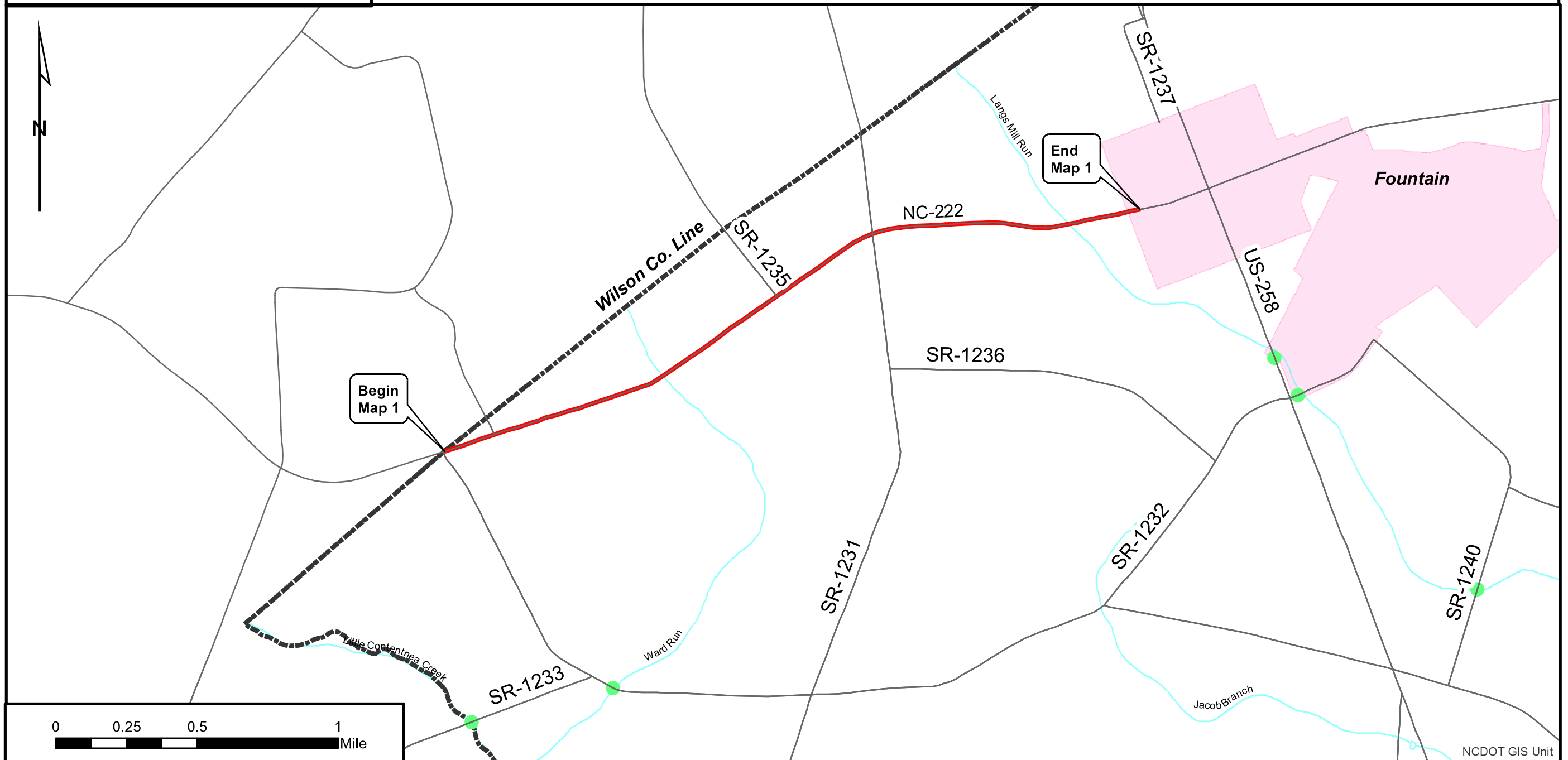


PITT COUNTY

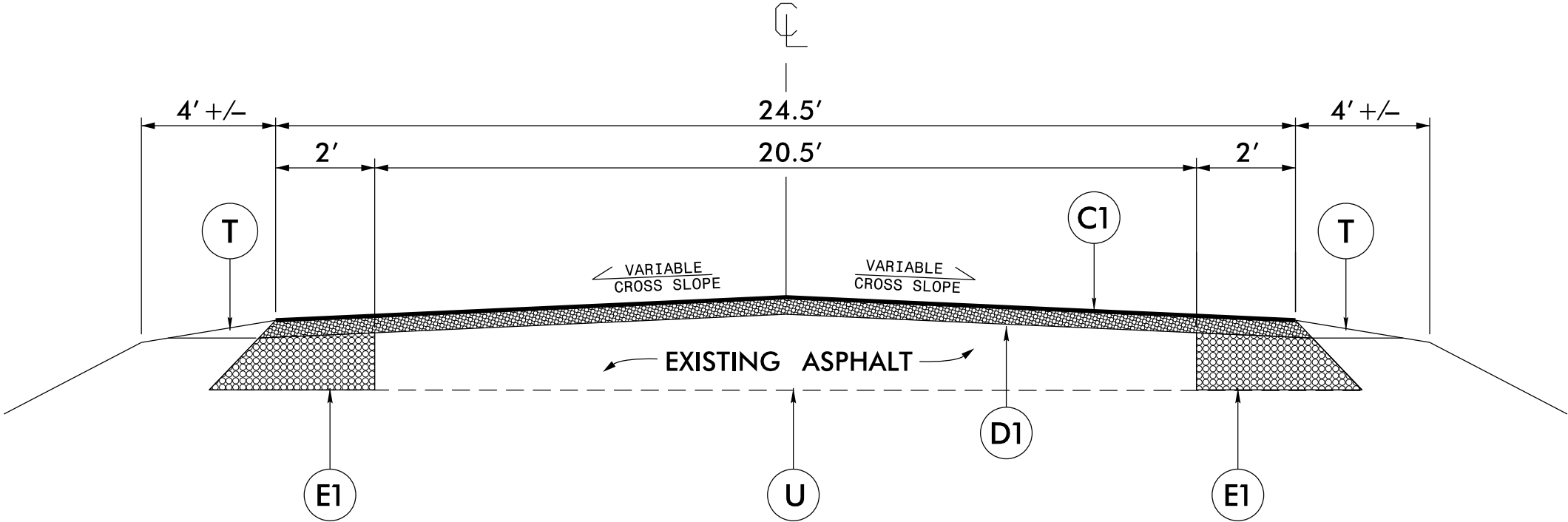
**WBS: 2016CPT.02.09.10741.7**

***Widen, Strengthen and Resurface NC 222 From the Wilson Co. Line to the Beginning of Curb and Gutter at the Fountain City Limits.***



# TYPICAL SECTION NO. 1

MAP 1: NC 222 FROM THE WILSON CO. LINE TO THE  
BEGINING CURB AND GUTTER AT THE FOUNTAIN CITY LIMITS



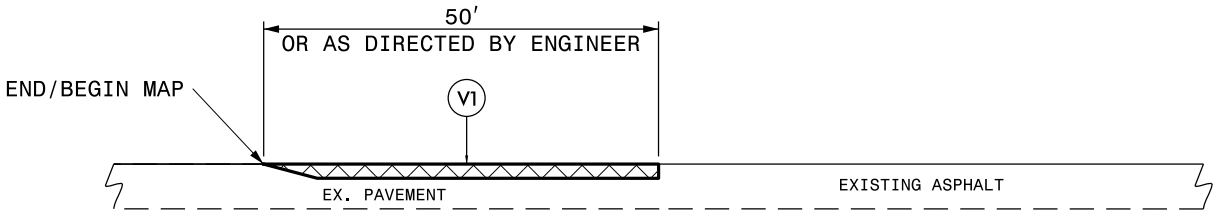
**NOTE:**

1. PLACE 2' SYMMETRICAL WIDENING. MAKE FLUSH WITH THE EXISTING ASHALT.
2. TRENCHING SHALL BE PERFORMED USING A MILLING MACHINE OR SIMILAR DEVICE.
3. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH, INCLUDING NEW WIDENING.
4. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 1

## PAVEMENT SCHEDULE

|    |  |
|----|--|
| C1 | PROP. APPROX. 1-½" ASPHALT CONCRETE SURFACE COURSE, TYPE S 9.5B, AT AN AVERAGE RATE OF 168 LBS PER SQ. YD.       |
| D1 | PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I 19.0B, AT AN AVERAGE RATE OF 285 LBS PER SQ. YD. |
| E1 | PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B 25.0B, AT AN AVERAGE RATE OF 570 LBS PER SQ. YD.           |
| T  | SHOULDER RECONSTRUCTION  |
| U  | EXISTING PAVEMENT  |
| V1 | INCIDENTAL MILLING   |

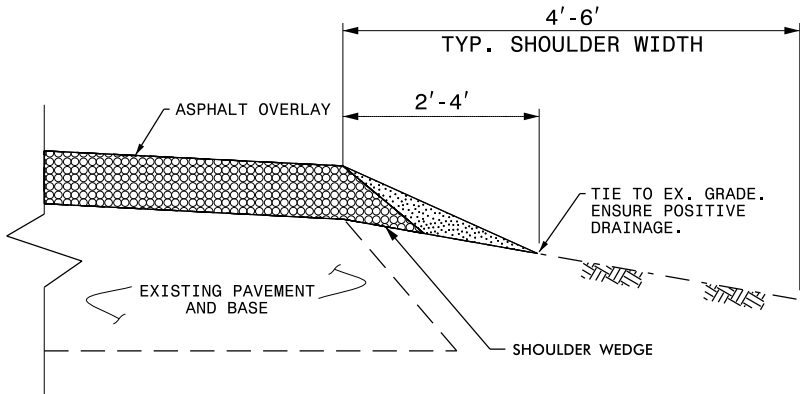
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



DETAIL 1

MAIN LINE MILLING

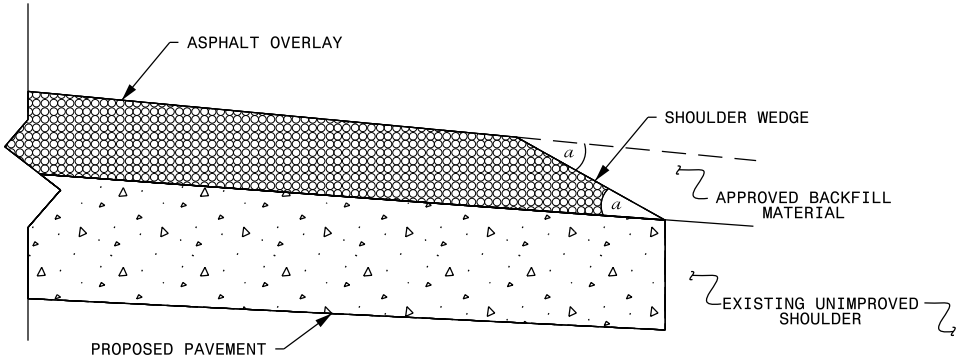
- NOTE:
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
  2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.



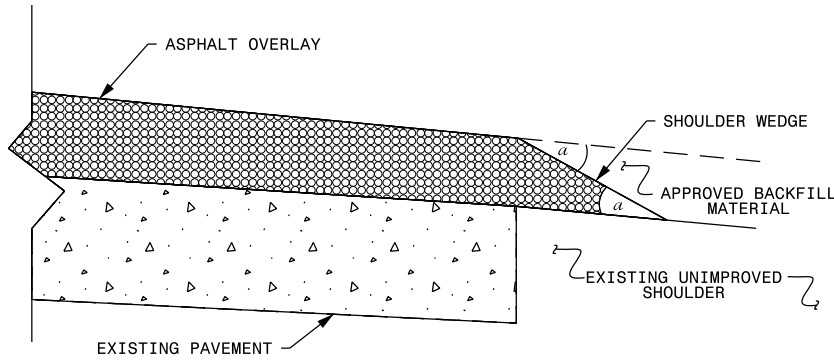
SHOULDER RECONSTRUCTION DETAIL

NOTE:

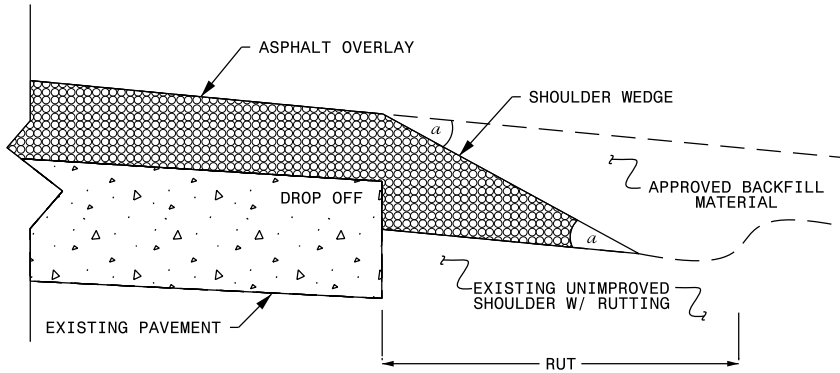
1. SHOULDERS SHALL BE RECONSTRUCTED AS SHOWN IN STD. DWG. NO. 560.01 & 560.02, WITH A MINIMUM SLOPE OF 1" PER FOOT TO ENSURE POSITIVE DRAINAGE AWAY FROM THE ROADWAY.
2. A VEGETATIVE BUFFER SHALL BE MAINTAINED BETWEEN THE DISTURBED AREA ALONG THE EDGE OF PAVEMENT AND THE DITCH SHOULDER POINT TO MINIMIZE EROSION. PULLING DITCHES OR CUTTING SHOULDERS TO GENERATE BORROW MATERIAL WILL NOT BE ALLOWED.
3. REQUIRED BORROW MATERIAL MAY BE OBTAINED FROM NCDOT STOCKPILES. ANY EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN APPROVED DISPOSAL SITE.



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



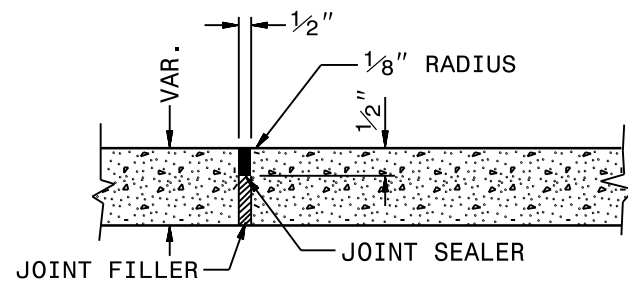
SHOULDER WEDGE DETAIL  
(Resurfacing Projects w/ no Widening)



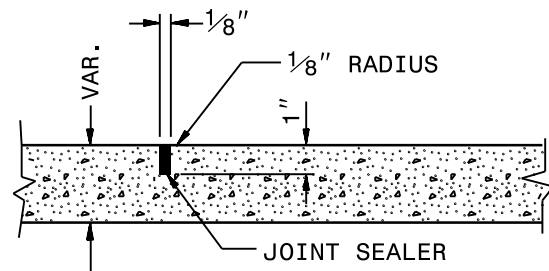
SHOULDER WEDGE DETAIL  
(Resurfacing Adjacent to Rutted Shoulder)

- 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 ANGLE = 30°



SHOWING EXPANSION JOINT



SHOWING GROOVED JOINT

### **PARTIAL LONGITUDINAL SECTIONS** **OF PAVED ISLANDS**

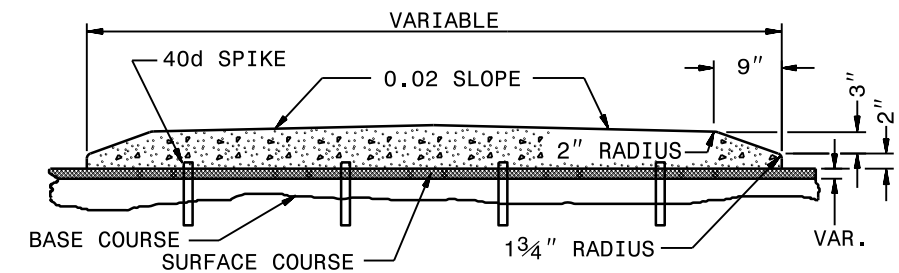
**NOTE:**

WHEN MONOLITHIC CONCRETE ISLAND IS ON TOP OF SURFACE COURSE, DRIVE 40d SPIKES INTO SURFACE UNDER MONOLITHIC CONCRETE ISLAND. STAGGER SPIKES ON 2' CENTERS EACH WAY.

IN THE CONCRETE PAVEMENT (ISLAND) AND CONCRETE ISLAND (MONOLITHIC) PLACE 1/2" EXPANSION JOINTS AT 30' INTERVALS AND GROOVED JOINTS 1" DEEP AT 10' INTERVALS BETWEEN EXPANSION JOINTS.

LINE UP THE JOINTS IN THE CONCRETE PAVEMENT (ISLAND) WITH THE JOINTS IN THE CURB OR CURB AND GUTTER. FILL AND SEAL THE TOP 1/2" OF THE EXPANSION JOINTS AND THE ENTIRE DEPTH OF GROOVED JOINTS WITH JOINT SEALER.

FOR JOINTS IN THE CURB AND/OR CURB AND GUTTER, SEE STANDARD NO. 846.01



### **5" MONOLITHIC CONCRETE ISLAND (SURFACE MOUNTED)** **ON ASPHALT CONCRETE PAVEMENT** (USE ON ISLAND 4' WIDE OR GREATER)

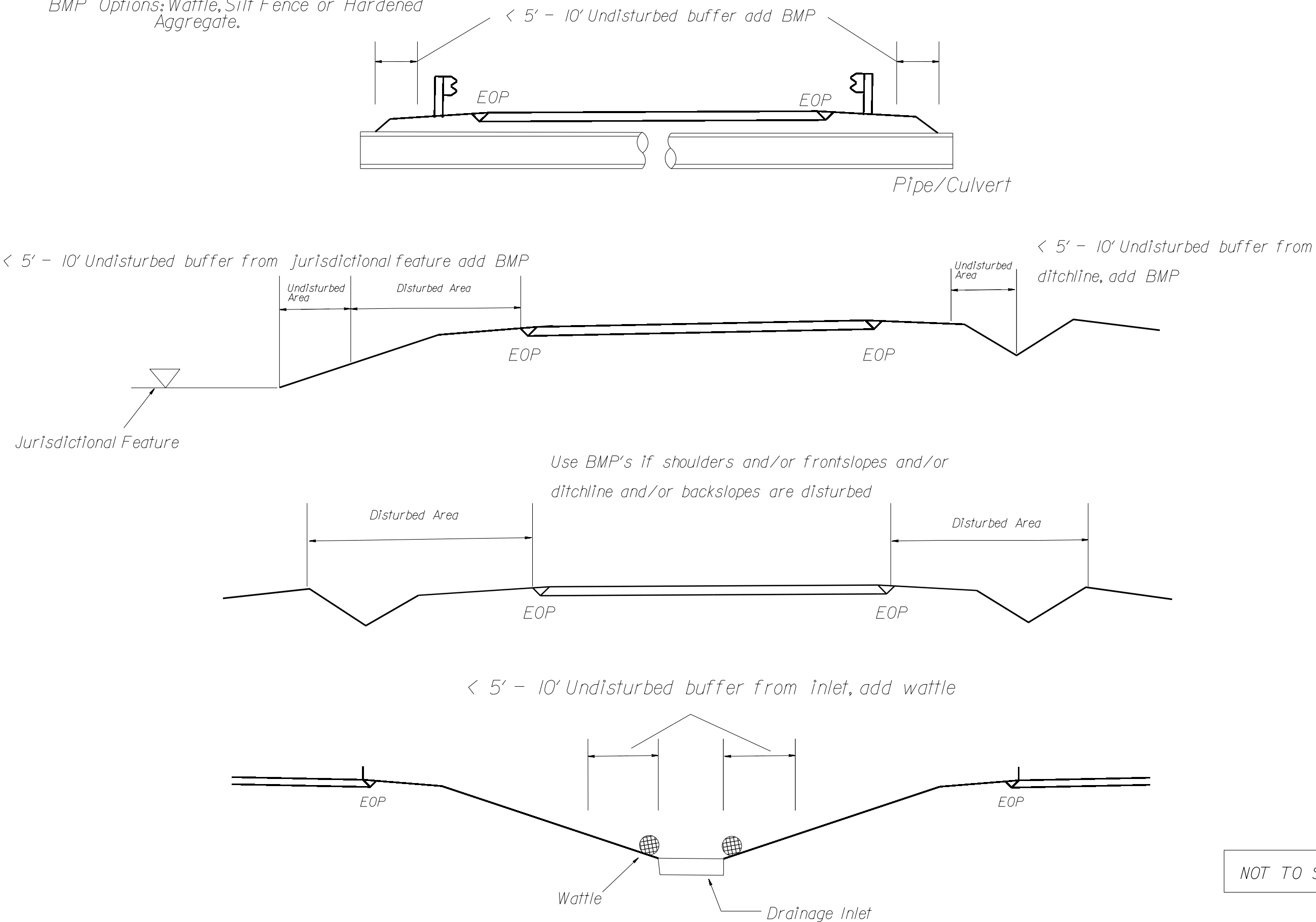
**NOTE:**

1. 5" MONOLITHIC CONCRETE ISLAND SHALL BE PREFORMED AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL AT SR 1235.

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

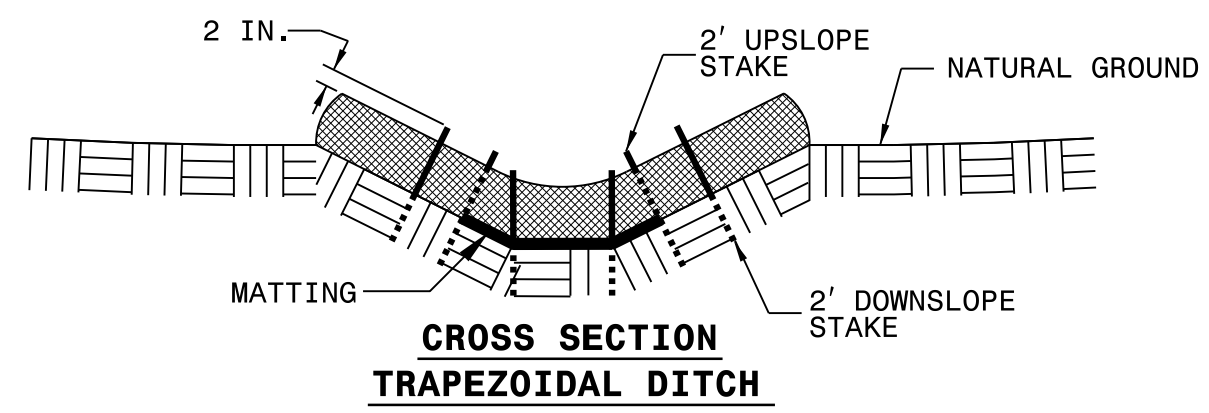
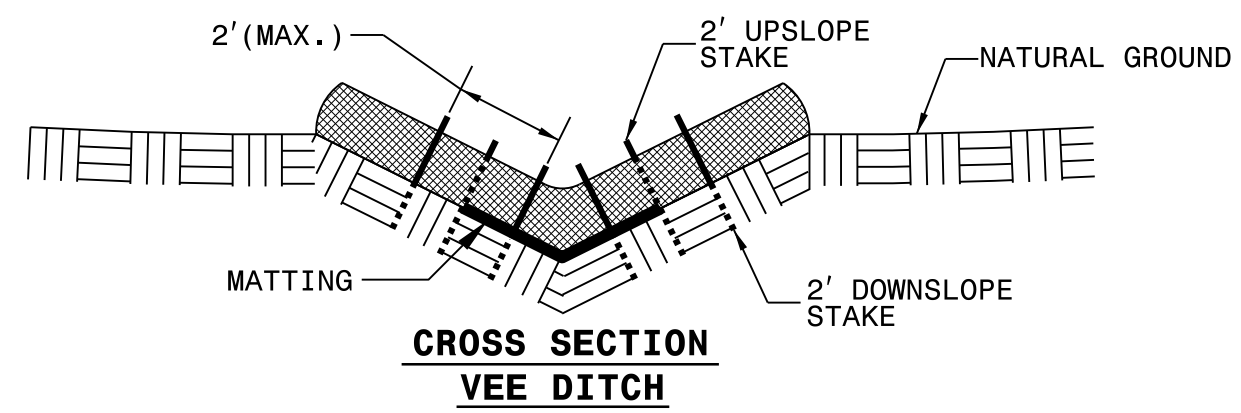
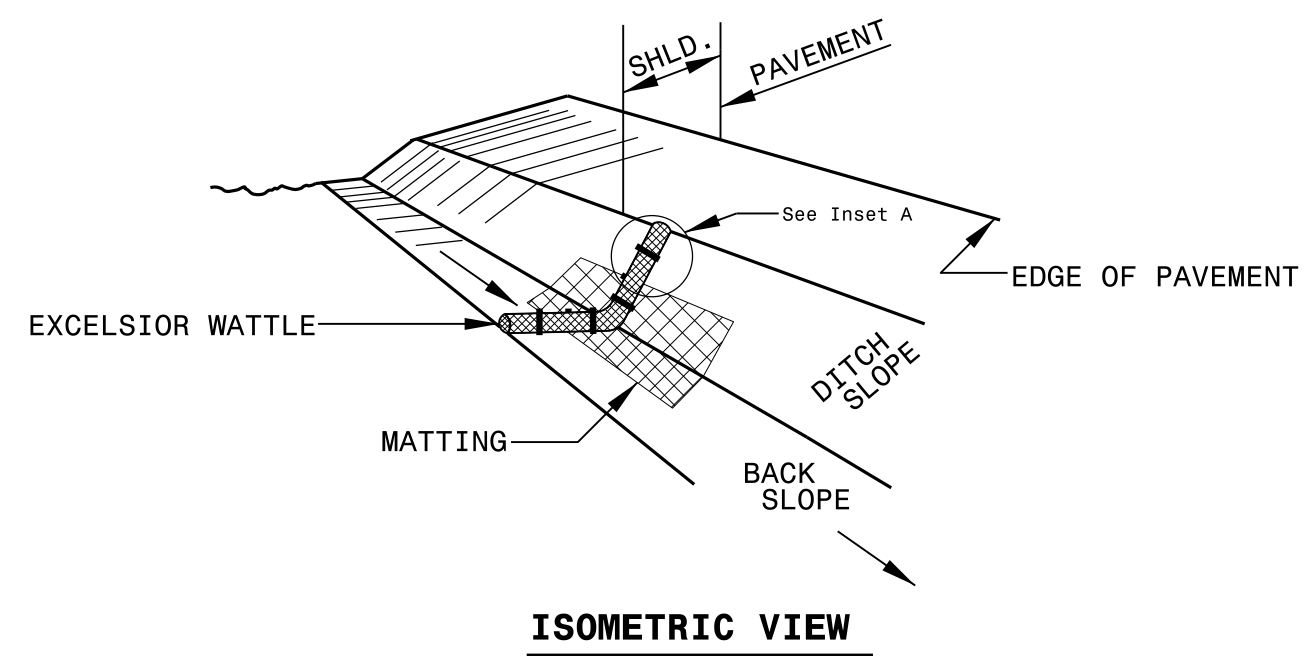
BMP Options: Wattle, Silt Fence or Hardened Aggregate.

# EROSION CONTROL DETAIL



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.

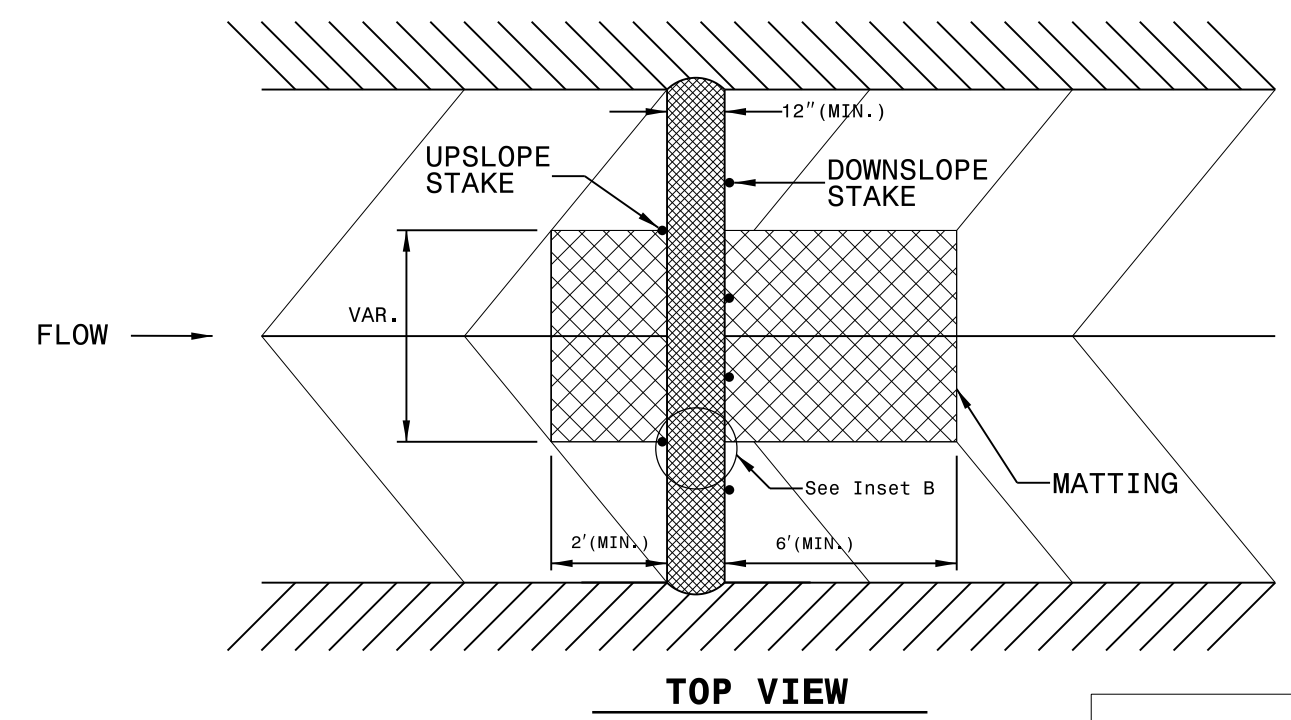
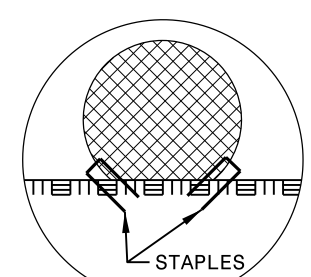
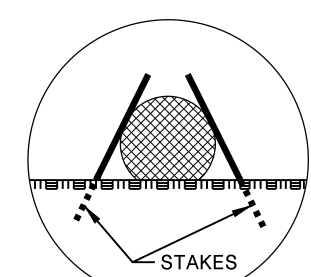
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

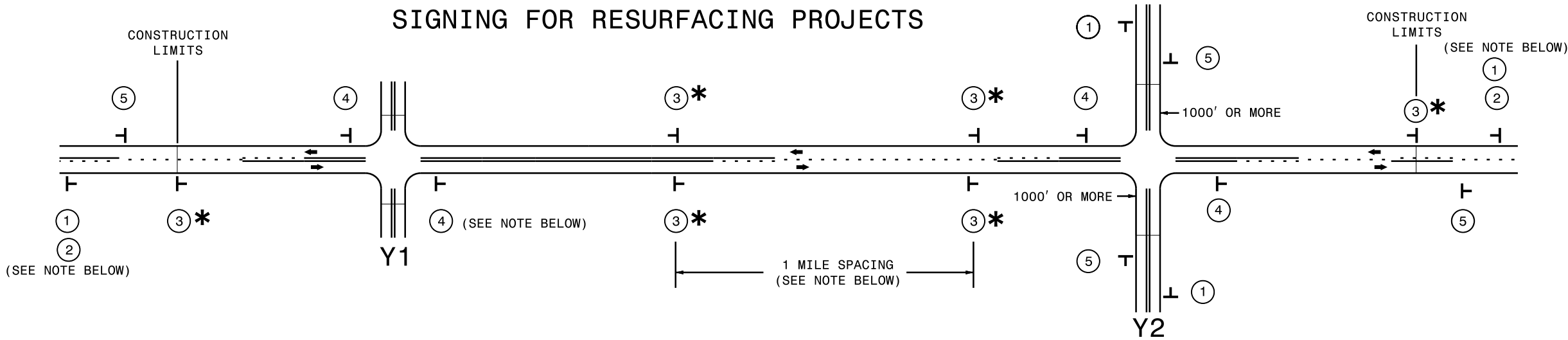
SUMMARY OF QUANTITIES

| PROJECT                                  | COUNTY | MAP | ROUTE  | DESCRIPTION  | TYP | LANES | LANE TYPE | FINAL SURFACE TESTING REQUIRED | WARM MIX ASPHALT REQUIRED | LENGTH | WIDTH | REMOVAL OF EXISTING CONCRETE ISLAND | INCIDENTAL STONE BASE | SHOULDER RECONSTRUCTION | INCIDENTAL MILLING | BASE COURSE, 825.0B | INTERMEDIATE COURSE, 119.0B | SURFACE COURSE, 59.5B | ASPHALT BINDER FOR PLANT MIX | 5' MONOLITHIC CONCRETE ISLANDS (SURFACE MOUNTED) SY | TEMPORARY SILT FENCE | WATTLE | SEED & MULCHING | RESPONSE FOR EROSION CONTROL EA |
|--|--------|-----|--------|--|-----|-------|-----------|--------------------------------|---------------------------|--------|-------|-------------------------------------|-----------------------|-------------------------|--------------------|---------------------|-----------------------------|-----------------------|------------------------------|---|----------------------|--------|-----------------|---------------------------------|
| NO                                       |        | NO  |        |  | NO  |       |           |                                |                           | MI     | FT    | SY                                  | TONS                  | SMI                     | SY                 | TONS                | TONS                        | TONS                  | TONS                         | SY  | LF                   | LF     | AC              | EA                              |
| 2016CPT.02.09.10741.7                    | Platt  | 1   | NC 222 | RESURFACING FROM THE WILSON CO. LINE TO THE BEGINNING OF CURB AND GUTTER AT FOUNTAIN CITY LIMITS | 1   | 2     | 2WJ       | NO                             | NO                        | 2.69   | 24.5  | 6.0                                 | 200.0                 | 5.4                     | 630.0              | 2189.0              | 6270.0                      | 3839.0                | 628.0                        | 6.0   | 800.0                | 400.0  | 3.5             | 5.0                             |
| TOTAL FOR MAP NO. 1                      |        |     |        |  |     |       |           |                                |                           | 2.7    |       | 6.0                                 | 200.0                 | 5.4                     | 630.0              | 2189.0              | 6270.0                      | 3839.0                | 628.0                        | 6.0   | 800.0                | 400.0  | 3.5             | 5.0                             |
| TOTAL FOR PROJ NO. 2016CPT.02.09.10741.7 |        |     |        |  |     |       |           |                                |                           | 2.7    |       | 6.0                                 | 200.0                 | 5.4                     | 630.0              | 2189.0              | 6270.0                      | 3839.0                | 628.0                        | 6.0   | 800.0                | 400.0  | 3.5             | 5.0                             |
| GRAND TOTAL                              |        |     |        |  |     |       |           |                                |                           | 2.7    |       | 6.0                                 | 200.0                 | 5.4                     | 630.0              | 2189.0              | 6270.0                      | 3839.0                | 628.0                        | 6.0   | 800.0                | 400.0  | 3.5             | 5.0                             |

THERMOPLASTIC AND PAINT QUANTITIES

| PROJECT<br><br>NO                        | COUNTY<br><br>Pi tt | MAP<br><br>NO | ROUTE<br><br>NC 222 | DESCRIPTION<br><br>RESURFACING FROM THE WILSON CO. LINE<br>TO THE BEGINNING OF CURB AND GUTTER<br>AT FOUNTAIN CITY LIMITS | TYP<br><br>NO | LANES<br><br>2 | LANE TYPE<br><br>2WJ | LENGTH<br><br>2.689 | WIDTH<br><br>24.5 | 4399000000-N                              | 4413000000-E  | 4688000000-E                                 | 4690000000-E                                  | 4900000000-N                         |
|--|---------------------|---------------|---------------------|---|---------------|----------------|----------------------|---------------------|-------------------|---|---|--|---|--------------------------------------|
|  |                     |               |                     |   |               |                |                      |                     |                   | TEMPORARY<br>TRAFFIC<br>CONTROL<br><br>LS | WORK ZONE<br>ADVANCE/<br>GENERAL WARNING<br>SIGNING<br><br>SF | THERMO PVT MKG<br>LINES 6" 90 MILS<br><br>LF | TRERMO PVT MKG<br>LINES 6" 120 MILS<br><br>LF | PERM RAISED PVT<br>MARKERS<br><br>EA |
| 2016CPT.02.09.10741.7                    | Pi tt               | 1             | NC 222              | RESURFACING FROM THE WILSON CO. LINE<br>TO THE BEGINNING OF CURB AND GUTTER<br>AT FOUNTAIN CITY LIMITS                    | 1             | 2              | 2WJ                  | 2.689               | 24.5              | 1.0                                       | 302.0   | 28934.0                                      | 17747.0                                       | 200.0                                |
| TOTAL FOR MAP NO. 1                      |                     |               |                     |   |               |                |                      | 2.7                 |                   | 1.0                                       | 302.0   | 28934.0                                      | 17747.0                                       | 200.0                                |
| TOTAL FOR PROJ NO. 2016CPT.02.09.10741.7 |                     |               |                     |   |               |                |                      | 2.7                 |                   | 1.0                                       | 302.0   | 28934.0                                      | 17747.0                                       | 200.0                                |
| GRAND TOTAL                              |                     |               |                     |   |               |                |                      | 2.7                 |                   | 1.0                                       | 302.0   | 28934.0                                      | 17747.0                                       | 200.0                                |





| LEGEND |                           |
|--------|---------------------------|
|        | STATIONARY SIGN           |
|        | DIRECTION OF TRAFFIC FLOW |

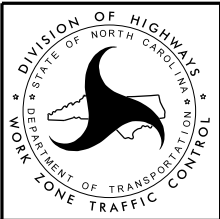
**MAINLINE (-L-) SIGNING**

**-Y- LINE SIGNING**

|  |   |   |
|--|---|---|
| SIGNING NOTES AND<br>PLACEMENT PER DIRECTION | <div>①</div> <div></div> <div>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS.<br/>ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</div>  | <p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <div>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</div> <div>2) SUBDIVISION ROADS</div> <div>3) DEAD END ROADS</div> <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></div> <div>PLACED 500' IN ADVANCE OF FLAGGER.</div> <div></div> <div>PLACED 250' IN ADVANCE OF FLAGGER.</div> |
|  | <div>②</div> <div></div> <div>#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH.<br/>ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)</div>  |   |
|  | <div>③*</div> <div></div> <div>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.</div>  |   |
|  | <div>④</div> <div></div> <div>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.</div> |   |
|  | <div>⑤</div> <div></div> <div>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</div>  |   |

**\* SIGNING FOR ASPHALT SURFACE TREATMENTS (ONLY)**

SUBSTITUTE LOW/SOFT SHOULDER SIGNS BY ALTERNATING THE FOLLOWING TWO SIGNS:  
STARTING WITH "UNMARKED PAVEMENT AHEAD" (SP 06026) FOLLOWED BY "LOOSE GRAVEL" (W8-7).



RESURFACING  
ADVANCE WARNING SIGNS  
FOR  
RURAL AND SUBURBAN  
2 LANE ROADWAYS