

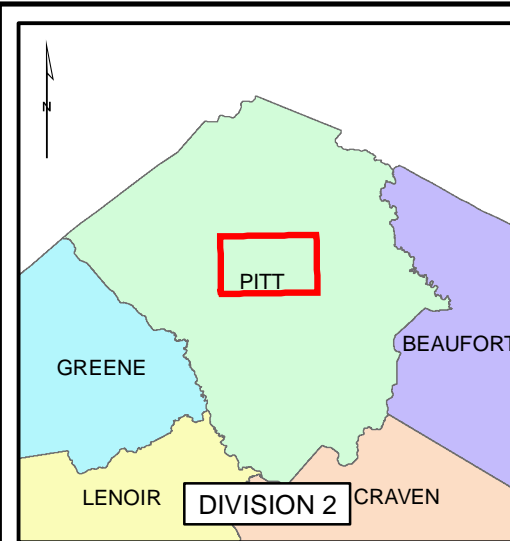
PROJECT REFERENCE NO.	SHEET NO.
DB00382	1

# PITT COUNTY

## DB00382

WBS# 2018CPT.02.24.10741

2018CPT.02.25.20741



**LOCATION:**

- MAP 01 - NC 33 FROM SR 1531 TO US13/NC11
- MAP 02 - SR 1530 FROM SR 1531 TO US 13 SOUTH
- MAP 03 - SR 1531 FROM NC 33 TO THE GREEN STREET BRIDGE
- MAP 04 - SR 1702 FROM RED BANKS ROAD TO SR 1598
- MAP 05 - SR 1571 FROM 5TH STREET TO DICKINSON AVENUE

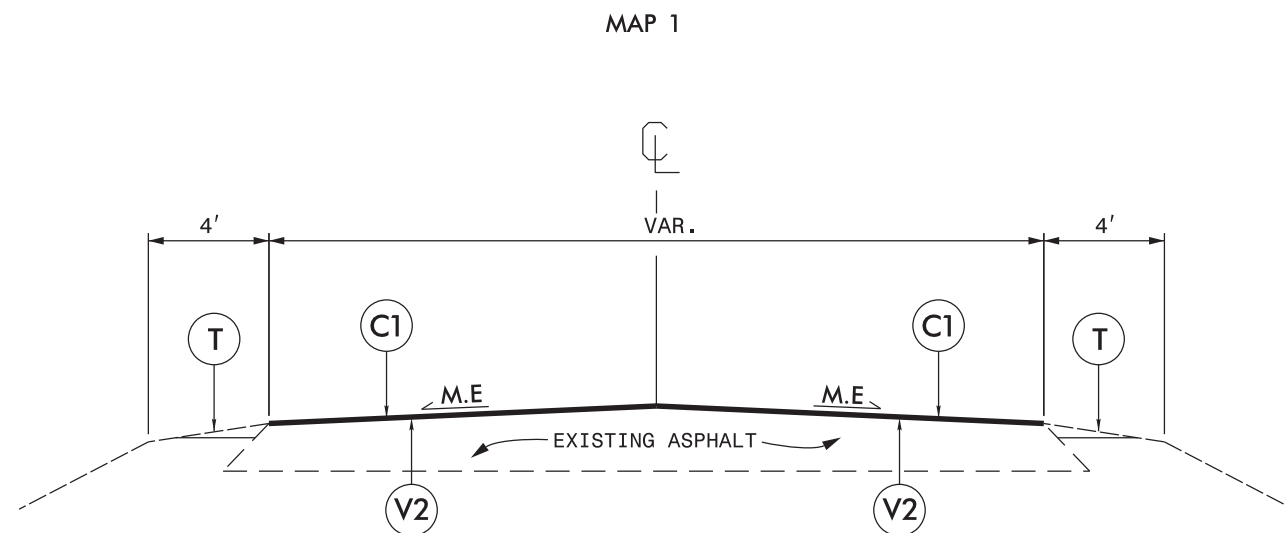
**TYPE OF WORK: MILLING, PATCHING, RESURFACING, PAVEMENT MARKINGS, PAVEMENT MARKERS**



**NCDOT**  
DIVISION 2



## TYPICAL SECTION NO. 1



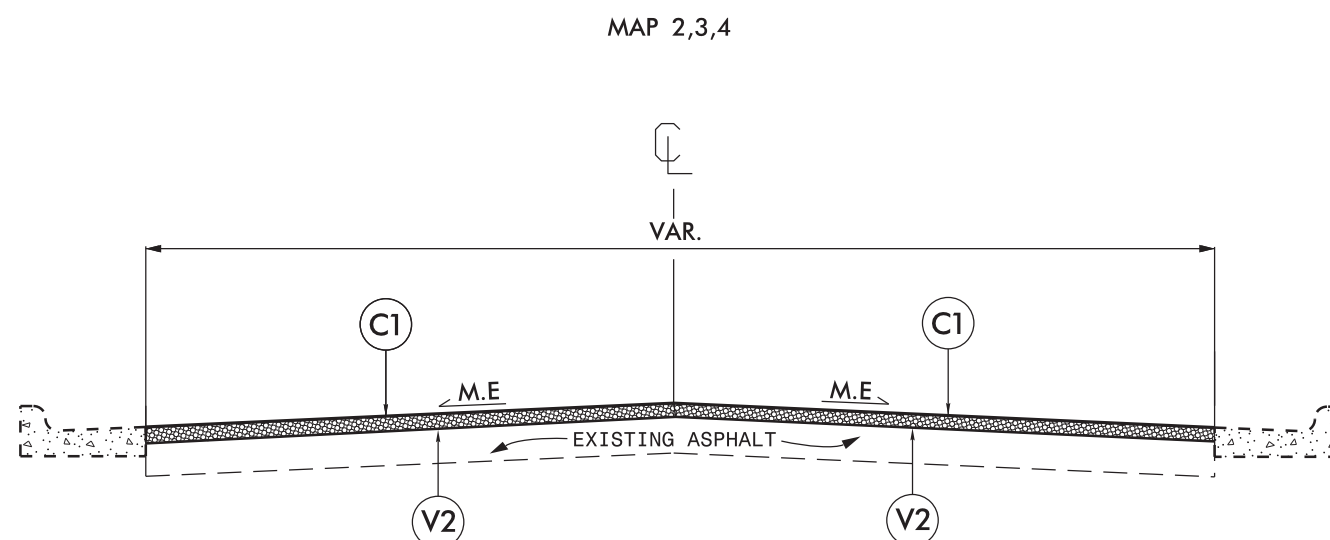
**NOTE:**

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. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224.0 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.
T	SHOULDER RECONSTRUCTION
V1	INCIDENTAL MILLING.
V2	3" DEPTH MILLING FOR THE ENTIRE WIDTH OF ROADWAY
V3	2" DEPTH MILLING FOR THE ENTIRE WIDTH OF ROADWAY
<b>DRAWINGS NOT TO SCALE</b>	

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

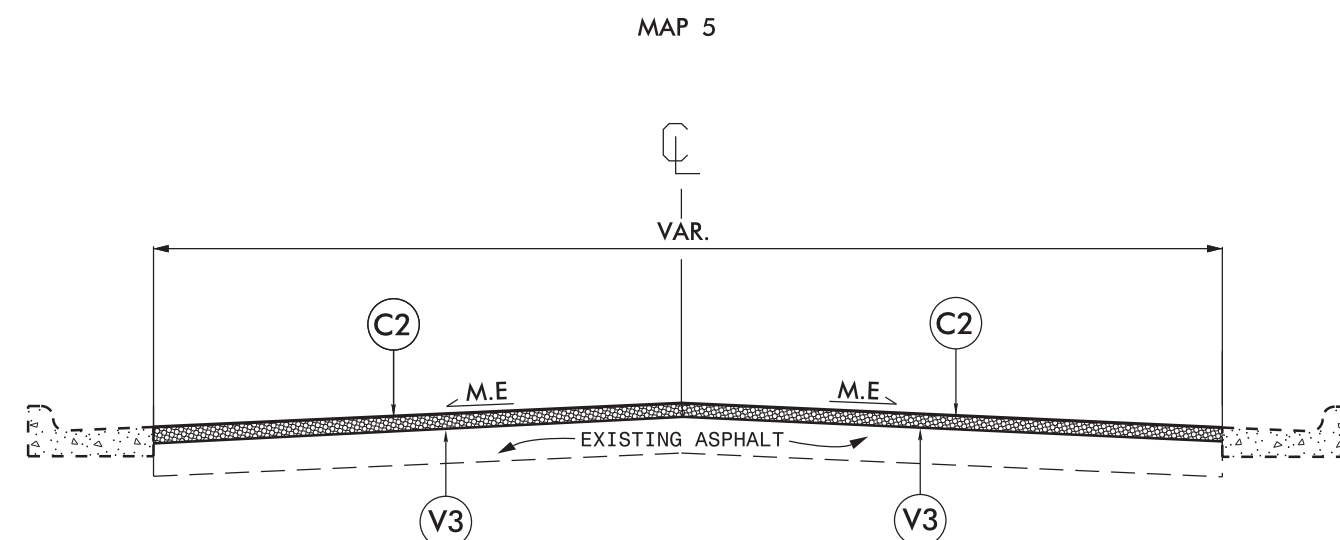
## TYPICAL SECTION NO. 2



**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. MAP 2 - 0 - 1 1/2" MILLING AT OLD RIVER ROAD INTERSECTIONS.

## TYPICAL SECTION NO. 3



**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.

## SUMMARY OF QUANTITIES

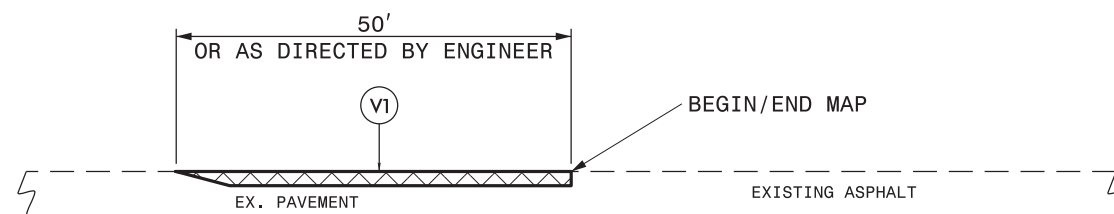
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	0000930000-E	0262000000-N	1220000000-E	1245000000-E	1297000000-E			1330000000-E	1519000000-E	1575000000-E	2600000000-N	2830000000-N	2845000000-N	6000000000-E	6071010000-E	6084000000-E	6117000000-N			
												2'6" CURB & GUTTER - REMOVE/REPLACE	HAULING NCDOT SUPPLIED SHOULDER MATERIAL	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	3" MILLING	1 1/2" MILLING	2" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5B	ASPHALT BINDER FOR PLANT MIX	RETROFIT EXISTING CURB RAMP	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX	TEMPORARY SILT FENCE	WATTLE	SEED & MULCHING	RESPONSE FOR EROSION CONTROL			
												MI	FT	LF	EA	TONS	SMI	SY	SY	SY	SY	TONS	TONS	EA	EA	EA	LF	LF	AC	EA	
2018CPT.02.24.10741	Pitt	1	NC 33	FROM SR 1531 TO US 13/NC 11	1	2	2WU	NO	NO	0.84	30								100	2,500	150			1	1	50	50	0.84	1		
<b>TOTAL FOR MAP NO. 1</b>												<b>0.84</b>			<b>35</b>	<b>42</b>	<b>1.40</b>	<b>19,000</b>			<b>100</b>	<b>2,500</b>	<b>150</b>		<b>1</b>	<b>1</b>	<b>50</b>	<b>50</b>	<b>0.84</b>	<b>1</b>	
<b>TOTAL FOR PROJ NO. 2018CPT.02.24.10741</b>												<b>0.84</b>			<b>35</b>	<b>42</b>	<b>1.40</b>	<b>19,000</b>		<b>19,000</b>	<b>100</b>	<b>2,500</b>	<b>150</b>		<b>1</b>	<b>1</b>	<b>50</b>	<b>50</b>	<b>0.84</b>	<b>1</b>	
2018CPT.02.25.20741	Pitt	2	SR 1530	FROM SR 1531 TO US13 S	2	5	MU	NO	NO	0.38	65							14,000	600		100	1,700	102	8							
<b>TOTAL FOR MAP NO. 2</b>												<b>0.38</b>						<b>14,000</b>	<b>600</b>		<b>100</b>	<b>1,700</b>	<b>102</b>	<b>8</b>							
2018CPT.02.25.20741	Pitt	3	SR 1531	FROM NC 33 TO BRIDGE	2	4	MU	NO	NO	1.30	45							34,000			100	4,000	240	4	1	1					
<b>TOTAL FOR MAP NO. 3</b>												<b>1.30</b>			<b>65</b>			<b>34,000</b>			<b>100</b>	<b>4,000</b>	<b>240</b>	<b>4</b>	<b>1</b>	<b>1</b>					
2018CPT.02.25.20741	Pitt	4	SR 1702	FROM US 264 ALT. TO SR 1598	2	5	MU	NO	NO	2.00	65							75,500			100	9,000	540		1	1					
<b>TOTAL FOR MAP NO. 4</b>												<b>2.00</b>						<b>75,500</b>			<b>100</b>	<b>9,000</b>	<b>540</b>		<b>1</b>	<b>1</b>					
2018CPT.02.25.20741	Pitt	5	SR 1571	FROM 5TH STREET TO DICKINSON AVE.	3	2	2WU	NO	NO	0.27	31										5,500	100	550	33							
<b>TOTAL FOR MAP NO. 5</b>												<b>0.27</b>						<b>5,500</b>	<b>100</b>	<b>5,500</b>	<b>100</b>	<b>550</b>	<b>33</b>								
<b>TOTAL FOR PROJ NO. 2018CPT.02.25.20741</b>												<b>3.95</b>			<b>65</b>			<b>123,500</b>	<b>600</b>	<b>5,500</b>	<b>400</b>	<b>15,250</b>	<b>915</b>	<b>12</b>	<b>2</b>	<b>2</b>					
<b>GRAND TOTAL</b>												<b>4.79</b>			<b>65</b>	<b>35</b>	<b>69</b>	<b>142,500</b>	<b>600</b>	<b>5,500</b>	<b>500</b>	<b>17,750</b>	<b>1,065</b>	<b>12</b>	<b>3</b>	<b>3</b>	<b>50</b>	<b>50</b>	<b>0.84</b>	<b>1</b>	
																		<b>148,600</b>													

Curb & Gutter Remove / Replace		
Station	Station	Length
20+59	20+79	20 FT
22+93	23+11	18 FT
28+34	28+58	24 FT

## THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	441300000-E	445700000-N	469000000-E		470200000-E	470500000-E	471000000-E	472100000-E		472500000-E			490500000-N					
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	6" X 120 M YELLOW THERMO	6" X 120 M WHITE THERMO	12" X 120 M WHITE THERMO	16" X 120 M WHITE THERMO	24" X 120 M WHITE THERMO	THERMO RXR 120 M	THERMO MSG ONLY 120 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO STR & LT ARROW 90 M	THERMO STR ARROW 90 M	SNOW PLOWABLE MARKERS			
								MI	FT	SF	LS	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA					
2018CPT.02.24.10741	Pitt	1	NC 33	FROM SR 1531 TO US 13/NC 11	1	2	2WU	0.84	30	100	0.160	10,000			300	375	12	2	5	2	4	1	85				
<b>TOTAL FOR MAP NO. 1</b>								<b>0.84</b>		<b>100</b>	<b>0.160</b>	<b>10,000</b>			<b>300</b>	<b>375</b>	<b>12</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>85</b>				
<b>TOTAL FOR PROJ NO. 2018CPT.02.24.10741</b>										<b>100</b>	<b>0.160</b>	<b>10,000</b>			<b>300</b>	<b>375</b>	<b>12</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>85</b>				
												<b>10,000</b>					<b>14</b>			<b>12</b>							
2018CPT.02.25.20741	Pitt	2	SR 1530	FROM SR 1531 TO US13 S	2	5	MU	0.38	65	130	0.090	5,200	1,100		150	213	6	2	15	4			4	110			
<b>TOTAL FOR MAP NO. 2</b>								<b>0.38</b>		<b>130</b>	<b>0.090</b>	<b>5,200</b>	<b>1,100</b>		<b>150</b>	<b>213</b>	<b>6</b>	<b>2</b>	<b>15</b>	<b>4</b>			<b>4</b>	<b>110</b>			
2018CPT.02.25.20741	Pitt	3	SR 1531	FROM NC 33 TO BRIDGE	2	4	MU	1.30	45	130	0.300	14,000	3,500		100				3		5	1	5	265			
<b>TOTAL FOR MAP NO. 3</b>								<b>1.30</b>		<b>130</b>	<b>0.300</b>	<b>14,000</b>	<b>3,500</b>		<b>100</b>							<b>3</b>		<b>5</b>	<b>1</b>	<b>5</b>	<b>265</b>
2018CPT.02.25.20741	Pitt	4	SR 1702	FROM US 264 ALT.TO SR 1598	2	5	MU	2.00	65	130	0.390	30,000	5,500	800	200	625	4	2	90	10	20		20	570			
<b>TOTAL FOR MAP NO. 4</b>								<b>2.00</b>		<b>130</b>	<b>0.390</b>	<b>30,000</b>	<b>5,500</b>	<b>800</b>	<b>200</b>	<b>625</b>	<b>4</b>	<b>2</b>	<b>90</b>	<b>10</b>	<b>20</b>		<b>20</b>		<b>20</b>	<b>570</b>	
2018CPT.02.25.20741	Pitt	5	SR 1571	FROM 5TH STREET TO DICKINSON AVE.	3	2	2WU	0.27	31	35	0.060	3,000				15											
<b>TOTAL FOR MAP NO. 5</b>								<b>0.27</b>		<b>35</b>	<b>0</b>	<b>3,000</b>				<b>15</b>											
<b>TOTAL FOR PROJ NO. 2018CPT.02.25.20741</b>								<b>3.95</b>		<b>425</b>	<b>1</b>	<b>52,200</b>	<b>10,100</b>	<b>800</b>	<b>350</b>	<b>953</b>	<b>10</b>	<b>4</b>	<b>108</b>	<b>14</b>	<b>25</b>	<b>1</b>	<b>29</b>		<b>29</b>	<b>945</b>	
												<b>62,300</b>						<b>14</b>			<b>177</b>						
<b>GRAND TOTAL</b>								<b>4.79</b>		<b>525</b>	<b>1</b>	<b>62,200</b>	<b>10,100</b>	<b>800</b>	<b>650</b>	<b>1,328</b>	<b>22</b>	<b>6</b>	<b>113</b>	<b>16</b>	<b>29</b>	<b>2</b>	<b>29</b>	<b>1,030</b>			
												<b>72,300</b>						<b>28</b>			<b>189</b>						

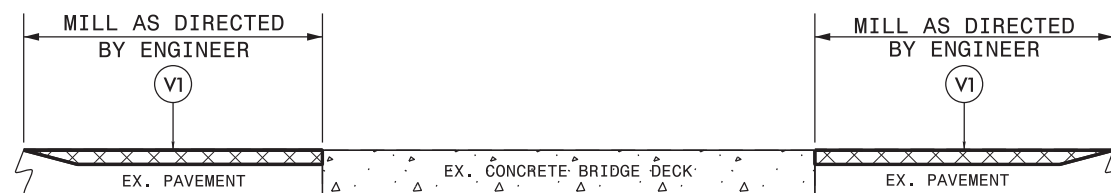
# MILLING TYPICALS



**DETAIL 1**  
BEGIN/END MAP TIE-IN

**NOTE:**

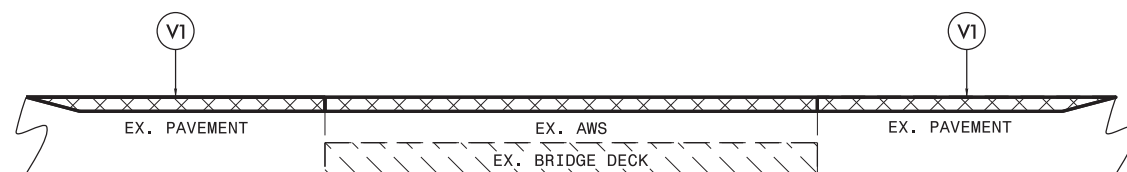
- MILLING SHALL BE PERFORMED AT MAIN LINE TIE-INS AND Y-LINE TIE-INS AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



**DETAIL 2**  
BRIDGE MILLING

**NOTE:**

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

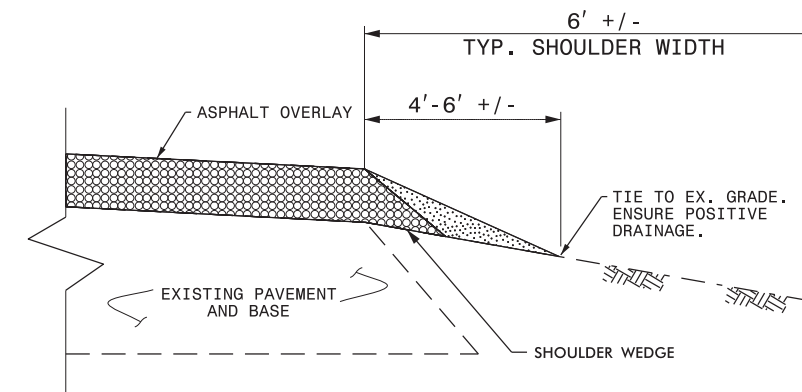


**DETAIL 3**  
BRIDGE MILLING

**NOTE:**

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

# SHOULDER RECONSTRUCTION TYPICAL

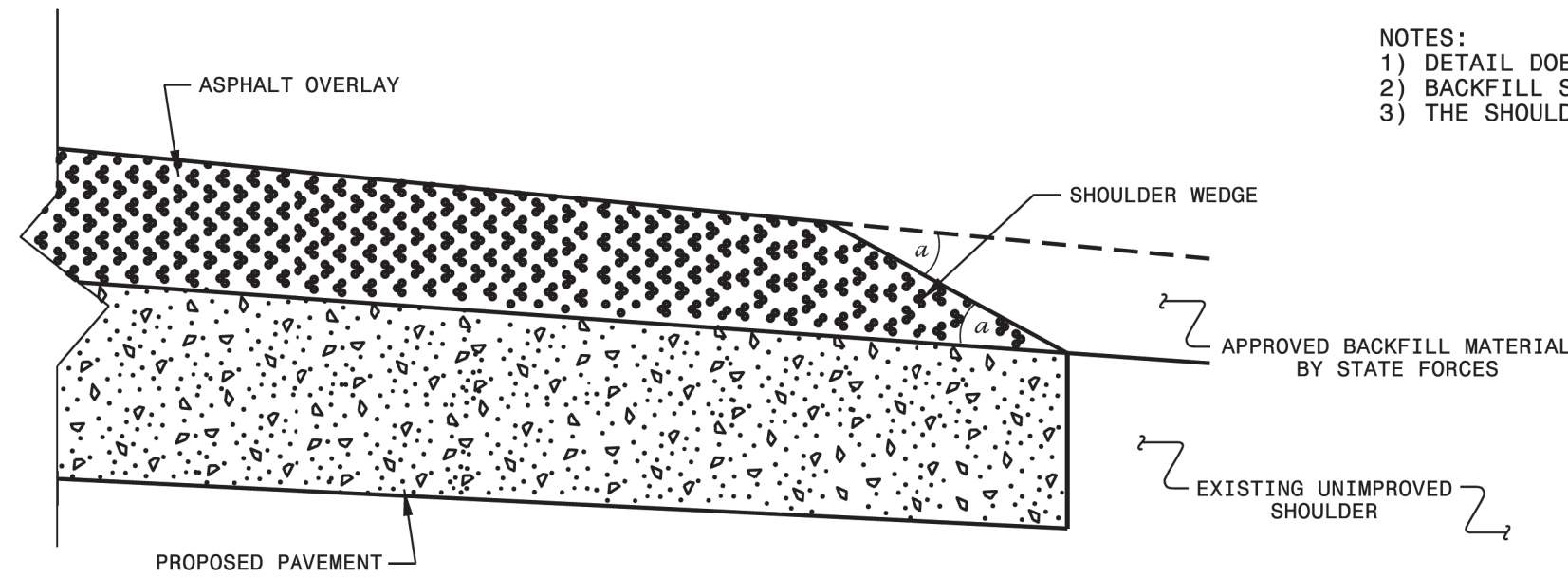


**SHOULDER RECONSTRUCTION DETAIL**

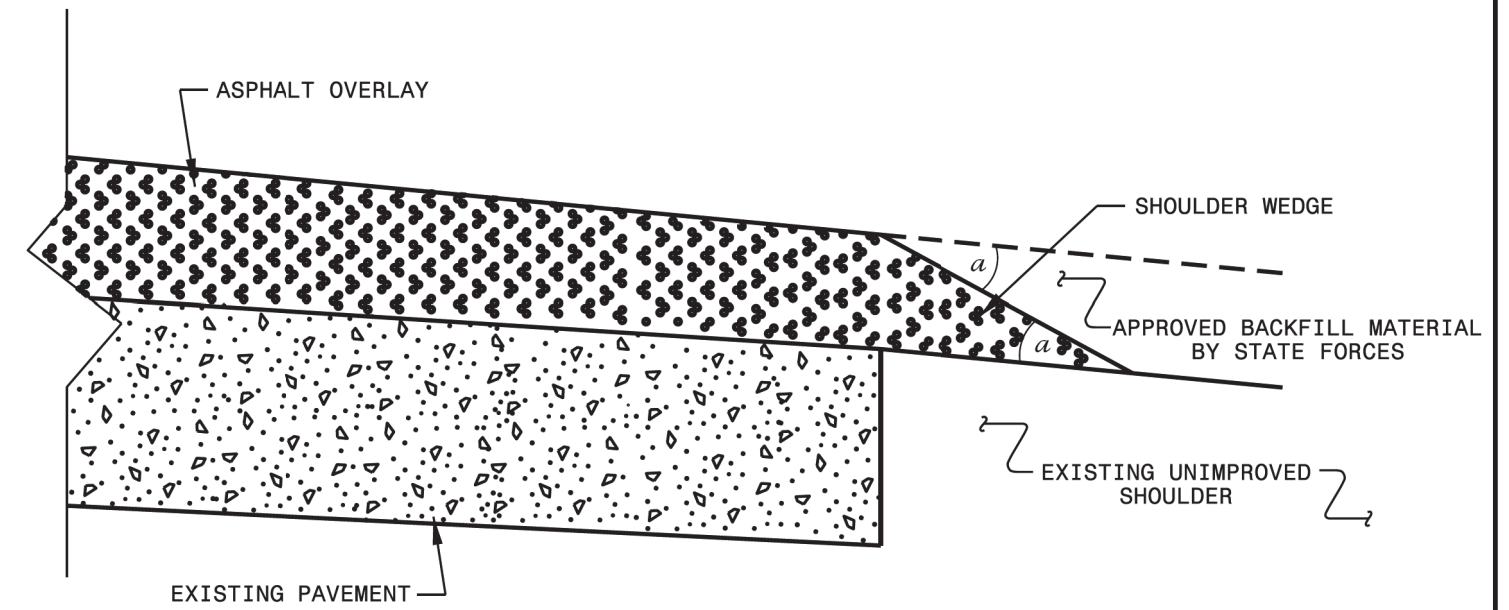
**NOTE:**

- 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.

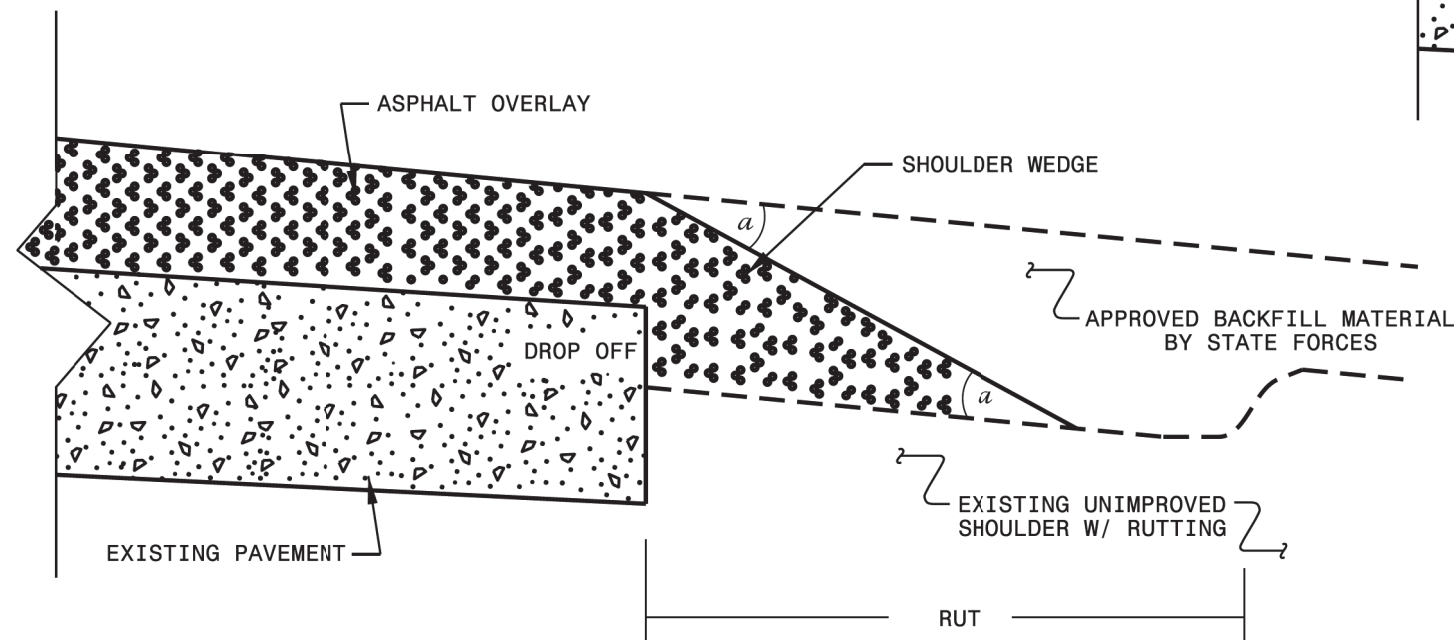
- NOTES:  
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.  
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.  
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



**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

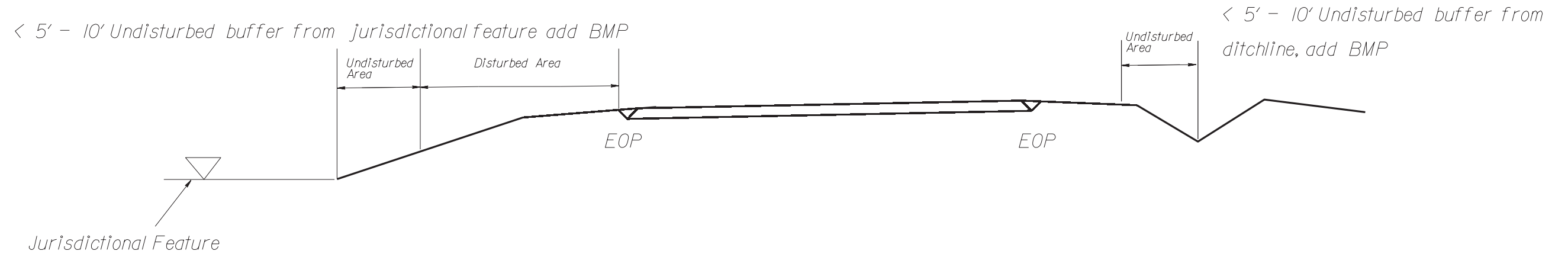
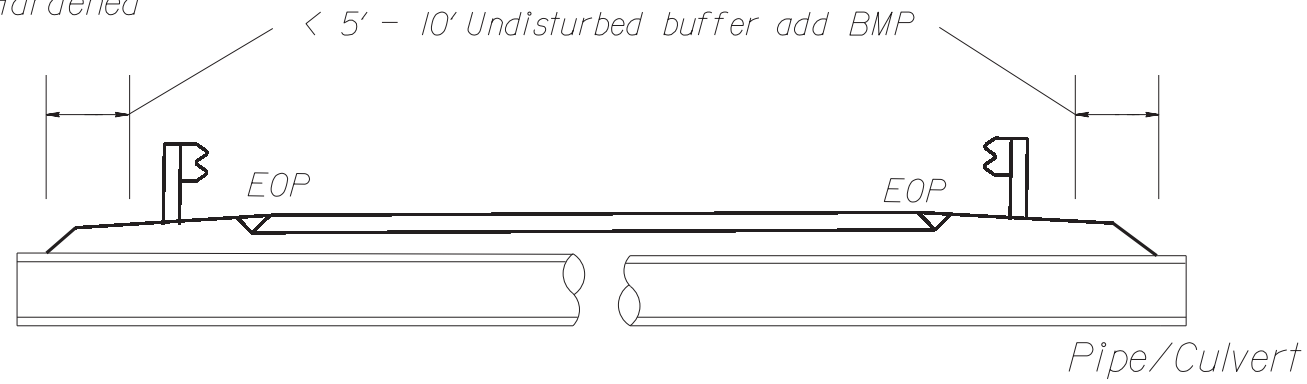
**SHOULDER WEDGE  
 DETAILS**

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.

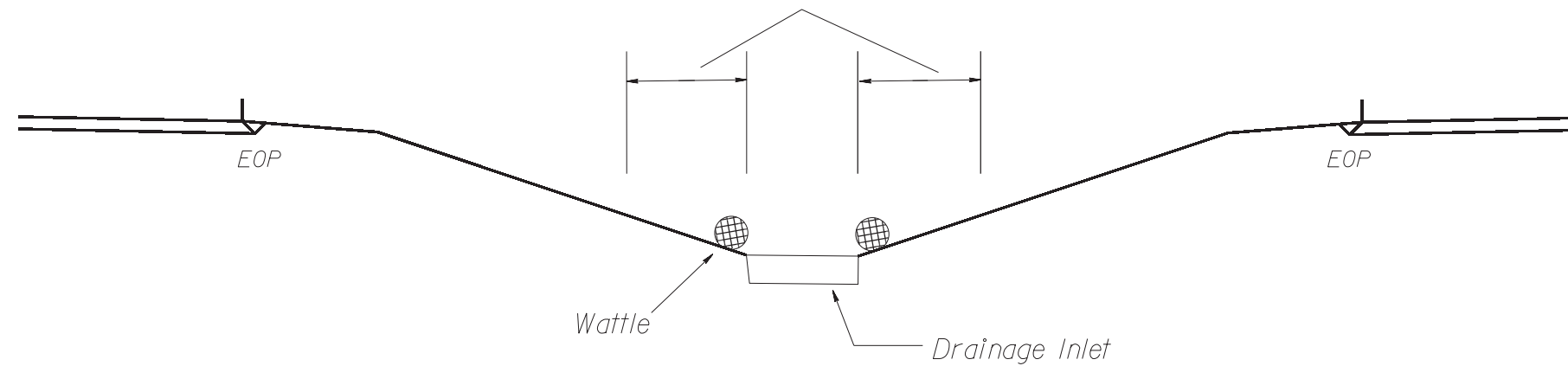
# EROSION CONTROL DETAIL



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



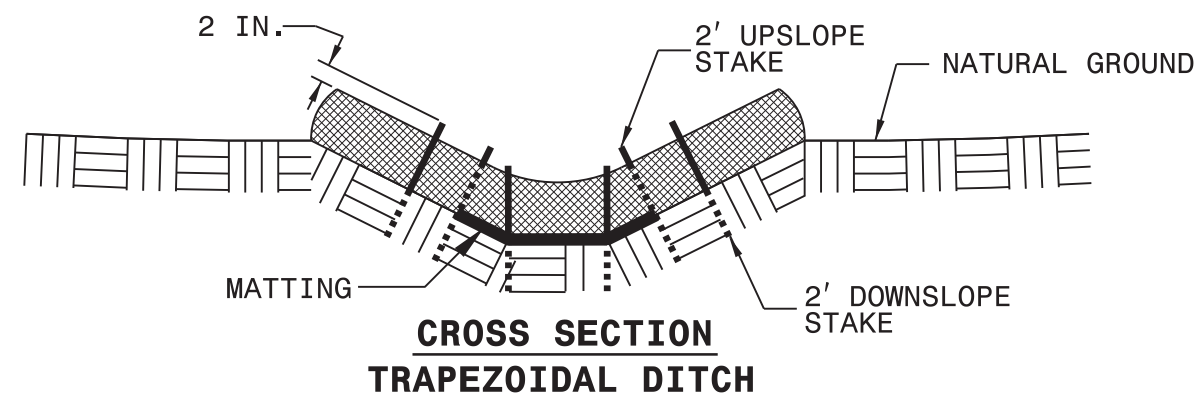
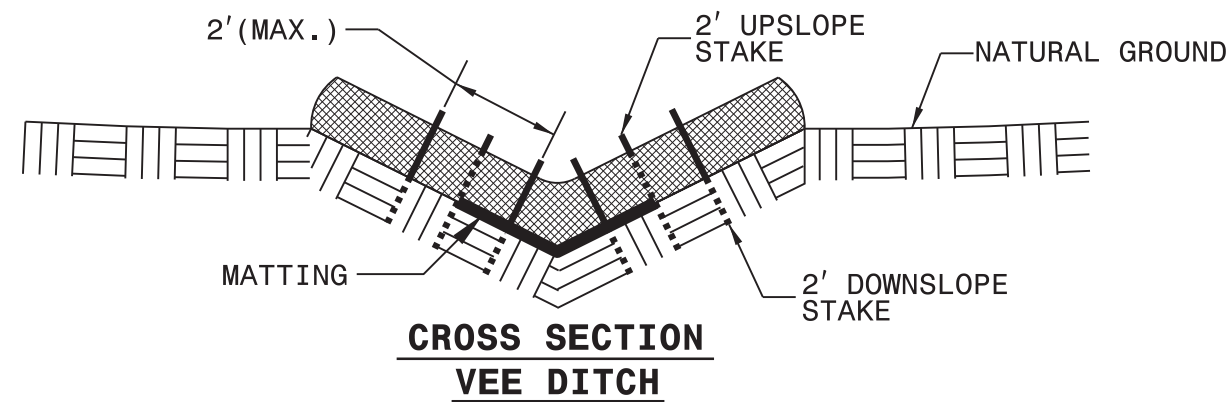
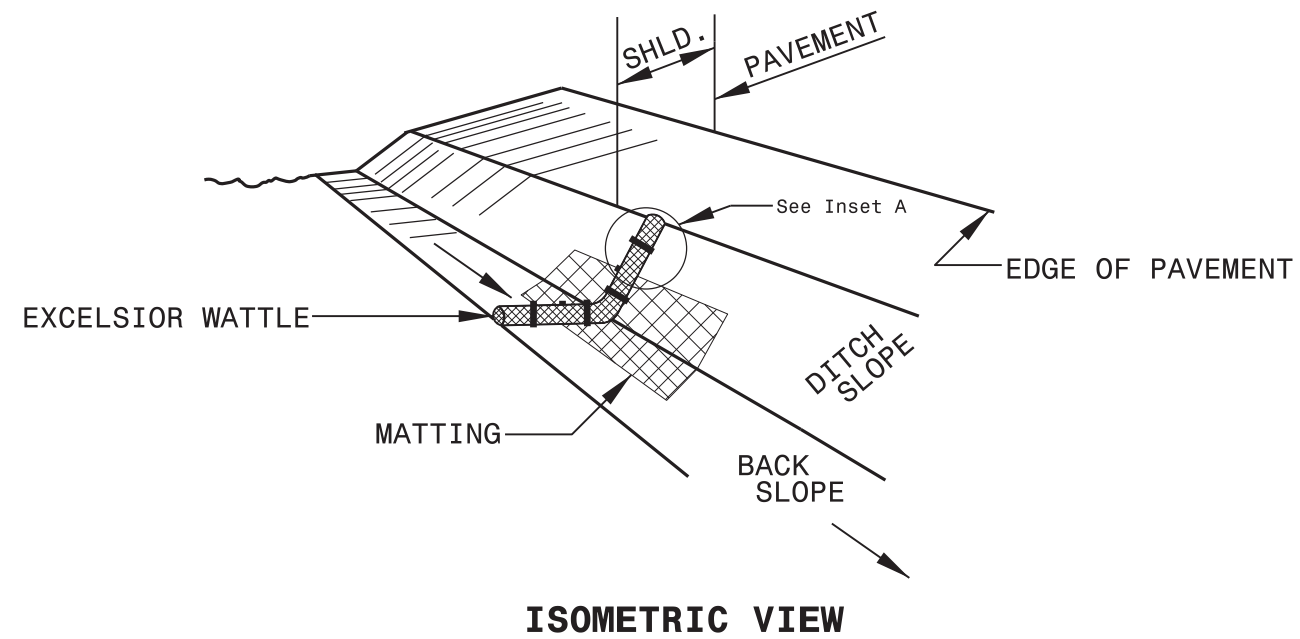
< 5' - 10' Undisturbed buffer from inlet, add wattle



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.

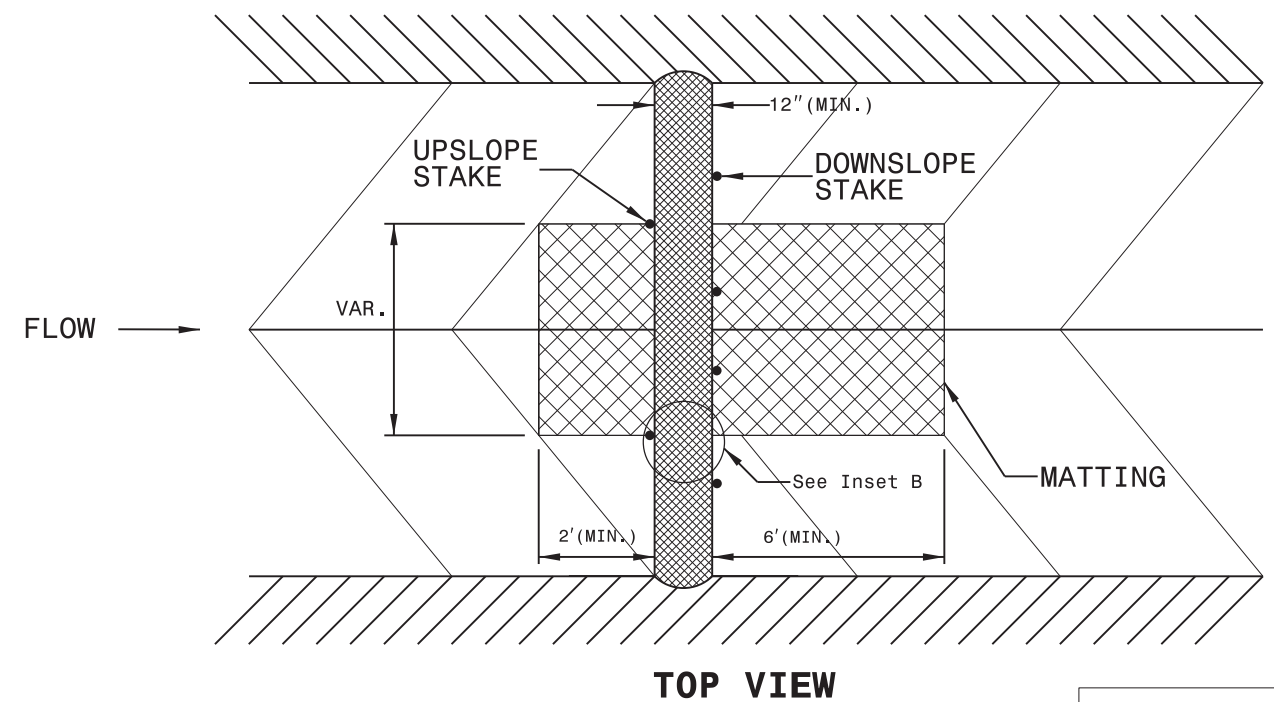
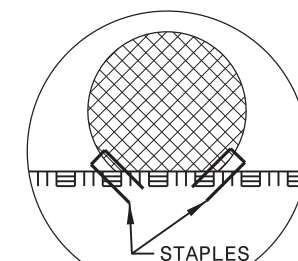
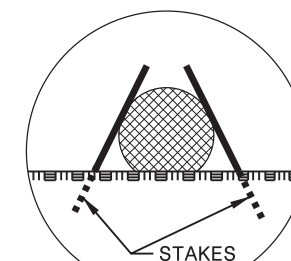
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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.

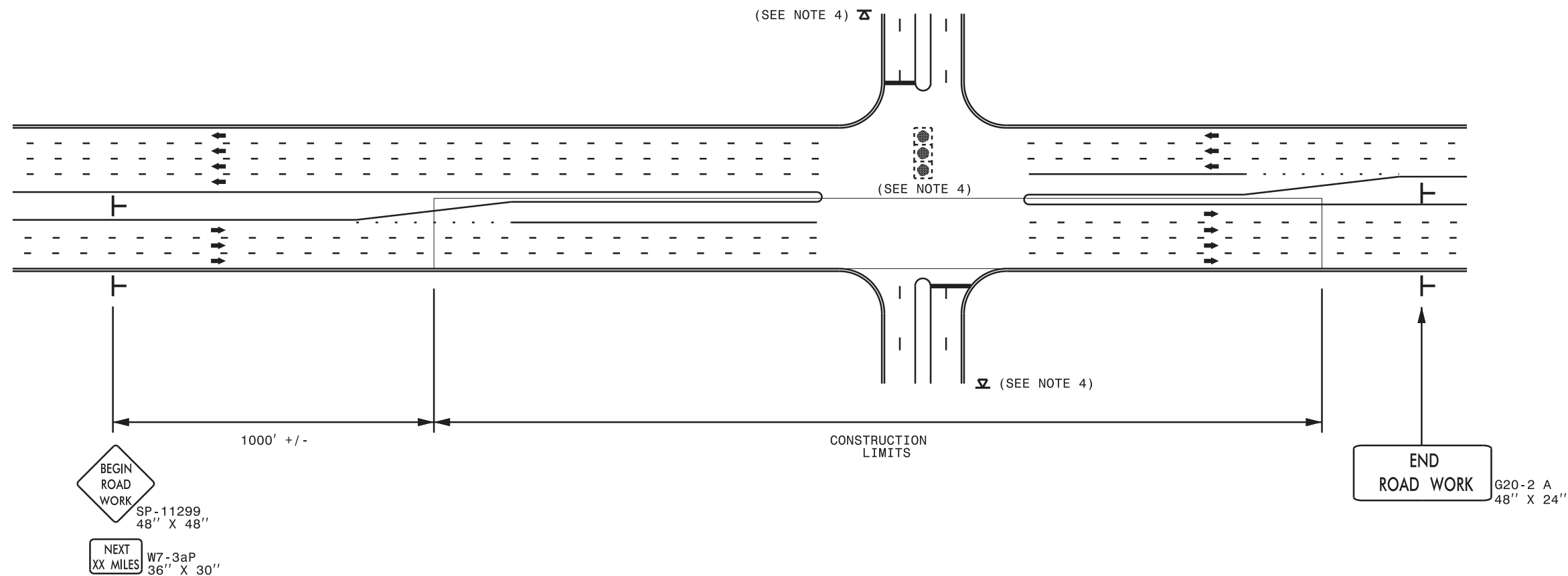
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



NOT TO SCALE



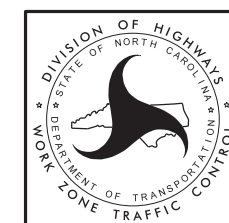
## URBAN / SUBURBAN WORKZONES



### 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**