

WBS NO: 2025CPT.01.12.10281,

CONTRACT: DA00620

STATE OF NORTH CAROLINA

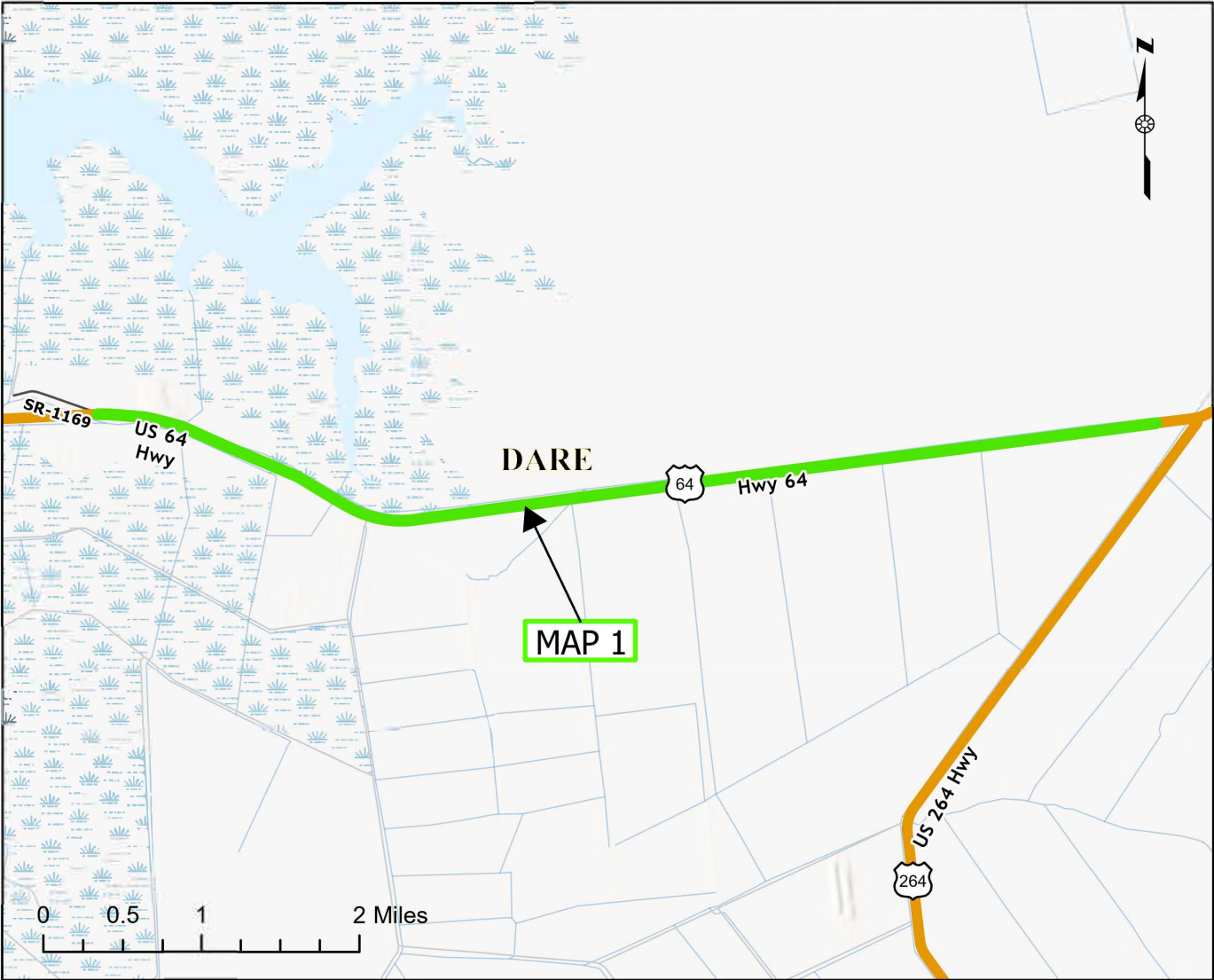
DIVISION OF HIGHWAYS

DARE

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2025CPT.01.12.10281	1
STATE PROJECT NUMBER		DESCRIPTION
2025CPT.01.12.10281		P.E., CONST.

TYPE OF WORK: GUARDRAIL, MILLING, RESURFACING, SHOULDER RECONSTRUCTION, & PAVEMENT MARKINGS

MAP	ROUTE	FROM	TO
01	US 64	SR 1169 (Robertson Landing Rd.)	US 264



PROJECT LENGTH

MAP	MILES
01	5.803

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

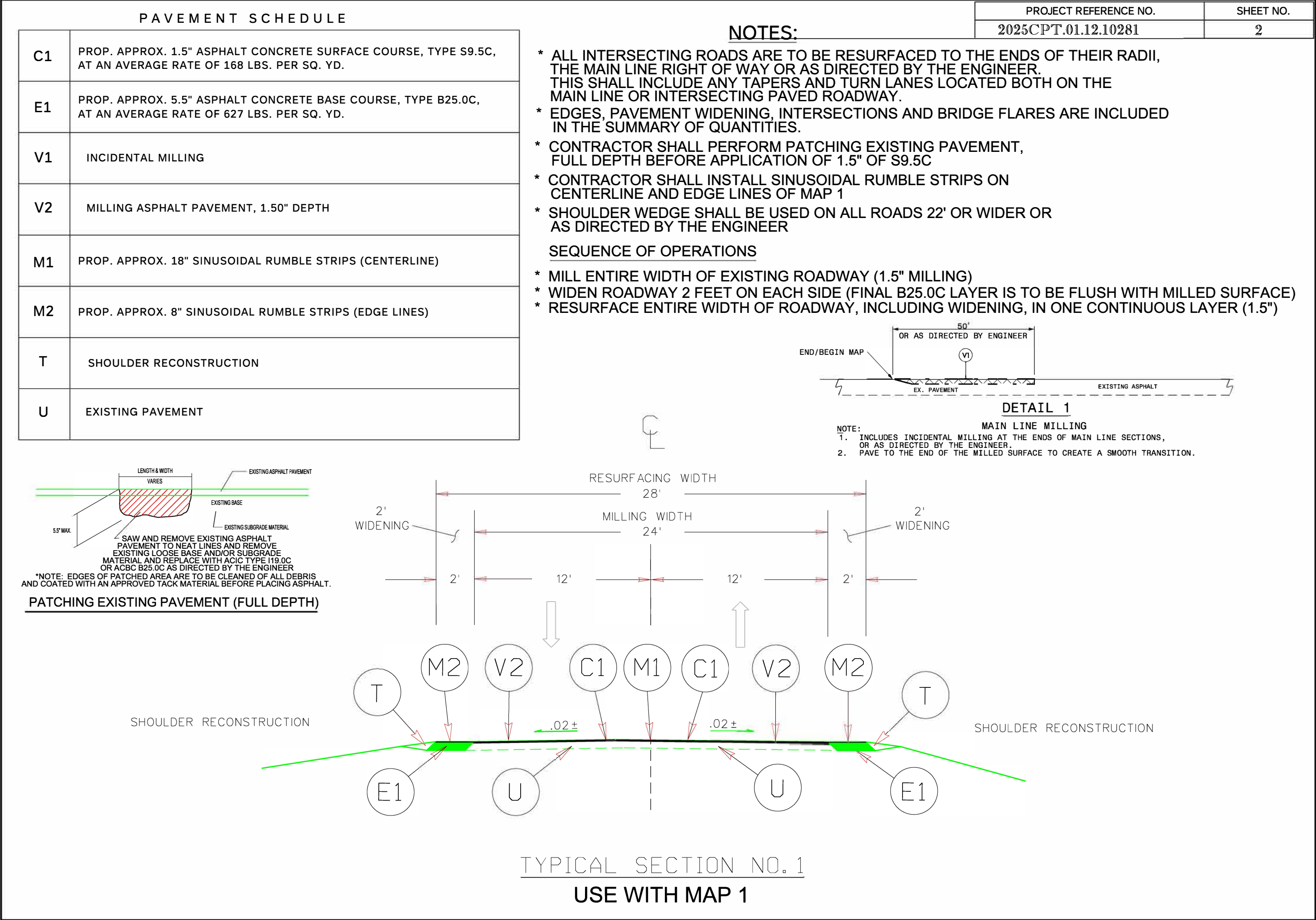
B. N. BRASWELL, PE
DIV. PROJ. DEVELOPMENT ENGINEER

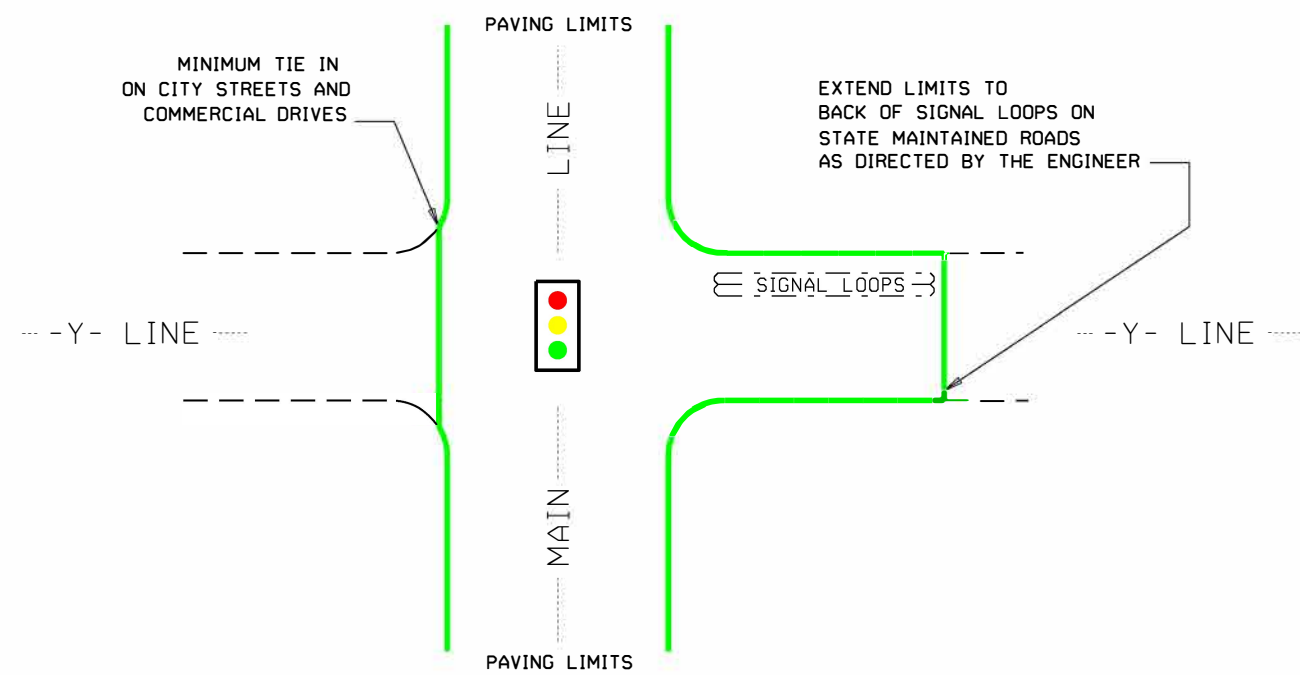
M. S. WINSLOW
DIVISION CONTRACT ENGINEER

J. S. ABEL, JR.
DIVISION PROJECT TEAM LEAD

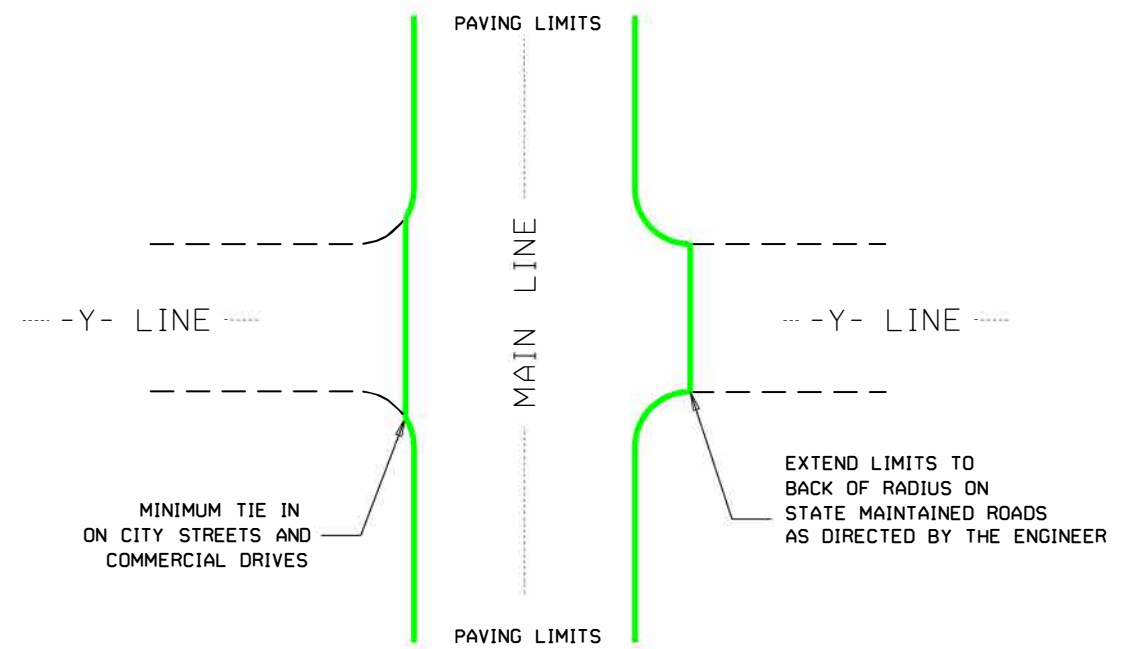
D. H. STALLINGS
DIVISION DESIGN ENGINEER







TYPICAL DETAIL OF PROJECT LIMITS AT
SIGNALIZED Y LINES



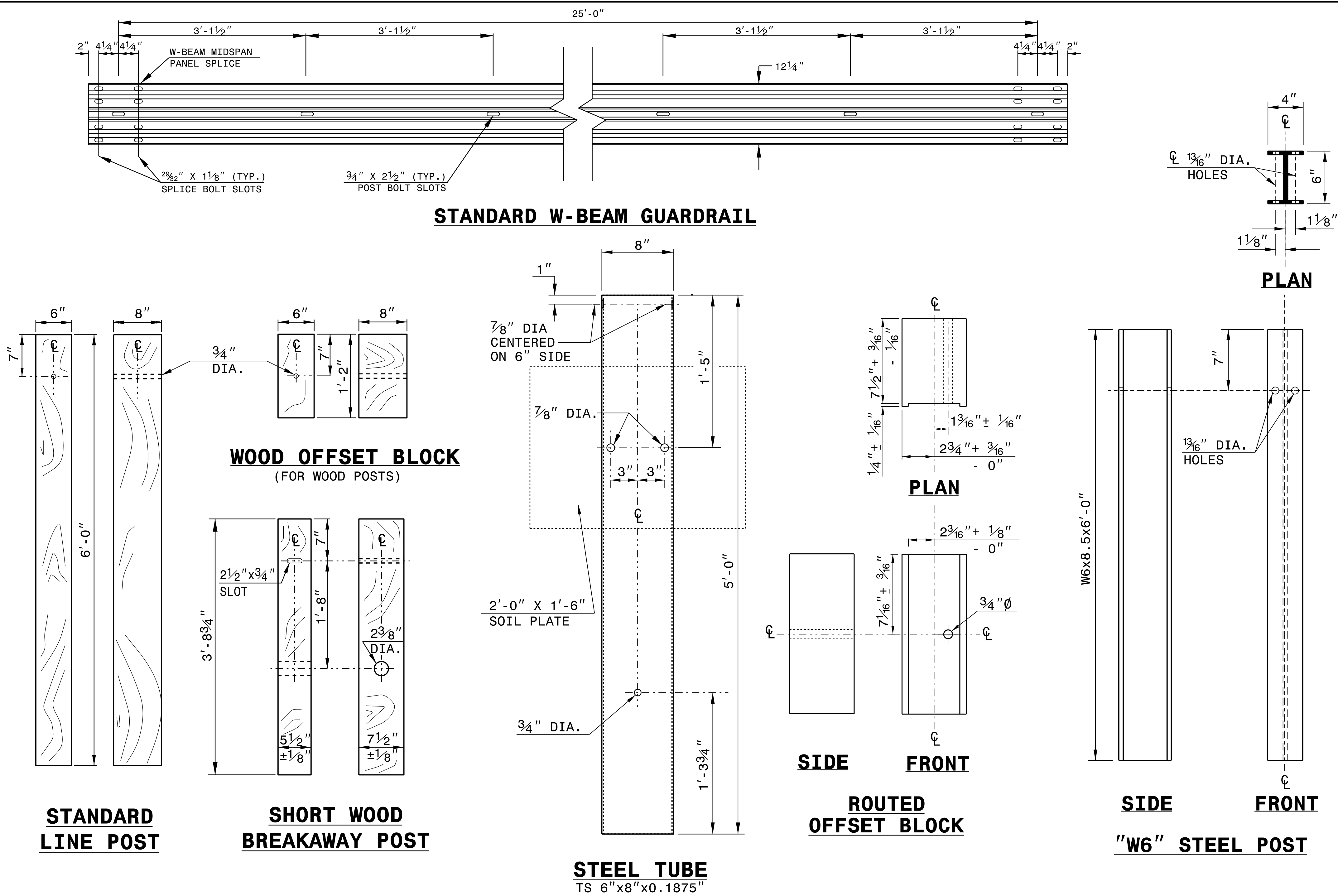
TYPICAL DETAIL OF PROJECT LIMITS AT
UNSIGNALIZED Y LINES

ADDITIONAL INTERSECTIONS (NON-TYPICAL)		
Extend paving limits to back of radius or loop on the following intersections:		
MAP#	STREET NAME	COMMENTS
	PAVE ALL STATE OWNED & TOWN STREETS	
	TO BACK OF RADIUS FOR THIS PROJECT	

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ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

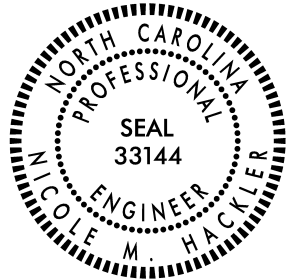
SHEET 6 OF 8
862D02

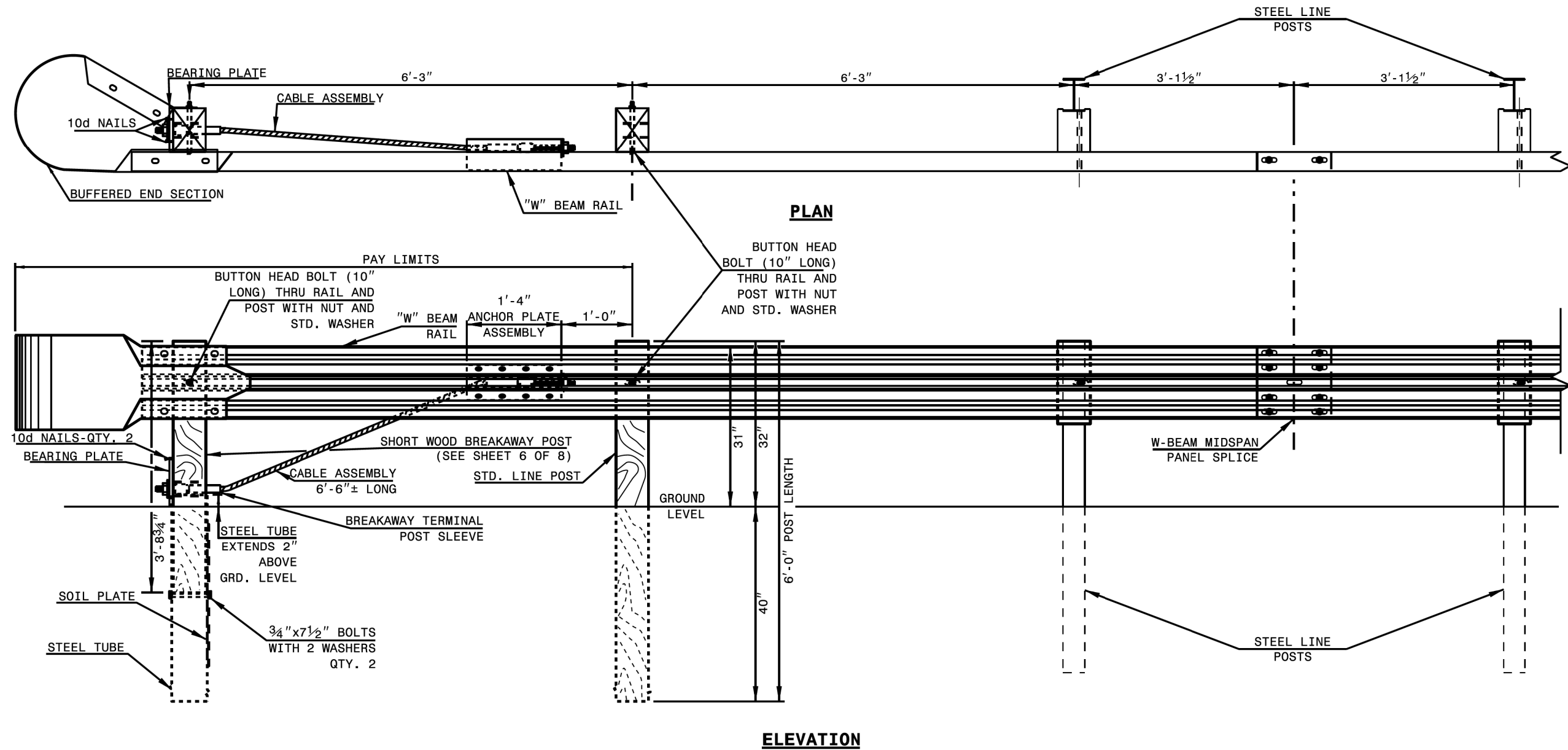


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DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 6 OF 8
862D02





TRAILING END UNIT ASSEMBLY
C.A.T.-1 SYSTEM

1-24
STATE OF
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RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
GUARDRAIL INSTALLATION

[illegible]

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RALEIGH, N.C.

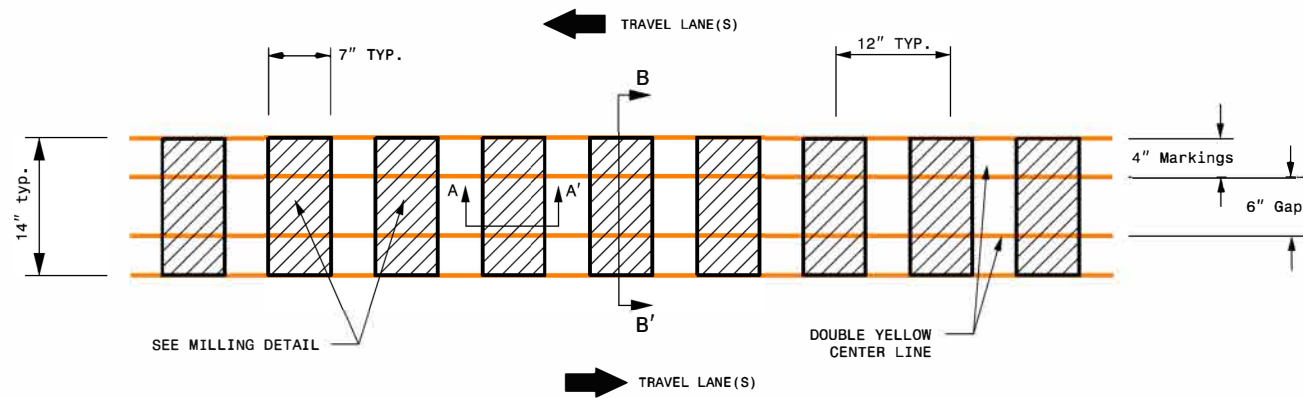
2-23
ENGLISH DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES
TRADITIONAL CENTERLINE RUMBLE STRIPE

2-23
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

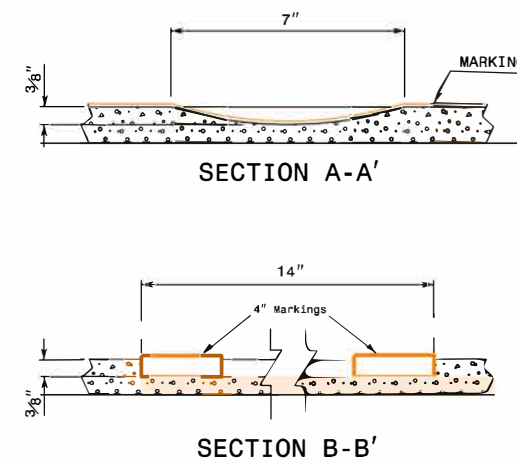
ENGLISH DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES
TRADITIONAL CENTERLINE RUMBLE STRIPE

See Table 2 within Rumble Strip
Policy for Design Guidance

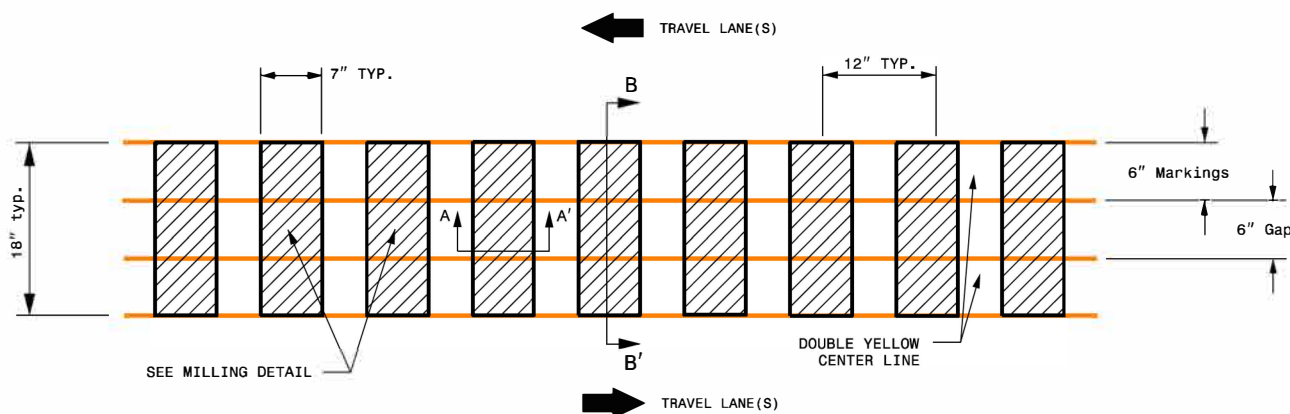
If 4" Markings will be used:



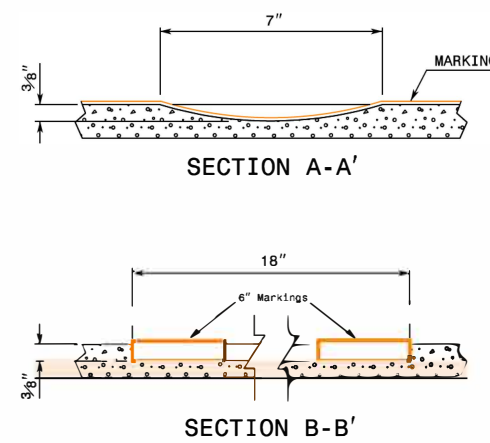
MILLING DETAIL - 4" Markings



If 6" Markings will be used:



MILLING DETAIL - 6" Markings



REFERENCE DRAWING ID: Trad.CL

NOTES:

- 1) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
- 2) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.

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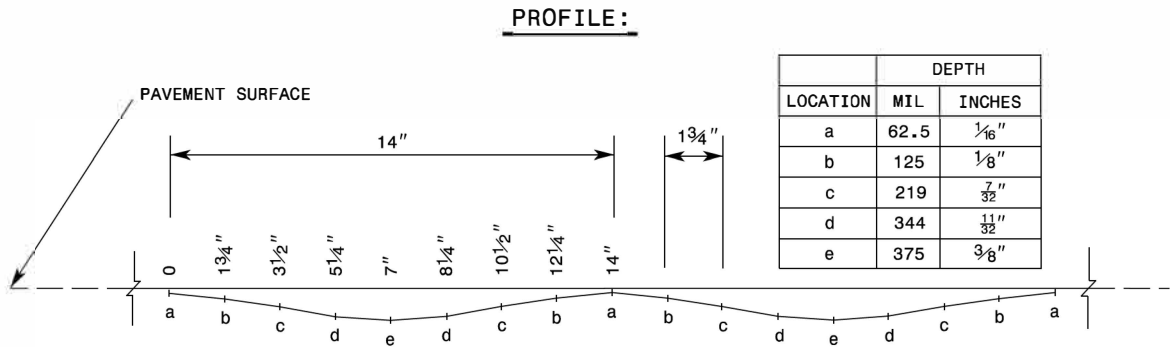
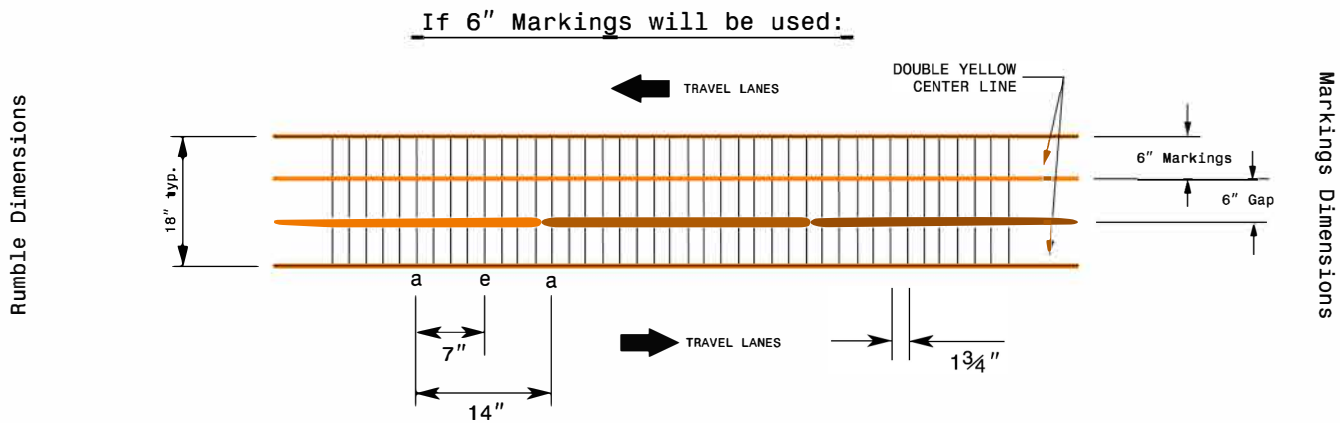
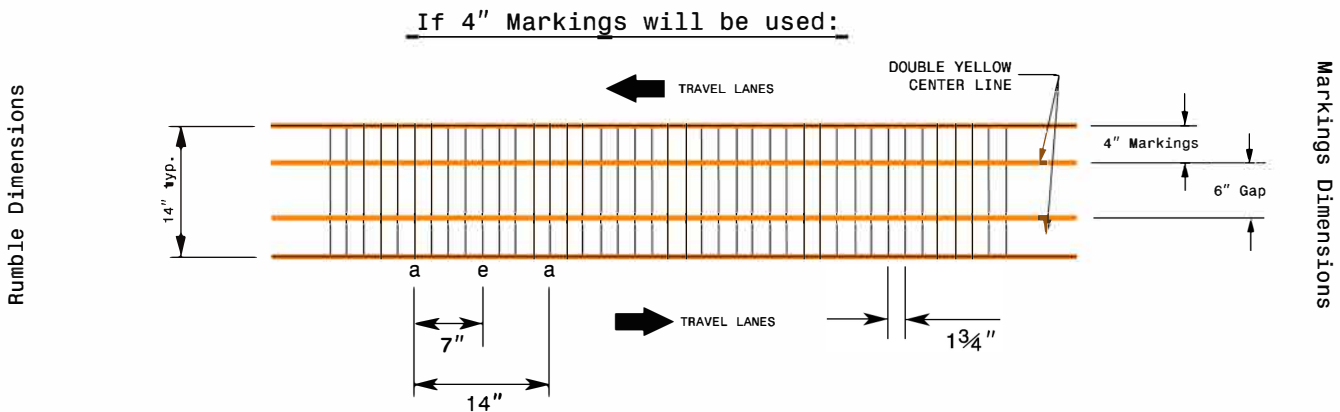
2-23

ENGLISH DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES

SINUSOIDAL CENTERLINE RUMBLE STRIPE

SHEET 6 OF 7

See Table 2 within Rumble Strip Policy for Design Guidance



REFERENCE DRAWING ID: Sin.CL

NOTES:

- 1) Specification in table taken from MNDOT Research Project Final Report 2016-23: *Sinusoidal Rumble Strip Design Optimization Study By Terhaar et. al, June 2016*
- 2) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
- 3) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.

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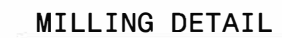
2-23

ENGLISH DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES

SINUSOIDAL CENTERLINE RUMBLE STRIPE

SHEET 6 OF 7

LANE TREATMENT



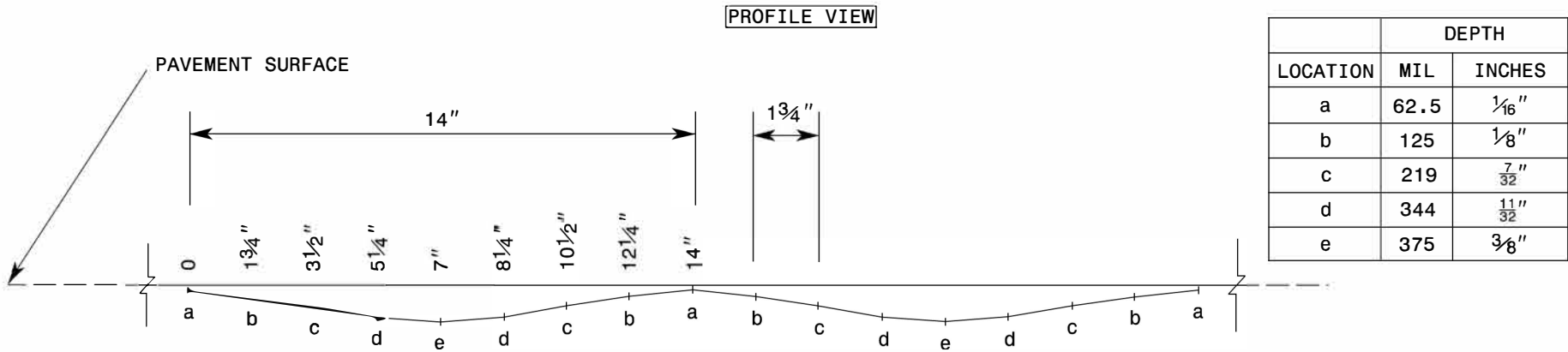
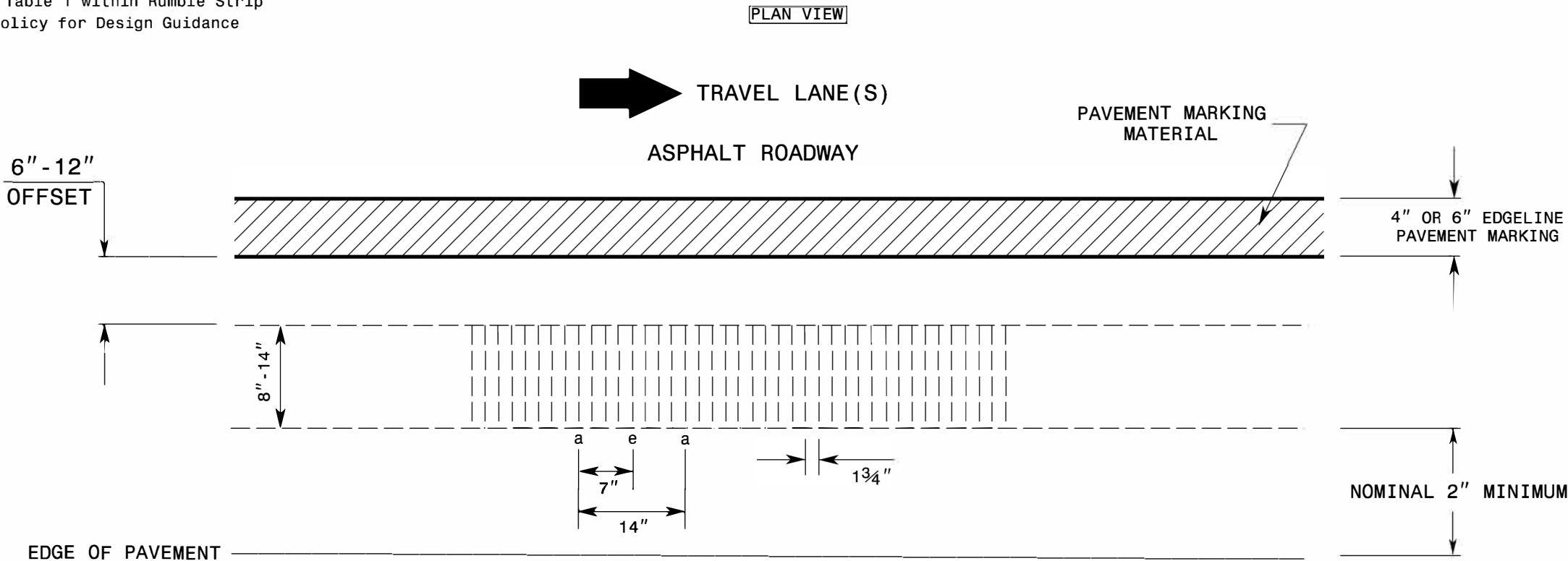
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RALEIGH, N.C.

2-23

ENGLISH DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES
SINUSOIDAL SHOULDER RUMBLE STRIP

SHEET 2 OF 7

See Table 1 within Rumble Strip Policy for Design Guidance



REFERENCE DRAWING ID: Sin.Strip

NOTES:

1) Specification in table taken from MNDOT Research Project Final Report 2016-23: *Sinusoidal Rumble Strip Design Optimization Study By Terhaar et. al, June 2016*

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2-23

ENGLISH DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES
SINUSOIDAL SHOULDER RUMBLE STRIP

SHEET 2 OF 7

PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.01.12.10281	10	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	PROPOSED WIDTH	BEGIN MP	END MP	MATERIAL TRANSFER VEHICLE REQUIRED	0000100000-N	1220000000-E	1245000000-E	1297000000-E	1330000000-E	1491000000-E	1523000000-E	1575000000-E	1705000000-E	1881000000-E	
								MI	FT	FT				LS	TONS	SMI	SY	SY	TONS	TONS	TONS	TON	LF	LF
2025CPT.01.12.10281	Dare	1	US-64 E / US 64 HWY/HWY 64/US 64 264 HWY	FROM SR 1169 (ROBERTSON LANDING RD.) TO US 264		2	2WU	5.803	24	28	7.28	13.083	YES	1	50	11.61	83,624	227	4,696	8,445	710	16	61,280	30,640
TOTAL FOR PROJ NO. 2025CPT.01.12.10281								5.803							50	11.61	83,624	227	4,696	8,445	710	16	61,280	30,640
GRAND TOTAL								5.803						1	50	11.61	83,624	227	4,696	8,445	710	16	61,280	30,640

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	PROPOSED WIDTH	BEGIN MP	END MP	MATERIAL TRANSFER VEHICLE REQUIRED	3030000000-E	3210000000-N	3287000000-N	3360000000-E	6000000000-E	6071012000-E	6084000000-E	6117000000-N
								MI	FT	FT				STEEL BEAM GR	GR ANCH CAT-1	GUARDRAIL END UNITS, TYPE TL-3	REMOVE EXISTING GUARDRAIL	TEMPORARY SILT FENCE	COIR FIBER WATTLE	SEEDING & MULCHING	RESPONSE FOR EROSION CONTROL
2025CPT.01.12.10281	Dare	1	US-64 E / US 64 HWY/HWY 64/US 64 264 HWY	FROM SR 1169 (ROBERTSON LANDING RD.) TO US 264		2	2WU	5.803	24	28	7.28	13.083	YES	30,602	1	12	31,208	250	100	7.0	2
TOTAL FOR PROJ NO. 2025CPT.01.12.10281								5.803						30,602	1	12	31,208	250	100	7.0	2
GRAND TOTAL								5.803						30,602	1	12	31,208	250	100	7.0	2

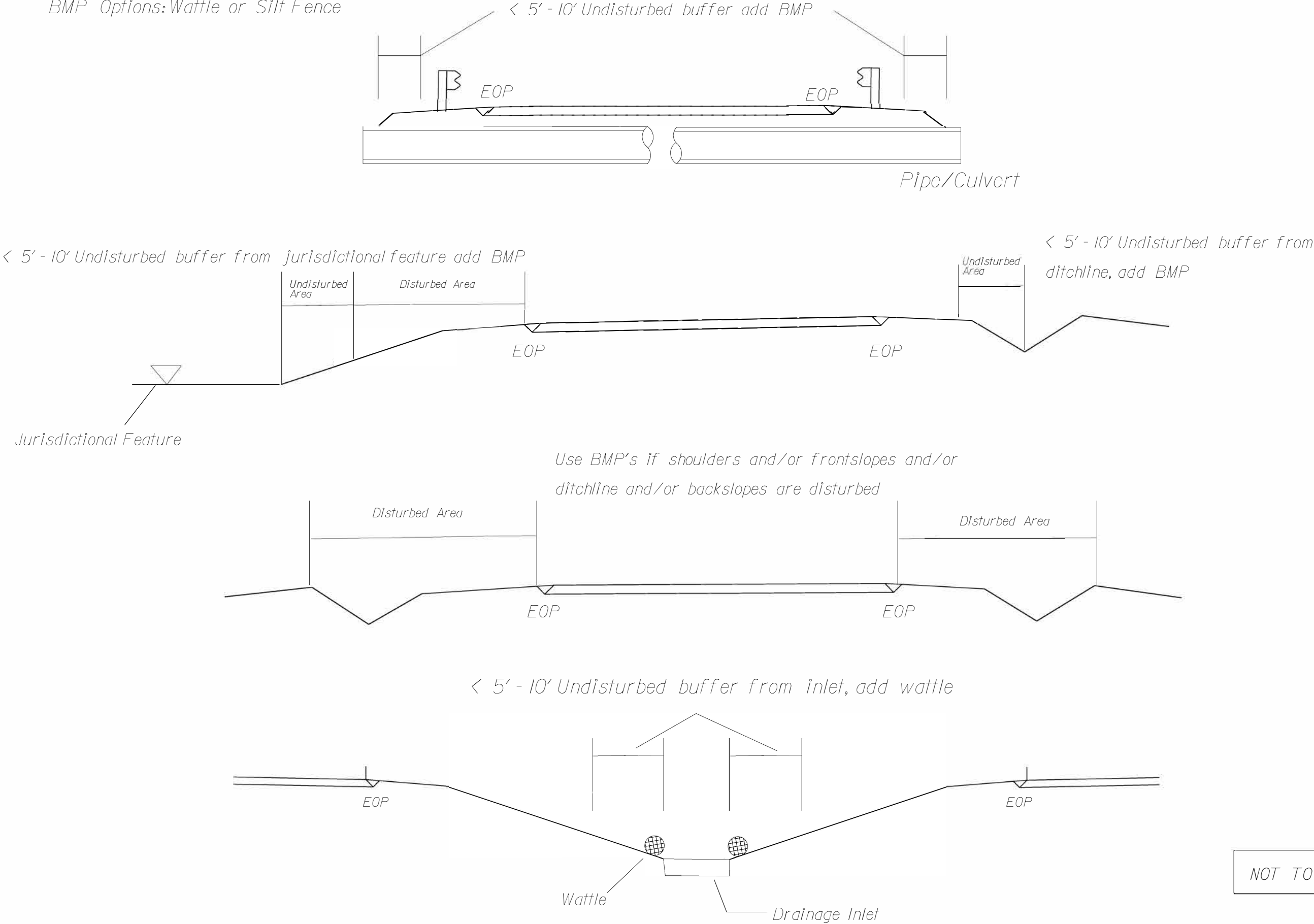
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	PROPOSED WIDTH	BEGIN MP	END MP	MATERIAL TRANSFER VEHICLE REQUIRED	4413000000-E	4457000000-N	4688000000-E		4810000000-E		4895000000-N
								MI	FT	FT				WORK ZONE ADVANCE / GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS) YELLOW	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	GENERIC PAVEMENT MARKING ITEM (POLYCARBONATE H-SHAPED MARKERS)
2025CPT.01.12.10281	Dare	1	US-64 E / US 64 HWY/HWY 64/US 64 264 HWY	FROM SR 1169 (ROBERTSON LANDING RD.) TO US 264		2	2WU	5.803	24	28	7.28	13.083	YES	214	1	61,280	15,649	61,280	35,649	383
TOTAL FOR PROJ NO. 2025CPT.01.12.10281								5.803						214	1	61,280	15,649	61,280	35,649	383
																76,929		96,929		
GRAND TOTAL								5.803						214	1	61,280	15,649	61,280	35,649	383

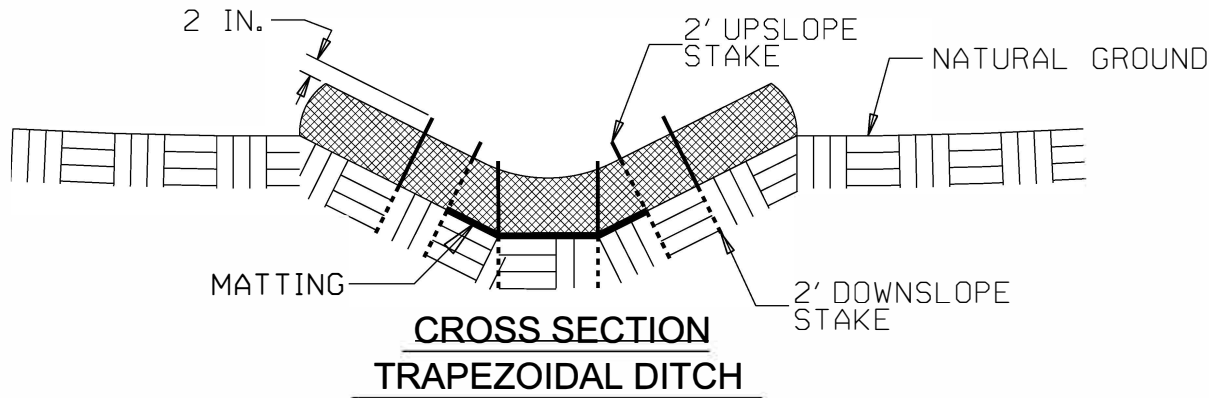
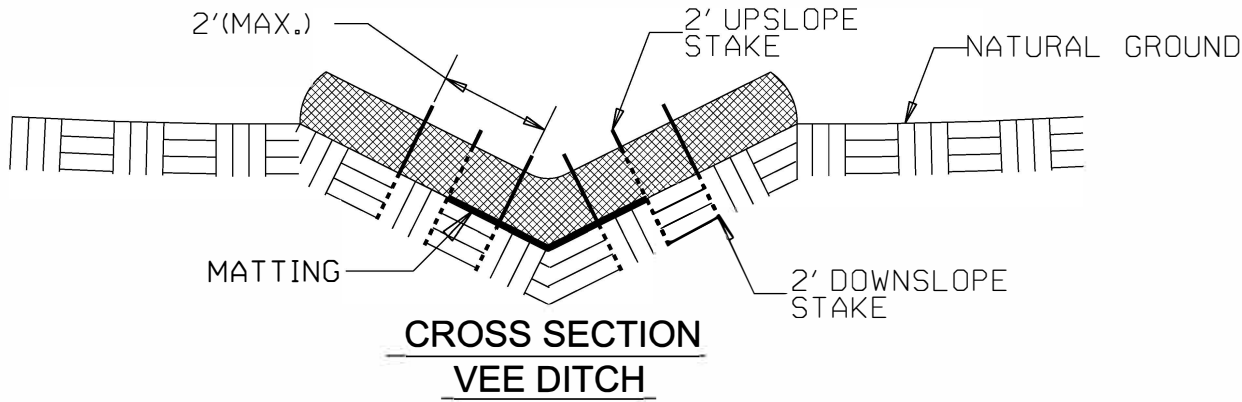
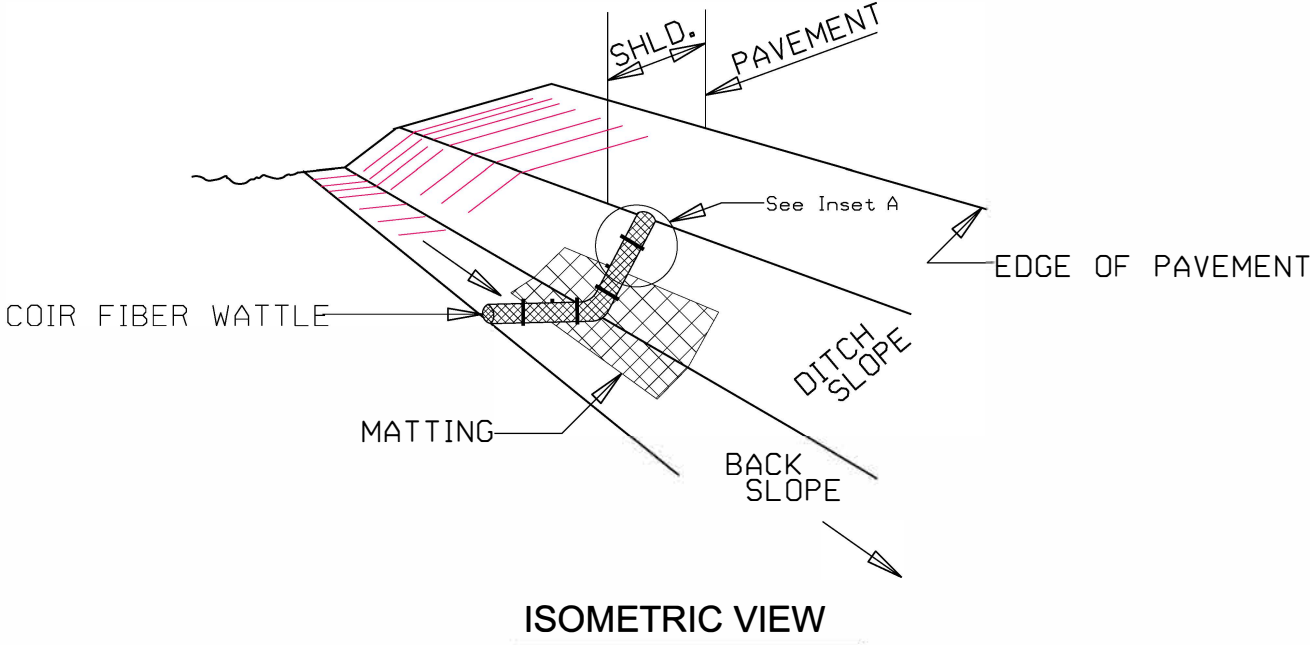
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

EROSION CONTROL DETAIL



COIR FIBER WATTLE DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

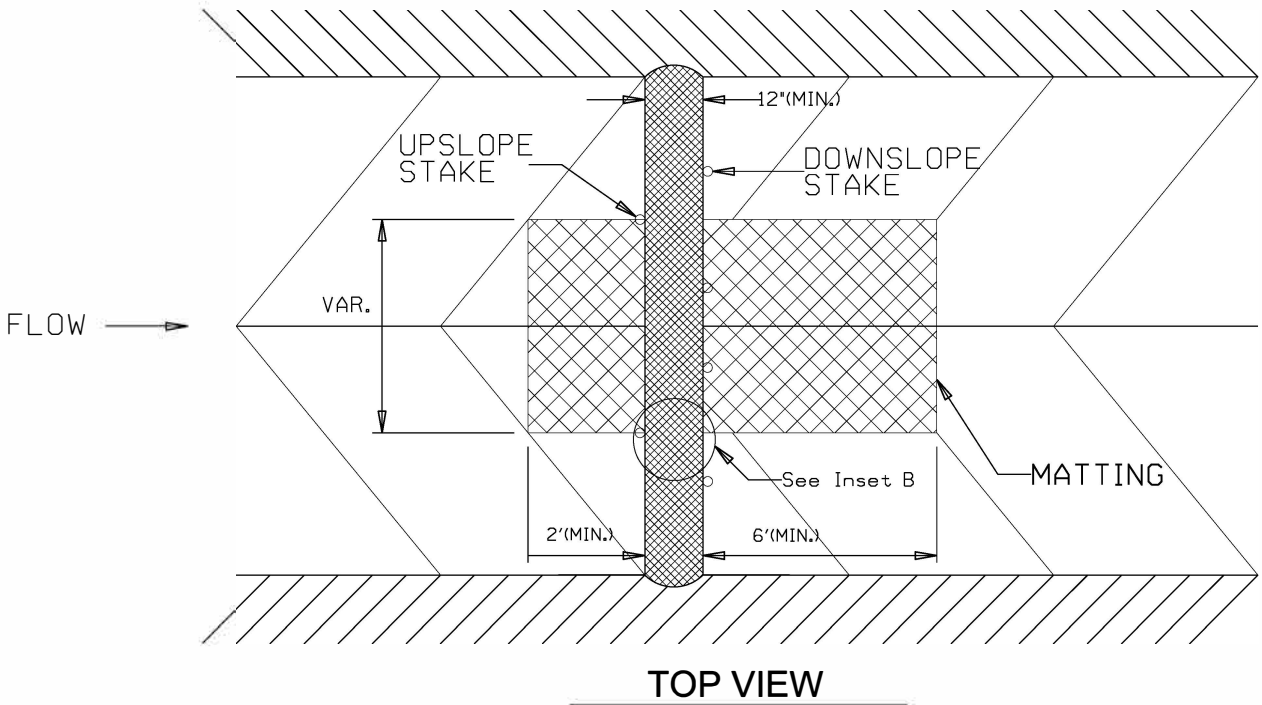
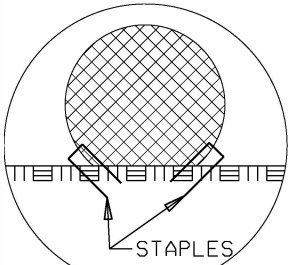
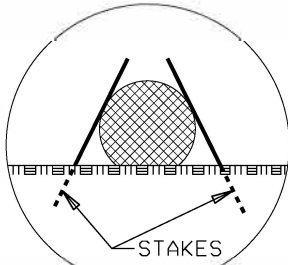
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

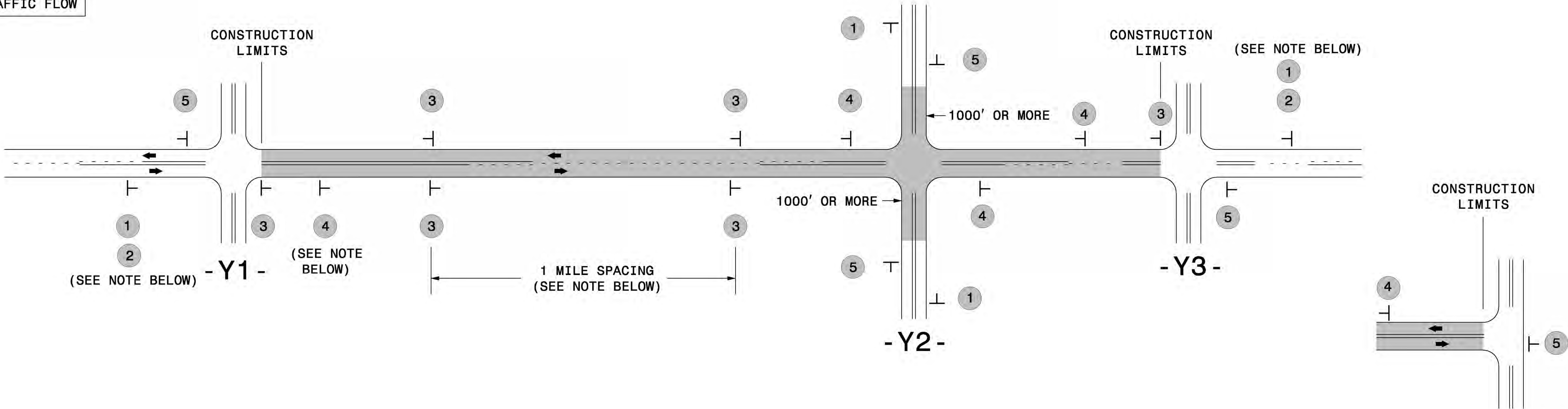
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

SIGNING FOR RESURFACING PROJECTS

LEGEND

STATIONARY SIGN

DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1 2 ROAD WORK AHEAD W20-1 48" X 48" NEXT XX MILES W7-3aP 24" X 18" PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. #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)	NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS: 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS 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. ROAD WORK AHEAD W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. ROAD WORK AHEAD W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER.
	3 LOW/SOFT SHOULDER SP 13107 48" X 48" - 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 ROAD UNDER CONST SP 13106 48" X 48" - 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 END ROAD WORK G20-2 A 48" X 24" 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.	
LESS 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