

# PITT COUNTY

## DB00530

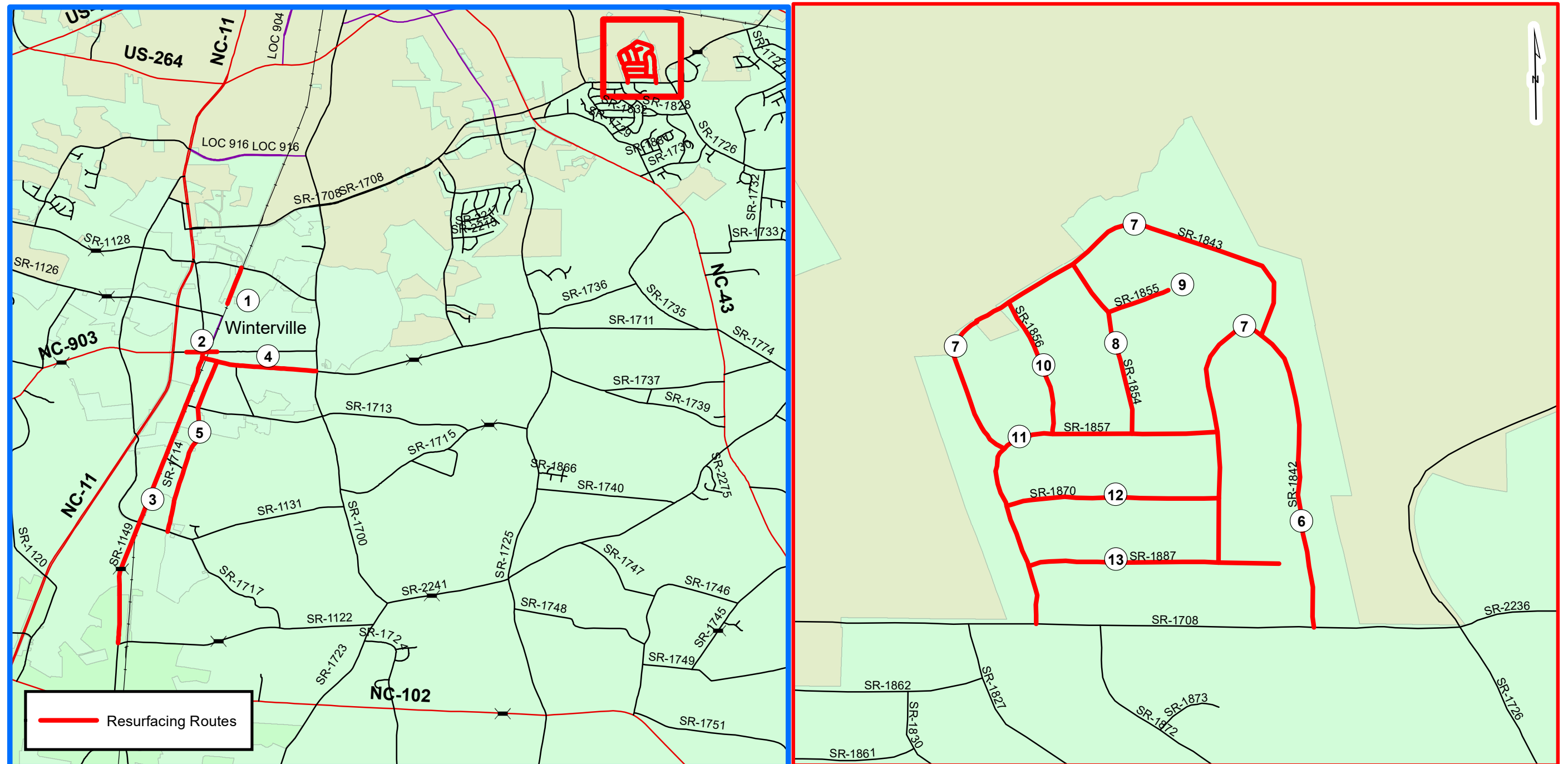
WBS# 2022CPT.02.21.20741

**TYPE OF WORK: MILLING, RESURFACING, WIDENING, SHOULDER RECONSTRUCTION**

<b>PROJECT REFERENCE NO.</b>	<b>SHEET NO.</b>
DB00530	1

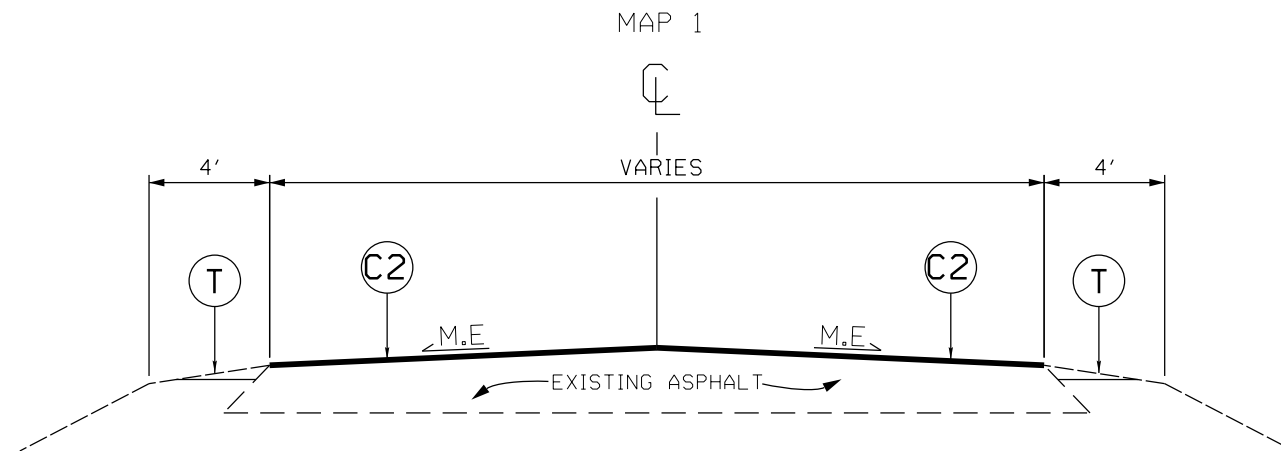


**NCDOT**  
DIVISION 2



— Resurfacing Routes

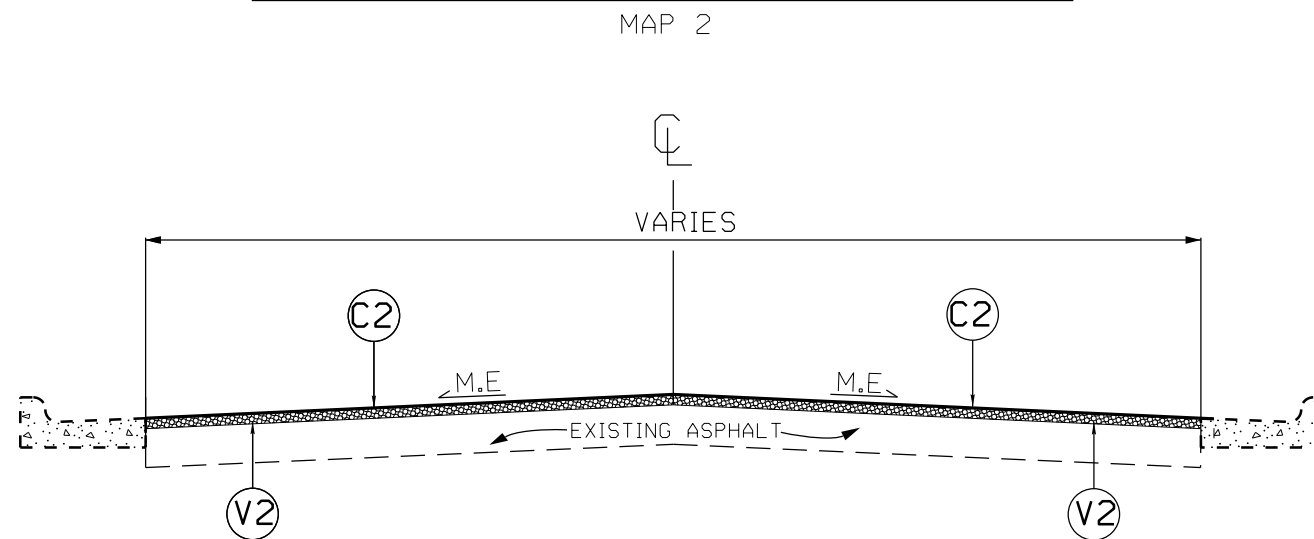
## TYPICAL SECTION NO. 1



**NOTE:**

1. PERFORM 4" DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN ON SHEET 6. PLACE ASPHALT BASE COURSE B25.0C IN ONE LIFT TO BACKFILL.
2. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
4. PERFORM SHOULD RECONSTRUCTION AFTER PAVING IS COMPLETED.

## TYPICAL SECTION NO. 2



**NOTE:**

1. PERFORM 1.5" DEPTH MILLING FROM CURB AND GUTTER TO CURB AND GUTTER, FULL WIDTH.
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.

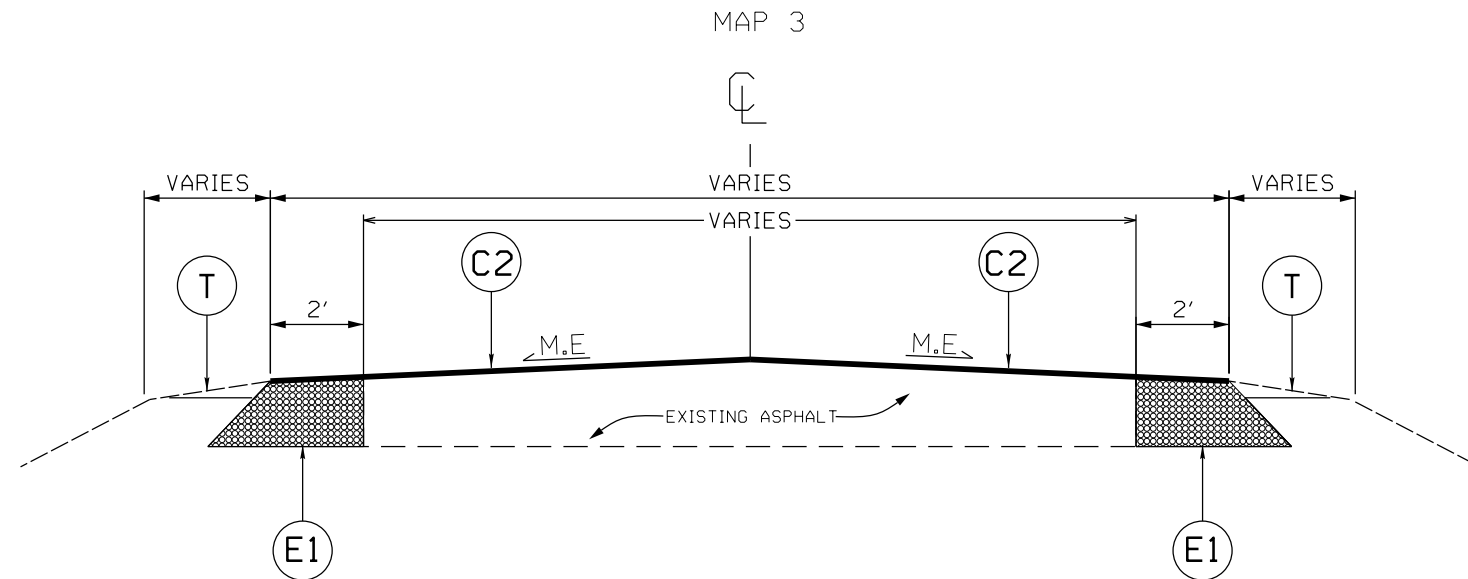
### PAVEMENT SCHEDULE

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. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" ACBC, TYPE B25.0C AT AN AVERAGE RATE OF 684 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING
V2	MILLING DEPTH 1.5" FOR THE ENTIRE WIDTH OF ROADWAY
V3	MILLING DEPTH 2" FOR THE ENTIRE WIDTH OF ROADWAY
T	SHOULDER RECONSTRUCTION

DRAWINGS NOT TO SCALE

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

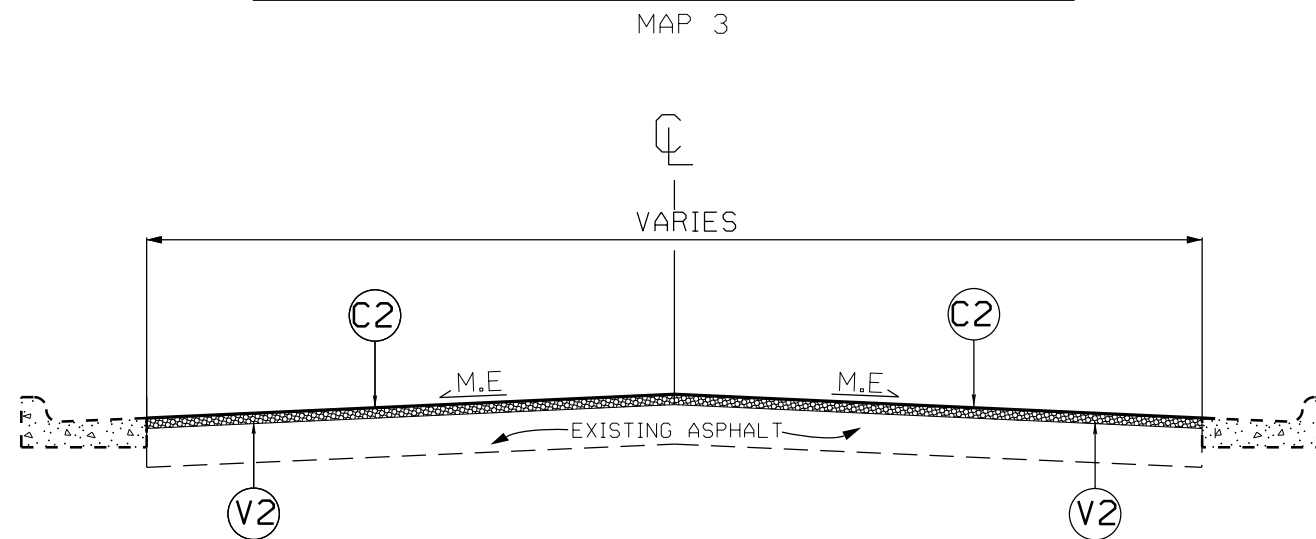
## TYPICAL SECTION NO. 3



**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 SURFACE COURSE AT FULL WIDTH, INCLUDING NEW WIDENING.
4. PERFORM SHOULDER RECONSTRUCTION AFTER PAVING IS COMPLETED.

## TYPICAL SECTION NO. 4



**NOTE:**

1. PERFORM 4" DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN ON SHEET 6. PLACE ASPHALT BASE COURSE B25.00C IN ONE LIFT TO BACKFILL.
2. PERFORM 1.5" DEPTH MILLING FROM CURB AND GUTTER TO CURB AND GUTTER, FULL WIDTH.
3. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER.
4. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.

### PAVEMENT SCHEDULE

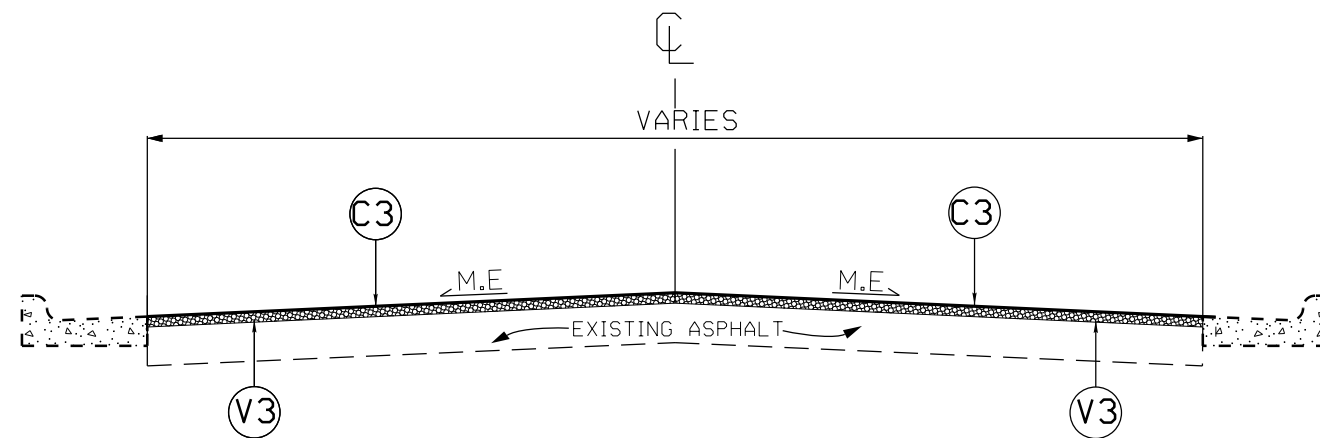
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C3	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
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V3	MILLING DEPTH 2" FOR THE ENTIRE WIDTH OF ROADWAY
T	SHOULDER RECONSTRUCTION

DRAWINGS NOT TO SCALE

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

## TYPICAL SECTION NO. 5

MAP 4

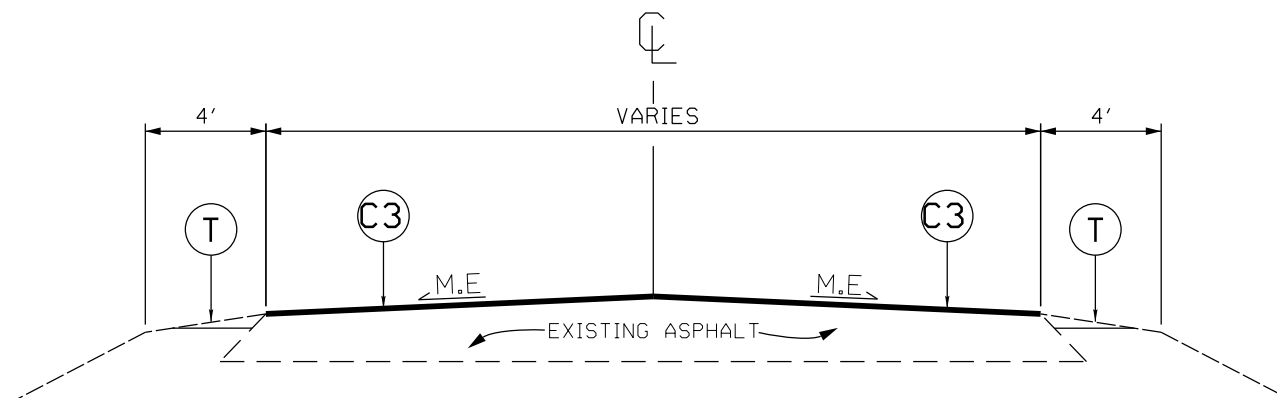


**NOTE:**

1. PERFORM 4" DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN ON SHEET 6. PLACE ASPHALT BASE COURSE B25.0C IN ONE LIFT TO BACKFILL.
2. PERFORM 2" DEPTH MILLING FROM CURB AND GUTTER TO CURB AND GUTTER, FULL WIDTH.
3. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER.
4. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.

## TYPICAL SECTION NO. 6

MAP 4



**NOTE:**

1. PERFORM 4" DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN ON SHEET 6. PLACE ASPHALT BASE COURSE B25.0C IN ONE LIFT TO BACKFILL.
2. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.
4. PERFORM SHOULD RECONSTRUCTION AFTER PAVING IS COMPLETED.

### PAVEMENT SCHEDULE

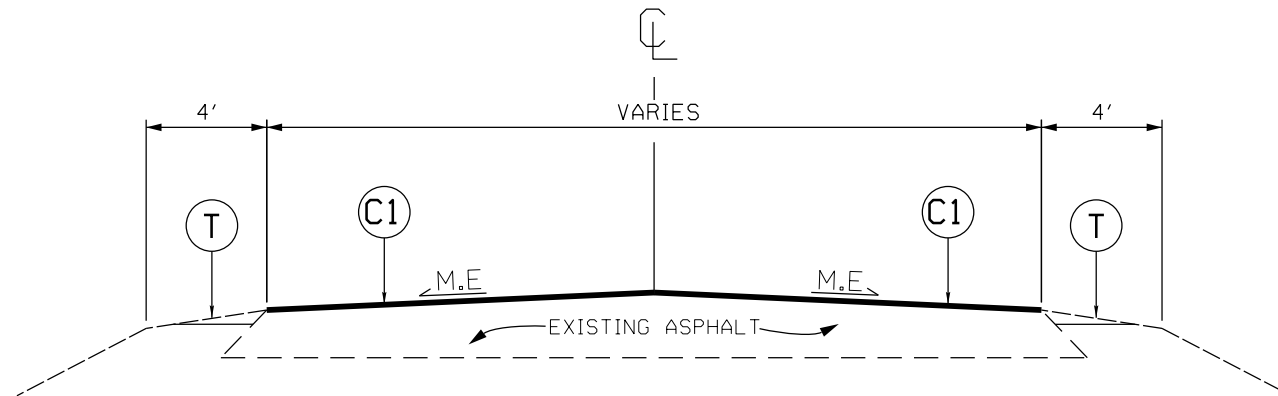
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T	SHOULDER RECONSTRUCTION

DRAWINGS NOT TO SCALE

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

## TYPICAL SECTION NO. 7

MAP 5



**NOTE:**

1. PERFORM 4" DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN ON SHEET 6. PLACE ASPHALT BASE COURSE B25.0C IN ONE LIFT TO BACKFILL.
2. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
4. PERFORM SHOULD RECONSTRUCTION AFTER PAVING IS COMPLETED.

### PAVEMENT SCHEDULE

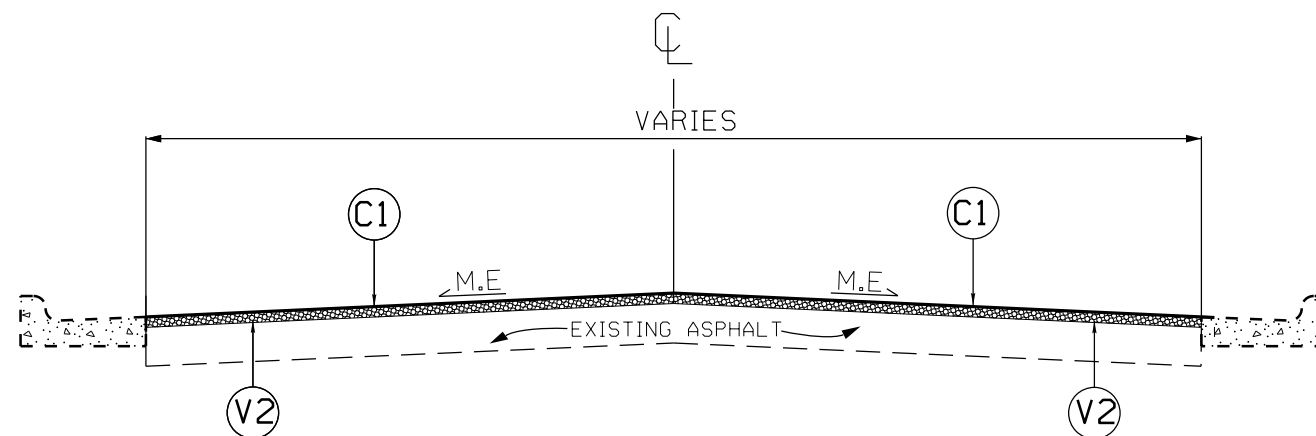
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
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V1	INCIDENTAL MILLING
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T	SHOULDER RECONSTRUCTION

DRAWINGS NOT TO SCALE

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

## TYPICAL SECTION NO. 8

MAP 5,6,7,8,9,10,11,12,13

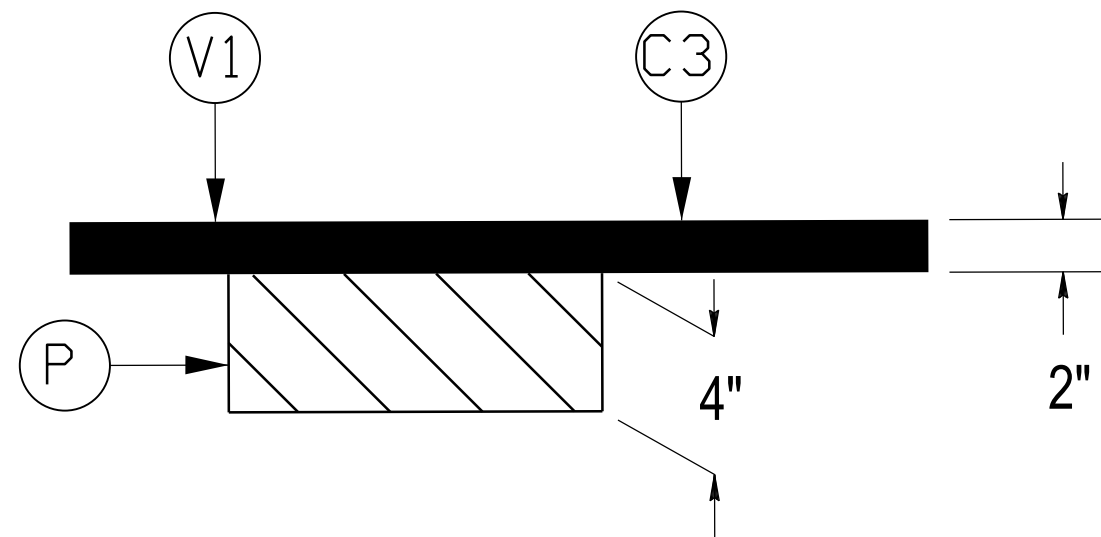


**NOTE:**

1. PERFORM 4" DEPTH MILL PATCHING AT LOCATIONS AND WIDTHS AS SHOWN ON SHEET 6. PLACE ASPHALT BASE COURSE B25.0C IN ONE LIFT TO BACKFILL.
2. PERFORM 1.5" DEPTH MILLING FROM CURB AND GUTTER TO CURB AND GUTTER, FULL WIDTH.
3. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER.
4. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.



## 4" DEPTH MILL PATCHING DETAIL MAP 4

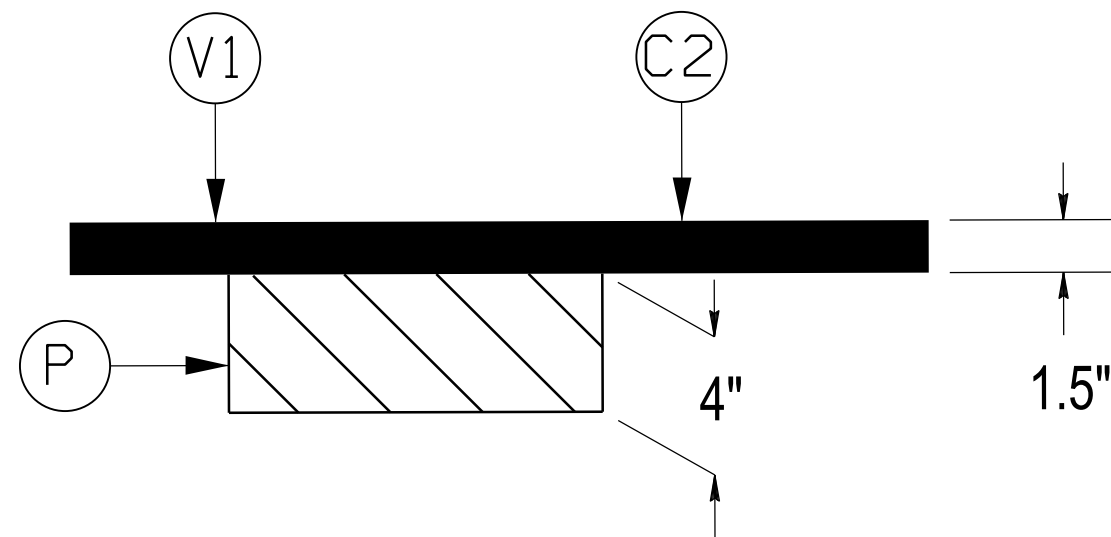


PAVEMENT SCHEDULE	
C3	PROP. APPROX. 2" OF ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AVERAGE RATE OF 224.0 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING
P	4" DEPTH MILL PATCHING W/ B 25.0C
DRAWINGS NOT TO SCALE	

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 8, AND AS DIRECTED BY THE ENGINEER.

## 4" DEPTH MILL PATCHING DETAIL MAP 1,3



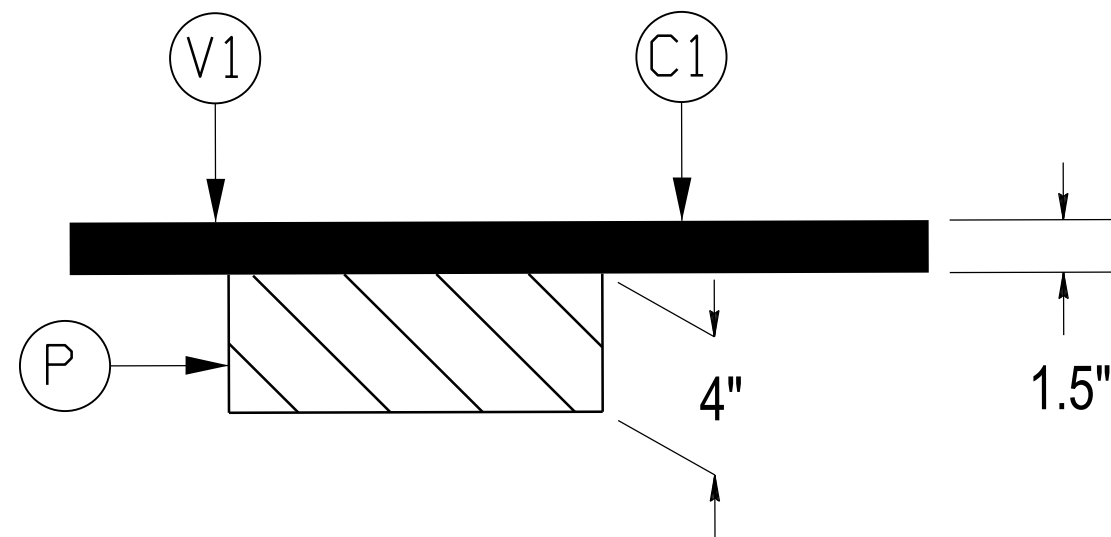
PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" OF ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING
P	4" DEPTH MILL PATCHING W/ B 25.0C
DRAWINGS NOT TO SCALE	

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 8, AND AS DIRECTED BY THE ENGINEER.



## 4" DEPTH MILL PATCHING DETAIL MAP 5,11,13



PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" OF ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AVERAGE RATE OF 165.0 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING
P	4" DEPTH MILL PATCHING W/ B 25.0C
DRAWINGS NOT TO SCALE	

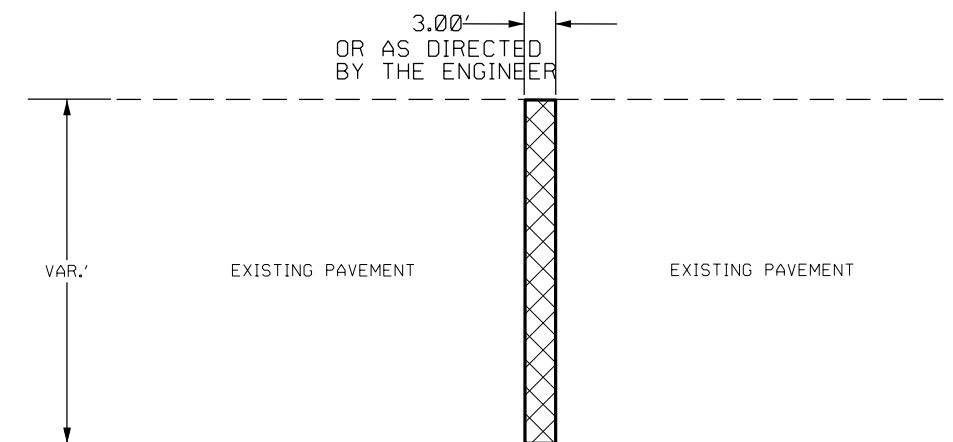
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2. THE CONTRACTOR SHALL PERFORM THE MILL PATCHING REMOVAL AND REPLACEMENT IN THE SAME DAY.
3. 4" DEPTH MILL PATCHING SHALL BE PERFORMED AT LOCATIONS AS SHOWN ON SHEET 8, AND AS DIRECTED BY THE ENGINEER.

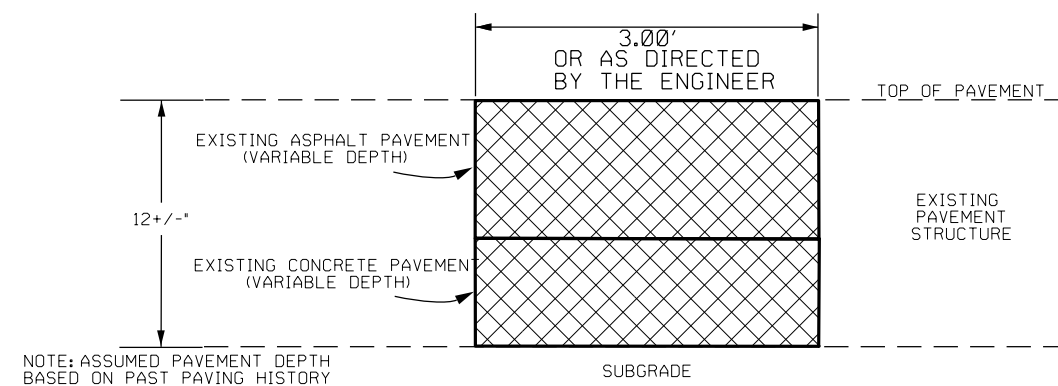
# JOINT REPAIR DETAIL

JOINT SCHEDULE	
MAP	# JOINTS
3	34

CONTRACTOR SHALL COORDINATE WITH RESIDENT ENGINEER'S OFFICE FOR LOCATION OF JOINTS TO BE REPAIRED.



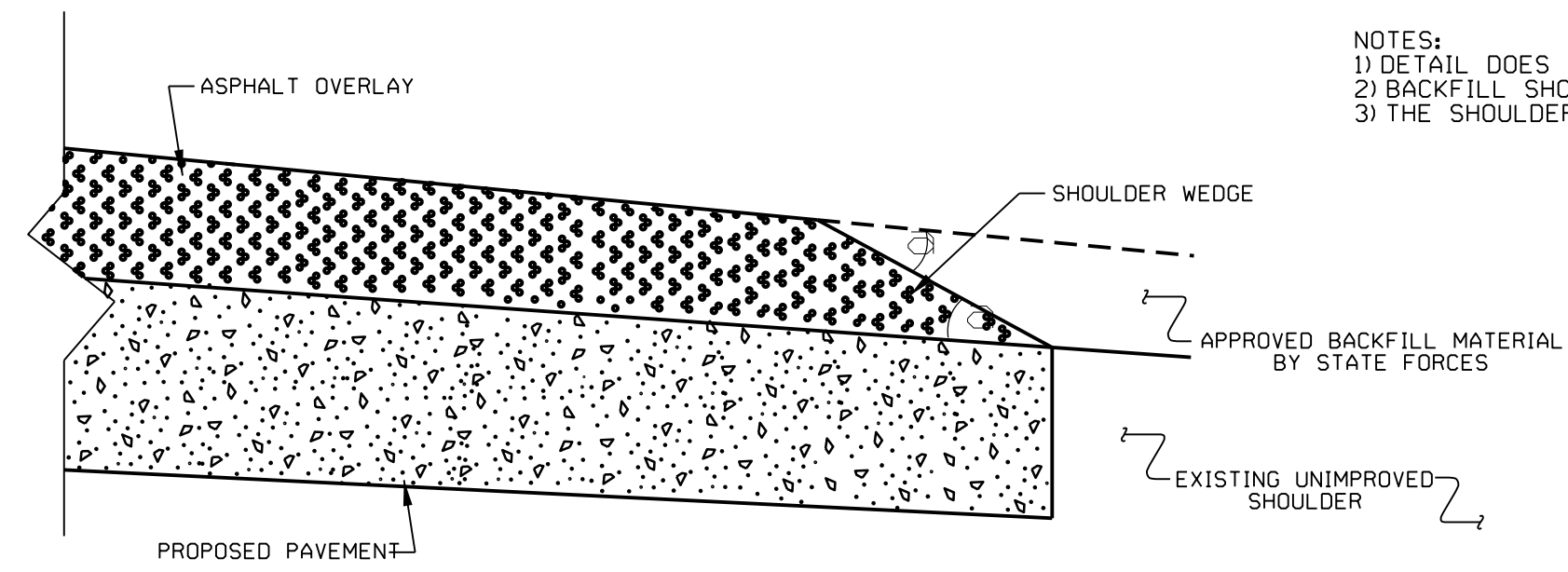
## CROSS-SECTION



### NOTE:

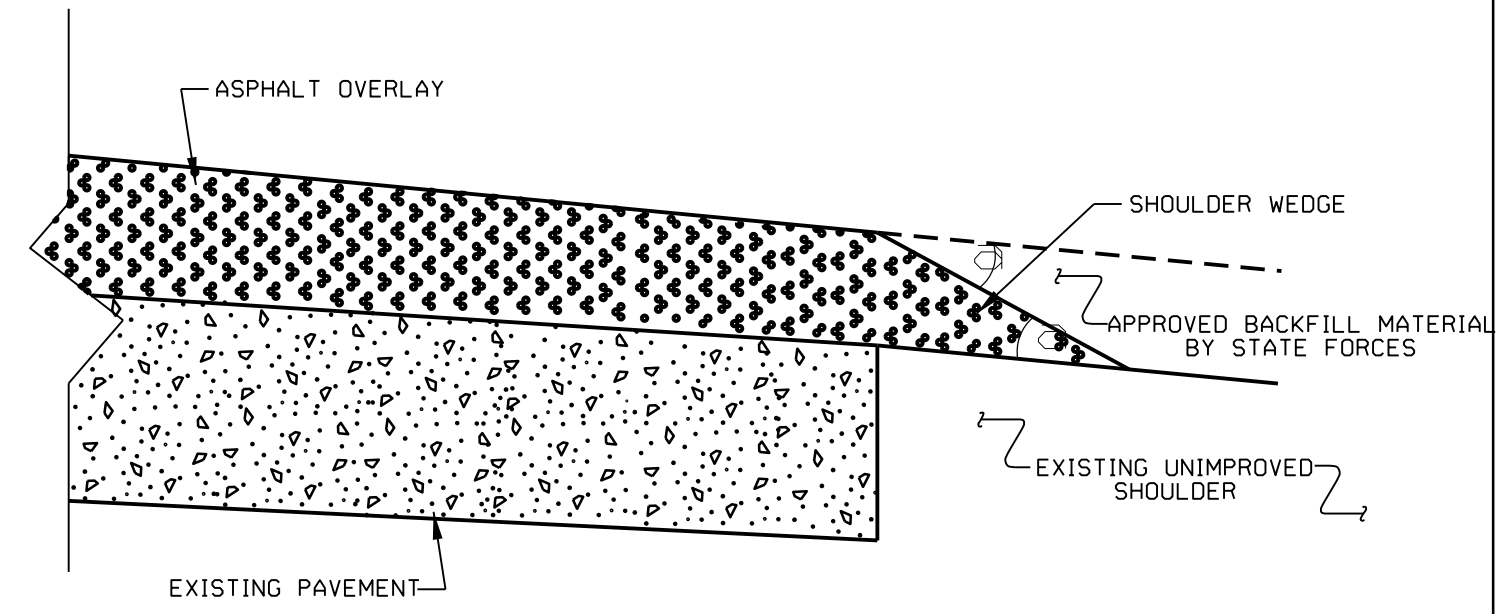
REMOVE ASPHALT AND CONCRETE AT JOINT LOCATIONS AS DIRECTED BY THE ENGINEER (BY SAWING CLEAN JOINTS). REMOVE A TOTAL WIDTH OF 3' (APPROX. 1.5' EACH SIDE OF JOINT). REMOVE AND REPLACE WITH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C. THERE WILL BE NO DIRECT PAY FOR THIS WORK AS IT WILL BE CONSIDERED INCIDENTAL TO THE LINE ITEM, JOINT REPAIR (TONS)

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.



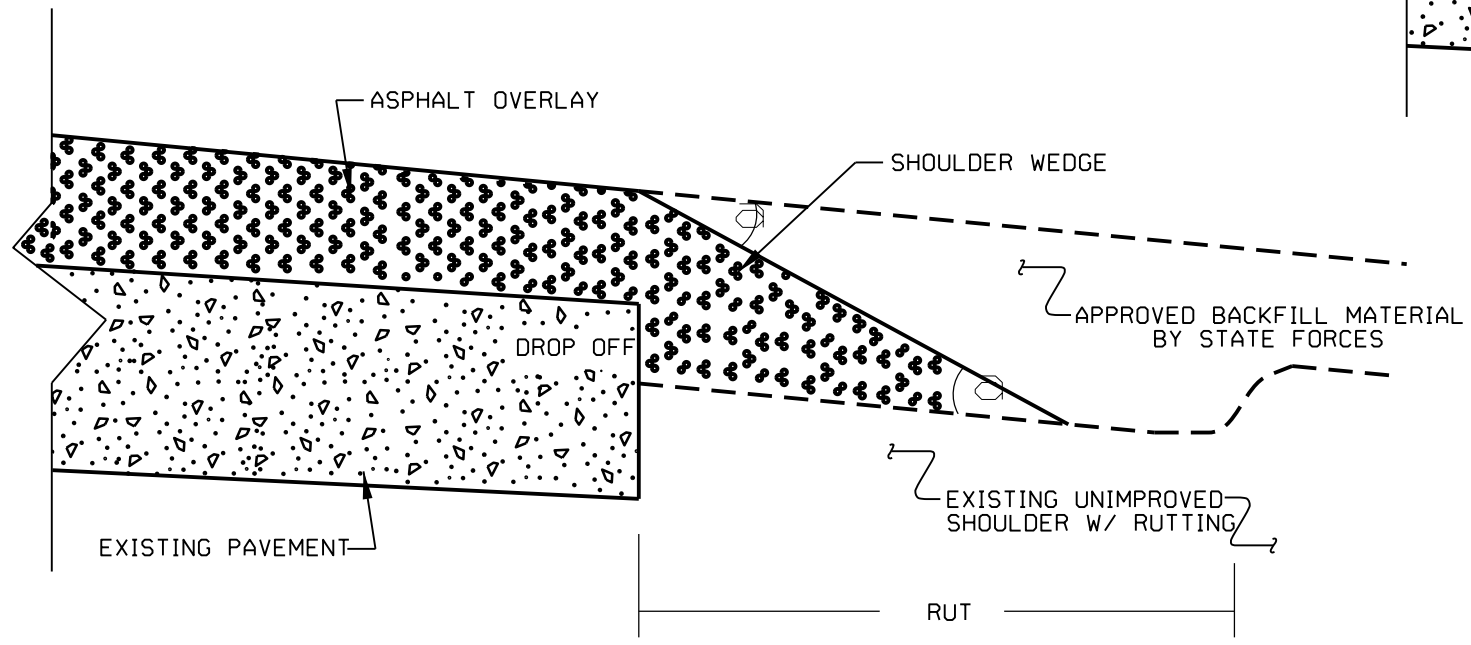
**SHOULDER WEDGE DETAIL**

(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)

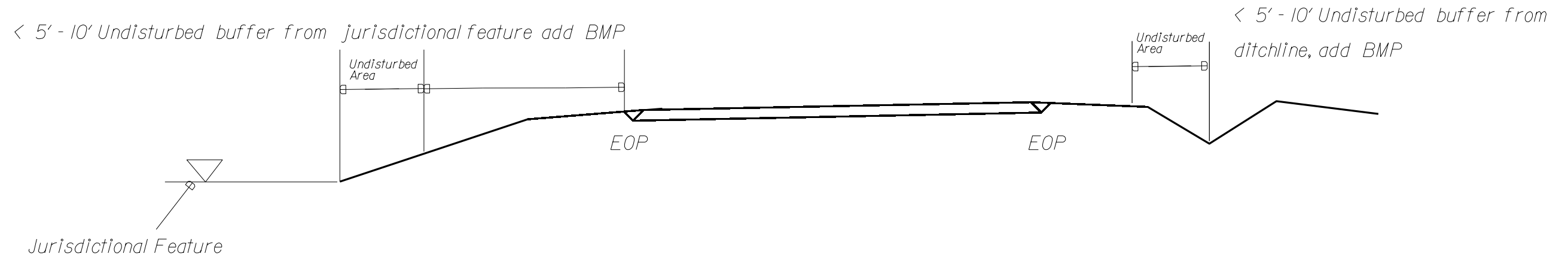
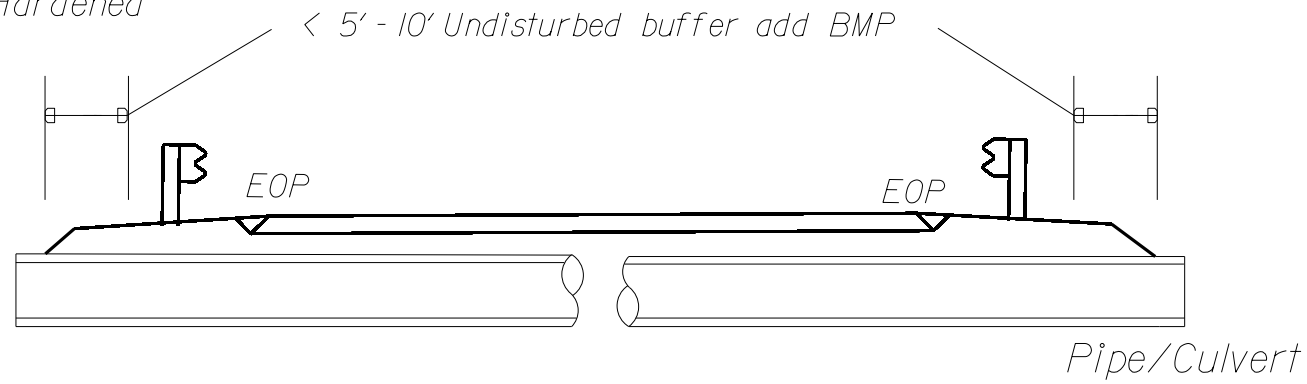
- SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
<b>SHOULDER WEDGE DETAILS</b>	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 10/16/12
CHECKED BY:	DATE:
FILE SPEC.: <a href="#">swwr/details/stand/shoulderwedgestdetail.dgn</a>	

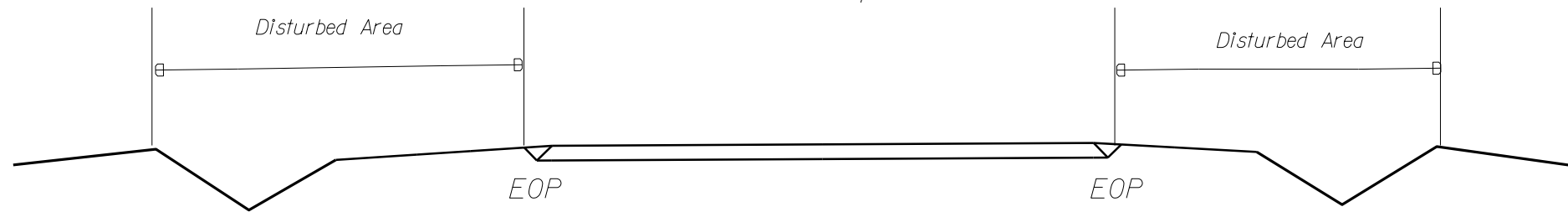
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

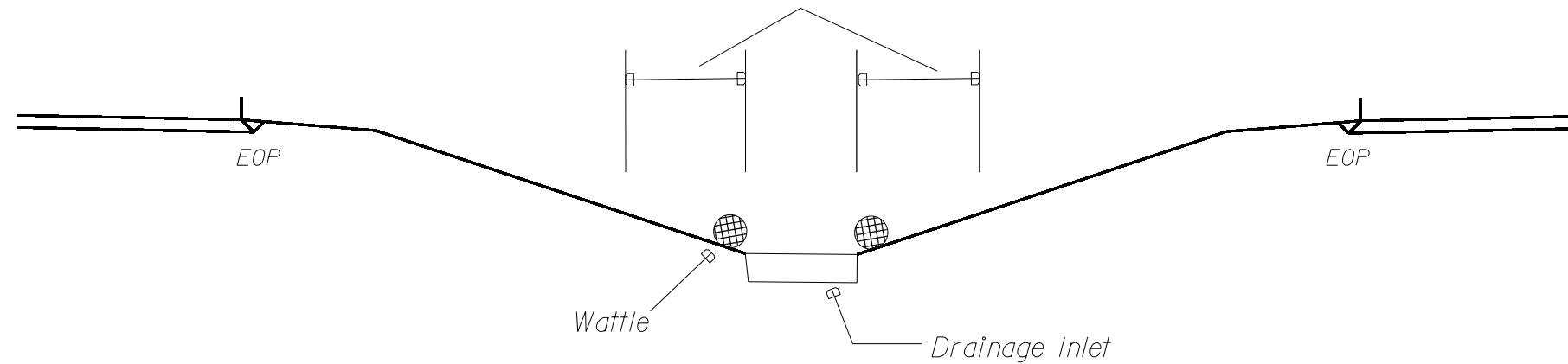
# EROSION CONTROL DETAIL



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

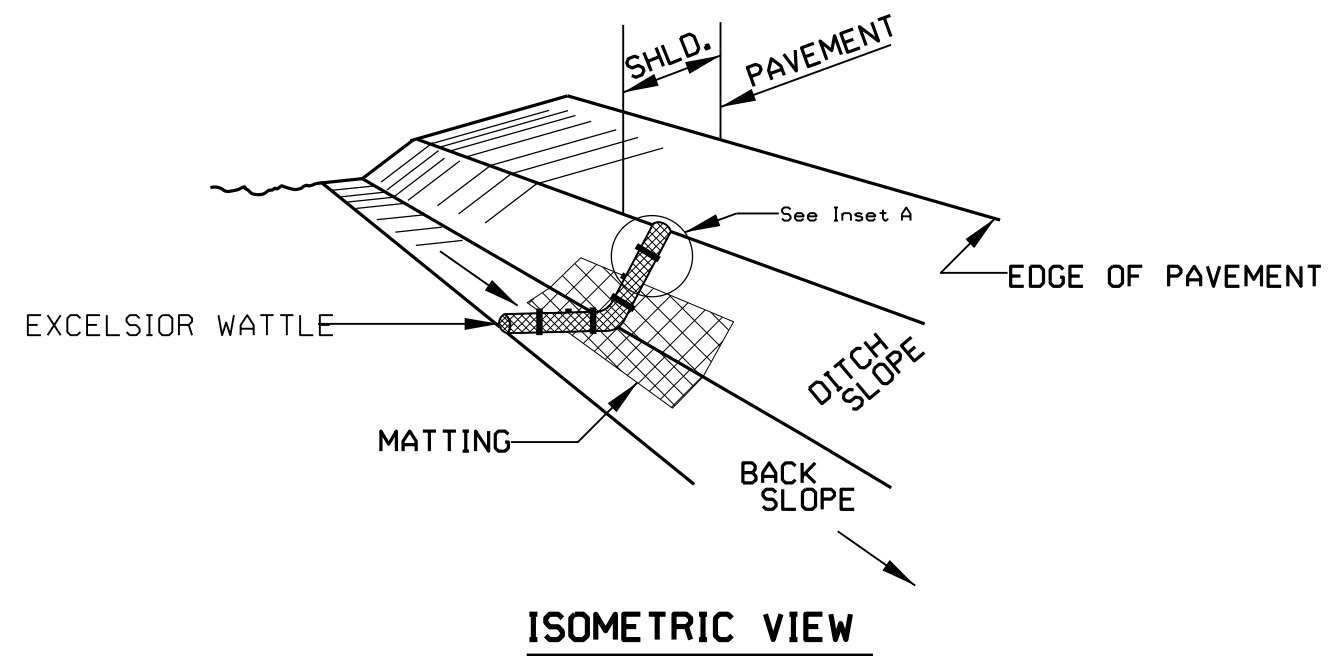


< 5' - 10' Undisturbed buffer from inlet, add wattle



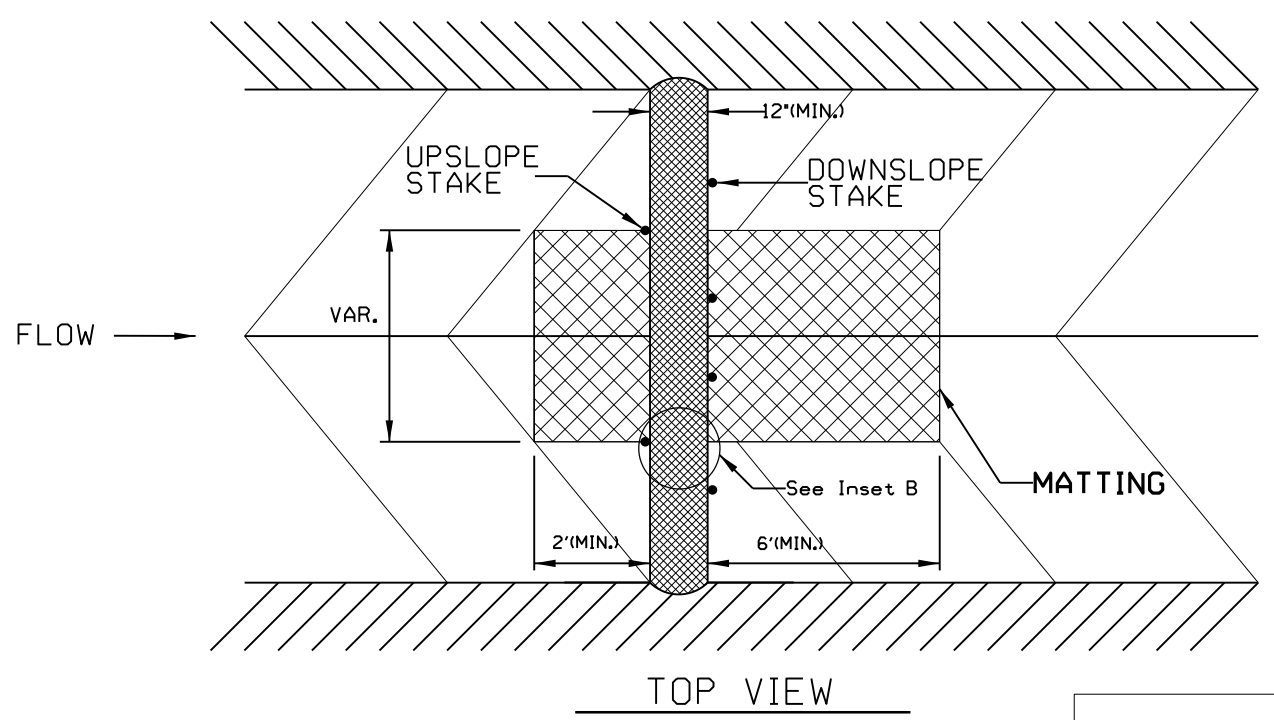
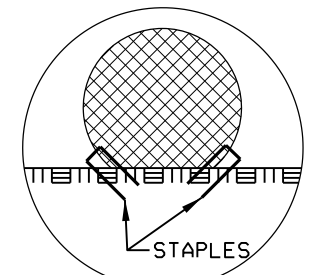
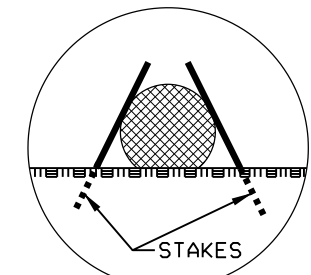
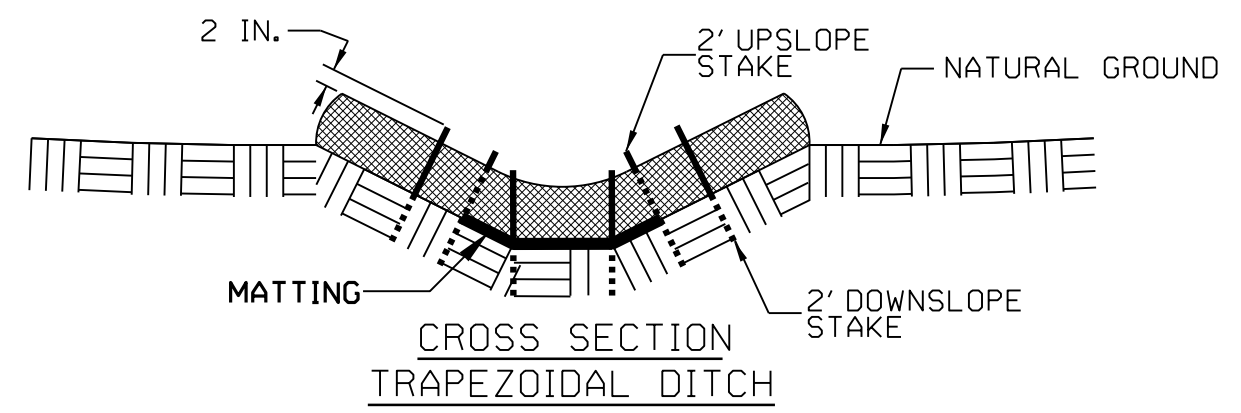
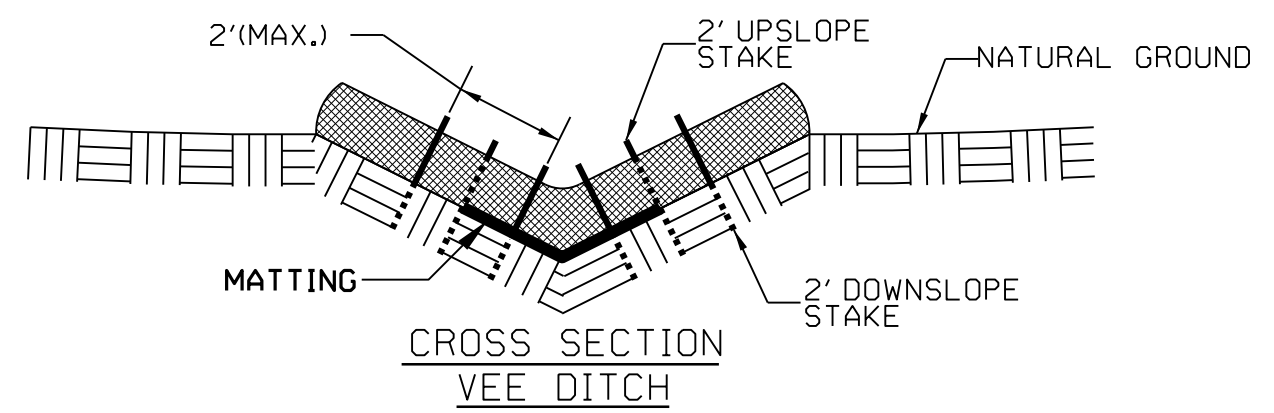
NOT TO SCALE

# WATTLE DETAIL



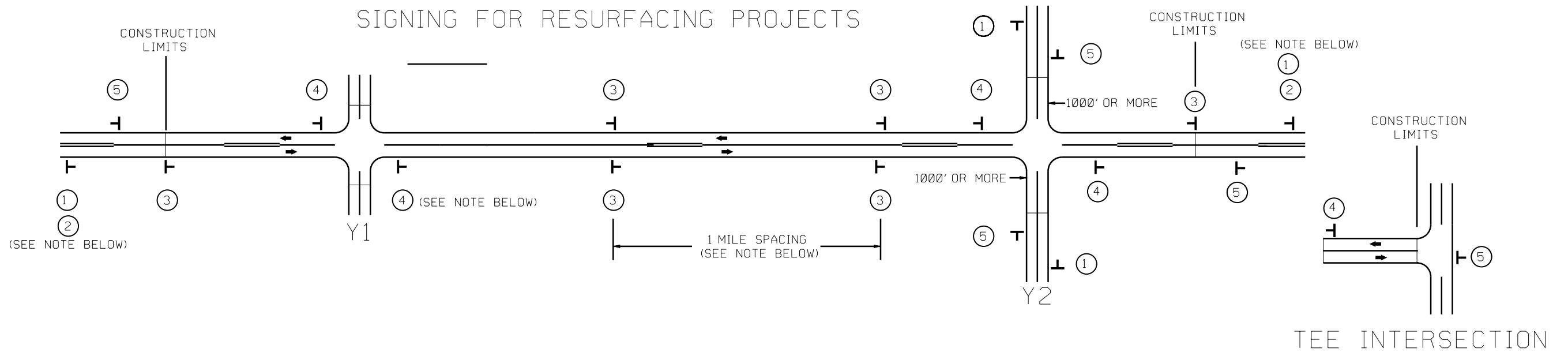
**NOTES:**

- 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.









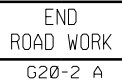
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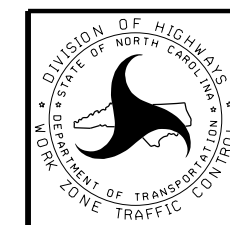
# SIGNING FOR RESURFACING PROJECTS



## MAINLINE (-L-) SIGNING

## -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	<p>①  w20-1 48" X 48"</p> <p>②  w7-3aP 24" X 18"</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"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <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> w20-1 48" X 48"</p> <p> w20-7 A 48" X 48"</p> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	<p>③  SP 13107 48" X 48"</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  SP 13106 48" X 48"</p> <p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS.</p> <p>- 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  G20-2 A 48" X 24"</p> <p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	



RESURFACING  
 ADVANCE WARNING SIGNS  
 FOR  
 RURAL AND SUBURBAN  
 2 LANE ROADWAYS