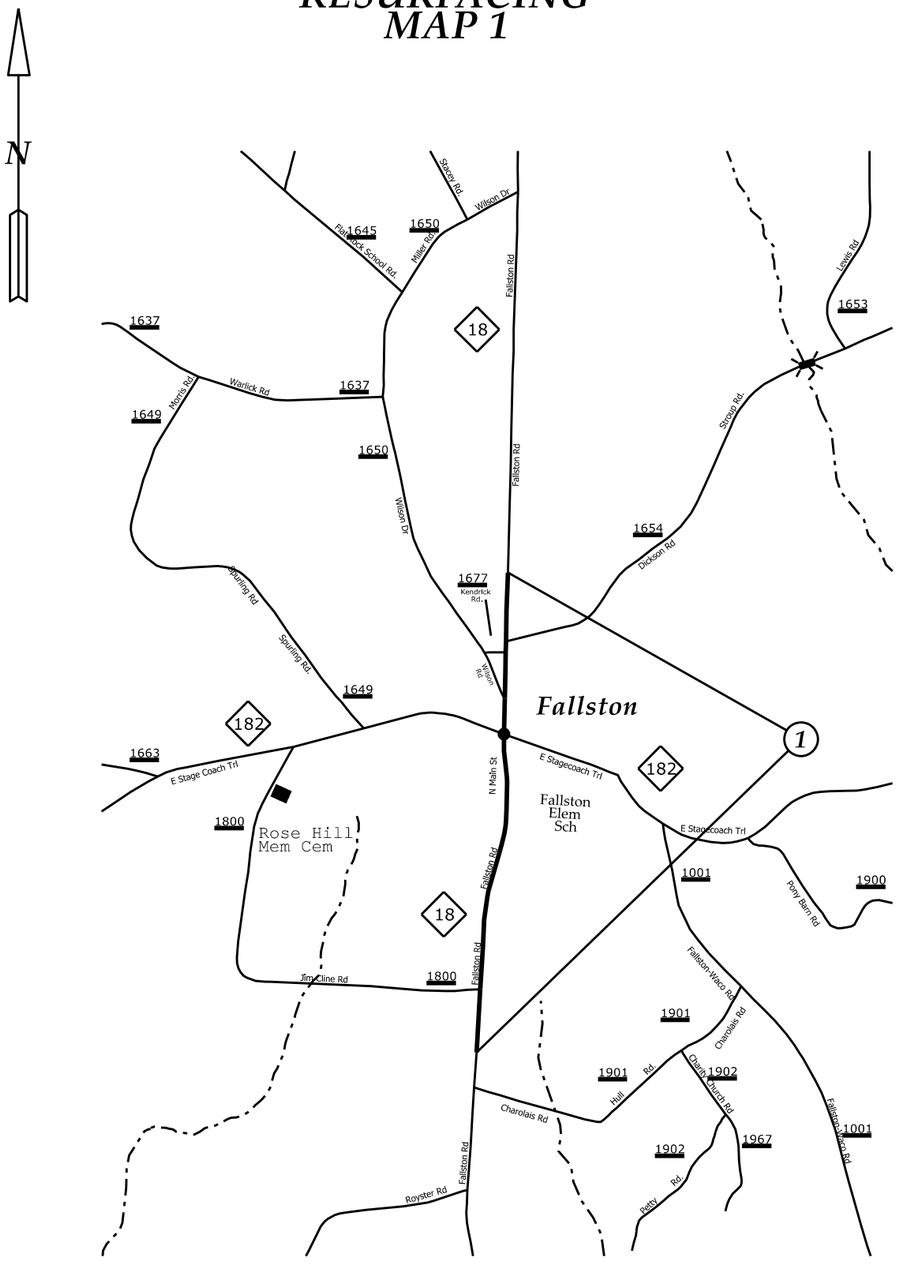
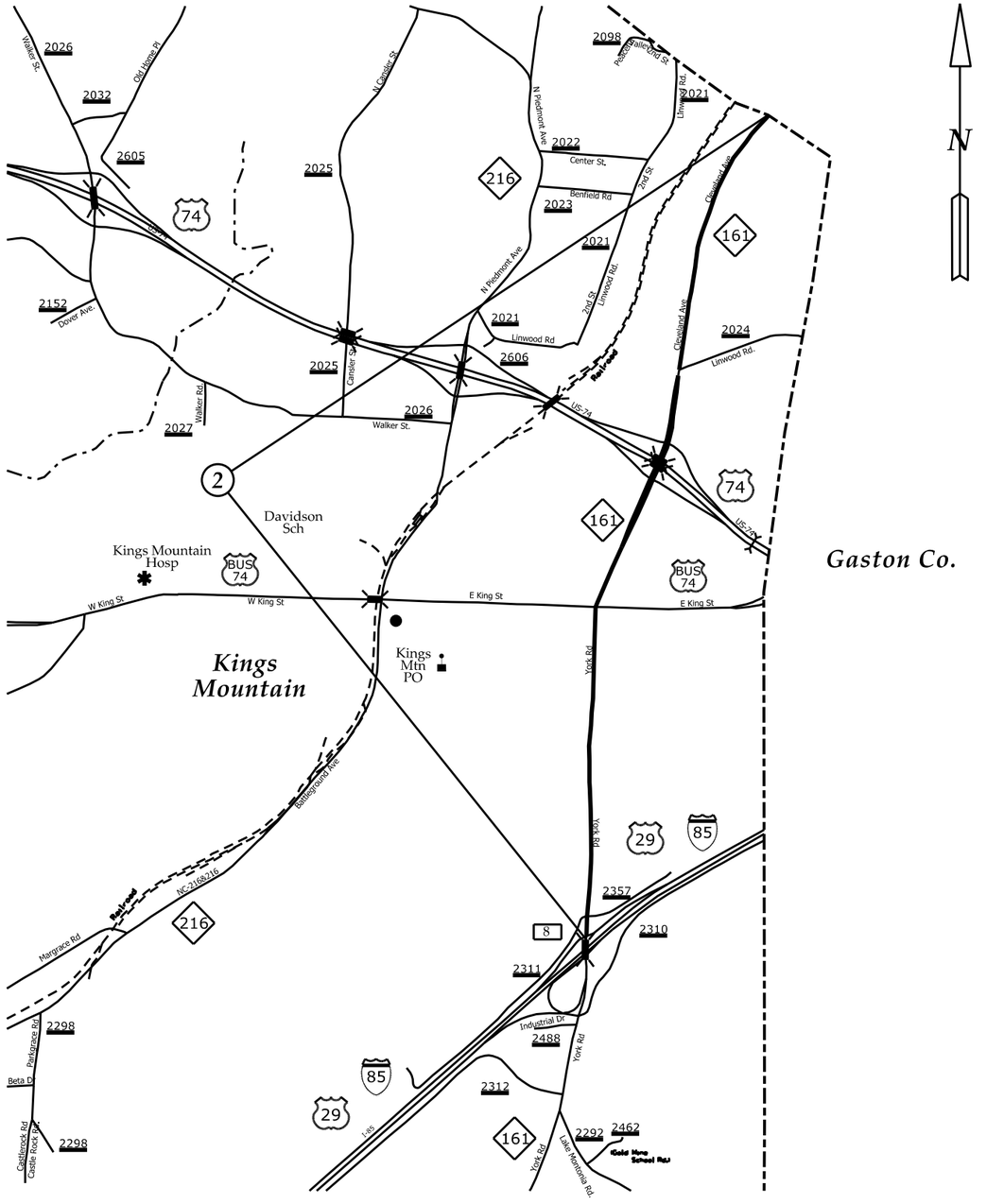
CLEVELAND CO.
RESURFACING
MAP 1



No Scale

CLEVELAND CO.
RESURFACING
MAP 2

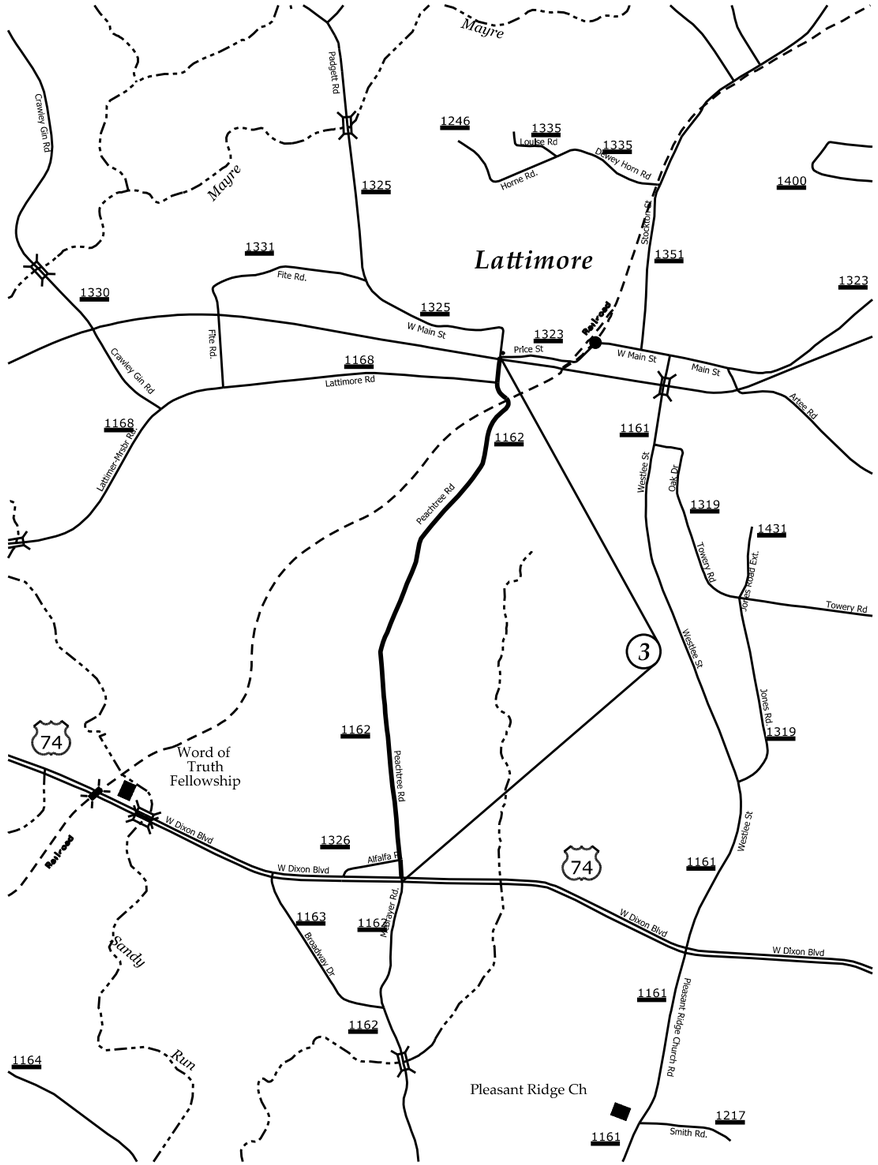
WBS Number	Sheet No.
2026CPT.12.03.10231 etc	1



No Scale

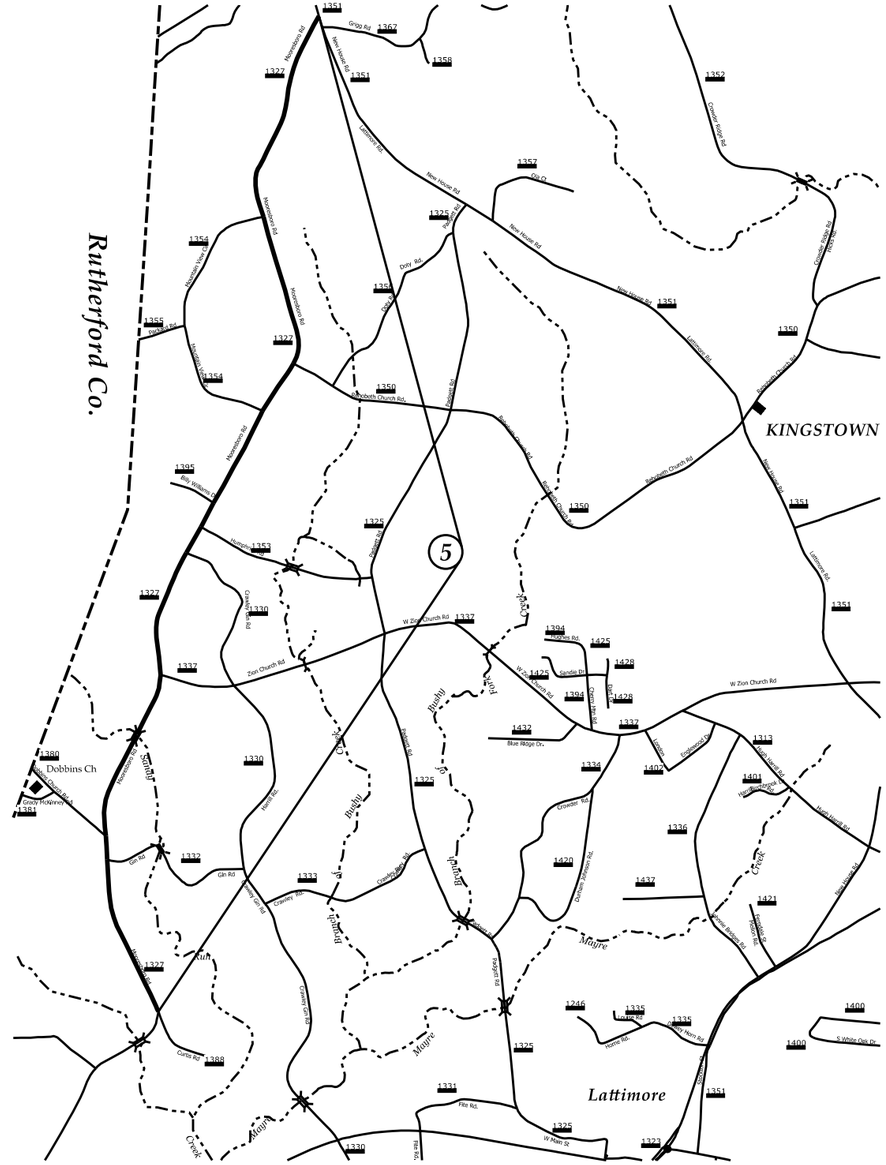
WBS Number	Sheet No.
2026CPT.12.03.10231 etc	2

CLEVELAND CO.
RESURFACING
MAP 3



No Scale

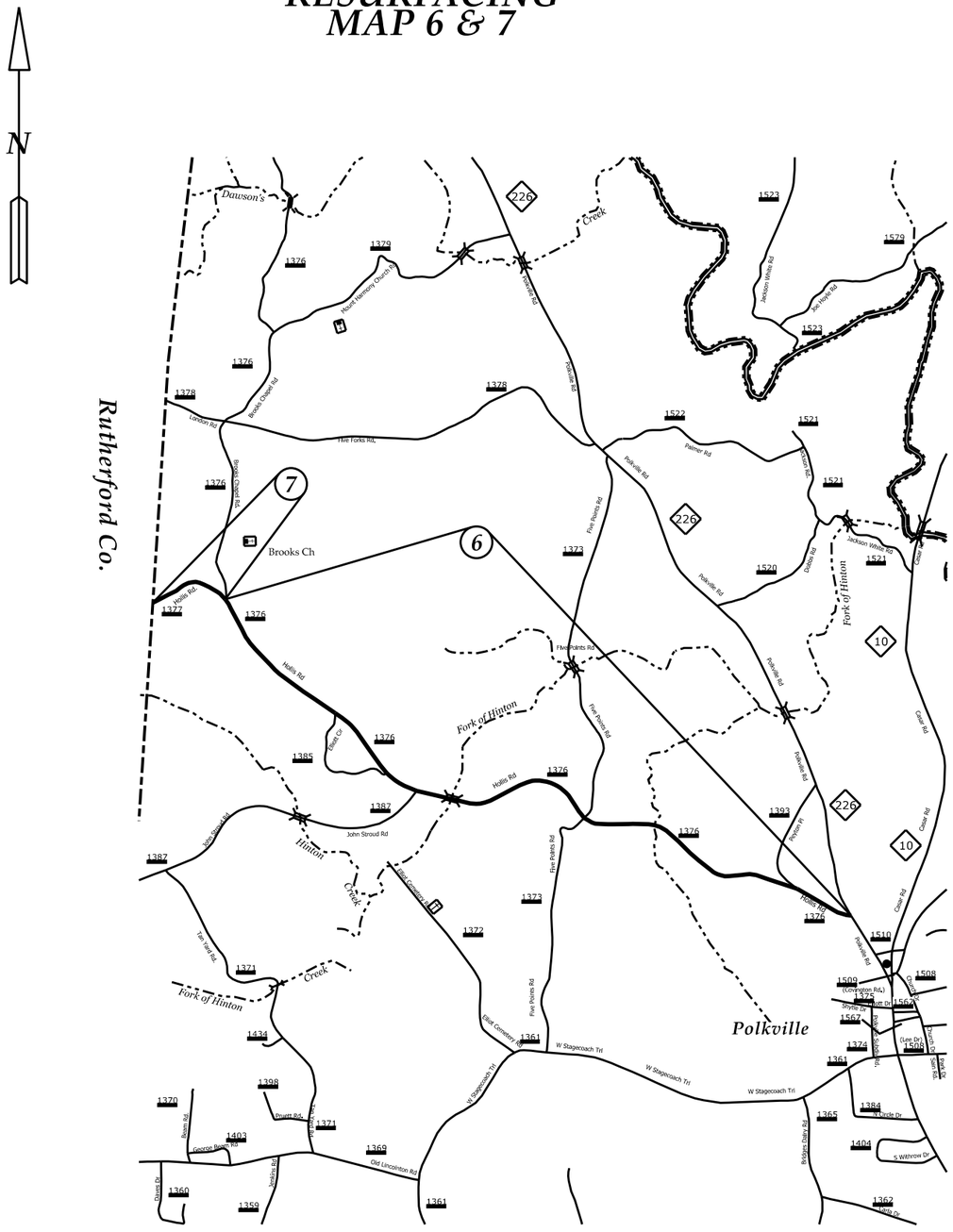
CLEVELAND CO.
RESURFACING
MAP 5



No Scale

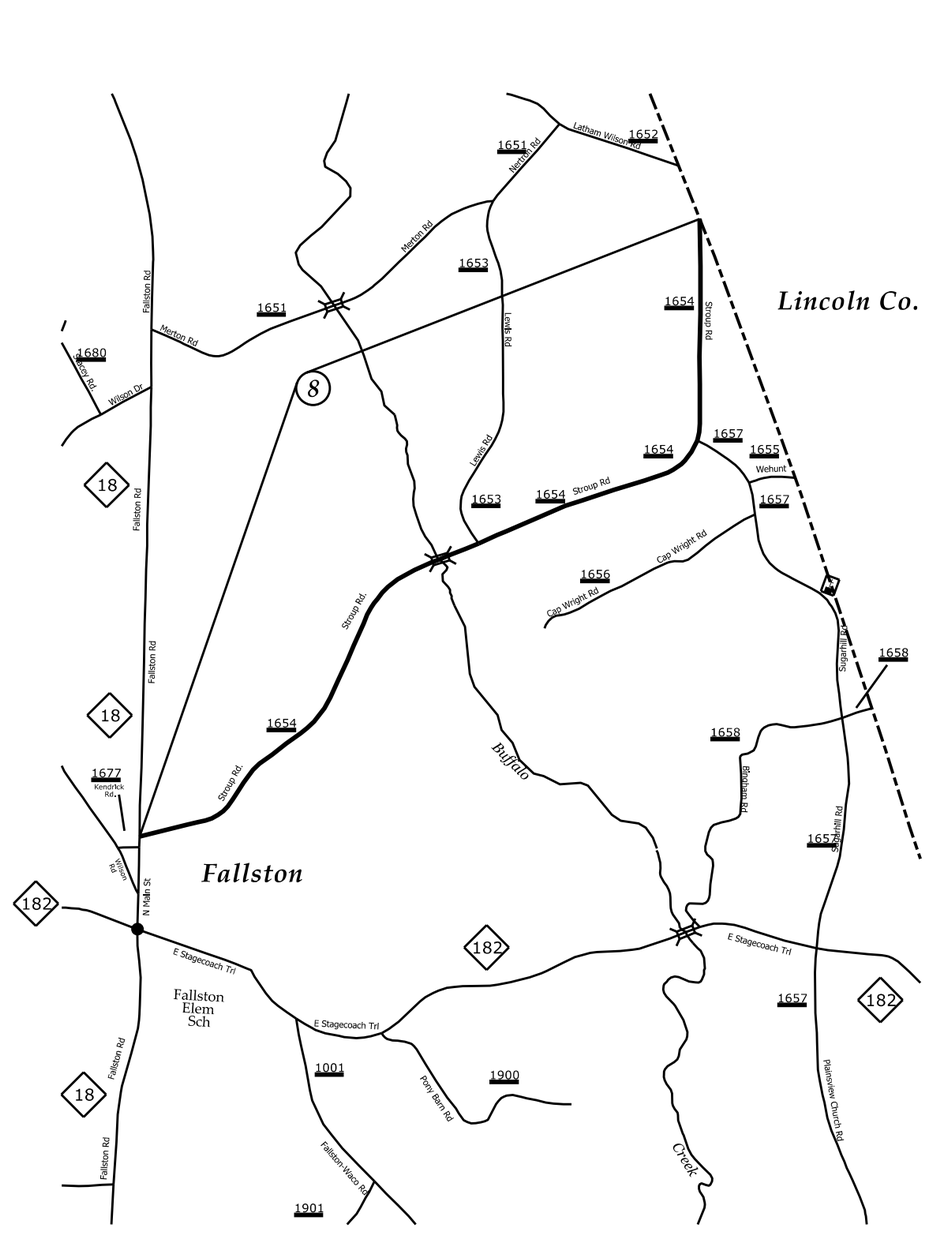
WBS Number	Sheet No.
2026CPT.12.03.10231 etc	3

CLEVELAND CO.
RESURFACING
MAP 6 & 7



No Scale

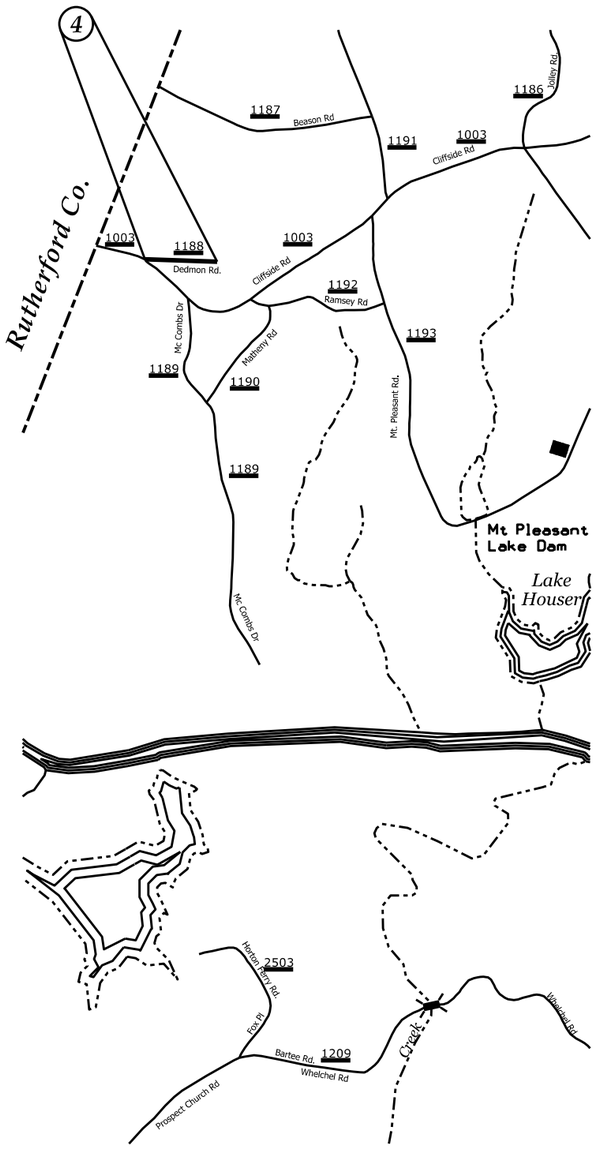
CLEVELAND CO.
RESURFACING
MAP 8



No Scale

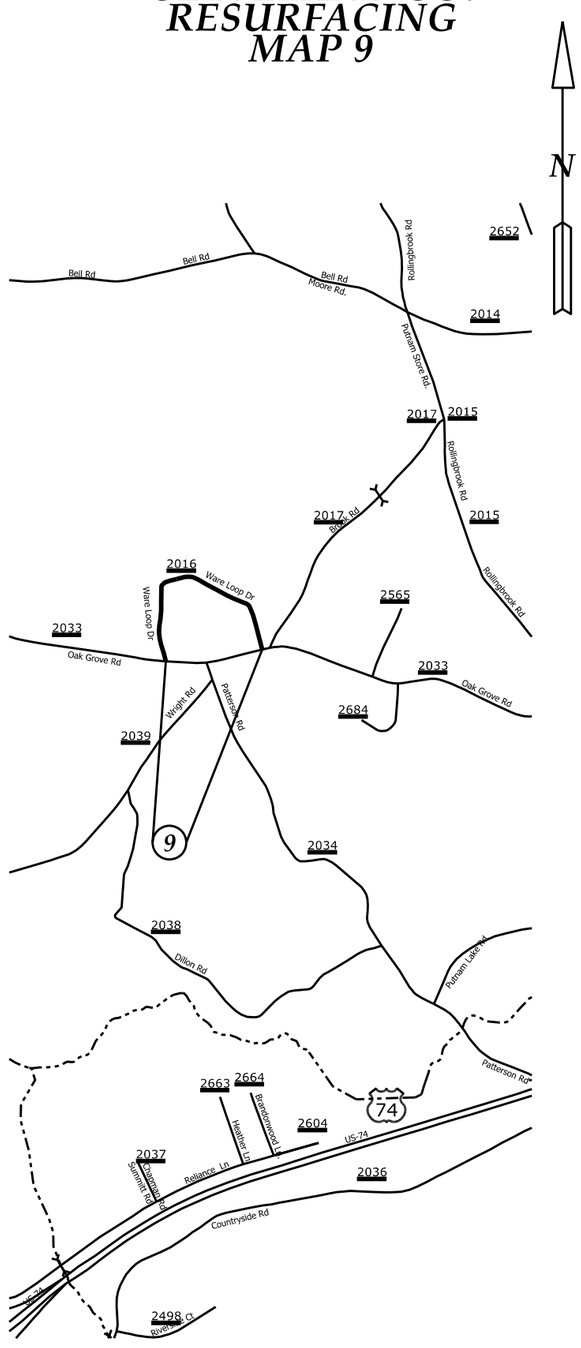
WBS Number	Sheet No.
2026CPT.12.03.10231 etc	4

CLEVELAND CO. RESURFACING MAP 4



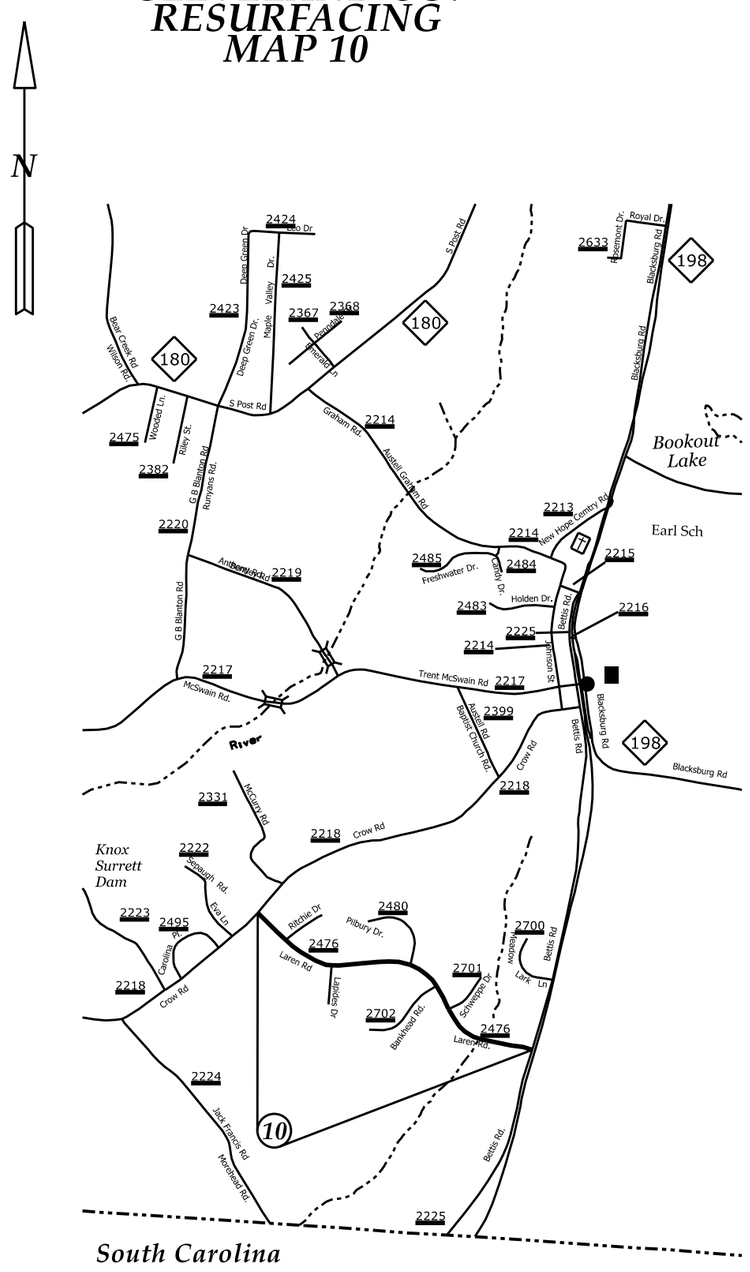
No Scale

CLEVELAND CO. RESURFACING MAP 9



No Scale

CLEVELAND CO. RESURFACING MAP 10



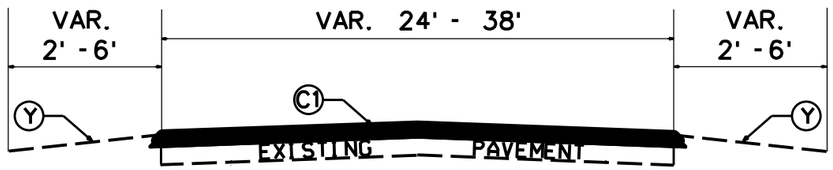
No Scale

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
CLEV COUNTY 2026	5	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
2026CPT.12.03.10231		

PAVEMENT SCHEDULE

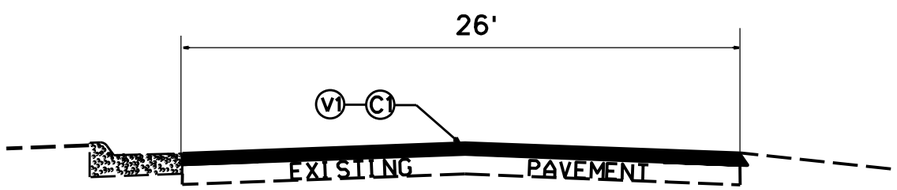
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	PROP. APPROX. 3" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E2	PROP. APPROX. 8" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LIFTS.
V1	MILL ASPHALT PAVEMENT APPROX. 1-1/2" AS DIRECTED BY ENGINEER
V2	MILL ASPHALT PAVEMENT APPROX. 4-1/2" AS DIRECTED BY ENGINEER
Y	SHOULDER RECONSTRUCTION
Z	INCIDENTAL MILLING AS DIRECTED BY THE ENGINEER.

NOTES:
1. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
2. MILL BRIDGE APPROACHES & RXR APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.
3. MILL INTO GUTTER LINE WHERE SHOWN AND AS DIRECTED.
4. MAINTAIN PROPER CROWN FOR DRAINAGE OF THE ROAD SURFACE.



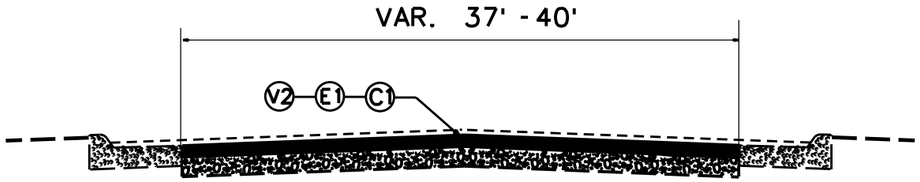
TYPICAL SECTION NO. 1
(MAPS 1, 2)

** Map 1 Surface Course will contain Fiber Reinforcement.



TYPICAL SECTION NO. 2
(MAP 1)

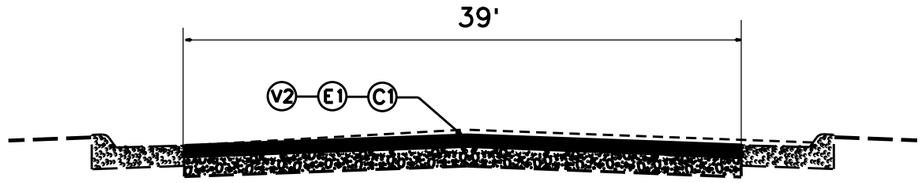
** Map 1 Surface Course will contain Fiber Reinforcement.



TYPICAL SECTION NO. 3
(MAP 1)

** Additional 1.5" milling may be required in some areas as directed.

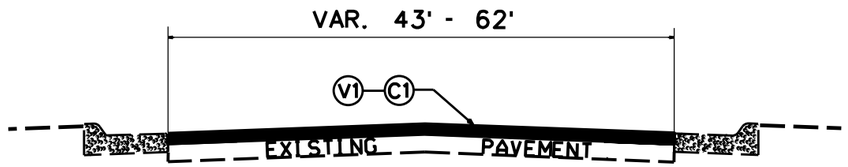
** Map 1 will contain Fiber Reinforcement for Base & Surface Courses.



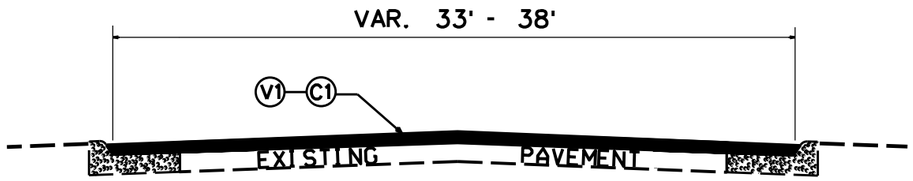
TYPICAL SECTION NO. 4
(MAP 1)

** Additional 1.5" milling may be required in some areas as directed.

** Map 1 will contain Fiber Reinforcement for Base & Surface Courses..



TYPICAL SECTION NO. 5
(MAP 2)



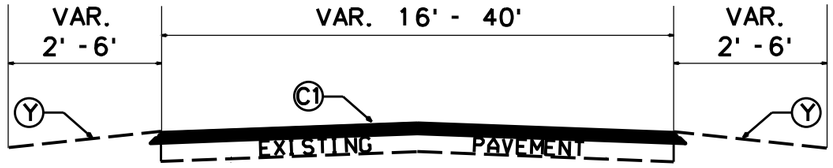
TYPICAL SECTION NO. 6
(MAP 2)

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
CLEV COUNTY 2026	6	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
2026CPT.12.03.10231		

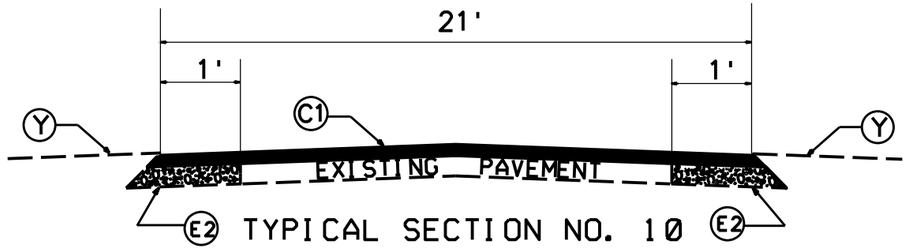
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	PROP. APPROX. 3" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E2	PROP. APPROX. 8" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LIFTS.
V1	MILL ASPHALT PAVEMENT APPROX. 1-1/2" AS DIRECTED BY ENGINEER
V2	MILL ASPHALT PAVEMENT APPROX. 4-1/2" AS DIRECTED BY ENGINEER
Y	SHOULDER RECONSTRUCTION
Z	INCIDENTAL MILLING AS DIRECTED BY THE ENGINEER.

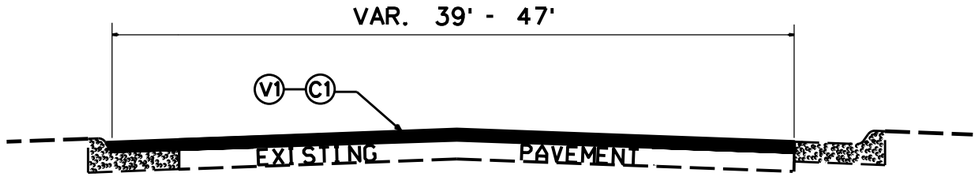
NOTES:
1. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
2. MILL BRIDGE APPROACHES & RXR APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.
3. MILL INTO GUTTER LINE WHERE SHOWN AND AS DIRECTED.
4. MAINTAIN PROPER CROWN FOR DRAINAGE OF THE ROAD SURFACE.



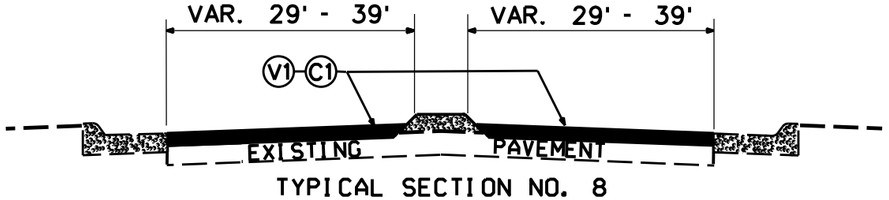
TYPICAL SECTION NO. 9
(MAPS 3, 4, 8, 9, 10)



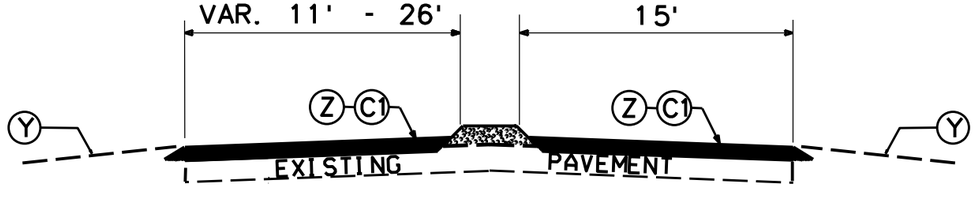
TYPICAL SECTION NO. 10
(MAPS 5, 6, 7)



TYPICAL SECTION NO. 7
(MAP 2)

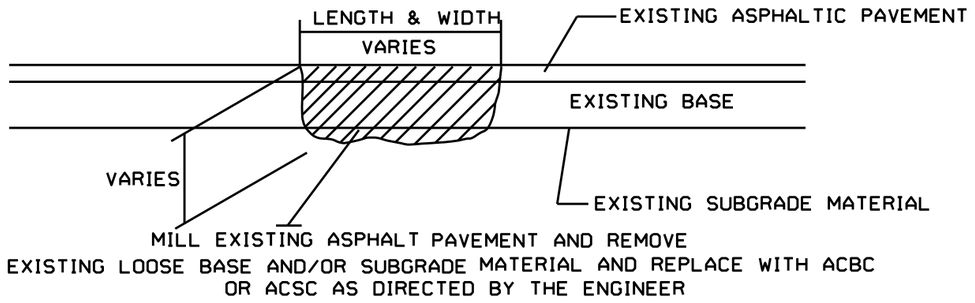


TYPICAL SECTION NO. 8
(MAP 2)



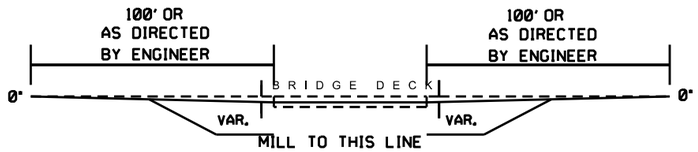
TYPICAL SECTION NO. 11
(MAP 3)

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
CLEV COUNTY 2026	7	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
2026CPT.12.03.10231		

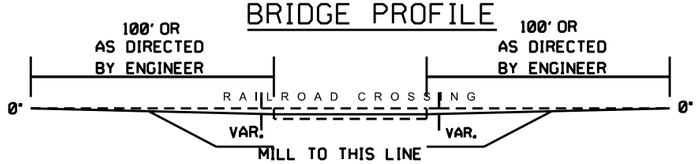


PATCHING EXISTING PAVEMENT

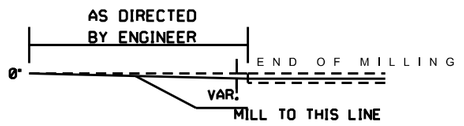
INCIDENTAL MILLING DETAILS



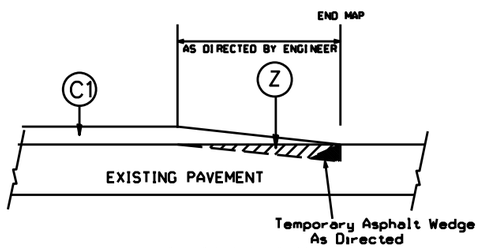
BRIDGE PROFILE



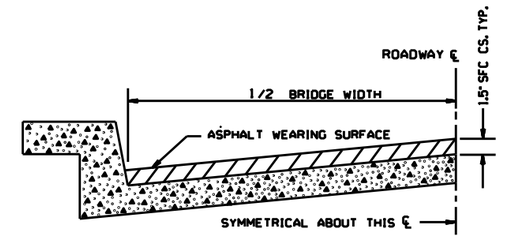
RAILROAD PROFILE



END OF MILLING PROFILE



TIE-IN MILLING DETAIL



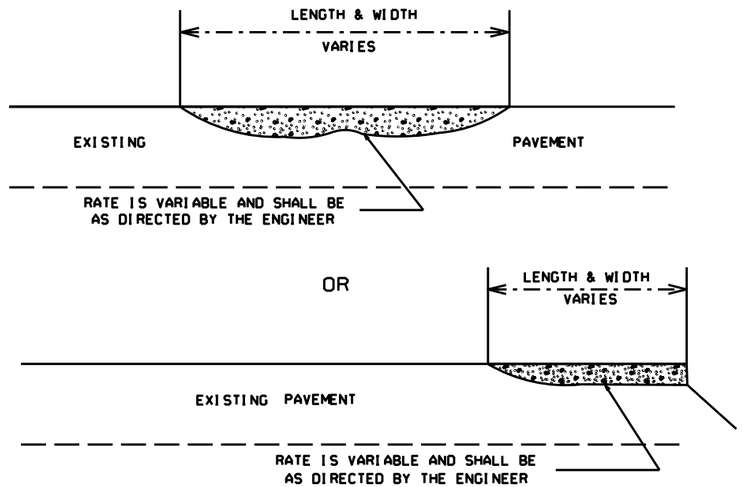
BRIDGE HALF TYPICAL SECTION

FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN.

THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. A THICKNESS OF NOT LESS THAN 1.00" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1.5" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.

NOTES

BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.



ASPHALT CONCRETE SURFACE COURSE
TYPE S9.5C (LEVELING COURSE)

NOTES:
1. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
2. MILL BRIDGE APPROACHES & RXR APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.
3. MILL INTO GUTTER LINE WHERE SHOWN AND AS DIRECTED.
4. MAINTAIN PROPER CROWN FOR DRAINAGE OF THE ROAD SURFACE.

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
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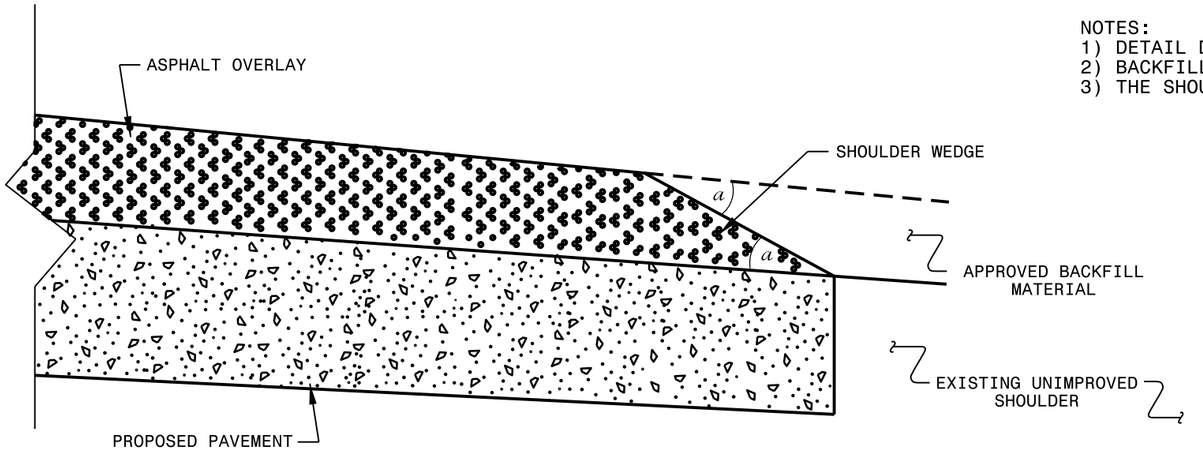
V1	MILL ASPHALT PAVEMENT APPROX. 1-1/2" AS DIRECTED BY ENGINEER
V2	MILL ASPHALT PAVEMENT APPROX. 4-1/2" AS DIRECTED BY ENGINEER
Y	SHOULDER RECONSTRUCTION
Z	INCIDENTAL MILLING AS DIRECTED BY THE ENGINEER.

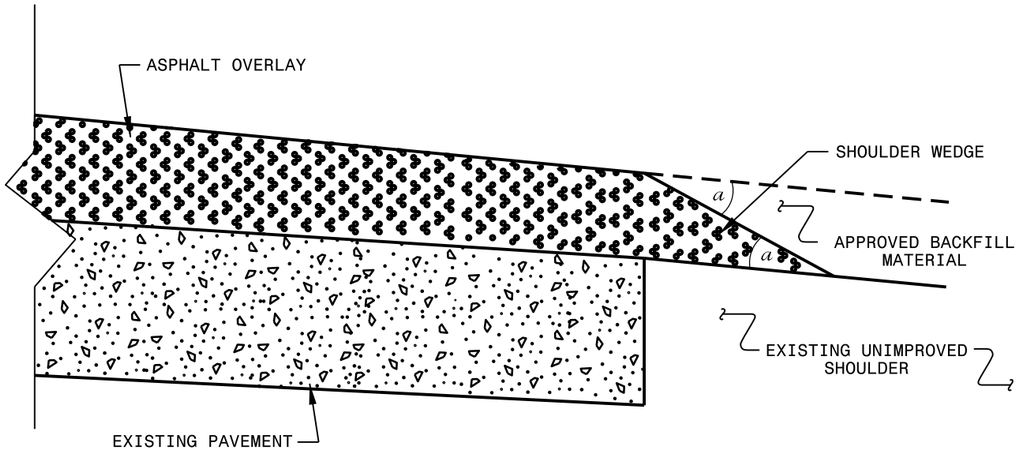
PROJECT REFERENCE NO.	SHEET NO.
2026CPT.12.03.10231 etc	8



NOTES:
1) DETAIL DOES NOT APPLY TO OGAFC 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.

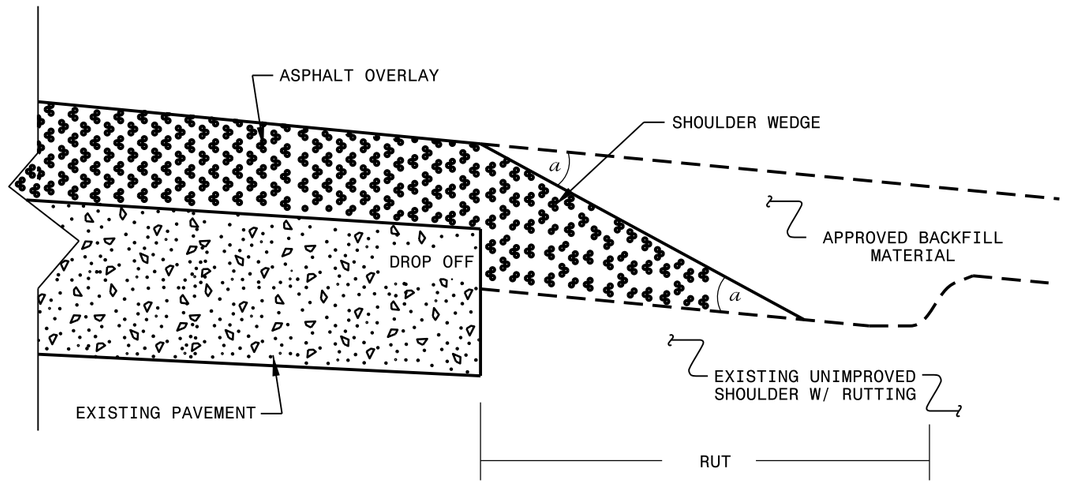
SHOULDER WEDGE DETAIL

(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°

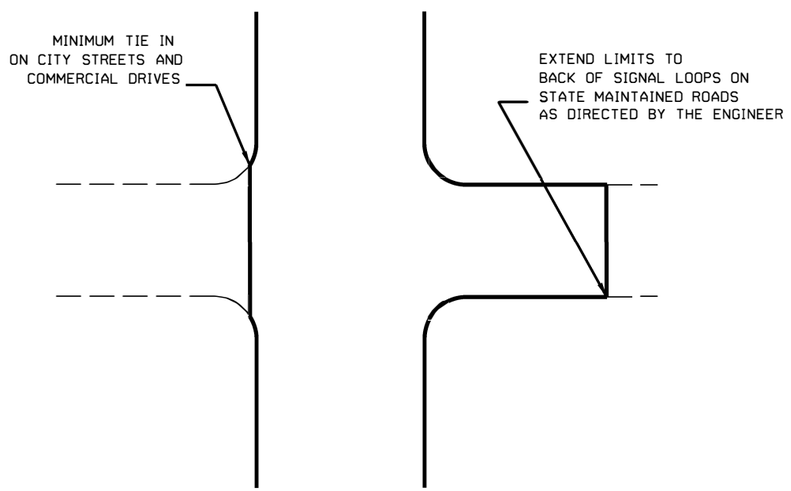
CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SHOULDER WEDGE DETAILS

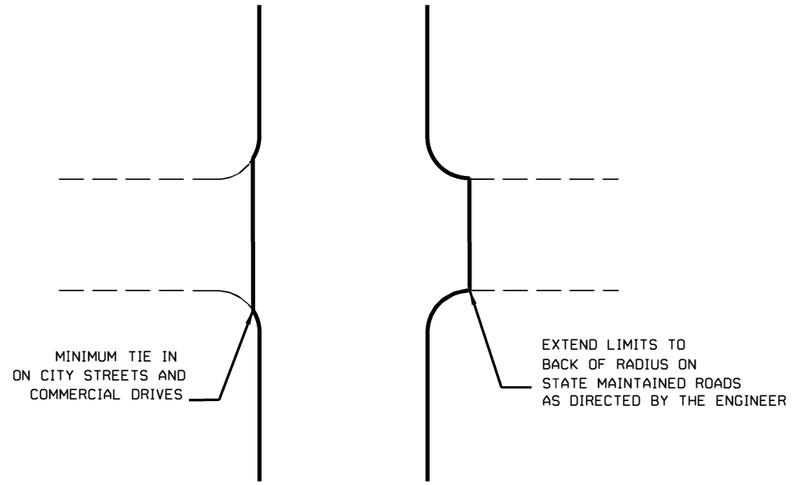
ORIGINAL BY:	T.SPELL	DATE:	7-19-11
MODIFIED BY:		DATE:	10/16/12
CHECKED BY:		DATE:	
FILE SPEC.:	s:usr/details/stand/shoulderwedgedetail.dgn		

$$$$$$SYSTIME$$$$$
$$$$$$USERNAME$$$$$DGN$$$$$$$$$$$$$$$$$$$$

PROJECT REFERENCE NO.	SHEET NO.
2026CPT.12.03.10231 etc	9



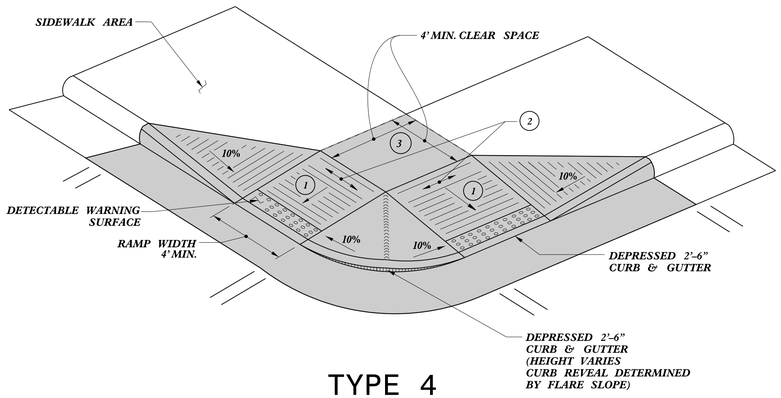
TYPICAL DETAIL OF PROJECT LIMITS AT
SIGNALIZED Y LINES



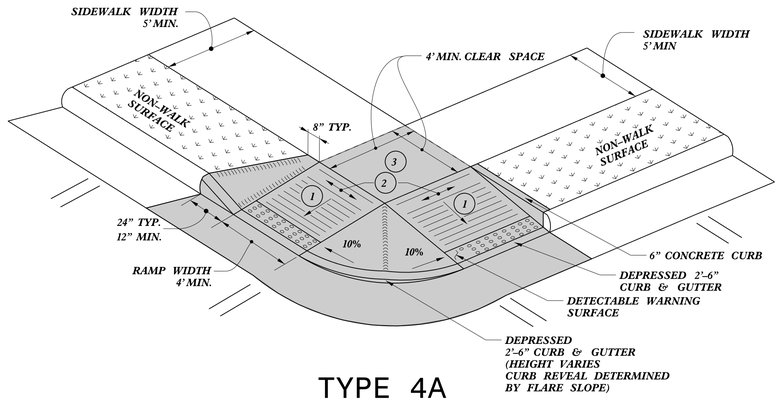
TYPICAL DETAIL OF PROJECT LIMITS AT
UNSIGNALIZED Y LINES

ADDITIONAL INTERSECTIONS (NON-TYPICAL)		
Extend paving limits to back of radius or loop on the following intersections:		
MAP#	STREET NAME	COMMENTS

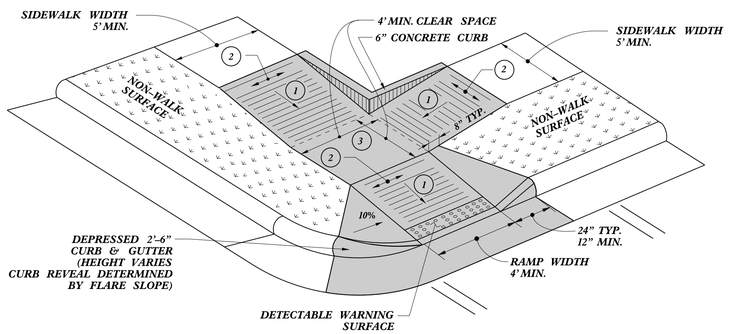
PROJECT REFERENCE NO.	SHEET NO.
2026CPT.12.03.10231 etc	10



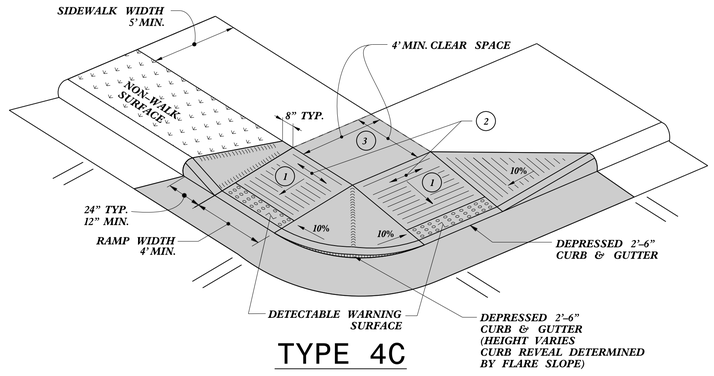
TYPE 4



TYPE 4A



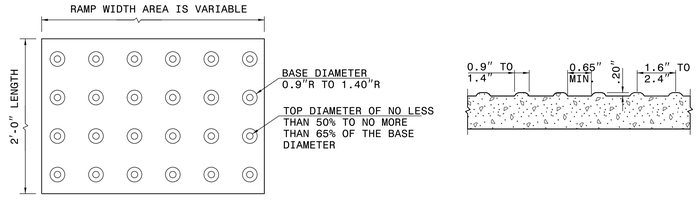
TYPE 4B



TYPE 4C

NOTES:
DETECTABLE WARNING SURFACE SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.

DETECTABLE WARNING SURFACE SHALL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



DETECTABLE WARNING SURFACE

1. *8.33% (12:1) MAX RAMP SLOPE*
2. *CROSS SLOPE: 2.00%*
3. *MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00%.*

PAY LIMITS FOR 1 OR 2 CURB RAMPS (CALCULATE BASED ON NUMBER OF SETS OF DETECTABLE WARNING SURFACES

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

ROADWAY DETAIL DRAWING FOR

CURB RAMP

SHARED LANDING

SHEET 10 OF 13

848D06

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

SEE TITLE BLOCK

ORIGINAL BY: S.CALHOUN DATE: 12-22-2023
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC.: special details\nmhackler\848D0610.dgn

SUMMARY OF CURB RAMP QUANTITIES

Proj. #	2026CPT.12.03.10231 etc
Sheet #	11

WBS No.	Division	County	Major Route	Minor Route	Retrofit Existing Curb Ramp (EA)	Concrete Curb Ramp (EA)	Remove and Replace Concrete Curb Ramp (EA)	Quadrant (NE,SE,NW, SW)	Alternate Replacement Type
2026CPT.12.03.10231	12	Cleveland	NC 161 York Rd	Innovation Dr.	1			SE	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 York Rd	Floyd St.	1			SE	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 BUS	1			NW	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	E Ridge St			1	SW	Type 2A
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	S. YMCA Driveway Entrance			1	SW	Type 1
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	S. YMCA Driveway Entrance	1			NW	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	N. YMCA Driveway Entrance	2			SW	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	N. YMCA Driveway Entrance	2			NW	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Bojangles Driveway Entrance			1	SE	Type 1
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Bojangles Driveway Entrance			1	NE	Type 1
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Bojangles Driveway Entrance			1	SW	Type 1
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Bojangles Driveway Entrance			1	NW	Type 1
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Battle Forest Apartments DW	2			SE	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Battle Forest Apartments DW	1			NE	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Branch St.	2			SW	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Branch St.			1	NW	Type 4C
Page 1 Total					**13**	**0**	**7**		

SUMMARY OF CURB RAMP QUANTITIES

Proj. #	2026CPT.12.03.10231 etc
Sheet #	12

WBS No.	Division	County	Major Route	Minor Route	Retrofit Existing Curb Ramp (EA)	Concrete Curb Ramp (EA)	Remove and Replace Concrete Curb Ramp (EA)	Quadrant (NE,SE,NW, SW)	Alternate Replacement Type
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 E Off-Ramp to NC 161			1	SW	Type 2A Modified
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 E Off-Ramp to NC 161	1			NW	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 E Off-Ramp to NC 161			1	W	Type 7
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 E On-Ramp from NC 161	1			SE	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 E On-Ramp from NC 161	1			NE	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 W Off-Ramp to NC 161	1			SE	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 W Off-Ramp to NC 161			1	E	Type 7
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 W Off-Ramp to NC 161	1			NE	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 W On-Ramp from NC 161	1			SW	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	US 74 W On-Ramp from NC 161	1			NW	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	East Elementary Driveway Entr			1	SW	Type 4A
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	East Elementary Driveway Entr			1	NW	Type 4A
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Woodside Dr.	2			SW	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Woodside Dr.			1	NW	Type 2A
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Woodside Dr.	2			SE	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Woodside Dr.	1			NE	Retrofit Dome
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Linwood Dr.			1	SW	Type 2A Modified
2026CPT.12.03.10231	12	Cleveland	NC 161 Cleveland Ave.	Linwood Dr.			1	SW	Type 2A Modified
Page 2 Total					**12**	**0**	**7**		
Project Total					**25**	**0**	**14**		

PROJECT NO.	SHEET NO.	TOTAL NO.
2026CPT.12.03.10231	13	
2026CPT.12.03.20231		

SUMMARY OF QUANTITIES

												2762000000-E	1260000000-E	1220000000-E	1245000000-E	1297000000-E		1330000000-E	1491000000-E	1523000000-E	1524000000-E	1575000000-E	1704000000-E	2612300000-N	2612500000-N	2800000000-N	2815000000-N	2830000000-N	2845000000-N	2846000000-N	5255000000-N	7324000000-N	7444000000-E	7456100000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	FIBER REINFORCEMENT OF ASPHALT	AGGREGATE SHOULDER BORROW	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	4.5" MILLING	1½" MILLING	INCIDENTAL MILLING	BASE COURSE, B25.0C	SURFACE COURSE, S9.5C	LEVELING COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	RETROFIT EXISTING CONCRETE CURB RAMPS	REMOVE AND REPLACE CONCRETE CURB RAMPS	ADJ. OF CATCH BASIN	ADJ. OF DROP INLET	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX	ADJUSTMENT OF OVERSIZE MANHOLE	PORTABLE LIGHTING	JUNCTION BOX (STANDARD SIZE)	INDUCTIVE LOOP SAWCUT	LEAD-IN CABLE (14-2)
								MI	FT			LB	TON	TONS	SMI	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	EA	EA	EA	EA	EA	EA	EA	LS	EA	LF	LF
					1	2		0.20	VAR. 24-38																									
					2	2		0.37	26																									
				528' S OF SR-1800 / JIM CLINE RD TO	3	3		0.58	VAR. 37-40																									
2026CPT.12.03.10231	Cleveland	1	NC-18	660' N OF SR-1654 / DICKSON RD	4	3	MU	0.06	39	18.515	19.725	4988	158	66	0.90	16,108	6,210	780	2,755	2,233	140	296	672			1	2	4	10		*	1	500	200
TOTAL FOR MAP NO. 1								**1.21**				**4988**	**158**	**66**	**0.90**	**16,108**	**6,210**	**780**	**2,755**	**2,233**	**140**	**296**	**672**			**1**	**2**	**4**	**10**			**1**	**500**	**200**
					1	2		0.88	24																									
					5	VAR. 3-4		0.7	VAR. 43-62																									
					6	3		0.78	VAR.33-38																									
					7	3		0.06	VAR. 39-47																									
2026CPT.12.03.10231	Cleveland	2	NC-161	FROM I-85 TO GASTON COUNTY LINE	8	VAR. 4-5	MU	0.21	VAR. 58-68	4.77	7.37		308	210	1.76		57,334	60		5,973	299	407	777	25	14		4	18	15	2	*	2	4,000	1,600
TOTAL FOR MAP NO. 2								**2.6**				**0**	**308**	**210**	**1.76**		**57,334**	**60**		**5,973**	**299**	**407**	**777**	**25**	**14**		**4**	**18**	**15**	**2**		**2**	**4,000**	**1,600**
TOTAL FOR PROJ NO. 2026CPT.12.03.10231								**3.81**				**4988**	**466**	**276**	**2.66**	**16,108**	**63,544**	**840**	**2,755**	**8,206**	**439**	**703**	**1,449**	**25**	**14**	**1**	**6**	**22**	**25**	**2**		**3**	**4,500**	**1,800**
2026CPT.12.03.20231	Cleveland	3	SR-1162 / PEACHTREE RD	FROM SR-1323 / PRICE ST TO US-74 / W DIXON BLVD	9	2		1.47																										
					11	2	2WU	0.12	VAR. 20-40	0	1.59		557	65	3.18			4,500		2,228	115	153	301											
TOTAL FOR MAP NO. 3								**1.59**					**557**	**65**	**3.18**			**4,500**		**2,228**	**115**	**153**	**301**											
2026CPT.12.03.20231	Cleveland	4	SR-1188 / DEDMON RD	FROM SR-1003 / CLIFFSIDE RD TO DEAD END	9	2	2WU	0.2	16	0	0.2			30						175	58	16	49											
TOTAL FOR MAP NO. 4								**0.2**						**30**						**175**	**58**	**16**	**49**											
2026CPT.12.03.20231	Cleveland	5	SR-1327 / MOORESBORO RD	FROM SR-1388 (PVMT JOINT) / CURTIS RD TO SR-1351 / NEW HOUSE RD	10	2	2WU	4.61	21	1.65	6.26		1,614	170	9.22			420	2,710	5,279	637	516	929											
TOTAL FOR MAP NO. 5								**4.61**					**1,614**	**170**	**9.22**			**420**	**2,710**	**5,279**	**637**	**516**	**929**											
2026CPT.12.03.20231	Cleveland	6	SR-1376 / HOLLIS RD	FROM SR-1377 TO NC-226 / POLKVILLE RD	10	2	2WU	3.1	21	3.03	6.13		1,085	110	6.20			1,250	1,822	3,550	428	343	555											
TOTAL FOR MAP NO. 6								**3.1**					**1,085**	**110**	**6.20**			**1,250**	**1,822**	**3,550**	**428**	**343**	**555**											
2026CPT.12.03.20231	Cleveland	7	SR-1377 / HOLLIS RD	FROM SR-1376 TO RUTHERFORD CO LINE	10	2	2WU	0.34	21	0	0.34		119	7	0.68			50	37	389	28	27	20											
TOTAL FOR MAP NO. 7								**0.34**					**119**	**7**	**0.68**			**50**	**37**	**389**	**28**	**27**	**20**											
2026CPT.12.03.20231	Cleveland	8	SR-1654 / STROUP RD	FROM HULL RD (LINCOLN CO) TO NC-18 / FALLSTON RD	9	2	2WU	2.65	18	0	2.65		973	78	5.30			650		2,604	282	192	443											
TOTAL FOR MAP NO. 8								**2.65**					**973**	**78**	**5.30**			**650**		**2,604**	**282**	**192**	**443**											
2026CPT.12.03.20231	Cleveland	9	SR-2016 / WARE LOOP DR	FROM SR-2033 TO SR-2033	9	2	2WU	0.62	18	0	0.62			18				100		609	30	41	60											
TOTAL FOR MAP NO. 9								**0.62**						**18**				**100**		**609**	**30**	**41**	**60**											
2026CPT.12.03.20231	Cleveland	10	SR-2476 / LAREN RD	FROM SR-2225 / BETTIS RD TO SR-2218 / CROW RD	9	2		0.93	19	0	0.93			30				140		964	87	71	190											
TOTAL FOR MAP NO. 10								**0.93**						**30**				**140**		**964**	**87**	**71**	**190**											
TOTAL FOR PROJ NO. 2026CPT.12.03.20231												**4,348**	**508**	**24.58**				**7,110**	**4,569**	**15,798**	**1,665**	**1,359**	**2,547**											
								14.04																										
GRAND TOTAL								**17.85**				**4988**	**4,814**	**784**	**27.24**	**16,108**	**63,544**	**7,950**	**7,324**	**24,004**	**2,104**	**2,062**	**3,996**	**25**	**14**	**1**	**6**	**22**	**25**	**2**	**1**	**3**	**4,500**	**1,800**

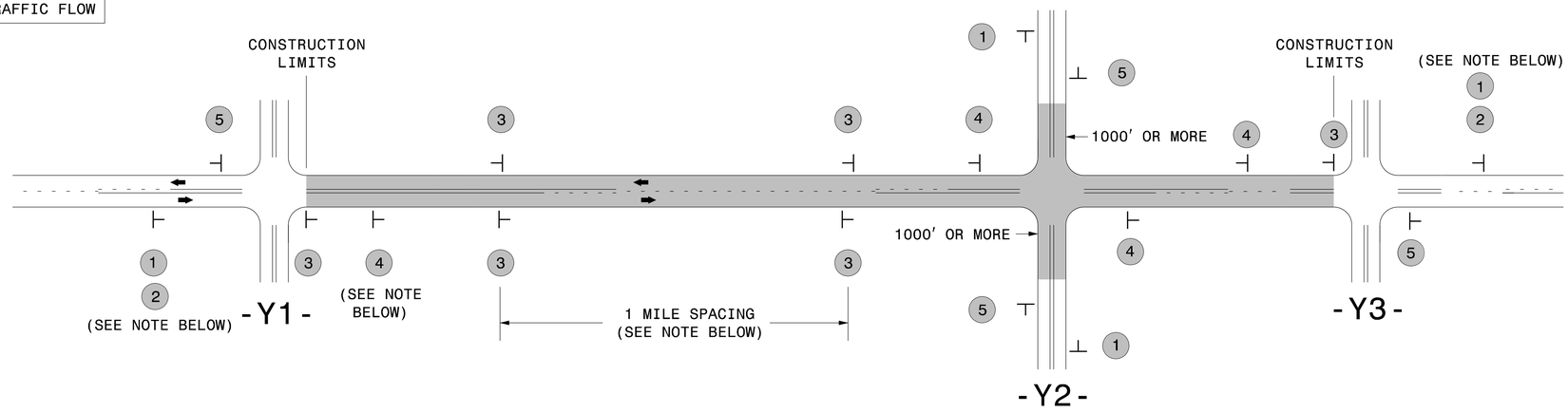
PROJECT NO.	SHEET NO.	TOTAL NO.
2026CPT.12.03.10231	14	
2026CPT.12.03.20231		

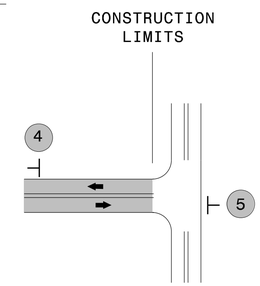
														4413000000-E	4447000000-E	4457000000-N	4685000000-E		4695000000-E		4700000000-E		4704000000-E	4709000000-E	4720000000-E			4725000000-E				4810000000-E		4835000000-E	4840000000-N	4845000000-N	4850000000-E	4905100000-N
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP			WORK ZONE ADV/GEN WARNING SIGNS	PEDESTRIAN CHANNELIZING DEVICE	TEMPORARY TRAFFIC CONTROL	4" X 90 M YELLOW THERMO	4" X 90 M WHITE THERMO	8" X 90 M YELLOW THERMO	8" X 90 M WHITE THERMO	12" X 90 M YELLOW THERMO	12" X 90 M WHITE THERMO	16" X 90 M WHITE THERMO	24" X 90 M WHITE THERMO	THERMO MSG SCHOOL 90 M	THERMO MSG ONLY 90 M	THERMO MSG RXR 90 M	THERMO LT ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR ARROW 90 M	4" YELLOW PAINT	4" WHITE PAINT	24" WHITE PAINT	PAINT MSG STOP	PAINT LT ARROW	4" LINE REMOVAL	POLYCARBONATE H-SHAPED MARKER
								MI	FT					SF	LF	LS	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	EA	EA	LF	EA
					1	2		0.20	VAR. 24-38																													
					2	2		0.37	26																													
				528' S OF SR-1800 / JIM CLINE RD TO	3	3		0.58	VAR. 37-40																													
2026CPT.12.03.10231	Cleveland	1	NC-18	660' N OF SR-1654 / DICKSON RD	4	3	MU	0.06	39	18.515	19.725			260		*	15,200	4,900	145		35			70				23	4			15,200	300	70		10		130
TOTAL FOR MAP NO. 1								**1.21**						**260**			**15,200**	**4,900**	**145**		**35**			**70**				**23**	**4**			**15,200**	**300**	**70**		**10**		**130**
					1	2		0.88	24																													
					5	VAR. 3-4		0.7	VAR. 43-62																													
					6	3		0.78	VAR. 33-38																													
					7	3		0.06	VAR. 39-47																													
2026CPT.12.03.10231	Cleveland	2	NC-161	FROM I-85 TO GASTON COUNTY LINE	8	VAR. 4-5	MU	0.21	VAR. 58-68	4.77	7.37			340	20	*	30,994	14,609	50	210		50		310	12	8		51	6	10	4	30,994	6,500	310	2	25		215
TOTAL FOR MAP NO. 2								**2.6**						**340**	**20**		**30,994**	**14,609**	**50**	**210**		**50**		**310**	**12**	**8**		**51**	**6**	**10**	**4**	**30,994**	**6,500**	**310**	**2**	**25**		**215**
								3.81						**600**	**20**		**46,194**	**19,509**	**195**	**210**	**35**	**50**		**380**	**12**	**8**		**74**	**10**	**10**	**4**	**46,194**	**6,800**	**380**	**2**	**35**		**345**
TOTAL FOR PROJ NO. 2026CPT.12.03.10231																	**65,703**		**405**		**85**			**380**	**20**			**98**				**52,994**						
					9	2		1.47																														
2026CPT.12.03.20231	Cleveland	3	SR-1162 / PEACHTREE RD	FROM SR-1323 / PRICE ST TO US-74 / W DIXON BLVD	11	2	2WU	0.12	VAR. 20-40	0	1.59			308		*					95		50	37			2	3			2	34,581	34,281				500	105
TOTAL FOR MAP NO. 3								**1.59**						**308**							**95**		**50**	**37**			**2**	**3**			**2**	**34,581**	**34,281**				**500**	**105**
2026CPT.12.03.20231	Cleveland	4	SR-1188 / DEDMON RD	FROM SR-1003 / CLIFFSIDE RD TO DEAD END	9	2	2WU	0.2	16	0	0.2			84		*																						
TOTAL FOR MAP NO. 4								**0.2**						**84**																							
2026CPT.12.03.20231	Cleveland	5	SR-1327 / MOORESBORO RD	FROM SR-1388 (PVMT JOINT) / CURTIS RD TO SR-1351 / NEW HOUSE RD	10	2	2WU	4.61	21	1.65	6.26			324		*																	70,852	99,207					
TOTAL FOR MAP NO. 5								**4.61**						**324**																	**70,852**	**99,207**					
2026CPT.12.03.20231	Cleveland	6	SR-1376 / HOLLIS RD	FROM SR-1377 TO NC-226 / POLKVILLE RD	10	2	2WU	3.1	21	3.03	6.13			244		*																	66,712	66,712					
TOTAL FOR MAP NO. 6								**3.1**						**244**																	**66,712**	**66,712**					
2026CPT.12.03.20231	Cleveland	7	SR-1377 / HOLLIS RD	FROM SR-1376 TO RUTHERFORD CO LINE	10	2	2WU	0.34	21	0	0.34			84		*																	7,317	7,317					
TOTAL FOR MAP NO. 7								**0.34**						**84**																	**7,317**	**7,317**					
2026CPT.12.03.20231	Cleveland	8	SR-1654 / STROUP RD	FROM HULL RD (LINCOLN CO) TO NC-18 / FALLSTON RD	9	2	2WU	2.65	18	0	2.65			196		*																	46,696	56,000					
TOTAL FOR MAP NO. 8								**2.65**						**196**																	**46,696**	**56,000**					
2026CPT.12.03.20231	Cleveland	9	SR-2016 / WARE LOOP DR	FROM SR-2033 TO SR-2033	9	2	2WU	0.62	18	0	0.62			84		*																	13,343						
TOTAL FOR MAP NO. 9								**0.62**						**84**																	**13,343**						
2026CPT.12.03.20231	Cleveland	10	SR-2476 / LAREN RD	FROM SR-2225 / BETTIS RD TO SR-2218 / CROW RD	9	2		0.93	19	0	0.93			83		*																	20,014	20,014					
TOTAL FOR MAP NO. 10								**0.93**						**83**																	**20,014**	**20,014**					
TOTAL FOR PROJ NO. 2026CPT.12.03.20231								**14.04**						**1,407**							**95**		**50**	**37**			**2**	**3**			**2**	**259,515**	**283,531**				**500**	**105**
																					95			**37**		**2**			**5**				**543,046**						
GRAND TOTAL								**17.85**						**2,007**	**20**	**1**	**46,194**	**19,509**	**195**	**210**	**130**	**50**	**50**	**417**	**12**	**8**	**2**	**77**	**10**	**10**	**6**	**305,709**	**290,331**	**380**	**2**	**35**	**500**	**450**
																	65,703		**405**		**180**			**417**	**22**			**103**				**596,040**						

PROJ. REFERENCE NO.	SHEET NO.
2026CPT.12.03.10231 etc	TMP-1

SIGNING FOR RESURFACING PROJECTS

LEGEND
- ⊢ STATIONARY SIGN
- ⬅ DIRECTION OF TRAFFIC FLOW





TEE INTERSECTION

MAINLINE (-L-) 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.

#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 — 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 ½ 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.

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.

-Y- LINE SIGNING

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.

W20-7 A, 48″ X 48″
PLACED 250′ IN ADVANCE OF FLAGGER.

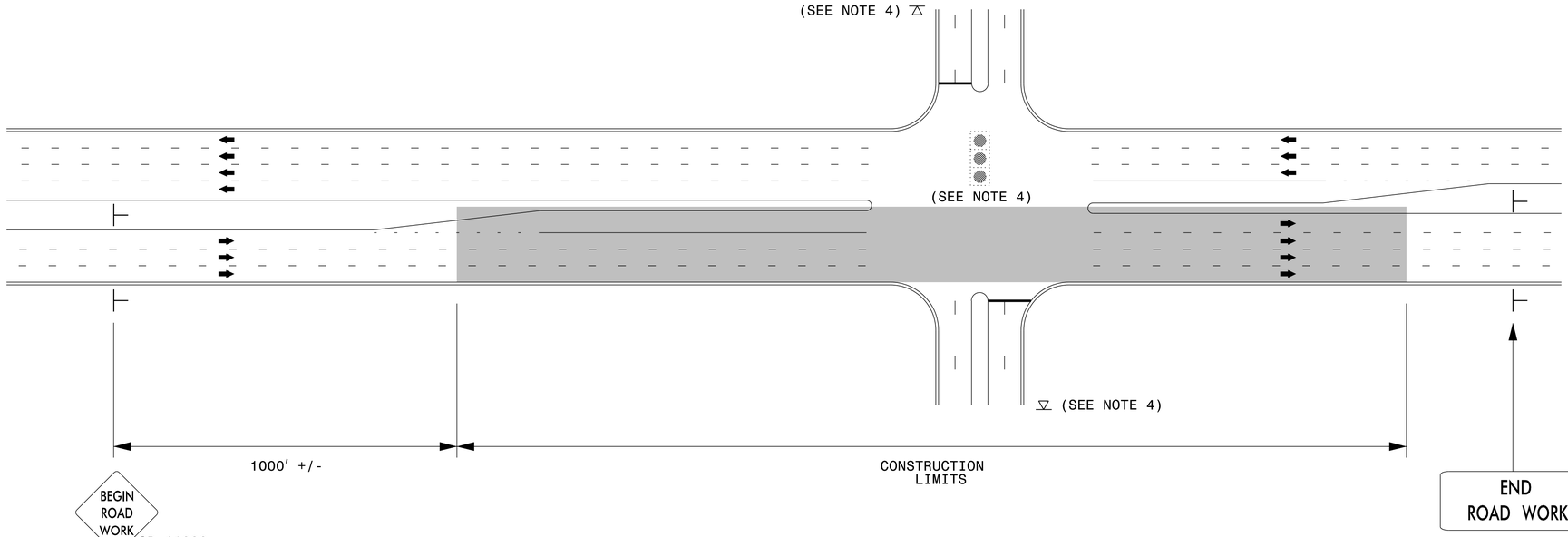
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

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

5/15/2017
SATMU\WZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing_AdvWarn_2Ln.dgn
User:kedavis

PROJ. REFERENCE NO.	SHEET NO.
2026CPT.12.03.10231 etc	TMP-2

URBAN / SUBURBAN WORKZONES



NOTES:

1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
4) 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.
5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS.THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW

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

RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES

4/8/2015
C:\Users\rmgarrett\Downloads\Resurfacing_AdvWarn_UrSu (2).dgn
User:rmgarrett

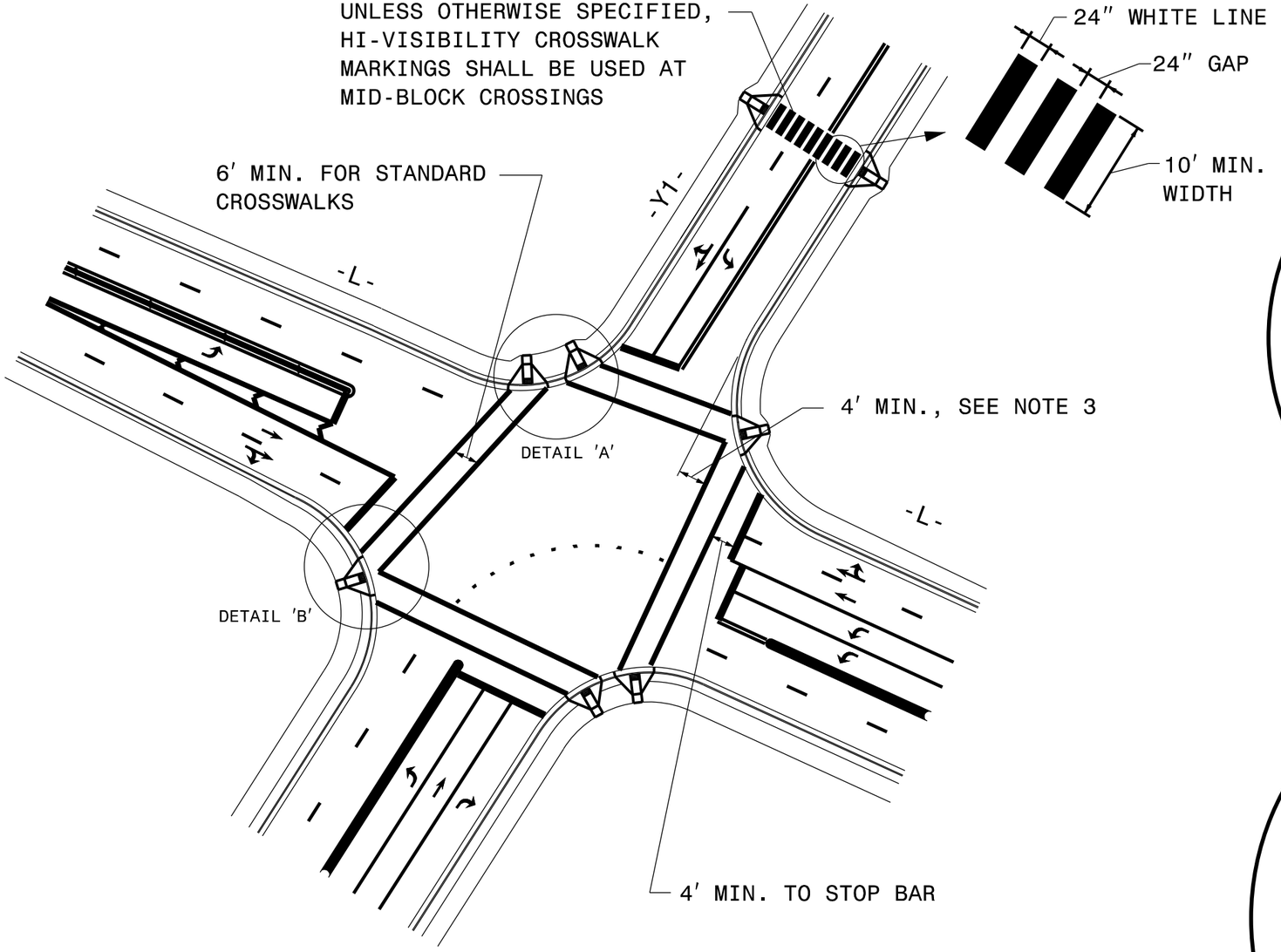
TIP NO.	SHEET NO.
2026CPT.12.03.10231etc	PMP-1

APPROVED:

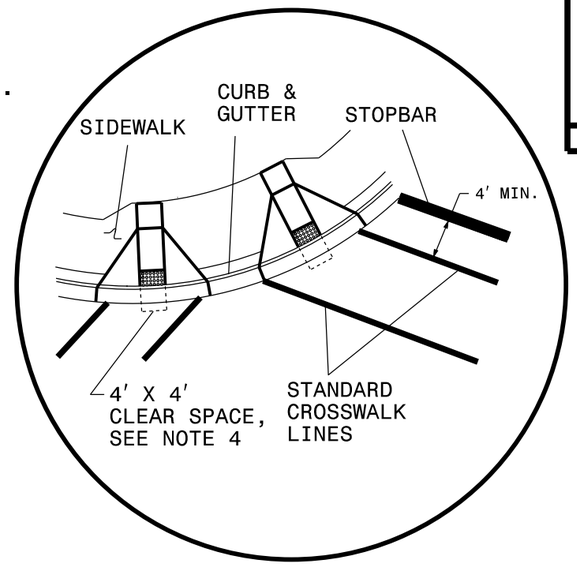
DATE:

SEAL

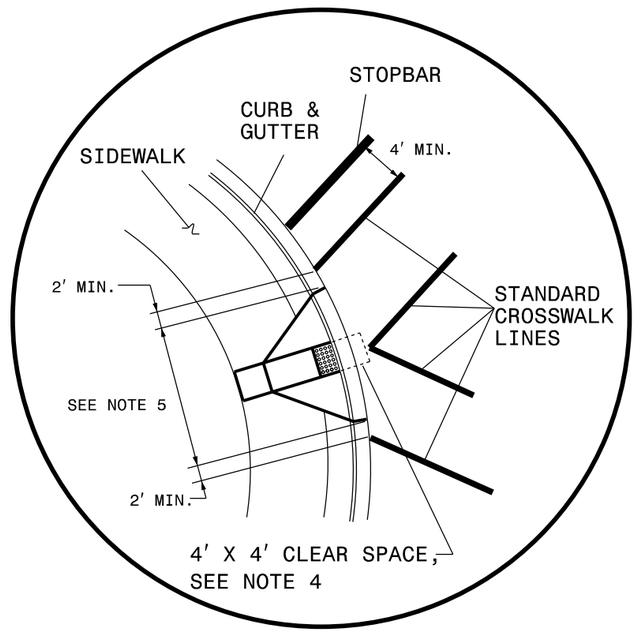
REVISIONS



GUIDANCE DETAIL FOR CROSSWALK MARKINGS



DETAIL 'A'- DUAL CURB RAMPS



DETAIL 'B'- SINGLE DIAGONAL CURB RAMP

NOTES:

1. USE THE DETAILS ABOVE AND THE FOLLOWING NOTES FOR GUIDANCE IN PLACING CROSSWALK MARKINGS NOT STATIONED ON THE DETAIL SHEETS OR WHEN FIELD ADJUSTMENTS REQUIRED MOVING STATIONED MARKINGS AS DIRECTED BY THE ENGINEER. REFER TO NCDOT ROADWAY STANDARD DRAWINGS, MUTCD AND ADA STANDARDS FOR ADDITIONAL GUIDANCE.

2. THE CROSSWALK MARKINGS SHOWN ON THE ABOVE DETAILS ARE FOR REFERENCE ONLY. ONLY INSTALL CROSSWALK MARKINGS WHERE SHOWN ON THE DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER. THE CROSSWALK MARKING TYPE, STANDARD OR HI-VISIBILITY, SHALL BE INSTALL AS SPECIFIED ON THE DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER.

3. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL IS 4′ MIN.

4. BEYOND THE BOTTOM GRADE BRAKE, A CLEAR SPACE OF 4′ X 4′ MINIMUM SHALL BE PROVIDED WITHIN THE MARKINGS.

5. SINGLE DIAGONAL CURB RAMPS WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 2 FEET LONG MINIMUM LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING, SEE DETAIL 'B'.

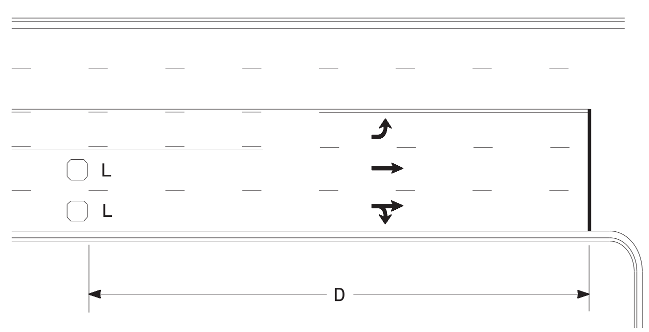
6. CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE TO THE LATEST NCDOT ROADWAY STANDARD DRAWINGS.

CROSSWALK PAVEMENT MARKING GUIDANCE DETAIL

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

8/7/13

High Speed Detection
(≥40 mph)



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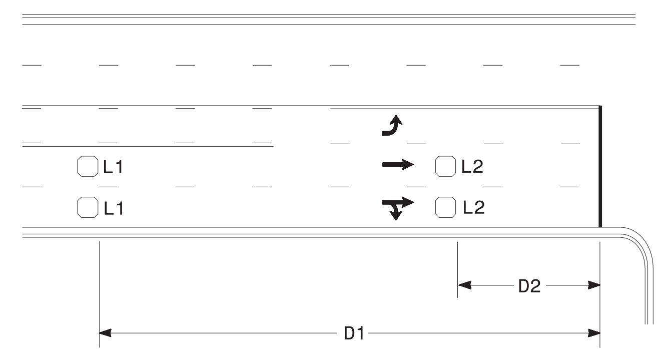


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired separately

Volume Density Operation

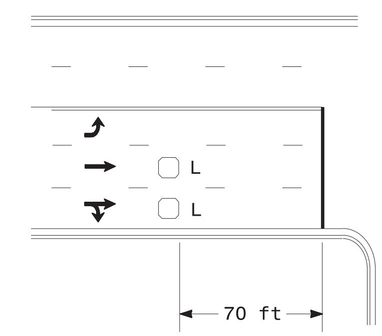
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

"Stretch" Operation

Low Speed Detection
(≤35 mph)



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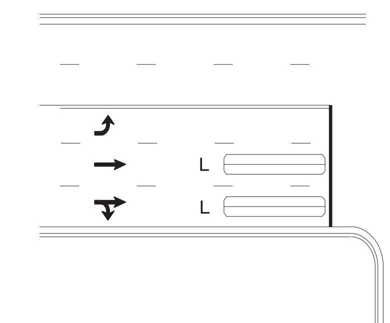
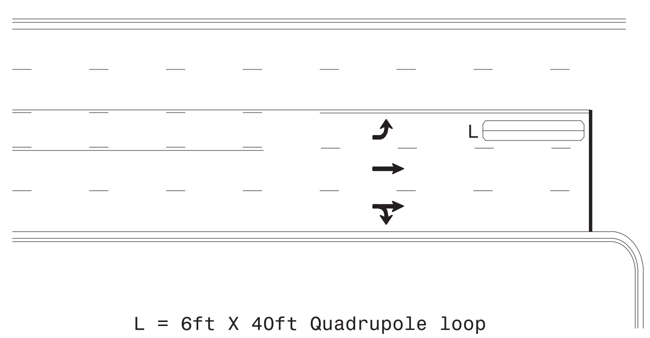


L = 6ft X 6ft
Wired in series

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

Left Turn Lane Detection



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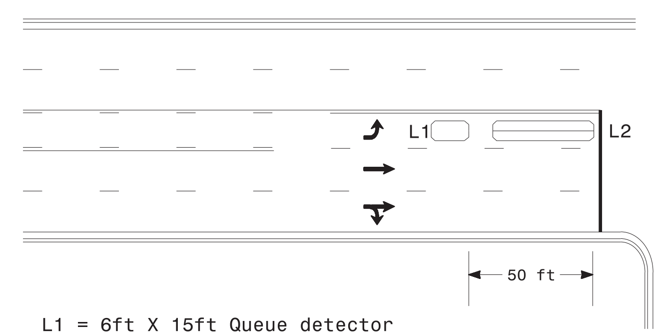


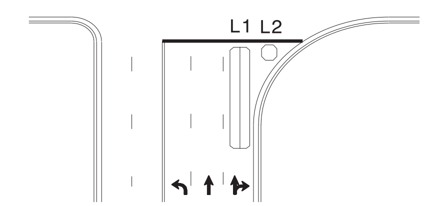
L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

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

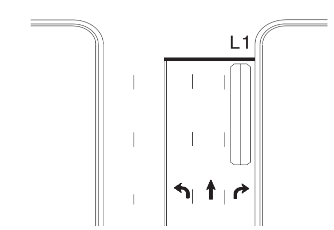
Queue Loop Detection

Right Turn Lane Detection

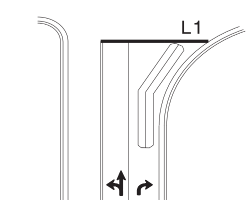


Shared Lane/
Wide Radius Turn

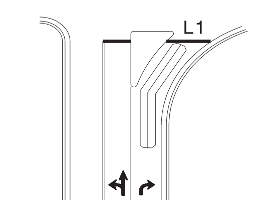
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

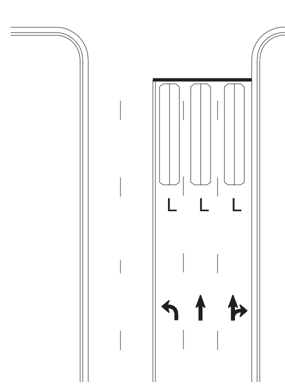


Wide Radius Turn



Channelized Turn

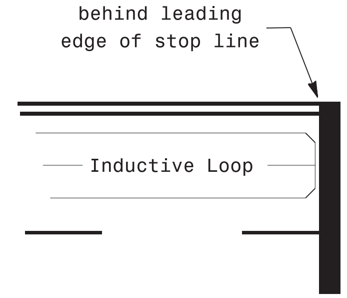
Side Street Detection



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

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

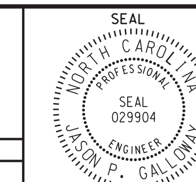
Typical Signal Loop Locations

PLAN DATE: September 2020	REVIEWED BY: JPG
PREPARED BY: PLA	REVIEWED BY:

SCALE
N/A

REVISIONS | INIT. | DATE

SEAL



9/8/2020
DATE

SIG. INVENTORY NO.

08-SEP-2020 11:54
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jgalloway