STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	37451	1	

STATE FUND NO.	F.A. PROJ. NO.	DESCRIPTION
37451		PE, CONST

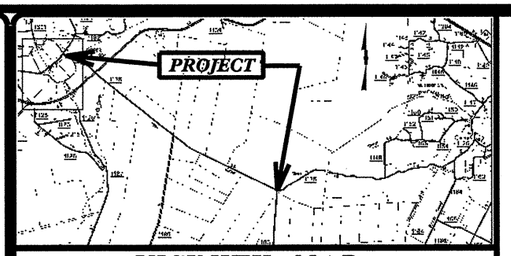
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WASHINGTON COUNTY

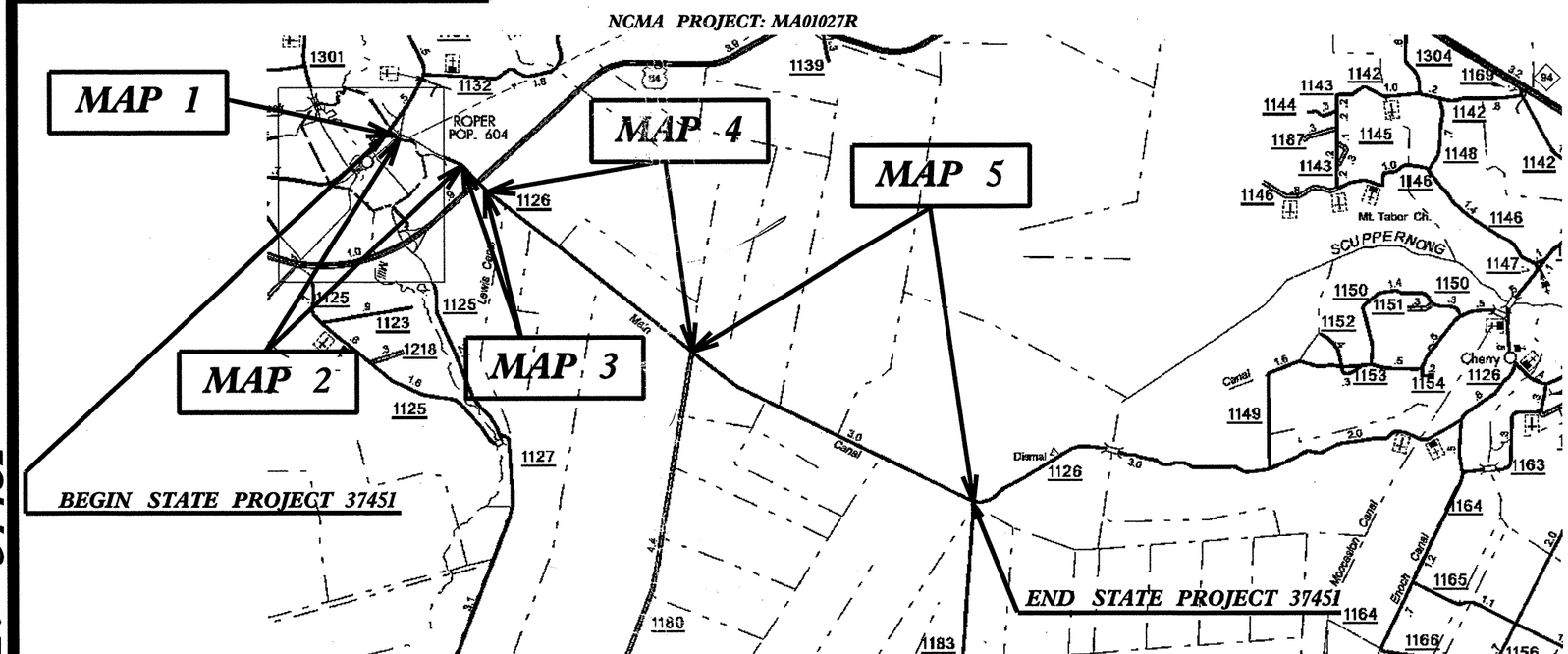
LOCATION: SR 1126 FROM US 64 TO SR 1183

TYPE OF WORK: MILLING,WIDENING AND RESURFACING

NCMA PROJECT: MA01027R



VICINITY MAP



PROJECT: 37451

GRAPHIC SCALES

NTS

PROJECT LENGTH

LENGTH ROADWAY STATE PROJECT 37451 = 6.8 MILES
TOTAL LENGTH STATE PROJECT 37451 = 6.8 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
113 AIRPORT DRIVE, SUITE 100
EDENTON, NC 27932

2006 STANDARD SPECIFICATIONS

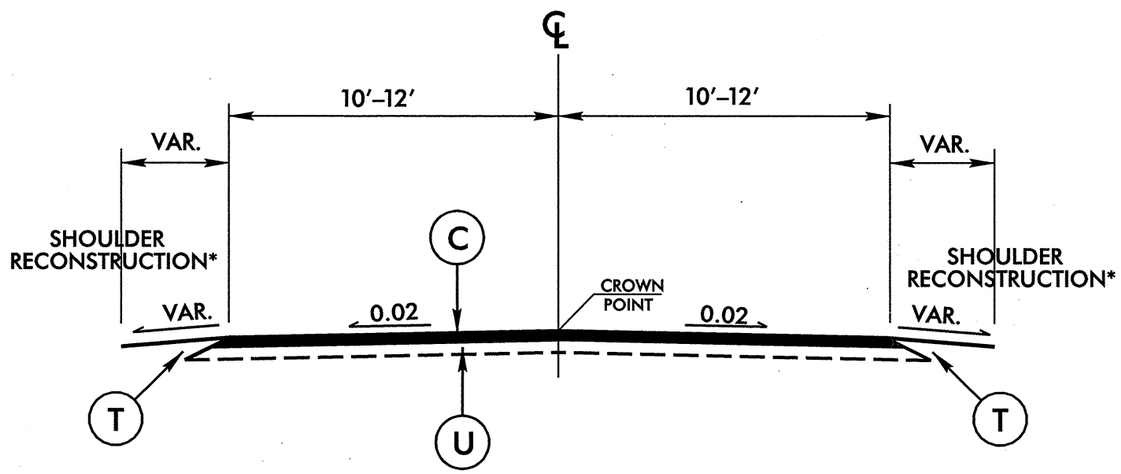
S.P. FENWICK, P.L.S.
DIVISION DESIGN /CONST. ENGINEER

CHRIS SLACHTA
DIVISION STAFF ENGINEER

NOTE TO CONTRACTOR:

ALL LANES SHALL BE STRIPED 10' (TEN FEET) FROM CENTER LINE

PROJECT REFERENCE NO.	SHEET NO.
37451	2



TYPICAL SECTION NO. 1

USE WITH MAP 1 & MAP 3

* SHOULDER RECONSTRUCTION TO BE PERFORMED AS DIRECTED BY THE ENGINEER TO MATCH EXISTING SHOULDERS AS CLOSELY AS POSSIBLE.

PROPOSED CONSTRUCTION SEQUENCE

1) PERFORM PIPE REPLACEMENTS AND REGRADE AREAS AS DIRECTED BY ENGINEER. (MAP 1 ONLY)

2) PERFORM PAVEMENT REPAIRS (FOR PIPE REPLACEMENTS) (MAP 1 ONLY)

3) PLACE S9.5B

4) RECONSTRUCT SHOULDERS.

6) APPLY PAINT MARKINGS AND RAISED PAVEMENT MARKERS.

PAVEMENT SCHEDULE	
C	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQUARE YARD.
C1	PROP. APPROX. 3/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 82.5 LBS. PER SQ. YD.
D	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQUARE YARD.
D1	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2.25" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQUARE YARD.
V	VARIABLE DEPTH MILLING (0"– 6")
V1	MILLING BITUMINOUS PAVEMENT 4"
U	EXISTING PAVEMENT
T	EARTH MATERIAL
Z	ASPHALT INTERLAYER REINFORCING SYSTEM

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

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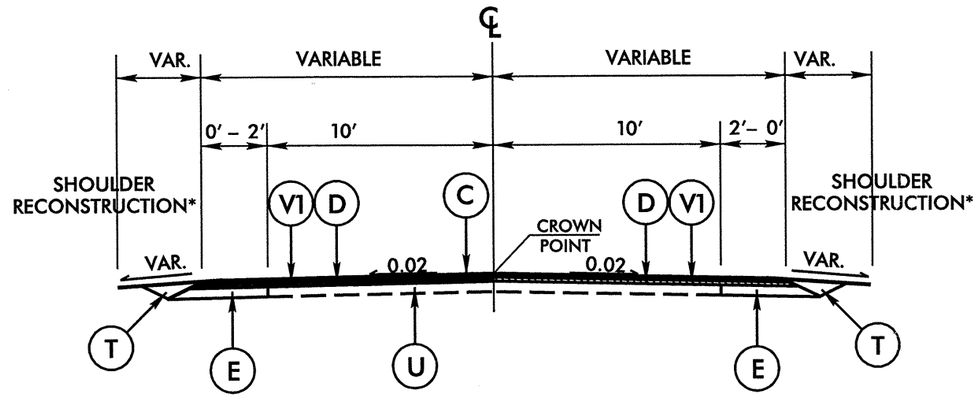
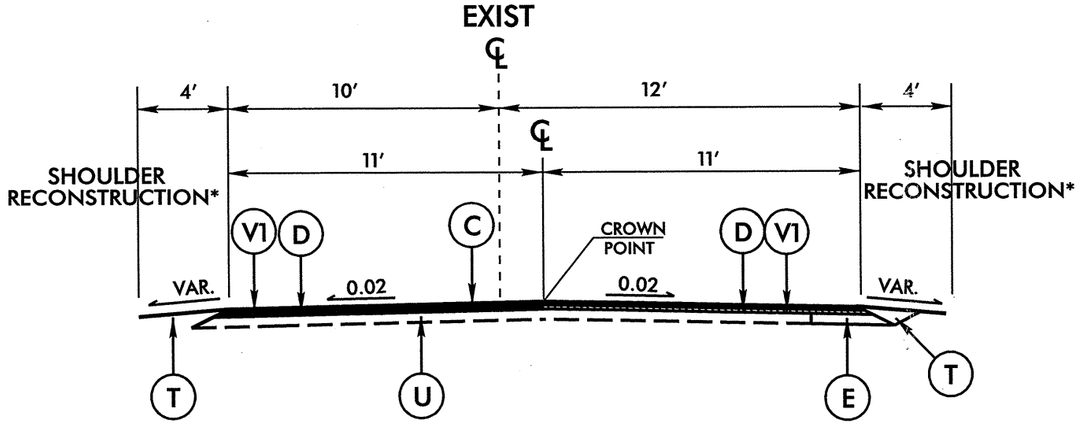


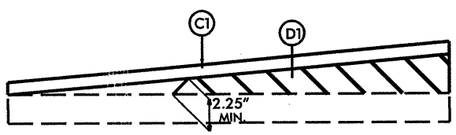
TRANSITION TYPICAL SECTION

USE WITH MAP 2



TYPICAL SECTION NO. 2

USE WITH MAP 2



Wedging Detail For Resurfacing

WEDGING DETAIL TO BE USED FOR LEVELING WHERE DIRECTED BY ENGINEER.

PROPOSED CONSTRUCTION SEQUENCE

1) PERFORM PIPE REPLACEMENTS AND REGRADE AREAS AS DIRECTED BY ENGINEER.
2) PERFORM PAVEMENT REPAIRS (FOR PIPE REPLACEMENTS)
3) MILL BITUMINOUS PAVEMENT 4" ESTABLISHING CROSS SLOPE AS DIRECTED BY THE ENGINEER
4) WIDEN RIGHT SIDE 2'–0" WITH B25.0B UP TO EXISTING PAVEMENT ELEVATION
5) PLACE I19.0B
6) RECONSTRUCT SHOULDERS.
7) APPLY TEMPORARY PAINT MARKINGS
8) PLACE S9.5B
6) APPLY PAINT MARKINGS AND RAISED PAVEMENT MARKERS.

PAVEMENT SCHEDULE

C	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQUARE YARD.
C1	PROP. APPROX. 3/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 82.5 LBS. PER SQ. YD.
D	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQUARE YARD.
D1	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2.25" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQUARE YARD.
V1	MILLING BITUMINOUS PAVEMENT 4"
U	EXISTING PAVEMENT
T	EARTH MATERIAL

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

* SHOULDER RECONSTRUCTION TO BE PERFORMED AS DIRECTED BY THE ENGINEER TO MATCH EXISTING SHOULDERS AS CLOSELY AS POSSIBLE.

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name:$FILE$
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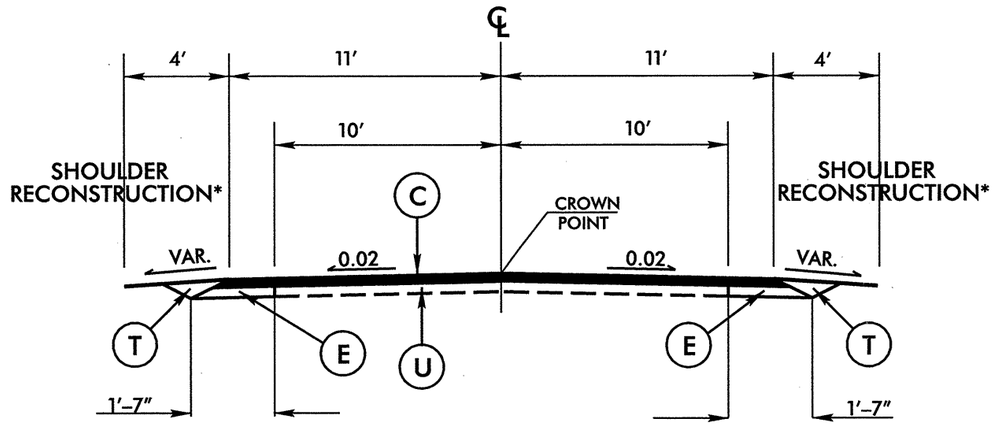
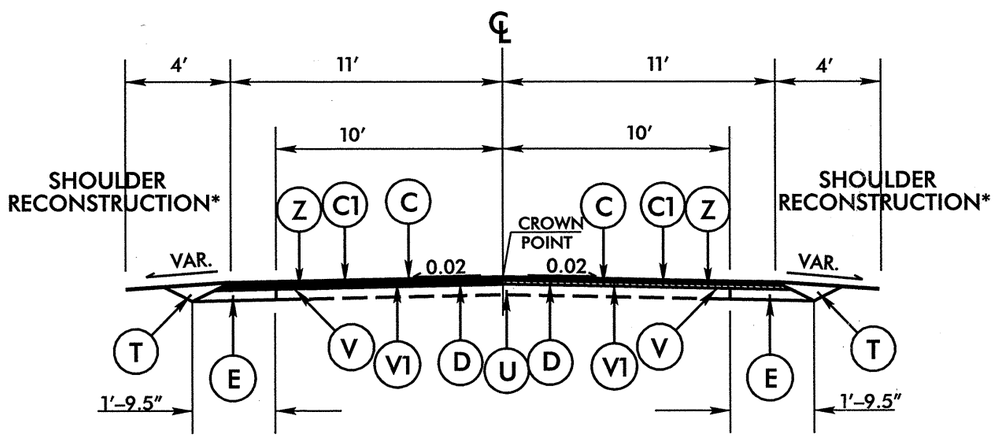
PROJECT REFERENCE NO.	SHEET NO.
37451	4



TYPICAL SECTION NO. 3

USE WITH MAP 4

* USE FROM MILE POST 1.21 TO MILE POST 3.40 OR AS DIRECTED BY THE ENGINEER



TYPICAL SECTION NO. 4

USE WITH MAP 5

* USE FROM MILE POST 3.40 (0.20 MILES NW OF THE INTERSECTION OF SR 1126 AND SR 1180) TO THE END OF PROJECT OR AS DIRECTED BY THE ENGINEER

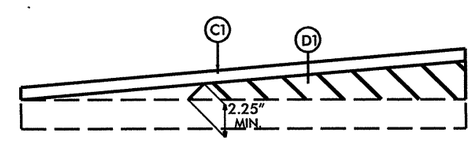
PROPOSED CONSTRUCTION SEQUENCE

1) PERFORM MILLING OPERATIONS AS DIRECTED BY THE ENGINEER
2) PERFORM PATCHING OF EXISTING PAVEMENT AS PER ENGINEER (SEE DETAIL SHEET 2-C)
3) WIDEN ONE SIDE AT A TIME WITH B 25.0B UP TO EXISTING PAVEMENT ELEVATION.
4) PLACE SF9.5A
5) INSTALL PAVEMENT REINFORCEMENT MATERIAL
6) PLACE I19.0B.
7) APPLY TEMPORARY PAINT.
8) RECONSTRUCT SHOULDERS.
9) PLACE S9.5B AND APPLY PAINT MARKINGS.

PAVEMENT SCHEDULE	
C	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQUARE YARD.
C1	PROP. APPROX. 3/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 82.5 LBS. PER SQ. YD.
D	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQUARE YARD.
D1	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2.25" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQUARE YARD.
V	VARIABLE DEPTH MILLING (0"- 6")
V1	MILLING BITUMINOUS PAVEMENT 4"
U	EXISTING PAVEMENT
T	EARTH MATERIAL
Z	ASPHALT INTERLAYER REINFORCING SYSTEM

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

* SHOULDER RECONSTRUCTION TO BE PERFORMED AS DIRECTED BY THE ENGINEER TO MATCH EXISTING SHOULDERS AS CLOSELY AS POSSIBLE.



Wedging Detail For Resurfacing

WEDGING DETAIL TO BE USED FOR LEVELING WHERE DIRECTED BY ENGINEER.

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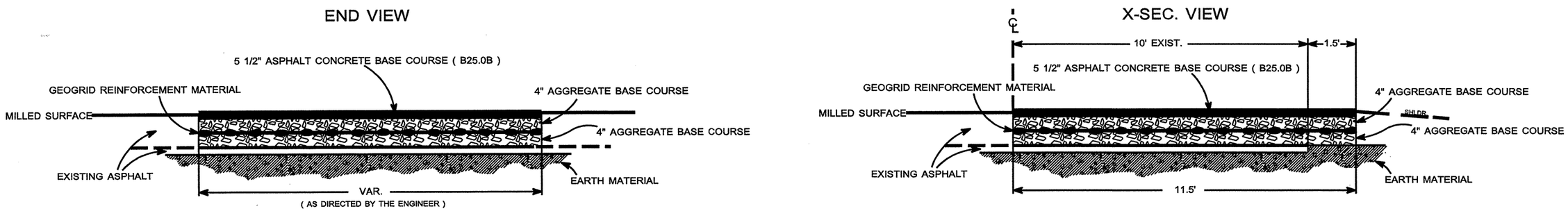
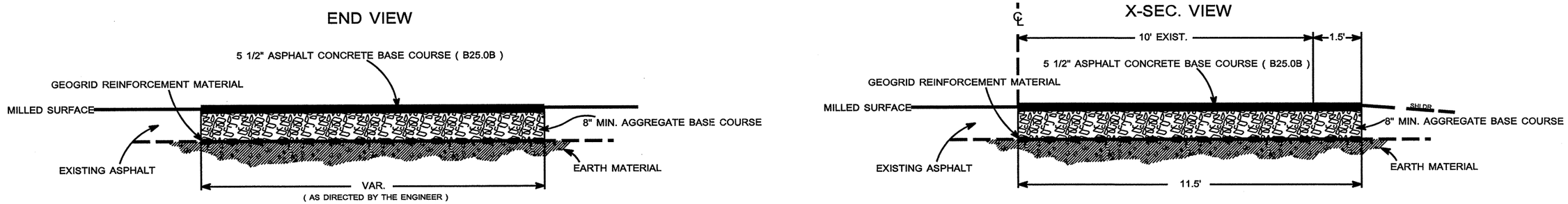
PROJECT REFERENCE NO.	SHEET NO.
37451	5



PATCHING EXISTING PAVEMENT DETAIL - SCENARIO 1



PATCHING EXISTING PAVEMENT DETAIL - SCENARIO 2

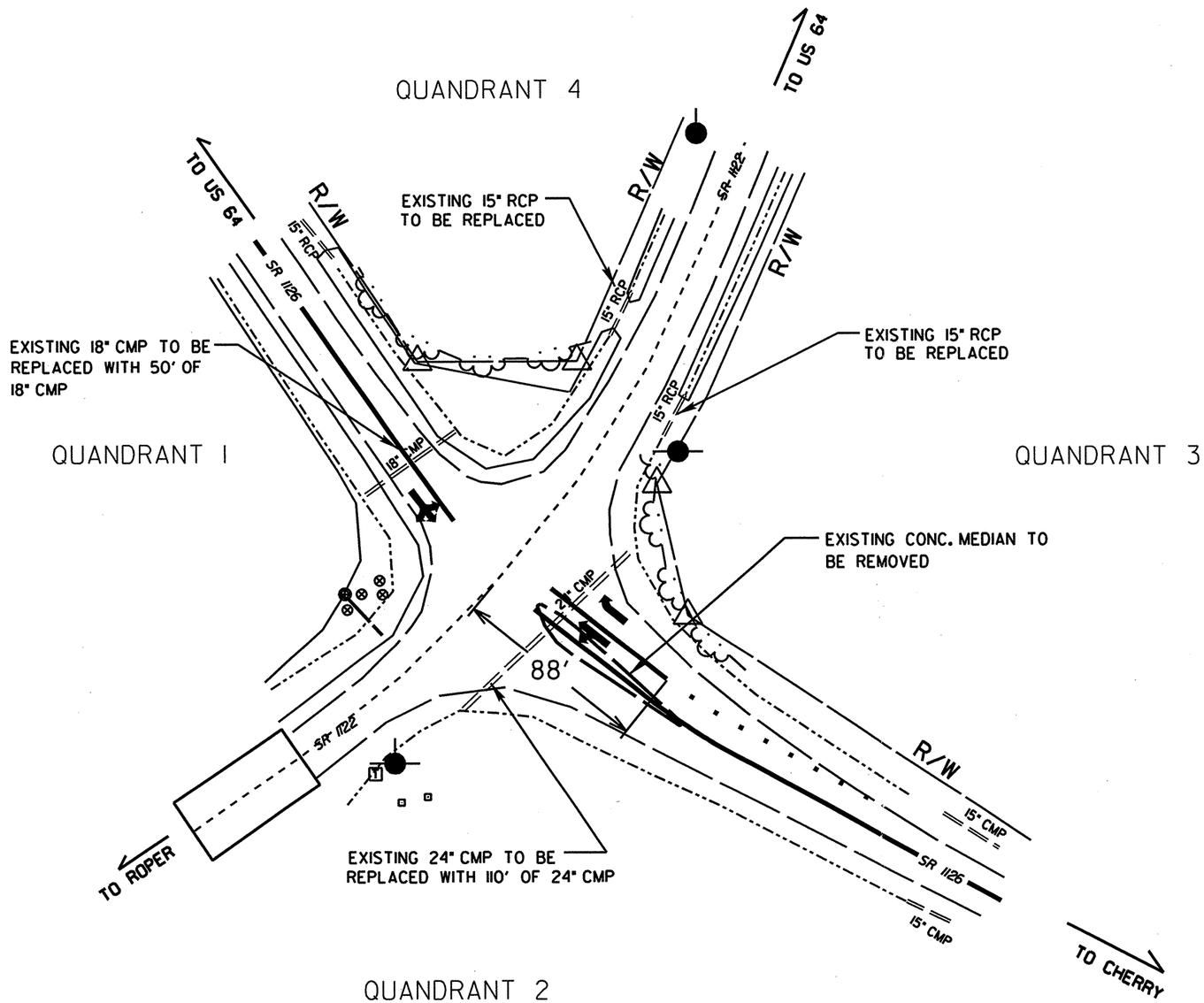
NOTES:

PORTIONS OF ROADWAY THAT FALL UNDER "PATCHING EXISTING PAVEMENT" WILL BE DETERMINED BY THE ENGINEER.

ASPHALT AND/OR EARTH MATERIAL IN THESE PORTIONS OF ROADWAY WILL BE REMOVED TO A MINIMUM DEPTH OF 13 1/2" BELOW MILLED SURFACE OR AS DIRECTED BY THE ENGINEER

WHEN APPROVED DEPTH HAS BEEN REACHED SCENARIO 1 SHALL BE USED FOR PATCHING PROVIDING THERE IS AN ASPHALT CONCRETE COURSE REMAINING.

WHEN APPROVED DEPTH HAS BEEN REACHED AND EARTH MATERIAL IS EXPOSED SCENARIO 2 SHALL BE USED AS DIRECTED BY THE ENGINEER.



NOTES:

1- THE ROADSIDE DITCHES ALONG QUANDRANTS 2, 3, & 4 WILL REQUIRE MINOR REGRADING AS DIRECTED BY THE ENGINEER

2- EROSION CONTROL MATTING SHALL BE USED TO STABILIZE THESE DITCHES AS DIRECTED BY THE ENGINEER

3- ONCE THE EXISTING CONC. MEDIAN HAS BEEN REMOVED THE AREA SHALL BE PATCHED AS DIRECTED BY THE ENGINEER

4- THIS INTERSECTION SHALL BE STRIPED AS SHOWN IN ROADWAY STANDARD DRAWINGS DATED JULY 2006 OR AS DIRECTED BY THE ENGINEER

5- PAVING SHALL STOP AT THE EDGES OF US 64 BUS. (SR1122) ON EACH SIDE

SCALE 1" = 60'

5/14/99

PROJECT NO.	SHEET NO.	TOTAL NO.
37451	7	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH MI	WIDTH FT	18" CAA PIPE CULVERT LF	24" CAA PIPE CULVERT LF	PATCHING EXISTING PAVEMENT (GEOGRID REINFORCEMENT MATERIAL) SY	ASPHALT INTERLAYER REINFORCING SYSTEM SY	GRADING LS	BORROW EXCAVATION CY	FOUNDATION CONDITIONING MATERIAL TON	18" RC PIPE CULVERT, CLASS III LF	PATCHING EXISTING PAVEMENT (AGGREGATE BASE COURSE) TONS	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	4" MILLING SY	VARIABLE DEPTH MILLING (0" TO 6") SY	BASE COURSE, B25.0B TONS	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, SF9.5A TONS	PG 64-22 PLANT MIX TONS	ASPHALT PLANT MIX, PAVEMENT REPAIR TONS	PATCH EXISTING PAVEMENT (ASPHALT) TONS	6" CONCRETE DRIVEWAYS SY	ADJ. METER OR VALVE BOX EA	PLAIN RIP RAP, CLASS B TON	TEMPORARY SILT FENCE LF	SEDIMENT CONTROL STONE TON	MATTING (EROSION CONTROL) SY	SEED & MULCHING AC
37451	Washington	1	SR 1126	US 64 TO SR1122	1	0.1	20	50				1	50	7	20		12	0					110		7	6							90	0.15
		2	SR 1126	SR1122 TO CONSTRUCTION JOINT (TRANS. SECTION INCLUDED)	2	0.7	20		110			1	350	14	20		80	1.40	9,034		316	1,461	853		133	20	25	15	2	5	75	10	280	1
		3	SR 1126	CONST. JOINT TO CONST. JOINT	1	0.43	24										10	0.86					540		32									0.43
		4	SR 1126	CONST. JOINT TO 0.2 MILES NW OF INTERSECTION OF SR1126 & SR1180	3	2.19	20			475						400	50	4.38			1,200		2,643		210		164								3
		5	SR 1126	0.2 MILES NW OF INTERSECTION OF SR1126 & SR1180 TO END OF PROJECT	4	3.43	20			3,016	44,270					1,384	100	6.86	40,245	40,245	2,169	7,229	4,138	2,114	819		600				2,424			3.43
TOTAL FOR PROJ NO. 37451						6.85		50	110	3,491	44,270	1	400	21	40	1,784	252	13.50	49,279	40,245	3,685	8,690	8,284	2,114	1,201	26	789	15	2	5	2,499	10	370	8
GRAND TOTAL						6.85		50	110	3,491	44,270	1	400	21	40	1,784	252	13.50	49,279	40,245	3,685	8,690	8,284	2,114	1,201	26	789	15	2	5	2,499	10	370	8

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH MI	4" WHITE PAINT LF	4" YELLOW PAINT LF	YELLOW & YELLOW MARKERS EA
37451	Washington	1	SR 1126	US 64 TO SR1122	1	0.1	1,076	1,076	7
		2	SR 1126	SR1122 TO CONSTRUCTION JOINT (TRANS. SECTION INCLUDED)	2	0.7	16,262	9,240	46
		3	SR 1126	CONST. JOINT TO CONST. JOINT	1	0.43	4,540	4,540	28
		4	SR 1126	CONST. JOINT TO 0.2 MILES NW OF INTERSECTION OF SR1126 & SR1180	3	2.19	46,253	28,908	145
		5	SR 1126	0.2 MILES NW OF INTERSECTION OF SR1126 & SR1180 TO END OF PROJECT	4	3.43	72,442	45,276	226
TOTAL FOR PROJ NO. 37451						6.85	140,573	89,040	452
							229,613		
GRAND TOTAL						6.85			
							140,573	89,040	452
							229,613		

CLT-M4468

COMPUTED BY:		DATE:	
CHECKED BY:		DATE:	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT NO.	SHEET NO.
37451	8

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

MILEPOST	LOCATION (LT, RT, OR CL)'	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) 12"	15"	18"	24"	30"	36"	42"	48"	CORRUGATED ALUMINUM ALLOY CULVERT PIPE (UNLESS NOTED OTHERWISE) 12" .060	15" .060	18" .060	24" .079	24"	30" .079	30"	36" .109	36"	42" .109	42"	48" .109	48"
MP 0.08																		50										
MP 0.08										20																		
MP 0.09																			110									
MP 0.09										20																		
SHEET TOTALS										40	0							50	110				0		0			

MILEPOST	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CU. YARDS R.C.P.	C.S.P.	QUANITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	*TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL.'B') LIN. FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	C.B. STD. 840.01 OR STD. 840.02	FRAME, GRATES, AND HOOD STANDARD 840.03 TYPE OF GRATE E	F	G	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME AND GRATE STD. 840.16	M.D.I. TYPE "A" STD. 840.17 OR 840.26	M.D.I. TYPE "B" STD. 840.18 OR 840.27	M.D.I. TYPE "D" STD. 840.19 OR 840.28	M.D.I. FRAME WITH GRATE STD. 840.20	M.D.I. FRAME WITH TWO GRATES STD. 840.22	M.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	M.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	J.B. STD. 840.31 OR 840.32	MANHOLE STD. 840.51	M.H. STD. 840.51 OR 840.53	M.H. FRAME AND COVER STD. 840.54	CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS CL. "B" C.Y. STD. 840.72	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN. FT.	REMARKS
MP 0.08																															Replace Existing 50' of 18" CMP
MP 0.08																															Replace Existing 20' of 18" RCP (Drive LT)
MP 0.09																															Replace Existing 104' of 24" CMP
MP 0.09																															Replace Existing 20' of 18" RCP (Drive LT)
SHEET TOTALS																															

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
M.D.I.	MEDIAN DROP INLET
M.D.I.(N.S.)	MEDIAN DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUNCTION BOX

PROJ. REFERENCE NO.	SHEET NO.
37451	NCMA-1

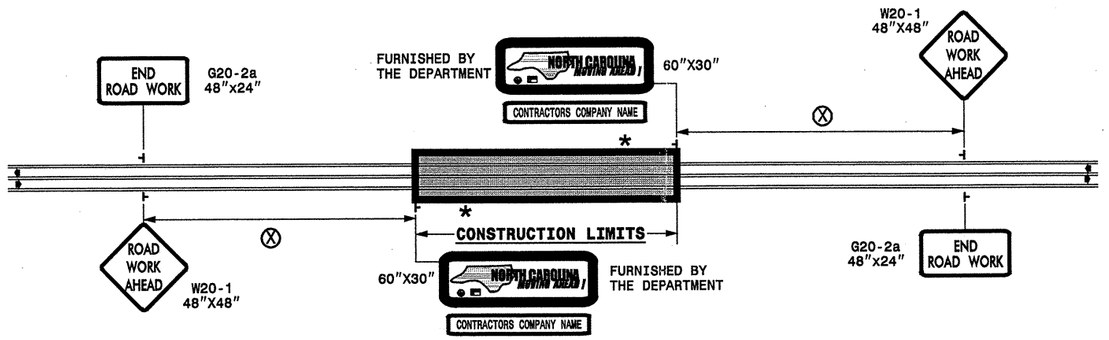
TWO LANE, TWO WAY WORK ZONE (L-LINES)

FURNISHED BY THE DEPARTMENT

60"X30"

CONTRACTORS COMPANY NAME

60" Max. X 12"



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING X
P.S.L. ≤ 50	350'
P.S.L. ≥ 55	500'

* ROAD WORK NEXT XX MILES G20-1A 60"X24"

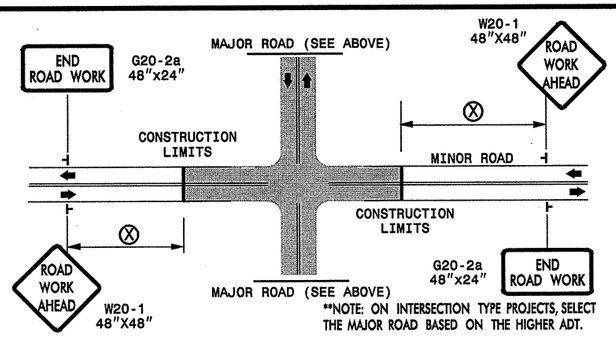
THIS SIGN TO BE USED ON PROJECTS LONGER THAN 2 MILES

THE NUMBER DISPLAYED ON THE SIGN IS TO BE A WHOLE NUMBER ROUNDED UP TO THE NEXT MILE

IT'S TO BE LOCATED 1,500 FEET INSIDE OF THE CONSTRUCTION LIMITS

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

INTERSECTIONS (-Y- LINES)

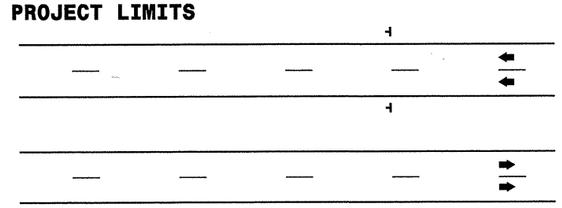


**NOTE: ON INTERSECTION TYPE PROJECTS, SELECT THE MAJOR ROAD BASED ON THE HIGHER ADT.

FREEWAYS/INTERSTATES

DUAL MOUNT "ROAD WORK AHEAD" SIGNS 1,000' IN ADVANCE OF PROJECT LIMITS

DUAL MOUNT "MOVING AHEAD" SIGNS 500' IN ADVANCE OF PROJECT LIMITS



DETAIL DRAWING FOR ADVANCE WARNING WORK ZONE SIGNS

GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCE 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. USE PORTABLE WORK ZONE SIGNS ONLY WITH PORTABLE WORK ZONE SIGN STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER. PORTABLE WORK ZONE SIGNS MAY BE ROLL UP OR APPROVED COMPOSITE.
- 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.

LEGEND

⊢ STATIONARY SIGN

DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1

APPROVED:_____ DATE:_____

SEAL

ADVANCE WARNING WORK ZONE SIGNS FOR "MOVING AHEAD"

SCALE:	NONE
DATE:	07/03
DWG. BY:	JSK
DESIGN BY:	JSK
REVIEWED BY:	SK

REVISIONS	
11/04	
12/04	
02/08	
CADD FILE	