SHEET NO.	TOTAL SHEETS
1	34

INDEX OF SHEETS

SHEET NO.	DESCRIPTION	SHEET
1	TITLE SHEET	1
2	OMITTED	–
3	TYPICAL SECTION	1
4	RIGHT–OF–WAY DATA SHEET	1
4A	PROPERTY STRIP MAP	1
5	OMITTED	–
5A	REFERENCE DATA SHEET	1
6–9	PLAN AND PROFILE SHEETS	3
D6–D9	DRAINAGE PLAN SHEETS	4
X1 – X21	CROSS SECTIONS	21
	TOTAL SHEETS	34

South Carolina Department of Transportation

PROPOSED PLANS FOR ROAD S-1009 & CONWAY BLACK ROAD FRONTAGE ROAD IMPROVEMENTS

PROJECT ID 0040692

Hydraulic Design Reference for these plans is the:
2009
Edition of SCDOT's "Requirements for Hydraulic Design Studies"

Design Reference for these plans is the:
2001
AASHTO "A Policy on Geometric Design of Highways and Streets"

NPDES PERMIT INFORMATION

Disturbed Area = 2.17 Acre(s)

Permitted Area = 4.03 Acre(s)

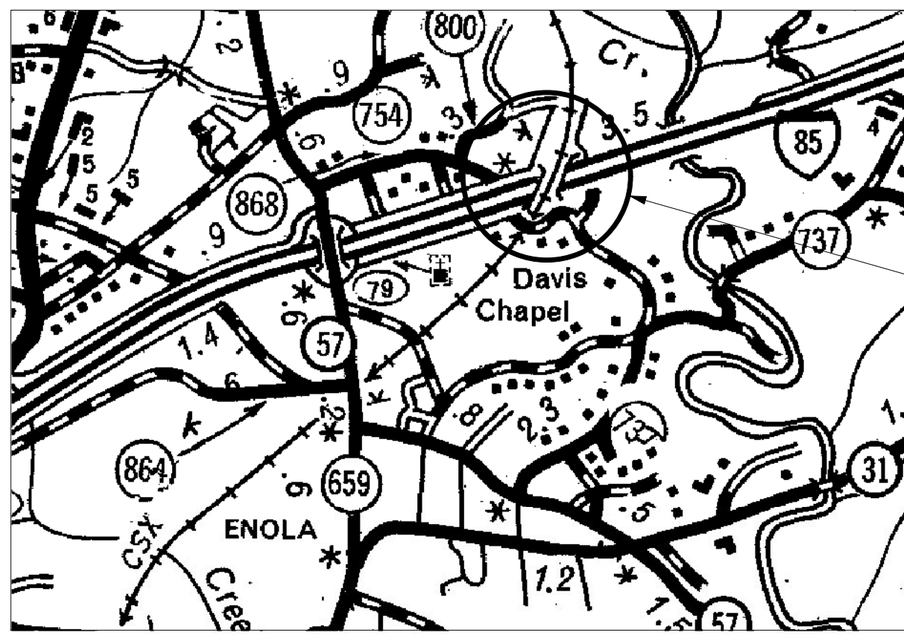
Approximate Location of Roadway is

Begin
Latitude 34^06'47.33" N
Longitude 80^56'54.39" W

End
Latitude 34^11'41.94" N
Longitude 80^54'26.11" W

Hydraulic and NPDES Design provided by:
VAUGHN & MELTON

Designs may be obtained from the SCDOT Regional Production Group



LAYOUT
N.T.S

	S–1009	CONWAY BLACK (WEST)	CONWAY BLACK (EAST)	DRIVEWAY	TOTAL (MILES)
NET LENGTH OF ROADWAY	0.291	0.023	0.030	0.030	0.374
NET LENGTH OF BRIDGES	–	–	–	–	–
NET LENGTH OF PROJECT	0.291	0.023	0.030	0.030	0.374
LENGTH OF EXCEPTIONS	–	–	–	–	–
GROSS LENGTH OF PROJECT	0.291	0.023	0.030	0.030	0.374

EQUALITIES IN STATIONING:
NONE

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 (CURRENT EDITION) AND THE STANDARD DRAWINGS FOR ROAD CONSTRUCTION IN EFFECT AT THE TIME OF LETTING.

SCDOT REVIEW	RIGHT-OF-WAY INITIAL	RIGHT-OF-WAY DATE	CONSTRUCTION INITIAL	CONSTRUCTION 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.

Approved for Right Of Way Acquisition:

CONSULTANT ENGINEER OF RECORD _____ Date _____

REGIONAL PRODUCTION ENGINEER _____ Date _____

ENVIRONMENTAL PERMIT INFORMATION

USACE PERMIT	___YES	___NO
NEPA DOCUMENT	___YES	___NO
401 CERTIFICATION	___YES	___NO
OCRM CAP	___YES	___NO
NAVIGABLE WATERS	___SC ___USCG	___USACE ___N/A

3 DAYS BEFORE DIGGING IN SOUTH CAROLINA
CALL 811
SOUTH CAROLINA 811 (SC811)
WWW.SC811.COM
ALL UTILITIES MAY NOT BE A MEMBER OF SC811

RAILROAD INVOLVEMENT?
(YES) NO

TRAFFIC DATA

_____ ADT _____

_____ ADT _____

TRUCKS _____%

CONSULTING ENGINEERING FIRM

Michael Baker INTERNATIONAL

ENGINEER OF RECORD

PRELIMINARY PLANS

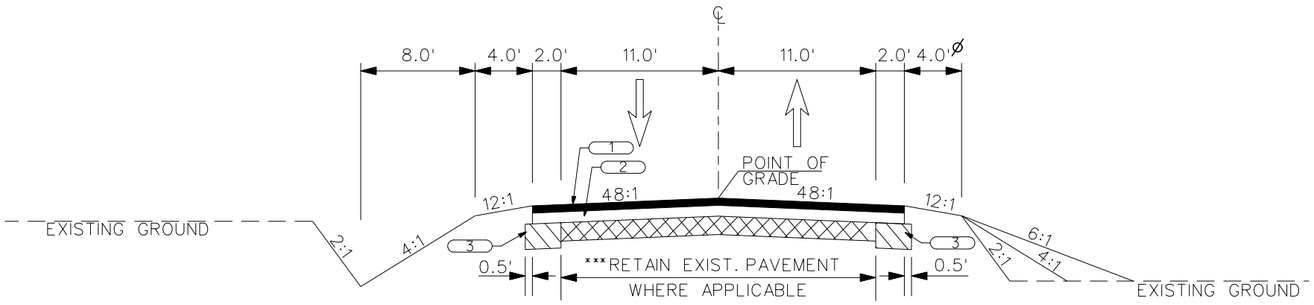
NOT FOR CONSTRUCTION

PRELIMINARY DESIGN: _____ _____ DATE

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	3

TYPICAL SECTION OF IMPROVEMENT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
COLUMBIA, S.C.

1

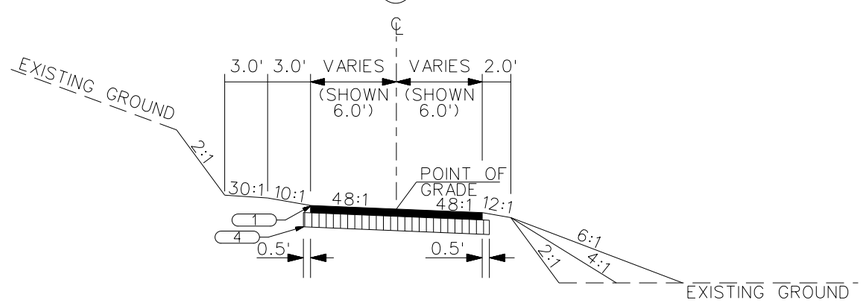


USE THIS SECTION ON ROAD S-1009
STA. 14+18.15 TO STA. 29+52.30
USE THIS SECTION ON CONWAY BLACK ROAD (WEST)
STA. 14+50.00 TO STA. 15+71.88
USE THIS SECTION ON CONWAY BLACK ROAD (EAST)
STA. 10+00.00 TO STA. 11+63.71

***CONSTRUCTION ℄ DOES NOT FOLLOW PRESENT ROADWAY, THEREFORE PAVEMENT INPLACE MAY VARY FROM LOCATION SHOWN.

Ø ADD 3.5' WHERE GUARDRAIL IS USED

2



USE THIS SECTION ON DRIVEWAY_01
STA. 10+17.00 TO STA. 11+73.17

LEGEND

1	HOT MIX ASPHALT SURFACE COURSE	
2	HOT MIX ASPHALT INTERMEDIATE COURSE	
3	HOT MIX ASPHALT BASE COURSE	
4	GRADED AGGREGATE BASE COURSE	

ROAD NAME	RTE.	MPH	DESIGN SPEED	
			FROM STA.	TO STA.
S-1009		40	14+18.15	29+52.30
CONWAY BLACK ROAD (WEST)		20	14+56.57	16+62.24
CONWAY BLACK ROAD (EAST)		20	10+00.00	11+50.00
DRIVEWAY_01		N/A	10+17.00	11+73.17
EXCEPTIONS TO DESIGN SPEED				

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PRELIMINARY PLANS — NOT FOR CONSTRUCTION

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

DESIGNED BY: _____ DATE _____
DRAWN BY: _____ DATE _____
CHECKED BY: _____ DATE _____

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
INTERSTATE 85 FRONTAGE ROAD IMPROVEMENTS

TYPICAL SECTION SHEET
ROAD S-1009
CONWAY BLACK ROAD

SHEET 3 — SCALE: 1" = 5' HORZ. N.T.S. VERT.

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FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	4

RIGHT-OF-WAY DATA SHEET

ROW PLANS TRACT NO.	PROPERTY OWNER	TAX MAP REFERENCE	TOTAL TRACT ACRES	OBTAIN[A]				REMAINDER LEFT ACRES[B]	REMAINDER RIGHT ACRES[B]	DATE ACQUIRED	TYPE OF INSTRUMENT	OUTFALL DITCH PERMISSION (YES)	SLOPE PERMISSION (YES)	DRAINAGE STRUCTURE PERMISSION (YES)	EROSION CONTROL PERMISSION (YES)	ENTRANCE CONSTRUCTION PERMISSION (YES)	REMARKS
				OUTFALL DITCH ACRES	LEFT	RIGHT	TOTAL										
1	TERESA P. COCHRAN, ET AL	3-09-00-002.00	47.26														
2	BETTY JO ABBOTT HOLLAND	3 09 00 014.00	63.13			13985.59 SF (0.37 AC.)		62.76									
2A	STEPHEN R. LAWTER	3-09-00-014.01	6.38			4350.57 SF (0.10 AC.)		6.28									
3	ABBOTT SIGN CO. INC.	3-09-00-004.00	1.80		4274.71 SF (0.10 AC.)			1.70									
4	LINDA GAIL EARNHART	3 09 00 005.02	1.47		19874.61 SF (0.46 AC.)			1.01									
5	RICKY HORTON	3-09-00-005.01	0.66														
6	BARBARA G. ABBOTT	3 09 00 005.00	12.87														
7	CNA HOLDINGS LLC	3-06-00-051.00	21.60														
8	DELORES B. ABBOTT	3 09 00 006.00	3.70														
9	JAY B. EASLER	3-09-00-007.00	19.64														
10	TERESA P. COCHRAN, ET AL	3-06-00-012.00	10.10														
11	TERESA P. COCHRAN, ET AL	3 06 00 012.01	7.64														
12	TERESA P. COCHRAN, ET AL	3-06-00-012.02	5.31														
13	AURIGIA POLYMERS INC.	3 06 00 027.02	384.34		66993.02 SF (1.54 AC.)			382.80									

NOTES:

A TOTAL OBTAIN INCLUDES HIGHLAND, MARSH AND OUTFALL DITCHES.
OBTAINS WILL BE SHOWN IN SQUARE FEET AND ACRES. ACRES WILL BE SHOWN IN PARENTHESES UNDER SQUARE FEET. IN RURAL AREAS OBTAINS MAY BE SHOWN IN ACRES ONLY. OUTFALL DITCHES WILL BE SHOWN IN ACRES ONLY.

B SHOW REMAINDER IN SQUARE FEET WHEN LESS THAN 0.25 ACRE.

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PRELIMINARY PLANS NOT FOR CONSTRUCTION

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

DESIGNED BY: _____ DATE _____
DRAWN BY: _____ DATE _____
CHECKED BY: _____ DATE _____

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
INTERSTATE 85 FRONTAGE ROAD IMPROVEMENTS

RIGHT-OF-WAY DATA SHEET
S-1009
CONWAY BLACK ROAD

SHEET 4 SCALE: N/A

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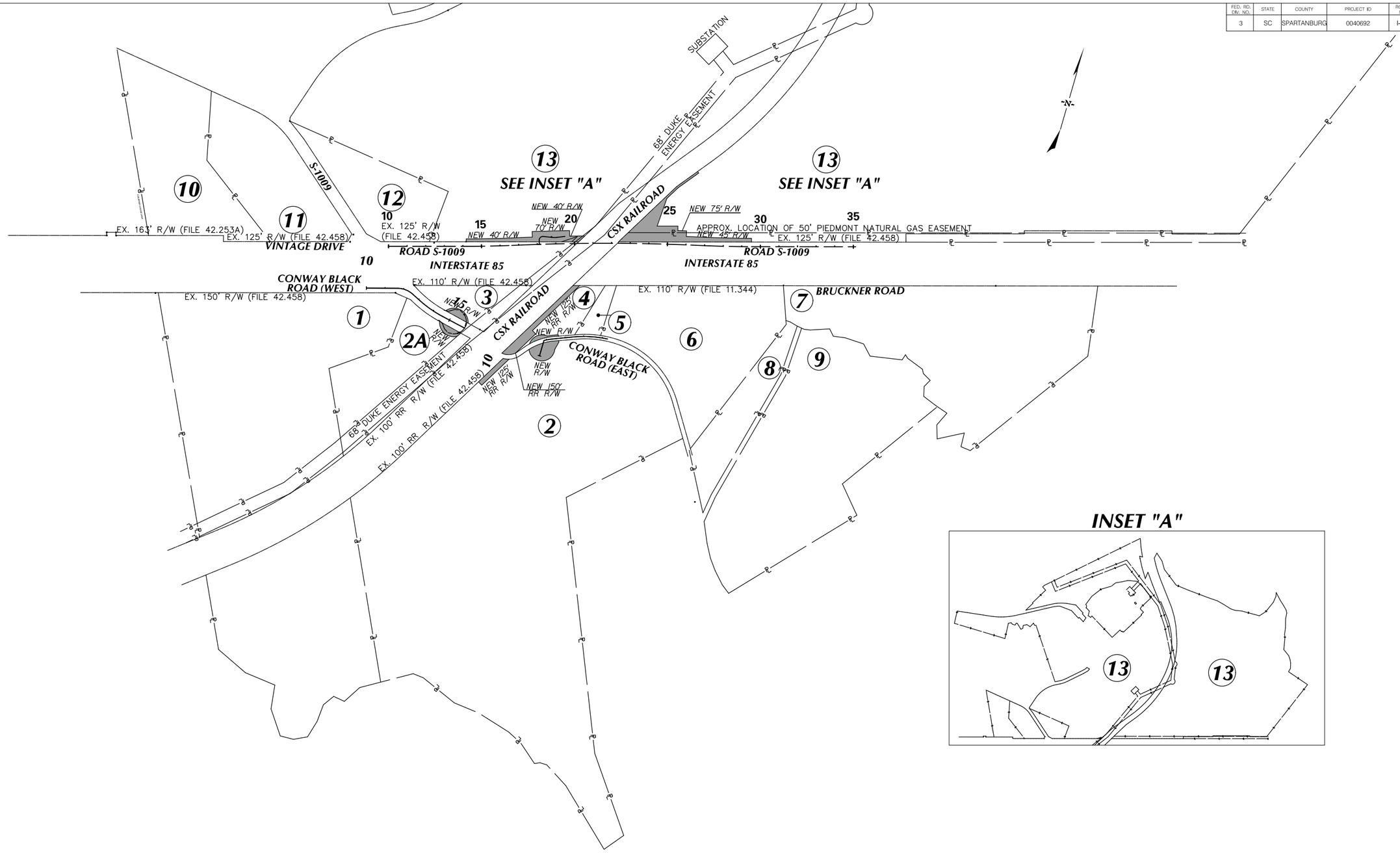
FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	4A



INSET "A"

Michael Baker INTERNATIONAL

PRELIMINARY PLANS

NOT FOR CONSTRUCTION

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

DESIGNED BY: _____ DATE _____
DRAWN BY: _____ DATE _____
CHECKED BY: _____ DATE _____

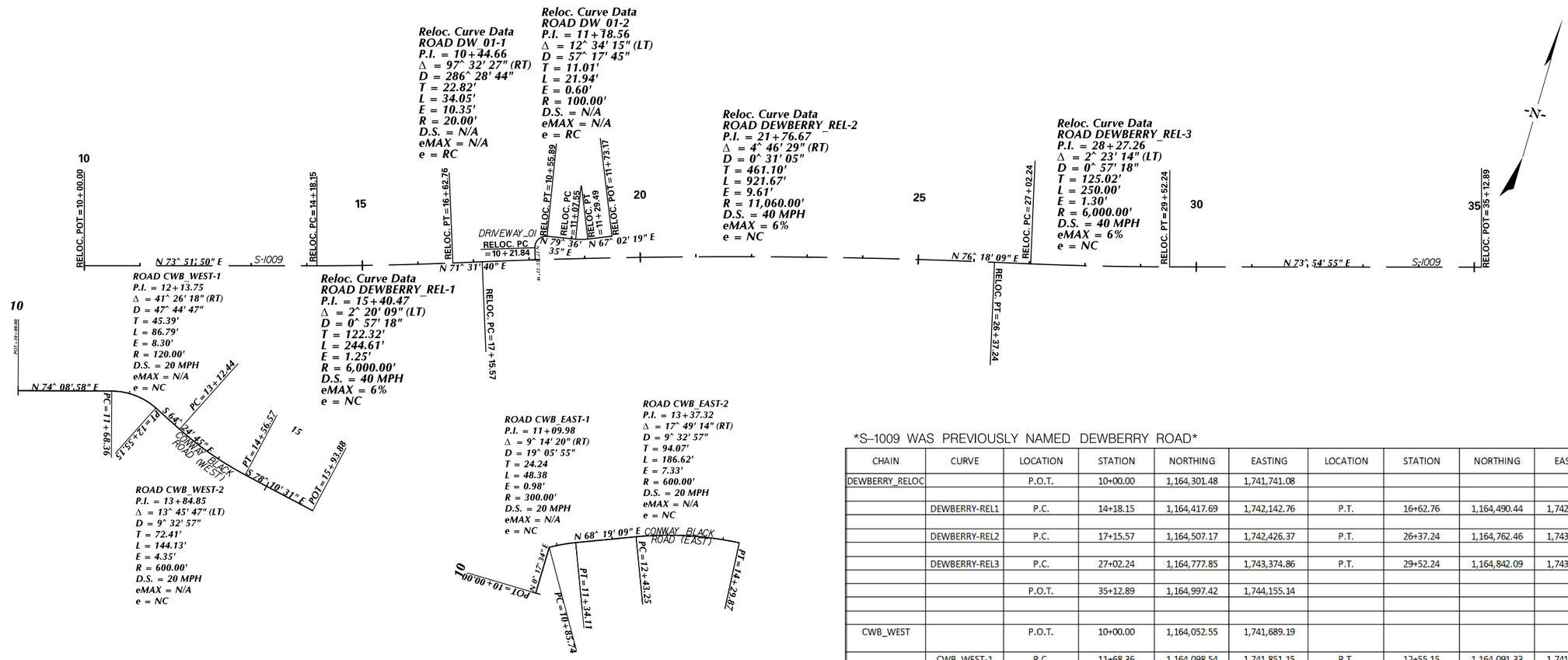
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
INTERSTATE 85 FRONTAGE ROAD IMPROVEMENTS

S-1009
PROPERTY STRIP MAP

SHEET 4A

SCALE: 1" = 50'

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	5A



S–1009 WAS PREVIOUSLY NAMED DEWBERRY ROAD

CHAIN	CURVE	LOCATION	STATION	NORTHING	EASTING	LOCATION	STATION	NORTHING	EASTING
DEWBERRY_RELOC		P.O.T.	10+00.00	1,164,301.48	1,741,741.08				
	DEWBERRY-REL1	P.C.	14+18.15	1,164,417.69	1,742,142.76	P.T.	16+62.76	1,164,490.44	1,742,376.29
	DEWBERRY-REL2	P.C.	17+15.57	1,164,507.17	1,742,426.37	P.T.	26+37.24	1,164,762.46	1,743,311.70
	DEWBERRY-REL3	P.C.	27+02.24	1,164,777.85	1,743,374.86	P.T.	29+52.24	1,164,842.09	1,743,616.45
		P.O.T.	35+12.89	1,164,997.42	1,744,155.14				
CWB_WEST		P.O.T.	10+00.00	1,164,052.55	1,741,689.19				
	CWB_WEST-1	P.C.	11+68.36	1,164,098.54	1,741,851.15	P.T.	12+55.15	1,164,091.33	1,741,935.75
	CWB_WEST-2	P.C.	13+12.44	1,164,066.59	1,741,987.43	P.T.	14+56.57	1,164,020.47	1,742,123.61
		P.O.T.	15+93.88	1,163,999.33	1,742,258.01				
CWB_EAST		P.O.T.	10+00.00	1,163,961.58	1,742,684.57				
	CWB_EAST-1	P.C.	10+85.74	1.164.047.3176	1,742,685.01	P.T.	11+34.11	1,164,068.73	1,742,728.33
	CWB_EAST-2	P.C.	12+43.25	1,164,109.05	1,742,829.75	P.T.	14+29.87	1,164,150.13	1,743,011.01
DW_01		P.O.T.	10+00.00	1,164,537.03	1,742,517.04				
	DW_01-1	P.C.	10+21.84	1,164,557.81	1,742,510.32	P.T.	10+55.89	1,164,583.64	1,742,525.74
	DW_01-2	P.C.	11+07.55	1,164,592.96	1,742,576.56	P.T.	11+29.49	1,164,599.24	1,742,597.53
		P.O.T.	11+73.17	1,164,616.28	1,742,637.76				

0 100 200 300 400

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PRELIMINARY PLANS NOT FOR CONSTRUCTION

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
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DESIGNED BY: _____ DATE _____
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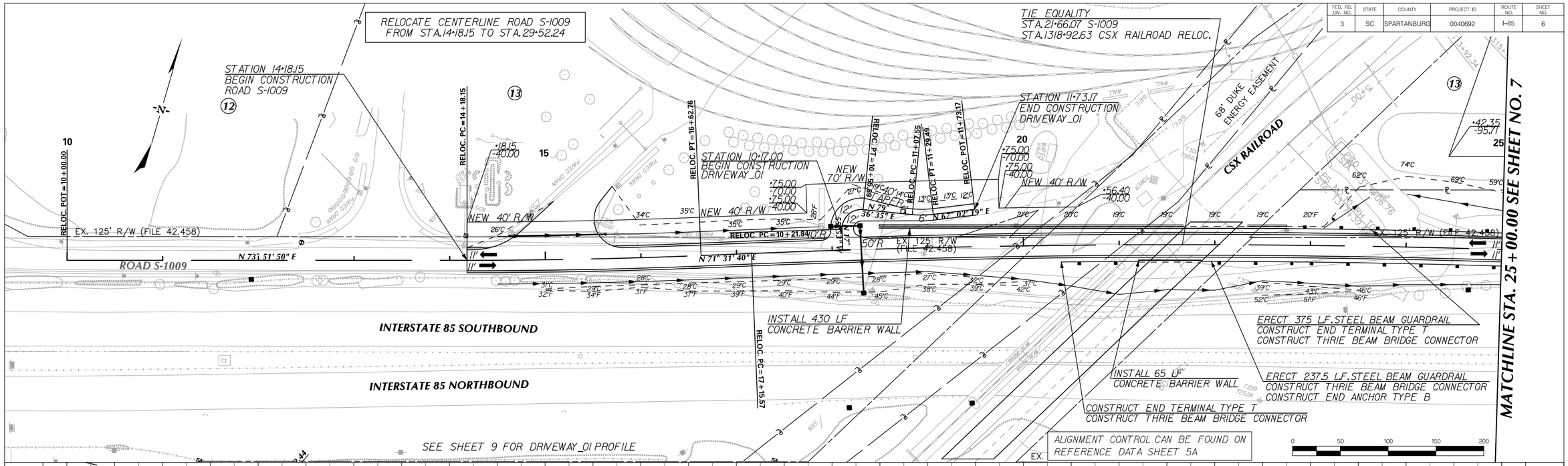
CHECKED BY: _____ DATE _____

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
INTERSTATE 85 FRONTAGE ROAD IMPROVEMENTS

S–1009
REFERENCE DATA

SHEET 5A SCALE: 1" = 100'

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	6



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PRELIMINARY PLANS NOT FOR CONSTRUCTION

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
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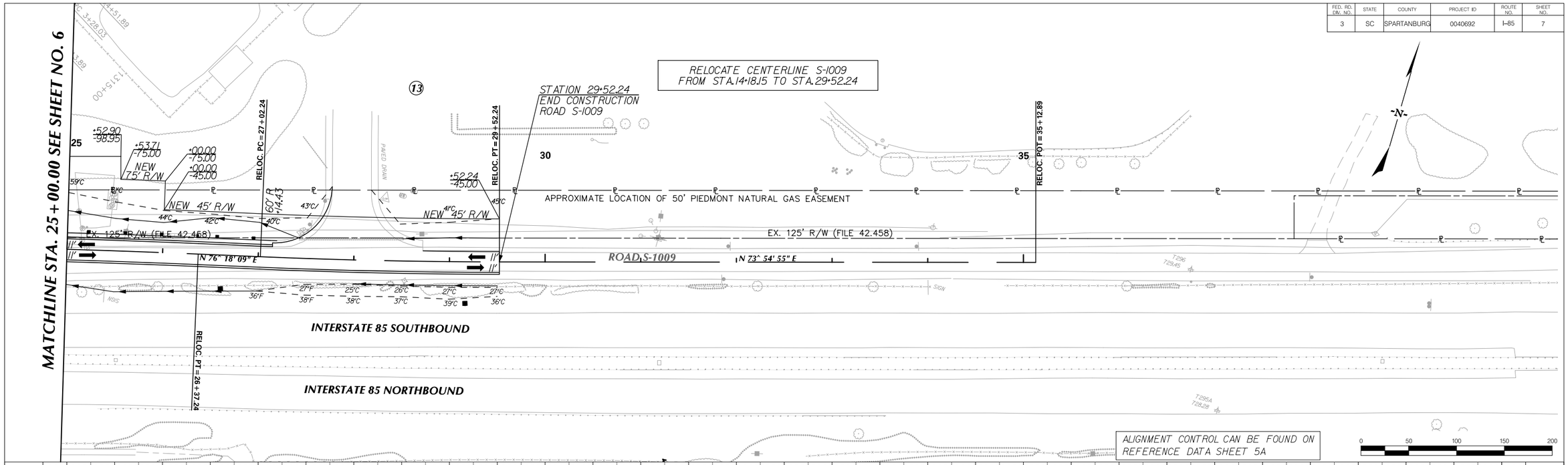
DESIGNED BY: _____ DATE _____
DRAWN BY: _____ DATE _____
CHECKED BY: _____ DATE _____

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
INTERSTATE 85 REHABILITATION

S-1009
PLAN AND PROFILE SHEET
STA. 14+18.15 TO STA. 25+00.00

SHEET 6 SCALE: 1" = 50'

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	7



Michael Baker INTERNATIONAL

PRELIMINARY PLANS NOT FOR CONSTRUCTION

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
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2			
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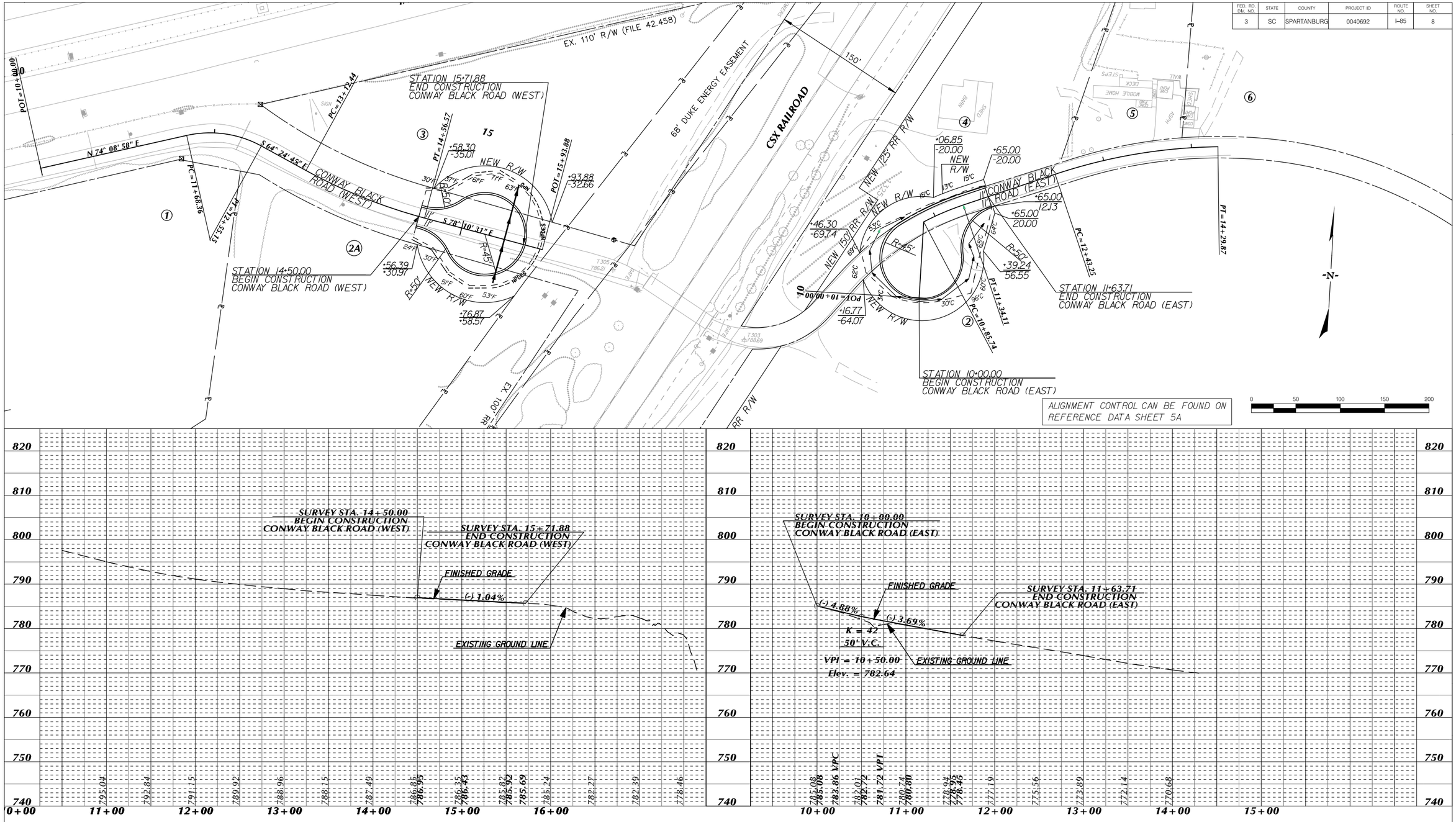
DESIGNED BY: _____ DATE _____
DRAWN BY: _____ DATE _____
CHECKED BY: _____ DATE _____

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
INTERSTATE 85 REHABILITATION

S-1009
PLAN AND PROFILE SHEET
STA. 25+00.00 TO STA. 29+52.24

SHEET 7 | SCALE: 1" = 50'

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	8



Michael Baker INTERNATIONAL

PRELIMINARY PLANS NOT FOR CONSTRUCTION

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
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2			
1			

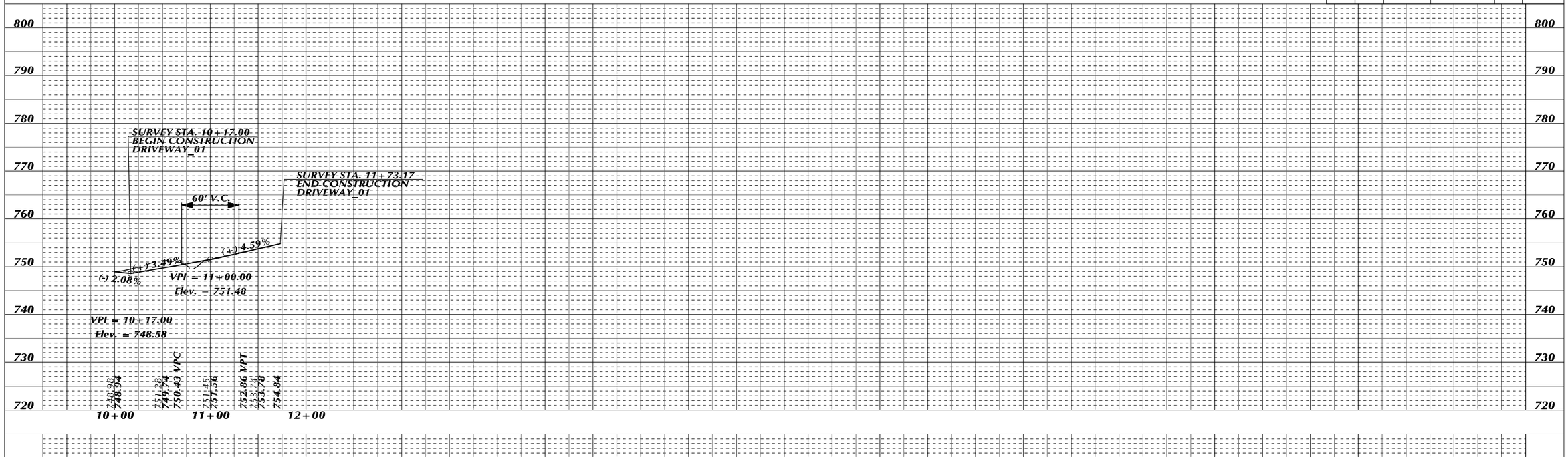
DESIGNED BY: _____ DATE _____
DRAWN BY: _____ DATE _____
CHECKED BY: _____ DATE _____

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
INTERSTATE 85 REHABILITATION

CONWAY BLACK ROAD
PLAN AND PROFILE SHEET

SHEET 8 SCALE: 1" = 50'

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	9



Michael Baker INTERNATIONAL

PRELIMINARY PLANS NOT FOR CONSTRUCTION

REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

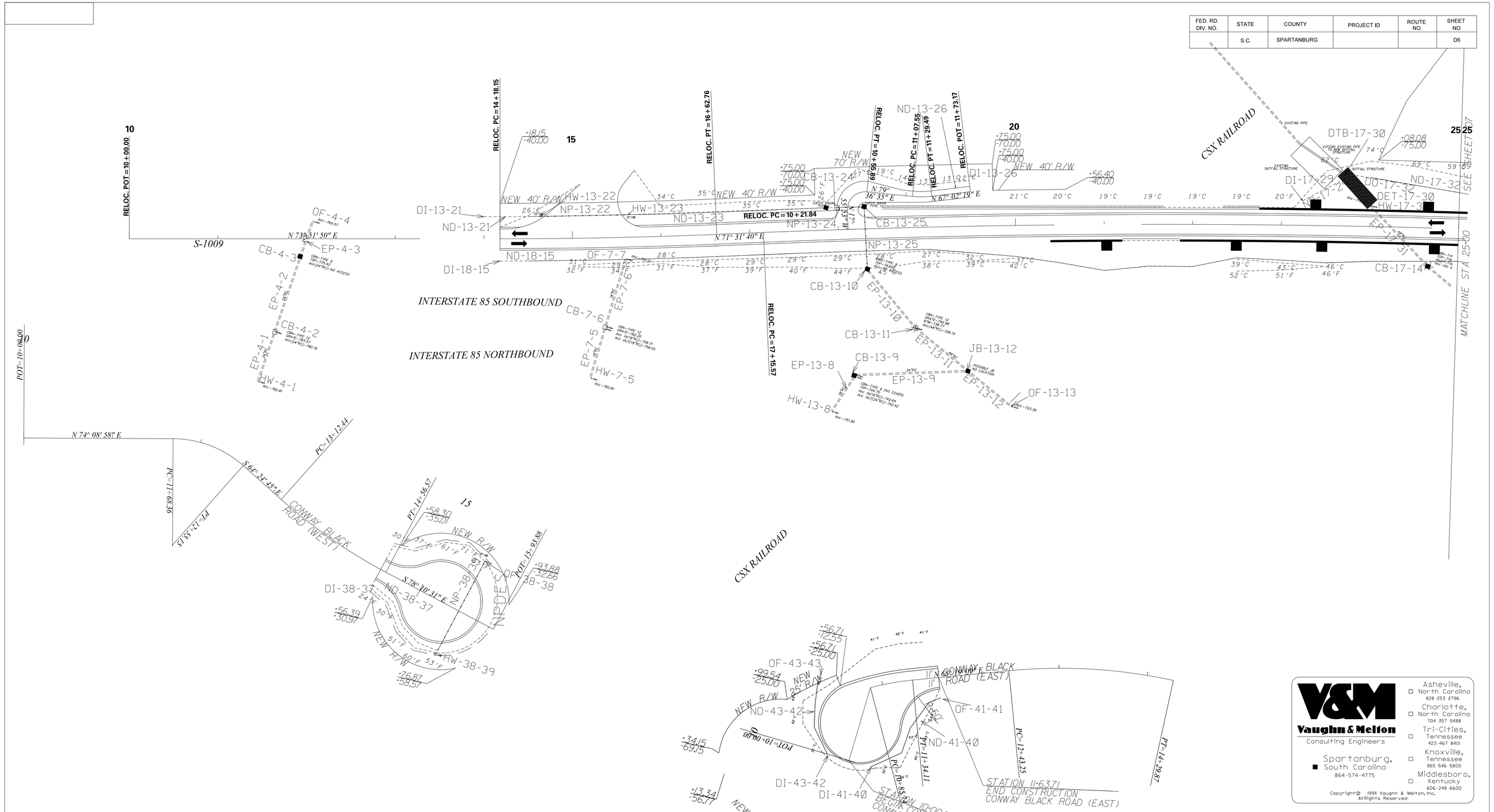
DESIGNED BY: _____ DATE _____
DRAWN BY: _____ DATE _____
CHECKED BY: _____ DATE _____

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
INTERSTATE 85 FRONTAGE ROAD IMPROVEMENTS

PROFILE SHEET
DRIVEWAY_01
STA. 10+17.00 TO STA. 11+73.17

SHEET 9 SCALE: 1" = 50'

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
	S.C.	SPARTANBURG			D6



REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

DESIGNED BY: _____ DATE _____
DRAWN BY: CSE DATE 7-DEC-2015
CHECKED BY: _____ DATE _____

Vaughn & Melton
Consulting Engineers
Spartanburg, South Carolina 864-574-4775
Asheville, North Carolina 828 253 2796
Charlotte, North Carolina 704 357 0488
Tri-Cities, Tennessee 423 467 8401
Knoxville, Tennessee 865 546 6800
Middlesboro, Kentucky 606-248-6600

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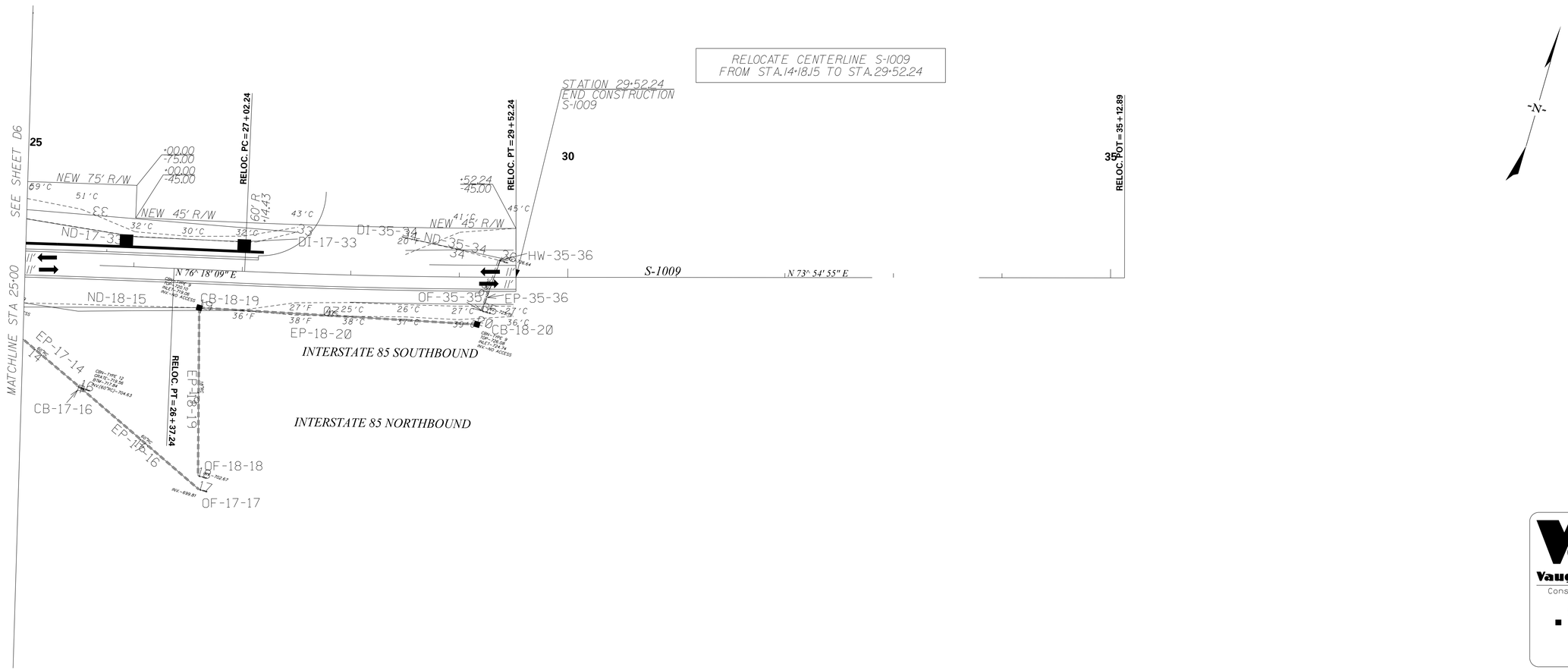
SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROAD DESIGN COLUMBIA, S.C.

S-1009/CONWAY BLACK DRAINAGE SHEET

SCALE 1"=50' RTE. DWG. NO. PNI

BORDER1.50.DGN

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
	S.C.	SPARTANBURG			D6



Vaughn & Melton
Consulting Engineers

Asheville, North Carolina 828 253 2796
Charlotte, North Carolina 704 357 0488
Tri-Cities, Tennessee 423 467 8401
Knoxville, Tennessee 865 546 5800
Middlesboro, Kentucky 606-248-6600
Spartanburg, South Carolina 864-574-4775

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
3			
2			
1			

DESIGNED BY: _____ DATE _____
DRAWN BY: CSE DATE 7-DEC-2015
CHECKED BY: _____ DATE _____

SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROAD DESIGN COLUMBIA, S.C.

S-1009/CONWAY BLACK DRAINAGE SHEET

SCALE 1"=50' RTE. DWG. NO. PNI

BORDER1.50.DGN

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
	S.C.	SPARTANBURG			D7

Smooth Wall Pipe																							
	Geometry				Upstream				Downstream				Fill Height				Smooth Wall Options						
Link ID	Diameter (in)	No. of Barrels	Pipe Length (ft)	Slope (%)	Node	Node Description	Node Station	Link Invert (ft)	Node	Node Description	Node Station	Link Invert (ft)	Min (ft)	Max (ft)	Min Field SPT "N" below invert	Joint Pressure (psi)	HDPE Type	Built ✓	RCP Highest Class	Built ✓	SRAP Thickest Gage	Built ✓	Notes
EP-4-1	2.00	1	59.195	4.477	HW-4-1	24" HEADWALL	11+45.15	782.810	CB-4-2	EXISTING CATCH BASIN	11+64.06	780.160											
EP-4-2	2.00	1	89.622	7.866	CB-4-2	EXISTING CATCH BASIN TYPE 12	11+64.06	780.160	CB-4-3	EXISTING CATCH BAIN TYPE 9	11+92.57	773.110											
EP-4-3	2.00	1	42.433	8.343	CB-4-3	EXISTING CATCH BAIN TYPE 9	11+92.57	773.110	OF-4-4	24" HEADWALL	12+06.85	769.570											
EP-7-5	1.50	1	59.363	3.538	HW-7-5	18" HEADWALL	15+20.05	760.810	CB-7-6	EXISTING CATCH BASIN TYPE 12	15+36.87	758.710											
EP-7-6	1.50	1	80.799	4.134	CB-7-6	EXISTING CATCH BASIN TYPE 12	15+36.87	758.550	OF-7-7	18" HEADWALL	15+60.15	755.210											
EP-13-8	1.50	1	47.950	19.207	HW-13-8	18" HEADWALL	17+84.15	751.850	CB-13-9	EXISTING CATCH BASIN TYPE 9	18+11.08	742.640											
EP-13-9	2.00	1	128.459	13.133	CB-13-9	EXISTING CATCH BAIN TYPE 9	18+11.08	742.420	JB-13-12	JUNCT BOX	19+39.87	725.550											
EP-13-10	4.00	1	85.404	0.503	CB-13-10	EXISTING CATCH BAIN TYPE 9	18+31.06	728.620	CB-13-11	EXISTING CATCH BASIN TYPE 12	18+82.34	728.190											
EP-13-11	4.00	1	76.861	3.435	CB-13-11	EXISTING CATCH BASIN TYPE 12	18+82.34	728.190	JB-13-12	JUNCT BOX	19+39.87	725.550											
EP-13-12	4.00	1	62.741	3.443	JB-13-12	JUNCT BOX	19+39.87	725.550	OF-13-13	48" HEADWALL	19+86.59	723.390											
EP-17-14	5.00	1	113.116	2.732	CB-17-14	EXISTING CATCH BAIN TYPE 9	24+66.11	707.720	CB-17-16	EXISTING CATCH BASIN TYPE 12	25+54.78	704.630											
ND-18-15	N/A	1	1244.993	3.604	DI-18-15	DITCH INLET	14+18.15	760.970	CB-18-19	EXISTING CATCH BAIN TYPE 9	26+61.37	716.100											
EP-17-16	5.00	1	143.125	3.368	CB-17-16	EXISTING CATCH BASIN TYPE 12	25+54.78	704.630	OF-17-17	60" HEADWALL	26+66.17	699.810											
EP-18-19	1.50	1	154.746	8.679	CB-18-19	EXISTING CATCH BAIN TYPE 9	26+61.37	716.100	OF-18-18	18" HEADWALL	26+64.96	702.670											
EP-18-20	1.50	1	256.197	2.334	CB-18-20	EXISTING CATCH BAIN TYPE 9	29+17.45	722.080	CB-18-19	C.B. TYPE 9	26+61.37	716.100											
ND-13-21	N/A	1	62.893	7.473	DI-13-21	DITCH INLET	13+99.91	763.670	HW-13-22	15" HEADWALL	14+62.92	758.970											
NP-13-22	1.25	1	100.034	4.968	HW-13-22	15" HEADWALL	14+62.92	758.970	HW-13-23	15" HEADWALL	15+62.82	754.000											
ND-13-23	N/A	1	235.631	3.225	HW-13-23	15" HEADWALL	15+62.82	754.000	CB-13-24	C.B. TYPE 1	17+99.50	746.400											
NP-13-24	1.50	1	30.670	18.161	CB-13-24	C.B. TYPE 1	17+99.50	746.400	CB-13-25	C.B. TYPE 1	18+28.94	740.830											
NP-13-25	2.00	1	70.666	15.538	CB-13-25	C.B. TYPE 1	18+28.94	740.830	CB-13-10	EXISTING CATCH BAIN TYPE 9	21+50.00	729.850											
ND-13-26	N/A	1	175.895	24.000	DI-13-26	DITCH INLET	DW 11+73.17	807.840	CB-13-24	C.B. TYPE 1	17+87.05	762.450											
ND-17-29	N/A	1	73.432	1.784	DI-17-29	DITCH INLET	23+23.70	713.310	DTB-17-30	DETENTION BASIN	23+74.66	712.000											
DET-17-30	N/A	1	40.114	4.014	DTB-17-30	DETENTION BASIN	23+74.66	712.000	HW-17-31	48" HEADWALL	23+99.98	710.390											
EP-17-31	4.00	1	94.369	2.829	HW-17-31	48" HEADWALL	23+99.98	710.390	CB-17-14	C.B. TYPE 9	24+66.11	707.720											
ND-17-32	N/A	1	39.211	17.883	DO-17-32	DITCH OUTFALL	23+83.25	720.498	DTB-17-30	DETENTION BASIN	23+74.66	713.486											
ND-17-33	N/A	1	340.389	4.952	DI-17-33	DITCH INLET	27+48.98	727.977	DO-17-32	DITCH OUTFALL	23+83.25	711.060											
ND-35-34	N/A	1	96.563	5.996	DI-35-34	DITCH INLET	28+46.28	732.430	HW-35-36	18" HEADWALL	29+36.14	726.640											
EP-35-36	1.50	1	49.227	1.788	HW-35-36	18" HEADWALL	29+36.14	726.640	OF-35-35	18" HEADWALL	29+21.48	725.760											
ND-38-37	N/A	1	108.150	0.874	DI-38-37	DITCH INLET	CBW 14+50+00	783.850	HW-38-39	18" HEADWALL	CBW 15+50.00	782.800											
NP-38-39	1.50	1	113.993	2.535	HW-38-39	18" HEADWALL	CBW 16+50.00	782.800	OF-38-38	18" HEADWALL	CBW 15+50.00	779.910											
ND-41-40	N/A	1	117.949	5.604	DI-41-40	DITCH INLET	CBE 10+00.00	782.470	OF-41-41	DITCH OUTFALL	CBE 11+63.71	776.31											
ND-43-42	N/A	1	85.054	4.515	DI-43-42	DITCH INLET	CBE 10+00.00	782.47	OF-43-43	DITCH OUTFALL	10+75.00	778.63											

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REV. NO.	BY	DATE	DESCRIPTION OF REVISION
4			
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DRAWN BY: CSE DATE 7-DEC-2015
CHECKED BY: DATE

SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROAD DESIGN COLUMBIA, S.C.

S-1009/CONWAY BLACK DRAINAGE SHEET

SCALE N/A RTE. DWG. NO. PNI

BORDER1.50.DGN

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
	S.C.	SPARTANBURG			D8

												Design Storm			100-Year Storm					
Location	**Video Pipe Inspection Pipe ID**	**Road / Classification**	**Design Storm (25-year /50-year)**	**Stream Name**	**Drainage Structure**	**Structure Height (ft)**	**Existing Invert (Inlet)**	**Existing Invert (Outlet)**	**Cross-line Drainage Area (acre)**	**Design Flow (cfs)**	**100-Year Flow (cfs)**	**Calculated Headwater**	**Headwater Depth (from inlet)**	**Hw / D**	**Calculated Headwater**	**Headwater Depth (from inlet)**	**Hw / D**	**Hydraulic Analysis Notes**	**Inspection Notes**	**Recommendation**
Network 4	--	I-85/Primary	50-Year		18" RC Pipe	0.5	782.81	769.57	System analyzed with Geopak Drainage									Cross-line Drainage meets design standards. Geopak Drainage Nodes 1,2,3,4	--	Retain existing pipe system.
Network 7	--	I-85/Primary	50-Year		18" RC Pipe	1.5	760.81	755.21	System analyzed with Geopak Drainage									Cross-line Drainage meets design standards. Geopak Drainage Nodes 5,6,7	--	Retain existing pipe system.
Network 13	--	I-85/Primary	50-Year		18", 24", 48" RC Pipe	4	No Access, 751.85	723.39	System analyzed with Geopak Drainage									System Drainage meets design standards. Geopak Drainage Nodes 8,9,10,11,12,13,21,22,23,24,25,26	--	Missing Invert at Node 10; Assumed invert Elevation. Verify Calucations when invert information is available. If condtions meet design standards retain the existing pipes.
Network 17	--	I-85/Primary	50-Year		48", 60" RC Pipe	5	710.39	699.81	System analyzed with Geopak Drainage									System Drainage meets design standards. Part of a larger Drainage system on Shady Lane, that includes a possible environmental detention basin. Geopak Drainage Nodes 29,30,31,32,33, 14,16,17	--	Retain Existing Pipe System, and replace detention basin with identical structure.
Network 18	--	I-85/Primary	50-Year		18" RC Pipe	1.5	No Access, 706.78	702.67	System analyzed with Geopak Drainage									Missing invert elevation data, inverts assumed based on standard drawings and minimum slope crieria. Geopak Drainage Nodes 18, 19,20.	--	Verify hydraulic calculations when invert information is available. If conditions meet design standards, retain the existing pipe system.
S-1009 Sta 14+62.92-Sta 15+62.82	--	S-10009/Collector	50-Year		18" RC Pipe	1.5	758.97	755.13	System analyzed with Geopak Drainage									Entrance Pipe meets design standards. Geopak Drainage Nodes 22,23	--	Place 18" RC Pipe under entrance
S-1009 Sta 17+85.27-Sta 18+28.94	--	S-1009/Collector	50-Year		18" RC Pipe	1.5	747.96	746.71	System analyzed with Geopak Drainage									Entrance Pipe meets design standards. Geopak Drainage Nodes 24,25	--	Place 24" RC Pipe under entrance
S-1009 Sta 18+28.94-23+24.03	--	S-1009/Collector	50-Year		24" RC Pipe	2	746.71	713.31	System analyzed with Geopak Drainage									System Drainage meets design standards. (Links 29, 30, and 32 represent the detention basin) Geopak Drainage Nodes 25,26,27,28,29	--	Tie into 24" pipe under entrance. Place 24" RC Pipe under retaining wall alongside Shady Lane. Outlet into new detention basin.
S-1009 Sta 29+31.11	--	S-1009/Collector	50-Year		18" RC Pipe	1.5	726.64	725.76	System analyzed with Geopak Drainage									Cross Line Pipe meets design standards. Geopak Drainage Nodes 36,35	--	Retain Existing Pipe System.
Conway Black Road (West) Sta 15+49.69	--	Conway Black Road/Collector	50-Year		18" RC Pipe	1.5	782.8	779.91	System analyzed with Geopak Drainage									Cross Line Pipe meets design standards. Geopak Drainage Nodes 38,39	--	Place 18" RC Pipe at outlet of ditch
For more information regarding the new pipes see Sheet D7.																				

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4			
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2			
1			

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CHECKED BY: _____ DATE _____

SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROAD DESIGN COLUMBIA, S.C.

S-1009/CONWAY BLACK DRAINAGE SHEET

SCALE 1"=100' RTE. DWG. NO. PNI

BORDER1.50.DGN

S–1009

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
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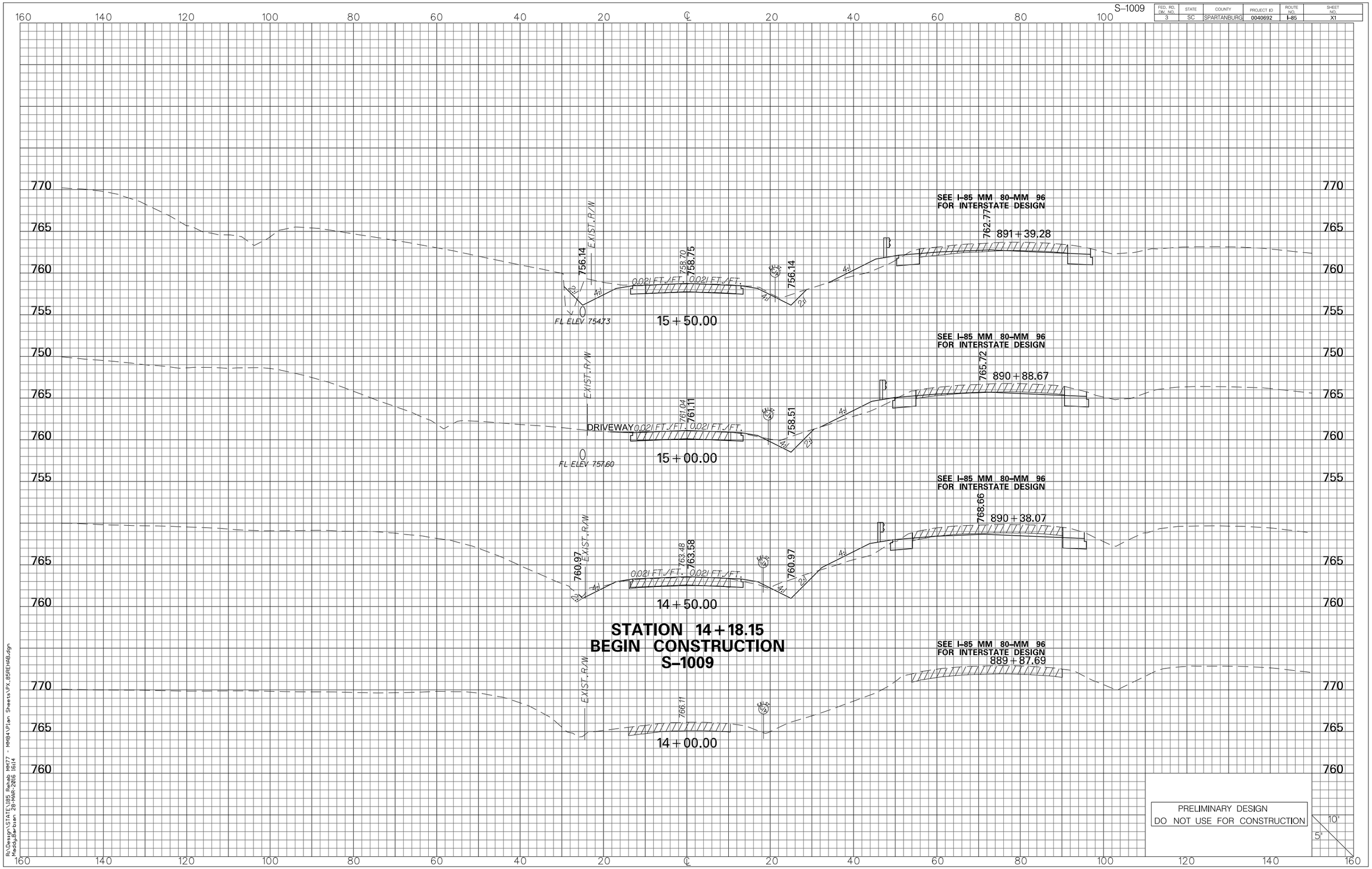

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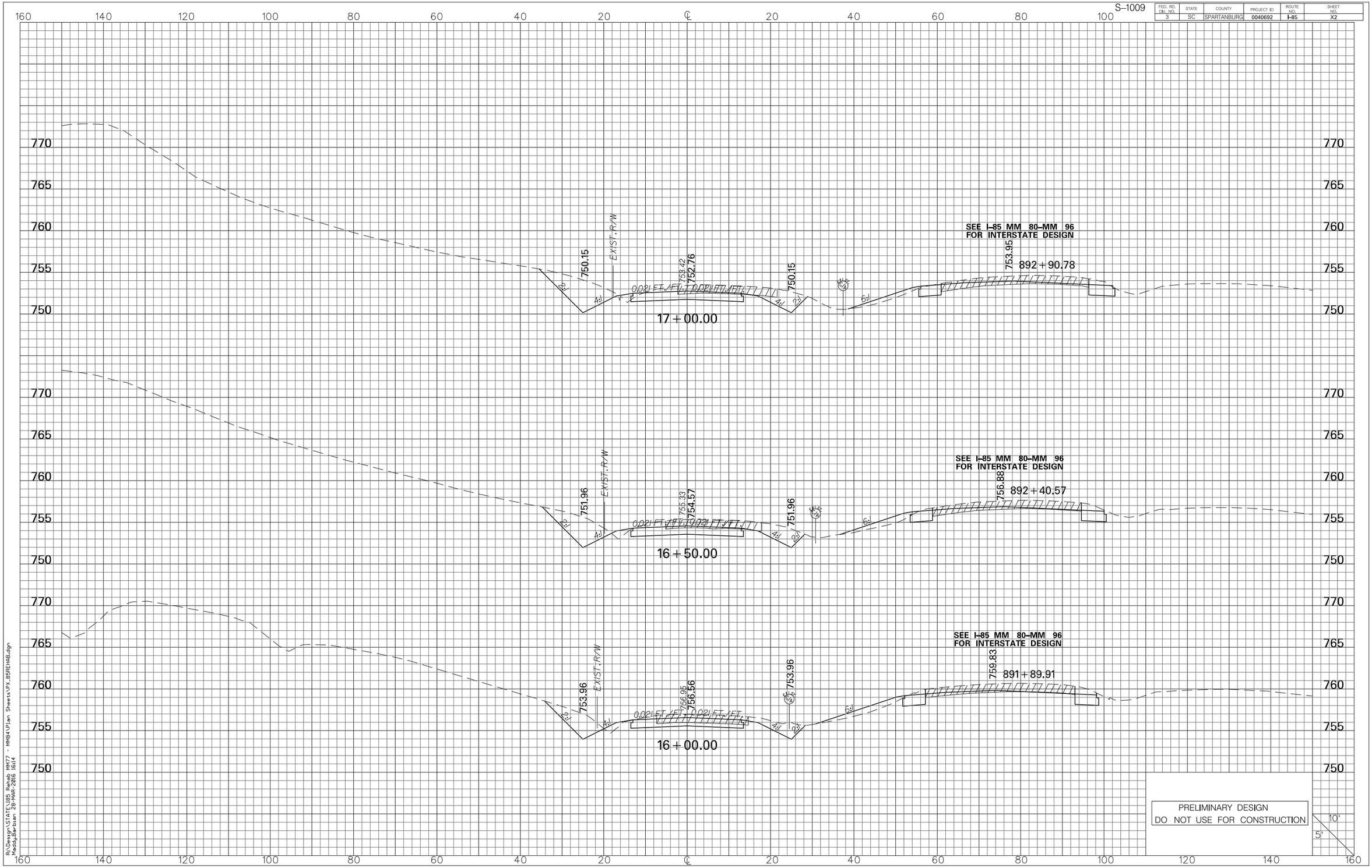
S–1009

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	X2



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S-1009

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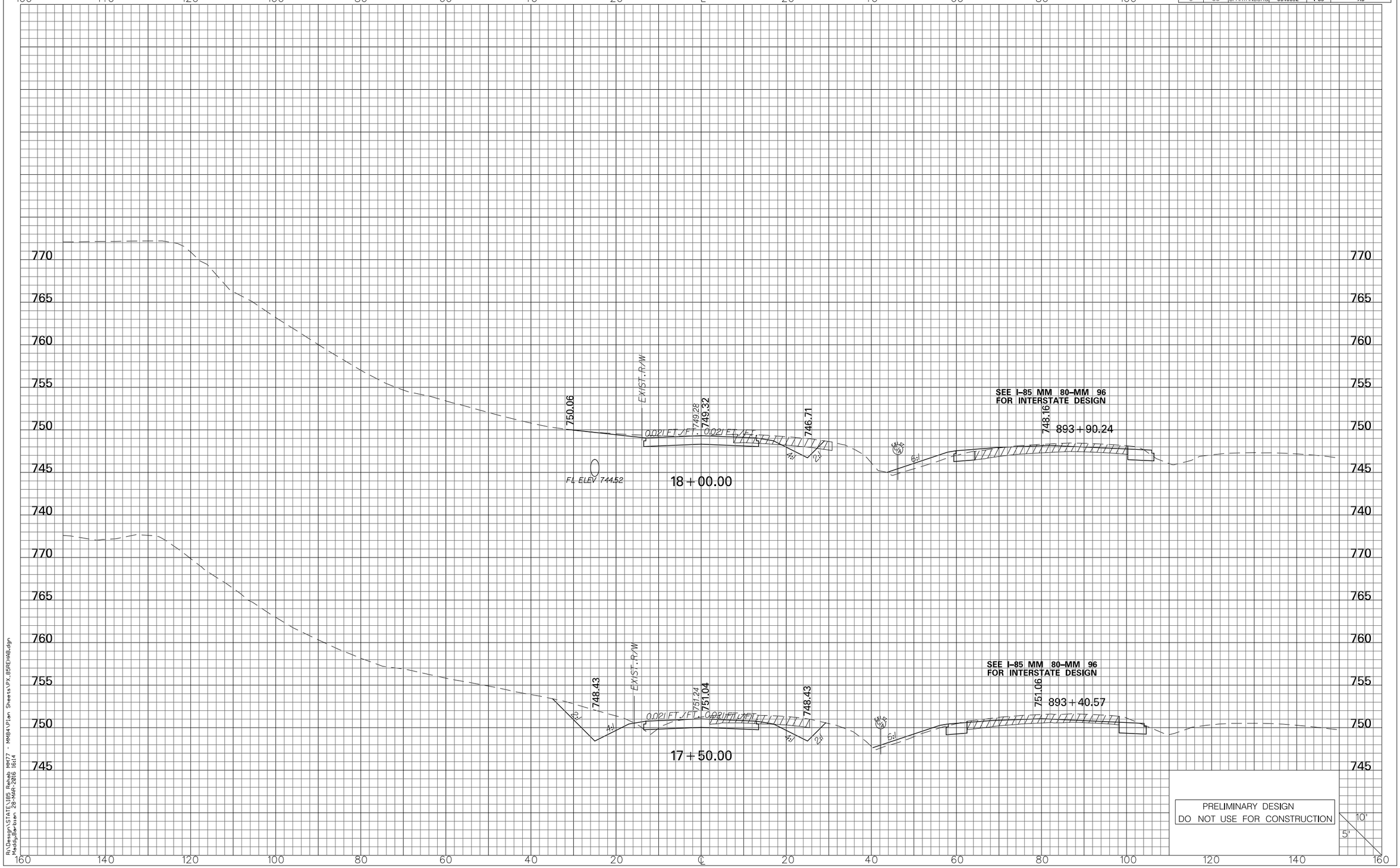

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S-1009

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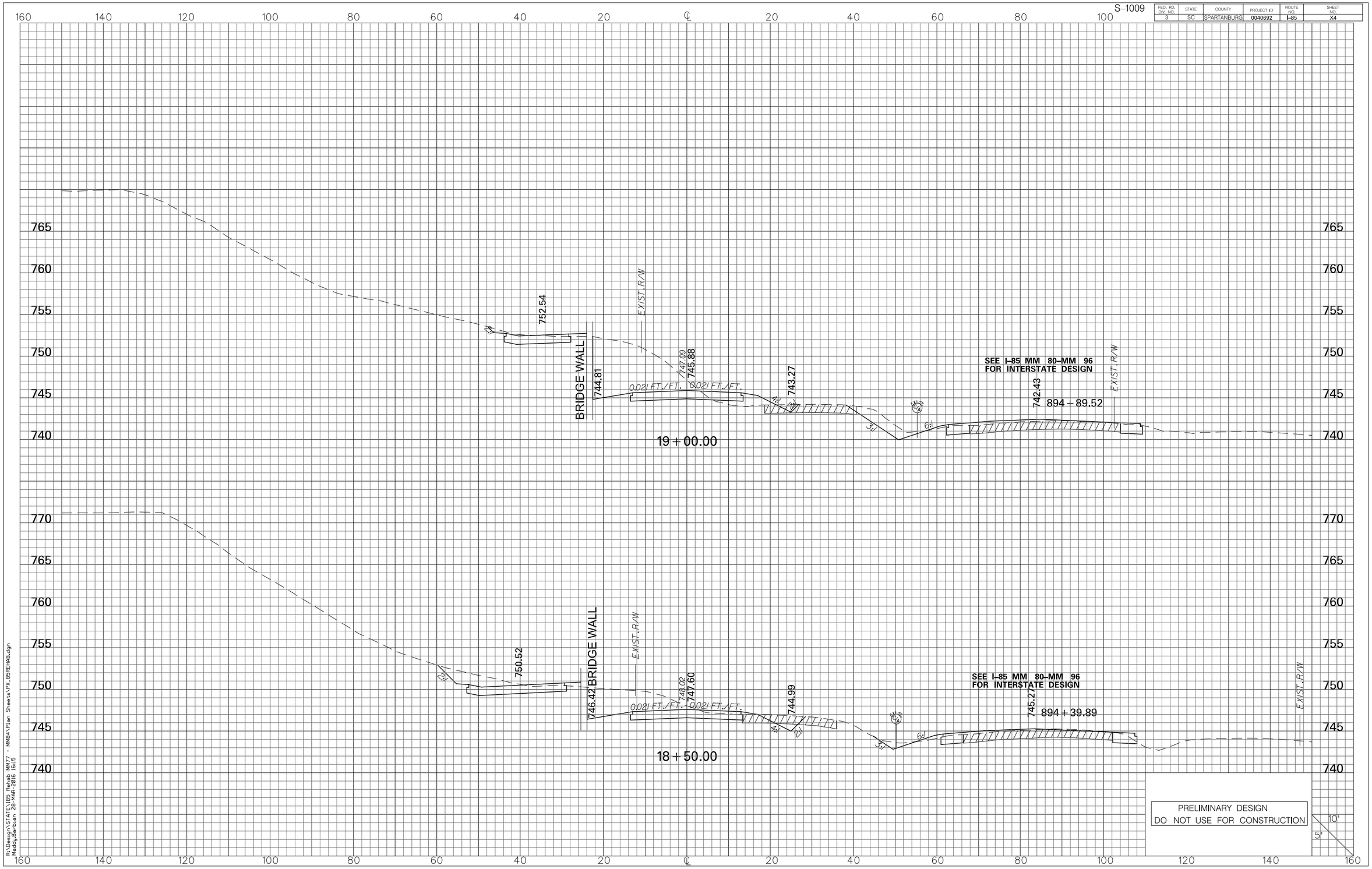
3	SC	SPARTANBURG	0040692	I-85	X4



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S–1009

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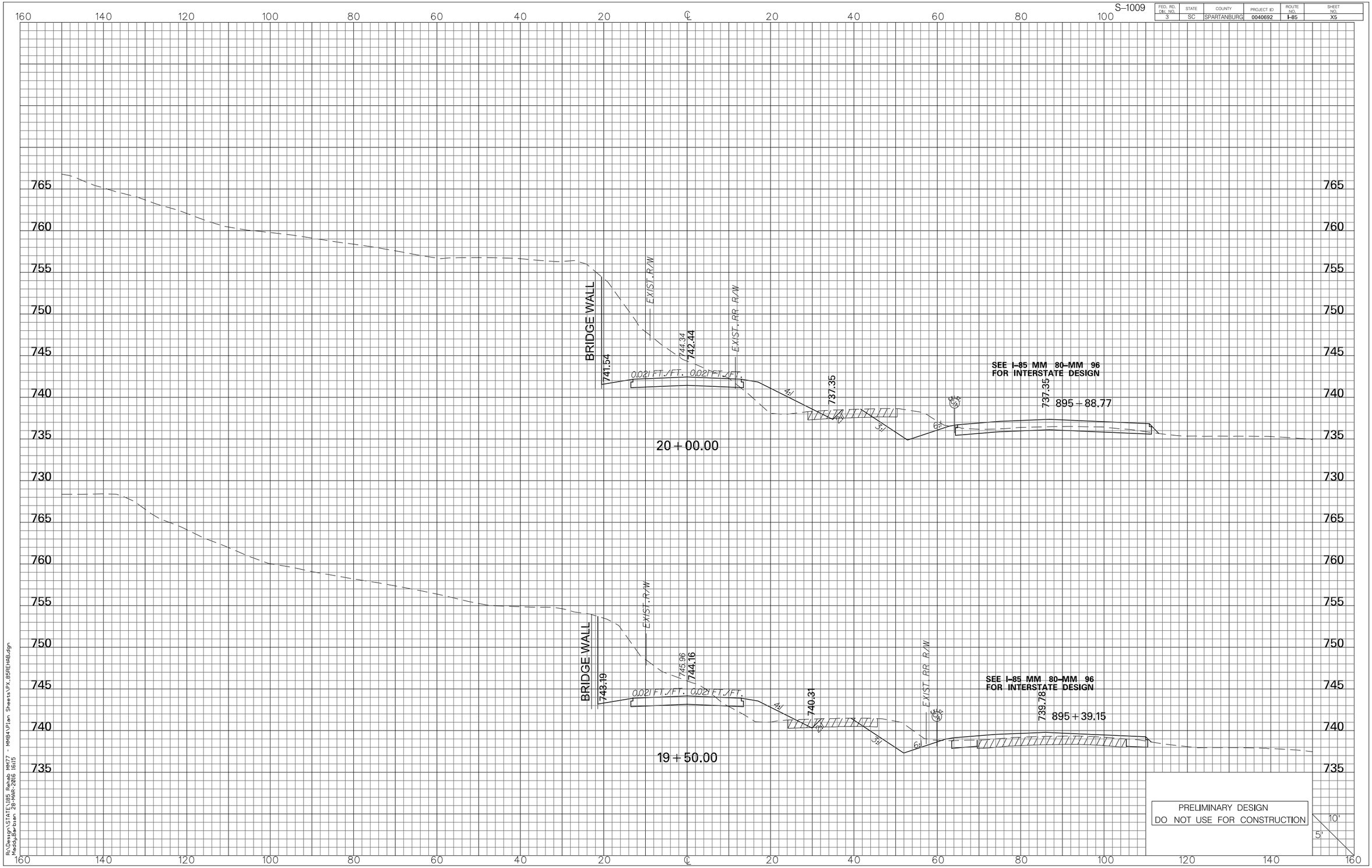
3	SC	SPARTANBURG	0040692	I-85	X5



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S-1009

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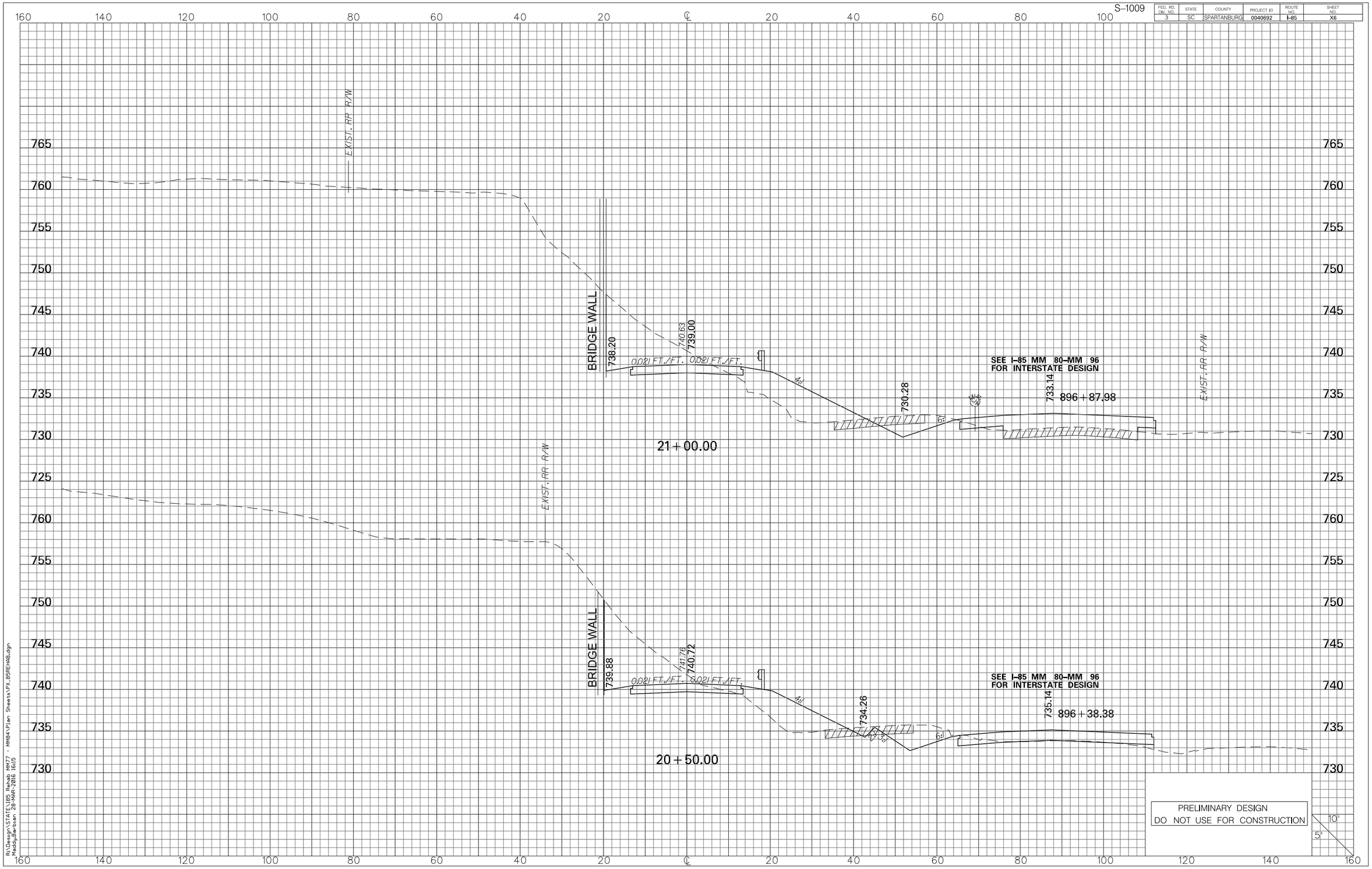
3	SC	SPARTANBURG	0040692	I-85	X6



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S–1009

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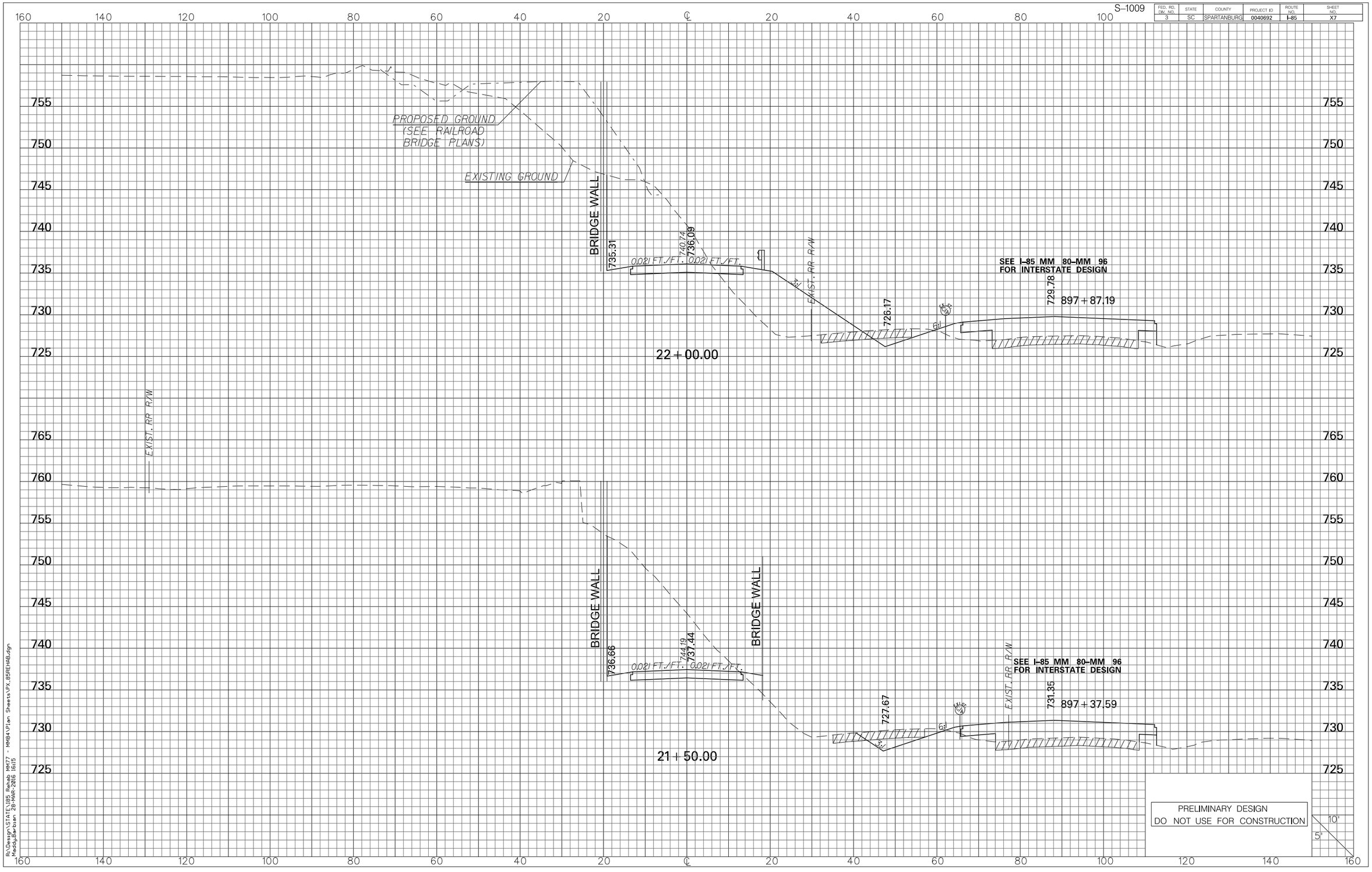
3	SC	SPARTANBURG	0040692	I-85	X7



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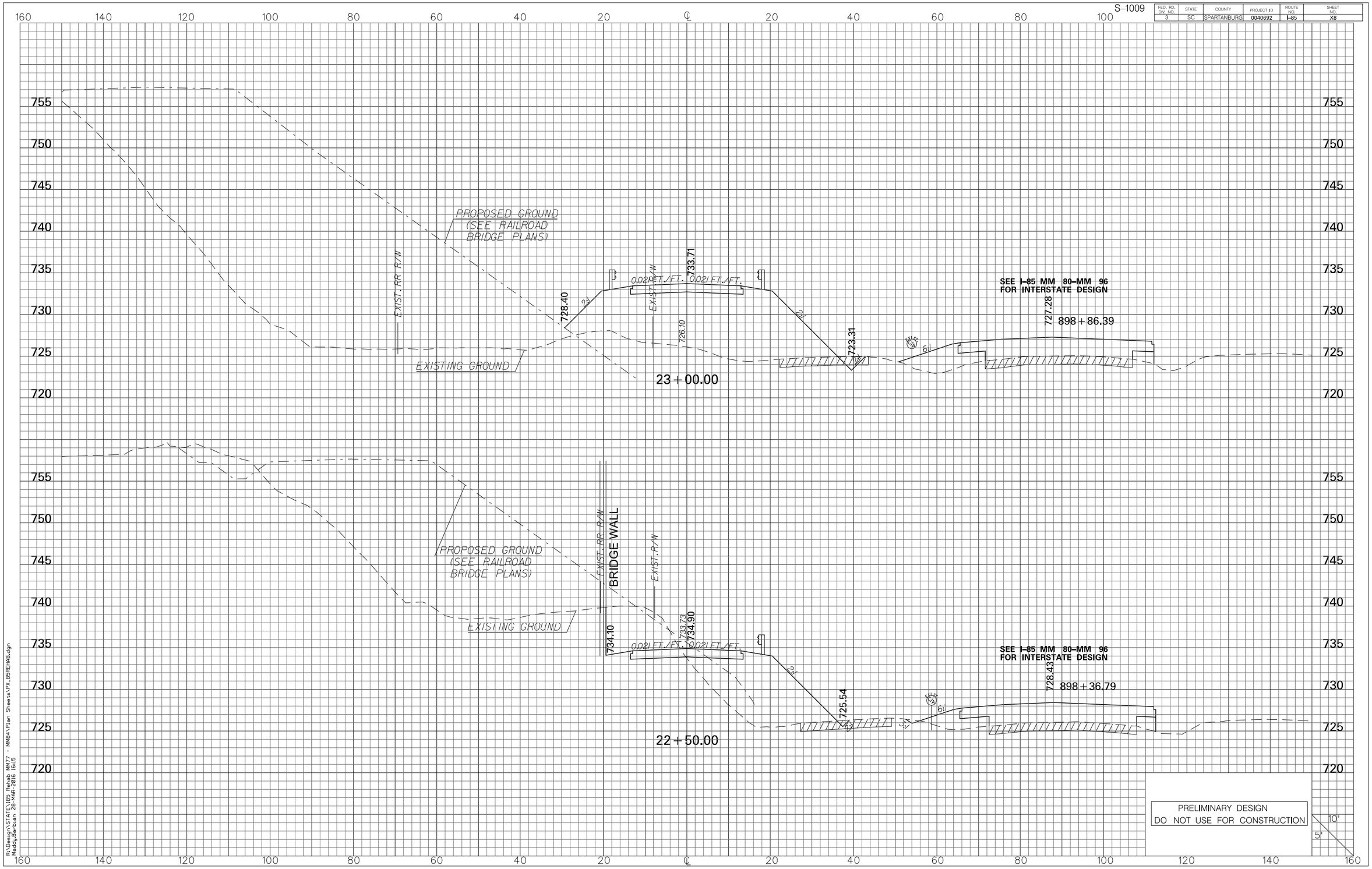
3	SC	SPARTANBURG	0040692	I-85	X8



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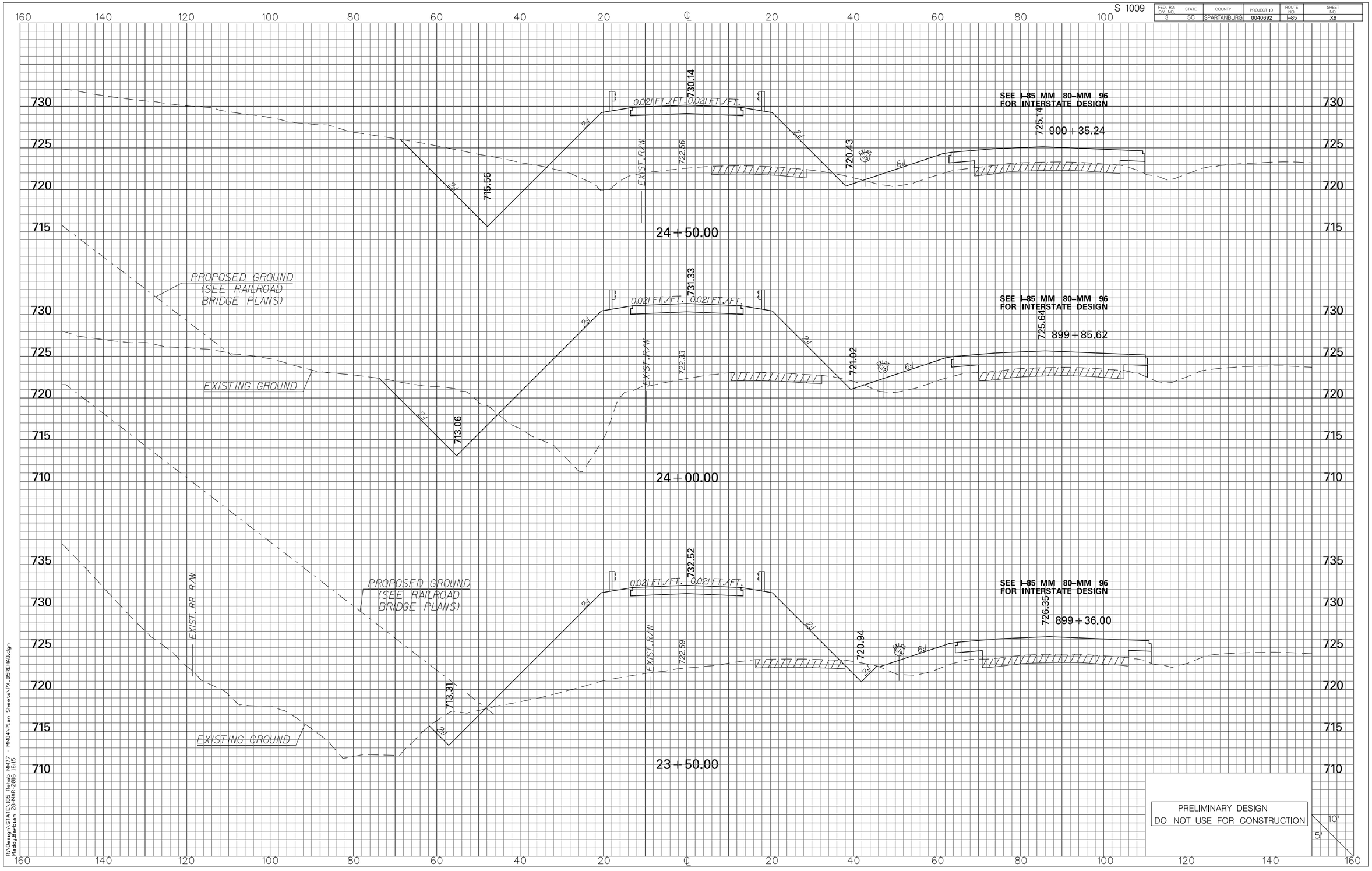

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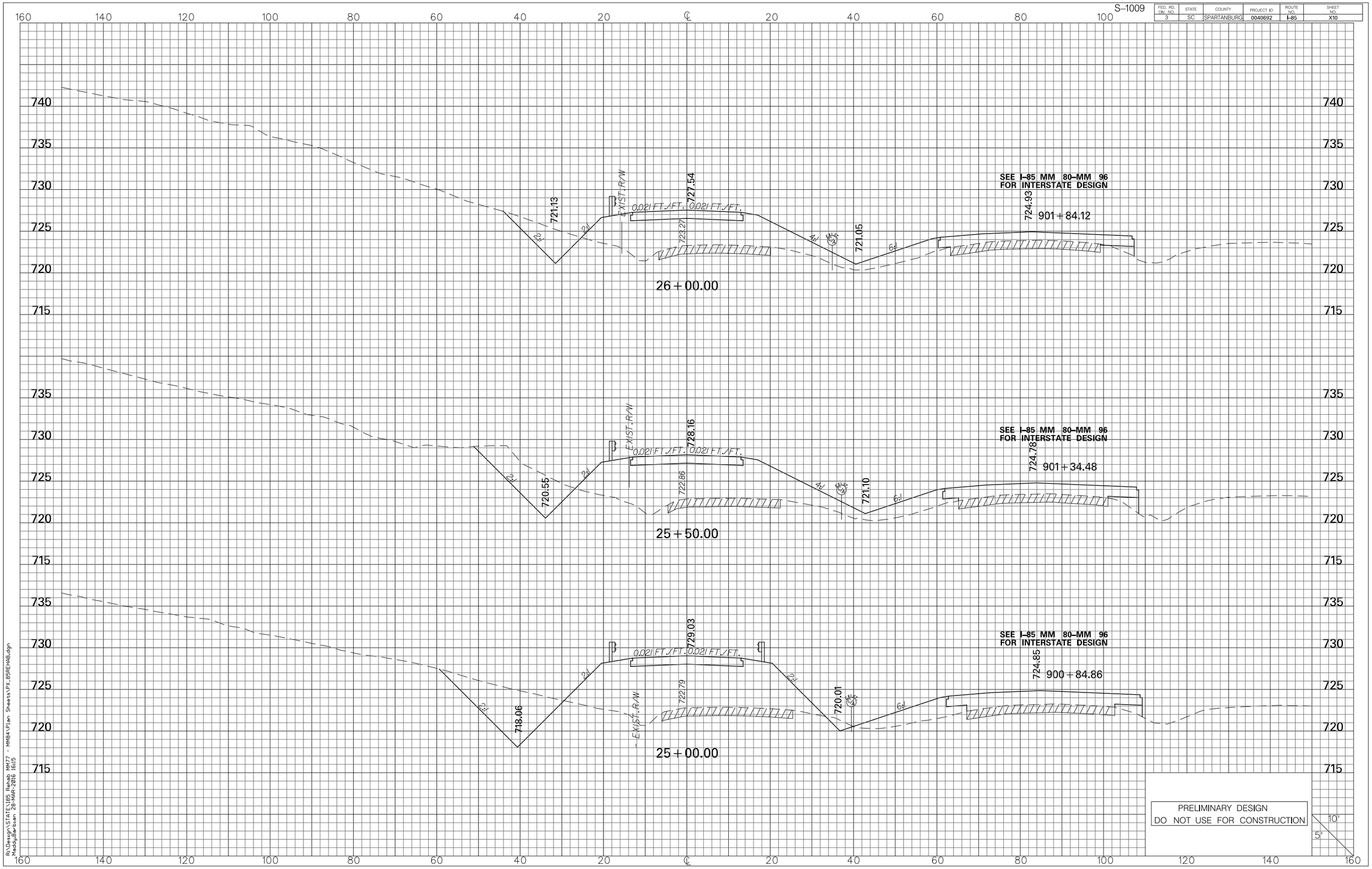

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S-1009

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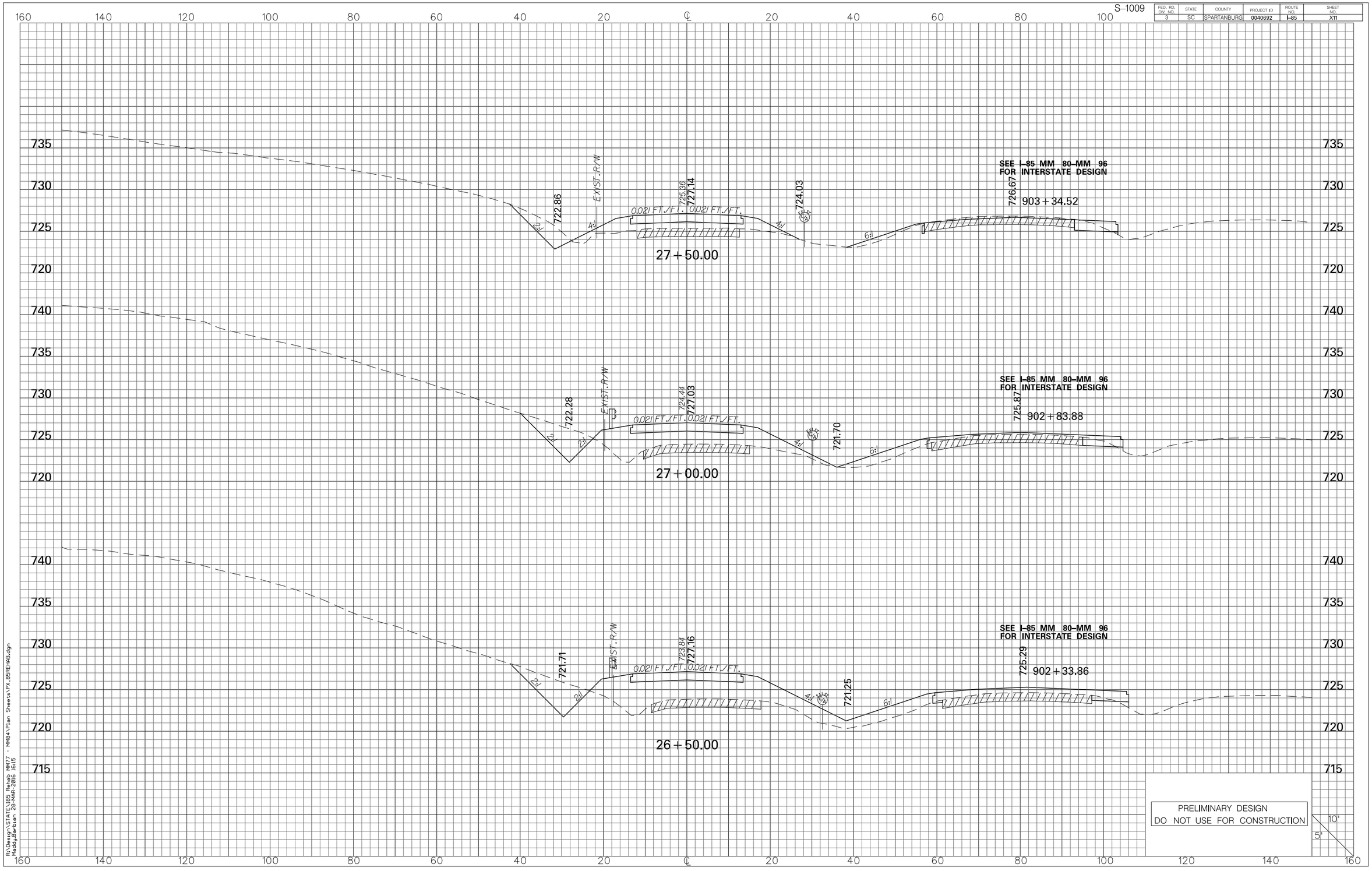
3	SC	SPARTANBURG	0040692	I-85	X11



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S-1009

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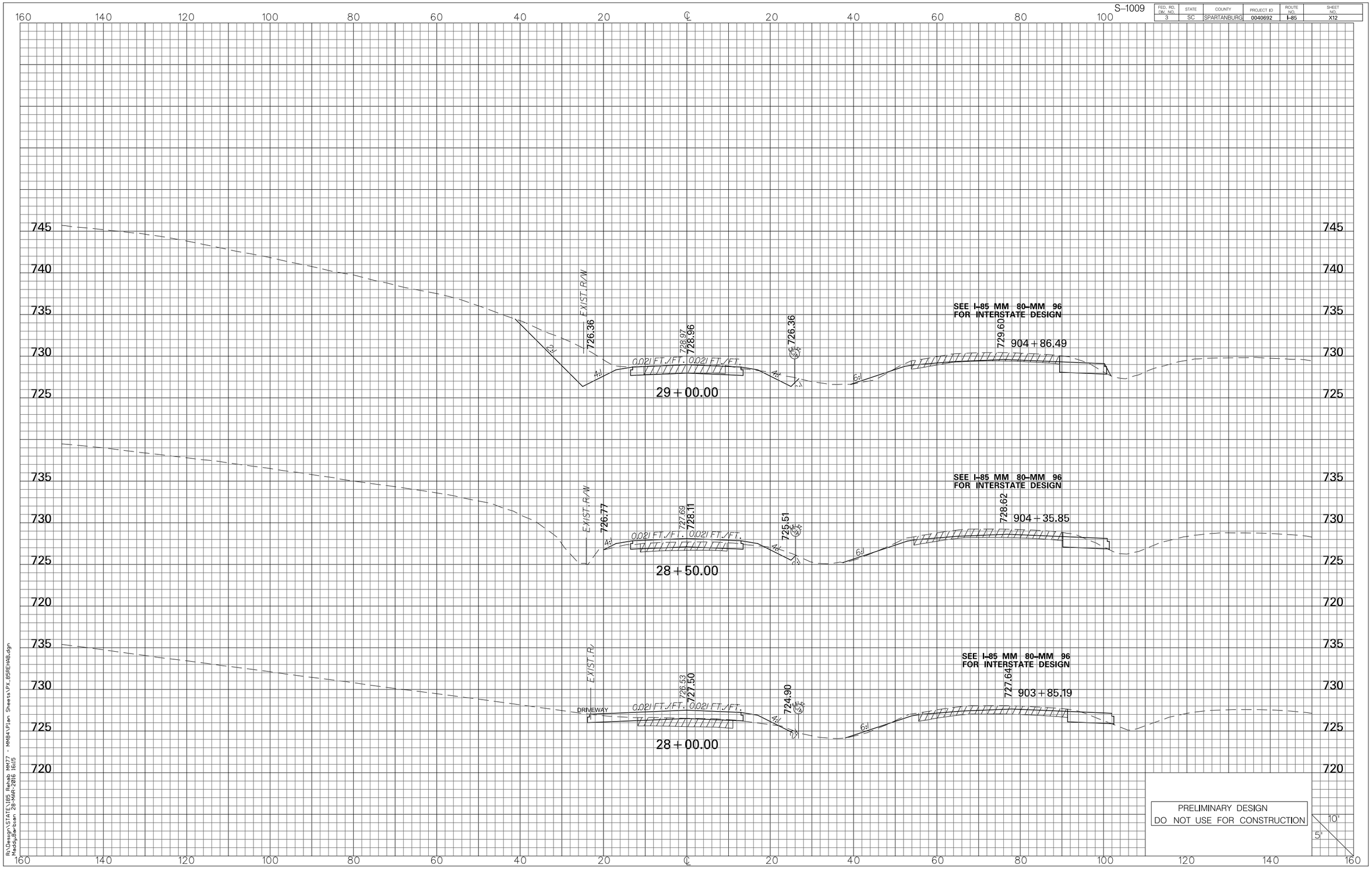

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S–1009

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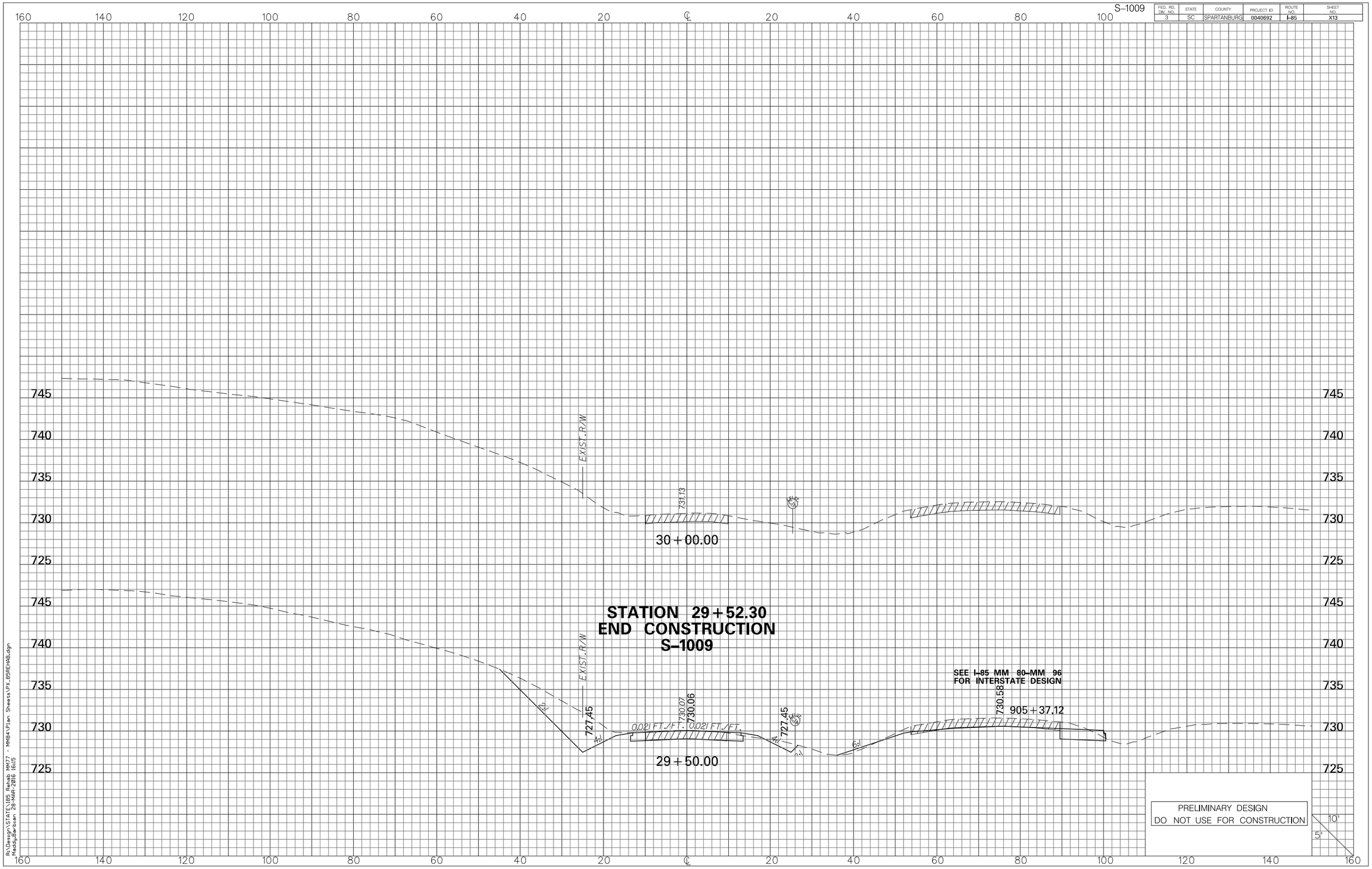

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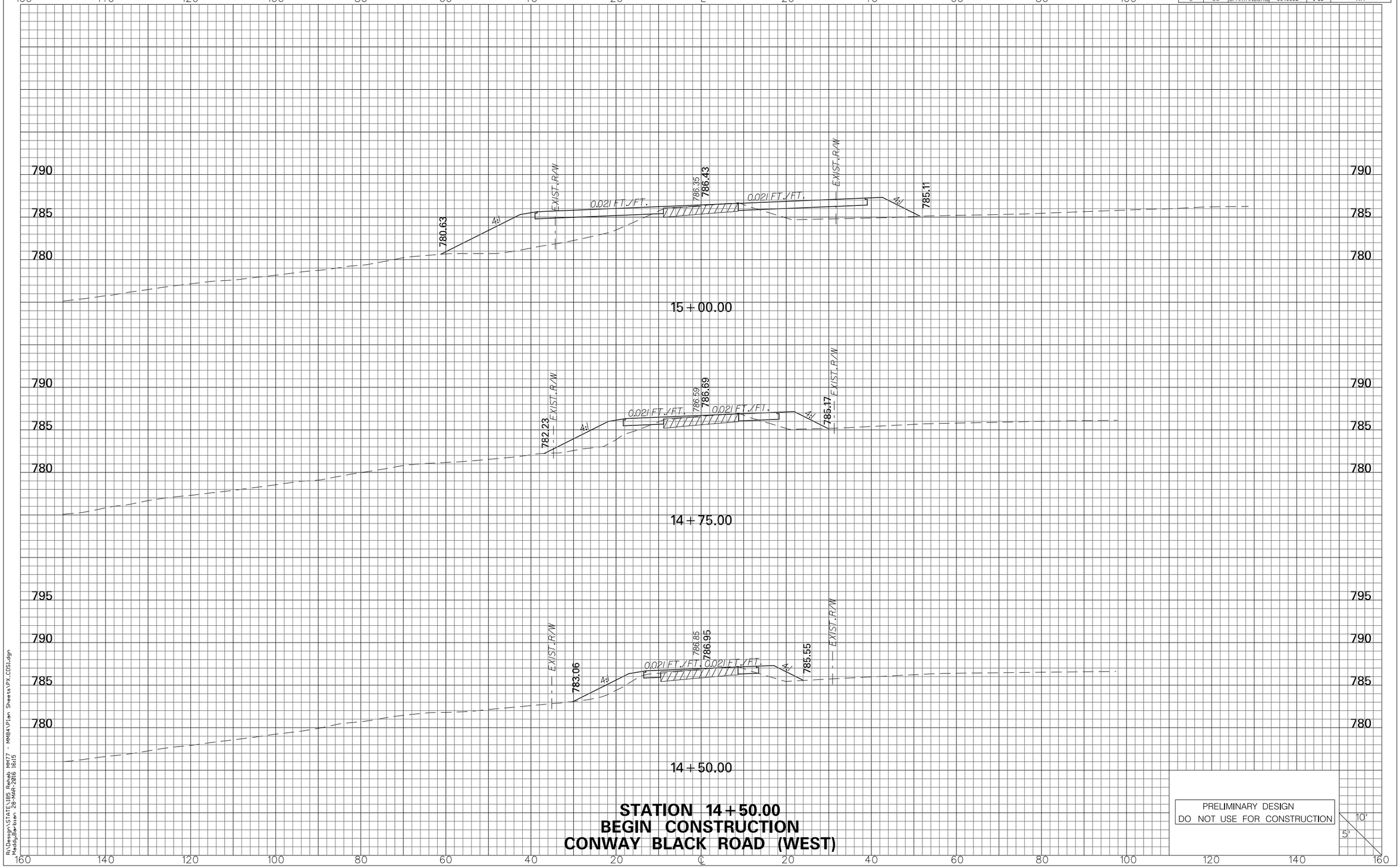
CONWAY BLACK ROAD (WEST)

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	X14



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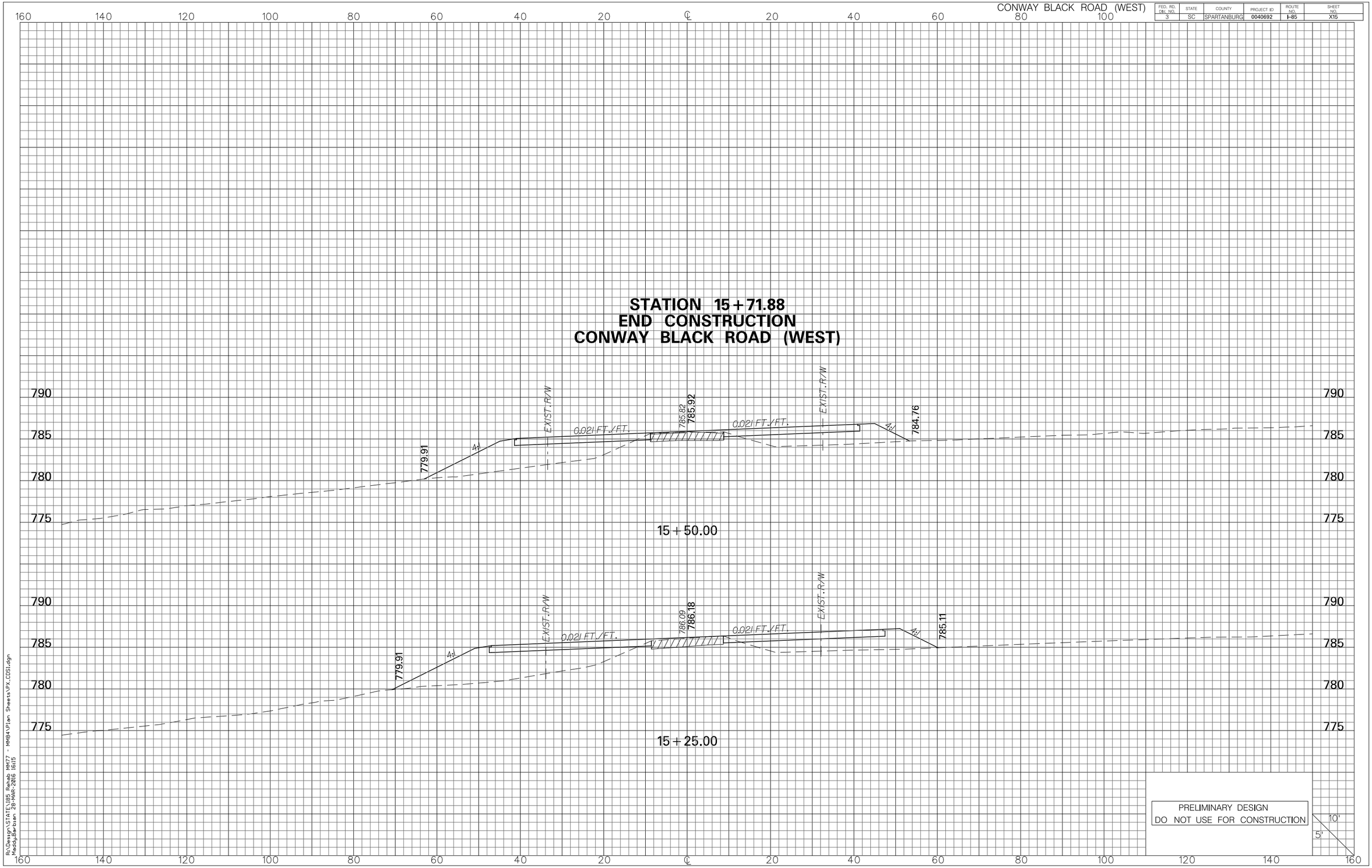
CONWAY BLACK ROAD (WEST)

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	X15

STATION 15+71.88
END CONSTRUCTION
CONWAY BLACK ROAD (WEST)



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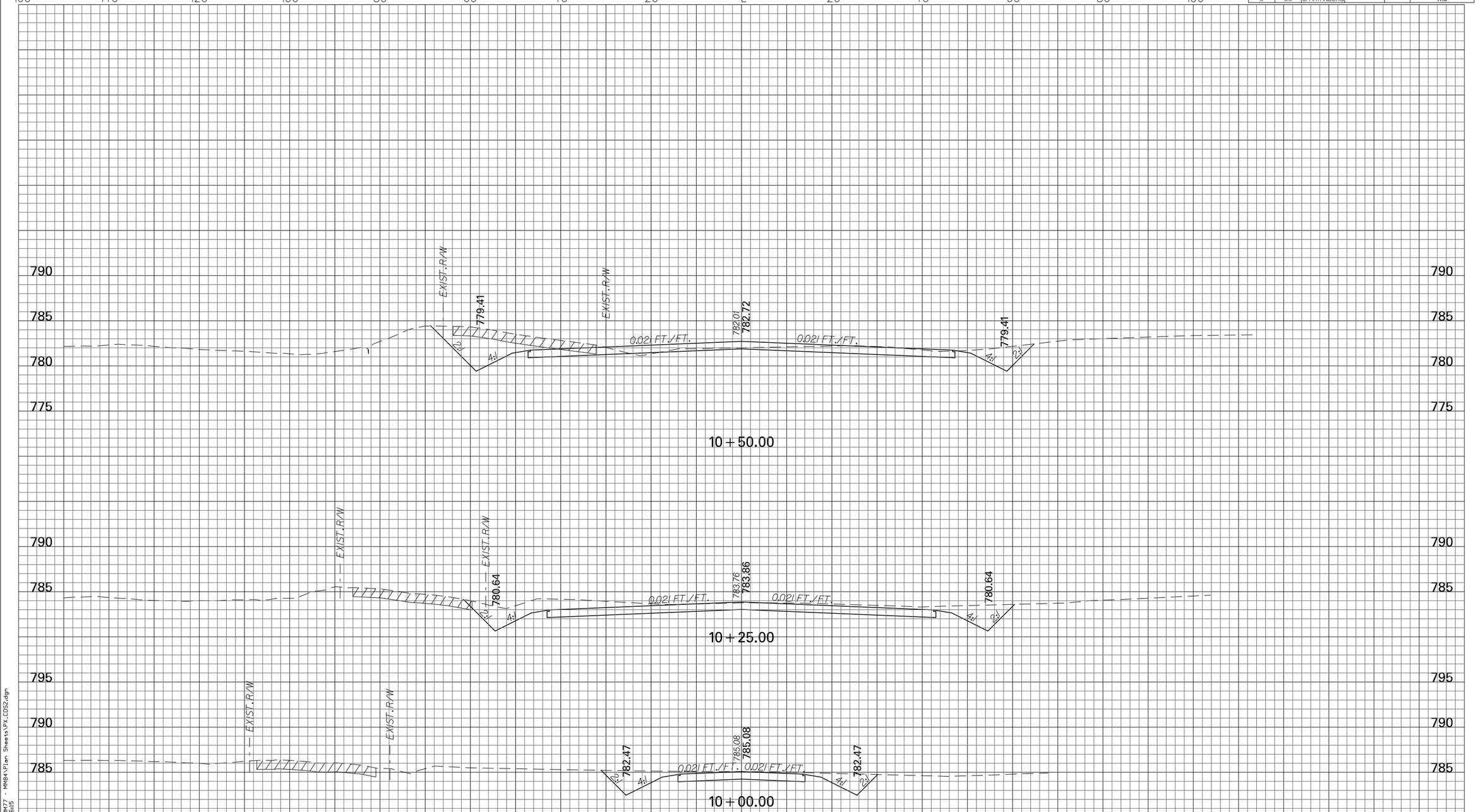
CONWAY BLACK ROAD (EAST)

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG			X16



STATION 10+00.00
BEGIN CONSTRUCTION
CONWAY BLACK ROAD (EAST)

PRELIMINARY DESIGN
DO NOT USE FOR CONSTRUCTION

10'
5'

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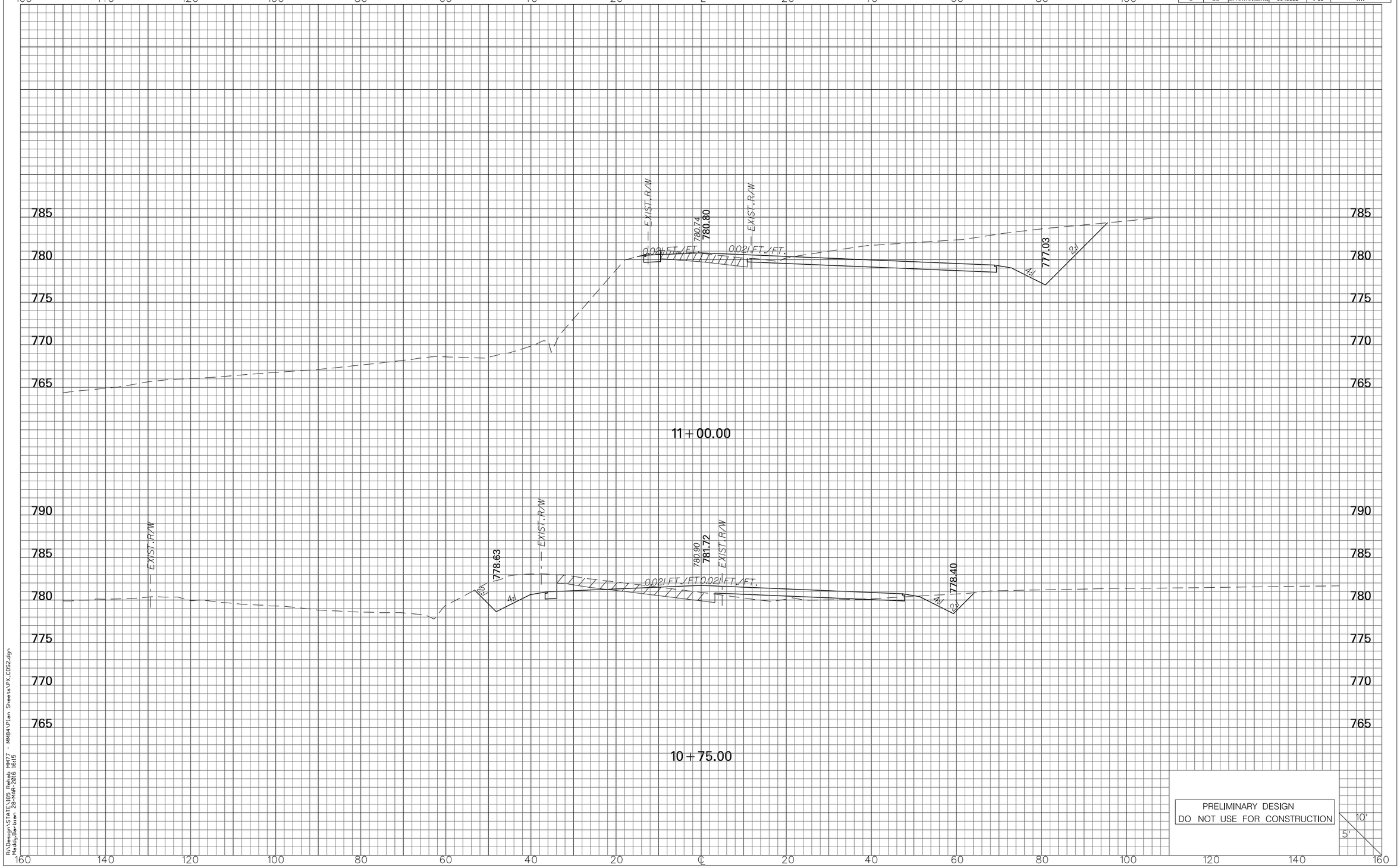
Wednesday, Jun 13, 2018 2:31:14PM EDT

CONWAY BLACK ROAD (EAST)

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG	0040692	I-85	X17



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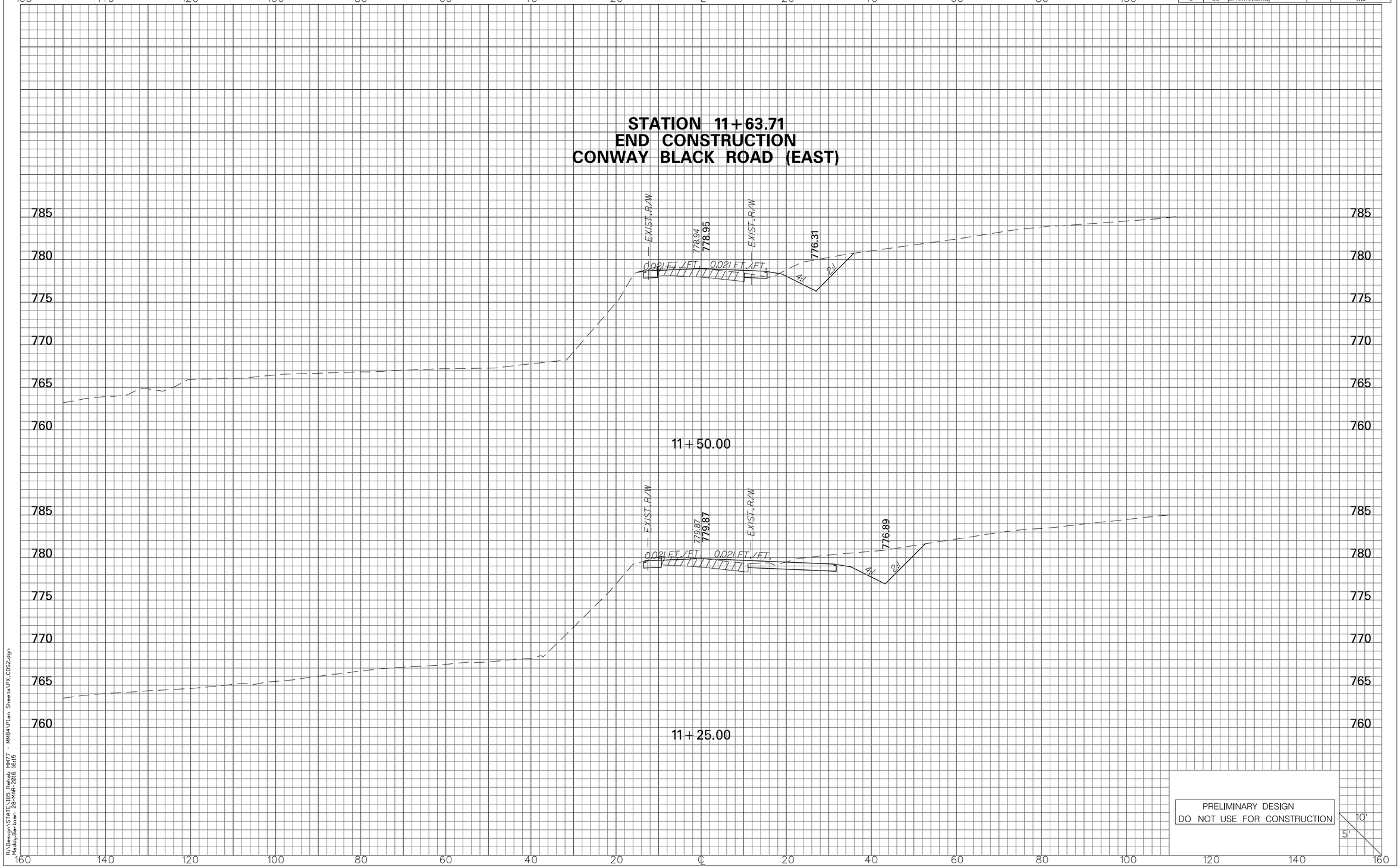
CONWAY BLACK ROAD (EAST)

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	ROUTE NO.	SHEET NO.
3	SC	SPARTANBURG			X18



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DRIVEWAY_01

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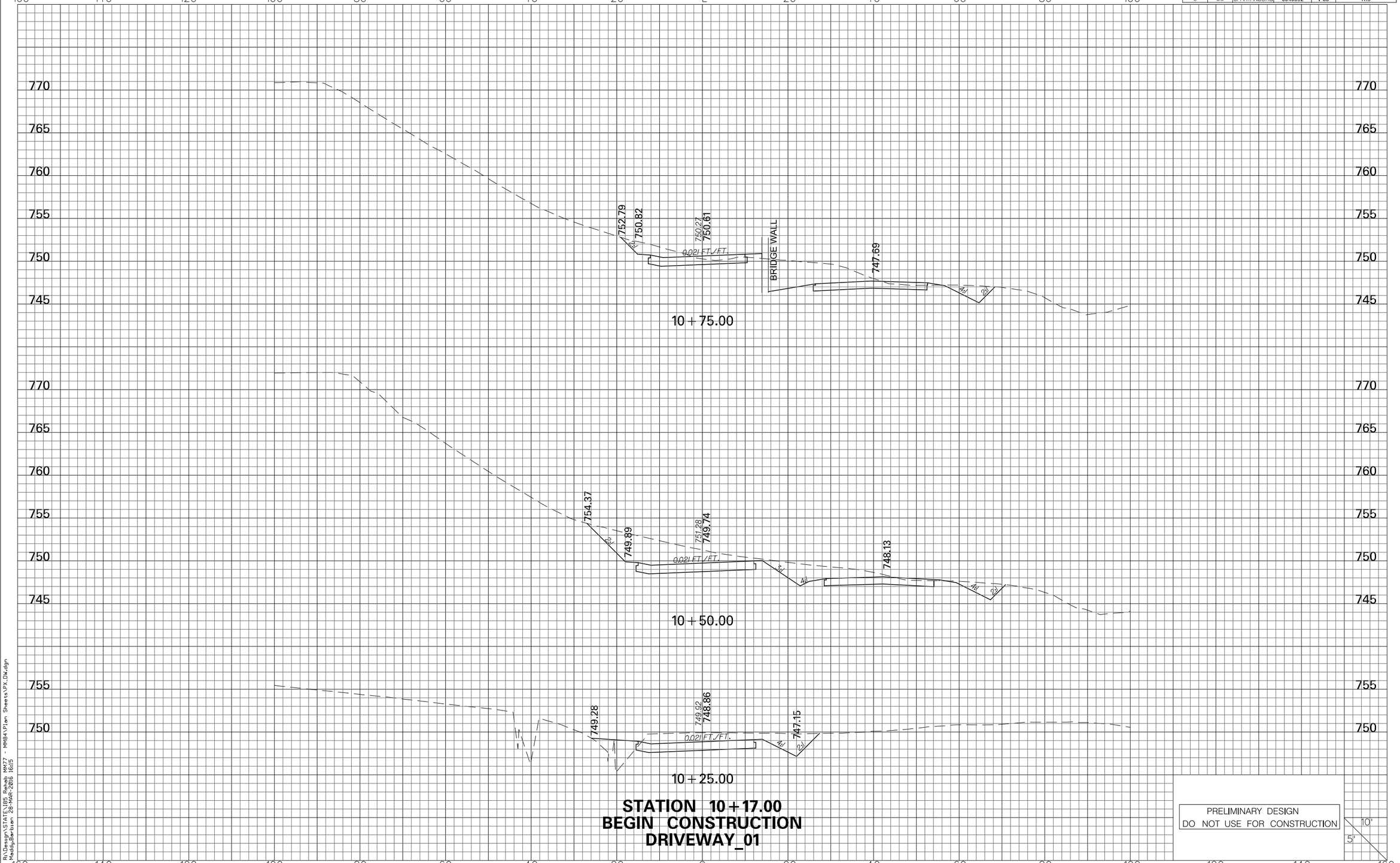
3	SC	SPARTANBURG	0040692	I-85	X19



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DRIVEWAY_01

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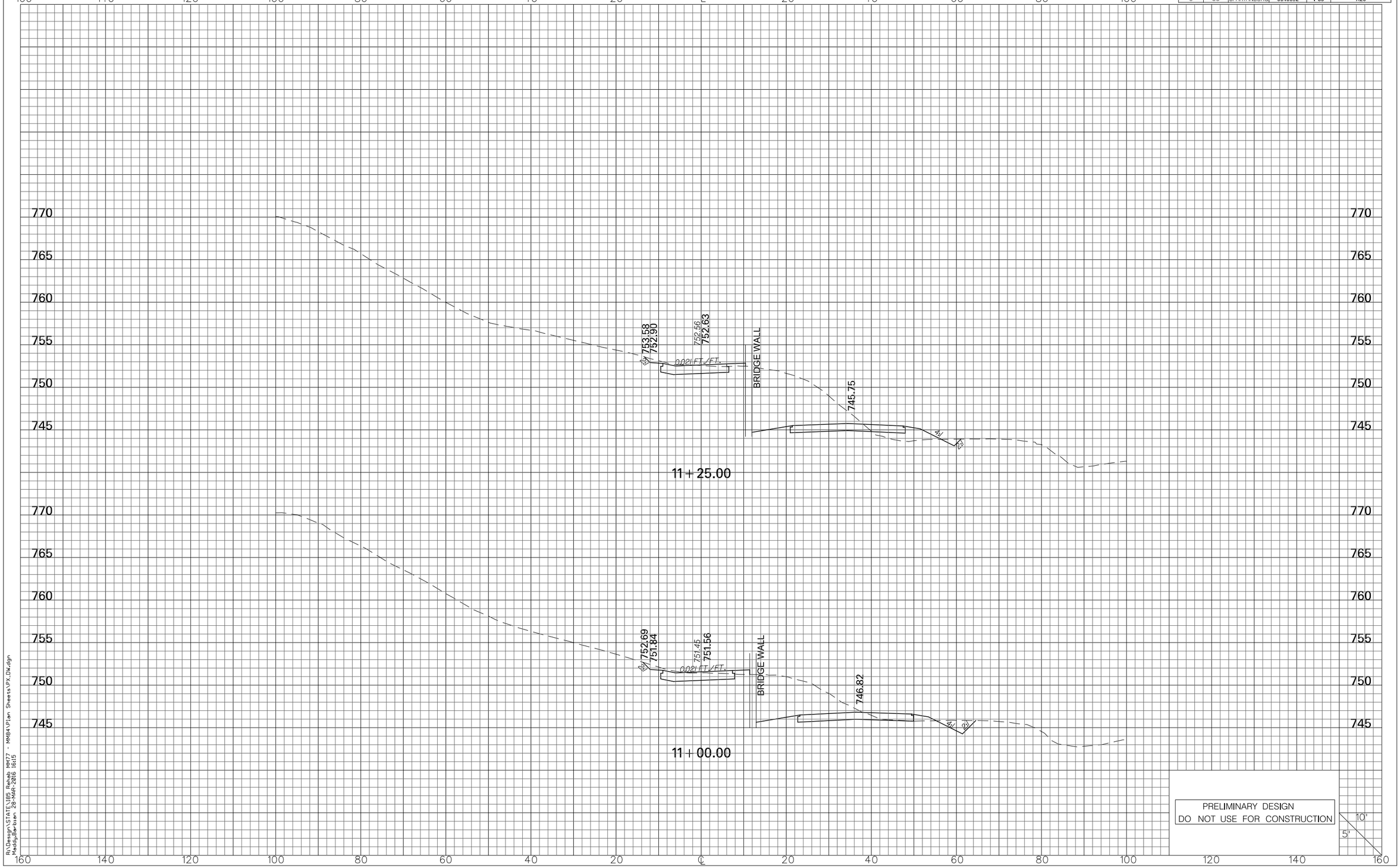
3	SC	SPARTANBURG	0040692	I-85	X20



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DRIVEWAY_01

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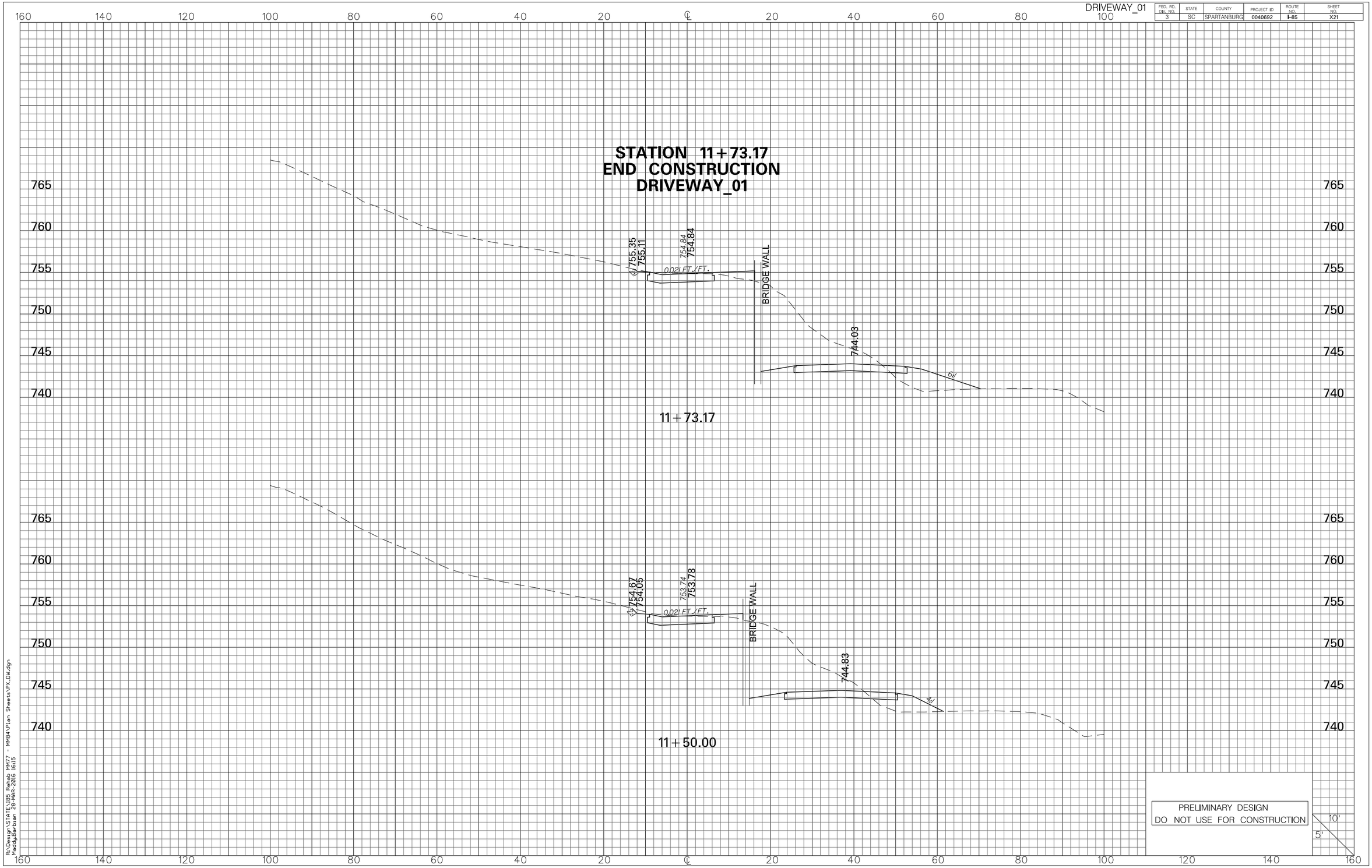
3	SC	SPARTANBURG	0040692	I-85	X21



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