

08/08/09

CONTRACT NO.: WBS ELEMENT : IC.021026, ETC.

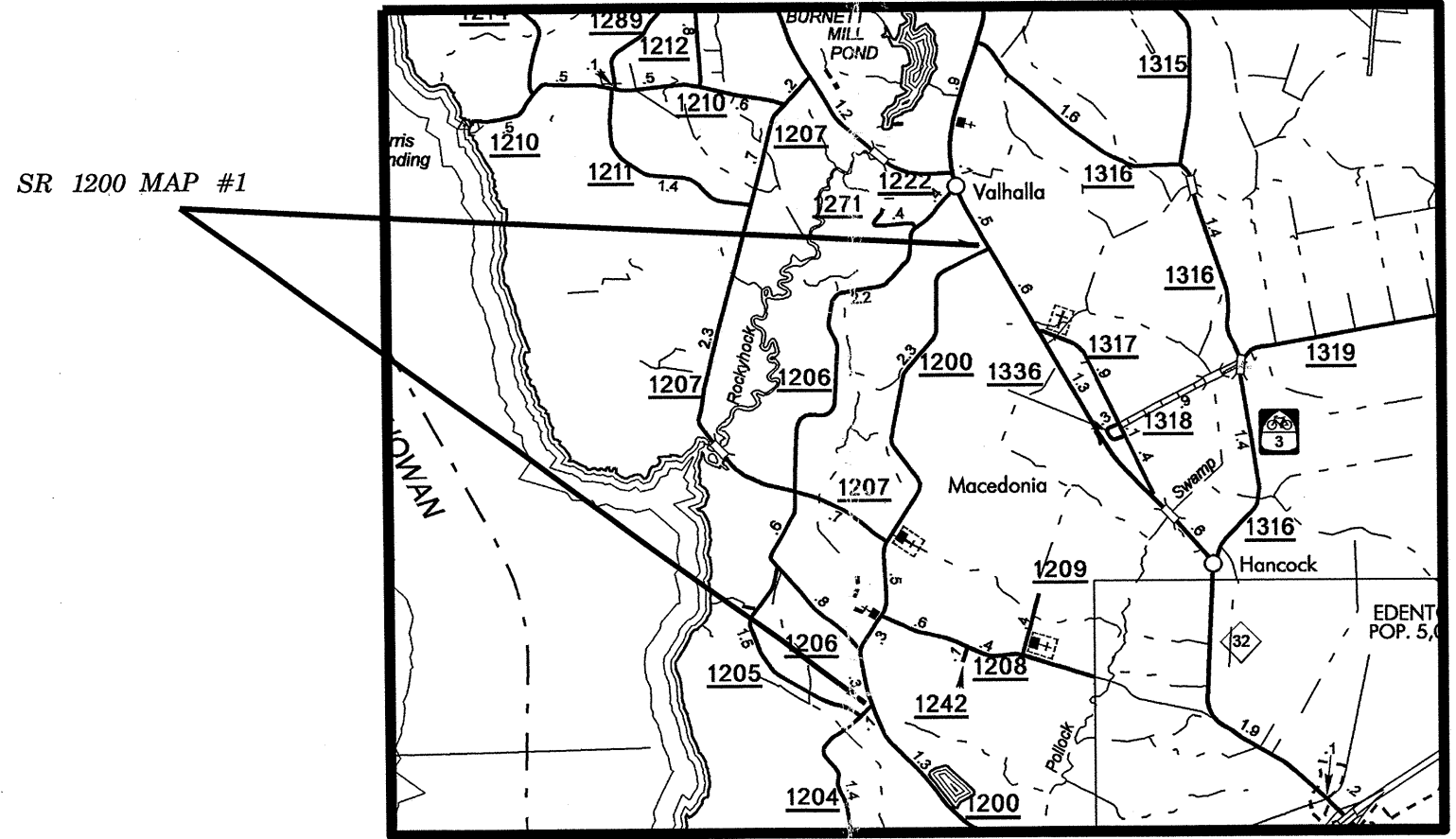
\$\$\$\$\$SYTIME\$\$\$\$\$  
\$\$\$\$\$SDGN\$\$\$\$\$  
\$\$\$\$\$SERNAME\$\$\$\$\$

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**CHOWAN COUNTY**



LOCATION: MAP #1 SR 1200 FROM NC 32 TO SR 1204  
TYPE OF WORK: WIDENING, RESURFACING AND PAVEMENT MARKINGS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	IC.021026, ETC.	1	7
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	



NOT TO SCALE

PROJECT LENGTH  
MAP#1 WBS# IC.021026 = 3.5 MILES

Prepared in the Office of  
**DIVISION OF HIGHWAYS**

2006 STANDARD SPECIFICATIONS

LETTING DATE:

W.B. HOBBS, P.E.  
DIVISION PROJECT MANAGER

C.E. SLACHTA  
DIVISION PROPOSALS ENGINEER

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

05/08/99

CONTRACT NO.: WBS ELEMENT : IC.021026, ETC.

\$\$\$\$\$SYTIME\$\$\$\$\$  
\$\$\$\$\$DGN\$\$\$\$\$  
\$\$\$\$\$USERAME\$\$\$\$\$

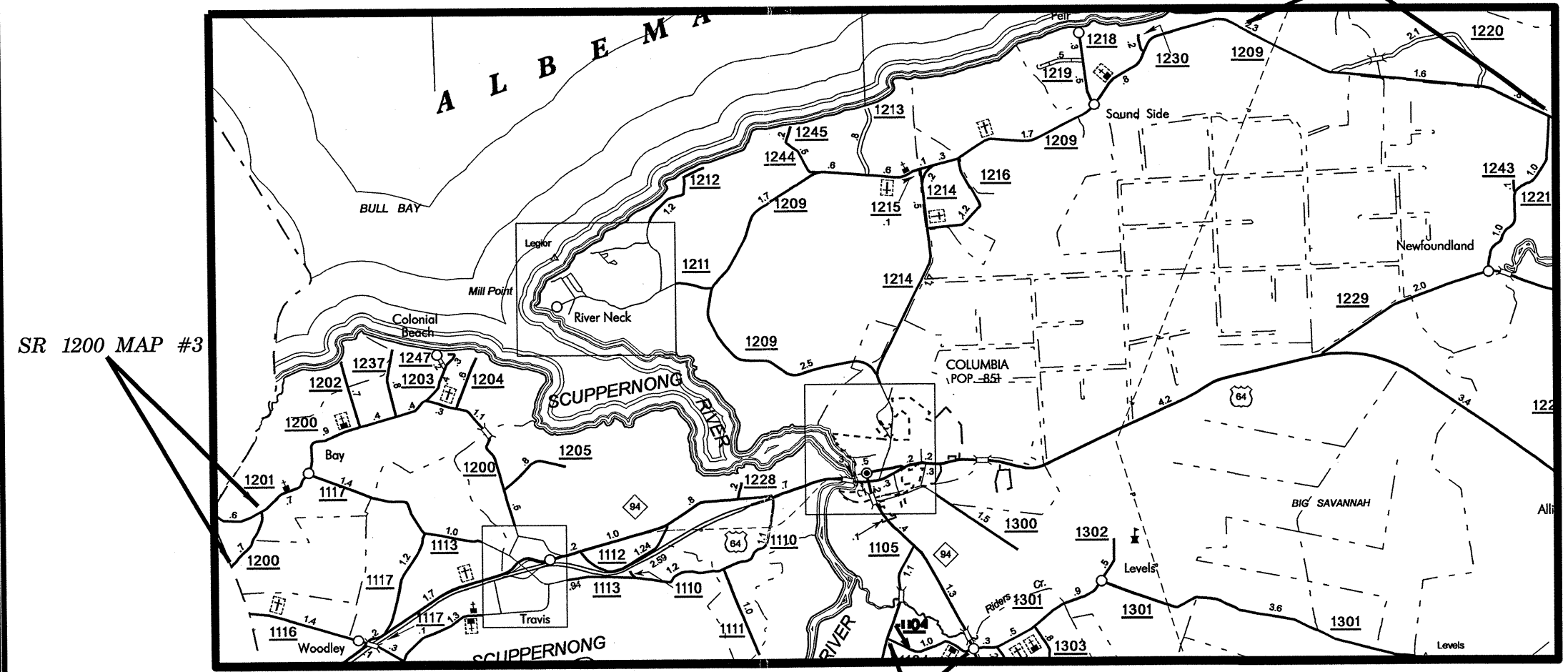


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS  
**TYRRELL COUNTY**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	IC.021026, ETC.	2	7
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

LOCATION: MAP #2 SR 1104 FROM SR 1105 TO NC 94 / MAP #3 SR 1200 FROM SR 1201 TO WASHINGTON COUNTY LINE  
MAP #4 SR 1209 FROM NEW PAVEMENT TO SR 1221  
TYPE OF WORK: WIDENING, RESURFACING AND PAVEMENT MARKINGS

SR 1209 MAP #4



SR 1200 MAP #3

SR 1104 MAP #2

NOT TO SCALE

PROJECT LENGTH

MAP#2 WBS# 1C.089026 = 1.0 MILES  
MAP#3 WBS# 1C.089027 = 0.7 MILES  
MAP#4 WBS# 1C.089031 = 3.7 MILES

Prepared in the Office of  
DIVISION OF HIGHWAYS

2006 STANDARD SPECIFICATIONS

LETTING DATE:

W.B. HOBBS, P.E.  
DIVISION PROJECT MANAGER

C.E. SLACHTA  
DIVISION PROPOSALS ENGINEER

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA



08/08/99

CONTRACT NO.: WBS ELEMENT: IC.021026, ETC.

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

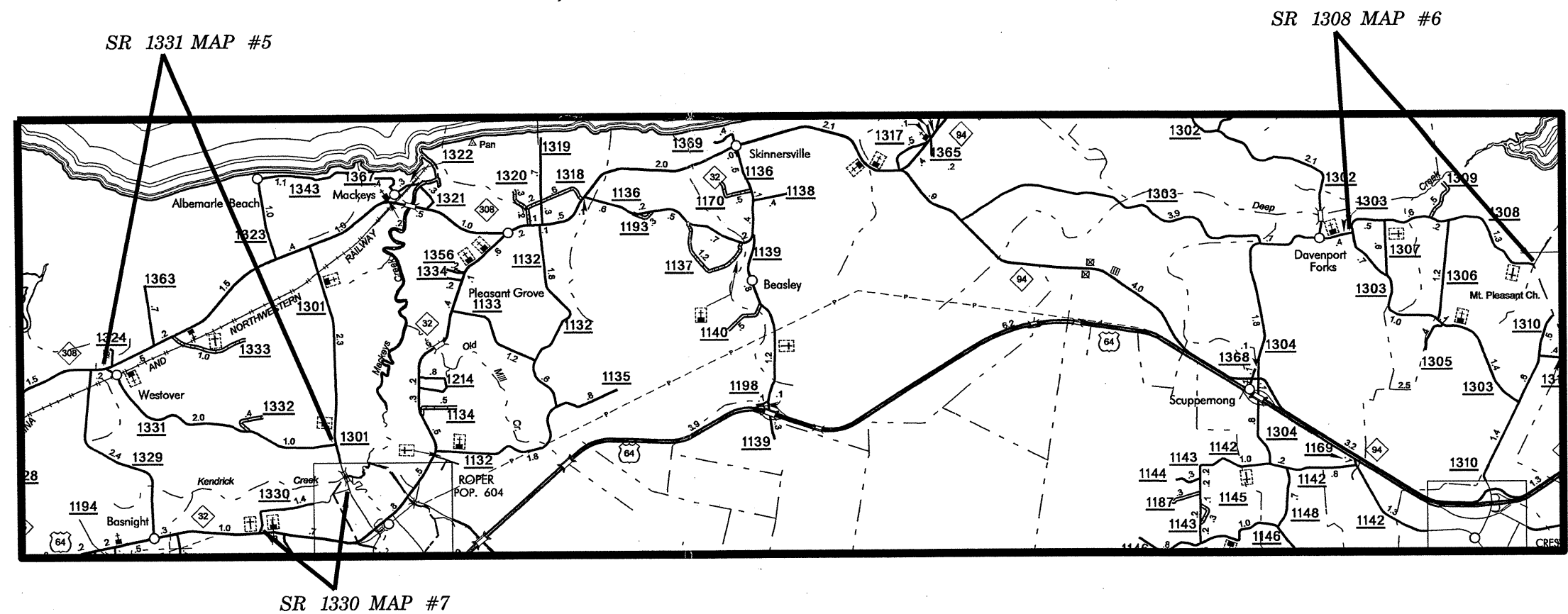
**WASHINGTON COUNTY**



LOCATION: MAP # 5 SR 1331 FROM NC 308 TO SR 1301 / MAP # 6 SR 1308 FROM 1303 TO TYRRELL COUNTY LINE  
MAP # 7 SR 1330 FROM NC 32 TO SR 1301

TYPE OF WORK: WIDENING, RESURFACING AND PAVEMENT MARKINGS

STATE	PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	IC.021026, ETC.	3	7
DATE	DESCRIPTION		



NOT TO SCALE

PROJECT LENGTH

MAP#5 WBS# 1C.094033 = 3.0 MILES  
MAP#6 WBS# 1C.094034 = 2.5 MILES  
MAP#7 WBS# 1C.094036 = 1.36 MILES

Prepared in the Office of  
DIVISION OF HIGHWAYS

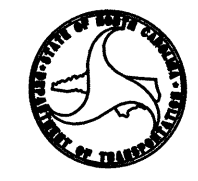
2006 STANDARD SPECIFICATIONS

LETTING DATE:

W.B. HOBBS, P.E.  
DIVISION PROJECT MANAGER

C.E. SLACHTA  
DIVISION PROPOSALS ENGINEER

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA



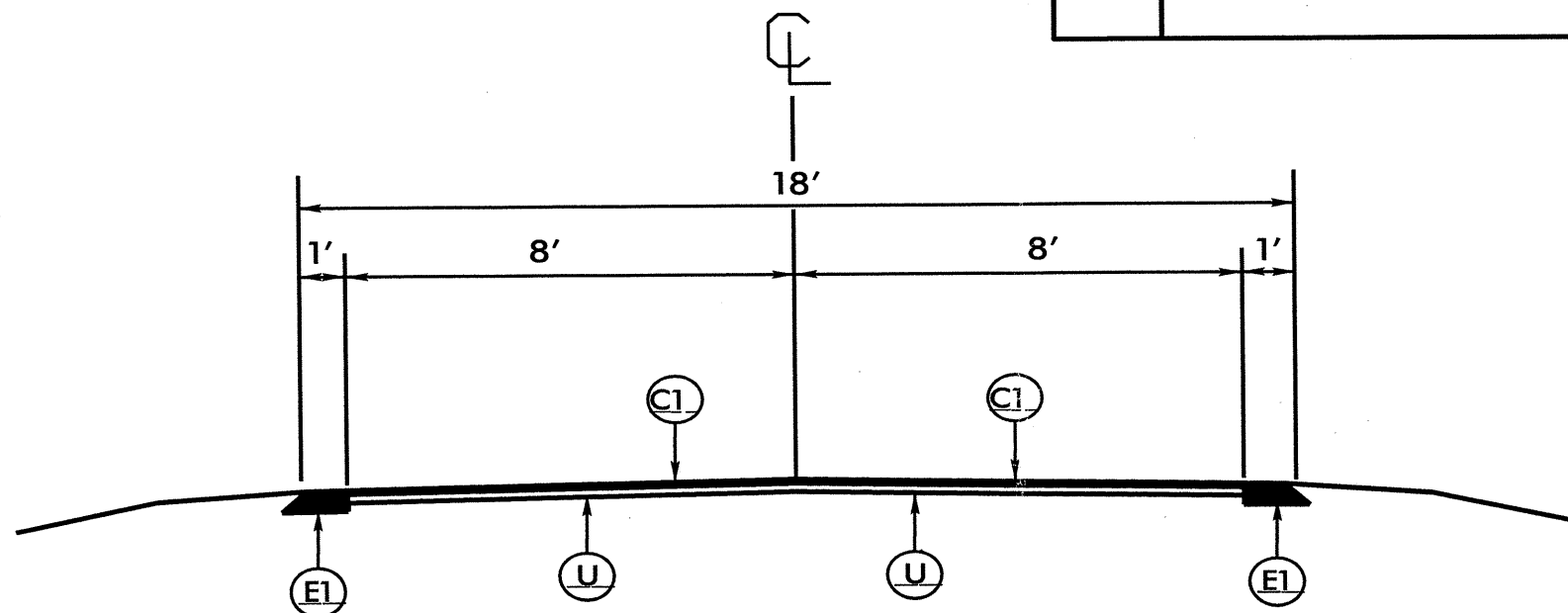
\*\*\*\*\*SYSTEMS\*\*\*\*\*  
\*\*\*\*\*DRAWINGS\*\*\*\*\*  
\*\*\*\*\*REVISIONS\*\*\*\*\*  
\*\*\*\*\*DATE\*\*\*\*\*

NOTES:

1. ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII OR AS DIRECTED BY THE ENGINEER
2. EDGES, PAVEMENT WIDENING, INTERSECTIONS, AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES
3. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE
4. SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS

PROJECT REFERENCE NO.	SHEET NO.
1C.021026, ETC.	4 OF 7

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ.YD.
E1	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ.YD.
U	EXISTING PAVEMENT



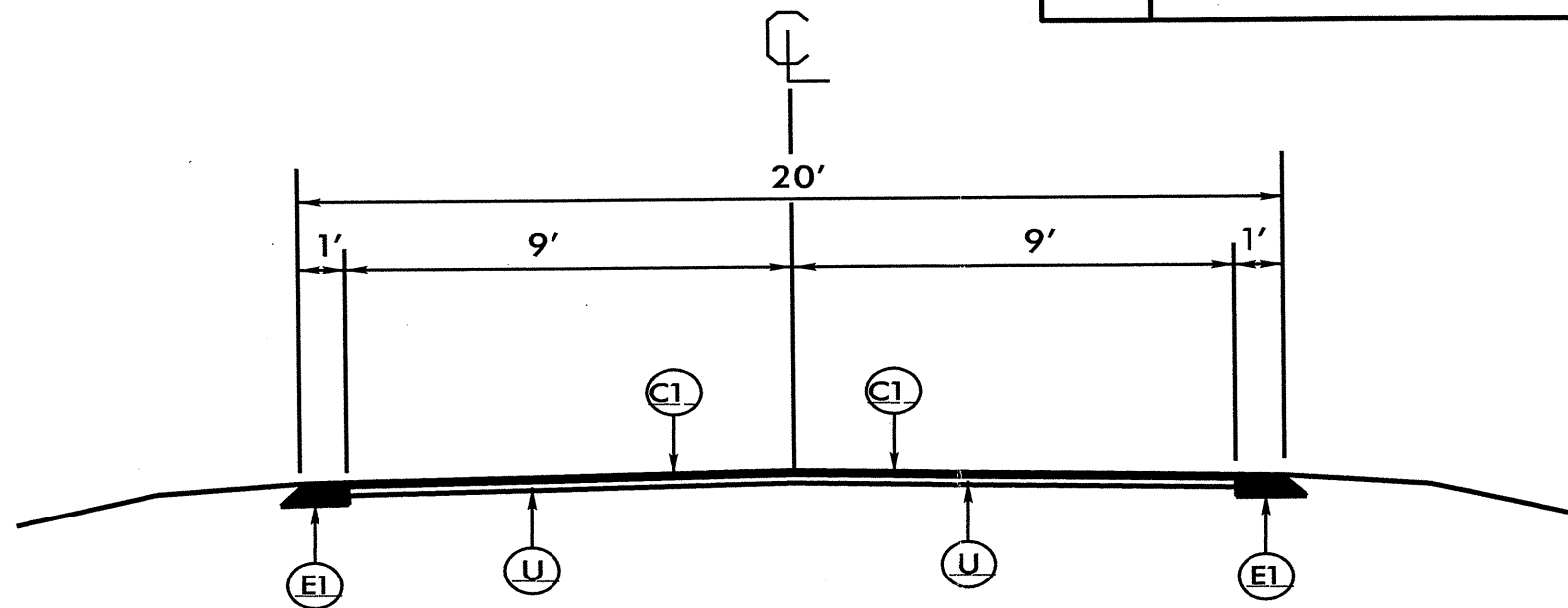
***TYPICAL SECTION #1***  
 USE WITH MAPS 2 & 6

NOTES:

1. ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII OR AS DIRECTED BY THE ENGINEER
2. EDGES, PAVEMENT WIDENING, INTERSECTIONS, AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES
3. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE
4. SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS

PROJECT REFERENCE NO.	SHEET NO.
1C.021026, ETC.	5 OF 7

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ.YD.
E1	PROP. APPROX. 5.5" ASPHALT CONCRETE BASE COURSE TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ.YD.
U	EXISTING PAVEMENT



**TYPICAL SECTION #2**

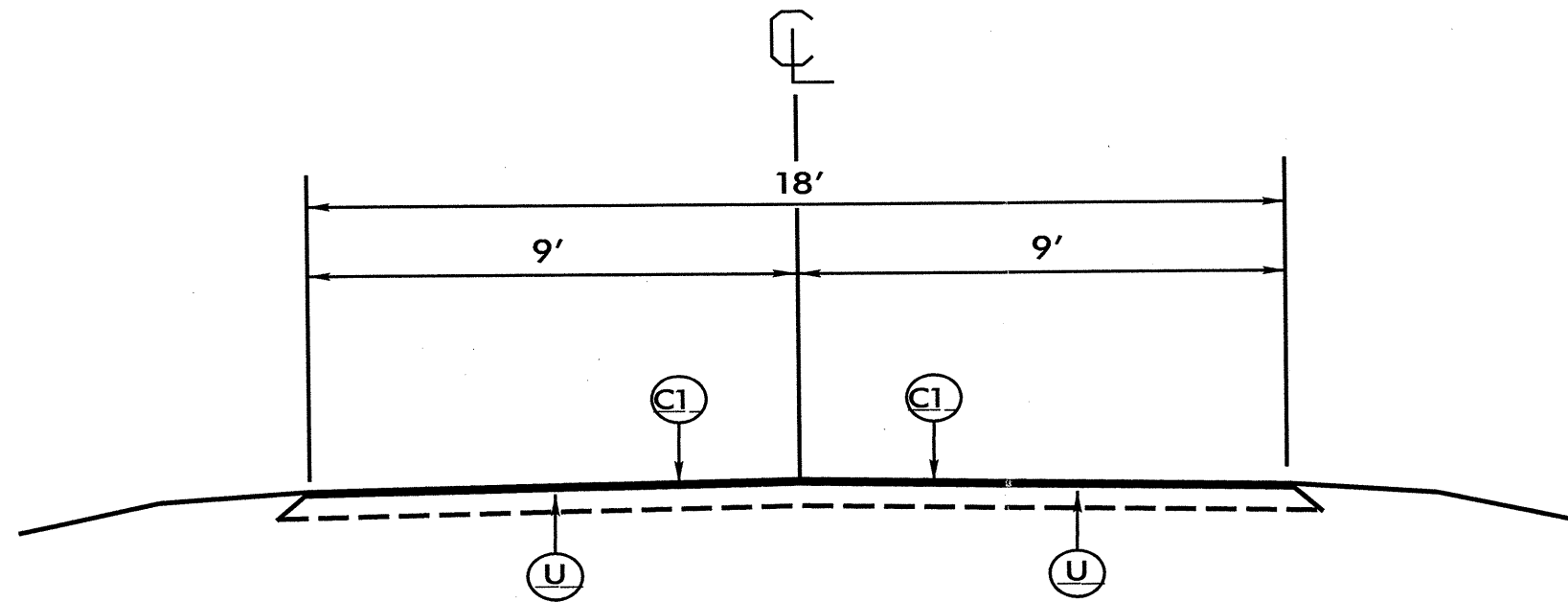
USE WITH MAPS 1, 3, & 5

NOTES:

1. ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII OR AS DIRECTED BY THE ENGINEER
2. EDGES, PAVEMENT WIDENING, INTERSECTIONS, AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES
3. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE
4. SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS

PROJECT REFERENCE NO.	SHEET NO.
1C.021026, ETC.	6 OF 7

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ.YD.
U	EXISTING PAVEMENT



**TYPICAL SECTION #3**  
 USE WITH MAPS 4 & 7

PROJECT NO.	SHEET NO.	TOTAL NO.
1C.021026, ETC.	7	7

## SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	0000100000-N MOBILIZATION LS	1489000000-E BASE COURSE, B25.0B TON	1525000000-E SURFACE COURSE, SF9.5A TON	1560000000-E PG 64-22 PLANT MIX TON
1C.021026	Chowan	1	SR 1200	FROM NC 32 TO SR 1204	2	NO	3.5	20	1	1,917	3,773	328
1C.089026	Tyrrell	2	SR 1104	FROM SR 1105 TO NC 94	1	NO	1	18	*	549	971	87
1C.089027	Tyrrell	3	SR 1200	FROM SR 1201 TO WASHINGTON COUNTY LINE	2	NO	0.7	20	*	383	755	66
1C.089031	Tyrrell	4	SR 1209	FROM NEW PAVEMENT TO SR 1221	3	NO	3.7	18	*		3,570	232
1C.094033	Washington	5	SR 1331	FROM NC 308 TO SR 1301	2	NO	3	20	*	1,644	3,234	281
1C.094034	Washington	6	SR 1308	FROM SR1303 TO TYRRELL COUNTY LINE	1	NO	2.5	18	*	1,370	2,429	217
1C.094036	Washington	7	SR 1330	FROM NC 32 TO SR 1301	3	NO	1.36	18	*		1,312	85
<b>GRAND TOTAL</b>							<b>15.76</b>		<b>1</b>	<b>5,863</b>	<b>16,044</b>	<b>1,296</b>






## THERMOPLASTIC AND PAINT QUANTITIES

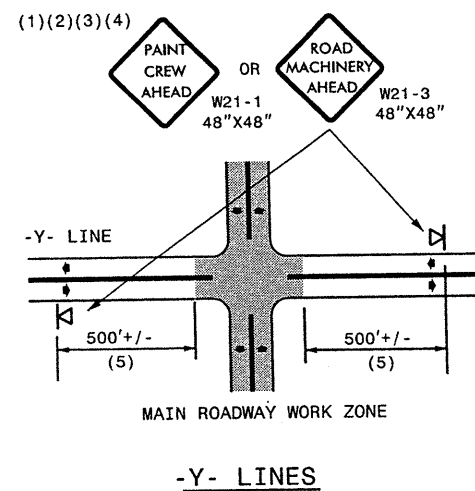
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4589000000-N	4810000000-E	
					GENERIC TRAFFIC CONTROL ITEM (TRAFFIC CONTROL) LS	4" WHITE PAINT LF	4" YELLOW PAINT LF
1C.021026	Chowan	1	SR 1200	FORM NC 32 TO SR 1204	1	75,320	46,200
1C.089026	Tyrrell	2	SR 1104	FROM SR 1105 TO NC 94	*	21,520	13,200
1C.089027	Tyrrell	3	SR 1200	FROM SR 1201 TO WASHINGTON COUNTY LINE	*	15,064	9,240
1C.089031	Tyrrell	4	SR 1209	FROM NEW PAVEMENT TO SR 1221	*	79,624	48,840
1C.094033	Washington	5	SR 1331	FROM NC 308 TO SR 1301	*	64,560	39,600
1C.094034	Washington	6	SR 1308	FROM SR1303 TO TYRRELL COUNTY LINE	*	53,800	33,000
1C.094036	Washington	7	SR 1330	FROM NC 32 TO SR 1301	*	29,267	17,952
<b>GRAND TOTAL</b>					<b>1</b>	<b>339,155</b>	<b>208,032</b>
						<b>547,187</b>	

### GENERAL NOTES

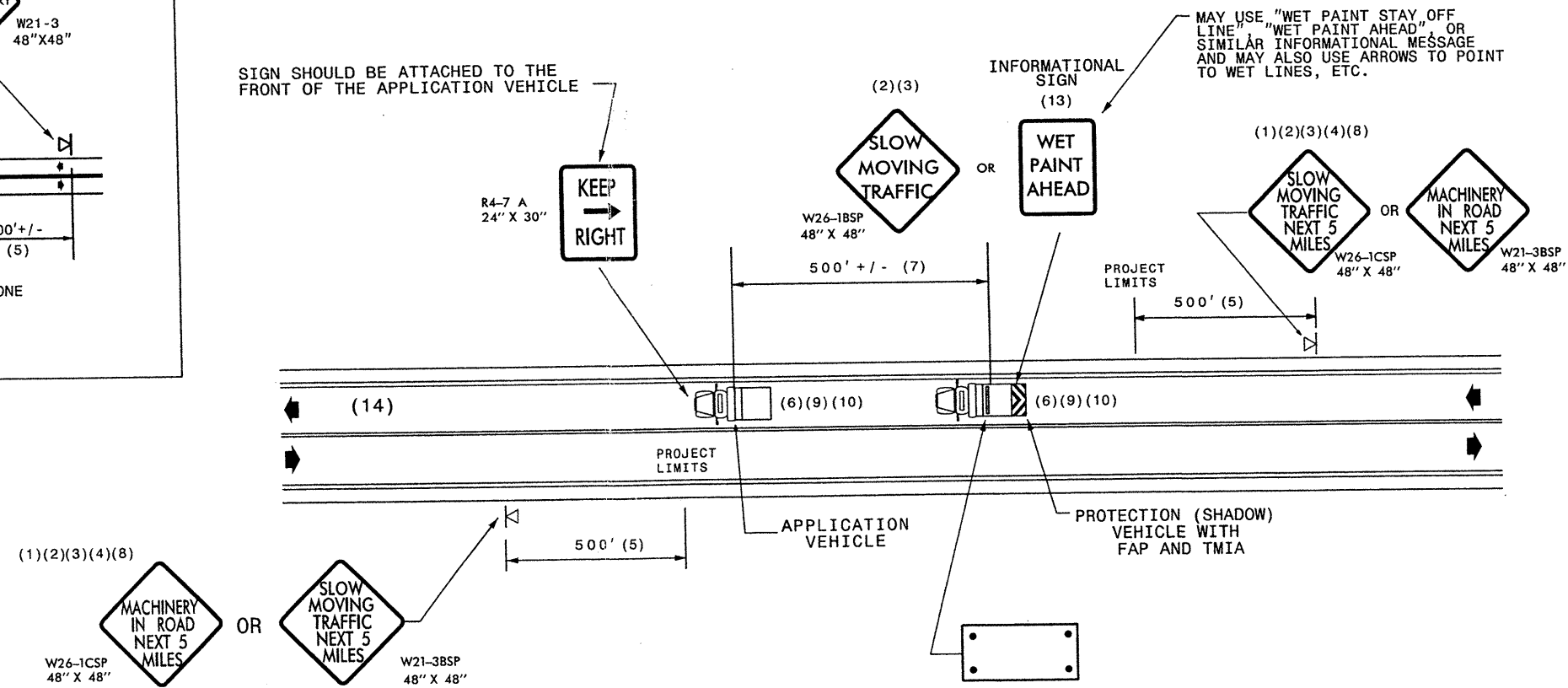
- (1) THE FOLLOWING OPTIONS MAY BE USED FOR ADVANCE WARNING SIGNS:
  - A. TRUCK MOUNTED SIGNS
  - B. TRUCK MOUNTED CHANGEABLE MESSAGE SIGN (CMS)
  - C. GROUND MOUNTED ADVANCE WARNING SIGNS (MUST CIRCLE TO PICK UP SIGNS)
  - D. GROUND MOUNTED CHANGEABLE MESSAGE SIGN (CMS) (MUST USE CIRCLE TO PICK UP SIGNS)
- (2) ALL ADVANCE WARNING SIGNS MUST BE 48" X 48" WITH FLUORESCENT ORANGE TYPE VII, VIII OR IX SHEETING. IF SPACE LIMITATIONS ON SHOULDER PROHIBIT A 48" X 48" SIGN, A SMALLER SIGN CAN BE USED WITH APPROVAL FROM ENGINEER.
- (3) SIGNS ON VEHICLES SHOULD BE MOUNTED A MINIMUM OF ONE (1) FOOT FROM THE GROUND AND SHOULD NOT BLOCK THE MOTORIST'S SIGHT OF THE FLASHING ARROW PANEL AND/OR LIGHTBAR.
- (4) GROUND MOUNTED ADVANCED WARNING SIGNS SHOULD BE MOUNTED A MINIMUM OF ONE (1) FOOT FROM THE GROUND TO BOTTOM OF SIGN.
- (5) SIGN SPACING SHOULD BE ADJUSTED FOR HORIZONTAL AND VERTICAL CURVES, ETC. TO IMPROVE SIGHT DISTANCES.
- (6) ADDITIONAL VEHICLES SHOULD BE USED IN WORK CARAVAN TO FACILITATE DRYING OF PAVEMENT MARKING MATERIAL (TMIA'S ARE OPTIONAL ON THESE ADDITIONAL VEHICLES). HOWEVER, THE FIRST VEHICLE MOTORISTS SEE IN THE TRAVEL LANE SHALL HAVE A TMIA.
- (7) ADJUST DISTANCE AS NEEDED TO PREVENT MOTORISTS FROM ENTERING SPACE BETWEEN THE APPLICATION AND PROTECTION VEHICLE. DISTANCE CAN BE LENGTHENED TO ACCOMMODATE SIGHT DISTANCE NEEDS.
- (8) ROUND UP MILEAGE TO NEXT WHOLE MILE. WORK ZONE SHOULD NOT EXCEED FIVE (5) MILES IN LENGTH.
- (9) RADIO COMMUNICATION BETWEEN VEHICLES IS REQUIRED.
- (10) USE OF A LIGHT BAR ON ALL VEHICLES IS PREFERRED, BUT A ROTATING BEACON MAY BE USED INSTEAD.
- (11) IF WORK IS PERFORMED AT NIGHT, THE WORK AREA MUST BE ILLUMINATED WITH MACHINE AND/OR TOWER LIGHTS AS APPROVED BY THE ENGINEER.
- (12) ALL TRAFFIC CONTROL DEVICES WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEMS FOR PAVEMENT MARKING AND MARKERS.
- (13) INFORMATIONAL SIGNS SHOULD BE ACTIVITY SPECIFIC, i.e. "PAINT CREW IN ROAD". SIGNS MAY BE RECTANGULAR OR DIAMOND SHAPE. SIGN SIZE SHOULD BE BASED ON THE MOTORIST ABILITY TO RECOGNIZE SIGN WHEN TRAVELING FIVE (5) MILES ABOVE POSTED SPEED LIMIT.
- (14) IF A LEAD VEHICLE IS ADDED TO OPERATION, IT SHOULD HAVE THE SAME ADVANCE WARNING SIGNS AS THE APPLICATION VEHICLE SHOWN BELOW.

### LEGEND

-  PORTABLE SIGN. SIGNS MUST BE NCHRP-350 AND NCDOT APPROVED.
-  DIRECTION OF TRAFFIC FLOW
-  APPLICATION VEHICLE WITH LIGHT BAR
-  PROTECTION VEHICLE WITH TRUCK MOUNTED IMPACT ATTENUATOR (TMIA) AND LIGHT BAR (SEE ROADWAY STANDARD NO. 1165.01). TMIA MUST BE NCHRP-350 TEST LEVEL 3 (60+MPH) APPROVED.
-  FLASHING ARROW PANEL, TYPE "B" (60"X30" MIN.), "CAUTION MODE"



SIGN SHOULD BE ATTACHED TO THE FRONT OF THE APPLICATION VEHICLE



## MOVING OPERATION CARAVAN

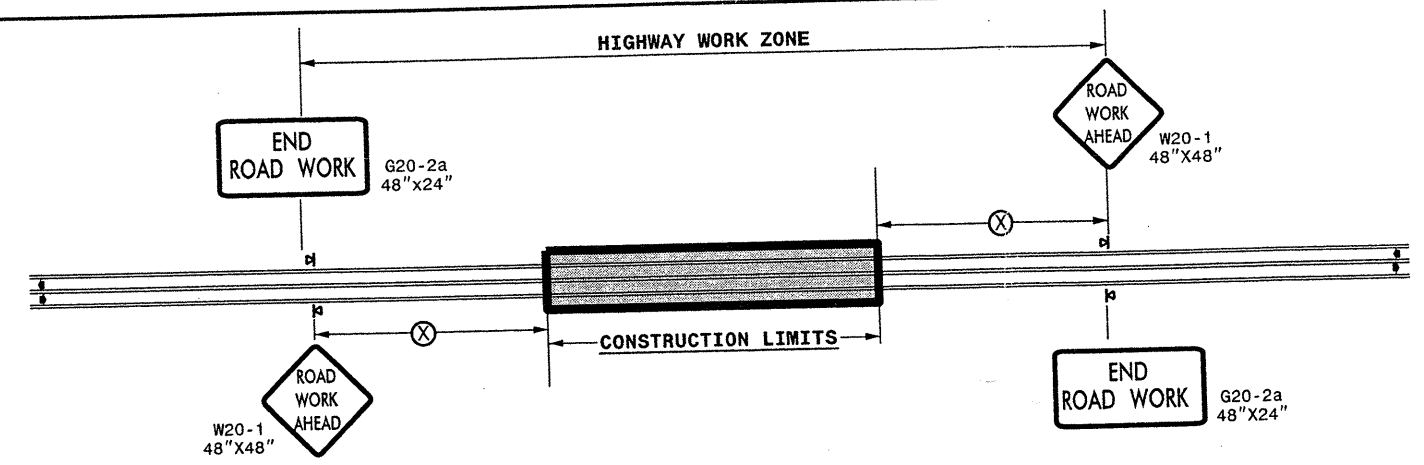
(OPERATIONS TRAVELING 3 MPH OR FASTER)  
 PLACING PAVEMENT MARKING OR MARKERS  
 ON TWO-LANE TWO-WAY ROADWAYS

**DRAWING NUMBER 6**  
 IMPLEMENTATION DATE: 07/01/97  
 REVISED: 11/03/04



07-FEB-2011 10:30 \\DOT\OFFSR001\GROUPS-WZTCCC\TMU\WZTC\Resur-facing\2011Resur-facing\2011Eastern\2011Div01\C-202755A-G-IC021026x7\_ChowanTyrrell\kashi.mSRs\_AXP\C-202755A-G-IC021026x7\_2wayundivurbfr.wJuly2006.por-table.dgn

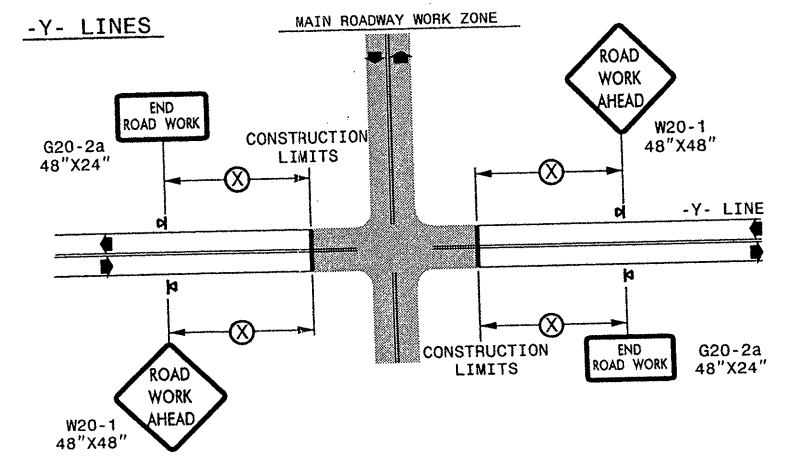
**TWO-WAY UNDIVIDED \*\* (L-LINES)**



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)**



**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.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- 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.
- PROVIDE PORTABLE WORK ZONE SIGN STANDS, PORTABLE SIGNS AND SIGN SHEETING WHICH ARE LISTED ON THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCT LIST OR ACCEPTED AS TRAFFIC QUALIFIED BY THE TRAFFIC CONTROL UNIT.
- \*\* 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.

**DETAIL DRAWING  
FOR TWO-WAY UNDIVIDED  
WORK ZONE WARNING SIGNS**

**LEGEND**

◀ PORTABLE SIGN

◀ DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1

APPROVED: _____	DATE: _____	DETAIL DRAWING FOR TWO-WAY UNDIVIDED ADVANCED WORK ZONE WARNING SIGNS	
SEAL			
		DATE: 02/11	
DESIGN BY: _____			
REVIEWED BY: _____			