

PROJECT REFERENCE NO.	SHEET NO.
DB00521	1

PITT COUNTY

DB00521

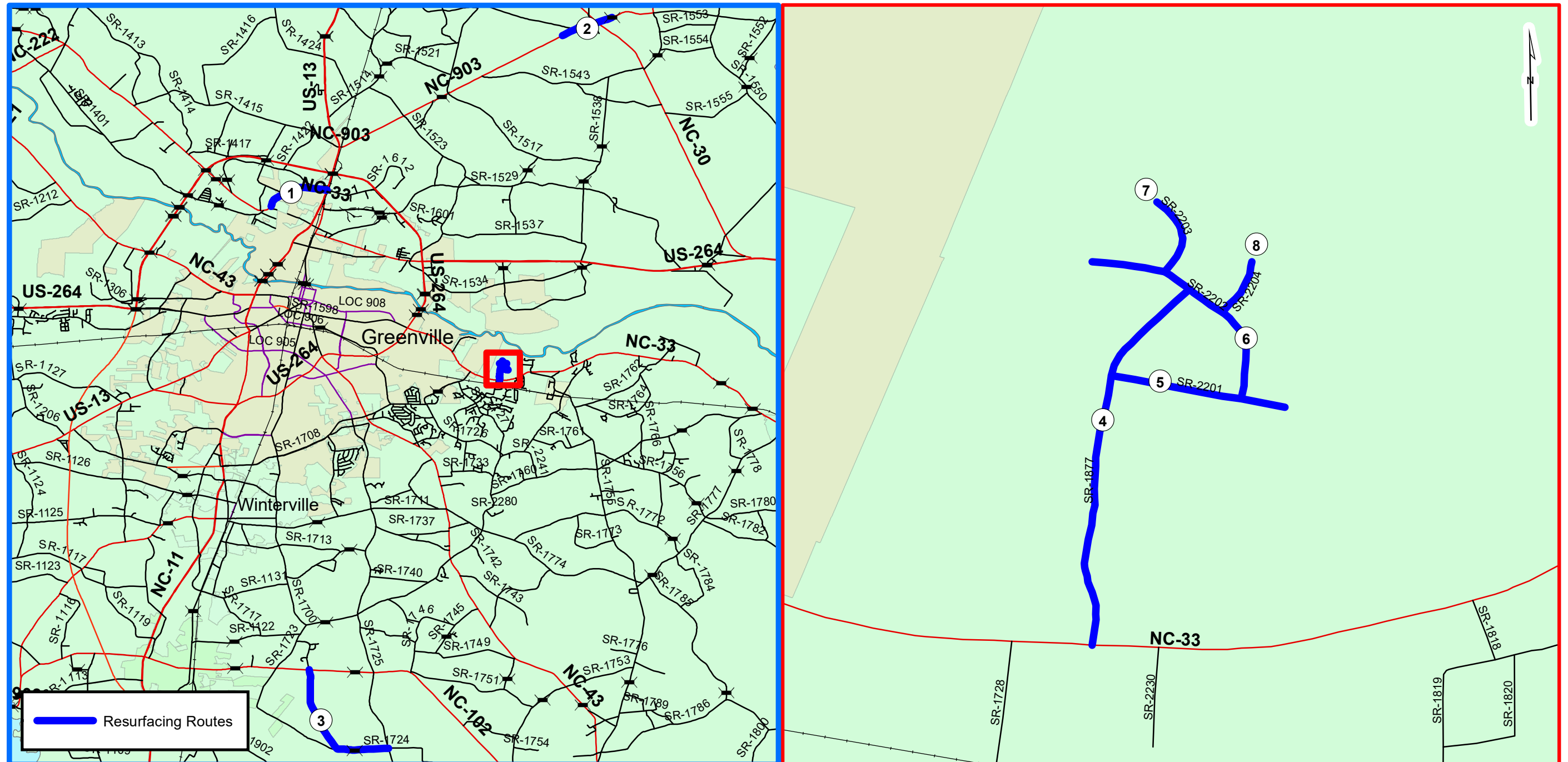
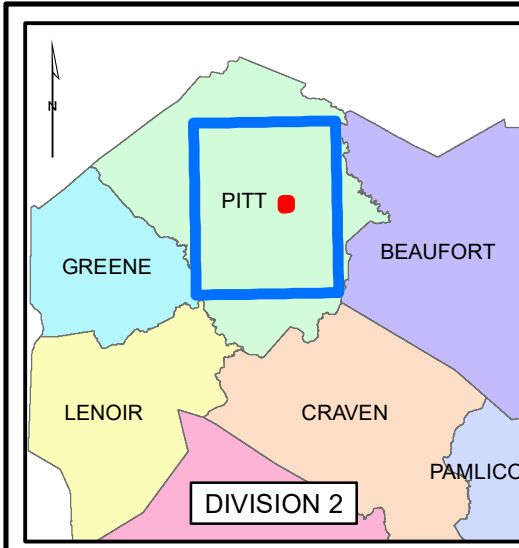
WBS# 2022CPT.02.03.10741

WBS# 2022CPT.02.04.20741

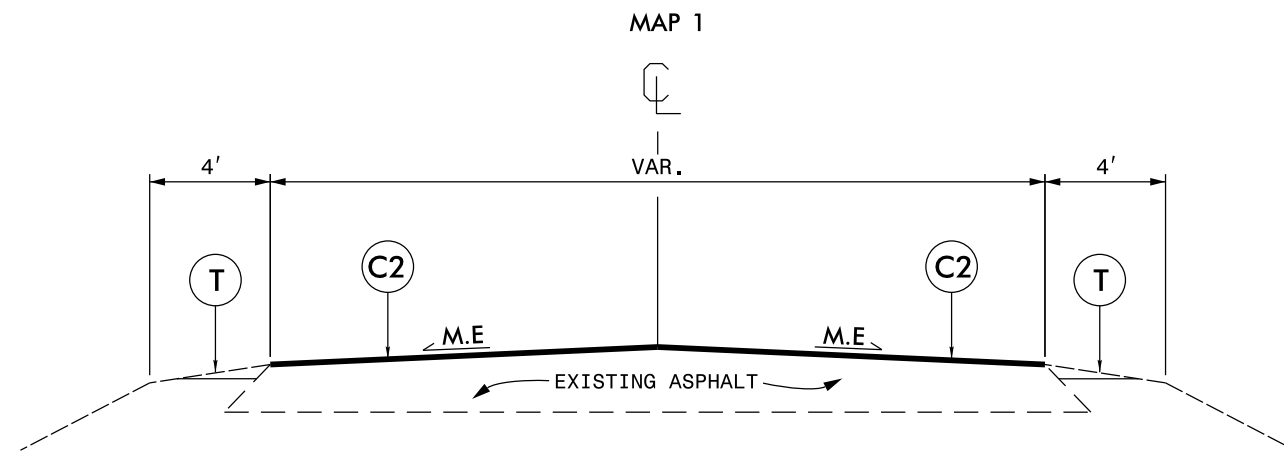
TYPE OF WORK: MILLING, STRENGTHENING, RESURFACING, SHOULDER RECONSTRUCTION



NCDOT
DIVISION 2



TYPICAL SECTION NO. 1



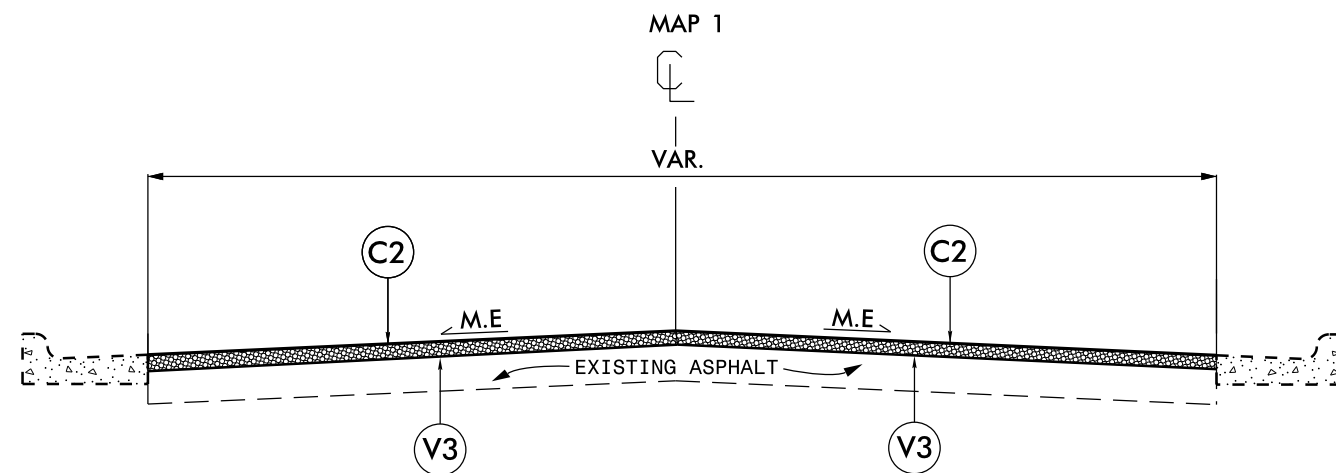
NOTE:

1. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, 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. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.75" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING.
V2	MILLING DEPTH 1.5" FOR THE ENTIRE WIDTH OF ROADWAY.
V3	MILLING DEPTH 1.75" FOR THE ENTIRE WIDTH OF ROADWAY.
T	SHOULDER RECONSTRUCTION.
DRAWINGS NOT TO SCALE	

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

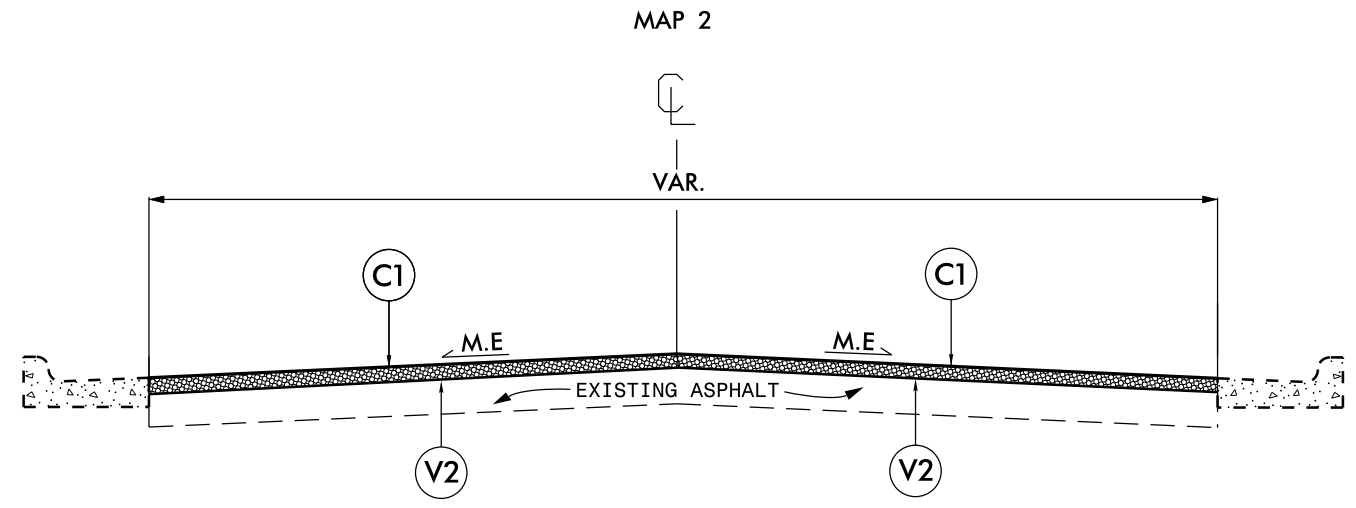
TYPICAL SECTION NO. 2



NOTE:

1. PERFORM 1.75" DEPTH MILLING WITHIN THE CURB AND GUTTER SECTION, FULL WIDTH.
2. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER.

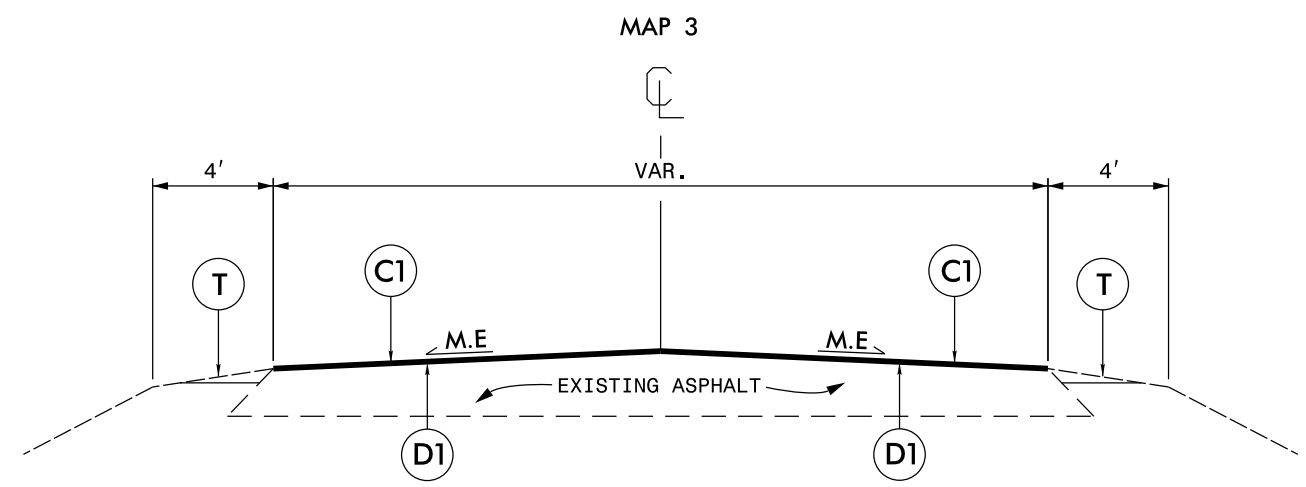
TYPICAL SECTION NO. 3



NOTE:

1. PERFORM 1.5" DEPTH MILLING WITHIN THE CURB AND GUTTER SECTION, FULL WIDTH.
2. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER.
3. NO SHOULDER RECONSTRUCTION REQUIRED FOR THE SHOULDER SECTION OF THIS MAP.

TYPICAL SECTION NO. 4



NOTE:

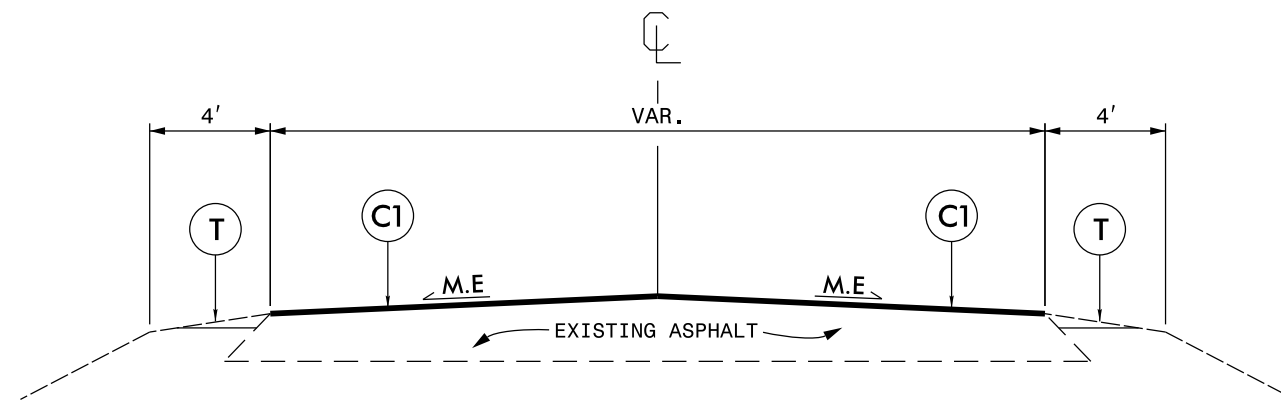
1. PERFORM 4" DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS SHOWN ON SHEET 5. PLACE ASPHALT BASE COURSE B25.0C IN ONE LIFT TO BACKFILL.
2. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER.
3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
4. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.75" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING.
V2	MILLING DEPTH 1.5" FOR THE ENTIRE WIDTH OF ROADWAY.
V3	MILLING DEPTH 1.75" FOR THE ENTIRE WIDTH OF ROADWAY.
T	SHOULDER RECONSTRUCTION.
DRAWINGS NOT TO SCALE	

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

TYPICAL SECTION NO. 5

MAP 4, 5, 6, 7, 8



NOTE:

1. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, 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. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.75" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING.
V2	MILLING DEPTH 1.5" FOR THE ENTIRE WIDTH OF ROADWAY.
V3	MILLING DEPTH 1.75" FOR THE ENTIRE WIDTH OF ROADWAY.
T	SHOULDER RECONSTRUCTION.

DRAWINGS NOT TO SCALE

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

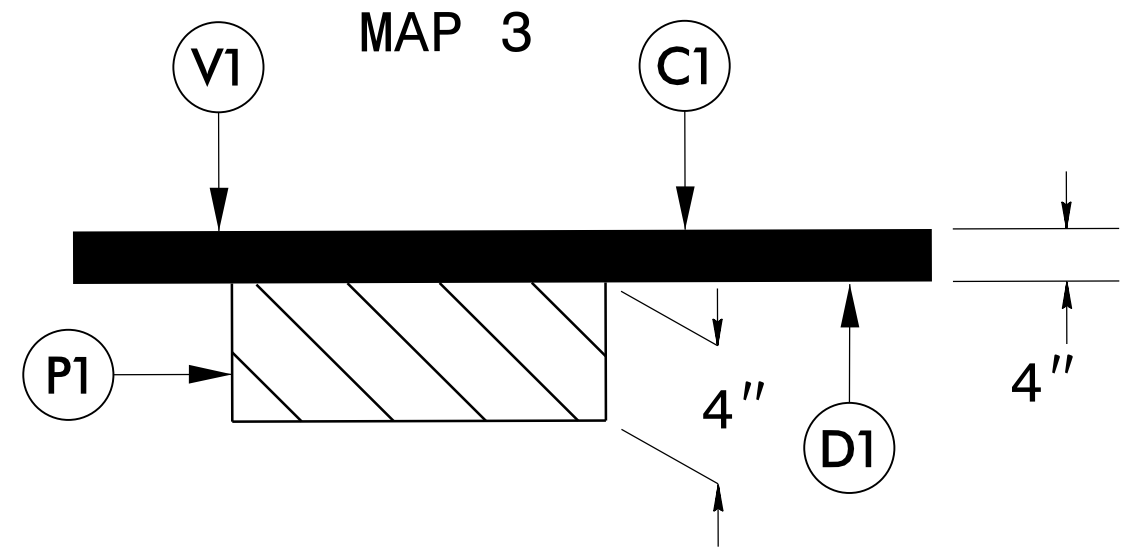
PROJECT NO. DB00521	SHEET NO. 5	TOTAL NO.
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SUMMARY OF QUANTITIES

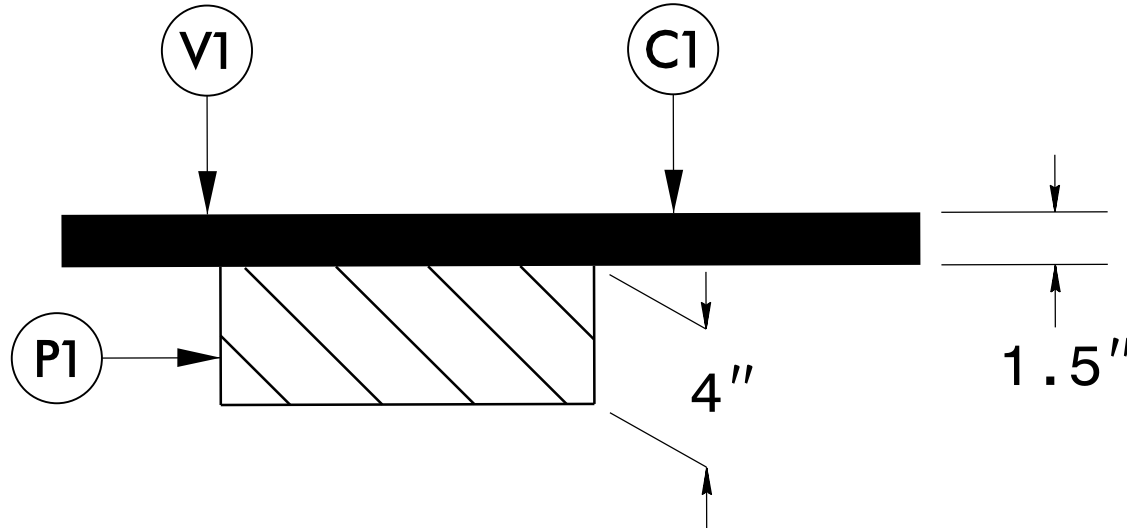
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	0262000000-N		1220000000-E		1245000000-E		1297000000-E		1330000000-E		1503000000-E		1519000000-E		1575000000-E		1880000000-E		2830000000-N		6000000000-E		6071010000-E		6084000000-E		6117000000-N		4413000000-E		4457000000-N	
												HAULING NCDOT SUPPLIED SHOULDER MATERIAL	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1.75" MILLING	1 1/2" MILLING	INCIDENTAL MILLING	INTERMEDIATE COURSE, 119.0C	SURFACE COURSE, 59.5B	ASPHALT BINDER FOR PLANT MIX	6" DEPTH MILL PATCHING EXISTING PAVEMENT - B 25.0 C	4" DEPTH MILL PATCHING EXISTING PAVEMENT - B 25.0 C	ADJ. OF MANHOLES	TEMPORARY SILT FENCE	WATTLE	SEED & MULCHING	RESPONSE FOR EROSION CONTROL	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL														
												MI	FT	EA	TONS	SMI	SY	SY	SY	TONS	TONS	TONS	TON	TON	EA	LF	LF	AC	EA	SF	LS												
2022CPT.02.03.10741	Pitt	1	NC 33 BELVOIR HWY	FROM REDMOND LN TO US 13	1,2	2	2WU	NO	NO	1.46	36	58	73	2.92	7,500			200		3,500	235			2	234	200	1.46	1	170	0.22													
TOTAL FOR MAP NO. 1												1.46		58	73	2.92	7,500			200		3,500	235			2	234	200	1.46	1	170	0.22											
2022CPT.02.03.10741	Pitt	2	NC 903	FROM C&G TO 100' EAST OF BRIDGE # 54	3	2	2WU	NO	NO	0.88	44						22,000	200		2,000	134	500								100	0.20												
TOTAL FOR MAP NO. 2												0.88							22,000	200		2,000	134	500								100	0.20										
TOTAL FOR PROJ NO. 2022CPT.02.03.10741												2.34		58	73	2.92	7,500		29,500	400		5,500	369	500		2	234	200	1.46	1	270	0.42											
2022CPT.02.04.20741	Pitt	3	SR 1724 EMMA CANNON RD	FROM SR 1725 TO NC 102	4	2	2WU	NO	NO	3.28	20	131	164	6.56			500	5,300		3,100	462			2,000		525	100	3.28	1	400	0.30												
TOTAL FOR MAP NO. 3												3.28		131	164	6.56			500	5,300		3,100	462		2,000		525	100	3.28	1	400	0.30											
2022CPT.02.04.20741	Pitt	4	SR 1877 FARMINGWOOD RD	FROM NC 33 TO SR 2202	5	2	2WU	NO	NO	0.39	20	16	20	0.78			100			500	34			300		62	40	0.39		50	0.08												
TOTAL FOR MAP NO. 4												0.39		16	20	0.78			100			500	34		300		62	40	0.39		50	0.08											
2022CPT.02.04.20741	Pitt	5	SR 2201 MEADOWGLENN RD	FROM SR 1877 TO DEAD END	5	2	2WU	NO	NO	0.16	18	6		0.32			200			200	13			50		26	40	0.16		20	0.06												
TOTAL FOR MAP NO. 5												0.16		6		0.32			200			200	13		50		26	40	0.16		20	0.06											
2022CPT.02.04.20741	Pitt	6	SR 2202 ROLLING MEADOWS DR	FROM SR 2201 TO END MAINTENANCE	5	2	2WU	NO	NO	0.24	18	10		0.48			200			300	20			300		38		0.24		30	0.06												
TOTAL FOR MAP NO. 6												0.24		10		0.48			200			300	20		300		38		0.24		30	0.06											
2022CPT.02.04.20741	Pitt	7	SR 2203 DORCUS TERRACE	FROM SR 2202 TO DEAD END	5	2	2WU	NO	NO	0.08	18	3		0.16			200			150	10					13		0.08		10	0.04												
TOTAL FOR MAP NO. 7												0.08		3		0.16			200			150	10				13		0.08		10	0.04											
2022CPT.02.04.20741	Pitt	8	SR 2204 JULIE CIR	FROM SR 2202 TO CUL-DE-SAC	5	2	2WU	NO	NO	0.05	18	2		0.10			200			110	7					8		0.05		10	0.04												
TOTAL FOR MAP NO. 8												0.05		2		0.10			200			110	7				8		0.05		10	0.04											
TOTAL FOR PROJ NO. 2022CPT.02.04.20741												4.20		168	184	8.40			1,400	5,300		4,360	546		2,650		672	180	4.20	1	520	0.58											
GRAND TOTAL												6.54		226	257	11.32			7,500	22,000		1,800	5,300		9,860	915	500	2,650	2	906	380	5.66	2	790	1								

STA.	STA.	WIDTH	MAP#
7+37	8+69	12'	2
15+81	19+82	12'	2
20+28	22+72	12'	2
0+09	0+85	32'	2 / NC 30
0+00	1+31	FULL	LT / RT 3
1+31	4+32	FULL	LT / RT 3
8+17	12+37	FULL	LT / RT 3
15+30	22+68	FULL	LT / RT 3
26+31	27+22	FULL	RT 3
28+71	35+47	FULL	LT / RT 3
41+06	43+54	FULL	LT / RT 3
45+84	48+87	FULL	LT / RT 3
53+73	54+78	FULL	LT / RT 3
71+76	72+96	FULL	RT 3
72+96	77+30	FULL	LT / RT 3
79+43	82+02	FULL	LT / RT 3
12+73	14+65	FULL	LT / RT 4
15+51	17+17	FULL	LT / RT 4
17+82	19+15	FULL	LT / RT 4
8+28	8+57	FULL	LT / RT 5
0+36	1+81	10'	RT 6
6+78	9+68	FULL	LT / RT 6
10+93	12+81	FULL	LT / RT 6

4" DEPTH MILL PATCHING DETAIL



MAP 4, 5, 6



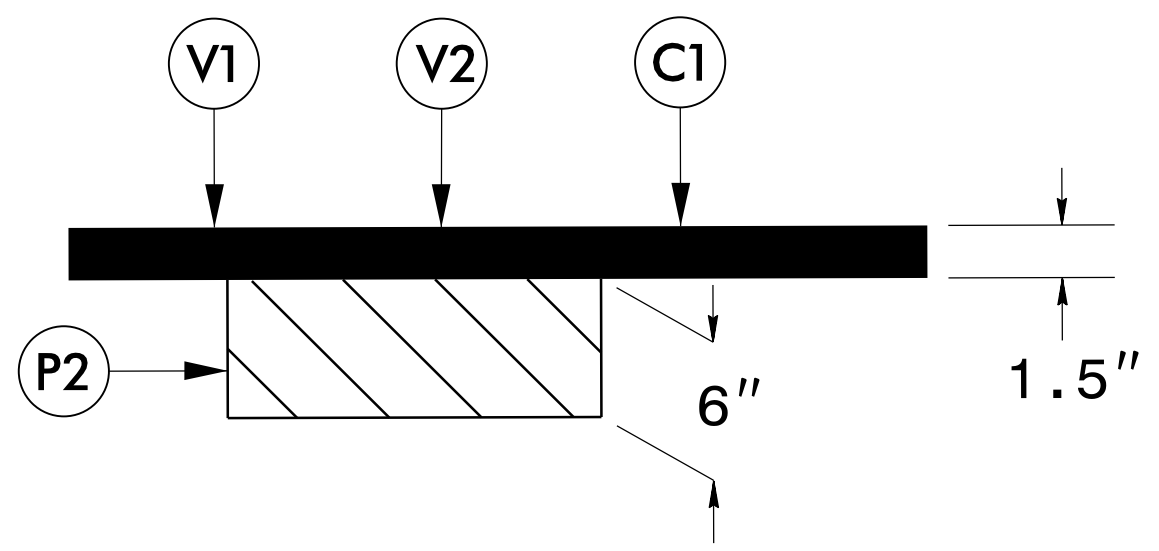
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING
V2	1.5" MILLING
P1	4" DEPTH MILL PATCHING W/ B 25.0C
P2	6" DEPTH MILL PATCHING W/ B 25.0C
DRAWINGS NOT TO SCALE	

NOTE:

1. THE CONTRACTOR SHALL PERFORM ANY UNIFORM OR INCIDENTAL MILLING AT TIE-INS BEFORE PERFORMING THE 4" DEPTH MILL PATCHING.
2. THE CONTRACTOR SHALL PERFORM THE MILL PATCHING REMOVAL AND REPLACEMENT IN THE SAME DAY.
3. 4" DEPTH MILL PATCHING SHALL BE PERFORMED AT LOCATIONS AS SHOWN ON SHEET 5, AND AS DIRECTED BY THE ENGINEER.

6" DEPTH MILL PATCHING DETAIL

MAP 2

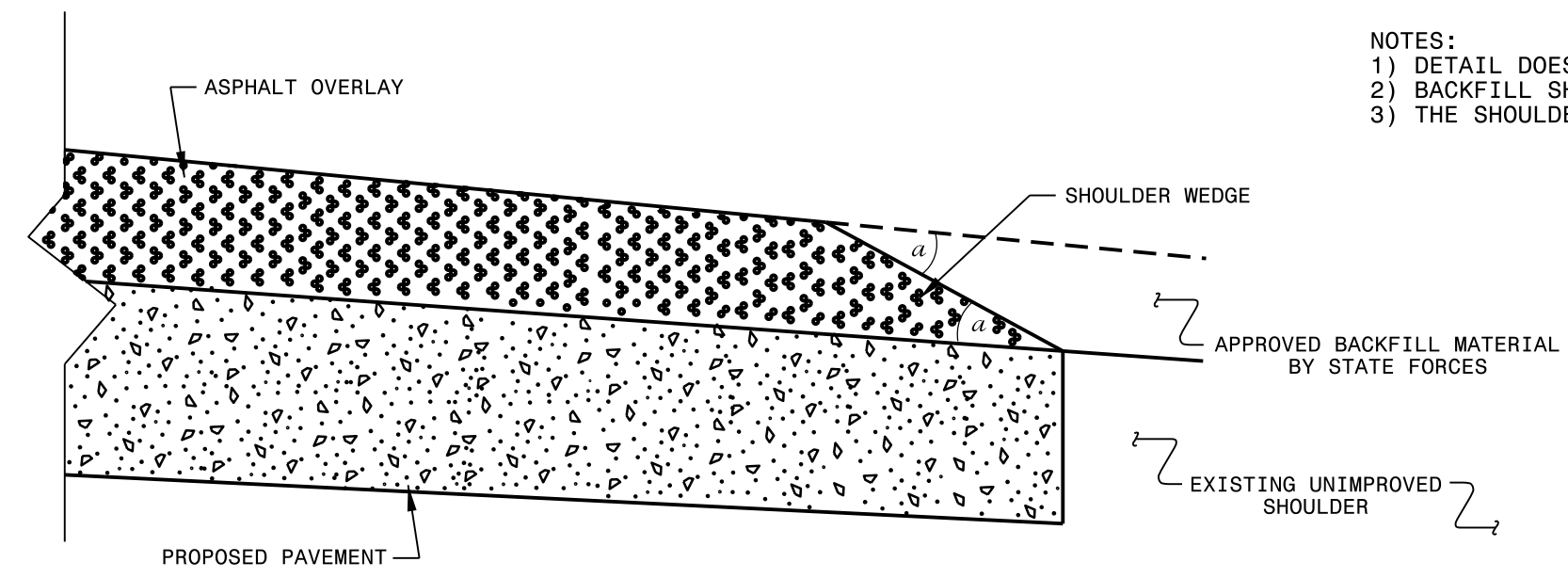


PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING
V2	1.5" MILLING
P1	4" DEPTH MILL PATCHING W/ B 25.0C
P2	6" DEPTH MILL PATCHING W/ B 25.0C
DRAWINGS NOT TO SCALE	

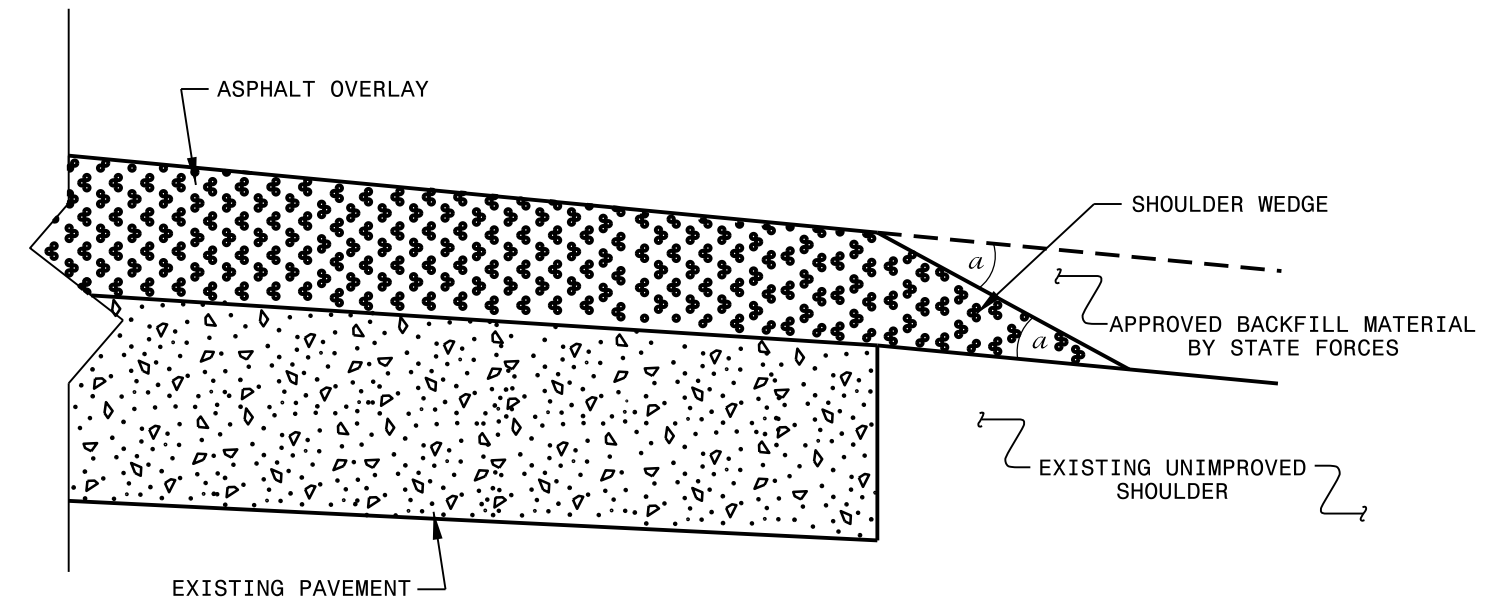
NOTE:

1. THE CONTRACTOR SHALL PERFORM ANY UNIFORM OR INCIDENTAL MILLING AT TIE-INS BEFORE PERFORMING THE 6" DEPTH MILL PATCHING.
2. THE CONTRACTOR SHALL PERFORM THE MILL PATCHING REMOVAL AND REPLACEMENT IN THE SAME DAY.
3. 6" DEPTH MILL PATCHING SHALL BE PERFORMED AT LOCATIONS AS SHOWN ON SHEET 5, AND AS DIRECTED BY THE ENGINEER.

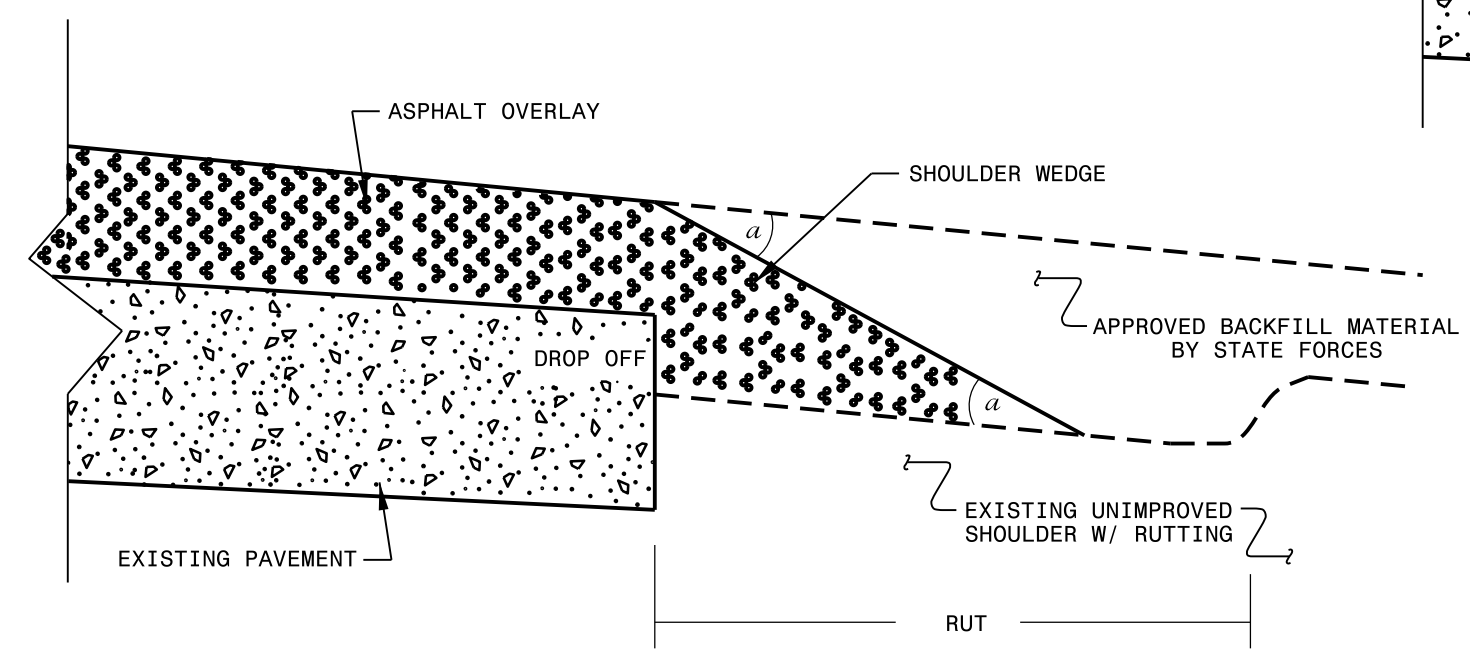
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)

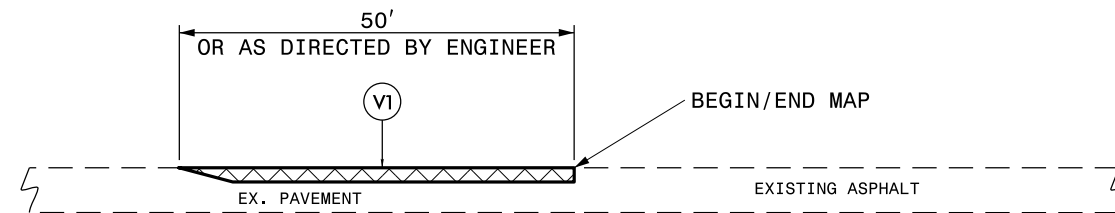


SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- 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	

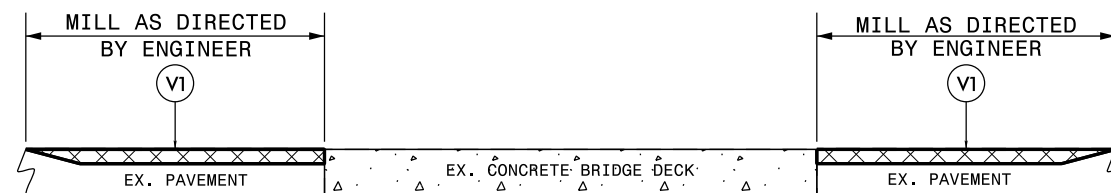
MILLING TYPICALS



DETAIL 1
BEGIN/END MAP TIE-IN

NOTE:

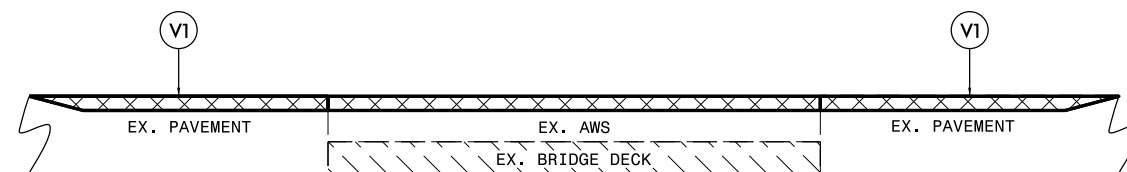
- MILLING SHALL BE PERFORMED AT MAIN LINE TIE-INS AND Y-LINE TIE-INS AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



DETAIL 2
BRIDGE MILLING

NOTE:

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

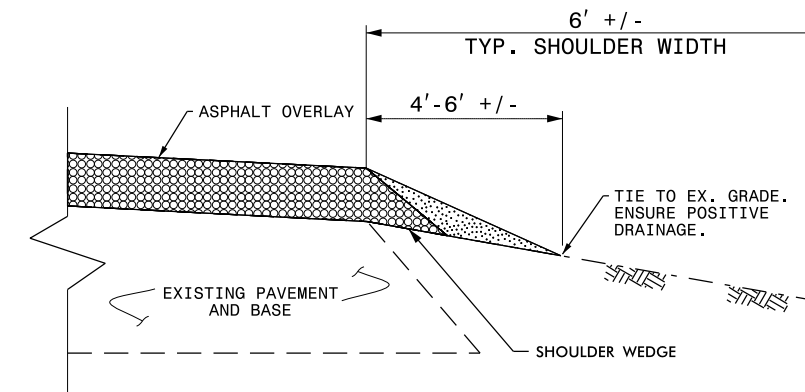


DETAIL 3
BRIDGE MILLING

NOTE:

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

SHOULDER RECONSTRUCTION TYPICAL



SHOULDER RECONSTRUCTION DETAIL

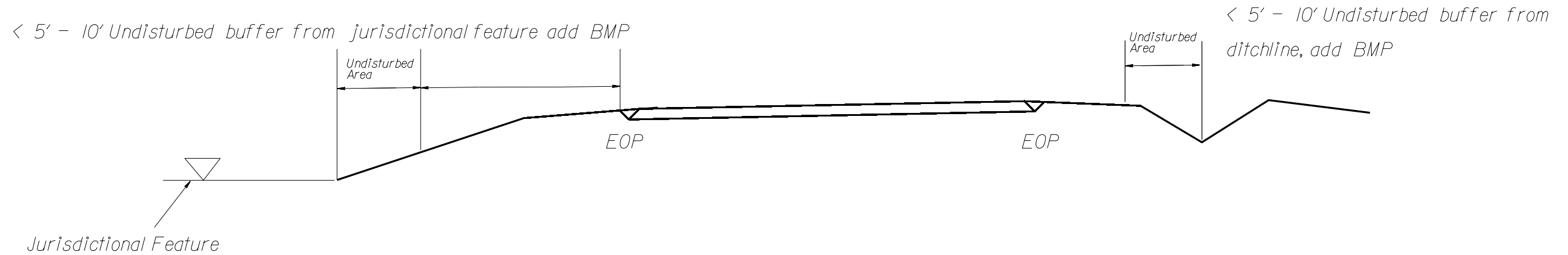
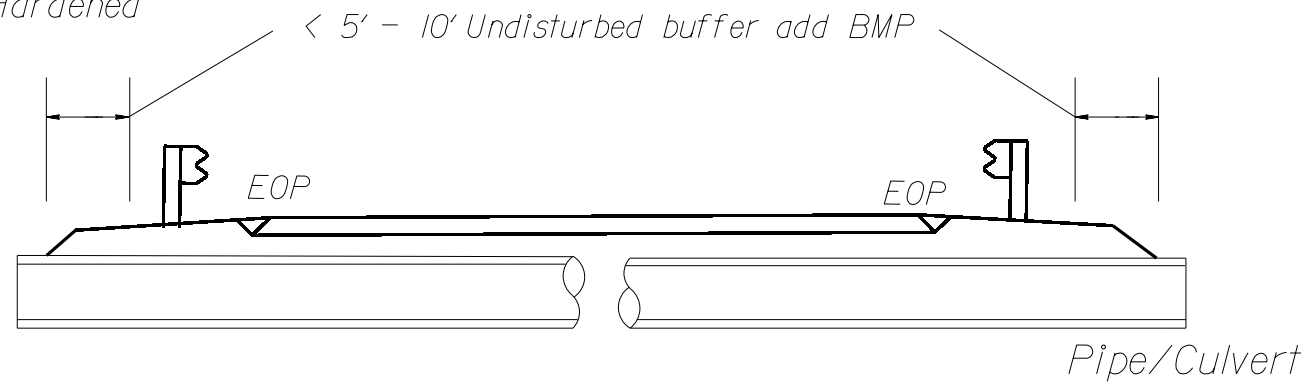
NOTE:

- 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.

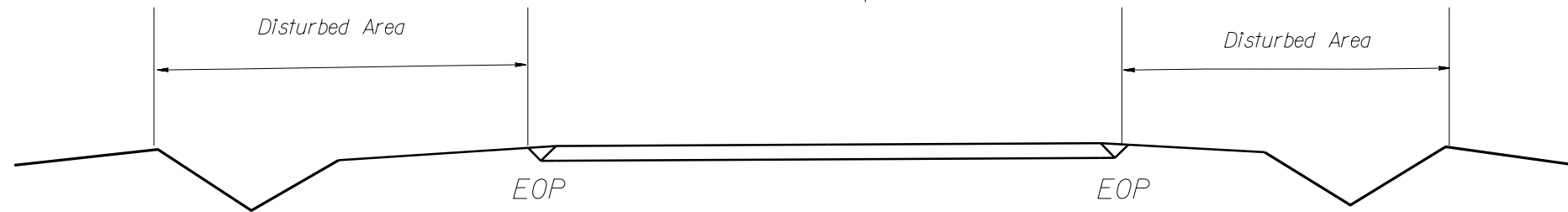
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

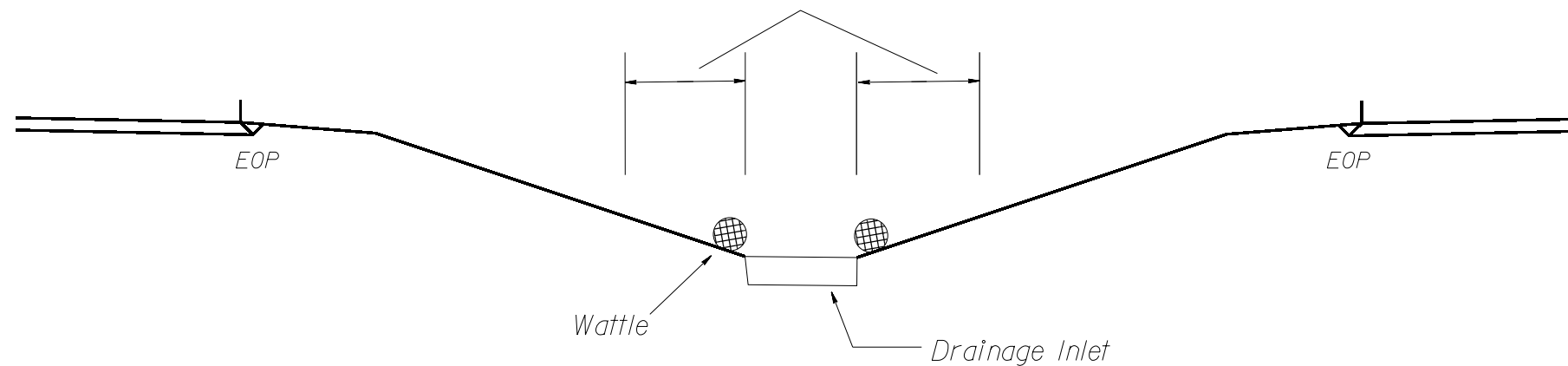
EROSION CONTROL DETAIL



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

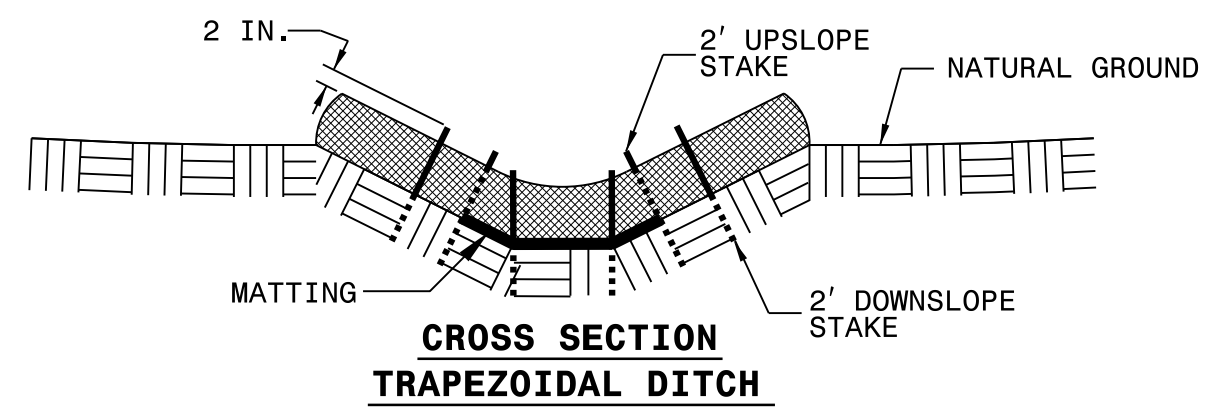
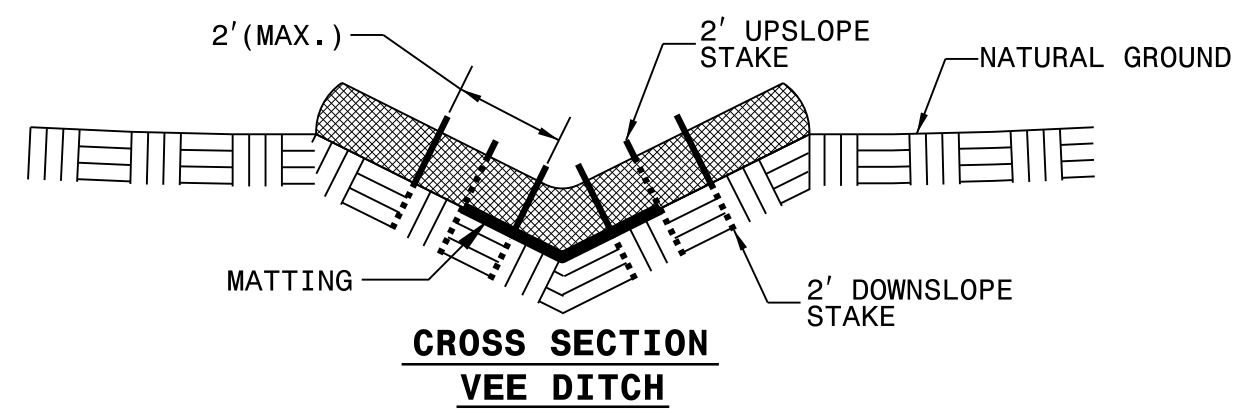
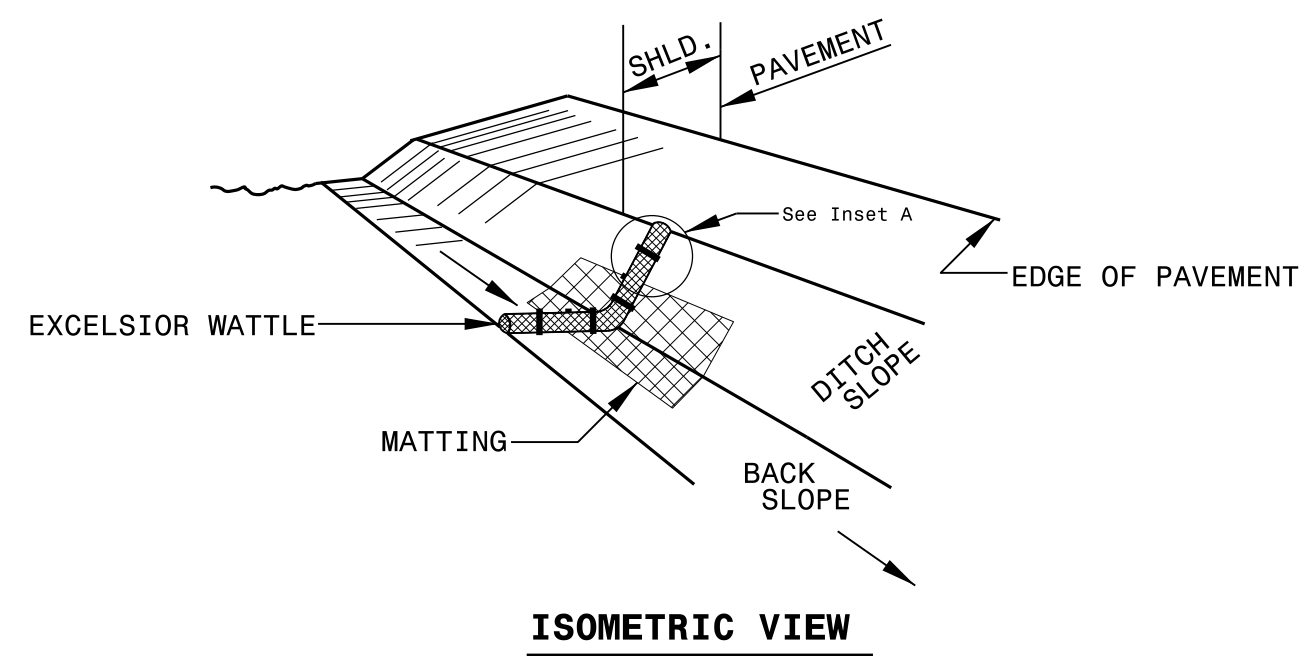


< 5' - 10' Undisturbed buffer from inlet, add wattle

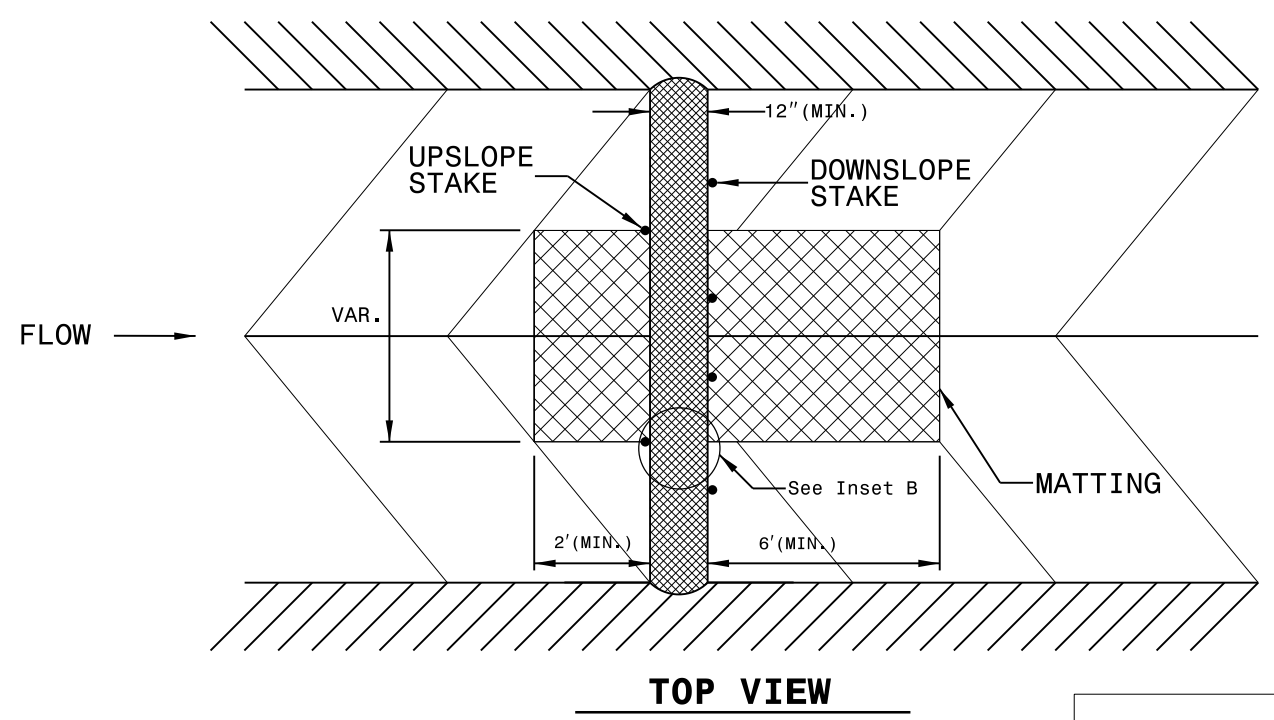
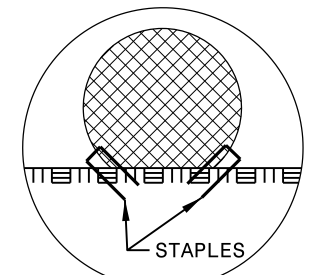
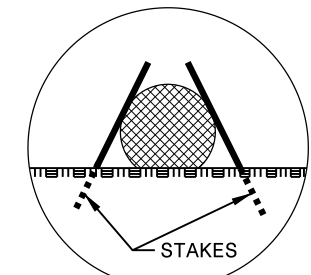


NOT TO SCALE

WATTLE DETAIL

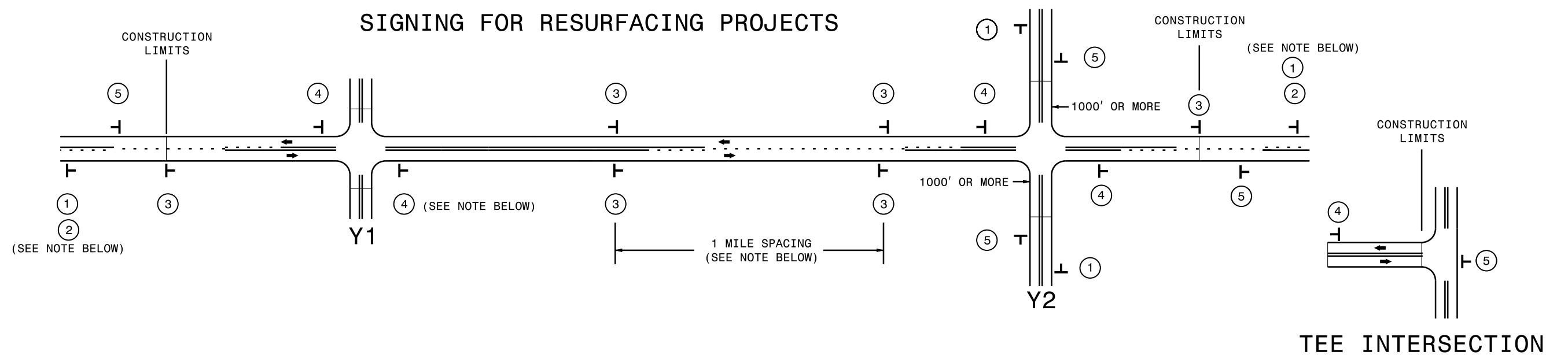


- NOTES:**
- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
 - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
 - ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
 - INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 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>①</p> <p>②</p> <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> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	<p>③</p> <p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p>	
	<p>④</p> <p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</p> <p>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</p> <p>- 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.</p> <p>- 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>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</p>	
	<p>⑤</p> <p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	