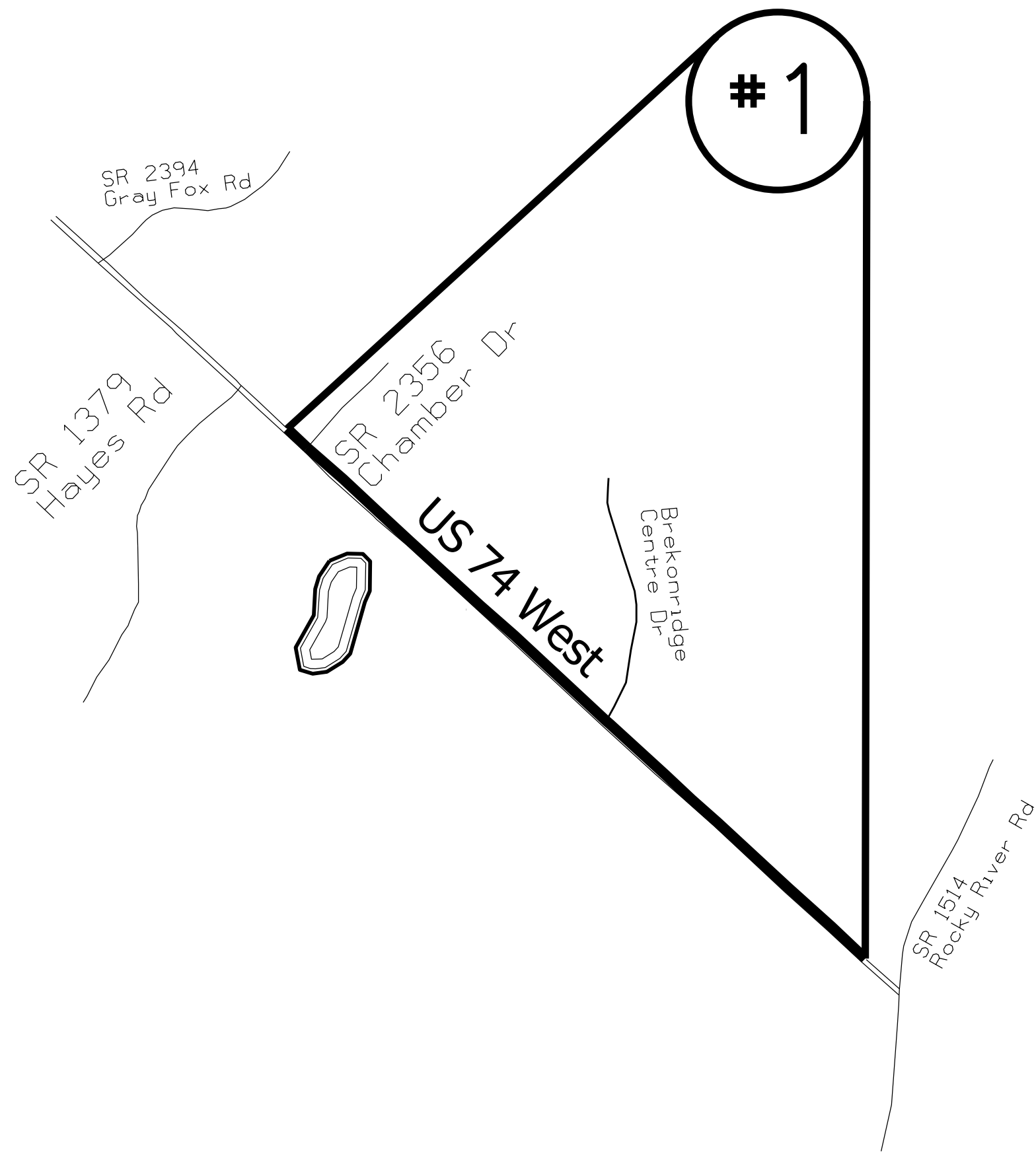


STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	1	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

UNION COUNTY

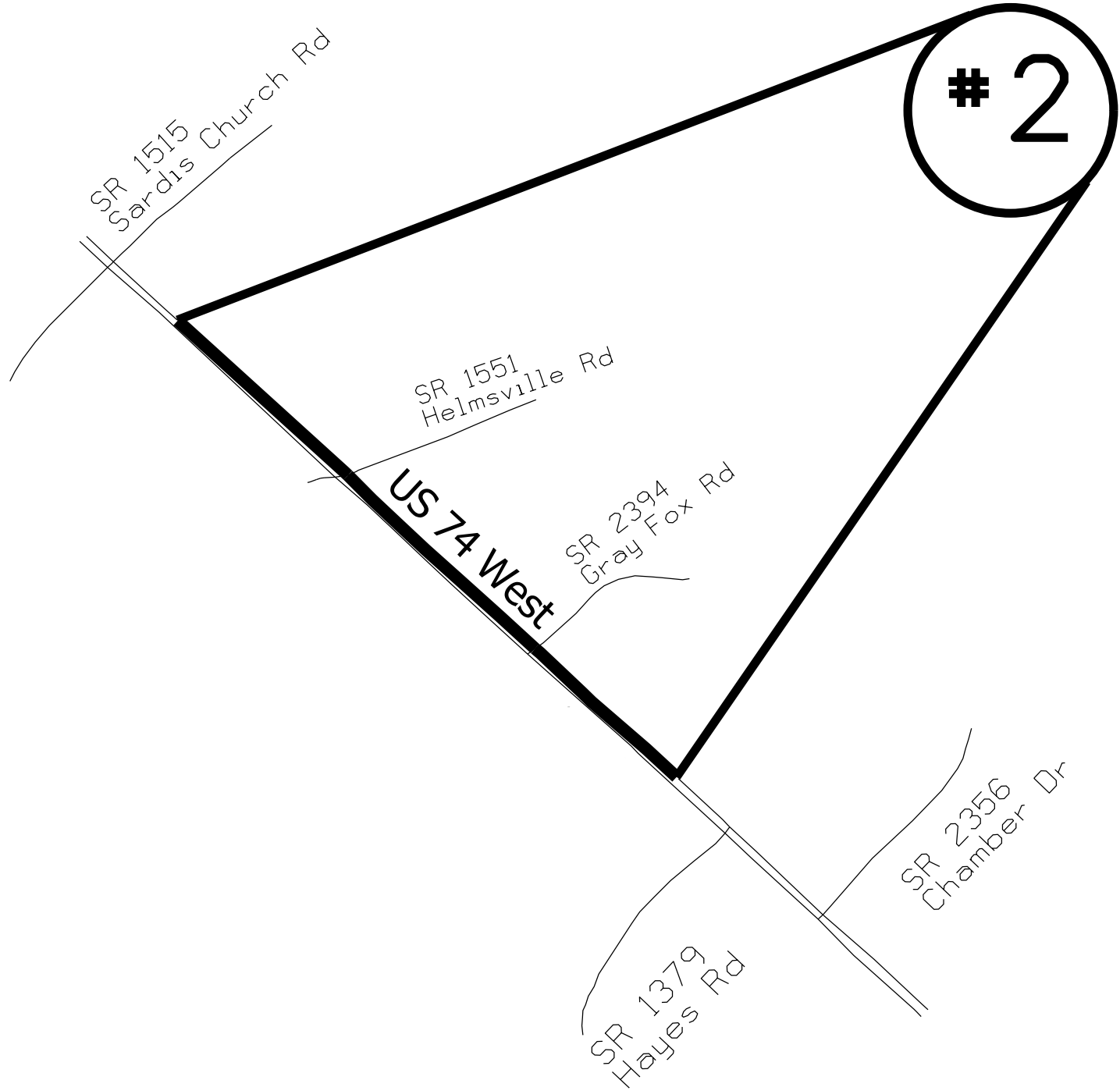
NORTH CAROLINA

PREPARED BY THE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #1 US 74 WEST
1.3 MILES
FROM SR 1514 ROCKY RIVER RD
TO SR 1379 HAYES RD
(HAYES RD IMPROVEMENT PROJECT DJ0577)

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	2	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

UNION COUNTY

NORTH CAROLINA

PREPARED BY THE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #2 US 74 WEST

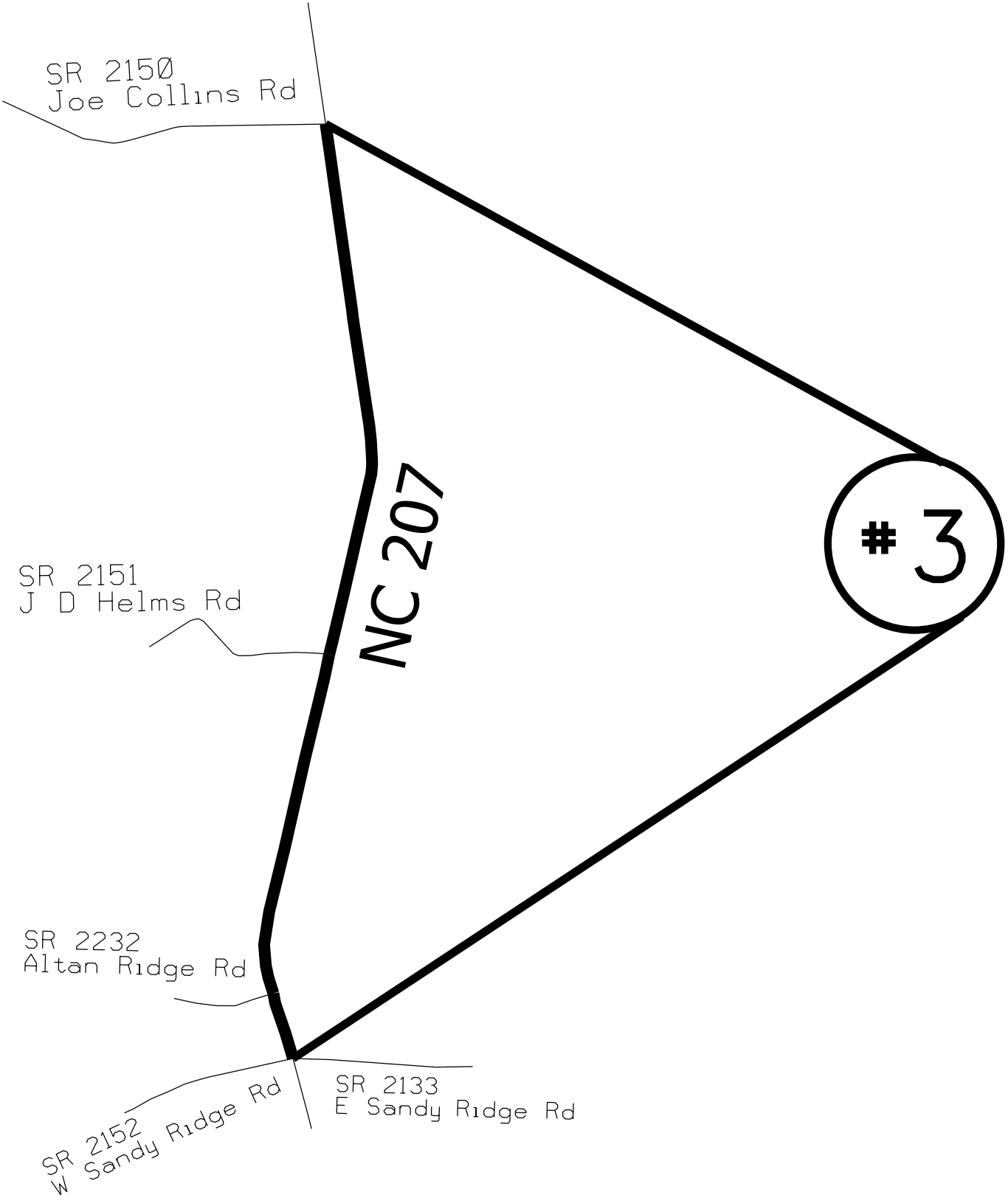
0.72 MILES

FROM SR 1379 HAYES RD

(HAYES RD IMPROVEMENT PROJECT DJ00577)

TO SR 1515 SARDIS CHURCH RD

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	3	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

UNION COUNTY

NORTH CAROLINA

PREPARED BY THE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #3 NC 207
1.4 MILES
FROM SR 2152 W SANDY RIDGE RD
TO SR 2150 JOE COLLINS RD

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	4	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

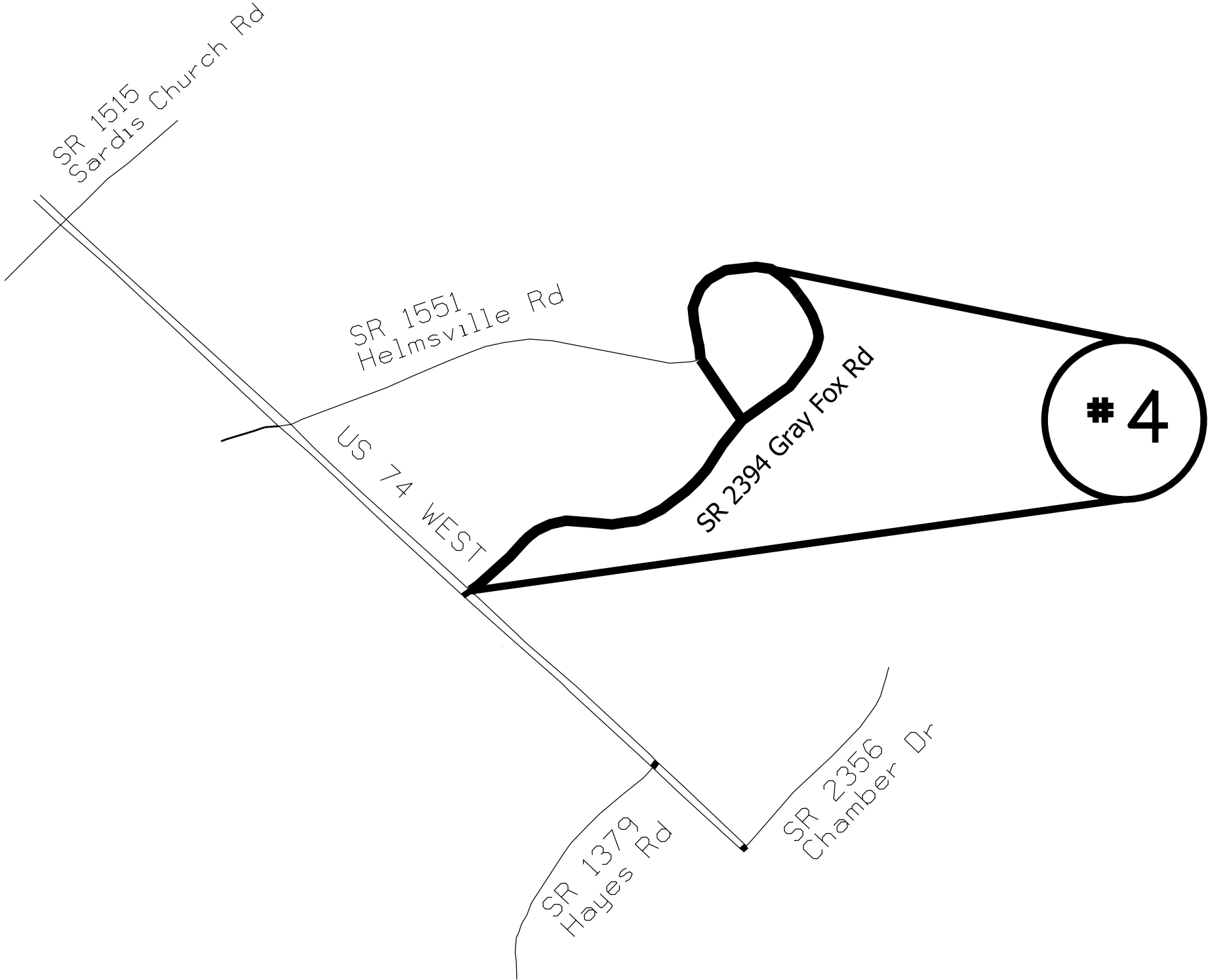
UNION COUNTY

NORTH CAROLINA

PREPARED BY THE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #4 SR 2394 GRAY FOX RD
0.96 MILES
FROM US 74 WEST
TO SR 1551 HELMVILLE RD



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	5	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

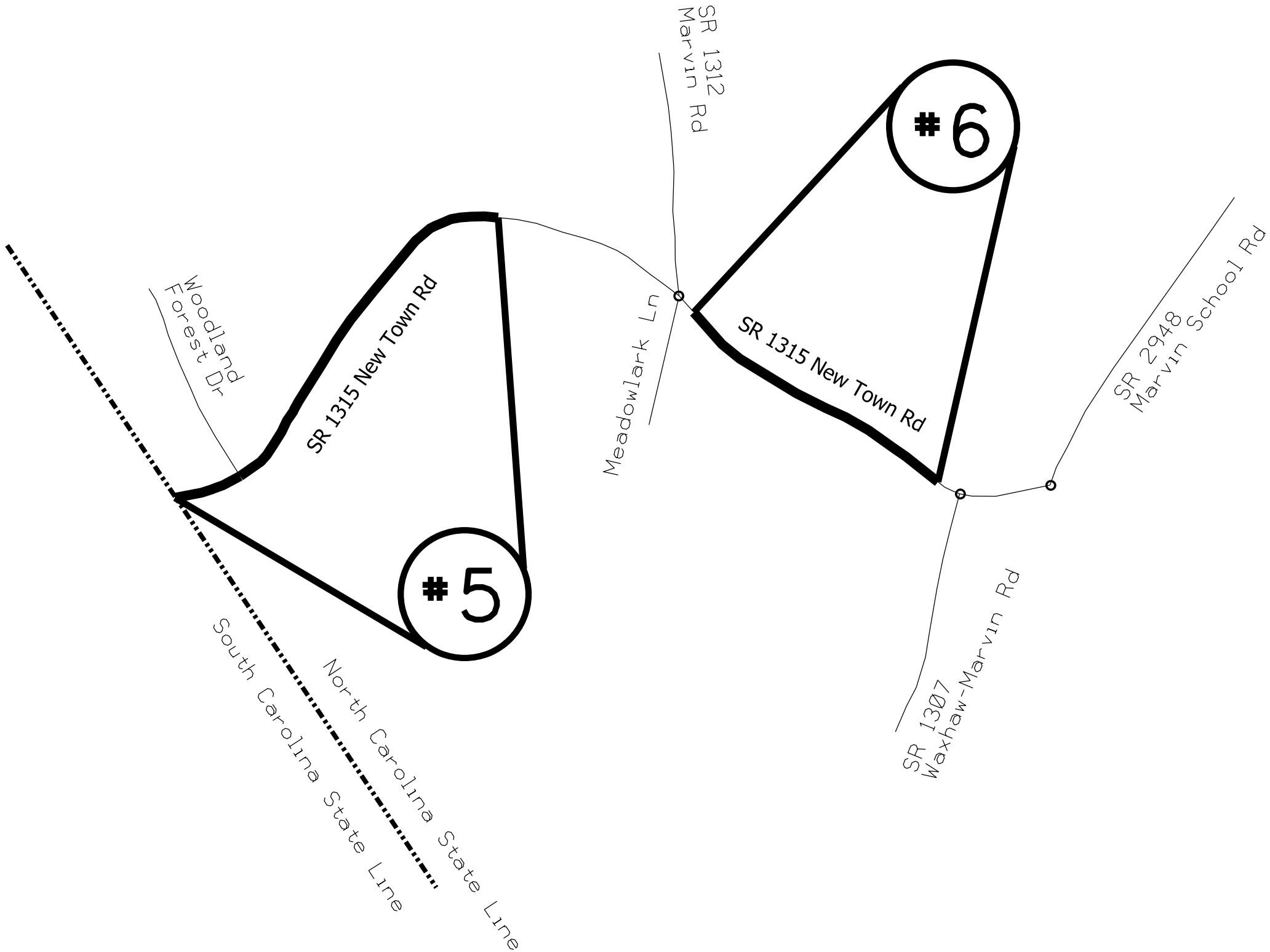
UNION COUNTY

NORTH CAROLINA

PREPARED BY THE
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #5 SR 1315 NEW TOWN RD
0.50 MILES
FROM PVMT JOINT (MP 14.9)
TO SOUTH CAROLINA STATE LINE

MAP #6 SR 1315 NEW TOWN RD
0.28 MILES
FROM SR 1307 WAXHAW MARIVIN RD
TO SR 1312 MARVIN RD



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	6	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

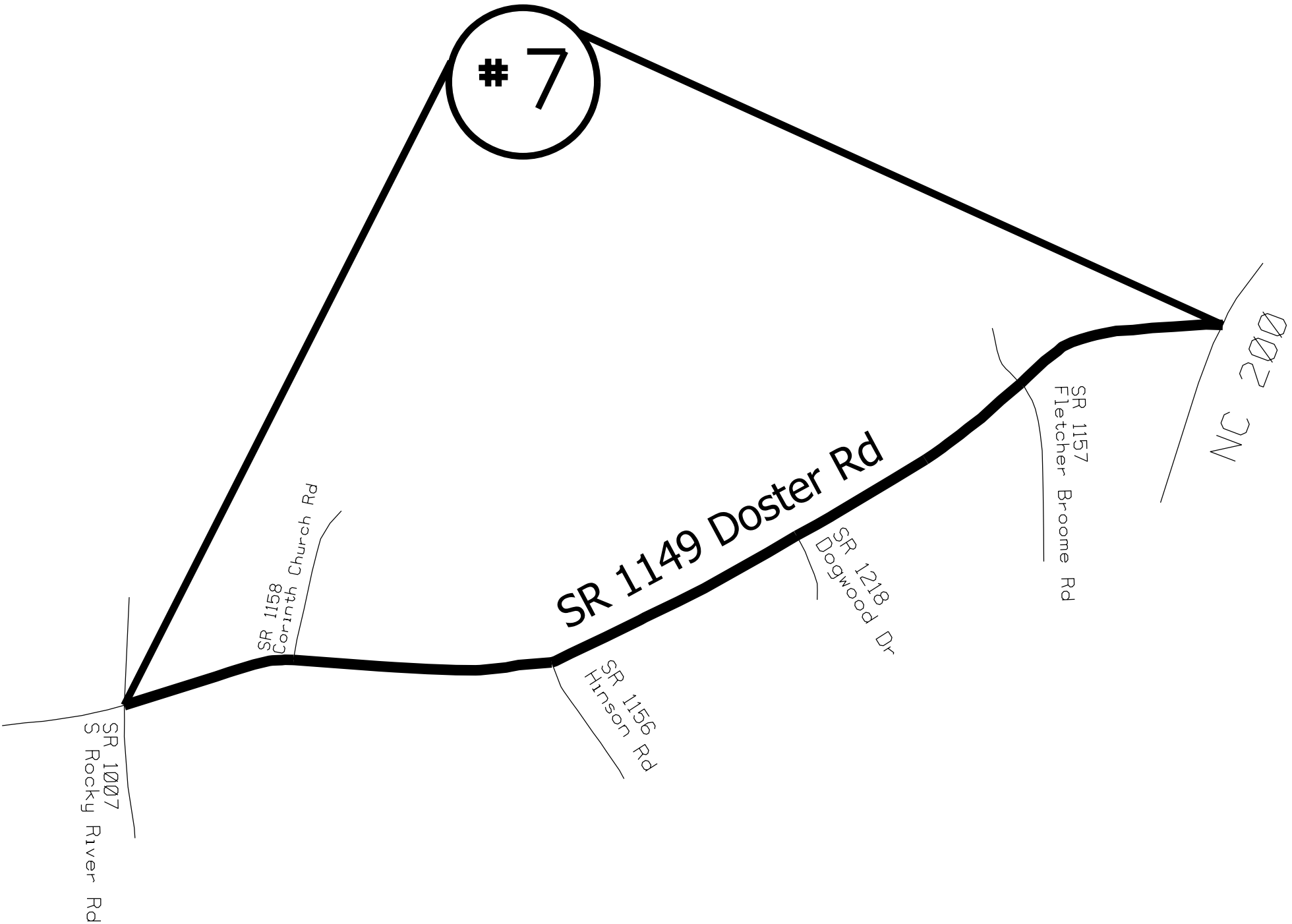
UNION COUNTY

NORTH CAROLINA

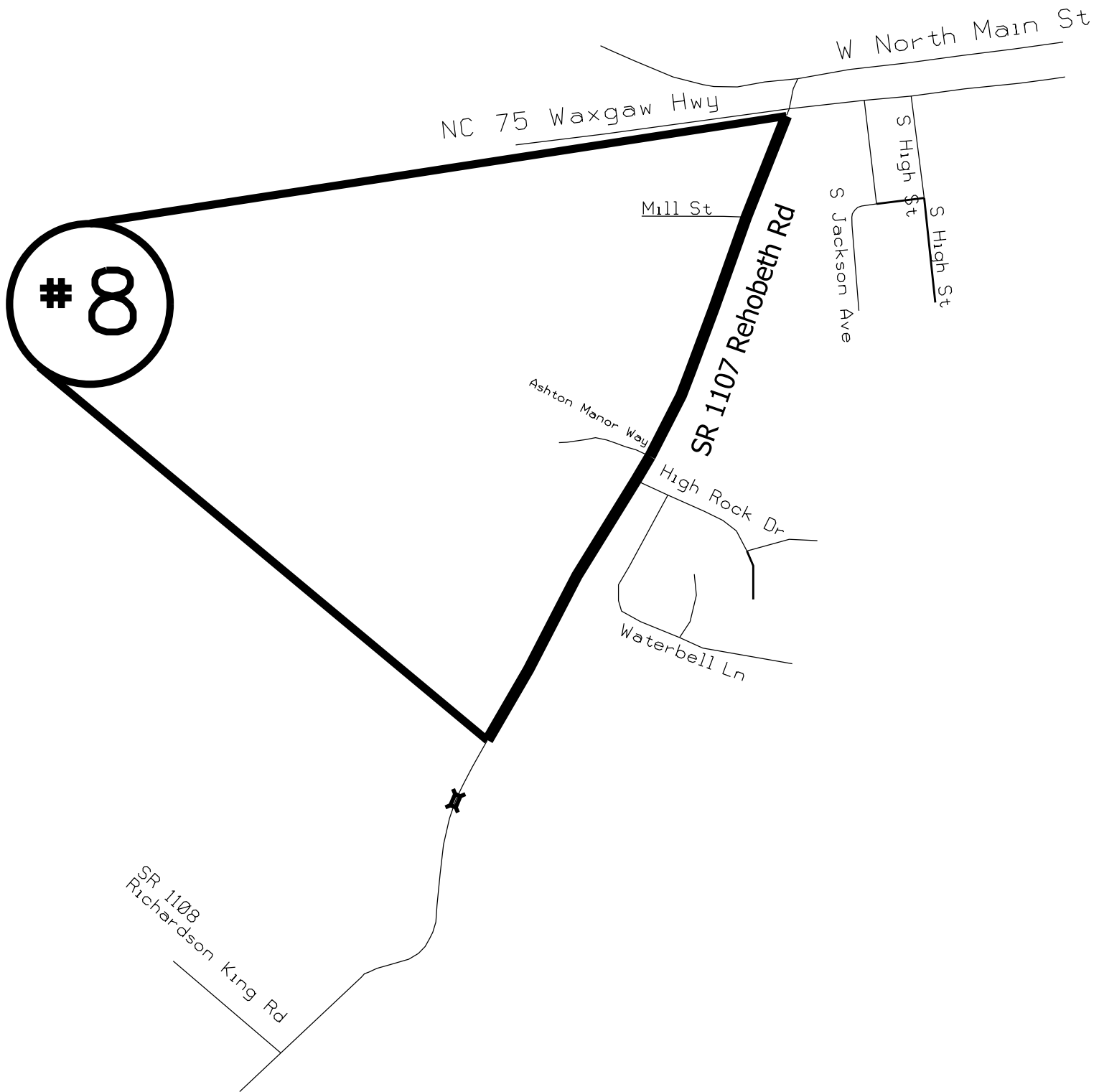
PREPARED BY THE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #7 SR 1149 DOSSTER RD
2.23 MILES
FROM NC 200
TO SR 1007 ROCKY RIVER RD



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	7	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

UNION COUNTY

NORTH CAROLINA

PREPARED BY THE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #8 SR 1107 REHOBETH RD
0.72 MILES
FROM NC 75
TO PVMT JOINT AT MP 4.67
.59 MILES NORTH OF RICHARDSON KING RD

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	8	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

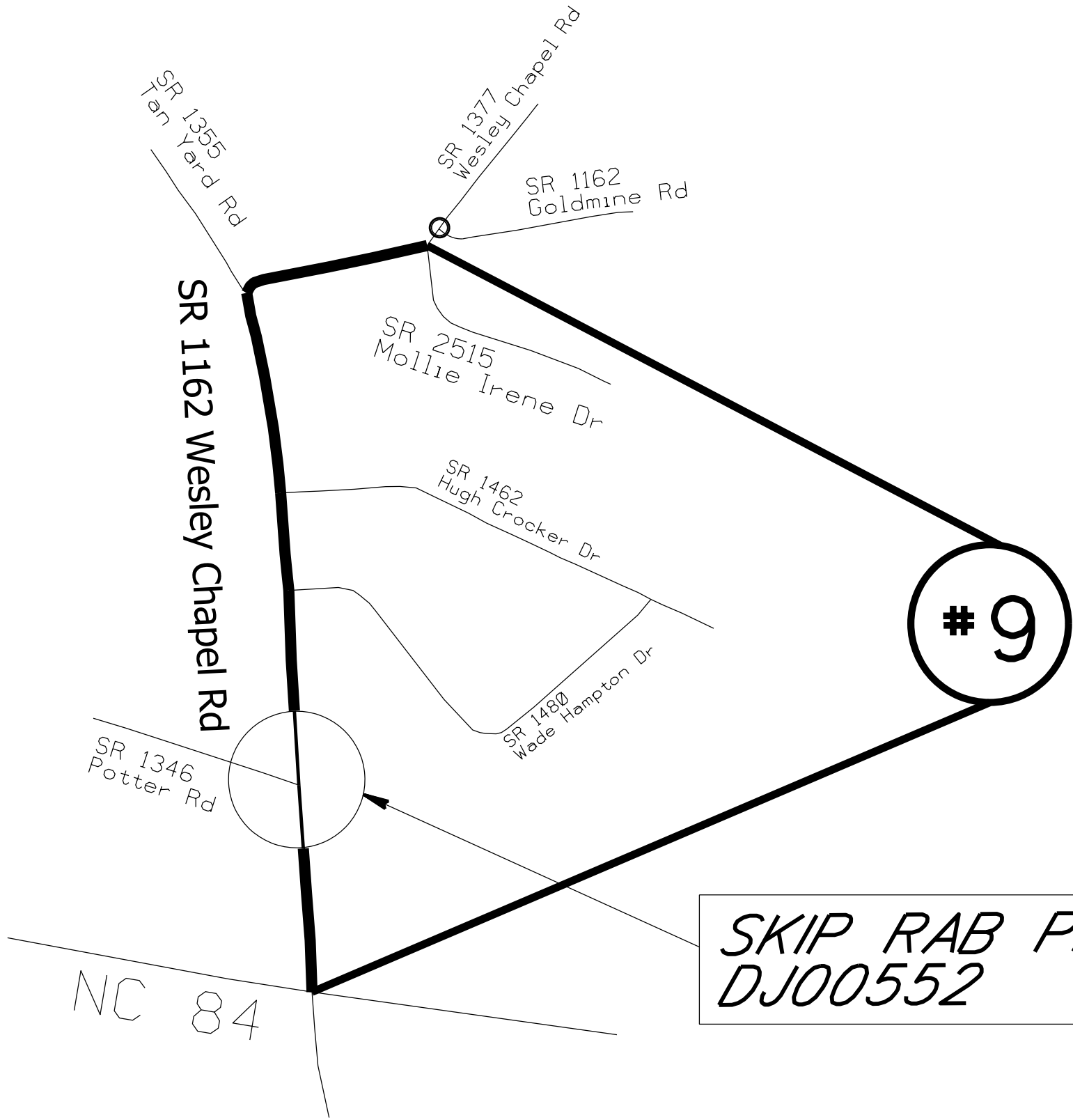
UNION COUNTY

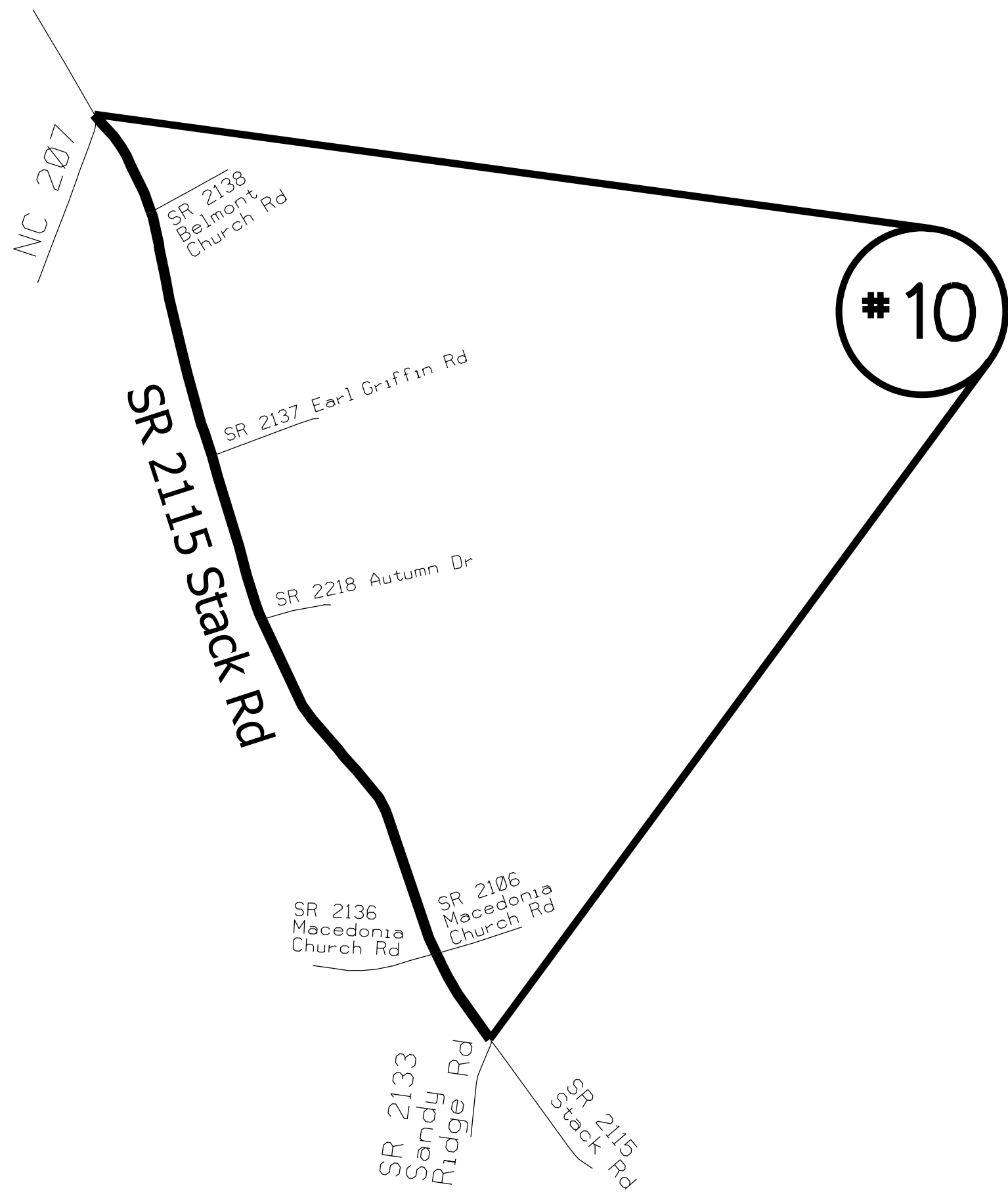
NORTH CAROLINA

PREPARED BY THE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #9 SR 1162 WESLEY CHAPEL RD
0.97 MILES
FROM SR 2515 MOLLIE IRENE DR
TO NC 84
SKIP PROJECT DJ00552





STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	9	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS
UNION COUNTY
NORTH CAROLINA
PREPARED BY THE
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #10 SR 2115 STACK RD
2.02 MILES
FROM SR 2133 SANDY RIDGE RD
TO NC 207

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	10	
F.A. PROJECT NO.			



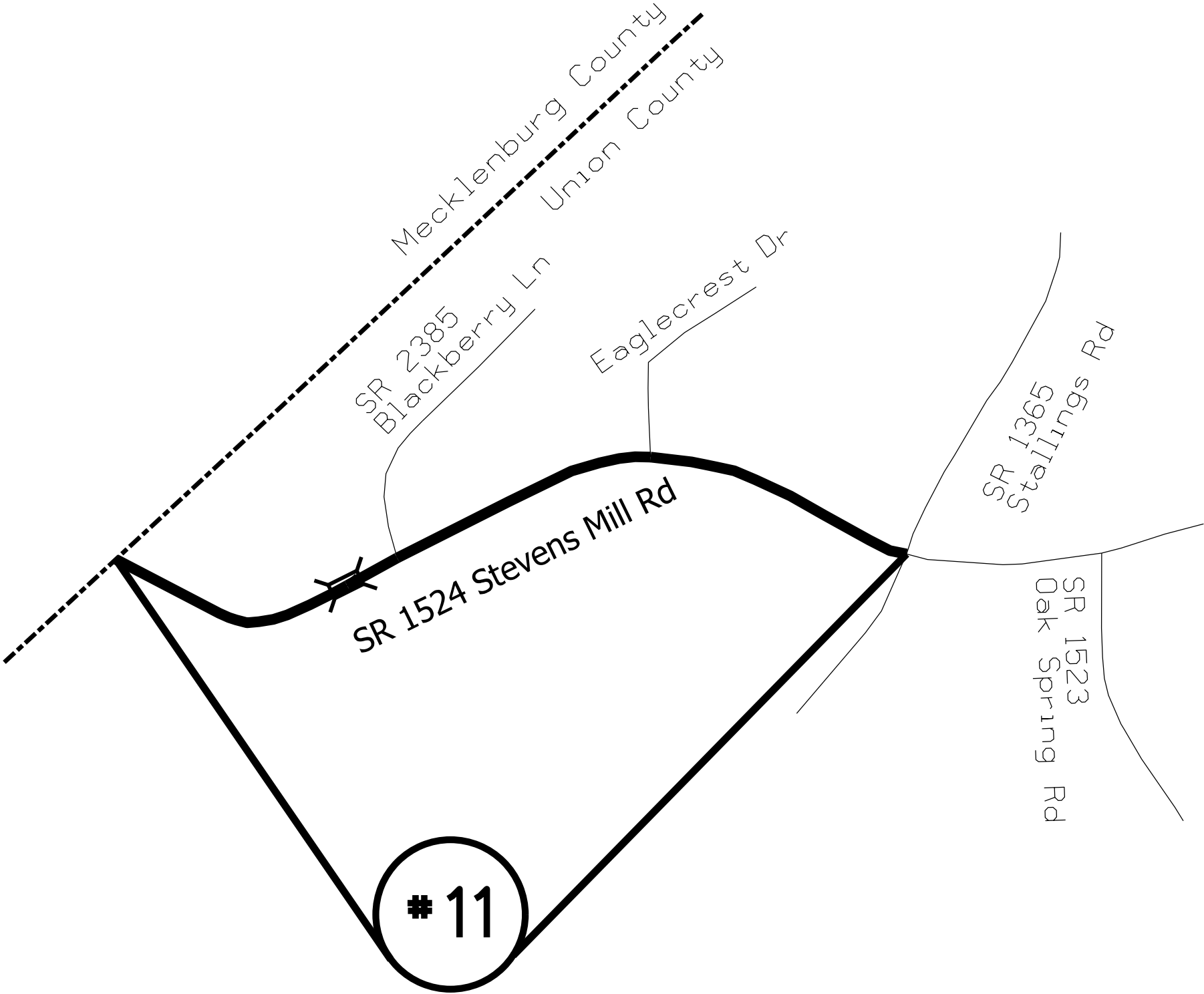
ENLARGED MUNICIPAL AND SUBURBAN AREAS

UNION COUNTY

NORTH CAROLINA

PREPARED BY THE
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #11 SR 1524 STEVENS MILL RD
0.75 MILES
FROM SR 1365 STALLINGS RD
TO MECKLENBURG COUNTY LINE



STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	11	
F.A. PROJECT NO.			



ENLARGED MUNICIPAL AND SUBURBAN AREAS

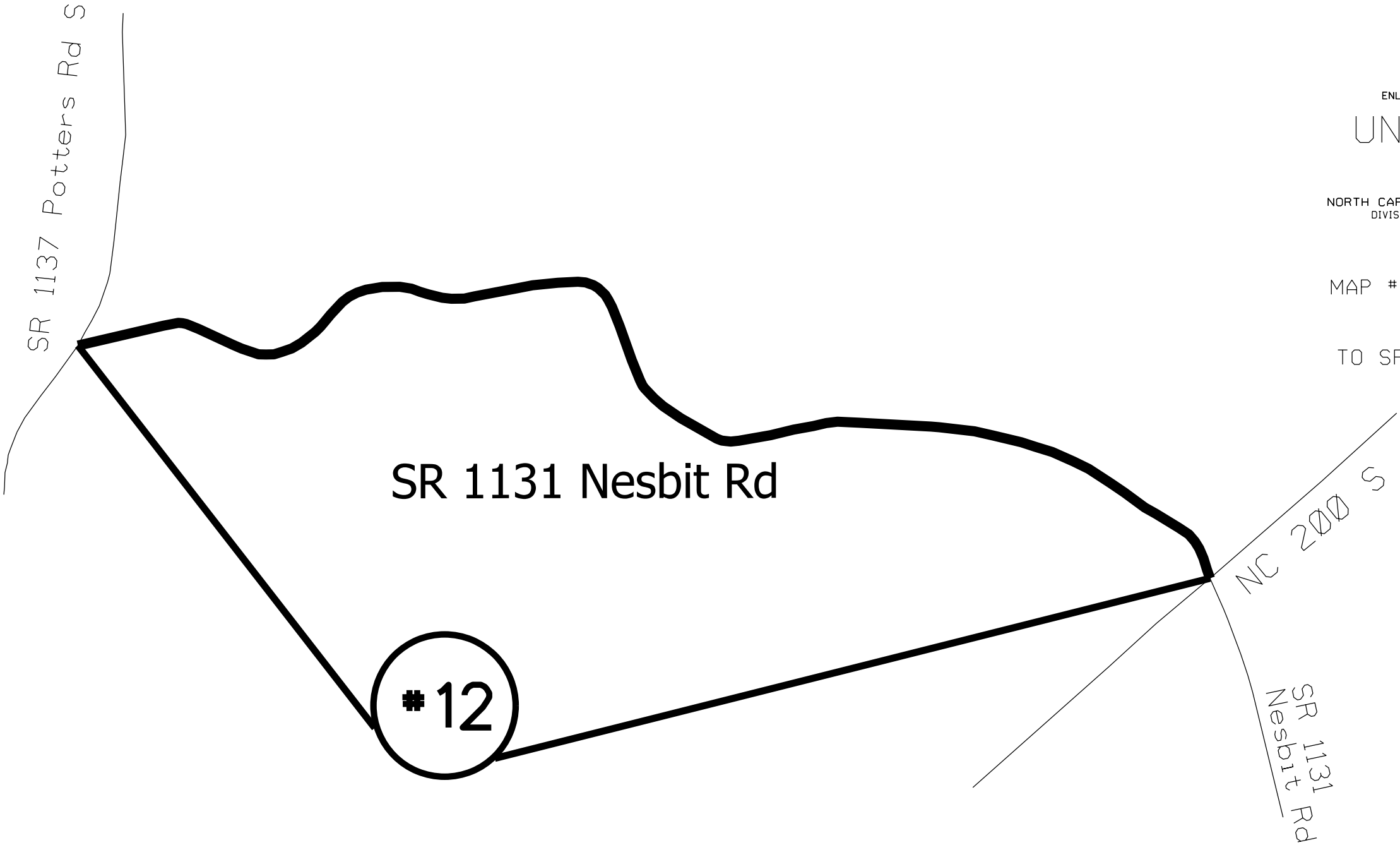
UNION COUNTY

NORTH CAROLINA

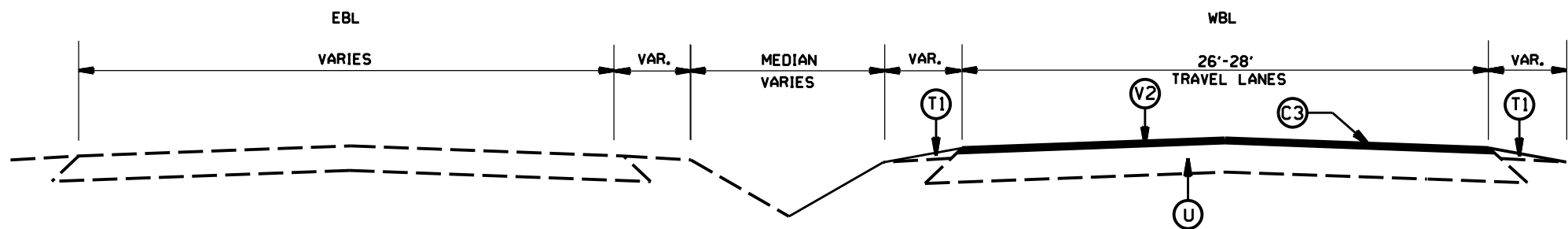
PREPARED BY THE

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - DIVISION 10 DISTRICT 3

MAP #12 SR 1331 NESBIT RD
2.53 MILES
FROM NC 200
TO SR 1137 POTTERS RD S



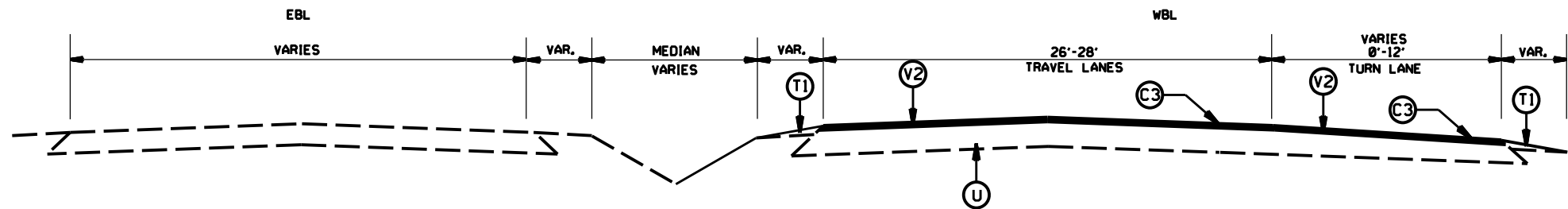
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	12	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 1
TRAVEL LANES ONLY
US 74 WEST (MAPS 1 & 2)

PAVEMENT SCHEDULE

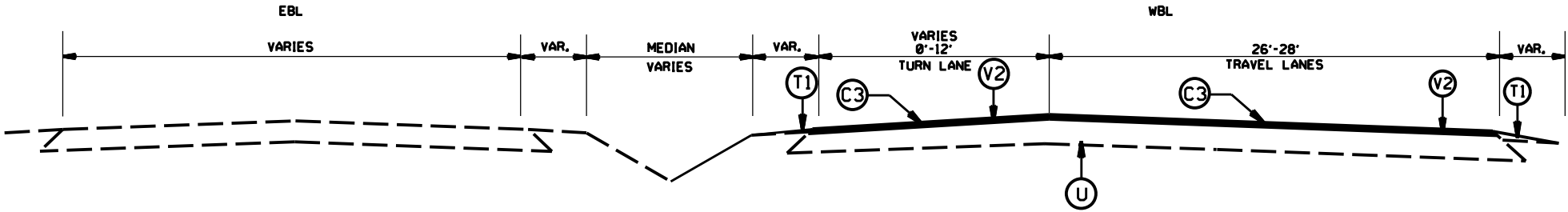
(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS PER SQ. YD.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC. SURFACE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD.
(F1)	ASPHALT SURFACE TREATMENT, MAT COAT = 78
(M)	CENTERLINE MILLED RUMBLE STRIPS
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	MILLING OF EXISTING PAVEMENT, 2.0" DEPTH.



TYPICAL SECTION NO. 2
FOR RIGHT TURN LANES
US 74 WEST (MAPS 1 & 2)

2026 UNION COUNTY RESURFACING			
SCALE	1/4"		REVISIONS
DATE	1/20		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

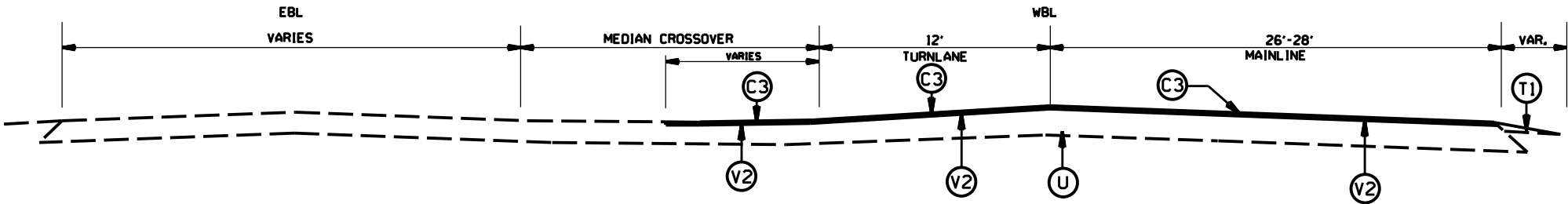
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	13	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 3
FOR LEFT TURN LANES
US 74 WEST (MAPS 1 & 2)

PAVEMENT SCHEDULE

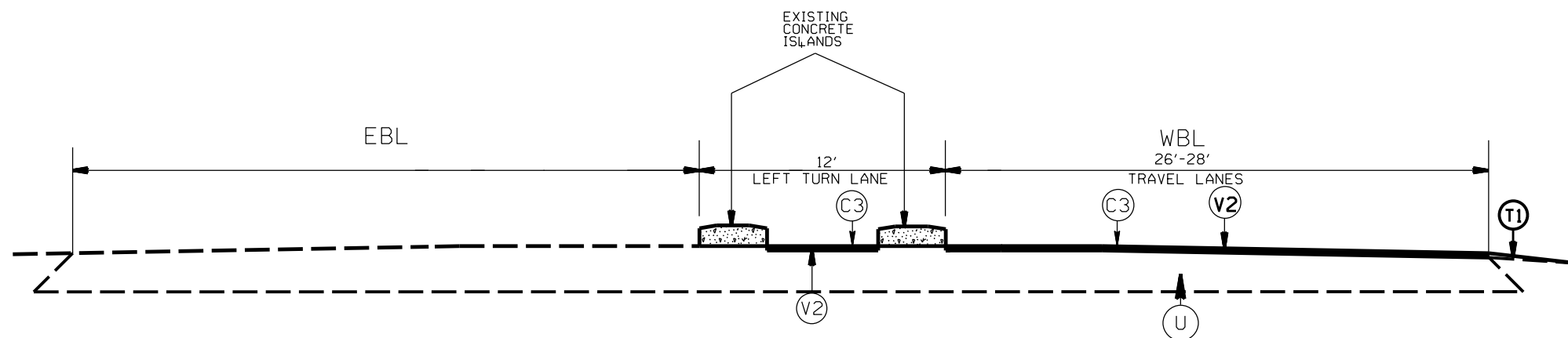
(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS PER SQ. YD.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC. SURFACE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD.
(F1)	ASPHALT SURFACE TREATMENT, MAT COAT = 78
(M)	CENTERLINE MILLLED RUMBLE STRIPS
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	MILLING OF EXISTING PAVEMENT, 2.0" DEPTH.



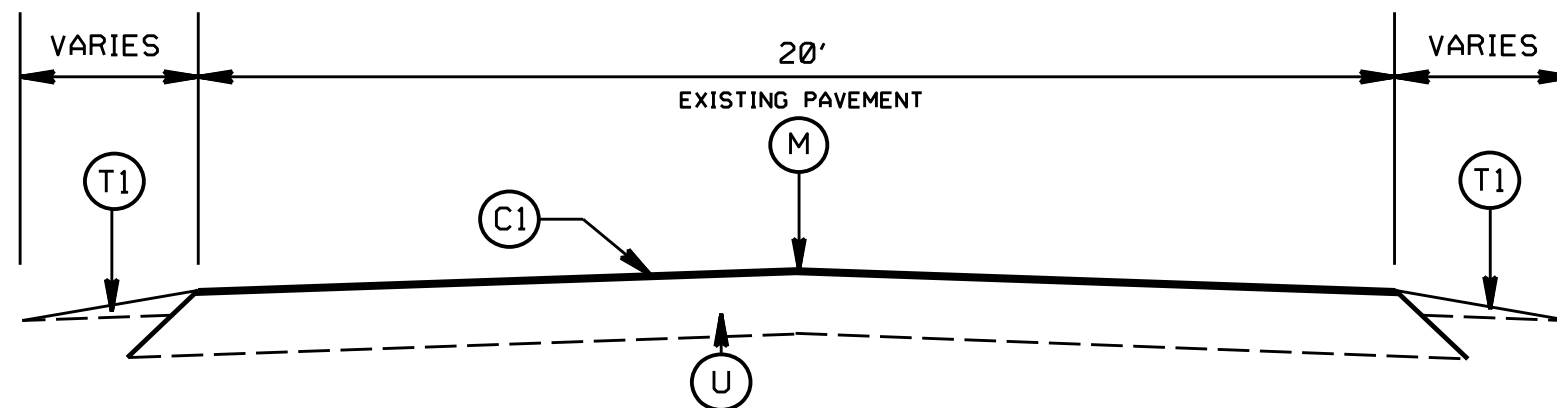
TYPICAL SECTION NO. 4
FOR MEDIAN CROSSOVERS
US 74 WEST (MAPS 1 & 2)

2026 UNION COUNTY RESURFACING			
SCALE	-1A-		REVISIONS
DATE	1/20		
DWG. BY	AMO		
DESIGN BY	AMO		
APPROVED	CLA		

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	14	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 5
FOR LEFTOVER CROSSING
US 74 WEST (MAP 2)



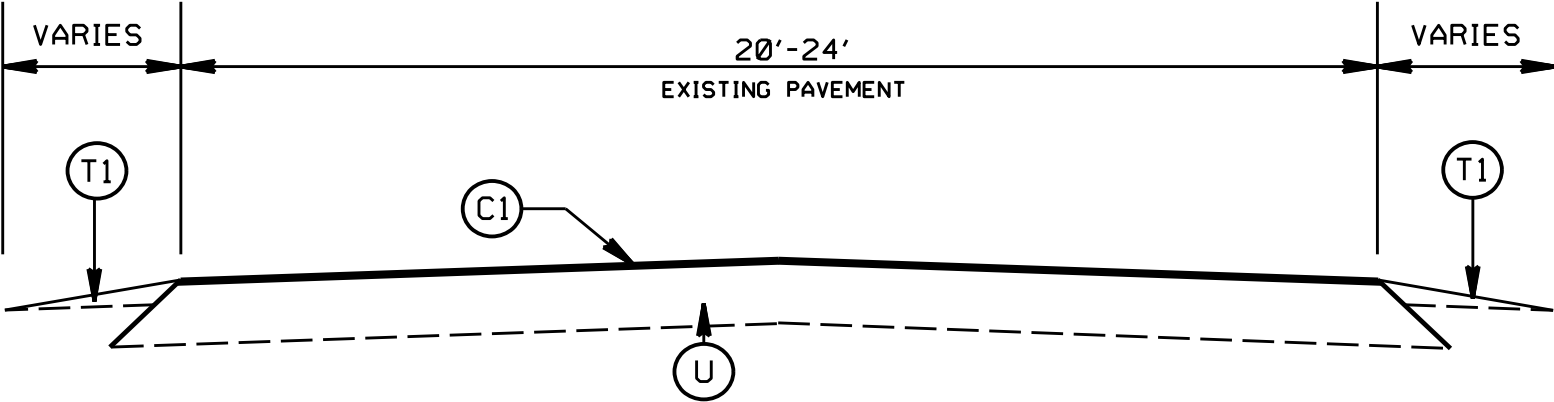
TYPICAL SECTION NO. 6
NC 207 WOLF POND RD (MAP 3)

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS PER SQ. YD.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC. SURFACE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD.
(F1)	ASPHALT SURFACE TREATMENT, MAT COAT = 78
(M)	CENTERLINE MILLLED RUMBLE STRIPS
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	MILLING OF EXISTING PAVEMENT, 2.0" DEPTH.

**2026
UNION COUNTY RESURFACING**

SCALE	NA		REVISIONS	
DATE	1/20			
DWG. BY	AMO			
DESIGN BY	AMO			
APPROVED	C/A			

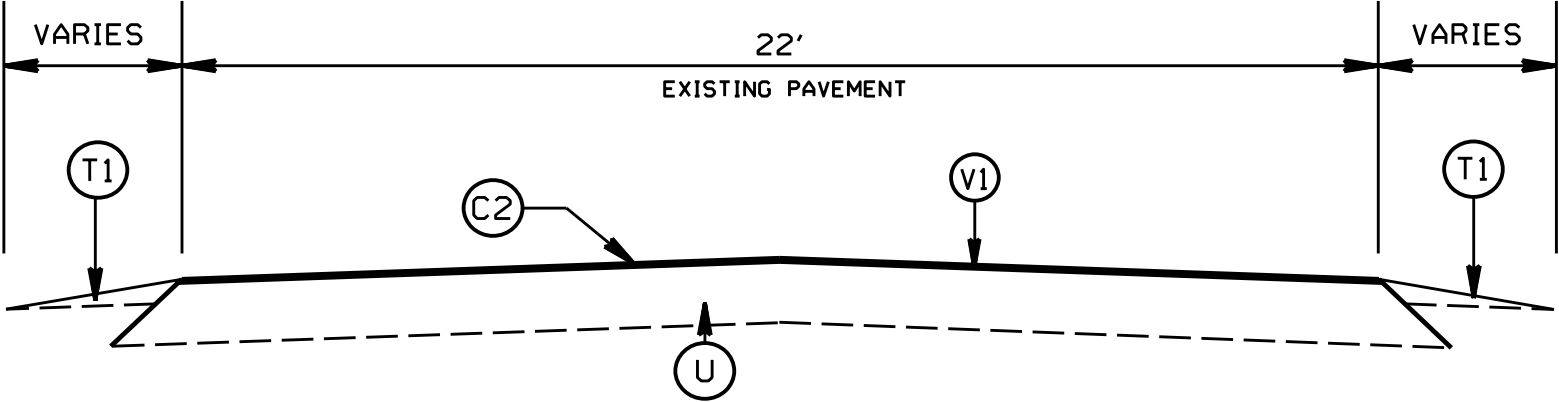


TYPICAL SECTION NO. 7
SR 1315 NEW TOWN RD (MAP 5)
SR 1315 NEW TOWN RD (MAP 6)
SR 1524 STEVENS MILL RD (MAP 11)
SR 113 NESBIT RD (MAP 12)

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	15	
F.A. PROJECT NO.			

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS PER SQ. YD.
E1	PROP. APPROX. 5.0" ASPHALT CONC. SURFACE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, MAT COAT = 78
M	CENTERLINE MILLLED RUMBLE STRIPS
T1	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
V2	MILLING OF EXISTING PAVEMENT, 2.0" DEPTH.



TYPICAL SECTION NO. 8
SR 1107 REHOBETH RD (MAP 8)
APPROX. STA. 10+00 TO STA. 22+95

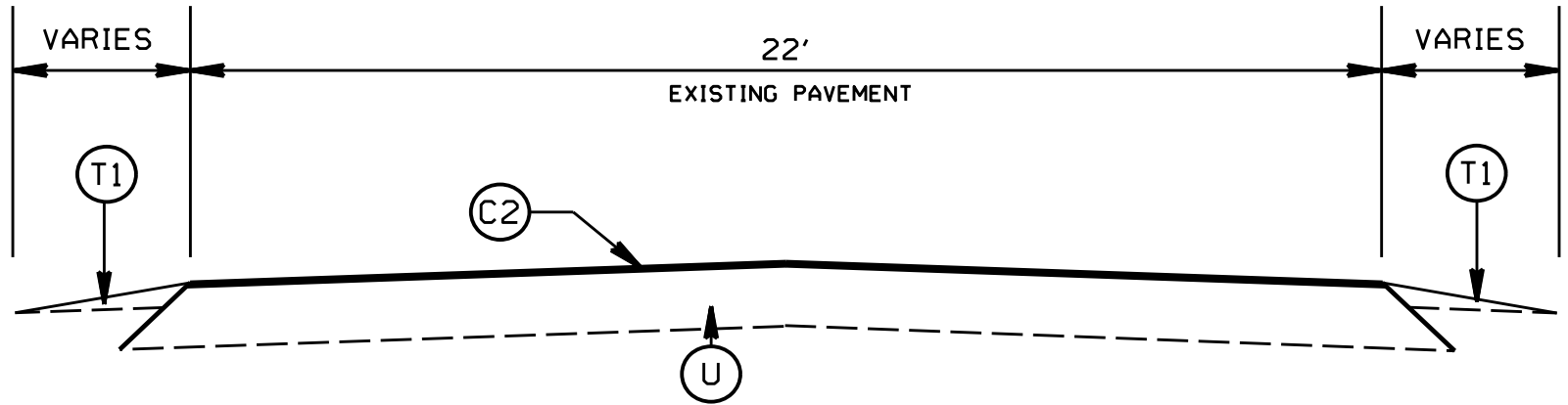
2026
UNION COUNTY RESURFACING

SCALE	-1A-
DATE	1/20
DWG. BY	AMC
DESIGN BY	AMC
APPROVED	CLA



REVISIONS	

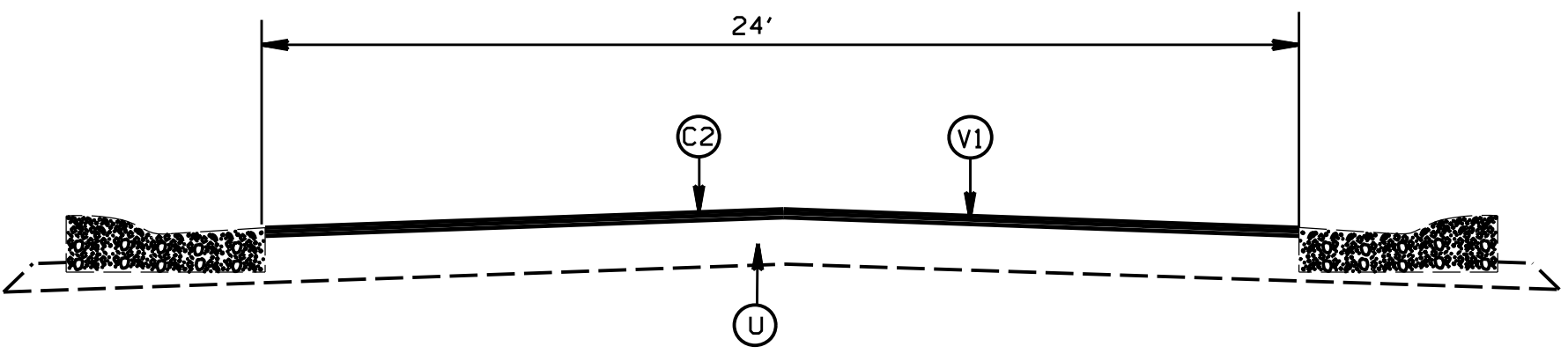
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	16	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 9
SR 1107 REHOBETH RD (MAP 8)
APPROX. STA. 22+95 TO STA. 48+02
SR 1162 WESLEY CHAPEL RD (MAP 9)
APPROX. STA 10+00 TO STA. 16+47
APPROX. STA 26+77 TO STA. 61+22

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS PER SQ. YD.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC. SURFACE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD.
(F1)	ASPHALT SURFACE TREATMENT, MAT COAT " 78
(M)	CENTERLINE MILLLED RUMBLE STRIPS
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	MILLING OF EXISTING PAVEMENT, 2.0" DEPTH.

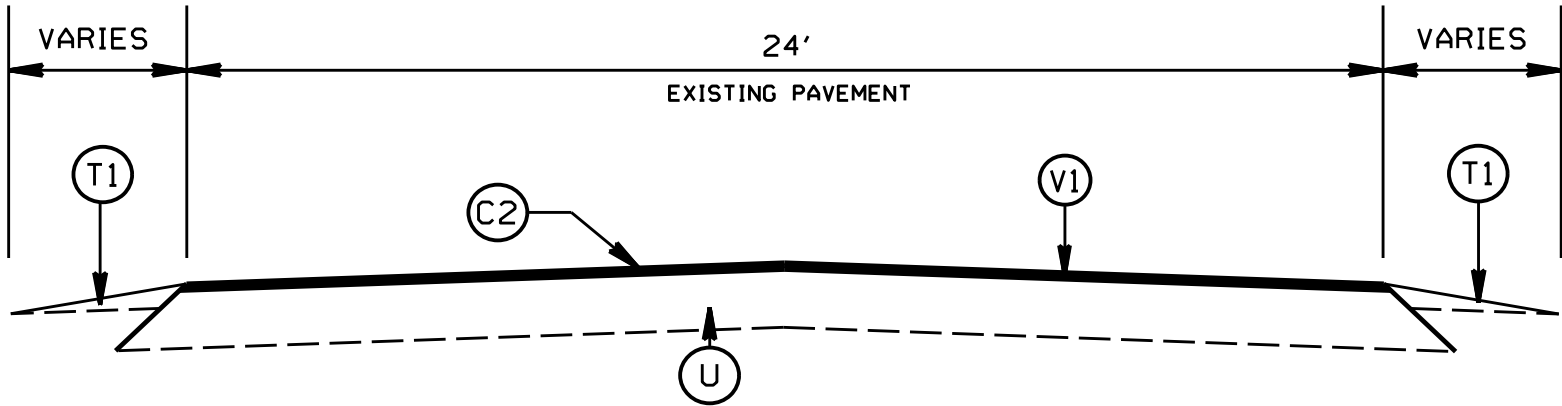


TYPICAL SECTION NO. 10
SR 2394 GRAY FOX RD (MAP 4)
APPROX. STA. 10+00 TO STA. 29+24

2026
UNION COUNTY RESURFACING

SCALE	-NA-		REVISIONS	
DATE	1/20			
DWG. BY	AMO			
DESIGN BY	AMO			
APPROVED	CLA			

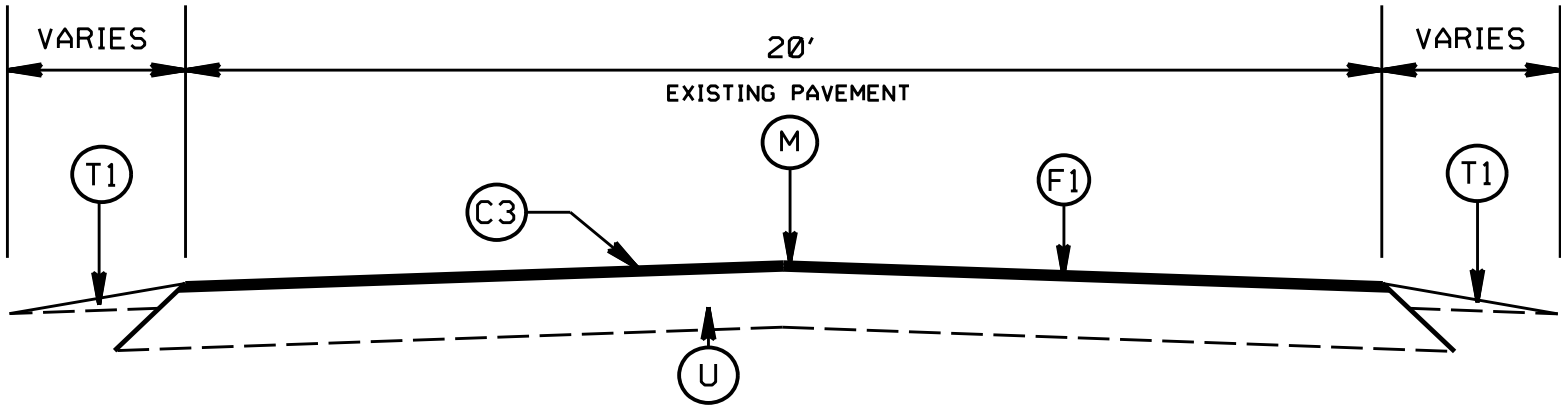
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	17	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 11
 SR 2394 GRAY FOX RD (MAP 4)
 APPROX. STA. 29+24 TO STA. 60+69

PAVEMENT SCHEDULE

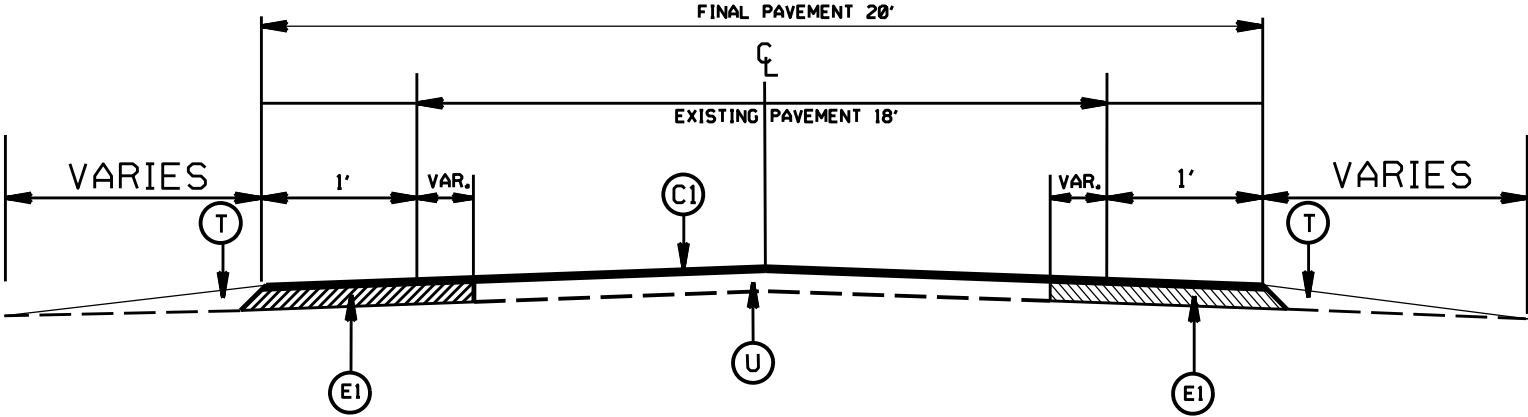
(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS PER SQ. YD.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC. SURFACE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD.
(F1)	ASPHALT SURFACE TREATMENT, MAT COAT = 78
(M)	CENTERLINE MILLLED RUMBLE STRIPS
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	MILLING OF EXISTING PAVEMENT, 2.0" DEPTH.



TYPICAL SECTION NO. 12
 SR 2115 STACK RD (MAP 10)

2026 UNION COUNTY RESURFACING			
SCALE	DATE	DESIGN BY	APPROVED
1/20	AMO	AMO	CLA
REVISIONS			

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	18	
F.A. PROJECT NO.			



TYPICAL SECTION NO. 13
SR 1149 DOSTER RD (MAP 7)

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS PER SQ. YD.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC. SURFACE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD.
(F1)	ASPHALT SURFACE TREATMENT, MAT COAT = 78
(M)	CENTERLINE MILLED RUMBLE STRIPS
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	MILLING OF EXISTING PAVEMENT, 2.0" DEPTH.

2026
UNION COUNTY RESURFACING

SCALE	DATE	DESIGN BY	APPROVED	REVISIONS
1/20	1/20	AMO	CLA	

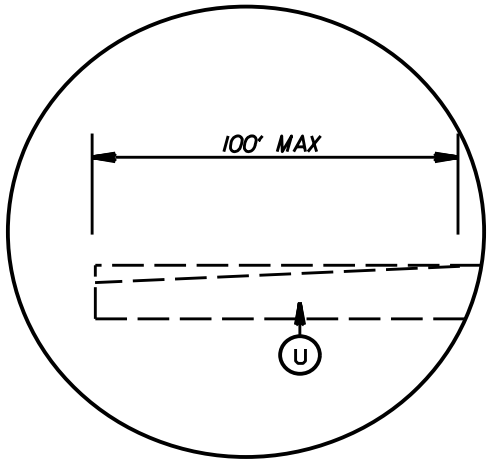
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	19	
F.A. PROJECT NO.			

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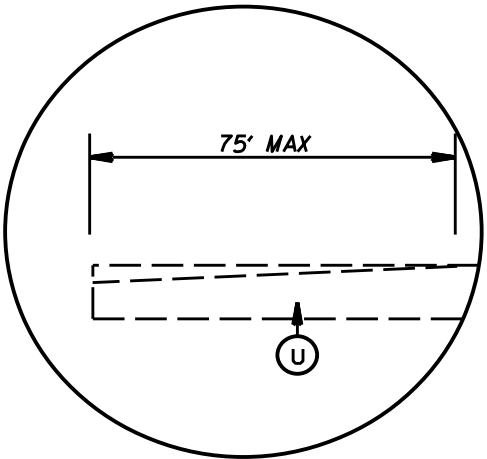
- 1.DEPTH OF PATCHING WILL BE AS DIRECTED BY THE ENGINEER.
- 2.SHOULDER RECONSTRUCTION WILL BE AS DIRECTED BY THE ENGINEER.
- 3.INSTALL CENTERLINE MILLED RUMBEL STRIPS WITH 6" THERMO MARKINGS ON MAP 3 (NC 207) AND MAP 10 (SR 2115 STACK RD). SEE TYPICALS #6, #12, AND RUMBLE STRIP DETAIL SHEETS RS 1 AND RS 2.
- 4.MAP 9 (SR 1377) WESLEY CHAPEL RD, SKIP THE PROJECT LIMITS FOR ROUND ABOUT PROJECT DJ00522. SEE TYPICAL #9 FOR APPROX.STATIONS.

2026 UNION COUNTY RESURFACING			
SCALE	-1/4"		REVISIONS
DATE	01/20		
DWG. BY	AJB		
DESIGN BY	AJB		
APPROVED	CLA		

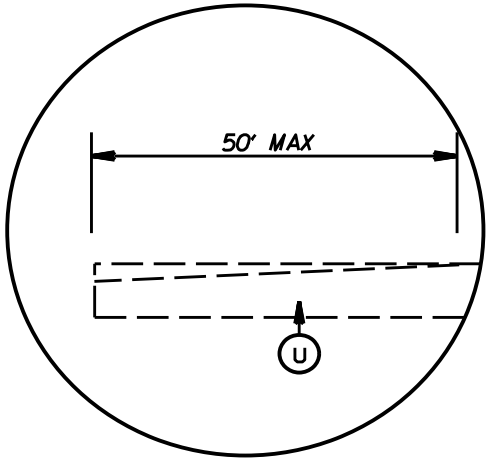
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	20	



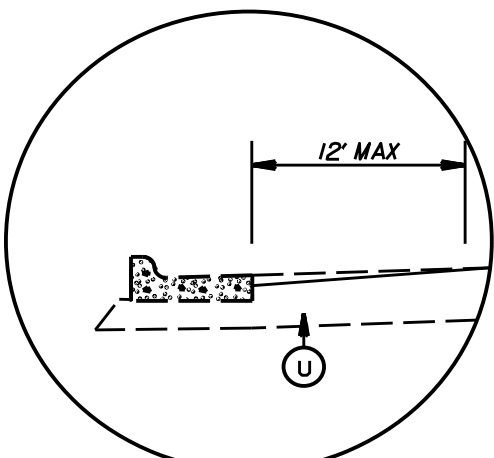
DETAIL FOR INCIDENTAL MILLING (0" TO 2.0")



DETAIL FOR INCIDENTAL MILLING (0" TO 1.5")

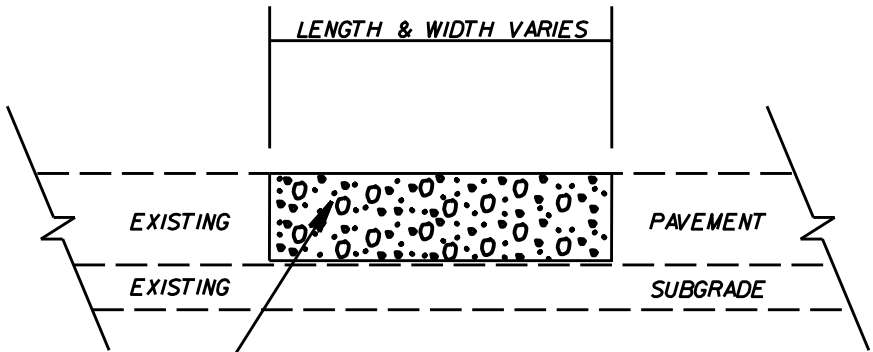


DETAIL FOR INCIDENTAL MILLING (0" TO 1.0")



DETAIL FOR PROFILE MILLING

PATCHING DETAIL



RATE IS VARIABLE AND SHALL BE
AS DIRECTED BY THE ENGINEER.
ASPHALT TYPE 119.0C SHALL BE PLACED.

PAVEMENT SCHEDULE

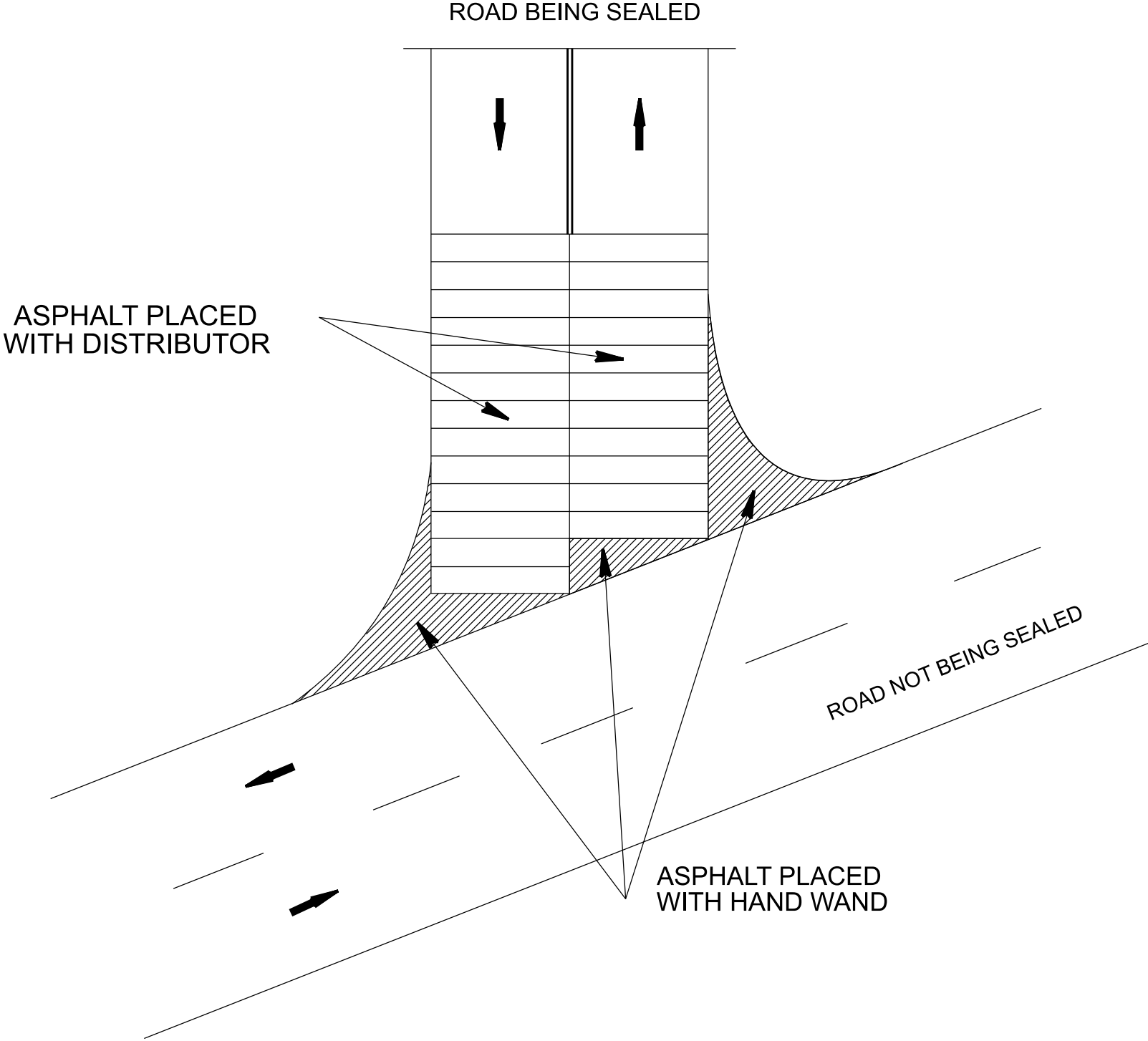
(C1)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 1.5" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C3)	PROP. APPROX. 2.0" ASPHALT CONC. SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS PER SQ. YD.
(E1)	PROP. APPROX. 5.0" ASPHALT CONC. SURFACE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD.
(F1)	ASPHALT SURFACE TREATMENT, MAT COAT * 78
(T1)	SHOULDER RECONSTRUCTION
(U)	EXISTING PAVEMENT
(V1)	MILLING OF EXISTING PAVEMENT, 1.5" DEPTH.
(V2)	MILLING OF EXISTING PAVEMENT, 2.0" DEPTH.

2025
UNION COUNTY RESURFACING

SCALE	DATE	DWG. BY	DESIGN BY	APPROVED	REVISIONS
-NA-	1/20	AMO	AMO	CLA	

INTERSECTION EMULSION PLACEMENT
TWO LANE TWO WAY ROADWAY

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	2026CPT.10.13.10901 2026CPT.10.13.20901	21	
F.A. PROJECT NO.			

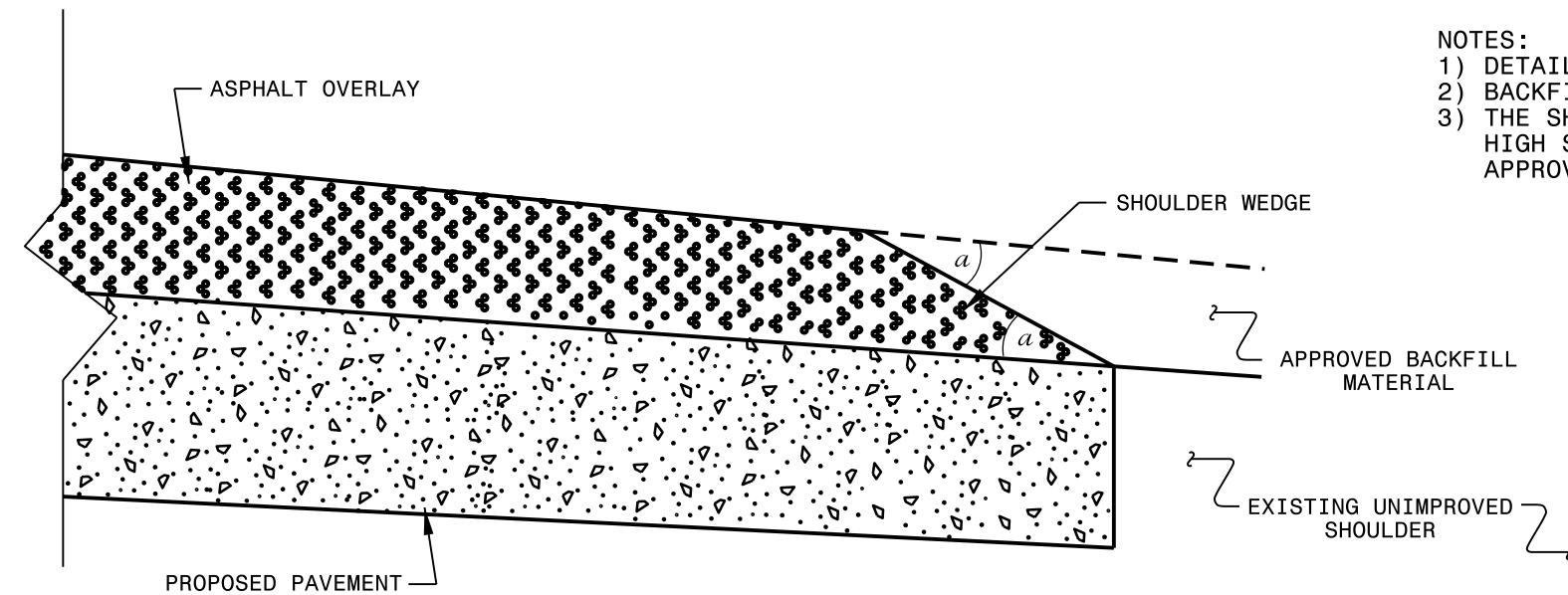


LEGEND

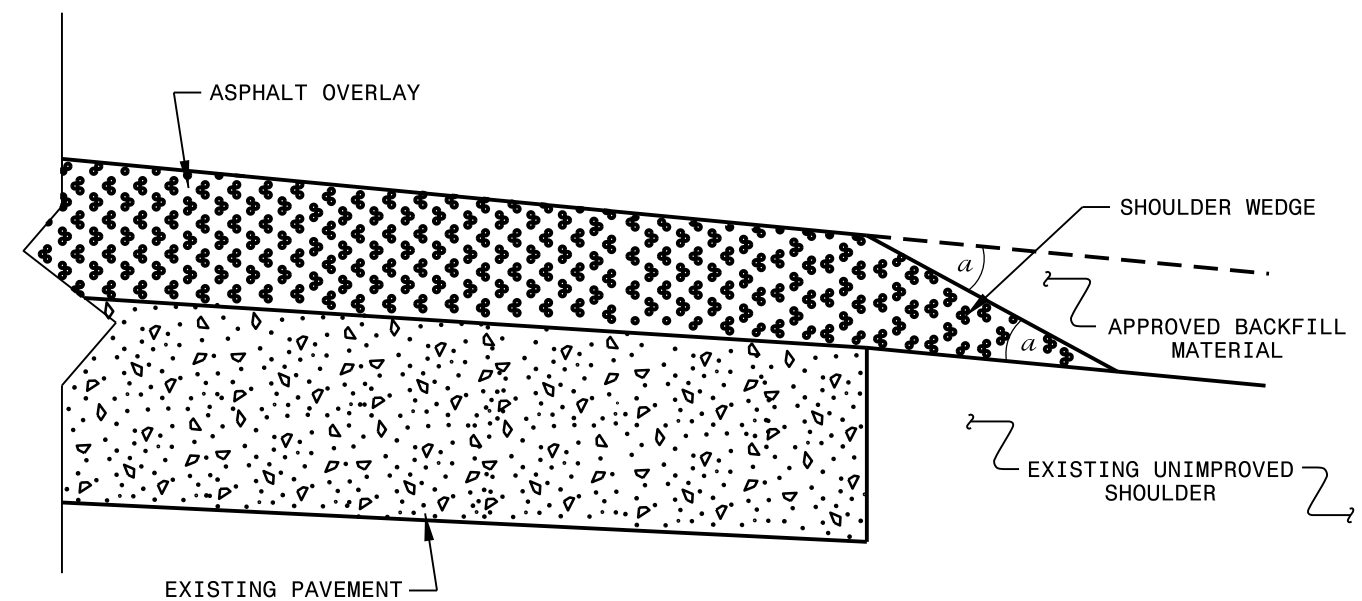
- ➔ DIRECTION OF TRAFFIC FLOW
- SKIP LINES
- == DOUBLE YELLOW LINES

INTERSECTION EMULSION PLACEMENT			
SCALE	NA		REVISIONS
DATE	9/19		
DWG. BY	TBL		
DESIGN BY	TBL		
APPROVED	TWB		

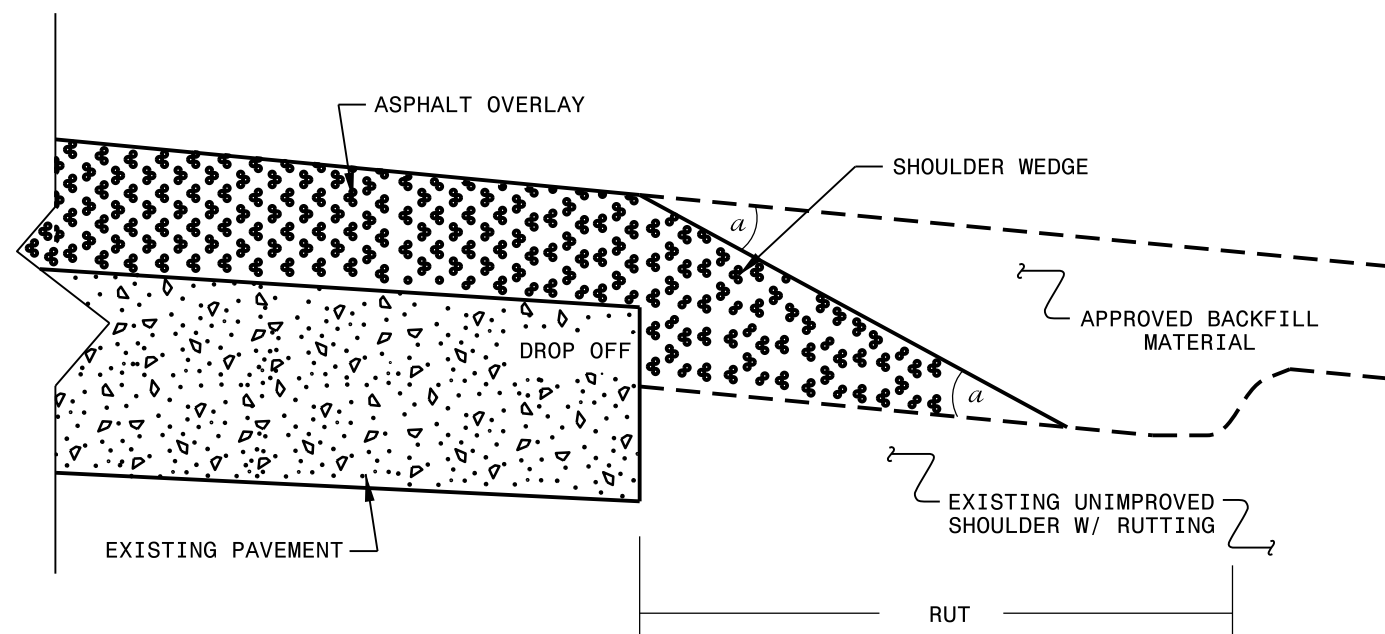
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



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



SHOULDER WEDGE DETAIL
(Resurfacing Projects w/ NO Widening)

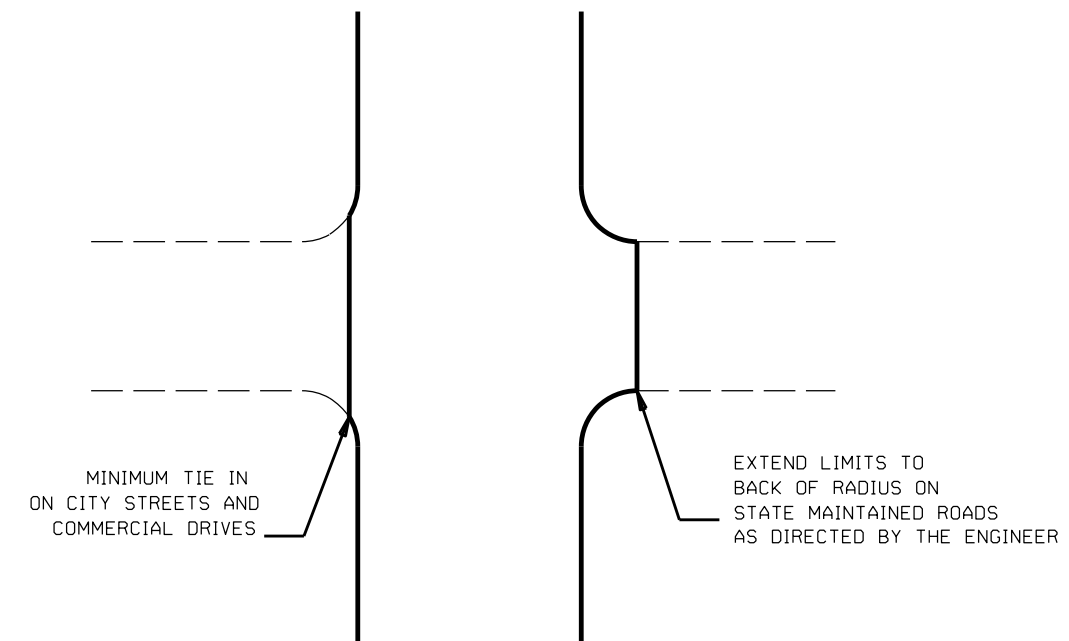


SHOULDER WEDGE DETAIL
(Resurfacing Adjacent to
Rutted Shoulder)

- 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.: s:\usr\details\stand\shoulderwedgedetail.dgn	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

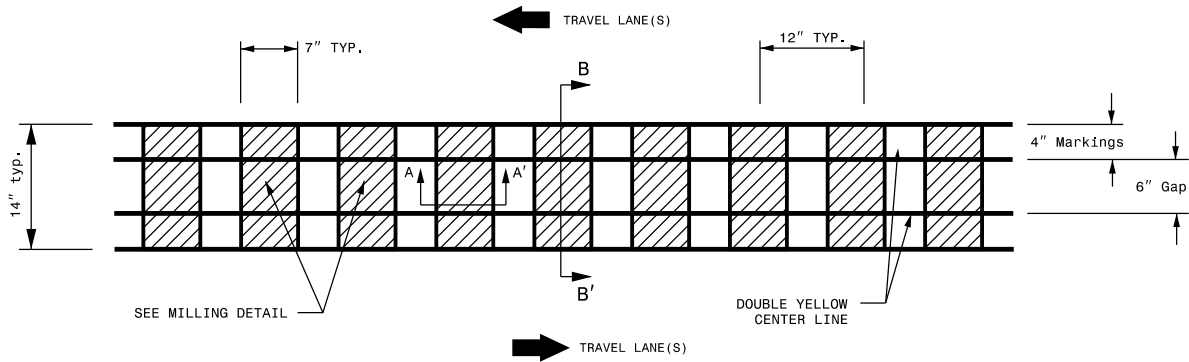


TYPICAL DETAIL OF PROJECT LIMITS AT
UNSIGNALIZED Y LINES

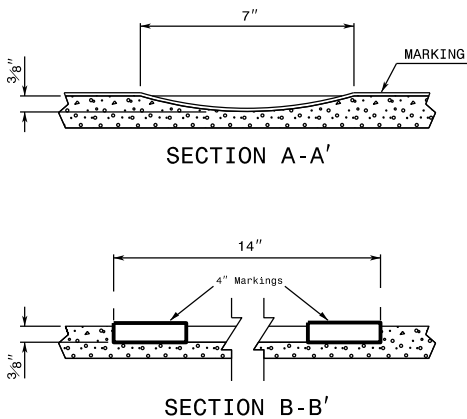
[illegible]

See Table 2 within Rumble Strip
Policy for Design Guidance

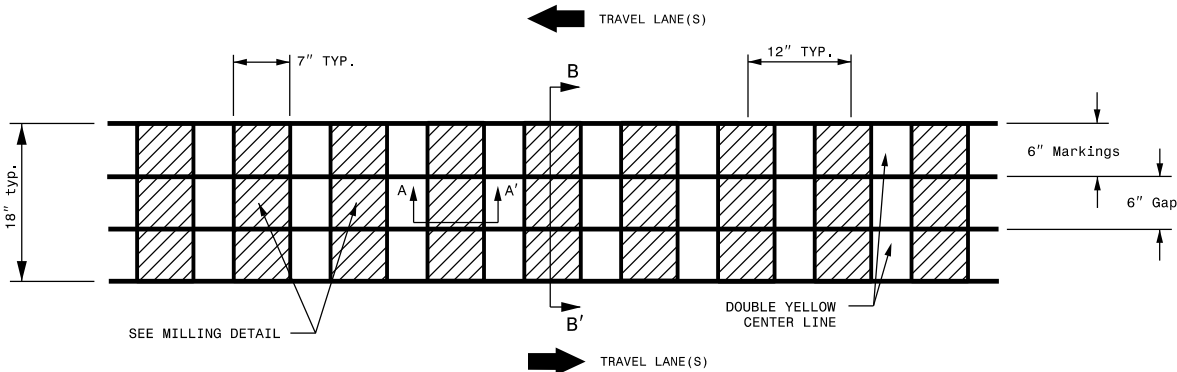
If 4" Markings will be used:



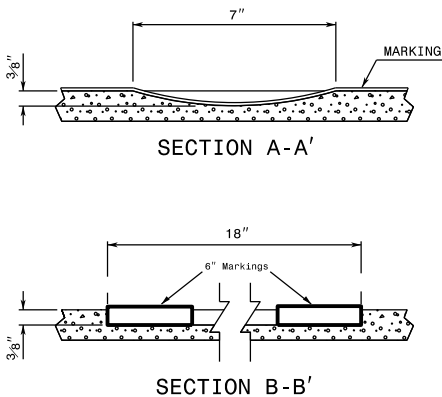
MILLING DETAIL - 4" Markings



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.

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

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

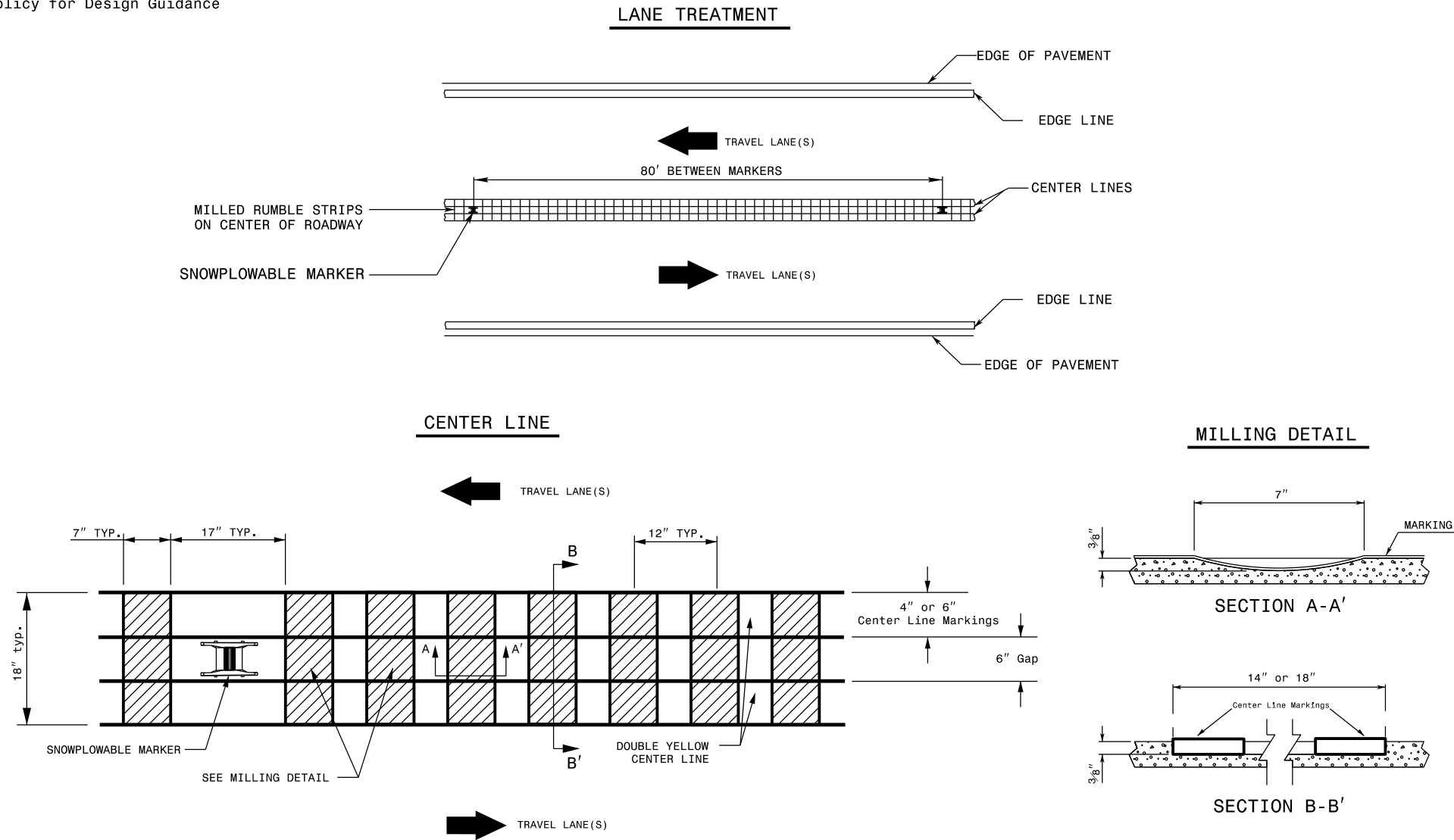
SHEET 5 OF 9

CONTRACTS STANDARDS
AND DEVELOPMENT UNIT
Office 919-707-8950 FAX 919-250-4119

2026 Union County Resurfacing

ORIGINAL BY: C. SIMPSON DATE: 04-24-2025
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: DATE:

See Table 2 within Rumble Strip
Policy for Design Guidance



- 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 SNOWFLOWABLE MARKERS AT APPROXIMATELY 80' INCREMENTS. DO NOT MILL RUMBLE STRIPS IN SECTION WHERE SNOWFLOWABLE MARKERS ARE INSTALLED.

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

ROADWAY DETAIL DRAWING FOR
RUMBLE STRIPS / STRIPES
TRADITIONAL CENTERLINE RUMBLE STRIPE WITH SNOWFLOWABLE MARKERS

SHEET 7 OF 9

PROJECT NO.	SHEET NO.	TOTAL NO.	
2026CPT.10.13.10901, 2026CPT.10.13.20901	26		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	1220000000-E	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1491000000-E	1519000000-E	1520000000-E	1523000000-E	1524000000-E	1575000000-E	1704000000-E	1775000000-E	1838000000-E	1838500000-N	1881000000-E	2143000000-E	2612000000-E	2830000000-N	2845000000-N	5255000000-N	7444000000-E		
												INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	2" MILLING	1½" MILLING	INCIDENTAL MILLING	BASE COURSE, B25.0C	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	SURFACE COURSE, S9.5C	LEVELING COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ASPHALT SURFACE TREATMENT, MATCOAT, #78M STONE	EMULSION FOR ASPHALT SURFACE TREATMENT	VACUUM TRUCK	CENTERLINE MILLED RUMBLE STRIPS (ASPHALT CONCRETE 18")	BLOTTING SAND	6" DRIVEWAYS	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX	PORTABLE LIGHTING	INDUCTIVE LOOP	
								MI	FT			TONS	SMI	TON	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	TONS	SY	GAL	WK	LF	TON	SY	EA	EA	LS	LF		
2026CPT.10.13.10901	Union	1	US-74 WEST ROUTE ID 20600074090	FROM SR 1514 ROCKY RIVER RD TO SR 1379 HAYES RD (HAYES RD IMPROVEMENT PROJECT DJ0577) MP 19.2 TO 20.50	1,2,3,4	2	MD	1.3	28	19.2	20.5		2.60	481	22,548		3,460			3,190	150	253	1,170								0.40	268			
TOTAL FOR MAP NO. 1								1.3					2.60	481	22,548		3,460			3,190	150	253	1,170								0.40	268			
2026CPT.10.13.10901	Union	2	US-74 WEST ROUTE ID 20600074090	FROM SR 1379 HAYES RD (HAYES RD IMPROVMENT PROJECT DJ00577) TO SR 1515 SARDIS CHURCH RD MP 20.68 TO MP 21.40	1,2,3,4,5	2	MD	0.72	28	20.68	21.4		1.44	266	13,799		3,161			2,026	90	156	648							2	2	0.40			
TOTAL FOR MAP NO. 2								0.72					1.44	266	13,799		3,161			2,026	90	156	648							2	2	0.40			
2026CPT.10.13.10901	Union	3	NC-207 ROUTE ID 30000207090	FROM SR 2152 W SANDY RIDGE RD TO SR 2150 JOE COLLINS RD MP 4.60 TO MP 6.00	6	2	2WU	1.4	20	4.6	6		95	2.80	388		767		1,583	350			156	630				7,392							
TOTAL FOR MAP NO. 3								1.4					95	2.80	388		767		1,583	350			156	630				7,392							
TOTAL FOR PROJ NO. 2026CPT.10.13.10901								3.42					95	6.84	1,135	36,347		7,388		1,583	350	5,216	240	565	2,448					2	2	0.80	268		
2026CPT.10.13.20901	Union	4	SR-2394 / GRAY FOX RD ROUTE ID 40002394090	FROM US 74 WEST TO SR 1551 HELMSVILLE RD MP 0.00 TO MP .96	10,11	2	2WU	0.96	24	0	0.96					13,517				1,227		93	432												
TOTAL FOR MAP NO. 4								0.96								13,517				1,227		93	432												
2026CPT.10.13.20901	Union	5	SR-1315 / NEWTOWN RD ROUTE ID 40001315090	FROM PVMT JOINT (MP 14.9) TO SOUTH CARLOINA STATE LINE MP 14.9 TO MP 15.40	7	2	2WU	0.5	24	14.9	15.4		25	1.00	139		800		659	125		62	225												
TOTAL FOR MAP NO. 5								0.5					25	1.00	139		800		659	125		62	225												
2026CPT.10.13.20901	Union	6	SR-1315 / NEW TOWN RD ROUTE ID 40001315090	FROM SR 1307 WAXHAW MARVNN RD TO SR 1312 MARVIN RD MP 14.27 TO MP 14.55	7	2	2WU	0.28	24	14.27	14.55		25	0.56	78		800		398	70		36	126												
TOTAL FOR MAP NO. 6								0.28					25	0.56	78		800		398	70		36	126												
2026CPT.10.13.20901	Union	7	SR-1149 / DOSTER RD ROUTE 400011490090	FROM NC 200 TO SR 1007 ROCKY RIVER RD MP 0.00 TO 2.23	13	2	2WU	2.23	20	0	2.23		185	4.46	618		1,382	1,401	2,474	558		308	1,004					252							
TOTAL FOR MAP NO. 7								2.23					185	4.46	618		1,382	1,401	2,474	558		308	1,004					252							
2026CPT.10.13.20901	Union	8	SR-1107 / REHOBETH RD ROUTE ID 40001107090	FROM NC 75 TO PVMT JOINT AT MP 4.67 (.59 MILES NORTH OF RICHARDSON KING RD) MP 4.67 TO MP 5.39	8,9	2	2WU	0.72	22	5.39	4.67		50	1.54	213		1,295	517		839	193	79	382												
TOTAL FOR MAP NO. 8								0.72					50	1.54	213		1,295	517		839	193	79	382												
2026CPT.10.13.20901	Union	9	SR-1162 / WESLEY CHAPEL RD ROUTE ID 40001162090	FROM SR 2515 MOLLIE IRENE DR TO NC 84 MP 7.66 TO MP 8.63	9	2	2WU	0.97	22	7.66	8.63		55	1.56	269			2,358		974	195	90	437									0.20			
TOTAL FOR MAP NO. 9								0.97					55	1.56	269			2,358		974	195	90	437									0.20			
2026CPT.10.13.20901	Union	10	SR-2115 / STACK RD ROUTE ID 40002115090	FROM SR 2133 SANDY RIDGE RD TO NC 207 MP 9.27 TO MP 11.29	12	2	2WU	2.02	20	9.27	11.29		70	4.04	560			1,667		3,000	505	250	909	23,704	5,930	1.00	9,611	60	216						
TOTAL FOR MAP NO. 10								2.02					70	4.04	560			1,667		3,000	505	250	909	23,704	5,930	1.00	9,611	60	216						
2026CPT.10.13.20901	Union	11	SR-1524 / STEVENS MILL RD ROUTE ID 40001524090	FROM SR 1365 STALLINGS RD TO MECKLENBURG COUNTY LINE MP 3.56 TO MP 4.31	7	2	2WU	0.75	20	3.56	4.31		65	1.52	211			962		859	190		85	342											
TOTAL FOR MAP NO. 11								0.75					65	1.52	211			962		859	190		85	342											
2026CPT.10.13.20901	Union	12	SR-1131 / NESBIT RD ROUTE ID 40001131090	FROM NC 200 S TO SR 1137 POTTERS RD S MP 4.05 TO MP 6.58	7	2	2WU	2.53	20	4.05	6.58		140	5.06	701			667		2,694	633		271	1,139											
TOTAL FOR MAP NO. 12								2.53					140	5.06	701			667		2,694	633		271	1,139											
TOTAL FOR PROJ NO. 2026CPT.10.13.20901								10.96					615	19.74	2,789		14,812	9,153	1,401	7,084	1,576	6,040	893	1,274	4,996	23,704	5,930	1.00	9,611	60	468		0.20		
GRAND TOTAL								14.38					710	26.58	3,924	36,347	14,812	16,541	1,401	8,667	1,926	11,256	1,133	1,839	7,444	23,704	5,930	1.00	17,003	60	468	2	2	1	268

PROJECT NO.	SHEET NO.	TOTAL NO.
2026CPT.10.13.10901 etc	27	

THERMOPLASTIC AND PAINT QUANTITIES

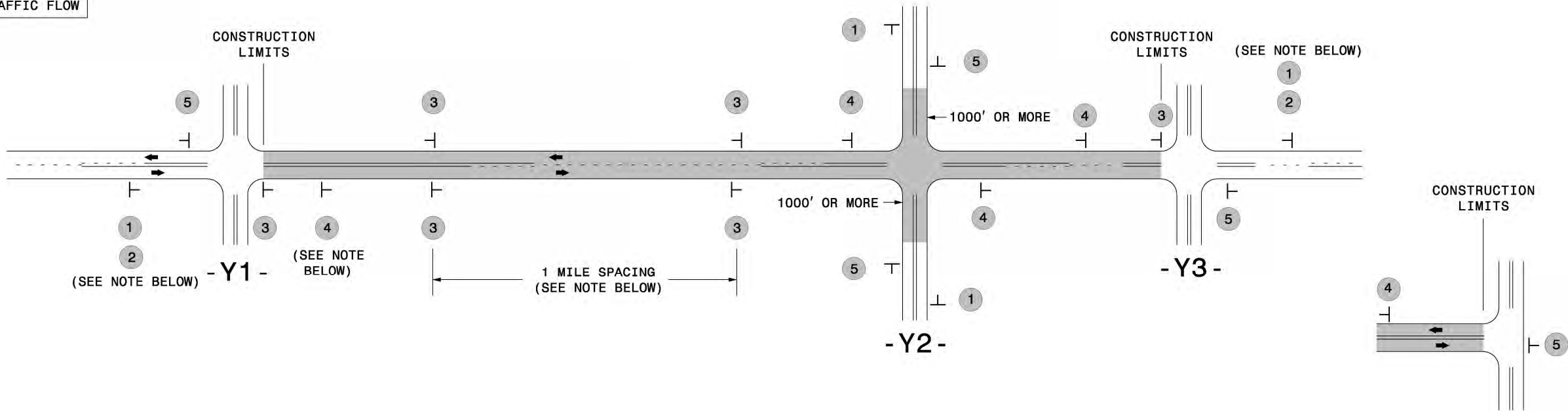
												4413000000-E	4457000000-N	4510000000-N	4685000000-E	4687000000-E	4688000000-E	4695000000-E	4700000000-E	4709000000-E	4720000000-E			4725000000-E			4810000000-E			4895000000-N			
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	THERMOPLASTIC PAVEMENT MARKING LINES (4", 240 MILS)	6" X 90 M WHITE THERMO	6" X 90 M YELLOW THERMO	8" X 90 M WHITE THERMO	12" X 90 M WHITE THERMO	12" X 90 M YELLOW THERMO	THERMOPLASTIC PAVEMENT MARKING LINES (24", 90 MILS)	THERMO MSG STOP 90 M	THERMO MSG AHEAD 90 M	THERMO MSG SCHOOL 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO O STR ARROW 90 M	4" WHITE PAINT	4" YELLOW PAINT	POLYCARBONATE H-SHAPED MARKERS	
								MI	FT			SF	LS	HR	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	LF	LF	EA			
2026CPT.10.13.10901	Union	1	US-74 WEST ROUTE ID 20600074090	FROM SR 1514 ROCKY RIVER RD TO SR 1379 HAYES RD (HAYES RD IMPROVEMENT PROJECT DJ0577) MP 19.2 TO 20.50	1,2,3,4	2	MD	1.3	28	19.2	20.5	126	*	40	10,438	6,872											16	15		16,234	13,774	148	
TOTAL FOR MAP NO. 1							1.3					126		40	10,438	6,872											16	15		16,234	13,774	148	
2026CPT.10.13.10901	Union	2	US-74 WEST ROUTE ID 20600074090	FROM SR 1379 HAYES RD (HAYES RD IPROVMENT PROJECT DJ00577) TO SR 1515 SARDIS CHURCH RD MP 20.68 TO MP 21.40	1,2,3,4,5	2	MD	0.72	28	20.68	21.4	126				6,009	3,897				188	45						6	8	2	17,264	7,794	100
TOTAL FOR MAP NO. 2							0.72					126				6,009	3,897				188	45						6	8	2	17,264	7,794	100
2026CPT.10.13.10901	Union	3	NC-207 ROUTE ID 30000207090	FROM SR 2152 W SANDY RIDGE RD TO SR 2150 JOE COLLINS RD MP 4.60 TO MP 6.00	6	2	2WU	1.4	20	4.6	6	157							1,478	9,892					4	5							92
TOTAL FOR MAP NO. 3							1.4					157						1,478	9,892					4	5							92	
TOTAL FOR PROJ NO. 2026CPT.10.13.10901							3.42					409	1.00	40	16,447	10,769		1,478	9,892	188	45			4	5		22	23	2	33,498	21,568	340	
															27,216		11,370		45			9		47		55,066							
2026CPT.10.13.20901	Union	4	SR-2394 / GRAY FOX RD ROUTE ID 40002394090	FROM US 74 WEST TO SR 1551 HELMSVILLE RD MP 0.00 TO MP .96	10,11	2	2WU	0.96	24	0	0.96	108	*			10,138																	
TOTAL FOR MAP NO. 4							0.96					108				10,138																	
2026CPT.10.13.20901	Union	5	SR-1315 / NEW TOWN RD ROUTE ID 40001315090	FROM PVMT JOINT (MP 14.9) TO SOUTH CARLOINA STATE LINE MP 14.9 TO MP 15.40	7	2	2WU	0.5	24	14.9	15.4	56				5,280	5,280																
TOTAL FOR MAP NO. 5							0.5					56				5,280	5,280																
2026CPT.10.13.20901	Union	6	SR-1315 / NEW TOWN RD ROUTE ID 40001315090	FROM SR 1307 WAXHAW MARVNN RD TO SR 1312 MARVIN RD MP 14.27 TO MP 14.55	7	2	2WU	0.28	24	14.27	14.55	31				2,956	2,956																
TOTAL FOR MAP NO. 6							0.28					31				2,956	2,956																
2026CPT.10.13.20901	Union	7	SR-1149 / DOSTER RD ROUTE 400011490090	FROM NC 200 TO SR 1007 ROCKY RIVER RD MP 0.00 TO 2.23	13	2	2WU	2.23	20	0	2.23	250						192						8	10					47,096	46,384		
TOTAL FOR MAP NO. 7							2.23					250						192						8	10					47,096	46,384		
2026CPT.10.13.20901	Union	8	SR-1107 / REHOBETH RD ROUTE ID 40001107090	FROM NC 75 TO PVMT JONT AT MP 4.67 (.59 MILES NORTH OF RICHARDSON KING RD) MP 4.67 TO MP 5.39	8,9	2	2WU	0.72	22	5.39	4.67	81				7,604	6,823																
TOTAL FOR MAP NO. 8							0.72					81				7,604	6,823																
2026CPT.10.13.20901	Union	9	SR-1162 / WESLEY CHAPEL RD ROUTE ID 40001162090	FROM SR 2515 MOLLIE IRENE DR TO NC 84 MP 7.66 TO MP 8.63	9	2	2WU	0.97	22	7.66	8.63	109				8,184	8,184					37	50			6	1						
TOTAL FOR MAP NO. 9							0.97					109				8,184	8,184					37	50			6	1						
2026CPT.10.13.20901	Union	10	SR-2115 / STACK RD ROUTE ID 40002115090	FROM SR 2133 SANDY RIDGE RD TO NC 207 MP 9.27 TO MP 11.29	12	2	2WU	2.02	20	9.27	11.29	226				2,112	2,112		19,222	16,436													
TOTAL FOR MAP NO. 10							2.02					226				2,112	2,112		19,222	16,436													
2026CPT.10.13.20901	Union	11	SR-1524 / STEVENS MILL RD ROUTE ID 40001524090	FROM SR 1365 STALLINGS RD TO MECKLENBURG COUNTY LINE MP 3.56 TO MP 4.31	7	2	2WU	0.75	20	3.56	4.31	85				8,094	8,094							4	5								
TOTAL FOR MAP NO. 11							0.75					85			8,094	8,094							4	5									
2026CPT.10.13.20901	Union	12	SR-1131 / NESBIT RD ROUTE ID 40001131090	FROM NC 200 S TO SR 1137 POTTERS RD S MP 4.05 TO MP 6.58	7	2	2WU	2.53	20	4.05	6.58	283																	53,432	51,859			
TOTAL FOR MAP NO. 12							2.53					283																		53,432	51,859		
TOTAL FOR PROJ NO. 2026CPT.10.13.20901							10.96					1,229	1.000		34,230	43,587	192	19,222	16,436			37	50	12	15	6	1			100,528	98,243		
															77,817		35,658		37			33		1		198,771							
GRAND TOTAL							14.38					1,638	1.000	40	50,677	54,356	192	20,700	26,328	188	45	37	50	16	20	6	23	23	2	134,026	119,811	340	
															105,033		47,028		82		42		48		253,837								

SIGNING FOR RESURFACING PROJECTS

LEGEND

STATIONARY SIGN

DIRECTION OF TRAFFIC FLOW



TEE INTERSECTION

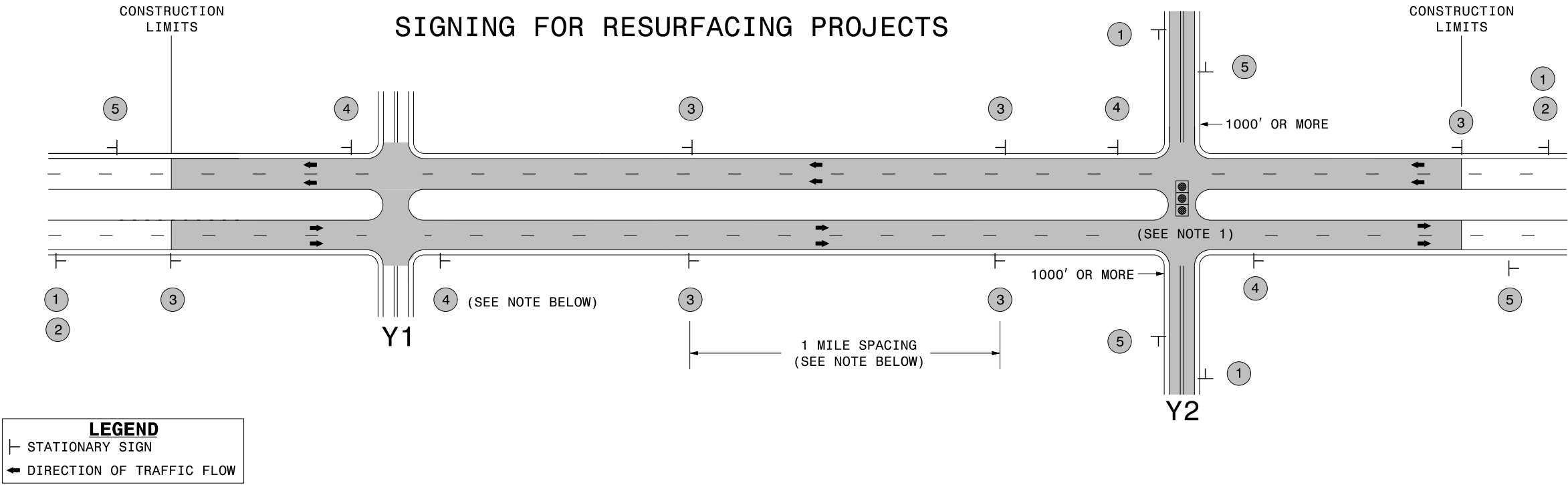
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1 2  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.
	3  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  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.
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DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL	ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING
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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 W7-3gP 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 RESURFACING 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, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK. ROAD WORK AHEAD W20-1 48" X 48" W20-7 A 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER. NOTES: 1) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.
	3 LOW/SOFT SHOULDER SP 13107 48" X 48" PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE 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.	
	5 END ROAD WORK G20-2 A 48" X 24" PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	

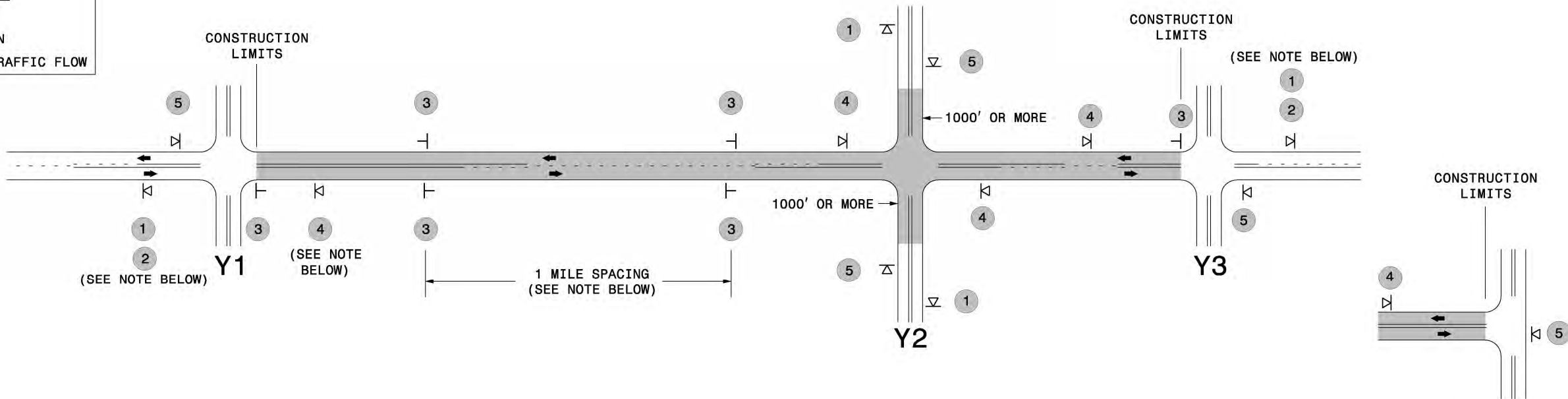
SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND

 PORTABLE SIGN

 STATIONARY SIGN

 DIRECTION OF TRAFFIC FLOW

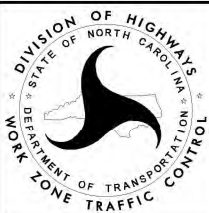


TEE INTERSECTION

MAINLINE (-L-) SIGNING

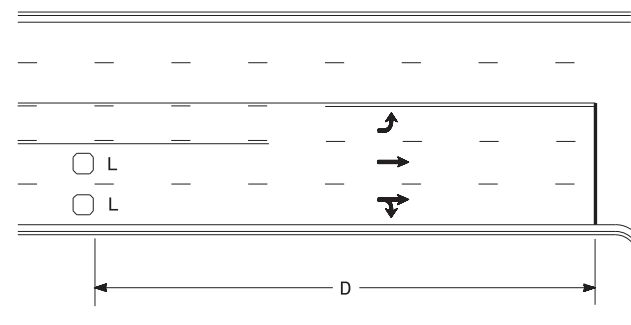
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1 ROAD WORK AHEAD W20-1 48" X 48" 2 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. - SIGN #2 ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO THE NEAREST WHOLE NUMBER. DO NOT USE FRACTIONAL OR DECIMAL NUMBERS.	STATIONARY SIGNING NOT REQUIRED 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. W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER.
	3 LOOSE GRAVEL W8-7 48" X 48" UNMARKED PAVEMENT SP 48" X 48" - ALTERNATE THE FOLLOWING TWO SIGNS: - STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT". - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 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.	
	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.
PS LESS 2 MILES	FOR AST RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, USE A STATIONARY "LOOSE GRAVEL" SIGN AT THE BEGINNING CONSTRUCTION LIMIT FOLLOWED BY AN "UNMARKED PAVEMENT" SIGN MIDWAY THROUGH AND AN "END ROAD WORK" SIGN AT THE END CONSTRUCTION LIMIT.	DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL A ASP

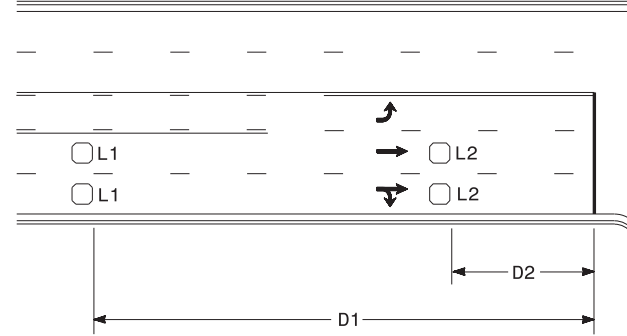


ADVANCE WARNING SIGNS
FOR
2-LANE ROADWAY
ASPHALT SURFACE TREATMENT

High Speed Detection
(≥ 40 mph)



OR



Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired separately

Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

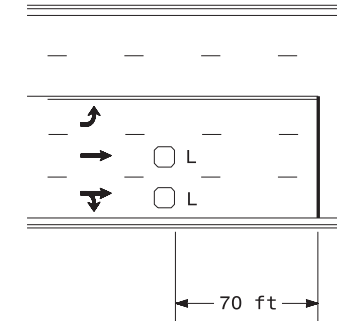
L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

Volume Density Operation

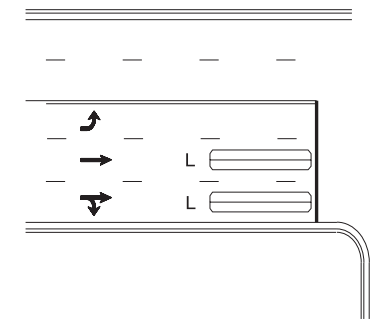
"Stretch" Operation

Low Speed Detection (≤ 35 mph)



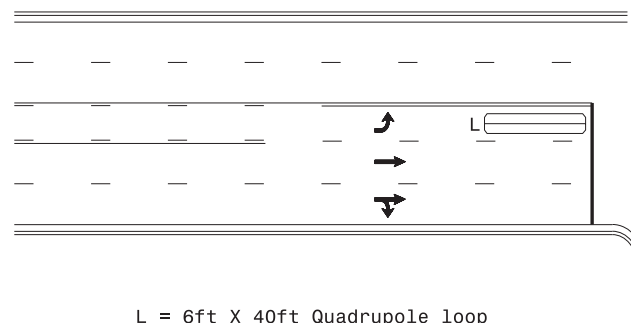
L = 6ft X 6ft
Wired in series

OR



L = 6ft X 40ft
Quadrupole loop, wired separately

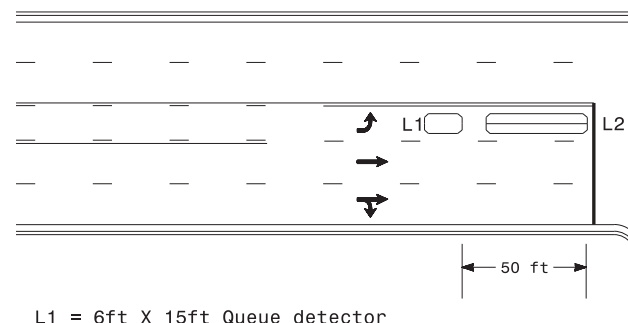
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

OR

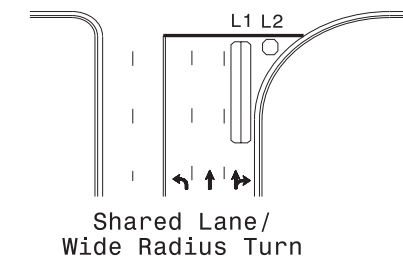


L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

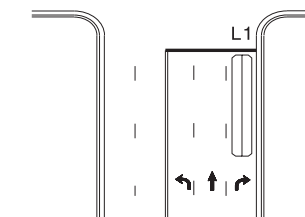
Queue Loop Detection

Right Turn Lane Detection

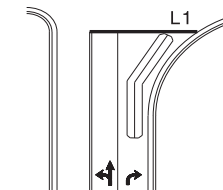
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



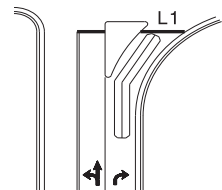
Shared Lane/
Wide Radius Turn



Standard Turn

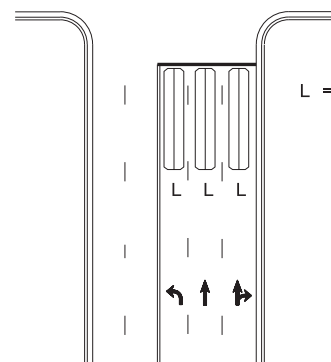


Wide Radius Turn



Channelized Turn

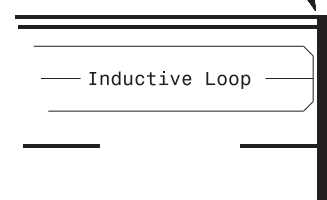
Side Street Detection



L = 6ft X 40ft
 Quadrupole loop
 Wired to separate
 detectors/channels

Presence Loop Placement at Stop Lines

Locate loop slightly
behind leading
edge of stop line



Note:
Loop may be located in advance of stop line under any of the following conditions:

- 1) stop line is greater than 15' from edge of intersecting roadway
- 2) loop detects a permissive or protected/permissive left turn
- 3) for an exclusive right turn lane

Recommended Number of Turns

Single 6' X 6' loop
(when wired separately):

Length of Lead-in ft	Number of Turns
< 250	3
250-375	4
375-525	5
> 525	6

Quadrupole loops: Use 2-4-2 turns

6' X 15' Loops:
Lead-in < 150', use 2 turns
Lead-in > 150', use 3 turns

