

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 6

PLANS – REVISED – 1-29-19

Letting Date: February 6, 2019

CONTRACT ID: DF00248

TIP NO.: -----

FEDERAL AID NO.: STATE FUNDED

WBS ELEMENT NO.: 2020CPT.06.12.10431.1 & 2020CPT.06.12.20431.1

ROUTE NO.: NC 55, NC 217 & VARIOUS SR ROUTES

LOCATION: VARIOUS

COUNTY: HARNETT

LENGTH OF PROJECT: 26.84 MILES

TYPE OF WORK: RESURFACING, WIDENING, MILLING & PVT. MKGS.

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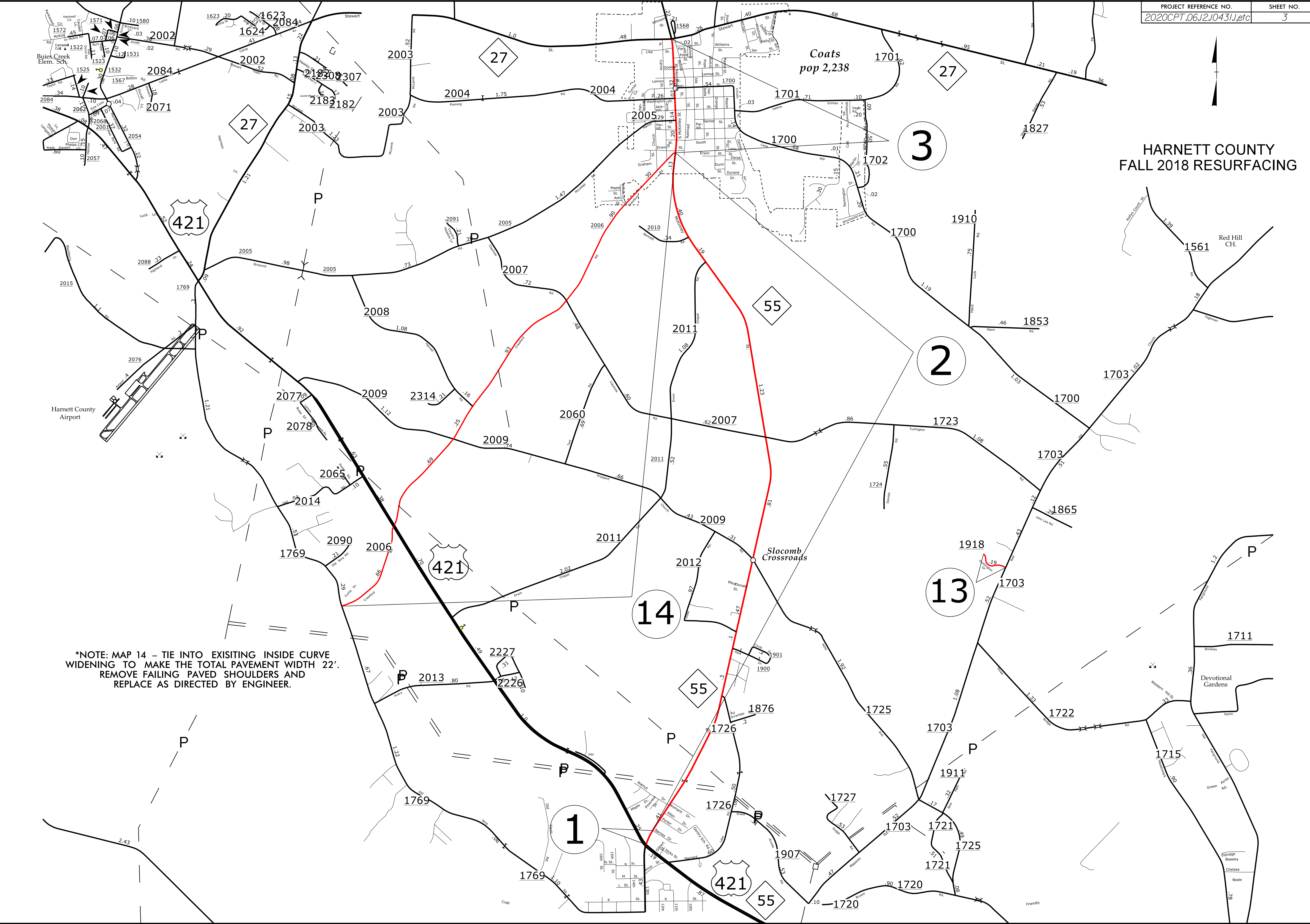
**This file or an individual page
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HARNETT COUNTY FALL 2018 RESURFACING

REVISIONS

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***NOTE: MAP 14 - TIE INTO EXISTING INSIDE CURVE
WIDENING TO MAKE THE TOTAL PAVEMENT WIDTH 22'.
REMOVE FAILING PAVED SHOULDERS AND
REPLACE AS DIRECTED BY ENGINEER.**

421

421

421

Coats
pop 2,238

Slocomb
Crossroads

Harnett County
Airport

Red Hill
CH.

Devotional
Gardens

1

2

3

14

13

55

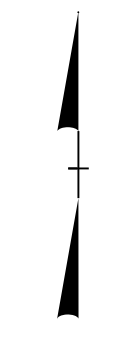
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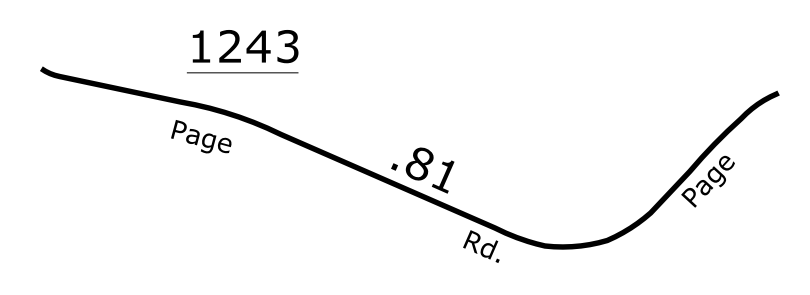
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27

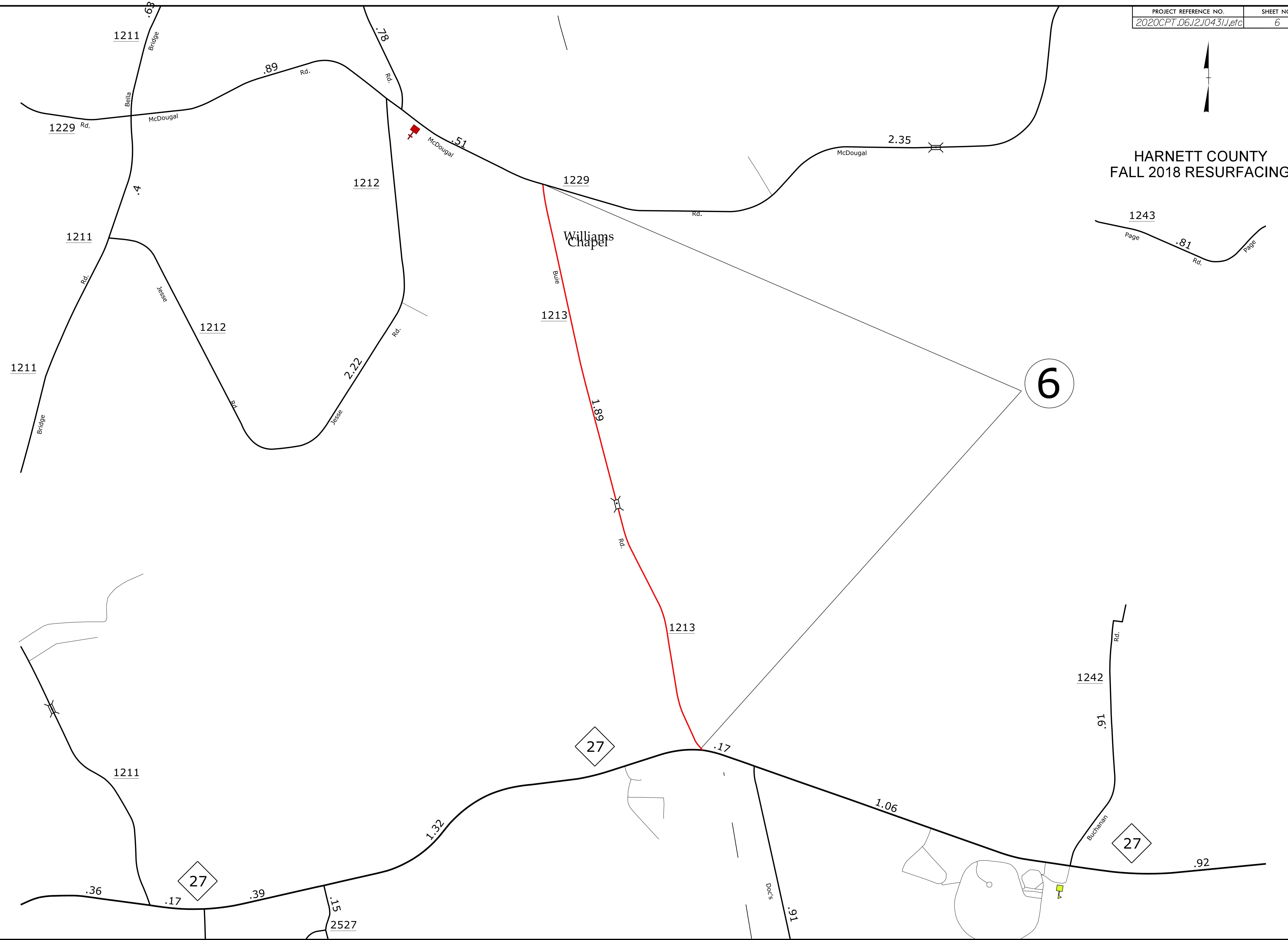
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HARNETT COUNTY
FALL 2018 RESURFACING



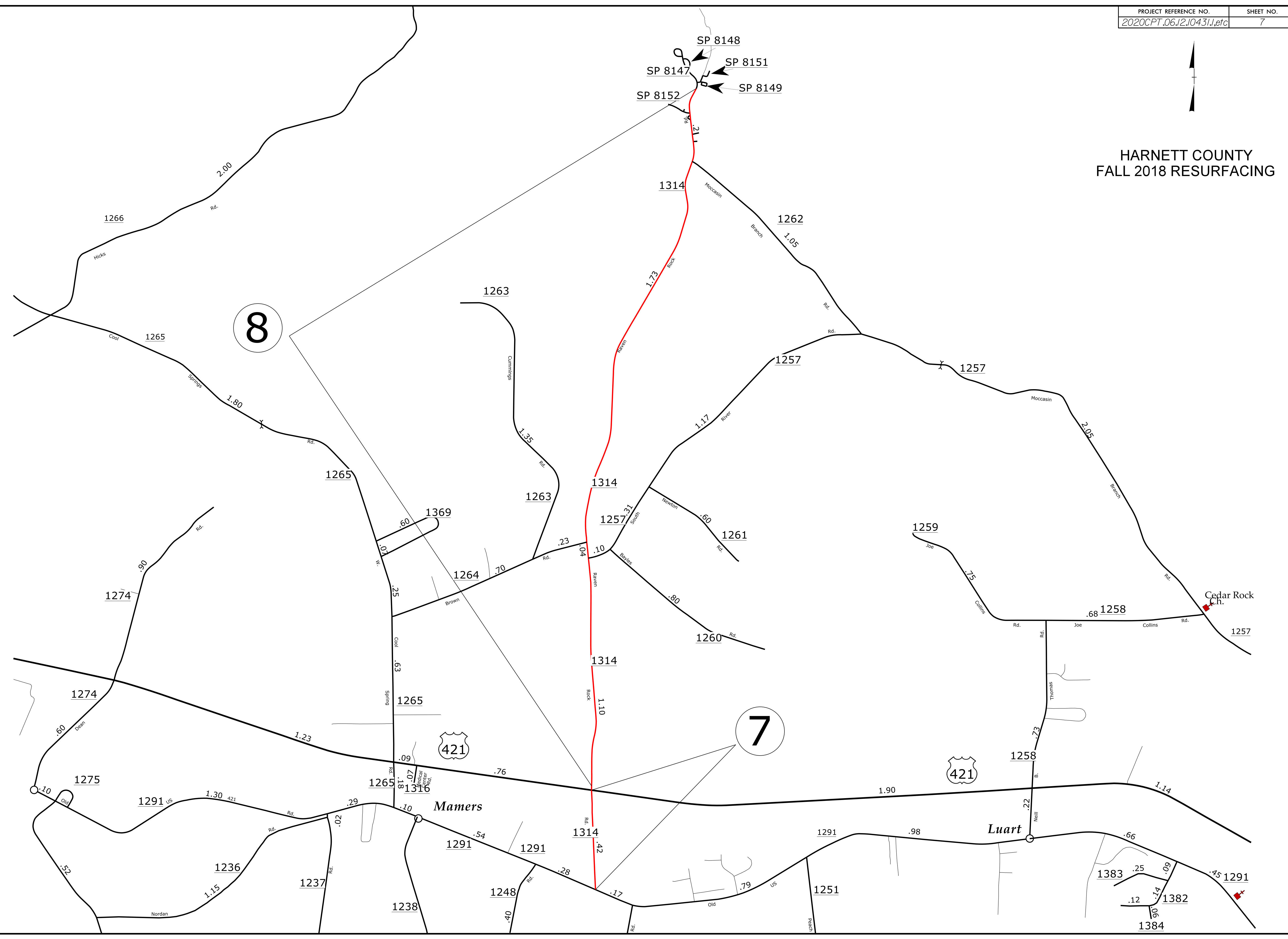
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REVISIONS

8/17/99
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Author: AM
Plotter: ATC

**HARNETT COUNTY
FALL 2018 RESURFACING**



8

7

421

421

Mamers

Luart

Cedar Rock Ch.

REVISIONS
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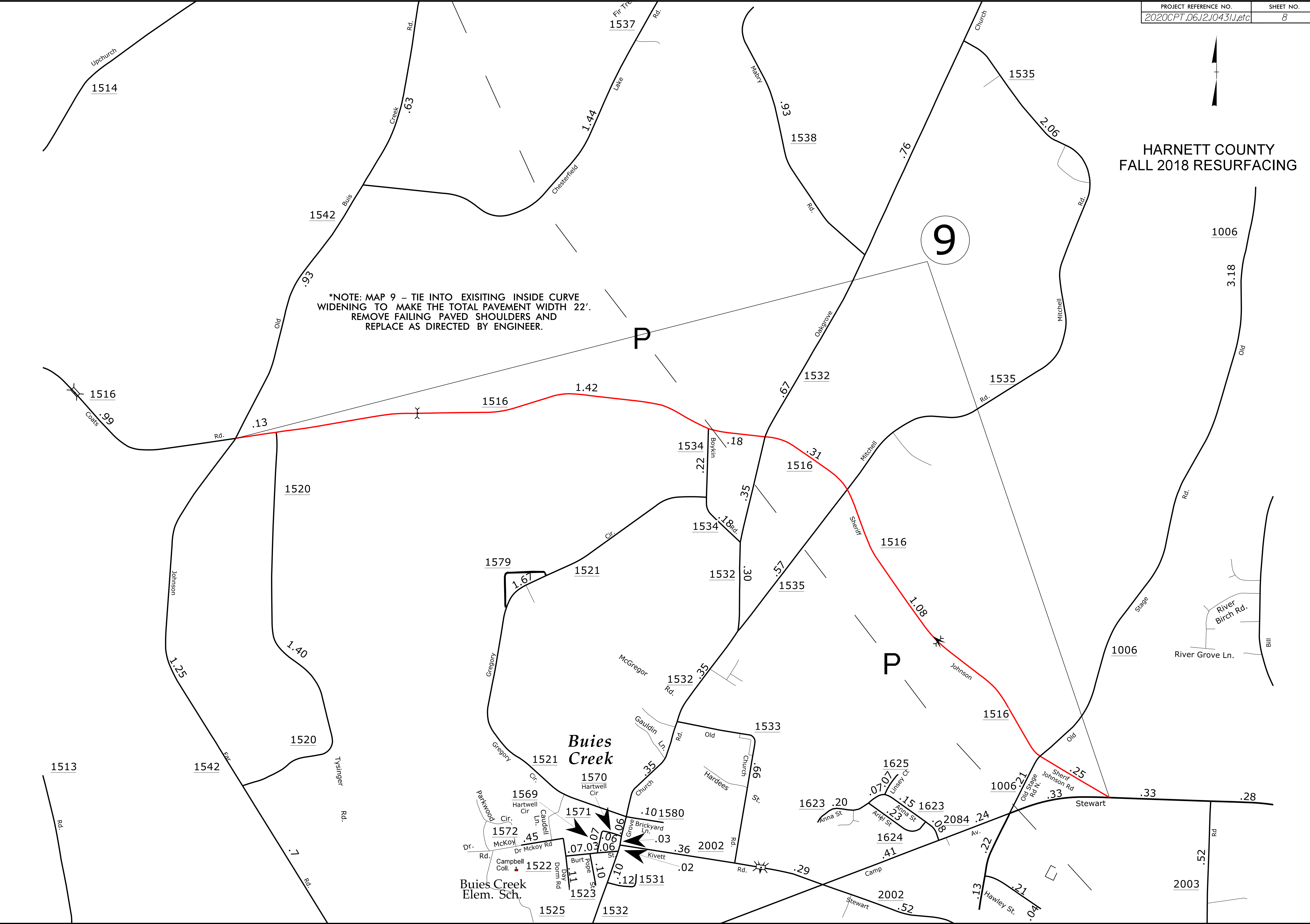
HARNETT COUNTY FALL 2018 RESURFACING

9

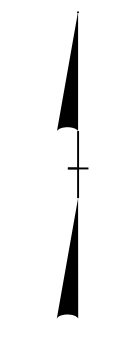
*NOTE: MAP 9 - TIE INTO EXISTING INSIDE CURVE
WIDENING TO MAKE THE TOTAL PAVEMENT WIDTH 22'.
REMOVE FAILING PAVED SHOULDERS AND
REPLACE AS DIRECTED BY ENGINEER.

NO.	DATE	DESCRIPTION

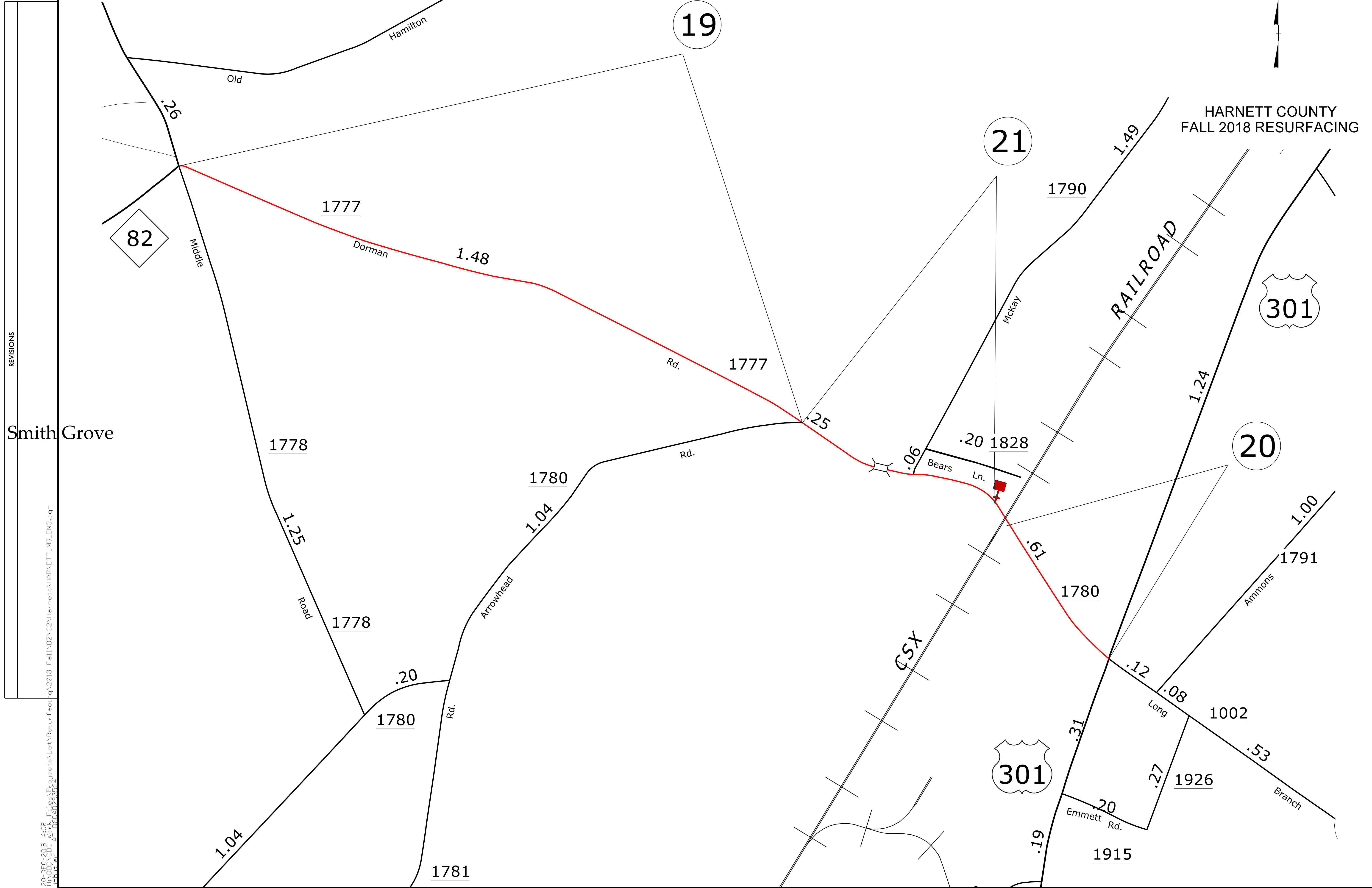
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 Author: J. H. ...
 Date: 8/17/99



Buies Creek
 Buies Creek Elem. Sch.
 Buies Creek Cir.
 Hartwell Cir.
 Gregory Cir.
 Tysinger Rd.
 Johnson Rd.
 Old Church Rd.
 Church St.
 Hardees Rd.
 Gaudin Ln.
 McGregor Rd.
 Bowlin Rd.
 Oakgrove Rd.
 Mitchell Rd.
 Sheriff Rd.
 Johnson Rd.
 Stewart Rd.
 Anna St.
 Ariel St.
 Linsley Ct.
 Brickyard Ln.
 Kivett Rd.
 Camp Rd.
 Hawley St.
 River Birch Rd.
 River Grove Ln.
 Bill Rd.



HARNETT COUNTY
FALL 2018 RESURFACING



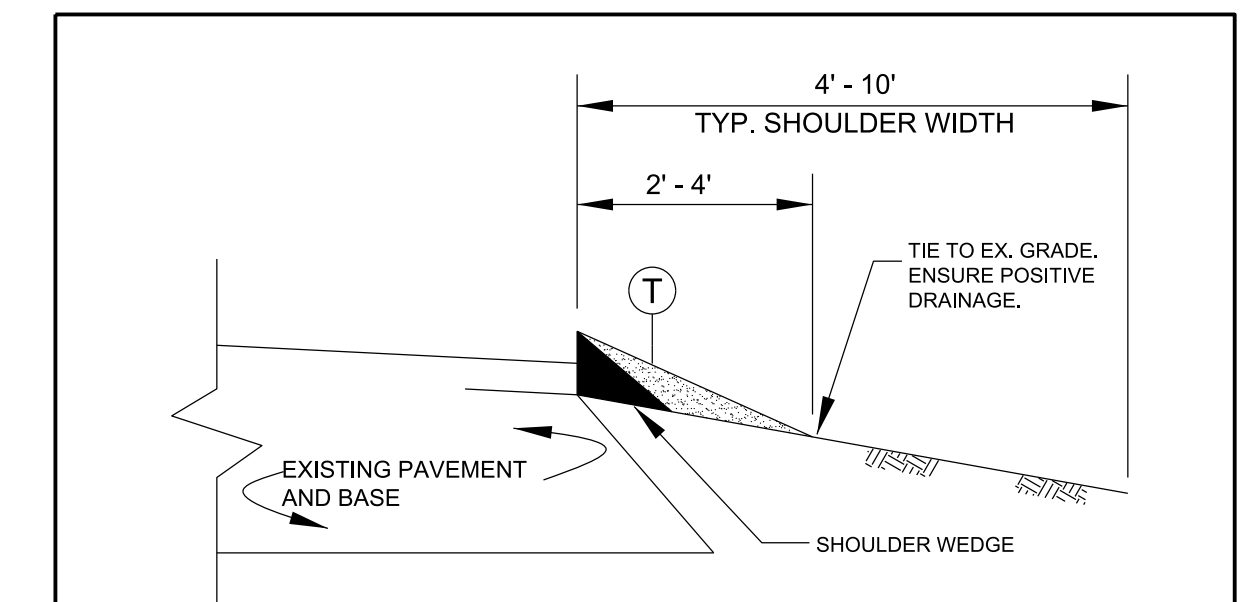
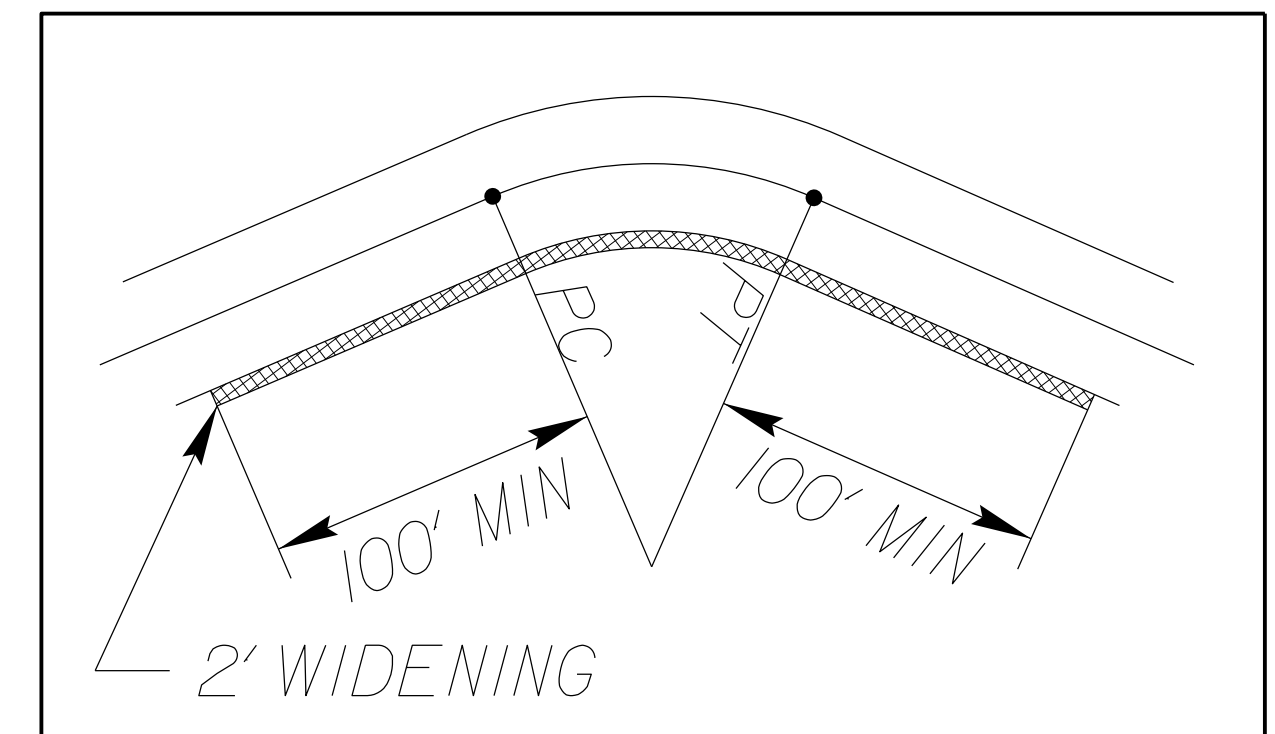
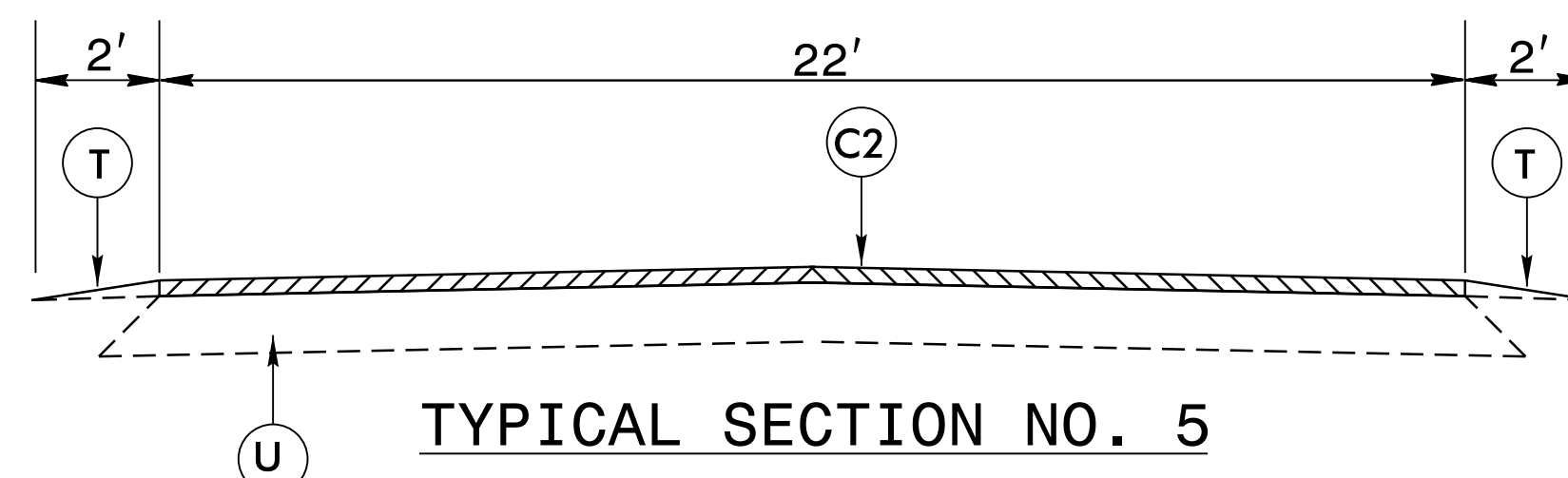
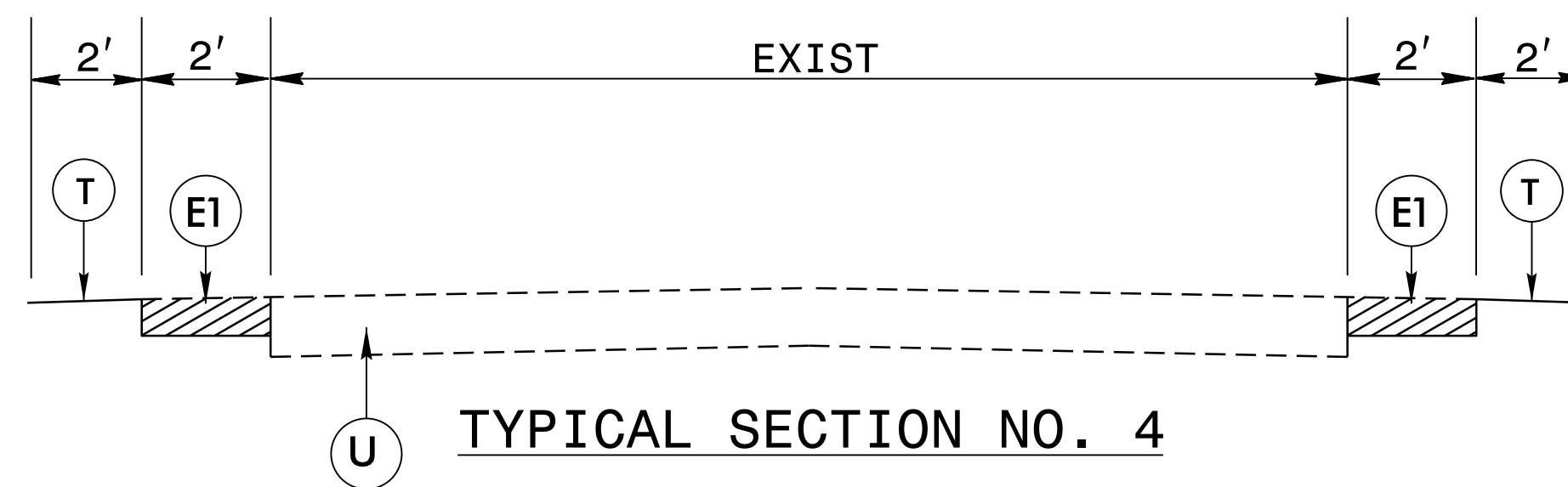
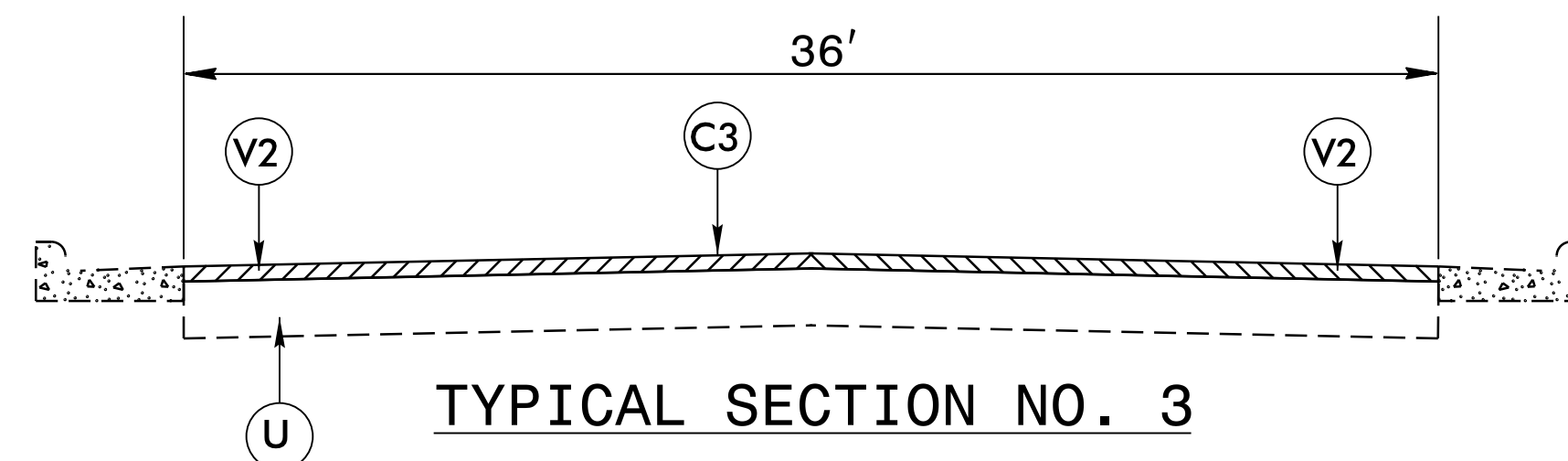
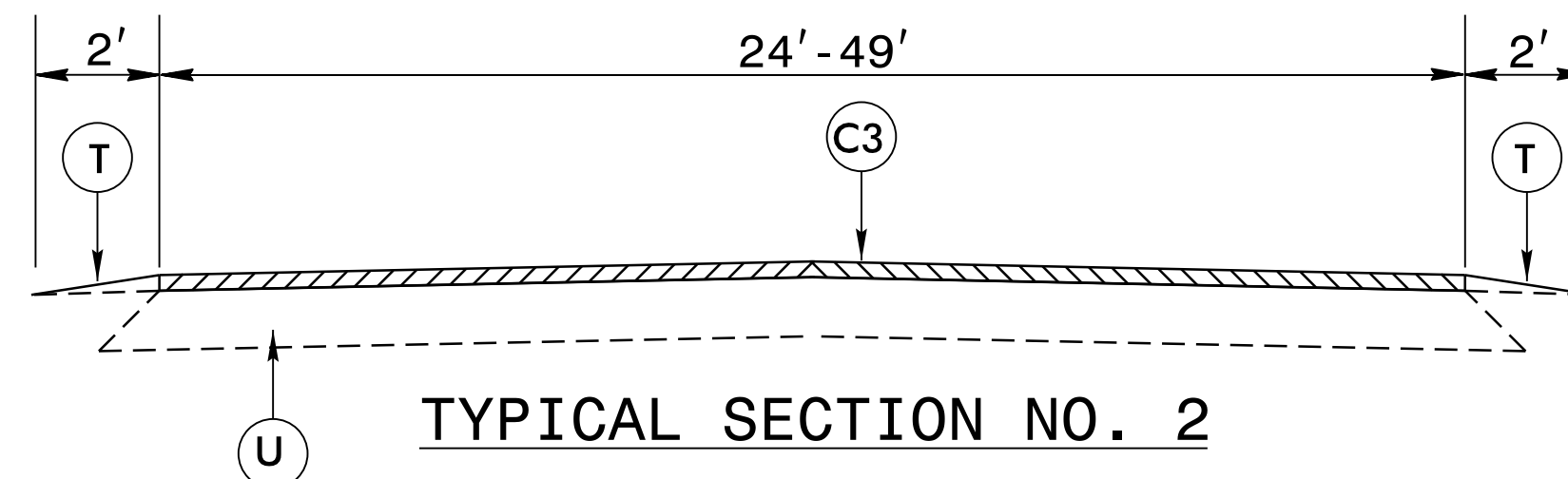
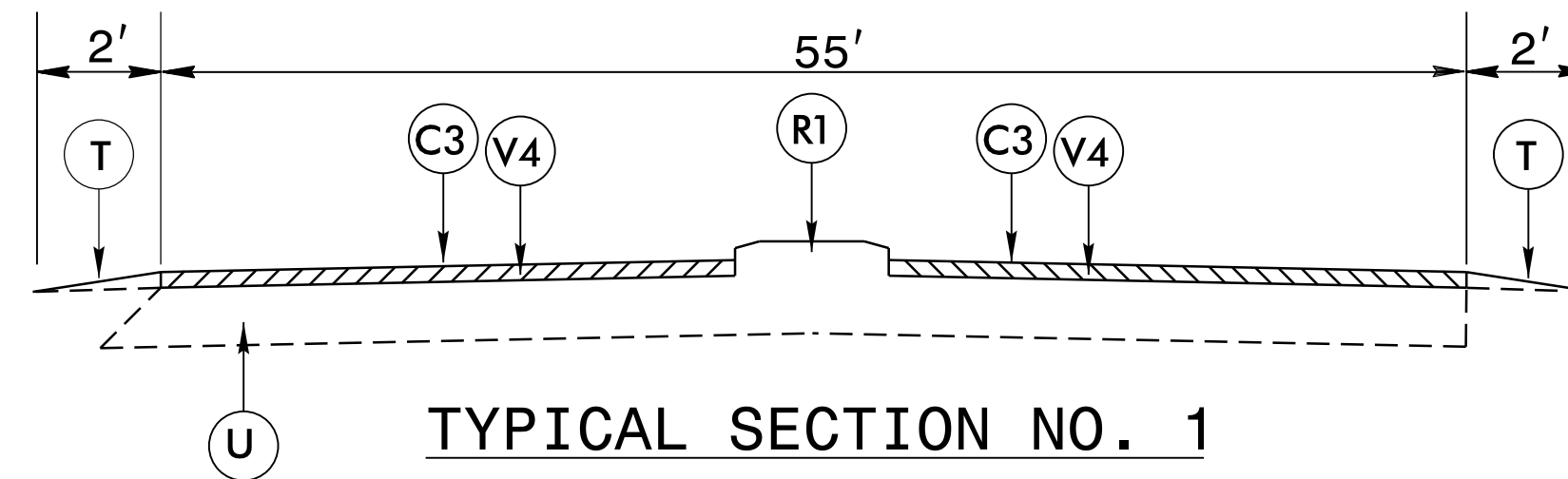
REVISIONS

Smith Grove

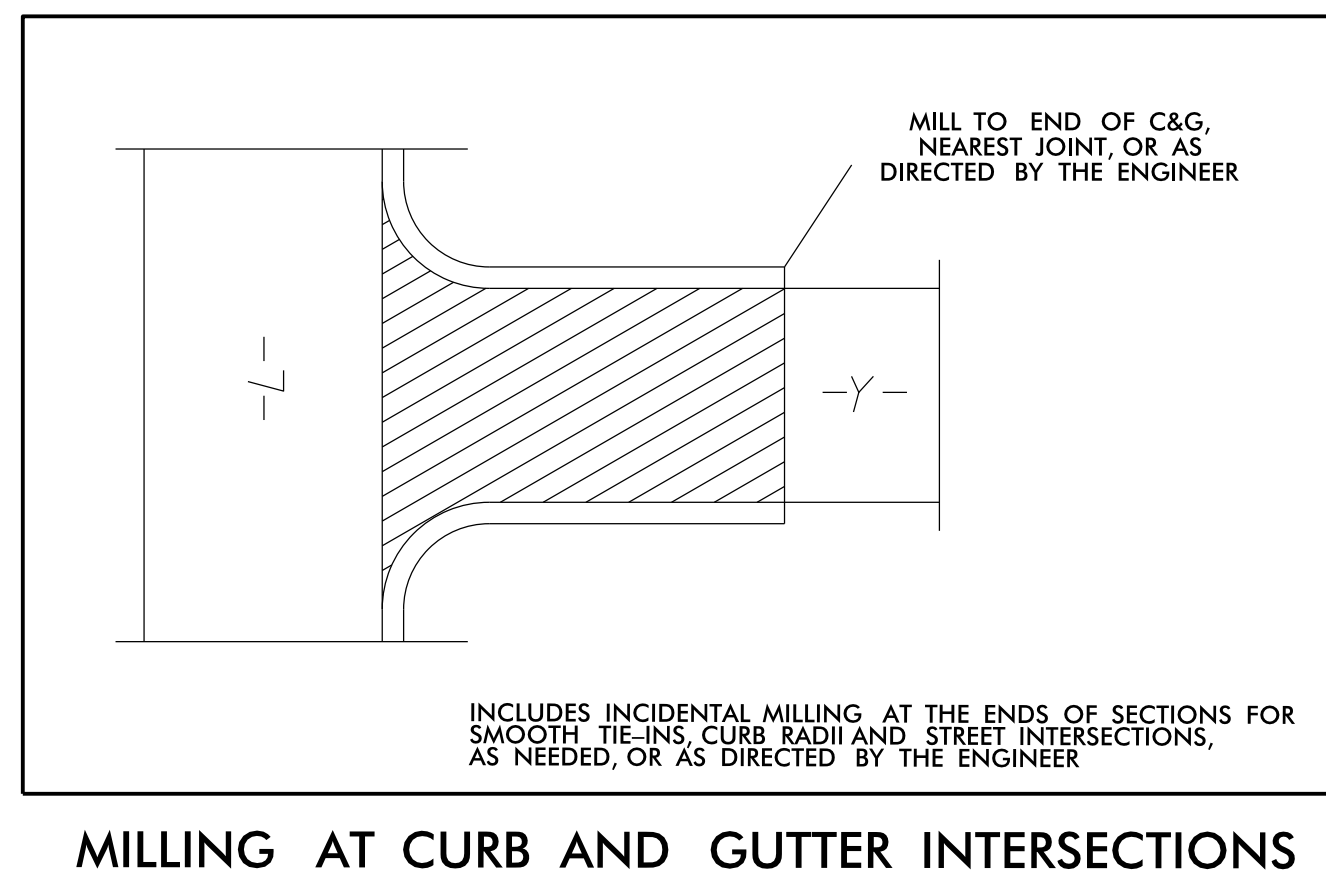
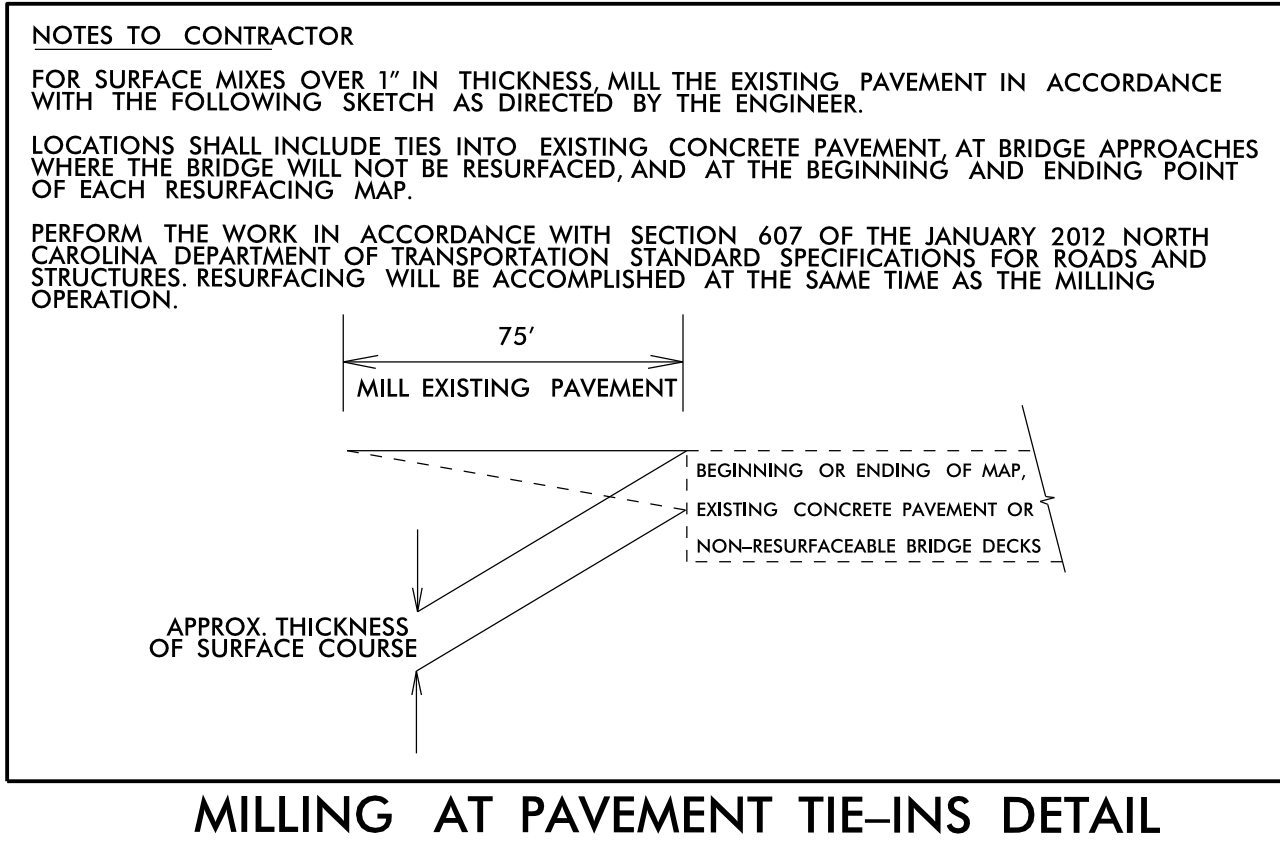
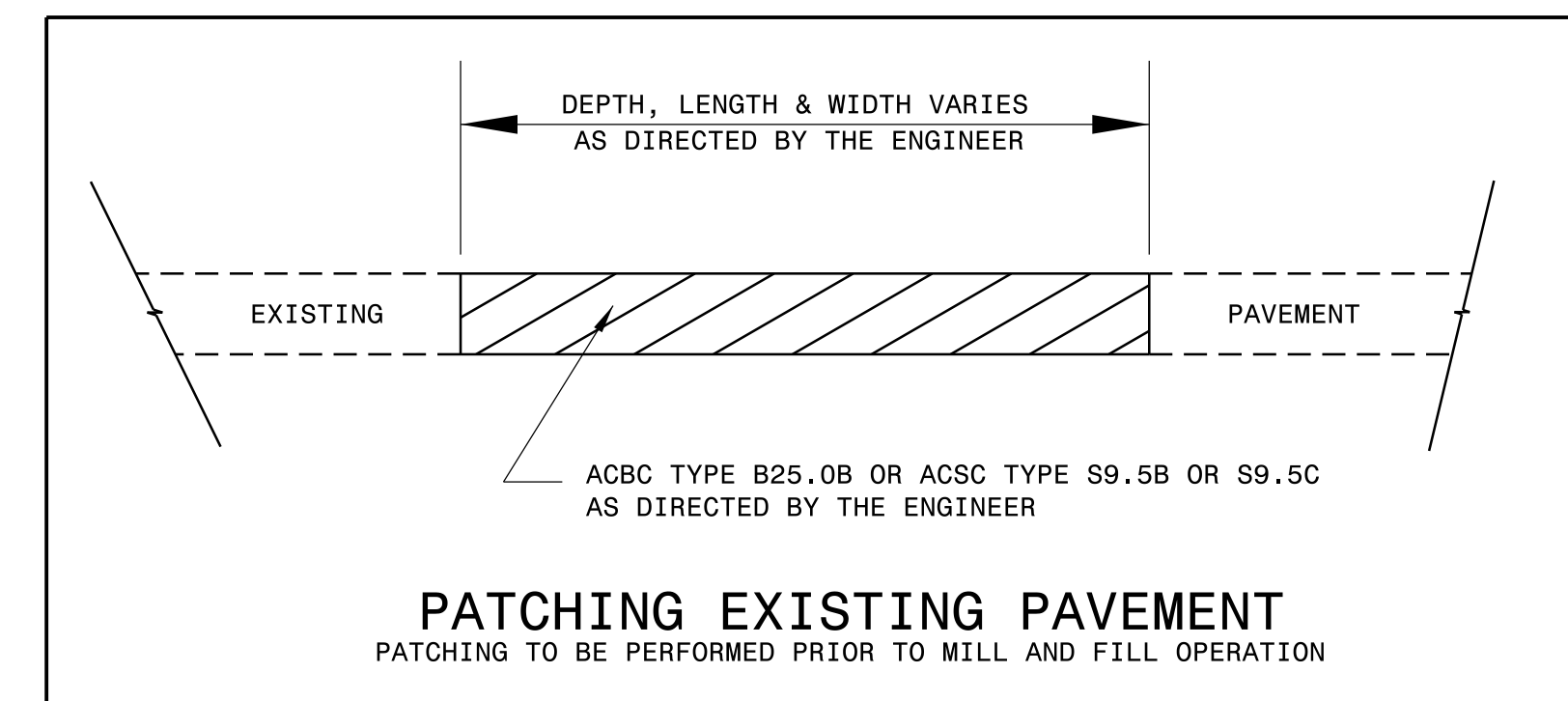
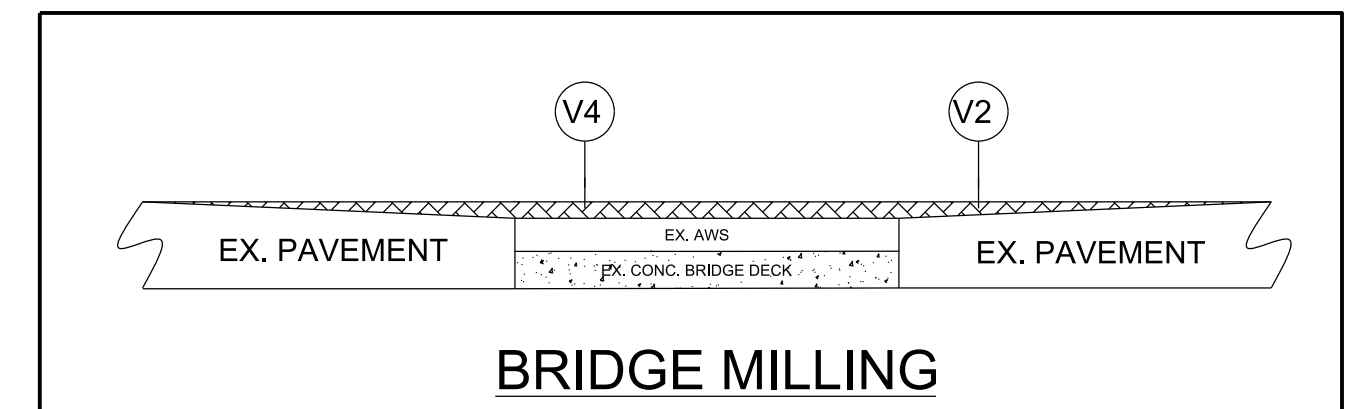
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 8/17/99

PAVEMENT SCHEDULE

C1	1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C3	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
E1	5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
R1	EXISTING CONCRETE ISLAND
T	AGGREGATE SHOULDER BORROW
U	EXISTING ASPHALT
V1	0'-1" MILLING (10' CURB MILLING)
V2	0"-1½" MILLING (10' CURB MILLING)
V3	1" MILLING (FULL WIDTH)
V4	1½" MILLING (FULL WIDTH)



- NOTES:
- SHOULDER SHALL BE RECONSTRUCTED AS SHOWN IN STD. DWG. NO. 560.01 & 560.02, WITH A MINIMUM SLOPE OF 1" PER FOOT TO ENSURE POSITIVE DRAINAGE AWAY FROM ROADWAY.
 - AGGREGATE SHOULDER BORROW (ASB) MATERIAL SHALL BE PLACED USING A WIDENING MACHINE OR SIMILAR DEVICE.
 - A VEGETATIVE BUFFER SHALL BE MAINTAINED BETWEEN THE DISTURBED AREA ALONG THE EDGE OF PAVEMENT AND THE DITCH SHOULDER POINT TO MINIMIZE EROSION. PULLING DITCHES OR CUTTING SHOULDERS TO GENERATE BORROW MATERIAL WILL NOT BE ALLOWED.
 - REQUIRED BORROW MATERIAL MAY BE OBTAINED BY THE CONTRACTOR FROM WIDENING OPERATIONS WITHIN THE PROJECT LIMITS, FROM NCDOT APPROVED BORROW PITS OR FROM NCDOT STOCKPILES. ANY EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN APPROVED DISPOSAL SITE.

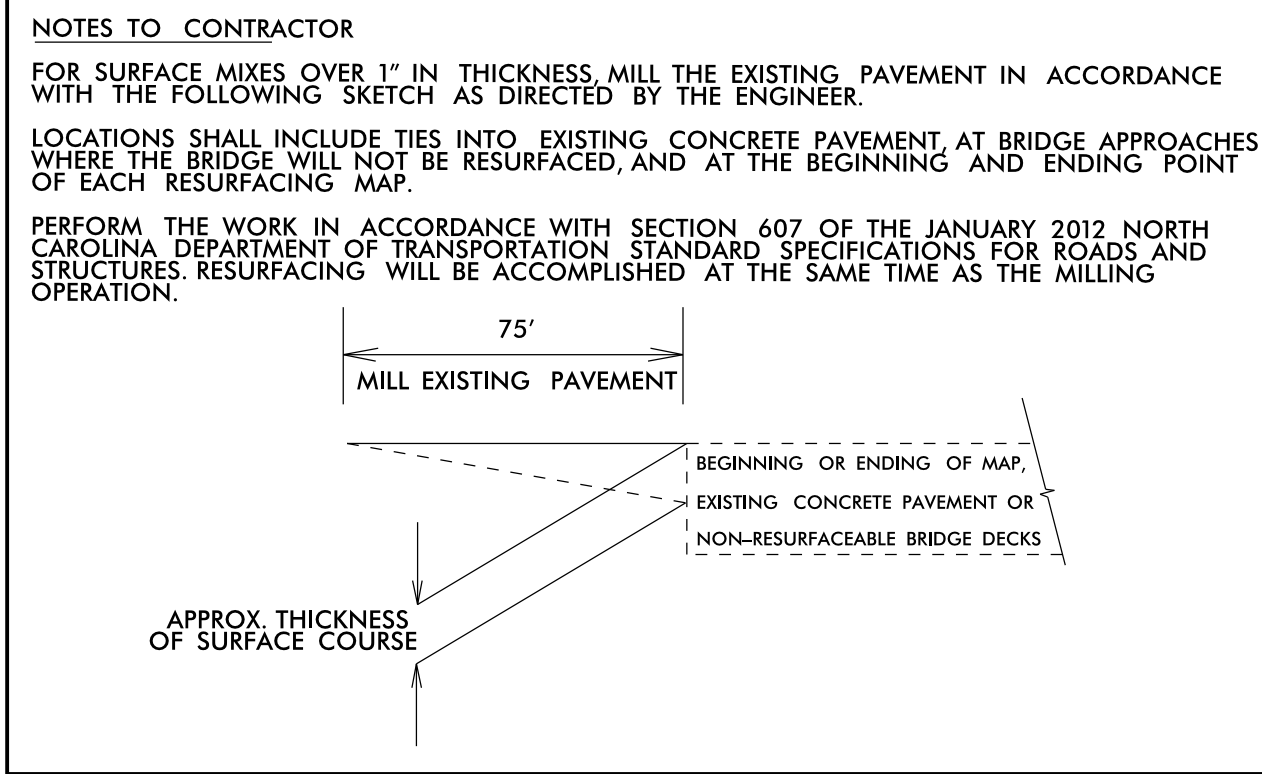


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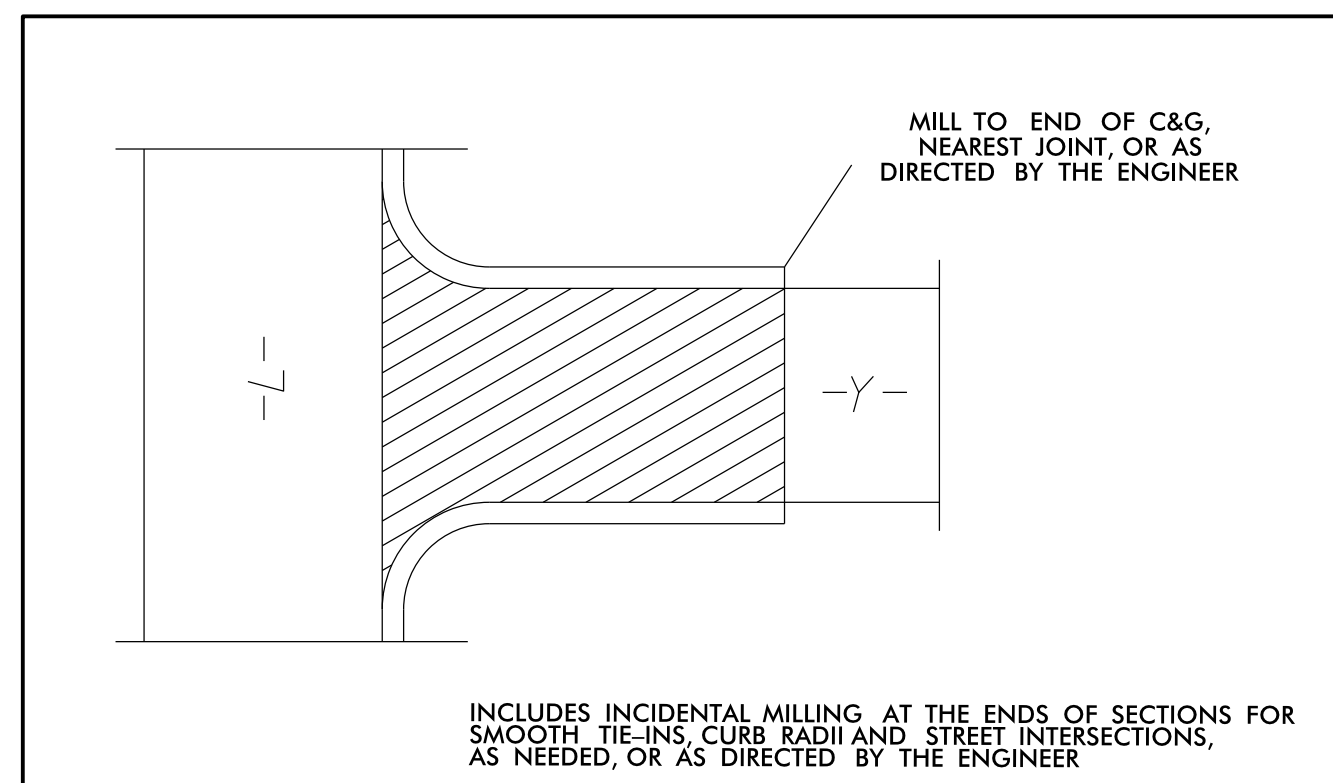
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PAVEMENT SCHEDULE

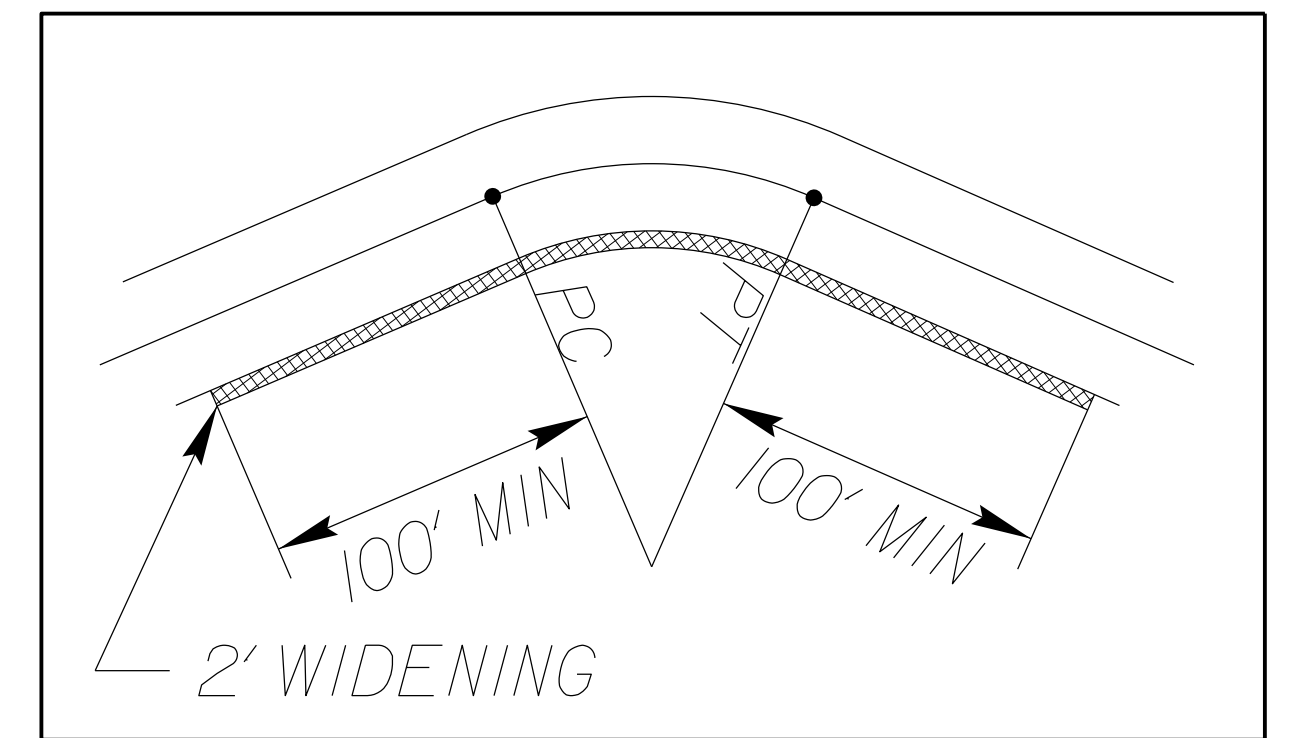
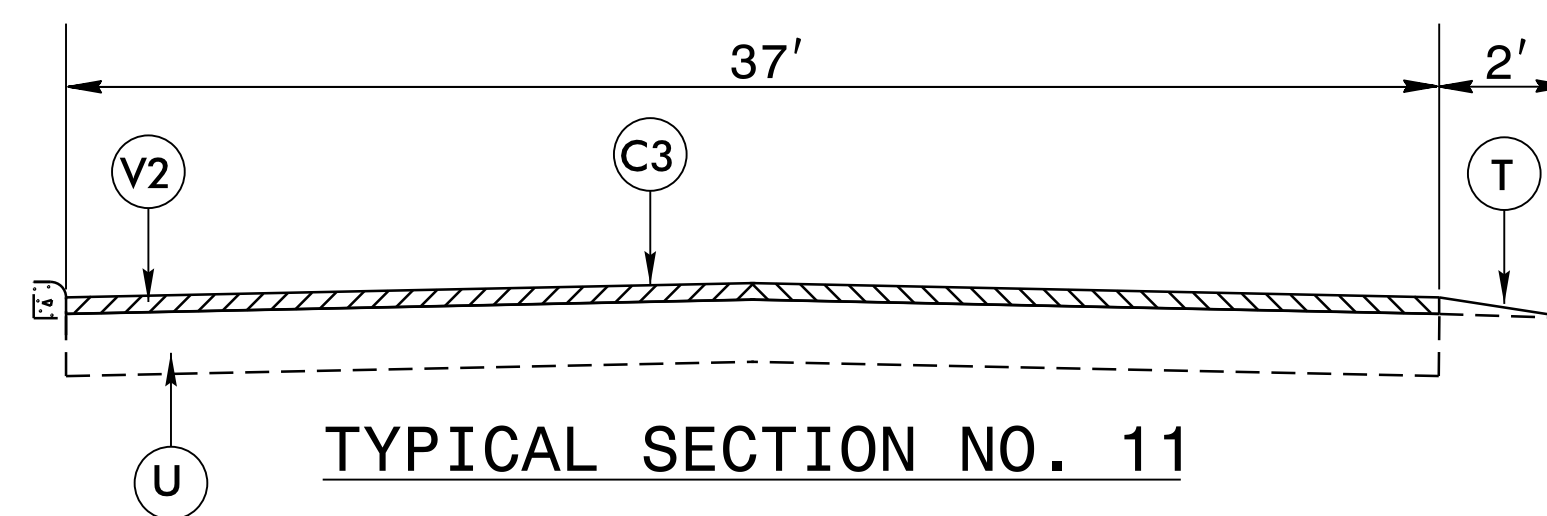
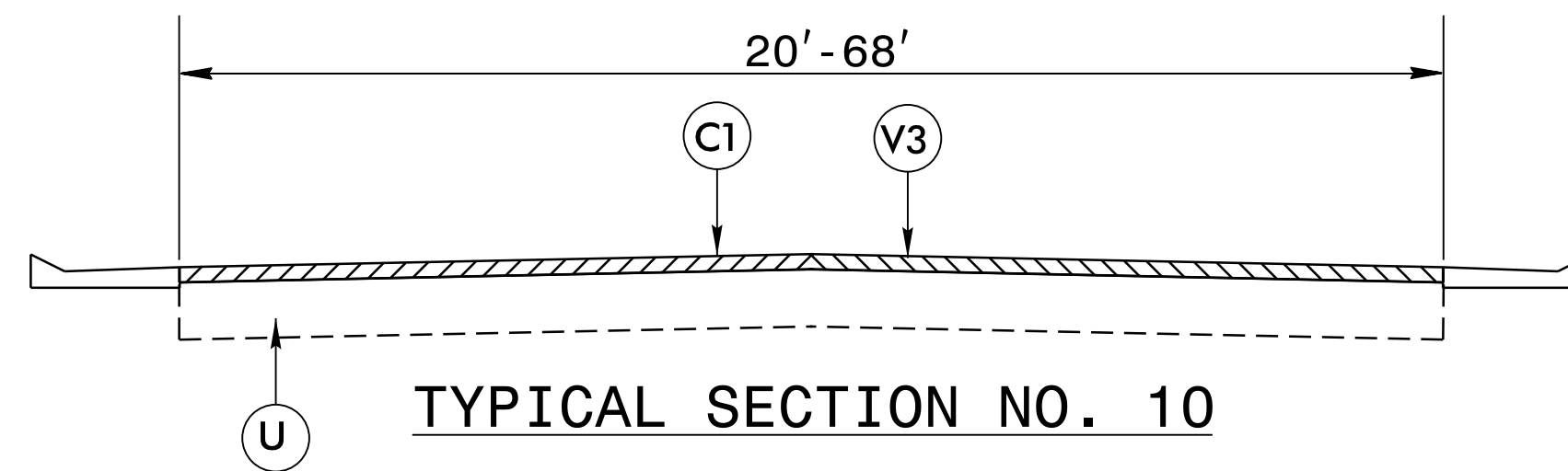
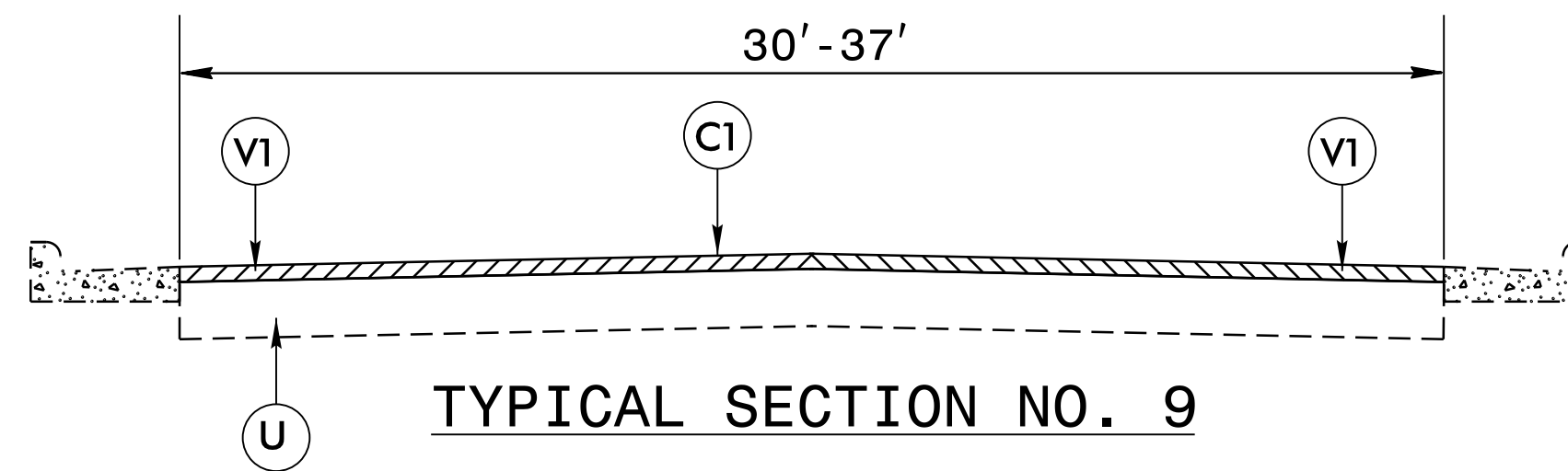
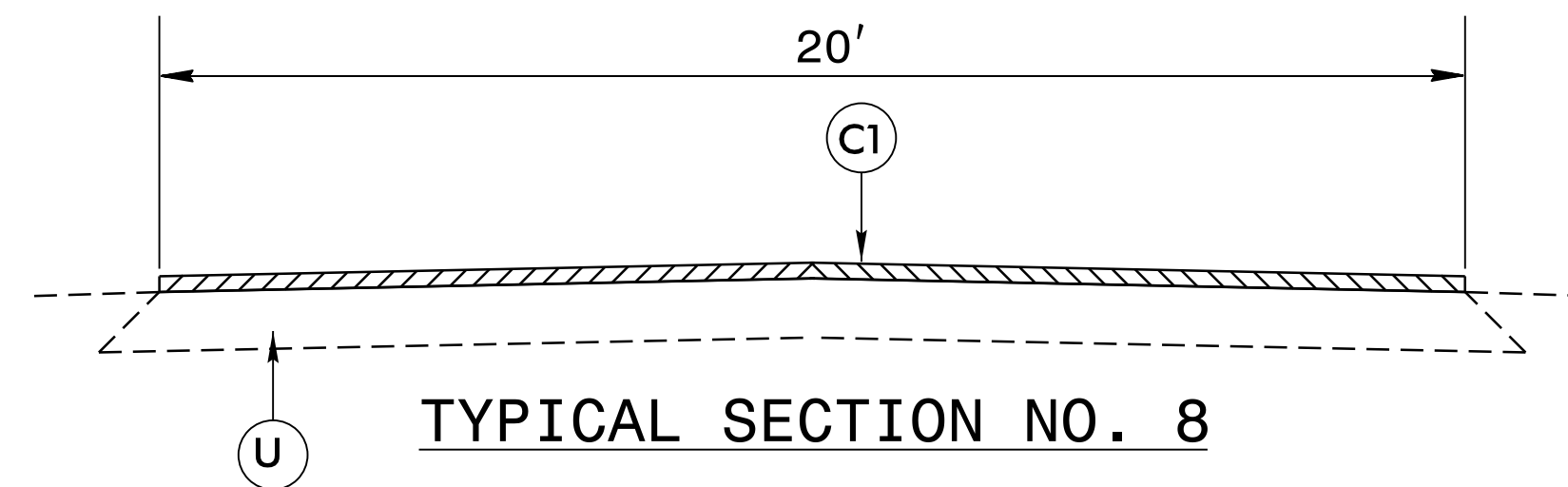
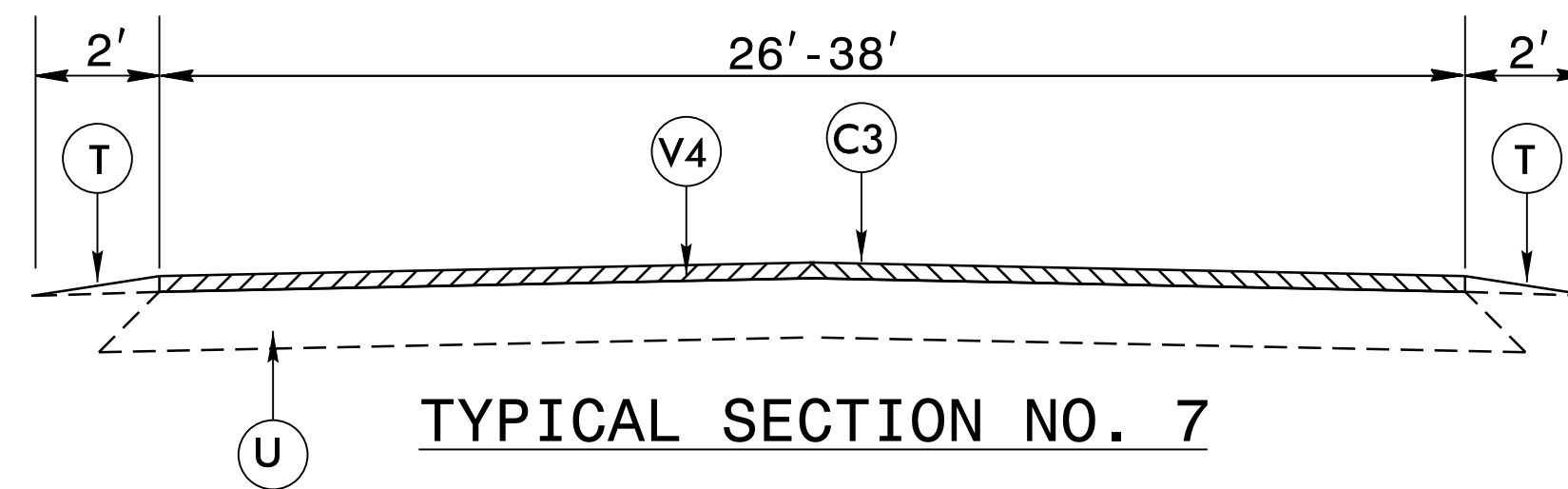
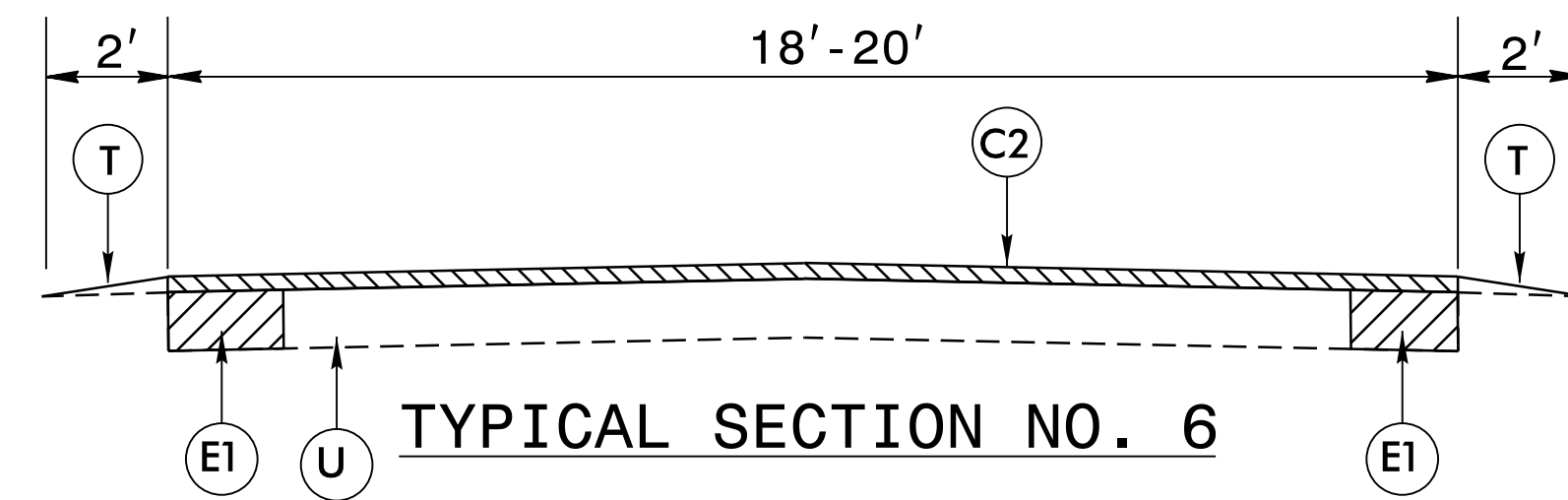
C1	1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
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V1	0'-1" MILLING (10' CURB MILLING)
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V3	1" MILLING (FULL WIDTH)
V4	1½" MILLING (FULL WIDTH)



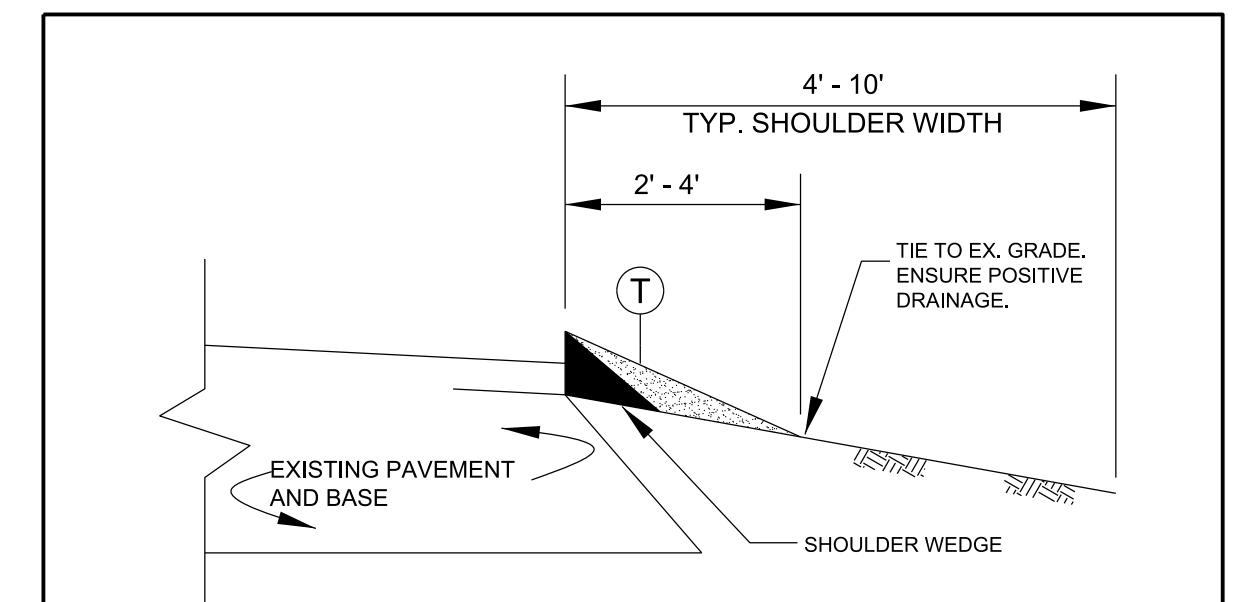
MILLING AT PAVEMENT TIE-INS DETAIL



MILLING AT CURB AND GUTTER INTERSECTIONS

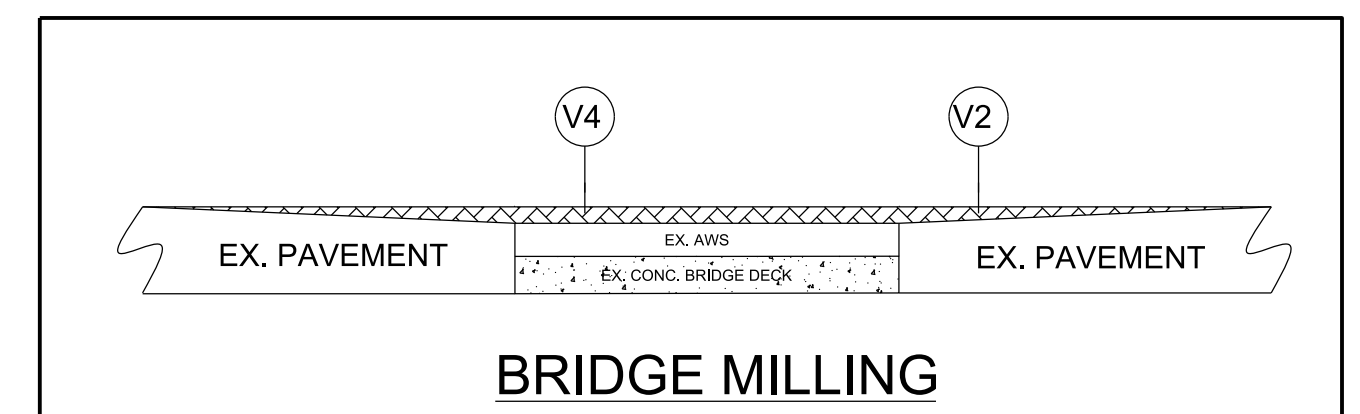


INSIDE CURVE WIDENING
MAPS 6, 8, 19 & 21

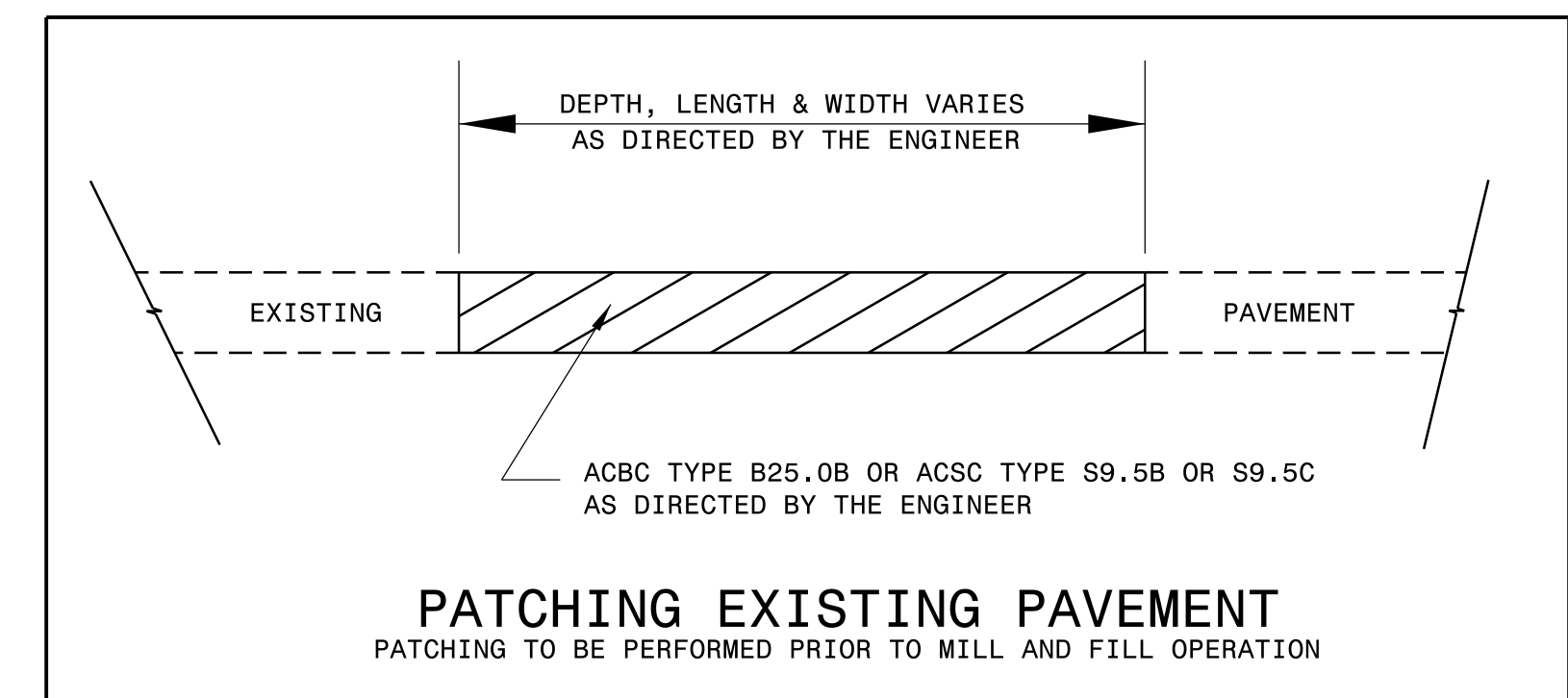


SHOULDER RECONSTRUCTION

- NOTES:**
- SHOULDER SHALL BE RECONSTRUCTED AS SHOWN IN STD. DWG. NO. 560.01 & 560.02, WITH A MINIMUM SLOPE OF 1" PER FOOT TO ENSURE POSITIVE DRAINAGE AWAY FROM ROADWAY.
 - AGGREGATE SHOULDER BORROW (ASB) MATERIAL SHALL BE PLACED USING A WIDENING MACHINE OR SIMILAR DEVICE.
 - A VEGETATIVE BUFFER SHALL BE MAINTAINED BETWEEN THE DISTURBED AREA ALONG THE EDGE OF PAVEMENT AND THE DITCH SHOULDER POINT TO MINIMIZE EROSION. PULLING DITCHES OR CUTTING SHOULDERS TO GENERATE BORROW MATERIAL WILL NOT BE ALLOWED.
 - REQUIRED BORROW MATERIAL MAY BE OBTAINED BY THE CONTRACTOR FROM WIDENING OPERATIONS WITHIN THE PROJECT LIMITS, FROM NCDOT APPROVED BORROW PITS OR FROM NCDOT STOCKPILES. ANY EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN APPROVED DISPOSAL SITE.



BRIDGE MILLING

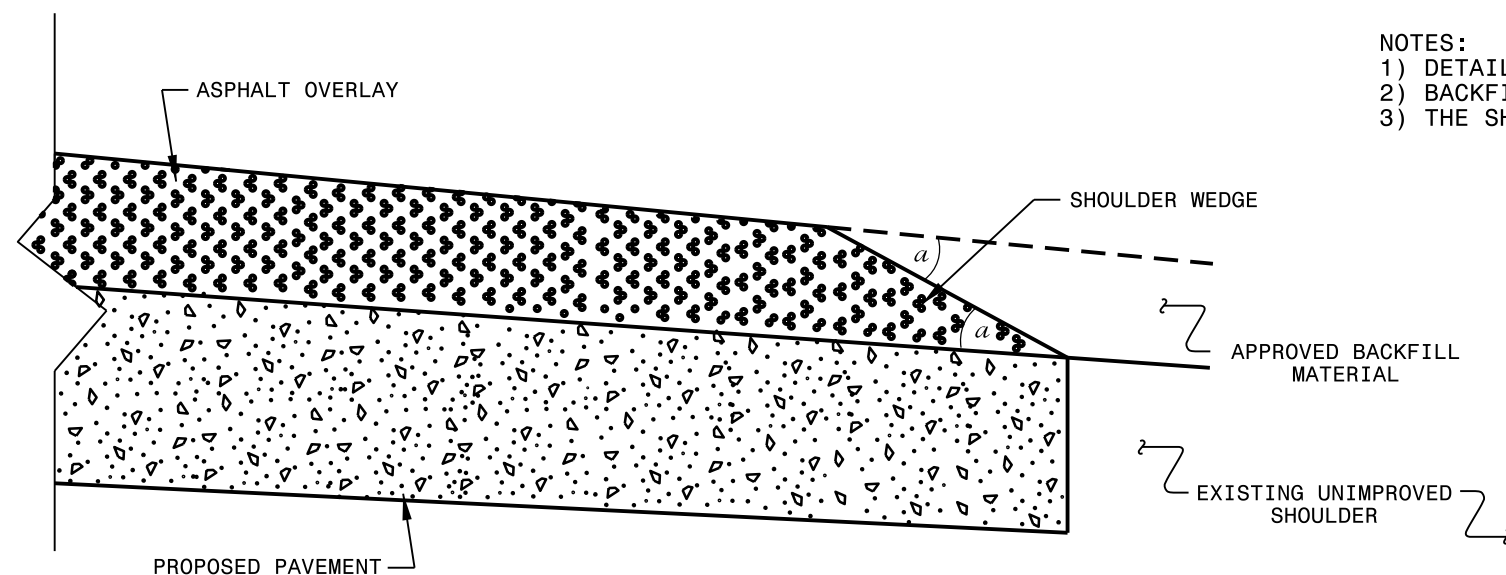


PATCHING EXISTING PAVEMENT
PATCHING TO BE PERFORMED PRIOR TO MILL AND FILL OPERATION

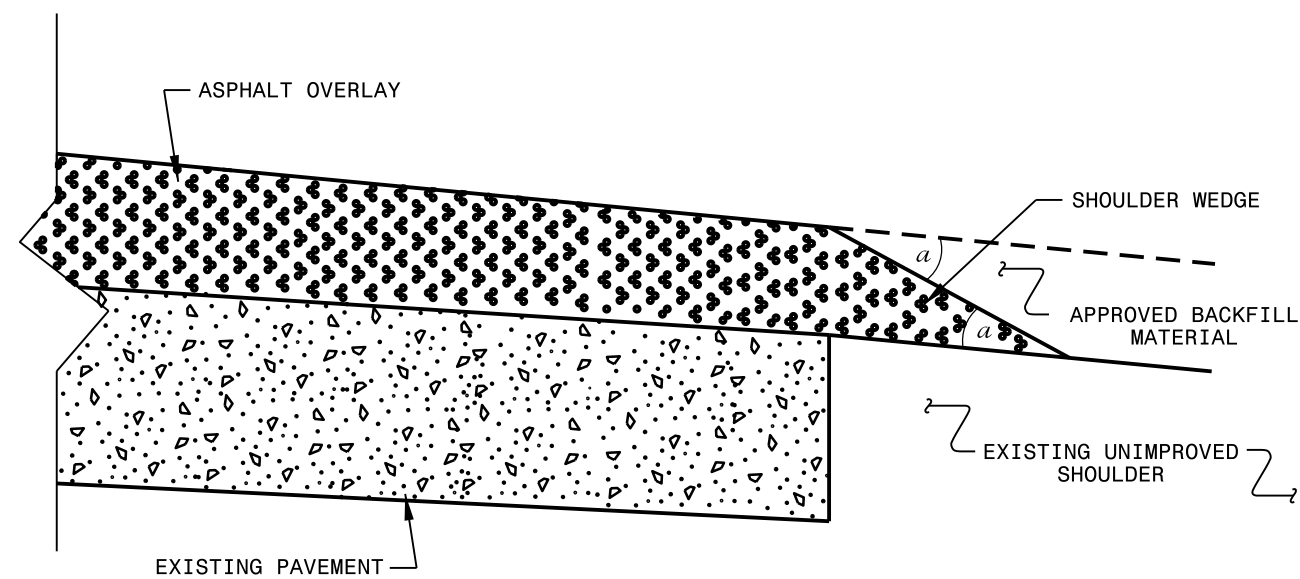
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NOTES:

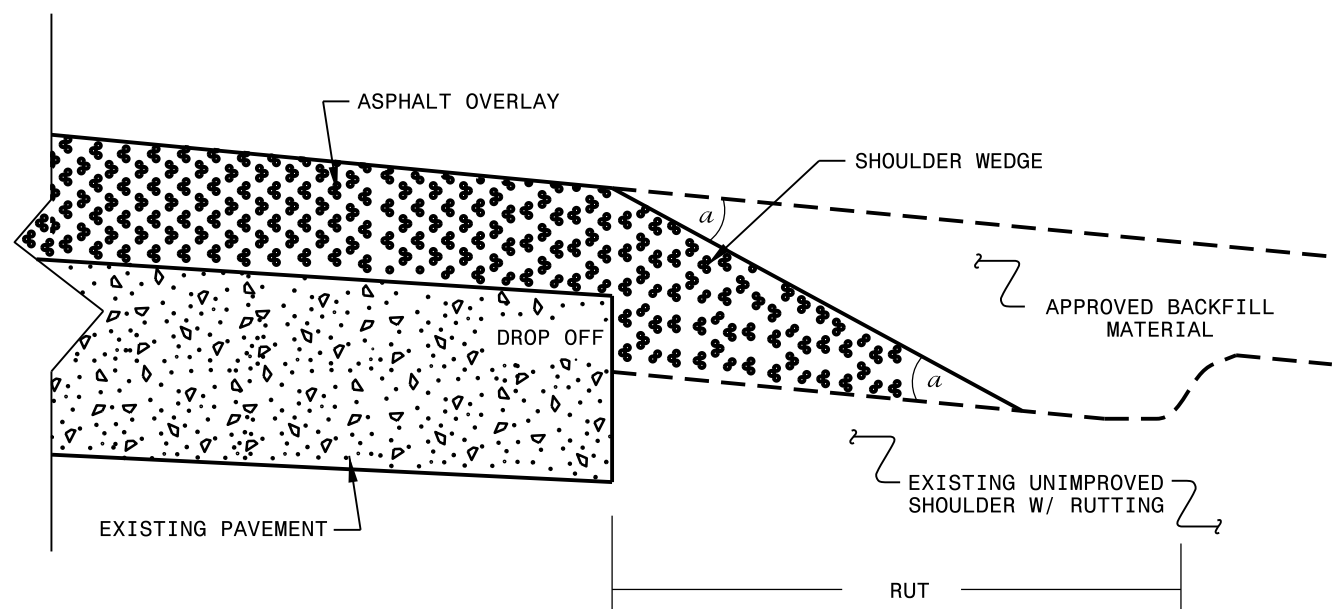
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
- 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
- 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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°

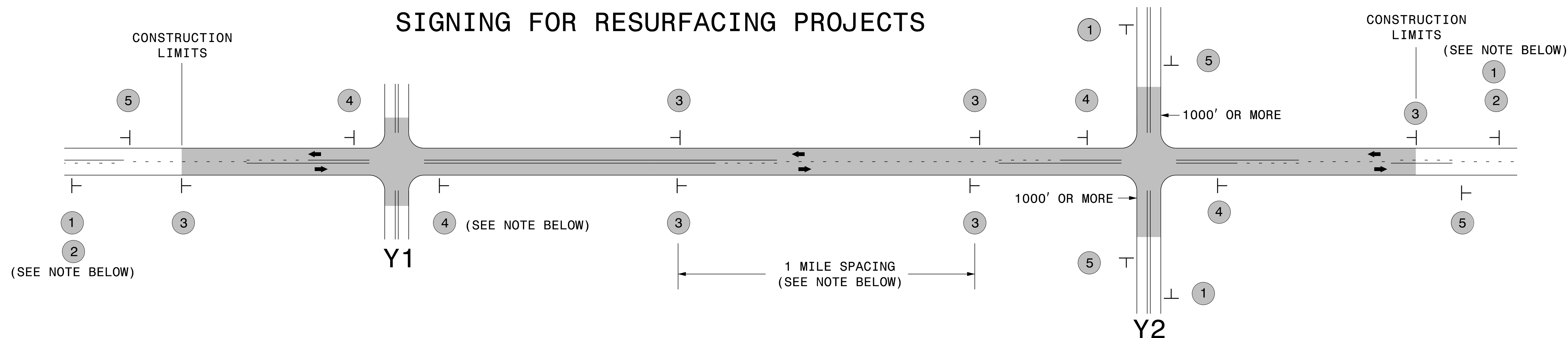
**CONTRACT STANDARDS
AND DEVELOPMENT UNIT**
Office 919-707-6950 FAX 919-250-4119

**SHOULDER WEDGE
DETAILS**

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

SYSTEMS DESIGN
USER NAME

SIGNING FOR RESURFACING PROJECTS



LEGEND	
	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

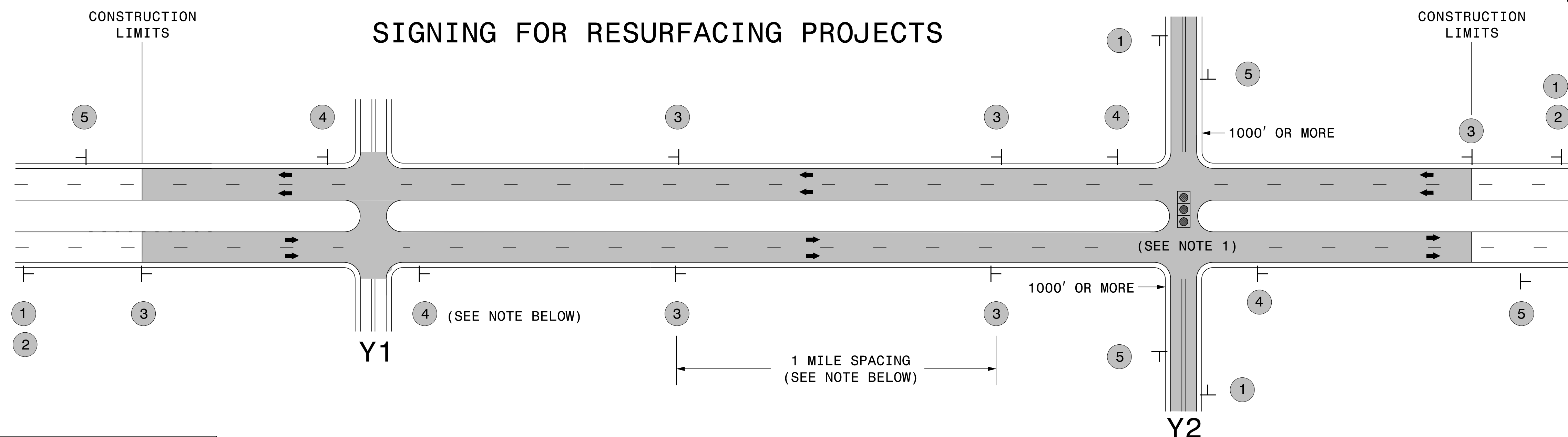
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING		-Y- LINE SIGNING	
	1	 <small>W20-1 48" X 48"</small>	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p>	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> LESS THAN 1000' OF RESURFACING ALONG -Y- LINE SUBDIVISION ROADS DEAD END ROADS <p>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.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <small>W20-1 48" X 48"</small> </div> <div style="text-align: center;"> <small>W20-7 A 48" X 48"</small> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	2	 <small>W7-3aP 24" X 18"</small>	<p>#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)</p>	
	3	 <small>SP 13107 48" X 48"</small>	<p>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.</p>	
	4	 <small>SP 13106 48" X 48"</small>	<p>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.</p>	
5	 <small>G20-2 A 48" X 24"</small>	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>		

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**RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS**



LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

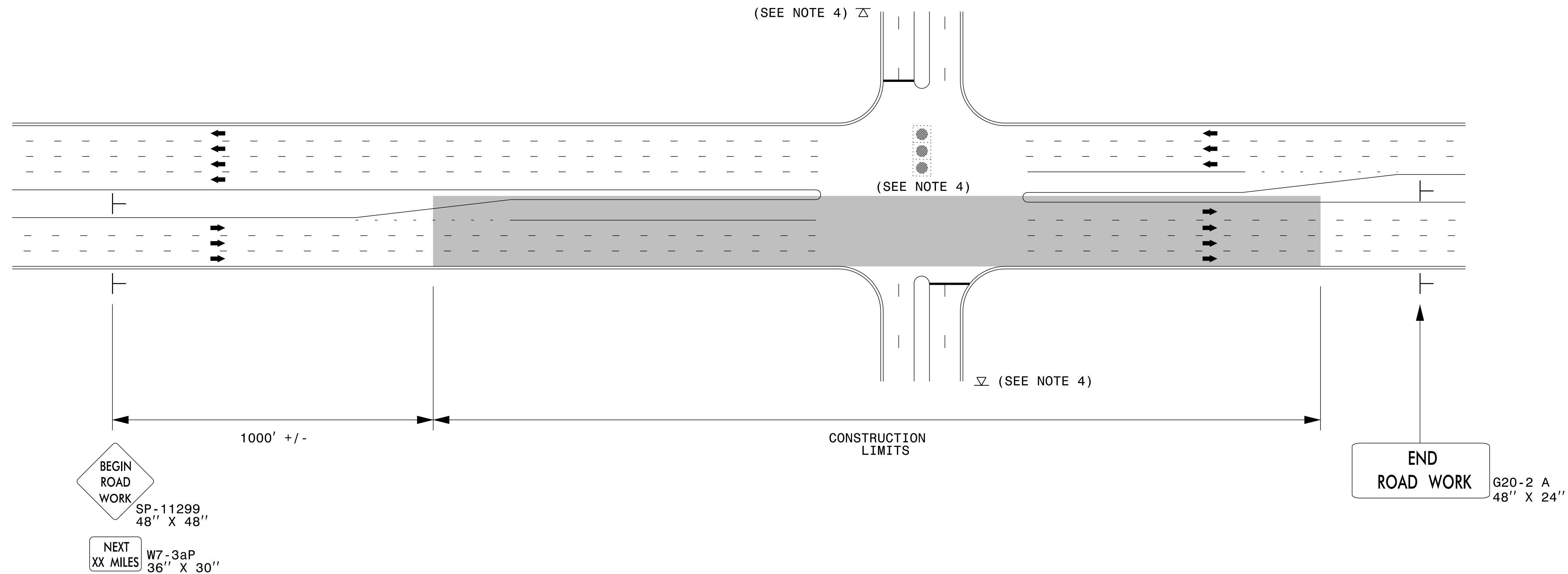
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	 	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)</p>	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>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.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <small>W20-1 48" X 48"</small> </div> <div style="text-align: center;"> <small>W20-7 A 48" X 48"</small> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p> <p>NOTES:</p> <ol style="list-style-type: none"> 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.
		<p>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.</p>	
		<p>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.</p>	
		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>	

**RESURFACING
ADVANCE WARNING SIGNS
FOR RURAL AND SUBURBAN
MULTI-LANE ROADWAYS
W/ SHOULDER SECTIONS**

URBAN / SUBURBAN WORKZONES

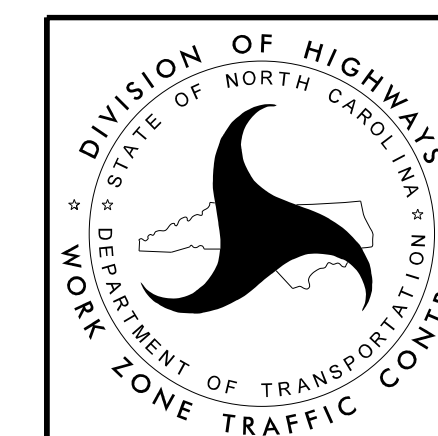


NOTES:

- 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.

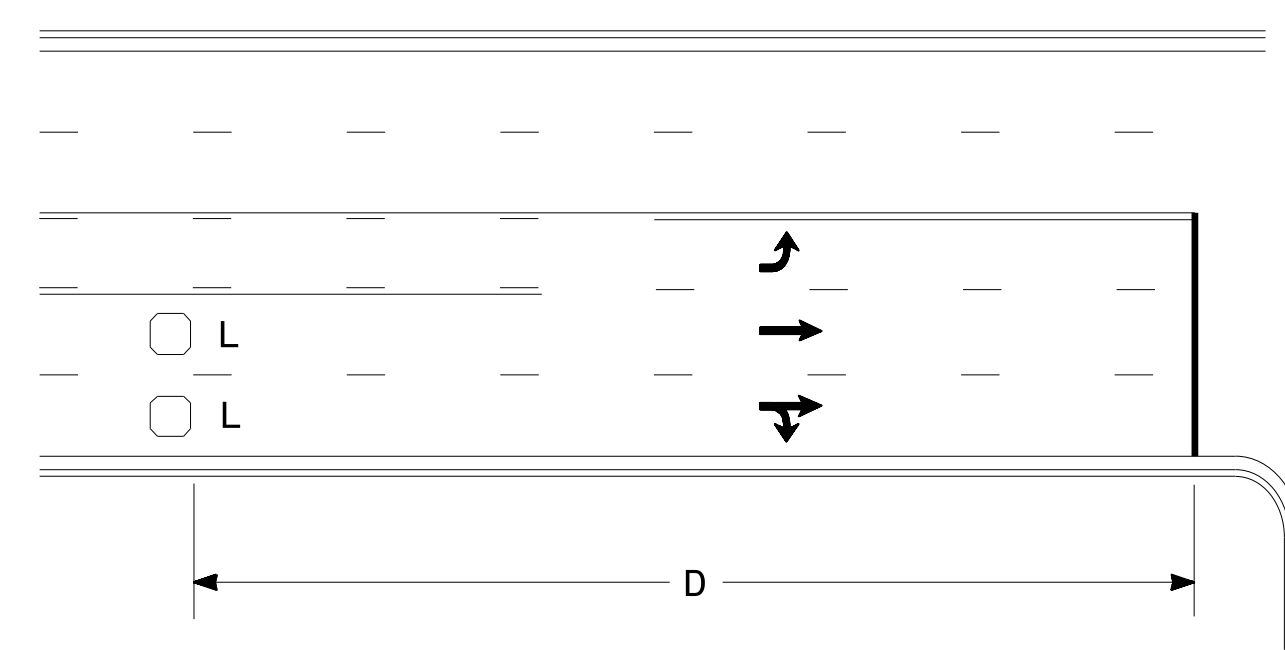
LEGEND

- ┆ STATIONARY SIGN
- ➔ DIRECTION OF TRAFFIC FLOW



**RESURFACING ADVANCE
WARNING SIGNS FOR
URBAN / SUBURBAN
FACILITIES**

High Speed Detection (≥40 mph)

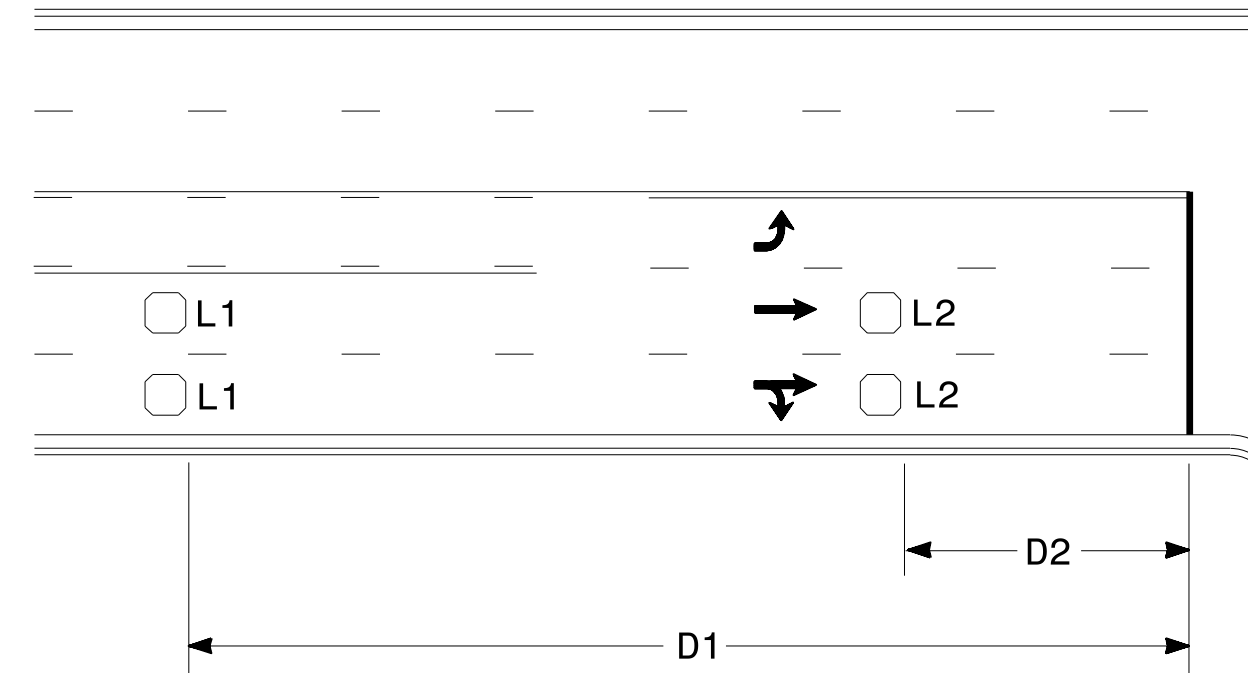


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired in series for TS1
Controllers
Wired separately for TS2,
170, and 2070L Controllers

Volume Density Operation

OR

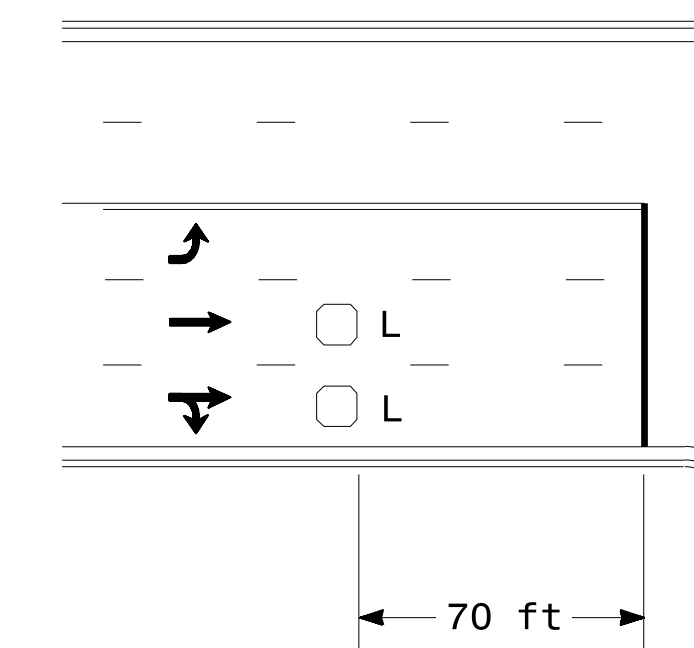


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series
L2 = 6ft X 6ft
Wired in series

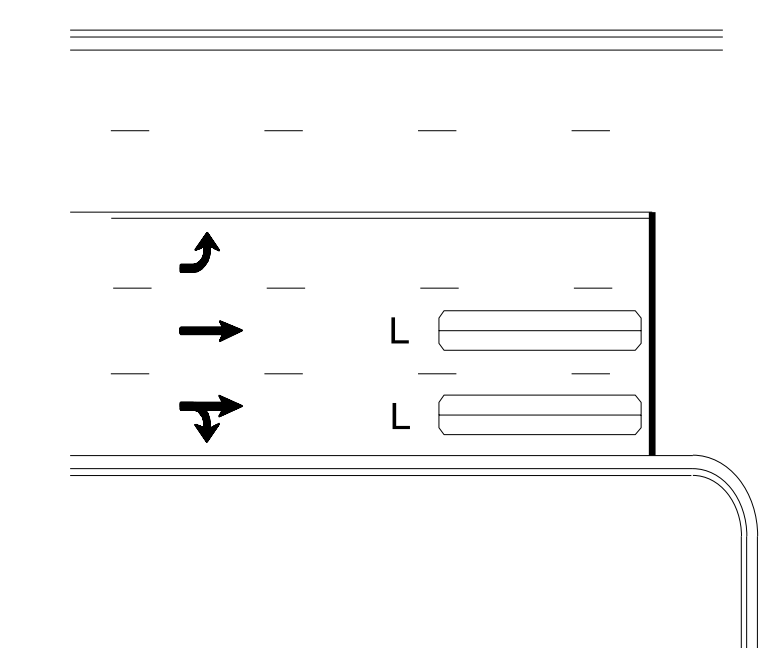
"Stretch" Operation

Low Speed Detection (≤35 mph)



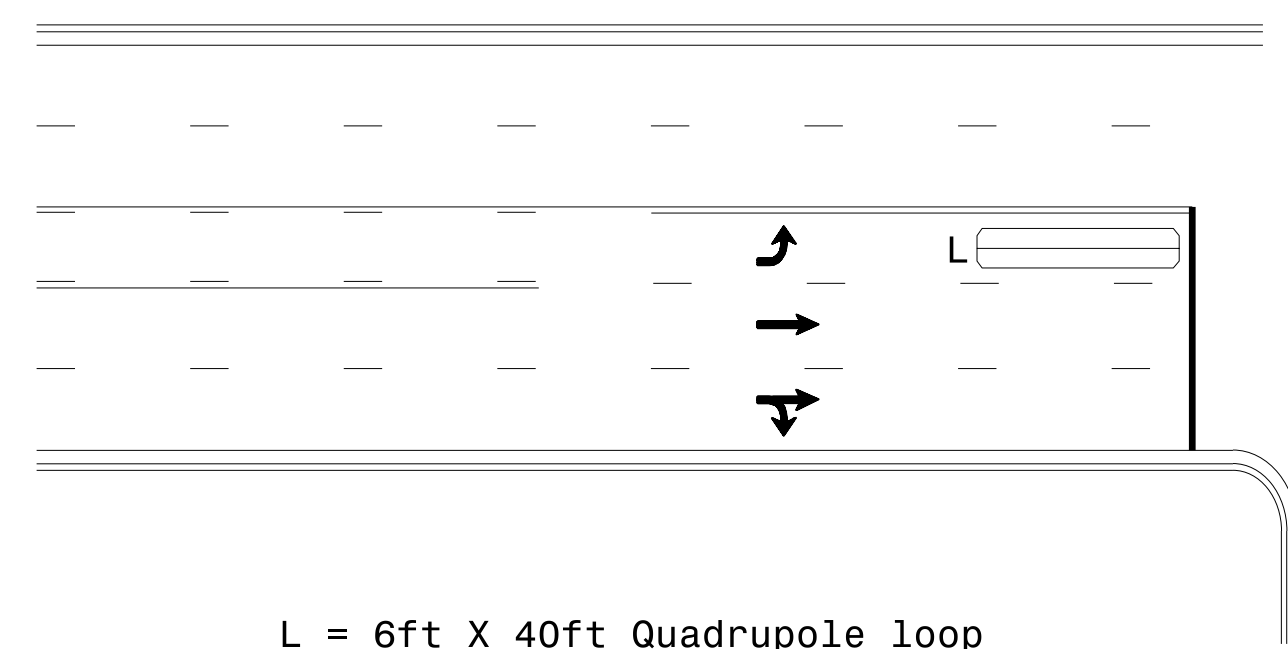
L = 6ft X 6ft
Wired in series

OR



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

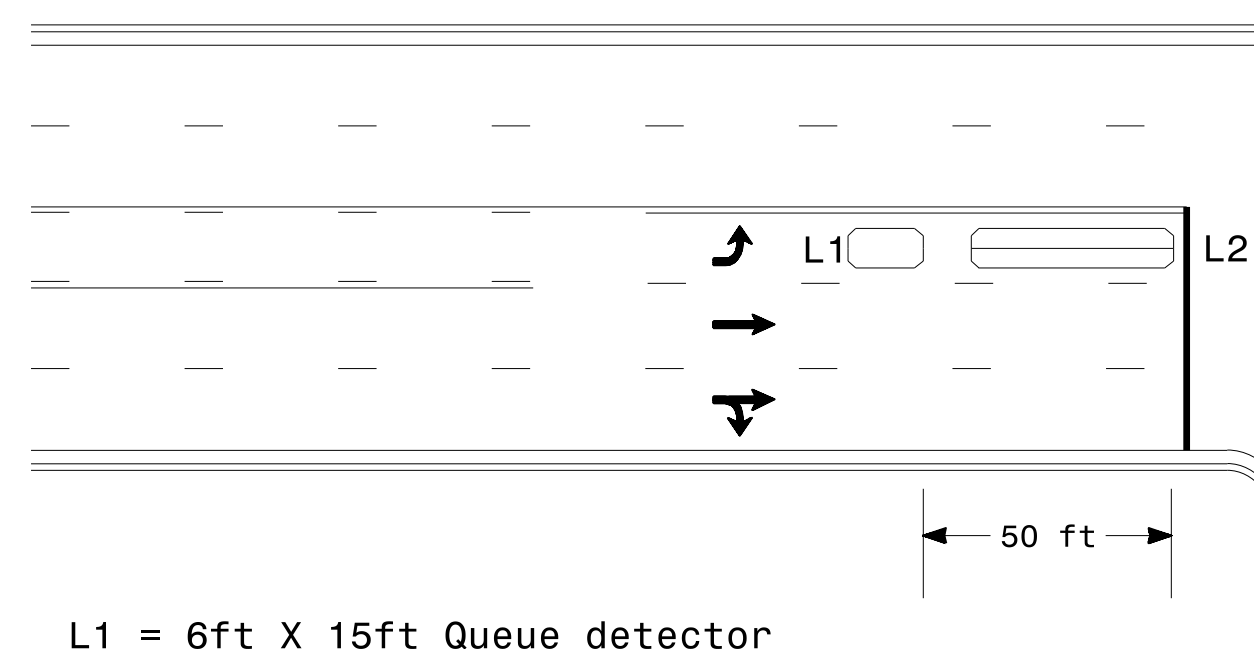
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

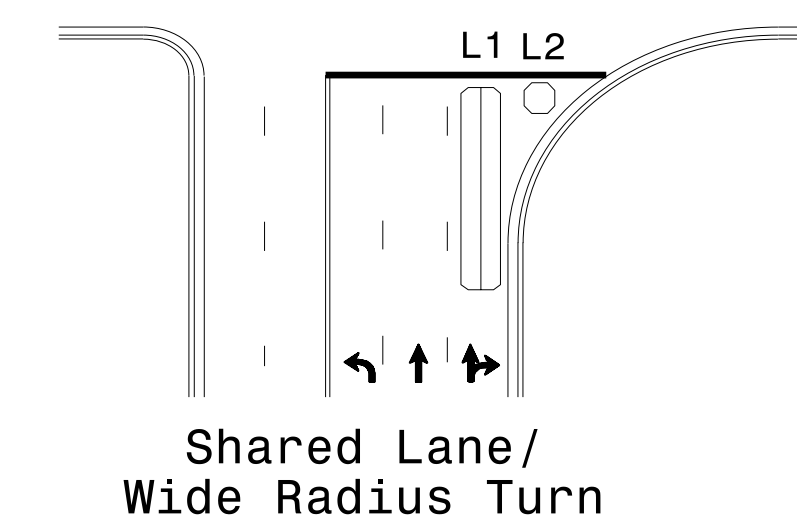
OR



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

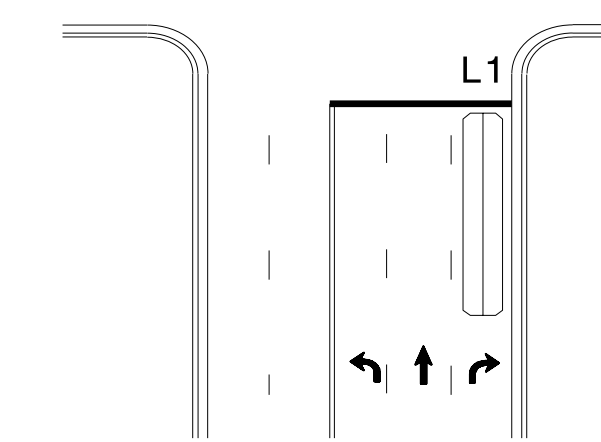
Queue Loop Detection

Right Turn Lane Detection

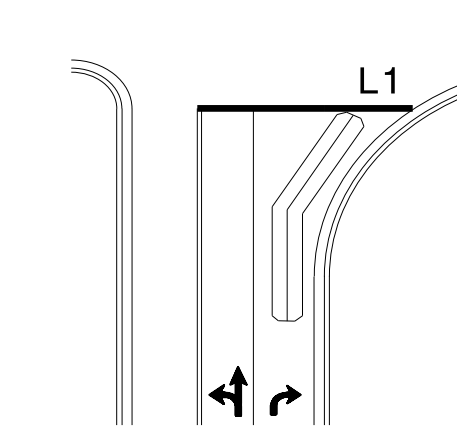


Shared Lane/
Wide Radius Turn

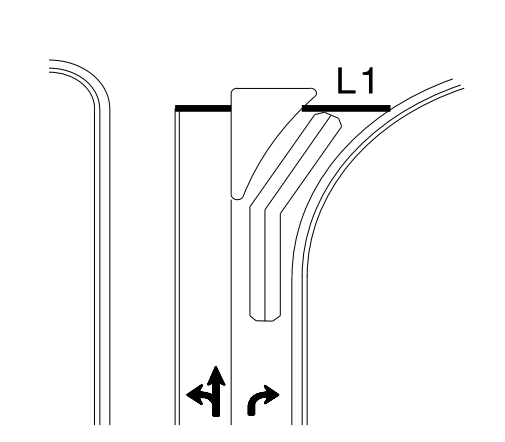
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

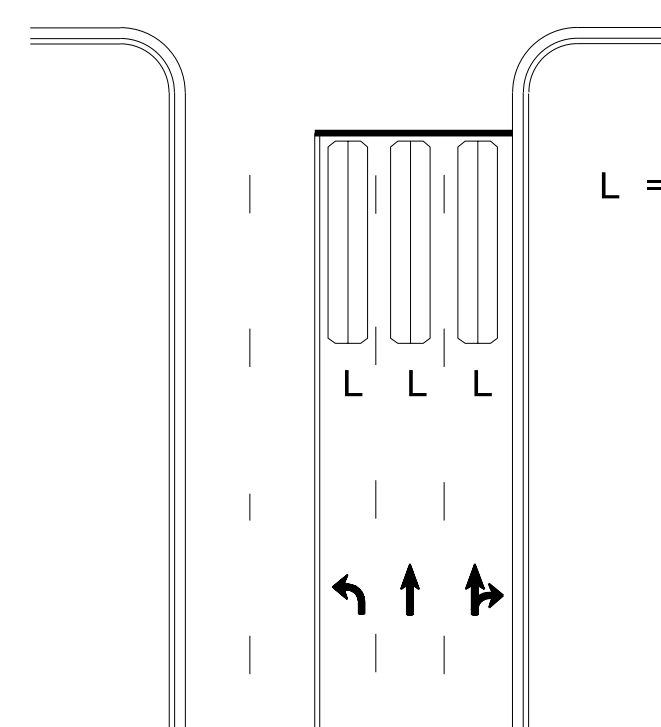


Wide Radius Turn



Channelized Turn

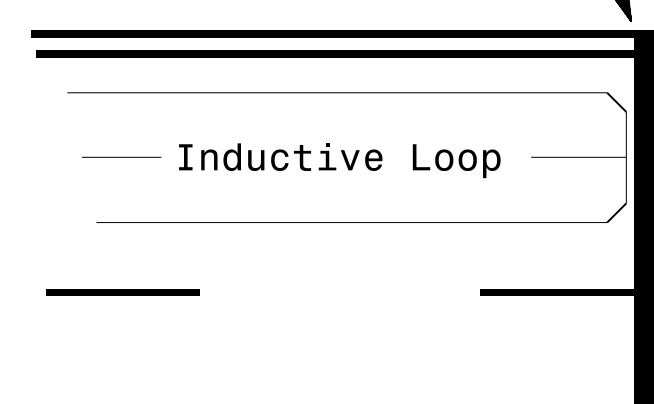
Side Street Detection



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

	<p>Prepared In the Offices of:</p> <p>TRANSPORTATION MOBILITY AND SAFETY DIVISION DEPARTMENT OF TRANSPORTATION SIGNAL DESIGN SECTION</p> <p>750 N. Greenfield Pkwy, Garner, NC 27529</p>		<p>SEAL</p> <p>NORTH CAROLINA</p> <p>PROFESSIONAL ENGINEER</p> <p>SEAL 23489</p> <p>PAMELA L. ALEXANDER</p>
	<p>Typical Signal Loop Locations</p>		
<p>SCALE</p> <p>N/A</p>	<p>PLAN DATE: January 2015</p> <p>PREPARED BY: PLA</p>	<p>REVIEWED BY: JPG</p> <p>REVIEWED BY:</p>	<p>DocuSigned by:</p> <p>P. Alexander</p> <p>1/30/2015</p>

GUIDELINES FOR LANE WIDTHS ON RESURFACING PROJECTS

Contractor shall place the new pavement markings in accordance with this table and detail unless otherwise directed by the Engineer.

TWO LANE - TWO WAY ROADWAY - 55 MPH		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	12'	2'
32'	12'	4'

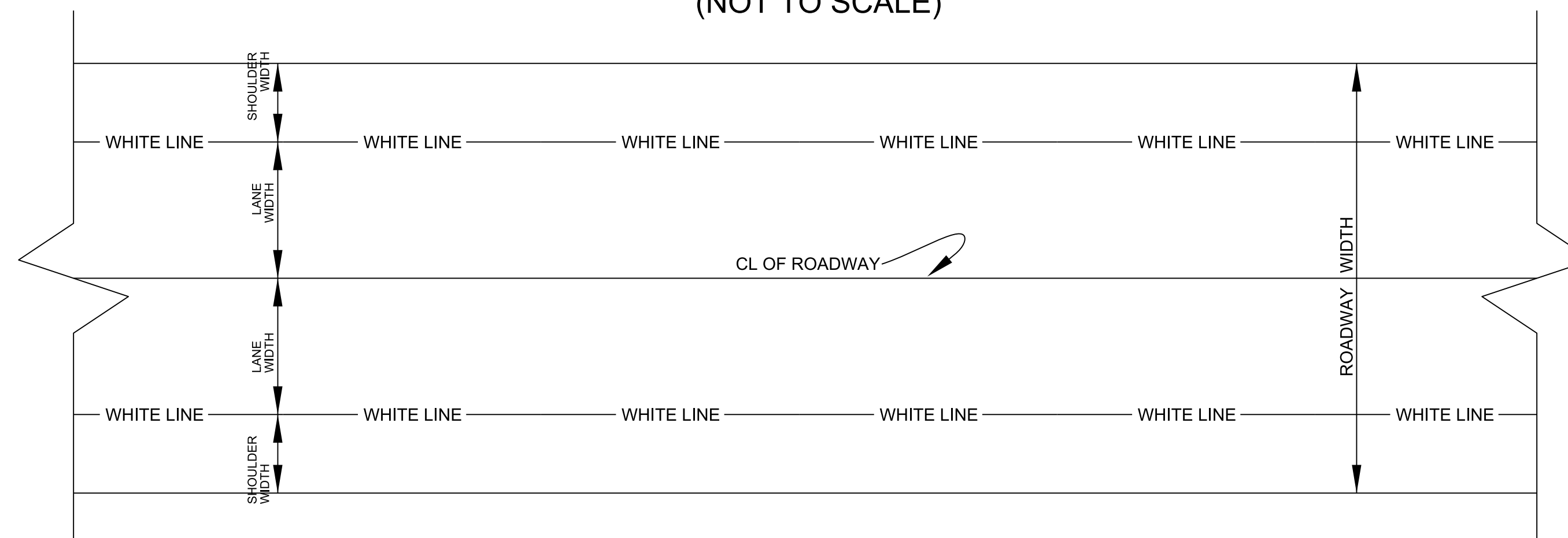
* May vary due to pavement width

TWO LANE - TWO WAY ROADWAY		50
MPH OR LESS		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	11'	3'
32'	11'	5'

* May vary due to pavement width

SCHEMATIC OF ROADWAY

(NOT TO SCALE)



PROJECT NO.	SHEET NO.	TOTAL NO.
06.12.10431.1, 2020CPT.06.12	19	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	441300000-E	445700000-N	451000000-N	468500000-E		468600000-E		469500000-E	469700000-E	470000000-E		470500000-E	471000000-E	472100000-E		472500000-E			481000000-E		490000000-N						
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	4" X 120 M WHITE THERMO	4" X 120 M YELLOW THERMO	8" X 90 M WHITE THERMO	8" X 120 M WHITE THERMO	12" X 90 M WHITE THERMO	12" X 90 M YELLOW THERMO	16" X 120 M WHITE THERMO	24" X 120 M WHITE THERMO	THERMO MSG SCHOOL 120 M	THERMO RXR 120 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR ARROW 90 M	THERMO STR & RT ARROW 90 M	4" WHITE PAINT	4" YELLOW PAINT	CRYSTAL & RED MARKERS	YELLOW & YELLOW MARKERS				
								MI	FT	SF	LS	HR	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA						
2020CPT.06.12.10431.1	Harnett	1	NC 55	FROM US HWY 421 MP 7.30 TO END MEDIAN ISLAND MP 7.40	1	2	2WD	0.1	50	11	1.00	40	1,056	800	1,000		380					37				3	3	1	1			60				
TOTAL FOR MAP NO. 1								0.1		11	1	40	1,056	800	1,000		380					37				3	3	1	1			60				
2020CPT.06.12.10431.1	Harnett	2	NC 55	FROM END MEDIAN ISLAND MP 7.40 TO BEGIN CURB & GUTTER MP 12.07	2	2	2WU	4.67	24	523			49,315		780	46,796						1,210				5	2					35	387			
TOTAL FOR MAP NO. 2								4.67		523			49,315		780	46,796						1,210				5	2					35	387			
2020CPT.06.12.10431.1	Harnett	3	NC 55	FROM BEGIN CURB & GUTTER (SR 2006) MP 12.07 TO NC 27 MP 12.82	3	3	2WU	0.75	36	84					390	12,672		195								7	24					21	110			
TOTAL FOR MAP NO. 3								0.75		84					390	12,672		195								7	24					21	110			
2020CPT.06.12.10431.1	Harnett	4	NC 217	FROM CUMBERLAND COUNTY LINE MP 0.00 TO SR 1779 MP 4.21	2	2	2WU	4.21	28	472			44,457		200	37,787										2					9	285				
TOTAL FOR MAP NO. 4								4.21		472			44,457		200	37,787										2					9	285				
TOTAL FOR PROJ NO. 2020CPT.06.12.10431.1								9.73		1,090	1	40	94,828	800	2,370	97,255	380	195	1,210	420		272	12			17	29	1	9			125	782			
													95,628		99,625				1,630					12		56				907						
2020CPT.06.12.20431.1	Harnett	5	SR 1002	FROM I-5877 PROJECT LIMITS MP 1.58 TO US 301 MP 2.11	7	2	2WU	0.53	26	59					7,708		860	8,451								4	3					33	90			
TOTAL FOR MAP NO. 5								0.53		59					7,708		860	8,451								4	3					33	90			
2020CPT.06.12.20431.1	Harnett	6	SR 1213	FROM NC 27 MP 0.00 TO SR 1229 MP 1.89	4	2	2WU	1.82	18	204																					19,219	16,335				
TOTAL FOR MAP NO. 6								1.82		204																					19,219	16,335				
2020CPT.06.12.20431.1	Harnett	7	SR 1314	FROM SR 1291 MP 0.00 TO US 421 MP 0.43	6	2	2WU	0.43	18	48																					4,540	3,859				
TOTAL FOR MAP NO. 7								0.43		48																					4,540	3,859				
2020CPT.06.12.20431.1	Harnett	8	SR 1314	FROM US 421 MP 0.43 TO END MAINTANCE MP 3.55	5	2	2WU	3.12	22	349																					32,947	28,004				
TOTAL FOR MAP NO. 8								3.12		349																					32,947	28,004				
2020CPT.06.12.20431.1	Harnett	9	SR 1516	FROM NC 27 MP 0.00 TO SR 1542 MP 3.40	4	2	2WU	3.41	18	382																					36,009	30,606				
TOTAL FOR MAP NO. 9								3.41		382																					36,009	30,606				
2020CPT.06.12.20431.1	Harnett	10	SR 1866	FROM SR 1793 MP 0.00 TO DEAD END MP 0.27	8	2	2WU	0.27	20	30																										
TOTAL FOR MAP NO. 10								0.27		30																										
2020CPT.06.12.20431.1	Harnett	11	SR 1912	FROM SR 1793 MP 0.00 TO DEAD END MP 0.29	9	2	2WU	0.29	30	32																										
TOTAL FOR MAP NO. 11								0.29		32																										
2020CPT.06.12.20431.1	Harnett	12	SR 1913	FROM SR 1912 MP 0.00 TO DEAD END MP 0.20	9	2	2WU	0.2	30	22																										
TOTAL FOR MAP NO. 12								0.2		22																										
2020CPT.06.12.20431.1	Harnett	13	SR 1918	FROM SR 1703 MP 0.00 TO CUL-DE-SAC MP 0.20	10	2	2WU	0.2	20	22																										
TOTAL FOR MAP NO. 13								0.2		22																										
2020CPT.06.12.20431.1	Harnett	14	SR 2006	FROM NC 55 MP 0.00 TO SR 1769 MP 3.74	6	2	2WU	3.67	18	411																					38,754	33,134				
TOTAL FOR MAP NO. 14								3.67		411																					38,754	33,134				
2020CPT.06.12.20431.1	Harnett	15	SR 2079	FROM SR 1779 MP 0.00 TO DEAD END MP 0.28	8	2	2WU	0.28	20	31																										
TOTAL FOR MAP NO. 15								0.28		31																										
2020CPT.06.12.20431.1	Harnett	16	SR 2087	FROM SR 1779 MP 0.00 TO SR 2089 MP 0.28	8	2	2WU	0.28	18	31																										
TOTAL FOR MAP NO. 16								0.28		31																										
2020CPT.06.12.20431.1	Harnett	17	SR 2089	FROM SR 2087 MP 0.00 TO SR 2303 MP 0.19	8	2	2WU	0.19	18	21																										
TOTAL FOR MAP NO. 17								0.19		21																										
2020CPT.06.12.20431.1	Harnett	18	SR 2303	FROM SR 2089 MP 0.00 TO SR 1779 MP 0.13	8	2	2WU	0.13	18	15																										
TOTAL FOR MAP NO. 18								0.13		15																										
2020CPT.06.12.20431.1	Harnett	19	SR 1777	FROM SR 1780 MP 0.00 TO NC 82 MP 1.46	7	2	2WU	1.46	23	164																					15,418	13,106				
TOTAL FOR MAP NO. 19								1.46		164																					15,418	13,106				
2020CPT.06.12.20431.1	Harnett	20	SR 1780	FROM US 301 MP 0.00 TO RR TRACK PAVEMENT JT MP 0.35	2, 11	2	2WU	0.35	37	47			3,696		555	3,810					230	95	165		2	7	3				33	20				
TOTAL FOR MAP NO. 20								0.35		47			3,696		555	3,810						230	95	165		2	7	3				33	20			
2020CPT.06.12.20431.1	Harnett	21	SR 1780	FROM RR TRACK PAVEMENT JT MP 0.40 TO SR 1777 MP 0.88	2	2	2WU	0.48	24	54			5,597			5,958						95	65		2								50			
TOTAL FOR MAP NO. 21								0.48		54			5,597			5,958							95	65		2							50			
TOTAL FOR PROJ NO. 2020CPT.06.12.20431.1								17.11		1,922			17,001		1,415	18,219						790	790	190	280		4	4	11	6	4		146,887	125,044	66	160
													17,001		19,634				790						4		21				271,931		226			
GRAND TOTAL								26.84		3,012	1	40	111,829	800	3,785	115,474	380	195	1,210	1,210	190	552	12	4	28	35	1	13	146,887	125,044	191	942				
													112,629		119,259				2,420				16		77					271,931		1,133				