

BEAUFORT & PITT COUNTY

DB00376

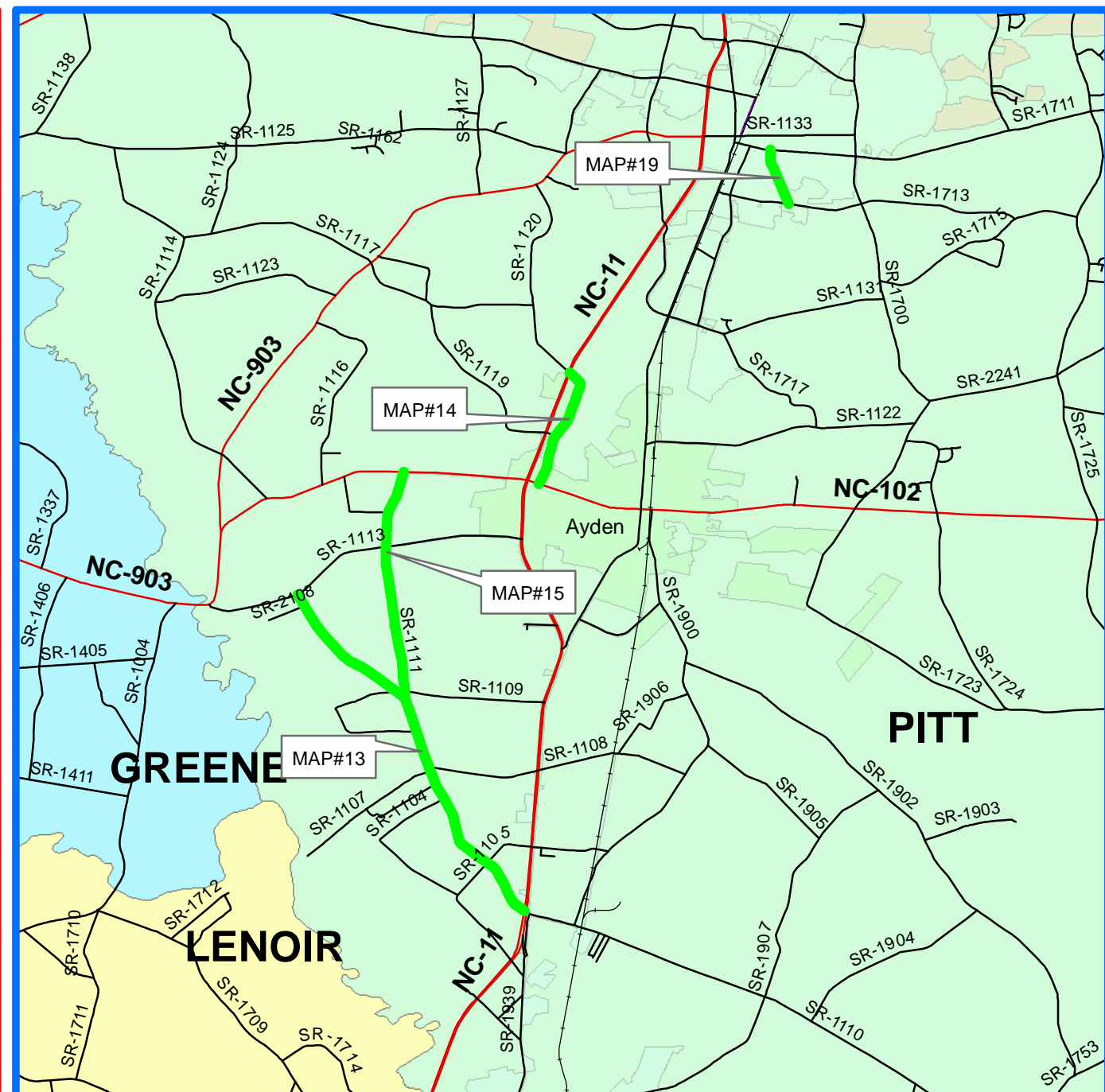
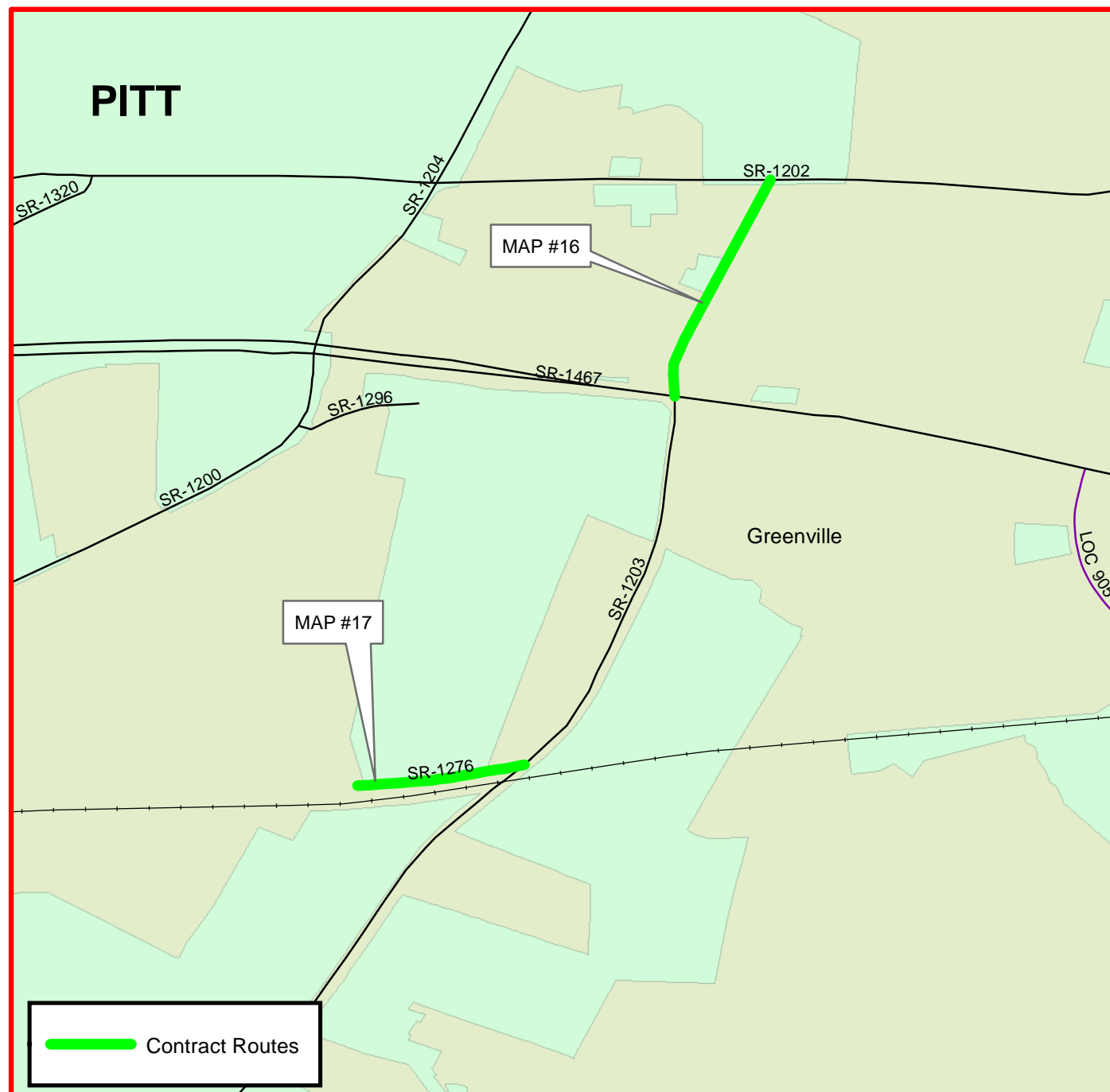
WBS# 2018CPT.02.08.20071
2018CPT.02.09.20741

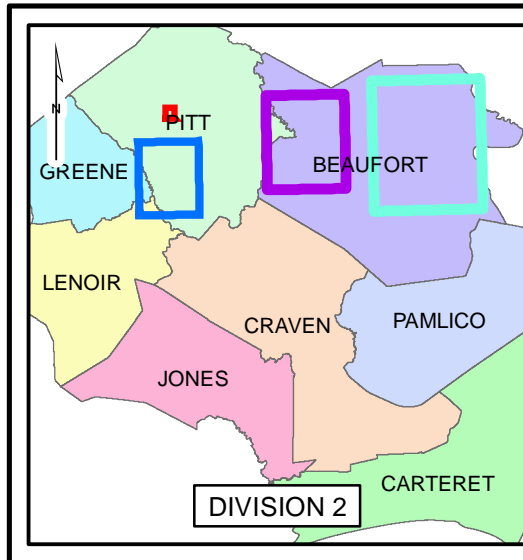
TYPE OF WORK: DISTRICT 1 - SECONDARY RESURFACING

PROJECT REFERENCE NO.	SHEET NO.
DB00376	1



NCDOT
DIVISION 2





BEAUFORT & PITT COUNTY

DB00376

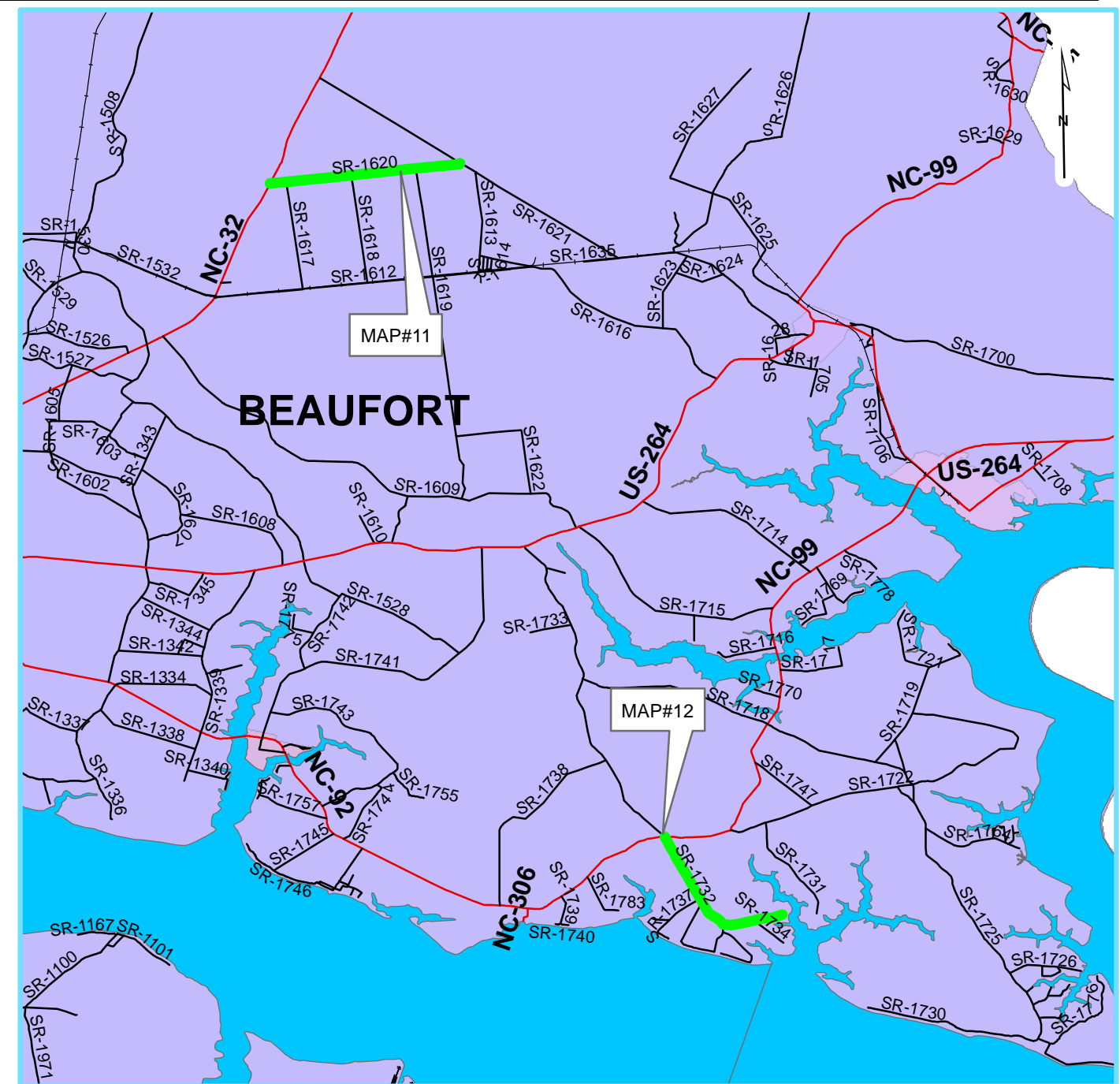
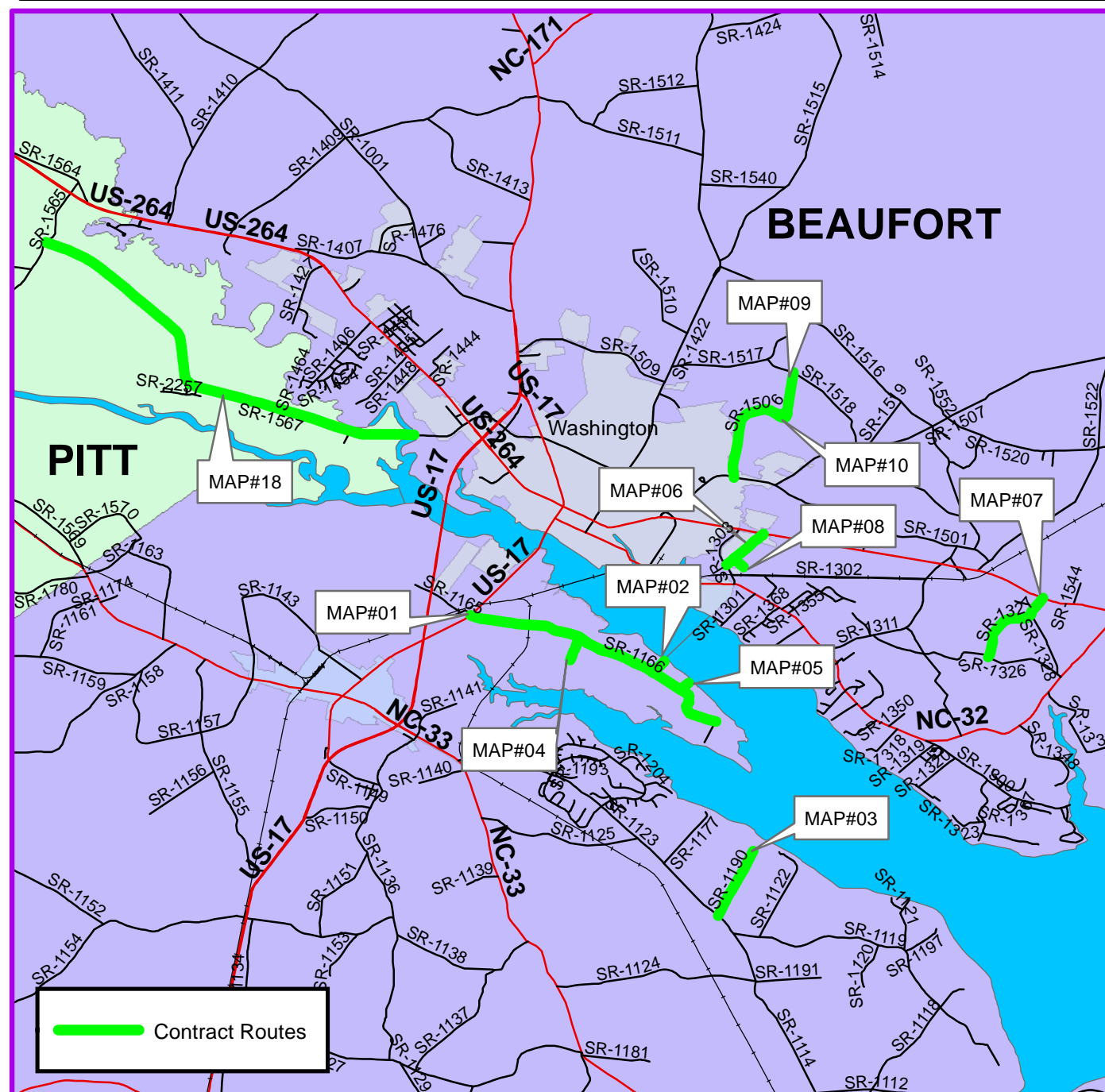
WBS# 2018CPT.02.08.20071
2018CPT.02.09.20741

TYPE OF WORK: DISTRICT 1 - SECONDARY RESURFACING

PROJECT REFERENCE NO.	SHEET NO.
DB00376	2

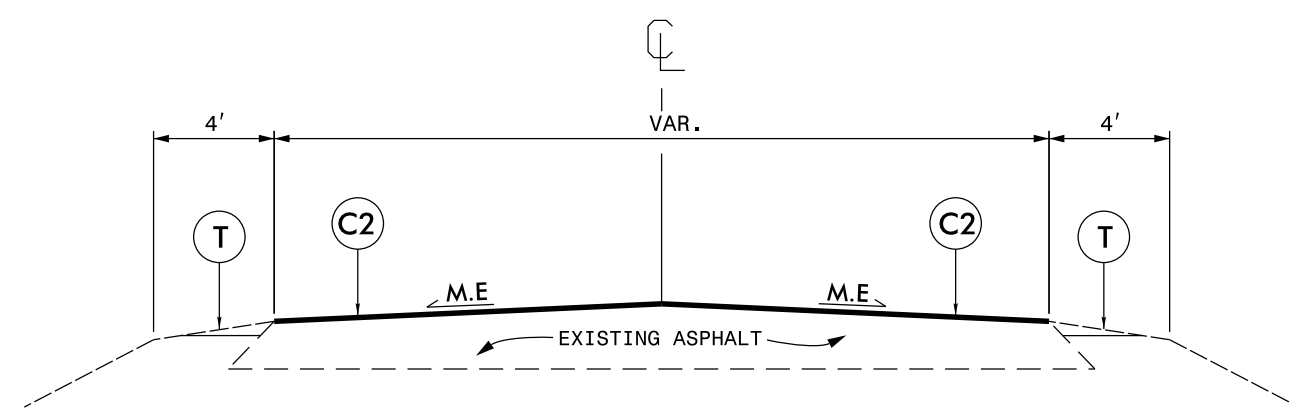


NCDOT
DIVISION 2



TYPICAL SECTION NO. 1

MAP 1,17

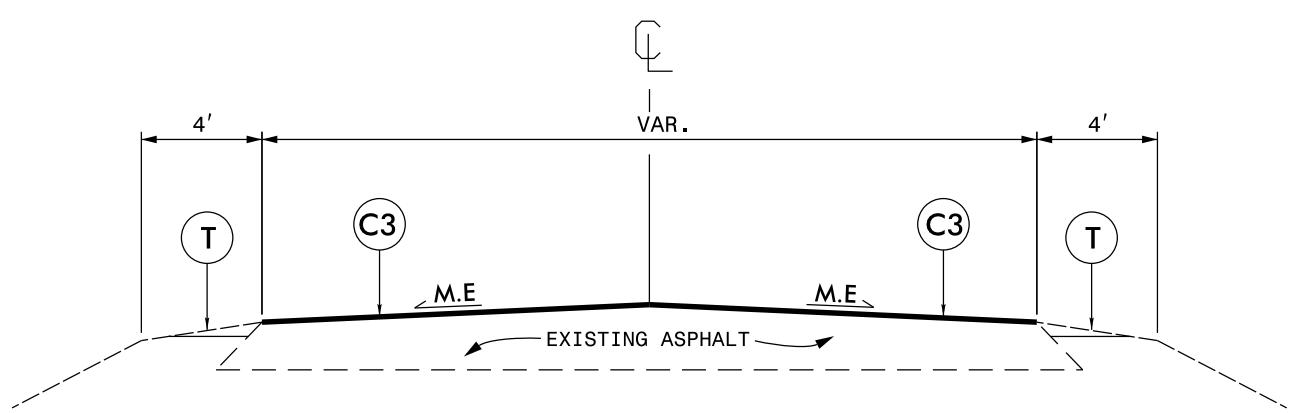


NOTE:

1. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, OR AS DIRECTED BY THE ENGINEER.
2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
3. STRENGTHENING USING I 19.0B SHALL BE PERFORMED AT LOCATIONS AND WIDTHS AS SHOWN IN THE TABLE ON PAGE 5.
3. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

TYPICAL SECTION NO. 2

MAP 2,4,5,6,7,8,10,13,19



NOTE:

1. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, OR AS DIRECTED BY THE ENGINEER.
2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
3. STRENGTHENING USING I 19.0B SHALL BE PERFORMED AT LOCATIONS AND WIDTHS AS SHOWN IN THE TABLE ON PAGE 5.
4. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

PAVEMENT SCHEDULE

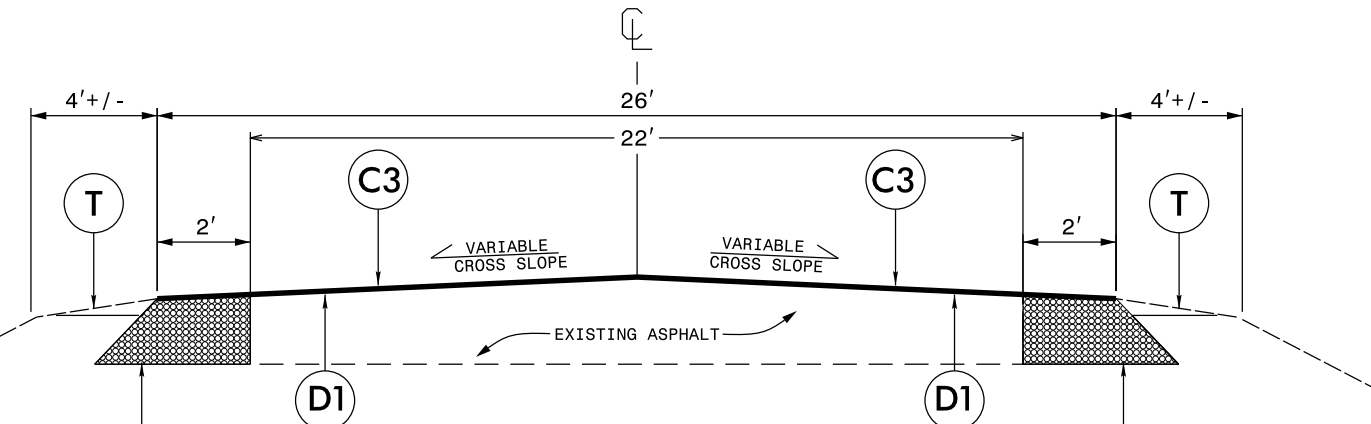
C1	PROP. APPROX. 1 3/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
C2	PROP. APPROX. 1 3/4" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 196.0 LBS. PER SQ. YD.
C3	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B AT AN AVERAGE RATE OF 285.0 LBS. PER SQ. YD.
E1	PROP. APPROX. 5" ACBC, TYPE B25.0B AT AN AVERAGE RATE OF 570.0, LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
V1	INCIDENTAL MILLING
V3	0" - 1 1/2" DEPTH MILLING IN 7 FT

DRAWINGS NOT TO SCALE

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

TYPICAL SECTION NO. 3

MAP 18

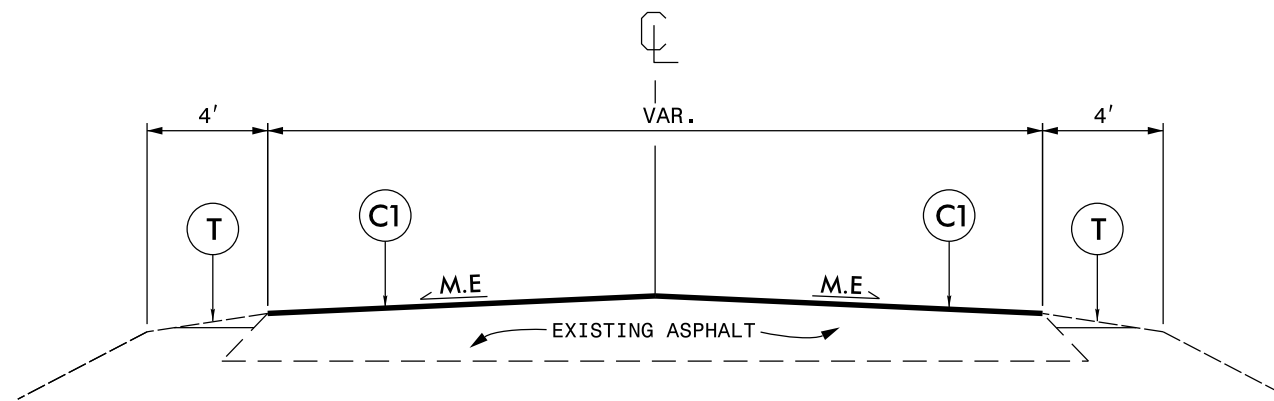


NOTE:

1. PLACE ASYMMETRICAL WIDENING, AS DIRECTED BY THE ENGINEER. MAKE FLUSH WITH THE EXISTING ASPHALT.
2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
3. PLACE ASPHALT INTERMEDIATE COURSE AT FULL WIDTH, INCLUDING NEW WIDENING.
4. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH, INCLUDING NEW WIDENING.
5. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

TYPICAL SECTION NO. 4

MAP 3,11,12,14,15,16

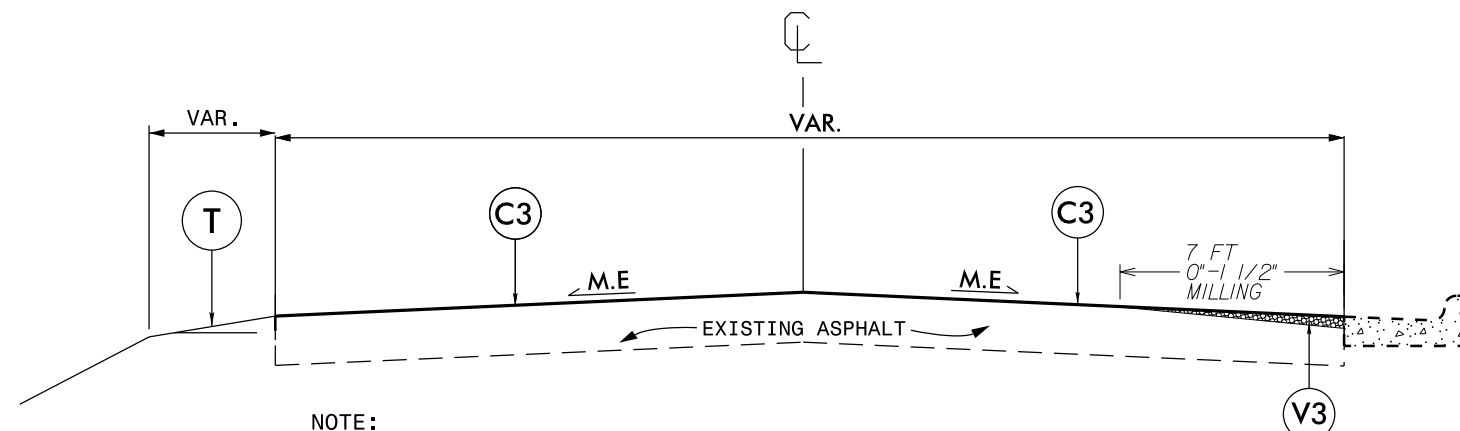


NOTE:

1. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, OR AS DIRECTED BY THE ENGINEER.
2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
3. STRENGTHENING USING I 19.0B AND LEVELING USING SF 9.5A SHALL BE PERFORMED AT LOCATIONS AND WIDTHS AS SHOWN IN THE TABLE ON PAGE 5.
4. OVERLAY DAMAGED AREA OF EXISTING PAVEMENT WITH 1 3/4" LIFT OF SURFACE COURSE PRIOR TO FINAL LAYER, AS DIRECTED BY ENGINEER. SEE PAGE 5 FOR LOCATION AND WIDTH.
5. PREFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

TYPICAL SECTION NO. 5

MAP 9



NOTE:

1. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, OR AS DIRECTED BY THE ENGINEER.
2. MILL ASPHALT PAVEMENT TO A DEPTH OF 0"-1 1/2" WITHIN 7FT TO TIE TO EXISTING C&G FROM STA. 0+00 TO 31+04 RT OF -L-.
3. AT BRIDGE, MILL ASPHALT PAVEMENT AT FULL WIDTH TO A DEPTH OF 0"-1 1/2" FROM STA. 55+14 TO 56+56.
4. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
5. STRENGTHENING USING I 19.0B SHALL BE PERFORMED AT LOCATIONS AND WIDTHS AS SHOWN IN THE TABLE ON PAGE 5.
6. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1 3/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
C2	PROP. APPROX. 1 3/4" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 196.0 LBS. PER SQ. YD.
C3	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B AT AN AVERAGE RATE OF 285.0 LBS. PER SQ. YD.
E1	PROP. APPROX. 5" ACBC, TYPE B25.0B AT AN AVERAGE RATE OF 570.0, LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
V1	INCIDENTAL MILLING
V3	0" - 1 1/2" DEPTH MILLING IN 7 FT
DRAWINGS NOT TO SCALE	

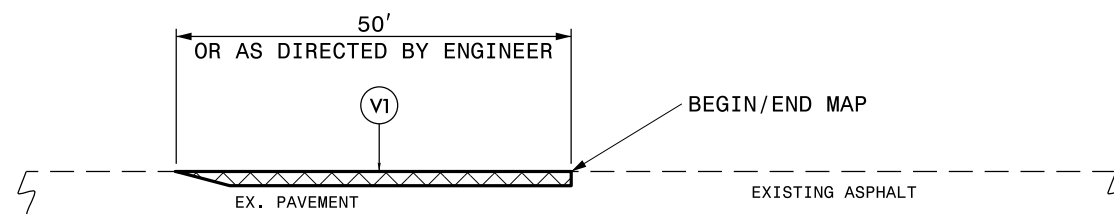
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

PROJECT NO.	SHEET NO.	TOTAL NO.
DB00376	7	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	4413000000-E		4457000000-N	
								LENGTH	WIDTH	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL
								M	FT	SF	LS
2018CPT.02.08.20071	Beaufort	1	SR 1166	FROM US 17 BUS TO END OF MAINT. ROAD	1	2	2WU	3.23	23	400	0.12
TOTAL FOR MAP NO. 1								3.23		400	0.12
2018CPT.02.08.20071	Beaufort	2	SR 1176	FROM SR 1166 TO DEAD END	2	2	2WU	0.19	22	25	0.01
TOTAL FOR MAP NO. 2								0.19		25	0.01
2018CPT.02.08.20071	Beaufort	3	SR 1190	FROM SR 1123 TO DEAD END	4	2	2WU	0.94	20	110	0.04
TOTAL FOR MAP NO. 3								0.94		110	0.04
2018CPT.02.08.20071	Beaufort	4	SR 1203	FROM SR 1166 TO DEAD END	2	2	2WU	0.31	22	35	0.01
TOTAL FOR MAP NO. 4								0.31		35	0.01
2018CPT.02.08.20071	Beaufort	5	SR 1231	FROM SR 1166 TO DEAD END	2	2	2WU	0.12	20	15	0.01
TOTAL FOR MAP NO. 5								0.12		15	0.01
2018CPT.02.08.20071	Beaufort	6	SR 1305	FROM SR 1303 TO US 264	2	2	2WU	0.58	20	65	0.02
TOTAL FOR MAP NO. 6								0.58		65	0.02
2018CPT.02.08.20071	Beaufort	7	SR 1327	FROM SR 1326 TO US 264	2	2	2WU	1.10	18	125	0.05
TOTAL FOR MAP NO. 7								1.10		125	0.05
2018CPT.02.08.20071	Beaufort	8	SR 1376	FROM SR 1305 TO END MAINT. ROAD	2	2	2WU	0.15	20	20	0.01
TOTAL FOR MAP NO. 8								0.15		20	0.01
2018CPT.02.08.20071	Beaufort	9	SR 1506	FROM SR 1501 TO SR 1518	5	2	2WU	1.86	20	210	0.08
TOTAL FOR MAP NO. 9								1.86		210	0.08
2018CPT.02.08.20071	Beaufort	10	SR 1545	FROM SR 1506 TO SR 1506	2	2	2WU	0.19	20	25	0.01
TOTAL FOR MAP NO. 10								0.19		25	0.01
2018CPT.02.08.20071	Beaufort	11	SR 1620	FROM NC 32 TO SR 1621	4	2	2WU	2.91	20	350	0.11
TOTAL FOR MAP NO. 11								2.91		350	0.11
2018CPT.02.08.20071	Beaufort	12	SR 1732	FROM NC 99 TO END PAVEMENT	4	2	2WU	2.80	20	325	0.10
TOTAL FOR MAP NO. 12								2.80		325	0.10
TOTAL FOR PROJ NO. 2018CPT.02.08.20071								14.38		1,705	0.57
2018CPT.02.09.20741	Pitt	13	SR 1110	FROM SR 1113 TO NC 11 SOUTH	2	2	2WU	3.98	20	450	0.14
TOTAL FOR MAP NO. 13								3.98		450	0.14
2018CPT.02.09.20741	Pitt	14	SR 1120	FROM NC 102 TO NC 11	4	2	2WU	1.27	20	150	0.06
TOTAL FOR MAP NO. 14								1.27		150	0.06
2018CPT.02.09.20741	Pitt	15	SR 1111	FROM SR 1110 TO NC 102	4	2	2WU	2.34	18	270	0.01
TOTAL FOR MAP NO. 15								2.34		270	0.01
2018CPT.02.09.20741	Pitt	16	SR 1203	FROM SR 1202 TO SR 1467	4	2	2WU	0.36	20	40	0.01
TOTAL FOR MAP NO. 16								0.36		40	0.01
2018CPT.02.09.20741	Pitt	17	SR 1276	FROM SR 1203 TO DEAD END	1	2	2WU	0.21	24	25	0.01
TOTAL FOR MAP NO. 17								0.21		25	0.01
2018CPT.02.09.20741	Pitt	18	SR 1567	FROM SR 1565 TO BEAUFORT CO. LINE	3	2	2WU	5.16	26	600	0.18
TOTAL FOR MAP NO. 18								5.16		600	0.18
2018CPT.02.09.20741	Pitt	19	SR 1712	FROM SR 1713 SR 1711	2	2	2WU	0.59	30	70	0.02
TOTAL FOR MAP NO. 19								0.59		70	0.02
TOTAL FOR PROJ NO. 2018CPT.02.09.20741								13.91		1,605	0.43
GRAND TOTAL								28.29		3,310	1

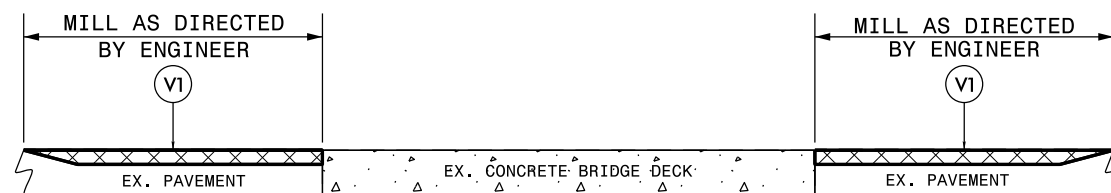
MILLING TYPICALS



DETAIL 1
BEGIN/END MAP TIE-IN

NOTE:

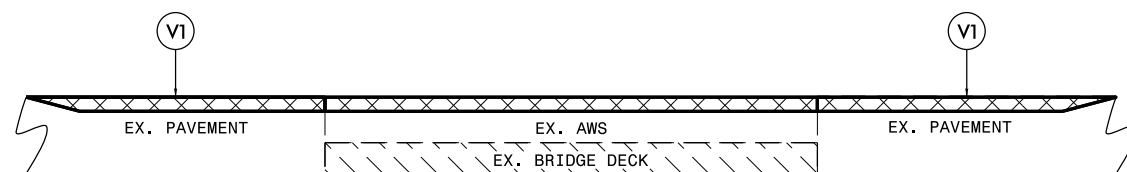
- MILLING SHALL BE PERFORMED AT MAIN LINE TIE-INS AND Y-LINE TIE-INS AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



DETAIL 2
BRIDGE MILLING

NOTE:

- MILLING SHALL BE PERFORMED AT THE BRIDGE APPROACHES AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.

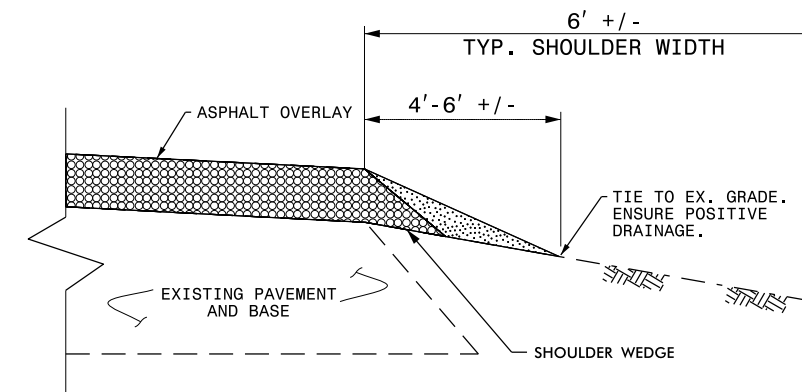


DETAIL 3
BRIDGE MILLING

NOTE:

- INCLUDES MILLING FOR THE ENTIRE WIDTH OF THE BRIDGE WEARING SURFACE, AS DIRECTED BY THE ENGINEER.

SHOULDER RECONSTRUCTION TYPICAL

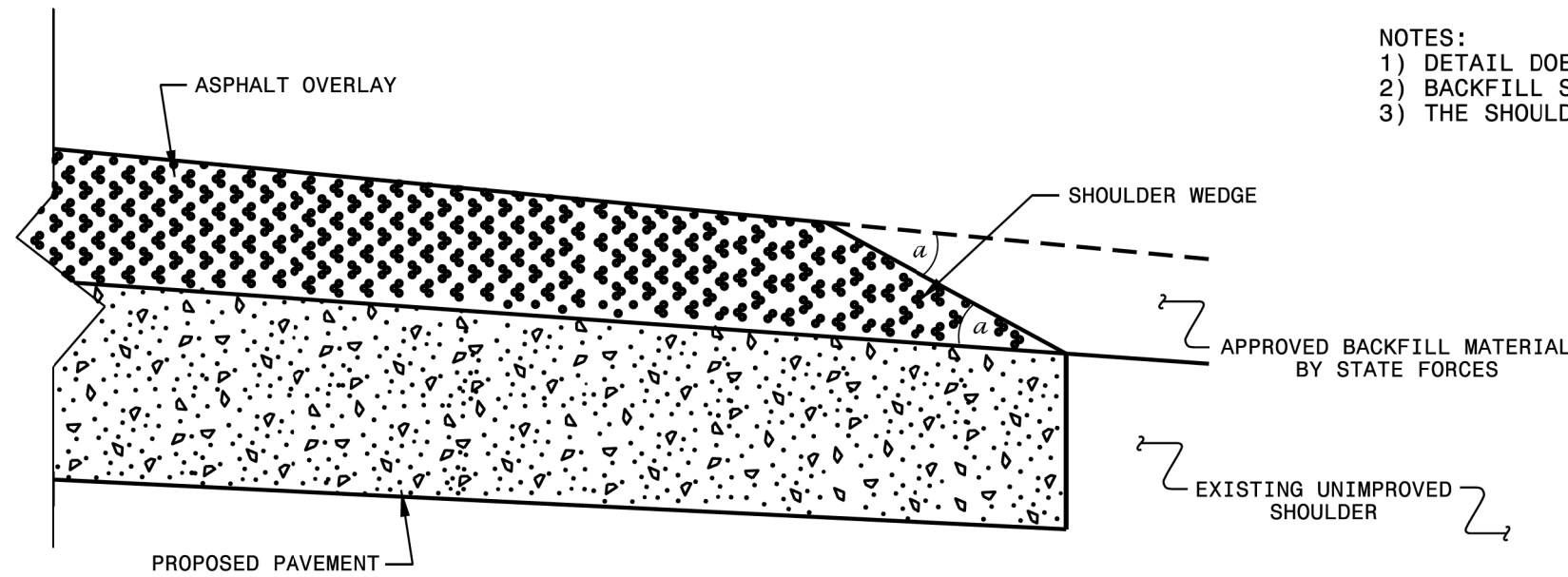


SHOULDER RECONSTRUCTION DETAIL

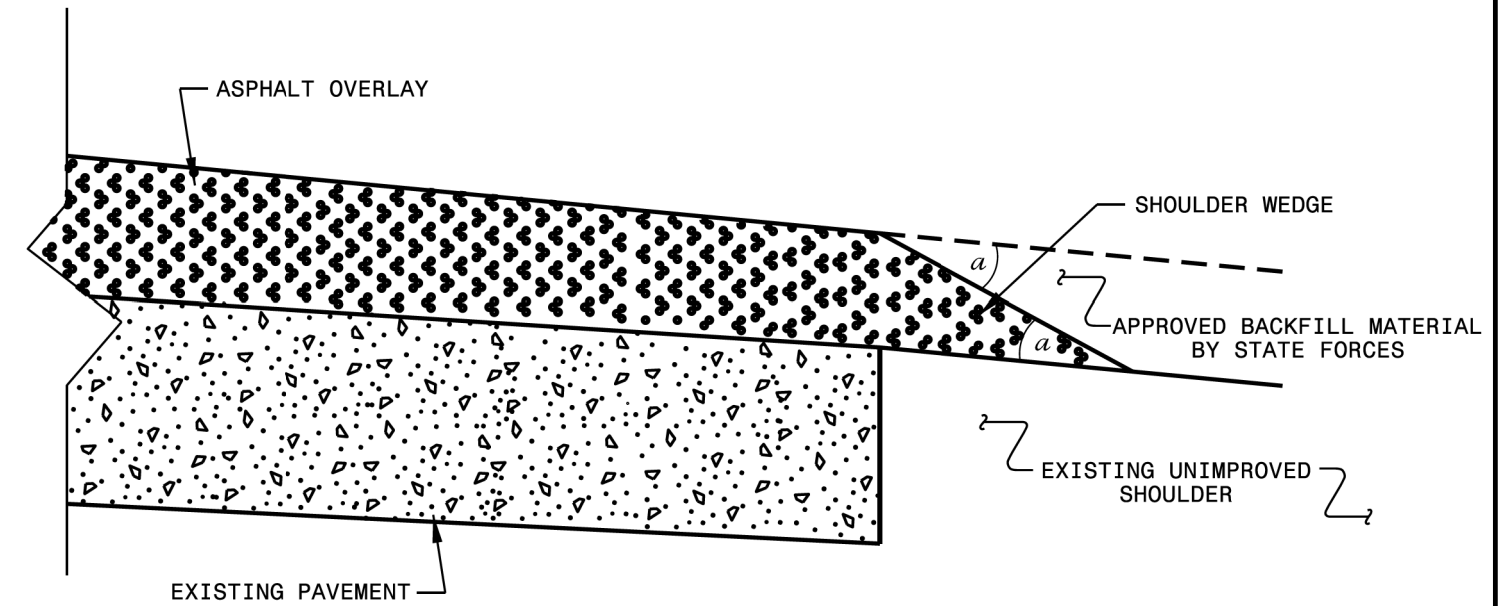
NOTE:

- SHOULDERS 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 THE ROADWAY.
- 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 FROM NCDOT STOCKPILES. ANY EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN APPROVED DISPOSAL SITE.

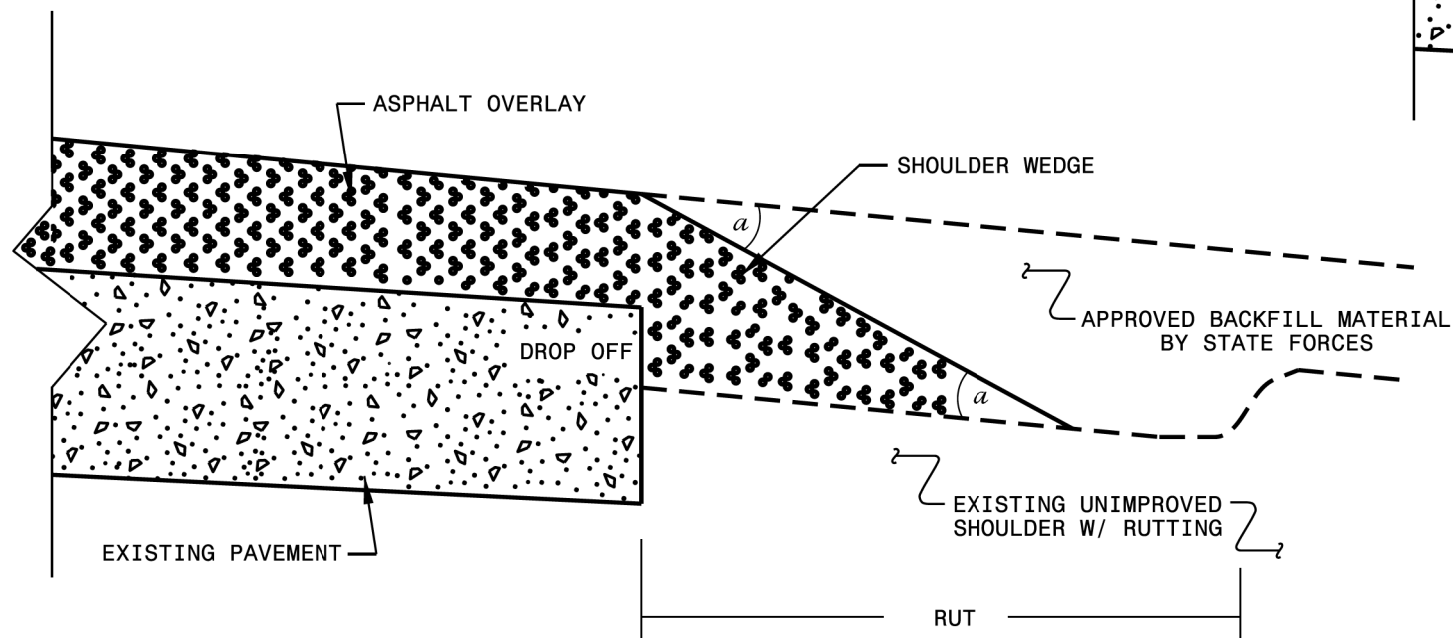
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ Widening or
 with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

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

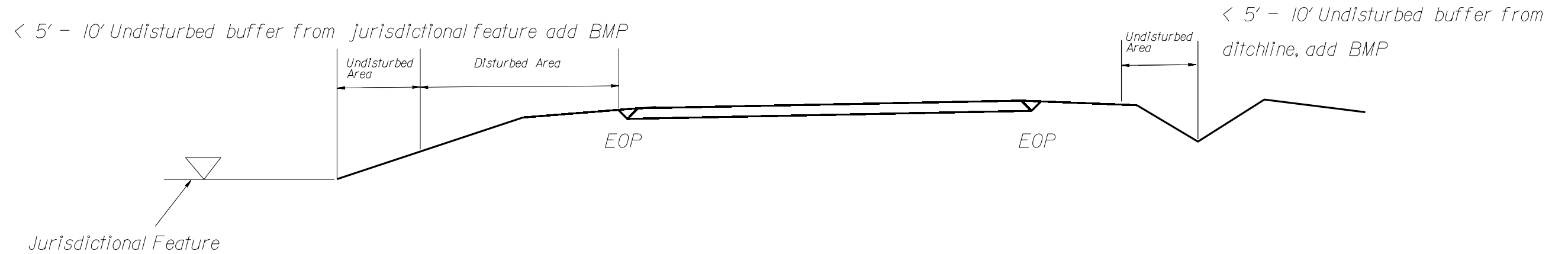
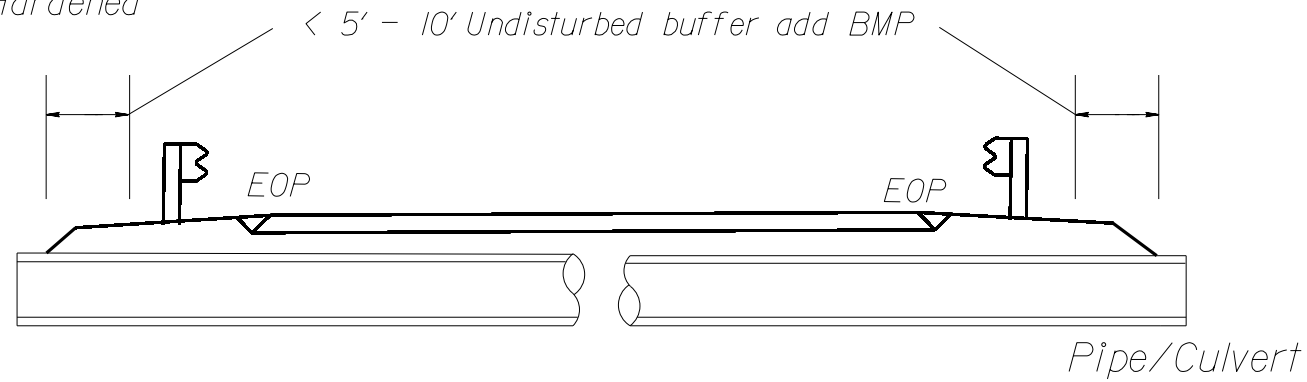
**SHOULDER WEDGE
 DETAILS**

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

NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

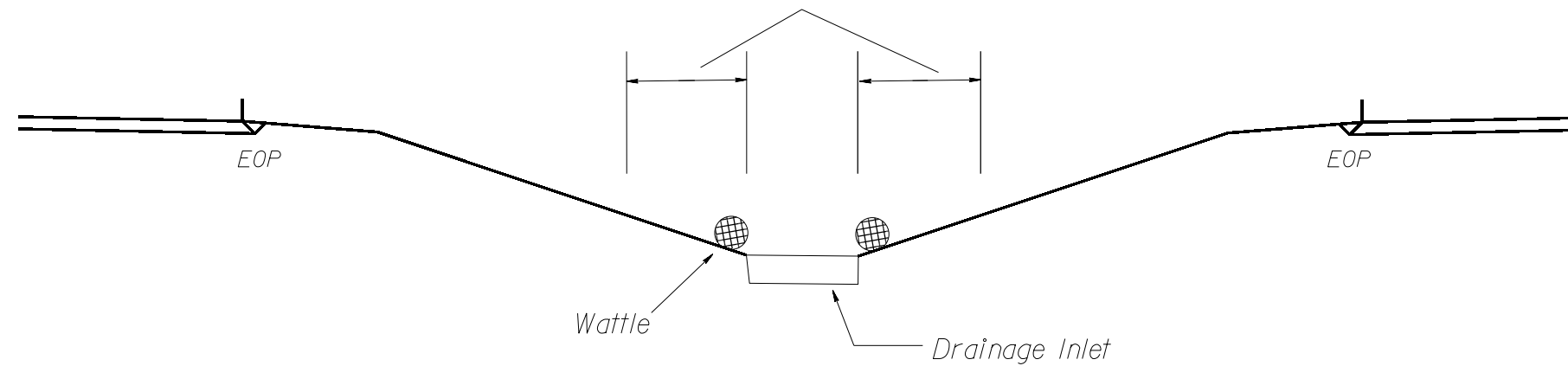
EROSION CONTROL DETAIL



Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed

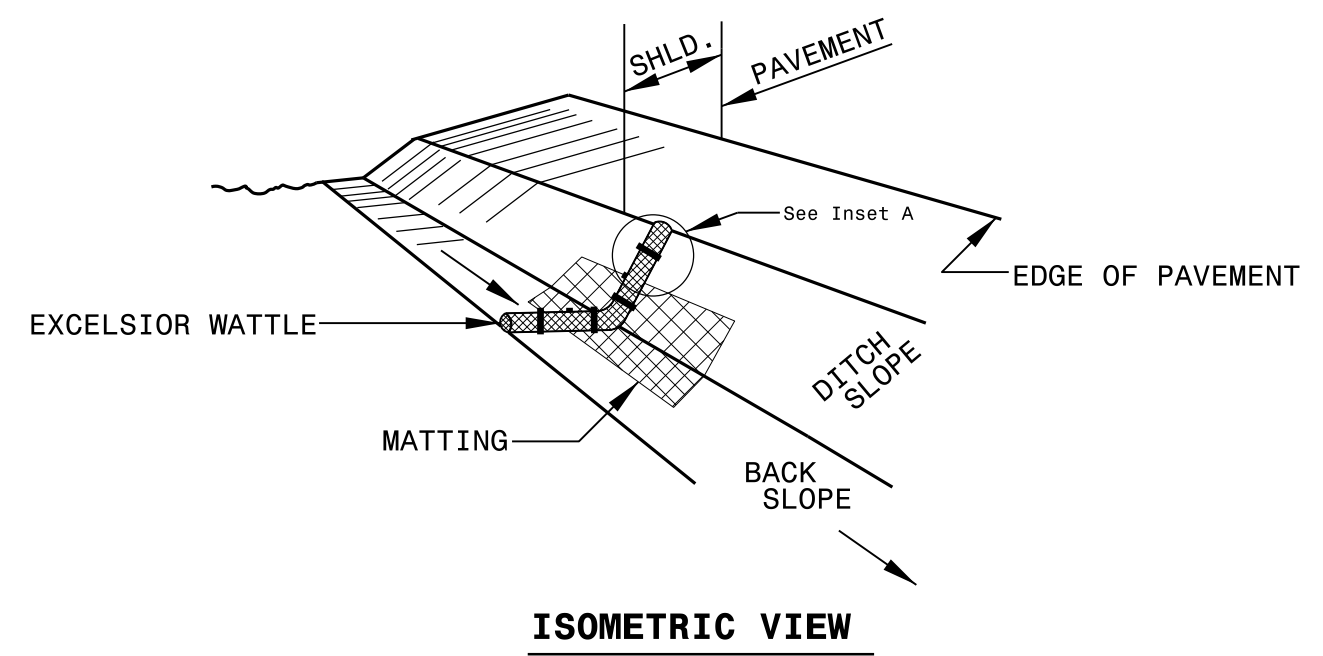


< 5' - 10' Undisturbed buffer from inlet, add wattle



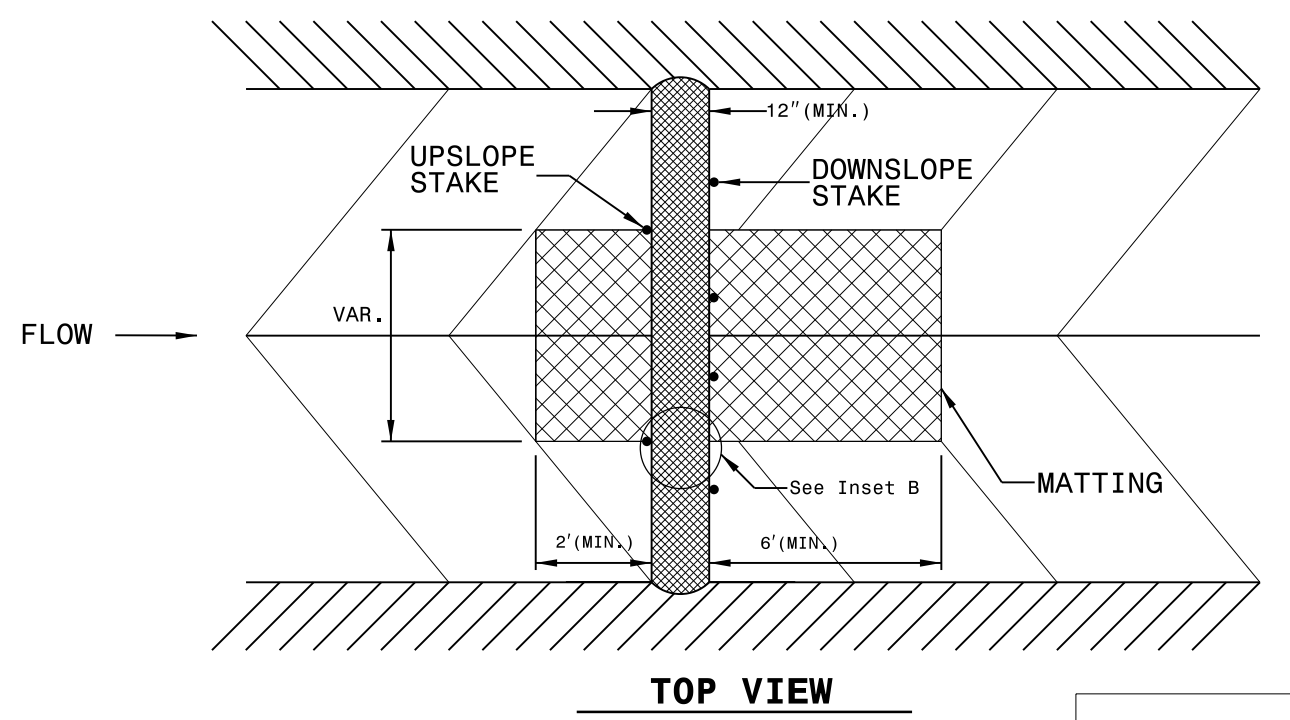
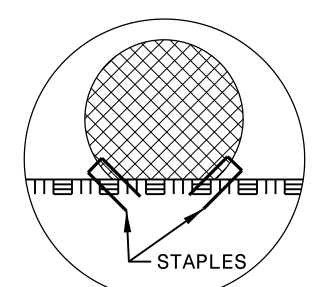
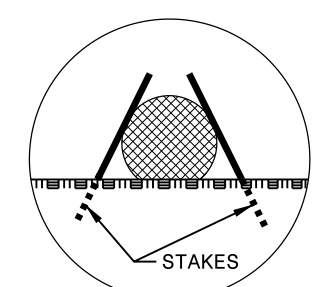
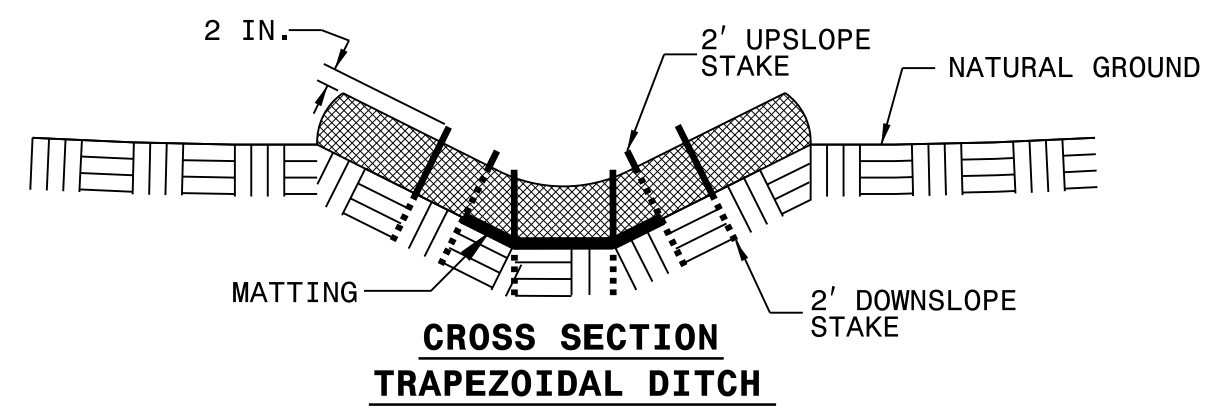
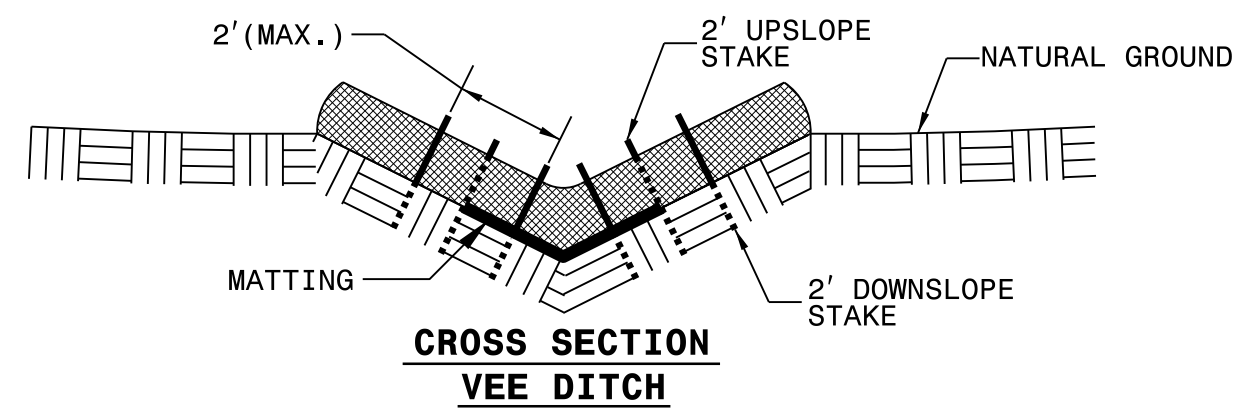
NOT TO SCALE

WATTLE DETAIL



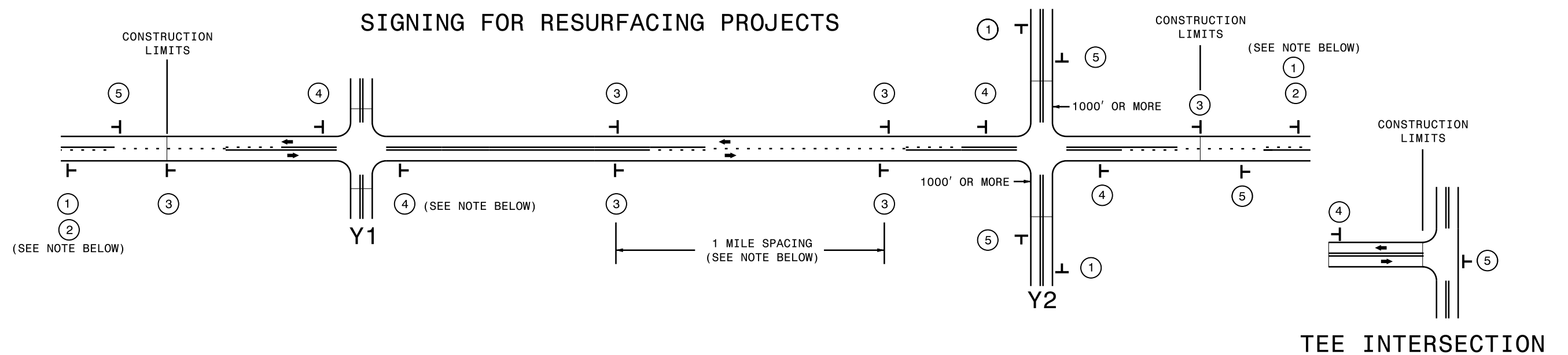
NOTES:

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
- PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
- INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
- INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



NOT TO SCALE

SIGNING FOR RESURFACING PROJECTS



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;"> <div style="text-align: center;"> <p>W20-1 48" X 48"</p> </div> <div style="text-align: center;"> <p>W20-7 A 48" X 48"</p> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
		<ul style="list-style-type: none"> - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER. 	
		<ul style="list-style-type: none"> - 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. 	
		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	