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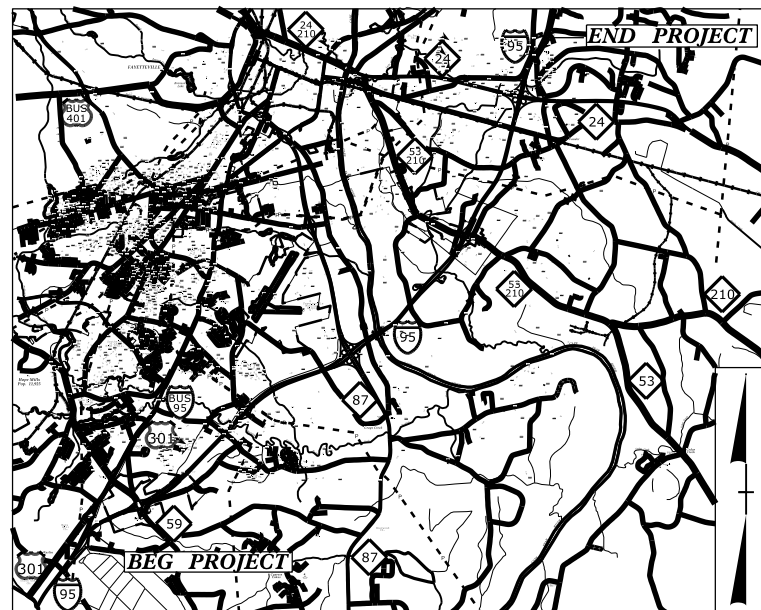
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17-FEB-2016 09:10 H:\DDC\Projects\I-573I-95 From mm 40 to mm 53\_Resurface and Bridges\_Cumberland Co\Roadway\Proj\I-573I\_Rdy\_tsh.dgn \$\$\$USERNAME\$\$\$

**TIP PROJECT: I-5731**

**CONTRACT: C203819**



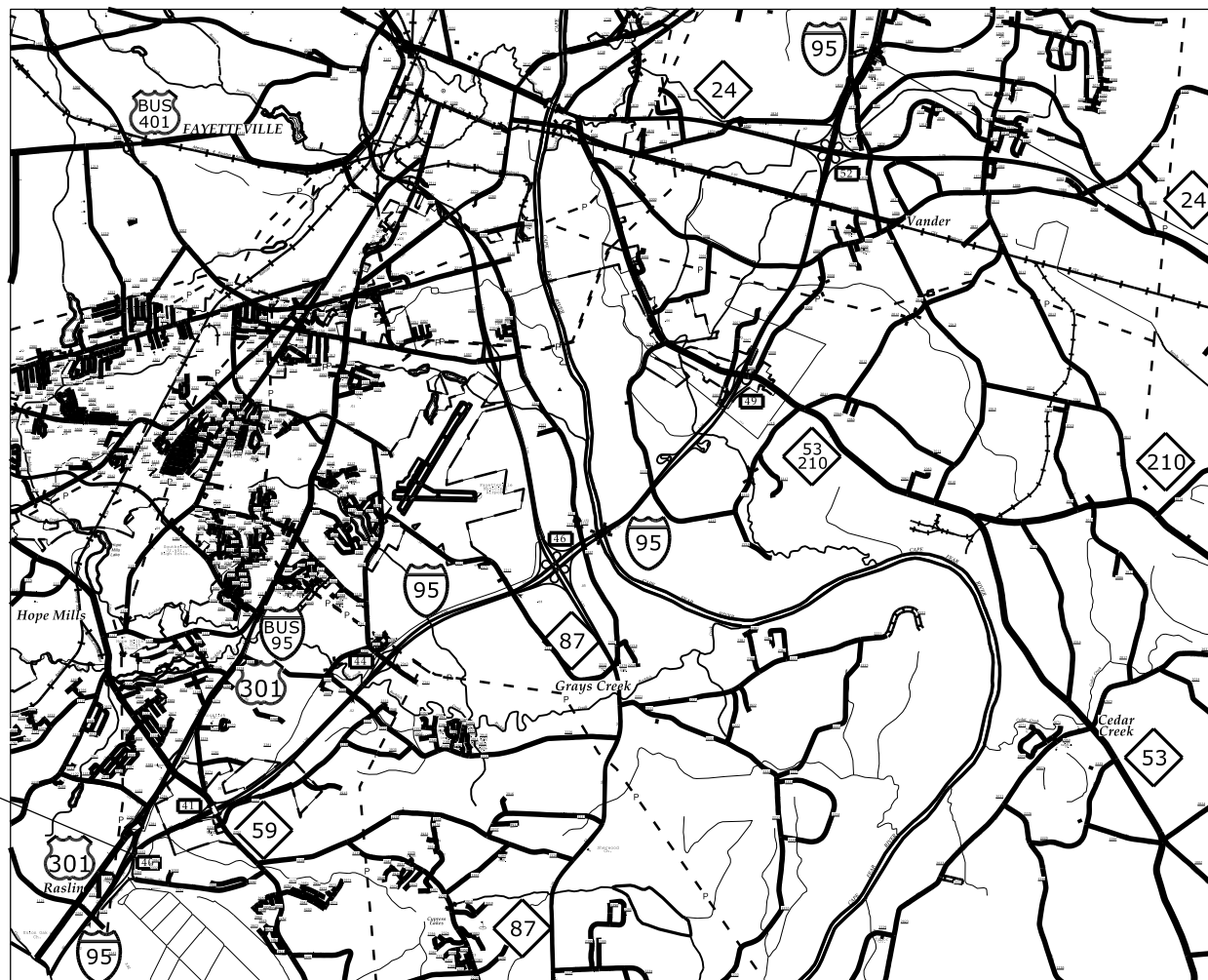
VICINITY MAP

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**CUMBERLAND COUNTY**

LOCATION: I-95 FROM MILE MARKER 40 TO MILE MARKER 53

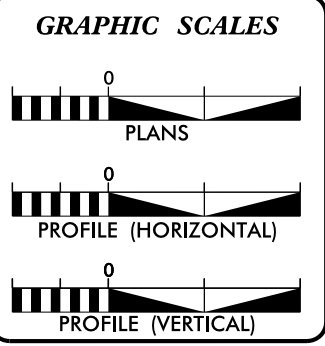
TYPE OF WORK: PAVEMENT REHABILITATION, DRAINAGE  
AND BRIDGE REHABILITATION



**BEG TIP PROJECT I-5731**  
**-L- STA 0+00.00**

**END TIP PROJECT I-5731**  
**-L- STA 686+40.00**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5731	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
52008.1.FS1	NHPP-0095(034)	P.E.	
52008.3.FS1	NHPP-0095(034)	CONSTR	



**DESIGN DATA**

ADT 2016 = 51,800

**PROJECT LENGTH**

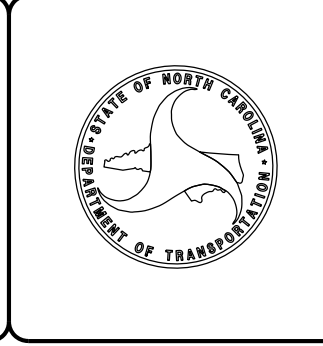
I-5731 TOTAL PROJECT LENGTH = 13mi

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
1000 Birch Ridge Dr., Raleigh NC, 27610

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
N/A

LETTING DATE:  
MAY 17, 2016



EFF. 01-17-2012  
REV. 10-30-2012

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
2A-1	PAVEMENT SCHEDULE AND TYPICAL SECTIONS
2B-1	ROADWAY DETAILS
3B-1 THRU 3B-3	ROADWAY SUMMARIES
3D-1	DRAINAGE SUMMARIES
4 THRU 14	PLAN SHEETS
TMP-1 THRU TMP-19	TRAFFIC MANAGEMENT PLANS
PMP-1 THRU PMP-17	PAVEMENT MARKING PLANS
S-1 THRU S-37	STRUCTURE PLANS

GENERAL NOTES:

2012 SPECIFICATIONS  
EFFECTIVE: 01-17-2012  
REVISED: 10-31-2014

GUARDRAIL:

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

2012 ROADWAY ENGLISH STANDARD DRAWINGS

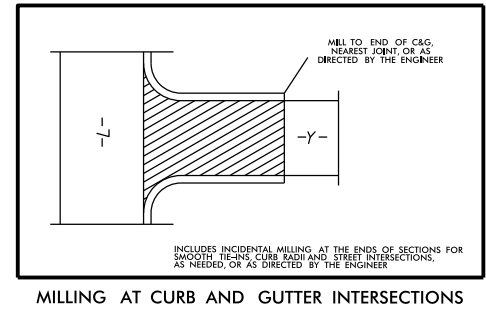
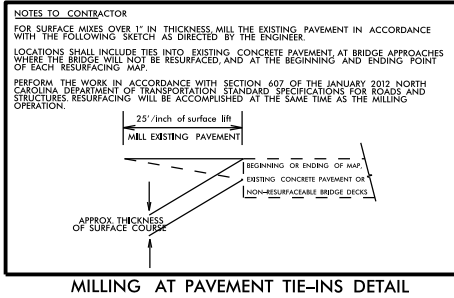
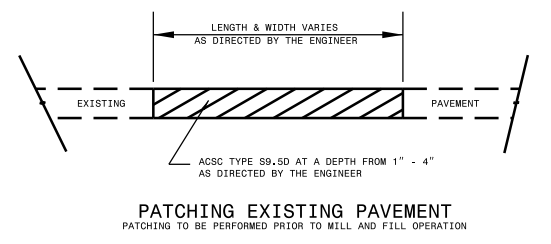
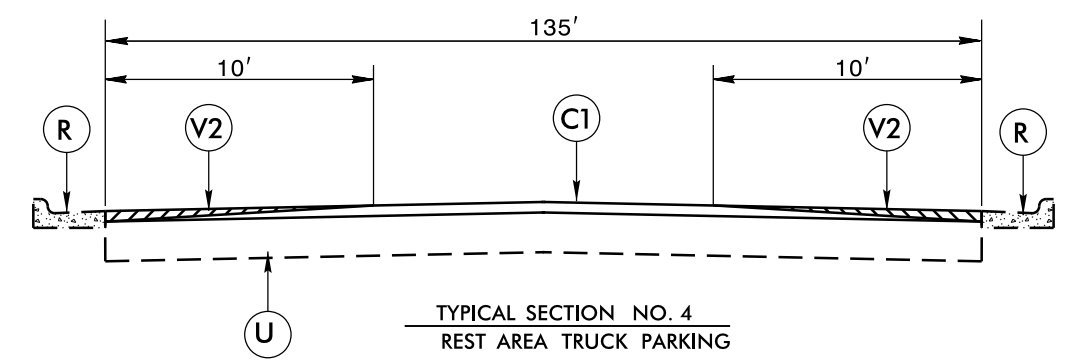
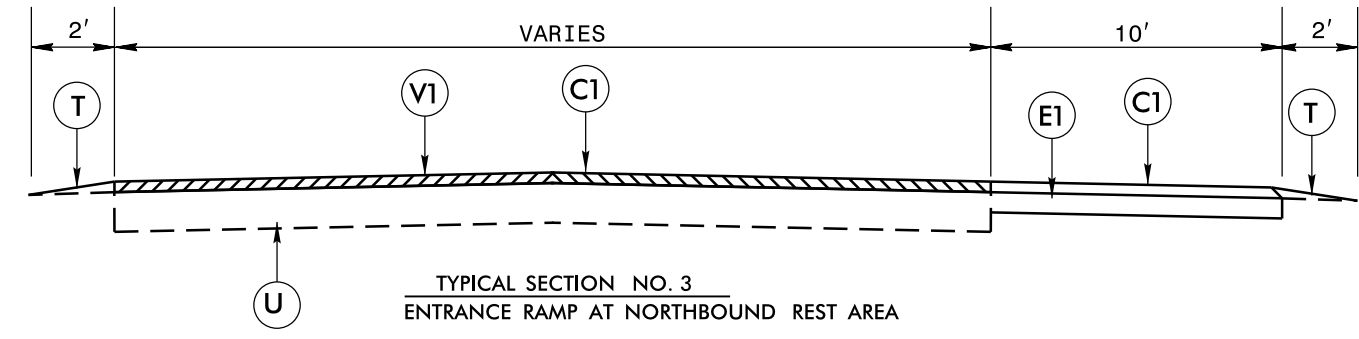
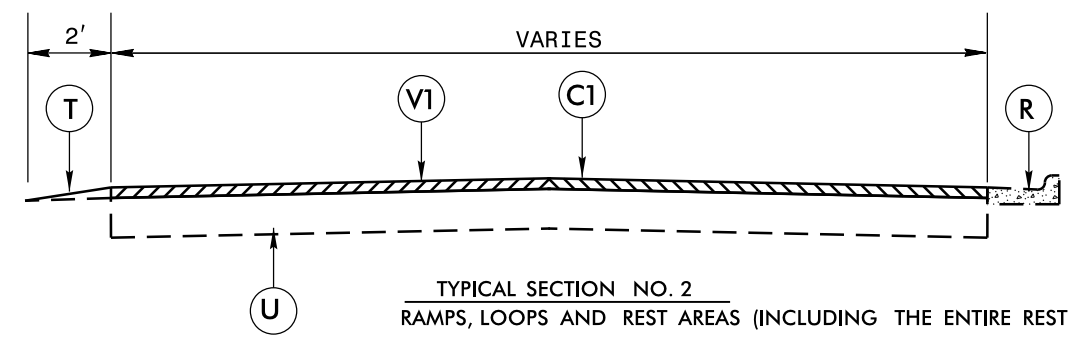
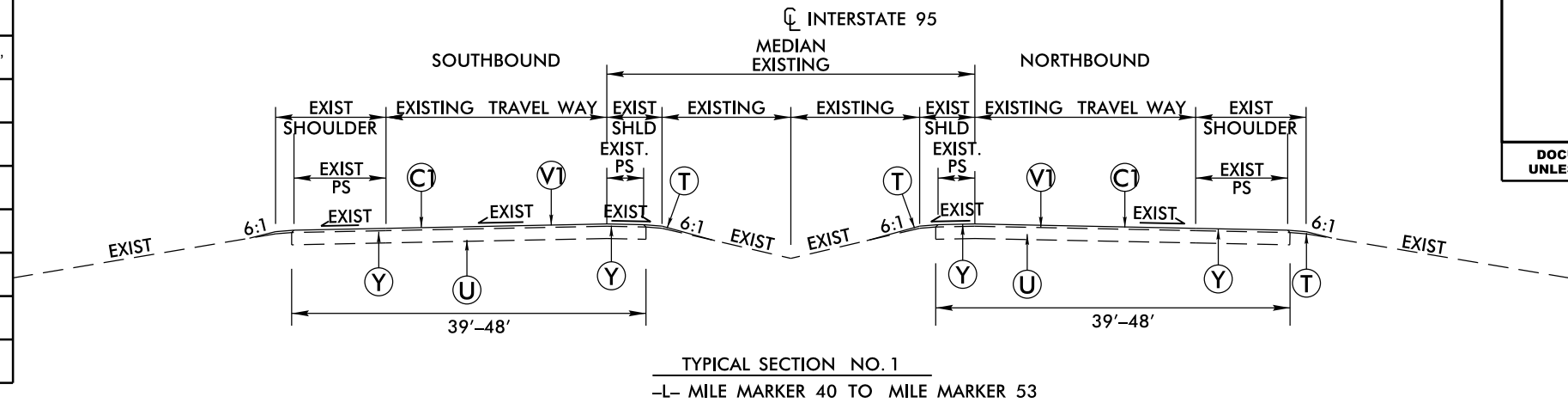
The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
DIVISION 8 - INCIDENTALS	
840.18	Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.22	Frames and Wide Slot Sag Grates
840.27	Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
840.45	Precast Drainage Structure
840.66	Drainage Structure Steps
862.01	Guardrail Placement
862.02	Guardrail Installation
866.02	Woven Wire Fence with Wood Posts

8/17/09

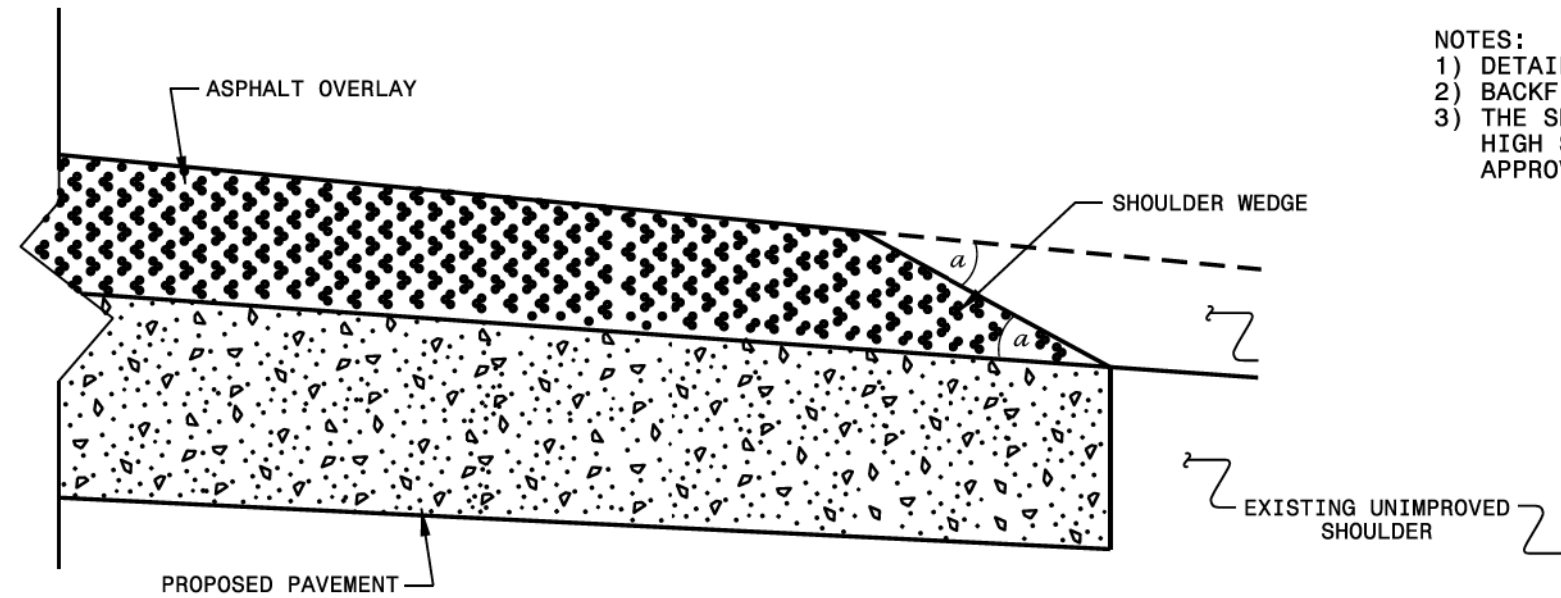
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FINAL PAVEMENT SCHEDULE	
C1	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5D, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
R	EXISTING CURB AND GUTTER
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
U	EXISTING PAVEMENT
V1	2" MILLED ASPHALT PAVEMENT
V2	CURB MILLING (10' FROM EOP)
Y	PROPOSED MILLED RUMBLE STRIPS

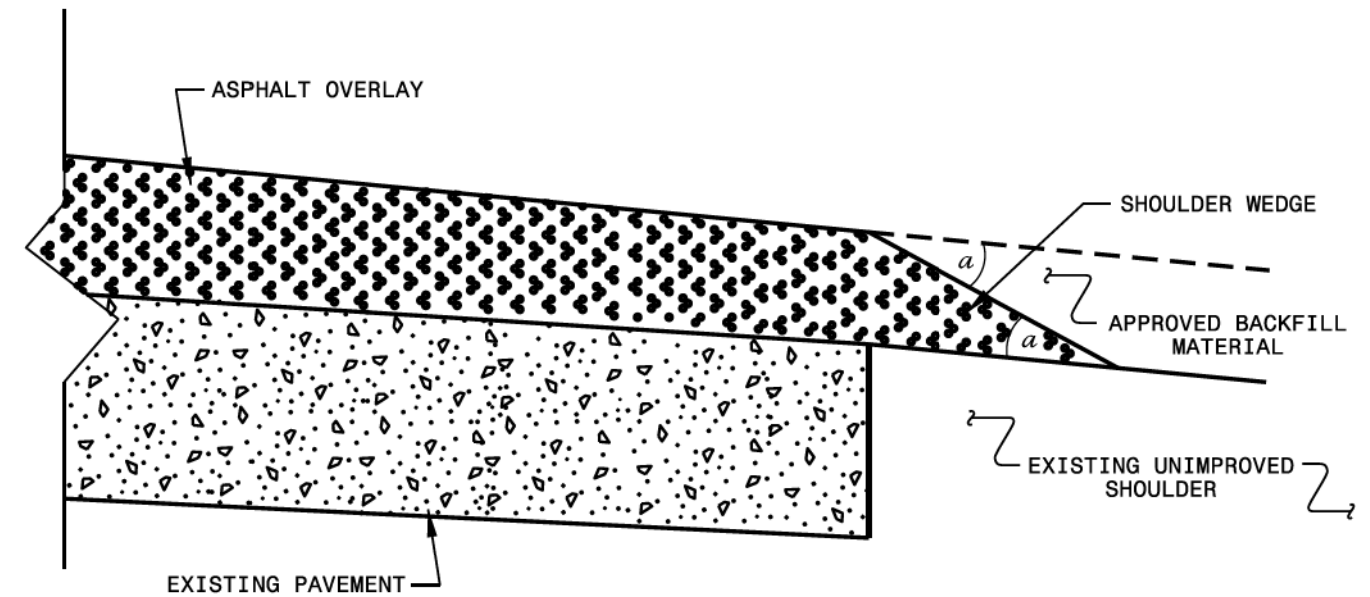


6/2/99  
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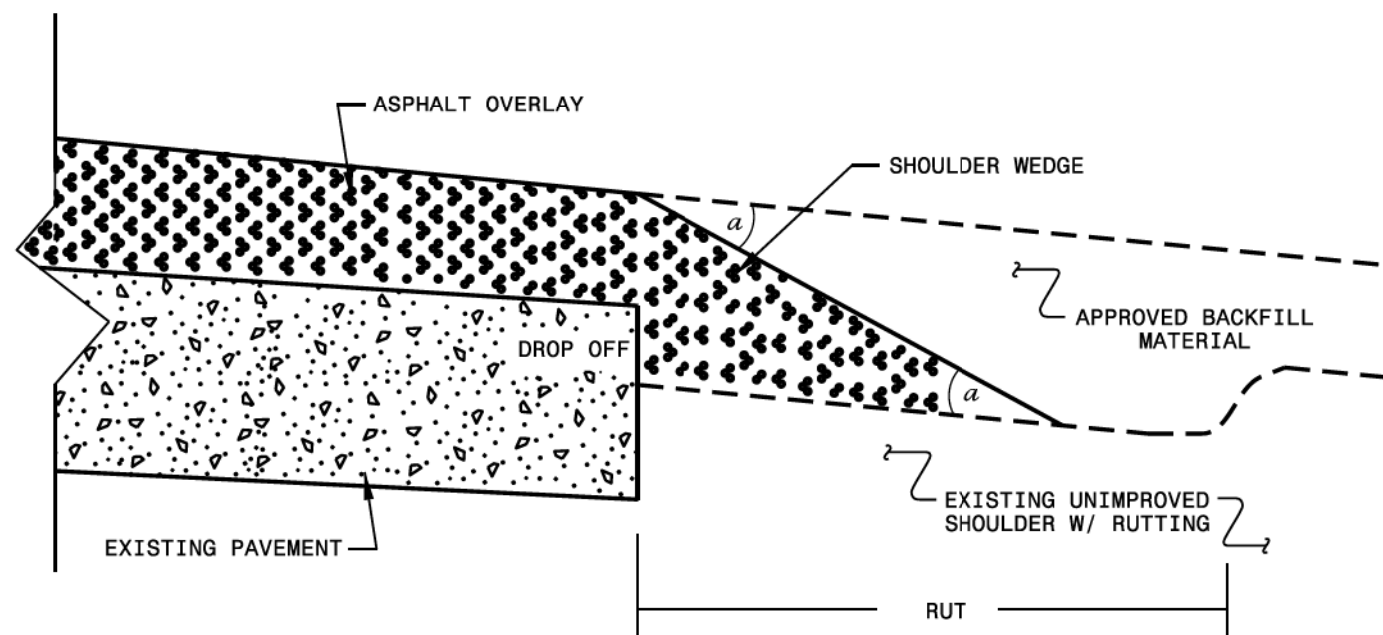
- NOTES:  
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.  
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.  
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ Widening or  
 with Existing Paved Shoulder having no dropoffs)



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ NO Widening)



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Adjacent to  
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

**CONTRACT STANDARDS  
 AND DEVELOPMENT UNIT**  
 Office 919-707-6950 FAX 919-250-4119

**SHOULDER WEDGE  
 DETAILS**

ORIGINAL BY:	T. SPELL	DATE:	7-19-11
MODIFIED BY:		DATE:	2/2/16
CHECKED BY:		DATE:	
FILE SPEC:	stwp/detail/stand/shoulderwedgedata11.dgn		

SYSTEMS  
 OFFICE  
 FILE NAME

COMPUTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.  
 TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.  
 FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.  
 W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.  
 G = GATING IMPACT ATTENUATOR TYPE 350  
 NG = NON-GATING IMPACT ATTENUATOR TYPE 350

# GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOULDER WIDTH	FLARE LENGTH		W		ANCHORS								IMPACT ATTENUATOR TYPE 350 PERMITTED NO. G NG	REMOVE EXISTING GUARDRAIL	REMARKS					
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END																
L	9+40		RT																									50		
L	178+40		CL																									50		
L	306+10		CL																									50		
L	310+00		RT																									50		
L	318+85		LT																									50		
L	354+65		LT																									50		
L	429+40		RT																									50		
L	526+50		RT																									50		
L	528+45		LT																									50		
L	577+50		CL																									50		
L	595+00		LT																									50		
	PROJECT TOTAL																										11		550	

PROJECT NO.	SHEET NO.
I-5731	3B-2

### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	ASB TON	SHOULDER RECONSTRUCTION SMI	2" MILLING SY	0" TO 2" MILLING SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	SURFACE COURSE, S9.5D TONS	ASPHALT BINDER FOR PLANT MIX TONS	POLYMER MODIFIED ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT TONS	MILLED RUMBLE STRIPS (ASPHALT CONCRETE) LF	REMOVE & REPLACE MASONRY DRAINAGE STRUCTURES EA	MASONRY DRAINAGE STRUCTURE LF	FRAME WITH TWO GRATES, STD 840.22 EA	RETROFIT EXISTING CURB RAMP EA	GUARDRAIL ANCHOR UNITS, TYPE 350 EA	REMOVE EXISTING GUARDRAIL LF	WOVEN WIRE FENCE, 47" FABRIC LF	4" TIMBER FENCE POSTS, 7'-6" LONG EA	5" TIMBER FENCE POSTS, 8'-0" LONG EA	ADDITIONAL BARBED WIRE LF	PORTABLE LIGHTING LS	
I-5731	Cumberland	1	I-95	FROM: MM 40 TO: MM 53		1, 2, 3, 4	4	MD	NO	NO	13	78	7,700	59.00	814,217	1,956	1,000	261	92,606	12	5,280	4,600	274,560	19	36.19	19	16	11	550	137,280	9,810	3,300	750	1
<b>TOTAL FOR MAP NO. 1</b>										13		7,700	59.00	814,217	1,956	1,000	261	92,606	12	5,280	4,600	274,560	19	36.19	19	16	11	550	137,280	9,810	3,300	750	1	
<b>TOTAL FOR PROJ NO. I-5731</b>										13		7,700	59.00	814,217	1,956	1,000	261	92,606	12	5,280	4,600	274,560	19	36.19	19	16	11	550	137,280	9,810	3,300	750	1	
<b>GRAND TOTAL</b>										13		7,700	59.00	814,217	1,956	1,000	261	92,606	12	5,280	4,600	274,560	19	36.19	19	16	11	550	137,280	9,810	3,300	750	1	

PROJECT NO.	SHEET NO.
I-5731	3B-3

**THERMOPLASTIC AND PAINT QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4400000000-E	4405000000-E	4410000000-E	4415000000-N	4420000000-N	4430000000-N	4445000000-E	4480000000-N	4516000000-N	4600000000-N	4600000000-N	4686000000-E	4688000000-E	4690000000-E	4695000000-E
										STATIONARY WORK ZONE SIGN	PORTABLE WORK ZONE SIGN	BARRICADE MOUNTED WORK ZONE SIGN	FLASHING ARROW BOARD	PORTABLE CHANGEABLE MESSAGE SIGN	DRUMS	BARRICADES (TYPE III)	TMA	SKINNY DRUM	WORK ZONE PRESENCE LIGHTING	SEQUENTIAL FLASHING WARNING LIGHTS	THERMO-PLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	THERMO-PLASTIC PAVEMENT MARKING LINES (6", 90 MILS)	THERMO-PLASTIC PAVEMENT MARKING LINES (6", 120 MILS)	THERMO-PLASTIC PAVEMENT MARKING LINES (8", 90 MILS)
NO		NO			NO					SF	SF	SF	EA	EA	EA	LF	EA	EA	EA	EA	LF	LF	LF	LF
I-5731	Cumberland	1	I-95	FROM: MM 40 TO: MM 53	1, 2, 3, 4	4	MD	13	78	144	862	42	4	8	400	56	3	400	8	12	380	396,579	40,536	10,802
<b>TOTAL FOR MAP NO. 1</b>										<b>144</b>	<b>862</b>	<b>42</b>	<b>4</b>	<b>8</b>	<b>400</b>	<b>56</b>	<b>3</b>	<b>400</b>	<b>8</b>	<b>12</b>	<b>380</b>	<b>396,579</b>	<b>40,536</b>	<b>10,802</b>
<b>TOTAL FOR PROJ NO. I-5731</b>										<b>144</b>	<b>862</b>	<b>42</b>	<b>4</b>	<b>8</b>	<b>400</b>	<b>56</b>	<b>3</b>	<b>400</b>	<b>8</b>	<b>12</b>	<b>380</b>	<b>396,579</b>	<b>40,536</b>	<b>10,802</b>
<b>GRAND TOTAL</b>										<b>144</b>	<b>862</b>	<b>42</b>	<b>4</b>	<b>8</b>	<b>400</b>	<b>56</b>	<b>3</b>	<b>400</b>	<b>8</b>	<b>12</b>	<b>380</b>	<b>396,579</b>	<b>40,536</b>	<b>10,802</b>

**THERMOPLASTIC AND PAINT QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4697000000-E	4700000000-E	4702000000-E	4710000000-E	4725000000-E	4810000000-E	4815000000-E	4820000000-E	4825000000-E	4835000000-E	4845000000-N	4847100000-E	4847120000-E	4855000000-E	4865000000-E	4905000000-N
										THERMO-PLASTIC PAVEMENT MARKING LINES (8", 120 MILS)	THERMO-PLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	THERMO-PLASTIC PAVEMENT MARKING LINES (12", 120 MILS)	THERMO-PLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	THERMO-PLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	PAINT PAVEMENT MARKING LINES (4")	PAINT PAVEMENT MARKING LINES (6")	PAINT PAVEMENT MARKING LINES (8")	PAINT PAVEMENT MARKING LINES (12")	PAINT PAVEMENT MARKING LINES (24")	PAINT PAVEMENT MARKING SYMBOL	POLYUREA PAVEMENT MARKING LINES (6", HIGHLY REFLECTIVE ELEMENTS)	POLYUREA PAVEMENT MARKING LINES (12", HIGHLY REFLECTIVE ELEMENTS)	REMOVAL OF PAVEMENT MARKING LINES (6")	REMOVAL OF PAVEMENT MARKING LINES (12")	SNOW-PLOWABLE PAVEMENT MARKERS
NO		NO			NO					LF	LF	LF	LF	EA	LF	LF	LF	LF	EA	LF	LF	LF	LF	LF	EA
I-5731	Cumberland	1	I-95	FROM: MM 40 TO: MM 53	1, 2, 3, 4	4	MD	13	78	128	27,550	412	190	66	380	444,780	10,708	28,186	190	66	7,664	224	7,664	224	4,904
<b>TOTAL FOR MAP NO. 1</b>										<b>128</b>	<b>27,550</b>	<b>412</b>	<b>190</b>	<b>66</b>	<b>380</b>	<b>444,780</b>	<b>10,708</b>	<b>28,186</b>	<b>190</b>	<b>66</b>	<b>7,664</b>	<b>224</b>	<b>7,664</b>	<b>224</b>	<b>4,904</b>
<b>TOTAL FOR PROJ NO. I-5731</b>										<b>128</b>	<b>27,550</b>	<b>412</b>	<b>190</b>	<b>66</b>	<b>380</b>	<b>444,780</b>	<b>10,708</b>	<b>28,186</b>	<b>190</b>	<b>66</b>	<b>7,664</b>	<b>224</b>	<b>7,664</b>	<b>224</b>	<b>4,904</b>
<b>GRAND TOTAL</b>										<b>128</b>	<b>27,550</b>	<b>412</b>	<b>190</b>	<b>66</b>	<b>380</b>	<b>444,780</b>	<b>10,708</b>	<b>28,186</b>	<b>190</b>	<b>66</b>	<b>7,664</b>	<b>224</b>	<b>7,664</b>	<b>224</b>	<b>4,904</b>



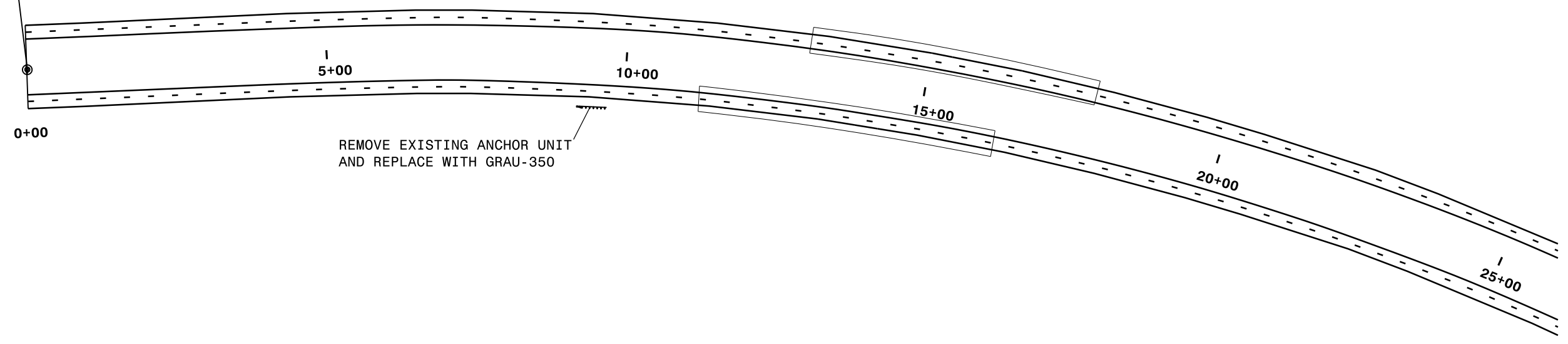
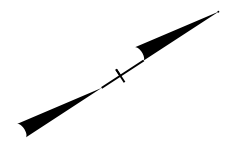
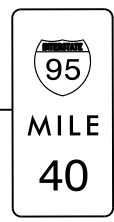


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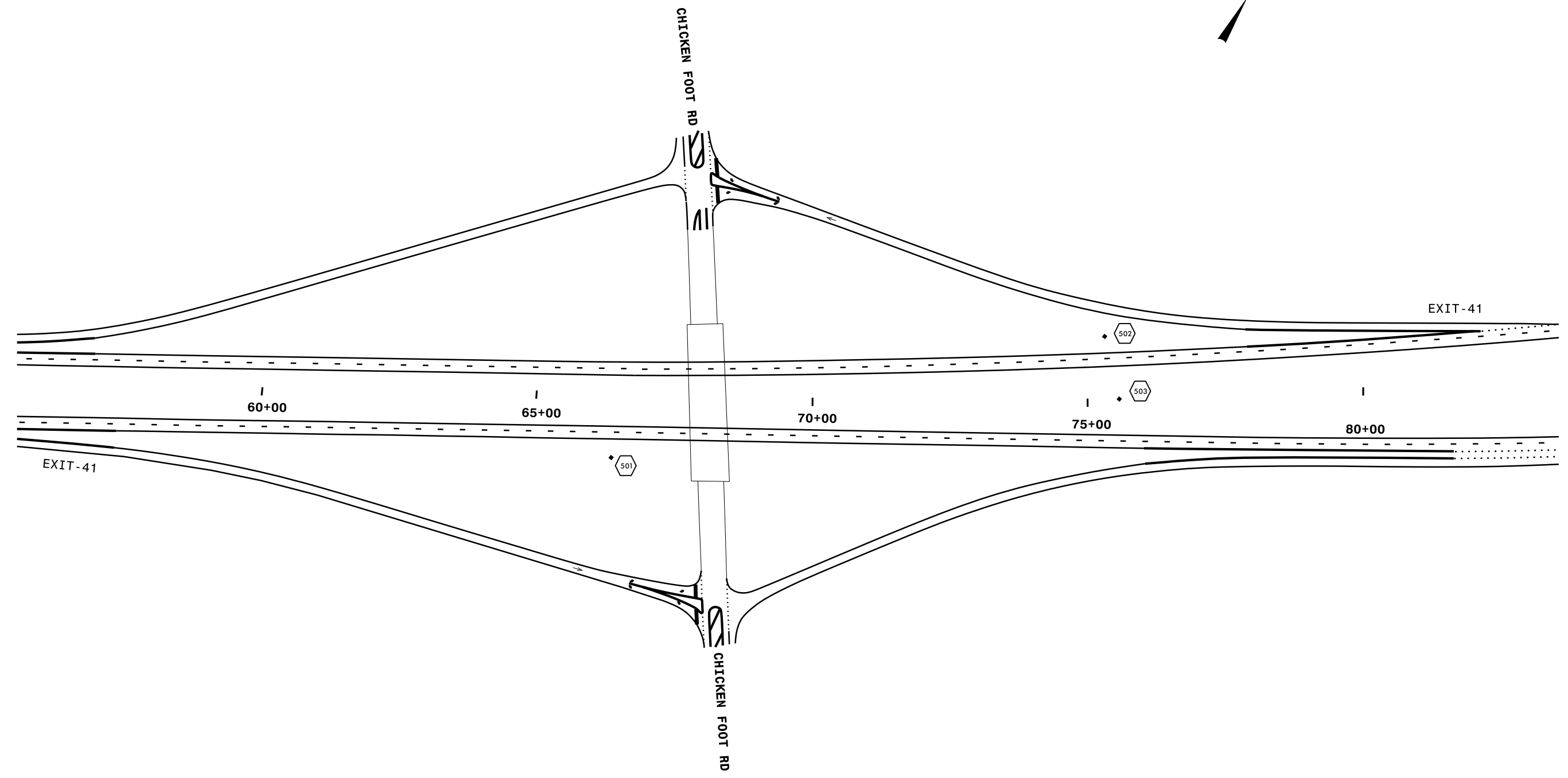
REVISIONS

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BEGIN PROJECT I-5731  
 MILE MARKER 40  
 STA. 00+00  
 BEGIN REMOVE AND REPLACE  
 WOVEN WIRE FENCE



REMOVE EXISTING ANCHOR UNIT  
 AND REPLACE WITH GRAU-350



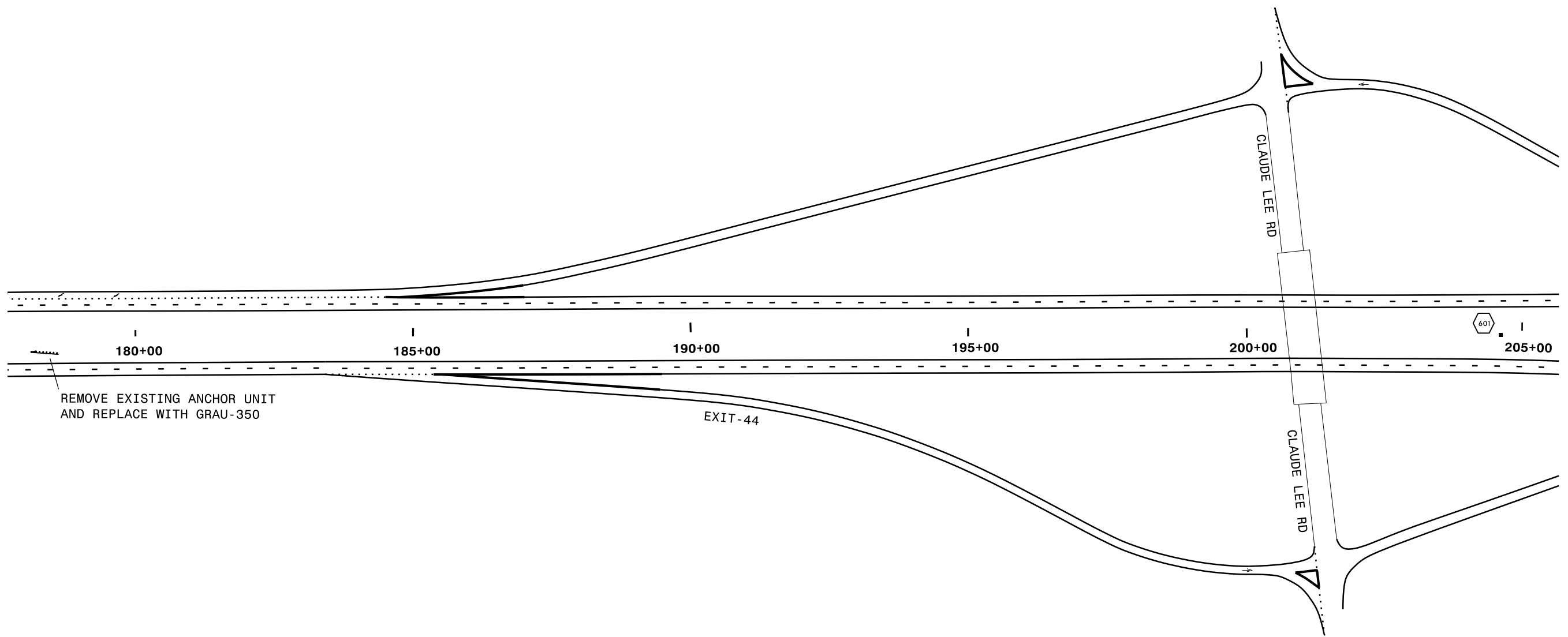
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 8/17/99

REVISIONS

8/17/99

REVISIONS

09-FEB-2016 09:18 1-5731-1-95 From mm 40 to mm 53.Resurface and Bridges.Cumberland Co.Roadway\Proj\1-5731.Rdy.psh\_6.dgn



REMOVE EXISTING ANCHOR UNIT  
AND REPLACE WITH GRAU-350

EXIT-44

CLAUDE LEE RD

CLAUDE LEE RD

180+00

185+00

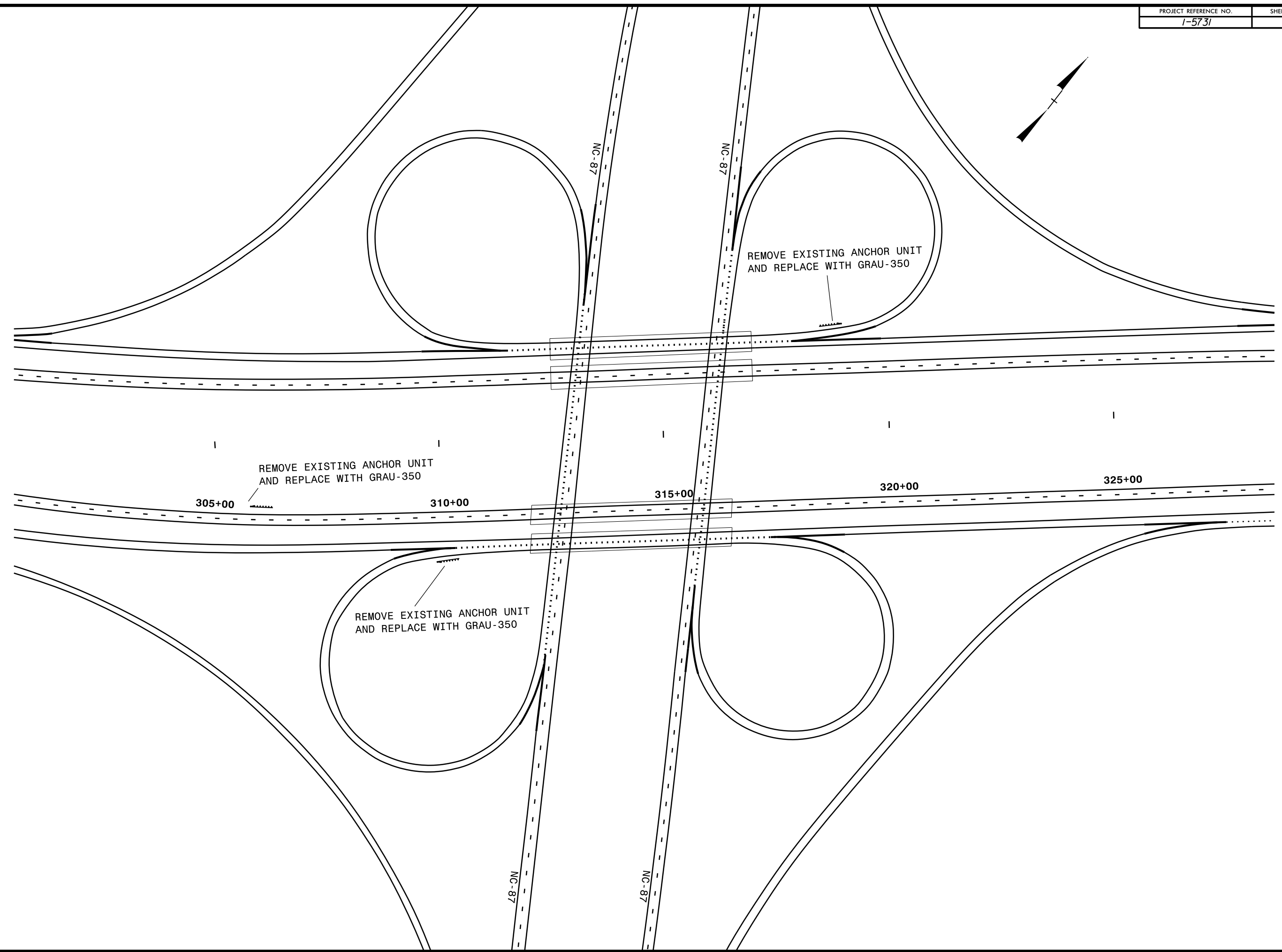
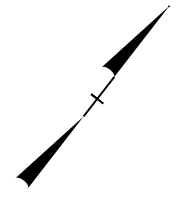
190+00

195+00

200+00

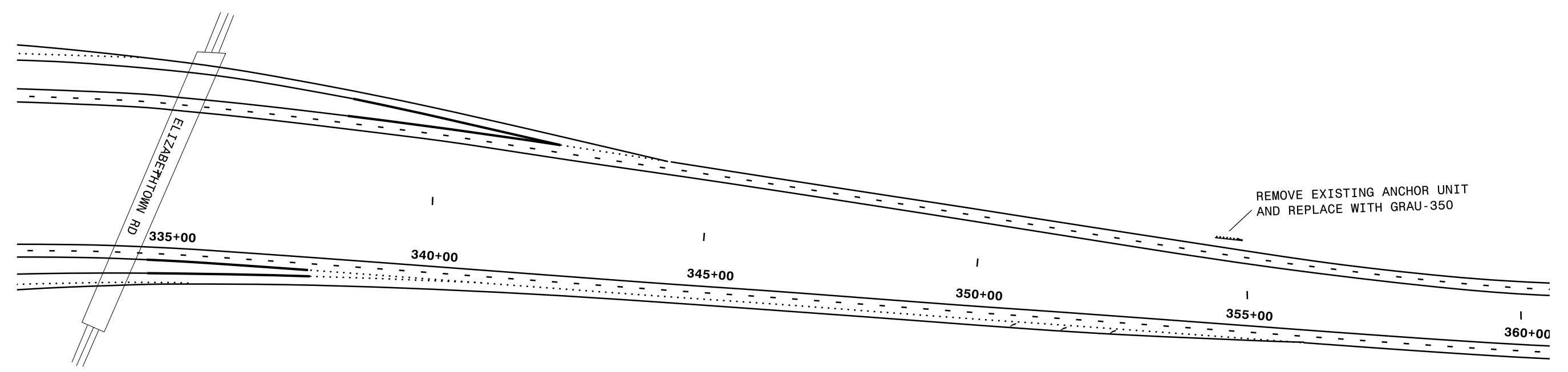
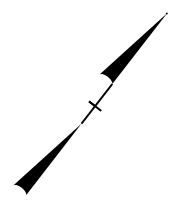
205+00

601



REVISIONS

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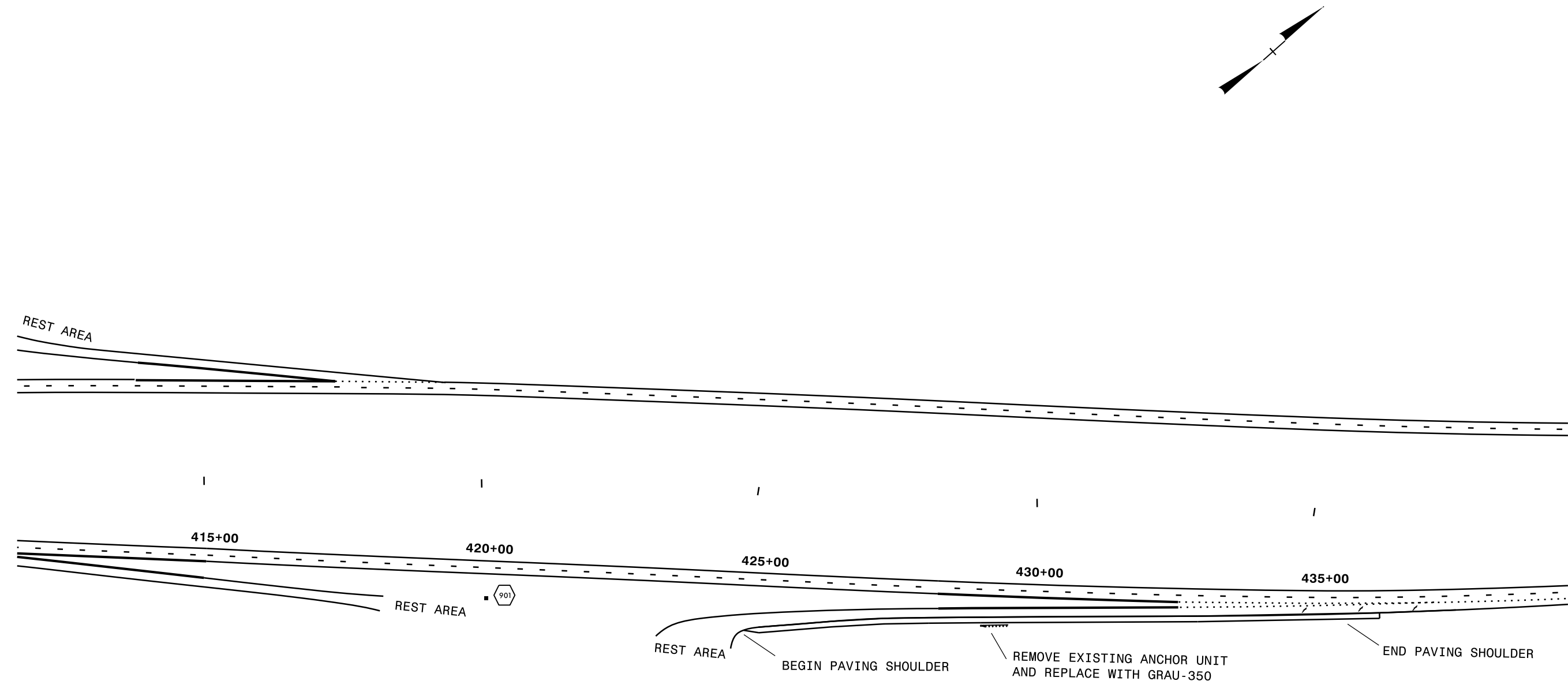


REVISIONS

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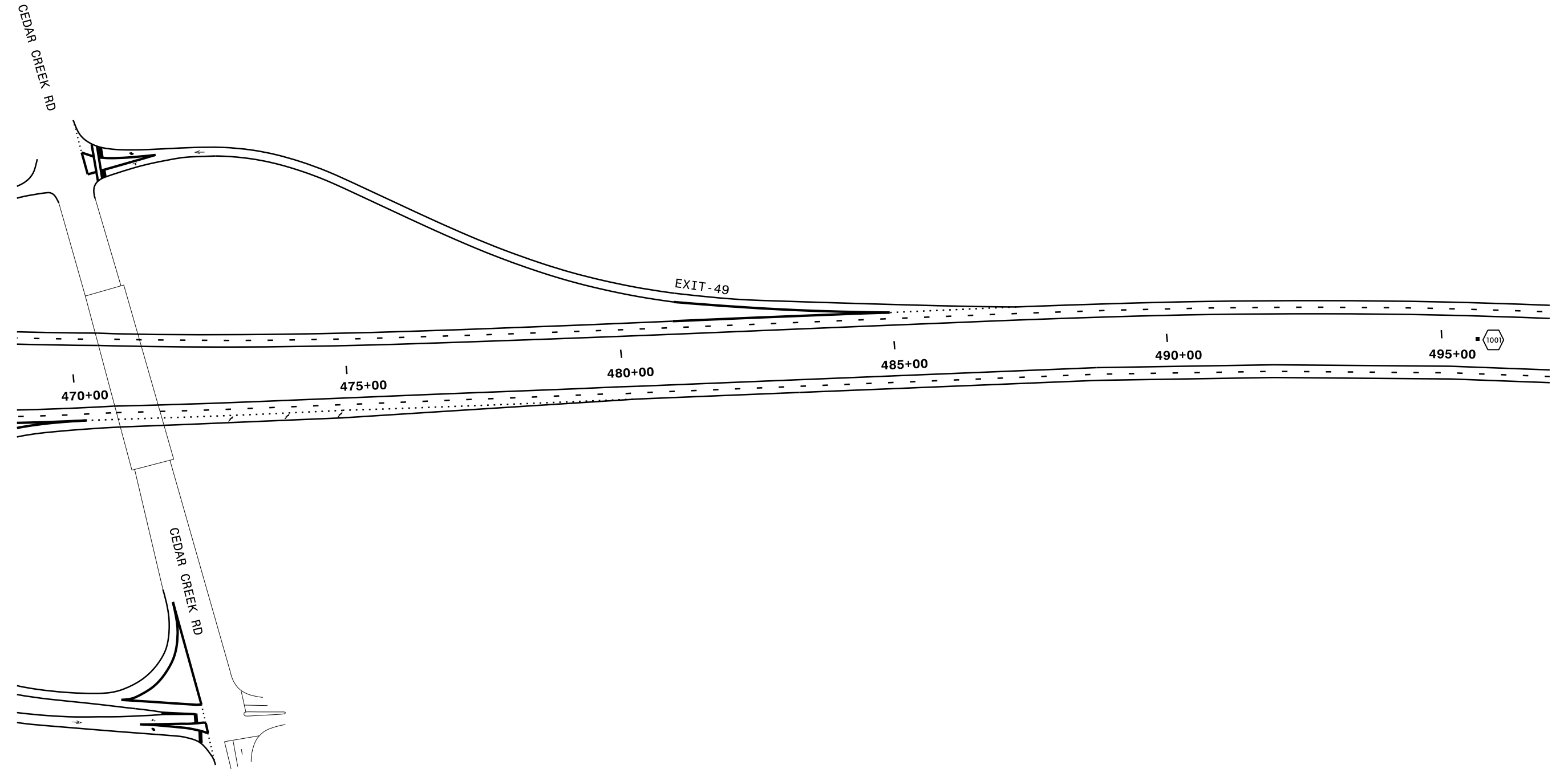
8/17/99

REVISIONS  
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 \$\$\$USERNAME\$\$\$



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 8/17/99

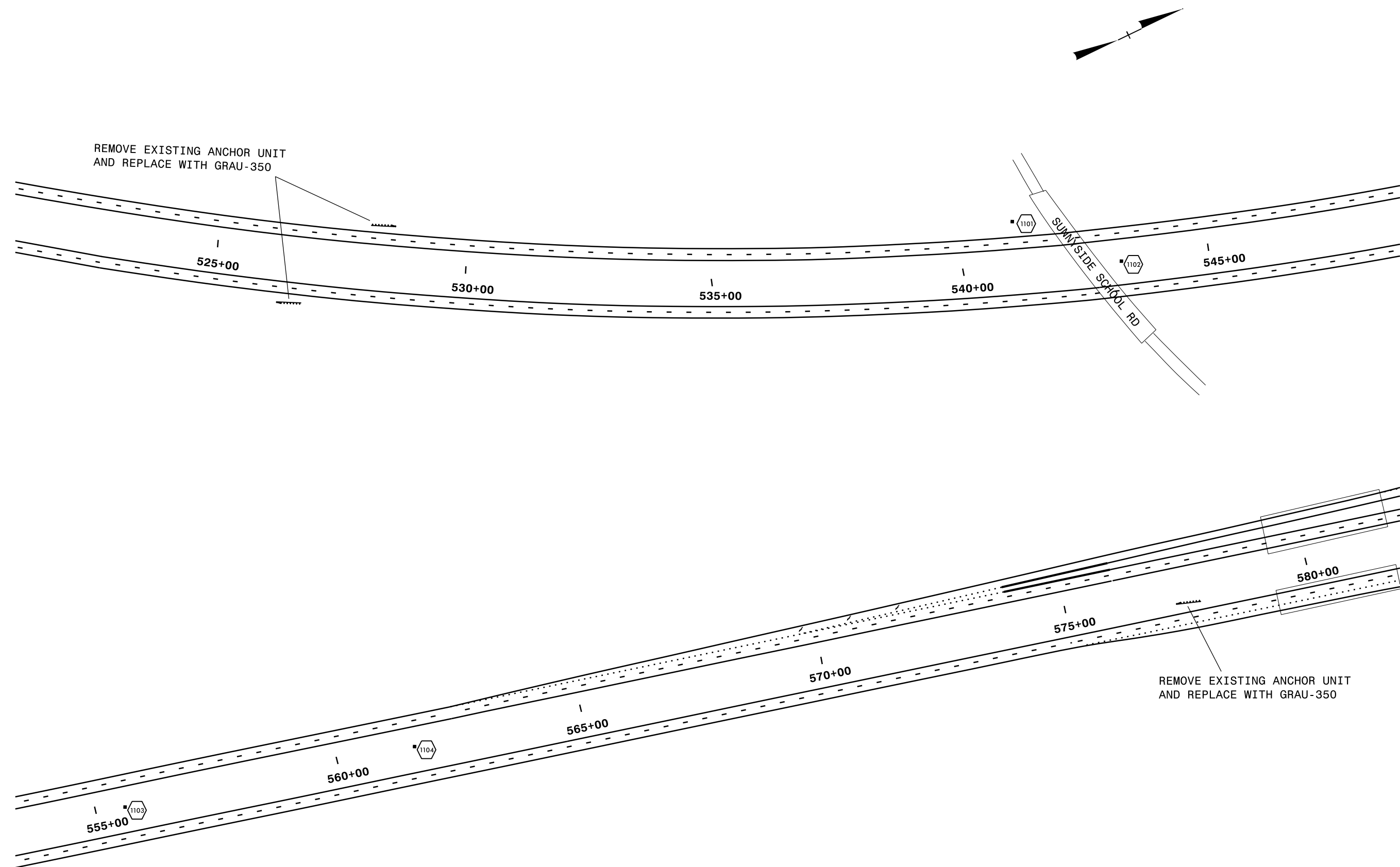
REVISIONS

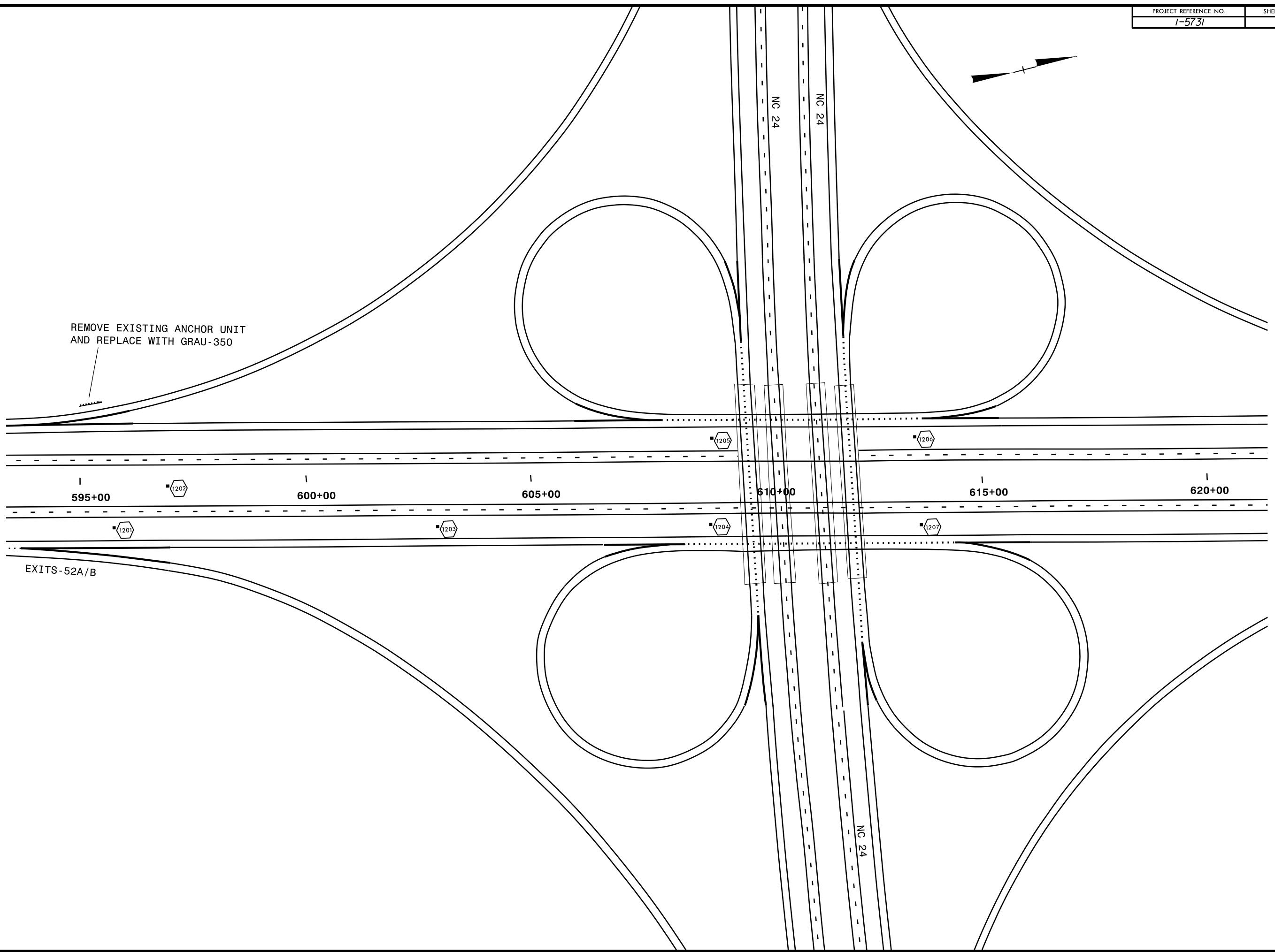




8/17/99

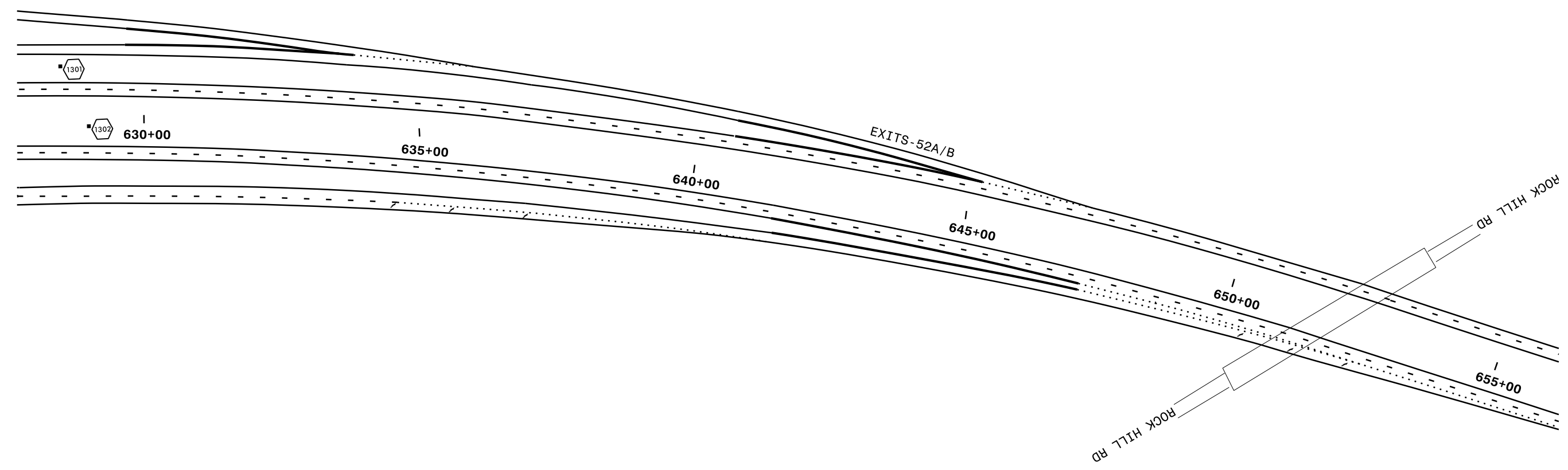
REVISIONS  
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 53\_Resurface and Bridges-Cumberland Co\Roadway\Proj\1-5731-Rdy.psh.11.dgn



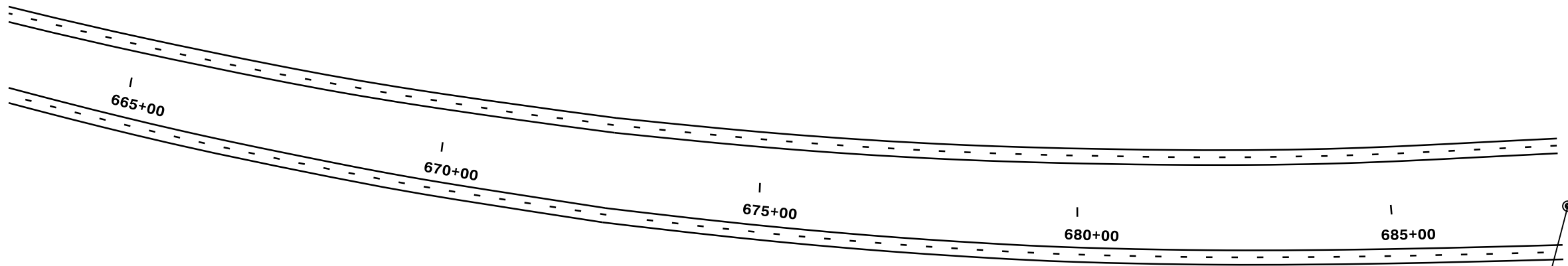
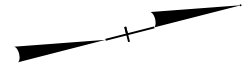



REVISIONS

09-FEB-2016 09:22  
 53.Resurface and Bridges.Cumberland Co.Roadway\Proj\1-5731.1-95 From mm 40 to mm 45  
 53.Resurface and Bridges.Cumberland Co.Roadway\Proj\1-5731.Rdy.psh.12.dgn  
 8/17/99



09-FEB-2016 09:23 1-5731-1-95 From mm 40 to mm 53.Resurface and Bridges.Cumberland Co.Roadway\Proj\1-5731-Rdy\_psh\_13.dgn  
 REVISIONS



  
 MILE  
 53

END PROJECT I-5731  
 MILE MARKER 53  
 STA. 686+40 (+/-)  
 END REMOVE AND REPLACE  
 WOVEN WIRE FENCE

REVISIONS

I:\FEB-2016 08:21 I-5731 I-95 From mm 40 to mm 53.Resurface and Bridges.Cumberland Co\Roadway\Proj\I-5731.Rdy.psh.14.dgn 8/17/99