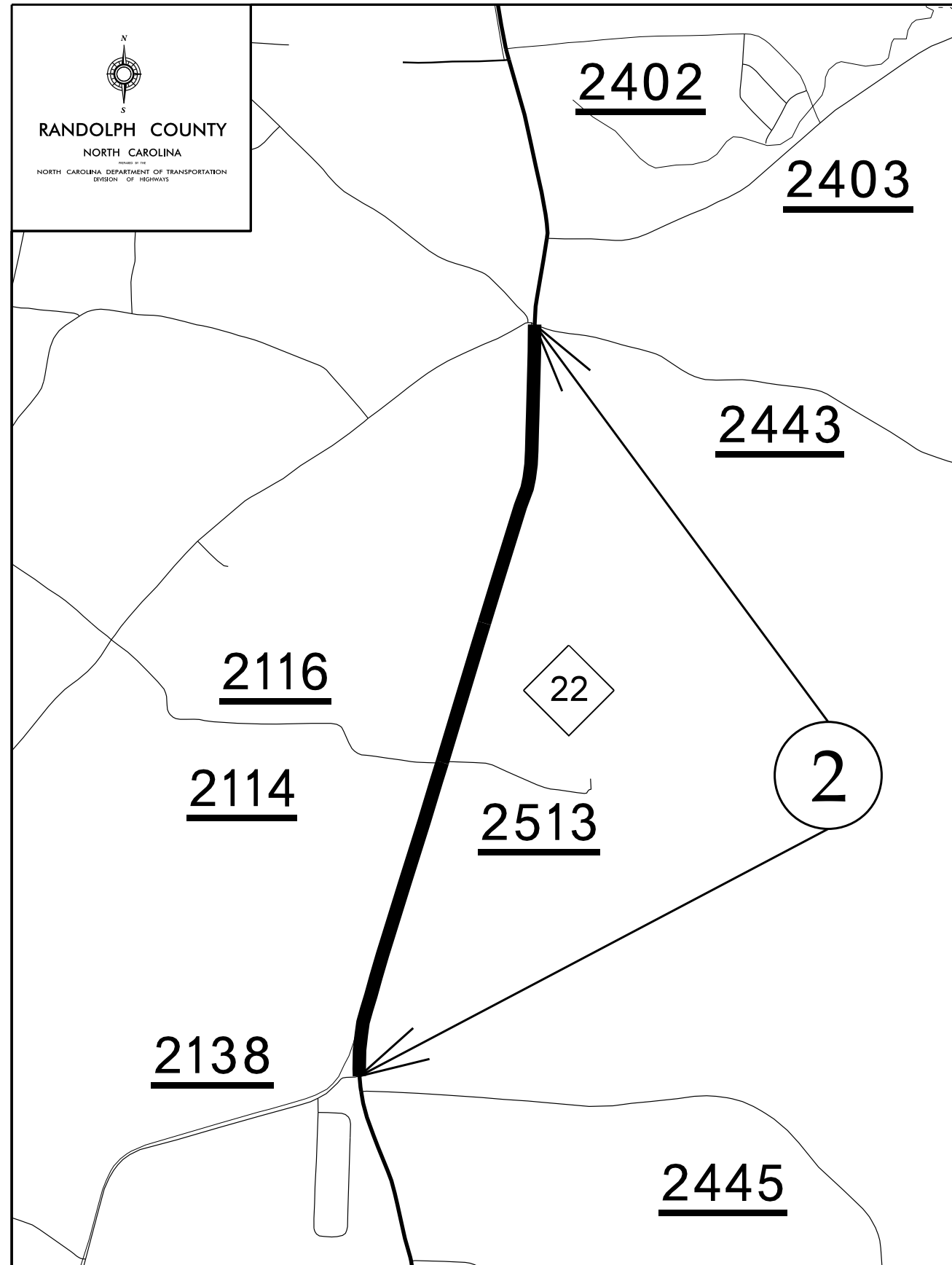


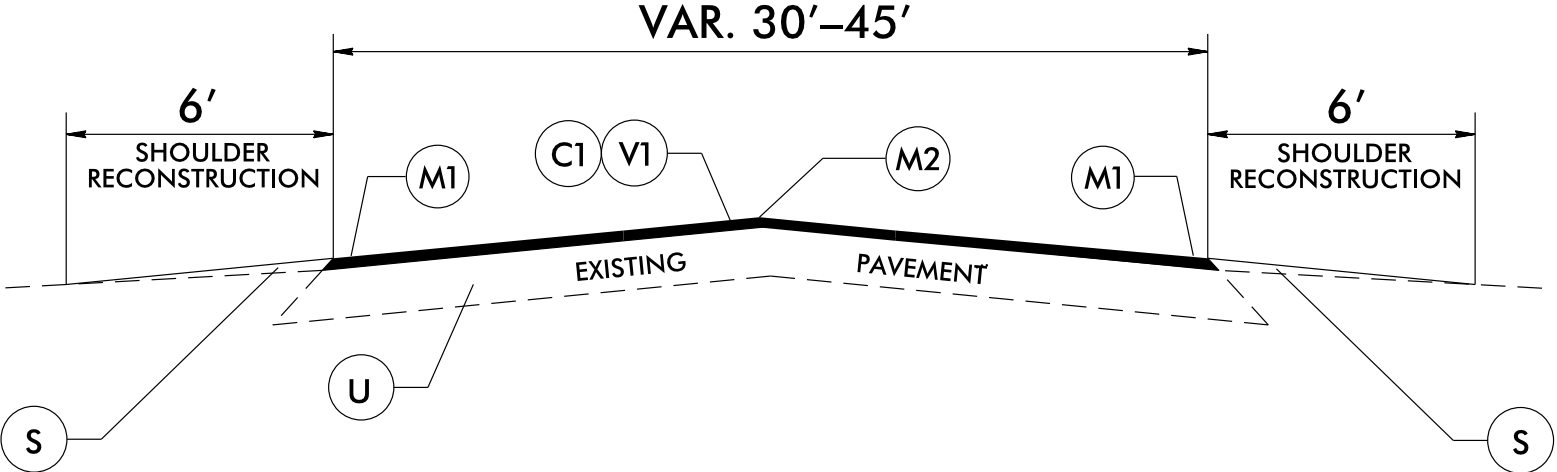
***RANDOLPH COUNTY  
PRIMARY RESURFACING***



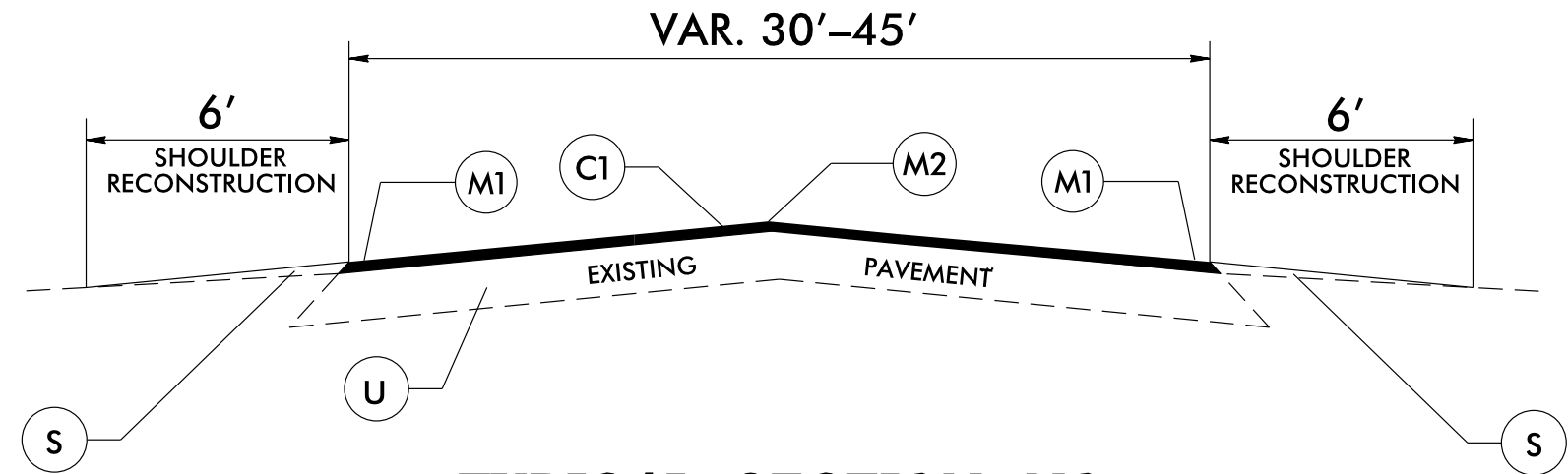
# Map 2 - NC 22





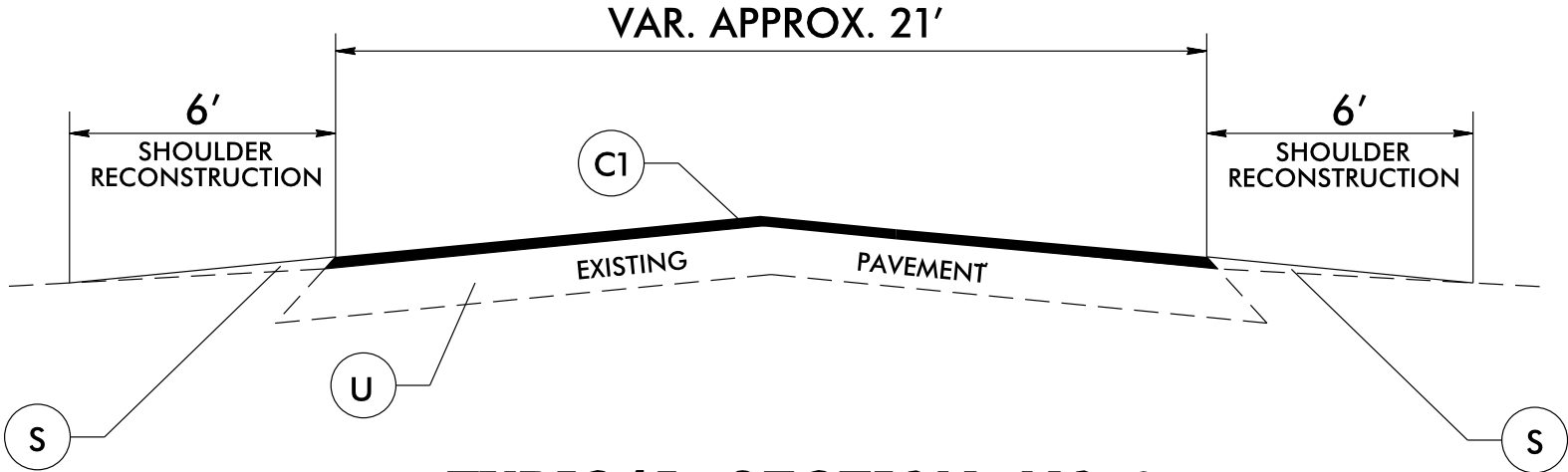


***TYPICAL SECTION NO. 1***  
USE FOR MAP #1 US 64  
FROM DAVIDSON COUNTY LINE TO  
EAST SIDE OF BRIDGE #33 OVER UWHARRIE RIVER

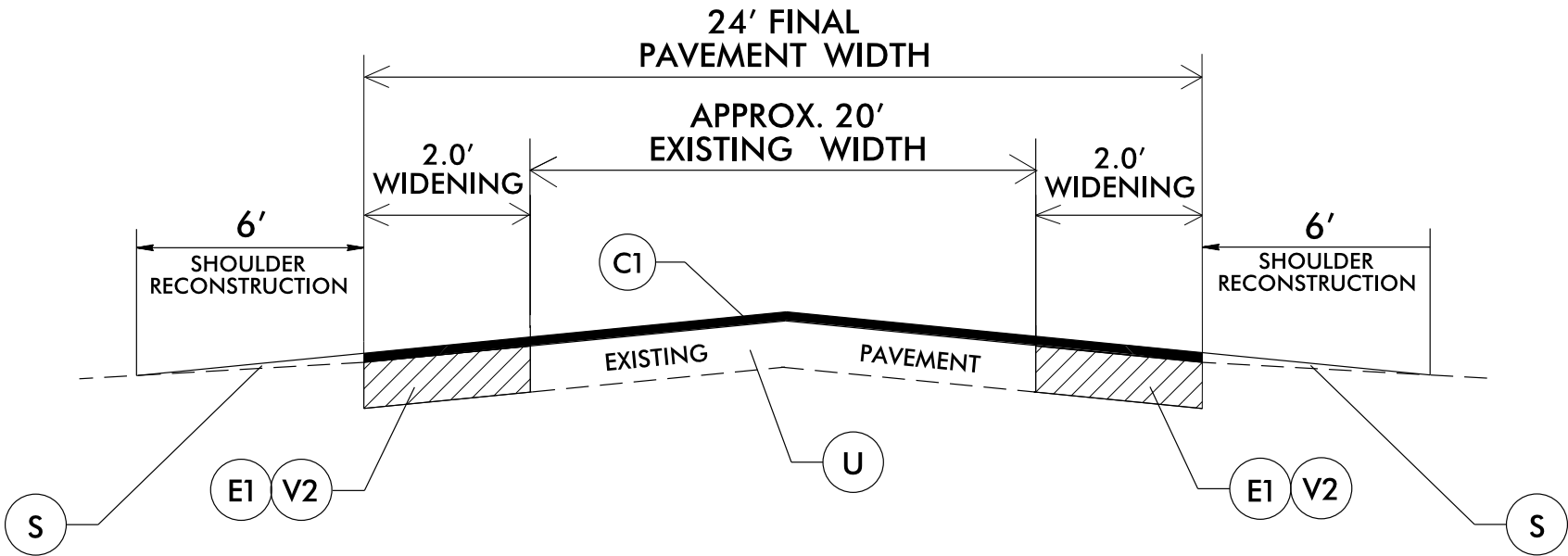


***TYPICAL SECTION NO. 2***  
USE FOR MAP #1 US 64  
FROM EAST SIDE OF BRIDGE #33 OVER UWHARRIE RIVER  
TO PAVEMENT JOINT 300 FT EAST OF SR 2079 (GRAHAM DR)

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
M1	MILLED RUMBLE STRIPS, EDGELINE (12")
M2	MILLED RUMBLE STRIPES, CENTERLINE (18")
S	AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT
V1	MILLING 1.5" IN DEPTH
V2	TRENCHING FOR BASE COURSE (SEE S.P.)



**TYPICAL SECTION NO. 3**  
USE FOR MAP #3 NC 42

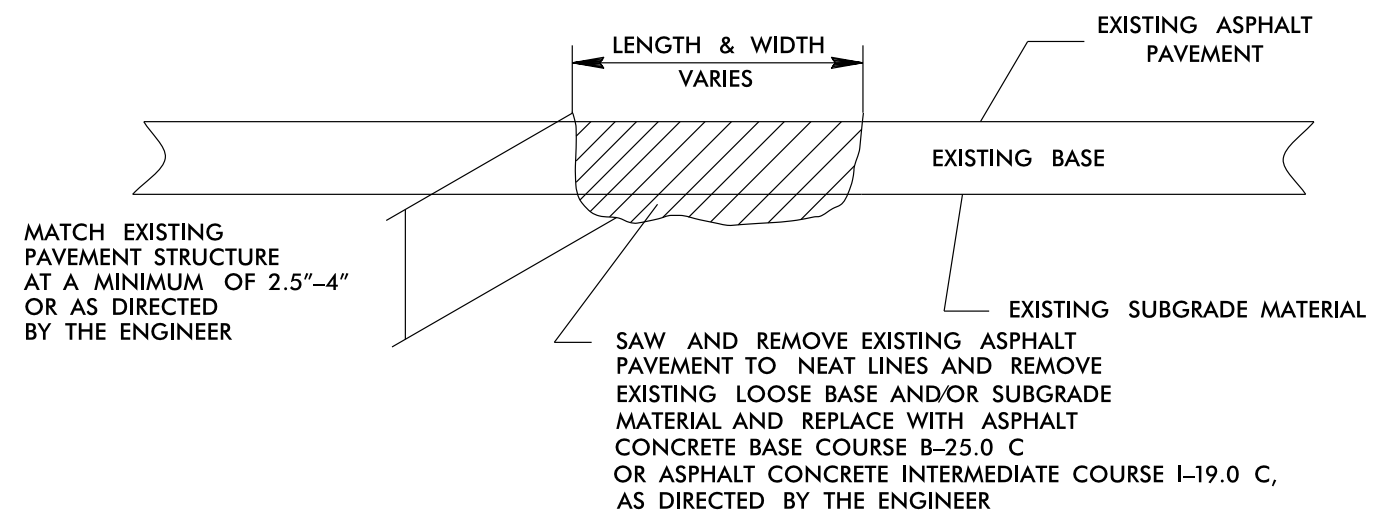


**TYPICAL SECTION NO. 4**  
USE FOR MAP #2 NC 22

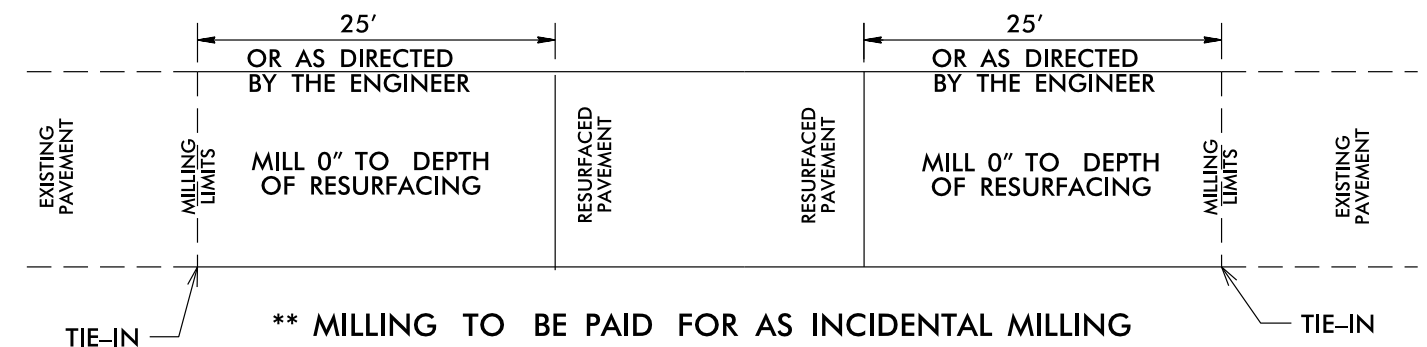
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
M1	MILLED RUMBLE STRIPS, EDGELINE (12")
M2	MILLED RUMBLE STRIPES, CENTERLINE (18")
S	AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT
V1	MILLING 1.5" IN DEPTH
V2	TRENCHING FOR BASE COURSE (SEE S.P.)

# DETAILS

## DETAILS OF PATCHING EXISTING PAVEMENT PRIOR TO RESURFACING



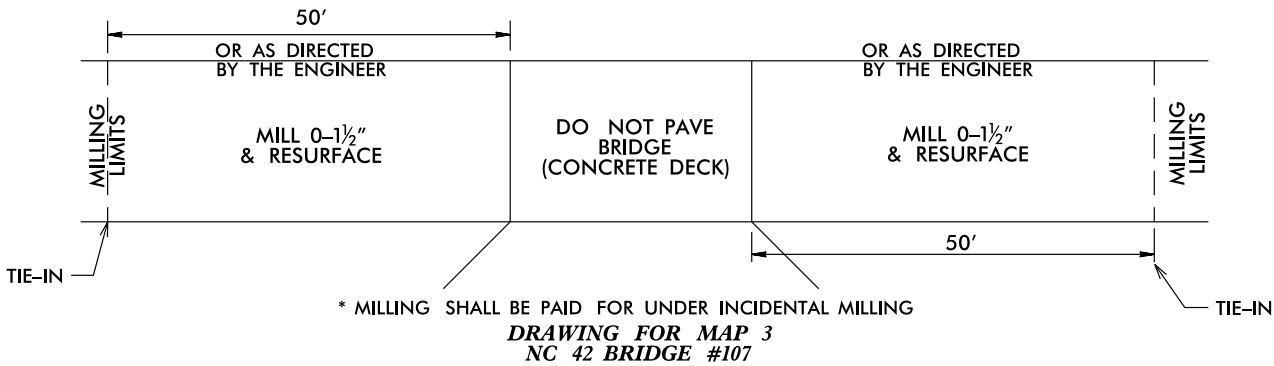
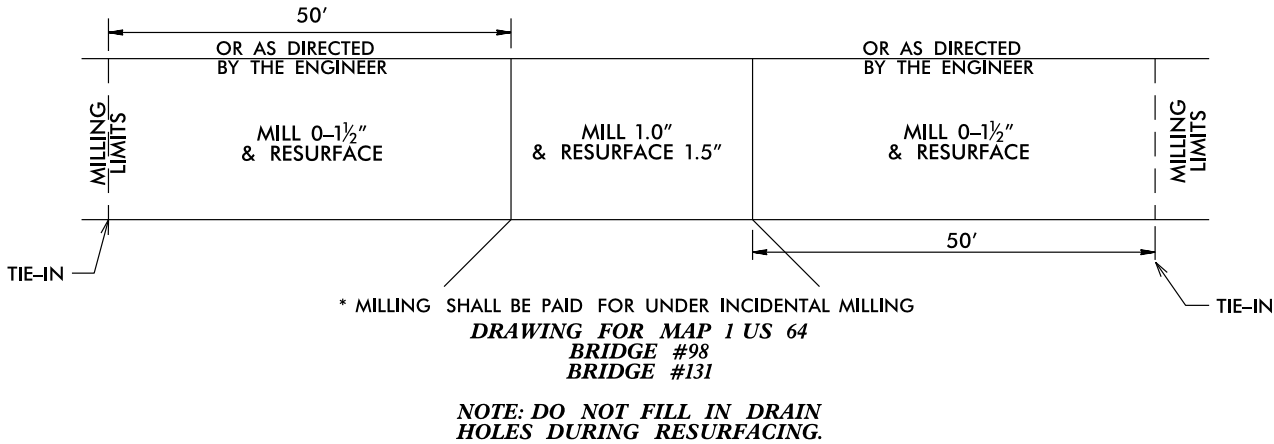
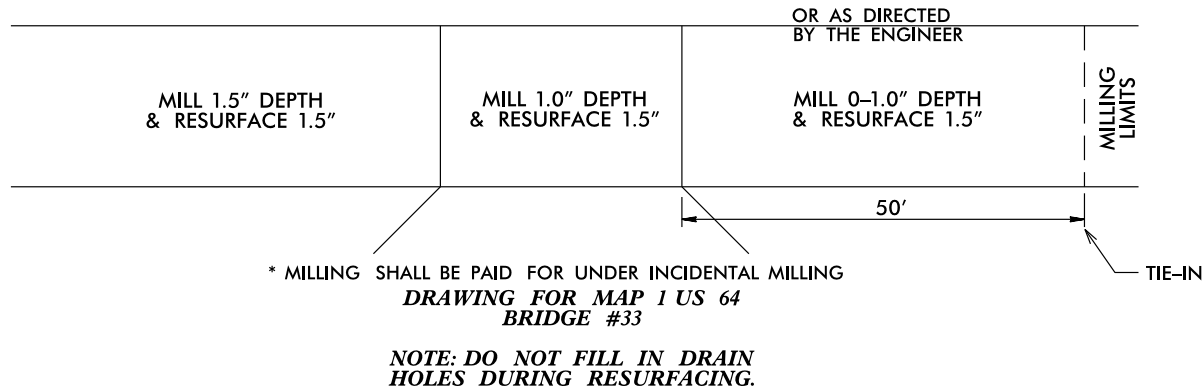
## PAVEMENT TIE-IN DETAIL



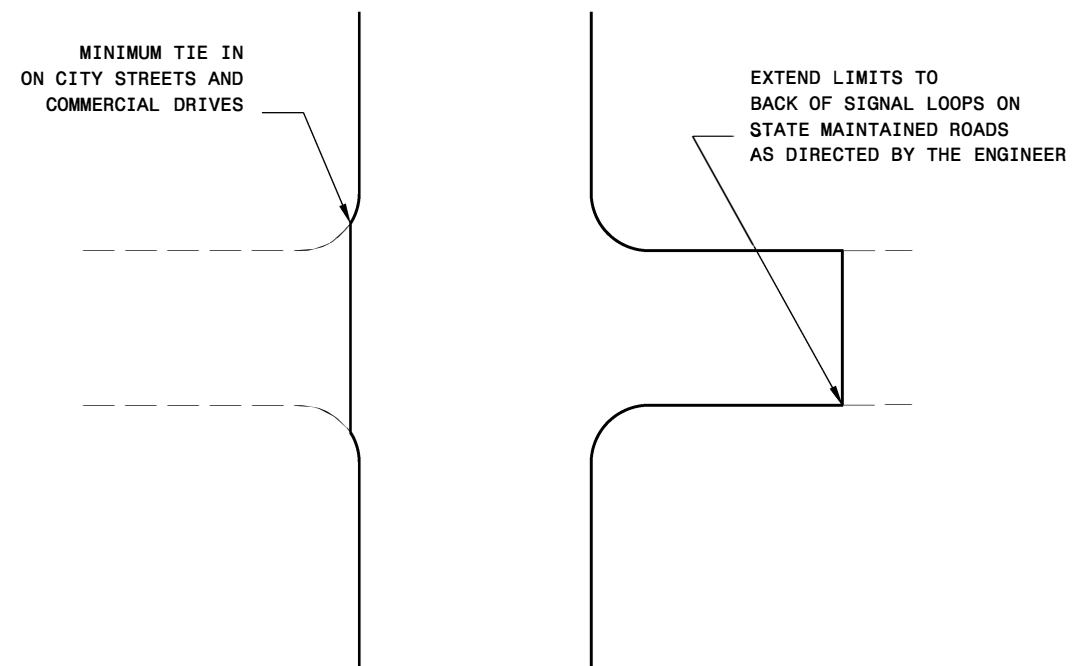
## PROJECT NOTES

- PAINT MARKINGS INCLUDED FOR MILLING ON MAP 1.
- PAINT MARKINGS AND LINE REMOVAL INCLUDED FOR BRIDGE ON MAP 3.
- BASE FOR WIDENING ON MAP 2 NC 22 TO BE PAID UNDER HILC WBS 51488.

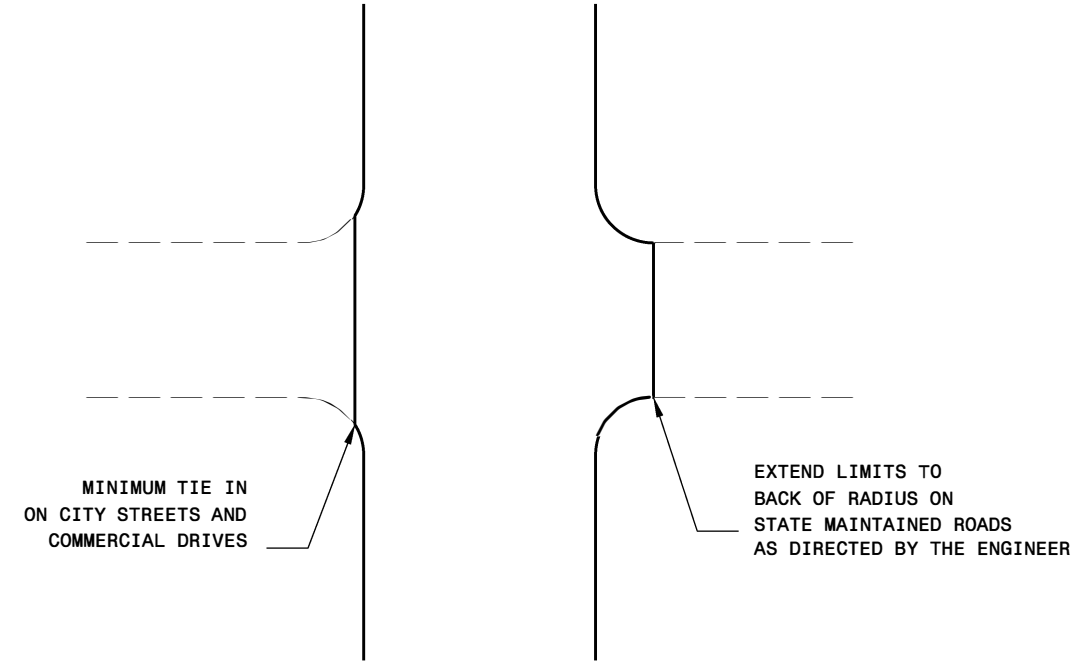
BRIDGE DETAILS





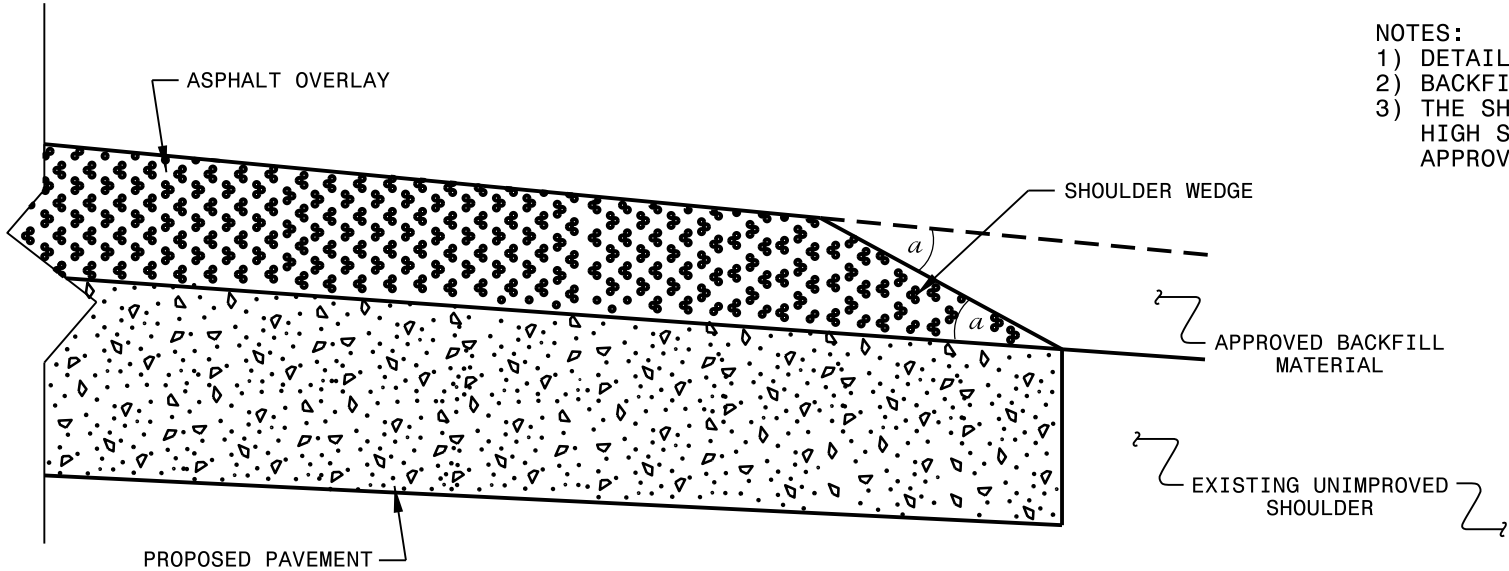


TYPICAL DETAIL OF PROJECT LIMITS AT  
SIGNALIZED Y LINES



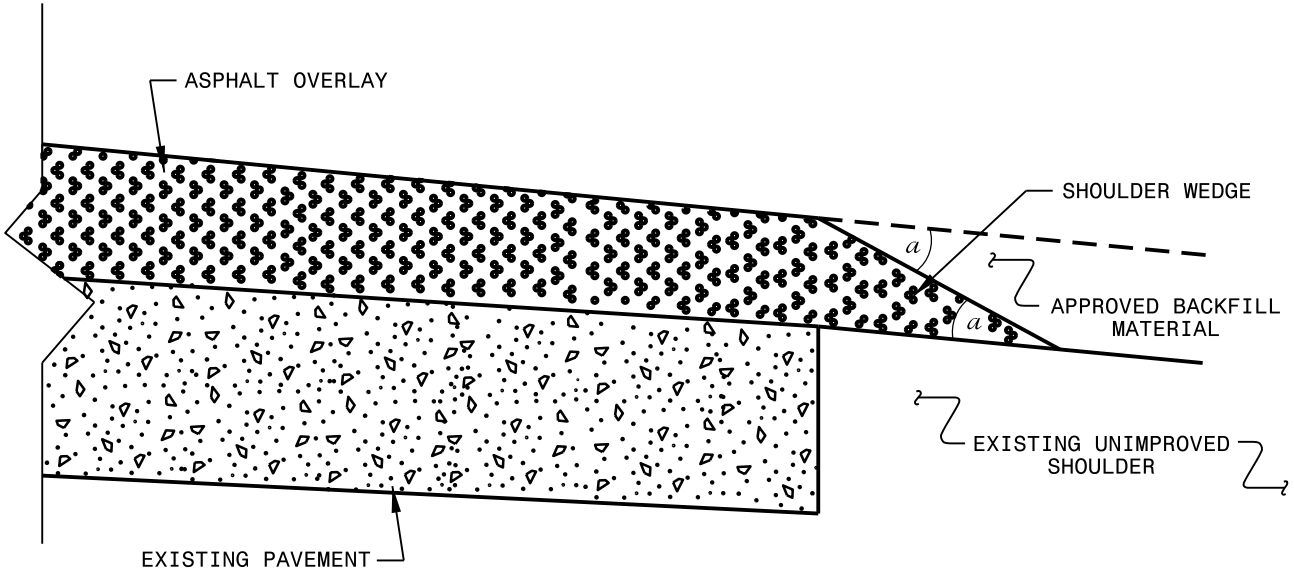
TYPICAL DETAIL OF PROJECT LIMITS AT  
UNSIGNALIZED Y LINES

[illegible]

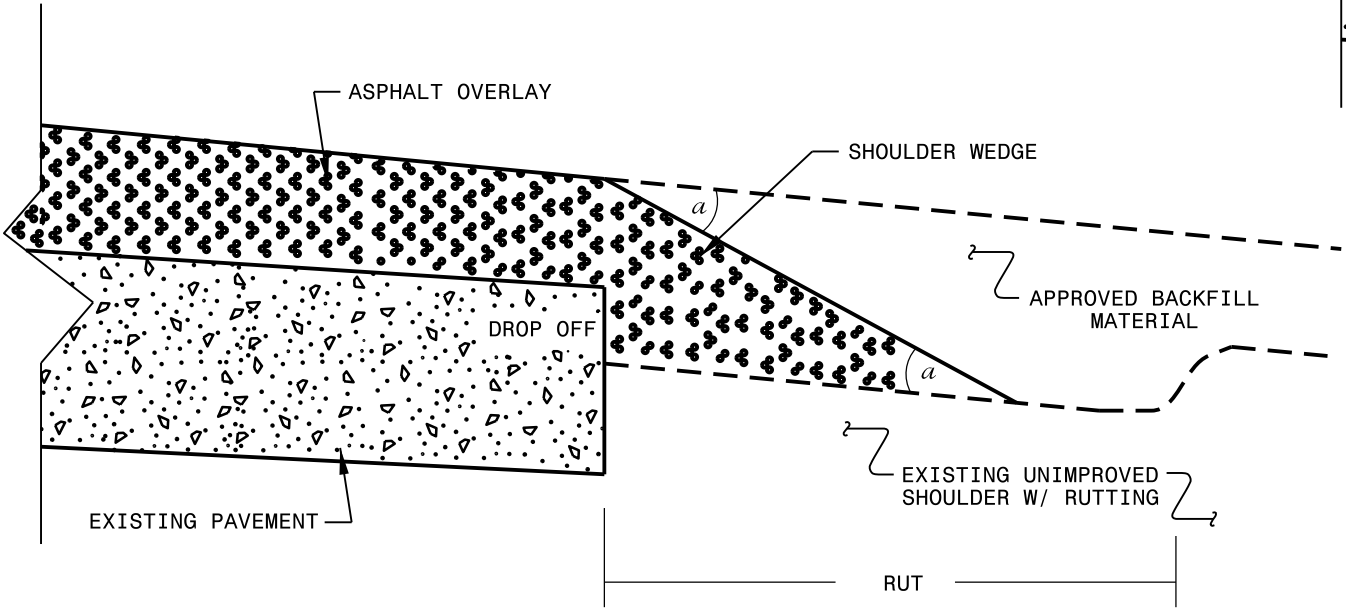


- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
  - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.

**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°

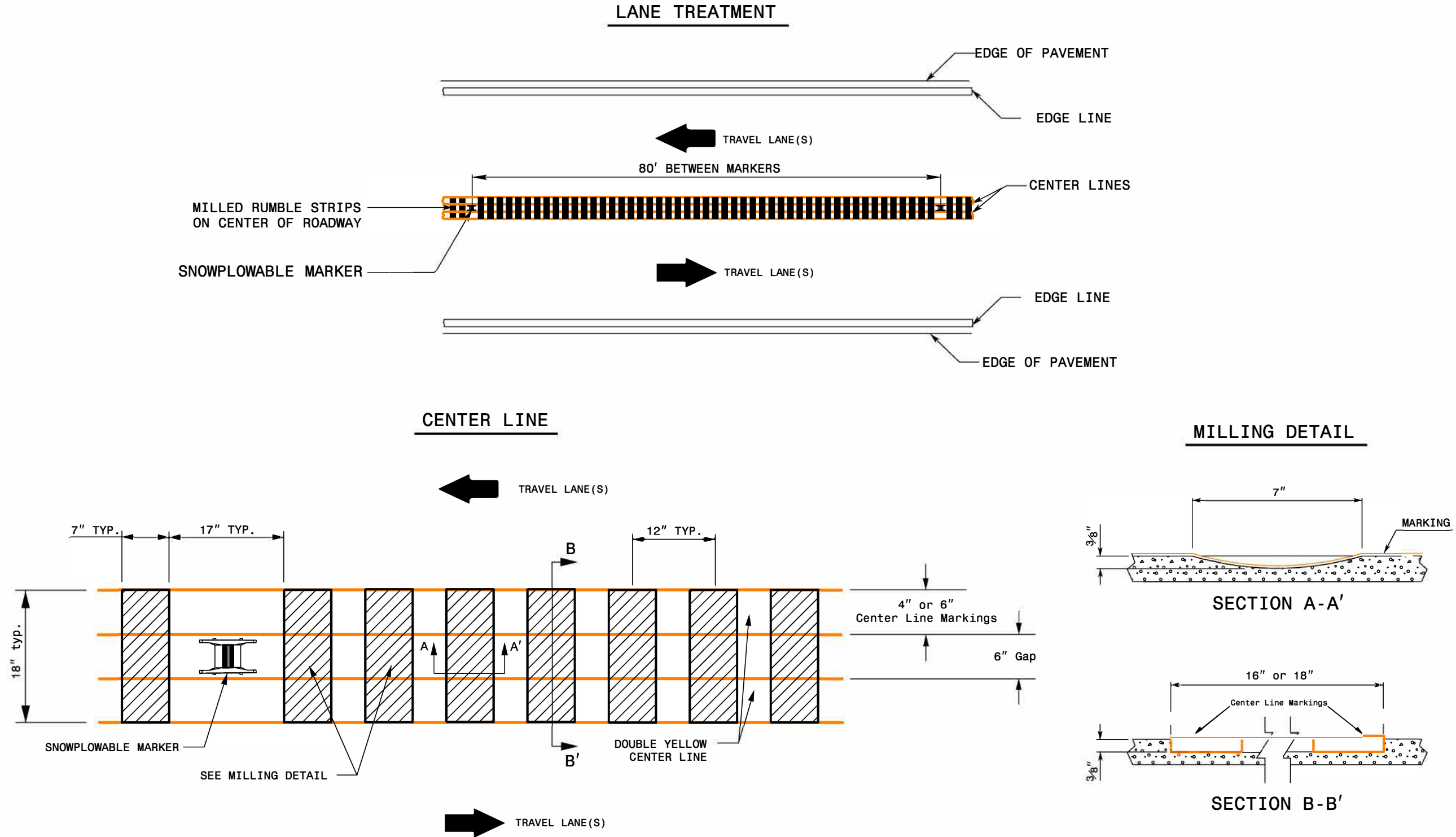
<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>			
Office 919-707-6950		FAX 919-250-4119	
<b>SHOULDER WEDGE DETAILS</b>			
ORIGINAL BY:	T.SPELL	DATE:	7-19-11
MODIFIED BY:		DATE:	2/2/16
CHECKED BY:		DATE:	
FILE SPEC.:	s:\usr\details\stand\shoulderwedgedetail.dgn		

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

2-23

ENGLISH DETAIL DRAWING FOR  
**RUMBLE STRIPS / STRIPES**  
TRADITIONAL CENTERLINE RUMBLE STRIPE WITH SNOWPLOWABLE MARKERS

See Table 2 within Rumble Strip  
Policy for Design Guidance



REFERENCE DRAWING ID: Trad.CL with Snowplowable Markers

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.
- 3) INSTALL SNOWPLOWABLE MARKERS AT APPROXIMATELY 80' INCREMENTS. DO NOT MILL RUMBLE STRIPS IN SECTION WHERE SNOWPLOWABLE MARKERS ARE INSTALLED.

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

2-23

ENGLISH DETAIL DRAWING FOR  
**RUMBLE STRIPS / STRIPES**  
TRADITIONAL CENTERLINE RUMBLE STRIPE WITH SNOWPLOWABLE MARKERS

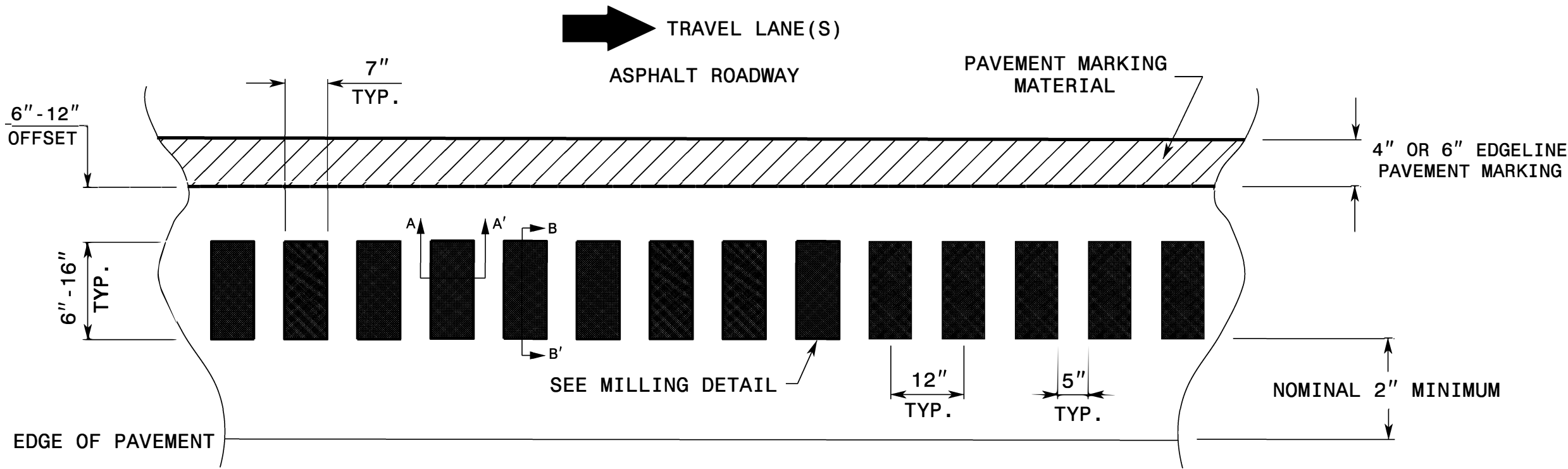
STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

2-23

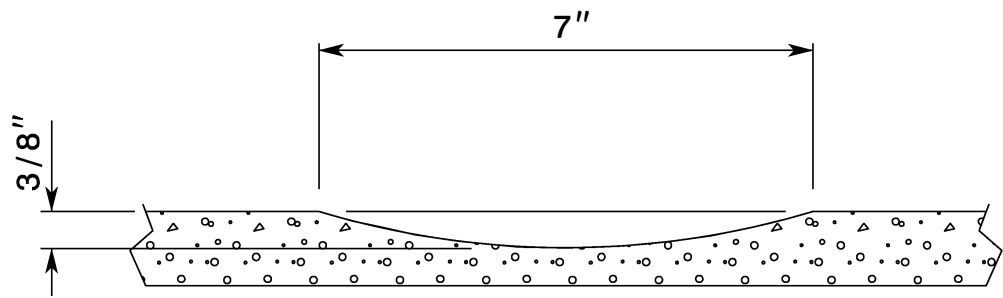
ENGLISH DETAIL DRAWING FOR  
**RUMBLE STRIPS / STRIPES**  
TRADITIONAL SHOULDER RUMBLE STRIP

SHEET 1 OF 7

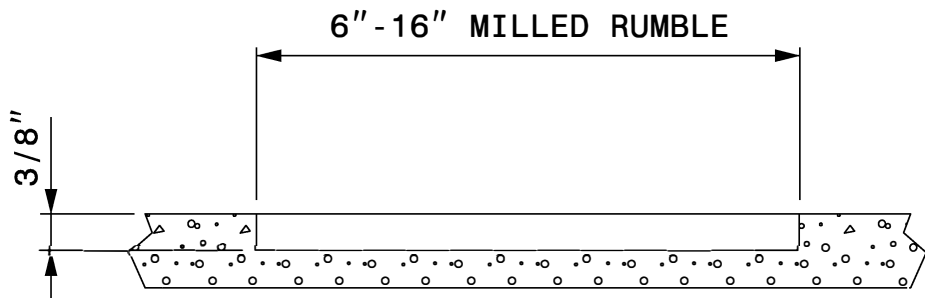
See Table 1 within Rumble Strip  
Policy for Design Guidance



MILLING DETAIL:



SECTION A-A'



SECTION B-B'

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

2-23

ENGLISH DETAIL DRAWING FOR  
**RUMBLE STRIPS / STRIPES**  
TRADITIONAL SHOULDER RUMBLE STRIP

REFERENCE DRAWING ID: Trad.Strip

PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.08.13.10761, 51488	13	

SUMMARY OF QUANTITIES

												1245000000-E	1260000000-E	1297000000-E	1330000000-E	1491000000-E	1523000000-E	1575000000-E	1704000000-E	1841000000-E	1881000000-E	2845000000-N	5255000000-N
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	SHOULDER RECONSTRUCTI ON	AGGREGATE SHOULDER BORROW	1.5" MILLING	INCIDENTAL MILLING	BASE COURSE, B25.0C	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	GENERIC PAVING ITEM - MILLED RUMBLE STRIPS (ASPHALT CONCRETE), 12"	GENERIC PAVING ITEM - CENTERLINE MILLED RUMBLE STRIPS (ASPHALT CONCRETE), 18"	ADJUST METER OR VALVE BOX	PORTABLE LIGHTING
								MI	FT			SMI	TON	SY	SY	TONS	TONS	TONS	TONS	LF	LF	EA	LS
2025CPT.08.13.10761	Randolph	1	US-64	FROM DAVIDSON COUNTY LINE TO PVMT JOINT 300 FT EAST OF SR 2079 (GRAHAM DR)	1,2	2	2WU	10.7	30	0	10.7	21.40	3,000.00	79,058	16,250		18,094	1,080	250	112,992	40,700	2	1
TOTAL FOR MAP NO. 1								10.7				21.40	3,000.00	79,058	16,250		18,094	1,080	250	112,992	40,700	2	1
2025CPT.08.13.10761	Randolph	2	NC-22	FROM SR 2138 (MACK LINEBERRY RD) TO PVMT JOINT 140 FT NORTH OF SR 2443 (RANDOLPH CHURCH RD)	4	2	2WU	2.26	24	24.55	26.81	4.52	635.00		520		2,675	163	100				
TOTAL FOR MAP NO. 2								2.26				4.52	635.00		520		2,675	163	100				
2025CPT.08.13.10761	Randolph	3	NC-42	FROM PVMT JOINT 100 FT EAST OF SR 2845 (OLD NC HWY 13) TO NC 22/42	3	2	2WU	6.997	21	8.62	15.617	14.00	1,960.00		3,740		7,555	455	200				
TOTAL FOR MAP NO. 3								6.997				14.00	1,960.00		3,740		7,555	455	200				
TOTAL FOR PROJ NO. 2025CPT.08.13.10761								19.957				39.92	5,595.00	79,058	20,510		28,324	1,698	550	112,992	40,700	2	1
51488	Randolph	2	NC-22	FROM SR 2138 (MACK LINEBERRY RD) TO SR 2443 (RANDOLPH CHURCH RD)	4	2	2WU	2.26	24	24.55	26.81					1,665		75					
TOTAL FOR MAP NO. 2								2.26								1,665		75					
TOTAL FOR PROJ NO. 51488								2.26								1,665		75					
GRAND TOTAL																							
								22.217				39.92	5,595.00	79,058	20,510	1,665	28,324	1,773	550	112,992	40,700	2	1

PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.08.13.10761, 51488	14	

THERMOPLASTIC AND PAINT QUANTITIES

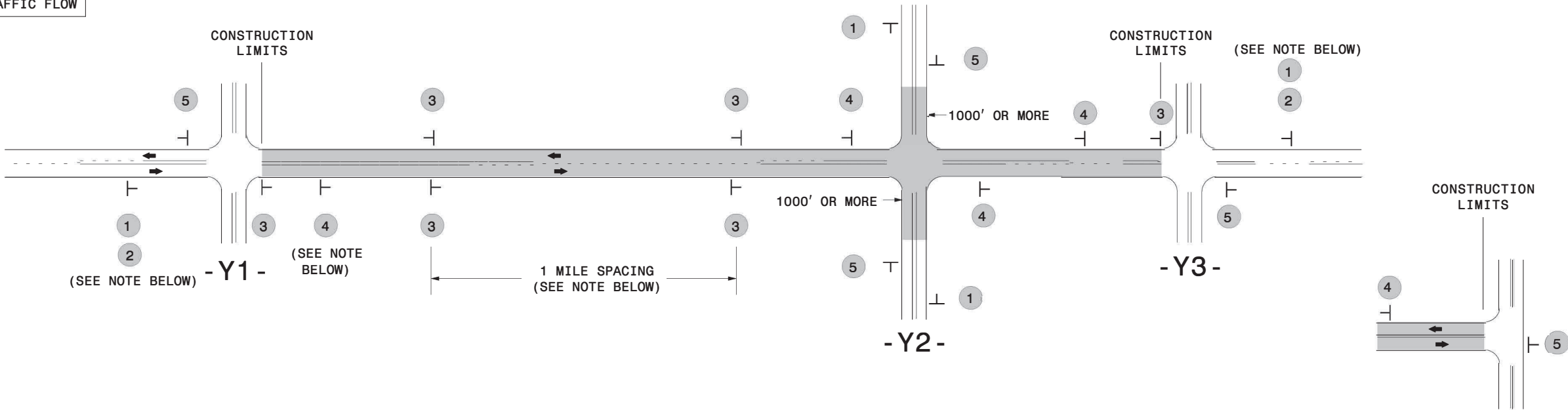
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	4" X 240 M WHITE THERMO	6" X 90 M YELLOW THERMO	6" X 90 M WHITE THERMO	12" X 90 M YELLOW THERMO	24" X 90 M WHITE THERMO	THERMO MSG SCHOOL 90 M	THERMO MSG STOP 90 M	THERMO MSG AHEAD 90 M	THERMO LT ARROW 90 M	THERMO STR ARROW 90 M	THERMO RT ARROW 90 M	4815000000-E		4825000000-E	4845000000-N			4850000000-E	4895000000-N																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

SIGNING FOR RESURFACING PROJECTS

LEGEND

STATIONARY SIGN







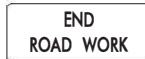

DIRECTION OF TRAFFIC FLOW



TEE INTERSECTION

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	<div><div>1</div><div><div>W20-1 48" X 48"</div></div></div> <div><div>2</div><div><div>W7-3aP 24" X 18"</div></div></div>	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>#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)</p>	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <div><div>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</div><div>2) SUBDIVISION ROADS</div><div>3) DEAD END ROADS</div></div> <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><div><div>W20-1 48" X 48"</div></div><div>PLACED 500' IN ADVANCE OF FLAGGER.</div></div> <div><div><div>W20-7 A 48" X 48"</div></div><div>PLACED 250' IN ADVANCE OF FLAGGER.</div></div>
	<div><div>3</div><div><div>SP 13107 48" X 48"</div></div></div>	<ul style="list-style-type: none"><li>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</li><li>- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</li></ul>	
	<div><div>4</div><div><div>SP 13106 48" X 48"</div></div></div>	<ul style="list-style-type: none"><li>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS.</li><li>- DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</li><li>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</li><li>- 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.</li><li>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</li><li>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</li></ul>	
	<div><div>5</div><div><div>G20-2 A 48" X 24"</div></div></div>	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	
	<p>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.</p>		
LESS 2 MILES	<p>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.</p>		<div></div> <div>AD</div>



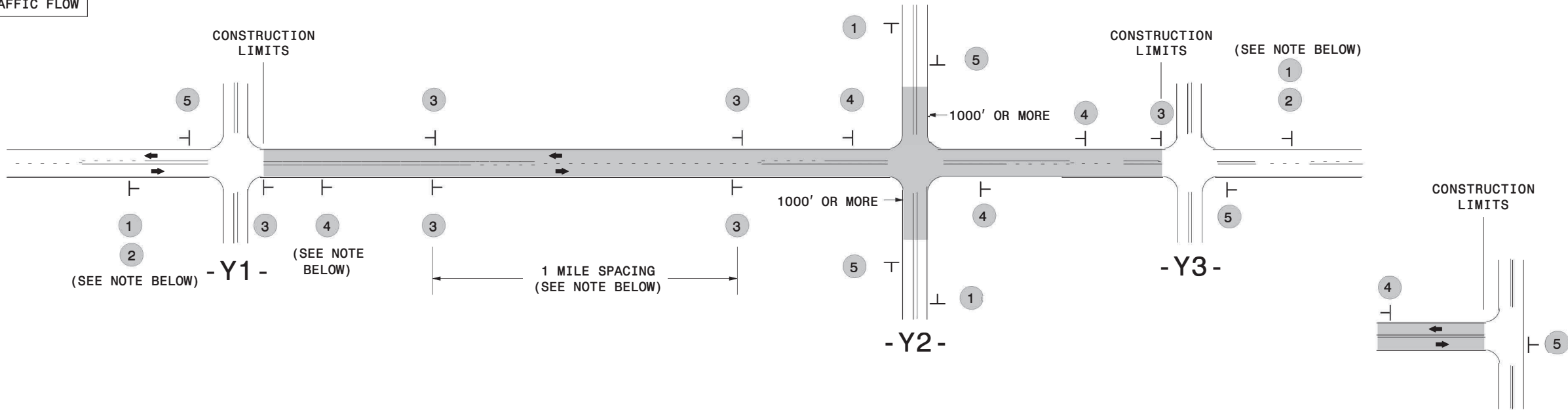
ADVANCE WARNING SIGNS  
FOR  
RURAL AND SUBURBAN  
2-LANE ROADWAY  
RESURFACING

SIGNING FOR RESURFACING PROJECTS

LEGEND

STATIONARY SIGN







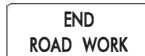
DIRECTION OF TRAFFIC FLOW




TEE INTERSECTION

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	<div><div>1</div><div><div>W20-1 48" X 48"</div></div></div> <div><div>2</div><div><div>W7-3aP 24" X 18"</div></div></div> <div>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</div> <div>#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)</div>	<div>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</div> <div><div>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</div><div>2) SUBDIVISION ROADS</div><div>3) DEAD END ROADS</div></div> <div>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.</div> <div><div><div>W20-1 48" X 48"</div></div><div>PLACED 500' IN ADVANCE OF FLAGGER.</div></div> <div><div><div>W20-7 A 48" X 48"</div></div><div>PLACED 250' IN ADVANCE OF FLAGGER.</div></div>
	<div><div>3</div><div><div>SP 13107 48" X 48"</div></div></div> <div>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</div> <div>- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</div>	
	<div><div>4</div><div><div>SP 13106 48" X 48"</div></div></div> <div>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS.</div> <div>- DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</div> <div>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</div> <div>- 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.</div> <div>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</div> <div>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</div>	
	<div><div>5</div><div><div>G20-2 A 48" X 24"</div></div></div> <div>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</div>	
	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.	

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
WORK ZONE TRAFFIC CONTROL



AD