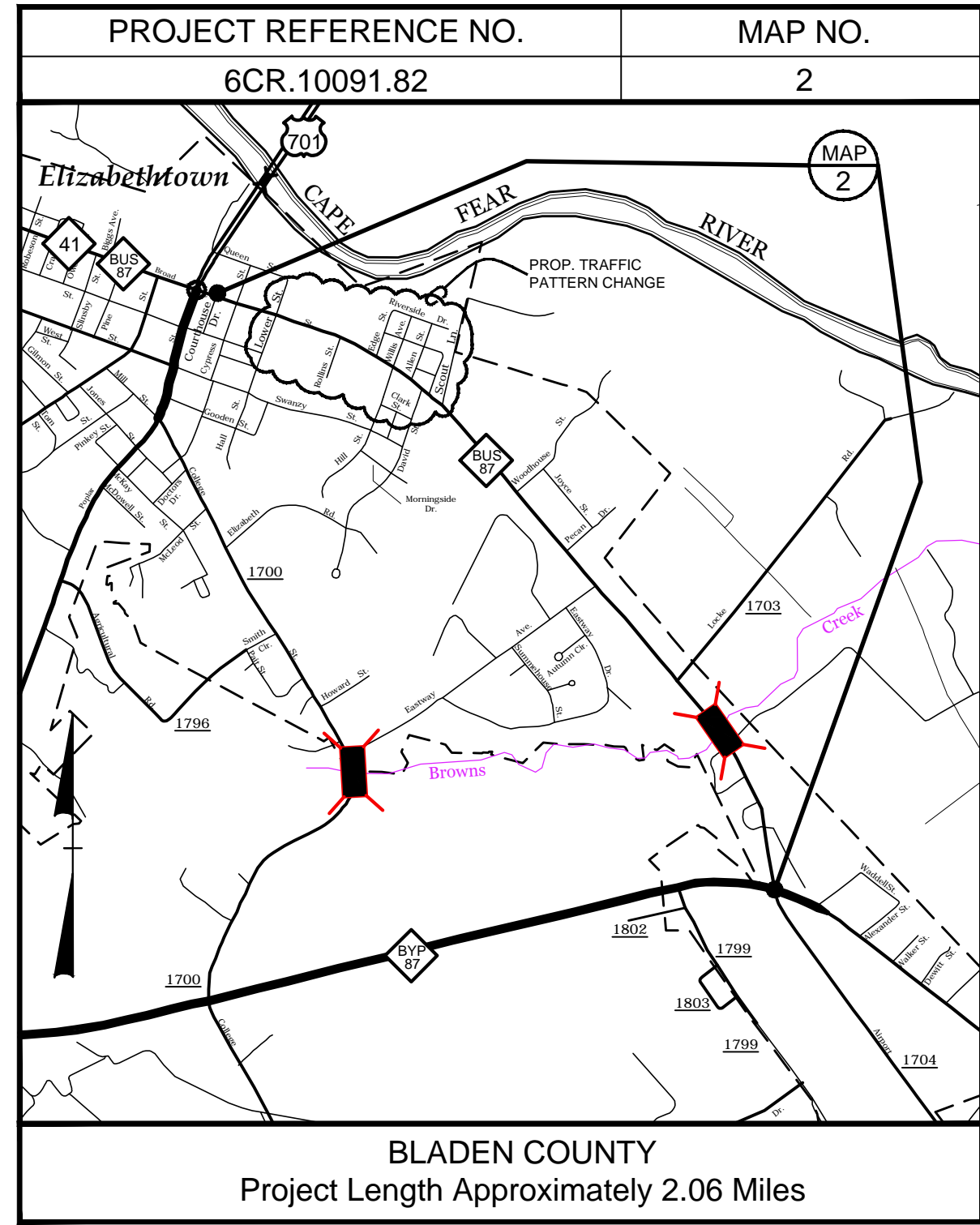
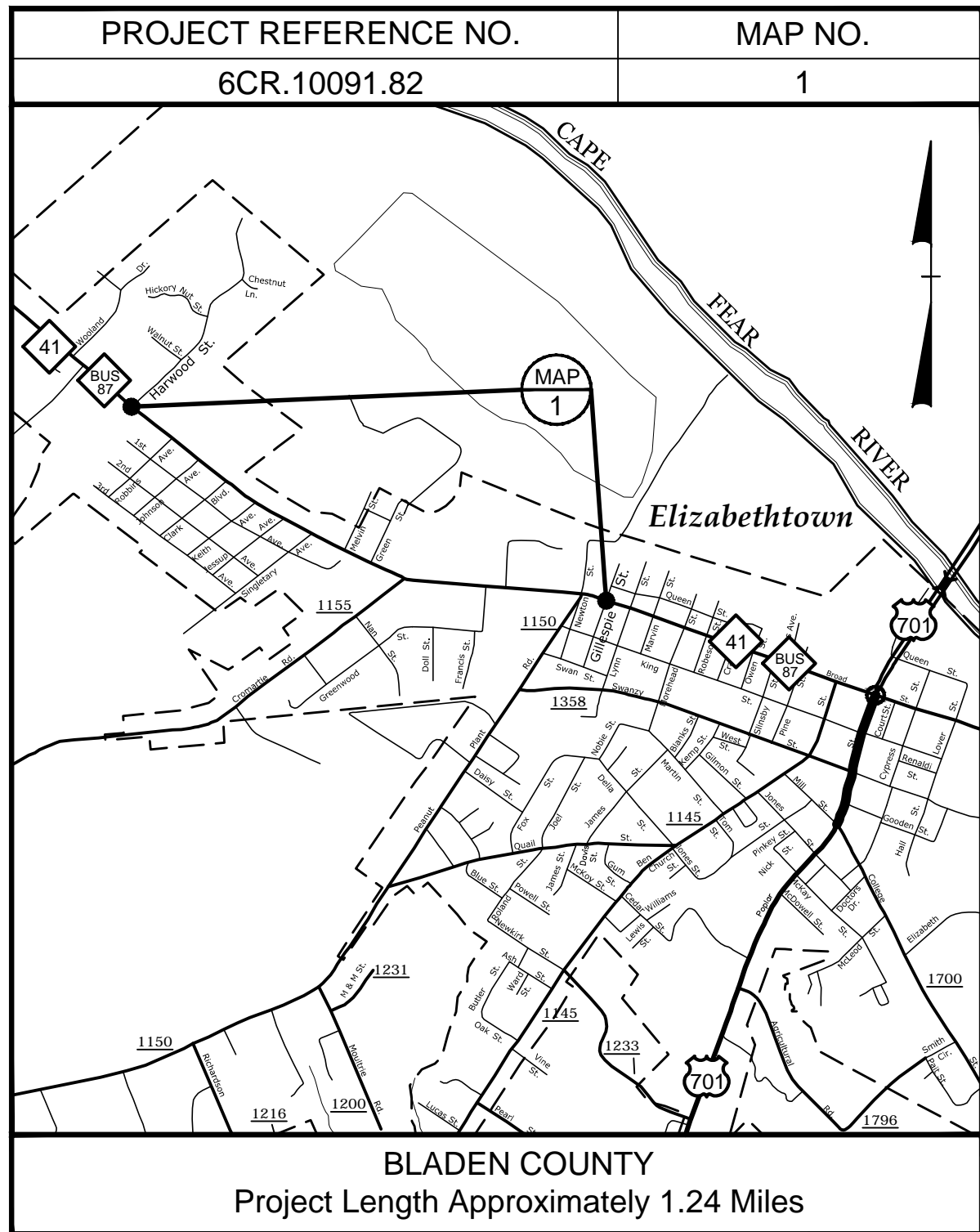


BLADEN COUNTY

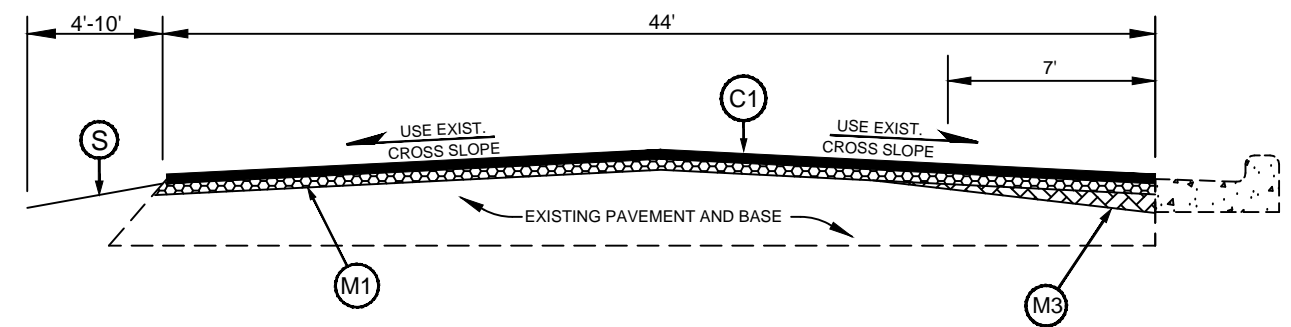
# RESURFACING MAPS - BLADEN COUNTY

NOTE:  
 PROP. TRAFFIC PATTERN CHANGE FROM LOWER STREET TO SCOUT LANE. CHANGE FROM 4-LANE UNDIVIDED (4 - 10' LANES) TO A 3-LANE SECTION WITH 2 - 11' TRAVEL LANES, A 10' CENTER TURN LANE & 4' BIKE LANES ON THE OUTSIDE EDGES. NO BIKE SYMBOLS ARE REQUIRED (BY OTHERS).



### TYPICAL SECTION NO. 2

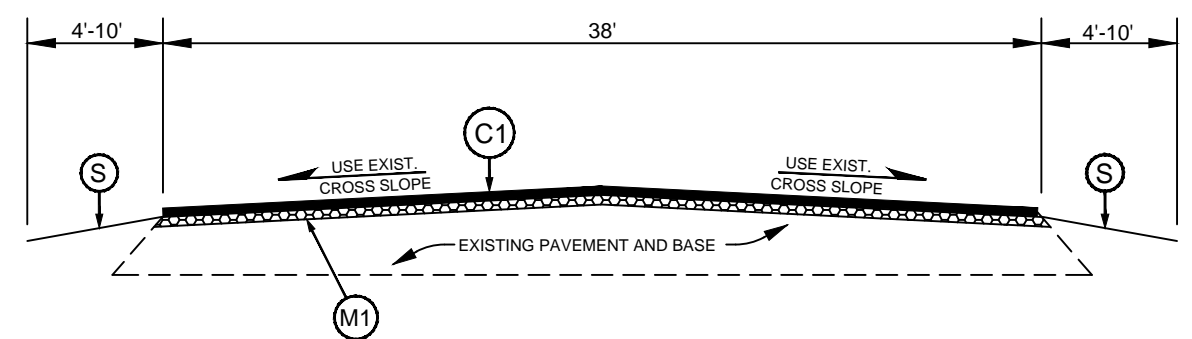
MAP 1: NC 41 - B - FROM BEGIN C&G-R TO GREENWOOD ST.



- NOTES:
1. INCLUDES MILL & FILL PAVEMENT REPAIR WHERE IDENTIFIED BY ENGINEER. SEE DETAIL 2.
  2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 3.

### TYPICAL SECTION NO. 3

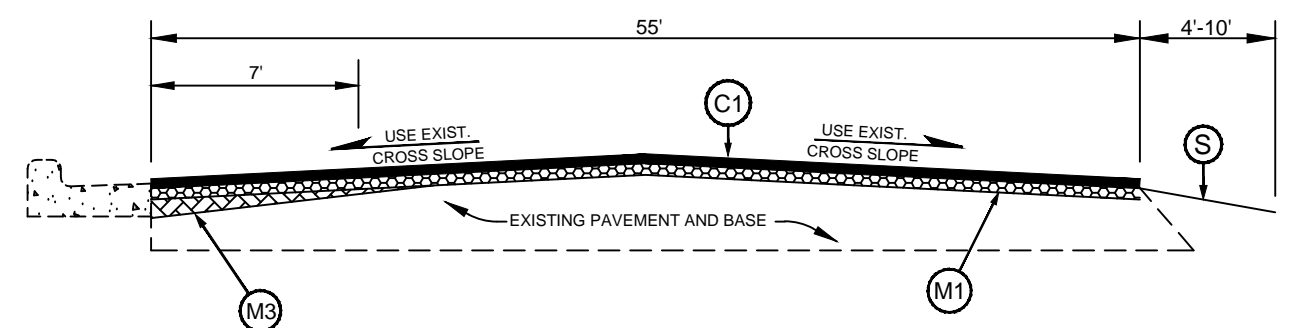
MAP 1: NC 41 - C - FROM GREENWOOD ST. TO BEGIN C&G-L



- NOTES:
1. INCLUDES MILL & FILL PAVEMENT REPAIR WHERE IDENTIFIED BY ENGINEER. SEE DETAIL 2.
  2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 3.

### TYPICAL SECTION NO. 4

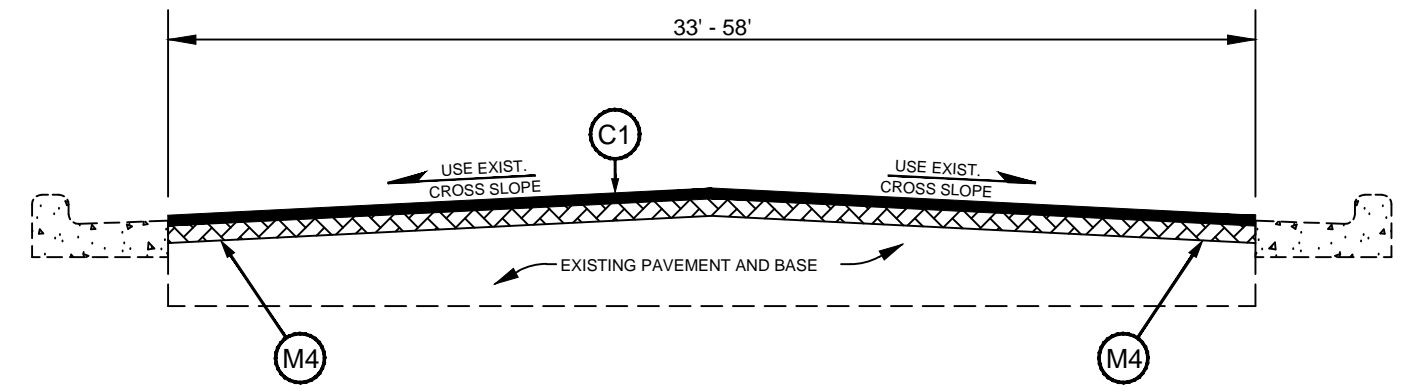
MAP 1: NC 41 - D - FROM BEGIN C&G-L TO SR 1150 (PEANUT RD.)



- NOTES:
1. INCLUDES MILL & FILL PAVEMENT REPAIR WHERE IDENTIFIED BY ENGINEER. SEE DETAIL 2.
  2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 3.

### TYPICAL SECTION NO. 5

MAP 1: NC 41 - E - FROM SR 1150 (PEANUT RD.) TO CJ @ GILLESPIE ST.  
MAP 2: NC 87 BUS. - B - FROM SCOUT ST. TO COURTHOUSE DR.



- NOTES:
1. INCLUDES MILL & FILL PAVEMENT REPAIR WHERE IDENTIFIED BY ENGINEER. SEE DETAIL 2.
  2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 3.

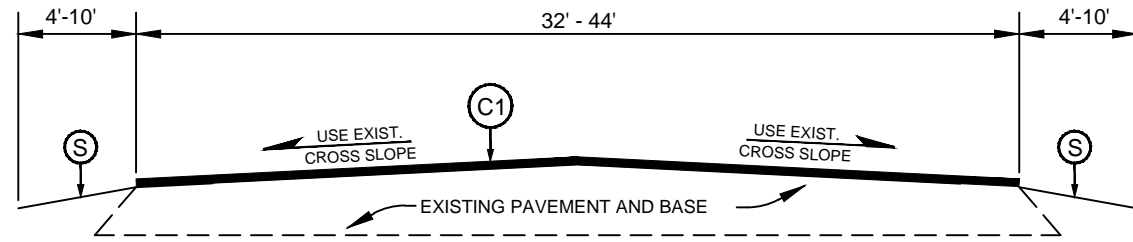
### PAVEMENT SCHEDULE

C1	Proposed approximately 1½" of Asphalt Concrete Surface Course, Type S-9.5-B, at an average rate of 168 pounds per square yard.
D1	Proposed approximately 2½" of Asphalt Concrete Intermediate Course, Type I-19.0-B, at an average rate of 285 pounds per square yard.
E1	Proposed approximately 5½" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 627 pounds per square yard for symmetrical 2' widening.
E2	Proposed approximately 5½" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 627 pounds per square yard for 2' widening at inside curve radii, as Directed by the Engineer.
M1	Milling existing asphalt to a depth of ¾" for the entire width of the roadway, or as Directed by the Engineer, for roadway profile correction.
M2	Milling existing soil shoulder, to a depth of 5½" with a width of 2', where indicated by Typical, for symmetrical & inside curve widening.
M3	Milling Depth 0" - ¾" at the edge of Curb & Gutter. Milling shall extend below the lip of the Curb & Gutter by the thickness of the Proposed Overlay, or as Directed by the Engineer.
M4	Milling Depth 1½" for the entire width of the roadway. Milling shall extend below the lip of the Curb & Gutter by the thickness of the Proposed Overlay.
M5	Milling Depth of 2½" for the entire width of the roadway.
M6	Milling Depth 2½" at all designated distressed areas, with a variable width from 9' to 12', or as Directed by the Engineer.
M7	Incidental Milling 0" - 1½" at all Bridge Approaches, Bridge Decks and Railroad Track Approaches, for the entire width of the roadway, or as Directed by the Engineer.
M8	Milling Depth of 1½" for the entire width of the roadway.
S	Shoulder Reconstruction to be performed by State Forces. Contractor shall coordinate with NCDOT units as needed.

DRAWINGS NOT TO SCALE

### TYPICAL SECTION NO. 6

MAP 2: NC 87 BUS. - A - FROM NC 87 BYP. TO SCOUT ST.

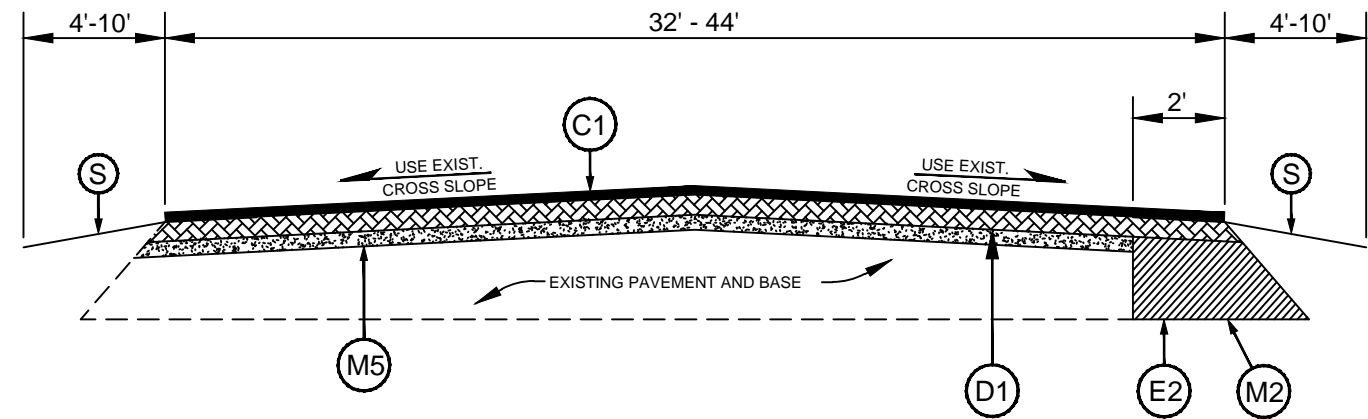


**NOTES:**

1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 3.
2. INCLUDES MILLING ON ASPHALT BRIDGE DECKS & BRIDGE APPROACHES, AS NEEDED, OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 4.

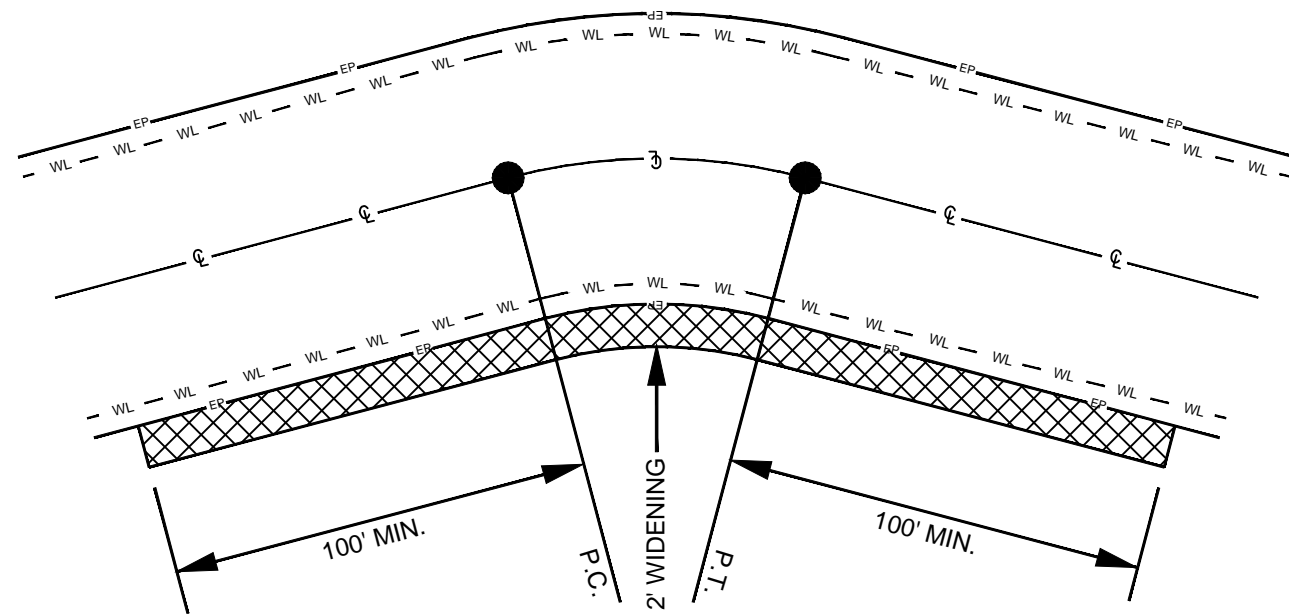
### TYPICAL SECTION NO. 7

MAP 3: SR 1179 - FROM NC 211 BUS. TO FEED MILL DRIVEWAY



**NOTES:**

1. MILL THE FULL WIDTH OF THE EXISTING PAVEMENT.
2. PLACE 2' SYMMETRICAL WIDENING. MAKE FLUSH WITH THE EXISTING ASPHALT LEFT IN PLACE AFTER FULL WIDTH MILLING.
3. PLACE ASPHALT BINDER COURSE AT FULL WIDTH, INCLUDING NEW WIDENING.
4. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH, INCLUDING NEW WIDENING.
5. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 3.
6. INCLUDES MILLING ON RAILROAD APPROACHES, AS NEEDED, OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 4.



**DETAIL 1**  
**2' INSIDE CURVE WIDENING**

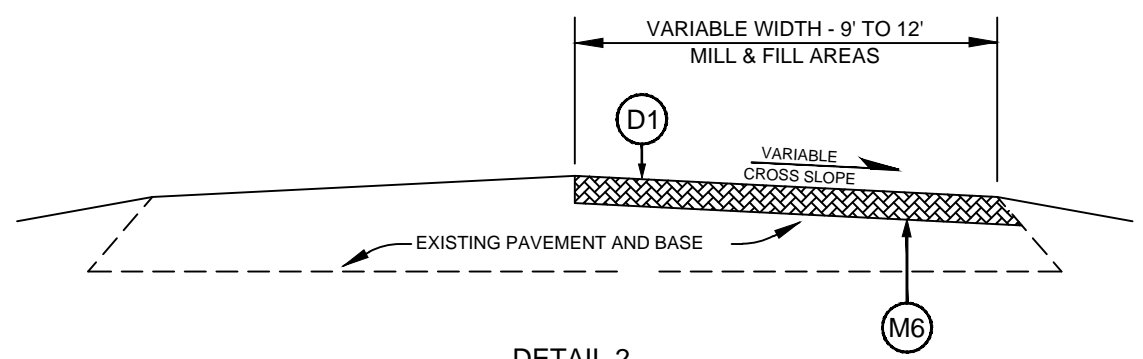
**NOTES:**

1. CONSTRUCT CURVE WIDENING ON ALL CURVES, PROVIDED ADEQUATE SHOULDER EXISTS, OR AS DIRECTED BY ENGINEER.
2. MAINTAIN LANE WIDTHS AND WHITE EDGE LINE PLACEMENT AS SHOWN. CURVE WIDENING SHOULD ACT AS A PAVED SHOULDER, NOT ADDITIONAL LANE WIDTH.

### PAVEMENT SCHEDULE

C1	Proposed approximately 1½" of Asphalt Concrete Surface Course, Type S-9.5-B, at an average rate of 168 pounds per square yard.
D1	Proposed approximately 2½" of Asphalt Concrete Intermediate Course, Type I-19.0-B, at an average rate of 285 pounds per square yard.
E1	Proposed approximately 5½" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 627 pounds per square yard for symmetrical 2' widening.
E2	Proposed approximately 5½" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 627 pounds per square yard for 2' widening at inside curve radii, as Directed by the Engineer.
M1	Milling existing asphalt to a depth of ¾" for the entire width of the roadway, or as Directed by the Engineer, for roadway profile correction.
M2	Milling existing soil shoulder, to a depth of 5½" with a width of 2', where indicated by Typical, for symmetrical & inside curve widening.
M3	Milling Depth 0" - ¾" at the edge of Curb & Gutter. Milling shall extend below the lip of the Curb & Gutter by the thickness of the Proposed Overlay, or as Directed by the Engineer.
M4	Milling Depth 1½" for the entire width of the roadway. Milling shall extend below the lip of the Curb & Gutter by the thickness of the Proposed Overlay.
M5	Milling Depth of 2½" for the entire width of the roadway.
M6	Milling Depth 2½" at all designated distressed areas, with a variable width from 9' to 12', or as Directed by the Engineer.
M7	Incidental Milling 0" - 1½" at all Bridge Approaches, Bridge Decks and Railroad Track Approaches, for the entire width of the roadway, or as Directed by the Engineer.
M8	Milling Depth of 1½" for the entire width of the roadway.
S	Shoulder Reconstruction to be performed by State Forces. Contractor shall coordinate with NCDOT units as needed.

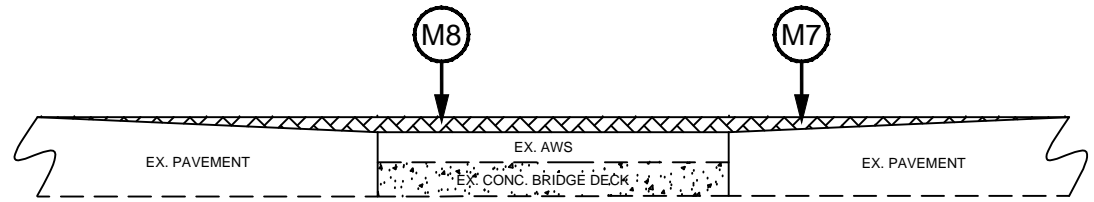
DRAWINGS NOT TO SCALE



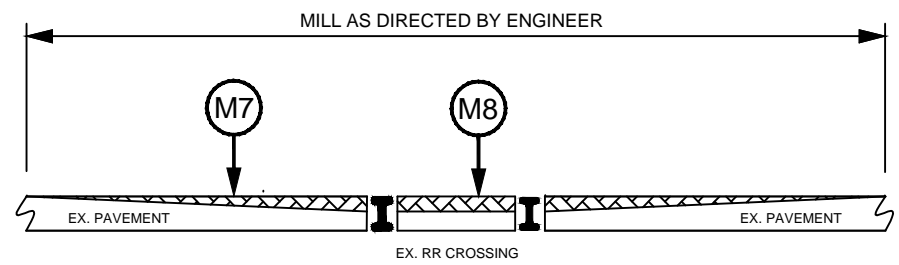
**DETAIL 2**  
**MILL & FILL PAVEMENT REPAIR**

**NOTES:**

1. DISTRESSED AREAS TO BE REPAIRED BY MILL & FILL SHALL BE DESIGNATED BY THE ENGINEER.
2. FILL MILLED AREAS WITH ASPHALT INTERMEDIATE COURSE BACK FLUSH WITH THE EXISTING ASPHALT LEFT IN PLACE, PRIOR TO PLACEMENT OF PROPOSED ASPHALT SURFACE COURSE.



**BRIDGE MILLING**

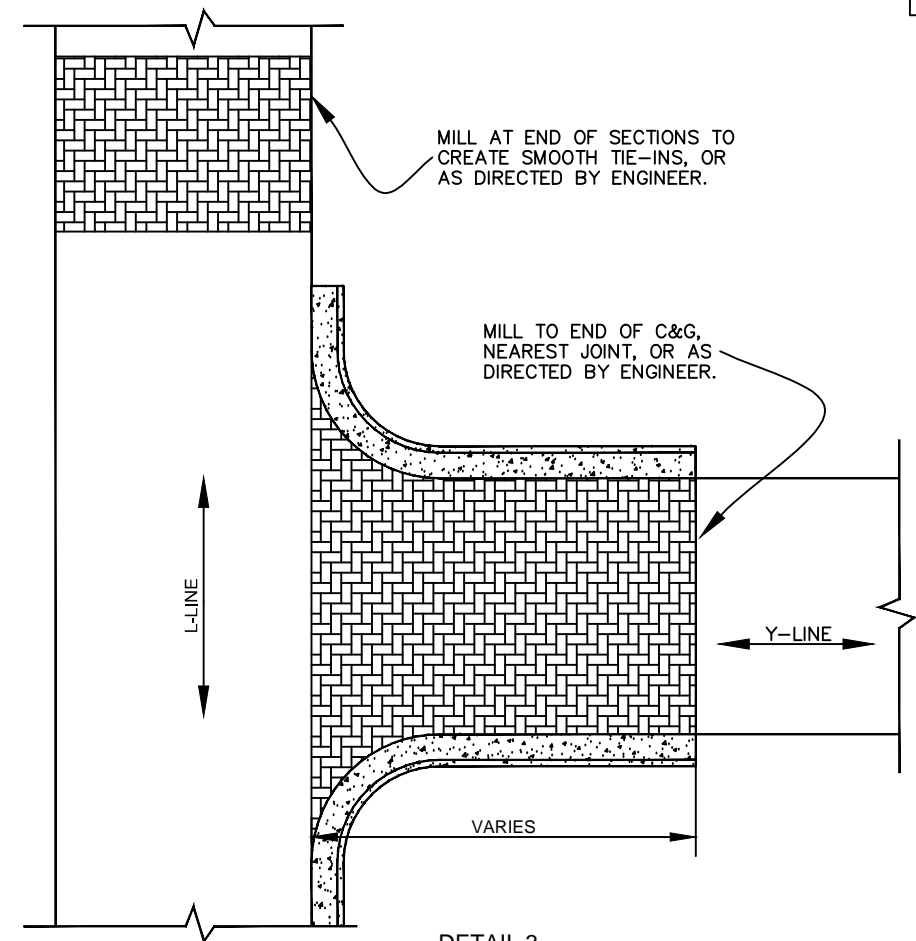


**RAILROAD TRACKS MILLING**

**DETAIL 4**  
**MILLING APPROACHES**

**NOTE:**

MILLING SHALL BE PERFORMED AT RR CROSSINGS, BRIDGE DECKS AND BRIDGE APPROACHES AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



**DETAIL 3**  
**Y-LINE / BUTT JOINT MILLING**

**NOTES:**

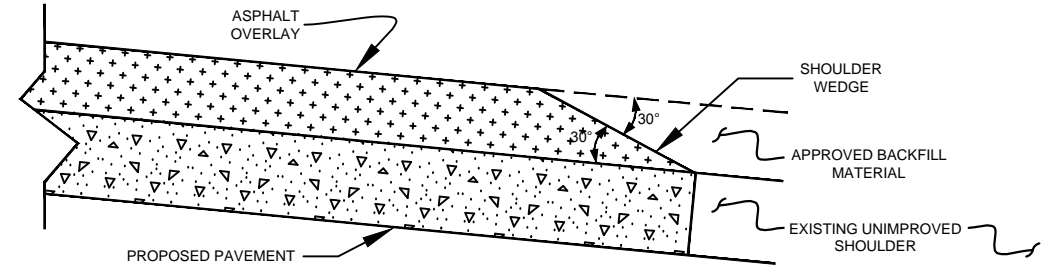
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER.
2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.

PAVEMENT SCHEDULE	
C1	Proposed approximately 1½" of Asphalt Concrete Surface Course, Type S-9.5-B, at an average rate of 168 pounds per square yard.
D1	Proposed approximately 2½" of Asphalt Concrete Intermediate Course, Type I-19.0-B, at an average rate of 285 pounds per square yard.
E1	Proposed approximately 5½" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 627 pounds per square yard for symmetrical 2' widening.
E2	Proposed approximately 5½" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 627 pounds per square yard for 2' widening at inside curve radii, as Directed by the Engineer.
M1	Milling existing asphalt to a depth of ¾" for the entire width of the roadway, or as Directed by the Engineer, for roadway profile correction.
M2	Milling existing soil shoulder, to a depth of 5½" with a width of 2', where indicated by Typical, for symmetrical & inside curve widening.
M3	Milling Depth 0" - ¾" at the edge of Curb & Gutter. Milling shall extend below the lip of the Curb & Gutter by the thickness of the Proposed Overlay, or as Directed by the Engineer.
M4	Milling Depth 1½" for the entire width of the roadway. Milling shall extend below the lip of the Curb & Gutter by the thickness of the Proposed Overlay.
M5	Milling Depth of 2½" for the entire width of the roadway.
M6	Milling Depth 2½" at all designated distressed areas, with a variable width from 9' to 12', or as Directed by the Engineer.
M7	Incidental Milling 0" - 1½" at all Bridge Approaches, Bridge Decks and Railroad Track Approaches, for the entire width of the roadway, or as Directed by the Engineer.
M8	Milling Depth of 1½" for the entire width of the roadway.
S	Shoulder Reconstruction to be performed by State Forces. Contractor shall coordinate with NCDOT units as needed.

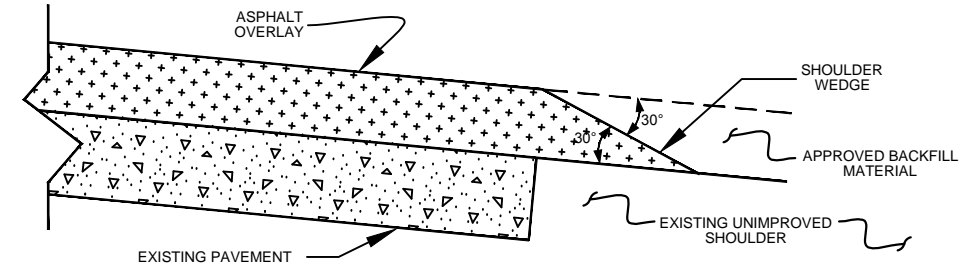
**DRAWINGS NOT TO SCALE**

### DETAIL 6 GUIDELINES FOR LANE WIDTHS ON RESURFACING PROJECTS

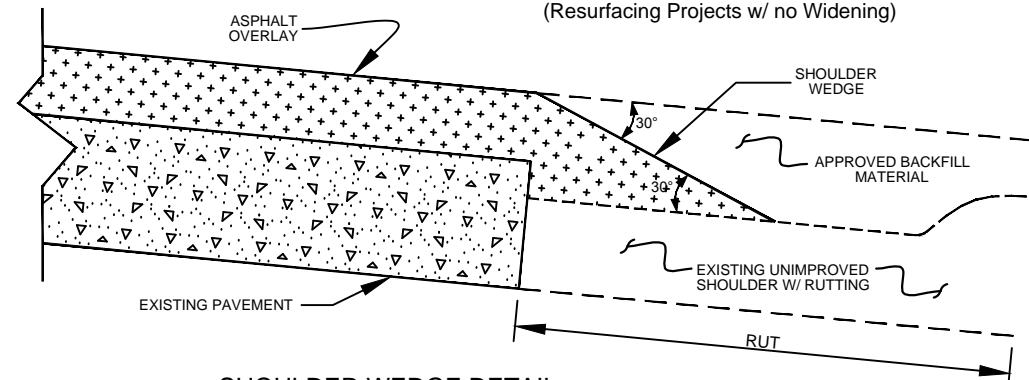
Contractor shall place the new pavement markings in accordance with this table and detail unless otherwise directed by the Engineer.



**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)

### DETAIL 5 SHOULDER WEDGE DETAILS

- 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.

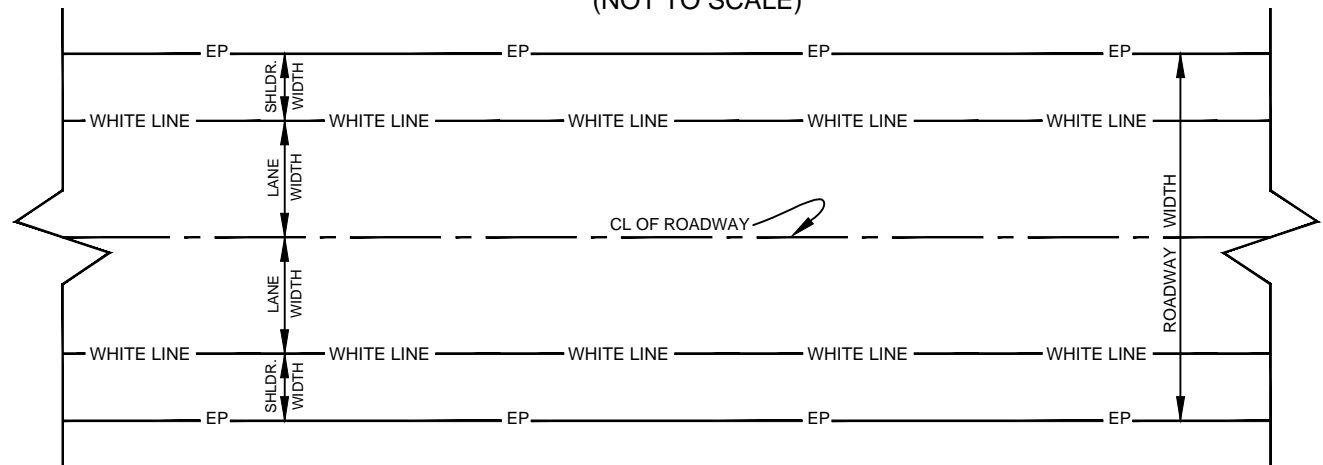
TWO LANE - TWO WAY ROADWAY - 55 MPH		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	12'	2'
32'	12'	4'

\* May vary due to pavement width

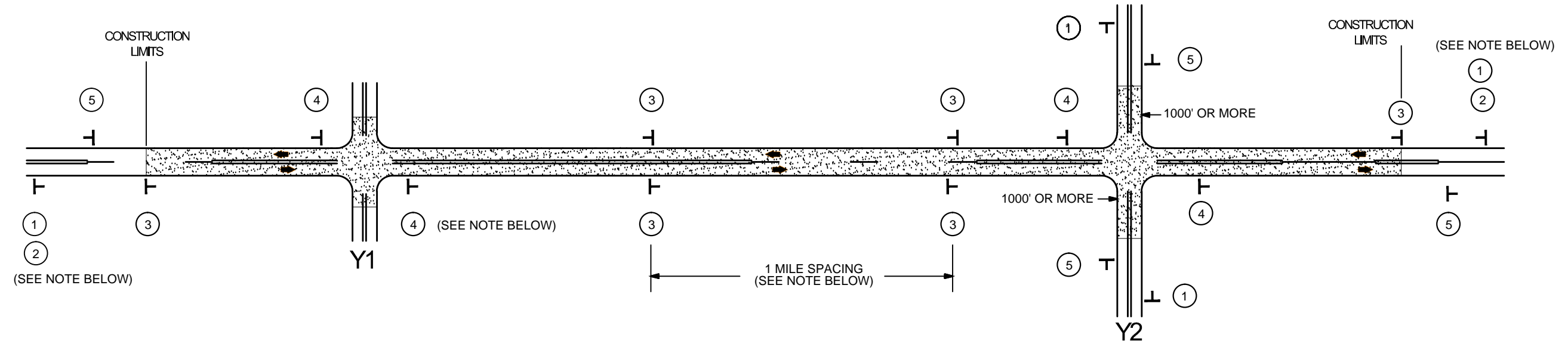
TWO LANE - TWO WAY ROADWAY 50 MPH OR LESS		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	11'	3'
32'	11'	5'

\* May vary due to pavement width

### SCHEMATIC OF ROADWAY (NOT TO SCALE)



# SIGNING FOR RESURFACING PROJECTS



LEGEND	
T	STATIONARY SIGN
→	DIRECTION OF TRAFFIC FLOW

## MAINLINE (-L-) SIGNING

## -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	 W20-1 48" X 48"	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.		
	2	 W7-3aP 24" X 18"	#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)		
	3	 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	 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	 G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.		

**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

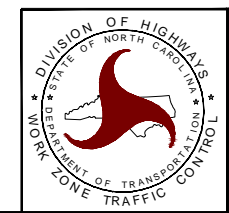
WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.



PLACED 500' IN ADVANCE OF FLAGGER.

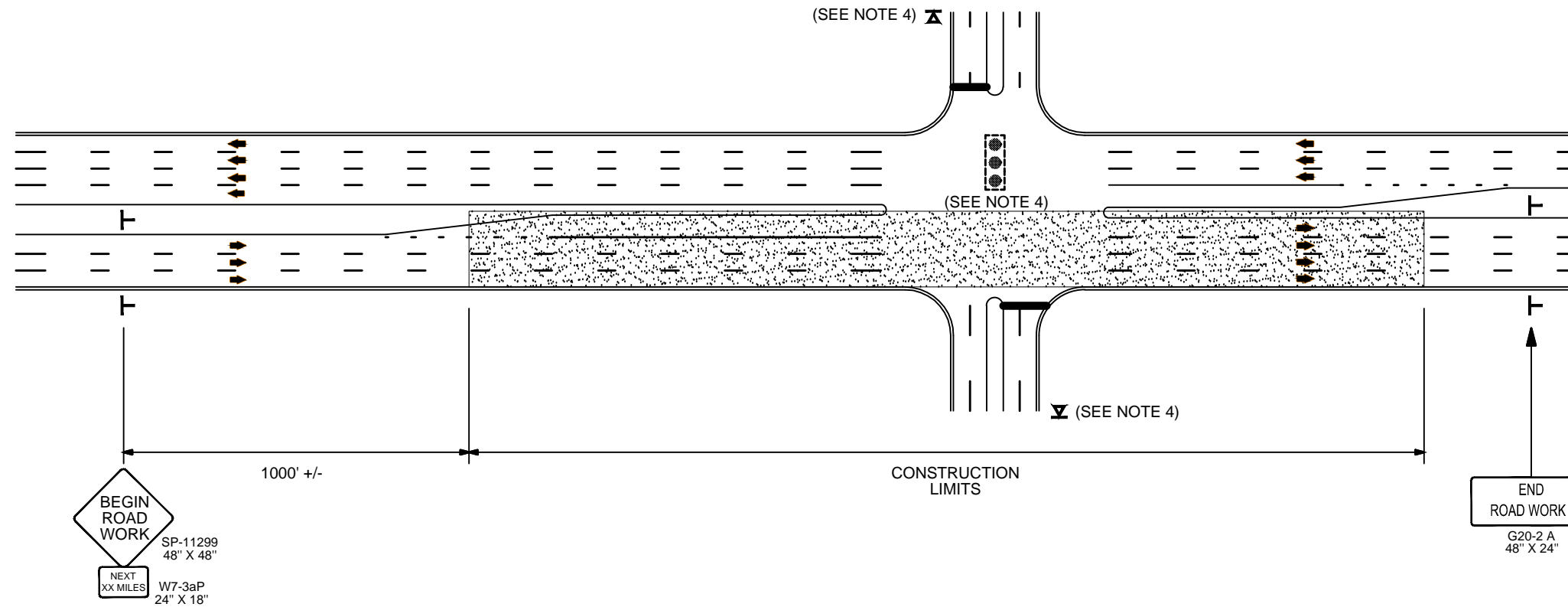


PLACED 250' IN ADVANCE OF FLAGGER.



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

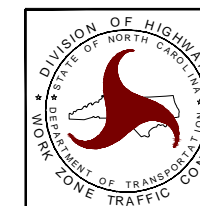
## URBAN / SUBURBAN WORKZONES



### NOTES:

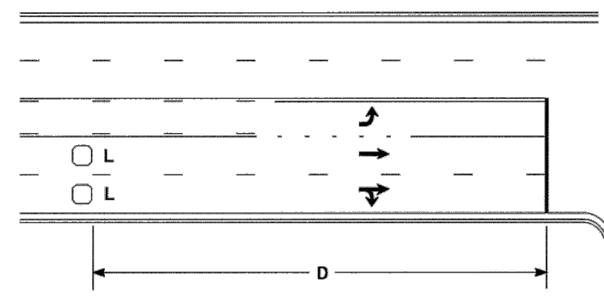
1. 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
2. MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. 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	
T	STATIONARY SIGN
➔	DIRECTION OF TRAFFIC FLOW



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

**High Speed Detection**  
[≥40 mph (64 km/hr)]

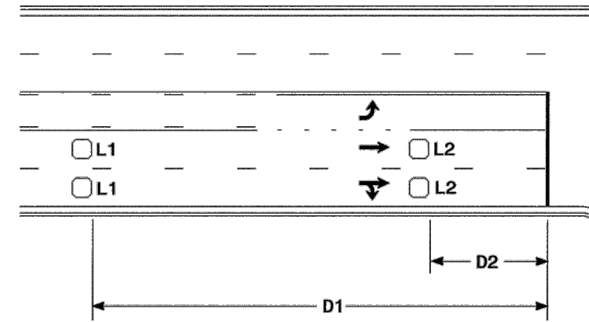


Speed Limit mph (km/hr)	D ft (m)
40 (64)	250 (75)
45 (72)	300 (90)
50 (80)	355 (110)
55 (88)	420 (130)

L = 6ft X 6ft (1.8m X 1.8m)  
Wired in series for TS1  
Controllers  
Wired separately for TS2,  
170, and 2070L Controllers

Volume Density Operation

OR

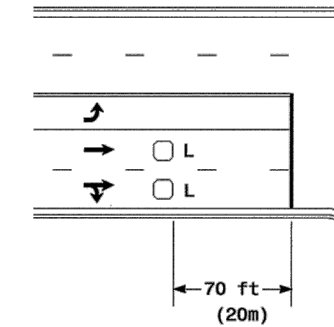


Speed Limit mph (km/hr)	D1 ft (m)	D2 ft (m)
40 (64)	250 (75)	80 (25)
45 (72)	300 (90)	90 (27)
50 (80)	355 (110)	100 (30)
55 (88)	420 (130)	110 (35)

L1 = 6ft X 6ft  
(1.8m X 1.8m)  
Wired in series  
L2 = 6ft X 6ft  
(1.8m X 1.8m)  
Wired in series

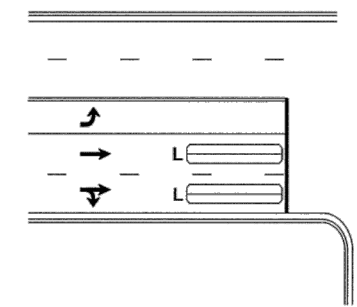
"Stretch" Operation

**Low Speed Detection**  
[≤35 mph (56 km/hr)]



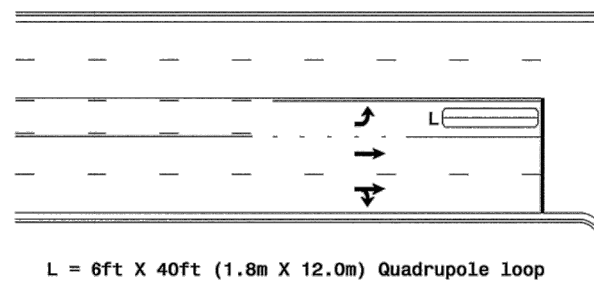
L = 6ft X 6ft (1.8m X 1.8m)  
Wired in series

OR



L = 6ft X 40ft (1.8m X 12.0m)  
Quadrupole loop, wired separately

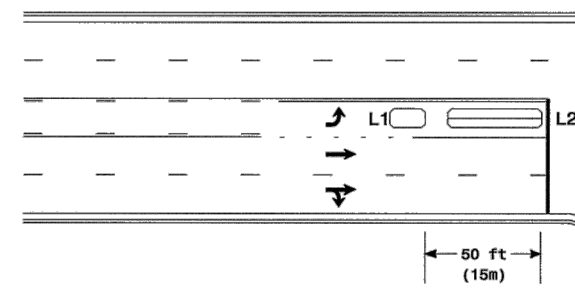
**Left Turn Lane Detection**



L = 6ft X 40ft (1.8m X 12.0m) Quadrupole loop

Presence Loop Detection

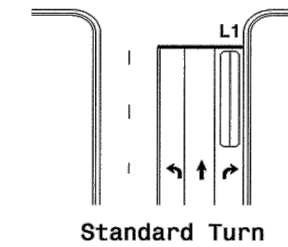
OR



L1 = 6ft X 15ft (1.8m X 4.6m) Queue detector  
L2 = 6ft X 40ft (1.8m X 12.0m) Quadrupole loop

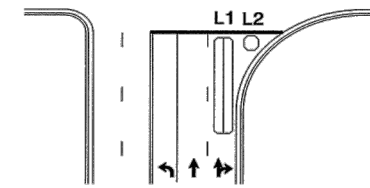
Queue Loop Detection

**Right Turn Lane Detection**

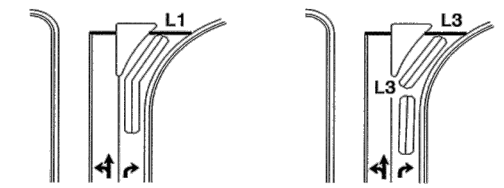


Standard Turn

L1 = 6ft X 40ft (1.8m X 12.0m) Quadrupole loop  
L2 = 6ft X 6ft (1.8m X 1.8m) [Minimum] Presence Loop  
Wired separately  
L3 = 6ft X 20ft (1.8m X 6.0m) Quadrupole loop  
Wired in series

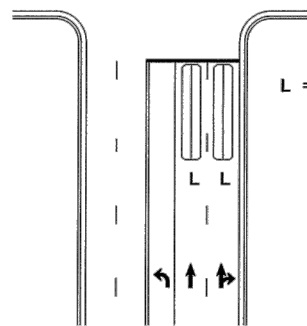


Wide Radius Turn



Channelized Turn

**Side Street Detection**

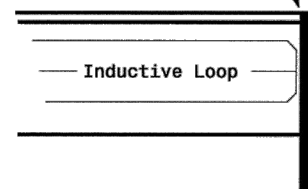


L = 6ft X 40ft (1.8m X 12.0m)  
Quadrupole loop  
Wired to separate  
detectors/channels

Presence Loop Detection

**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 when stop line is  
greater than 15' (4.5m) from edge  
of intersecting roadway; or, when  
loop detects a permissive or  
protected/permissive left turn.

**Recommended Number of Turns**

Single 6' X 6' (1.8m X 1.8m)  
loop (wired separately):

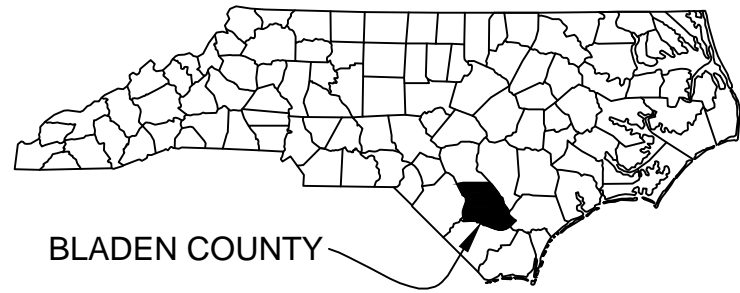
Length of Lead-in ft (m)	Number of Turns
< 250 (75)	3
250-375 (75-115)	4
375-525 (115-160)	5
> 525 (160)	6

Quadrupole loops: Use 2-4-2 turns  
6' X 15' (1.8m X 4.6m) Loops:  
Lead-in < 150' (45 m), use 2 turns  
Lead-in > 150' (45 m), use 3 turns

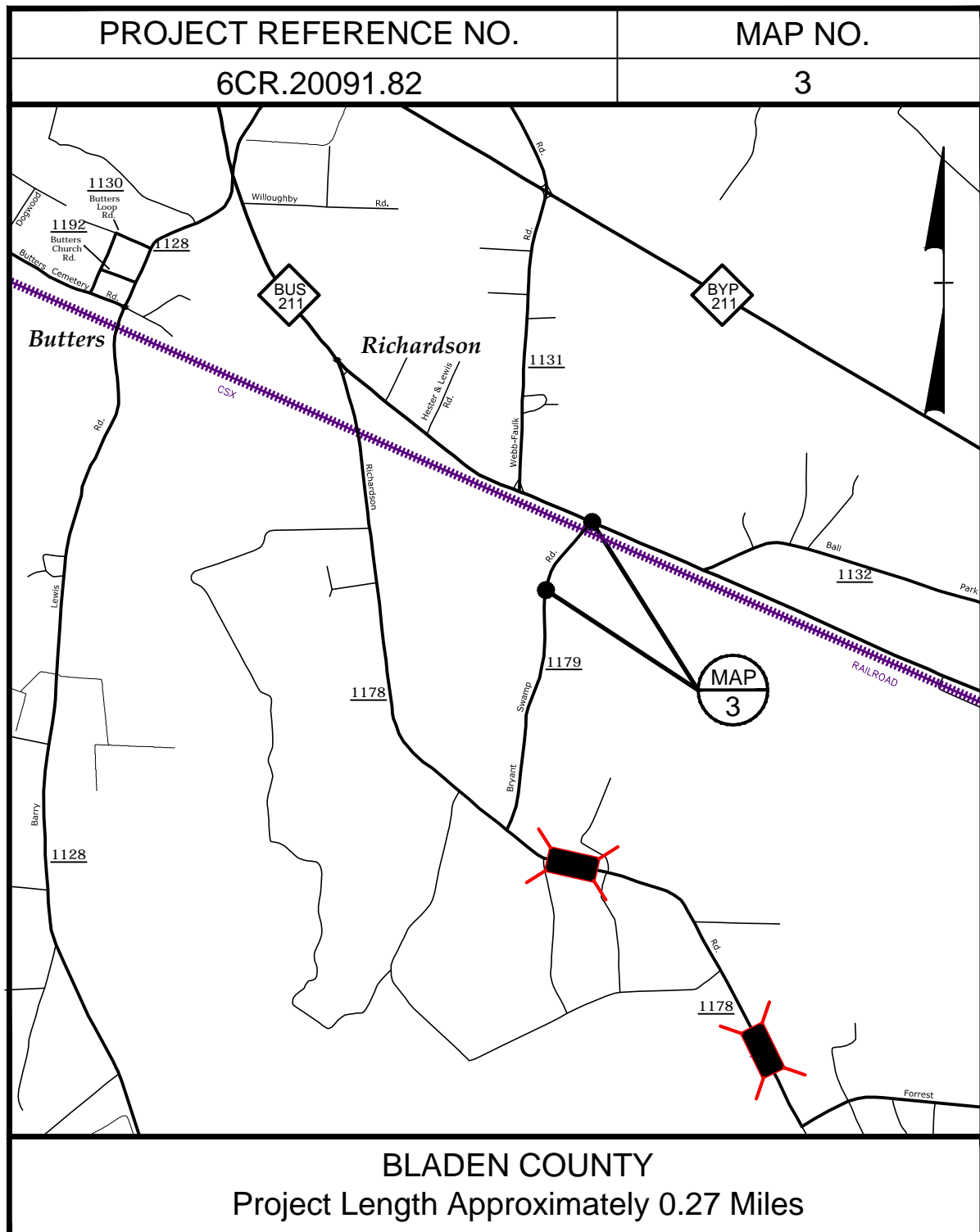
	<b>Typical Loop Locations</b>		
	PLAN DATE: June 2006 PREPARED BY: P. L. Alexander	REVIEWED BY: REVIEWED BY:	
SIGNATURE: <i>P. L. Alexander</i> DATE: <i>6/6/06</i>			SIG. INVENTORY NO.

19-DEC-2006 14:23  
 s-w-its:slgpl:slw:1b:turn:1:in:email:scaki:loop:pl:ccl:2006:06n:pat:rev:order



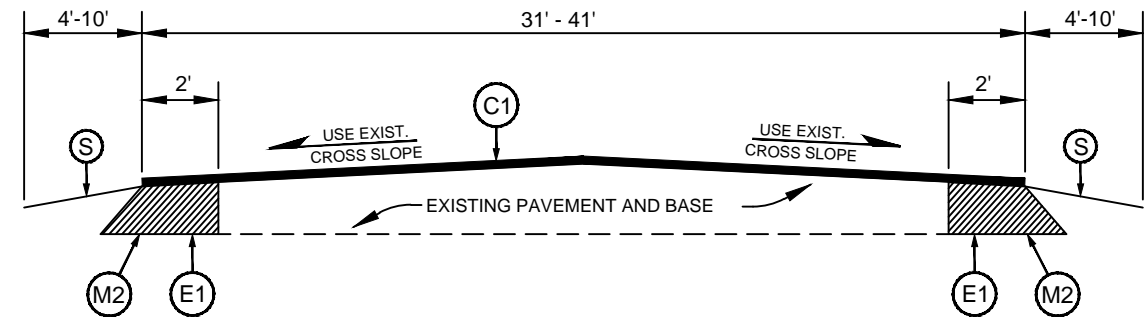


# RESURFACING MAPS - BLADEN COUNTY



## TYPICAL SECTION NO. 1

MAP 1: NC 41 - A - FROM HARWOOD ST. TO BEGIN C&G-R



**NOTES:**

- EXISTING DITCHES WILL NOT BE MOVED, UNLESS DIRECTED BY ENGINEER.
- INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 3.

### PAVEMENT SCHEDULE

C1	Proposed approximately 1½" of Asphalt Concrete Surface Course, Type S-9.5-B, at an average rate of 168 pounds per square yard.
D1	Proposed approximately 2½" of Asphalt Concrete Intermediate Course, Type I-19.0-B, at an average rate of 285 pounds per square yard.
E1	Proposed approximately 5½" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 627 pounds per square yard for symmetrical 2' widening.
E2	Proposed approximately 5½" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 627 pounds per square yard for 2' widening at inside curve radii, as Directed by the Engineer.
M1	Milling existing asphalt to a depth of ¾" for the entire width of the roadway, or as Directed by the Engineer, for roadway profile correction.
M2	Milling existing soil shoulder, to a depth of 5½" with a width of 2', where indicated by Typical, for symmetrical & inside curve widening.
M3	Milling Depth 0" - ¾" at the edge of Curb & Gutter. Milling shall extend below the lip of the Curb & Gutter by the thickness of the Proposed Overlay, or as Directed by the Engineer.
M4	Milling Depth 1½" for the entire width of the roadway. Milling shall extend below the lip of the Curb & Gutter by the thickness of the Proposed Overlay.
M5	Milling Depth of 2½" for the entire width of the roadway.
M6	Milling Depth 2½" at all designated distressed areas, with a variable width from 9' to 12', or as Directed by the Engineer.
M7	Incidental Milling 0" - 1½" at all Bridge Approaches, Bridge Decks and Railroad Track Approaches, for the entire width of the roadway, or as Directed by the Engineer.
M8	Milling Depth of 1½" for the entire width of the roadway.
S	Shoulder Reconstruction to be performed by State Forces. Contractor shall coordinate with NCDOT units as needed.

DRAWINGS NOT TO SCALE

# SUMMARY OF QUANTITIES

															PROJECT NO.		SHEET NO.	TOTAL NO.	
															6CR.10091.82, 6CR.20091.82				
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	0.75" MILLING SY	2.5" MILLING SY	1½" MILLING SY	0" TO 0.75" MILLING SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS
6CR.10091.82	Bladen	1	NC 41 - A	FROM HARWOOD ST. TO BEGIN C&G-R	1	2	2WU	NO	NO	0.96	37					489	706		1,792
		"	"	FROM BEGIN C&G-R TO GREENWOOD ST.	2	2	MU	NO	NO	0.007	44	181	99		29	44		14	28
		"	"	FROM GREENWOOD ST. TO BEGIN C&G-L	3	2	MU	NO	NO	0.085	38	1,895	1,197			44		171	172
		"	"	FROM BEGIN C&G-L TO SR 1150 (PEANUT RD.)	4	5	MU	NO	NO	0.131	55	4,227	1,844		538	44		263	368
		"	"	FROM SR 1150 (PEANUT RD.) TO CJ @ GILLESPIE ST.	5	3	MU	NO	NO	0.057	33		803	1,104		89		114	118
<b>TOTAL FOR MAP NO. 1</b>										<b>1.24</b>		<b>6,303</b>	<b>3,943</b>	<b>1,104</b>	<b>567</b>	<b>710</b>	<b>706</b>	<b>562</b>	<b>2,478</b>
6CR.10091.82	Bladen	2	NC 87 BUS. - A	FROM NC 87 BYP. TO SCOUT ST.	6	2	2WU	NO	NO	1.47	32			1,704		1,358			2,420
		"	"	FROM SCOUT ST. TO COURTHOUSE DR.	5	4	MU	NO	NO	0.59	40			15,324		400			1,401
<b>TOTAL FOR MAP NO. 2</b>										<b>2.06</b>				<b>17,028</b>		<b>1,758</b>			<b>3,821</b>
<b>TOTAL FOR PROJ NO. 6CR.10091.82</b>										<b>3.3</b>		<b>6,303</b>	<b>3,943</b>	<b>18,132</b>	<b>567</b>	<b>2,468</b>	<b>706</b>	<b>562</b>	<b>6,299</b>
6CR.20091.82	Bladen	3	SR 1179	FROM NC 211 BUS. TO FEED MILL D/WAY	7	2	2WU	NO	NO	0.27	20		3,168			89	99	496	318
<b>TOTAL FOR MAP NO. 3</b>										<b>0.27</b>			<b>3,168</b>			<b>89</b>	<b>99</b>	<b>496</b>	<b>318</b>
<b>TOTAL FOR PROJ NO. 6CR.20091.82</b>										<b>0.27</b>			<b>3,168</b>			<b>89</b>	<b>99</b>	<b>496</b>	<b>318</b>
<b>GRAND TOTAL</b>										<b>3.57</b>		<b>6,303</b>	<b>7,111</b>	<b>18,132</b>	<b>567</b>	<b>2,557</b>	<b>805</b>	<b>1,058</b>	<b>6,617</b>

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LEVELING COURSE, S9.5B TONS	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	RELOCATE EXISTING VEHICLE SIGNAL HEAD EA	UNPAVED TRENCHING (1 CONDUIT, 2") LF	JUNCTION BOX (STANDARD SIZE) EA	2" RISER WITH WEATHERHEAD EA	INDUCTIVE LOOP SAWCUT LF	LEAD-IN CABLE (14-2) LF
6CR.10091.82	Bladen	1	NC 41 - A	FROM HARWOOD ST. TO BEGIN C&G-R	1	2	2WU	76	144	20	8	5						
		"	"	FROM BEGIN C&G-R TO GREENWOOD ST.	2	2	MU		2	5								
		"	"	FROM GREENWOOD ST. TO BEGIN C&G-L	3	2	MU		19	10		3						
		"	"	FROM BEGIN C&G-L TO SR 1150 (PEANUT RD.)	4	5	MU		35	10	2	4		40	2	1	800	100
		"	"	FROM SR 1150 (PEANUT RD.) TO CJ @ GILLESPIE ST.	5	3	MU		13	5		2						
<b>TOTAL FOR MAP NO. 1</b>								<b>76</b>	<b>213</b>	<b>50</b>	<b>10</b>	<b>14</b>		<b>40</b>	<b>2</b>	<b>1</b>	<b>800</b>	<b>100</b>
6CR.10091.82	Bladen	2	NC 87 BUS. - A	FROM NC 87 BYP. TO SCOUT ST.	6	2	2WU	35	147	44	1	1		40	1		340	
		"	"	FROM SCOUT ST. TO COURTHOUSE DR.	5	4	MU	29	86	18	8	9	4	40	2	1	665	100
<b>TOTAL FOR MAP NO. 2</b>								<b>64</b>	<b>233</b>	<b>62</b>	<b>9</b>	<b>10</b>	<b>4</b>	<b>80</b>	<b>3</b>	<b>1</b>	<b>1,005</b>	<b>100</b>
<b>TOTAL FOR PROJ NO. 6CR.10091.82</b>								<b>140</b>	<b>446</b>	<b>112</b>	<b>19</b>	<b>24</b>	<b>4</b>	<b>120</b>	<b>5</b>	<b>2</b>	<b>1,805</b>	<b>200</b>
6CR.20091.82	Bladen	3	SR 1179	FROM NC 211 BUS. TO FEED MILL D/WAY	7	2	2WU		47	7								
<b>TOTAL FOR MAP NO. 3</b>									<b>47</b>	<b>7</b>								
<b>TOTAL FOR PROJ NO. 6CR.20091.82</b>									<b>47</b>	<b>7</b>								
<b>GRAND TOTAL</b>								<b>140</b>	<b>493</b>	<b>119</b>	<b>19</b>	<b>24</b>	<b>4</b>	<b>120</b>	<b>5</b>	<b>2</b>	<b>1,805</b>	<b>200</b>

# THERMOPLASTIC AND PAINT QUANTITIES

										PROJECT NO.			SHEET NO.	TOTAL NO.									
										6CR.10091.82, 6CR.20091.82													
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4399000000-N	4400000000-E	4510000000-N	4685000000-E	4686000000-E		4695000000-E		4705000000-E	4710000000-E		4721000000-E		
										TEMPORARY TRAFFIC CONTROL LS	STATIONARY WORK ZONE SIGNS SF	LAW ENFORCEMENT HR	4" X 90 M WHITE THERMO LF	4" X 120 M WHITE THERMO LF	4" X 120 M YELLOW THERMO LF	8" X 90 M YELLOW THERMO LF	8" X 90 M WHITE THERMO LF	16" X 120 M WHITE THERMO LF	24" X 120 M WHITE THERMO LF	THERMO MSG AHEAD 120 M EA	THERMO MSG SIGNAL 120 M EA	THERMO RXR 120 M EA	
6CR.10091.82	Bladen	1	NC 41 - A	FROM HARWOOD ST. TO BEGIN C&G-R	1	2	2WU	0.96	37	1	108		10,000	225	13,800	580							
		"	"	FROM BEGIN C&G-R TO GREENWOOD ST.	2	2	MU	0.007	44		126		100		100								
		"	"	FROM GREENWOOD ST. TO BEGIN C&G-L	3	2	MU	0.085	38		10		600		1,625	175							
		"	"	FROM BEGIN C&G-L TO SR 1150 (PEANUT RD.)	4	5	MU	0.131	55		126	40		1,215	1,650		200			30			
		"	"	FROM SR 1150 (PEANUT RD.) TO CJ @ GILLESPIE ST.	5	3	MU	0.057	33		126			100	600					40			
TOTAL FOR MAP NO. 1								1.24		1	496	40	10,700	1,540	17,775	755	200		70				
6CR.10091.82	Bladen	2	NC 87 BUS. - A	FROM NC 87 BYP. TO SCOUT ST.	6	2	2WU	1.47	32		165	40	15,000	130	15,000					50	5	6	
		"	"	FROM SCOUT ST. TO COURTHOUSE DR.	5	4	MU	0.59	40		142	40	12,800	230	8,200	200				75			
TOTAL FOR MAP NO. 2								2.06			307	80	27,800	360	23,200	200		125	5	6			
TOTAL FOR PROJ NO. 6CR.10091.82								3.3		1	803	120	38,500	1,900	40,975	955	200		195	5	6		
												42,875		1,155				11					
6CR.20091.82	Bladen	3	SR 1179	FROM NC 211 BUS. TO FEED MILL D/WAY	7	2	2WU	0.27	20		30							100	90			4	
TOTAL FOR MAP NO. 3								0.27			30								100	90			4
TOTAL FOR PROJ NO. 6CR.20091.82								0.27			30								100	90			4
GRAND TOTAL								3.57		1	833	120	38,500	1,900	40,975	955	200		100	285	5	6	4
												42,875		1,155				15					

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4725000000-E			4810000000-E		4820000000-E		4835000000-E	4845000000-N			4900000000-N	
										THERMO LT ARROW 90 M EA	THERMO RT ARROW 90 M EA	THERMO STR & RT ARROW 90 M EA	4" WHITE PAINT LF	4" YELLOW PAINT LF	8" YELLOW PAINT LF	8" WHITE PAINT LF	24" WHITE PAINT LF	PAINT LT ARROW EA	PAINT RT ARROW EA	PAINT STR & RT ARROW EA	CRYSTAL & RED MARKERS EA	YELLOW & YELLOW MARKERS EA
6CR.10091.82	Bladen	1	NC 41 - A	FROM HARWOOD ST. TO BEGIN C&G-R	1	2	2WU	0.96	37	10											15	120
		"	"	FROM BEGIN C&G-R TO GREENWOOD ST.	2	2	MU	0.007	44				100	100								3
		"	"	FROM GREENWOOD ST. TO BEGIN C&G-L	3	2	MU	0.085	38	2			600	1,625	175			2				20
		"	"	FROM BEGIN C&G-L TO SR 1150 (PEANUT RD.)	4	5	MU	0.131	55	7	7		1,215	1,650		200	30	7	7		55	20
		"	"	FROM SR 1150 (PEANUT RD.) TO CJ @ GILLESPIE ST.	5	3	MU	0.057	33	2	2		100	600			40	2	2		6	5
TOTAL FOR MAP NO. 1								1.24		21	7	2	2,015	3,975	175	200	70	11	7	2	76	168
6CR.10091.82	Bladen	2	NC 87 BUS. - A	FROM NC 87 BYP. TO SCOUT ST.	6	2	2WU	1.47	32	3	3										5	100
		"	"	FROM SCOUT ST. TO COURTHOUSE DR.	5	4	MU	0.59	40				230	8,200	200		75	24			15	90
TOTAL FOR MAP NO. 2								2.06		3	3	3	230	8,200	200	75	24			20	190	
TOTAL FOR PROJ NO. 6CR.10091.82								3.3		24	7	5	2,245	12,175	375	200	145	35	7	2	96	358
										36		14,420		575				44		454		
6CR.20091.82	Bladen	3	SR 1179	FROM NC 211 BUS. TO FEED MILL D/WAY	7	2	2WU	0.27	20				5,600	5,600								
TOTAL FOR MAP NO. 3								0.27					5,600	5,600								
TOTAL FOR PROJ NO. 6CR.20091.82								0.27					5,600	5,600								
												11,200										
GRAND TOTAL								3.57		24	7	5	7,845	17,775	375	200	145	35	7	2	96	358
										36		25,620		575		44		454				