

WBS NO: 2024CPT.01.14.10661

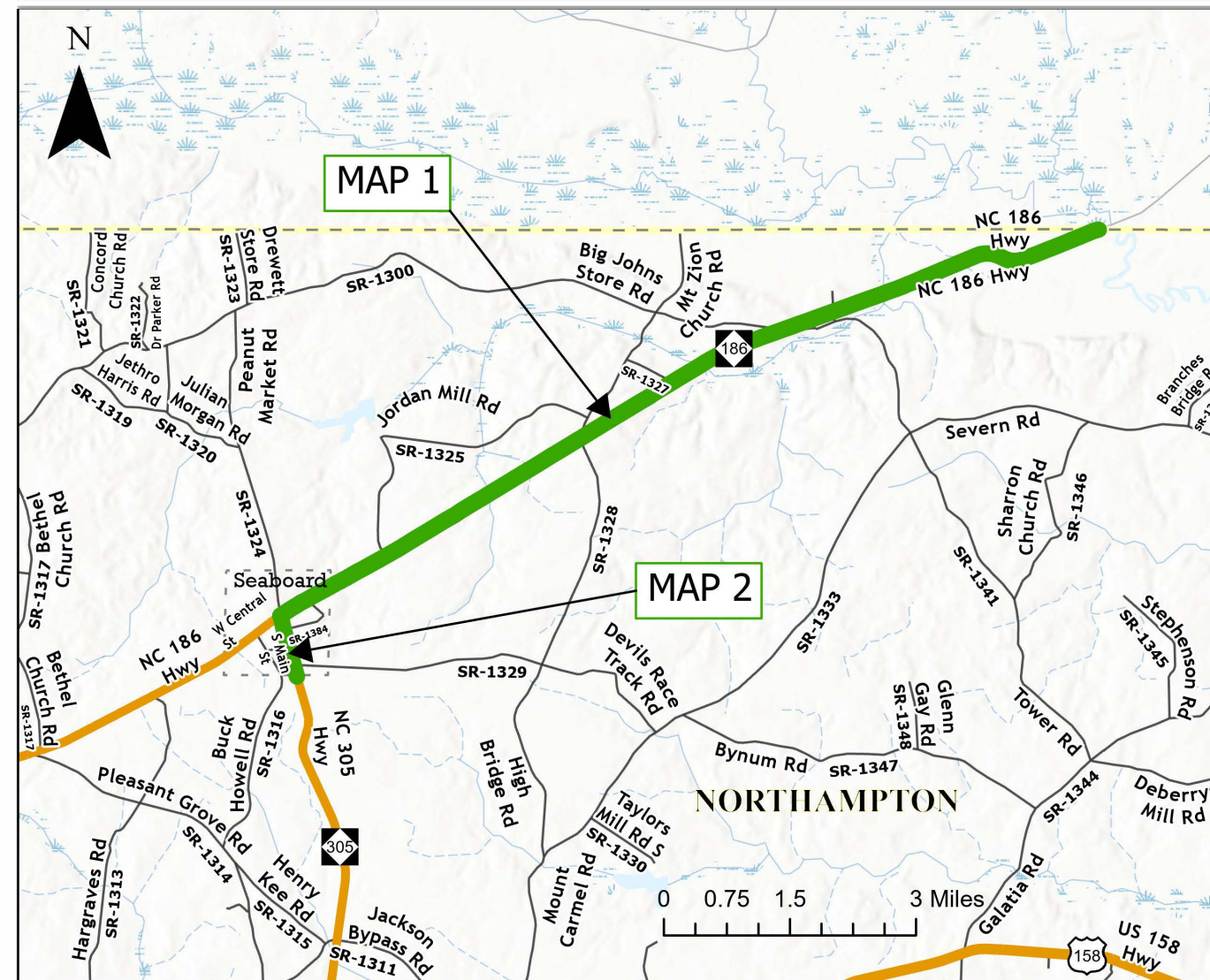
CONTRACT: DA00600

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
NORTHAMPTON

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2024CPT.01.14.10661	1
STATE PROJECT NUMBER		DESCRIPTION
2024CPT.01.14.10661		P.E., CONST.

TYPE OF WORK: MILLING, RESURFACING, & PAVEMENT MARKINGS

MAP	ROUTE	FROM	TO
01	NC 186	NC 305	Meherrin River Bridge
02	NC 305	Seaboard CL	NC 186



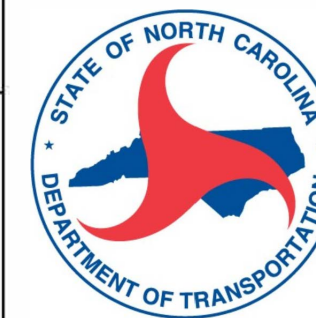
PROJECT LENGTH

MAP	LENGTH
01	8.76
02	0.60

Prepared in the Office of:
DIVISION OF HIGHWAYS
 113 AIRPORT DR., EDENTON, NC 27932

B. N. BRASWELL, PE
 DIV. PROJ. DEVELOPMENT ENGINEER
M. S. Winslow
 DIVISION CONTRACT ENGINEER

J. S. ABEL, JR.
 DIVISION PROJECT TEAM LEAD
D. H. STALLINGS
 DIVISION DESIGN ENGINEER



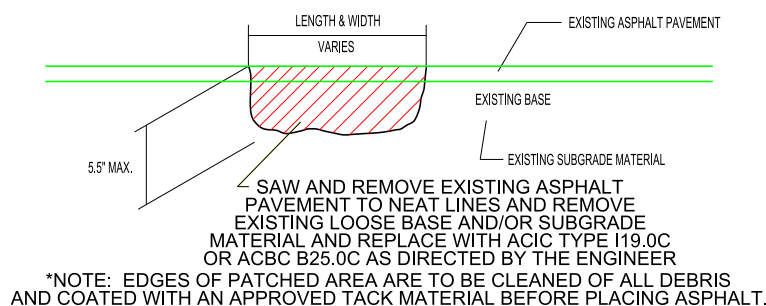
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING
V2	MILLING ASPHALT PAVEMENT, 1.5" DEPTH
U	EXISTING PAVEMENT

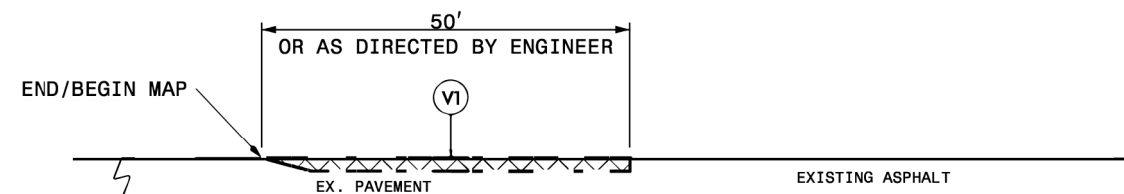
PROJECT REFERENCE NO.	SHEET NO.
2024CPT.01.14.10661	3

NOTES:

- * ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- * EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.
- * 1.5" OF S9.5C TO BE APPLIED THE FULL WIDTH OF THE ROADWAY
- * CONTRACTOR SHALL PERFORM PATCHING EXISTING PAVEMENT, FULL DEPTH BEFORE APPLICATION OF 1.5" OF S9.5C



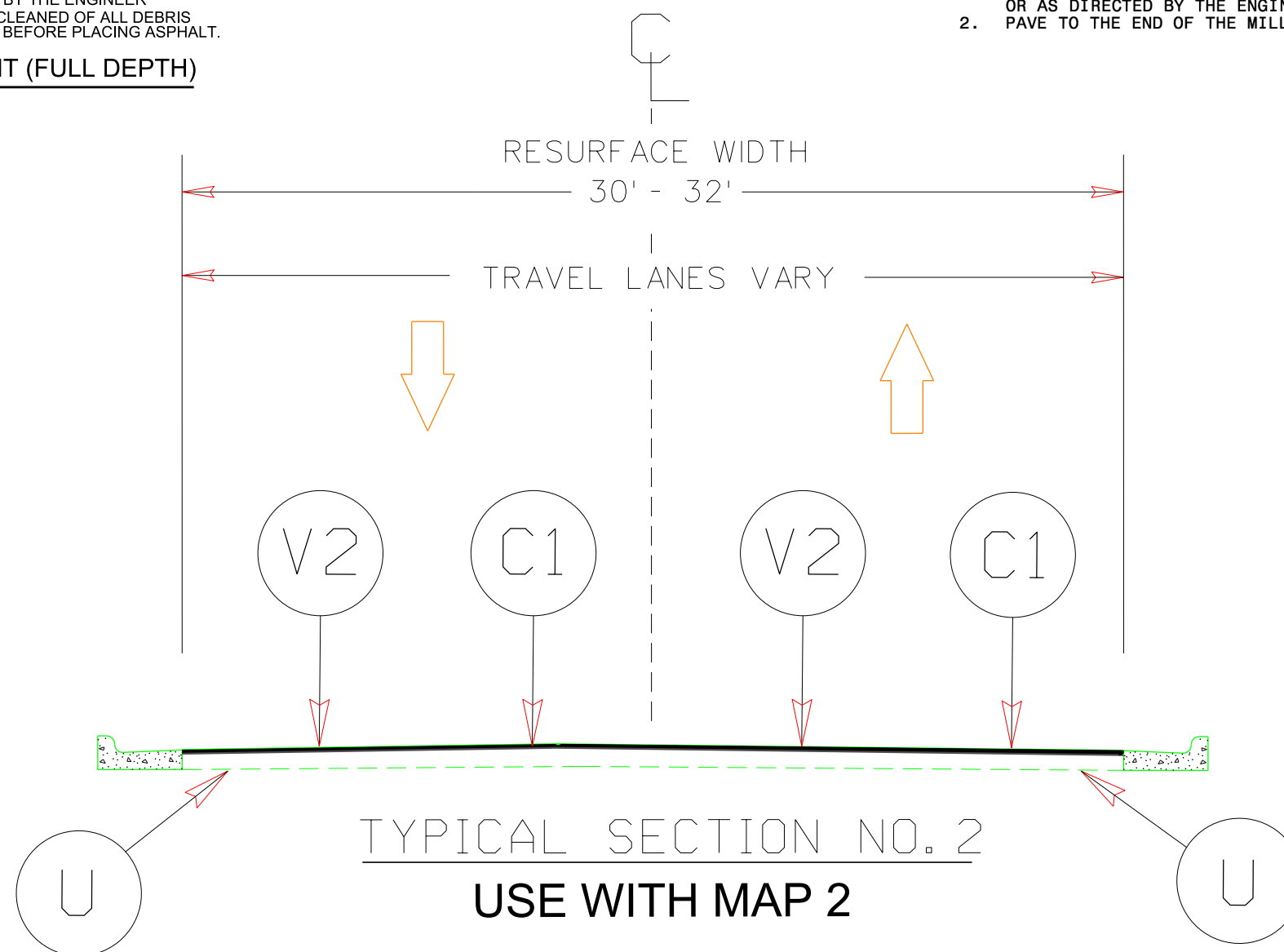
PATCHING EXISTING PAVEMENT (FULL DEPTH)



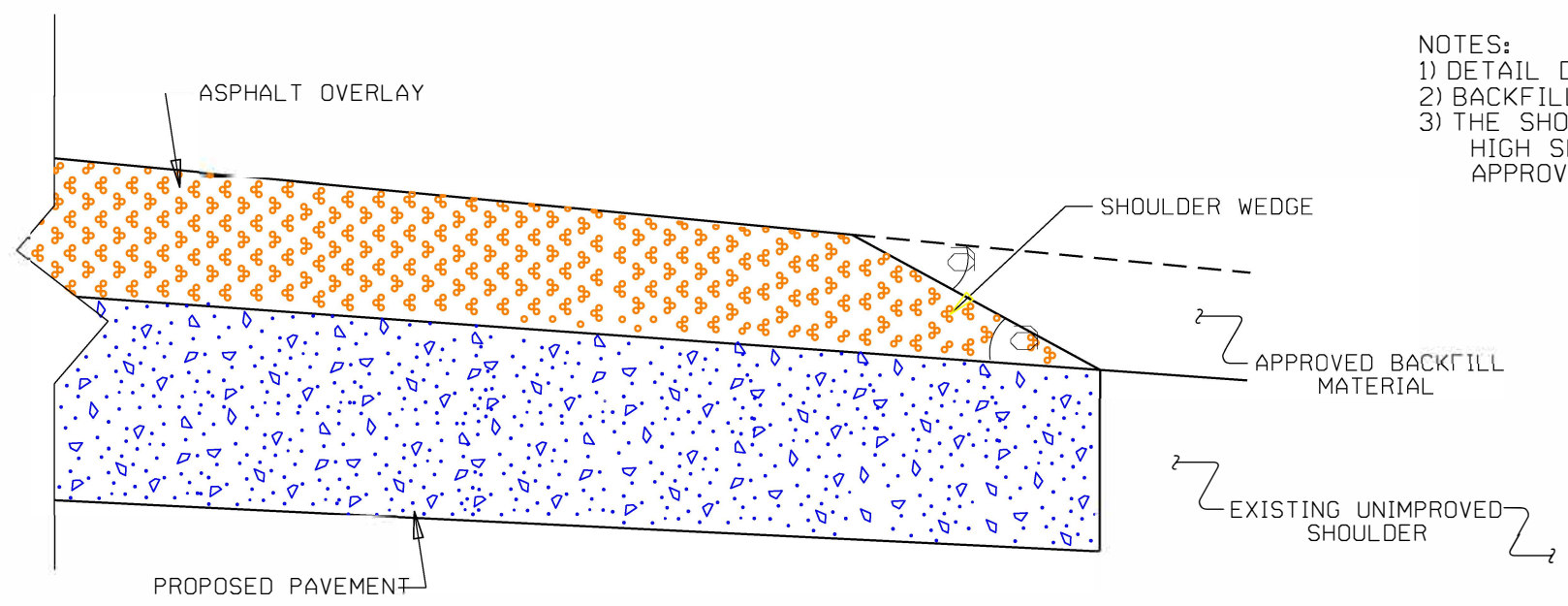
DETAIL 1

MAIN LINE MILLING

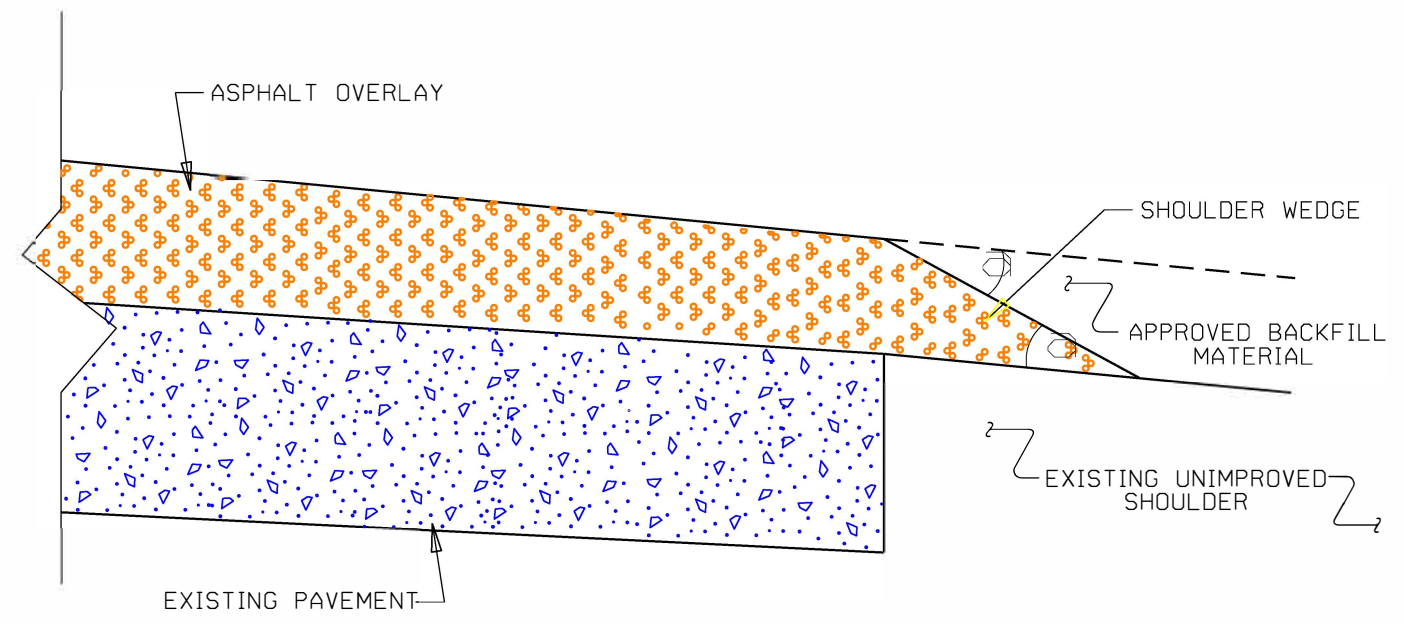
- NOTE:
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
 2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.



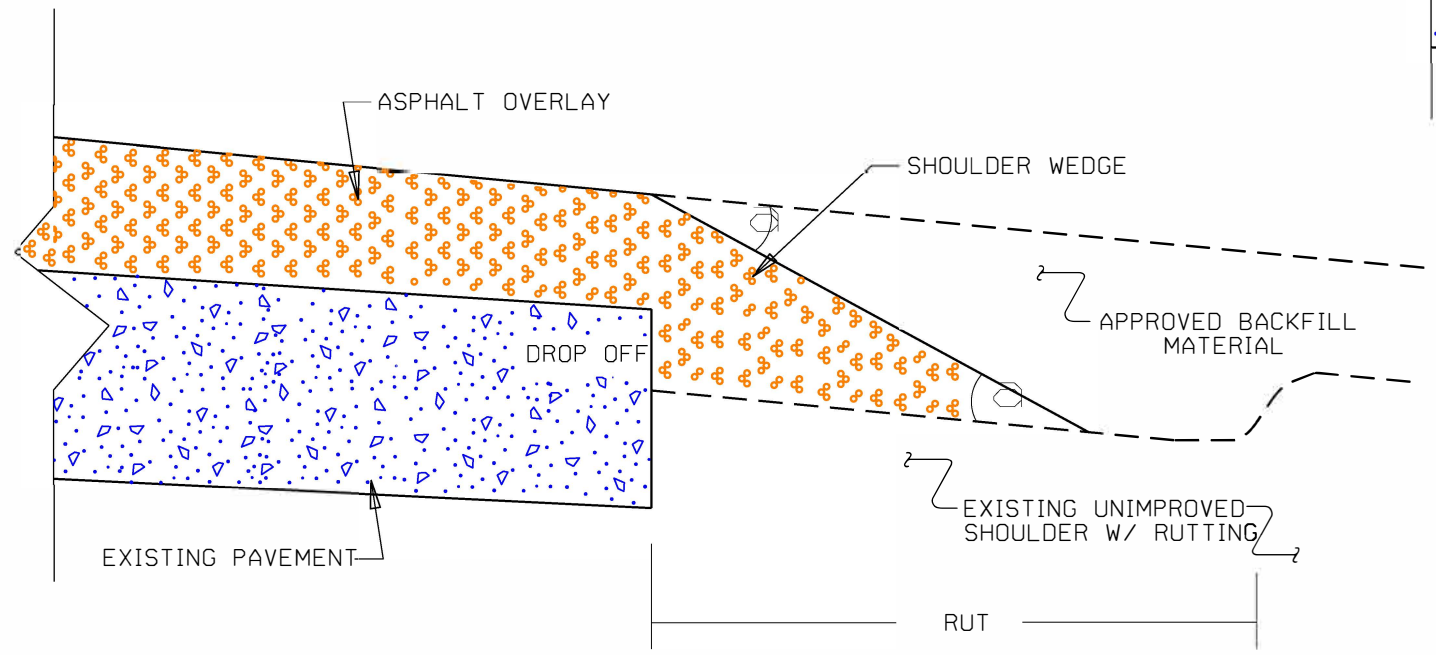
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



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



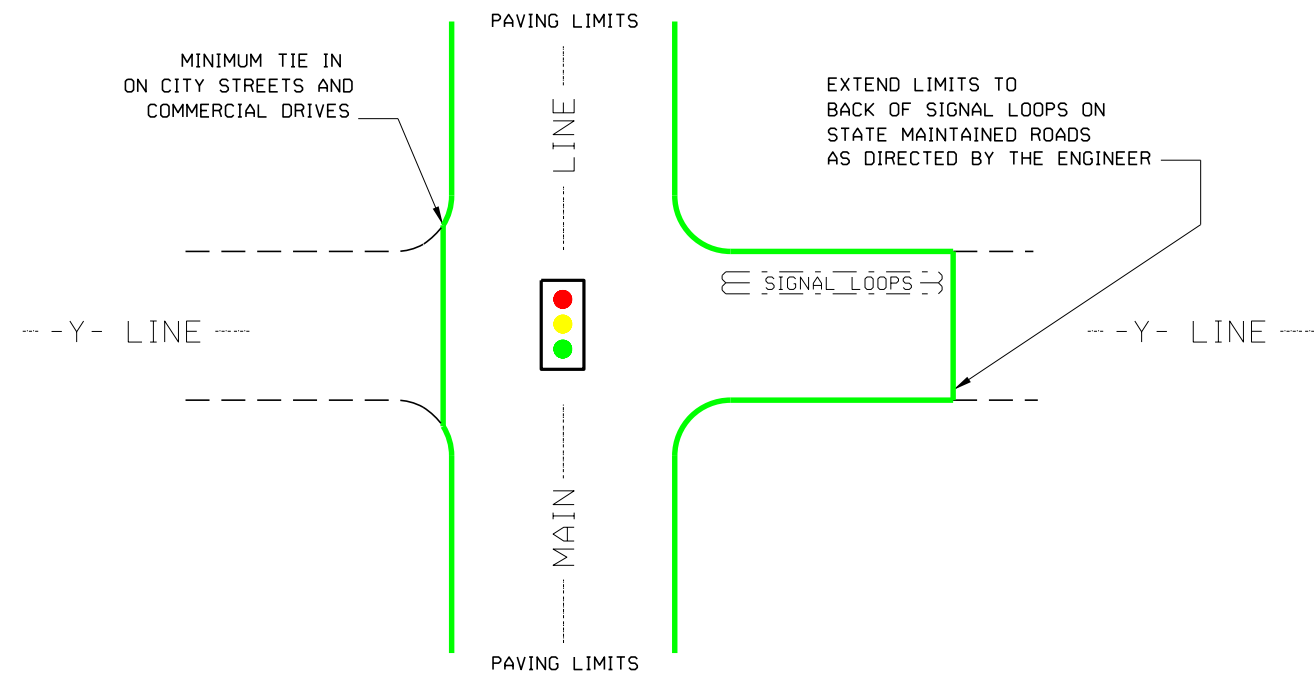
SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



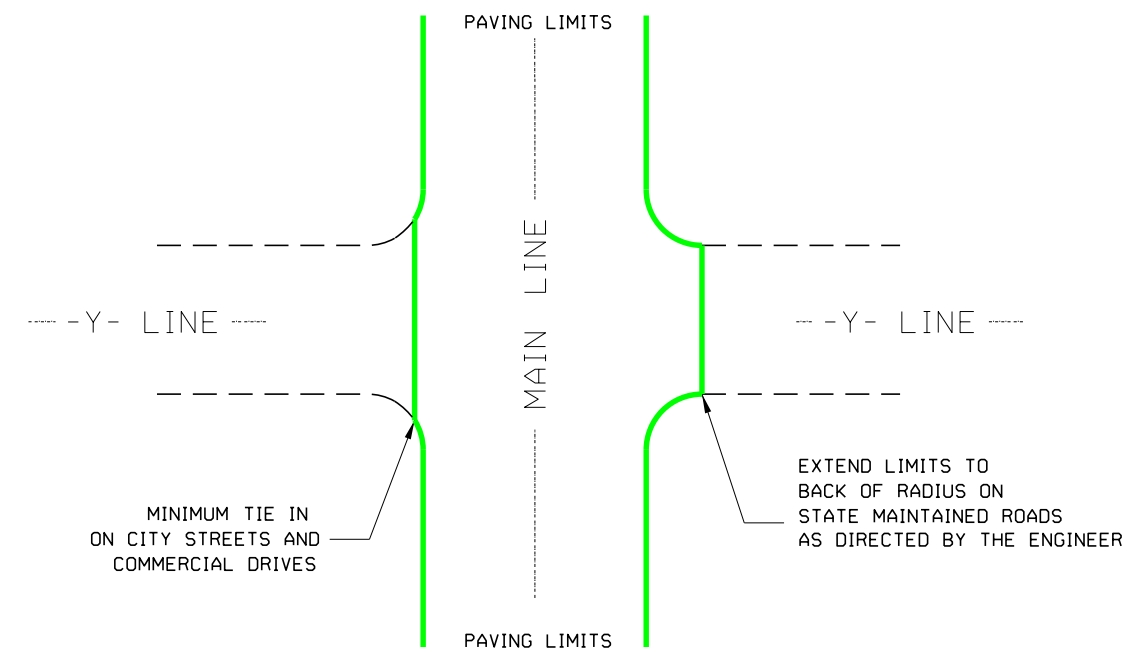
SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to Rutted Shoulder)

- 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: stur/details/stand/shoulderwedgedetail.dgn			



TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES



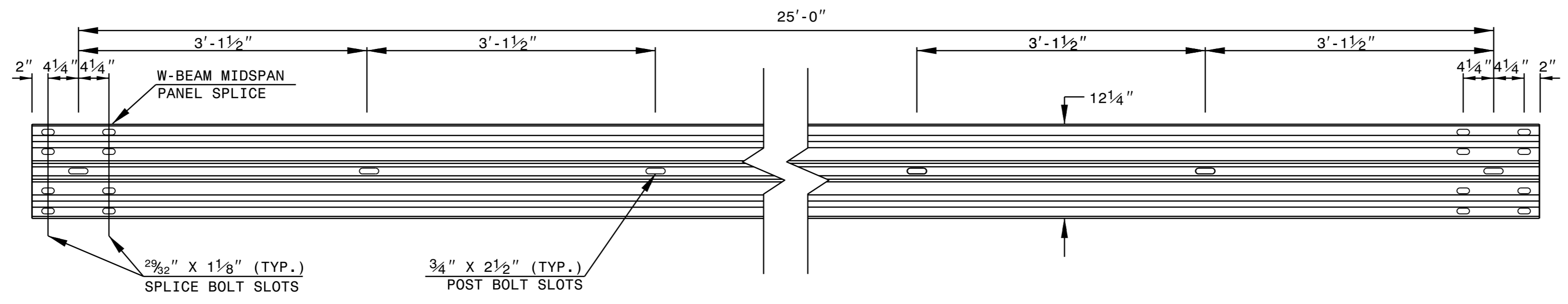
TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

ADDITIONAL INTERSECTIONS (NON-TYPICAL)		
Extend paving limits to back of radius or loop on the following intersections:		
MAP#	STREET NAME	COMMENTS
1	SR 1385 CALVERT STREET	PAVE TO RAILROAD CROSSING
1	WILLIAMS STREET	PAVE TO BACK OF RADIUS
2	HARRIS STREET	PAVE TO BACK OF RADIUS
2	EASTWOOD STREET	PAVE TO BACK OF RADIUS
2	CHURCH STREET	PAVE TO BACK OF RADIUS
2	PARK STREET	PAVE TO BACK OF RADIUS
2	CLAY STREET	PAVE TO BACK OF RADIUS
2	RAILROAD STREET	PAVE TO BACK OF RADIUS

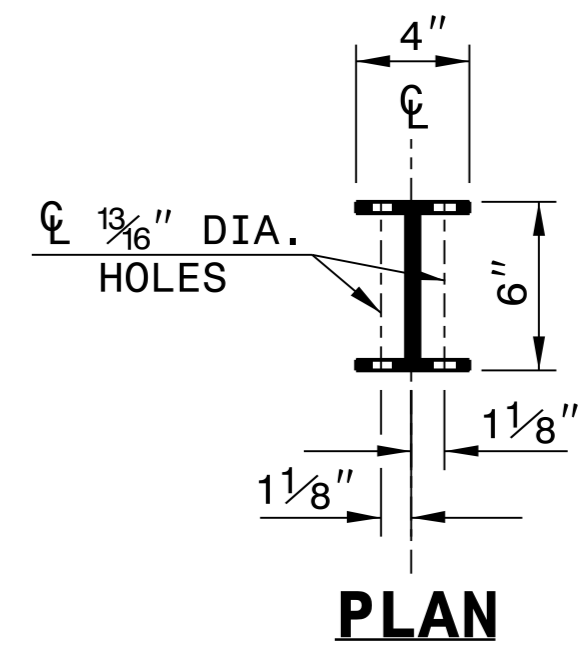
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

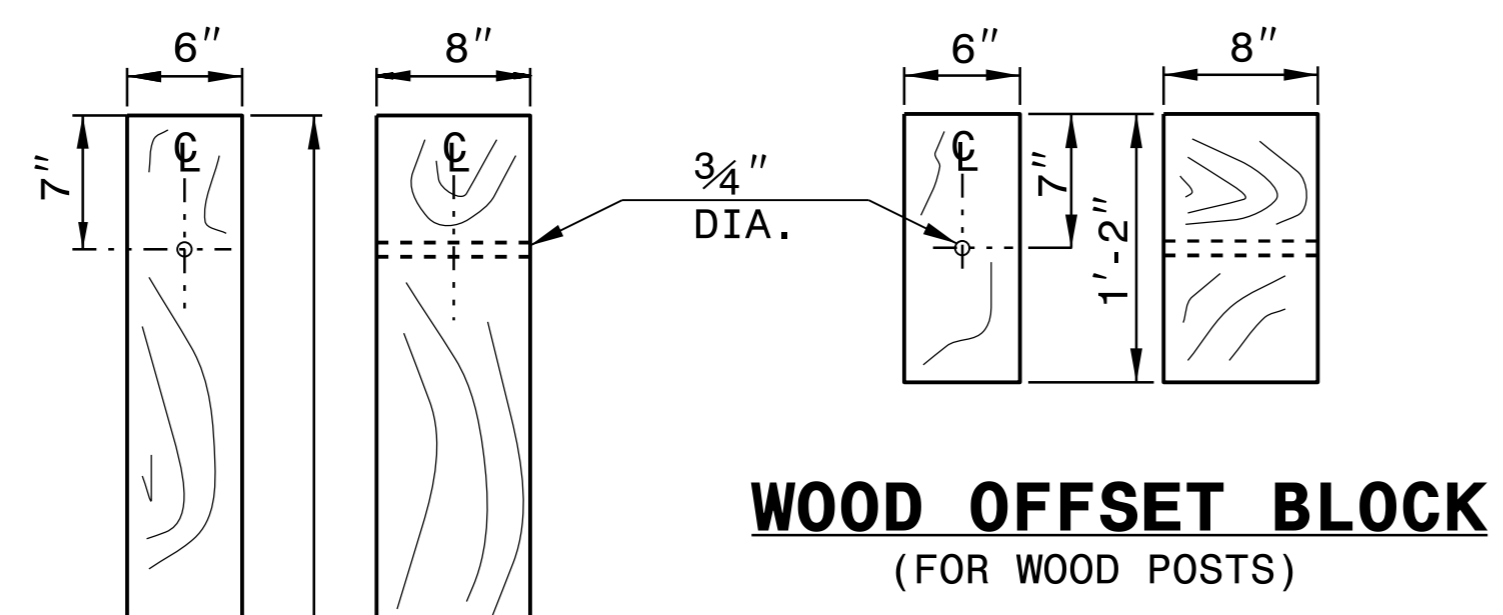
SHEET 6 OF 8
862D02



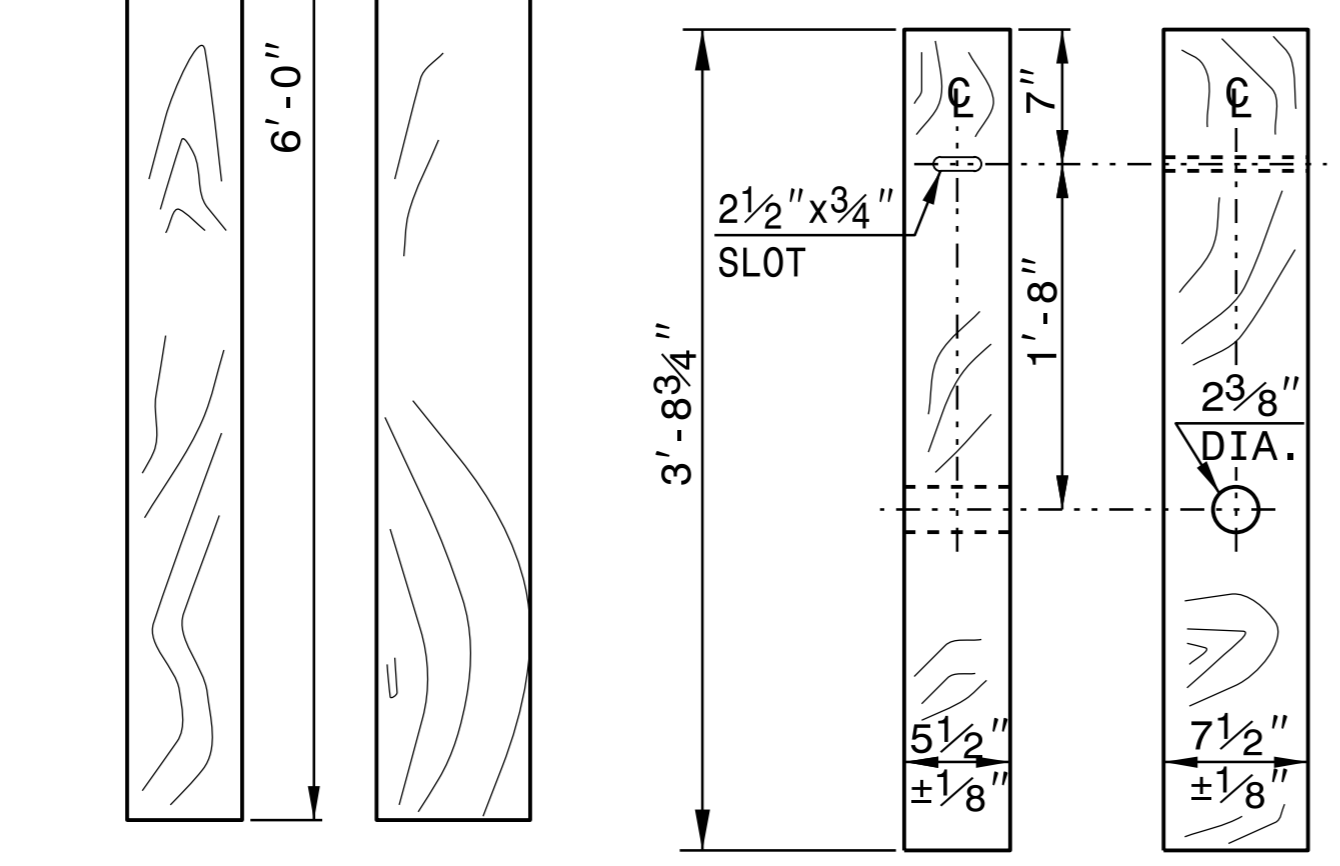
STANDARD W-BEAM GUARDRAIL



PLAN

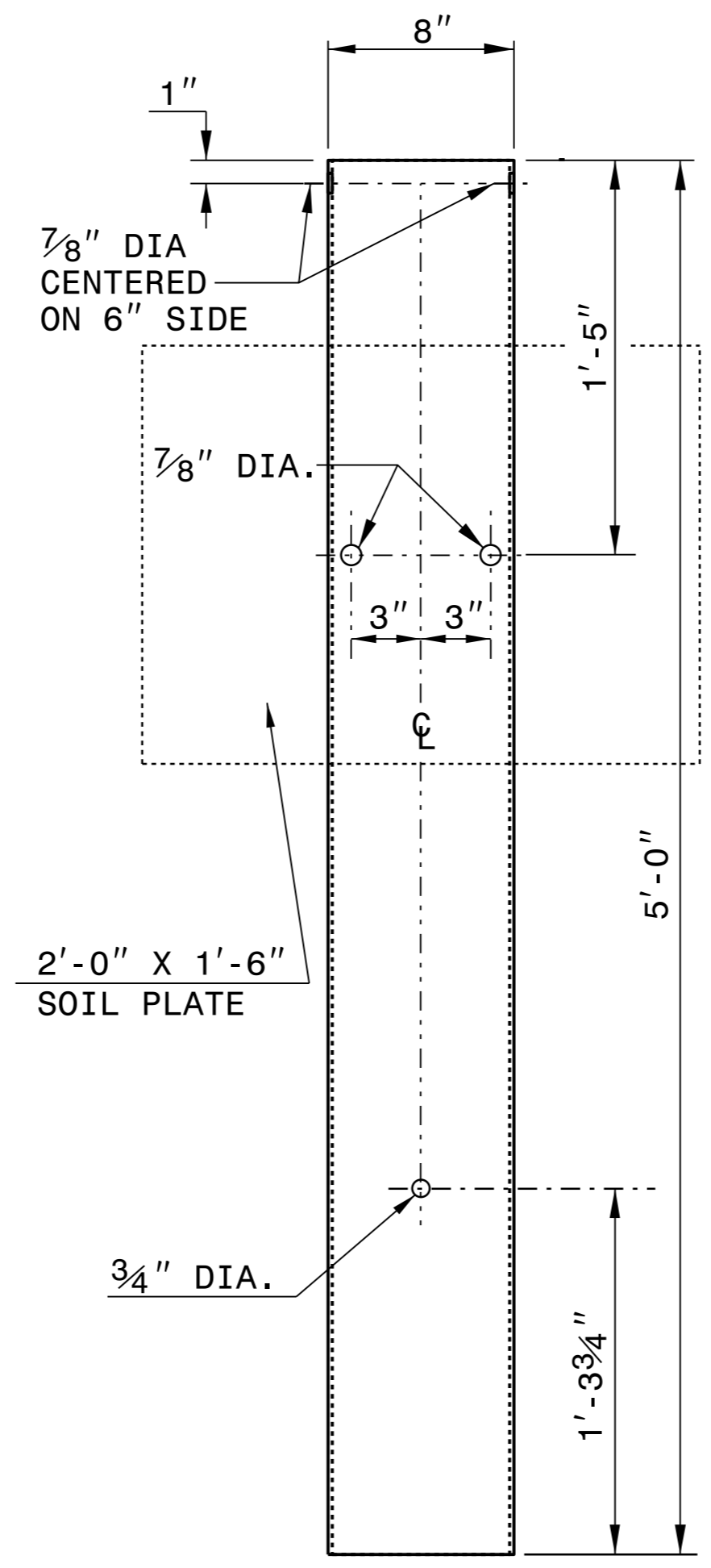


**WOOD OFFSET BLOCK
(FOR WOOD POSTS)**

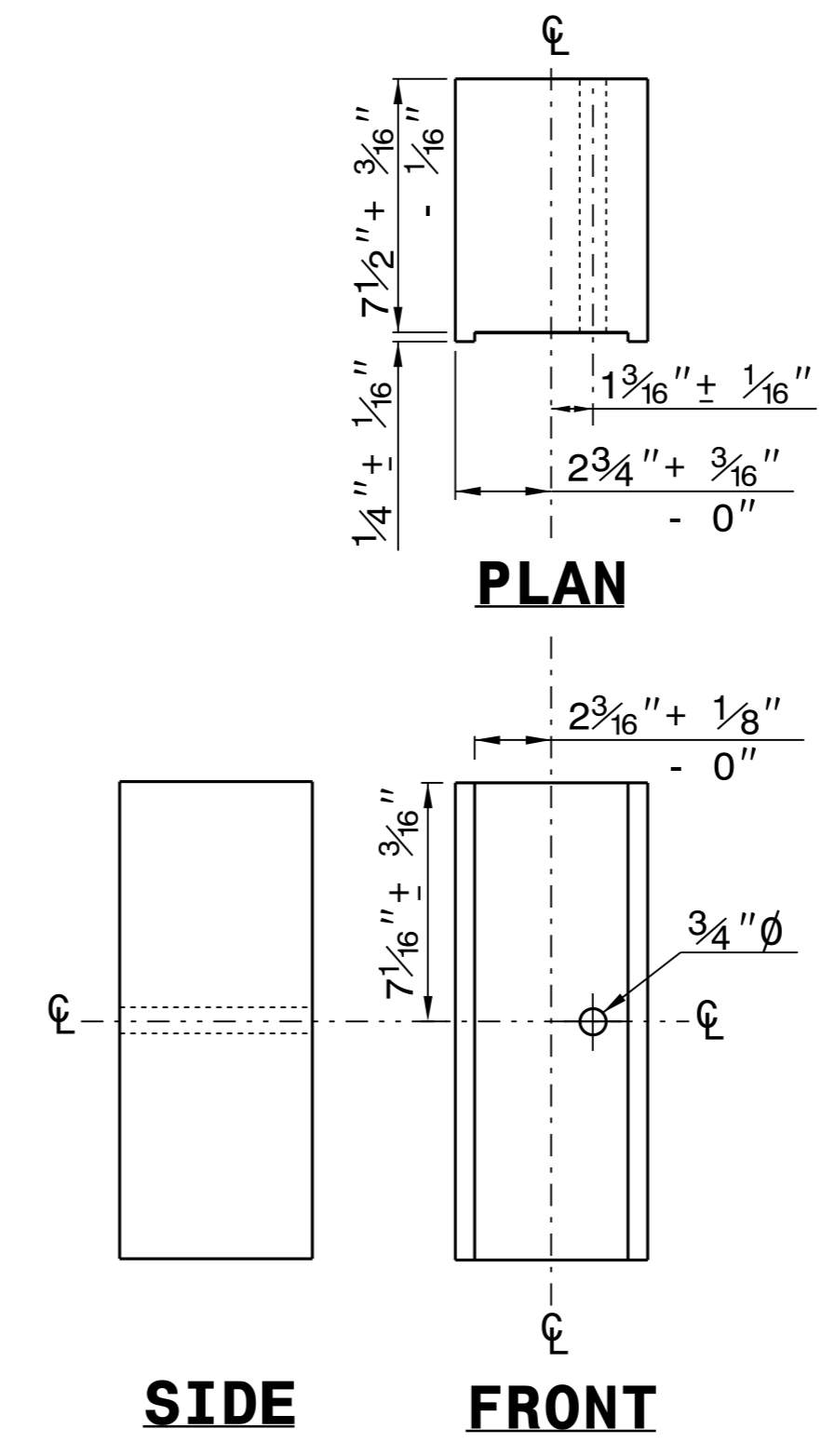


**STANDARD
LINE POST**

**SHORT WOOD
BREAKAWAY POST**



**STEEL TUBE
TS 6"x8"x0.1875"**

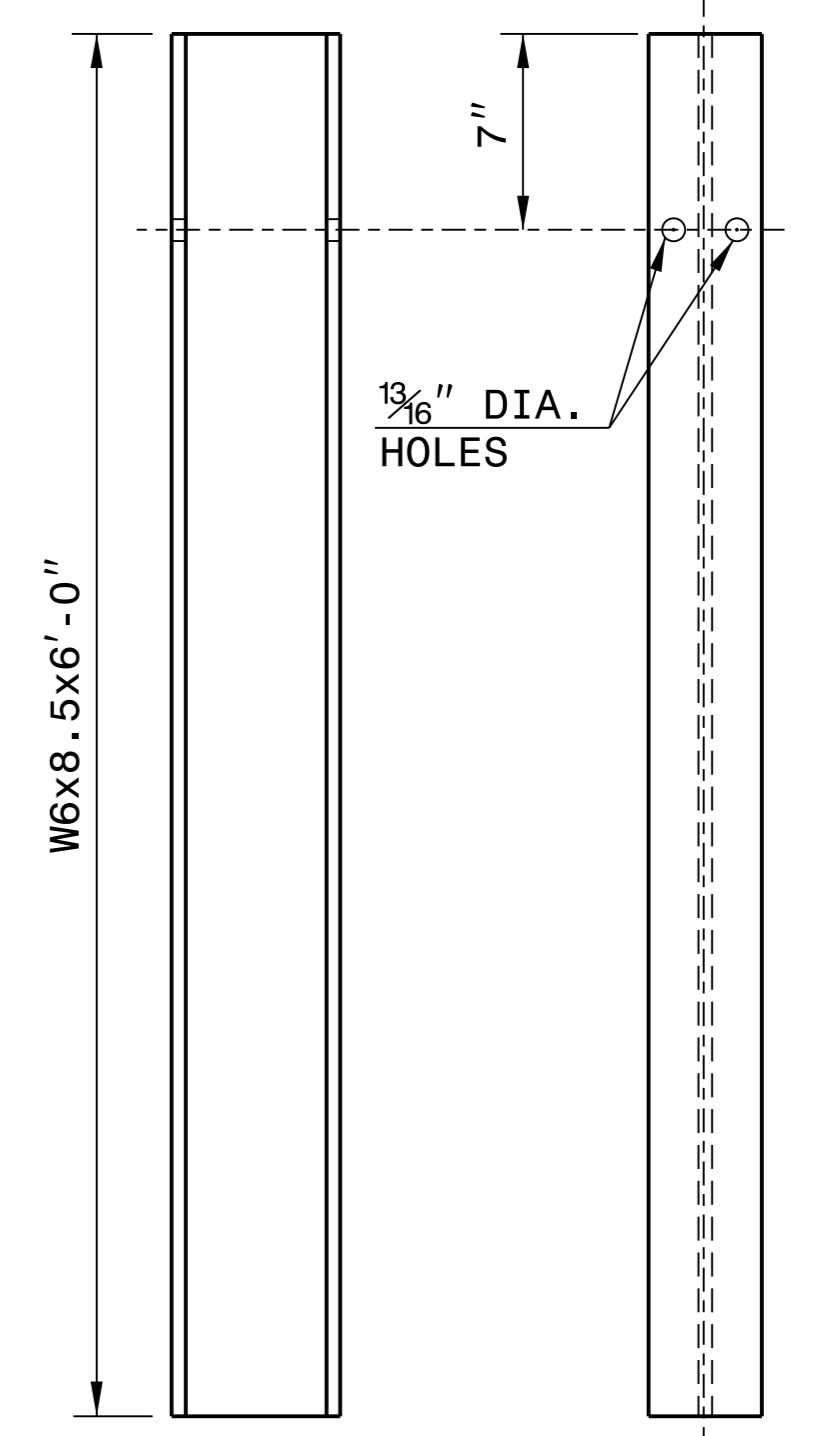


PLAN

SIDE

FRONT

**ROUTED
OFFSET BLOCK**



SIDE

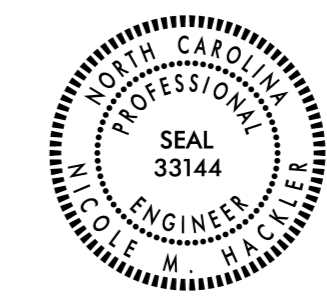
FRONT

"W6" STEEL POST

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 6 OF 8
862D02



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

SEE TITLE BLOCK

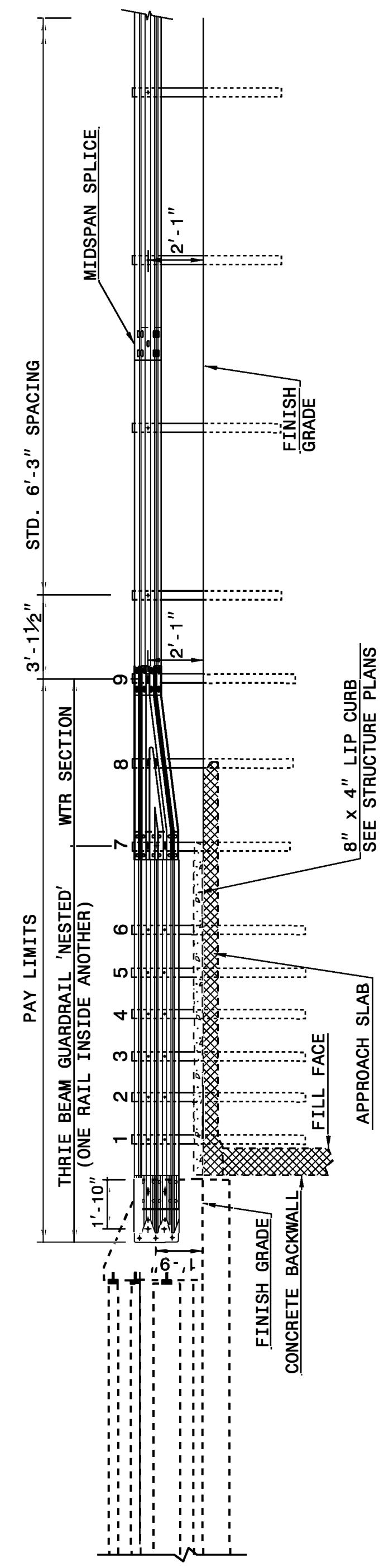
ORIGINAL BY: J. HOWERTON DATE: 3-7-2018
MODIFIED BY: DATE: _____
CHECKED BY: DATE: _____
FILE SPEC.: _____

I4-DEC-2017 10:36
 S:\Contracts\2018\Standard Drawings\Special Details\Drawings\Division 8\0862d0301.dgn
 Jhowerton AT CSU-212855

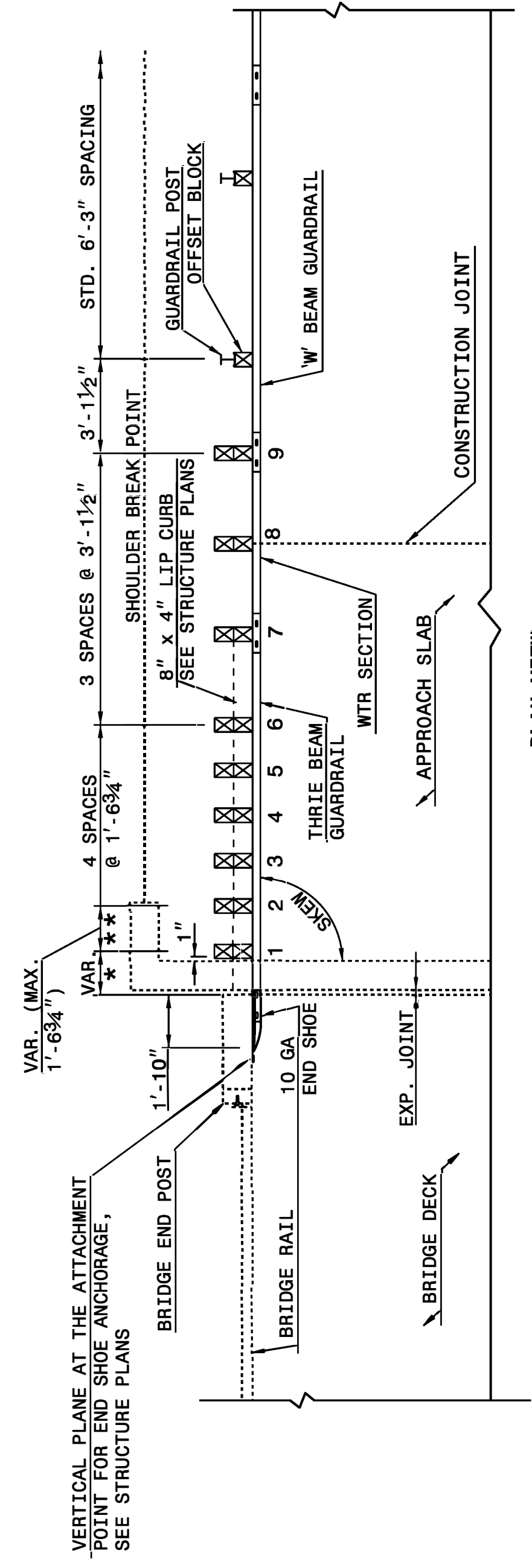
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE

SHEET 1 OF 7
862D03



NOTE:
 **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11½" IF CONCRETE BACKWALL IS NOT PRESENT.
 -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" x 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.
 -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).
 -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
 -SEE SHEET 3 FOR POST SECTIONS 1 THRU 9.



GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

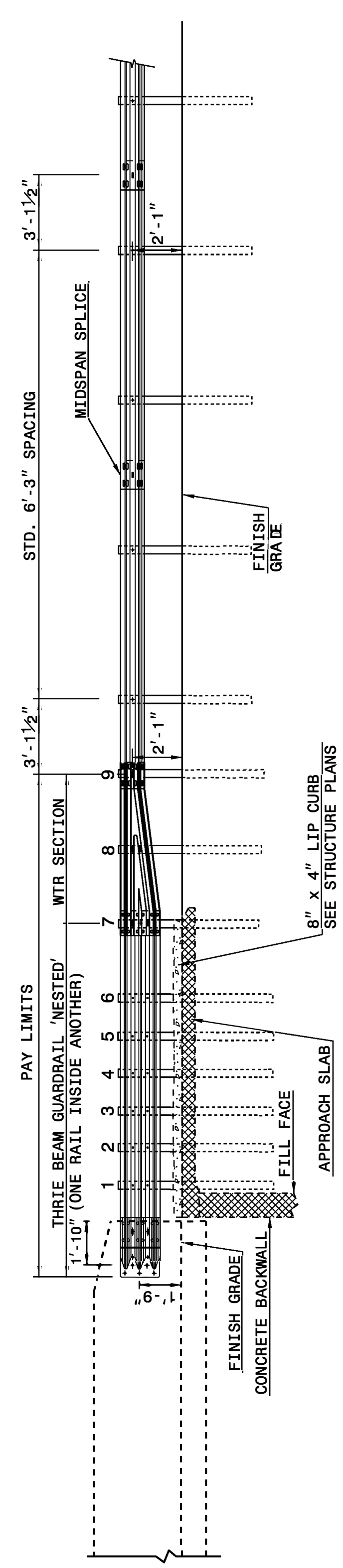
ROADWAY DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE

SHEET 1 OF 7
862D03

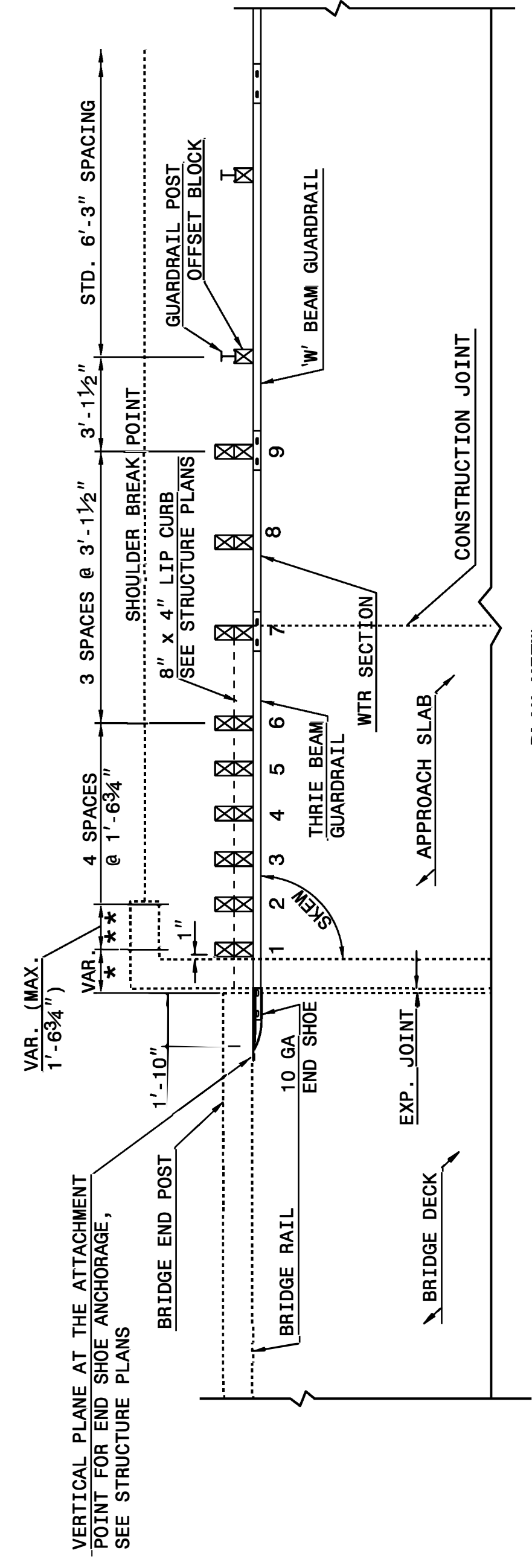
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE - SUB REGIONAL TIER

SHEET 2 OF 7
862D03



NOTE:
 **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11½" IF CONCRETE BACKWALL IS NOT PRESENT.
 -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" x 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB.
 -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER).
 -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
 -SEE SHEET 3 FOR POST SECTIONS 1 THRU 9.

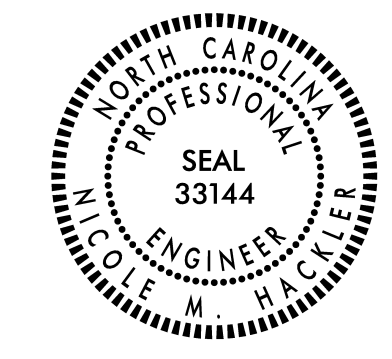


GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE - SUB REGIONAL TIER

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE - SUB REGIONAL TIER

SHEET 2 OF 7
862D03



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

SEE TITLE BLOCK

ORIGINAL BY: J. HOWERTON DATE: 06-22-12
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC.:

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.01.14.10661	8	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	BEGIN MP	END MP	MATERIAL TRANSFER VEHICLE REQUIRED	0000100000-N	1220000000-E	1297000000-E	1330000000-E	1523000000-E	1524000000-E	1575000000-E
															MOBILIZATION	INCIDENTAL STONE BASE	MILLING ASPHALT PAVEMENT (1½")	INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE, S9.5C	ASPHALT CONC LEVELING COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX
											MI	FT									
2024CPT.01.14.10661	Northampton	1	NC-186	FROM NC 305 TO MEHERRIN RIVER BRIDGE	1	2	2WU	NO	NO	8.70	25	14.77	23.47	YES	*	315	128,600	5,145	12,316	46	731
2024CPT.01.14.10661	Northampton	2	NC-305	FROM SEABOARD CL TO NC-186	2	2	2WU	NO	NO	0.60	30	24.4	25	NO	*		11,685	685	1,284	450	104
TOTAL FOR PROJ NO. 2024CPT.01.14.10661										9.30						315	140,285	5,830	13,600	496	835
GRAND TOTAL										9.3					1	315	140,285	5,830	13,600	496	835

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	BEGIN MP	END MP	MATERIAL TRANSFER VEHICLE REQUIRED	1705000000-E	2830000000-N	2845000000-N	3287000000-N	3319000000-N	3345000000-E	3360000000-E
															PATCHING EXISTING PAVEMENT (FULL DEPTH)	ADJUSTMENT OF MANHOLES	ADJUSTMENT OF METER OR VALVE BOXES	GUARDRAIL END UNITS, TYPE TL-3	GUARDRAIL ANCHOR UNITS, TYPE B-83	REMOVE & RESET EXISTING GUARDRAIL	REMOVE EXISTING GUARDRAIL
											MI	FT									
2024CPT.01.14.10661	Northampton	1	NC-186	FROM NC 305 TO MEHERRIN RIVER BRIDGE	1	2	2WU	NO	NO	8.70	25	14.77	23.47	YES	38	1	1	8	4	420	400
2024CPT.01.14.10661	Northampton	2	NC-305	FROM SEABOARD CL TO NC-186	2	2	2WU	NO	NO	0.60	30	24.4	25	NO	38	8	8				
TOTAL FOR PROJ NO. 2024CPT.01.14.10661										9.30					76	9	9	8	4	420	400
GRAND TOTAL										9.3					76	9	9	8	4	420	400

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.01.14.10661	9	

THERMOPLASTIC AND PAINT QUANTITIES

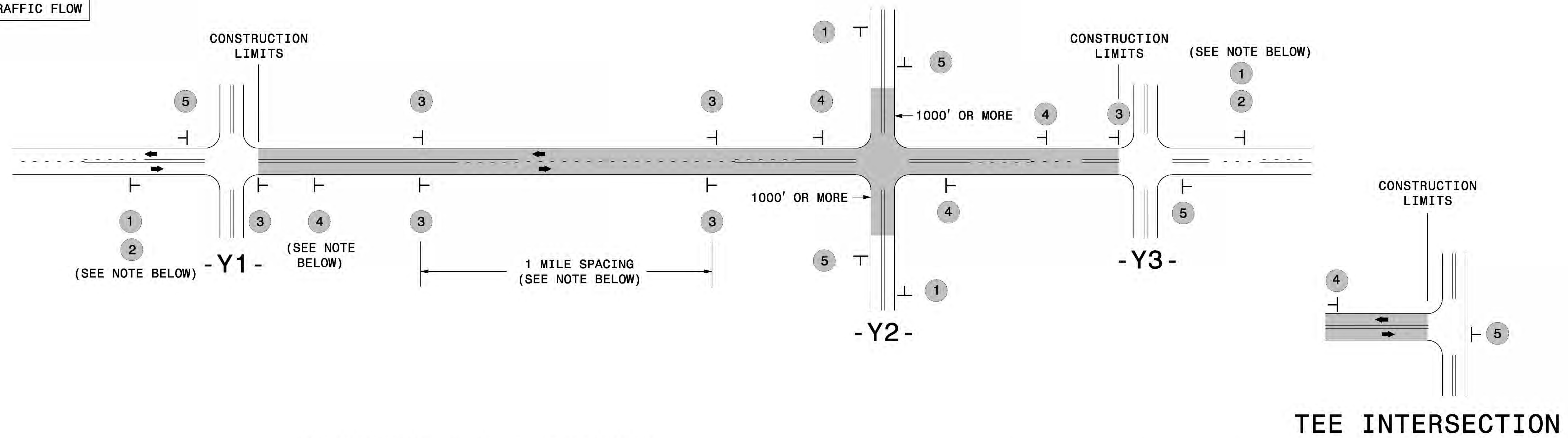
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4413000000-E	4457000000-N	4704000000-E	4709000000-E	4720000000-E	4725000000-E	4810000000-E		
												WORK ZONE ADVANCE / GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL (SP)	THERMO PAVEMENT MARKING LINES (16" 90 MILS)	THERMO PAVEMENT MARKING LINES (24" 90 MILS)	THERMOPLASTIC PAVEMENT MARKING CHARACTER (90 MILS), RXR	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS), RT ARROW	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	
								MI	FT			SF	LS	LF	LF	EA	EA	LF	LF	
2024CPT.01.14.10661	Northampton	1	NC-186	FROM NC 305 TO MEHERRIN RIVER BRIDGE	1	2	2WU	8.70	25	14.77	23.47	689	1	100	66	4	2	184,374	115,010	
2024CPT.01.14.10661	Northampton	2	NC-305	FROM SEABOARD CL TO NC-186	2	2	2WU	0.60	30	24.4	25	80	*	88	60	4		2,027	6,336	
TOTAL FOR PROJ NO. 2024CPT.01.14.10661								9.30				769	*	188	126	8	2	186,401	121,346	
																			307,747	
GRAND TOTAL								9.30				769	1	188	126	8	2	186,401	121,346	
																			307,747	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4830000000-E	4835000000-E	4840000000-N	4845000000-N	4890000000-E		
												PAINT PAVEMENT MARKING LINES (16")	PAINT PAVEMENT MARKING LINES (24")	PAINT PAVEMENT MARKING CHARACTER (MSG RXR)	PAINT PAVEMENT MARKING SYMBOL (RT ARROW)	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINES, (6", 55 MILS) WHITE	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINES, (6", 55 MILS) YELLOW	
								MI	FT			LF	LF	EA	EA	LF	LF	
2024CPT.01.14.10661	Northampton	1	NC-186	FROM NC 305 TO MEHERRIN RIVER BRIDGE	1	2	2WU	8.70	25	14.77	23.47	100	66	8	2			
2024CPT.01.14.10661	Northampton	2	NC-305	FROM SEABOARD CL TO NC-186	2	2	2WU	0.60	30	24.4	25	88	60	4		2,027	6,336	
TOTAL FOR PROJ NO. 2024CPT.01.14.10661								9.30				188	126	12	2	2,027	6,336	
																	8,363	
GRAND TOTAL								9.30				188	126	12	2	2,027	6,336	
																	8,363	

SIGNING FOR RESURFACING PROJECTS

LEGEND
 ┆ STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

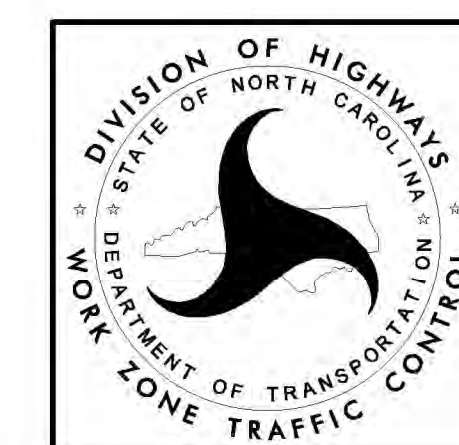
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1		PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
	2		#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3		- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.	
	4		- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. - DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. - FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.	
	5		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

MAPS LESS THAN 2 MILES

FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING