

**Buncombe County**  
**Contract# DM00446**  
**TIP# W-5213G**  
**WBS# 2024CPT.13.15.20111,**  
**45343.3.8**

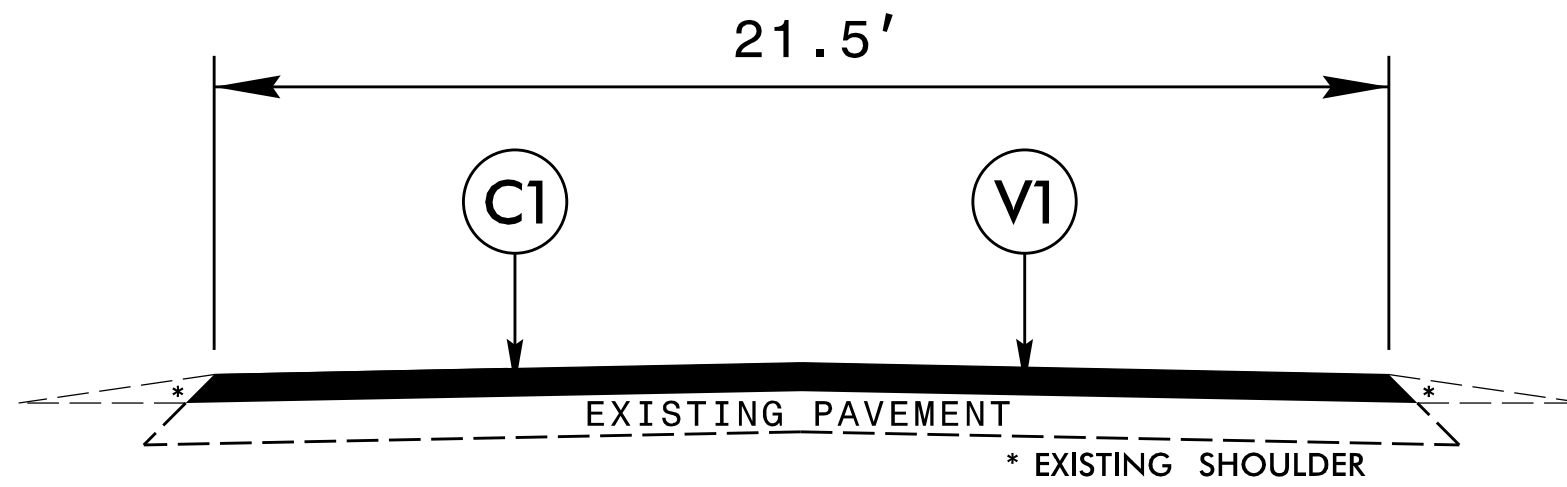
Patching, Resurfacing and Long Life  
 Pavement Markings on SR 2002 (Riceville  
 Rd) from MP 0.2 to MP 3.62.

**Sheet 1**

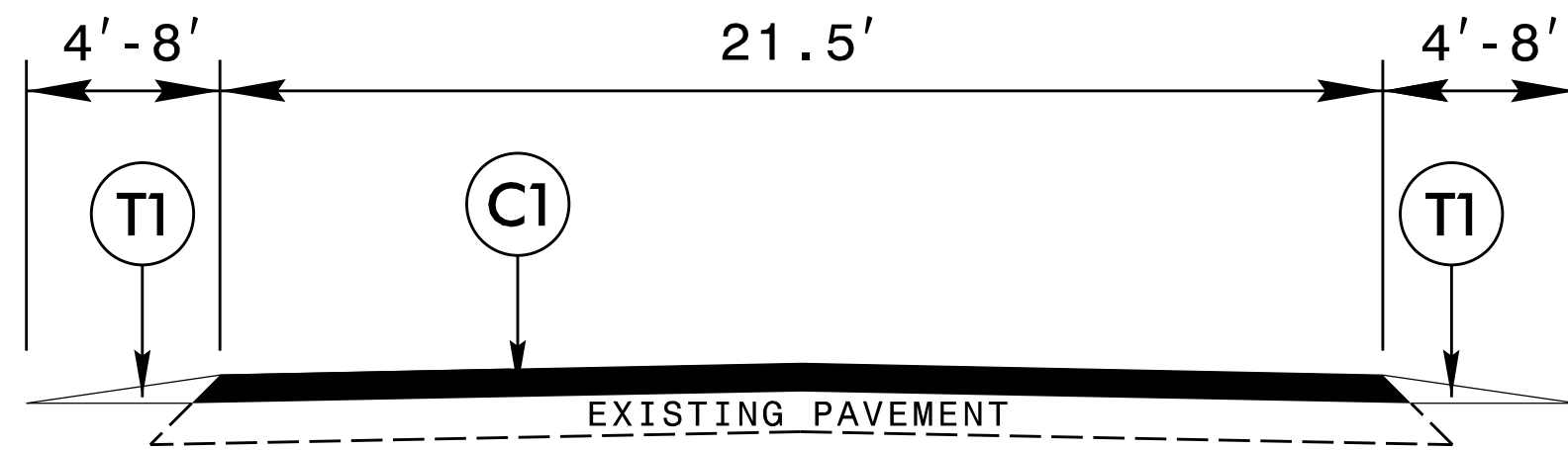
- All Surveyed NC HPO Resource Points
- Project Extents
- NC HPO Historic Districts
- Interstate
- US Route
- NC Route
- Secondary Route

Credits: Esri Community Maps Contributors, Buncombe County, NC, State of North Carolina DOT, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Buncombe County, NC, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA; Print date: 8/15/2023; Author: nb survey

Asheville Farm School  
 (Warren Wilson College  
 Historic District (SL))

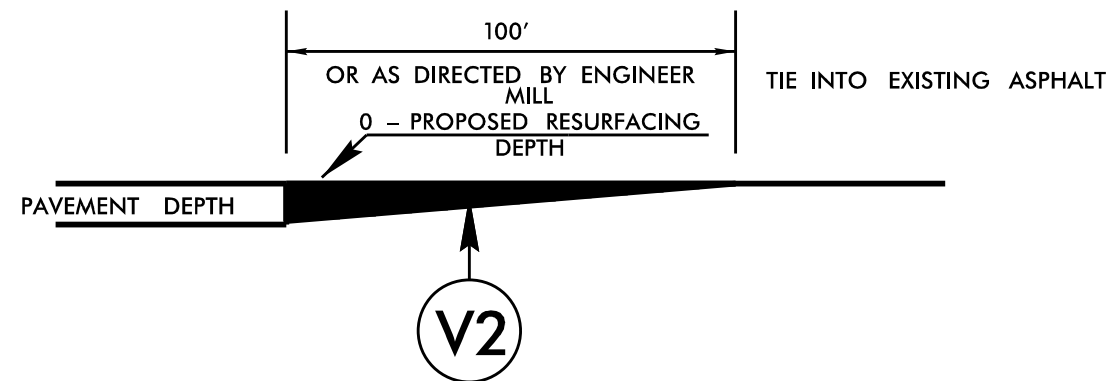


**TYPICAL SECTION #1**  
USE FROM MP 0.2 TO 0.36



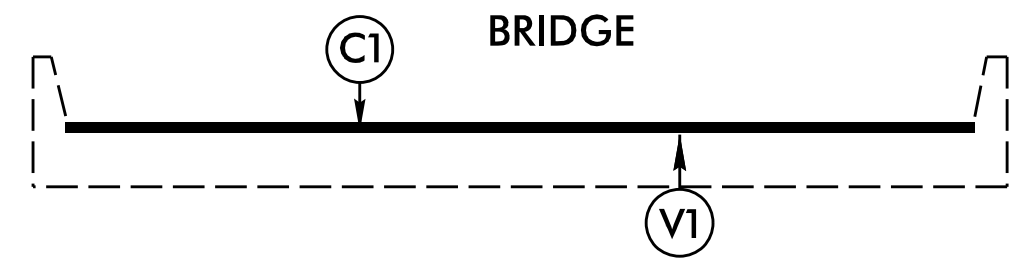
**TYPICAL SECTION #2**  
USE FROM MP 0.36 TO 3.62

| PAVEMENT SCHEDULE |   |
|-------------------|---|
| C1                | PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YARD |
| T1                | SHOULDER RECONSTRUCTION   |
| V1                | MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH  |
| V2                | INCIDENTAL MILLING  |



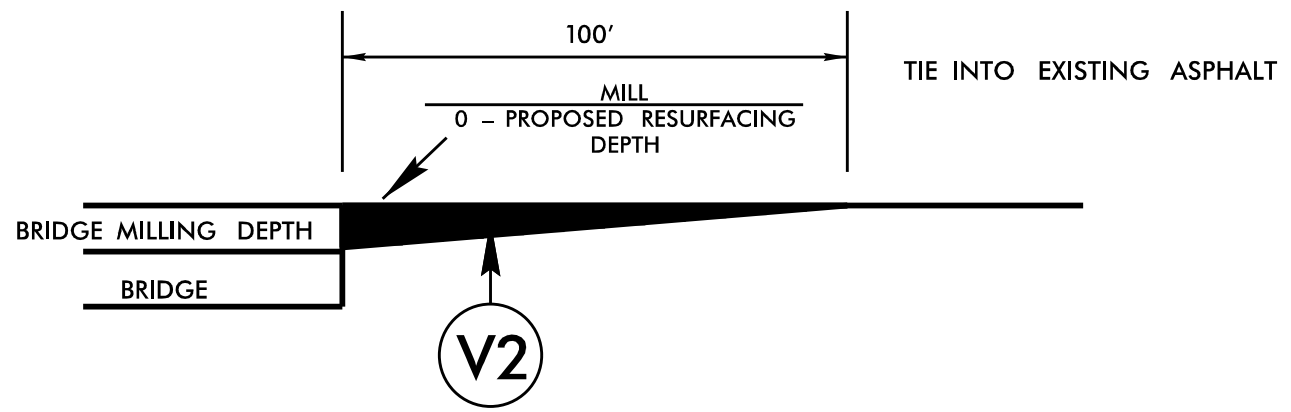
**DETAIL TO TIE INTO EXIST PAVEMENT**

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT HE WILL BE REQUIRED TO MILL THE EXISTING ASPHALT PAVEMENT TO ENSURE A PROPER TIE-IN WITH THE EXISTING SURFACE AT THE BEGINNING, END AND Y LINES OF EACH MAP TO BE RESURFACED WITH ASPHALT CONC SURFACE COURSE, TYPE S9.5C. THIS WILL BE PAID FOR AS INCIDENTAL MILLING.



**BRIDGE DETAIL**

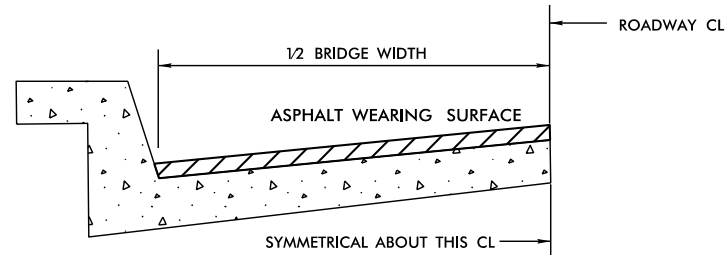
MILL 1-1/2" OFF EXISTING PAVEMENT  
SEE MAP FOR BRIDGE LOCATION.  
BRIDGE NUMBER 305 MAP 1.



**MILLING DETAIL AT BRIDGE APPROACHES**

WHERE BRIDGES WILL BE MILLED THEN RESURFACED. THIS WILL BE PAID FOR AS INCIDENTAL MILLING. USE AT BRIDGE NUMBER: BRIDGE NUMBER 305 MAP 1.

| PAVEMENT SCHEDULE |   |
|-------------------|---|
| C1                | PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YARD |
| T1                | SHOULDER RECONSTRUCTION   |
| V1                | MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH  |
| V2                | INCIDENTAL MILLING  |



**BRIDGE HALF TYPICAL SECTION**

FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN.

THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. THE MINIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1/2", S9.5B 1", S9.5C,D 1.5" - 2". ULTRA-THIN HOT MIX ASPHALT - TYPE A 3/4". ULTRA-THIN HOT MIX ASPHALT - TYPE B 5/8". ULTRA-THIN HOT MIX ASPHALT - TYPE C 1/2". THE MAXIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1", S9.5B 1.5", S9.5C,D 2". ULTRA-THIN HOT MIX ASPHALT - TYPE A 3/4", ULTRA-THIN HOT MIX ASPHALT - TYPE B 5/8", ULTRA-THIN HOT MIX ASPHALT - TYPE C 1/2".

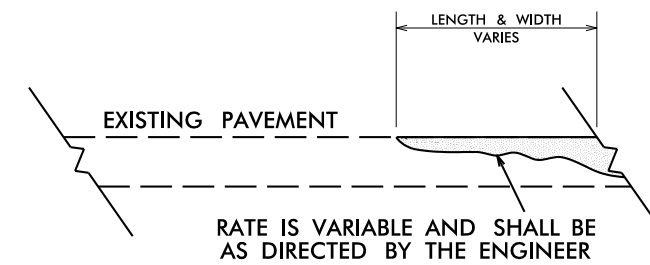
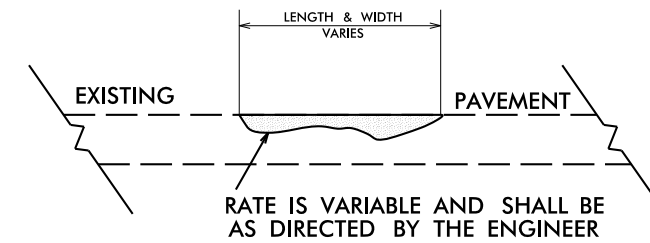
**NOTES**

ALL UNPAVED ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT. ALL PAVED S. R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.

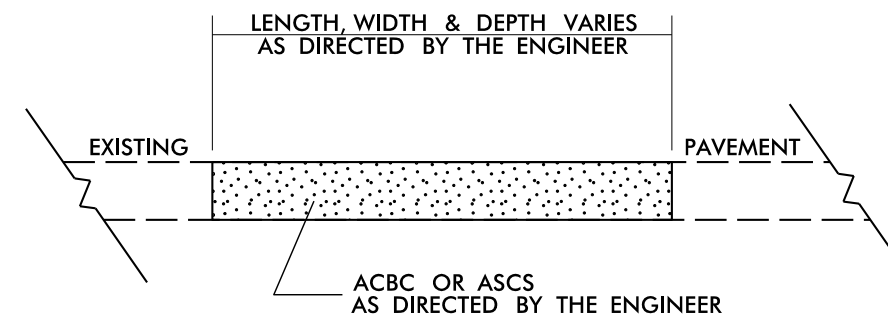
EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.

SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE INDICATED.

BRIDGES ARE TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.



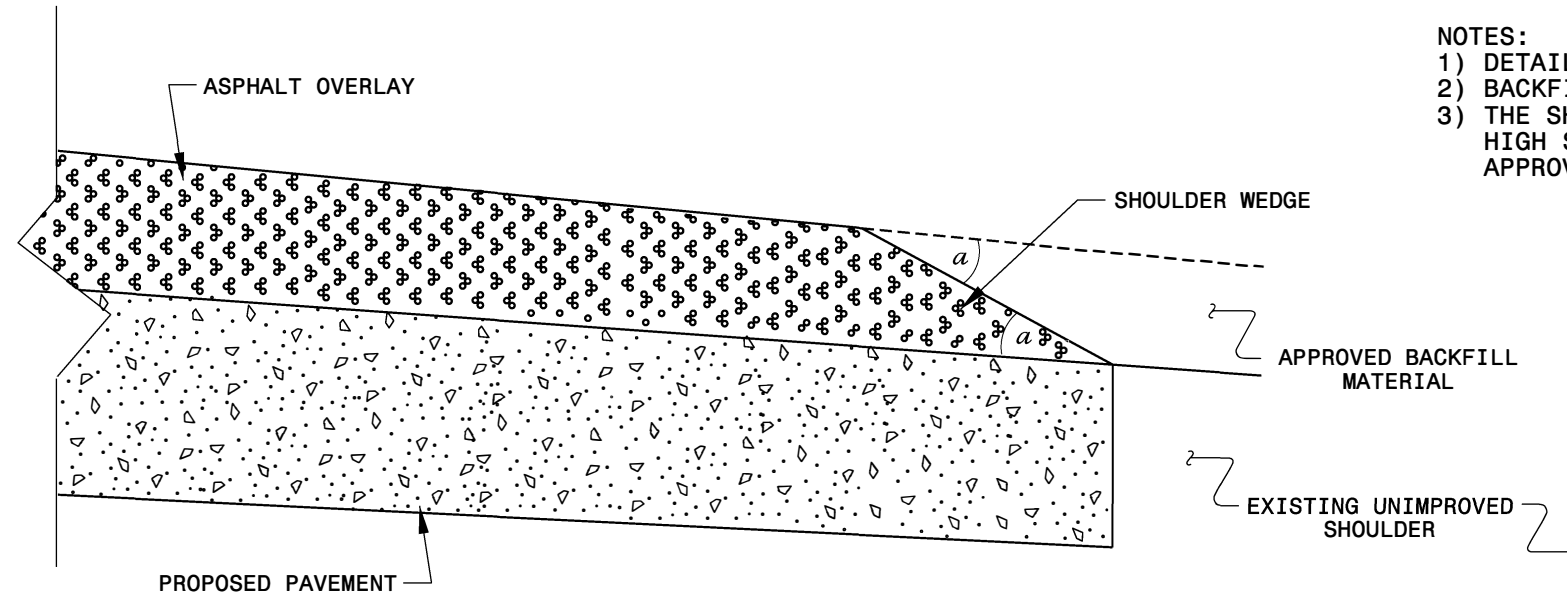
**DETAIL SHOWING METHOD OF WEDGING**



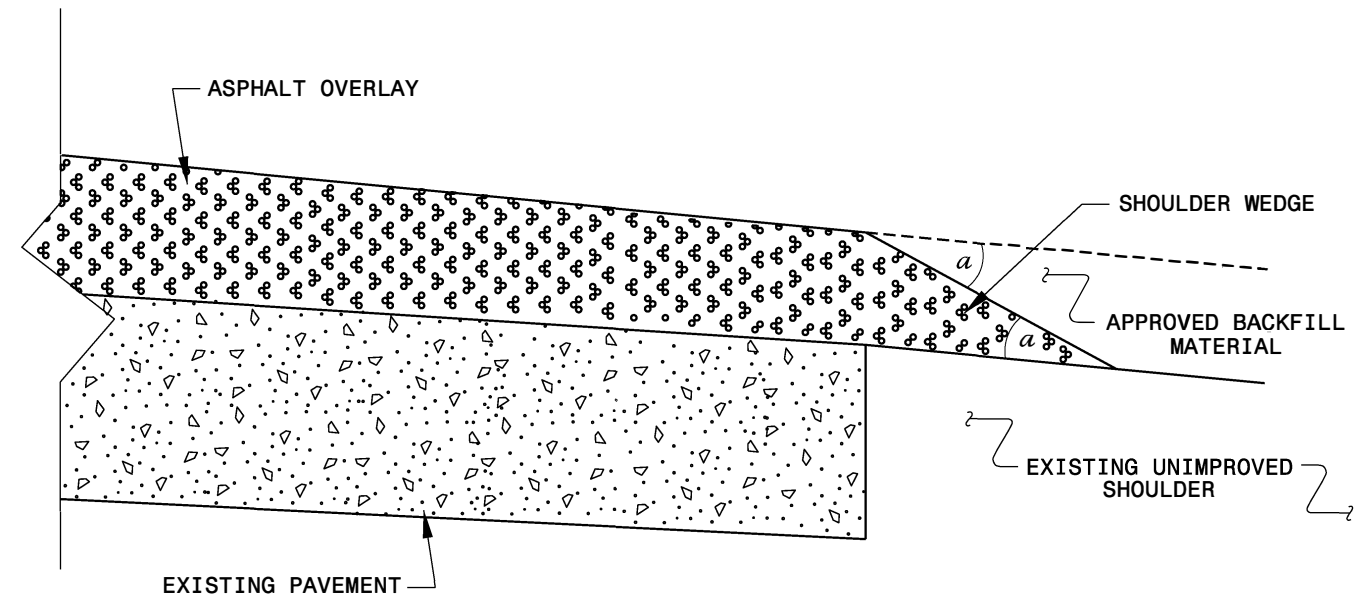
**PATCHING EXISTING PAVEMENT**

02-FEB-2023 11:00  
 C:\Users\Nextal\OneDrive\State of North Carolina\NCDOT - Division 13 - Resurfacing\2023 - Burke\03 - Let Preparation - CR\2023 Burke CR - DDC - pm1.dgn  
 6/2/99

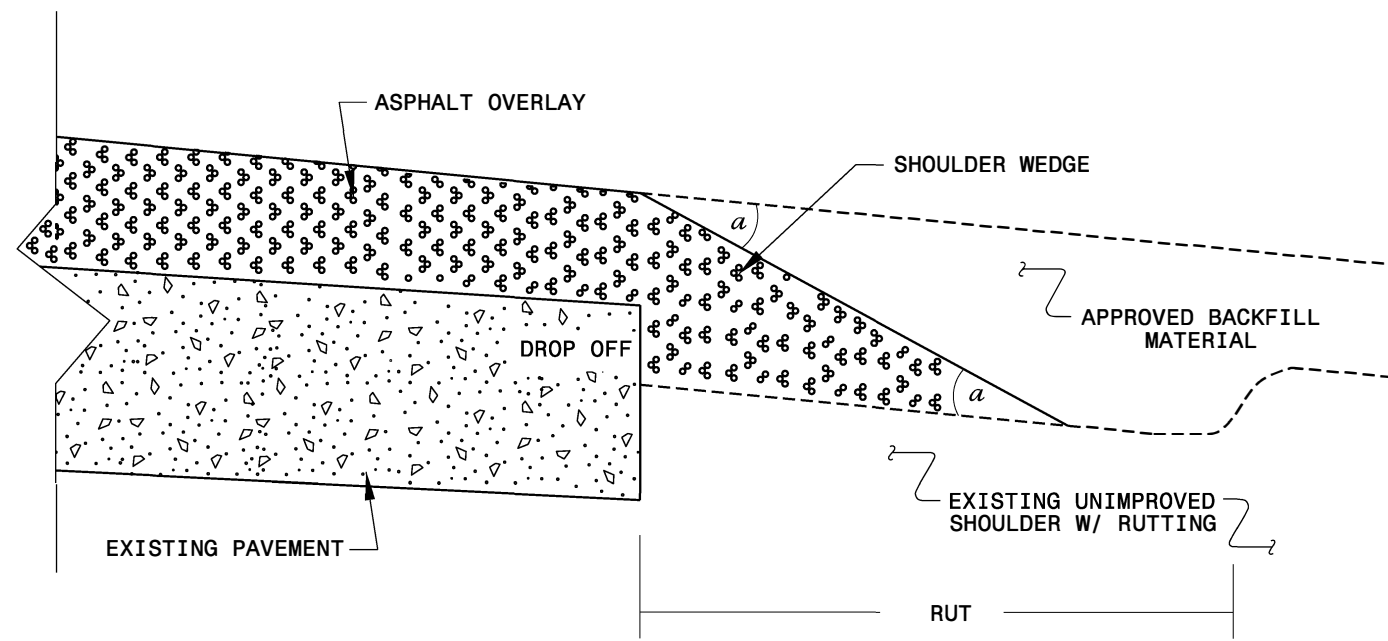
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
  - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



**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°



|  |               |
|--|---------------|
| <b>CONTRACT STANDARDS<br/>AND DEVELOPMENT UNIT</b>       |               |
| Office 919-707-6950 FAX 919-250-4119                     |               |
| <b>SHOULDER WEDGE<br/>DETAILS</b>                        |               |
| ORIGINAL BY: T. SPELL                                    | DATE: 7-19-11 |
| MODIFIED BY:   | DATE: 2/2/16  |
| CHECKED BY:  | DATE:         |
| FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn |               |

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

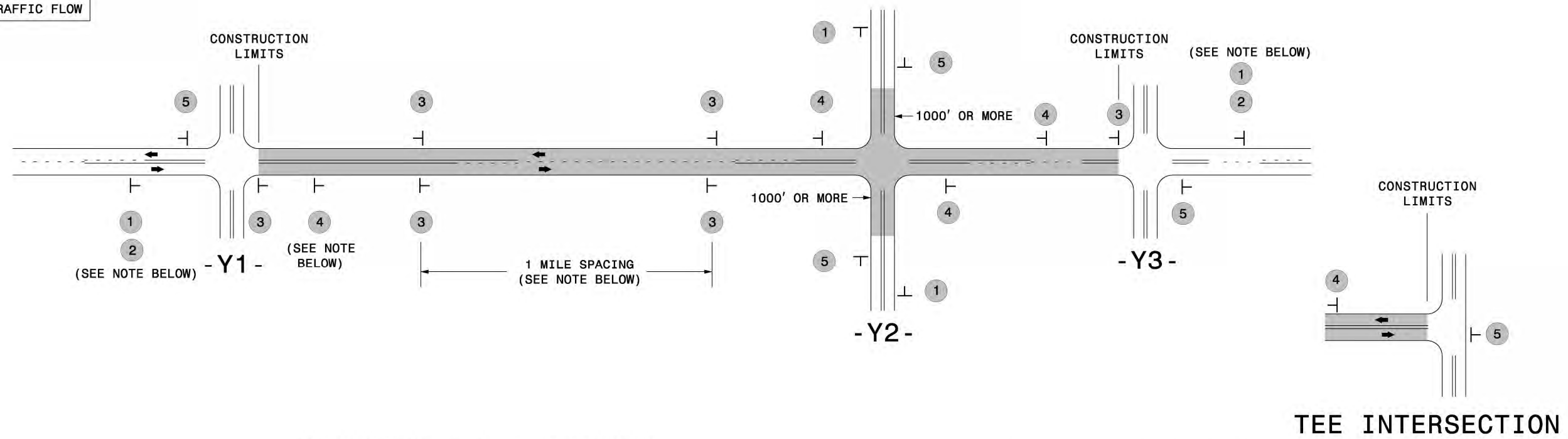
**SUMMARY OF QUANTITIES**

| PROJECT NO                                     | MAP NO | ROUTE                  | DESCRIPTION                   | TYP NO | BEGIN MP | END MP | LENGTH      | WIDTH       | 1220000000-E          | 1245000000-E            | 1260000000-E              | 1297000000-E                           | 1330000000-E       | 1523000000-E                            | 1524000000-E                | 1575000000-E                 | 1704000000-E               | 2830000000-N           | 2845000000-N                             | 2850000000-N                     | 4413000000-E                               | 4457000000-N              | 4688000000-E   |   | 4905100000-N   |               |  |
|--|--------|------------------------|-------------------------------|--------|----------|--------|-------------|-------------|-----------------------|-------------------------|---------------------------|--|--------------------|---|-----------------------------|------------------------------|----------------------------|------------------------|--|----------------------------------|--|---------------------------|--|---|--|---------------|--|
|  |        |                        |                               |        |          |        |             |             | INCIDENTAL STONE BASE | SHOULDER RECONSTRUCTION | AGGREGATE SHOULDER BORROW | MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH | INCIDENTAL MILLING | ASPHALT CONC SURFACE COURSE, TYPE S9.5C | LEVELING COURSE, TYPE S9.5C | ASPHALT BINDER FOR PLANT MIX | PATCHING EXISTING PAVEMENT | ADJUSTMENT OF MANHOLES | ADJUSTMENT OF METER BOXES OR VALVE BOXES | ADJUSTMENT OF OVERSIZED MANHOLES | WORK ZONE ADVANCE /GENERAL WARNING SIGNING | TEMPORARY TRAFFIC CONTROL | THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS) WHITE | THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS) YELLOW | NON-CAST IRON SNOWPLOWABLE PAVMENT MARKERS (DOUBLE YELLOW) |               |  |
|  |        |                        |                               |        |          |        | MI          | FT          | TON                   | SMI                     | TON                       | SY                                     | SY                 | TON                                     | TONS                        | TON                          | TON                        | EA                     | EA                                       | EA                               | SF   | LS                        | LF   | LF  | EA   |               |  |
| 2024CPT.13.15.20111                            | 1      | SR-2002 (RICEVILLE RD) | FROM US 70 TO PAVEMENT CHANGE | 1,2    | 0.20     | 3.62   | 3.42        | 21.50       | 10                    | 6.52                    | 848                       | 2,100                                  | 3,227              | 3,671                                   | 60                          | 247                          | 564                        | 5                      | 40                                       | 2                                | 383  | 1                         |  |   | 448  |               |  |
| <b>TOTAL FOR PROJ NO. 2024.CPT.13.15.20111</b> |        |                        |                               |        |          |        | <b>0.20</b> | <b>3.62</b> | <b>3.42</b>           | <b>10</b>               | <b>6.52</b>               | <b>848</b>                             | <b>2,100</b>       | <b>3,227</b>                            | <b>3,671</b>                | <b>60</b>                    | <b>247</b>                 | <b>564</b>             | <b>5</b>                                 | <b>40</b>                        | <b>2</b>                                   | <b>383</b>                | <b>1</b>   |   |  | <b>448</b>    |  |
| 45343.1FD8                                     | 2      | SR-2002 (RICEVILLE RD) | FROM US 70 TO PAVEMENT CHANGE | 1,2    | 0.20     | 3.62   | 3.42        | 21.50       |                       |                         |                           |  |                    |   |                             |                              |                            |                        |  |                                  |  |                           |  |   |  |               |  |
| <b>TOTAL FOR PROJ NO. 45343.1FD8</b>           |        |                        |                               |        |          |        | <b>0.20</b> | <b>3.62</b> | <b>3.42</b>           |                         |                           |  |                    |   |                             |                              |                            |                        |  |                                  |  |                           |  |   |  |               |  |
| <b>GRAND TOTAL</b>                             |        |                        |                               |        |          |        | <b>3.42</b> |             |                       | <b>10</b>               | <b>6.52</b>               | <b>848</b>                             | <b>2,100</b>       | <b>3,227</b>                            | <b>3,671</b>                | <b>60</b>                    | <b>247</b>                 | <b>564</b>             | <b>5</b>                                 | <b>40</b>                        | <b>2</b>                                   | <b>383</b>                | <b>1</b>   | <b>36,115</b>   | <b>36,115</b>  | <b>448</b>    |  |
|  |        |                        |                               |        |          |        |             |             |                       |                         |                           |  |                    |   |                             |                              |                            |                        |  |                                  |  |                           |  |   |  | <b>72,230</b> |  |

\* NOTE - ALL MAPS, COUNTY = BUNCOMBE, LANES= 2, LANE TYPE = 2WU, FINAL SURFACE TESTING REQUIRED = NO, WARM MIX ASPHALT REQUIRED = NO.

# SIGNING FOR RESURFACING PROJECTS

**LEGEND**  
 ┆ STATIONARY SIGN  
 ← DIRECTION OF TRAFFIC FLOW



## MAINLINE (-L-) SIGNING

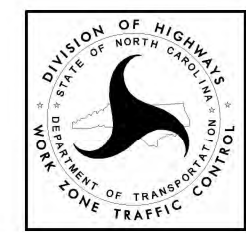
## -Y- LINE SIGNING

|   |   |  |   |  |
|---|---|--|---|--|
| SIGNING NOTES AND PLACEMENT PER DIRECTION | 1 |  | PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.  | <p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> <li>LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>SUBDIVISION ROADS</li> <li>DEAD END ROADS</li> </ol> <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING 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;"> <br/>           PLACED 500' IN ADVANCE OF FLAGGER.         </div> <div style="text-align: center;"> <br/>           PLACED 250' IN ADVANCE OF FLAGGER.         </div> </div> |
|   | 2 |  | #2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)   |  |
|   | 3 |  | - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.<br>- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.   |  |
|   | 4 |  | - THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS.<br>- DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.<br>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.<br>- 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.<br>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.<br>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE. |  |
|   | 5 |  | PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.   |  |

THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

**MAPS LESS THAN 2 MILES**

FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



**ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING**

5/15/2017 S:\T\1315\ZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing\_AdvWarn\_2Ln.dgn User:keads