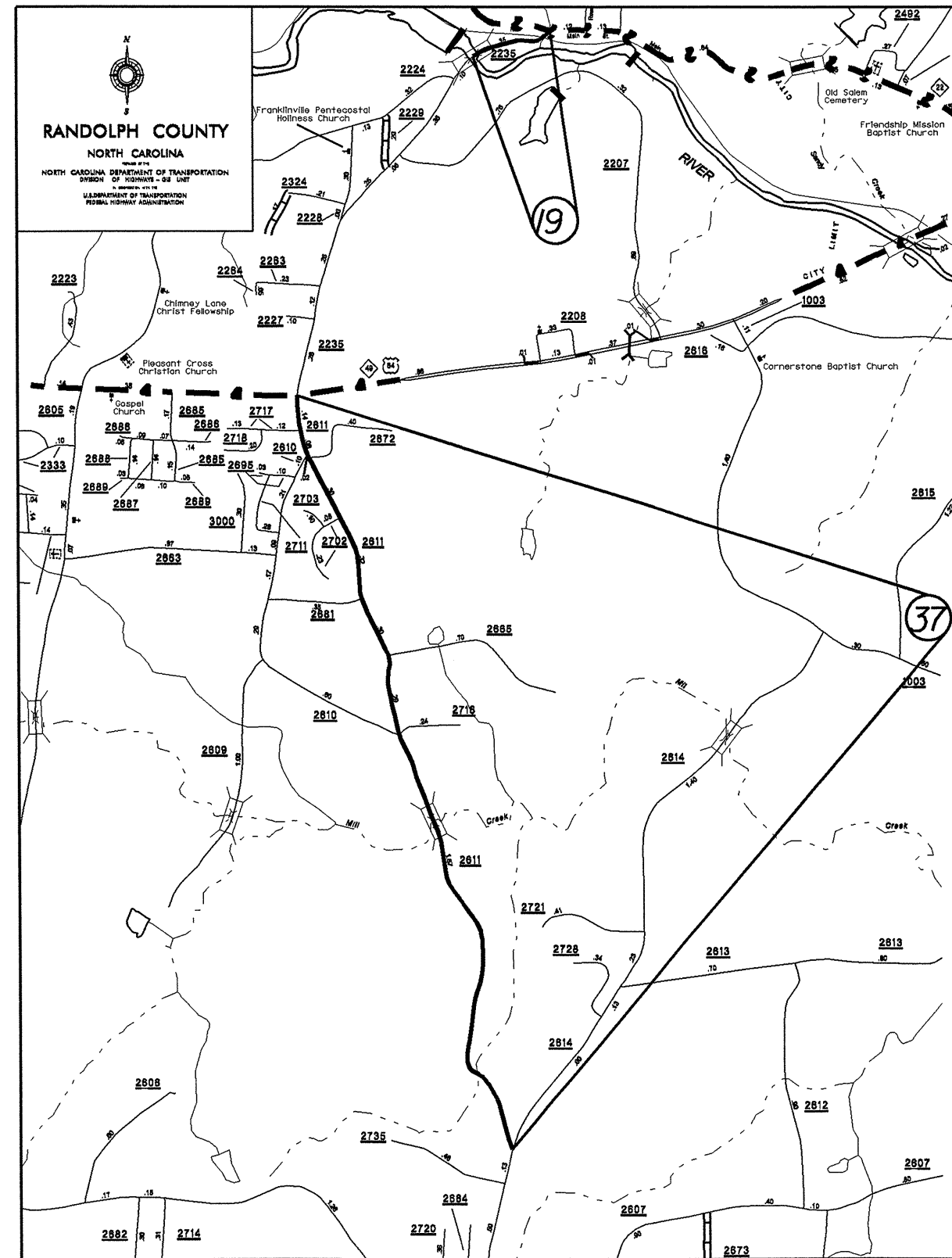
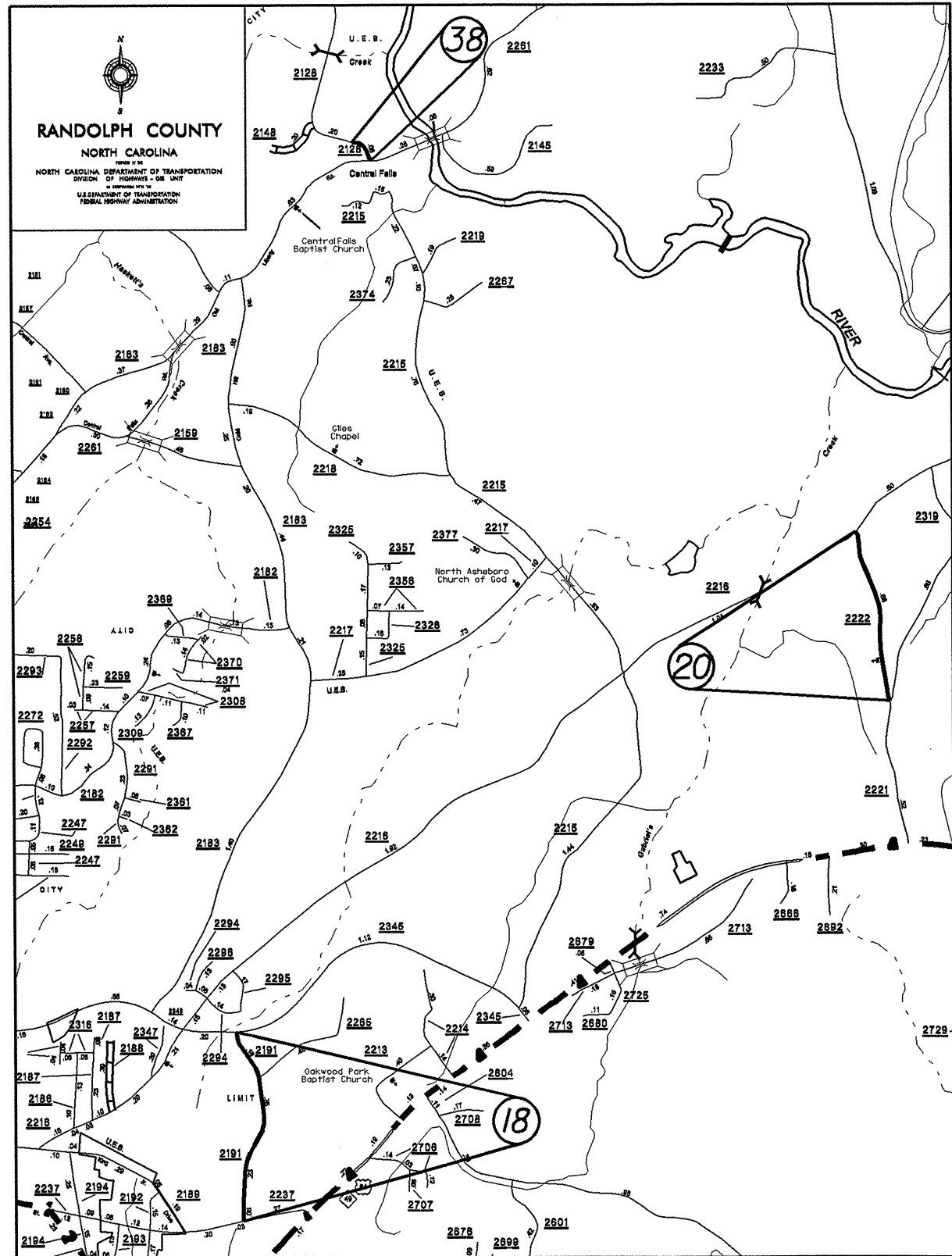
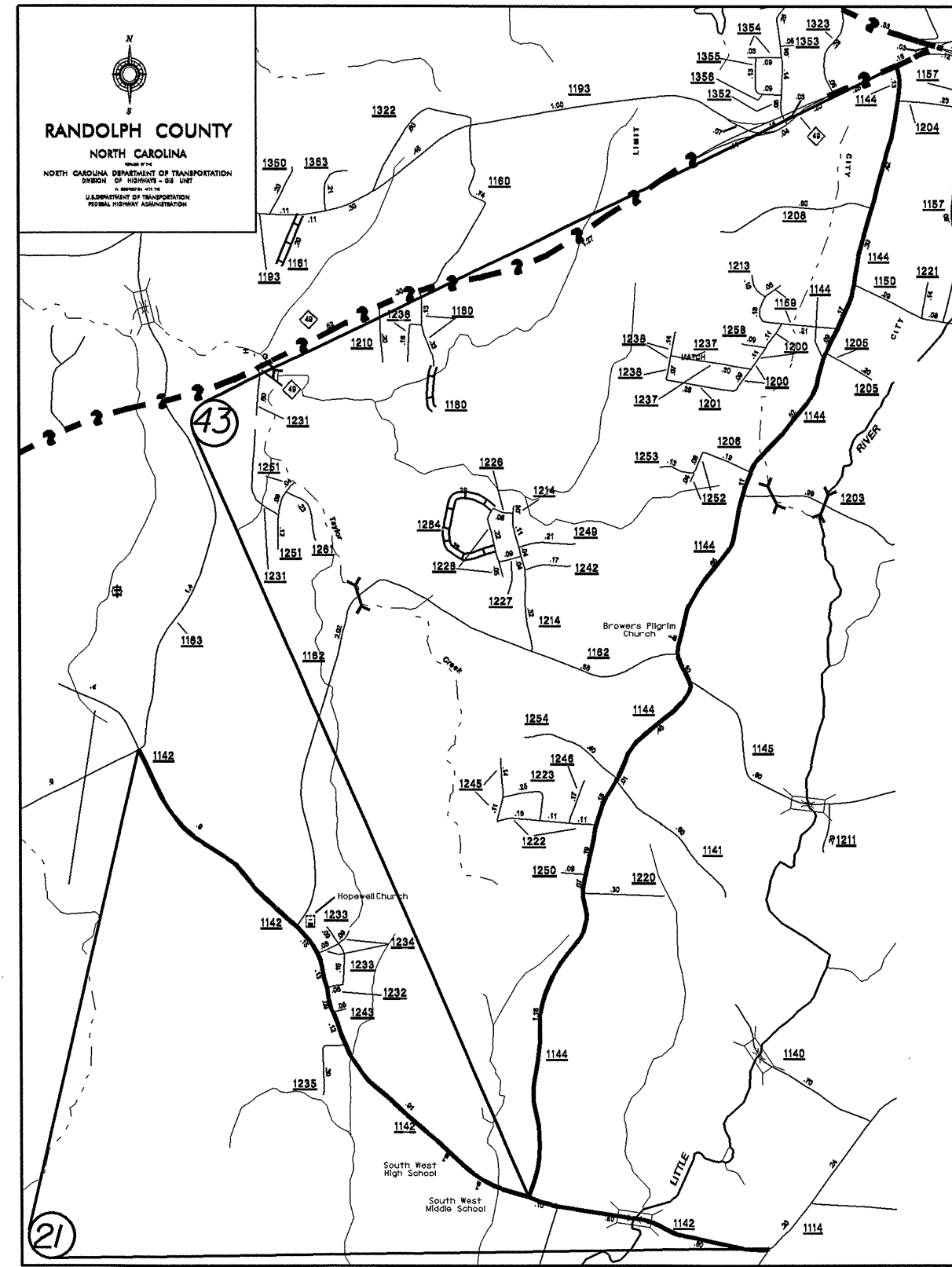
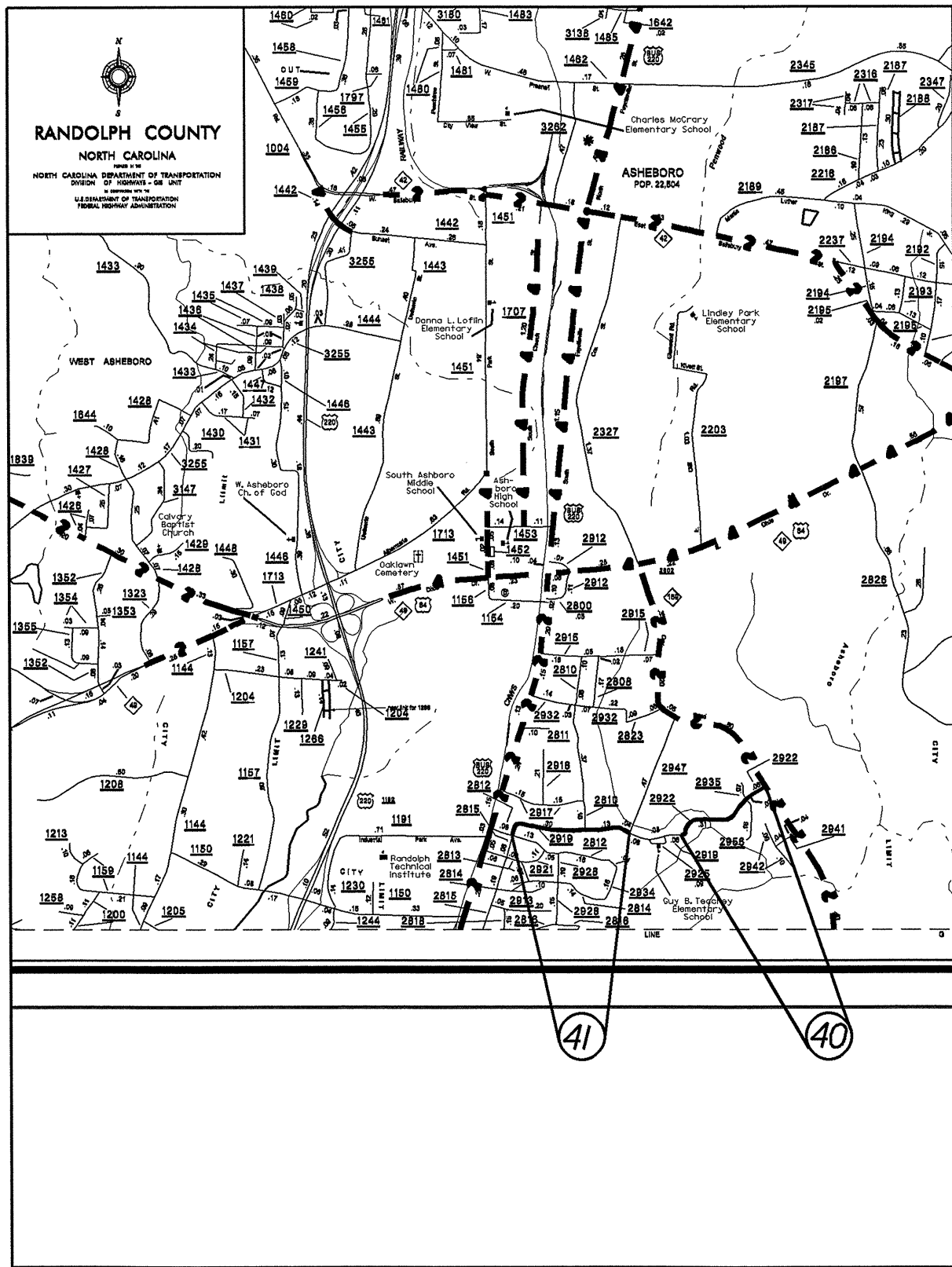


22-NOV-2010 08:55  
 C:\Users\jgordon\Documents\2011\div8-distl-res-maps-Rand.dgn  
 040397



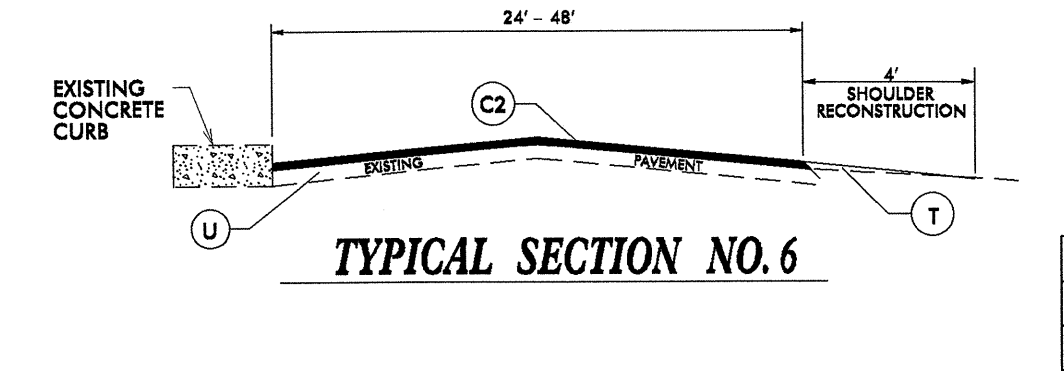
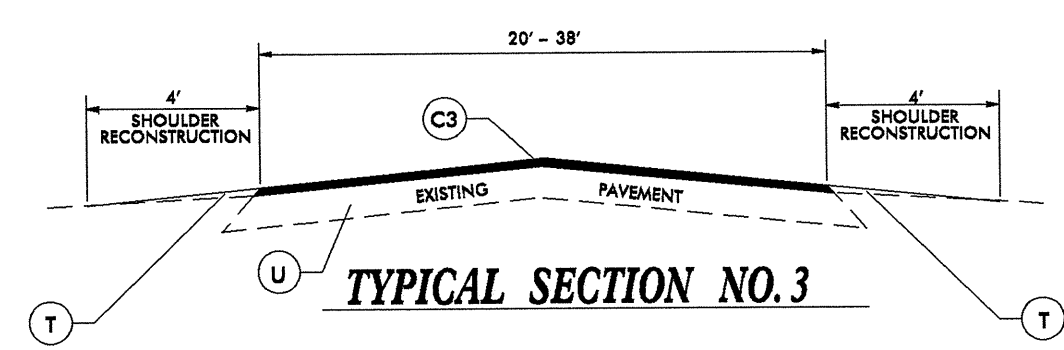
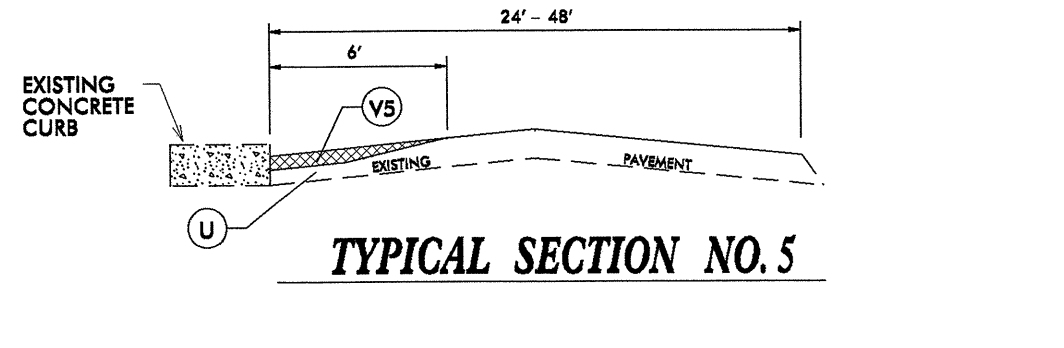
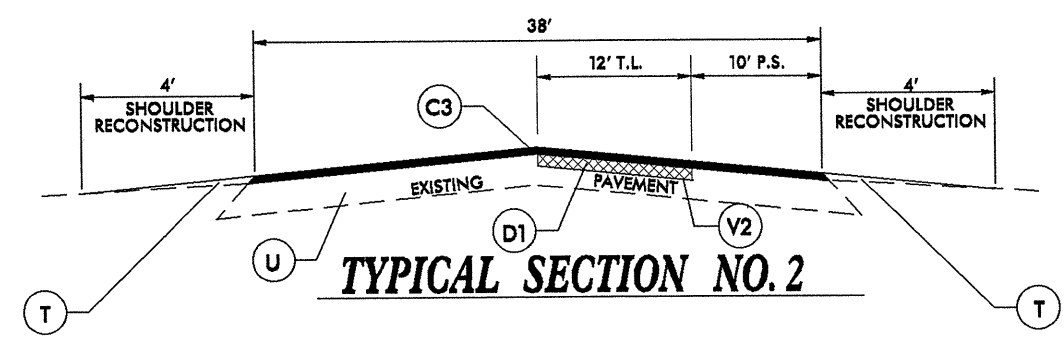
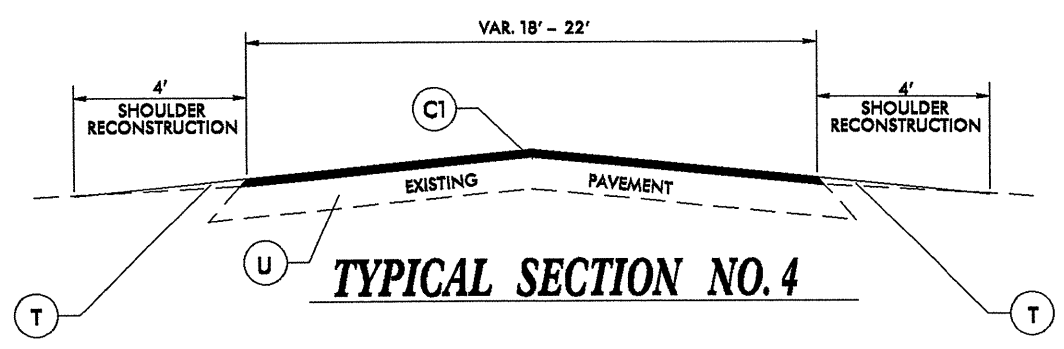
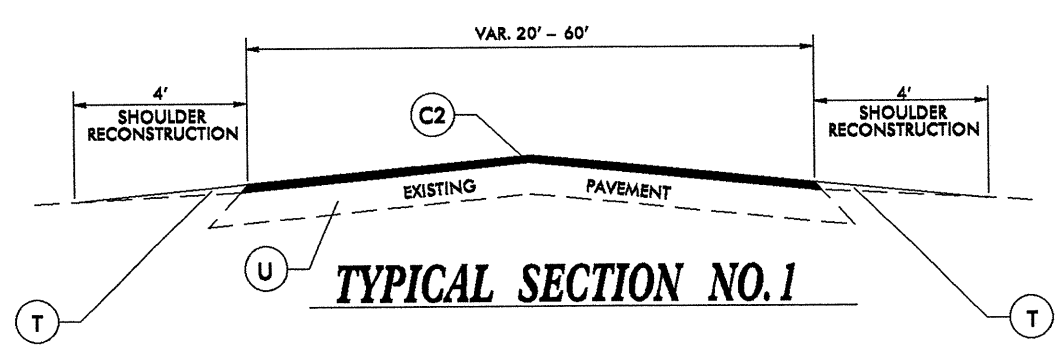












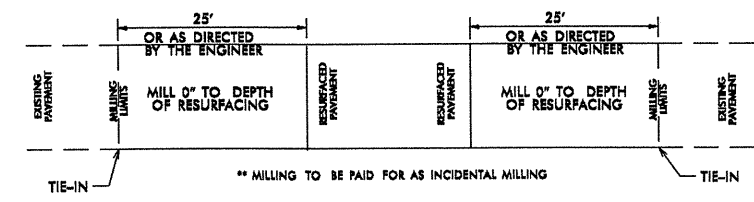
**NOTE:**  
USE THIS TYPICAL FOR RAMP RESURFACING ON MAPS #2, 3, 7, & 8.

**2006 ROADWAY ENGLISH STANDARD DRAWINGS**

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated July 18, 2006 are applicable to this project and by reference hereby are considered a part of these plans:

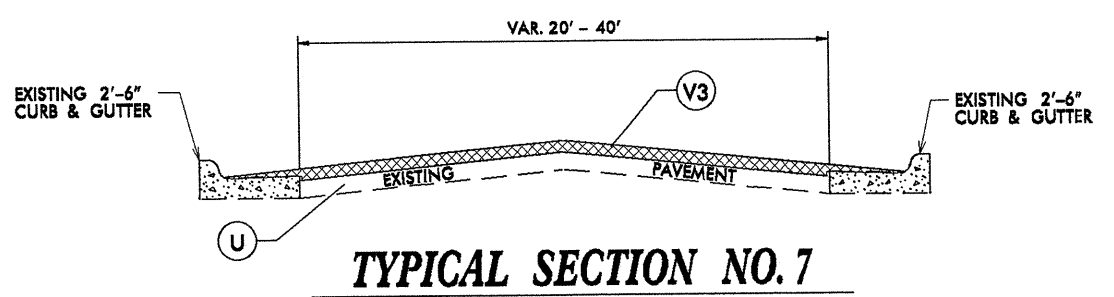
STD. NO. TITLE  
DIVISION 6 - ASPHALT BASES AND PAVEMENTS  
665.01 Milled Rumble Strips - Asphalt Pavements

EEF. 07-18-06  
REV. 01-02-07

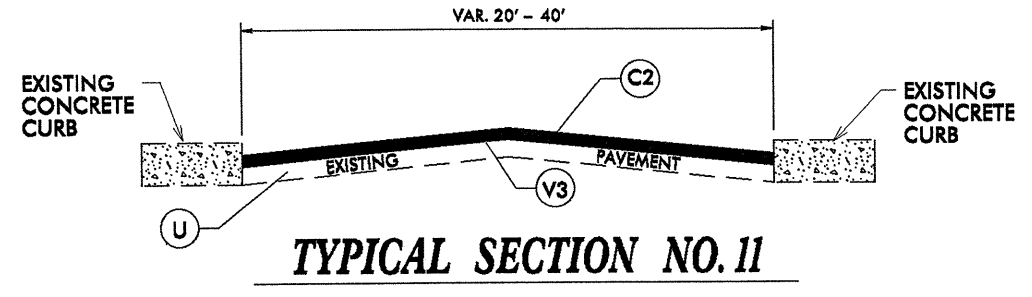


| PAVEMENT SCHEDULE |   |
|-------------------|---|
| C1                | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.             |
| C2                | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.              |
| C3                | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.              |
| C4                | PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN TWO LAYERS. |
| D1                | PROP. APPROX. 2.5" ASPHALT CONCRETE SURFACE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.             |
| D2                | PROP. APPROX. 3" ASPHALT CONCRETE BINDER COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.                |
| E1                | PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.                   |
| T                 | EARTH MATERIAL.   |
| U                 | EXISTING PAVEMENT.  |
| V1                | MILLING 1.5" IN DEPTH.  |
| V2                | MILLING 2.5" IN DEPTH.  |
| V3                | MILLING 3" IN DEPTH.  |
| V4                | MILLING 5" IN DEPTH.  |
| V5                | MILLING 0" TO 3" IN DEPTH.  |

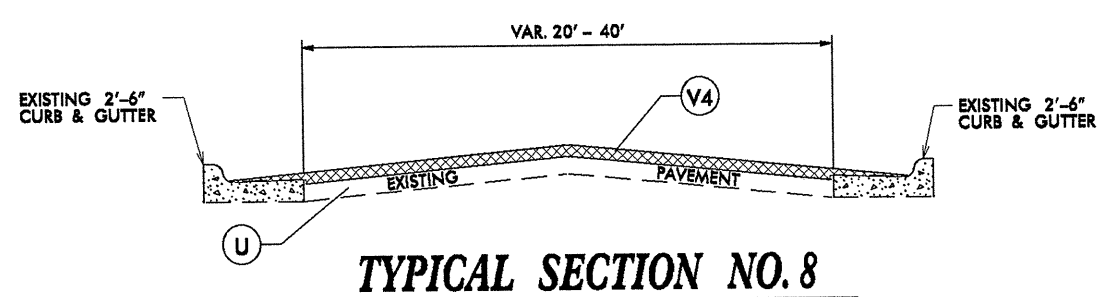
07-DEC-2010 09:45 jec23.10761.15-ando1.ph\Revised\2011.div8.dwt\res\_tjy-rand.mp.dgn



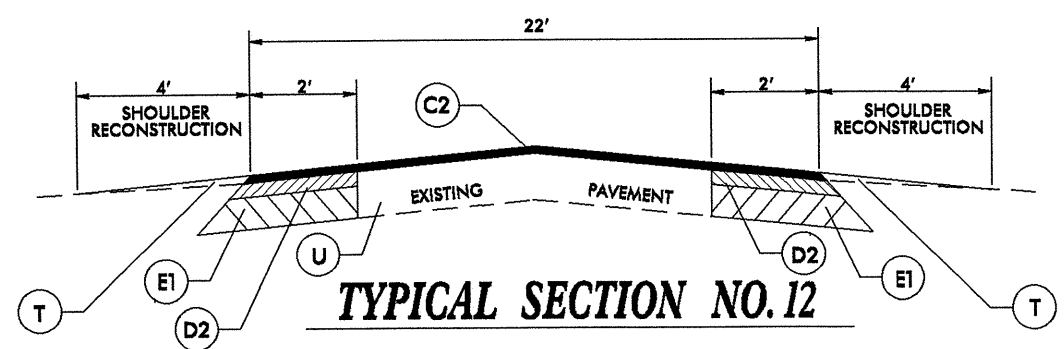
**TYPICAL SECTION NO. 7**



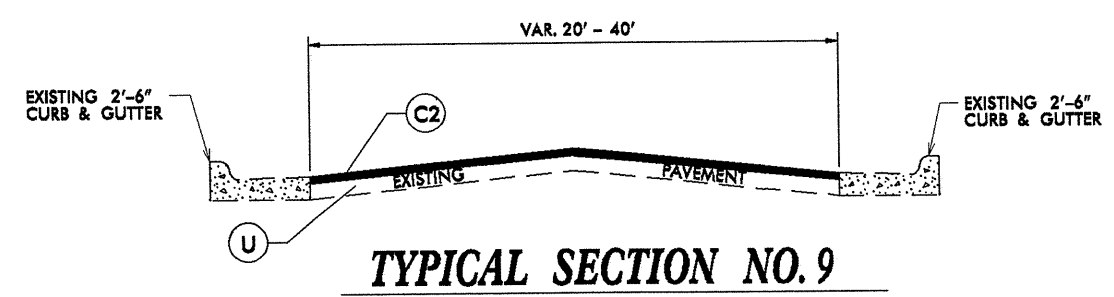
**TYPICAL SECTION NO. 11**



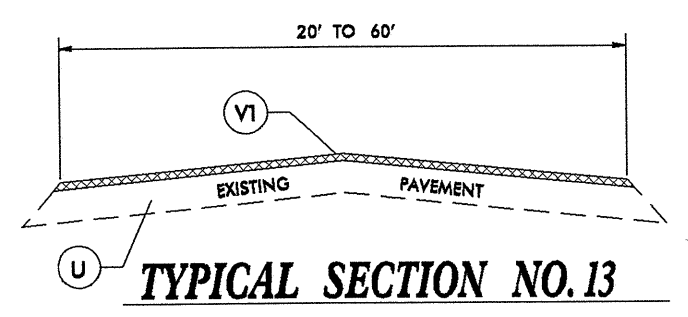
**TYPICAL SECTION NO. 8**



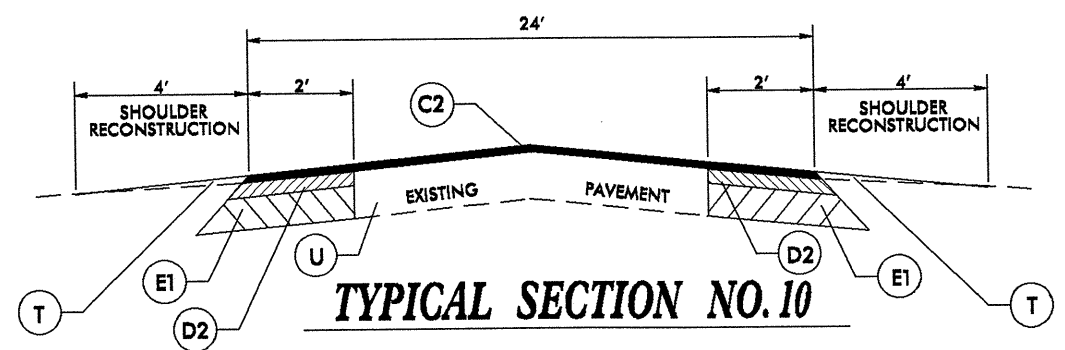
**TYPICAL SECTION NO. 12**



**TYPICAL SECTION NO. 9**



**TYPICAL SECTION NO. 13**



**TYPICAL SECTION NO. 10**

| PAVEMENT SCHEDULE |   |
|-------------------|---|
| C1                | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.             |
| C2                | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.              |
| C3                | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.              |
| C4                | PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN TWO LAYERS. |
| D1                | PROP. APPROX. 2.5" ASPHALT CONCRETE SURFACE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.             |
| D2                | PROP. APPROX. 3" ASPHALT CONCRETE BINDER COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.                |
| E1                | PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.                   |
| T                 | EARTH MATERIAL.   |
| U                 | EXISTING PAVEMENT.  |
| V1                | MILLING 1.5" IN DEPTH.  |
| V2                | MILLING 2.5" IN DEPTH.  |
| V3                | MILLING 3" IN DEPTH.  |
| V4                | MILLING 5" IN DEPTH.  |
| V5                | MILLING 0" TO 3" IN DEPTH.  |

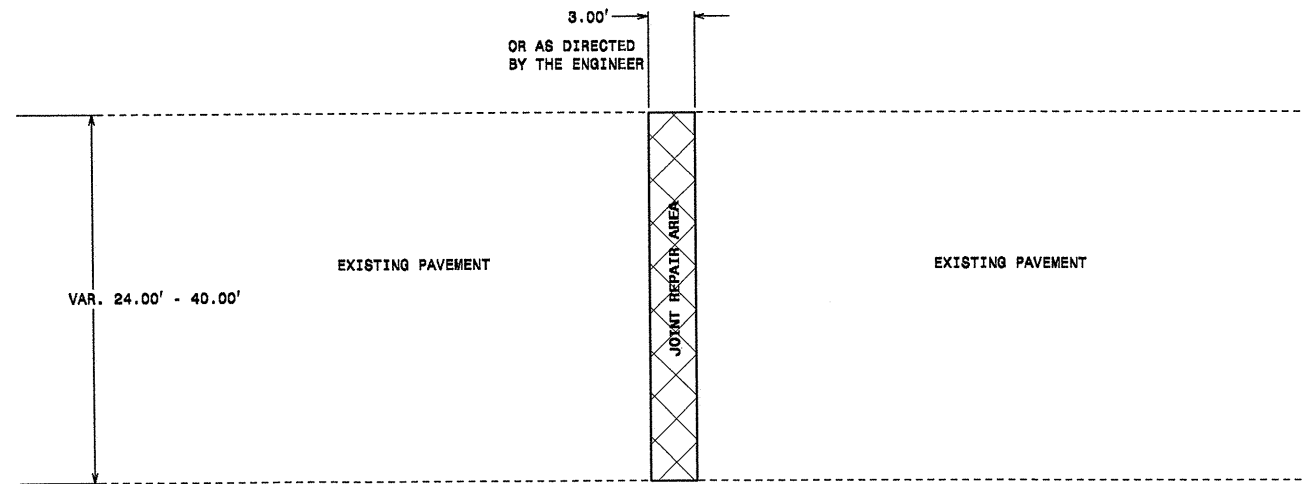
07-DEC-2010 09:45  
 J:\GIS\Projects\1076115\1076115-andoiph\Revised\2011\div8\dist1\res\_tjg\_rond.mp.dgn  
 040397

10/26/98

REVISIONS

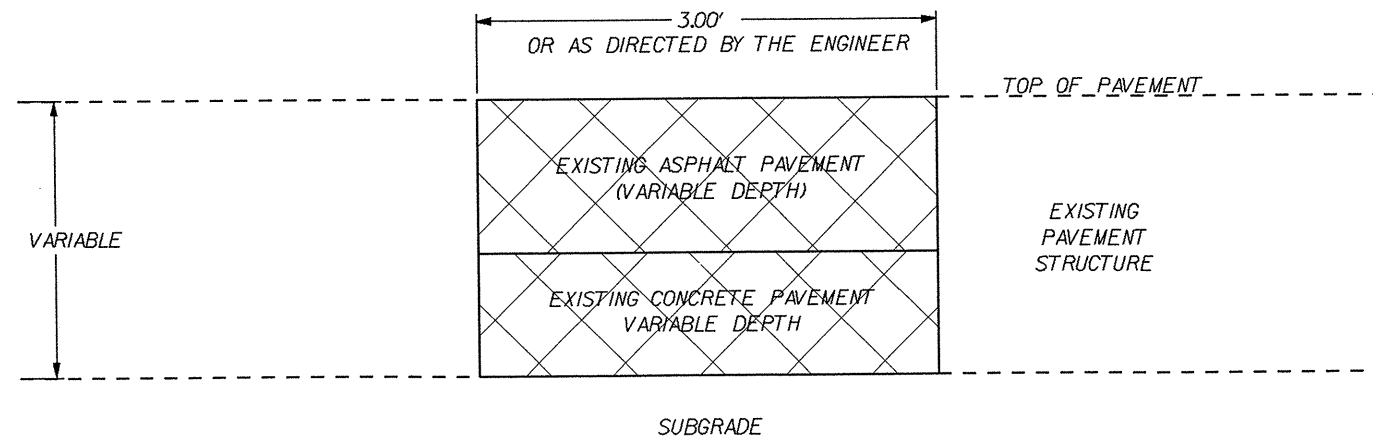
# JOINT REPAIR DETAIL

| JOINT SCHEDULE |          |
|----------------|----------|
| MAP            | # JOINTS |
| 1              | 4        |
| 10             | 4        |
| 11             | 6        |
| 23             | 4        |
|                |          |
|                |          |
|                |          |
|                |          |
|                |          |
|                |          |
|                |          |
|                |          |
|                |          |
|                |          |



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

### CROSS-SECTION



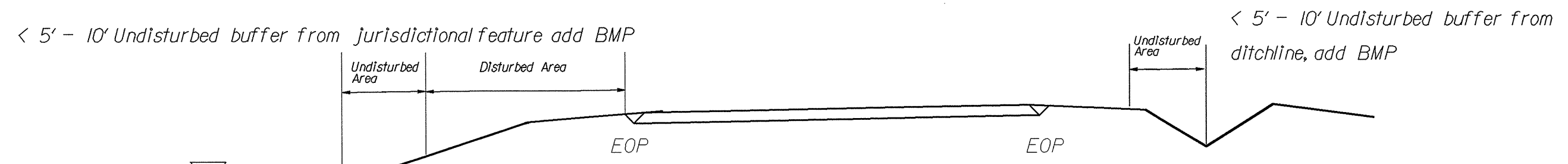
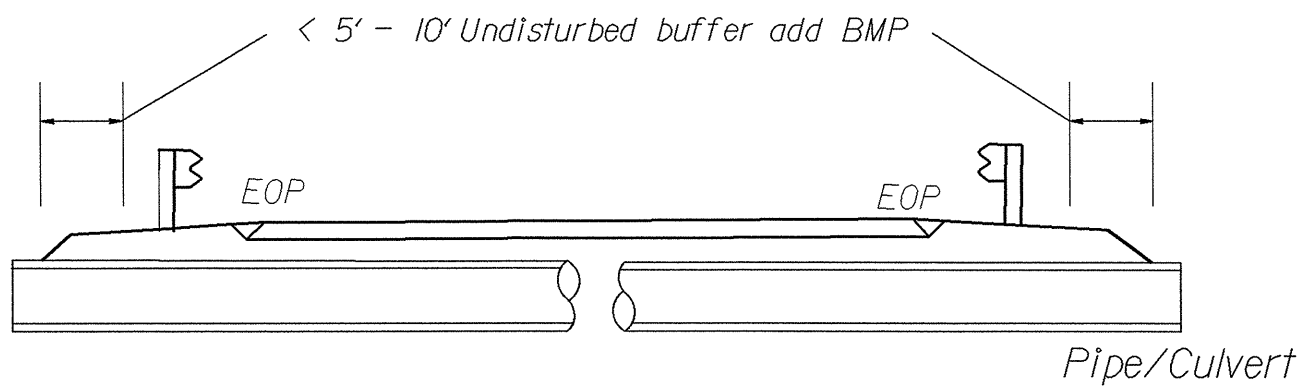
**NOTE:**  
 REMOVE ASPHALT AND CONCRETE AT JOINT LOCATIONS AS DIRECTED BY THE ENGINEER (BY SAWING CLEAN JOINTS).  
 REMOVE A TOTAL WIDTH OF 3' (APPROX. 1.5' EACH SIDE OF JOINT).  
 REMOVE AND REPLACE WITH ASPHALT CONCRETE BASE COURSE, TYPE B25.OB.

07-DEC-2010 09:29  
 C:\Program Files\Autodesk\AutoCAD 2010\AutoCAD 2010\acad.dwg  
 8:\cr-10761.15-randolph\Revised\JointRepair-typ2.dgn

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

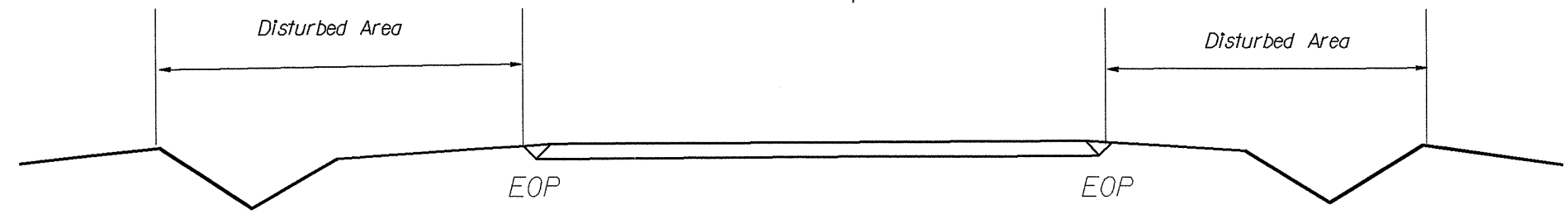
# EROSION CONTROL DETAIL

BMP Options: Wattle or Silt Fence

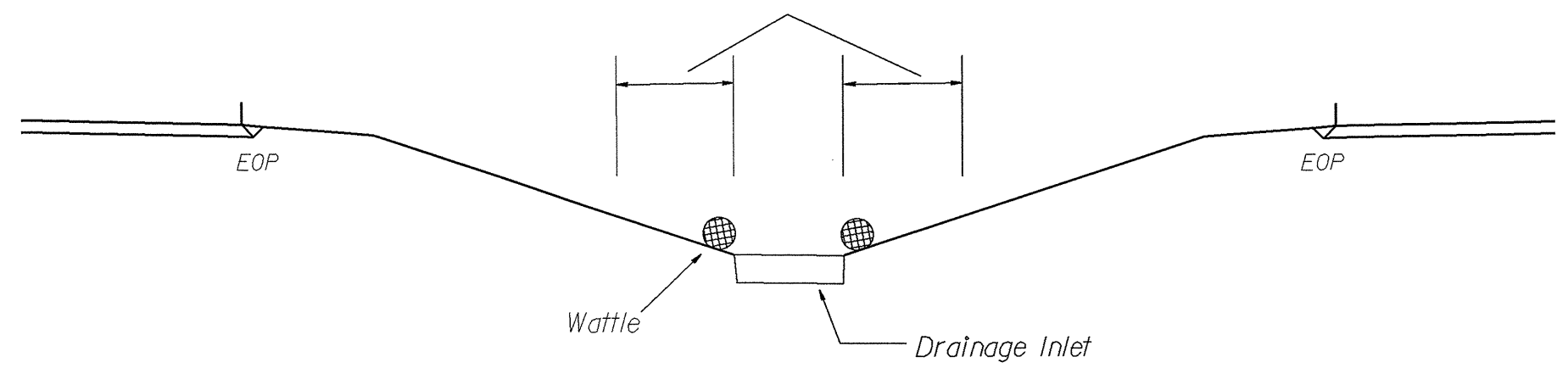


Jurisdictional Feature

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



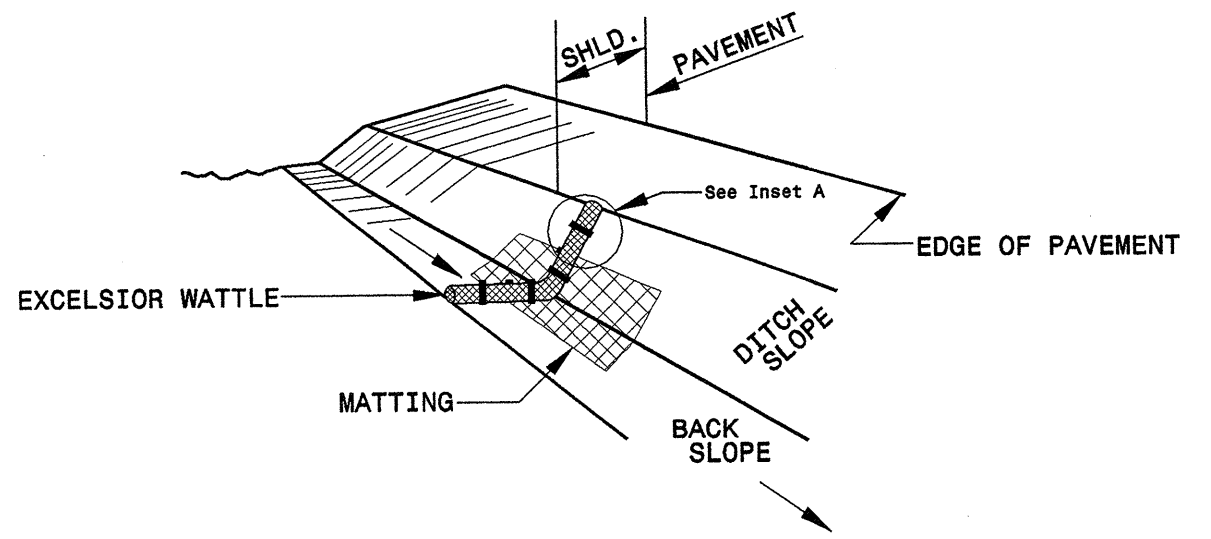
< 5' - 10' Undisturbed buffer from inlet, add wattle



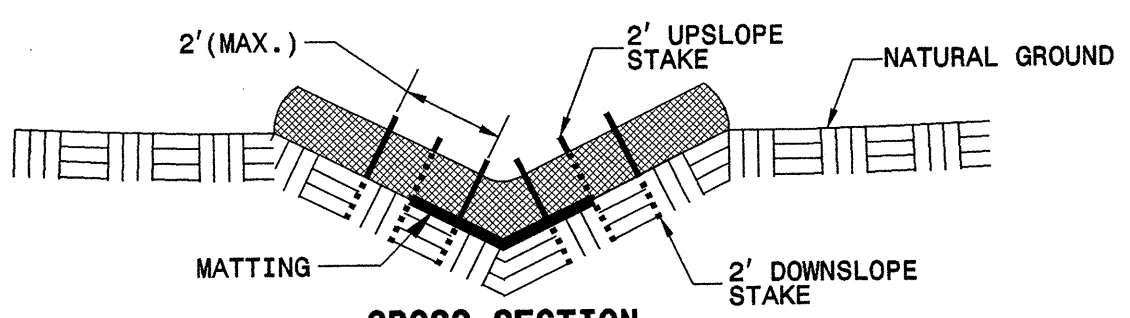
NOT TO SCALE

|  |                        |
|--|------------------------|
| PROJECT REFERENCE NO.<br><b>SCR. 10761.15, etc</b> | SHEET NO.<br><b>14</b> |
| RW SHEET NO.                                       |                        |
| ROADWAY DESIGN ENGINEER                            | HYDRAULICS ENGINEER    |

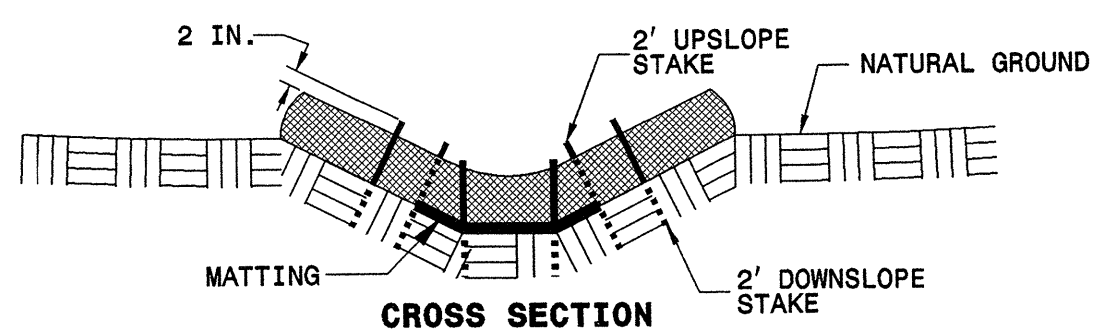
# WATTLE DETAIL



**ISOMETRIC VIEW**

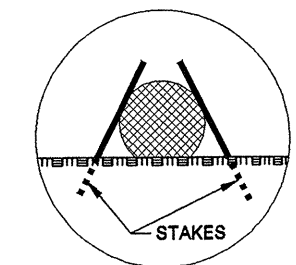


**CROSS SECTION VEE DITCH**

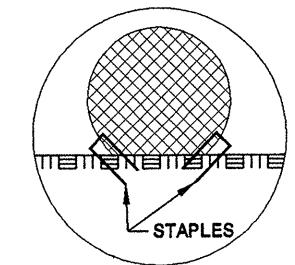


**CROSS SECTION TRAPEZOIDAL DITCH**

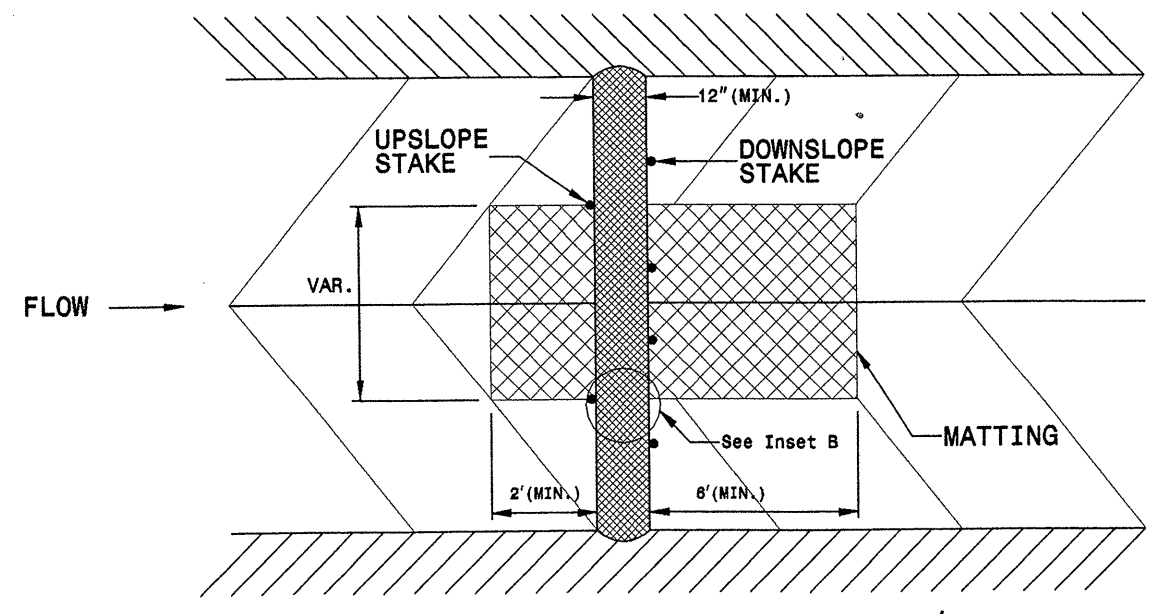
- NOTES:**
- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
  - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
  - ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
  - INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 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.



**INSET A**



**INSET B**



**TOP VIEW**

|                            |           |           |
|----------------------------|-----------|-----------|
| PROJECT NO.                | SHEET NO. | TOTAL NO. |
| 8CR.10761.15, 8CR.20761.15 | 15        | 18        |

## SUMMARY OF QUANTITIES

| PROJECT NO                      | COUNTY   | MAP NO | ROUTE     | DESCRIPTION                    | TYP | FINAL SURFACE TESTING REQUIRED | LENGTH | WIDTH | BORROW | INCIDENTAL STONE BASE | SHOULDER RECONSTRUCTION | 2.5" MILLING | 3" MILLING | 5" MILLING | 1 1/2" MILLING | 0" TO 3" MILLING | INCIDENTAL MILLING | BASE COURSE, B25.0B | INTERMEDIATE COURSE, I19.0B | INTERMEDIATE COURSE, I19.0C | SURFACE COURSE, S9.5B | SURFACE COURSE, S9.5C | SURFACE COURSE, SF9.5A |
|---------------------------------|----------|--------|-----------|--------------------------------|-----|--------------------------------|--------|-------|--------|-----------------------|-------------------------|--------------|------------|------------|----------------|------------------|--------------------|---------------------|-----------------------------|-----------------------------|-----------------------|-----------------------|------------------------|
| NO                              |          | NO     |           |                                | NO  |                                | MI     | FT    | CY     | TONS                  | SMI                     | SY           | SY         | SY         | SY             | SY               | SY                 | TONS                | TONS                        | TONS                        | TONS                  | TONS                  | TON                    |
| 8CR.10761.15                    | Randolph | 1      | US 311    | FROM SR 1571 TO SR 1747        | 1   | NO                             | 0.27   | 36    | 11     | 27                    | 0.54                    |              |            |            |                |                  | 200                |                     |                             |                             | 485                   |                       |                        |
| TOTAL FOR MAP NO. 1             |          |        |           |                                |     |                                | 0.27   |       | 11     | 27                    | 0.54                    |              |            |            |                |                  | 200                |                     |                             |                             | 485                   |                       |                        |
|                                 |          | 2      | US 220 SB | FROM GUILFORD CO TO US 220 BUS | 3   | NO                             | 2      | 38    | 80     | 100                   | 4.00                    |              |            |            |                |                  | 215                |                     |                             |                             |                       | 4,055                 |                        |
| TOTAL FOR MAP NO. 2             |          |        |           |                                |     |                                | 2      |       | 80     | 100                   | 4.00                    |              |            |            |                |                  | 215                |                     |                             |                             |                       | 4,055                 |                        |
|                                 |          | 3      | US 220 SB | FROM US 220 BUS TO MM 3.37     | 2,3 | NO                             | 1.38   | 38    | 55     | 100                   | 2.76                    | 9,715        |            |            |                |                  | 215                |                     |                             | 1,455                       |                       | 2,835                 |                        |
| TOTAL FOR MAP NO. 3             |          |        |           |                                |     |                                | 1.38   |       | 55     | 100                   | 2.76                    | 9,715        |            |            |                |                  | 215                |                     |                             | 1,455                       |                       | 2,835                 |                        |
|                                 |          | 4      | NC 22     | FROM ECL RAMSEUR TO SR 2615    | 1   | NO                             | 0.85   | 20    | 34     | 85                    | 1.70                    |              |            |            |                |                  | 115                |                     |                             |                             | 990                   |                       |                        |
| TOTAL FOR MAP NO. 4             |          |        |           |                                |     |                                | 0.85   |       | 34     | 85                    | 1.70                    |              |            |            |                |                  | 115                |                     |                             |                             |                       | 990                   |                        |
|                                 |          | 5      | NC 22     | FROM MOFFITT ST TO US 64       | 5,6 | NO                             | 0.1    | 24    | 2      | 5                     | 0.10                    |              |            |            |                | 355              |                    |                     |                             |                             | 125                   |                       |                        |
| TOTAL FOR MAP NO. 5             |          |        |           |                                |     |                                | 0.1    |       | 2      | 5                     | 0.10                    |              |            |            |                | 355              |                    |                     |                             |                             |                       | 125                   |                        |
|                                 |          | 6      | NC 22     | FROM SR 2615 TO MOFFITT ST     | 11  | NO                             | 0.1    | 22    |        |                       |                         |              | 1,295      |            |                |                  |                    |                     |                             |                             | 145                   |                       |                        |
| TOTAL FOR MAP NO. 6             |          |        |           |                                |     |                                | 0.1    |       |        |                       |                         |              | 1,295      |            |                |                  |                    |                     |                             |                             |                       | 145                   |                        |
|                                 |          | 7      | US 421 SB | FROM SR 2434 TO NC 49          | 2,3 | NO                             | 1.45   | 30    | 58     | 100                   | 2.90                    | 10,225       |            |            |                |                  | 170                |                     |                             | 1,530                       |                       | 2,370                 |                        |
| TOTAL FOR MAP NO. 7             |          |        |           |                                |     |                                | 1.45   |       | 58     | 100                   | 2.90                    | 10,225       |            |            |                |                  | 170                |                     |                             | 1,530                       |                       | 2,370                 |                        |
|                                 |          | 8      | US 421 NB | FROM SR 1006 TO NC 49          | 3   | NO                             | 1.27   | 30    | 51     | 100                   | 2.54                    |              |            |            |                |                  | 170                |                     |                             |                             | 2,185                 |                       |                        |
| TOTAL FOR MAP NO. 8             |          |        |           |                                |     |                                | 1.27   |       | 51     | 100                   | 2.54                    |              |            |            |                |                  | 170                |                     |                             |                             |                       | 2,185                 |                        |
|                                 |          | 9      | NC 705    | FROM MOORE CO TO SR 2859       | 10  | NO                             | 2.88   | 24    | 173    | 288                   | 5.76                    |              |            |            |                |                  | 135                | 2,130               | 1,230                       |                             | 3,650                 |                       |                        |
| TOTAL FOR MAP NO. 9             |          |        |           |                                |     |                                | 2.88   |       | 173    | 288                   | 5.76                    |              |            |            |                |                  | 135                | 2,130               | 1,230                       |                             |                       | 3,650                 |                        |
|                                 |          | 10     | NC 705    | FROM SR 2859 TO BEGIN C&G      | 1   | NO                             | 0.8    | 24    | 48     | 80                    | 1.60                    |              |            |            |                |                  | 135                |                     |                             |                             | 955                   |                       |                        |
| TOTAL FOR MAP NO. 10            |          |        |           |                                |     |                                | 0.8    |       | 48     | 80                    | 1.60                    |              |            |            |                |                  | 135                |                     |                             |                             |                       | 955                   |                        |
|                                 |          | 11     | NC 705    | FROM BEGIN C&G TO US 220A      | 7,9 | NO                             | 0.24   | 40    |        |                       |                         |              | 4,695      |            |                |                  |                    |                     |                             |                             | 500                   |                       |                        |
| TOTAL FOR MAP NO. 11            |          |        |           |                                |     |                                | 0.24   |       |        |                       |                         |              | 4,695      |            |                |                  |                    |                     |                             |                             |                       | 500                   |                        |
|                                 |          | 12     | NC 42     | FROM SR 2614 TO SR 2908        | 1   | NO                             | 2.1    | 20    | 126    | 210                   | 4.20                    |              |            |            |                |                  | 115                |                     |                             |                             | 2,215                 |                       |                        |
| TOTAL FOR MAP NO. 12            |          |        |           |                                |     |                                | 2.1    |       | 126    | 210                   | 4.20                    |              |            |            |                |                  | 115                |                     |                             |                             |                       | 2,215                 |                        |
| TOTAL FOR PROJ NO. 8CR.10761.15 |          |        |           |                                |     |                                | 13.44  |       | 638    | 1,095                 | 26.10                   | 19,940       | 5,990      |            |                | 355              | 1,470              | 2,130               | 1,230                       | 2,985                       | 9,065                 | 11,445                |                        |

| PROJECT NO                      | COUNTY   | MAP NO | ROUTE     | DESCRIPTION                    | TYP | FINAL SURFACE TESTING REQUIRED | LENGTH | PG 64-22 PLANT MIX | PG 70-22 PLANT MIX | PATCHING EXISTING PAVEMENT | MILLED RUMBLE STRIPS | JOINT REPAIR | ADJUST CATCH BASIN | ADJUST MANHOLES | ADJUST METER OR VALVE BOX | TEMPORARY SILT FENCE | WATTLE | SEED & MULCHING | SEED FOR REPAIR SEEDING | FERTILIZER FOR REPAIR SEEDING | INDUCTIVE LOOP |     |
|---------------------------------|----------|--------|-----------|--------------------------------|-----|--------------------------------|--------|--------------------|--------------------|----------------------------|----------------------|--------------|--------------------|-----------------|---------------------------|----------------------|--------|-----------------|-------------------------|-------------------------------|----------------|-----|
| NO                              |          | NO     |           |                                | NO  |                                | MI     | TONS               | TONS               | TONS                       | LF                   | TN           | EA                 | EA              | EA                        | LF                   | LF     | AC              | LB                      | TON                           | LF             |     |
| 8CR.10761.15                    | Randolph | 1      | US 311    | FROM SR 1571 TO SR 1747        | 1   | NO                             | 0.27   | 29                 |                    | 50                         |                      | 50.00        |                    |                 |                           | 50                   | 100    | 0.39            | 20                      | 0.50                          |                |     |
| TOTAL FOR MAP NO. 1             |          |        |           |                                |     |                                | 0.27   | 29                 |                    | 50                         |                      | 50.00        |                    |                 |                           | 50                   | 100    | 0.39            | 20                      | 0.50                          |                |     |
|                                 |          | 2      | US 220 SB | FROM GUILFORD CO TO US 220 BUS | 3   | NO                             | 2      |                    | 243                | 50                         | 21,120               |              |                    |                 |                           | 200                  | 50     | 2.90            | 100                     | 0.50                          |                |     |
| TOTAL FOR MAP NO. 2             |          |        |           |                                |     |                                | 2      |                    | 243                | 50                         | 21,120               |              |                    |                 |                           | 200                  | 50     | 2.90            | 100                     | 0.50                          |                |     |
|                                 |          | 3      | US 220 SB | FROM US 220 BUS TO MM 3.37     | 2,3 | NO                             | 1.38   | 68                 | 170                | 50                         | 14,572               |              |                    |                 |                           | 138                  | 50     | 2.00            | 69                      | 0.50                          |                |     |
| TOTAL FOR MAP NO. 3             |          |        |           |                                |     |                                | 1.38   | 68                 | 170                | 50                         | 14,572               |              |                    |                 |                           | 138                  | 50     | 2.00            | 69                      | 0.50                          |                |     |
|                                 |          | 4      | NC 22     | FROM ECL RAMSEUR TO SR 2615    | 1   | NO                             | 0.85   | 59                 |                    | 25                         |                      |              |                    | 4               | 4                         | 100                  | 50     | 1.23            | 42                      | 0.50                          |                |     |
| TOTAL FOR MAP NO. 4             |          |        |           |                                |     |                                | 0.85   | 59                 |                    | 25                         |                      |              |                    | 4               | 4                         | 100                  | 50     | 1.23            | 42                      | 0.50                          |                |     |
|                                 |          | 5      | NC 22     | FROM MOFFITT ST TO US 64       | 5,6 | NO                             | 0.1    | 7                  |                    |                            |                      |              |                    | 1               | 1                         |                      | 15     | 0.07            |                         |                               |                |     |
| TOTAL FOR MAP NO. 5             |          |        |           |                                |     |                                | 0.1    | 7                  |                    |                            |                      |              |                    | 1               | 1                         |                      | 15     | 0.07            |                         |                               |                |     |
|                                 |          | 6      | NC 22     | FROM SR 2615 TO MOFFITT ST     | 11  | NO                             | 0.1    | 9                  |                    |                            |                      |              |                    | 2               | 6                         |                      |        |                 |                         |                               |                |     |
| TOTAL FOR MAP NO. 6             |          |        |           |                                |     |                                | 0.1    | 9                  |                    |                            |                      |              |                    | 2               | 6                         |                      |        |                 |                         |                               |                |     |
|                                 |          | 7      | US 421 SB | FROM SR 2434 TO NC 49          | 2,3 | NO                             | 1.45   | 72                 | 142                |                            | 15,312               |              |                    |                 |                           | 115                  | 50     | 2.10            | 105                     | 1.00                          |                |     |
| TOTAL FOR MAP NO. 7             |          |        |           |                                |     |                                | 1.45   | 72                 | 142                |                            | 15,312               |              |                    |                 |                           | 115                  | 50     | 2.10            | 105                     | 1.00                          |                |     |
|                                 |          | 8      | US 421 NB | FROM SR 1006 TO NC 49          | 3   | NO                             | 1.27   |                    | 131                | 100                        | 13,411               |              |                    |                 |                           | 161                  | 50     | 1.84            | 92                      | 0.50                          |                |     |
| TOTAL FOR MAP NO. 8             |          |        |           |                                |     |                                | 1.27   |                    | 131                | 100                        | 13,411               |              |                    |                 |                           | 161                  | 50     | 1.84            | 92                      | 0.50                          |                |     |
|                                 |          | 9      | NC 705    | FROM MOORE CO TO SR 2859       | 10  | NO                             | 2.88   | 368                |                    | 200                        |                      |              |                    |                 |                           | 288                  | 50     | 4.20            | 210                     | 1.50                          |                |     |
| TOTAL FOR MAP NO. 9             |          |        |           |                                |     |                                | 2.88   | 368                |                    | 200                        |                      |              |                    |                 |                           | 288                  | 50     | 4.20            | 210                     | 1.50                          |                |     |
|                                 |          | 10     | NC 705    | FROM SR 2859 TO BEGIN C&G      | 1   | NO                             | 0.8    | 57                 |                    | 125                        |                      | 55.00        |                    |                 |                           | 80                   | 20     | 1.16            | 58                      | 0.50                          |                |     |
| TOTAL FOR MAP NO. 10            |          |        |           |                                |     |                                | 0.8    | 57                 |                    | 125                        |                      | 55.00        |                    |                 |                           | 80                   | 20     | 1.16            | 58                      | 0.50                          |                |     |
|                                 |          | 11     | NC 705    | FROM BEGIN C&G TO US 220A      | 7,9 | NO                             | 0.24   | 30                 |                    | 10                         |                      | 85.00        |                    |                 |                           |                      |        |                 |                         |                               | 500            |     |
| TOTAL FOR MAP NO. 11            |          |        |           |                                |     |                                | 0.24   | 30                 |                    | 10                         |                      | 85.00        |                    |                 |                           |                      |        |                 |                         |                               |                | 500 |
|                                 |          | 12     | NC 42     | FROM SR 2614 TO SR 2908        | 1   | NO                             | 2.1    | 133                |                    | 100                        |                      |              |                    |                 |                           | 210                  | 40     | 3.05            | 153                     | 1.00                          |                |     |
| TOTAL FOR MAP NO. 12            |          |        |           |                                |     |                                | 2.1    | 133                |                    | 100                        |                      |              |                    |                 |                           | 210                  | 40     | 3.05            | 153                     | 1.00                          |                |     |
| TOTAL FOR PROJ NO. 8CR.10761.15 |          |        |           |                                |     |                                | 13.44  | 832                | 686                | 710                        | 64,415               | 190.00       |                    | 7               | 11                        | 1,342                | 475    | 18.94           | 849                     | 6.50                          |                | 500 |

|              |           |           |
|--------------|-----------|-----------|
| PROJECT NO.  | SHEET NO. | TOTAL NO. |
| BCR.20761.15 | 16        | 16        |

### SUMMARY OF QUANTITIES

| PROJECT NO.          | COUNTY   | MAP NO. | ROUTE   | DESCRIPTION                 | TYP  | FINAL SURFACE TESTING REQUIRED | LENGTH | WIDTH | BORROW | INCIDENTAL STONE BASE | SHOULDER RECONSTRUCTION | 2.5" MILLING | 3" MILLING | 5" MILLING | 1/4" MILLING | 0" TO 3" MILLING | INCIDENTAL MILLING | BASE COURSE, B25.0B | INTERMEDIATE COURSE, I19.0B | INTERMEDIATE COURSE, I19.0C | SURFACE COURSE, S9.5B | SURFACE COURSE, S9.5C | SURFACE COURSE, S9.5A | PG 64-22 PLANT MIX | PG 70-22 PLANT MIX | PATCHING EXISTING PAVEMENT | MILLED RUMBLE STRIPS | JOINT REPAIR | ADJUST CATCH BASIN | ADJUST MANHOLES | ADJUST METER OR VALVE BOX | TEMPORARY SILT FENCE | WATTLE | SEED & MULCHING | SEED FOR REPAIR SEEDING | FERTILIZER FOR REPAIR SEEDING | INDUCTIVE LOOP |  |  |  |  |  |
|----------------------|----------|---------|---------|-----------------------------|------|--------------------------------|--------|-------|--------|-----------------------|-------------------------|--------------|------------|------------|--------------|------------------|--------------------|---------------------|-----------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|--------------------|--------------------|----------------------------|----------------------|--------------|--------------------|-----------------|---------------------------|----------------------|--------|-----------------|-------------------------|-------------------------------|----------------|--|--|--|--|--|
| NO                   |          | NO      |         |                             |      |                                | MI     | FT    | CY     | TONS                  | SMI                     | SY           | SY         | SY         | SY           | SY               | SY                 | TONS                | TONS                        | TONS                        | TONS                  | TONS                  | TONS                  | TONS               | TONS               | TONS                       | LF                   | TN           | EA                 | EA              | EA                        | LF                   | LF     | AC              | LB                      | TON                           | LF             |  |  |  |  |  |
| BCR.20761.15         | Randolph | 13      | SR 1596 | FROM SR 1595 TO WIDENING    | 1    | NO                             | 0.04   | 24    | 2      | 4                     | 0.08                    |              |            |            |              |                  | 135                |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 13 |          |         |         |                             |      |                                | 0.04   |       | 2      | 4                     | 0.08                    |              |            |            |              |                  |                    | 135                 |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 14      | SR 1596 | FROM WIDENING TO WIDENING   | 5,6  | NO                             | 0.42   | 36    | 13     | 42                    | 0.42                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 14 |          |         |         |                             |      |                                | 0.42   |       | 13     | 42                    | 0.42                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 15      | SR 1596 | FROM NC 62 TO WIDENING      | 5,6  | NO                             | 0.3    | 24    | 9      | 30                    | 0.30                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 15 |          |         |         |                             |      |                                | 0.3    |       | 9      | 30                    | 0.30                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 16      | SR 2062 | FROM SR 1804 TO DEAD END    | 4    | NO                             | 0.03   | 18    | 1      |                       | 0.06                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 16 |          |         |         |                             |      |                                | 0.03   |       | 1      |                       | 0.06                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 17      | SR 1526 | FROM SR 1004 TO SR 1526     | 4    | NO                             | 1.41   | 20    | 85     | 141                   | 2.82                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 17 |          |         |         |                             |      |                                | 1.41   |       | 85     | 141                   | 2.82                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 18      | SR 2191 | FROM SR 2237 TO SR 2345     | 4    | NO                             | 0.66   | 20    | 40     | 66                    | 1.32                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 18 |          |         |         |                             |      |                                | 0.66   |       | 40     | 66                    | 1.32                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 19      | SR 2235 | FROM BRIDGE 406 TO NC 22    | 4    | NO                             | 0.27   | 20    | 1      | 27                    | 0.54                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 19 |          |         |         |                             |      |                                | 0.27   |       | 1      | 27                    | 0.54                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 20      | SR 2222 | FROM SR 2221 TO 2216        | 4    | NO                             | 0.62   | 20    | 38     | 62                    | 1.24                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 20 |          |         |         |                             |      |                                | 0.62   |       | 38     | 62                    | 1.24                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 21      | SR 1142 | FROM SR 1163 TO SR 1114     | 1    | NO                             | 3.19   | 20    | 191    | 319                   | 6.38                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 21 |          |         |         |                             |      |                                | 3.19   |       | 191    | 319                   | 6.38                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 22      | SR 1553 | FROM SR 1547 TO SR 1547     | 4    | NO                             | 2.7    | 20    | 162    | 270                   | 5.40                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 22 |          |         |         |                             |      |                                | 2.7    |       | 162    | 270                   | 5.40                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 23      | SR 1451 | FROM SR 1713 TO SR 1442     | 11   | NO                             | 0.84   | 24    |        |                       |                         |              | 11,883     |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 23 |          |         |         |                             |      |                                | 0.84   |       |        |                       |                         |              | 11,883     |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 24      | SR 1451 | FROM SR 1442 TO NC 42       | 7,9  | NO                             | 0.16   | 30    |        |                       |                         |              |            | 2,817      |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 24 |          |         |         |                             |      |                                | 0.16   |       |        |                       |                         |              |            | 2,817      |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 25      | SR 2026 | FROM SR 1917 TO END MAINT   | 4    | NO                             | 0.37   | 20    | 22     | 37                    | 0.74                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 25 |          |         |         |                             |      |                                | 0.37   |       | 22     | 37                    | 0.74                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 26      | SR 3102 | FROM DEAD END TO US 220 BUS | 1    | NO                             | 0.52   | 24    | 31     | 52                    | 1.04                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 26 |          |         |         |                             |      |                                | 0.52   |       | 31     | 52                    | 1.04                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 27      | SR 1006 | FROM US 421 TO SCL LIBERTY  | 1    | NO                             | 1.62   | 24    | 97     | 162                   | 3.24                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 27 |          |         |         |                             |      |                                | 1.62   |       | 97     | 162                   | 3.24                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 28      | SR 1006 | FROM SCL LIBERTY TO NC 49   | 1    | NO                             | 0.89   | 24    | 53     | 89                    | 1.78                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 28 |          |         |         |                             |      |                                | 0.89   |       | 53     | 89                    | 1.78                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 29      | SR 1006 | FROM NC 49 TO END C&G       | 8,9  | NO                             | 0.47   | 40    |        |                       |                         |              |            |            | 11,031       |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 29 |          |         |         |                             |      |                                | 0.47   |       |        |                       |                         |              |            |            | 11,031       |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 30      | SR 1006 | FROM END C&G TO NCL LIBERTY | 1    | NO                             | 0.75   | 22    | 46     | 75                    | 1.50                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 30 |          |         |         |                             |      |                                | 0.75   |       | 46     | 75                    | 1.50                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 31      | SR 1713 | FROM NC 49 TO SR 1450       | 5,6  | NO                             | 0.12   | 48    | 4      | 10                    | 0.12                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 31 |          |         |         |                             |      |                                | 0.12   |       | 4      | 10                    | 0.12                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 32      | SR 1713 | FROM SR 1450 TO END C&G     | 8,9  | NO                             | 0.3    | 48    |        |                       |                         |              |            |            | 5,448        |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 32 |          |         |         |                             |      |                                | 0.3    |       |        |                       |                         |              |            |            | 5,448        |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 33      | SR 1713 | FROM END C&G TO BEGIN C&G   | 1    | NO                             | 0.1    | 24    | 6      | 10                    | 0.20                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 33 |          |         |         |                             |      |                                | 0.1    |       | 6      | 10                    | 0.20                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 34      | SR 1713 | FROM BEGIN CURB TO END CURB | 5,6  | NO                             | 0.14   | 28    | 4      | 10                    | 0.14                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 34 |          |         |         |                             |      |                                | 0.14   |       | 4      | 10                    | 0.14                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 35      | SR 1713 | FROM END CURB TO SR 1451    | 1    | NO                             | 0.27   | 24    | 16     | 27                    | 0.54                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 35 |          |         |         |                             |      |                                | 0.27   |       | 16     | 27                    | 0.54                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 36      | SR 3252 | FROM WIDTH CHANGE TO NC 62  | 1,13 | NO                             | 0.58   | 60    | 35     | 58                    | 1.16                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
| TOTAL FOR MAP NO. 36 |          |         |         |                             |      |                                | 0.58   |       | 35     | 58                    | 1.16                    |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |
|                      |          | 37      | SR 2811 | FROM SR 2814 TO US 64       | 4    | NO                             | 2.95   |       |        |                       |                         |              |            |            |              |                  |                    |                     |                             |                             |                       |                       |                       |                    |                    |                            |                      |              |                    |                 |                           |                      |        |                 |                         |                               |                |  |  |  |  |  |



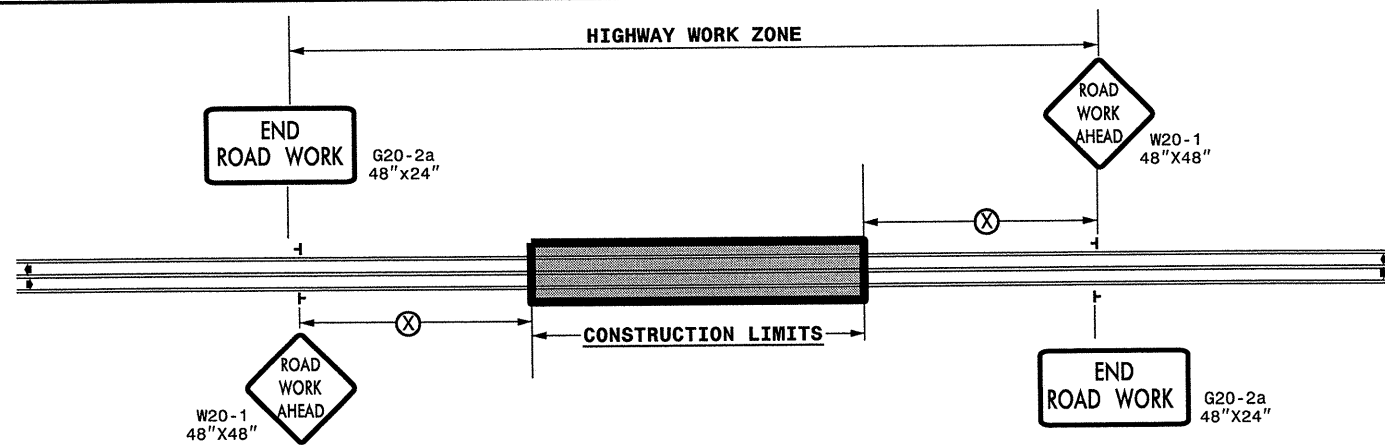


|                            |           |           |
|----------------------------|-----------|-----------|
| PROJECT NO.                | SHEET NO. | TOTAL NO. |
| RCR.20761.15, RCR.20761.15 | 18        | 18        |

### THERMOPLASTIC AND PAINT QUANTITIES

| PROJECT NO           | COUNTY   | MAP NO | ROUTE   | DESCRIPTION                  | 458900000-N     |                        | 468500000-E              |                         | 468800000-E            |                         | 468900000-E              |                        | 468900000-E             |                          | 470500000-E              |                            | 471000000-E         |                          | 472100000-E              |                           | 472500000-E             |                               | 481000000-E              |                         | 481500000-E                   |                    | 482000000-E       |                   | 484500000-N        |                    | 490000000-N        |                         |                   |                   |                            |                          |
|----------------------|----------|--------|---------|------------------------------|-----------------|------------------------|--------------------------|-------------------------|------------------------|-------------------------|--------------------------|------------------------|-------------------------|--------------------------|--------------------------|----------------------------|---------------------|--------------------------|--------------------------|---------------------------|-------------------------|-------------------------------|--------------------------|-------------------------|-------------------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|-------------------------|-------------------|-------------------|----------------------------|--------------------------|
|                      |          |        |         |                              | TRAFFIC CONTROL | 4" X 90 M WHITE THERMO | 4" X 120 M YELLOW THERMO | 4" X 120 M WHITE THERMO | 6" X 90 M WHITE THERMO | 6" X 120 M WHITE THERMO | 6" X 120 M YELLOW THERMO | 8" X 90 M WHITE THERMO | 8" X 90 M YELLOW THERMO | 16" X 120 M WHITE THERMO | 24" X 120 M WHITE THERMO | THERMO MSG SCHOOL 120 M EA | THERMO RXR 120 M EA | THERMO MSG ONLY 120 M EA | THERMO MSG STOP 120 M EA | THERMO MSG AHEAD 120 M EA | THERMO LT ARROW 90 M EA | THERMO STR & RT ARROW 90 M EA | THERMO STR ARROW 90 M EA | THERMO RT ARROW 90 M EA | THERMO STR & LT ARROW 90 M EA | 4" YELLOW PAINT LF | 4" WHITE PAINT LF | 6" WHITE PAINT LF | 6" YELLOW PAINT LF | 8" YELLOW PAINT LF | PAINT STR ARROW EA | PAINT STR & RT ARROW EA | PAINT LT ARROW EA | PAINT RT ARROW EA | YELLOW & YELLOW MARKERS EA | CRYSTAL & RED MARKERS EA |
| RCR.20761.15         | Randolph | 13     | SR 1596 | FROM SR 1595 TO WIDENING     | *               | 430                    | 422                      |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    | 5                       | 5                 |                   |                            |                          |
| TOTAL FOR MAP NO. 13 |          |        |         |                              |                 | 430                    | 422                      |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         | 5                 | 5                 |                            |                          |
|                      |          | 14     | SR 1596 | FROM WIDENING TO WIDENING    | *               | 4,519                  | 11,880                   |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         | 111               | 5                 |                            |                          |
| TOTAL FOR MAP NO. 14 |          |        |         |                              |                 | 4,519                  | 11,880                   |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   | 111               | 5                          |                          |
|                      |          | 15     | SR 1596 | FROM NC 62 TO WIDENING       | *               | 1,584                  | 3,228                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         | 40                | 5                 |                            |                          |
| TOTAL FOR MAP NO. 15 |          |        |         |                              |                 | 1,584                  | 3,228                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         | 40                | 5                 |                            |                          |
|                      |          | 16     | SR 2062 | FROM SR 1804 TO DEAD END     | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 16 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 17     | SR 1525 | FROM SR 1004 TO SR 1526      | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 17 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 18     | SR 2191 | FROM SR 2237 TO SR 2345      | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 18 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 19     | SR 2235 | FROM BRIDGE 406 TO NC 22     | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 19 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 20     | SR 2222 | FROM SR 2221 TO 2216         | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 20 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 21     | SR 1142 | FROM SR 1183 TO SR 1114      | *               | 34,324                 | 35,000                   |                         |                        |                         |                          | 300                    |                         |                          | 100                      |                            | 12                  |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         | 231               | 10                |                            |                          |
| TOTAL FOR MAP NO. 21 |          |        |         |                              |                 | 34,324                 | 35,000                   |                         |                        |                         | 300                      |                        |                         | 100                      |                          | 12                         |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         | 231               | 10                |                            |                          |
|                      |          | 22     | SR 1553 | FROM SR 1547 TO SR 1547      | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 22 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 23     | SR 1451 | FROM SR 1713 TO SR 1442      | *               |                        | 9,038                    | 1,500                   |                        |                         |                          |                        |                         |                          | 120                      |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   | 111               | 10                         |                          |
| TOTAL FOR MAP NO. 23 |          |        |         |                              |                 |                        | 9,038                    | 1,500                   |                        |                         |                          |                        |                         |                          | 120                      |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   | 111               | 10                         |                          |
|                      |          | 24     | SR 1451 | FROM SR 1442 TO NC 42        | *               |                        | 1,722                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   | 21                |                            |                          |
| TOTAL FOR MAP NO. 24 |          |        |         |                              |                 |                        | 1,722                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   | 21                |                            |                          |
|                      |          | 25     | SR 2026 | FROM SR 1917 TO END MAINT    | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 25 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 26     | SR 3102 | FROM DEAD END TO US 220 BUS  | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          | 100                      | 50                         |                     | 2                        |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 26 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         | 100                      | 50                       |                            | 2                   |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 27     | SR 1006 | FROM US 421 TO SCL LIBERTY   | *               | 17,431                 | 17,431                   |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 27 |          |        |         |                              |                 | 17,431                 | 17,431                   |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 28     | SR 1006 | FROM SCL LIBERTY TO NC 49    | *               | 9,576                  | 9,576                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 28 |          |        |         |                              |                 | 9,576                  | 9,576                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 29     | SR 1006 | FROM NC 49 TO END C&G        | *               | 5,057                  | 5,057                    | 700                     |                        |                         |                          |                        |                         |                          | 200                      |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 29 |          |        |         |                              |                 | 5,057                  | 5,057                    | 700                     |                        |                         |                          |                        |                         | 200                      |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 30     | SR 1006 | FROM END C&G TO NCL LIBERTY  | *               | 8,070                  | 8,070                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 30 |          |        |         |                              |                 | 8,070                  | 8,070                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 31     | SR 1713 | FROM NC 49 TO SR 1450        | *               | 634                    | 2,534                    | 158                     |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 31 |          |        |         |                              |                 | 634                    | 2,534                    | 158                     |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 32     | SR 1713 | FROM SR 1450 TO END C&G      | *               |                        | 3,228                    | 792                     |                        |                         |                          |                        |                         |                          | 300                      | 100                        |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 32 |          |        |         |                              |                 |                        | 3,228                    | 792                     |                        |                         |                          |                        |                         | 300                      | 100                      |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 33     | SR 1713 | FROM END C&G TO BEGIN C&G    | *               | 1,076                  | 1,076                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 33 |          |        |         |                              |                 | 1,076                  | 1,076                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 34     | SR 1713 | FROM BEGIN CURB TO END CURB  | *               | 1,506                  | 1,506                    | 125                     |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 34 |          |        |         |                              |                 | 1,506                  | 1,506                    | 125                     |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 35     | SR 1713 | FROM END CURB TO SR 1451     | *               | 2,905                  | 2,905                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 35 |          |        |         |                              |                 | 2,905                  | 2,905                    |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 36     | SR 3252 | FROM WIDTH CHANGE TO NC 62   | *               | 6,241                  | 6,241                    | 1,531                   |                        |                         |                          |                        |                         |                          | 600                      |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 36 |          |        |         |                              |                 | 6,241                  | 6,241                    | 1,531                   |                        |                         |                          |                        |                         | 600                      |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 37     | SR 2611 | FROM SR 2614 TO US 64        | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 37 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 38     | SR 2128 | FROM SR 2281 TO NCL ASHEBORO | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 38 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 39     | SR 1570 | FROM SR 1004 TO US 311       | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          | 100                      | 80                         |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 39 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         | 100                      | 80                       |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
|                      |          | 40     | SR 2922 | FROM SR 2919 TO NC 159       | *               |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |
| TOTAL FOR MAP NO. 40 |          |        |         |                              |                 |                        |                          |                         |                        |                         |                          |                        |                         |                          |                          |                            |                     |                          |                          |                           |                         |                               |                          |                         |                               |                    |                   |                   |                    |                    |                    |                         |                   |                   |                            |                          |

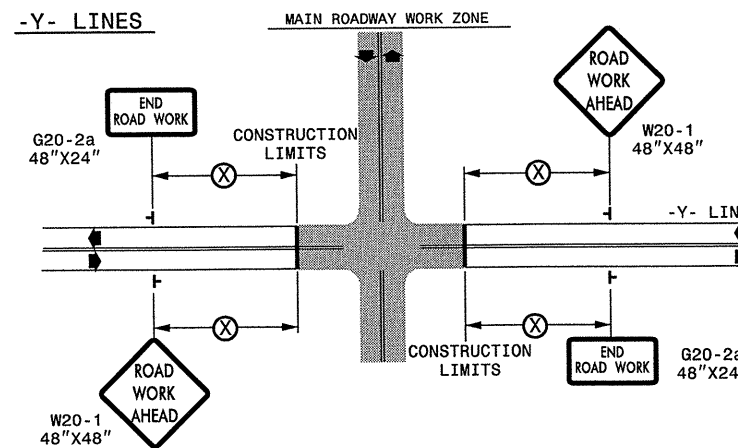
**TWO-WAY UNDIVIDED \*\* (L-LINES)**



| POSTED SPEED LIMIT (M.P.H.) | RECOMMENDED MINIMUM SIGN SPACING |
|-----------------------------|----------------------------------|
| ≤ 50                        | 500'                             |
| ≥ 55                        | 1000'                            |

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

**ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)**



DETAIL DRAWING FOR  
TWO-WAY UNDIVIDED  
WORK ZONE WARNING SIGNS

**GENERAL NOTES**

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- \*\* TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

**LEGEND**

└ STATIONARY SIGN

◀ DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1

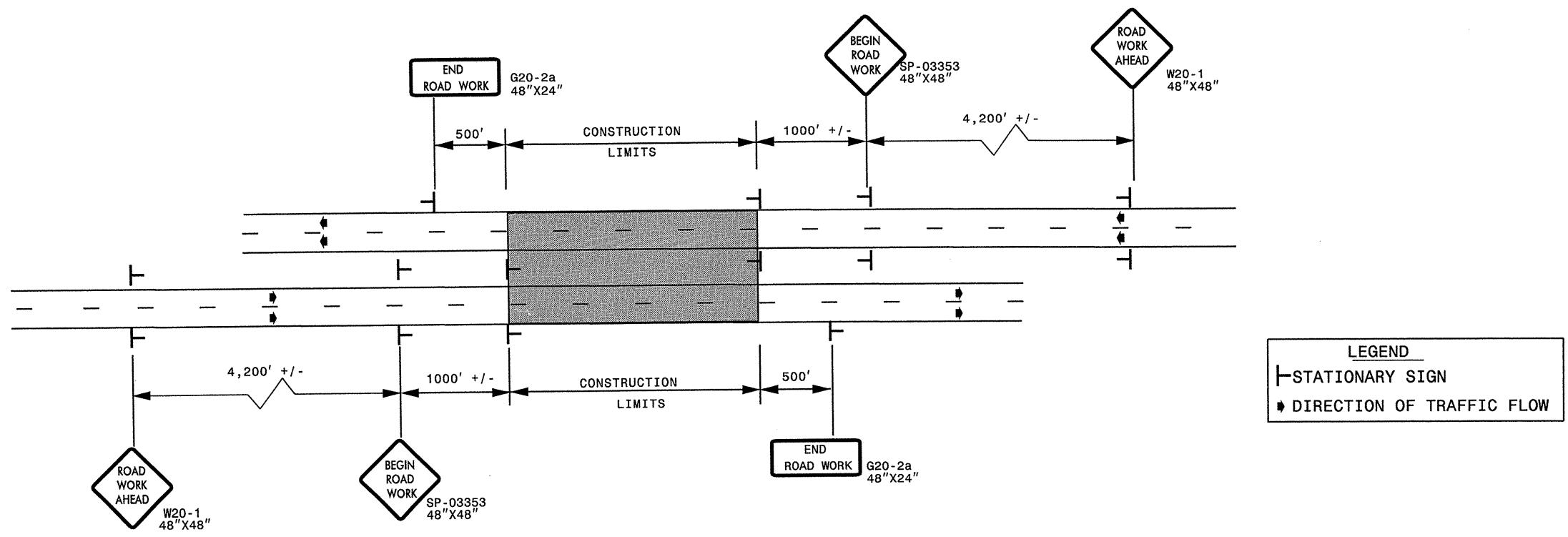
|                             |  |  |             |
|-----------------------------|--|--|-------------|
| APPROVED: _____ DATE: _____ | DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS |  | SCALE: NONE |
|                             |  |  | REVISIONS   |
|                             | DESIGN BY: _____   | 7-98 10/01<br>10-98 03/04<br>01/01 11/04 | CARO FILE   |
| DESIGNED BY: _____          |  |  |             |
| REVIEWED BY: _____          |  |  |             |

05-DEC-2006 1420  
 \DDI\OFFSHOOTING\GROUPS-WZTCC\M&S Division\Share\Resurfacing\2011\Central\2011\Div08\C202672A-B-8CR.10761.15x2-2way\_undiv.&.Urban.Fr.wys\_stationary.dgn  
 AT WZ TC2 44737

# ADVANCED WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)

|                                |           |
|--------------------------------|-----------|
| PROJ. REFERENCE NO.            | SHEET NO. |
| 8CR.10761.15 &<br>8CR.20761.15 | TCP-2     |

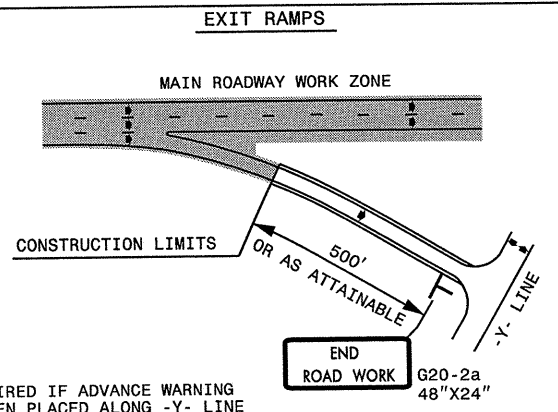
## DETAIL A



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

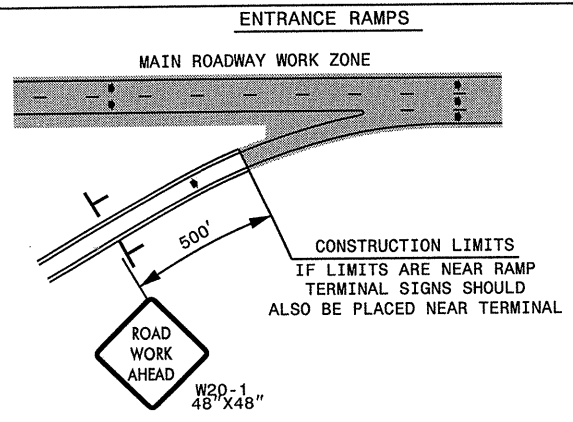
\* USE THE "\$250 SPEEDING PENALTY" SIGN, SPEED LIMIT SIGN, AND ORANGE PANEL; ONLY WHEN A "\$250 SPEEDING PENALTY" ORDINANCE HAS BEEN ISSUED BY THE REGIONAL TRAFFIC ENGINEER.

## DETAIL B



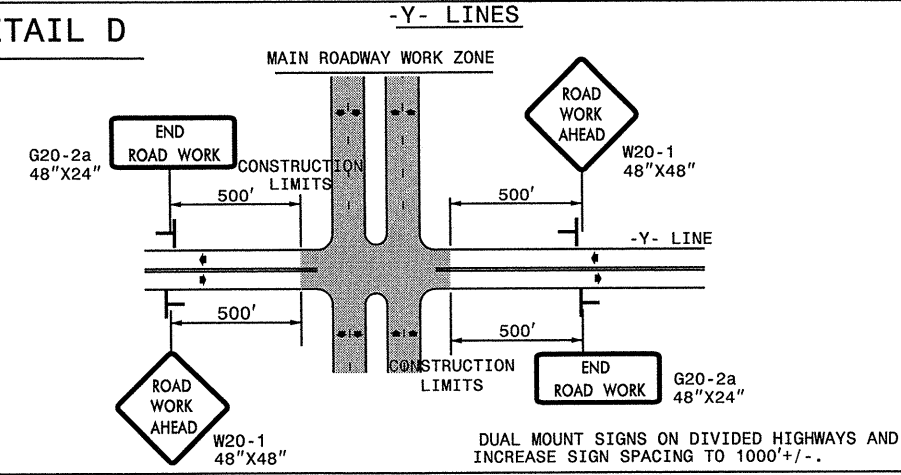
NOTE: SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

## DETAIL C



CONSTRUCTION LIMITS IF LIMITS ARE NEAR RAMP TERMINAL SIGNS SHOULD ALSO BE PLACED NEAR TERMINAL

## DETAIL D



DUAL MOUNT SIGNS ON DIVIDED HIGHWAYS AND INCREASE SIGN SPACING TO 1000'+/-.

## GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.

|                    |               |   |           |
|--------------------|---------------|---|-----------|
| APPROVED: _____    | DATE: _____   | ADVANCED WORK ZONE WARNING SIGNS<br>FOR FREEWAYS (4 LANES OR GREATER) |           |
| SEAL               | SCALE: NONE   |   | REVISIONS |
|                    | DATE: 8/03    |   | 03/04     |
|                    | DWG. BY: JI   |   |           |
|                    | DESIGN BY: JI |   |           |
| REVIEWED BY: _____ |               | CADD FILE   |           |

06-DEC-2010 11:20 \\DOT\DFSROOT\CRDUPS\WZTCCC\M&S Division\Share\Resurfacing\2010\Centr\al\2010\Div08\C202672A-B\_8CR.10761.15x2-Freeways-4lanes-or-greater\_stationary.dwg bpschoenbauer AT WZTCCC

STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

11-08

ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**

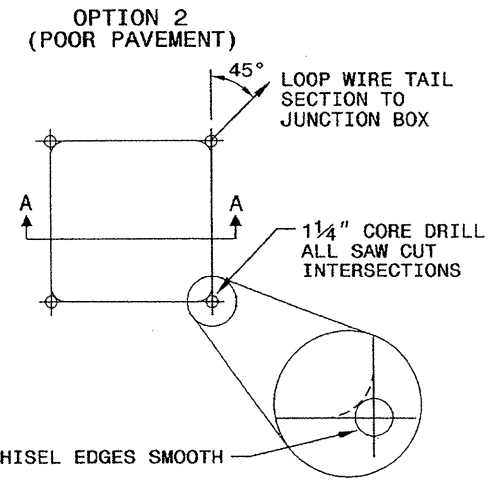
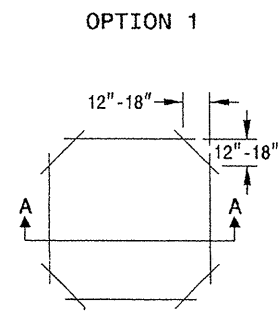
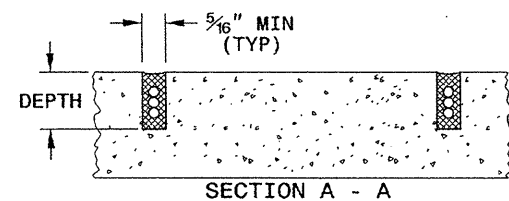
SHEET 1 OF 3  
**1725D01**

**CONVENTIONAL 4-SIDED LOOP**

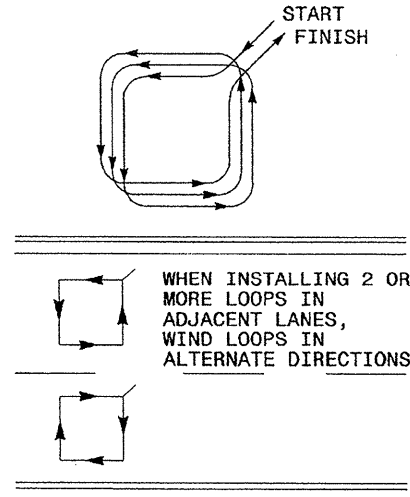
SAW CUT OPTIONS

SAW SLOT DEPTH CHART

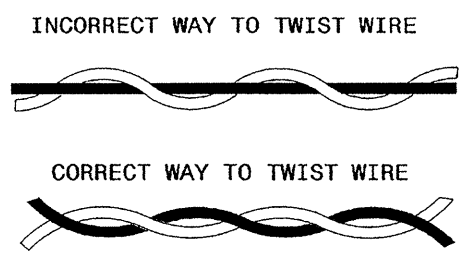
| DEPTH (IN) | NO. OF WIRE TURNS |     |     |     |     |  |
|------------|-------------------|-----|-----|-----|-----|--|
|            | 2                 | 3   | 4   | 5   | 6   |  |
| CONCRETE   | 2.0               | 2.0 | 2.5 | 2.5 | 3.0 |  |
| ASPHALT    | 2.0               | 2.5 | 3.0 | 3.0 | 3.0 |  |



LOOP WINDING METHOD



LOOP WIRE TWISTING METHOD

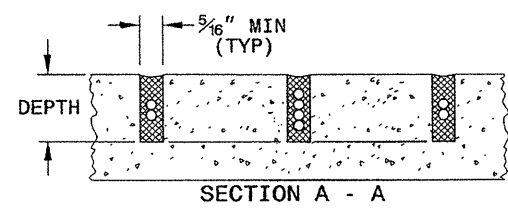
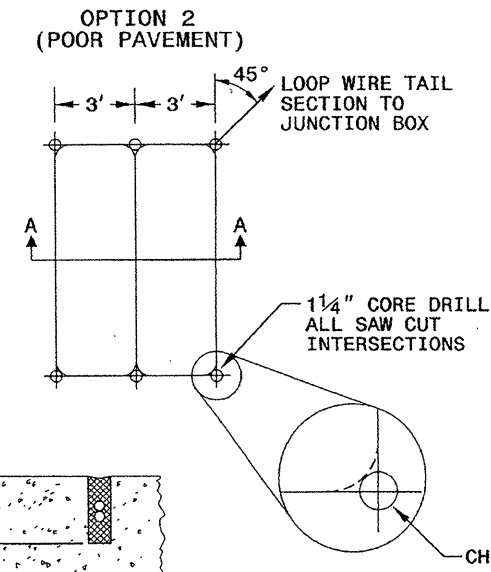
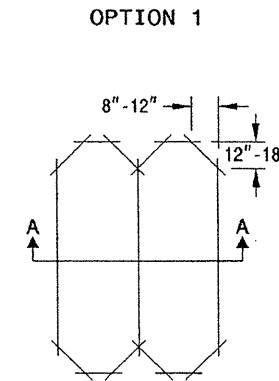


NOTES

1. OVERLAP SAW CUTS AT CORNERS AND INTERSECTION POINTS TO ENSURE UNIFORM SAW SLOT DEPTH.
2. MAINTAIN 12" SPACING BETWEEN LOOP WIRE TAIL SECTIONS.
3. WIRE LOOPS CONNECTED TO THE SAME DETECTOR CHANNEL IN SERIES.
4. LOCATE LOOPS IN CENTER OF LANES UNLESS OTHERWISE SHOWN ON PLANS OR APPROVED BY ENGINEER.

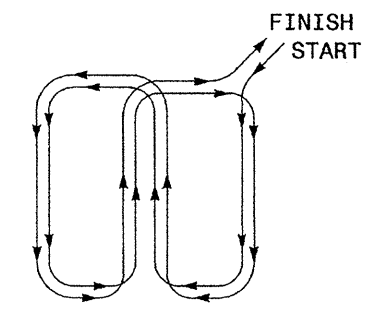
**QUADRUPOLE LOOP**

SAW CUT OPTIONS



DEPTH IS 2.5" FOR CONCRETE AND 3.0" FOR ASPHALT

LOOP WINDING METHOD



STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

11-08

ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**

SHEET 1 OF 3  
**1725D01**

See Plate for Title

Prepared in the Offices of:

750 N. Greenfield Parkway  
 Garner, NC 27529

SEAL

*Milton I. Dean* 11/24/08  
 SIGNATURE DATE

24-101-1008 08/28  
 d:\work\11\640-standard plate sheets\17250101.mxd\2307.dgn  
 mlf1116

STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

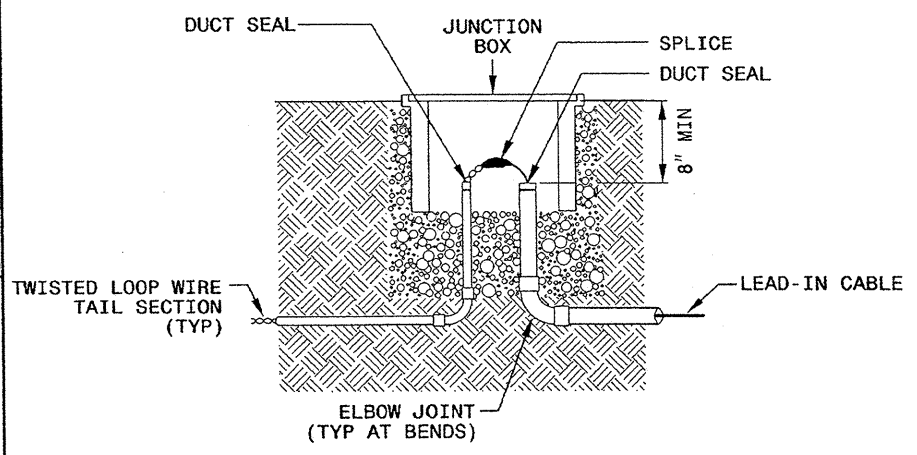
11-08

ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**  
 LOOP WIRE DETAILS

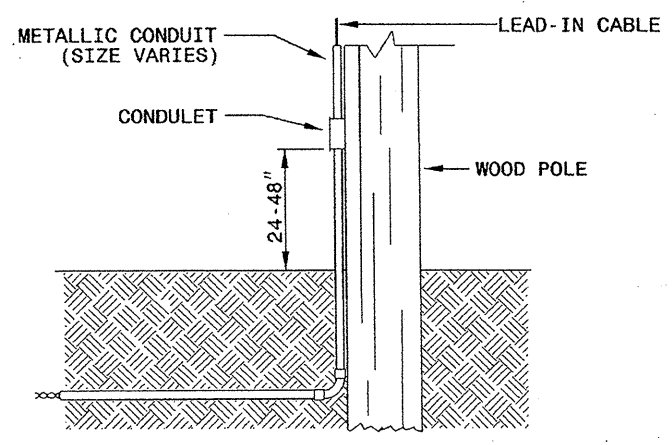
SHEET 2 OF 3  
**1725D01**

**LOOP WIRE SPLICE POINT DETAILS**

**LOOP WIRE AT JUNCTION BOX**



**LOOP WIRE AT POLE**

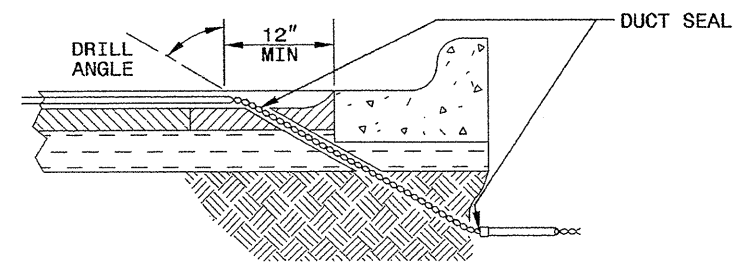


**NOTE**

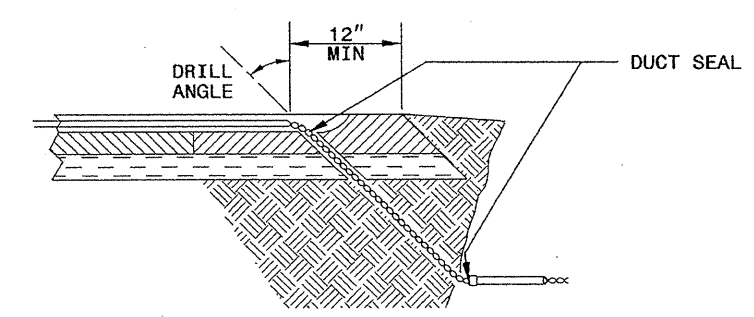
SPLICE ALL LOOP WIRE TAIL SECTIONS/LEAD-IN CABLE IN JUNCTION BOXES OR APPROVED CONDULETS.

**LOOP WIRE PAVEMENT EDGE DETAILS**

**LOOP WIRE AT CURB & GUTTER SECTION**



**LOOP WIRE AT PAVEMENT SECTION**



**NOTES**

- DO NOT EXCAVATE UNDER CURB AND GUTTER SECTIONS FOR CONDUIT INSTALLATION.
- TWIST LOOP WIRE TAIL SECTIONS FROM WHERE LOOP WIRE TAIL LEAVES SAW CUT TO JUNCTION BOX, INCLUDING THROUGH CONDUIT.
- BEFORE SEALING LOOPS, INSTALL DUCT SEAL WHERE LOOP WIRE TAIL SECTION LEAVES SAW CUT IN PAVEMENT AND AT ENTRANCE OF CONDUIT TO JUNCTION BOX.

STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

11-08

ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**  
 LOOP WIRE DETAILS

SHEET 2 OF 3  
**1725D01**

See Plate for Title

Prepared in the Offices of:

750 N. Greenfield Parkway  
 Garner, NC 27529

SEAL

Milton J. Dean 11/24/08  
 SIGNATURE DATE

24-MIV-2008 09:29  
 C:\work\1725D01\1725D01.dwg  
 11/24/08

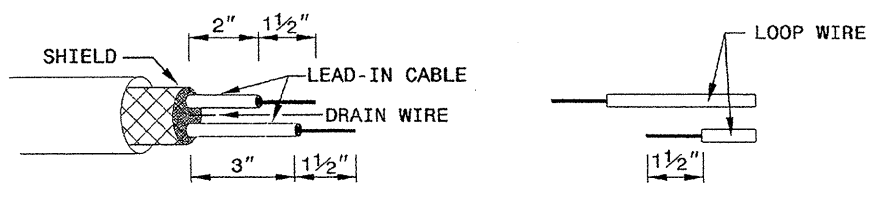
STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

11-08

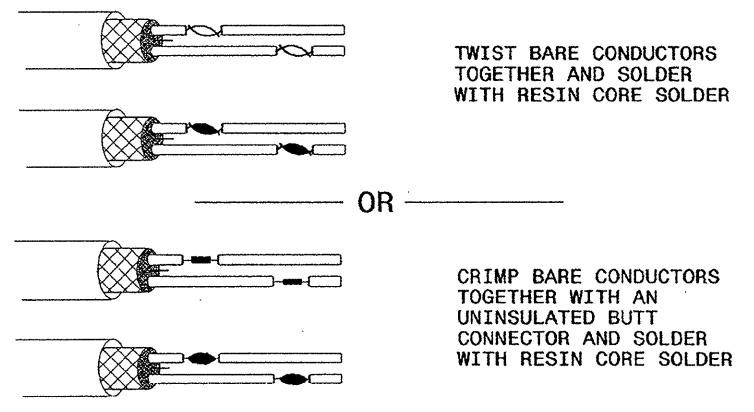
ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**  
 SPLICING FOR LEAD-IN CABLE AND LOOP WIRE

SHEET 3 OF 3  
**1725D01**

**STEP 1. STRIP LOOP WIRE AND LEAD-IN CABLE**

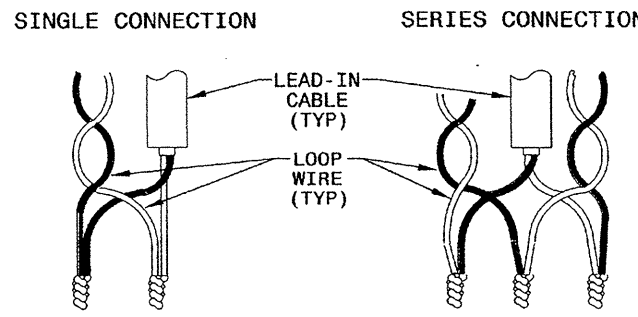


**STEP 2. CONNECT AND SOLDER**

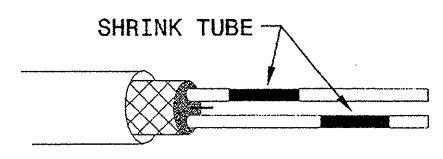


BOND SHIELD DRAIN WIRE AT SPLICE SECTIONS (DO NOT GROUND)

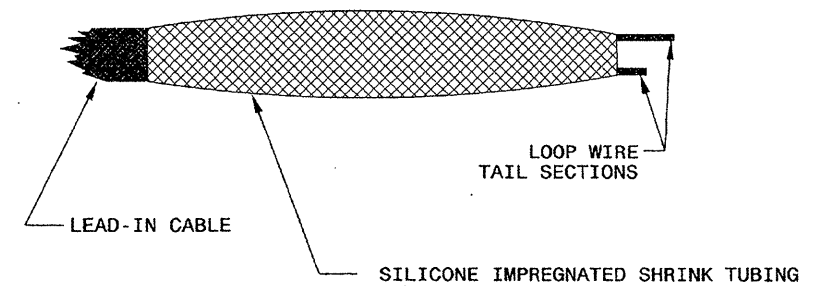
**LOOP WIRE AND LEAD-IN CABLE CONNECTION DETAILS**



**STEP 3. INSULATE EACH SOLDER JOINT SEPARATELY**



**STEP 4. ENVIRONMENTALLY PROTECT SPLICE**



STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

11-08

ENGLISH DETAIL DRAWING FOR  
**INDUCTIVE DETECTION LOOPS**  
 SPLICING FOR LEAD-IN CABLE AND LOOP WIRE

SHEET 3 OF 3  
**1725D01**

See Plate for Title

Prepared in the Offices of:

750 N. Greenfield Parkway  
 Garner, NC 27529

SEAL

Milton A. Dean 11/24/08  
 SIGNATURE DATE

24-nov-2005 09:35  
 1725D01-Standard plate sheets 1725D01.dwg  
 2m11110