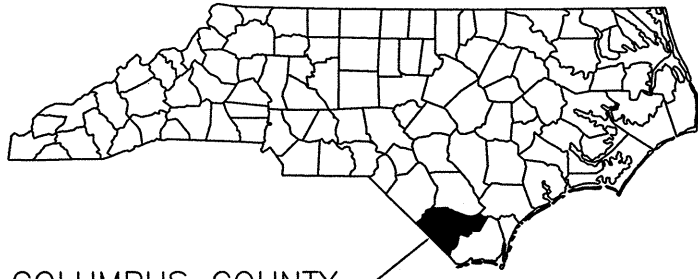
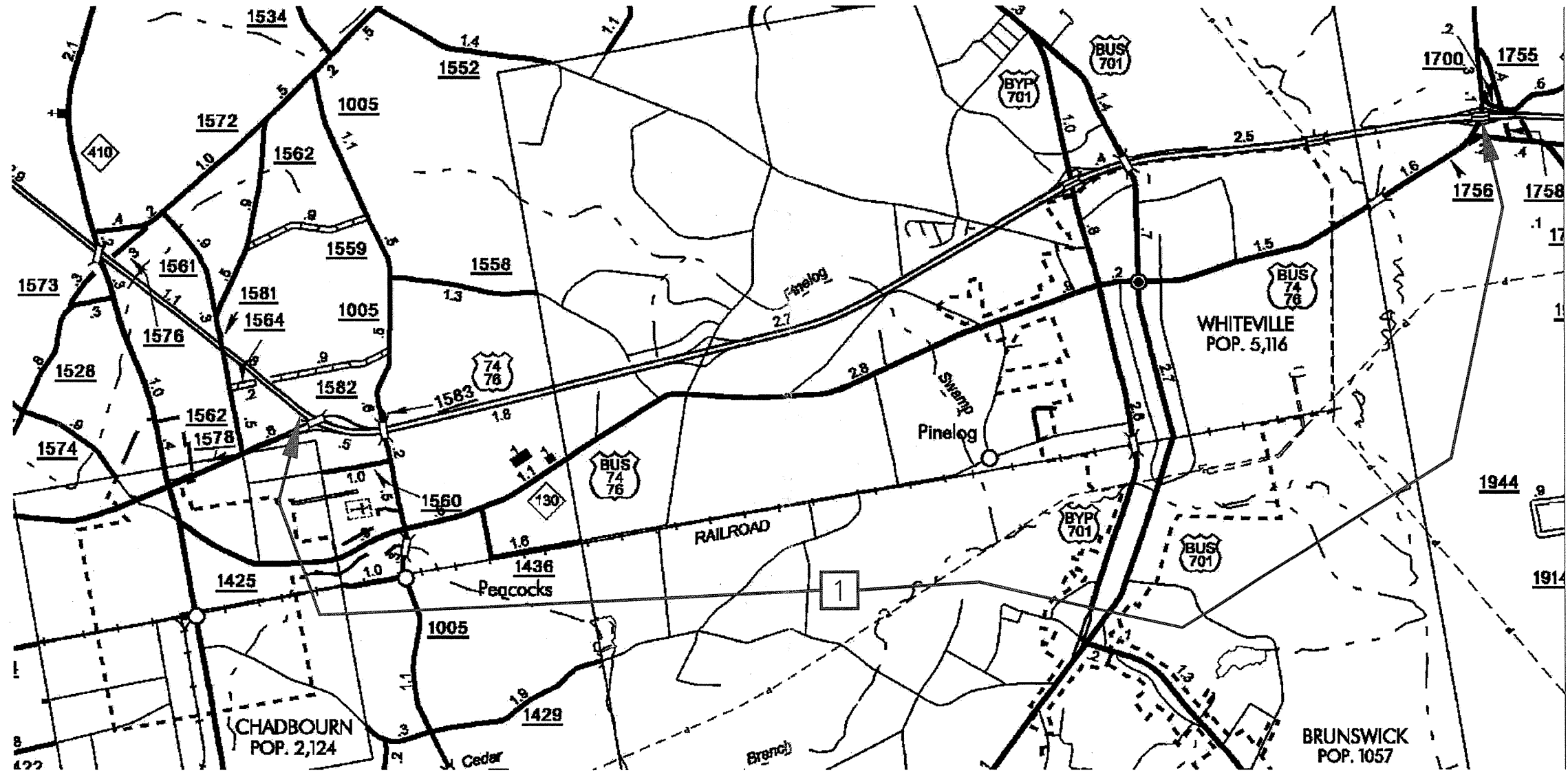
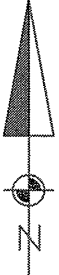
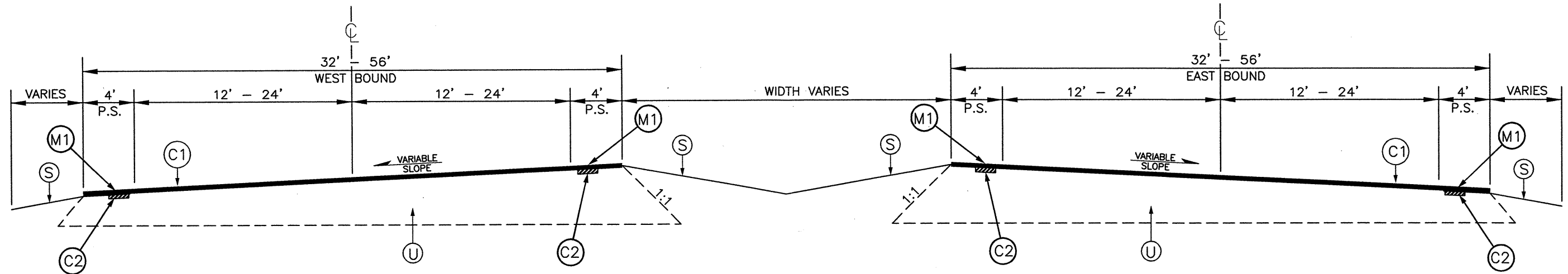


RESURFACING MAP – COLUMBUS COUNTY



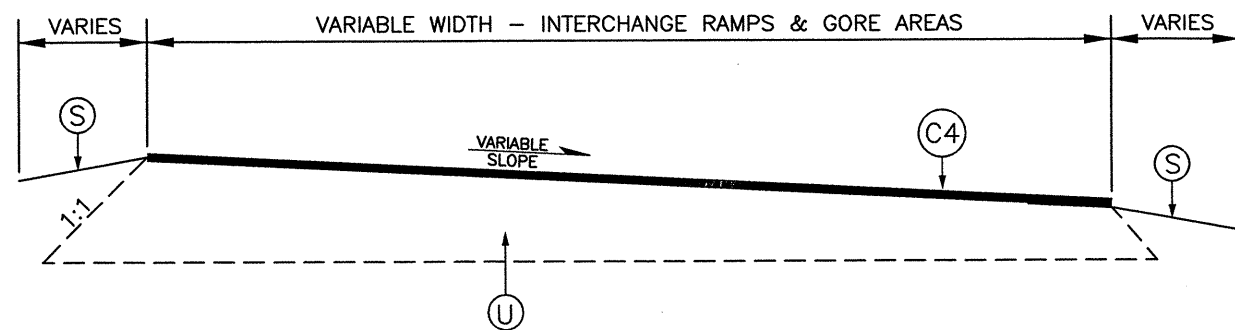
COLUMBUS COUNTY





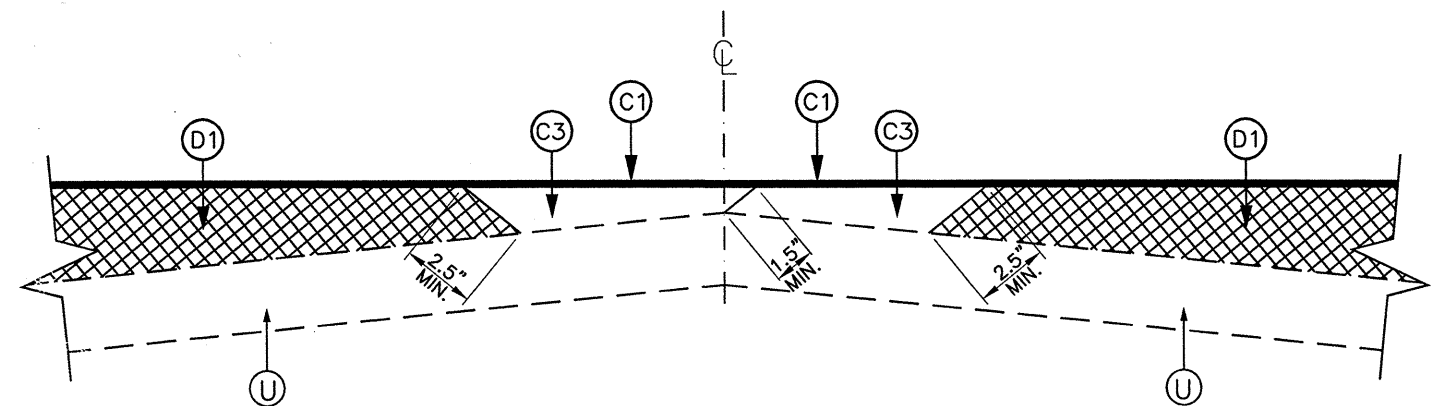
TYPICAL SECTION NO. 1

- NOTES:
1. INCLUDES MILLING ON ASPHALT BRIDGE DECKS & BRIDGE APPROACHES, AS NEEDED, OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 2.
 2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF SECTIONS FOR SMOOTH TIE-INS, CURB RADII, AND STREET INTERSECTIONS, AS NEEDED, OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 3.



INTERCHANGE RAMP DETAIL

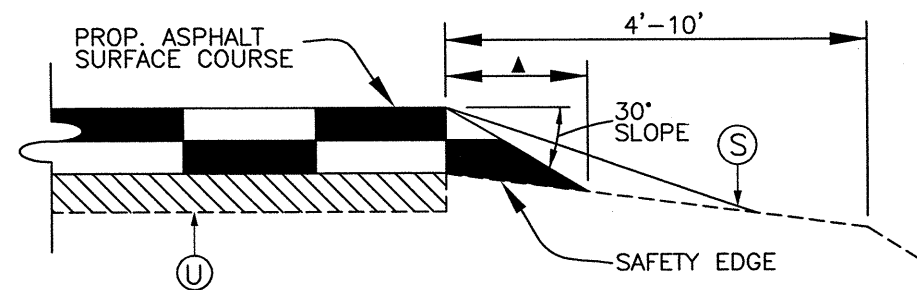
- NOTES:
1. FOR USE WITH ALL INTERCHANGE RAMPS AND GORE AREAS.
 2. INCLUDES MILLING ON INTERCHANGE RAMPS WITH CURB & GUTTER, AS NEEDED, OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 4.
 3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF SECTIONS FOR SMOOTH TIE-INS, CURB RADII, AND STREET INTERSECTIONS, AS NEEDED, OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 3.



WEDGING DETAIL

- L- STA. 255+00 TO -L- STA. 263+50
- L- STA. 287+00 TO -L- STA. 297+00
- L- STA. 402+00 TO -L- STA. 429+00

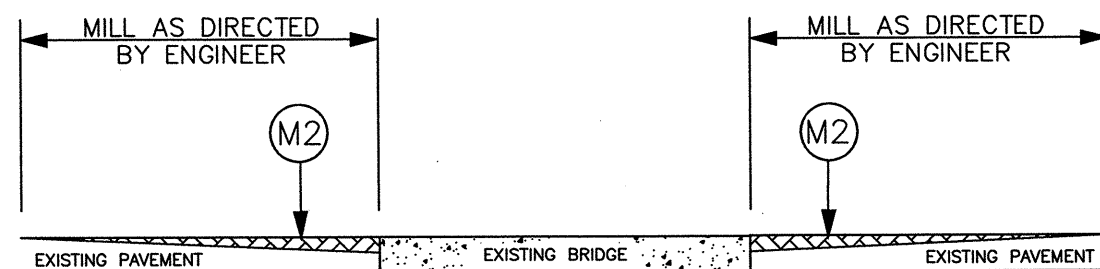
NOTE:
STATIONING BASED ON PLANS FOR PROJECT NUMBERS 6.4310019
& 6.4310089, DATED MARCH, 1970.



DETAIL 1
SHOULDER WEDGE / SAFETY EDGE

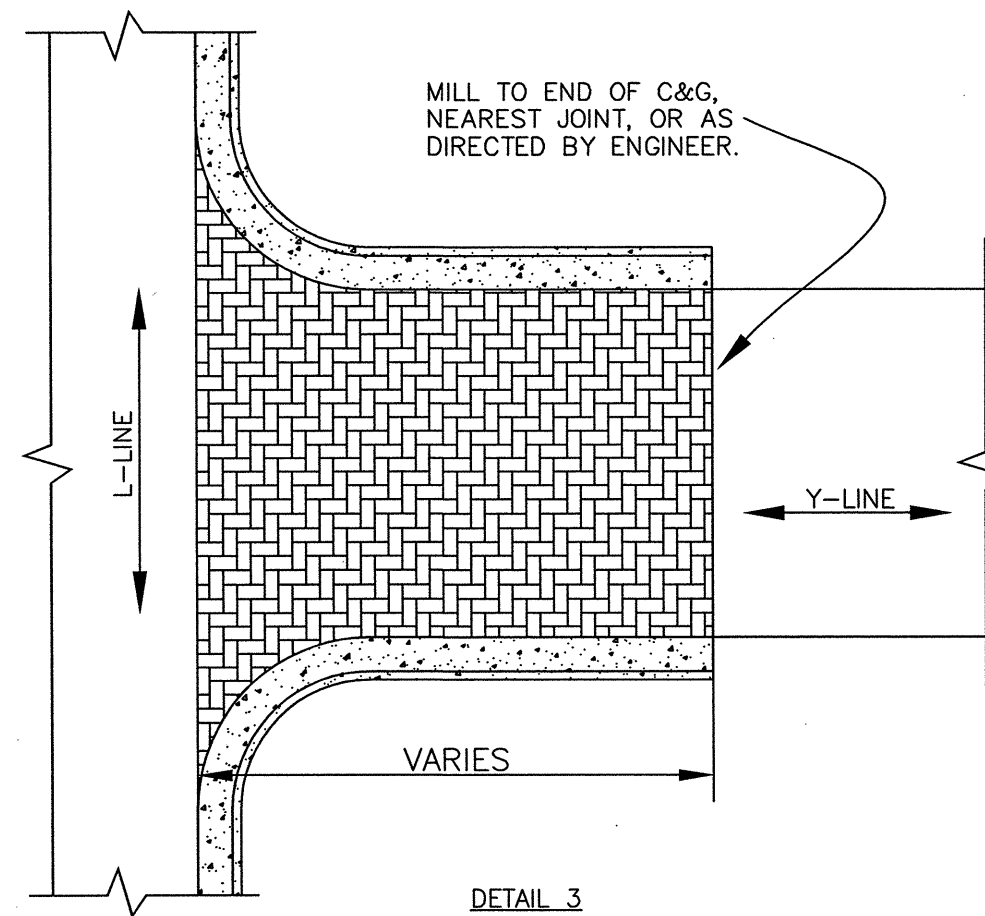
NOTE:

1. SAFETY EDGE SHALL BE CONSTRUCTED AS PART OF THE ROADWAY PAVEMENT. A SHOULDER WEDGE DEVICE SHALL BE ADDED TO THE SCREED OF THE PAVING MACHINE.
2. SAFETY EDGE SHALL BE INCLUDED ON ALL TYPICALS EXCEPT FOR CURB & GUTTER SECTIONS, OR AS DIRECTED OTHERWISE BY ENGINEER.
3. SAFETY EDGE SHALL BE USED ON THE SURFACE LAYER ONLY.
4. SAFETY EDGE MAY BE CONSTRUCTED BY HAND WHEN NECESSARY FOR TRANSITIONS AND TURNOUTS.
5. THE CONSTRUCTION OF THE SAFETY EDGE, AS WELL AS ANY ADDITIONAL SITE PREPARATION OR EARTHWORK REQUIRED, WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE ASPHALT CONCRETE SURFACE COURSE.



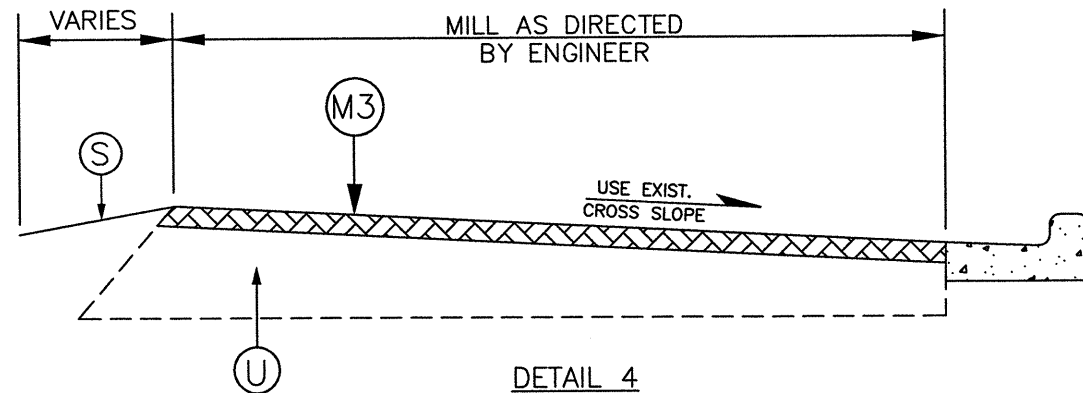
DETAIL 2
MILLING APPROACHES

NOTE:
MILLING SHALL BE PERFORMED AT BRIDGES AND RAILROAD APPROACHES AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH THIS DETAIL.



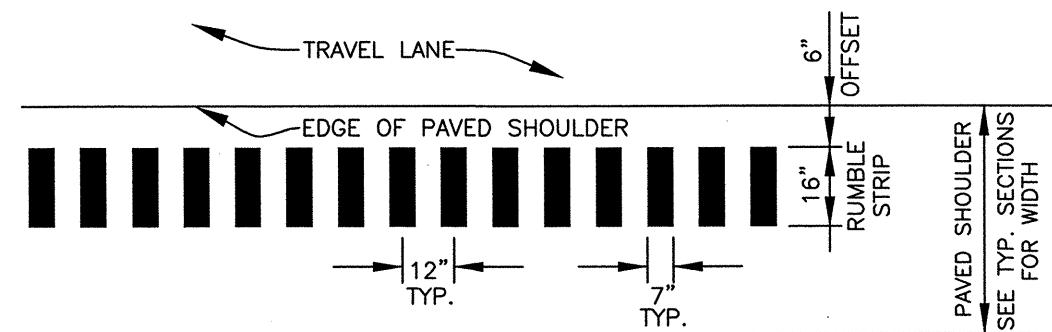
DETAIL 3
Y-LINE / END JOINT MILLING

NOTE: INCLUDES INCIDENTAL MILLING AT THE ENDS OF SECTIONS FOR SMOOTH TIE-INS, CURB RADII, AND STREET INTERSECTIONS, AS NEEDED, OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH THIS DETAIL.



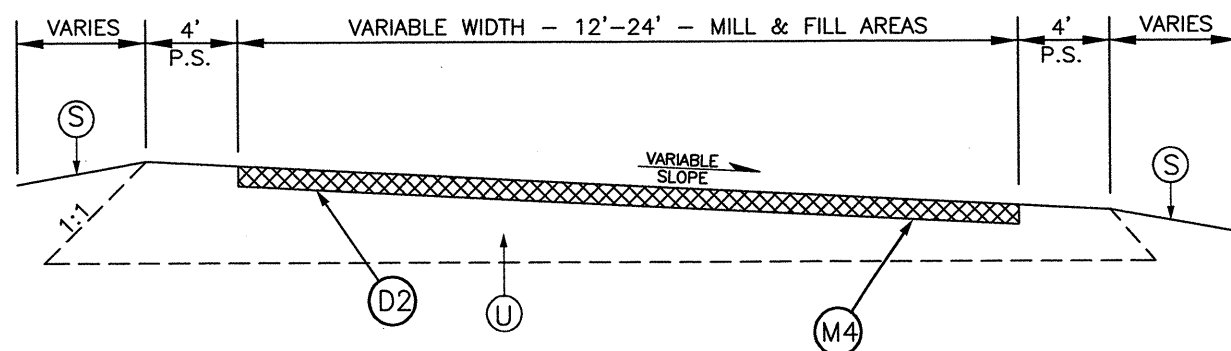
DETAIL 4
MILLING INTERCHANGE RAMPS

NOTE:
MILLING SHALL BE PERFORMED AT INTERCHANGE RAMPS WITH CURB & GUTTER AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH THIS DETAIL.



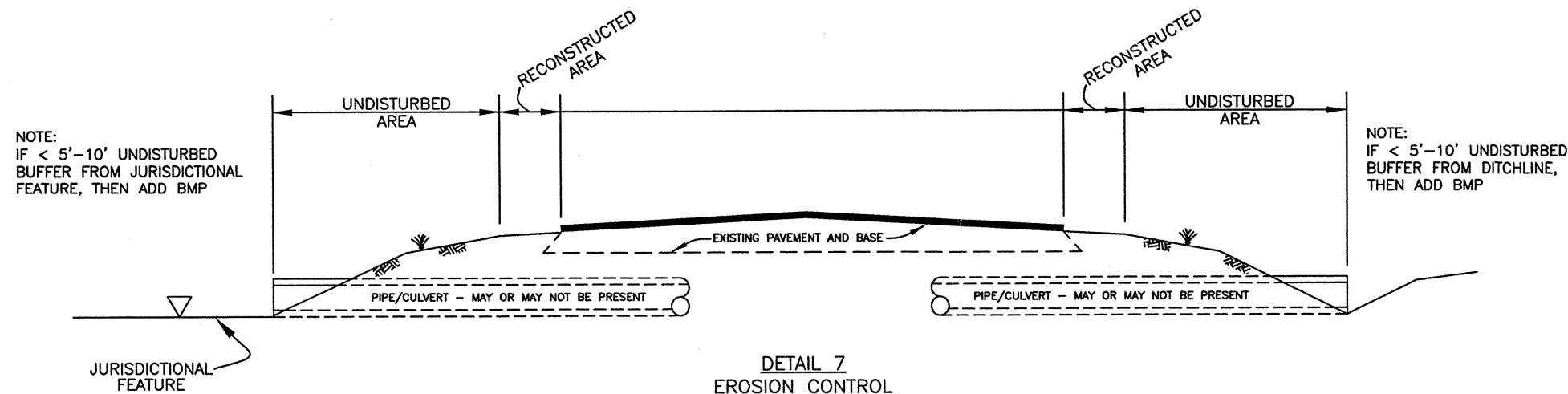
DETAIL 5
PAVED SHOULDER - PLAN VIEW

NOTE:
REFER TO STD. DWG. NO. 665.01 - "ASPHALT SHOULDERS MILLED RUMBLE STRIPS", IN THE NCDOT ROADWAY STANDARD DRAWINGS, LATEST EDITION, FOR ADDITIONAL INFORMATION.



DETAIL 6
MILL & FILL PATCHING

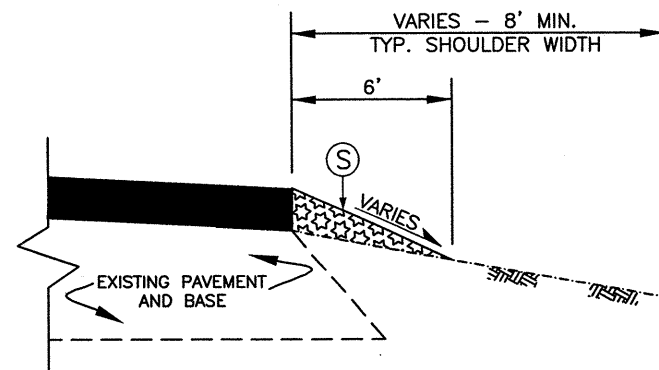
NOTE:
1. DISTRESSED AREAS TO BE PATCHED SHALL BE DESIGNATED BY THE ENGINEER.
2. MILL DISTRESSED AREAS TO A DEPTH AS INDICATED.
3. FILL MILLED AREAS WITH ASPHALT CONCRETE INTERMEDIATE COURSE BACK FLUSH WITH THE EXISTING ASPHALT LEFT IN PLACE.



DETAIL 7
EROSION CONTROL

NOTES:

1. IF A 5'-10' VEGETATED, UNDISTURBED BUFFER FROM ROW, DITCHLINE, WATER FEATURE OR DRAINAGE INLET CAN BE MAINTAINED, THEN NO BMP'S NEEDED.
2. IF < 5'-10' UNDISTURBED BUFFER FROM ROW, DITCHLINE, WATER FEATURE OR DRAINAGE INLET, THEN ADD BMP'S.
3. BMP OPTIONS:
 - a. MATTING MAY BE APPLIED AS SHOWN IN NCDOT STD. DWG. 1631.01 TO ESTABLISH BUFFER.
 - b. IF MATTING IS NOT PRACTICAL, OR THERE IS NOT ENOUGH SHOULDER WIDTH, THEN INSTALL TEMPORARY SILT FENCE AS SHOWN IN NCDOT STD. DWG. 1605.01, AND WATTLES WITH POLYACRYLAMIDE (PAM).



DETAIL 8
SHOULDER RECONSTRUCTION

NOTES:

1. SHOULDER SHALL BE RECONSTRUCTED FROM THE EDGE OF PAVEMENT OUT TO A WIDTH OF 6', WITH A VARIABLE SLOPE, TYING BACK INTO THE EXISTING SHOULDER. REFER TO ROADWAY STD. DWG. 560.01 FOR MORE DETAIL.
2. THE EXISTING SHOULDER SHALL BE SCARIFIED PRIOR TO ADDING BORROW MATERIAL TO PROVIDE A GOOD BOND BETWEEN LAYERS. SHOULDER SHALL BE PROPERLY COMPACTED AFTER SOIL PLACEMENT.
3. BORROW MATERIAL SHALL BE PLACED USING A WIDENING MACHINE OR SIMILAR DEVICE.
4. 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.
5. REQUIRED BORROW MATERIAL MAY BE OBTAINED BY THE CONTRACTOR FROM WIDENING OPERATIONS WITHIN THE PROJECT LIMITS, FROM NCDOT APPROVED BORROW PITS OR FROM NCDOT STOCKPILES. ANY EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN APPROVED DISPOSAL SITE.

PAVEMENT SCHEDULE

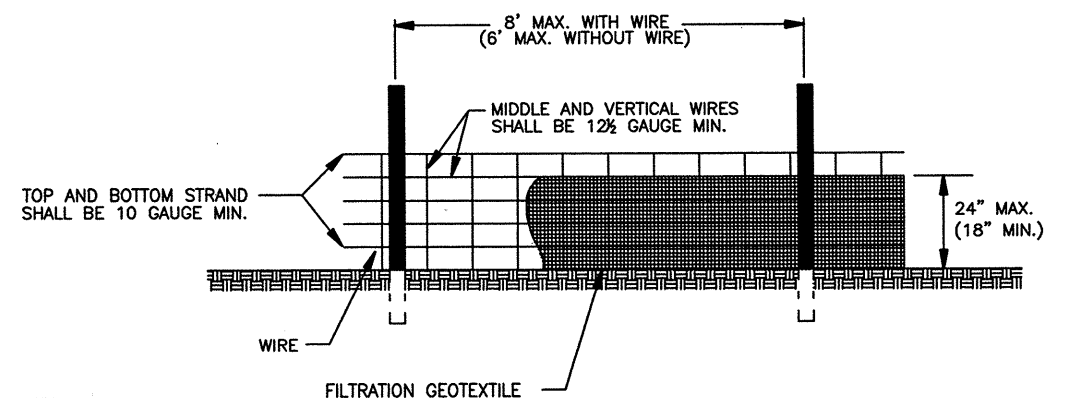
C1	Proposed approximately 2" of Asphalt Concrete Surface Course, Type S9.5C, at an average rate of 224 pounds per square yard.
C2	Proposed approximately 1/2" of Asphalt Concrete Surface Course, Type S4.75A, at an average rate of 50 pounds per square yard, for filling existing Milled Rumble Strips prior to placement of C1.
C3	Proposed variable depth Asphalt Concrete Surface Course, Type S9.5C at an average rate of 112 lbs. per sq. yd. per 1" depth. to be placed in layers not less than a depth of 1 1/2", nor greater than 2" in depth, with a max. total depth of 3.0".
C4	Proposed approximately 1 1/2" of Asphalt Concrete Surface Course, Type S9.5B, at an average rate of 168 pounds per square yard.
D1	Proposed variable depth Asphalt Concrete Intermediate Course, Type I19.0C, at an average rate of 114 lbs. per sq. yd. per 1" depth, to be placed in layers not less than a depth of 2 1/2", nor greater than 4" in depth, with a max. total depth of 4.0".
D2	Proposed approximately 2 1/2" of Asphalt Concrete Intermediate Course, Type I-19.0-C, at an average rate of 285 pounds per square yard.
M1	Proposed Milled Rumble Strips in accordance with Standard Drawing 665.01 of the Roadway Standard Drawings.
M2	Milling Depth 0" - 2" at all Bridge and Railroad Approaches, for the entire width of the roadway, or as Directed by the Engineer.
M3	Milling Depth 1 1/2" at all Interchange Ramps with Curb & Gutter, for the entire width of the roadway, or as Directed by the Engineer.
M4	Milling Depth 2 1/2" at all designated Mill & Fill Patch Areas, with a variable width from 12' to 24', or as Directed by the Engineer.
S	Shoulder Reconstruction
U	Existing Pavement and Base
W	Variable Depth Asphalt Pavement (See Wedging Detail)

DRAWINGS NOT TO SCALE

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

ENGLISH STANDARD DRAWING FOR TEMPORARY SILT FENCE

SHEET 1 OF 1 1605.01



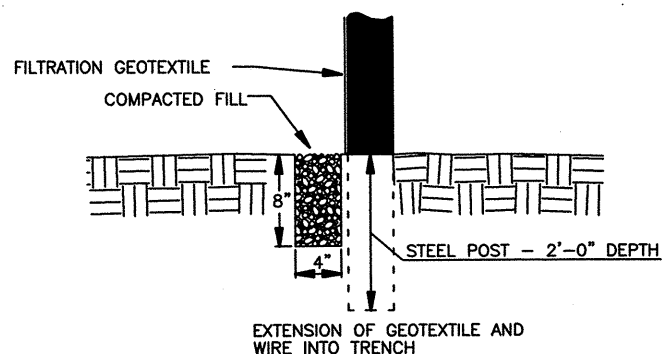
NOTES

USE FILTRATION GEOTEXTILE A MINIMUM OF 36" IN WIDTH AND FASTEN ADEQUATELY TO THE POSTS AND WIRE AS DIRECTED.

USE WIRE A MINIMUM OF 32" IN WIDTH AND WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.

PROVIDE 5'-0" STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.

FOR MECHANICAL SLICING METHOD INSTALLATION, GEOTEXTILE SHALL BE A MAXIMUM OF 18" ABOVE GROUND SURFACE.

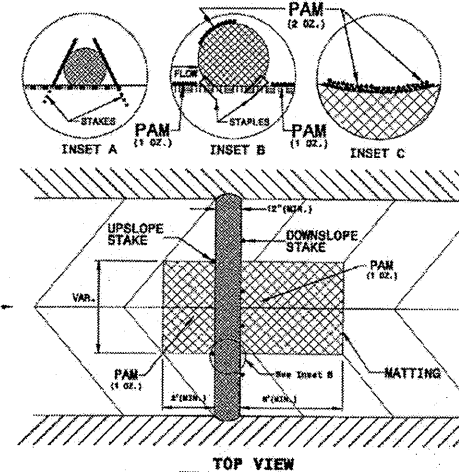
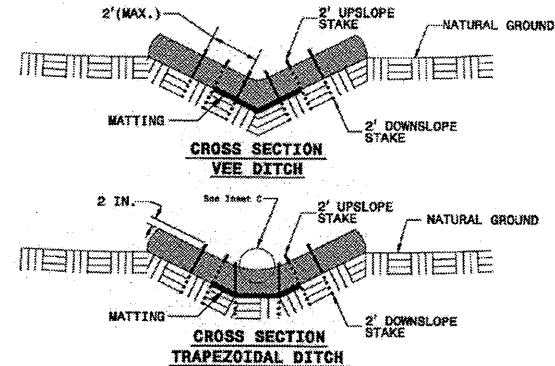
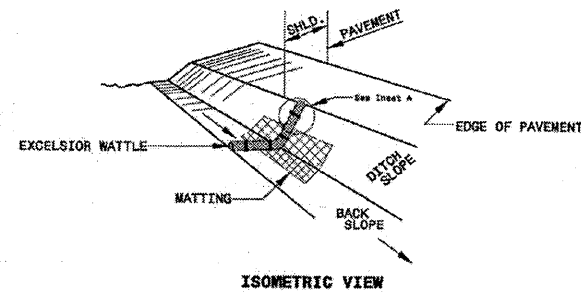


STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR TEMPORARY SILT FENCE

SHEET 1 OF 1 1605.01

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

USE MINIMUM 1/2 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 1001 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OPPOSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

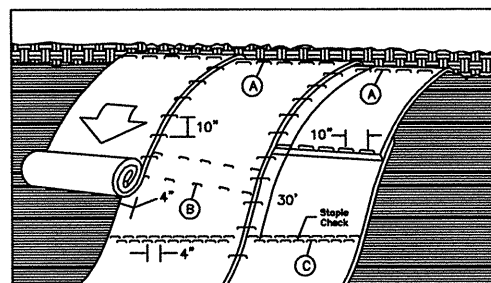
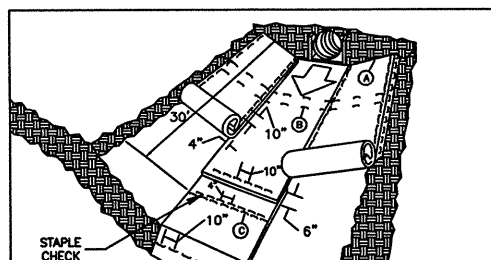
INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

PROJECT REFERENCE NO.	R-5508
SHEET NO.	6
DATE	11-22
BY	
CHECKED	
APPROVED	

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

ENGLISH STANDARD DRAWING FOR MATTING INSTALLATION

SHEET 1 OF 1 1631.01



MATTING ON SLOPES

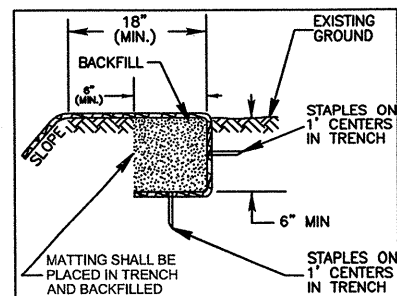


DIAGRAM (A)

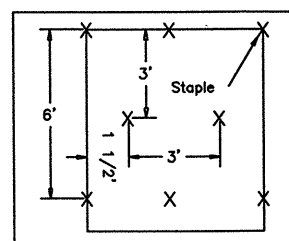


DIAGRAM (B)

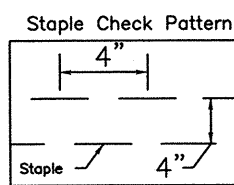


DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, COIR FIBER MAT AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION AND AS DIRECTED.

STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

NOT TO SCALE

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

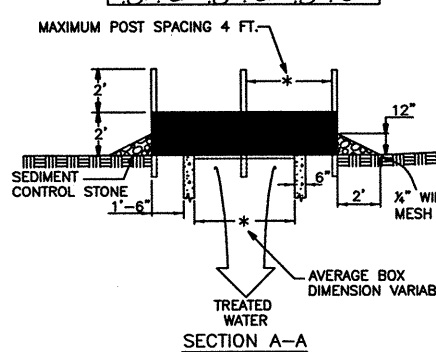
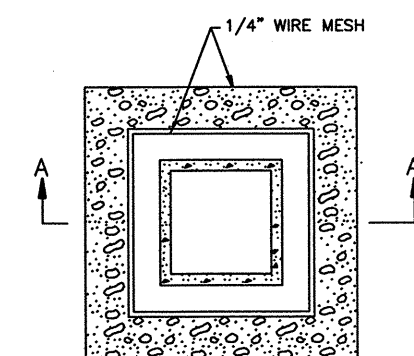
ENGLISH STANDARD DRAWING FOR MATTING INSTALLATION

SHEET 1 OF 1 1631.01

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

ENGLISH STANDARD DRAWING FOR ROCK INLET SEDIMENT TRAP TYPE C

SHEET 1 OF 1 1632.03



MULTI-DIRECTIONAL FLOW

NOTES

USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.

USE 24 GAUGE MINIMUM WIRE MESH HARDWARE CLOTH WITH 1/4 INCH MESH OPENINGS.

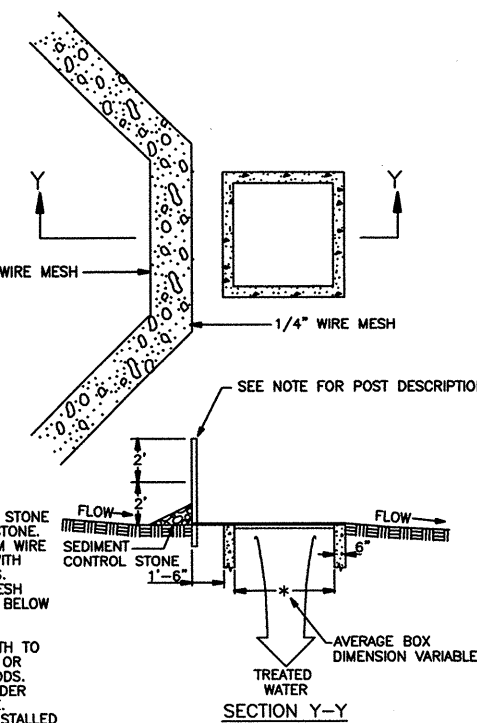
PLACE TOP OF WIRE MESH A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.

ATTACH HARDWARE CLOTH TO POSTS WITH WIRE STAPLE OR OTHER ACCEPTABLE METHODS.

INSTALL WIRE MESH UNDER SEDIMENT CONTROL STONE.

USE 5' STEEL POST, INSTALLED 1.5' DEEP MINIMUM, AND OF THE SELF-FASTENER ANGLE STEEL TYPE.

SPACE POST A MAXIMUM OF 4'.



SINGLE-DIRECTIONAL FLOW

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

ENGLISH STANDARD DRAWING FOR ROCK INLET SEDIMENT TRAP TYPE C

SHEET 1 OF 1 1632.03

PROJECT NO.	SHEET NO.	TOTAL NO.
R-5508	7	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	BORROW EXCAVATION CY	SHOULDER RECONSTRUCTION SMI	MILLING ASPHALT PAVEMENT, 1.5" DEPTH SY	MILLING ASPHALT PAVEMENT, 2.5" DEPTH SY	MILLING ASPHALT PAVEMENT, 0" TO 2" DEPTH SY	INCIDENTAL MILLING SY	INTER-MEDIATE COURSE, I19.0C TONS	WEDGING WITH I19.0C TONS	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	WEDGING WITH S9.5C TONS	SURFACE COURSE, S4.75A TONS
R-5508	Columbus	1	US 74-A	FROM US 76 TO US 74 BUSINESS	1, 2	No	8.5	64	3,200	34.00	2,000	5,700	11,500	533	803	4,280	9,797	37,591	788	673
TOTAL FOR MAP NO. 1							8.5		3,200	34.00	2,000	5,700	11,500	533	803	4,280	9,797	37,591	788	673
TOTAL FOR PROJ NO. R-5508							8.5		3,200	34.00	2,000	5,700	11,500	533	803	4,280	9,797	37,591	788	673
															5,083				38,379	

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LENGTH MI	WIDTH FT	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	MILLED RUMBLE STRIPS LF	TEMPORARY SILT FENCE LF	SEDIMENT CONTROL STONE TON	SILT EXCAVATION CY	MATTING FOR EROSION CONTROL SY	1/4" HARDWARE CLOTH LF	WATTLE LF	POLY-ACRYLAMIDE (PAM) LB	SEEDING & MULCHING ACR	REMOVAL AND REPLACEMENT OF BRIDGE JOINT SEALS LS
R-5508	Columbus	1	US 74-A	FROM US 76 TO US 74 BUSINESS	1, 2	8.5	64	3,142	255	180,000	2,550	100	300	680	1,320	1,224	51	42	LS
TOTAL FOR MAP NO. 1						8.5		3,142	255	180,000	2,550	100	300	680	1,320	1,224	51	42	LS
TOTAL FOR PROJ NO. R-5508						8.5		3,142	255	180,000	2,550	100	300	680	1,320	1,224	51	42	LS

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LENGTH	WIDTH	4399000000-N	4697000000-E	4688000000-E			4690000000-E		4700000000-E	4710000000-E	4725000000-E		4775000000-E	4850000000-E	4900000000-N
							TEMP. TRAFFIC CONTROL LS	8" X 120 M WHITE THERMO LF	6" X 90 M WHITE THERMO LF	6" X 90 M YELLOW THERMO LF	6" X 120 M WHITE THERMO LF	6" X 120 M YELLOW THERMO LF	12" X 90 M WHITE THERMO LF	24" X 120 M WHITE THERMO LF	THERMO STR ARROW 90 M EA	THERMO RAMP ARROW (90 MILS) EA	6" COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE III LF	4" LINE REMOVAL LF	CRYSTAL & RED MARKERS EA	
R-5508	Columbus	1	US 74-A	FROM US 76 TO US 74 BUSINESS	8.5	64	1	700	128,250	106,700	25,120	4,400	8,500	40	9	4	3,800	3,800	1,850	
TOTAL FOR MAP NO. 1					8.5		1	700	128,250	106,700	25,120	4,400	8,500	40	9	4	3,800	3,800	1,850	
TOTAL FOR PROJ NO. R-5508					8.5		1	700	128,250	106,700	25,120	4,400	8,500	40	9	4	3,800	3,800	1,850	
									234,950		29,520				13					