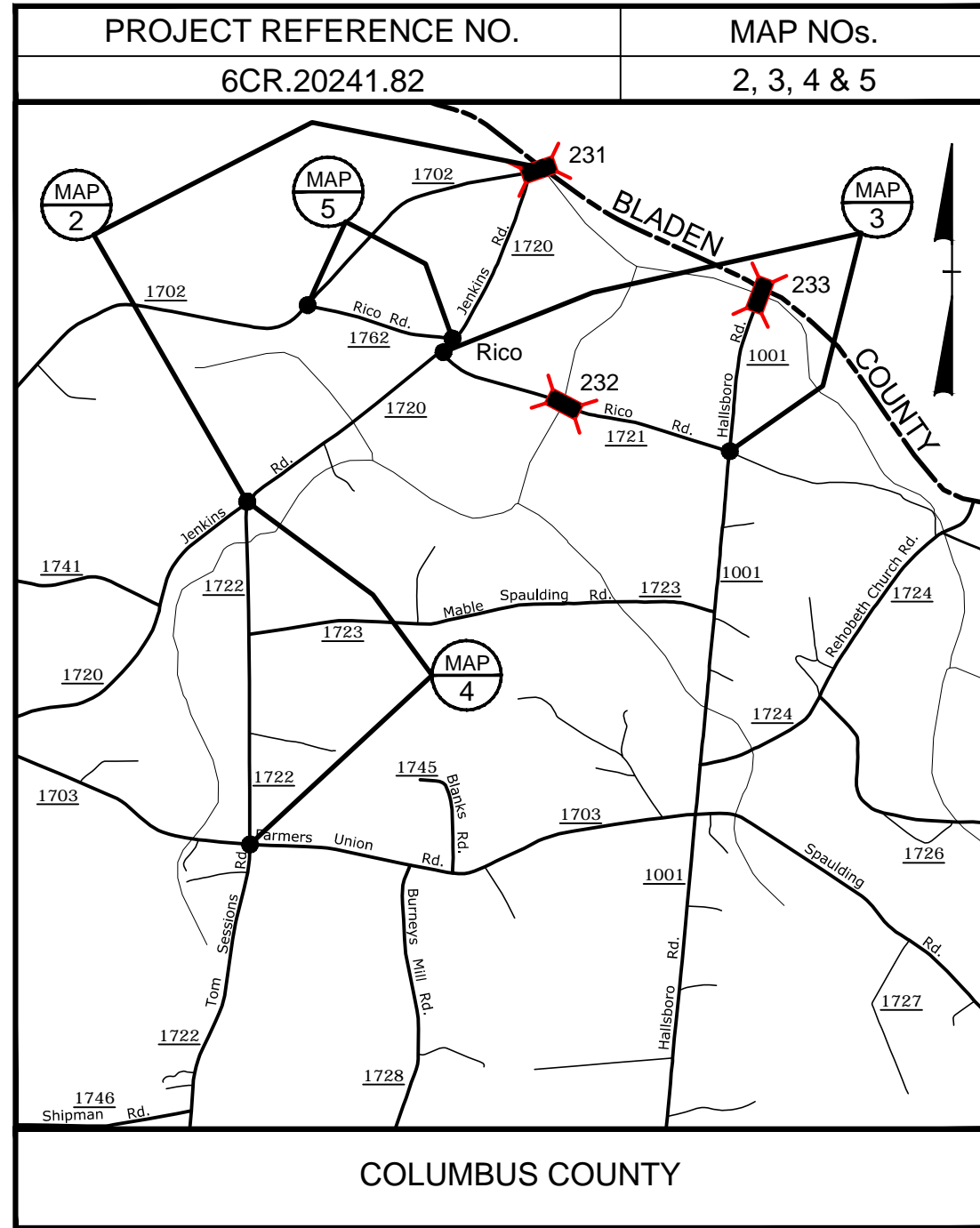
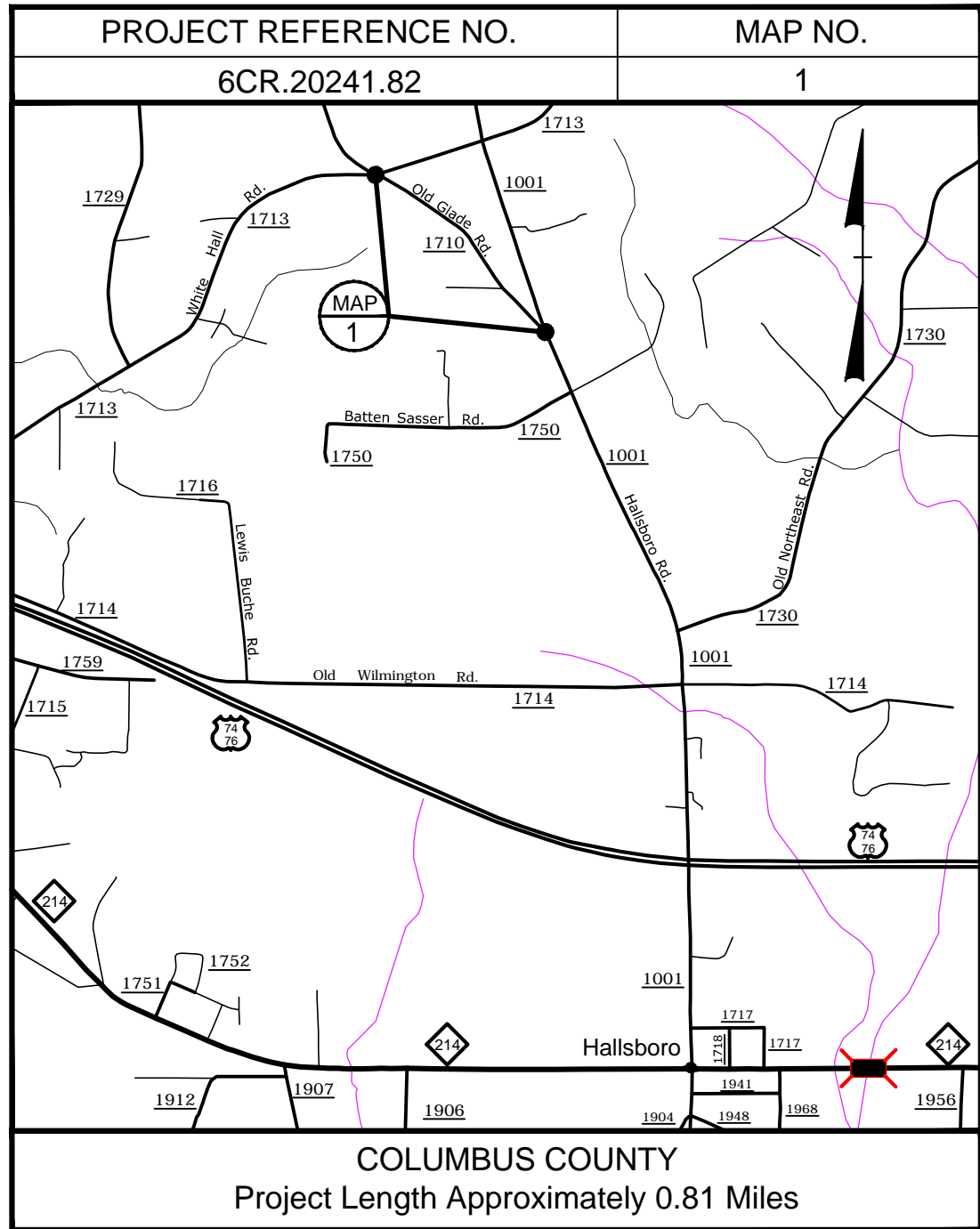
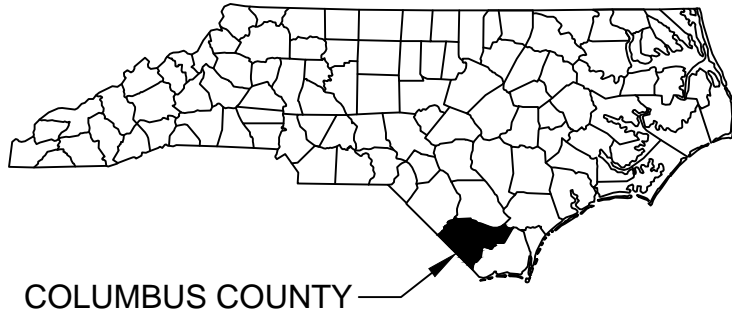


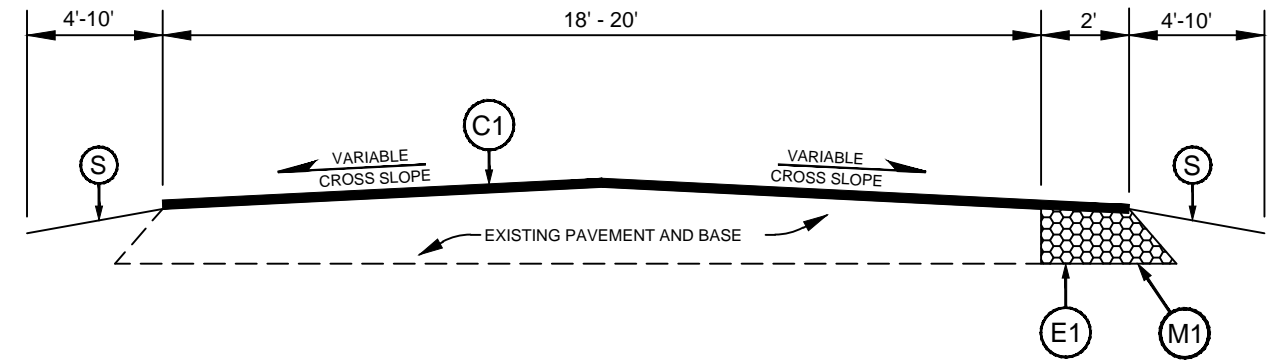
RESURFACING MAPS - COLUMBUS COUNTY





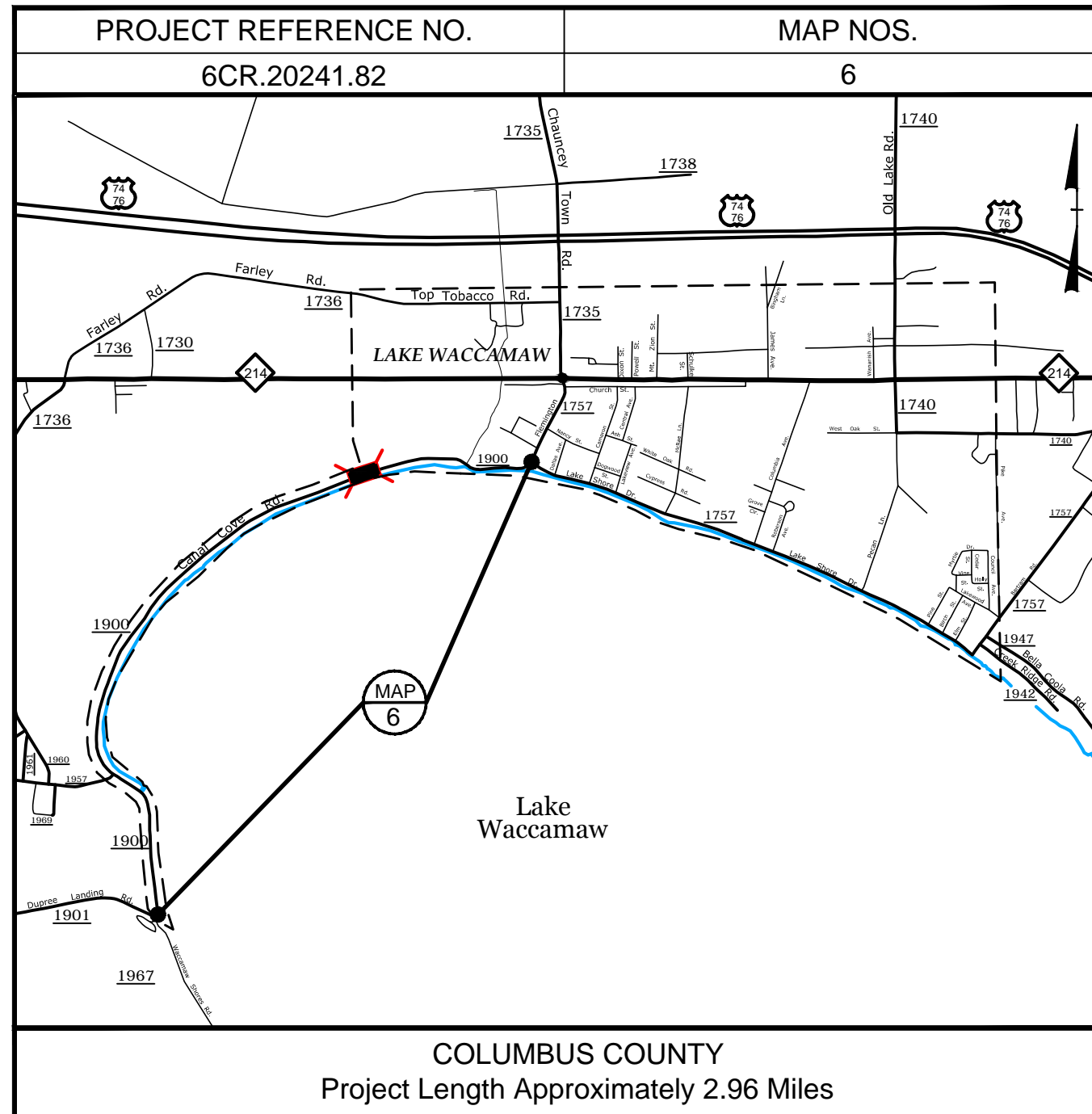
RESURFACING MAPS - COLUMBUS COUNTY

TYPICAL SECTION NO. 1



NOTES:

1. INCLUDES 2' WIDENING ON THE INSIDE RADIUS OF ALL CURVES, PROVIDED ADEQUATE SHOULDER WIDTH EXISTS. ENGINEER WILL IDENTIFY CURVES TO BE WIDENED IN THE FIELD. SEE DETAIL 2.
2. INCLUDES MILLING ON ASPHALT BRIDGE DECKS & BRIDGE APPROACHES, AS NEEDED, OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 4.
3. 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 5.



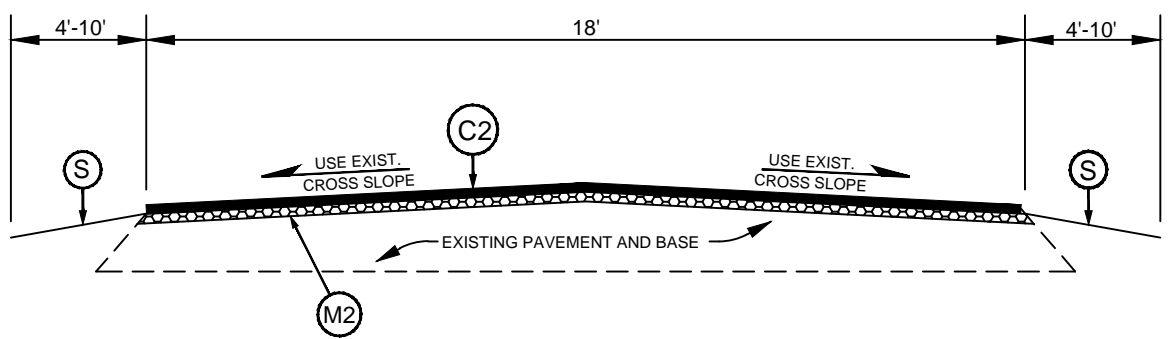
PAVEMENT SCHEDULE

C1	Proposed approximately 1½" of Asphalt Concrete Surface Course, Type SF-9.5-A, at an average rate of 165 pounds per square yard.
C2	Proposed approximately 2" of Asphalt Concrete Surface Course, Type SA-1, placed in 2 layers at an average rate of 100 lbs. per sq. yd. per 1" depth.
C3	Proposed variable depth Asphalt Concrete Surface Course, Type SF-9.5-A, at an average rate of 110 lbs. per sq. yd. per 1" depth, to be placed in layers not less than a depth of 1", nor greater than 1½", with a max. total depth of 3.0".
D1	Proposed variable depth Asphalt Concrete Intermediate Course, Type I-19.0-B, at an average rate of 114 lbs. per sq. yd. per 1" depth, to be placed in layers not less than a depth of 2½", nor greater than 4", with a max. total depth of 4.0".
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 2' widening at inside curve radii, as Directed by the Engineer.
E2	Proposed approximately 6" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 684 pounds per square yard.
M1	Milling existing soil shoulder, to a depth of 5½", with a width of 2' where indicated by Typical, for inside curve widening.
M2	Milling existing asphalt to a depth of 1" for the entire width of the roadway, or as Directed by the Engineer, for roadway profile correction.
M3	Milling Depth 6" at all designated distressed areas, with a variable width from 9' to 12', or as Directed by the Engineer.
M4	Incidental Milling 0" - 1½" at all Bridge Approaches, for the entire width of the roadway, or as Directed by the Engineer.
S	Shoulder Reconstruction to be performed by State Forces. Contractor shall coordinate with NCDOT units as needed.

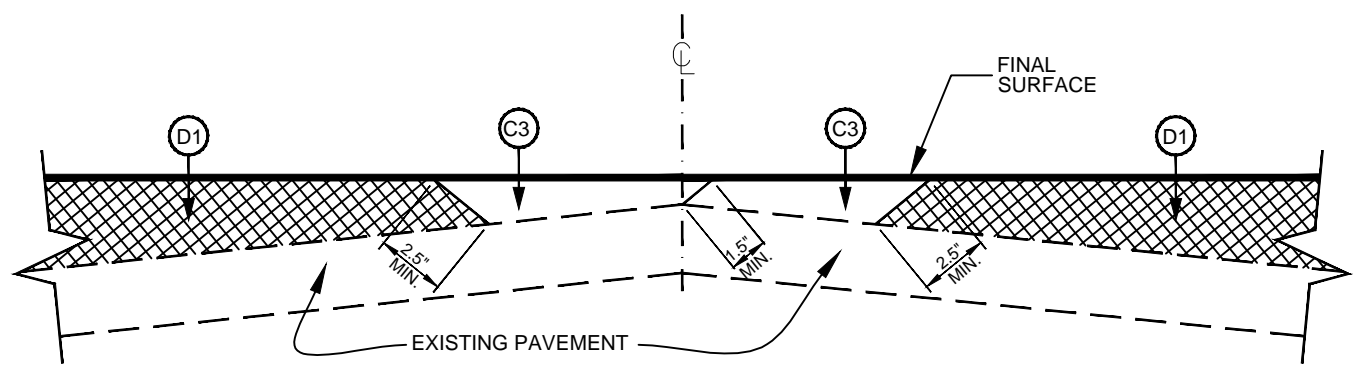
DRAWINGS NOT TO SCALE

TYPICAL SECTION NO. 2

MAP 6: SR 1900 - FROM SR 1757 TO SR 1901



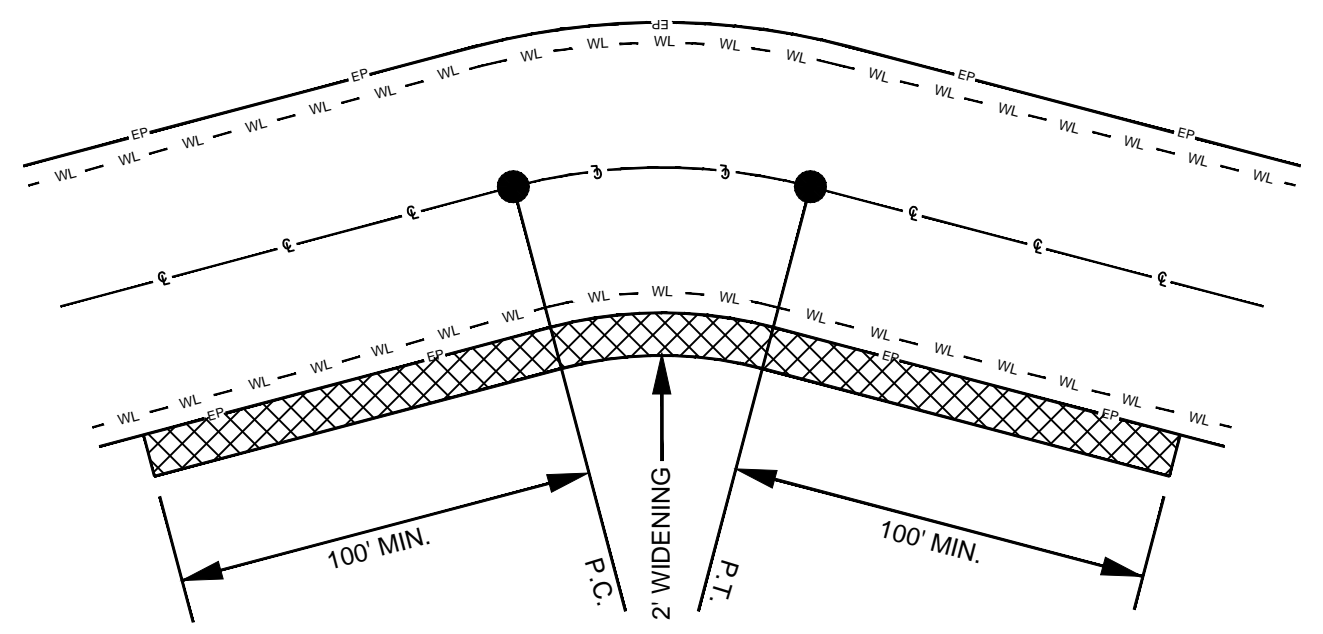
- NOTES:**
1. CONTRACTOR SHALL USE AN ERECTED STRINGLINE, OR OTHER ENGINEER APPROVED METHOD, TO REESTABLISH A LEVEL PROFILE OF THE EXISTING ROADWAY WHEN LEVELING OR MILLING. STRINGLINE AND/OR GRADE PROFILE SHALL BE PROVIDED BY STATE FORCES.
 2. NO SHOULDER WEDGE REQUIRED FOR THIS TYPICAL.
 3. INCLUDES MILL & FILL PAVEMENT REPAIR WHERE IDENTIFIED BY ENGINEER. SEE DETAIL 3.
 4. 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 5.



**DETAIL 1
LEVELING**

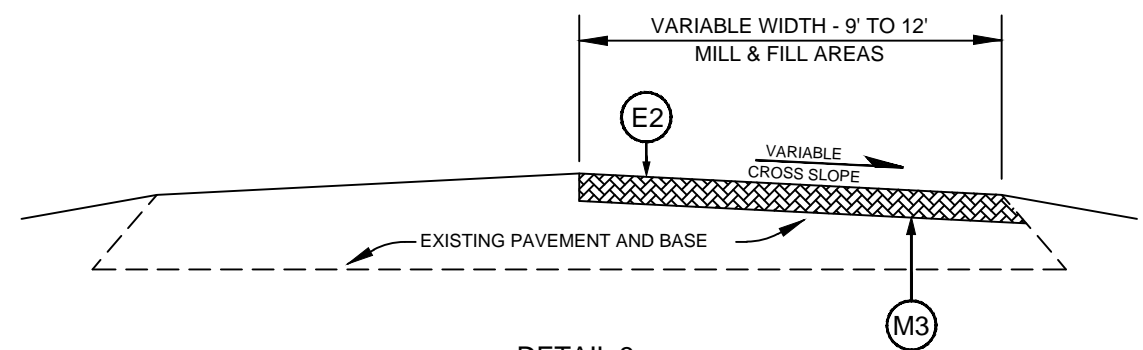
PAVEMENT SCHEDULE	
C1	Proposed approximately 1½" of Asphalt Concrete Surface Course, Type SF-9.5-A, at an average rate of 165 pounds per square yard.
C2	Proposed approximately 2" of Asphalt Concrete Surface Course, Type SA-1, placed in 2 layers at an average rate of 100 lbs. per sq. yd. per 1" depth.
C3	Proposed variable depth Asphalt Concrete Surface Course, Type SF-9.5-A, at an average rate of 110 lbs. per sq. yd. per 1" depth, to be placed in layers not less than a depth of 1", nor greater than 1½", with a max. total depth of 3.0".
D1	Proposed variable depth Asphalt Concrete Intermediate Course, Type I-19.0-B, at an average rate of 114 lbs. per sq. yd. per 1" depth, to be placed in layers not less than a depth of 2½", nor greater than 4", with a max. total depth of 4.0".
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 2' widening at inside curve radii, as Directed by the Engineer.
E2	Proposed approximately 6" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 684 pounds per square yard.
M1	Milling existing soil shoulder, to a depth of 5½", with a width of 2' where indicated by Typical, for inside curve widening.
M2	Milling existing asphalt to a depth of 1" for the entire width of the roadway, or as Directed by the Engineer, for roadway profile correction.
M3	Milling Depth 6" at all designated distressed areas, with a variable width from 9' to 12', or as Directed by the Engineer.
M4	Incidental Milling 0" - 1½" at all Bridge Approaches, for the entire width of the roadway, or as Directed by the Engineer.
S	Shoulder Reconstruction to be performed by State Forces. Contractor shall coordinate with NCDOT units as needed.

DRAWINGS NOT TO SCALE



**DETAIL 2
2' INSIDE CURVE WIDENING**

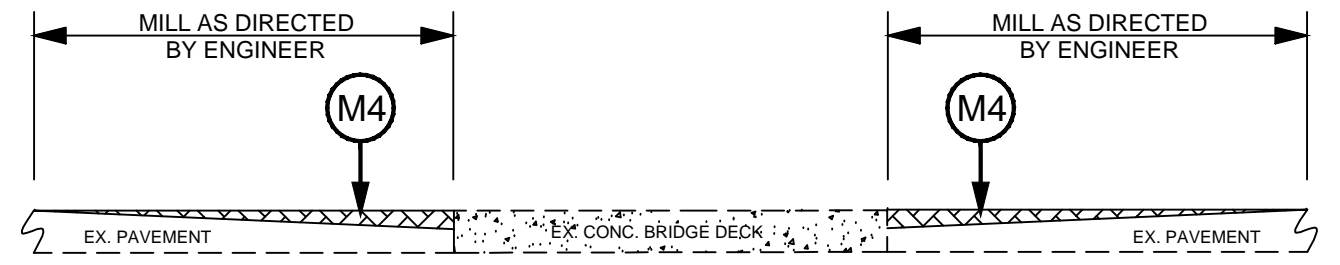
- NOTES:**
1. CONSTRUCT CURVE WIDENING ON ALL CURVES, PROVIDED ADEQUATE SHOULDER EXISTS, OR AS DIRECTED BY ENGINEER.
 2. MAINTAIN LANE WIDTHS AND WHITE EDGE LINE PLACEMENT AS SHOWN. CURVE WIDENING SHOULD ACT AS A PAVED SHOULDER, NOT ADDITIONAL LANE WIDTH.



DETAIL 3
MILL & FILL PAVEMENT REPAIR

NOTES:

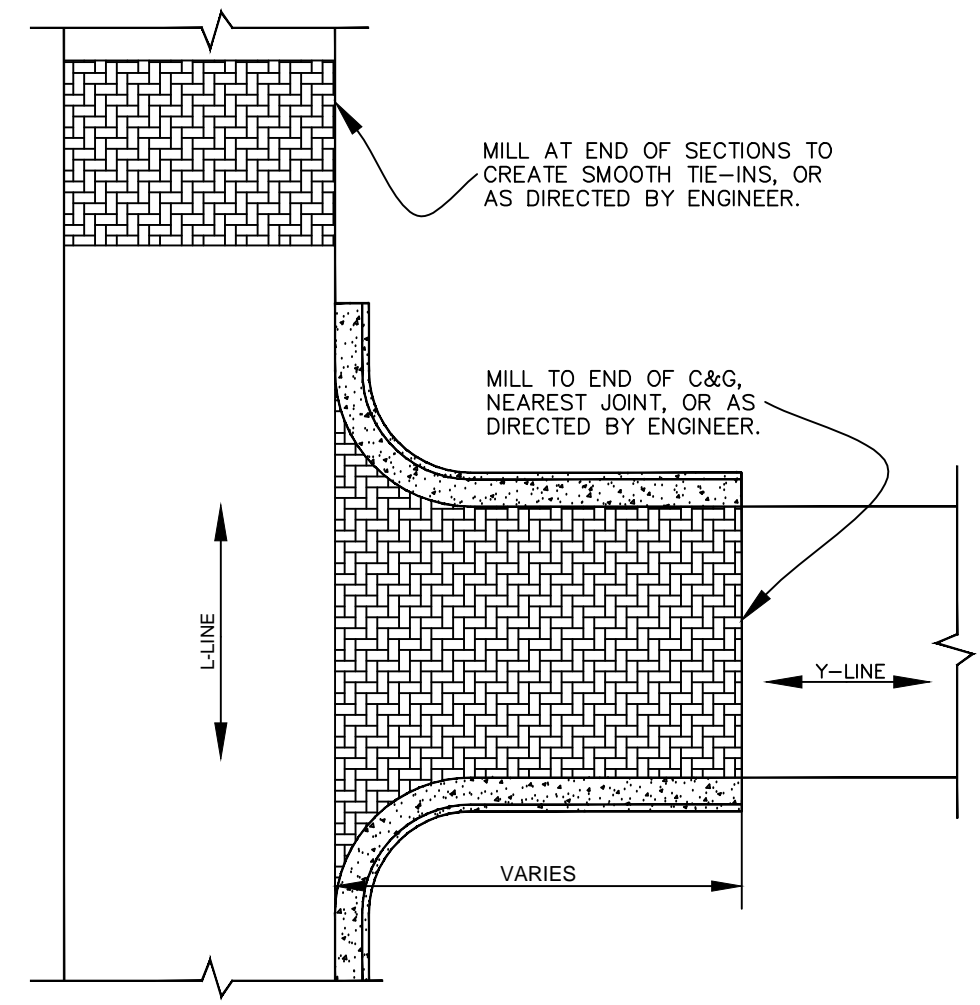
1. DISTRESSED AREAS TO BE REPAIRED BY MILL & FILL SHALL BE DESIGNATED BY THE ENGINEER.
2. FILL MILLED AREAS WITH ASPHALT BASE COURSE BACK FLUSH WITH THE EXISTING ASPHALT LEFT IN PLACE, PRIOR TO PLACEMENT OF PROPOSED ASPHALT SURFACE COURSE.



DETAIL 4
MILLING APPROACHES

PAVEMENT SCHEDULE	
C1	Proposed approximately 1½" of Asphalt Concrete Surface Course, Type SF-9.5-A, at an average rate of 165 pounds per square yard.
C2	Proposed approximately 2" of Asphalt Concrete Surface Course, Type SA-1, placed in 2 layers at an average rate of 100 lbs. per sq. yd. per 1" depth.
C3	Proposed variable depth Asphalt Concrete Surface Course, Type SF-9.5-A, at an average rate of 110 lbs. per sq. yd. per 1" depth, to be placed in layers not less than a depth of 1", nor greater than 1 ½", with a max. total depth of 3.0".
D1	Proposed variable depth Asphalt Concrete Intermediate Course, Type I-19.0-B, at an average rate of 114 lbs. per sq. yd. per 1" depth, to be placed in layers not less than a depth of 2½", nor greater than 4", with a max. total depth of 4.0".
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 2' widening at inside curve radii, as Directed by the Engineer.
E2	Proposed approximately 6" of Asphalt Concrete Base Course, Type B-25.0-B, at an average rate of 684 pounds per square yard.
M1	Milling existing soil shoulder, to a depth of 5½", with a width of 2' where indicated by Typical, for inside curve widening.
M2	Milling existing asphalt to a depth of 1" for the entire width of the roadway, or as Directed by the Engineer, for roadway profile correction.
M3	Milling Depth 6" at all designated distressed areas, with a variable width from 9' to 12', or as Directed by the Engineer.
M4	Incidental Milling 0" - 1½" at all Bridge Approaches, for the entire width of the roadway, or as Directed by the Engineer.
S	Shoulder Reconstruction to be performed by State Forces. Contractor shall coordinate with NCDOT units as needed.

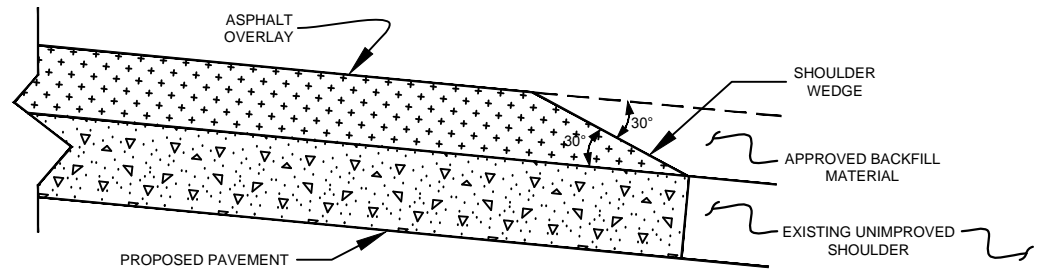
DRAWINGS NOT TO SCALE



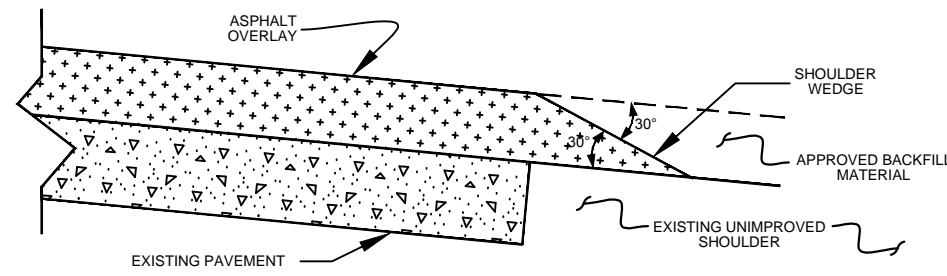
DETAIL 5
Y-LINE / BUTT JOINT MILLING

NOTES:

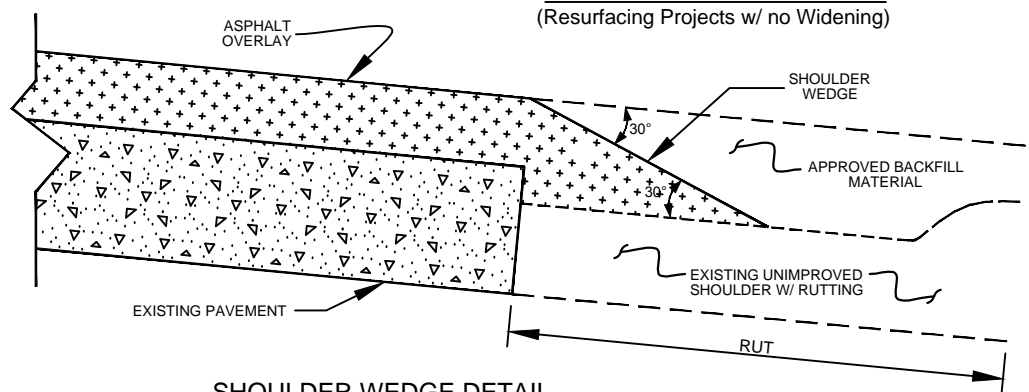
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, CURB RADII, AND ALL PUBLIC ROADWAY INTERSECTIONS (NCDOT & MUNICIPALITY), OR AS DIRECTED BY THE ENGINEER.
2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.



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 6
SHOULDER WEDGE DETAILS

- NOTES:**
1. DETAIL DOES NOT APPLY TO OGAFK 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.

DETAIL 7
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.

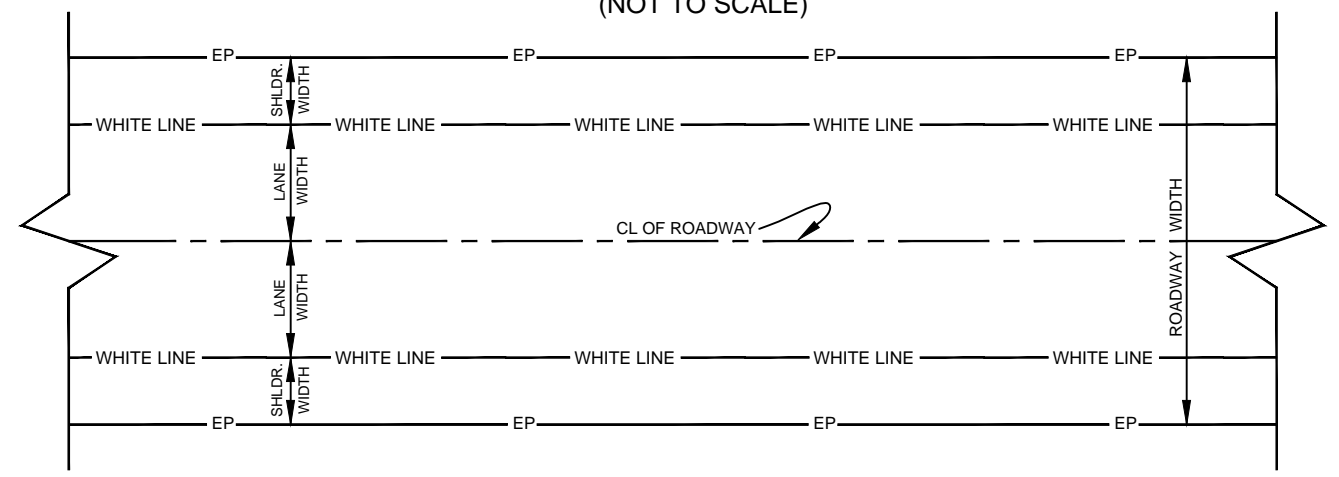
TWO LANE - TWO WAY ROADWAY - 55 MPH		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	12'	2'
32'	12'	4'

* May vary due to pavement width

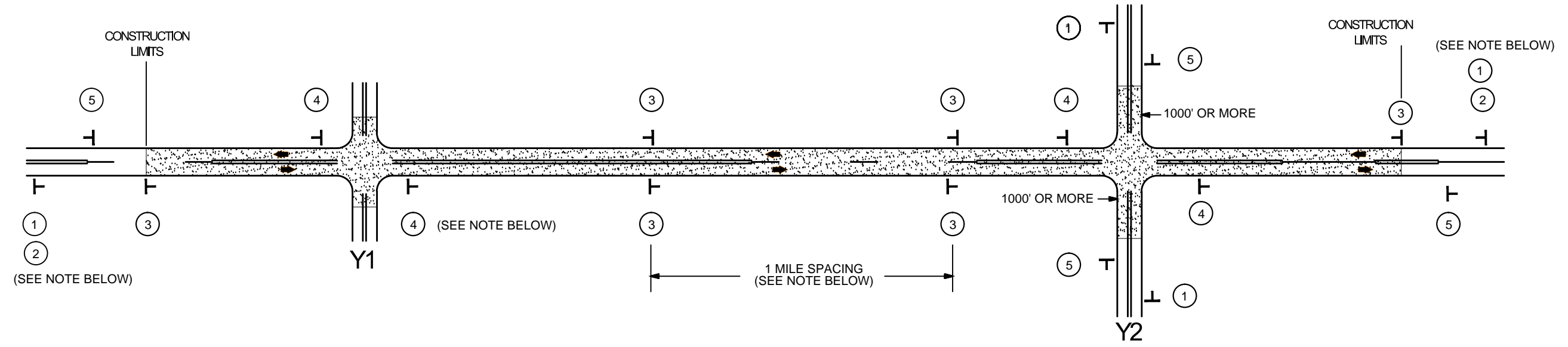
TWO LANE - TWO WAY ROADWAY 50 MPH OR LESS		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	11'	3'
32'	11'	5'

* May vary due to pavement width

SCHEMATIC OF ROADWAY
(NOT TO SCALE)



SIGNING FOR RESURFACING PROJECTS



LEGEND	
T	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"> 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; align-items: center;"> <div style="text-align: center;"> <p>PLACED 500' IN ADVANCE OF FLAGGER.</p> </div> <div style="text-align: center;"> <p>PLACED 250' IN ADVANCE OF FLAGGER.</p> </div> </div>
		<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
2 LANE ROADWAYS

SUMMARY OF QUANTITIES

											PROJECT NO.	SHEET NO.	TOTAL NO.	
											6CR.20241.82			
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	1" MILLING SY	6" MILLING SY	INCIDENTAL MILLING SY
6CR.20241.82	Columbus	1	SR 1710	FROM SR 1713 TO SR 1001	1	2	2WU - Two-lane two-way undivided traffic	NO	NO	1.11	20			89
TOTAL FOR MAP NO. 1										1.11				89
6CR.20241.82	Columbus	2	SR 1720	BLADEN CL TO SR 1722	1	2	2WU	NO	NO	1.59	18			89
TOTAL FOR MAP NO. 2										1.59				89
6CR.20241.82	Columbus	3	SR 1721	FROM SR 1001 TO SR 1720	1	2	2WU	NO	NO	1.07	20			558
TOTAL FOR MAP NO. 3										1.07				558
6CR.20241.82	Columbus	4	SR 1722	FROM SR 1720 TO SR 1703	1	2	2WU	NO	NO	1.19	18			89
TOTAL FOR MAP NO. 4										1.19				89
6CR.20241.82	Columbus	5	SR 1762	FROM SR 1720 TO SR 1702	1	2	2WU	NO	NO	0.52	20			89
TOTAL FOR MAP NO. 5										0.52				89
6CR.20241.82	Columbus	6	SR 1900	FROM SR 1757 TO SR 1901	2	2	2WU	NO	NO	2.96	18	31,258	1,760	555
TOTAL FOR MAP NO. 6										2.96		31,258	1,760	555
TOTAL FOR PROJ NO. 6CR.20241.82										8.44		31,258	1,760	1,469
GRAND TOTAL										8.44		31,258	1,760	1,469

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	BASE COURSE, B25.0B TONS	SURFACE COURSE, SF9.5A TONS	LEVELING COURSE, SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	GENERIC PAVING ITEM ASPHALT CONCRETE SURFACE COURSE, TYPE SA-1 TON	GENERIC PAVING ITEM ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B (LEVELING COURSE) TON
6CR.20241.82	Columbus	1	SR 1710	FROM SR 1713 TO SR 1001	1	2	2WU - Two-lane two-way undivided traffic	103	1,126	16	81	28		
TOTAL FOR MAP NO. 1								103	1,126	16	81	28		
6CR.20241.82	Columbus	2	SR 1720	BLADEN CL TO SR 1722	1	2	2WU	147	1,449	21	105	40		
TOTAL FOR MAP NO. 2								147	1,449	21	105	40		
6CR.20241.82	Columbus	3	SR 1721	FROM SR 1001 TO SR 1720	1	2	2WU	99	1,087	16	78	27		
TOTAL FOR MAP NO. 3								99	1,087	16	78	27		
6CR.20241.82	Columbus	4	SR 1722	FROM SR 1720 TO SR 1703	1	2	2WU	110	1,090	16	79	30		
TOTAL FOR MAP NO. 4								110	1,090	16	79	30		
6CR.20241.82	Columbus	5	SR 1762	FROM SR 1720 TO SR 1702	1	2	2WU	48	541	8	39	13		
TOTAL FOR MAP NO. 5								48	541	8	39	13		
6CR.20241.82	Columbus	6	SR 1900	FROM SR 1757 TO SR 1901	2	2	2WU	602		1,924	400		3,377	301
TOTAL FOR MAP NO. 6								602		1,924	400		3,377	301
TOTAL FOR PROJ NO. 6CR.20241.82								1,109	5,293	2,001	782	138	3,377	301
GRAND TOTAL								1,109	5,293	2,001	782	138	3,377	301

THERMOPLASTIC & PAINT QUANTITIES

										PROJECT NO.	SHEET NO.	TOTAL NO.				
										6CR.20241.82						
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4399000000-N TEMPORARY TRAFFIC CONTROL LS	4400000000-E STATIONARY WORK ZONE SIGNS SF	4685000000-E 4" X 90 M WHITE THERMO LF	4686000000-E 4" X 120 M YELLOW THERMO LF	4810000000-E 4" WHITE PAINT LF	4810000000-E 4" YELLOW PAINT LF	4900000000-N YELLOW & YELLOW MARKERS EA
6CR.20241.82	Columbus	1	SR 1710	FROM SR 1713 TO SR 1001	1	2	2WU - Two-lane two-way undivided traffic	1.11	20	1	124			24,000	20,400	
TOTAL FOR MAP NO. 1								1.11		1	124			24,000	20,400	
6CR.20241.82	Columbus	2	SR 1720	BLADEN CL TO SR 1722	1	2	2WU	1.59	18		178			33,200	29,880	
TOTAL FOR MAP NO. 2								1.59			178			33,200	29,880	
6CR.20241.82	Columbus	3	SR 1721	FROM SR 1001 TO SR 1720	1	2	2WU	1.07	20		120			22,800	20,520	
TOTAL FOR MAP NO. 3								1.07			120			22,800	20,520	
6CR.20241.82	Columbus	4	SR 1722	FROM SR 1720 TO SR 1703	1	2	2WU	1.19	18		133			25,200	22,680	
TOTAL FOR MAP NO. 4								1.19			133			25,200	22,680	
6CR.20241.82	Columbus	5	SR 1762	FROM SR 1720 TO SR 1702	1	2	2WU	0.52	20		58			10,800	10,800	
TOTAL FOR MAP NO. 5								0.52			58			10,800	10,800	
6CR.20241.82	Columbus	6	SR 1900	FROM SR 1757 TO SR 1901	2	2	2WU	2.96	18		332	32,000	32,000	32,000	32,000	200
TOTAL FOR MAP NO. 6								2.96			332	32,000	32,000	32,000	32,000	200
TOTAL FOR PROJ NO. 6CR.20241.82								8.44		1	945	32,000	32,000	148,000	136,280	200
GRAND TOTAL								8.44		1	945	32,000	32,000	148,000	136,280	200
												64,000	284,280			