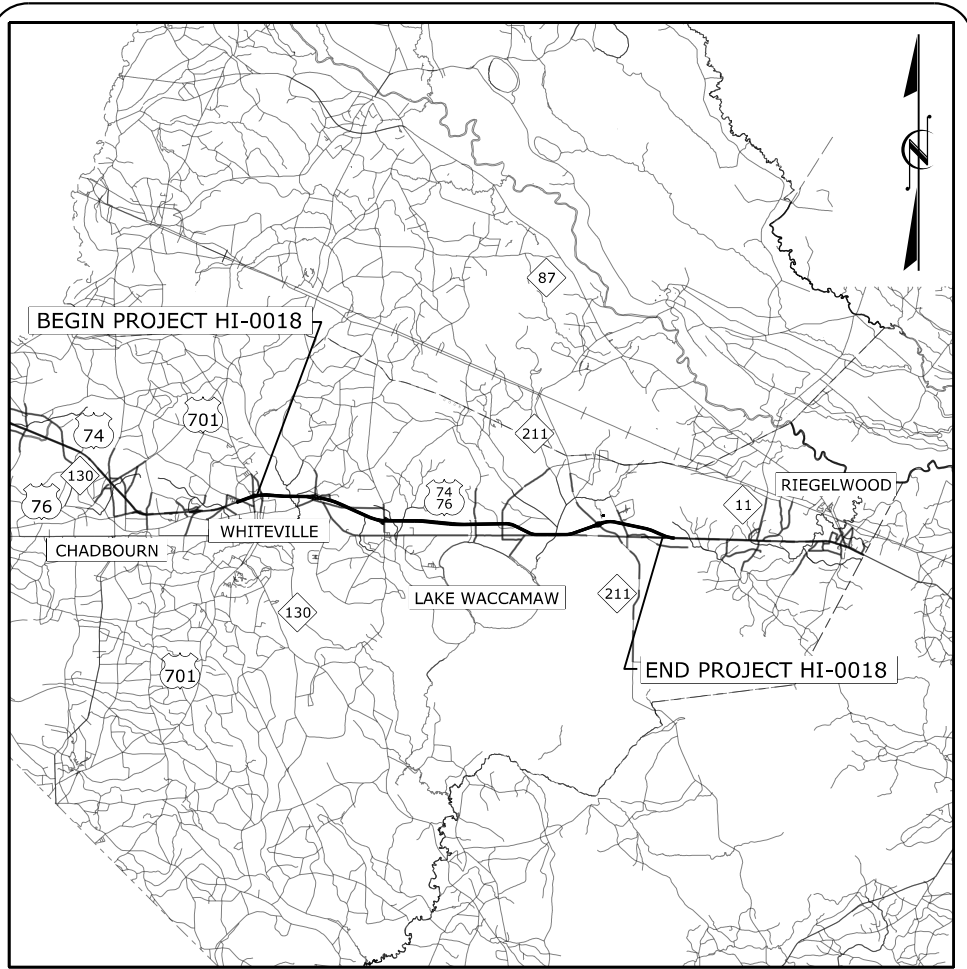


09.08/2019

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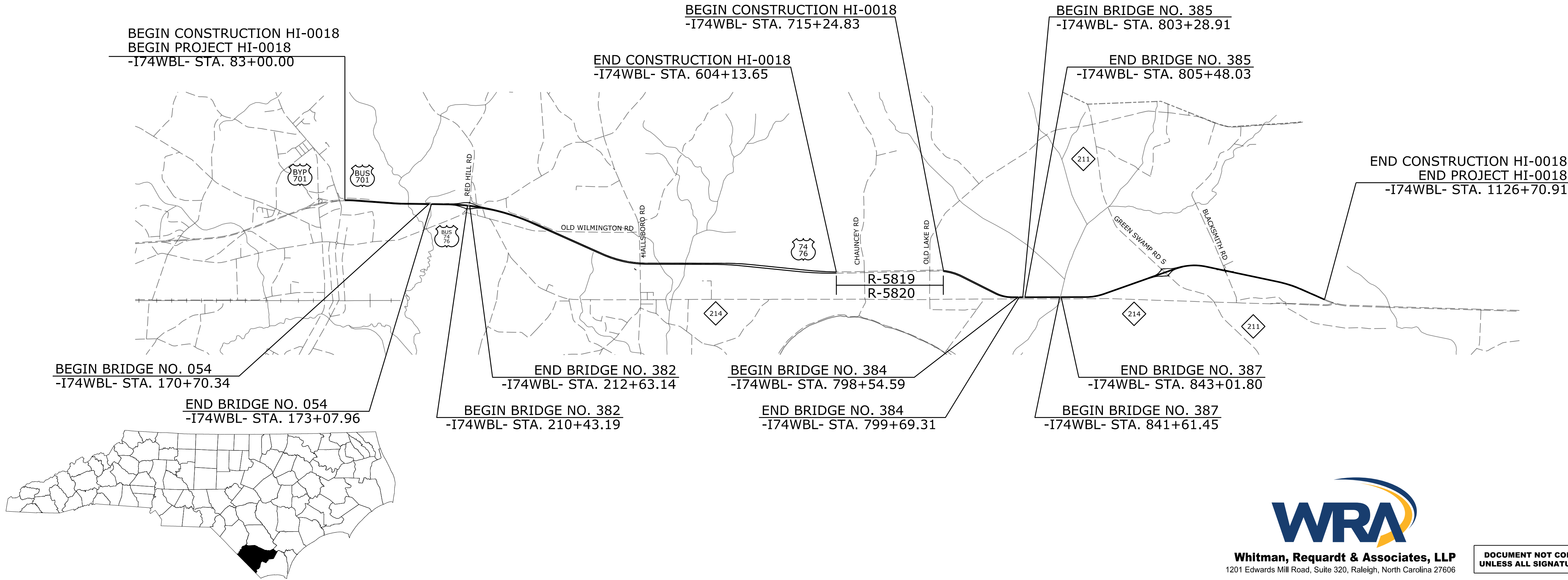
TIP PROJECT: HI-0018

CONTRACT: C204994



VICINITY MAP

N.T.S.



DESIGN DATA

AADT 2021 = 16,500

- V = 70 MPH FROM BUS 701 TO JUST EAST OF SR 1735 (CHAUNCEY TOWN RD)
- V = 60 MPH FROM EAST OF SR 1735 (CHAUNCEY TOWN RD) TO EAST OF NC 214

FUNC CLASS =

FREEWAY WEST OF BLACKSMITH RD
PRINCIPAL ARTERIAL EAST OF BLACKSMITH RD

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

COLUMBUS COUNTY

LOCATION: US 74 (FUTURE I-74) FROM 0.11 MILES EAST OF US 701 BUSINESS TO 0.17 MILES WEST OF NC 214

TYPE OF WORK: DRAINAGE, PAVEMENT REHABILITATION,
& BRIDGE REHABILITATION

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HI-0018	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
49989.1.1	0074247	PE	
49989.3.1	0074247	CONST	



Whitman, Requardt & Associates, LLP
1201 Edwards Mill Road, Suite 320, Raleigh, North Carolina 27606

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

Prepared In the Office of:
DIVISION OF HIGHWAYS

431 Transportation Dr, Fayetteville NC, 28301

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
N/A

LETTING DATE:
FEBRUARY 18, 2025

ALEX HENDERSON

NC DOT CONTACT
PROJECT MANAGER

DOUGLAS SAUNDERS, PE
PROJECT ENGINEER

WILLIAM TILLITT, PE
PROJECT DESIGN ENGINEER

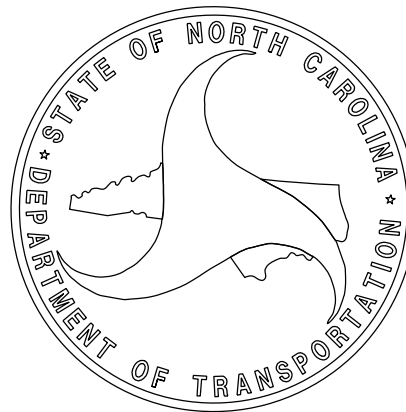
12/18/2024



Signed by:

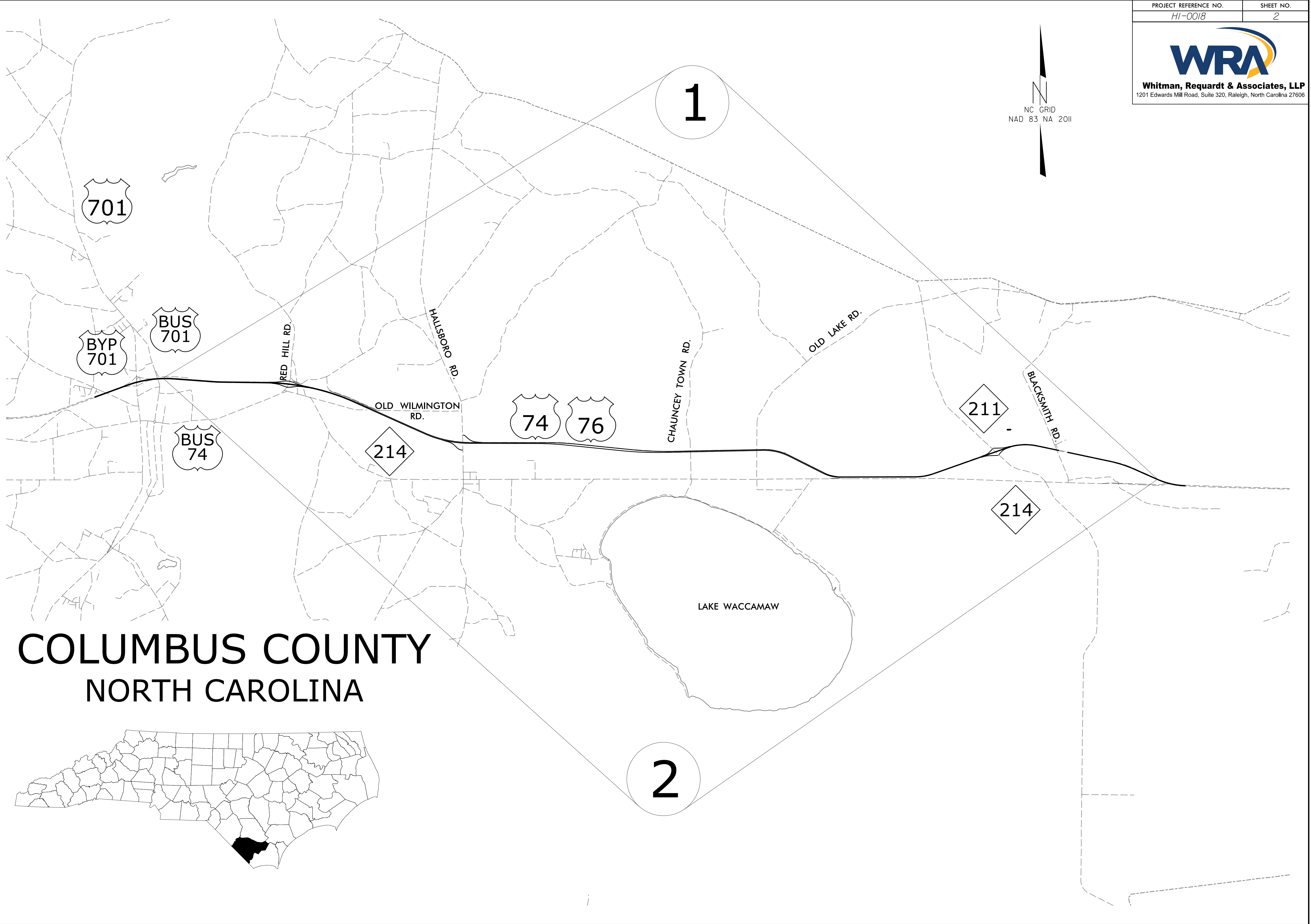
William E. Tillitt

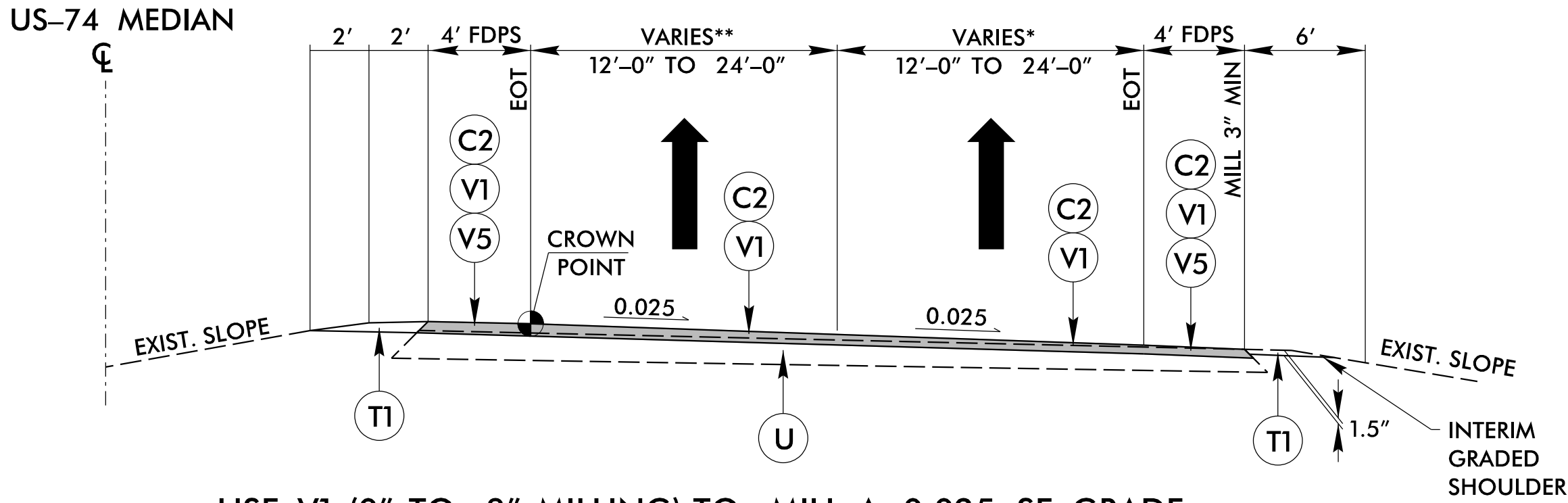
SIGNATURE: WILLIAM TILLITT, P.E.



8/17/99

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N:\48006-002\CADD\NCDDOT\Roadway\Proj\HI-0018\HI-0018_RDY_MAP-02.dgn
8/17/99

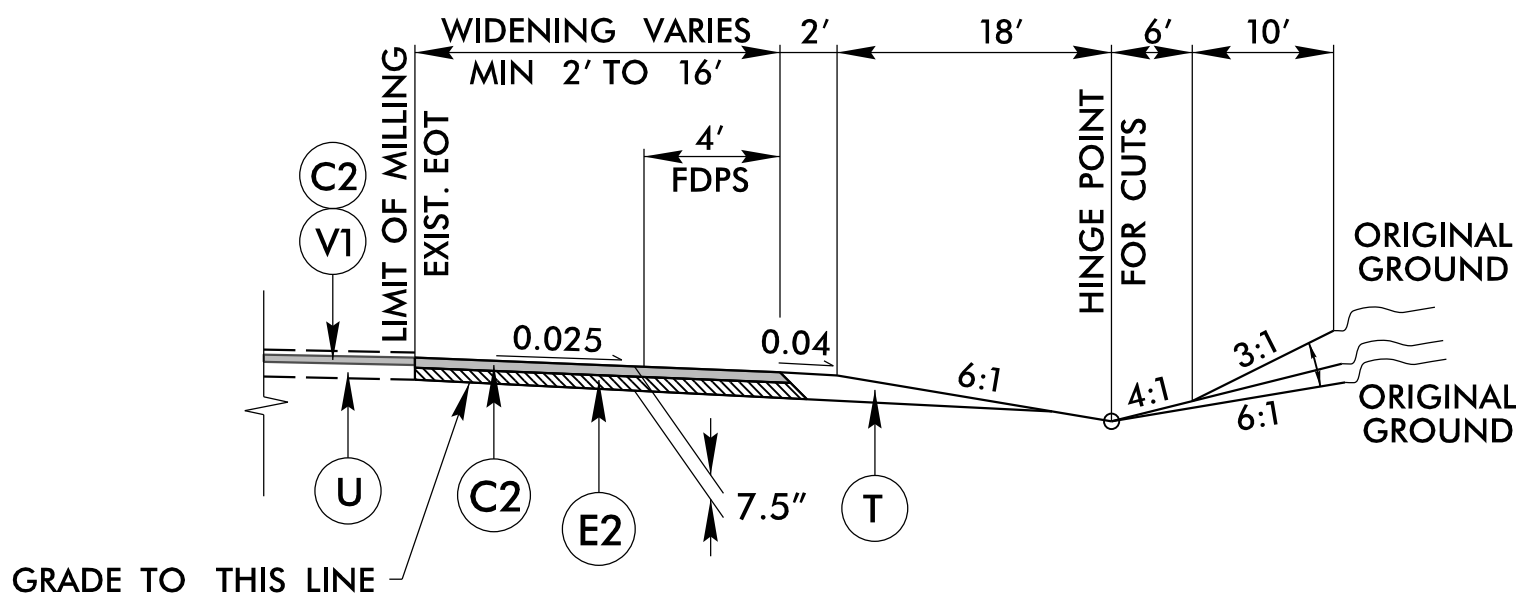




TYPICAL SECTION NO. 1

US-74 EB STA. 82+77.64 TO 170+45.16 (BEGIN BRIDGE)
US-74 EB STA. 172+85.11 (END BRIDGE) TO 209+76.20 (BEGIN BRIDGE)
US-74 EB STA. 212+00.00 (END BRIDGE) TO 604+00.00
US-74 EB STA. 715+00.00 TO 794+00.00
US-74 EB STA. 866+00.00 TO 1126+25.74

US-74 WB STA. 83+00.00 TO 170+70.34 (BEGIN BRIDGE)
US-74 WB STA. 173+07.96 (END BRIDGE) TO 210+43.19 (BEGIN BRIDGE)
US-74 WB STA. 212+63.14 (END BRIDGE) TO 604+13.65
US-74 WB STA. 715+24.83 TO 793+00.00
US-74 WB STA. 868+75.00 TO 1126+70.91
MAPS 1-2



TYPICAL SECTION NO. 3

US-74 EB STA. 1011+41.49 TO 1018+58.62
US-74 WB STA. 1019+00.00 TO 1026+02.62

NOTES:

*PAVEMENT REHABILITATION FOR RAMP ENTRANCE AND EXIT LANES WILL INCLUDE ADDITIONAL WIDTH FOR AREAS OF GORES. (SEE PLANS FOR LIMITS)

**PAVEMENT REHABILITATION FOR MEDIAN CROSSEOVERS AND LEFT TURN LANES WILL INCLUDE ADDITIONAL WIDTH. (SEE PLANS FOR LIMITS) LIMITS OF TYPICAL SECTIONS INDICATED ON THE PLANS ARE APPROXIMATE. TYPICAL SECTION LIMITS AND TRANSITIONS TO BE VERIFIED BY THE ENGINEER IN FIELD.

PAVE SHOULDERS FOR VEHICLE PULL-OFF AREA AS DIRECTED BY ENGINEER.

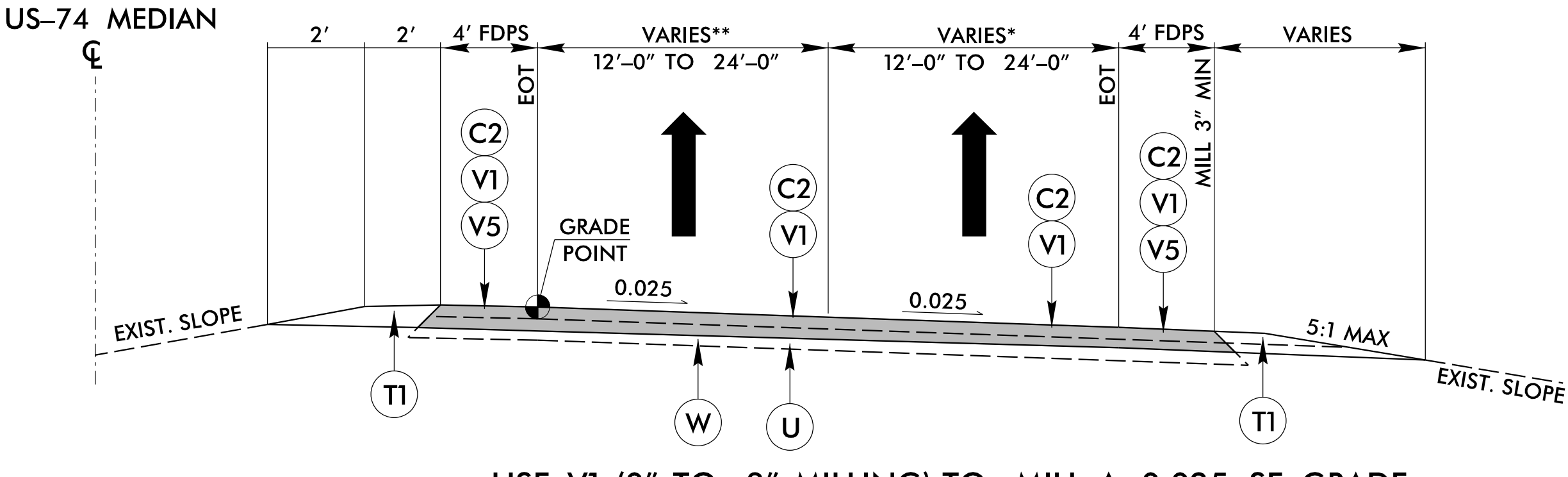
MILLED SECTIONS SHALL BE PAVED WITH WEDGING AND FIRST 1.5" RESURFACING LAYER IN THE SAME DAYS OPERATION TO NOT EXCEED MAXIMUM 2" DROP OFF.

LIMITS OF TYPICAL SECTIONS INDICATED ON THE PLANS ARE APPROXIMATE. TYPICAL SECTION LIMITS AND TRANSITIONS TO BE VERIFIED BY THE ENGINEER IN FIELD.

SURVEY EXISTING CURVE FROM APPROXIMATE STATION 93+00 TO 96+75 PROVIDE SURVEY TO NCDOT ENGINEER FOR DEPARTMENT/PEF REPRESENTATIVE TO COMPUTE RESURFACING PROFILE TO BE PROVIDED FOR YOUR USE PRIOR TO PAVING.

WITH RECOMMENDED RESURFACING GRADE PROVIDED, CONTRACTOR SHALL STAKE EVERY 50 FEET THROUGHOUT EACH CURVE FOR EACH LIFT. ITEM SHALL BE PAID FOR UNDER CONSTRUCTION SURVEYING.

EXISTING CROSS-SECTIONS WERE DEVELOPED FOR WEDGING QUANTITIES FROM LIDAR ONLY AND ARE PROVIDED FOR INFORMATIONAL BIDDING PURPOSES ONLY. FINAL QUANTITIES MAY VARY.



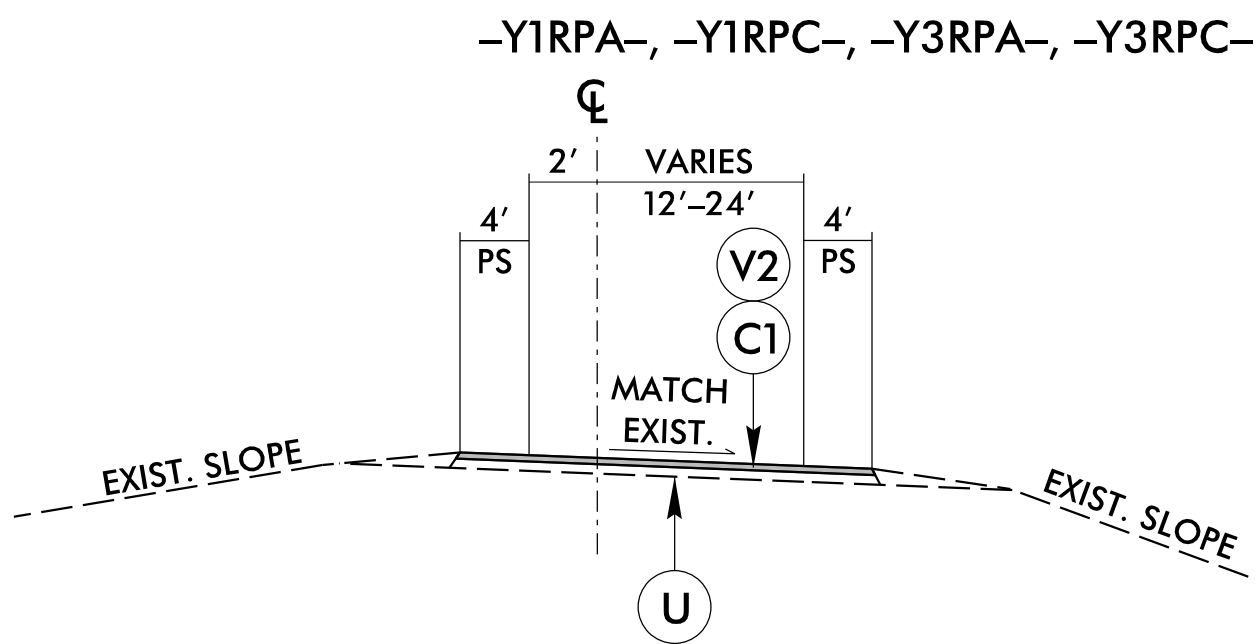
TYPICAL SECTION NO. 2

US-74 EB STA. 794+00.00 TO 798+27.59 (BEGIN BRIDGE)
US-74 EB STA. 799+41.73 (END BRIDGE) TO 803+02.70 (BEGIN BRIDGE)
US-74 EB STA. 805+18.65 (END BRIDGE) TO 841+36.58 (BEGIN BRIDGE)
US-74 EB STA. 842+75.64 (END BRIDGE) TO 866+00.00

US-74 WB STA. 793+00.00 TO 798+54.59 (BEGIN BRIDGE)
US-74 WB STA. 799+61.31 (END BRIDGE) TO 803+28.91 (BEGIN BRIDGE)
US-74 WB STA. 805+48.03 (END BRIDGE) TO 841+61.45 (BEGIN BRIDGE)
US-74 WB STA. 843+01.80 (END BRIDGE) TO 868+75.00
MAPS 1-2

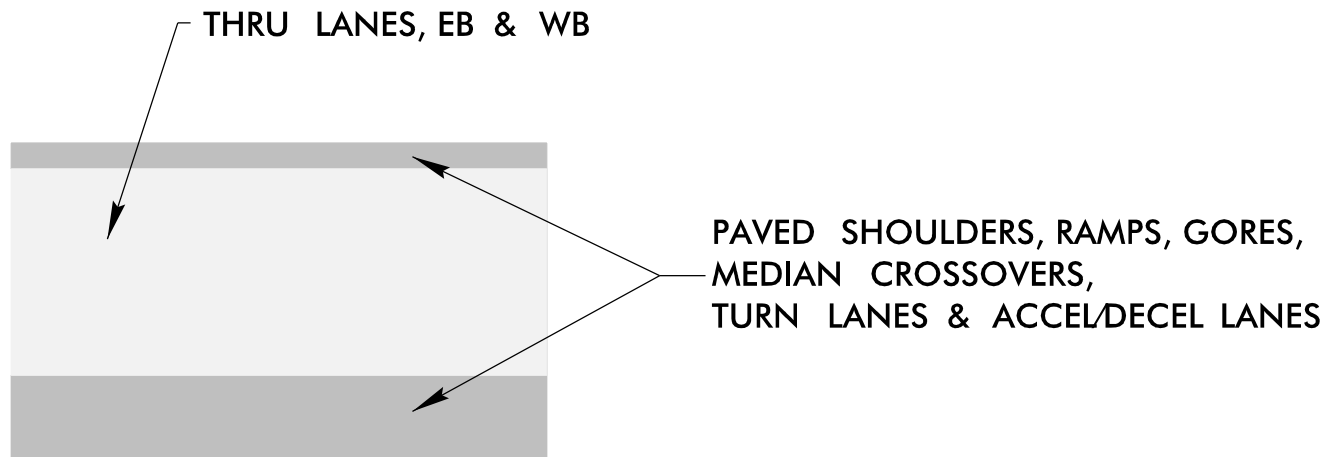
NOTES:

1. IF MILLING EXCEEDS 3" THEN USE WEDGING DETAIL
2. IF PROPOSED SHOULDER DEPTH EXCEEDS 4" USE BORROW EXCAVATION IN LIEU OF ASB
3. PHASING SEQUENCE:
 - 3" MILLING, WEDGING, AND FIRST 1.5" LIFT FOR OUTSIDE LANE TO BE COMPLETED PRIOR TO BEGINNING THE INSIDE LANE 3" MILLING, WEDGING, AND FIRST 1.5" LIFT OF RESURFACING IN EACH PHASE
 - CONTRACTOR CANNOT ADVANCE NEXT PHASE OF LANE CLOSURE UNTIL BOTH INSIDE AND OUTSIDE LANES HAVE COMPLETED MILLING, WEDGING AND FIRST 1.5" LIFT OF RESURFACING
 - AFTER COMPLETING THE ENTIRE PROJECT 3" MILLING, WEDGING AND FIRST LIFT OF 1.5" RESURFACING, CONTRACTOR CAN COMPLETE FINAL 1.5" UNIFORM RESURFACING FOLLOWING TRAFFIC CONTROL PROJECT SPECIAL PROVISIONS
4. SHOULDERS MUST BE GRADED AFTER MILLING AT THE END OF EACH DAY OPERATION TO ELIMINATE PONDING
5. THE CONTRACTOR SHALL RECONSTRUCT INSIDE MEDIAN SHOULDERS AS NEEDED PRIOR TO REOPENING TO TRAFFIC
6. TRANSITION FROM THE 0" TO 3" MILL TO A STANDARD 3" MILL IN THE CURVES AND APPROACHING BRIDGES
7. SEE MILLING TRANSITION SUMMARY ON SHEET 3B-1
8. MATCH EXISTING CROSS SLOPE IN CURVES AND EXISTING INTERCHANGES. LOCATIONS TO BE VERIFIED BY ENGINEER IN FIELD
9. 3" MILL AND RESURFACE RAMP AT ALL INTERCHANGES UP TO THE GORE PAVING LIMITS
10. ALL PAVED AREAS OUTSIDE THE 4' PAVED SHOULDER AND GORE PAVING AREAS WILL BE MILLED 1.5" AND RESURFACED



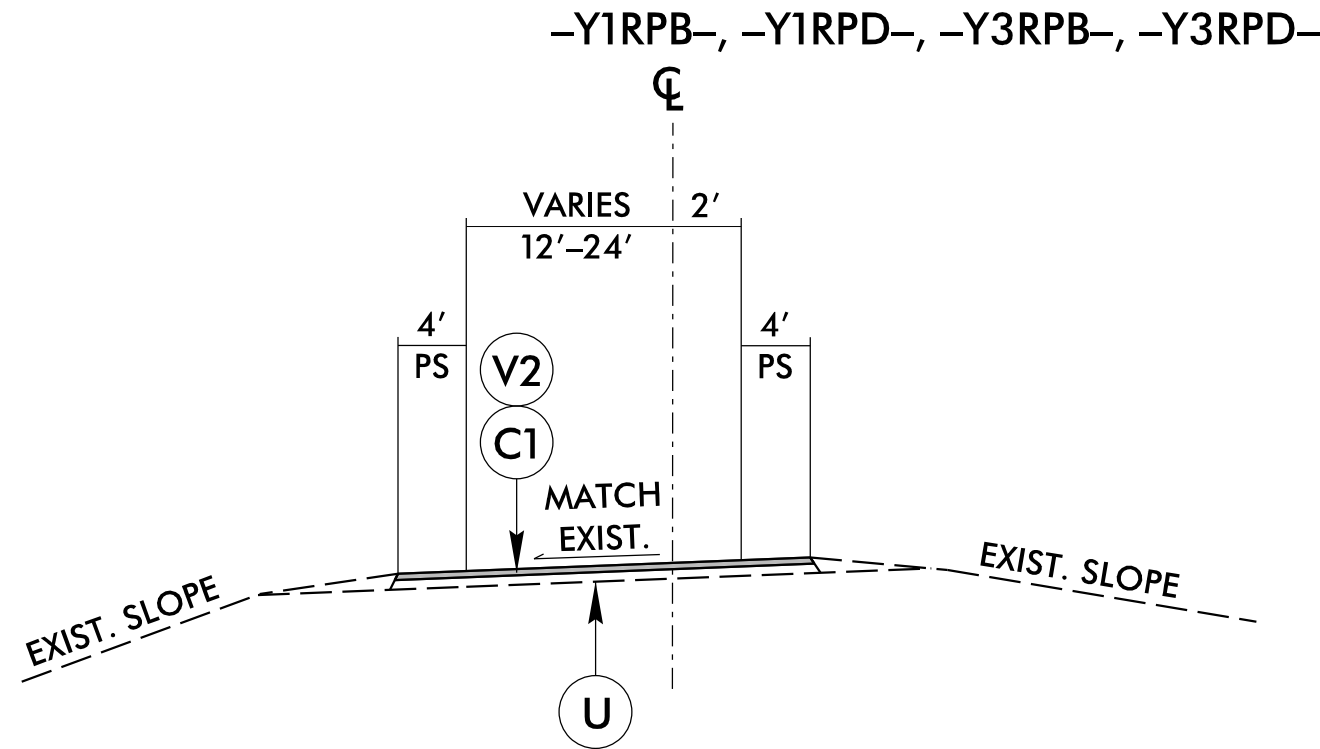
TYPICAL SECTION NO. 4

-Y1RPA- (RED HILL RD) STA. 14+72.00 TO 24+05.00
-Y1RPC- (RED HILL RD) STA. 15+03.00 TO 25+69.00
-Y3RPA- (GREEN SWAMP RD) STA. 15+55.00 TO 28+72.00
-Y3RPC- (GREEN SWAMP RD) STA. 15+76.00 TO 28+77.00



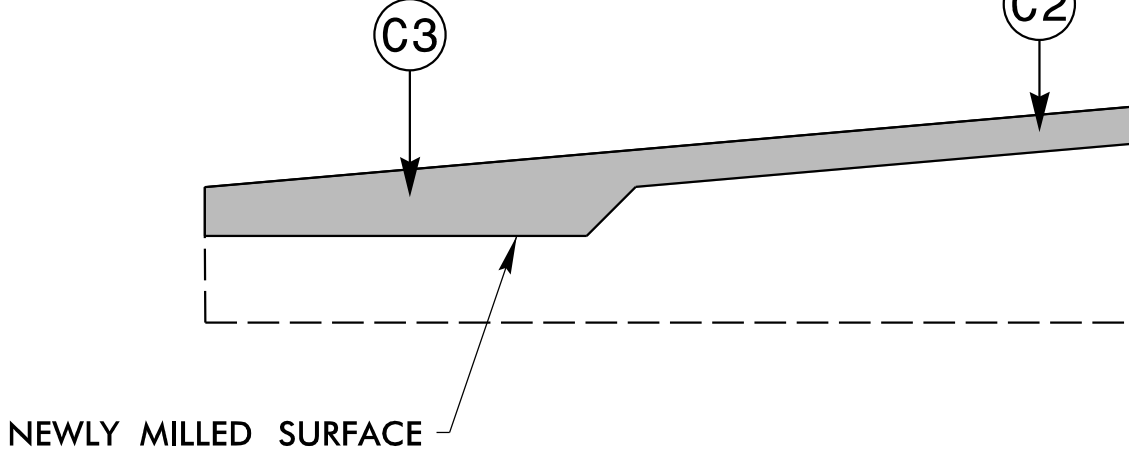
PAVEMENT REHABILITATION LIMITS LEGEND

SEE PLAN SHEETS



TYPICAL SECTION NO. 5

-Y1RPB- (RED HILL RD) STA. 16+79.00 TO 31+09.00
-Y1RPD- (RED HILL RD) STA. 17+84.00 TO 31+81.00
-Y3RPB- (GREEN SWAMP RD) STA. 16+77.00 TO 23+77.00
-Y3RPD- (GREEN SWAMP RD) STA. 17+23.00 TO 22+48.00



WEDGING DETAIL

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YARD
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YARD IN EACH OF TWO LAYERS
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT TO EXCEED 2.0" IN DEPTH
E1	PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YARD
E2	PROP. APPROX. 4.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 513 LBS. PER SQ. YARD
E3	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YARD
E4	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT GREATER THAN 5.5" IN DEPTH OR LESS THAN 3" IN DEPTH
T	EARTH MATERIAL
T1	SHOULDER RECONSTRUCTION USING AGGREGATE SHOULDER BORROW AS DIRECTED BY ENGINEER
U	EXISTING ASPHALT PAVEMENT
V1	0" TO 3" MILLED ASPHALT PAVEMENT
V2	1.5" MILLED ASPHALT PAVEMENT
V3	3" MILLED ASPHALT PAVEMENT
V4	4" MILLED ASPHALT PAVEMENT
V5	MILLED RUMBLE STRIPS
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL THIS SHEET)

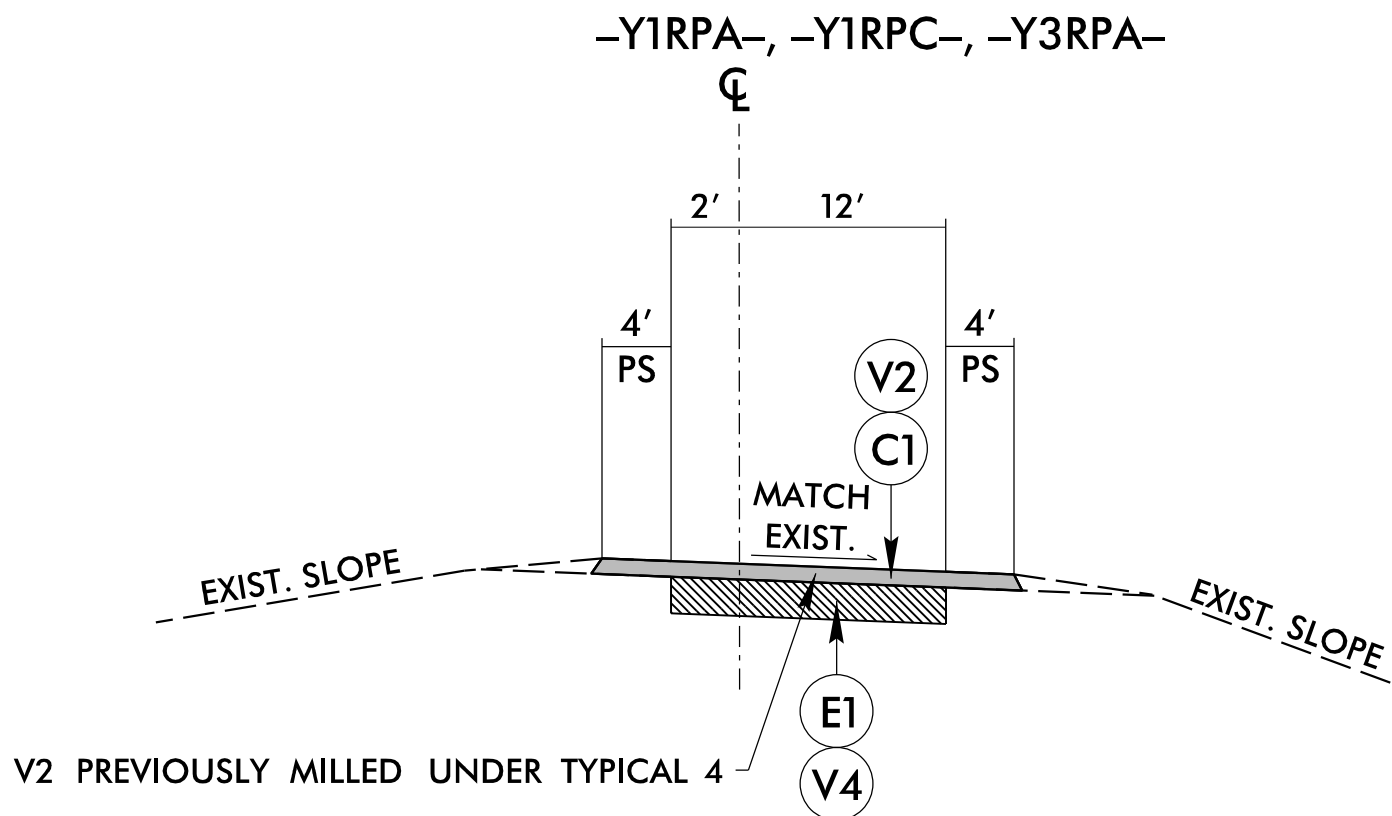
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

NOT TO SCALE

NOT TO SCALE

PAVEMENT SCHEDULE	
C1	1.5" S9.5C
C2	3.0" S9.5C
C3	VAR. S9.5C
E1	4.0" B25.0C
E2	4.5" B25.0C
E3	5.5" B25.0C
E4	VAR. B25.0C
T	EARTH MATERIAL
T1	SHLD. RECONSTR.
U	EX. PAVEMENT
V1	VAR. MILLING
V2	1.5" MILLING
V3	3" MILLING
V4	4" MILLING
V5	MILLED RMBL STR.
W	WEDGING

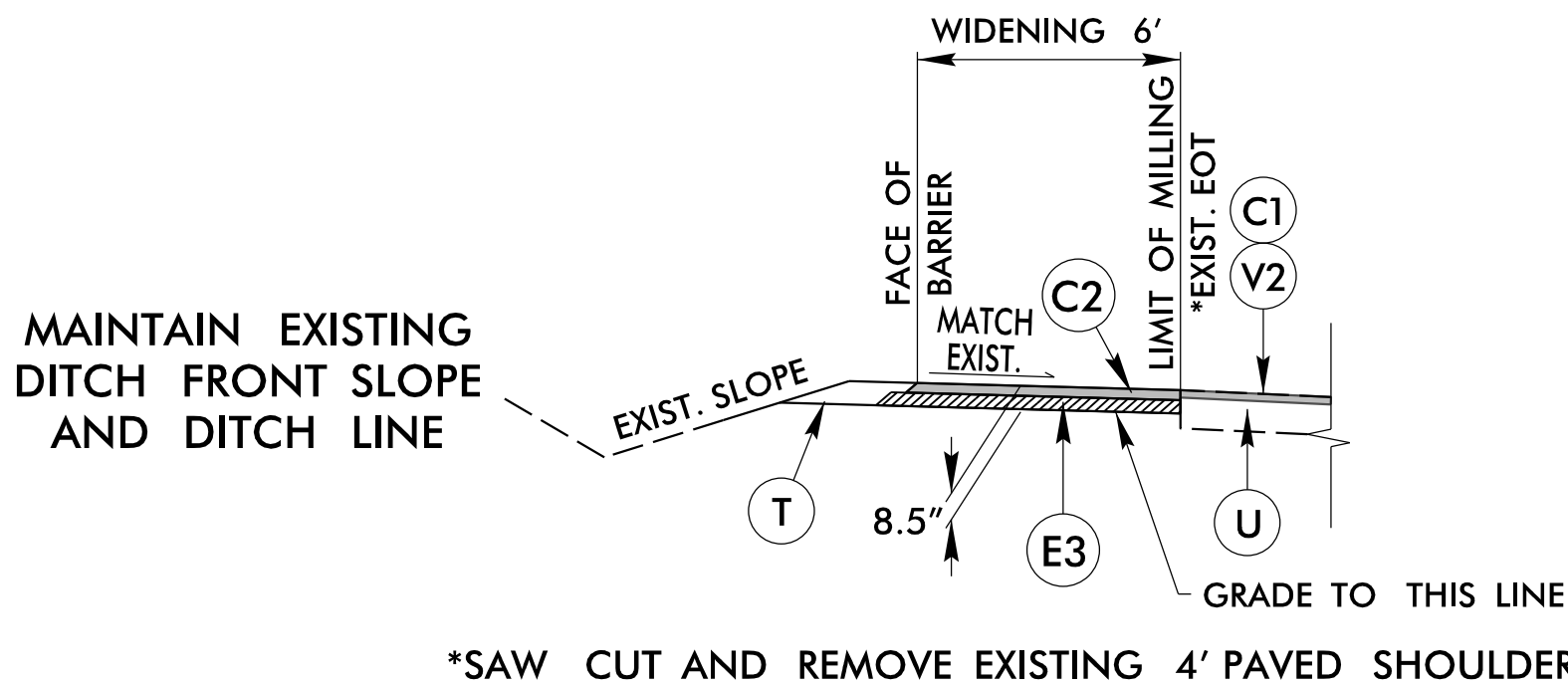
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



PAVEMENT REPLACEMENT DETAIL
SEE TYPICAL 4 FOR 1.5" MILL OF ENTIRE RAMP
PRIOR TO RESURFACING MILL/FILL
ADDITIONAL PAVEMENT REPAIR PER TYP NO. 6

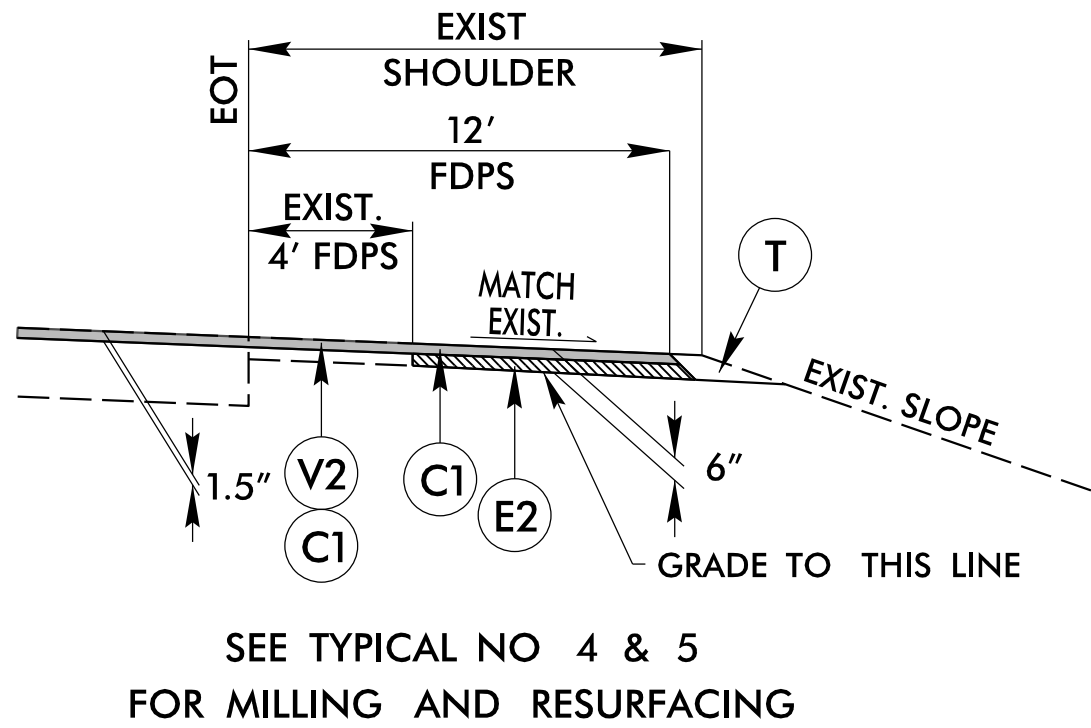
TYPICAL SECTION NO. 6

-Y1RPA- (RED HILL RD) STA. 21+80.00 TO 24+05.00
-Y1RPC- (RED HILL RD) STA. 23+30.00 TO 25+58.97
-Y3RPA- (GREEN SWAMP RD) STA. 18+00.00 TO 20+25.00



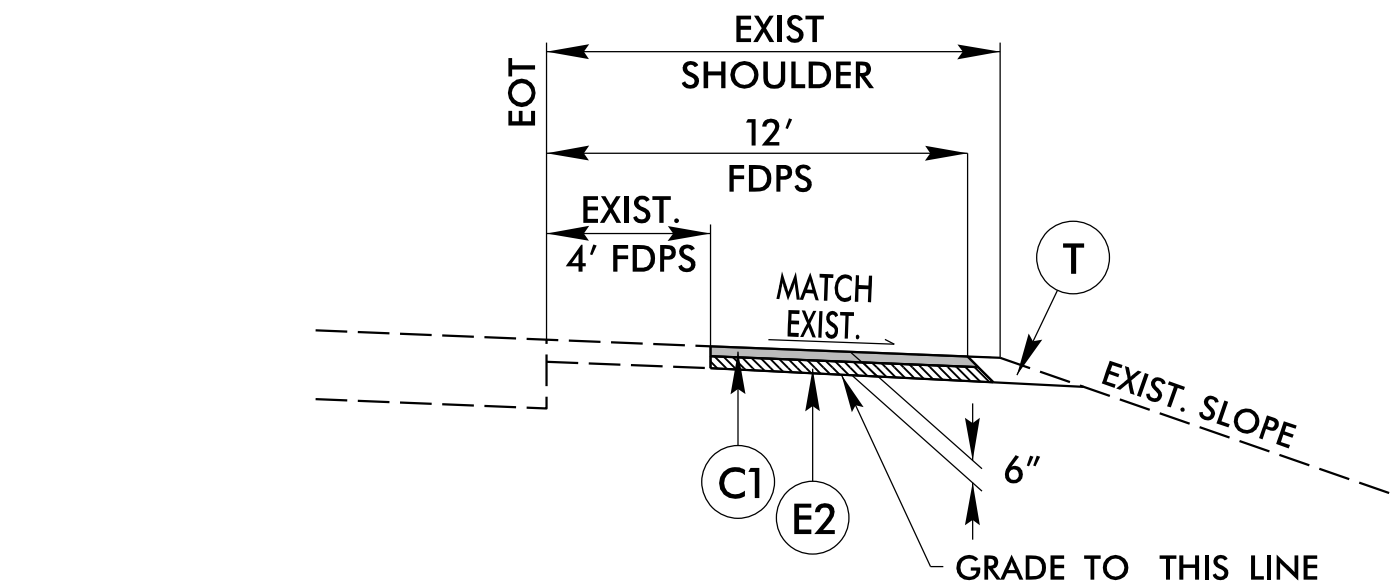
DETAIL C BRIDGE NO. 053 INSIDE SHOULDER WIDENING

US-74 EB STA. 169+97.16 TO 170+45.16
US-74 EB STA. 172+85.11 TO 173+33.11



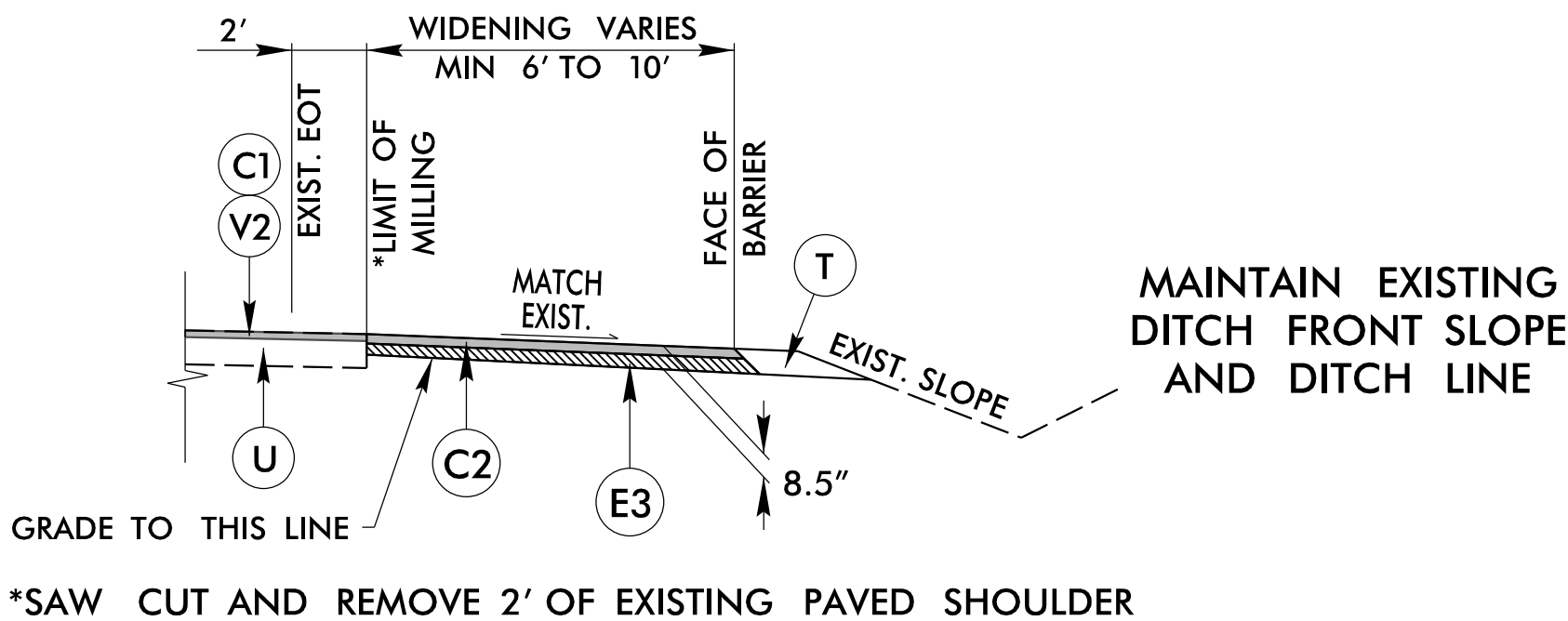
DETAIL A RAMP OUTSIDE SHOULDER WIDENING

TO BE USED IN CONJUNCTION WITH T.S. 4 & 5
-Y1RPA- (RED HILL RD) STA. 18+25.00 TO 20+75.00
-Y1RPB- (RED HILL RD) STA. 25+75.00 TO 28+25.00
-Y1RPC- (RED HILL RD) STA. 20+25.00 TO 22+75.00
-Y1RPD- (RED HILL RD) STA. 28+00.00 TO 30+50.00
-Y3RPA- (GREEN SWAMP RD) STA. 22+00.00 TO 24+50.00
-Y3RPB- (GREEN SWAMP RD) STA. 19+50.00 TO 22+00.00
-Y3RPC- (GREEN SWAMP RD) STA. 20+00.00 TO 22+50.00
-Y3RPD- (GREEN SWAMP RD) STA. 19+50.00 TO 22+00.00



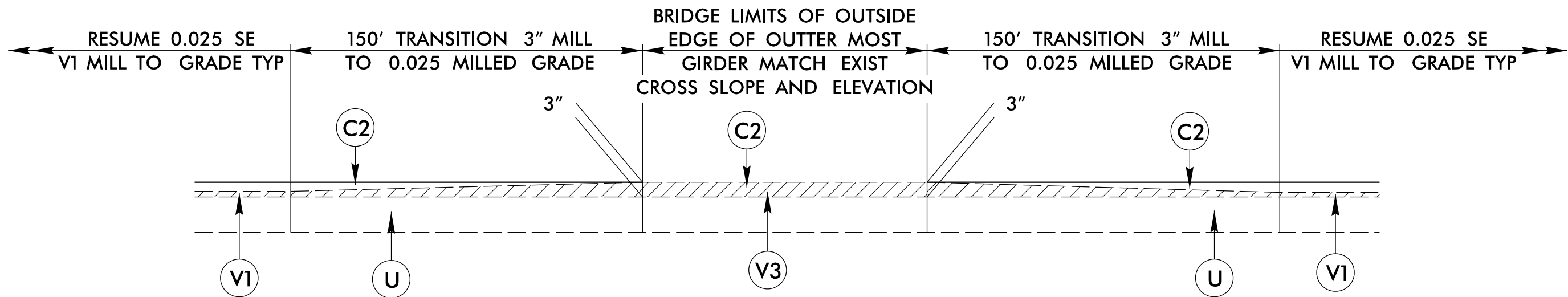
DETAIL B RAMP OUTSIDE SHOULDER WIDENING

-Y2RPA- (HALLSBORO RD) STA. 27+50.00 TO 30+00.00
-Y2RPC- (HALLSBORO RD) STA. 27+50.00 TO 30+00.00

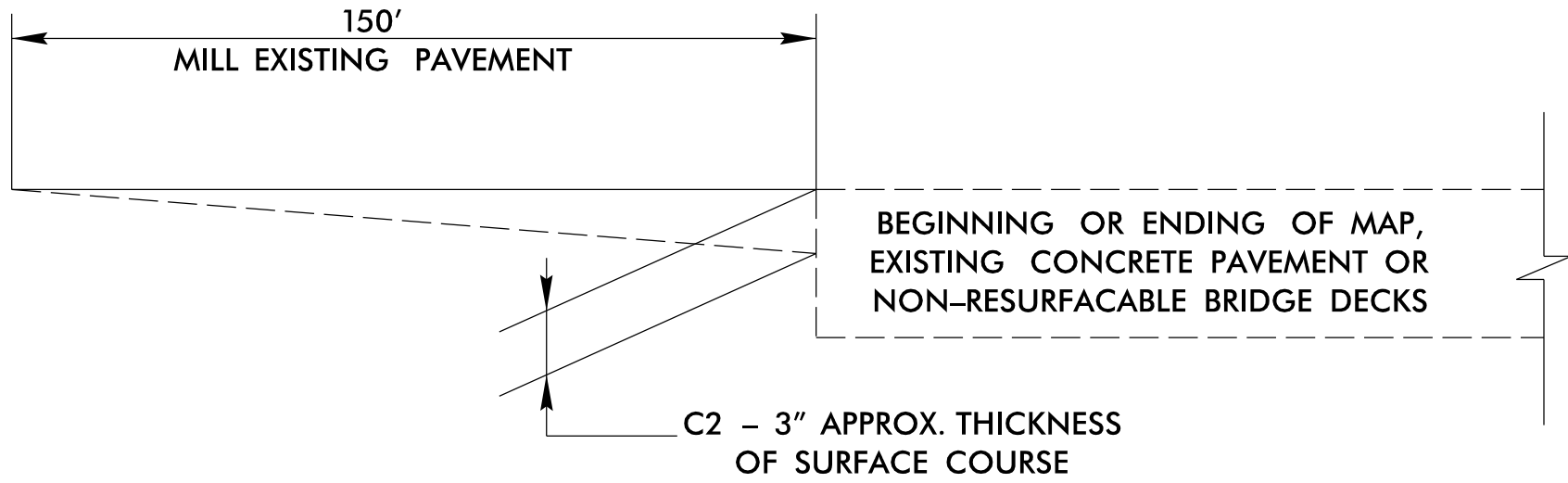


DETAIL D BRIDGE NO. 053 OUTSIDE SHOULDER WIDENING

US-74 EB STA. 169+97.16 TO 170+45.16
US-74 EB STA. 172+85.11 TO 173+33.11



MILLING UNDER BRIDGES



INCIDENTAL MILLING AT PAVEMENT TIE-INS

[illegible]

												PROJECT NO.		SHEET NO.							
												HI-0018		38-2							
														SUMMARY OF QUANTITIES - ROADWAY							
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	0000100000-N MOBILIZATION	0000400000-N CONSTRUCTION SURVEYING	0106000000-E BORROW EXCAVATION	0156000000-E REMOVAL OF EXISTING ASPHALT PAVEMENT	1245000000-E SHOULDER RECONSTRUCTION	1260000000-E AGGREGATE SHOULDER BORROW	1297000000-E MILLING ASPHALT PAVEMENT, 1.5" DEPTH	1297000000-E MILLING ASPHALT PAVEMENT, 3" DEPTH	1297000000-E MILLING ASPHALT PAVEMENT, 4" DEPTH	1308000000-E MILLING ASPHALT PAVEMENT, 0" TO 3"
										MI	FT	LS	LS	CY	SY	SMI	TONS	SY	SY	SY	SY
49989.3.1	Columbus	1	US 74 WB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	NO	NO	17.66	24			715			8,095	11,994	61,227	749	271,246
		2	US 74 EB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	NO	NO	17.66	24			660	70		8,043	11,601	61,384	350	268,776
TOTAL FOR MAP NO. 1										17.66							8,095	11,994	61,227	749	271,246
TOTAL FOR MAP NO. 2										17.66							8,043	11,601	61,384	350	268,776
														TOTAL FOR DRAINAGE = 5							
														PROJECT TOTAL = 1,380							
										35.33		1	1	1,380	70	65.50	16,138	23,595	122,611	1,099	540,022
GRAND TOTAL				TOTAL SAY								1	1	1,380	70	65.50	16,140	23,595	122,615	1,100	540,025
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	1330000000-E INCIDENTAL MILLING	1491000000-E ASPHALT CONC BASE COURSE, TYPE B25.0C	1523000000-E ASPHALT CONC SURFACE COURSE, TYPE S9.5C	1575000000-E ASPHALT BINDER FOR PLANT MIX	1840000000-E MILLED RUMBLE STRIPS (ASPHALT CONCRETE)	1880000000-E GENERIC PAVING ITEM - ASPHALT CONC SURFACE COURSE, TYPE S9.5C (WEDGING COURSE)				
										MI	FT	SY	TONS	TONS	TONS	LF	TONS				
49989.3.1	Columbus	1	US 74 WB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	NO	NO	17.66	24	7,527	650	58,505	3,575	184,672	1,510				
		2	US 74 EB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	NO	NO	17.66	24	7,500	615	58,132	3,550	184,630	1,560				
TOTAL FOR MAP NO. 1										17.66		7,527	650	58,505	3,575	184,672	1,510				
TOTAL FOR MAP NO. 2										17.66		7,500	615	58,132	3,550	184,630	1,560				
										35.33		15,027	1,265	116,637	7,125	369,302	3,070				
GRAND TOTAL				TOTAL SAY								15,030	1,265	116,640	7,125	369,310	3,070				
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	3030000000-E STEEL BEAM GUARDRAIL	3150000000-N ADDITIONAL GUARDRAIL POSTS	3210000000-N GUARDRAIL END UNITS, TYPE CAT-1	3287000000-N GUARDRAIL END UNITS, TYPE TL-3	3317000000-N GUARDRAIL ANCHOR UNITS, TYPE B-77	3360000000-E REMOVE EXISTING GUARDRAIL	3503000000-E WOVEN WIRE FENCE, 47" FABRIC	3509000000-E 4" TIMBER FENCE POSTS, 7'-6" LONG	3515000000-E 5" TIMBER FENCE POSTS, 8'-0" LONG	
										MI	FT	LF	EA	EA	EA	EA	LF	LF	EA	EA	
49989.3.1	Columbus	1	US 74 WB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	NO	NO	17.66	24							6,520	429	69	
		2	US 74 EB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	NO	NO	17.66	24							1,120	74	12	
TOTAL FOR MAP NO. 1										17.66											
TOTAL FOR MAP NO. 2										17.66											
										35.33											
GRAND TOTAL				TOTAL SAY								2,837.5	25	6	16	3	2,300	7,640	503	81	

																							PROJECT NO.	SHEET NO.			
																							H-0018	3B-3			
SUMMARY OF QUANTITIES - DRAINAGE																											
PROJECT NO	COUNTY	DRAINAGE ITEM NO	PLAN SHEET	ROUTE	Hydraulics Recommendation	Structure depth	0106000000-E	0318000000-E	0321000000-E	03660000000-E	03720000000-E	1220000000-E	22530000000-E	22640000000-E	22750000000-E	22860000000-N	23650000000-N	24730000000-N	60000000000-E	60120000000-E	60290000000-E	60420000000-E	6071010000-E	60840000000-E	61170000000-N	61175000000-N	
							BORROW EXCAVATION	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	FOUNDATION CONDITIONING GEOTEXTILE	15" RC PIPE CULVERTS, CLASS III	18" RC PIPE CULVERTS, CLASS III	INCIDENTAL STONE BASE	PIPE COLLARS	PIPE PLUGS	FLOWABLE FILL	MASONRY DRAINAGE STRUCTURES	FRAME WITH TWO GRATES, STD 840.22	GENERIC DRAINAGE ITEM - CONCRETE APRON FOR DROP INLET	TEMPORARY SILT FENCE	SEDIMENT CONTROL STONE	SAFETY FENCE	1/4" HARDWARE CLOTH	WATTLE	SEEDING & MULCHING	RESPONSE FOR EROSION CONTROL	CONCRETE WASHOUT STRUCTURE	
							CY	TON	SY	LF	LF	TON	CY	CY	CY	EA	EA	EA	LF	TON	LF	LF	ACR	EA	EA		
46983.1.1	Columbus	1	5	180+90 WBL MEDIAN	REPLACE CONCRETE APRON	N/A												1		5		40	40	0.10			
		2	5	188+90 WBL MEDIAN	REPLACE CONCRETE APRON	N/A												1		5		40	40	0.10			
		3	6	196+90 WBL MEDIAN	REPLACE CONCRETE APRON	N/A												1		5		40	40	0.10			
		4	6	199+15 WBL MEDIAN	REPLACE CONCRETE APRON	N/A												1		5		40	40	0.10			
		5	6	222+40 WBL MEDIAN	INSTALL CONCRETE APRON	N/A												1		5		40	40	0.10			
		6	6	227+35 WBL MEDIAN	REPLACE CONCRETE APRON	N/A												1		5		40	40	0.10			
		7	7	236+00 WBL MEDIAN	REPLACE CONCRETE APRON	N/A												1		5		40	40	0.10			
		8	7	243+15 WBL MEDIAN	REPLACE CONCRETE APRON	N/A												1		5		40	40	0.10			
		9	7	251+15 WBL MEDIAN	REPLACE CONCRETE APRON	N/A												1		5		40	40	0.10			
		10	7	259+15 WBL MEDIAN	REPLACE CONCRETE APRON	N/A												1		5		40	40	0.10			
		11	7	267+15 WBL MEDIAN	REPLACE CONCRETE APRON	N/A												1		5		40	40	0.10			
		12	7	275+15 WBL MEDIAN	REPLACE 2 WIDE SLOT SAG GRATES (EXISTING GRATES MISSING). REPLACE CONCRETE APRON	N/A										1	2	1		5		40	40	0.10			
		13	14	729+55 WBL LT	REMOVE AND REPLACE 8' OF 18" RCP WITH CONCRETE COLLAR ON EACH SIDE OF STRUCTURE. BACKFILL TO EXISTING DITCH SLOPES. REPLACE CONCRETE APRON	N/A	0.5	0.8	2.7		8		0.893					1		5		40	40	0.10			
		14	15	815+25 WBL MEDIAN	PLUG & FILL EXISTING 24" CMP WITH FLOWABLE FILL. CONTAIN GROUT OUTSIDE OF WETLANDS. CONTRACTOR'S MEANS AND METHODS SHOULD ASSURE PIPES ARE FLOWABLE FILLED COMPLETELY	N/A							0.232	17.8					10		80	80	0.20				
		15	15	825+25 WBL MEDIAN	PLUG & FILL EXISTING 24" CMP WITH FLOWABLE FILL. CONTAIN GROUT OUTSIDE OF WETLANDS. CONTRACTOR'S MEANS AND METHODS SHOULD ASSURE PIPES ARE FLOWABLE FILLED COMPLETELY	N/A							0.232	17.8					10		80	80	0.20				
		16	15	856+25 WBL MEDIAN	PLUG & FILL EXISTING 24" CMP WITH FLOWABLE FILL. CONTAIN GROUT OUTSIDE OF WETLANDS. CONTRACTOR'S MEANS AND METHODS SHOULD ASSURE PIPES ARE FLOWABLE FILLED COMPLETELY	N/A							0.232	17.8					10		80	80	0.20				
		17	16	871+25 WBL MEDIAN	PLUG & FILL EXISTING 24" CMP WITH FLOWABLE FILL. CONTAIN GROUT OUTSIDE OF WETLANDS. CONTRACTOR'S MEANS AND METHODS SHOULD ASSURE PIPES ARE FLOWABLE FILLED COMPLETELY	N/A							0.232	17.8					10		80	80	0.20				
		18	16	874+40 WBL MEDIAN	REMOVE AND REPLACE 20'. REMOVE AND REPLACE 4' OF 15" RCP WITH CONCRETE COLLAR. REPLACE CONCRETE APRON	N/A	0.5	0.4	1.3	4			0.399			1	1	1		5		40	40	0.10		1	
		19	17	930+00 WBL MEDIAN	REMOVE AND REPLACE 8' OF 15" RCP WITH CONCRETE COLLAR ON EACH SIDE OF STRUCTURE. BACKFILL TO EXISTING DITCH SLOPES. REPLACE CONCRETE APRON	N/A	0.5	0.8	2.7	8			0.798					1		5		40	40	0.10			
		20	17	964+55 WBL MEDIAN	REMOVE AND REPLACE 8' OF 15" RCP WITH CONCRETE COLLAR ON EACH SIDE OF STRUCTURE. BACKFILL TO EXISTING DITCH SLOPES. REPLACE CONCRETE APRON	N/A	0.5	0.8	2.7	8			0.798					1		5		40	40	0.10			
		21	18	984+00 WBL MEDIAN	REPLACE 1 WIDE SLOT SAG GRATE (EXISTING GRATE MISSING)	N/A												1		5		40	40	0.10			
		22	18	1001+65 WBL MEDIAN	REPLACE 1 WIDE SLOT SAG GRATE (EXISTING GRATE MISSING)	N/A												1		5		40	40	0.10			
		23	18	1021+80 WBL MEDIAN	REMOVE AND REPLACE 1 WIDE SLOT SAG GRATE (EXISTING GRATE BROKEN)	N/A												1		5		40	40	0.10			
		24	19	1063+65 WBL MEDIAN	REMOVE AND REPLACE 20'. REMOVE AND REPLACE 4' OF 15" RCP WITH CONCRETE COLLAR	N/A	0.5	0.4	1.3	4			0.399			1	1			5		40	40	0.10		1	
			6	-174WBL- 215+55 TO 224+96	REMOVE & REPLACE EXIST C/A FENCE	N/A																		0.23			
			7-8	-174WBL- 253+27 TO 308+36	REMOVE & REPLACE EXIST C/A FENCE	N/A																		1.27			
			14-15	-174EBL- 781+38 TO 792+01	REMOVE & REPLACE EXIST C/A FENCE	N/A																		0.26			
TOTAL							2.5	3.4	10.7	24	8		3.287	0.928	71.2	3	7	16		140		1,120	1,120	4.55		2	
SAY							5	5	20	24	8	250	3.5	1.00	71.3	3	7	16	350	140	250		1,120	1,120	5	6	2

																	PROJECT NO.	SHEET NO.
																	HI-0018	3B-4

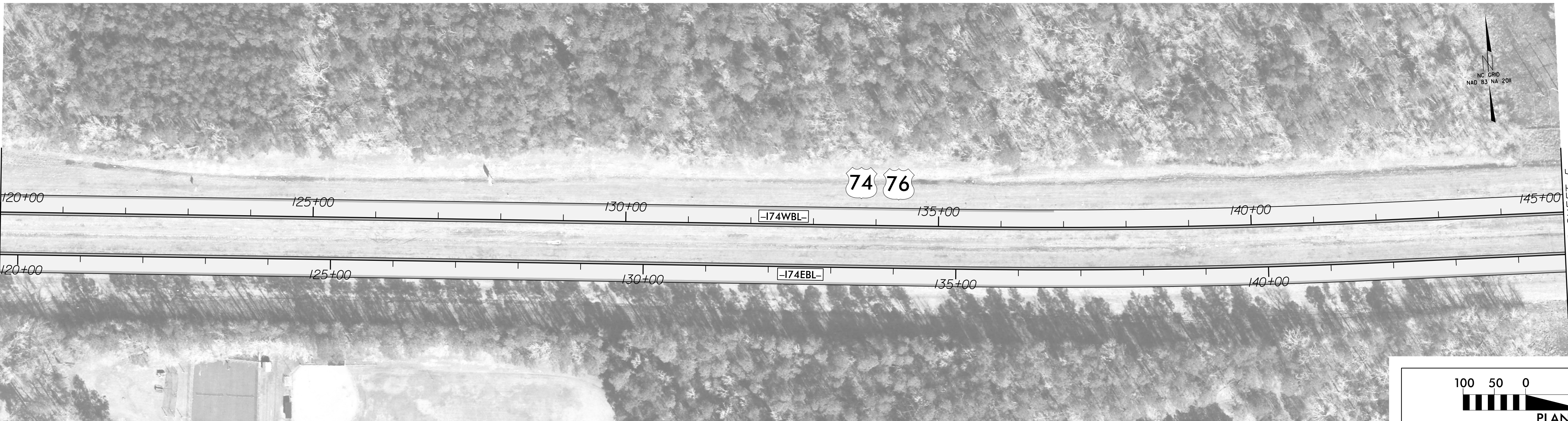
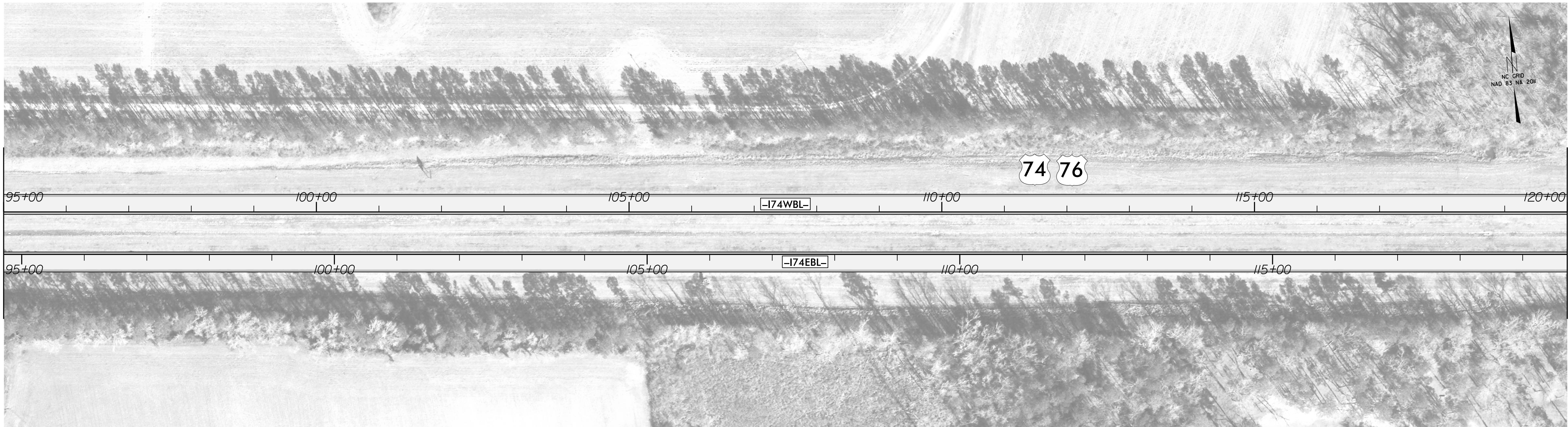
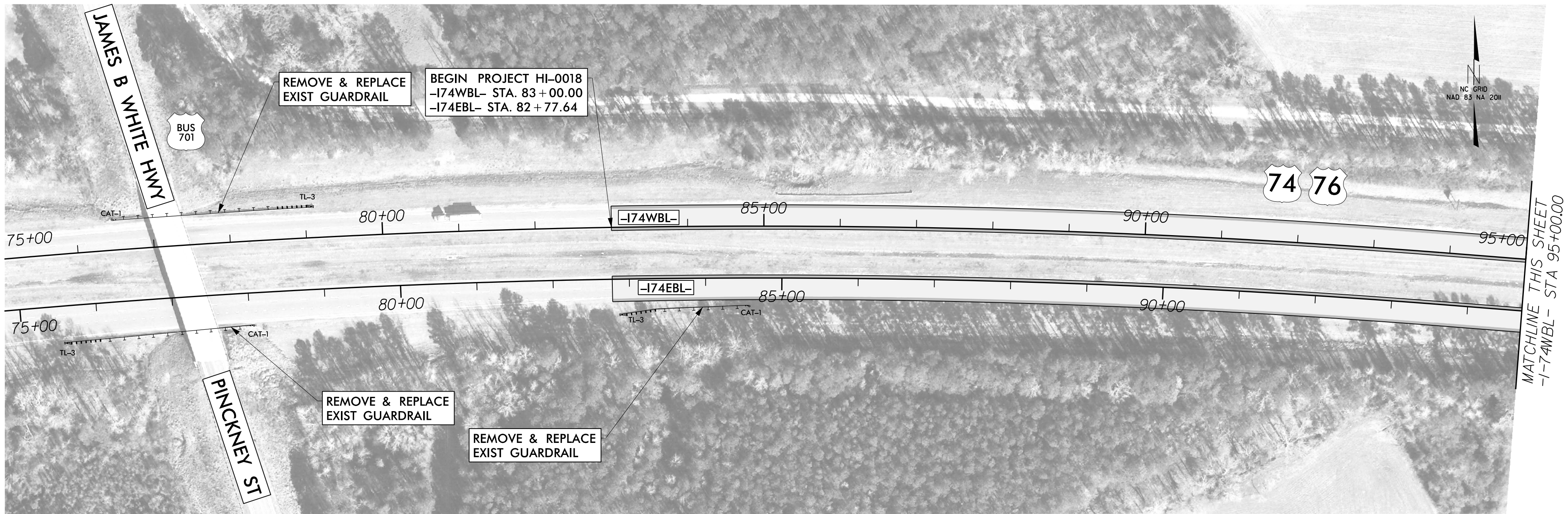
SIGNING QUANTITIES																				
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	4048000000-E	4054000000-E	4060000000-E	4072000000-E	4078000000-E	4096000000-N	4102000000-N	4110000000-N	4110000000-N	4114000000-N	4152000000-N	4155000000-N
								REINFORCED CONCRETE SIGN FOUNDATIONS	PLAIN CONCRETE SIGN FOUNDATIONS	SUPPORTS, BREAKAWAY STEEL BEAM	SUPPORTS, 3 LB STEEL U CHANNEL	SUPPORTS, 2-LB STEEL U-CHANNEL	SIGN ERECTION TYPE D	SIGN ERECTION TYPE E	SIGN ERECTION, TYPE A (GROUND MOUNTED)	SIGN ERECTION, TYPE B (GROUND MOUNTED)	SIGN ERECTION, MILEMARKERS	DISPOSAL OF SIGN SYSTEM, STEEL BEAM	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	
								MI	CY	CY	LB	LF	EA	EA	EA	EA	EA	EA	EA	EA
49989.3.1	Columbus	1	US 74 WB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	17.66												
		2	US 74 EB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	17.66												
GRAND TOTAL				SAY					5.00	1.00	5,844	530	5	6	17	10	3	5	10	19

WORK ZONE TRAFFIC CONTROL QUANTITIES														
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	4423000000-N	4424000000-N	4434000000-N	4457000000-N	4510000000-N	4600000000-N
								WORK ZONE DIGITAL SPEED LIMIT SIGNS	WORK ZONE PRESENCE LIGHTING	SEQUENTIAL FLASHING WARNING LIGHTS	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	GENERIC TRAFFIC CONTROL ITEM - CONNECTED LANE CLOSURE SYSTEM	
								MI	EA	EA	EA	LS	HR	EA
49989.3.1	Columbus	1	US 74 WB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	17.66						
		2	US 74 EB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	17.66						
GRAND TOTAL				TOTAL					10	28	24	1	5,817	4
				SAY					10	28	24	1	5,817	4

										PROJECT NO.		SHEET NO.							
										HI-0018		3B-5							
THERMOPLASTIC AND PAINT QUANTITIES																			
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4688000000-E		4700000000-E	4725000000-E				4815000000-E		
										THERMO PAVEMENT MARKING LINES (6", 90 MILS), WHITE	THERMO PAVEMENT MARKING LINES (6", 90 MILS), YELLOW	THERMO PAVEMENT MARKING LINES (12", 90 MILS), WHITE	THERMO PAVEMENT MARKING SYMBOL (90 MILS), MERGE ARROW	THERMO PAVEMENT MARKING SYMBOL (90 MILS), LEFT ARROW	THERMO PAVEMENT MARKING SYMBOL (90 MILS), THRU ARROW	THERMO PAVEMENT MARKING SYMBOL (90 MILS), U-TURN ARROW	PAINT PAVEMENT MARKING LINES (6"), WHITE	PAINT PAVEMENT MARKING LINES (6"), YELLOW	
								MI	FT	LF	LF	LF	EA	EA	EA	EA	LF	LF	
49989.3.1	Columbus	1	US 74 WB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	17.66	24										
		2	US 74 EB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	17.66	24										
GRAND TOTAL										230,828	184,663	11,200	18	2	6	6	230,828	184,663	
				SAY						415,491			32				415,491		
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4825000000-E		4845000000-N				4846000000-E		4895000000-N	4900000000-N
										PAINT PAVEMENT MARKING LINES (12"), WHITE	PAINT PAVEMENT MARKING SYMBOL, MERGE ARROW	PAINT PAVEMENT MARKING SYMBOL, LEFT ARROW	PAINT PAVEMENT MARKING SYMBOL, THRU ARROW	PAINT PAVEMENT MARKING SYMBOL, U-TURN ARROW	POLYUREA PAVEMENT MARKING LINES (6", 20 MILS), WHITE	POLYUREA PAVEMENT MARKING LINES (6", 20 MILS), YELLOW	GENERIC PAVEMENT MARKING ITEM - POLYCARBONATE H-SHAPED MARKERS	PERMANENT RAISED PAVEMENT MARKERS	
								MI	FT	LF	EA	EA	EA	EA	LF	LF	EA	EA	
49989.3.1	Columbus	1	US 74 WB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	17.66	24										
		2	US 74 EB	FROM EAST OF US 701 BUSINESS TO WEST OF NC 214	1	2	2WD	17.66	24										
GRAND TOTAL										11,200	18	2	6	6	2,153	1,722	2,306	24	
				SAY						11,200	32				3,875		2,306	24	

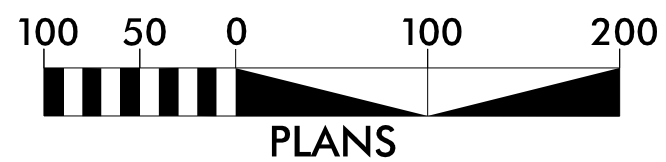
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PROJECT REFERENCE NO.	SHEET NO.
HI-0018	4

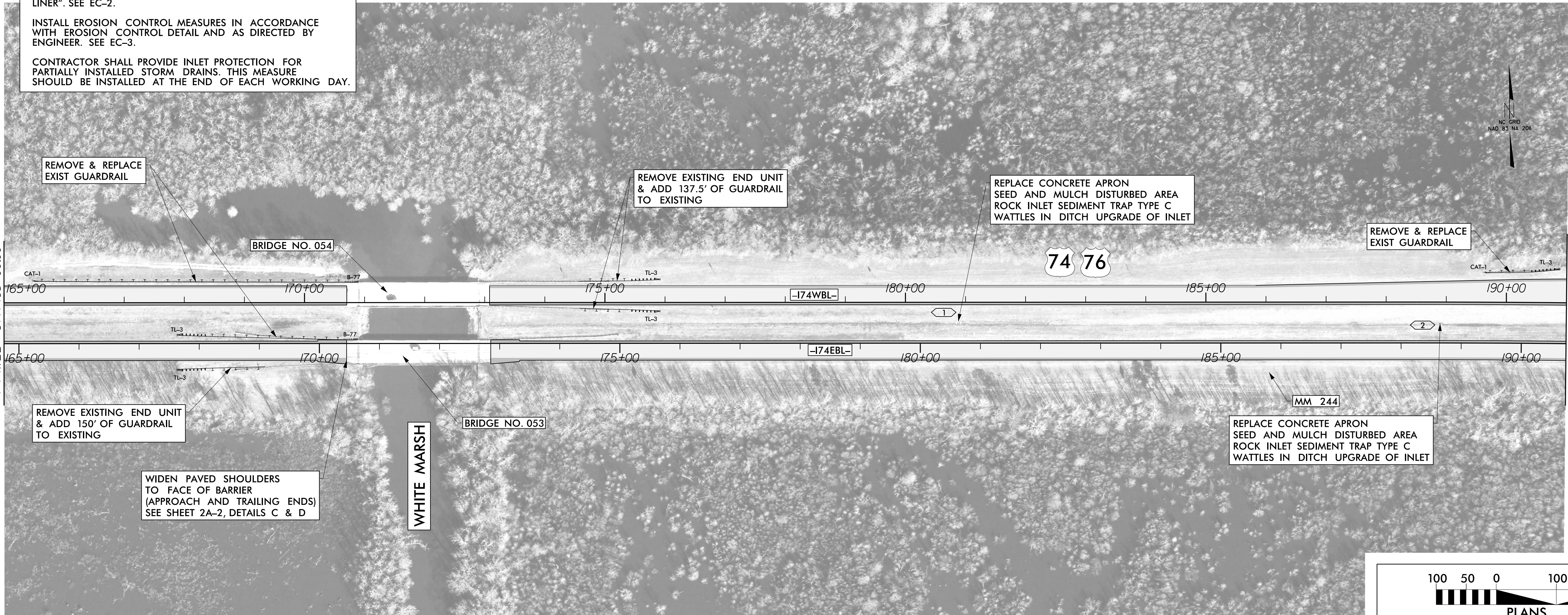
WRA
Whitman, Requardt & Associates, LLP
1201 Edwards Mill Road, Suite 320, Raleigh, North Carolina 27606



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EROSION CONTROL NOTES:

CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES", SEE EC-1.

PROVIDE CONCRETE WASHOUT STRUCTURE IN ACCORDANCE WITH EROSION CONTROL SPECIAL PROVISION AND SPECIAL DETAIL "ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER". SEE EC-2.

INSTALL EROSION CONTROL MEASURES IN ACCORDANCE WITH EROSION CONTROL DETAIL AND AS DIRECTED BY ENGINEER. SEE EC-3.

CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

REMOVE & REPLACE
EXIST GUARDRAIL

BRIDGE NO. 054

REMOVE EXISTING END UNIT
& ADD 137.5' OF GUARDRAIL
TO EXISTING

REPLACE CONCRETE APRON
SEED AND MULCH DISTURBED AREA
ROCK INLET SEDIMENT TRAP TYPE C
WATTLES IN DITCH UPGRADE OF INLET

REMOVE & REPLACE
EXIST GUARDRAIL

REMOVE EXISTING END UNIT
& ADD 150' OF GUARDRAIL
TO EXISTING

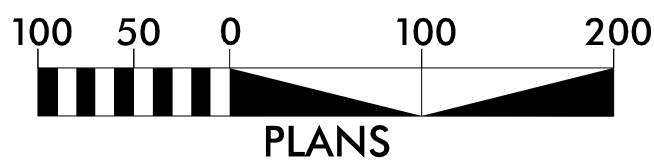
WIDEN PAVED SHOULDERS
TO FACE OF BARRIER
(APPROACH AND TRAILING ENDS)
SEE SHEET 2A-2, DETAILS C & D

BRIDGE NO. 053

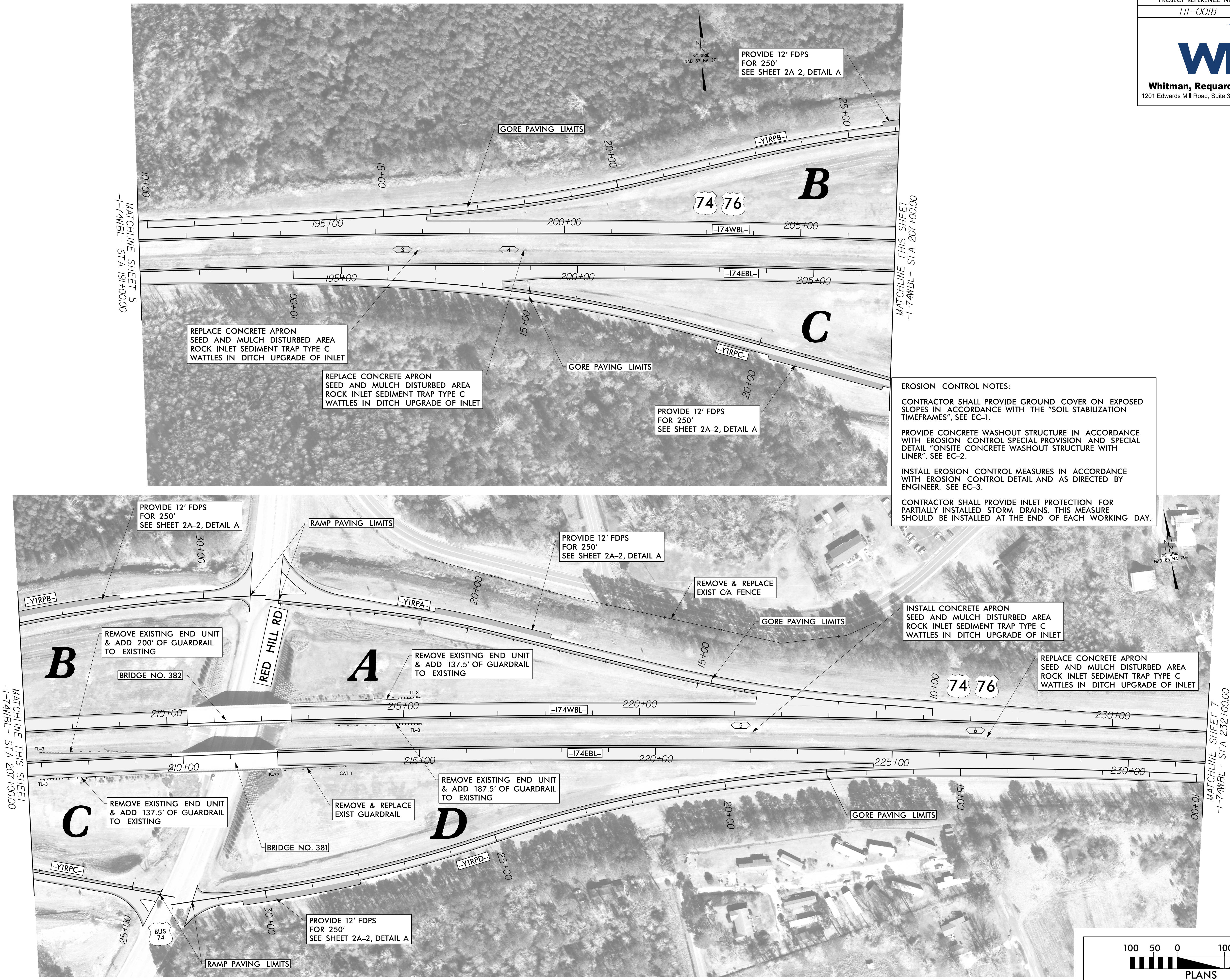
WHITE MARSH

REPLACE CONCRETE APRON
SEED AND MULCH DISTURBED AREA
ROCK INLET SEDIMENT TRAP TYPE C
WATTLES IN DITCH UPGRADE OF INLET

MM 244



8/17/99
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EROSION CONTROL NOTES:

CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES IN ACCORDANCE WITH THE "SOIL STABILIZATION TIMEFRAMES", SEE EC-1.

PROVIDE CONCRETE WASHOUT STRUCTURE IN ACCORDANCE WITH EROSION CONTROL SPECIAL PROVISION AND SPECIAL DETAIL "ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER". SEE EC-2.

INSTALL EROSION CONTROL MEASURES IN ACCORDANCE WITH EROSION CONTROL DETAIL AND AS DIRECTED BY ENGINEER. SEE EC-3.

CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

