATION IS TO INCLUDE THE REMOVAL OF ALL VEGETATION, TOPSOIL, AND ANY OTHER SOFT OR UNSUITABLE MATERIALS FROM AREAS WITHIN 2 FEET OF THE CULVERT AND 2 FEET BEYOND THE TOE OF STRUCTURAL FILLS. IT IS EXPECTED THAT APPROXIMATELY 2 FEET OF UNDERCUTTING WILL BE REQUIRED TO COMPLETELY REMOVE THE SOFT SOILS BELOW THE CULVERT. THE SOFT SOILS ARE TO BE REPLACED WITH NO. 57 STONE.

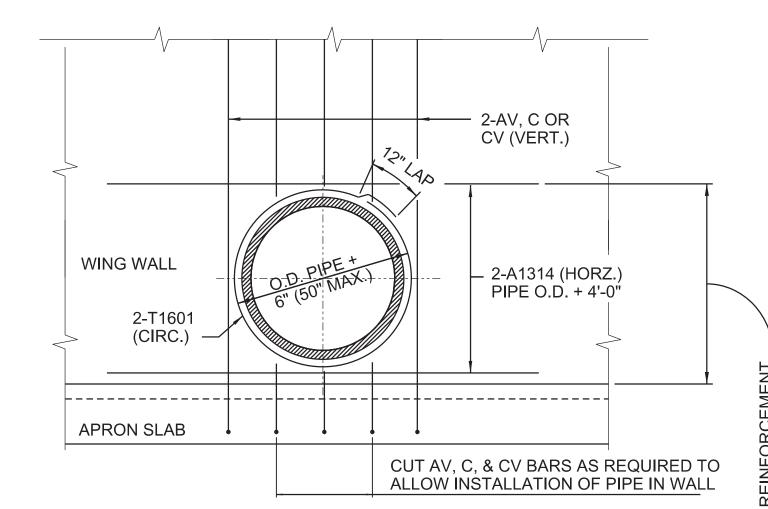
2.3 THE FINAL FOOTING ELEVATION IS TO BE EVALUATED BY A GEOTECHNICAL ENGINEER TO DOCUMENT THAT THE BEARING SOILS ARE CAPABLE OF SUPPORTING THE RECOMMENDED NET ALLOWABLE BEARING PRESSURE AND ARE SUITABLE FOR FOUNDATION CONSTRUCTION. THESE EVALUATIONS SHOULD INCLUDE VISUAL OBSERVATIONS, HAND ROD PROBING, AND DYNAMIC CONE PENETROMETER TESTING, OR OTHER APPROVED METHODS. AT INTERVALS NOT TO EXCEED 25 FEET.

2.4 INCLUDE THE COST OF DEWATERING COST IN THE UNIT BID PRICE FOR STRUCTURE EXCAVATION FOR CULVERT.

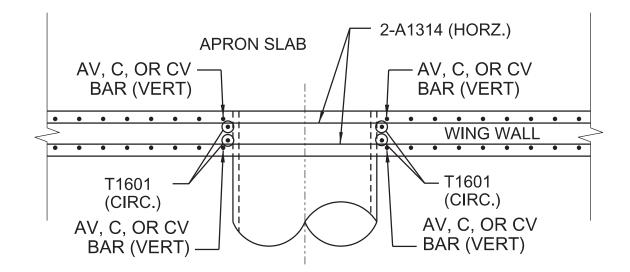


#### WEEP HOLE DETAIL





#### WALL SIDE VIEW



WALL CROSS SECTION

#### WALL PIPE PENETRATION DETAIL

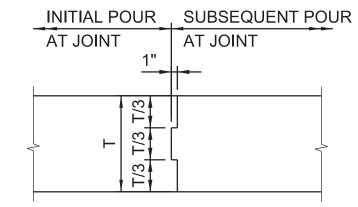
FOR PIPES NOT SHOWN, ON CIP CULVERTS AND EXTENSIONS THE RCE IS TO SET LOCATION OF THOSE PIPES IN THE FIELD.

ALL PIPES ARE TO BE PLACED AND WRAPPED IN TWO LAYERS OF TAR PAPER BEFORE THE SURROUNDING CONCRETE IS POURED

VERTICAL AV, C, AND CV BARS ARE TO MATCH MAIN AV, C, AND CV BARS IN WALL IN CIP WING WALLS.

REINFORCEMENT SHOWN ON CULVERT DETAILS SHALL BE CUT TO A MAXIMUM OF 3" CLEAR OF OPENING.

\*\*T1601 BAR DIMENSIONS ARE DETAILED ASSUMING PIPE IS 24" DIA. RCP WITH 3" WALL THICKNESS. MODIFY HOOP DIAMETER IF OD OF PIPE IS DIFFERENT THAN DETAILED.



#### CONST. JT. DETAIL

BEFORE MAKING SUBSEQUENT POUR, WAIT EITHER A MINIMUM OF 96 HOURS AFTER PLACEMENT OF THE INITIAL POUR OR UNTIL THE INITIAL POUR CONCRETE HAS ATTAINED A MINIMUM OF 75% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH AS VERIFIED BY TESTING EXTRA CYLINDERS.

#### REINFORCING STEEL SCHEDULE DIMENSION LENGTH **MARK** LOCATION REQ'D "a" "d" 4'-2½" CULVERT BARREL A1301 32 4'-3" **CULVERT BARREL** 20 A1302 6'-6" 6'-6" APRON SLAB/CUTOFF WALL A1303 10 21'-0" 21'-0" **APRON SLAB** 11'-8¾" A1304 34 11'-9" WING WALL A1305 16 13'-3" 13'-3" 13'-81/5" WING WALL A1306 13'-9" 4 **HEADWALL** 7'-11" A1307 8 7'-11" WING WALL A1308 16 9'-9" 9'-9" WING WALL A1309 10'-4%" 10'-5" 4 **APRON SLAB** 34 8'-8%" A1310 8'-9" 17'-2" APRON SLAB/CUTOFF WALL A1311 10 17'-2" 32 6'-5" **CULVERT BARREL** A1312 6'-5" WING WALL A1313 2 2'-7¾" 2'-8" PIPE PENETRATION A1314 12 6'-6" 6'-6" A1601 3'-3" **CULVERT BARREL** 60 3'-3" $6'-1^{11}/_{16}$ " **APRON SLAB** AV1301 1'-4%<sub>16</sub>" 10'-10%" 10%" 48 6'-2" 14'-6<sup>1</sup>3<sub>16</sub>" 8'-2\%16" 3½<sub>16</sub>" **APRON SLAB** AV1302 46 20'-11" 14'-7" WING WALL AV1303 16 8'-41/5" 3'-11<sup>13</sup>/<sub>16</sub>" 12'-9¼" 2'-111/8" 8'-5" 6'-1¾" 2'-10\%16" 9'-5" WING WALL AV1304 16 2'-21/8" 6'-2" **APRON SLAB** 4'-5%" $7'-10^{1}\frac{1}{16}$ " AV1305 36 11%<sub>16</sub>" 10%" 4'-6" APRON SLAB AV1306 34 12'-9%<sub>16</sub>" 8'-21/8" 17'-5" 3½<sub>6</sub>" 12'-10" 4'-71/8" 3'-5%" 5'-8½" WING WALL AV1601 56 2" 4'-8" WING WALL AV1602 40 4'-6½" 3'-6\%" 5'-6%" 2¾" 4'-7" C1301 20 4'-3½" CULVERT BARREL 2'-4" 6'-8" **CULVERT BARREL** C1302 20 3'-11½" 2'-0" 6'-0" 4'-1" 1'-0" WING WALL C1601 56 5'-1" WING WALL C1602 40 4'-2" 1'-0" 5'-2" WING WALL CV1601 52 4'-4½" 3'-4¼" 5'-4¾" 5'-5" 1'-0" 3'-4<sup>%</sup>16" WING WALL CV1602 40 4'-5" 5'-5%" 2¾" 1'-0" 5'-5" CULVERT BARREL 4'-5<sup>13</sup>/<sub>16</sub>" 2'-0" 1'-8<sup>13</sup>/<sub>16</sub>" F1301 64 1'-0" 6'-6" **CULVERT BARREL** J1301 10 8'-0" 4'-2½" 16'-5" J1302 CULVERT BARREL 10 7'-4" 3'-11½" 15'-3" **CUT OFF WALL** J1303 44 3'-3" 7'-0" **HEADWALL** J1304 18 1'-4" 3'-4"

STATE

S.C.

DIV.NO.

COUNTY

S-20

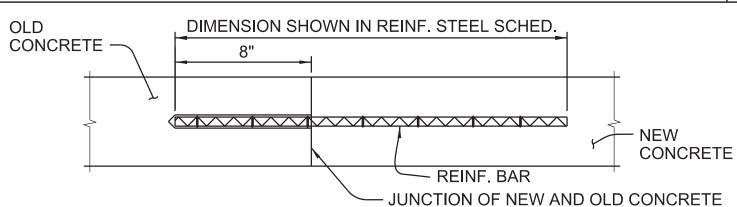
S11

### QUANTITIES

1'-0"

3'-0"

ITEM	UNIT	QTY.
CONC. FOR STRUCTURES CLASS 4000 (CULVERT)	CY	25.8
REINFORCING STEEL FOR STRUCTURES (ROADWAY)	LB	5,315
7'X6' PRECAST BOX CULVERT	LF	56.0
STRUCTURE EXCAVATION FOR CULVERTS	CY	306.0
GEOTEXTILE FOR SEPERATION OF SUBGRADE/BASE COURSE MATERIAL	SY	198
AGGREGATE UNDERDRAIN (AGGREGATE NO. 57)	TON	117
RIP-RAP (CLASS B)	TON	62
GEOTEXTILE FOR EROSION CONTROL UNDER RIP-RAP (CLASS B ) TYPE D	SY	92



T1601

6

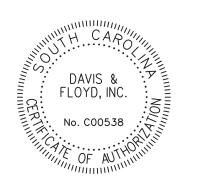
#### ADHESIVELY BONDED DOWEL DETAIL

CLEAN CONTACT SURFACE OF OLD CONCRETE. ENSURE THAT THE SURFACE IS FREE OF LAITANCE AND ROUGHEN THE SURFACE TO AN AMPLITUDE OF 1/4"

PROVIDE AND INSTALL ANCHORAGES IN ACCORDANCE WITH THE REQUIREMENTS OF THE SUPPLEMENTAL SPECIFICATION FOR ADHESIVELY BONDED ANCHORS AND DOWELS. USE AN ADHESIVE BONDING SYSTEM THAT HAS A MINIMUM BOND STRENGTH OF 1.5 KSI. FIELD TESTING OF THE ANCHORAGES IS NOT **REQUIRED** 

INCLUDE ALL COSTS OF ADHESIVELY BONDED DOWELS IN THE CONTRACT UNIT PRICE BID FOR REINFORCING STEEL. INCLUDE ALL COSTS OF CLEANING AND ROUGHENING THE EXISTING CONCRETE SURFACE IN THE CONTRACT UNIT PRICE BID FOR CLASS 4000 CONCRETE.

#### REINFORCEMENT BENDING DETAILS





# **DAVIS & FLOYD**

3229 W. MONTAGUE AVE, CHARLESTON, SC 29418 (843) 554-8602

**SINCE 1954** 

5				
4				] [
3				
2				S-2 PREC
1				6.0'-4
REV. NO.	BY	DATE	DESCRIPTION OF REVISION	
DES. BY	DLH D	RAWN BY	JEB REVIEWED BY DLH CHECKED BY RGS	

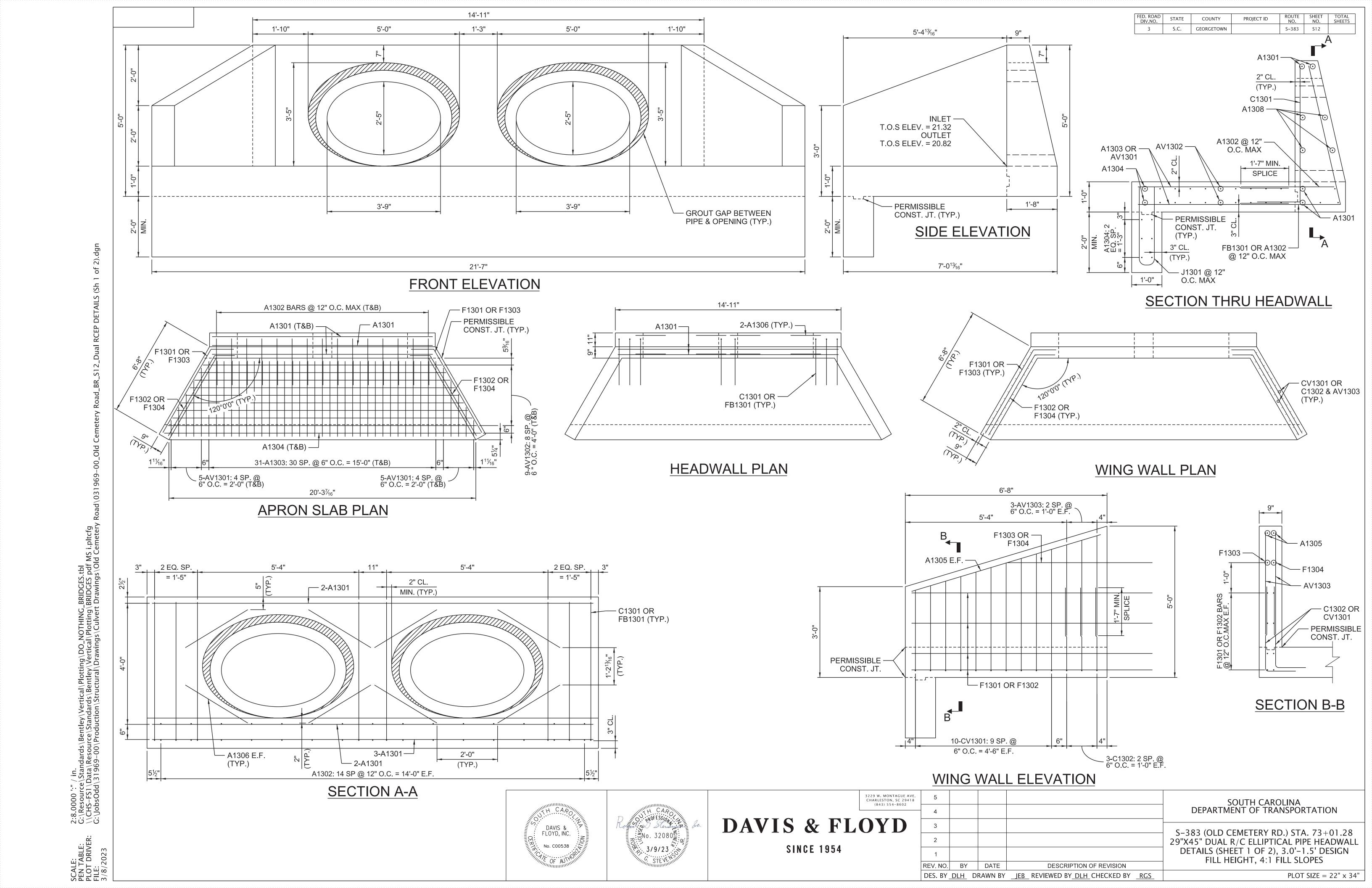
PIPE PENETRATION\*\*

**SOUTH CAROLINA** DEPARTMENT OF TRANSPORTATION

-20 (GAPWAY RD.) STA. 33+01.25 7'X6' ECAST CULVERT DETAILS (SHEET 4 OF 4), -4.5' DESIGN FILL HEIGHT, 2:1 FILL SLOPES

PLOT SIZE =  $22" \times 34"$ 

10'-6"



1.2 ALL DIMENSIONS ARE SUBJECT TO EXISTING FIELD CONDITIONS AND SHALL BE VERIFIED BY THE CONTRACTOR.

1.3 THE CONTRACTOR IS TO USE DUE CARE IN PROTECTION OF ALL UTILITIES IN PLACE AND SERVICE SHALL NOT BE INTERRUPTED. UTILITIES IN CONFLICT WITH STRUCTURE ARE TO BE RELOCATED PRIOR TO CONSTRUCTION.

1.4 POSITIONS LT.(LEFT), RT.(RIGHT), I.F.(INSIDE FACE), AND O.F.(OUTSIDE FACE), WHERE REFERRED TO IN THE CULVERT PLANS, ARE RELATIVE TO THE DIRECTION OF STATIONING.

1.5 MINIMUM COVER OF REINFORCING STEEL SHALL BE 2½" FROM THE SURFACE OF CONCRETE, UNLESS OTHERWISE NOTED.

1.6 CHAMFER ALL EXPOSED EDGES  $rac{3}{4}$ ". CONSTRUCTION JOINTS ARE TO BE AS SHOWN IN THE PLANS OR AS APPROVED BY THE ENGINEER (NOTE THAT REINFORCING BARS SHALL EXTEND THROUGH CONSTRUCTION JOINTS).

 $1.7\,$  CONTRACTOR SHALL CONSTRUCT  $rac{3}{4}$ " MINIMUM FILLETS AT ALL JUNCTIONS OF SLAB AND WALL

1.8 FOR BUILT IN PLACE CONSTRUCTION OF THE CONCRETE HEADWALL, CLASS 4000 CONCRETE SHALL BE USED. FOR PRECAST CONSTRUCTION, A MINIMUM OF CLASS 4000P CONCRETE MEETING THE REQUIREMENTS OF SECTION 701 OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION)

1.9 REINFORCING STEEL SHALL BE ASTM A-706, LOW-ALLOY STEEL DEFORMED BARS FOR CONCRETE REINFORCEMENT, GRADE 60.

1.10 GROUT SHALL BE TYPE M MORTAR MATERIAL IN ACCORDANCE WITH SECTION 718 OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).

1.11 CONCRETE CUT-OFF WALLS SHALL BE CAST TO A DEPTH SUFFICIENT TO REST ON HARD AND OR COMPACTED MATERIAL THE MINIMUM DEPTH BELOW BOTTOM SLABS AND FOOTING SHALL BE THE GREATER OF 2'-0" OR THE DEPTH OF SOIL EXCAVATION. AND MAY BE INCREASED AT THE DISCRETION OF THE SUPERVISING ENGINEER OR DESIGNER.

1.12 CONTRACTOR SHALL CUT AND OR BEND ANY REINFORCING BARS AS NECESSARY TO CARRY OUT WORK AS CALLED FOR ON THE STRUCTURE SHEETS.

1.13 STEEL MANUFACTURING PROCESSES MUST OCCUR IN THE UNITED STATES.

1.14 BAR DIMENSIONS SHOWN ARE OUT-TO-OUT AND STANDARD C.R.S.I. BENDING DETAILS SHALL APPLY, EXCEPT AS NOTED.

2.0 PRECAST NOTES:

2.1 THE USE OF PRECAST UNITS WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF OBTAINING SATISFACTORY INSTALLATIONS.

2.2 LIFT HOLES AND/OR DEVICES MAY BE PLACED AS NECESSARY. ALL LIFT HOLES SHALL BE GROUTED SHUT PRIOR TO COMPLETION OF THE INSTALLATION, ALL LIFTING METHODS MUST MEET OSHA REGULATIONS

2.3 THE CONTRACTOR SHALL USE MANUFACTURERS LISTED ON QUALIFIED PRODUCT LIST 14.

2.4 PRECAST ITEMS MODIFIED FROM THIS DRAWING MAY BE UTILIZED, HOWEVER, CONTRACTOR SHALL SUBMIT DESIGN DRAWINGS AND CALCULATIONS TO THE ENGINEER OF RECORD FOR REVIEW.

2.5 BED SHALL BE PREPARED AND COMPACTED FOR THE CONCRETE HEADWALL AS REQUIRED BY SCDOT STANDARD SPECIFICATIONS FOR PRECAST ITEMS, ELEVATION OF BEDDING MATERIAL SHALL BE APPROPRIATE TO ACCOMMODATE **ELEVATION OF PIPE.** 

2.6 PLACE AND LEVEL PRECAST HEADWALL.

2.7 PIPES SHALL BE GROUTED IN PLACE.

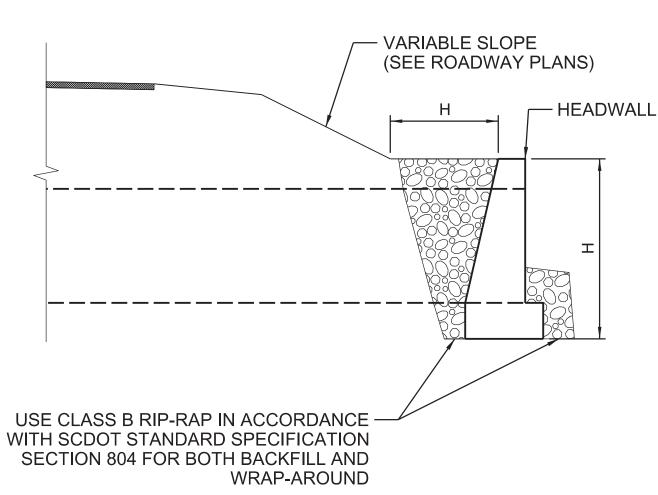
2.8 PIPES AND HEADWALL SHALL BE BACKFILLED AND COMPACTED AS REQUIRED BY SCDOT STANDARD SPECIFICATIONS.

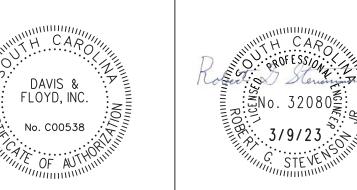
2.9 BRICK AND MORTAR SHALL BE USED TO ADJUST ELEVATIONS OF THROAT WALLS AS REQUIRED TO MEET ELEVATION AND CROSS SLOPES.

2.10 ANY LOCATION WHERE THE ABOVE REQUIREMENTS CANNOT BE MET SHALL BE COMPLETED USING CAST IN PLACE MATERIALS MEETING THE REQUIREMENTS OF THIS DRAWING. ANY ADDITIONAL MATERIALS OR COSTS ASSOCIATED WITH THE USE OF PRECAST SHALL BE PAID FOR BY THE CONTRACTOR AND MAY NOT BE CHARGED TO COUNTY.

3.0 REFERENCED SPECIFICATIONS:

LATEST EDITION OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION 8TH EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS WITH INTERIM REVISIONS.





DAVIS & FLOYD

3229 W. MONTAGUE AVE, CHARLESTON, SC 29418 (843) 554-8602

2-AV, C, OR

CV (VERT.)

- 2-A1307 (HORZ.)

PIPE O.D. + 4'-0'

CUT AV, C, & CV BARS AS REQUIRED TO

ALLOW INSTALLATION OF PIPE IN WALL

- AV, C, OR CV

BAR (VERT)

• • • • •

T1601

(CIRC.)

AV, C, OR CV

BAR (VERT)

WING WALL

WING WALL

APRON SLAB

AV, C, OR CV -

BAR (VERT)

• • • • •

T1601

BAR (VERT)

WALL IN CIP WING WALLS.

THAN DETAILED.

MAXIMUM OF 3" CLEAR OF OPENING.

(CIRC.)

2-T1601

(CIRC.)

WALL SIDE VIEW

WALL CROSS SECTION

WALL PIPE PENETRATION DETAIL

THE ENGINEER IS TO SET LOCATION OF THOSE PIPES IN THE FIELD.

ALL PIPES ARE TO BE PLACED AND WRAPPED IN TWO LAYERS OF TAR PAPER

VERTICAL AV, C, AND CV BARS ARE TO MATCH MAIN AV, C, AND CV BARS IN

MAIN REINFORCEMENT SHOWN ON CULVERT DETAILS SHALL BE CUT TO A

\*\*T1601 BAR DIMENSIONS ARE DETAILED ASSUMING PIPE IS 24" DIA. RCP WITH 3" WALL THICKNESS. MODIFY HOOP DIAMETER IF OD OF PIPE IS DIFFERENT

FOR PIPES NOT SHOWN, ON CIP CULVERTS AND EXTENSIONS

BEFORE THE SURROUNDING CONCRETE IS POURED

**APRON SLAB** 

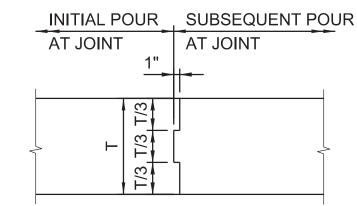
- 2**-**A1307

(HORZ.)

SHEET TOTAL NO. SHEETS STATE COUNTY DIV.NO. S-383 S13 S.C. GEORGETOWN

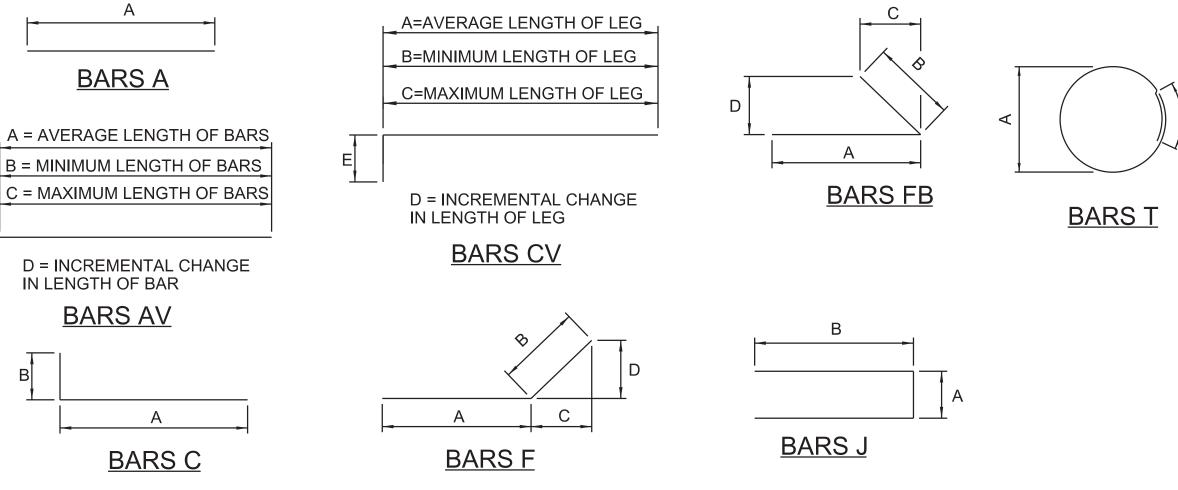


(FOR ONE HEADWALL) **UNIT** QTY. ITEM CONC. FOR STRUCTURES CLASS 4000 (CULVERT) CY 8.6 REINFORCING STEEL FOR STRUCTURES (ROADWAY) LB 1,252



### CONST. JT. DETAIL

BEFORE MAKING SUBSEQUENT POUR, WAIT EITHER A MINIMUM OF 96 HOURS AFTER PLACEMENT OF THE INITIAL POUR OR UNTIL THE INITIAL POUR CONCRETE HAS ATTAINED A MINIMUM OF 75% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH AS VERIFIED BY TESTING EXTRA CYLINDERS.



## REINFORCEMENT BENDING DETAILS

**SOUTH CAROLINA** DEPARTMENT OF TRANSPORTATION S-383 (OLD CEMETERY RD.) STA. 73+01.28 29"X45" DUAL R/C ELLIPTICAL PIPE HEADWALL DETAILS (SHEET 2 OF 2), 3.0'-1.5' DESIGN FILL HEIGHT, 4:1 FILL SLOPES DATE **DESCRIPTION OF REVISION** 

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PEN TABLE:
PLOT DRIVER:
FILE:
3/8/2023

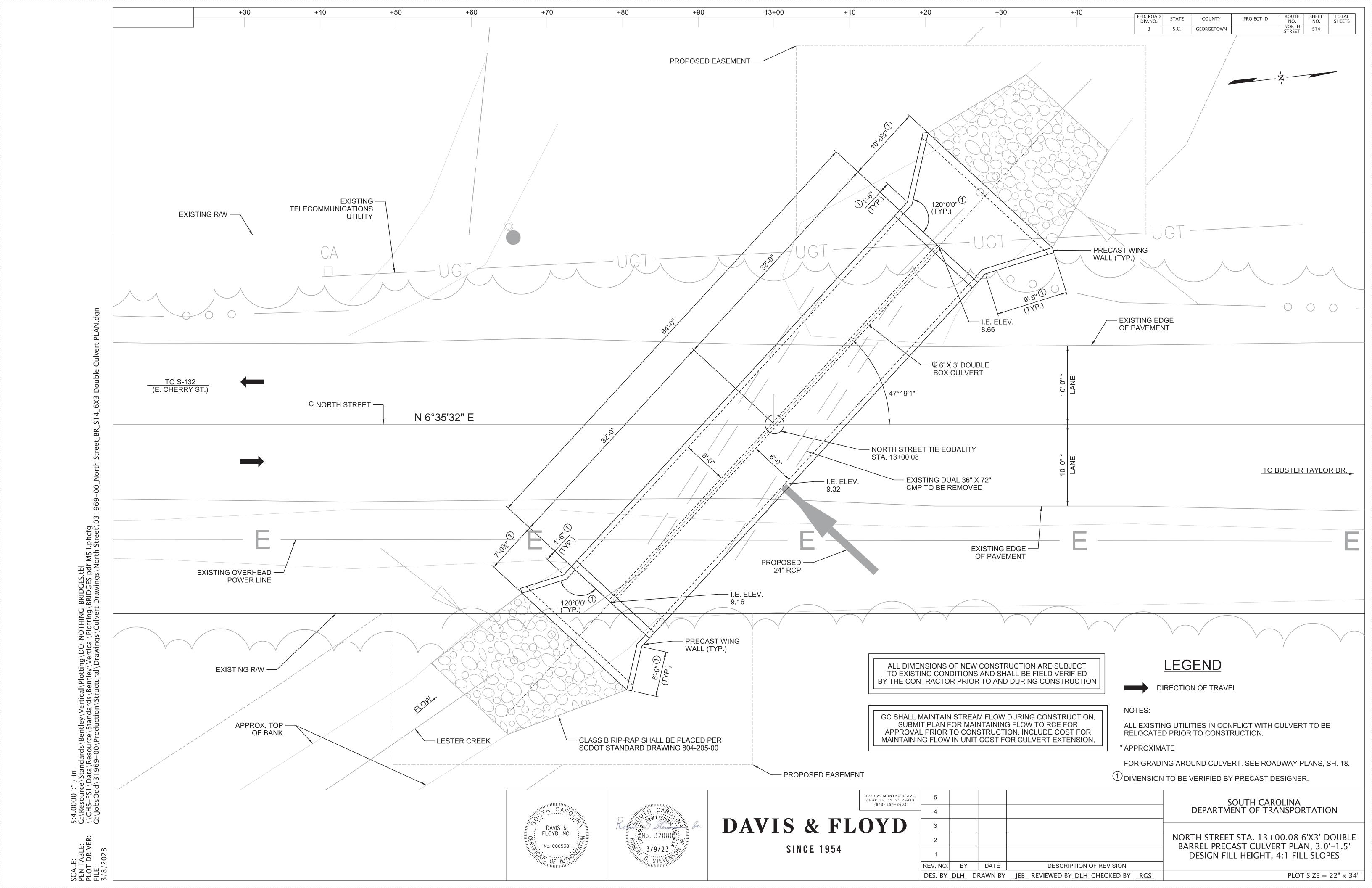
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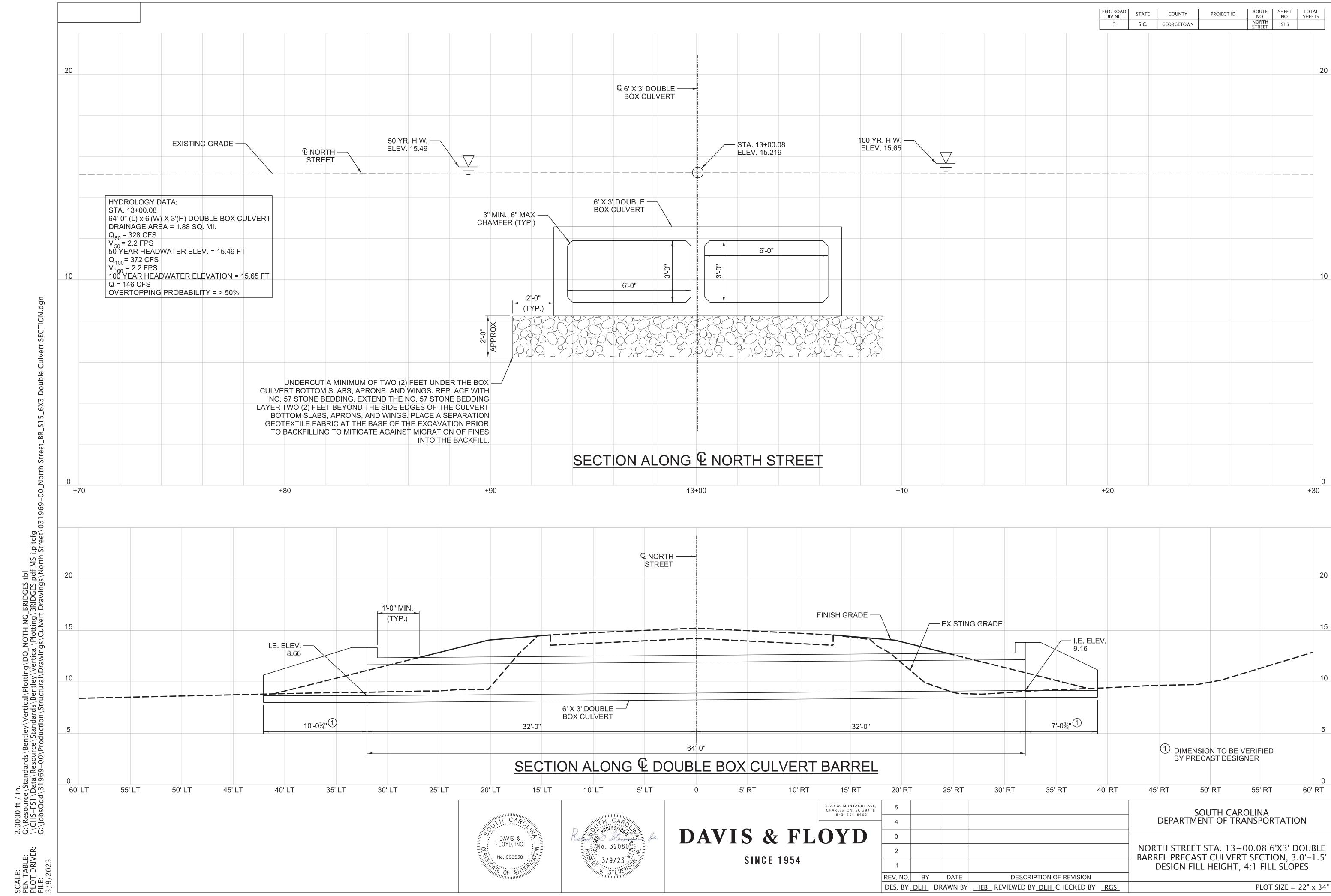
INSTALLATION DETAIL

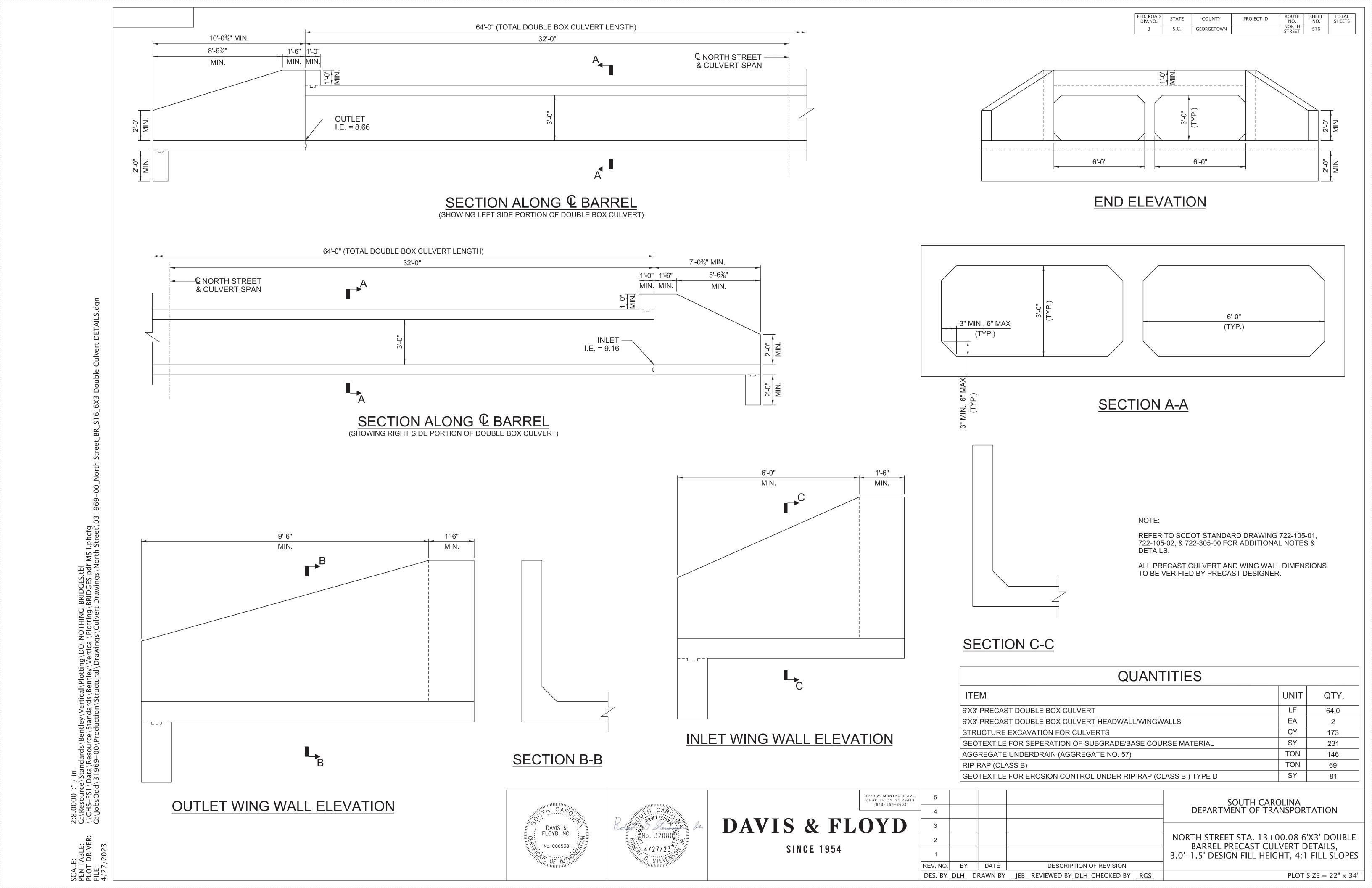
**SINCE 1954** 

REV. NO. BY DES. BY DLH DRAWN BY JEB REVIEWED BY DLH CHECKED BY RGS

PLOT SIZE =  $22" \times 34"$ 



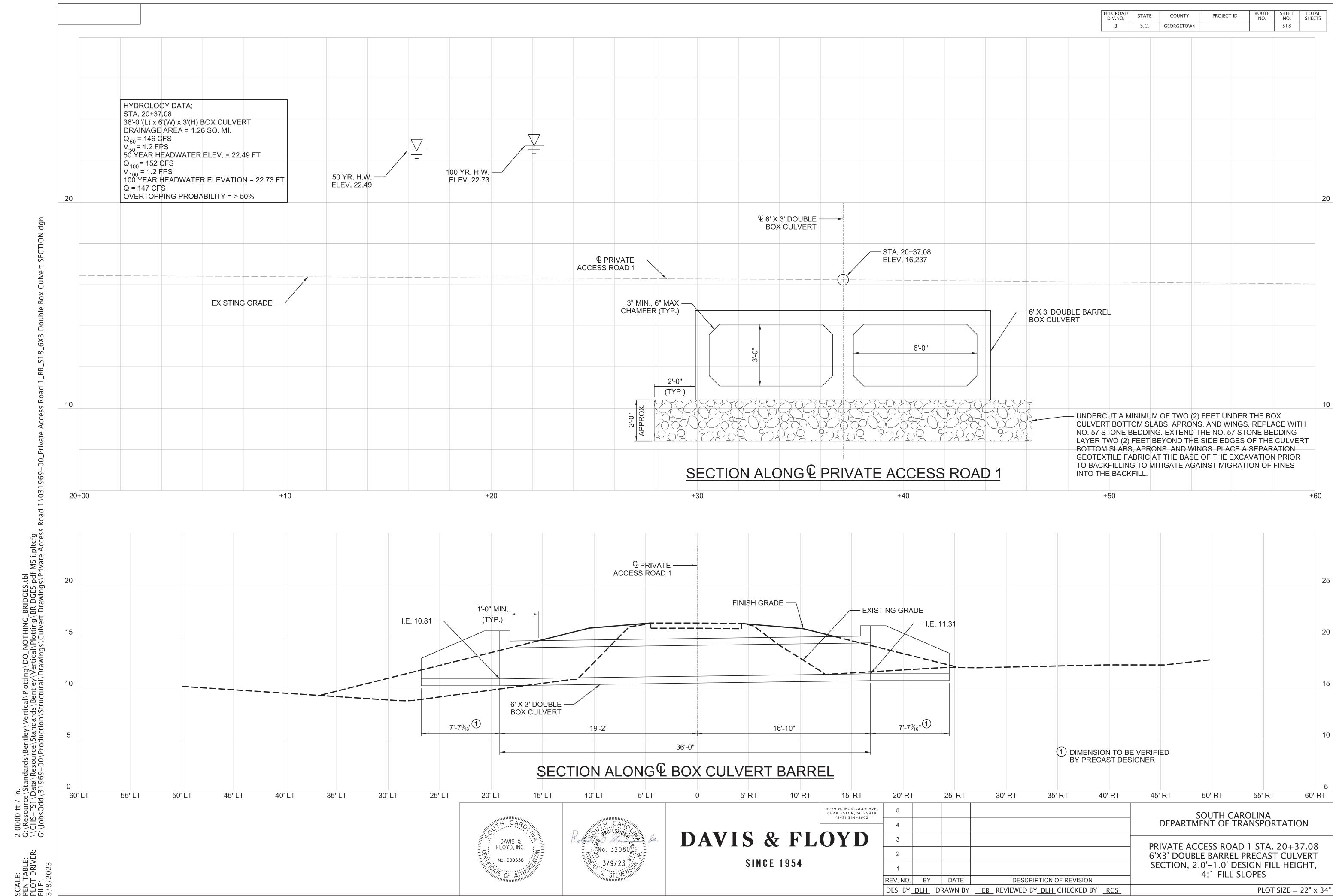


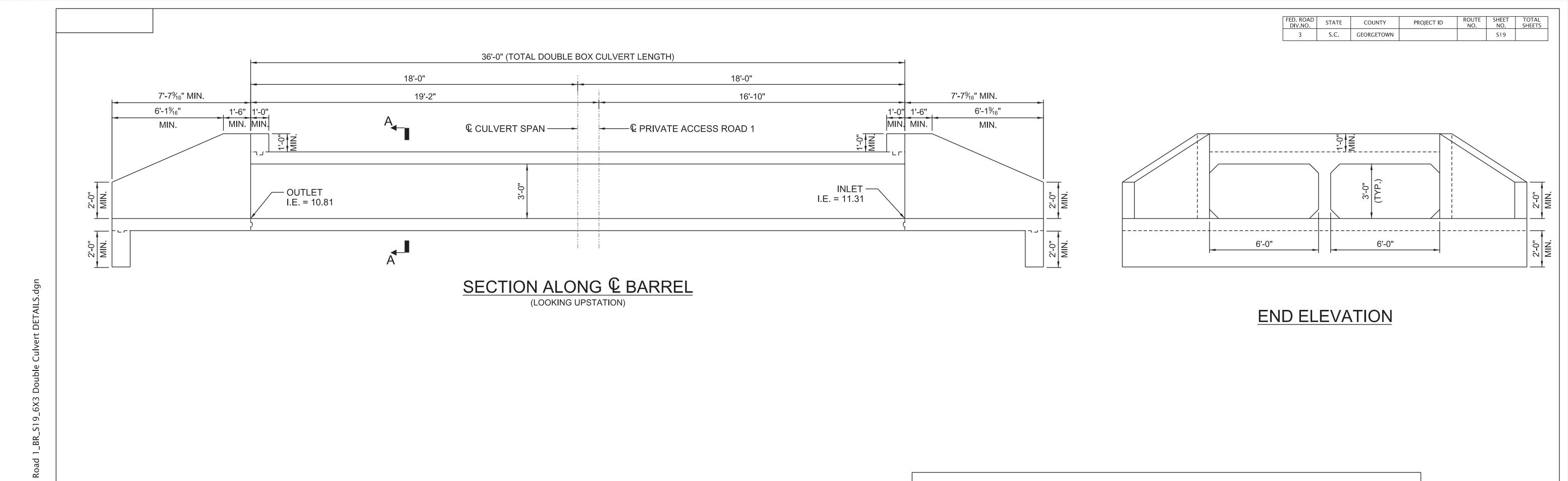


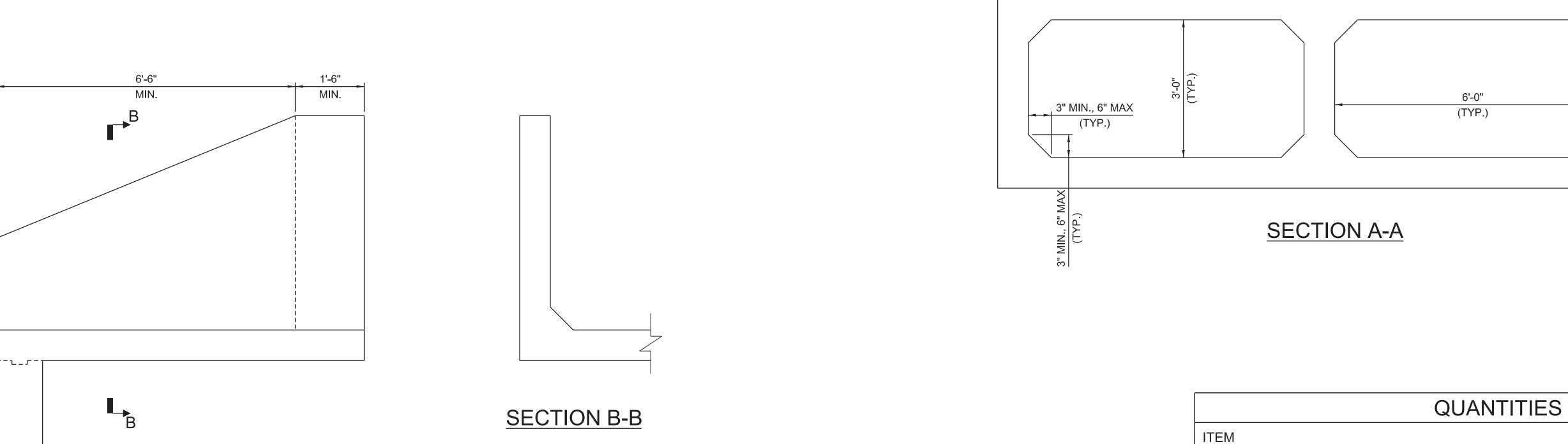
+20 +30 +90 20+00 +10 FED. ROAD STATE COUNTY S17 S.C. GEORGETOWN LESTER -CREEK - APPROX. TOP OF BANK PROPOSED -EASEMENT - PROPOSED EASEMENT - PRECAST WING — I.E. 10.81 WALL (TYP.) 6'-0" — EXISTING EDGE 6'-0" OF ROAD - EXISTING 36" RCP TO BE REMOVED € PRIVATE — ACCESS ROAD 1 N 57°13'24" E — TIE EQUALITY STA. 20+37.08 5.3333 ft / in. G:\Resource\Standards\Bentley\Vertical\Plotting\DO\_NOTHING\_BRIDGES.tbl \\CHS-FS1\Data\Resource\Standards\Bentley\Vertical\Plotting\BRIDGES pdf MS i.pltcfg G:\JobsOdd\31969-00\Production\Structural\Drawings\Culvert Drawings\Private Access Roa - EXISTING EDGE OF ROAD / I.E. 11.31 - PRECAST WING WALL (TYP.) CLASS B RIP-RAP SHALL BE PLACED PER SCDOT STANDARD DRAWING 804-205-00 ALL DIMENSIONS OF NEW CONSTRUCTION ARE SUBJECT TO EXISTING CONDITIONS AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO AND DURING CONSTRUCTION GC SHALL MAINTAIN STREAM FLOW DURING CONSTRUCTION.
SUBMIT PLAN FOR MAINTAINING FLOW TO RCE FOR
APPROVAL PRIOR TO CONSTRUCTION. INCLUDE COST FOR
MAINTAINING FLOW IN UNIT COST FOR CULVERT EXTENSION. - APPROX. TOP OF BANK **PLAN** 3229 W. MONTAGUE AVE, CHARLESTON, SC 29418 (843) 554-8602 NOTES: SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION ALL EXISTING UTILITIES IN CONFLICT WITH CULVERT TO BE RELOCATED PRIOR TO CONSTRUCTION. DAVIS & FLOYD DAVIS & FLOYD, INC. PRIVATE ACCESS ROAD 1 STA. 20+37.08 6'X3' DOUBLE BARREL PRECAST CULVERT SCALE:
PEN TABLE:
PLOT DRIVER:
FILE:
3/8/2023 \* APPROXIMATE No. C00538 **SINCE 1954** PLAN, 2.0'-1.0' DESIGN FILL HEIGHT, 4:1 FILL SLOPES FOR GRADING AROUND CULVERT, SEE ROADWAY PLANS, SH. 19. 1 DIMENSION TO BE VERIFIED BY PRECAST DESIGNER. REV. NO. BY DATE DESCRIPTION OF REVISION

DES. BY DLH DRAWN BY JEB REVIEWED BY DLH CHECKED BY RGS

PLOT SIZE =  $22" \times 34"$ 







NOTE:

3229 W. MONTAGUE AVE, CHARLESTON, SC 29418 (843) 554-8602 DAVIS & FLOYD **SINCE 1954** 

REFER TO SCDOT STANDARD DRAWING 722-105-01, 722-105-02, & 722-305-00 FOR ADDITIONAL NOTES &

ALL PRECAST CULVERT AND WING WALL DIMENSIONS TO BE VERIFIED BY PRECAST DESIGNER.

REV. NO. BY DATE **DESCRIPTION OF REVISION** 

DES. BY <u>DLH</u> DRAWN BY <u>JEB</u> REVIEWED BY <u>DLH</u> CHECKED BY <u>RGS</u>

6'X3' PRECAST DOUBLE BOX CULVERT HEADWALL/WINGWALLS

GEOTEXTILE FOR SEPERATION OF SUBGRADE/BASE COURSE MATERIAL

GEOTEXTILE FOR EROSION CONTROL UNDER RIP-RAP (CLASS B ) TYPE D

6'X3' PRECAST DOUBLE BOX CULVERT

RIP-RAP (CLASS B)

STRUCTURE EXCAVATION FOR CULVERTS

AGGREGATE UNDERDRAIN (AGGREGATE NO. 57)

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

PRIVATE ACCESS ROAD 1 STA. 20+37.08 6'X3' DOUBLE BARREL PRECAST CULVERT DETAILS, 2.0'-1.0' DESIGN FILL HEIGHT, 4:1 FILL SLOPES

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**WING WALL ELEVATION** 

UNIT

LF

EA

CY

SY

TON

TON

SY

PLOT SIZE =  $22" \times 34"$ 

QTY.

36.0

78

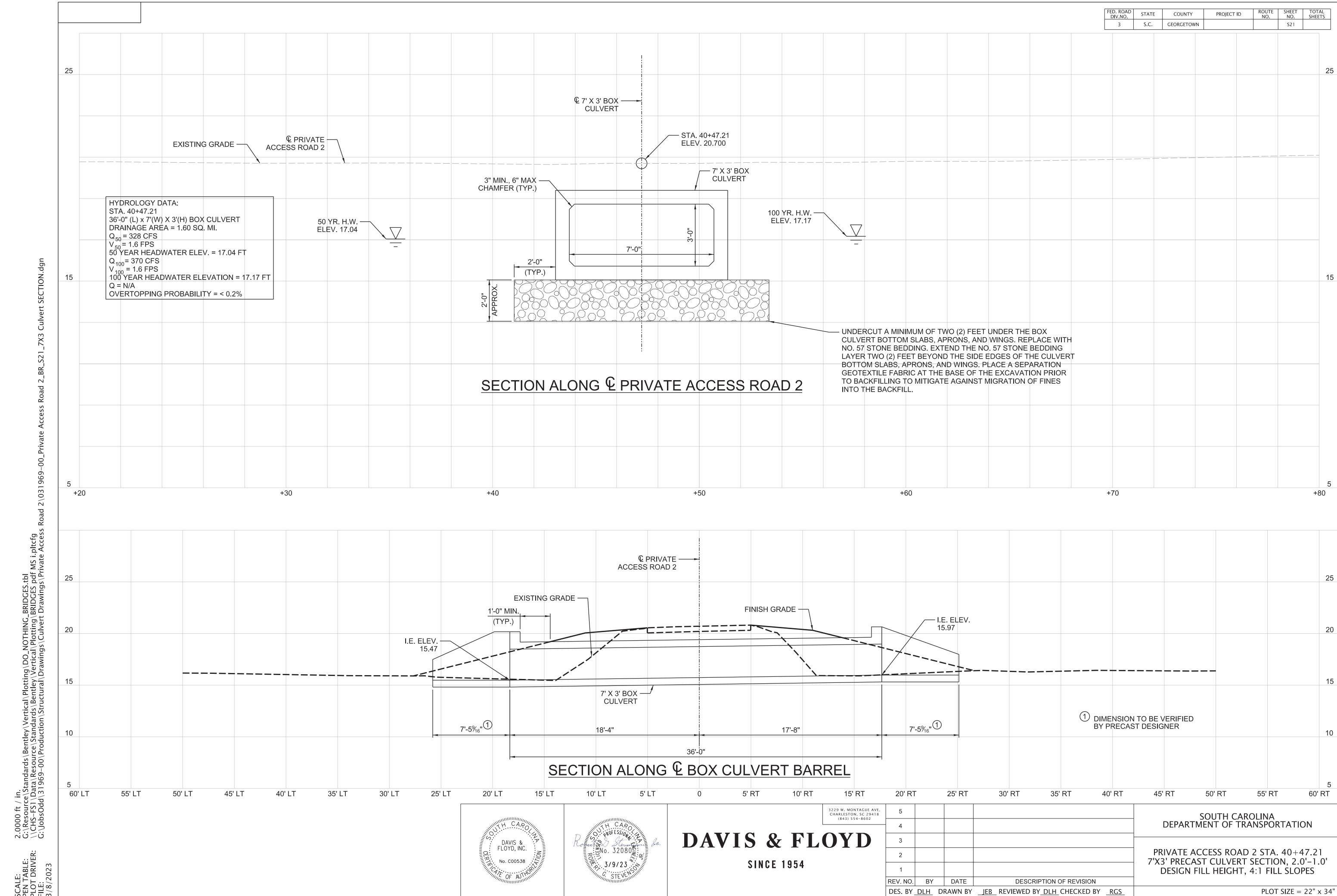
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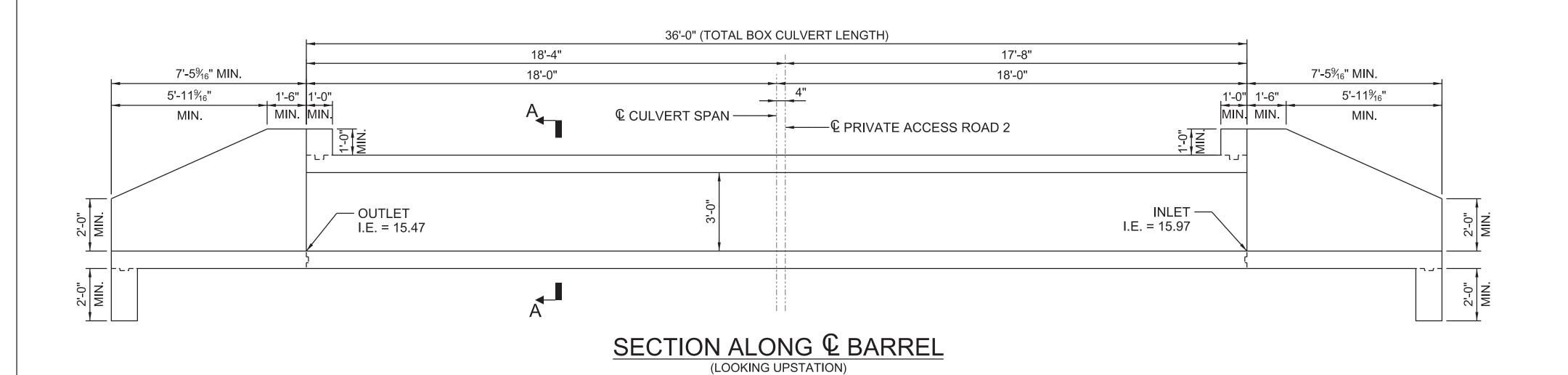
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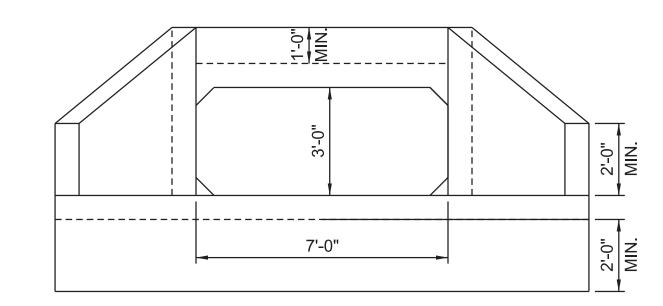
69

80

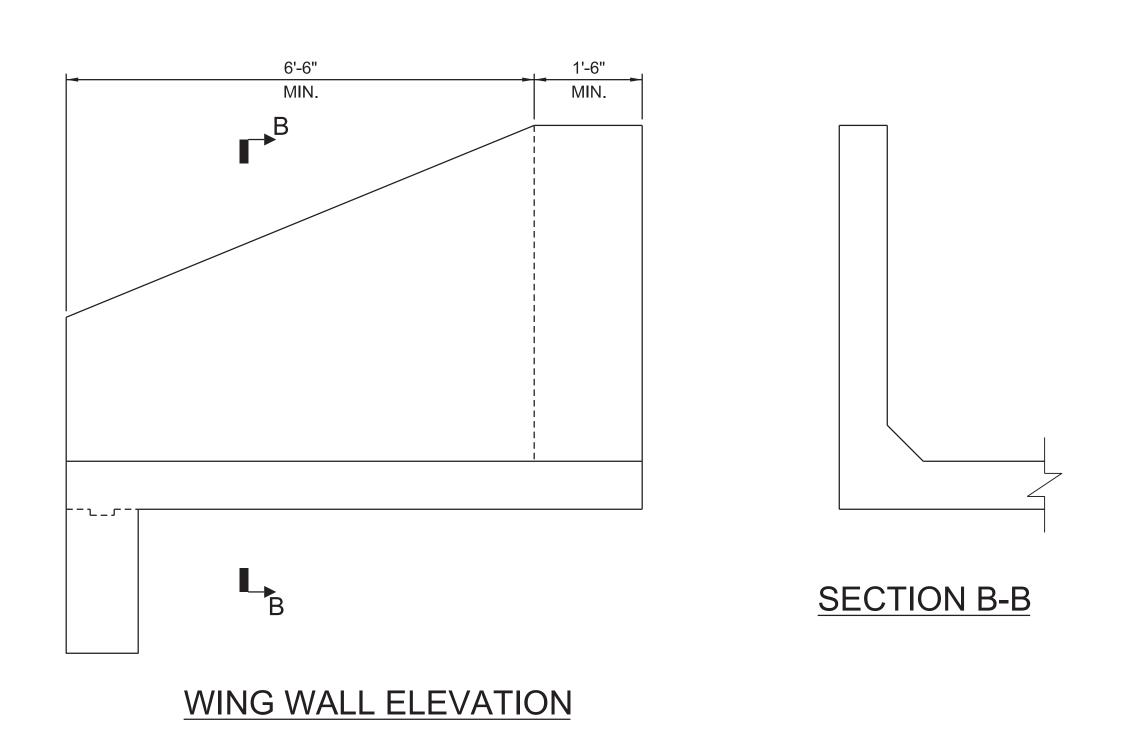
PLOT SIZE =  $22" \times 34"$ 







**END ELEVATION** 



NOTE:

REFER TO SCDOT STANDARD DRAWING 722-105-01, 722-105-02, & 722-305-00 FOR ADDITIONAL NOTES & DETAILS.

ALL PRECAST CULVERT AND WING WALL DIMENSIONS TO BE VERIFIED BY PRECAST DESIGNER.

	7'-0"	
3" MIN., 6" MAX (TYP.)	3'-0"	
3" MIN., 6" MAX (TYP.)	SECTION A-A	

QUANTITIES										
ITEM	UNIT	QTY.								
7'X3' PRECAST BOX CULVERT	LF	36.0								
7'X3' PRECAST BOX CULVERT HEADWALL/WINGWALLS	EA	2								
STRUCTURE EXCAVATION FOR CULVERTS	CY	59								
GEOTEXTILE FOR SEPERATION OF SUBGRADE/BASE COURSE MATERIAL	SY	117								
AGGREGATE UNDERDRAIN (AGGREGATE NO. 57)	TON	67								
RIP-RAP (CLASS B)	TON	44								
GEOTEXTILE FOR EROSION CONTROL UNDER RIP-RAP (CLASS B ) TYPE D	SY	54								





3229 W. MONTAGUE AVE, CHARLESTON, SC 29418 (843) 554-8602 DAVIS & FLOYD

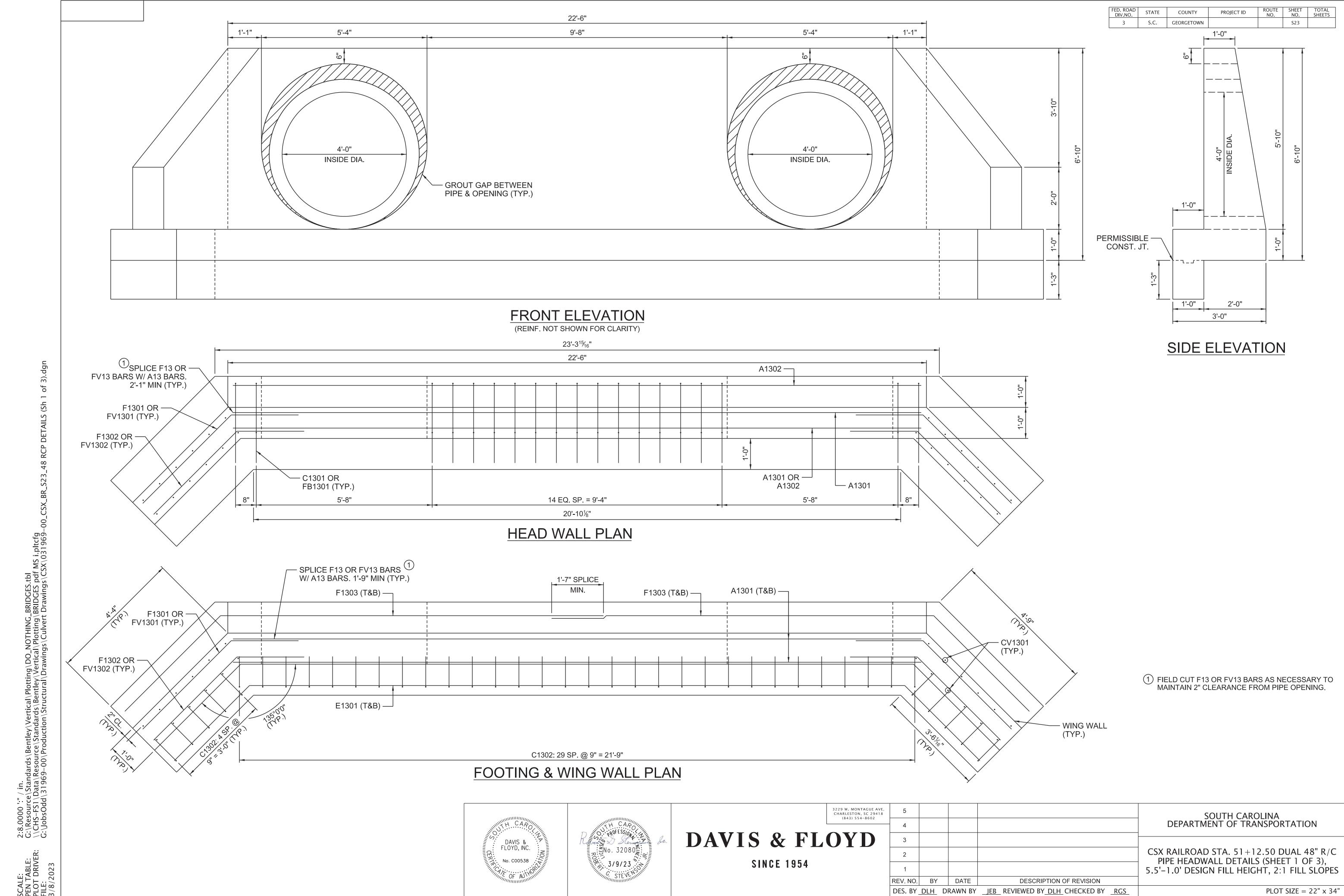
**SINCE 1954** 

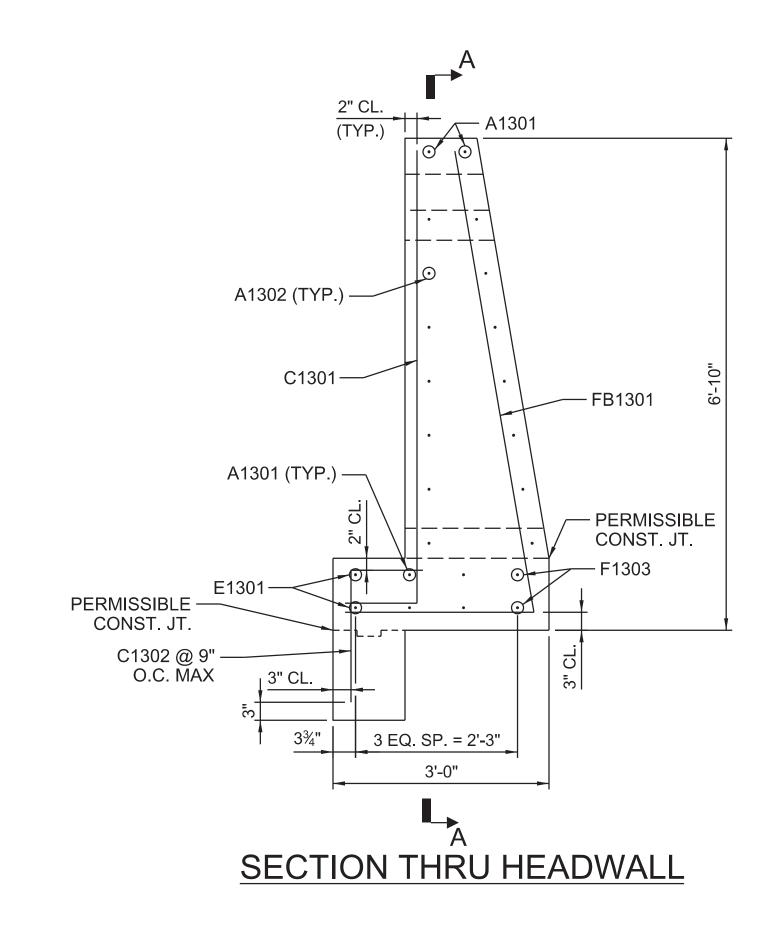
/E, 8	5					SOUTH CAROLINA
	4					DEPARTMENT OF TRANSPORTATION
	3					
	2					PRIVATE ACCESS ROAD 2 STA. 40+47.2
	1					7'X3' PRECAST CULVERT DETAILS, 2.0'-1. DESIGN FILL HEIGHT, 4:1 FILL SLOPES
	REV. NO.	BY	DATE	DESCRIPTION OF REVISION		
	DES. BY	DLH D	RAWN BY	<u>JEB</u> REVIEWED BY <u>DLH</u> CHECKED BY	RGS	PLOT SIZE = 22" >

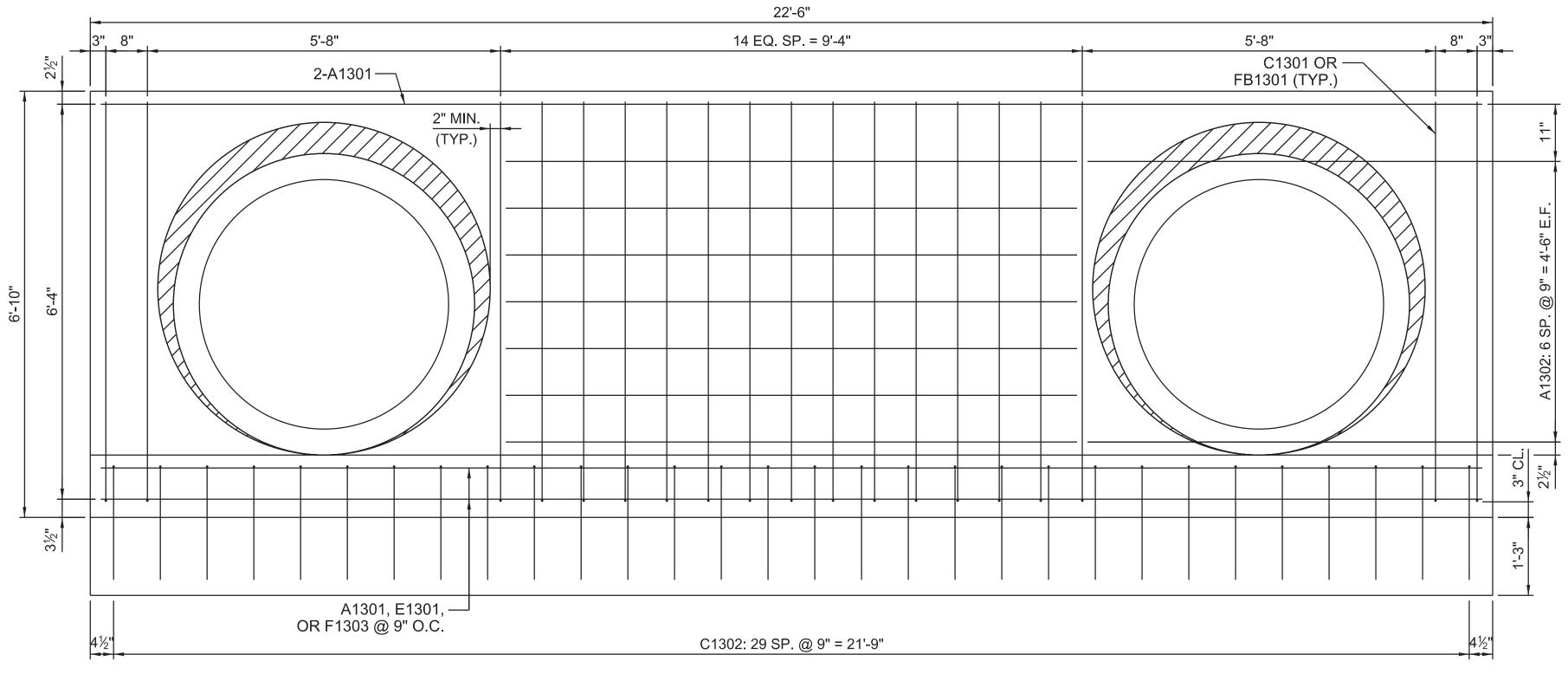
PRIVATE ACCESS ROAD 2 STA. 40+47.21 7'X3' PRECAST CULVERT DETAILS, 2.0'-1.0' DESIGN FILL HEIGHT, 4:1 FILL SLOPES

PLOT SIZE =  $22" \times 34"$ 

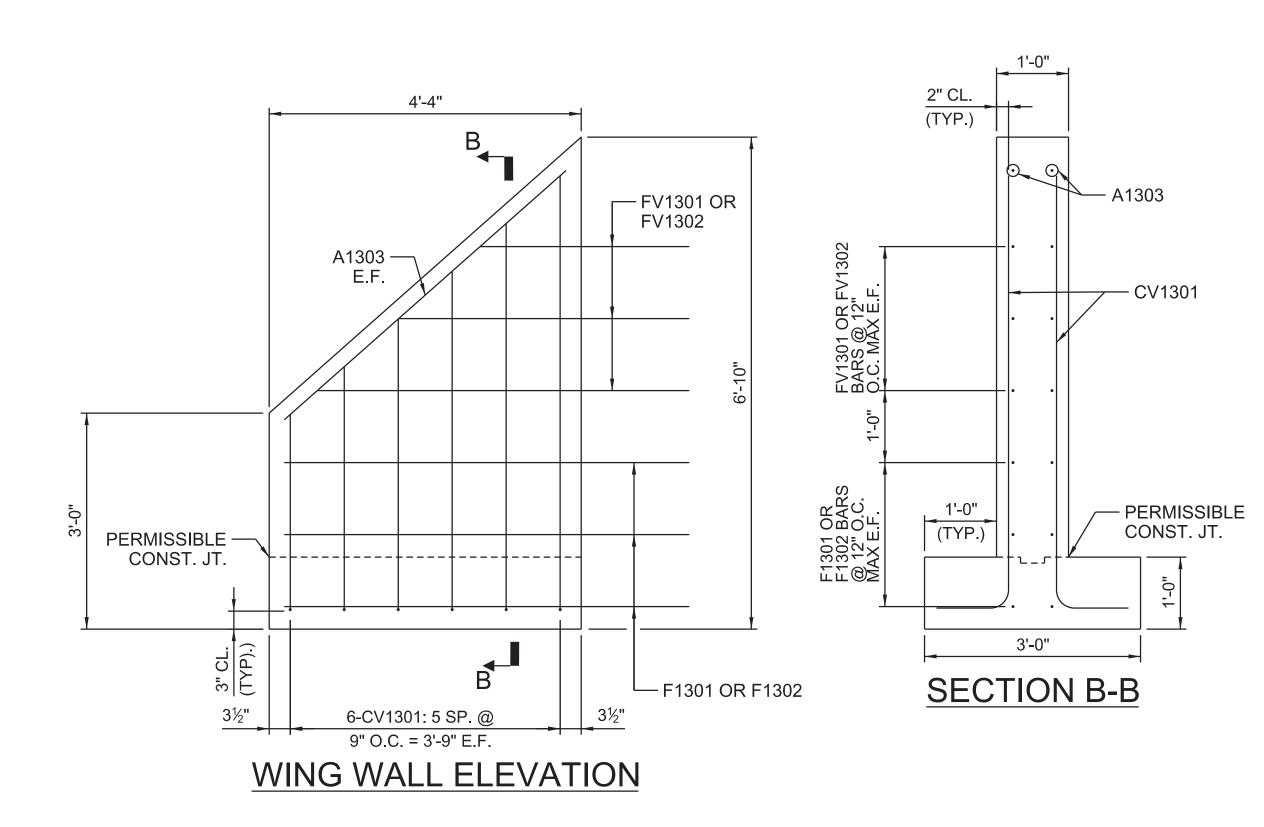
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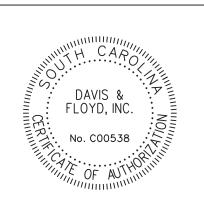






**SECTION A-A** (WING WALLS NOT SHOWN FOR CLARITY)







# DAVIS & FLOYD **SINCE 1954**

3229 W. MONTAGUE AVE, CHARLESTON, SC 29418 (843) 554-8602

5				
4				
3				
2				CSX PII
1				5.5'-
REV. NO.	BY	DATE	DESCRIPTION OF REVISION	
DES. BY	DLH D	RAWN BY	JEB REVIEWED BY DLH CHECKED BY RGS	

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

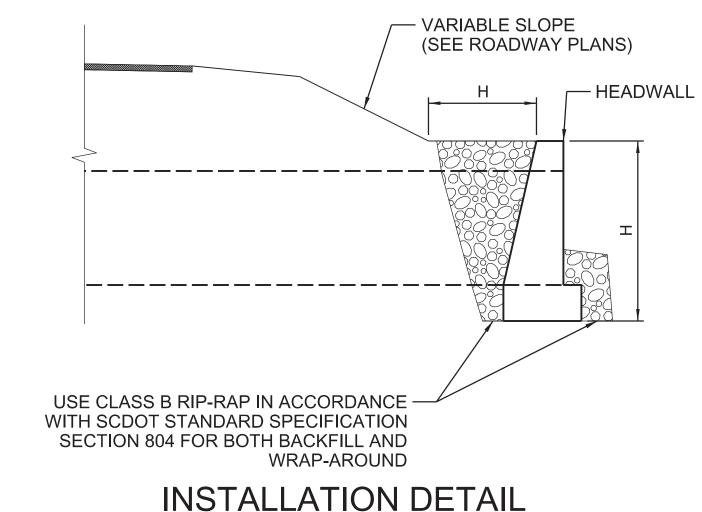
X RAILROAD STA. 51+12.50 DUAL 48" R/C PIPE HEADWALL DETAILS (SHEET 2 OF 3), '-1.0' DESIGN FILL HEIGHT, 2:1 FILL SLOPES

PLOT SIZE = 22" x 34"

SCALE:
PEN TABLE:
PLOT DRIVER:
FILE:
3/8/2023

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- 1.1 ALL WORKMANSHIP & MATERIAL SHALL CONFORM WITH THE LATEST EDITION OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. PLANS AND SPECIAL PROVISIONS.
- 1.2 ALL DIMENSIONS ARE SUBJECT TO EXISTING FIELD CONDITIONS AND SHALL BE VERIFIED BY THE CONTRACTOR.
- 1.3 THE CONTRACTOR IS TO USE DUE CARE IN PROTECTION OF ALL UTILITIES IN PLACE AND SERVICE SHALL NOT BE INTERRUPTED. UTILITIES IN CONFLICT WITH STRUCTURE ARE TO BE RELOCATED PRIOR TO CONSTRUCTION.
- 1.4 POSITIONS LT.(LEFT), RT.(RIGHT), I.F.(INSIDE FACE), AND O.F.(OUTSIDE FACE), WHERE REFERRED TO IN THE CULVERT PLANS, ARE RELATIVE TO THE DIRECTION OF STATIONING.
- 1.5 MINIMUM COVER OF REINFORCING STEEL SHALL BE 21#2" FROM THE SURFACE OF CONCRETE, UNLESS OTHERWISE NOTED.
- 1.6 CHAMFER ALL EXPOSED EDGES 3#4". CONSTRUCTION JOINTS ARE TO BE AS SHOWN IN THE PLANS OR AS APPROVED BY THE ENGINEER (NOTE THAT REINFORCING BARS SHALL EXTEND THROUGH CONSTRUCTION JOINTS).
- 1.7 CONTRACTOR SHALL CONSTRUCT 3#4" MINIMUM FILLETS AT ALL JUNCTIONS OF SLAB AND WALL.
- 1.8 FOR BUILT IN PLACE CONSTRUCTION OF THE CONCRETE HEADWALL, CLASS 4000 CONCRETE SHALL BE USED. FOR PRECAST CONSTRUCTION, A MINIMUM OF CLASS 4000P CONCRETE MEETING THE REQUIREMENTS OF SECTION 701 OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).
- 1.9 REINFORCING STEEL SHALL BE ASTM A-706, LOW-ALLOY STEEL DEFORMED BARS FOR CONCRETE REINFORCEMENT, GRADE 60.
- 1.10 GROUT SHALL BE TYPE M MORTAR MATERIAL IN ACCORDANCE WITH SECTION 718 OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).
- 1.11 CONCRETE CUT-OFF WALLS SHALL BE CAST TO A DEPTH SUFFICIENT TO REST ON HARD AND OR COMPACTED MATERIAL. THE MINIMUM DEPTH BELOW BOTTOM SLABS AND FOOTING SHALL BE THE GREATER OF 2'-0" OR THE DEPTH OF SOIL EXCAVATION, AND MAY BE INCREASED AT THE DISCRETION OF THE SUPERVISING ENGINEER OR DESIGNER.
- 1.12 CONTRACTOR SHALL CUT AND OR BEND ANY REINFORCING BARS AS NECESSARY TO CARRY OUT WORK AS CALLED FOR ON THE STRUCTURE SHEETS.
- 1.13 STEEL MANUFACTURING PROCESSES MUST OCCUR IN THE UNITED STATES.
- 1.14 BAR DIMENSIONS SHOWN ARE OUT-TO-OUT AND STANDARD C.R.S.I. BENDING DETAILS SHALL APPLY, EXCEPT AS NOTED.
- 2.0 PRECAST NOTES:
- 2.1 THE USE OF PRECAST UNITS WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF OBTAINING SATISFACTORY INSTALLATIONS.
- 2.2 LIFT HOLES AND/OR DEVICES MAY BE PLACED AS NECESSARY. ALL LIFT HOLES SHALL BE GROUTED SHUT PRIOR TO COMPLETION OF THE INSTALLATION. ALL LIFTING METHODS MUST MEET OSHA REGULATIONS.
- 2.3 THE CONTRACTOR SHALL USE MANUFACTURERS LISTED ON QUALIFIED PRODUCT LIST 14.
- 2.4 PRECAST ITEMS MODIFIED FROM THIS DRAWING MAY BE UTILIZED. HOWEVER, CONTRACTOR SHALL SUBMIT DESIGN DRAWINGS AND CALCULATIONS TO THE ENGINEER OF RECORD FOR REVIEW.
- 2.5 BED SHALL BE PREPARED AND COMPACTED FOR THE CONCRETE HEADWALL AS REQUIRED BY SCDOT STANDARD SPECIFICATIONS FOR PRECAST ITEMS. ELEVATION OF BEDDING MATERIAL SHALL BE APPROPRIATE TO ACCOMMODATE ELEVATION OF PIPE.
- 2.6 PLACE AND LEVEL PRECAST HEADWALL.
- 2.7 PIPES SHALL BE GROUTED IN PLACE.
- 2.8 PIPES AND HEADWALL SHALL BE BACKFILLED AND COMPACTED AS REQUIRED BY SCDOT STANDARD SPECIFICATIONS.
- 2.9 BRICK AND MORTAR SHALL BE USED TO ADJUST ELEVATIONS OF THROAT WALLS AS REQUIRED TO MEET ELEVATION AND CROSS SLOPES.
- 2.10 ANY LOCATION WHERE THE ABOVE REQUIREMENTS CANNOT BE MET SHALL BE COMPLETED USING CAST IN PLACE MATERIALS MEETING THE REQUIREMENTS OF THIS DRAWING. ANY ADDITIONAL MATERIALS OR COSTS ASSOCIATED WITH THE USE OF PRECAST SHALL BE PAID FOR BY THE CONTRACTOR AND MAY NOT BE CHARGED TO COUNTY.
- 3.0 REFERENCED SPECIFICATIONS:
- LATEST EDITION OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION 8TH EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS WITH INTERIM REVISIONS.



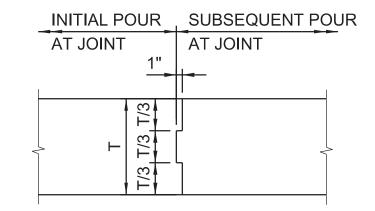
FED. ROAD DIV.NO. STATE COUNTY PROJECT ID ROUTE NO. SHEET NO. SHEETS

3 S.C. GEORGETOWN S25

#### REINFORCING STEEL SCHEDULE (FOR ONE HEADWALL) DIMENSION **MARK LENGTH** LOCATION REQ'D "a" "d" **HEADWALL** A1301 22'-2" 22'-2" 9'-4" **HEADWALL** A1302 14 9'-4" A1303 5'-2¾" 5'-3" WING WALL 6'-3½" **HEADWALL** C1301 19 1'-0" 7'-4" HEADWALL/KEY C1302 40 1'-10" 1'-0" 2'-10" 3'-5¾<sub>6</sub>" 1'-9¼" 5'-1½<sub>6</sub>" 7<sup>15</sup>/<sub>16</sub>" WING WALL CV1301 24 1'-0" 4'-6" **HEADWALL** E1301 21'-1¼" 3'-51/8" 2'-5" 28'-0" 4'-0¼" 1%" 8%" WING WALL F1301 2'-2" 6'-3" F1302 3'-9%" 2'-2" 1½6" 6%" WING WALL 6'-0" 4'-4<sup>5</sup>/<sub>16</sub>" **HEADWALL** F1303 12'-4" 3'-1" 3'-1" 16'-9" FB1301 6'-6" 2'-7½" 4%" 2'-71/8" WING WALL 19 9'-2" 1'-4<sup>%</sup>16" 8%" WING WALL FV1301 2'-6<sup>1</sup>/<sub>16</sub>" 3'-7%" 1'-1%<sub>16</sub>" 2'-2" 1%" 4'-9" WING WALL FV1302 2'-3<sup>3</sup>/<sub>16</sub>" 1'-1%" | 3'-4<sup>1</sup>1<sub>16</sub>" | 1'-19<sub>16</sub>" 2'-2" 1½6" 6%" 4'-6"

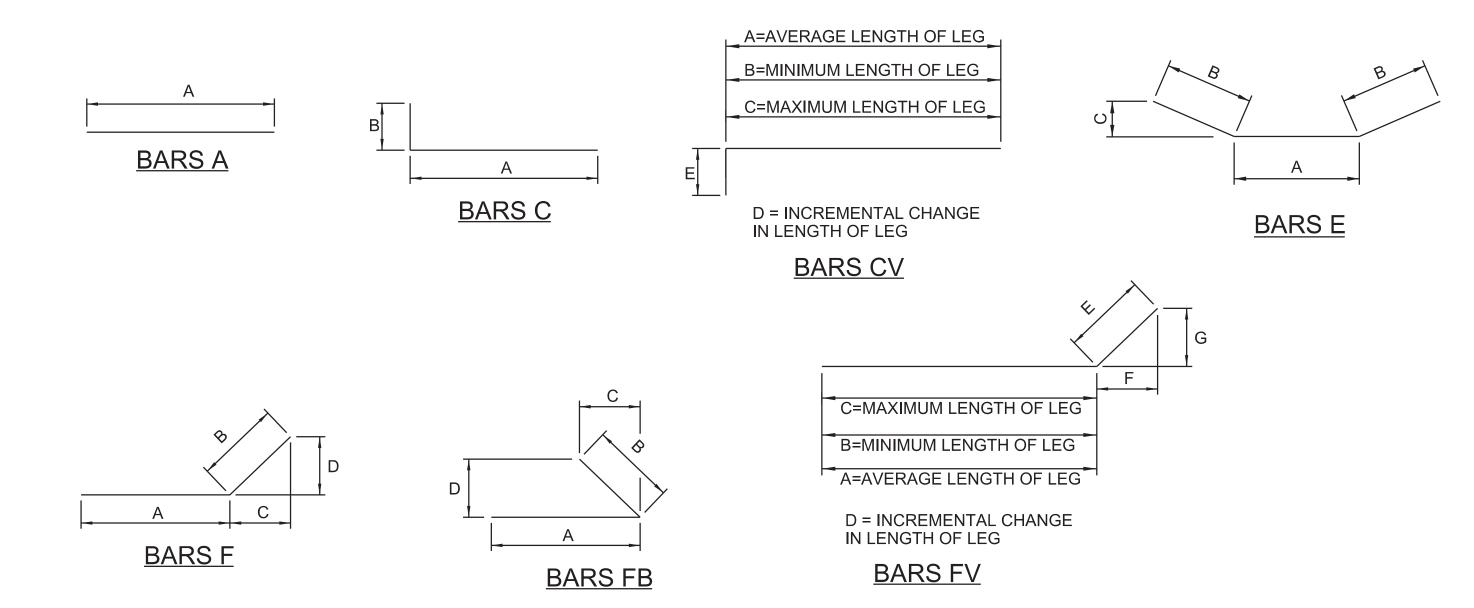
# QUANTITIES (FOR ONE HEADWALL)

ITEM	UNIT	QTY.
CONC. FOR STRUCTURES CLASS 4000 (CULVERT)	CY	10.7
REINFORCING STEEL FOR STRUCTURES (ROADWAY)	LB	716

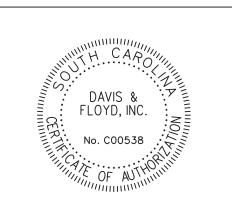


#### CONST. JT. DETAIL

BEFORE MAKING SUBSEQUENT POUR, WAIT EITHER A MINIMUM OF 96 HOURS AFTER PLACEMENT OF THE INITIAL POUR OR UNTIL THE INITIAL POUR CONCRETE HAS ATTAINED A MINIMUM OF 75% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH AS VERIFIED BY TESTING EXTRA CYLINDERS.



### REINFORCEMENT BENDING DETAILS





DAVIS & FLOYD

SINCE 1954

DEPARTMENT OF TRANSPORTATION

Y RAIL ROAD STA 51±12 50 DUAL 48" R

**SOUTH CAROLINA** 

CSX RAILROAD STA. 51+12.50 DUAL 48" R/C PIPE HEADWALL DETAILS (SHEET 3 OF 3), 5.5'-1.0' DESIGN FILL HEIGHT, 2:1 FILL SLOPES

PLOT SIZE = 22" x 34"

BLE: G:\Resource\Standards\Bentley\Vertical\Plotting\DO\_NOTHING\_BRIDGES.tbl RIVER: \\CHS-FS1\Data\Resource\Standards\Bentley\Vertical\Plotting\BRIDGES pdf MS i.pltcfg G:\JobsOdd\31969-00\Production\Structural\Drawings\Culvert Drawings\CSX\031969-00\_CSX\_BR\_S25\_48 RG

RECEIVING WATERS												
ROAD / ROUTE	OUTFALL DITCH		NAME OF	NAME OF ULTIMATE								
ROAD / ROUTE	STATION	SIDE	RECEIVING WATERS	RECEIVING WATERS								

BLANKET	TROL	CON	OSION	SOIL TYPES																												
MSY		SLO x:	DITCH BOTTOM	DEPTH OF BLANKET	l I	STATION		I S		S		S		S		S		S		S		S		S		S		ROAD / ROUTE	ZONE	SOIL PARTICLE SIZE (COARSE / FINE)	STATION TO STATION	ROAD / ROUTE
	BACK	FRONT	WIDTH (FT)	(FT)				ROUTE																								
0.103	2.0	2	13	4		02+74	02+44																									
0.103	2.0	2	13	4		03+67	03+37																									
0.103	2.0	2	13	4		11+57	11+27																									
0.103	2.0	2	13	4		12+17	11+87																									
0.083	2.0	2	7	4		27+74	27+44																									
0.083	2.0	2	7	4		28+67	28+37																									
0.083	2.0	2	7	4		35+28	34+98																									
0.083	2.0	2	7	4		35+88	35+58																									
0.083	2.0	2	7	4		48+94	48+64																									
0.080	2.0	2	6	4		49+82	49+52																									
0.096	2.0	2	11	4		58+62	58+32																									
0.096	2.0	2	11	4		59+54	59+24																									
0.093	2.0	2	10	4		65+94	65+64																									
0.093	2.0	2	10	4		66+74	66+44																									
1.285	OTAL	1																														

ROAD /

ROUTE

**SEDIMENT TUBES IN DITCHES** 

1

1

1

1

10

15

10

10

15

15

10

10

10

10

15

10

15

10

15

10

DESCRIPTION OF REVISION

\_ REVIEWED BY\_

\_\_CHECKED BY

N.T.S.

COMMENTS

STATION TO SIDE AVERAGE SPACING LENGTH (FT)

02+69 02+69 C 15

03+12 | 03+12 | L | 10

11+52 11+52 C 15

27+92 27+92 C 15

27+79 27+79 L 10

28+42 28+42 L 10

35+21 35+21 R 10

35+23 35+23 C 15

35+57 35+57 R 10

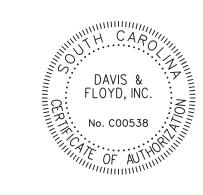
48+89 C 15

58+51 58+51 R 10

58+68 58+68 L 10

	TURF REINFORCED MATTING (TRM)											
ROAD / ROUTE	STATION TO STATION		SIDE	DEPTH OF MAT (FT)	SLOPES (x : 1) FRONT BACK		DITCH BOTTOM WIDTH (FT)	TYPE	TYPE 1 (MSY)	TYPE 2 (MSY)	TYPE 3 (MSY)	
LESTER CREEK	60+60	61+10	С	3	1	1 7		2		0.086		
LESTER CREEK	64+20	64+70	С	5	2.5	1.5	5	2		0.153		
			o G									
			10 61									
								TOTALS		0.239		
										-		

																	30.00	30.00		10		10	
																	59+21	59+21	L	10	1	10	
																	59+27	59+27	R	10	1	10	
				•						TOTALS			0.2	239			65+89	65+89	С	15	1	15	
												65+98	65+98	L	10	1	10						
							OFDI	ACCAIT	D A B A								65+98	65+98	R	10	1	10	
								MENT									66+43	66+43	L	10	1	10	
			$\Box$	DRAINED OR	LENGTH	WIDTH OF		SIDE	SPILL WAY	DAM		TOTAL	SEDIMENT STORAGE HEIGHT	OUTFALL	OUTFALL	OUTFALL	66+43	66+43	R	10	1	10	
NO	ROAD / ROUTE	STATION	SIDE	NOT	OF SILT	SILT	DAM HEIGHT	SLOPE OF	воттом	воттом	RIP RAP	STORAGE	STORAGE	CHANNEL	CHANNEL	CHANNEL	00 .0				•		
	ROUTE			DRAINED OR NOT DRAINED	BASIN	BASIN	HEIGHT	SILT	WIDTH	WIDTH	CLASS	VOLUME	HEIGHT	WIDTH	DEPTH	LENGTH							
								BASINI					150000000000000000000000000000000000000		And Alberta Market Control of the Co								
			_		+							1											
			_																				
					-																		
					-																		
					1																		
																					TOTAL	265	





# 1940 ALGONQUIN ROAD, SUITE 301 CHARLESTON, SC 29405 (843) 554-8602 DAVIS & FLOYD **SINCE 1954**

4			
3			
2			
1			
REV. NO.	BY	DATE	
DES. BY	D	RAWN BY	

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL DATA SHEET EAST ANDREWS DRAINAGE IMPROVEMENTS

PLOT SIZE = 22" x 34"

20.000 ft / in. East Andrews–SCDOT Levels 2015 B&W Plan–PDF.tbl PDF.pltcfg G:\JobsOdd\31969–00\Production\Transportation\f

5.000 ft / in. G:\JobsOdd\31969–00\Production\Transportation\Print Organizer\pentable\SCDOT Levels 2015 X Sections.tbl G:\Resource\Standards\Bentley\Transportation\DF STANDARDS\MSfiles\plotting\PDF.pltcfg G:\JobsOdd\31969–00\Production\Transportation\XSC\Crossings XS Sheets.dgn

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\_ REVIEWED BY\_\_\_\_\_ CHECKED BY

SCALE 1"= 1200'

DRAWN BY

PLOT SIZE =  $22" \times 34"$ 

1200.000 ft / in. TC Detour.tbl PDF.pltcfg G:\JobsOdd\31969–0

DRAWN BY

REVIEWED BY\_\_\_

CHECKED BY

SCALE 1"= 1200'

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