



PITT COUNTY

DB00337
WBS# 2017CPT.02.21.10741.5

| PROJECT REFERENCE NO. | SHEET NO. |
|-----------------------|-----------|
| DB00337 | 1 |

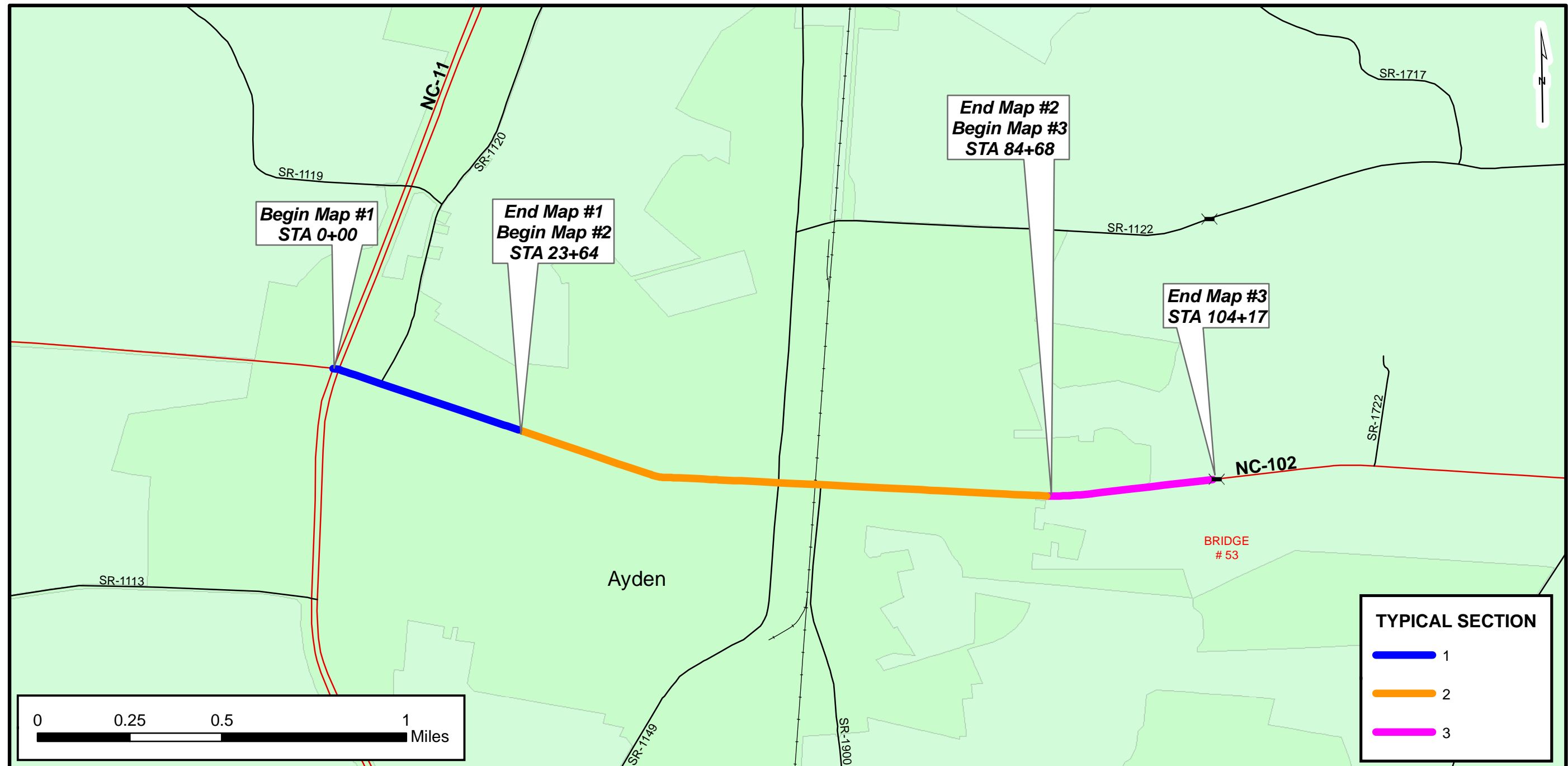
LOCATION:

MAP 1 - NC 102 FROM NC-11 TO VERNA AVENUE
MAP 2 - NC 102 FROM VERNA AVENUE TO END OF CURB & GUTTER.
MAP 2 - NC 102 FROM END OF CURB & GUTTER TO SWIFT CREEK BRIDGE

TYPE OF WORK: MILLING, FINE MILLING, PAVEMENT INTERLAYER, STRENGTHENING, RESURFACING & SHOULDER RECONSTRUCTION

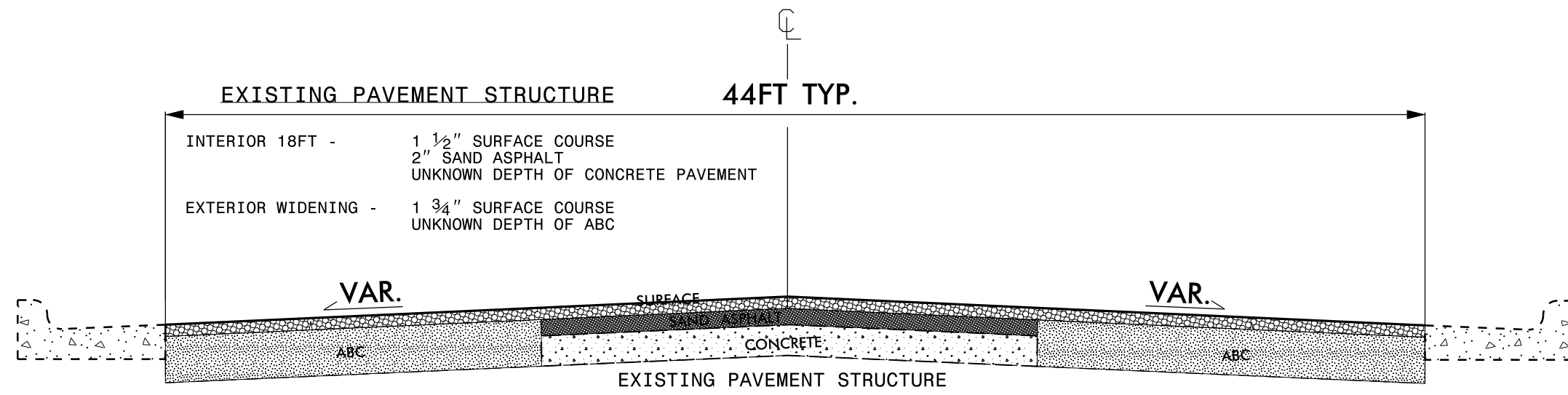


NCDOT
DIVISION 2

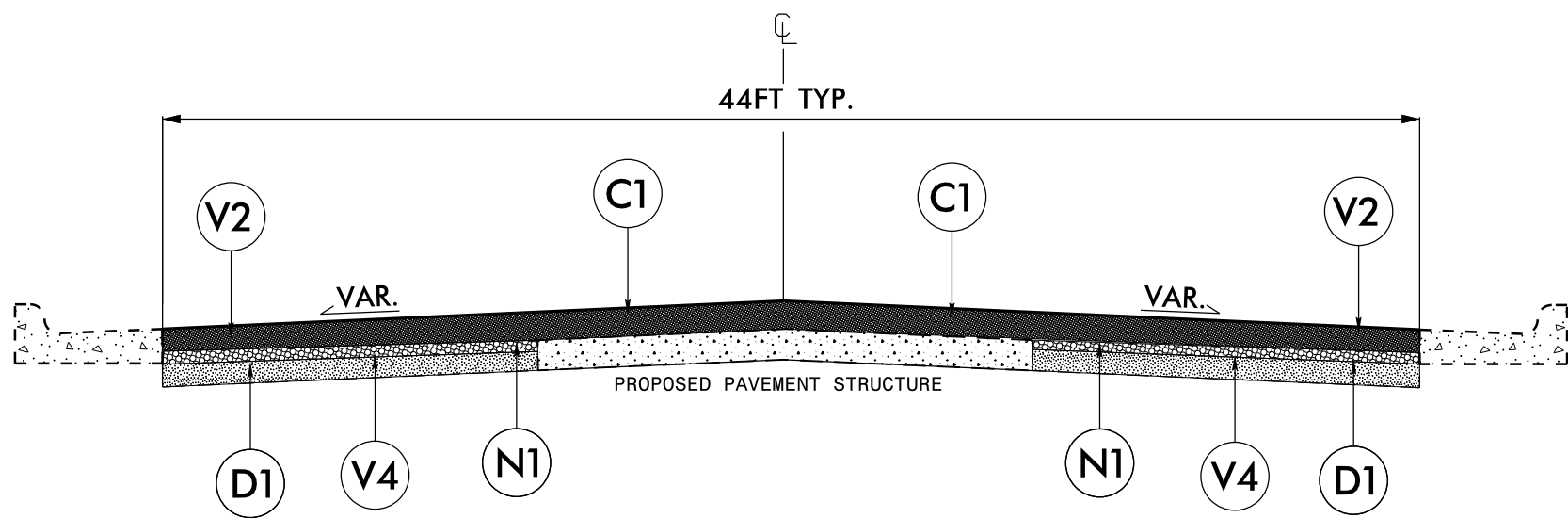


TYPICAL SECTION NO. 1

MAP 1 - NC 102 FROM NC 11 JOINT TO VERNA AVENUE (0+00 TO 23+64)



PROPOSED PAVEMENT STRUCTURE



NOTE:

1. MILL FULL WIDTH OF EXISTING ASPHALT PAVEMENT WITHIN THE CURB AND GUTTER SECTION TO REMOVE EXISTING ASPHALT AND ABC, AS DIRECTED BY THE ENGINEER.
2. REMOVE 2 1/2" OF EXISTING ABC ADJACENT TO EXISTING CONCRETE ROADBED AND INSTALL INTERMEDIATE COURSE, AS DIRECTED BY THE ENGINEER.
3. PLACE COMPOSITE PAVEMENT INTERLAYER MATTING FOR THE ENTIRE WIDTH OF THE ROADWAY AS DIRECTED BY THE ENGINEER ON TOP OF THE INTERMEDIATE LAYER AND THE EXISTING CONCRETE ROADBED.
4. PLACE ASPHALT SURFACE COURSE S 9.5B AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER IN TWO LAYERS.
5. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 1.

PAVEMENT SCHEDULE

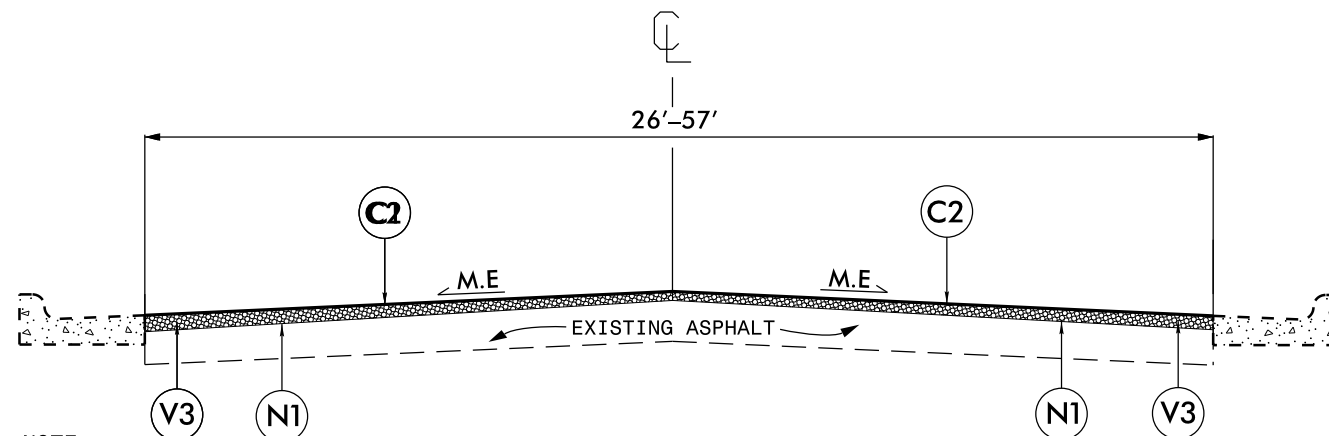
| | |
|----|---|
| C1 | PROP. APPROX. 3 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S 9.5B, AT AN AVERAGE RATE OF 336.0 LBS. PER SQ. YD. IN TWO LAYERS |
| C2 | PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S 9.5B, AT AN AVERAGE RATE OF 224.0 LBS. PER SQ. YD. |
| D1 | PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I 19.0B, AT AN AVERAGE RATE OF 285.0 LBS. PER SQ. YD. |
| N1 | PROP. COMPOSITE PAVEMENT INTERLAYER - HIGH STRENGTH MATTING FOR THE ENTIRE WIDTH OF THE ROADWAY. |
| T | SHOULDER RECONSTRUCTION |
| V1 | INCIDENTAL MILLING. |
| V2 | MILLING DEPTH 3 1/2" FOR THE ENTIRE WIDTH OF ROADWAY. |
| V3 | MILLING DEPTH 2" FOR THE ENTIRE WIDTH OF ROADWAY. FINE MILLING - GENERIC PAVING ITEM |
| V4 | MILLING DEPTH 2 1/2" TO REMOVE ABC FOR INTERMEDIATE PLACEMENT. |

DRAWINGS NOT TO SCALE

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

TYPICAL SECTION NO. 2

MAP 1 - NC 102 FROM VERNA AVENUE (23+64) TO END OF CURB & GUTTER (84+68)

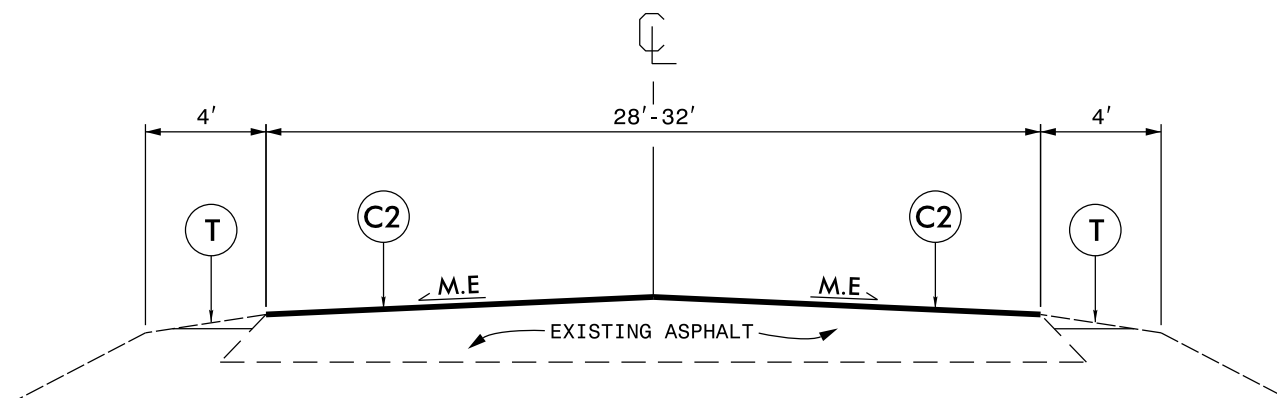


NOTE:

1. MILL FULL WIDTH PAVEMENT FROM C&G TO C&G AT A DEPTH OF 2 INCHES AS DIRECTED BY THE ENGINEER.
2. PLACE COMPOSITE PAVEMENT INTERLAYER MATTING FULL WIDTH OF PAVEMENT FROM C&G TO C&G AS DIRECTED BY THE ENGINEER.
3. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, OR AS DIRECTED BY THE ENGINEER.
4. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 1.

TYPICAL SECTION NO. 2

MAP 1 - NC 102 FROM END OF C&G SECTION TO BRIDGE (84+68 TO 104+17)



NOTE:

1. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT, AS DIRECTED BY THE ENGINEER.
2. PERFORM SHOULDER RECONSTRUCTION AFTER INSTALLATION OF ASPHALT PAVEMENT.
3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER. SEE DETAIL 1.

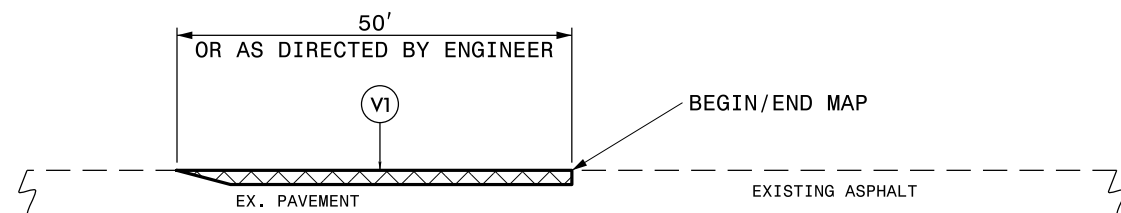
PAVEMENT SCHEDULE

| | |
|----|--|
| C1 | PROP. APPROX. 3½" ASPHALT CONCRETE SURFACE COURSE, TYPE S 9.5B, AT AN AVERAGE RATE OF 336.0 LBS. PER SQ. YD. IN TWO LAYERS |
| C2 | PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S 9.5B, AT AN AVERAGE RATE OF 224.0 LBS. PER SQ. YD. |
| D1 | PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I 19.0B, AT AN AVERAGE RATE OF 285.0 LBS. PER SQ. YD. |
| N1 | PROP. COMPOSITE PAVEMENT INTERLAYER - HIGH STRENGTH MATTING FOR THE ENTIRE WIDTH OF THE ROADWAY. |
| T | SHOULDER RECONSTRUCTION |
| V1 | INCIDENTAL MILLING. |
| V2 | MILLING DEPTH 3½" FOR THE ENTIRE WIDTH OF ROADWAY. |
| V3 | MILLING DEPTH 2" FOR THE ENTIRE WIDTH OF ROADWAY. FINE MILLING - GENERIC PAVING ITEM |
| V4 | MILLING DEPTH 2½" TO REMOVE ABC FOR INTERMEDIATE PLACEMENT. |

DRAWINGS NOT TO SCALE

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

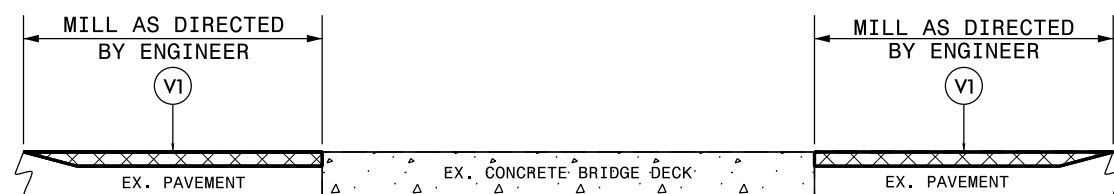
MILLING TYPICALS



DETAIL 1
BEGIN/END MAP TIE-IN

NOTE:

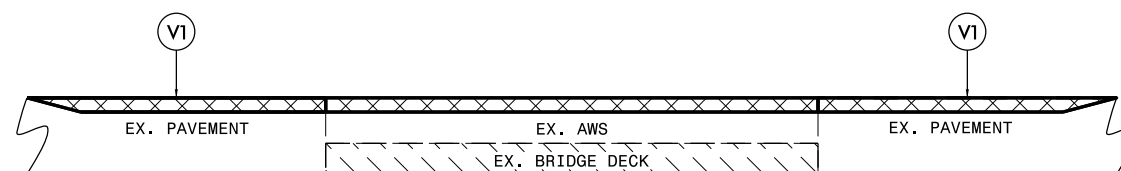
- MILLING SHALL BE PERFORMED AT MAIN LINE TIE-INS AND Y-LINE TIE-INS AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



DETAIL 2
BRIDGE MILLING

NOTE:

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

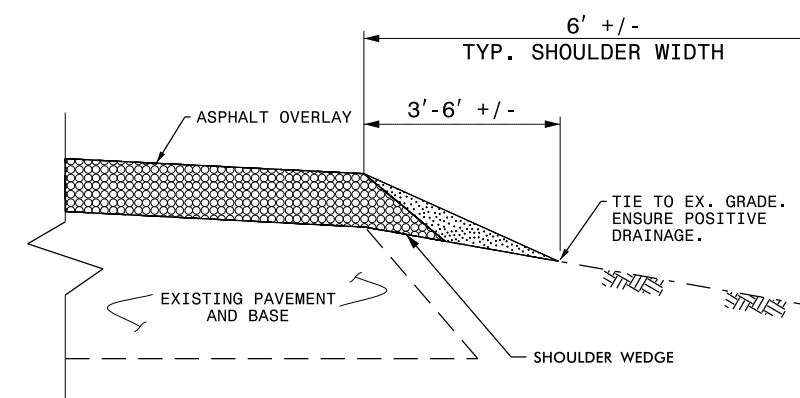


DETAIL 3
BRIDGE MILLING

NOTE:

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

SHOULDER RECONSTRUCTION TYPICAL

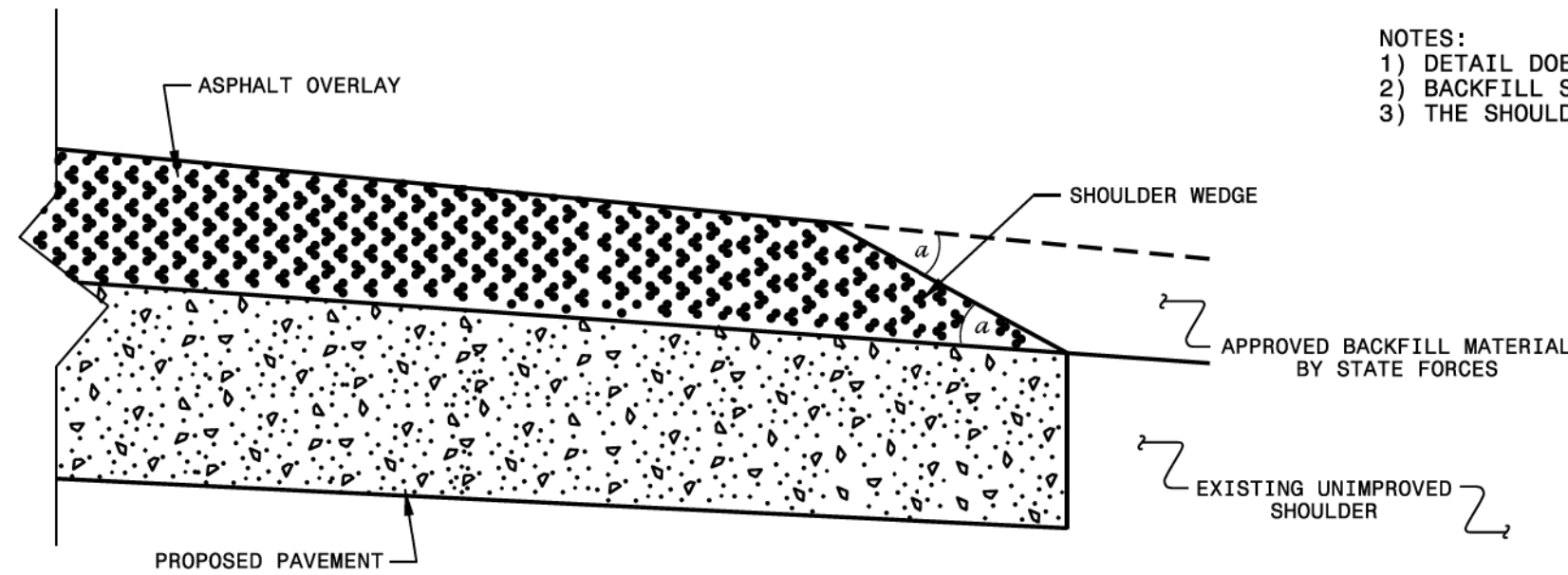


SHOULDER RECONSTRUCTION DETAIL

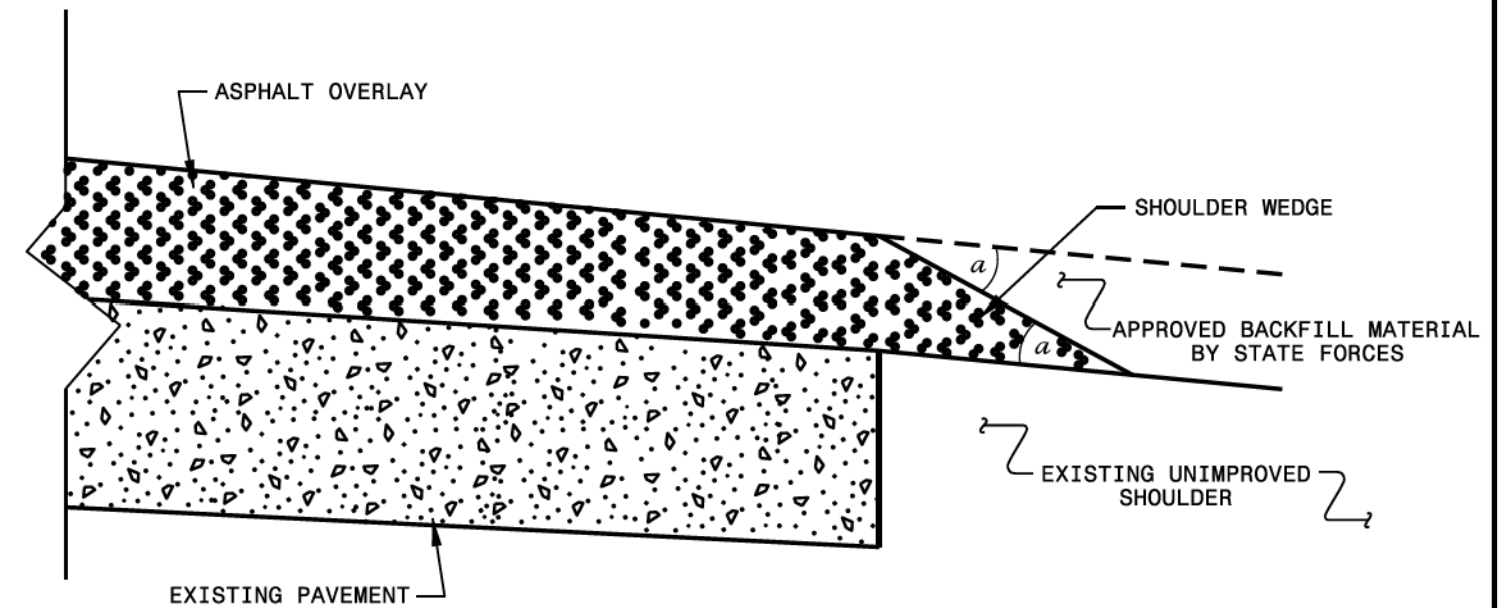
NOTE:

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

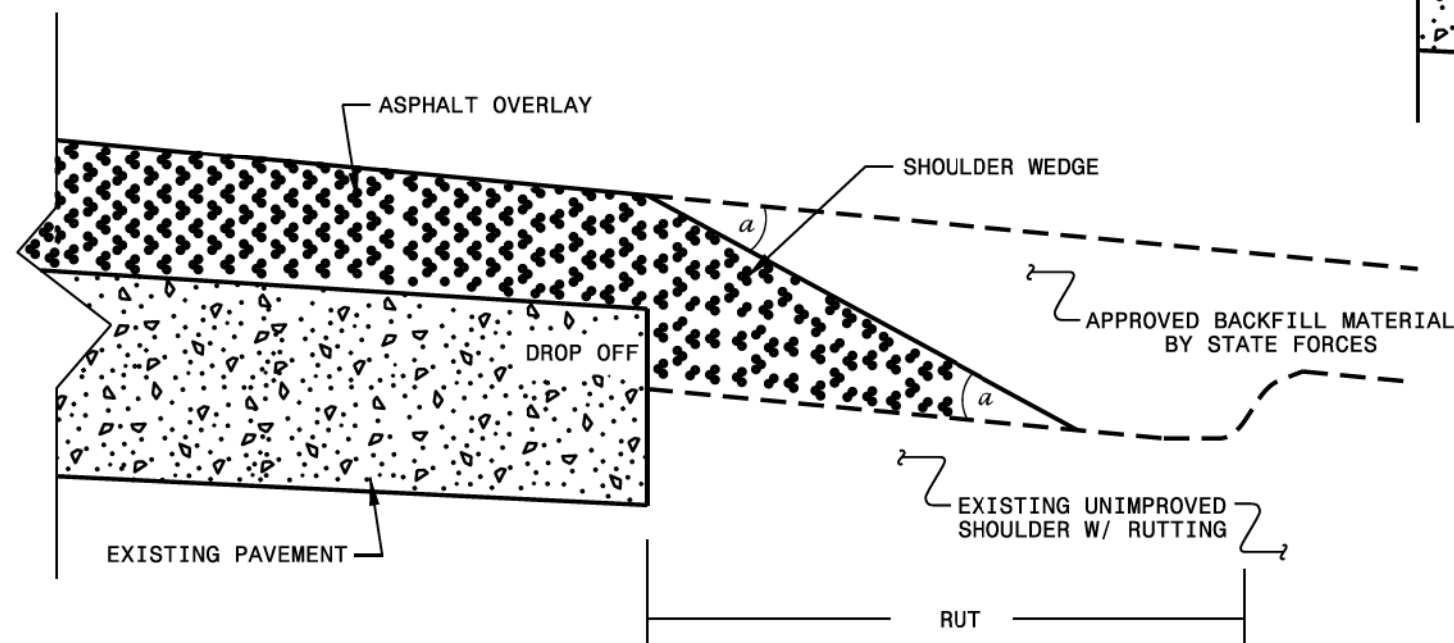
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFD AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

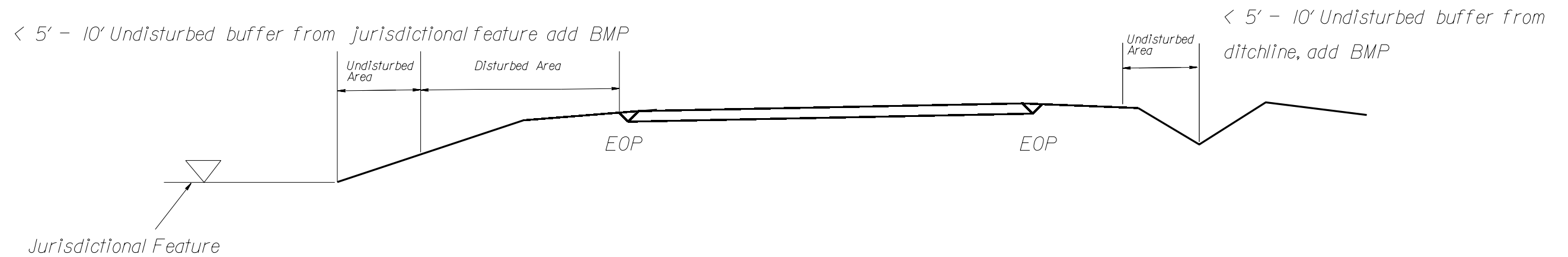
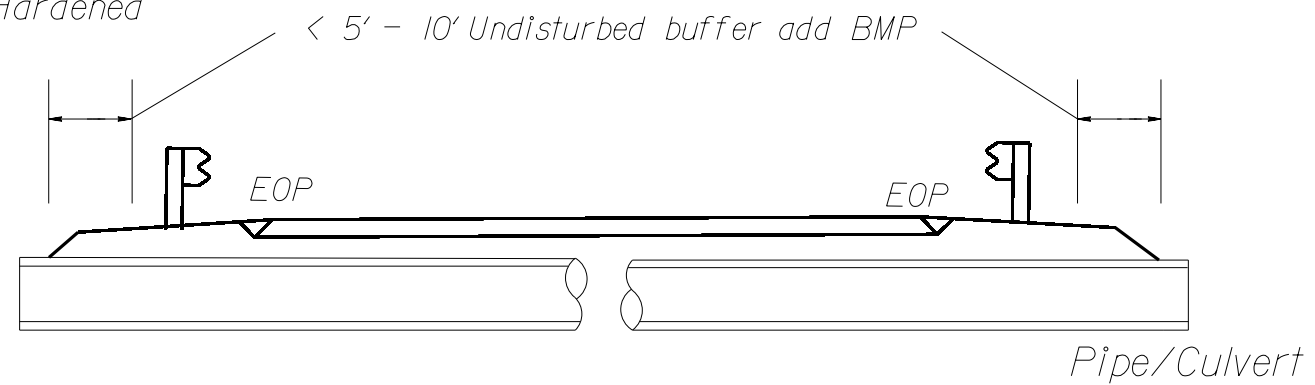
- SHOULDER WEDGE ANGLE = 30°

| | |
|--|----------------|
| CONTRACT STANDARDS AND DEVELOPMENT UNIT | |
| Office 919-707-6950 FAX 919-250-4119 | |
| SHOULDER WEDGE DETAILS | |
| ORIGINAL BY: T.SPELL | DATE: 7-19-11 |
| MODIFIED BY: | DATE: 10/16/12 |
| CHECKED BY: | DATE: |
| FILE SPEC.: s:\usr\details\stand\shou1dcrwedgedetail.dgn | |

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

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

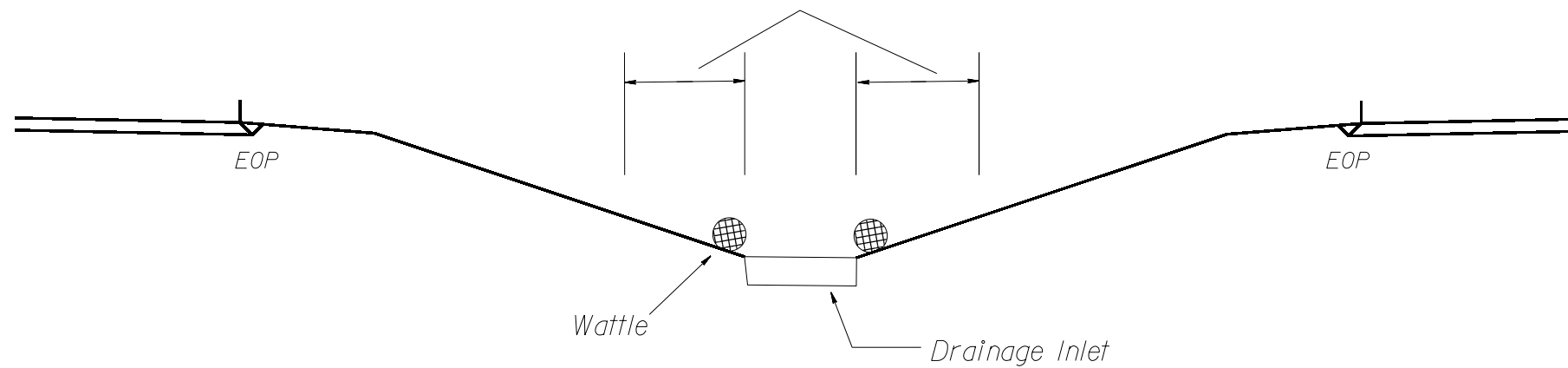
EROSION CONTROL DETAIL



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

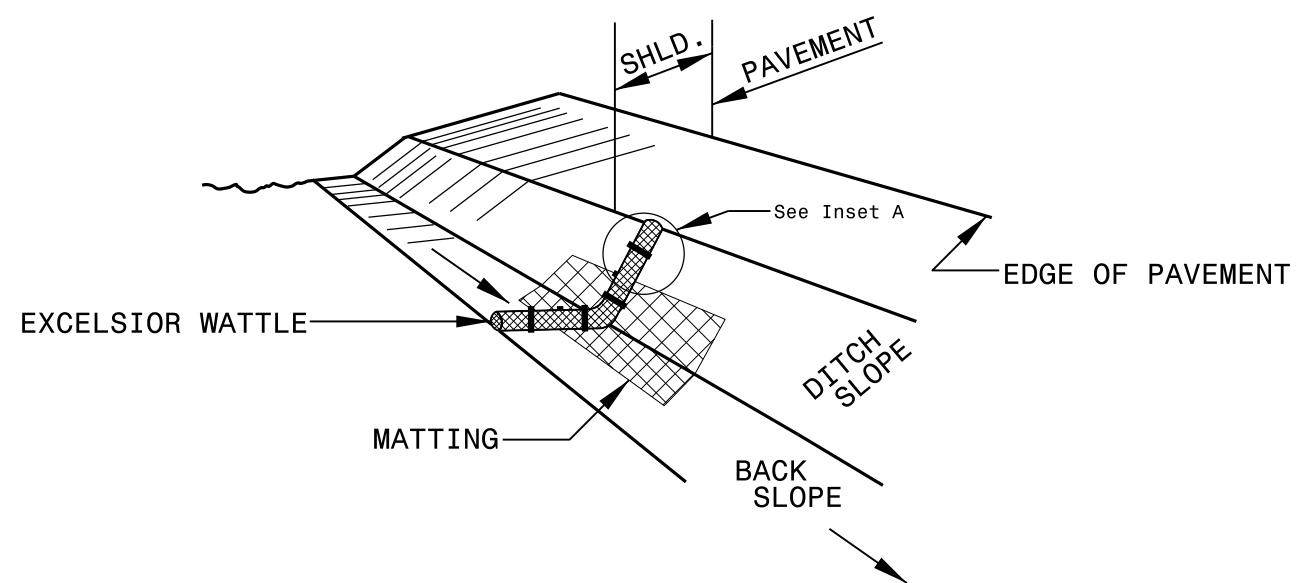


< 5' - 10' Undisturbed buffer from inlet, add wattle

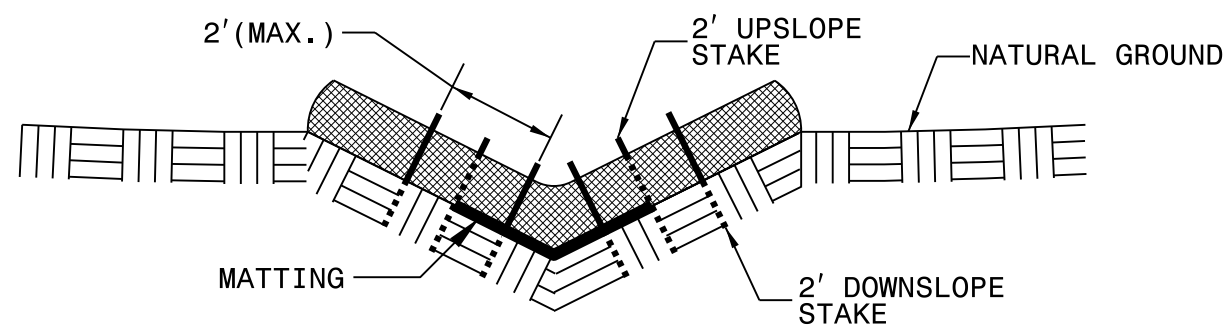


NOT TO SCALE

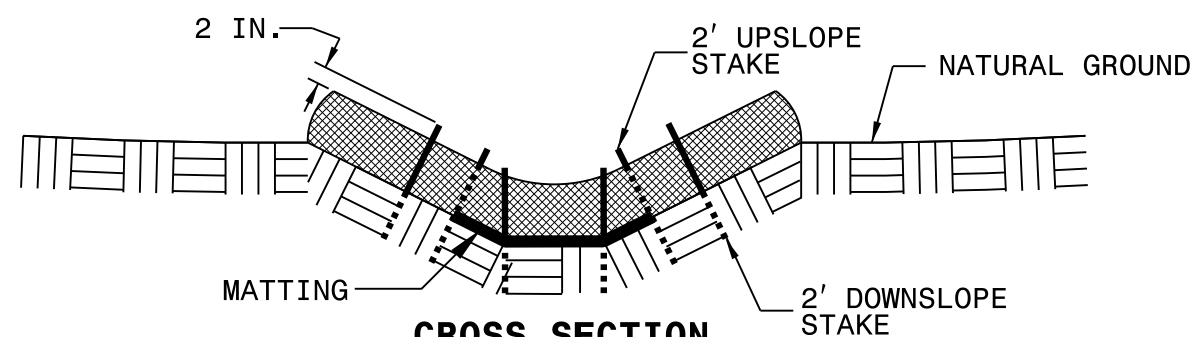
WATTLE DETAIL



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.

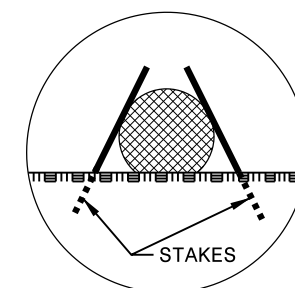
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

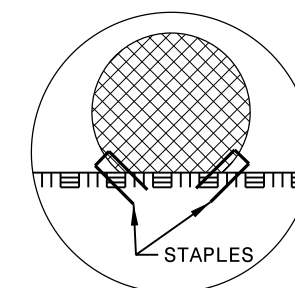
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

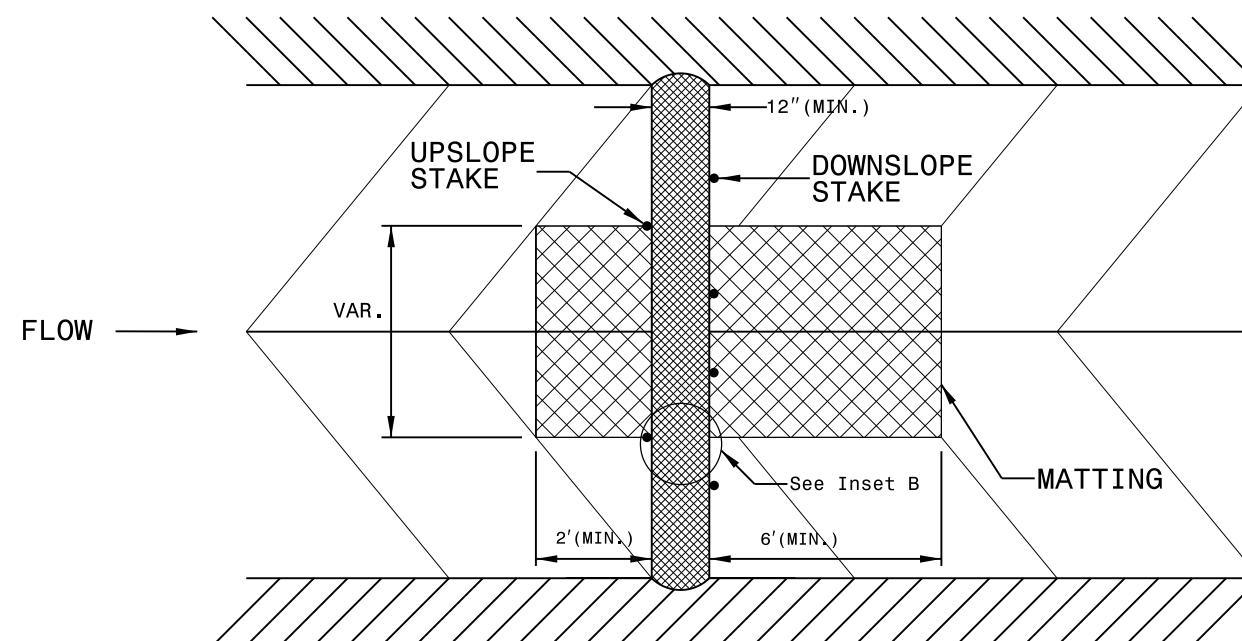
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



INSET A



INSET B



TOP VIEW

NOT TO SCALE

SUMMARY OF QUANTITIES

| PROJECT NO | COUNTY | MAP NO | ROUTE | DESCRIPTION | TYP NO | LANES | LANE TYPE | FINAL SURFACE TESTING REQUIRED | WARM MIX ASPHALT REQUIRED | LENGTH | WIDTH | 0262000000-N | 1220000000-E | 1245000000-E | 1297000000-E | 1330000000-E | 1498000000-E | 1519000000-E | 1575000000-E | 1891000000-E | | | | |
|---|--------|--------|--------|--------------------------------------|--------|-------|-----------|--------------------------------|---------------------------|--------------|-------|--|-----------------------|-------------------------|---------------|--------------|--------------------|-----------------------------|-----------------------|------------------------------|---|---|--|---------------|
| | | | | | | | | | | | | HAULING NCDOT SUPPLIED SHOULDER MATERIAL | INCIDENTAL STONE BASE | SHOULDER RECONSTRUCTION | 3.5" MILLING | 2.5" MILLING | INCIDENTAL MILLING | INTERMEDIATE COURSE, I19.0B | SURFACE COURSE, S9.5B | ASPHALT BINDER FOR PLANT MIX | GENERIC PAVING ITEM - COMPOSITE PVMT INTERLAYER - HIGH STRENGTH | GENERIC PAVING ITEM - FINE MILLING 2" DEPTH | GENERIC PAVING ITEM - STAMPED ASPHALT CROSSWALKS | |
| | | | | | | | | | | | | EA | TONS | SMI | SY | SY | SY | TONS | TONS | TONS | SY | SY | SY | |
| 2017CPT.02.21.10741.5 | Pitt | 1 | NC 102 | NC 11 TO VERNA AVENUE | 1 | 2 | 2WU | NO | NO | 0.448 | 44 | | | | 12,700 | 6,300 | | 900 | 2,500 | 193 | 11,500.00 | | | |
| TOTAL FOR MAP NO. 1 | | | | | | | | | | 0.448 | | | | 12,700 | 6,300 | | 900 | 2,500 | 193 | 11,500.00 | | | | |
| 2017CPT.02.21.10741.5 | Pitt | 2 | NC 102 | VERNA AVENUE TO END OF C&G | 2 | 2 | 2WU | NO | NO | 1.156 | 30 | | | | | | | 3,050 | 183 | 25,105.00 | 26,655 | 810.00 | | |
| TOTAL FOR MAP NO. 2 | | | | | | | | | | 1.156 | | | | | | | | 3,050 | 183 | 25,105.00 | 26,655 | 810.00 | | |
| 2017CPT.02.21.10741.5 | Pitt | 3 | NC 102 | END OF C&G TO SWIFT CREEK BRIDGE #53 | 3 | 2 | 2WU | NO | NO | 0.369 | 26 | 18 | 2 | 0.74 | | | | 375 | 679 | 41 | | | | |
| TOTAL FOR MAP NO. 3 | | | | | | | | | | 0.369 | | 18 | 2 | 0.74 | | | | 375 | 679 | 41 | | | | |
| TOTAL FOR PROJ NO. 2017CPT.02.21.10741.5 | | | | | | | | | | 1.973 | | 18 | 2 | 0.74 | 12,700 | 6,300 | | 375 | 900 | 6,229 | 417 | 36,605.00 | 26,655 | 810.00 |
| GRAND TOTAL | | | | | | | | | | 1.973 | | 18 | 2 | 0.74 | 12,700 | 6,300 | | 375 | 900 | 6,229 | 417 | 36,605.00 | 26,655 | 810.00 |

| PROJECT NO | COUNTY | MAP NO | ROUTE | DESCRIPTION | TYP NO | LANES | LANE TYPE | FINAL SURFACE TESTING REQUIRED | WARM MIX ASPHALT REQUIRED | LENGTH | WIDTH | 2549000000-E | 2580000000-E | 2591000000-E | 00000000 | 05000000 | 2612000000-E | 2647000000-E | 2830000000-N | 2845000000-N | 6000000000-E | 6071010000-E | 6084000000-E | 6117000000-N | |
|---|--------|--------|--------|--------------------------------------|--------|-------|-----------|--------------------------------|---------------------------|--------------|-------|---------------------|------------------------|----------------------|-----------------------------|-------------------|--------------|---|------------------|----------------------------|----------------------|--------------|-----------------|------------------------------|--|
| | | | | | | | | | | | | 2'-6" CURB & GUTTER | CONCRETE VALLEY GUTTER | 4" CONCRETE SIDEWALK | RETROFIT EXISTING CURB RAMP | WHEELCH AIR RAMPS | 6" DRIVEWAYS | 5" MONOLITHIC CONCRETE ISLANDS(SURFACE MOUNTED) | ADJ. OF MANHOLES | ADJ. OF METER OR VALVE BOX | TEMPORARY SILT FENCE | WATTLE | SEED & MULCHING | RESPONSE FOR EROSION CONTROL | |
| | | | | | | | | | | | | LF | LF | SY | EA | EA | SY | SY | EA | EA | LF | LF | AC | EA | |
| 2017CPT.02.21.10741.5 | Pitt | 1 | NC 102 | NC 11 TO VERNA AVENUE | 1 | 2 | 2WU | NO | NO | 0.448 | 44 | 55 | | 60 | 3 | 22 | | | 2 | 3 | | | | | |
| TOTAL FOR MAP NO. 1 | | | | | | | | | | 0.448 | | 55 | | 60 | 3 | 22 | | | 2 | 3 | | | | | |
| 2017CPT.02.21.10741.5 | Pitt | 2 | NC 102 | VERNA AVENUE TO END OF C&G | 2 | 2 | 2WU | NO | NO | 1.156 | 30 | 55 | 82 | | 3 | 22 | | | | | | | | | |
| TOTAL FOR MAP NO. 2 | | | | | | | | | | 1.156 | | 55 | 82 | | 3 | 22 | | | | | | | | | |
| 2017CPT.02.21.10741.5 | Pitt | 3 | NC 102 | END OF C&G TO SWIFT CREEK BRIDGE #53 | 3 | 2 | 2WU | NO | NO | 0.369 | 26 | | | | | | 150 | 77 | | | 250 | 100 | 0.46 | 1 | |
| TOTAL FOR MAP NO. 3 | | | | | | | | | | 0.369 | | | | | | | 150 | 77 | | | 250 | 100 | 0.46 | 1 | |
| TOTAL FOR PROJ NO. 2017CPT.02.21.10741.5 | | | | | | | | | | 1.973 | | 110 | 82 | 60 | 6 | 44 | 150 | 77 | 2 | 3 | 250 | 100 | 0.46 | 1 | |
| GRAND TOTAL | | | | | | | | | | 1.973 | | 110 | 82 | 60 | 6 | 44 | 150 | 77 | 2 | 3 | 250 | 100 | 0.46 | 1 | |

2'6" Curb & Gutter Remove/Replace

| Location | Feet |
|------------|------|
| 10+94 -LT- | 30 |
| 10+94 -RT- | 15 |
| 20+65 -LT- | 5 |
| 22+77 -LT- | 5 |
| 28+35 -RT- | 40 |
| 34+58 -LT- | 5 |
| 43+55 -LT- | 10 |

**Locations provided for informational purposes. To be verified by the Engineer.

Concrete Valley Gutter

| Location | Feet |
|------------|------|
| 26+51 -LT- | 50 |
| 26+69 -RT- | 32 |

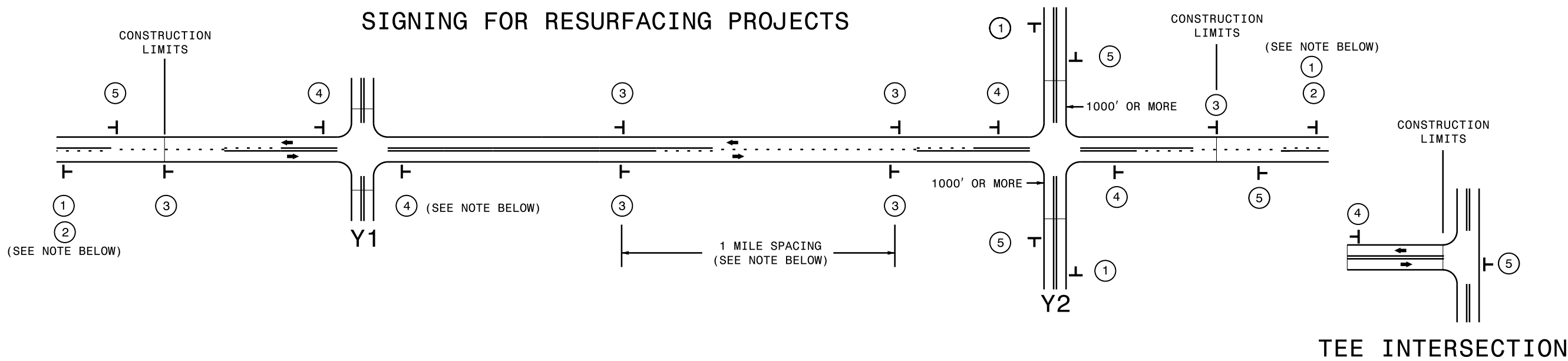
**Locations provided for informational purposes. To be verified by the Engineer.

THERMOPLASTIC AND PAINT QUANTITIES

| PROJECT NO | COUNTY | MAP NO | ROUTE | DESCRIPTION | TYP NO | LANES | LANE TYPE | LENGTH | WIDTH | 4413000000-E | 4457000000-N | 4510000000-N | 4686000000-E | 4688000000-E | 4690000000-E | | 4695000000-E | 4697000000-E | 4705000000-E | 4710000000-E | 4721000000-E | | | |
|---|--------|--------|--------|--------------------------------------|--------|-------|-----------|--------------|-------|---|---------------------------|-----------------|-------------------------|------------------------|-------------------------|--------------------------|------------------------|-------------------------|--------------------------|--------------------------|-----------------------|-------------------------|------------------|----------|
| | | | | | | | | | | WORK ZONE ADVANCE/GENERAL WARNING SIGNING | TEMPORARY TRAFFIC CONTROL | LAW ENFORCEMENT | 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 120 M WHITE THERMO | 16" X 120 M WHITE THERMO | 24" X 120 M WHITE THERMO | THERMO MSG ONLY 120 M | THERMO MSG SCHOOL 120 M | THERMO RXR 120 M | |
| | | | | | | | | | | SF | LS | HR | LF | LF | LF | LF | LF | LF | LF | LF | EA | EA | EA | |
| 2017CPT.02.21.10741.5 | Pitt | 1 | NC 102 | NC 11 TO VERNA AVENUE | 1 | 2 | 2WU | 0.448 | 44 | 126 | 0.230 | 40 | | | 500 | 5,914 | 100 | 120 | | 310 | 4 | 12 | | |
| TOTAL FOR MAP NO. 1 | | | | | | | | 0.448 | | 126 | 0.230 | 40 | | | 500 | 5,914 | 100 | 120 | | 310 | 4 | 12 | | |
| 2017CPT.02.21.10741.5 | Pitt | 2 | NC 102 | VERNA AVENUE TO END OF C&G | 2 | 2 | 2WU | 1.156 | 30 | 126 | 0.600 | 40 | 1,350 | | 300 | 12,207 | 325 | | 100 | 200 | | | 4 | |
| TOTAL FOR MAP NO. 2 | | | | | | | | 1.156 | | 126 | 0.600 | 40 | 1,350 | | 300 | 12,207 | 325 | | 100 | 200 | | | 4 | |
| 2017CPT.02.21.10741.5 | Pitt | 3 | NC 102 | END OF C&G TO SWIFT CREEK BRIDGE #53 | 3 | 2 | 2WU | 0.369 | 26 | 45 | 0.170 | | | 3,970 | | 3,690 | | | | 27 | | | | |
| TOTAL FOR MAP NO. 3 | | | | | | | | 0.369 | | 45 | 0 | | 3,970 | | 3,690 | | | | | 27 | | | | |
| TOTAL FOR PROJ NO. 2017CPT.02.21.10741.5 | | | | | | | | 1.973 | | 297 | 1 | 80 | 1,350 | 3,970 | | 800 | 21,811 | 425 | 120 | 100 | 537 | 4 | 12 | 4 |
| | | | | | | | | | | | | | | | 22,611 | | | | | 20 | | | | |
| GRAND TOTAL | | | | | | | | 1.973 | | 297 | 1 | 80 | 1,350 | 3,970 | | 800 | 21,811 | 425 | 120 | 100 | 537 | 4 | 12 | 4 |
| | | | | | | | | | | | | | | | 22,611 | | | | | 20 | | | | |

| PROJECT NO | COUNTY | MAP NO | ROUTE | DESCRIPTION | TYP NO | LANES | LANE TYPE | LENGTH | WIDTH | 4725000000-E | | | | | 4810000000-E | 4830000000-E | 4835000000-E | 4840000000-N | | 4845000000-N | | | 4905000000-N | |
|---|--------|--------|--------|--------------------------------------|--------|-------|-----------|--------------|-------|----------------------|-----------------------|----------------------|----------------------------|----------------------------|-----------------|-----------------|-----------------|------------------|---------------|----------------|----------------|-----------------|-----------------------|-----------|
| | | | | | | | | | | THERMO LT ARROW 90 M | THERMO STR ARROW 90 M | THERMO RT ARROW 90 M | THERMO STR & RT ARROW 90 M | THERMO STR & LT ARROW 90 M | 4" YELLOW PAINT | 16" WHITE PAINT | 24" WHITE PAINT | PAINT MSG SCHOOL | PAINT MSG RXR | PAINT LT ARROW | PAINT RT ARROW | PAINT STR ARROW | SNOW PLOWABLE MARKERS | |
| | | | | | | | | | | EA | EA | EA | EA | EA | LF | LF | LF | EA | EA | EA | EA | EA | EA | |
| 2017CPT.02.21.10741.5 | Pitt | 1 | NC 102 | NC 11 TO VERNA AVENUE | 1 | 2 | 2WU | 0.448 | 44 | 21 | 2 | 3 | 3 | 1 | 5,914 | | 100 | 12 | | 6 | 2 | 2 | 75 | |
| TOTAL FOR MAP NO. 1 | | | | | | | | 0.448 | | 21 | 2 | 3 | 3 | 1 | 5,914 | | 100 | 12 | | 6 | 2 | 2 | 75 | |
| 2017CPT.02.21.10741.5 | Pitt | 2 | NC 102 | VERNA AVENUE TO END OF C&G | 2 | 2 | 2WU | 1.156 | 30 | 12 | | | 9 | | 12,207 | 100 | 50 | | 4 | | | | 87 | |
| TOTAL FOR MAP NO. 2 | | | | | | | | 1.156 | | 12 | | | 9 | | 12,207 | 100 | 50 | | 4 | | | | 87 | |
| 2017CPT.02.21.10741.5 | Pitt | 3 | NC 102 | END OF C&G TO SWIFT CREEK BRIDGE #53 | 3 | 2 | 2WU | 0.369 | 26 | | | | | | | | | | | | | | 24 | |
| TOTAL FOR MAP NO. 3 | | | | | | | | 0.369 | | | | | | | | | | | | | | | | 24 |
| TOTAL FOR PROJ NO. 2017CPT.02.21.10741.5 | | | | | | | | 1.973 | | 33 | 2 | 3 | 12 | 1 | 18,121 | 100 | 150 | 12 | 4 | 6 | 2 | 2 | 186 | |
| | | | | | | | | | | 51 | | | | 16 | | 10 | | | | | | | | |
| GRAND TOTAL | | | | | | | | 1.973 | | 33 | 2 | 3 | 12 | 1 | 18,121 | 100 | 150 | 12 | 4 | 6 | 2 | 2 | 186 | |
| | | | | | | | | | | 51 | | | | 16 | | 10 | | | | | | | | |

SIGNING FOR RESURFACING PROJECTS



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

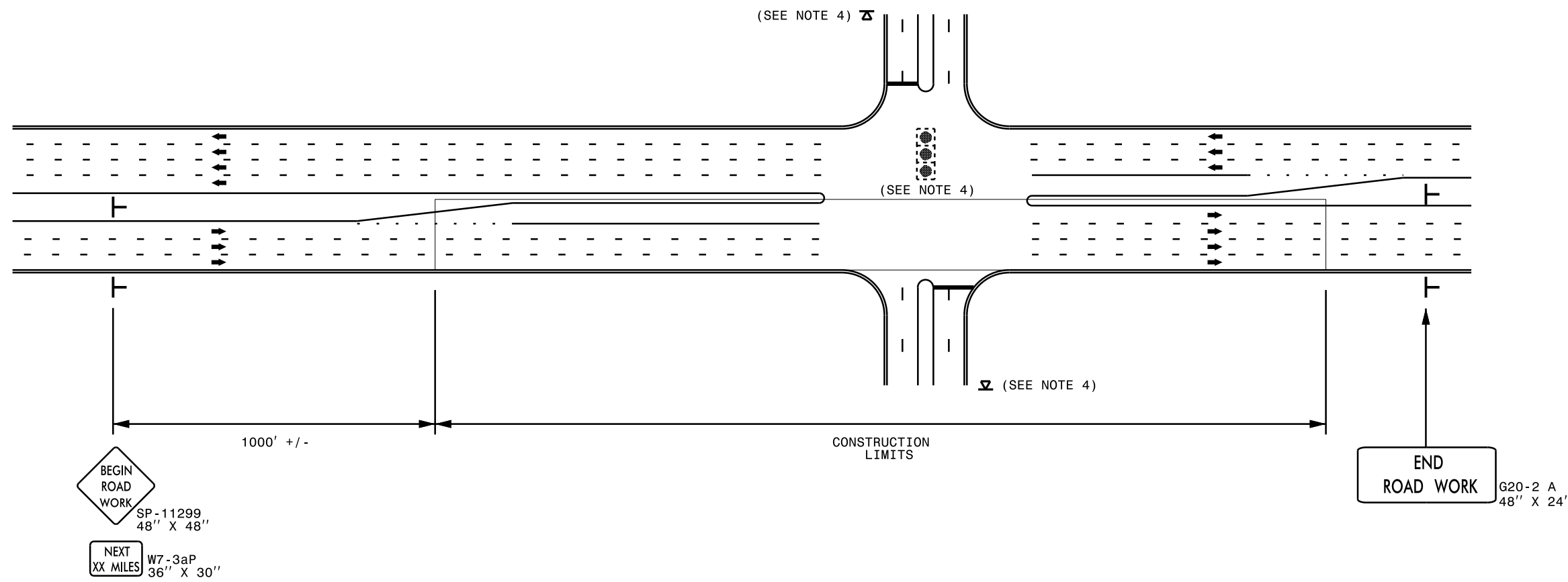
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

| | | | |
|--|------|--|---|
| SIGNING NOTES AND PLACEMENT PER DIRECTION | | <p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)</p> | <p style="text-align: center;">NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <small>W20-1 48" X 48"</small> </div> <div style="text-align: center;"> <small>W20-7 A 48" X 48"</small> </div> </div> <p style="text-align: center;">PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p> |
| | | <p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p> | |
| | | <p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS.</p> <p>- DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</p> <p>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</p> <p>- FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH.</p> <p>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</p> <p>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</p> | |
| | | <p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p> | |

**RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS**

URBAN / SUBURBAN WORKZONES



NOTES:

- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
- 4) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.
- 5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
- 6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
- 7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

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



**RESURFACING ADVANCE
WARNING SIGNS FOR
URBAN / SUBURBAN
FACILITIES**