

8/17/99

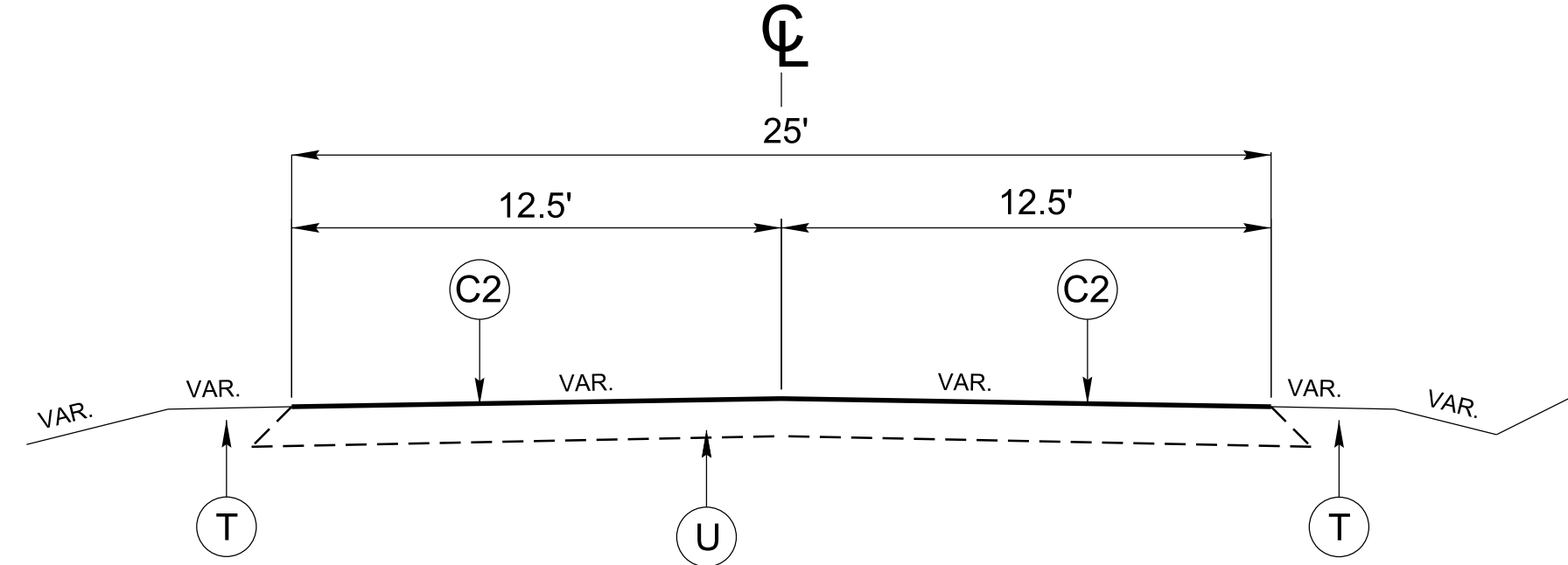
* "PATCHING EXISTING PAVEMENT" HAS BEEN INCLUDED AS A PAY ITEM ON MAPS. PATCHING MAY OR MAY NOT BE NEEDED
DEPENDING ON CONDITION OF MAP SURFACE AT TIME THAT PAVING SEASON BEGINS. AREAS TO BE DELINIATED BY THE ENGINEER.

PROJECT REFERENCE NO.
DK00410

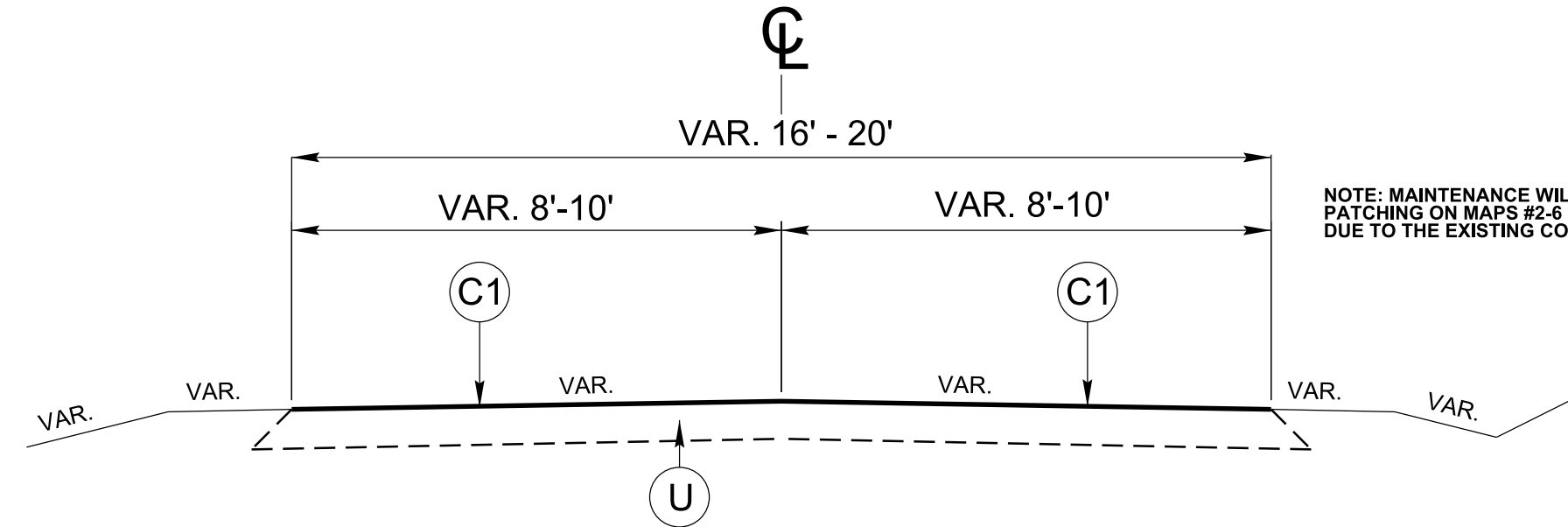
SHEET NO.
01

- * INCIDENTAL MILLING AT LOCATIONS AS DIRECTED BY THE ENGINEER
- *** LEVELING AT LOCATIONS AS DIRECTED BY ENGINEER THE ENGINEER

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	INCIDENTAL MILLING (See Tie in Detail)

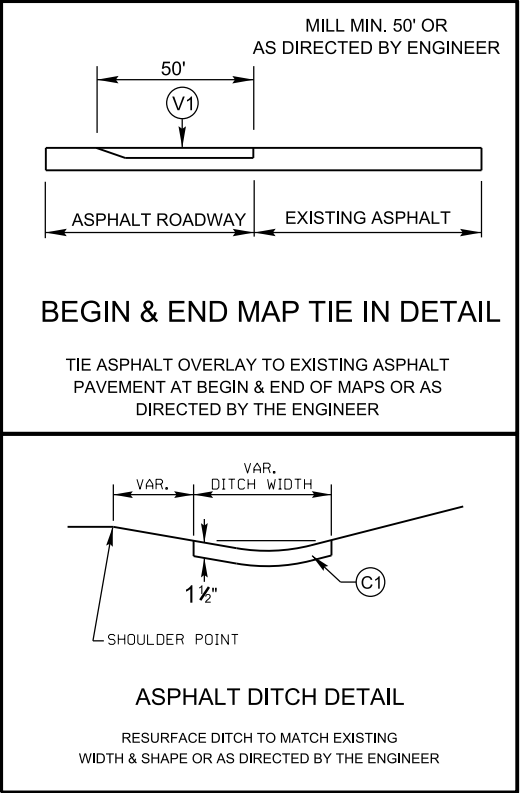


TYPICAL SECTION NO. 1
MAP 1 - US 321 FROM WATAUGA CO LINE TO TENN STATE LINE



NOTE: MAINTENANCE WILL NEED TO REVIEW
PATCHING ON MAPS #2-6 PRIOR TO CONSTRUCTION,
DUE TO THE EXISTING CONDITION OF THE AST SURFACE.

TYPICAL SECTION NO. 2
*** MAP 2 - SR 1128 FROM SR 1126 TO END MAINTENANCE
*** MAP 3 - SR 1301 FROM SR 1300 TO EOP
*** MAP 4 - SR 1302 FROM SR 1301 TO TENN STATE LINE
*** MAP 5 - SR 1355 FROM SR 1337 TO WATAUGA CO
*** MAP 6 - SR 1175 FROM SR 1131 TO AVERY CO LINE



*** Note: An asphalt ditch is present on map 3 from MP 0.00 - 0.85 (LT Shld).
The contractor is to clean the ditch and refer to the corresponding
detail for resurfacing guidance as directed by the engineer.

NOTE: TYPICALS ARE NOT TO SCALE

AVERY COUNTY
PRIMARY & SECONDARY ROADS
2025 ASPHALT RESURFACING

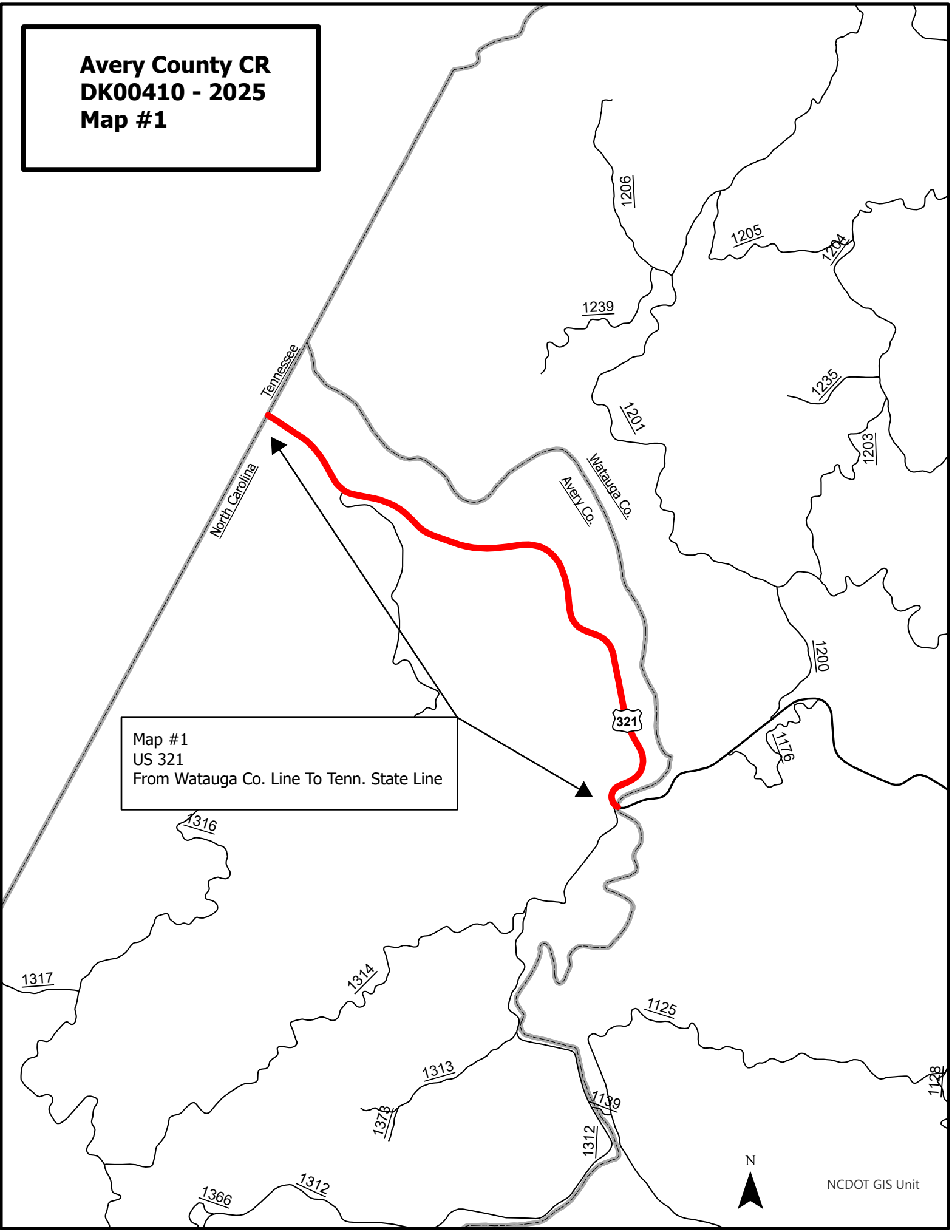
REVISIONS	INIT.	DATE

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

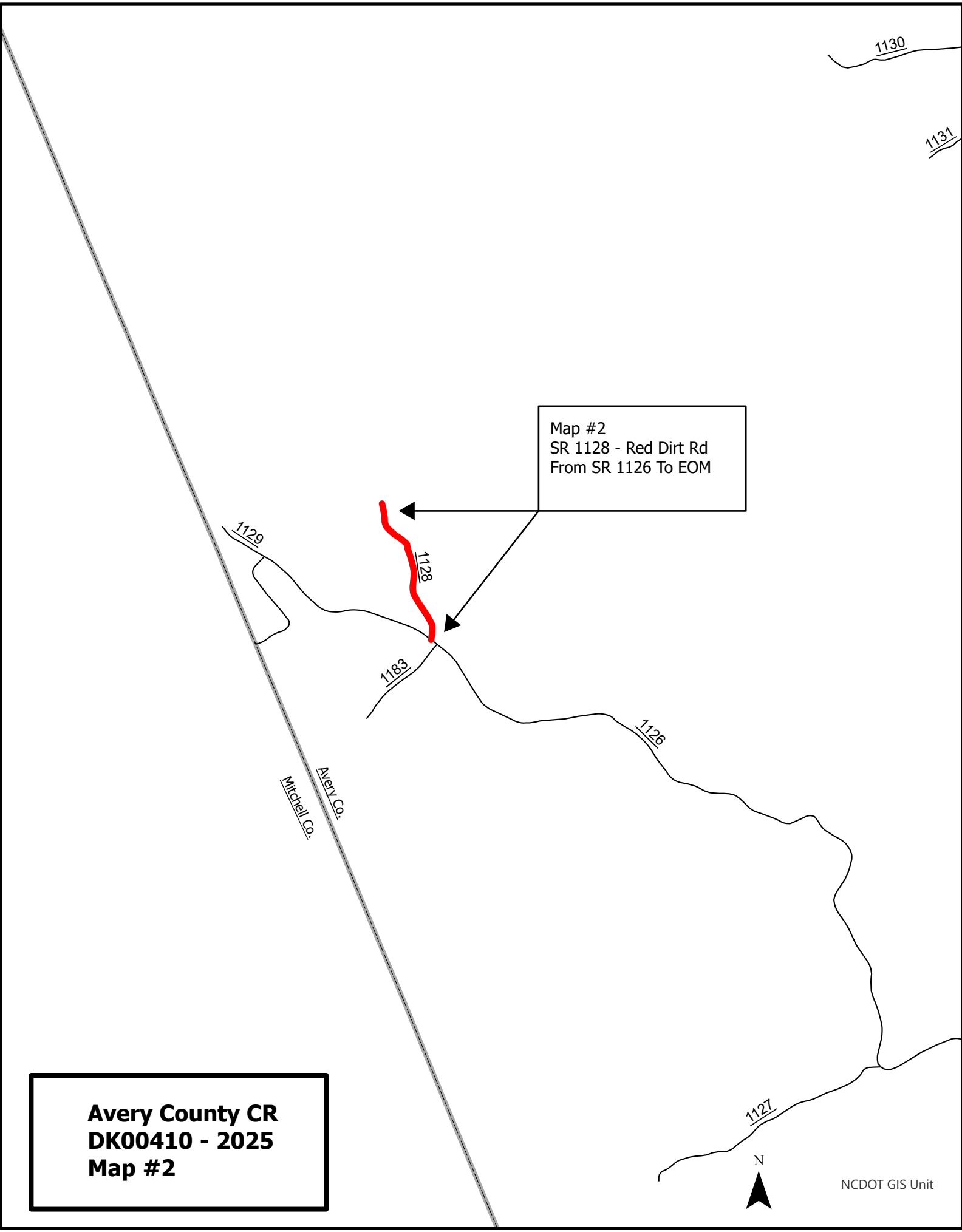
SCALE: N/A DATE: 2/05/2025
PREPARED BY: DLH
REVIEWED BY:
REVIEWED BY:

12-FEB-2025 11:24
14-2025-Resurfacing Maps\Avery\MicroStation\DK00410_Avery-Resurfacing-typricals.dgn
ASSISTANT MANAGER

**Avery County CR
DK00410 - 2025
Map #1**



**Map #2
SR 1128 - Red Dirt Rd
From SR 1126 To EOM**



**Avery County CR
DK00410 - 2025
Map #2**

**Avery County CR
DK00410 - 2025
Map #3 and 4**

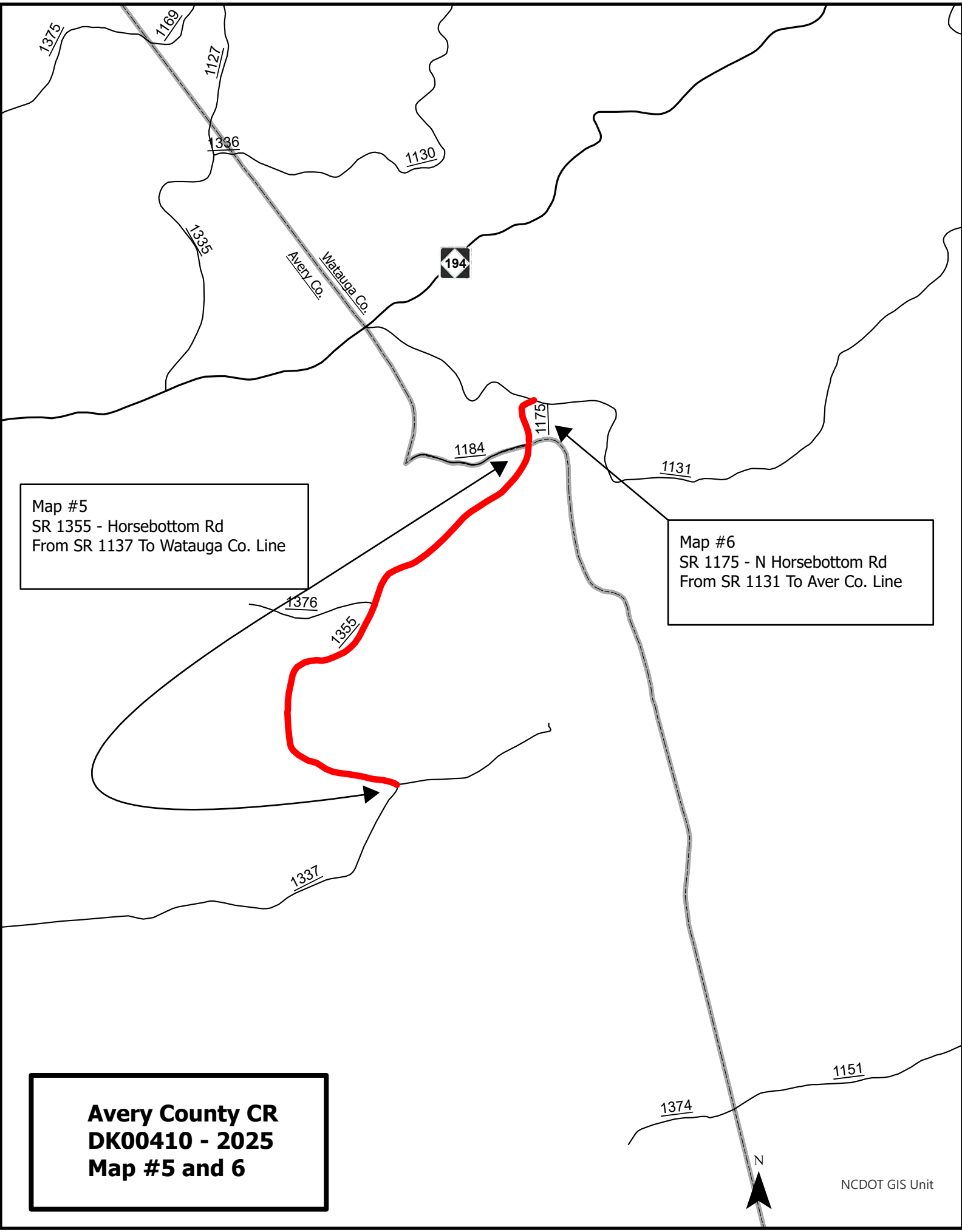
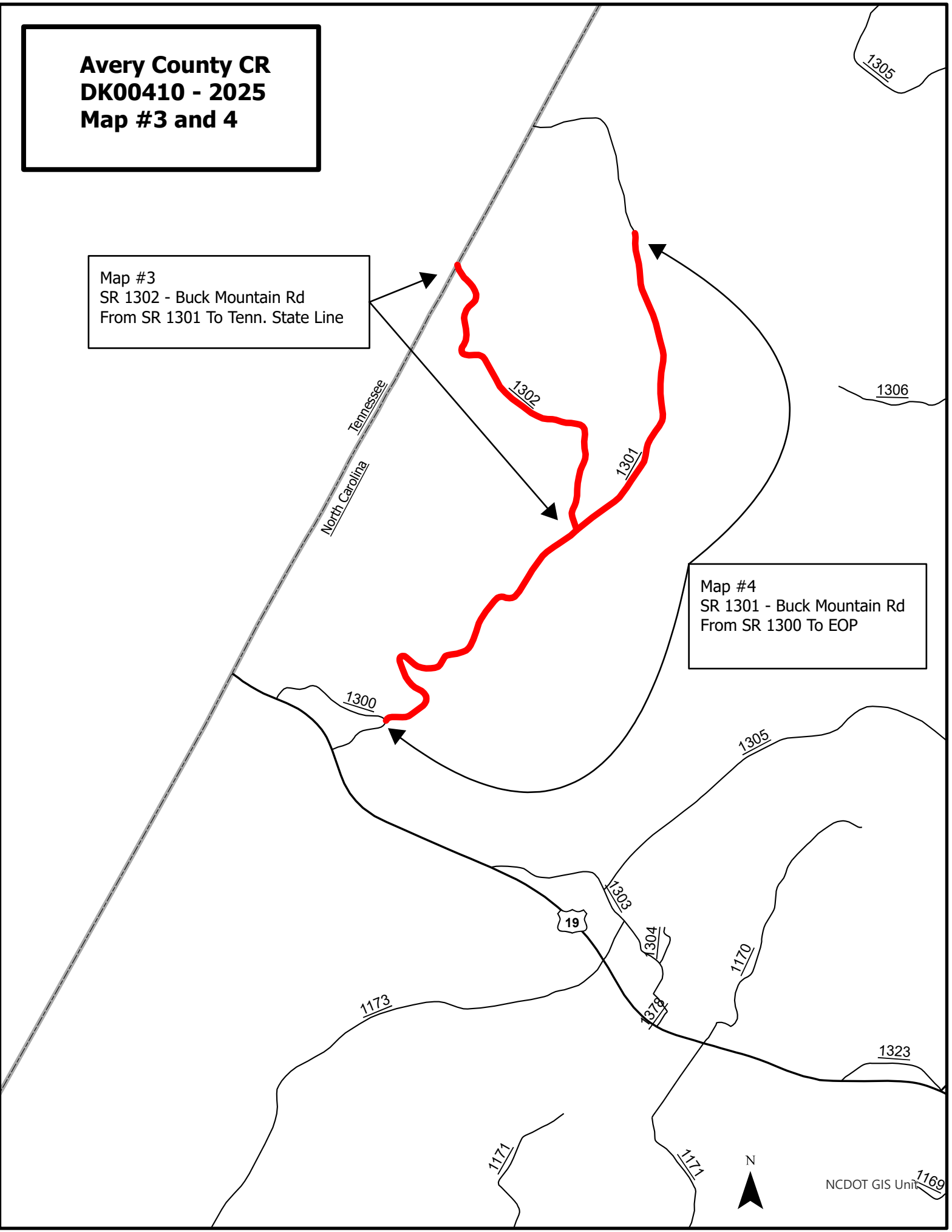
Map #3
SR 1302 - Buck Mountain Rd
From SR 1301 To Tenn. State Line

Map #4
SR 1301 - Buck Mountain Rd
From SR 1300 To EOP

Map #5
SR 1355 - Horsebottom Rd
From SR 1137 To Watauga Co. Line

Map #6
SR 1175 - N Horsebottom Rd
From SR 1131 To Aver Co. Line

**Avery County CR
DK00410 - 2025
Map #5 and 6**

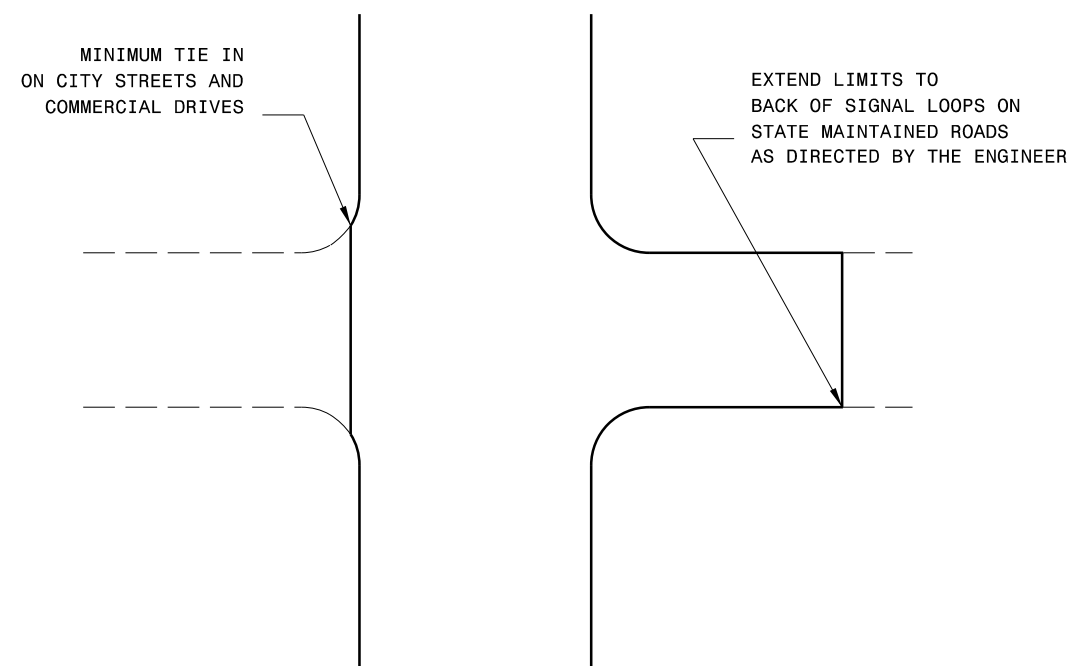


												PROJECT NO.		SHEET NO.						
												DK00410		4						
SUMMARY OF QUANTITIES																				
												1220000000-E	1245000000-E	1260000000-E	1330000000-E	1519000000-E	1520000000-E	1523000000-E	1575000000-E	1704000000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	INCIDENTAL MILLING	SURFACE COURSE, S9.5B	LEVELING COURSE, TYPE S9.5B	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT
								MI	FT			TONS	SMI	TON	SY	TONS	TON	TONS	TONS	TONS
2025CPT.11.07.10061	Avery	1	US-321 N / US 321	FROM WATAUGA CO LINE TO TENN ST LINE	1	2	2WU	2.4	25	0	2.4	48	4.8	660	278			3,417	243	871
TOTAL FOR PROJ NO. 2025CPT.11.07.10061								2.4				48	4.8	660	278			3,417	243	871
2025CPT.11.07.20061	Avery	2	SR-1128 / RED DIRT RD	FROM SR 1126 TO END MAINTENANCE	2	2	2WU	0.3	16	0	0.3		0.6	83	18	224	156		25	
2025CPT.11.07.20061	Avery	3	SR-1301 / BUCK MOUNTAIN/MILES FIELD	FROM SR 1300 TO EOP	2	2	2WU	1.66	20	0	1.66	33	3.3	457	111	1,548	806		153	
2025CPT.11.07.20061	Avery	4	SR-1302 / BUCK MOUNTAIN	FROM SR 1301 TO TN STATE LINE	2	2	2WU	0.87	20	0	0.87	17	1.7	239	111	720	422		74	
2025CPT.11.07.20061	Avery	5	SR-1355 / HORSE BOTTOM	FROM SR 1337 TO WATAUGA CO	2	2	2WU	1.2	20	0	1.2	24	2.4	330	111	973	583		101	
TOTAL FOR PROJ NO. 2025CPT.11.07.20061								4.03				74	8.0	1,109	351	3,465	1,967		353	
2025CPT.11.07.20951	Watauga	6	SR-1175 / N HORSEBOTTOM RD	FROM SR 1131 TO AVERY CO LINE	2	2	2WU	0.11	20	0	0.11	2	0.2	30	111	103	53		10	
TOTAL FOR PROJ NO. 2025CPT.11.07.20951								0.11				2	0.2	30	111	103	53		10	
GRAND TOTAL								6.54				124	13.0	1,799	740	3,568	2,020	3,417	606	871

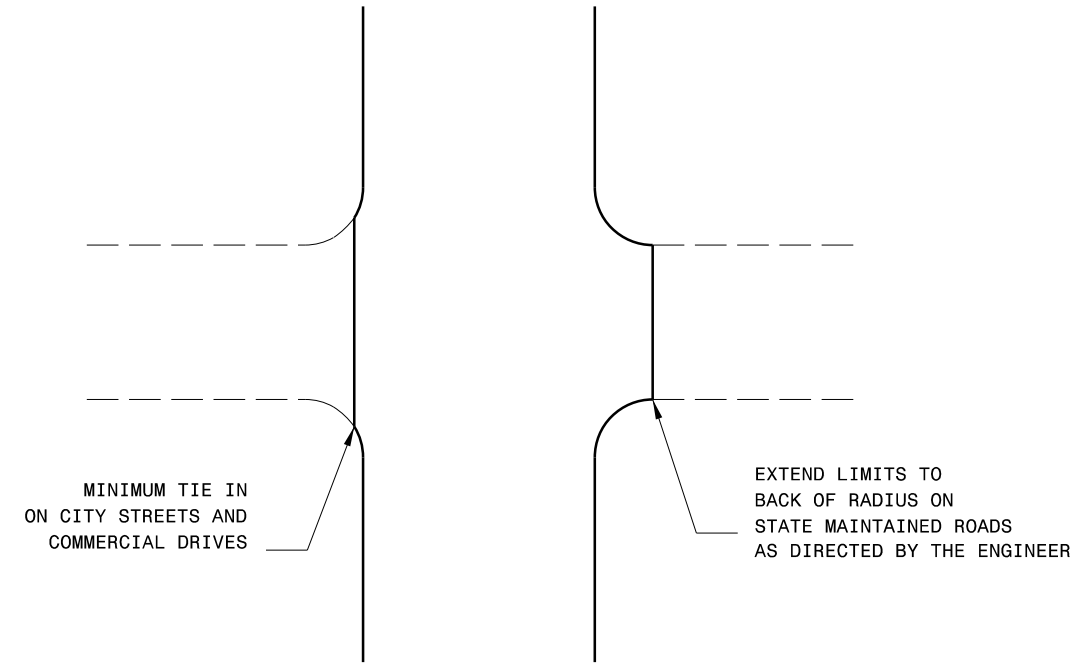
[Mile Posting Map](#)

												PROJECT NO.	SHEET NO.	
												DK00410	5	
THERMOPLASTIC AND PAINT QUANTITIES														
												4413000000-E	4890000000-E	4892000000-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	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINES, 4", 65 MIL	POLYCARBONATE H-SHAPED MARKERS
								MI	FT					
2025CPT.11.07.10061	Avery	1	US-321 N / US 321	FROM WATAUGA CO LINE TO TENN ST LINE	1	2	2WU	2.4	25	0	2.4	200	51,648	158
TOTAL FOR PROJ NO. 2025CPT.11.07.10061								2.4				200	51,648	158
2025CPT.11.07.20061	Avery	2	SR-1128 / RED DIRT RD	FROM SR 1126 TO END MAINTENANCE	2	2	2WU	0.3	16	0	0.3	112		
2025CPT.11.07.20061	Avery	3	SR-1301 / BUCK MOUNTAIN/MILES FIELD	FROM SR 1300 TO EOP	2	2	2WU	1.66	20	0	1.66	160	35,723	
2025CPT.11.07.20061	Avery	4	SR-1302 / BUCK MOUNTAIN	FROM SR 1301 TO TN STATE LINE	2	2	2WU	0.87	20	0	0.87	112	18,722	
2025CPT.11.07.20061	Avery	5	SR-1355 / HORSE BOTTOM	FROM SR 1337 TO WATAUGA CO	2	2	2WU	1.2	20	0	1.2	112	25,824	
TOTAL FOR PROJ NO. 2025CPT.11.07.20061								4.03				496	80,269	
2025CPT.11.07.20951	Watauga	6	SR-1175 / N HORSEBOTTOM RD	FROM SR 1131 TO AVERY CO LINE	2	2	2WU	0.11	20	0	0.11	64	2,367	
TOTAL FOR PROJ NO. 2025CPT.11.07.20951								0.11				64	2,367	
GRAND TOTAL								6.54				760	134,284	158.000

[Mile Posting Map](#)



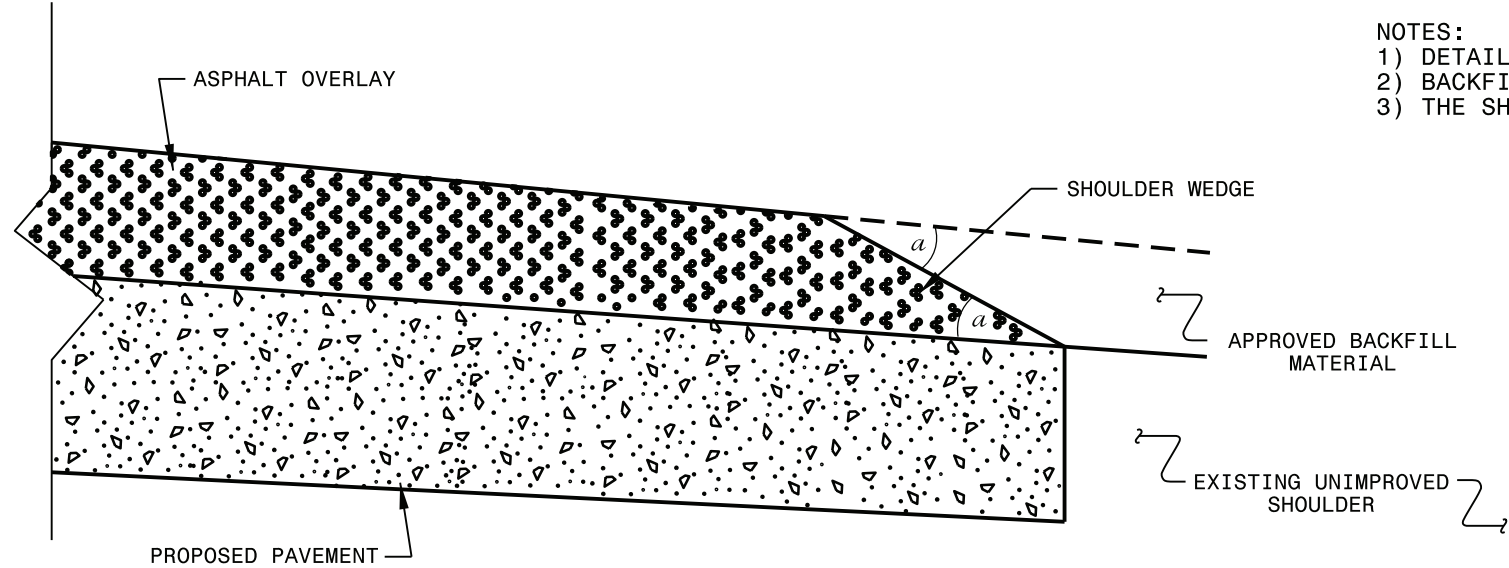
TYPICAL DETAIL OF PROJECT LIMITS AT
SIGNALIZED Y LINES



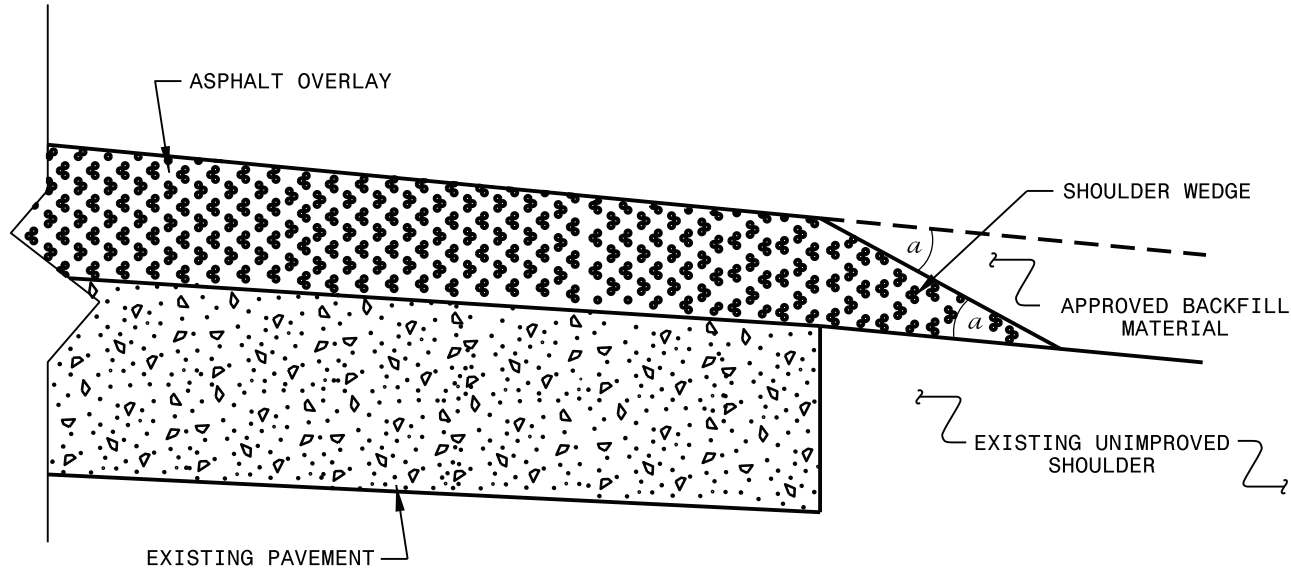
TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

[illegible]

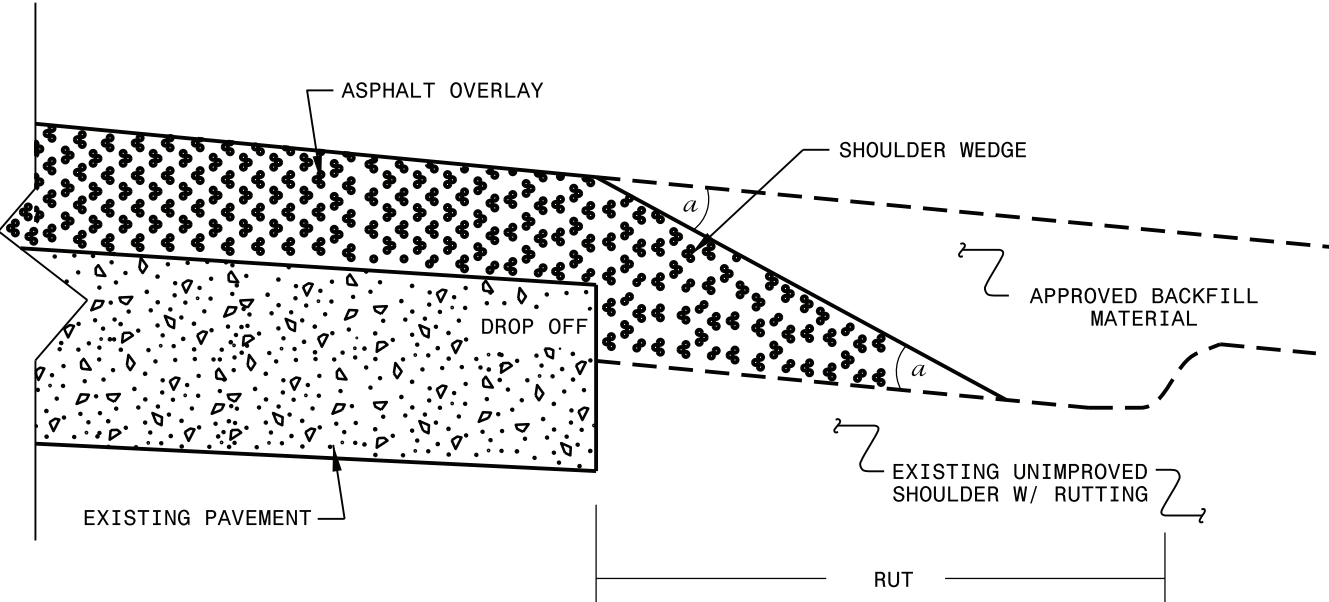
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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**

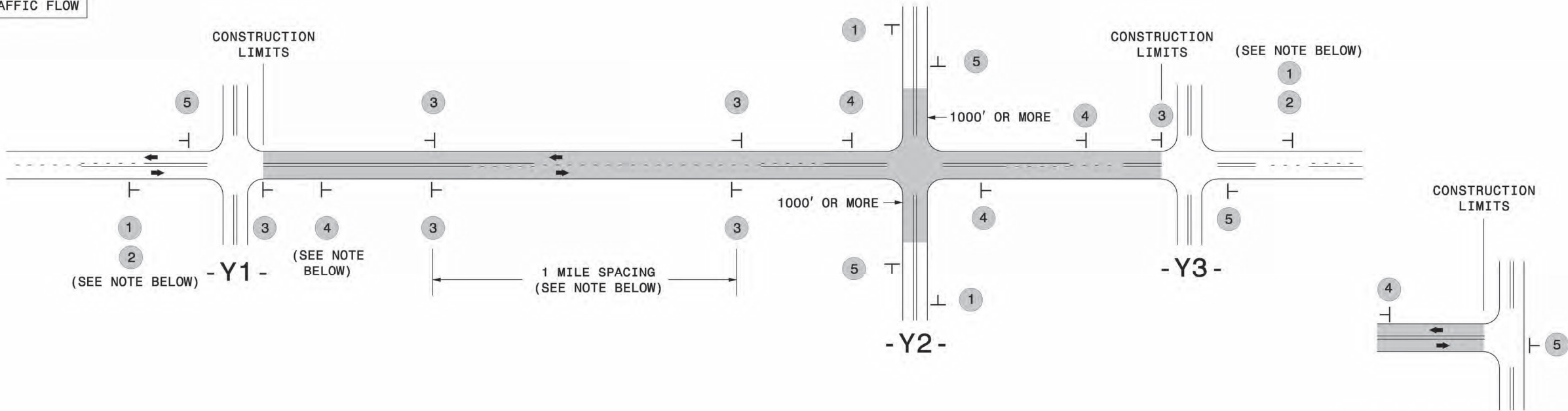
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MODIFIED BY: DATE: 10/16/12
CHECKED BY: DATE:
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SIGNING FOR RESURFACING PROJECTS

LEGEND

STATIONARY SIGN

DIRECTION OF TRAFFIC FLOW



TEE INTERSECTION

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

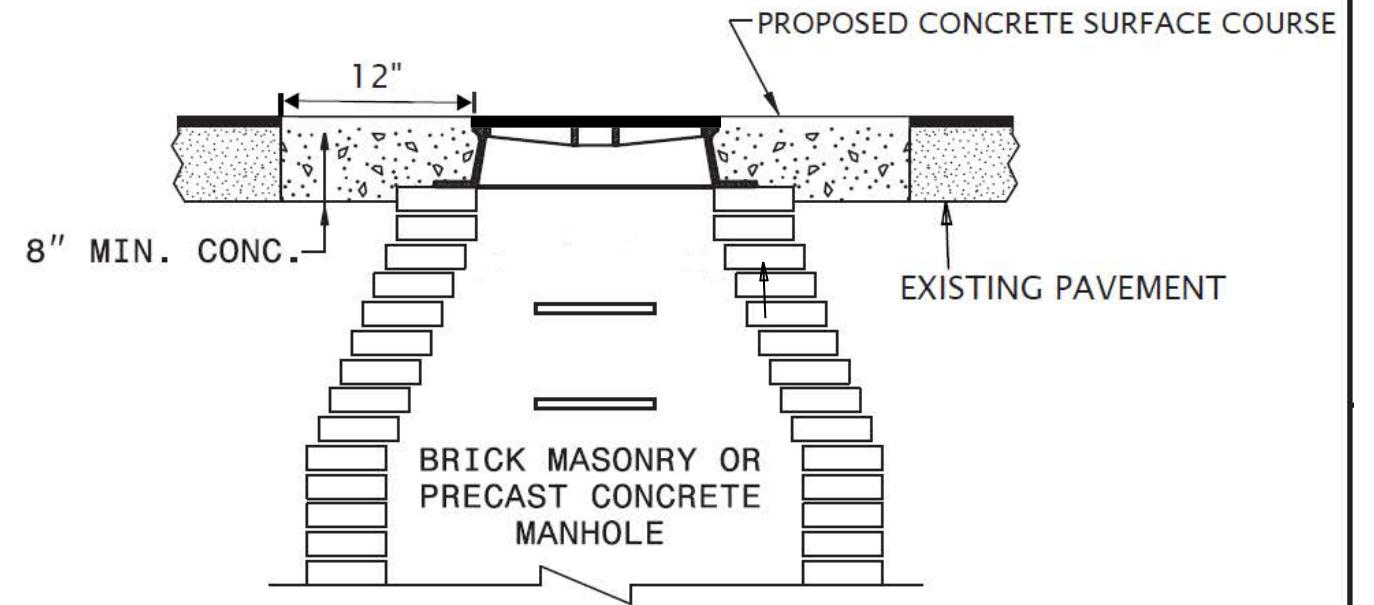
SIGNING NOTES AND PLACEMENT PER DIRECTION	<div><div>1</div><div><div><div>ROAD WORK AHEAD</div><div>W20-1 48" X 48"</div><div><div>NEXT XX MILES</div><div>W7-3aP 24" X 18"</div></div></div><div>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 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></div>	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. <div><div><div><div>ROAD WORK AHEAD</div><div>W20-1 48" X 48"</div></div><div>PLACED 500' IN ADVANCE OF FLAGGER.</div></div><div><div><div><div><div></div><div></div></div><div>W20-7 A 48" X 48"</div></div><div>PLACED 250' IN ADVANCE OF FLAGGER.</div></div></div></div>
	<div><div>3</div><div><div><div>LOW/SOFT SHOULDER</div><div>SP 13107 48" X 48"</div></div><div>- 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.</div></div></div>	
	<div><div>4</div><div><div><div>ROAD UNDER CONST</div><div>SP 13106 48" X 48"</div></div><div>- 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.</div></div></div>	
	<div><div>5</div><div><div><div>END ROAD WORK</div><div>G20-2 A 48" X 24"</div></div><div>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</div></div></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.	



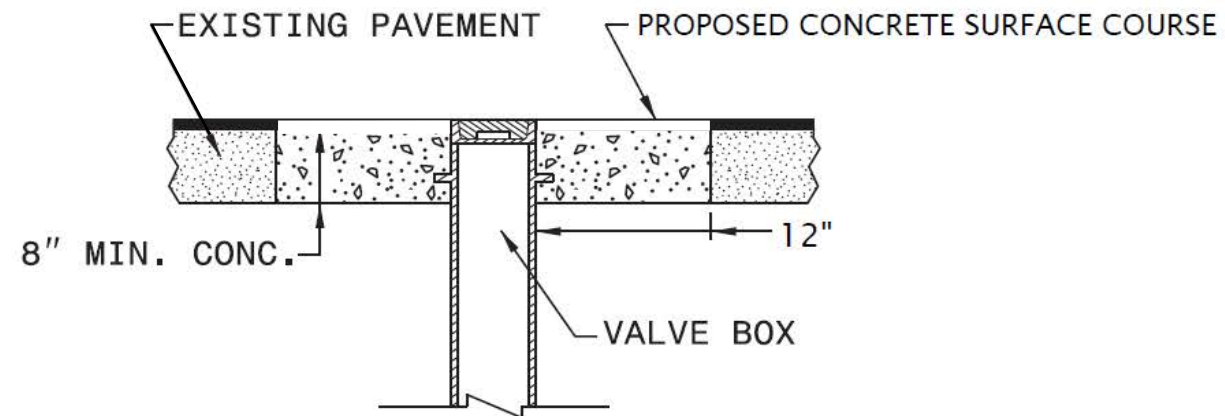
ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

GENERAL NOTES:

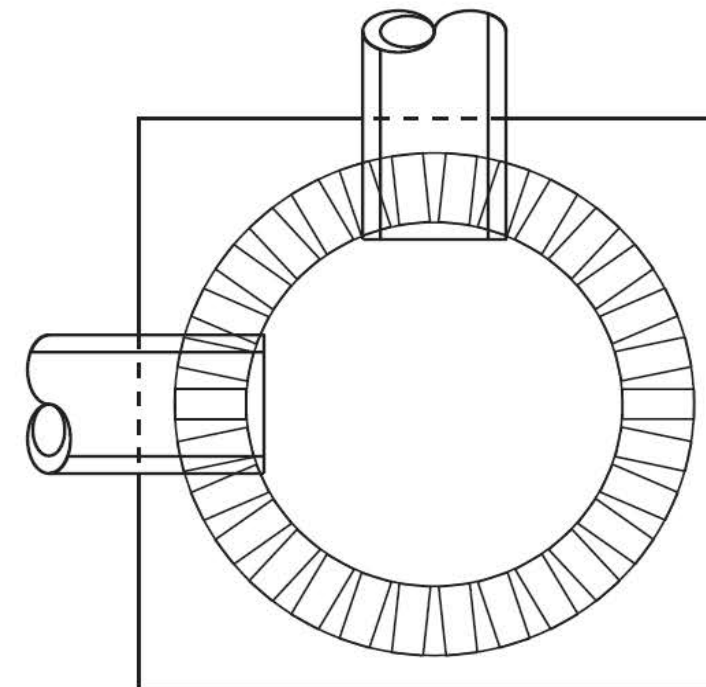
1. USE RAPID SET DYED CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
2. REMOVE ALL FAULTY EXISTING BRICKWORK AND REPLACE WITH NEW BRICK MASONRY.
3. SHEER CUT RECTANGULAR EXCAVATION FOR THE ADJUSTMENT ON ALL SIDES. NO OVERSAW CUTS ALLOWED IN CORNERS.
4. FILL AREA BELOW 8" DEPTH WITH 78M OR NO. 57 CLEAN STONE.
5. MIX MORTAR TO NCDOT SPECIFICATIONS.
6. MORTAR JOINTS 1/2" +/- 1/8"



MANHOLE CONCRETE ENCASEMENT



VALVE BOX CONCRETE ENCASEMENT



ELEVATION VIEW

PLACE BRICK ACCORDING TO ELEVATION VIEW

REVISIONS

24-JAN-2016 13:31
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\$\$\$\$\$USERNAME\$\$\$\$\$