

09/26/99
WBS NO.: ICR.10581.20, ETC.
CONTRACT NO.:

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MARTIN COUNTY

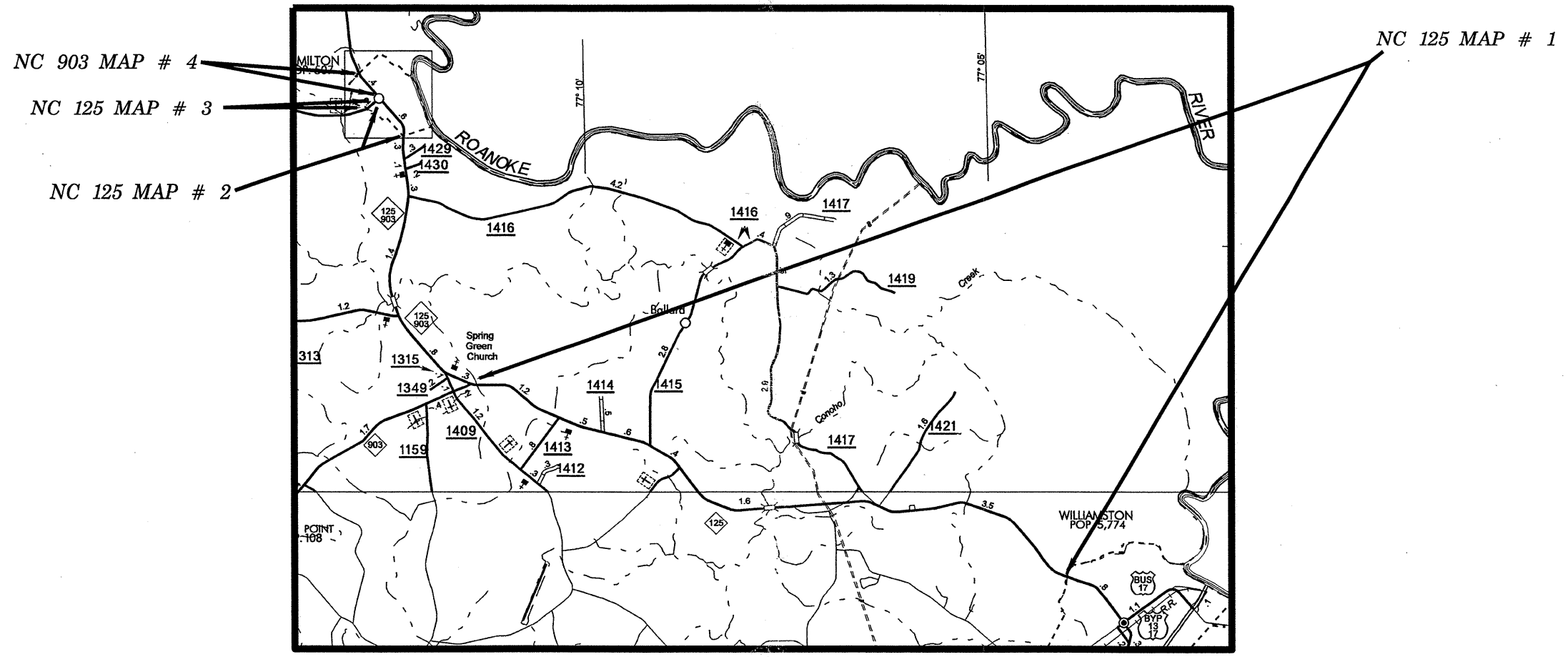


LOCATION: MAP #1 NC 125 FROM WILLIAMSTON CL TO NC 903
MAP #3 NC 125 FROM NC 903 TO HAMILTON WEST CL

MAP #2 NC 125 FROM HAMILTON SOUTH CL TO NC 903
MAP #4 NC 903 FROM NC 125 TO NORTH HAMILTON CL

TYPE OF WORK: MILLING, RESURFACING AND PAVEMENT MARKINGS

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
N.C.	1CR.10581.20, ETC.	1	
STATE PROJECT NO.	F.A. PROJECT NO.	DESCRIPTION	



NOT TO SCALE

PROJECT LENGTH	
MAP#1 WBS# 1CR.10581.20	= 7.50 MILES
MAP#2 WBS# 1CR.10581.21	= 0.40 MILES
MAP#3 WBS# 1CR.10581.21	= 0.40 MILES
MAP#4 WBS# 1CR.10581.22	= 0.40 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

09/08/09

WBS NO.: ICR.10581.20, ETC.

CONTRACT NO.:

SYSTEM TIME: 09/08/09 10:10:10
 USER: DGN
 PROJECT: ICR.10581.20



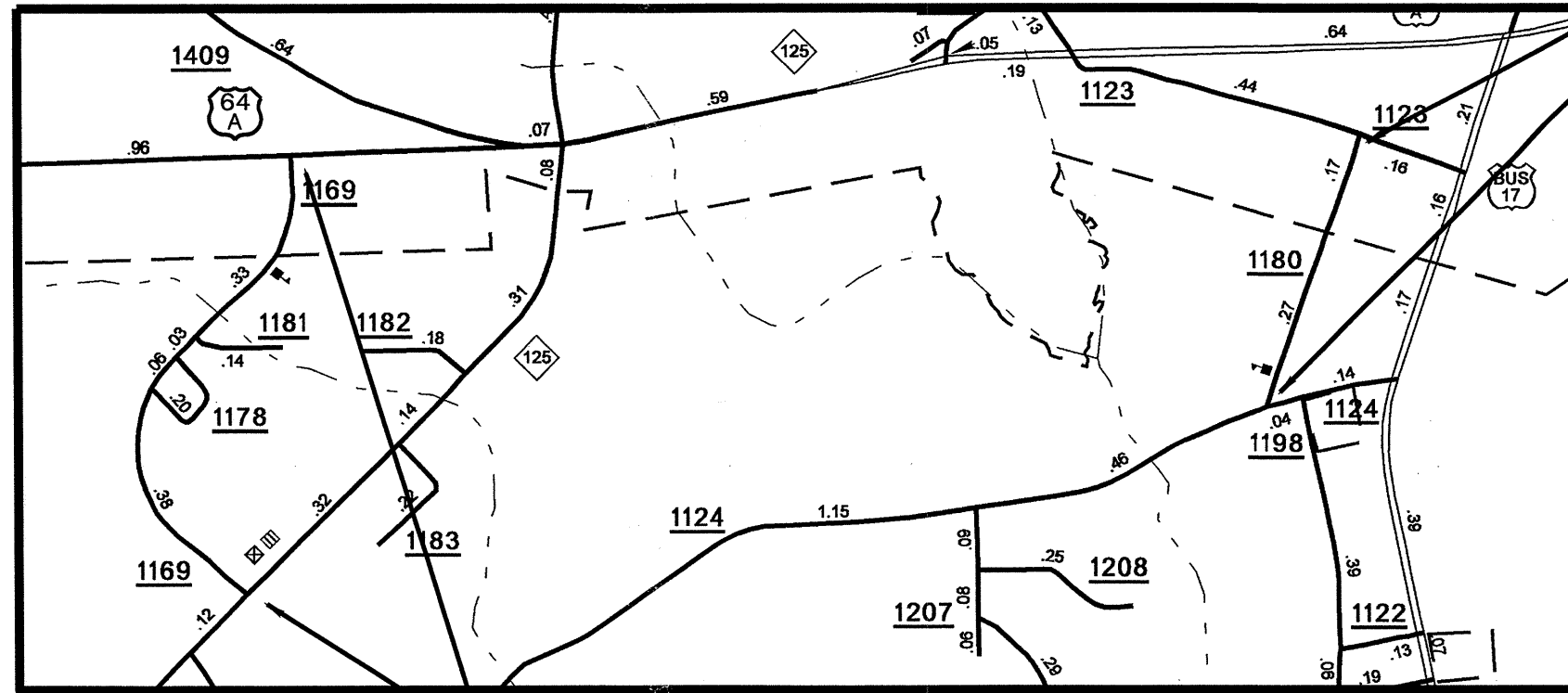
STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
MARTIN COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	ICR.10581.20, ETC.	2	
STATE PROJECT NO.	F.A. PROJECT NO.	DESCRIPTION	

LOCATION: MAP #5 SR 1169 FROM NC 125 TO US 64 ALT
 MAP #6 SR 1180 FROM SR 1124 TO SR 1123

TYPE OF WORK: MILLING, RESURFACING AND PAVEMENT MARKINGS

SR 1180 MAP # 6



SR 1169 MAP # 5

NOT TO SCALE

PROJECT LENGTH

MAP#5 WBS# ICR.20581.29 = 0.73 MILES
 MAP#6 WBS# ICR.20581.30 = 0.45 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



WBS NO.: ICR.10581.20, ETC.

CONTRACT NO.:

SYSTEMS \$\$\$\$\$\$
 \$\$\$\$\$\$ LAYOUT \$\$\$\$\$\$
 \$\$\$\$\$\$ DRAWING \$\$\$\$\$\$
 \$\$\$\$\$\$ USER NAME \$\$\$\$\$\$



STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

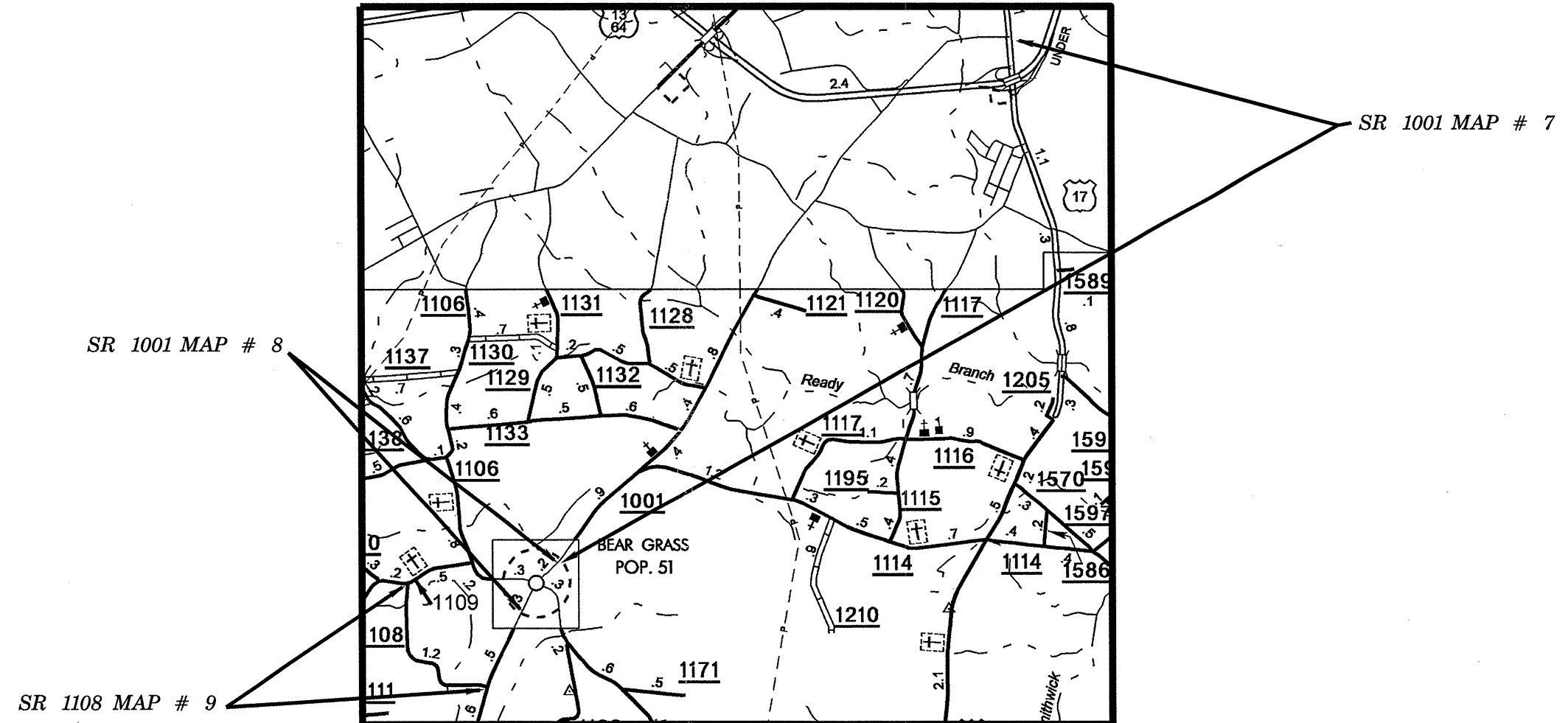
MARTIN COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	ICR.10581.20, ETC.	3	
STATE FUNDING	F.A.FUNDING	DESCRIPTION	

LOCATION: MAP #7 SR 1001 FROM US17 TO NORTH CL
 MAP #9 SR 1108 FROM SR 1001 TO SR 1109

MAP #8 SR 1001 FROM NORTH CL TO SOUTH CL

TYPE OF WORK: MILLING, RESURFACING AND PAVEMENT MARKINGS



NOT TO SCALE

PROJECT LENGTH

MAP#7 WBS# ICR.20581.31 = 5.50 MILES
 MAP#8 WBS# ICR.10581.32 = 0.53 MILES
 MAP#9 WBS# ICR.20581.33 = 1.20 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

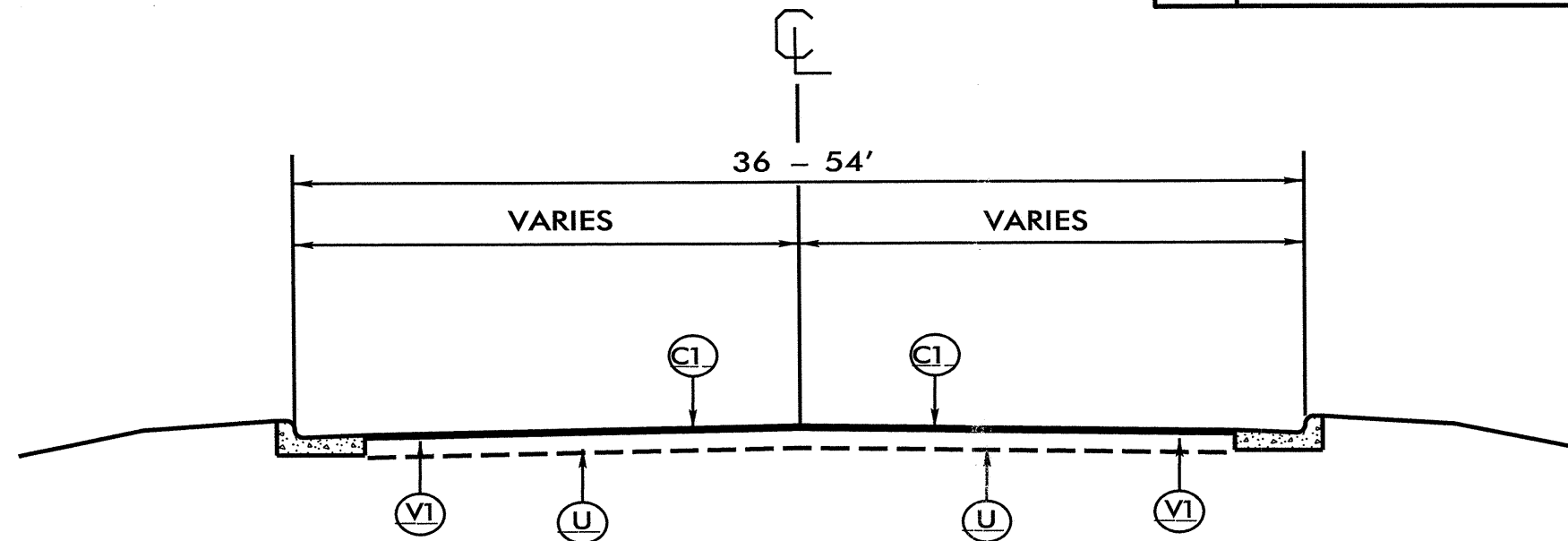
DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA



- NOTES:
1. ALL PAVED S.R. ROADS TO BE MILLED, 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.
1CR.10581.20, ETC.	4

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ.YD.
V1	MILLING ASPHALT PAVEMENT 2.0" DEPTH
U	EXISTING PAVEMENT



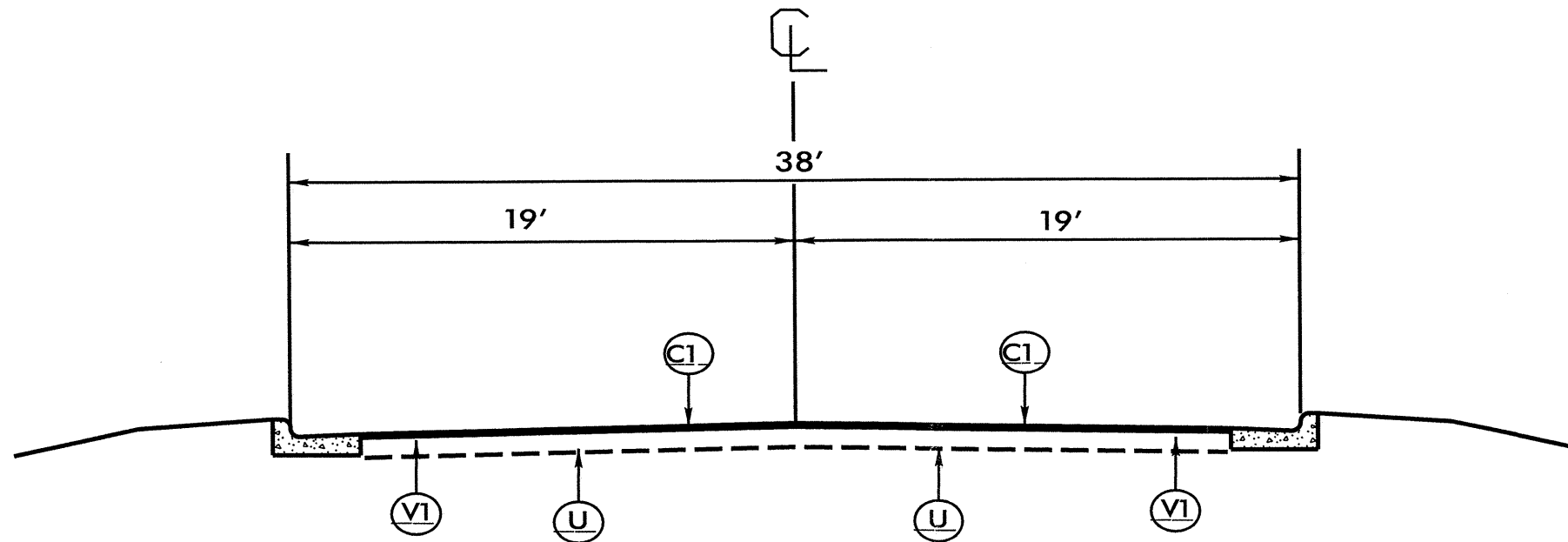
TYPICAL SECTION #1

USE WITH MAP #2, 3 & 4

- NOTES:
1. ALL PAVED S.R. ROADS TO BE MILLED, 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.
1CR.10581.20, ETC.	5

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE TYPE SF9.5A, AT AN AVERAGE RATE OF 220 LBS. PER SQ.YD.
V1	MILLING ASPHALT PAVEMENT 2" DEPTH
U	EXISTING PAVEMENT



TYPICAL SECTION #2

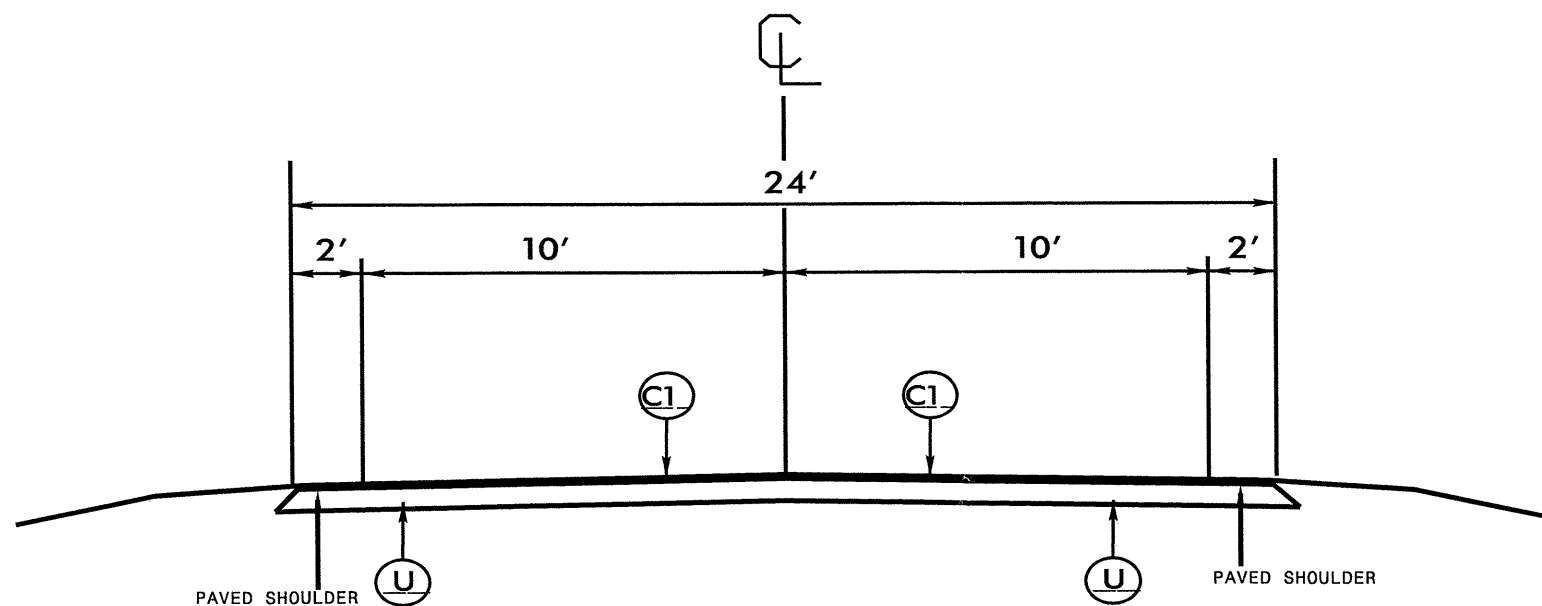
USE WITH MAP #8

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.
1CR.10581.20, ETC.	6

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ.YD.
U	EXISTING PAVEMENT.



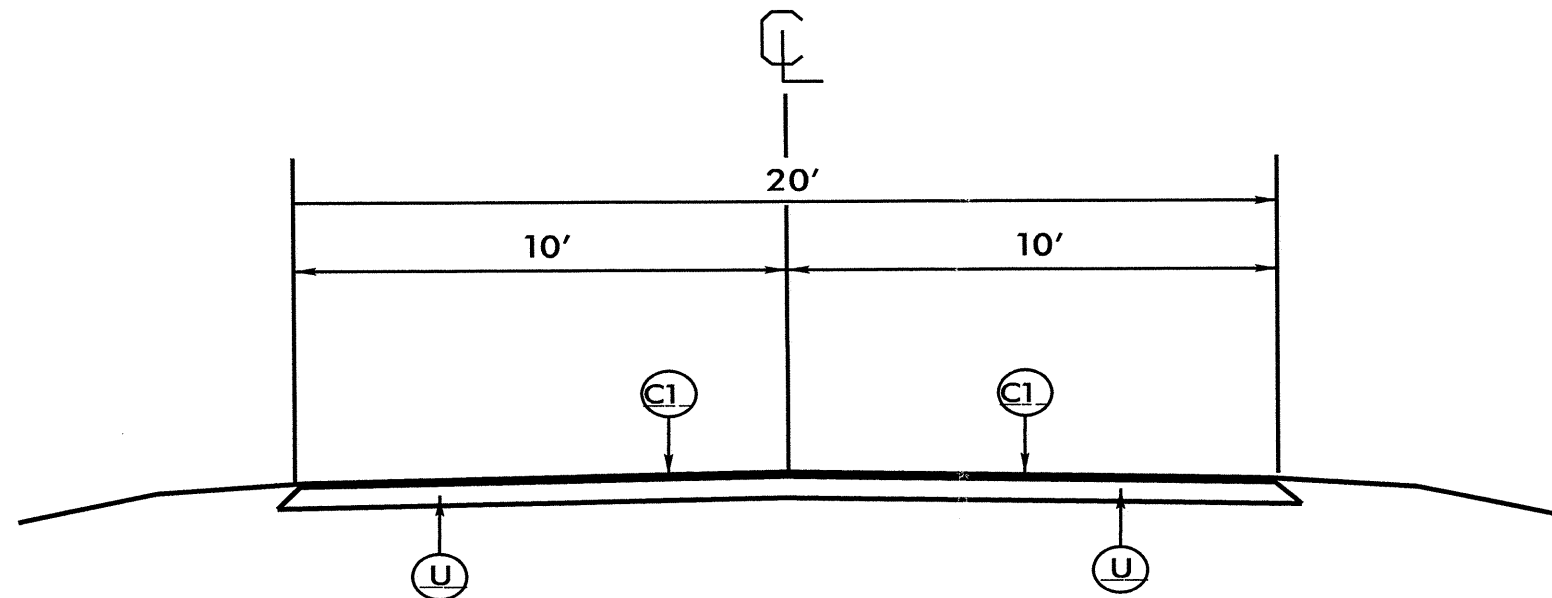
TYPICAL SECTION #3

USE WITH MAP 1

- 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.
1CR.10581.20, ETC.	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.



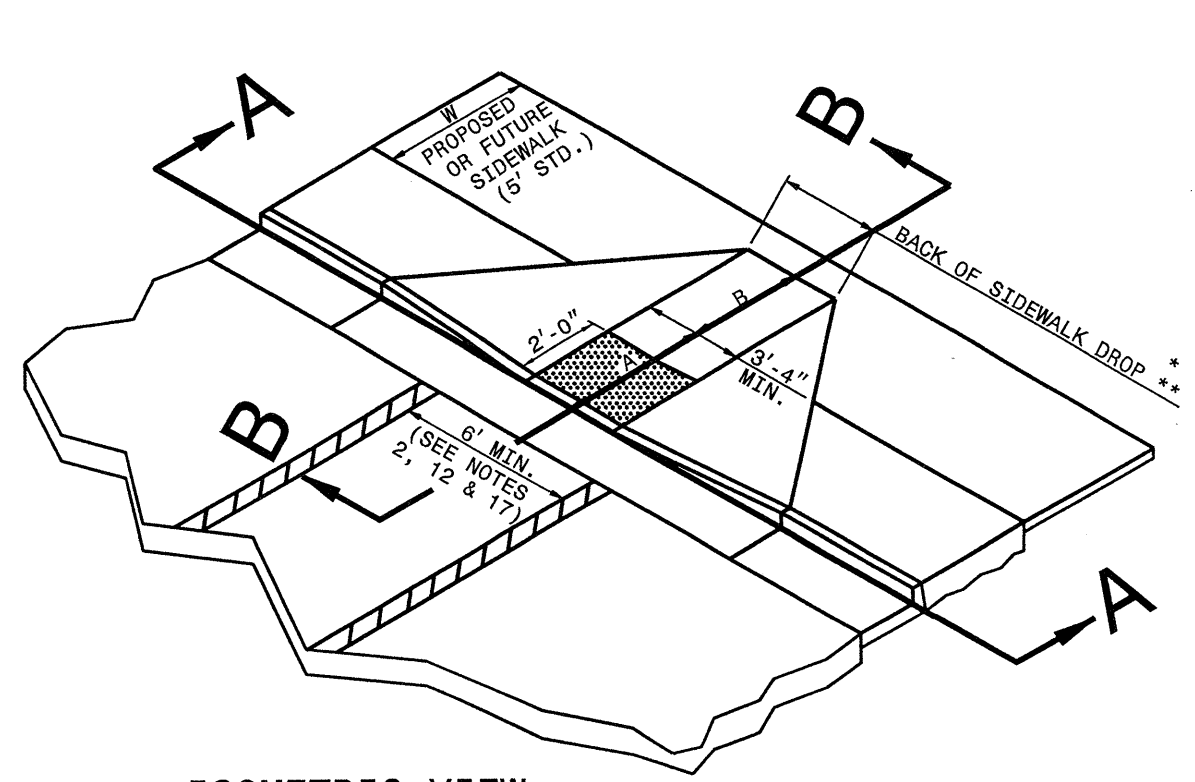
TYPICAL SECTION #4
 USE WITH MAP 5, 6, 7 & 9

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

ENGLISH DETAIL DRAWING FOR
WHEELCHAIR RAMP
PROPOSED CURB AND GUTTER

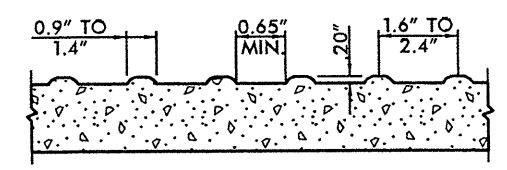
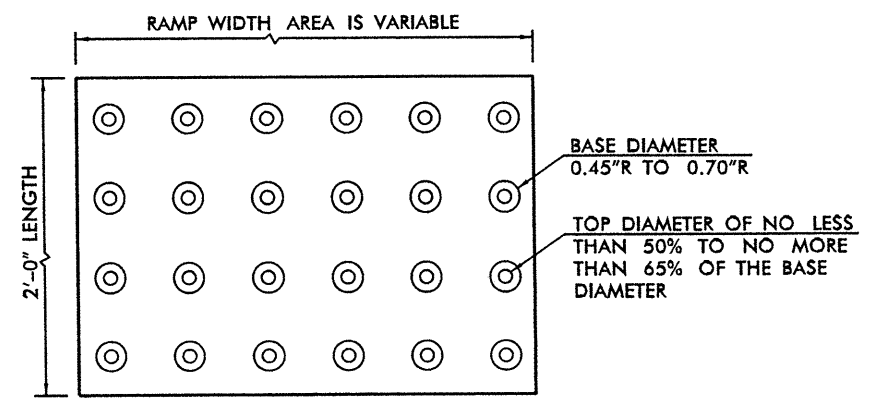
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
WHEELCHAIR RAMP
PROPOSED CURB AND GUTTER



ISOMETRIC VIEW

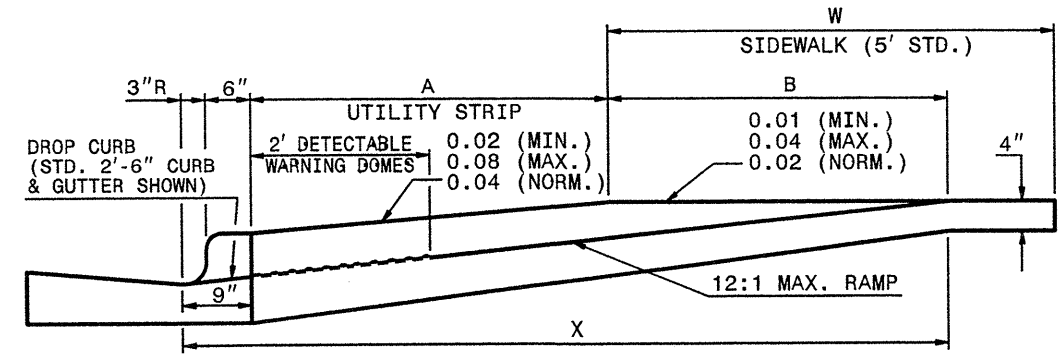
- NOTES:
1. DETECTABLE WARNING DOMES SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
 2. OBTAIN 70% CONTRAST VISIBILITY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



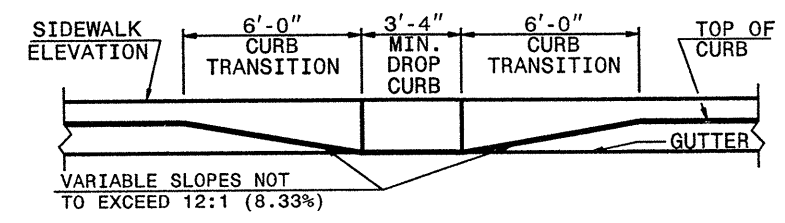
DETECTABLE WARNING DOMES

W	A	W+A+9"	X	B
5'	0.0'	5.8'	5.8'	5.0'*
6'	0.0'	6.8'	6.8'	6.0'*
7'	0.0'	7.8'	7.3'	6.5'*
8'	0.0'	8.8'	7.3'	6.5'*
5'	2.0'	7.8'	7.8'	5.0'
5'	2.5'	8.3'	8.1'	4.8'
5'	3.0'	8.8'	8.3'	4.4'
5'	3.5'	9.3'	8.4'	4.1'
5'	4.0'	9.8'	8.6'	3.8'
5'	4.5'	10.3'	8.7'	3.4'
5'	5.0'	10.8'	8.9'	3.1'

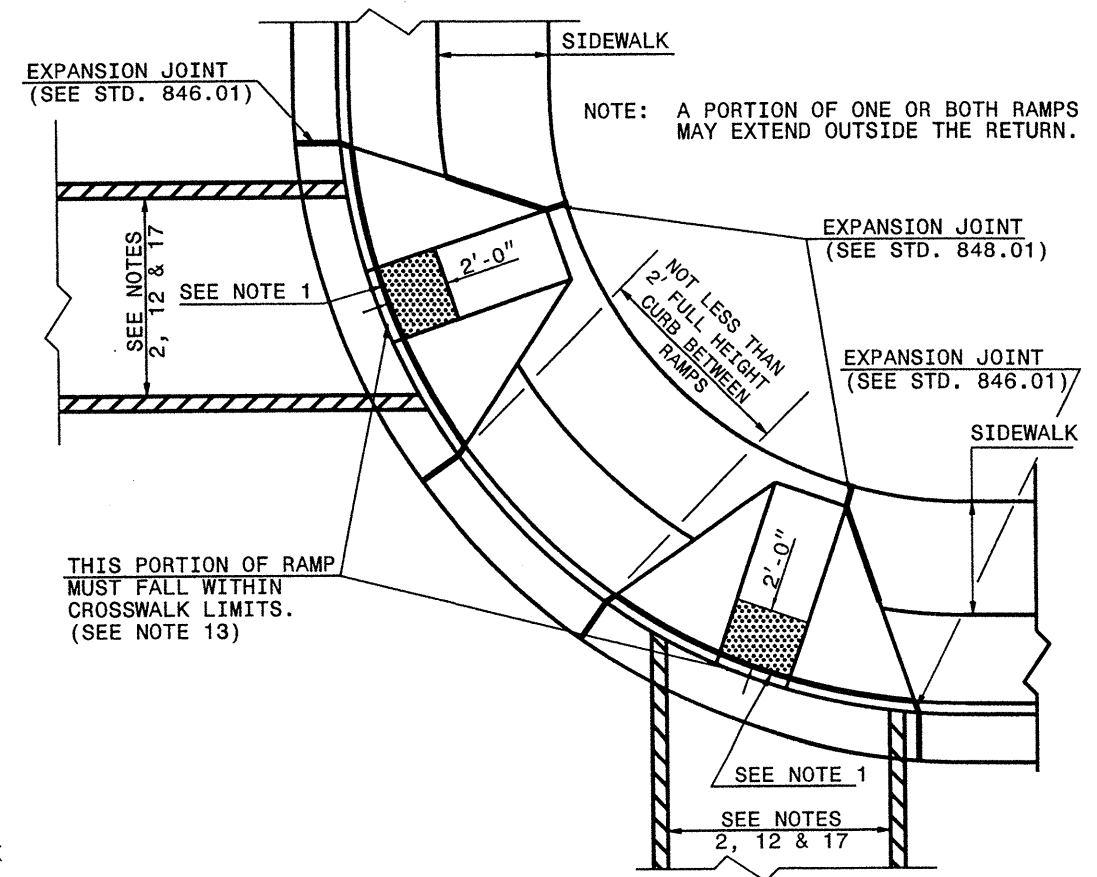
$B = X - (A + 9")$
 B = DISTANCE FROM FRONT EDGE OF SIDEWALK TO BACK POINT OF 12:1 (8.33%) SLOPE.
 * BACK OF SIDEWALK DROP REQUIRED FOR ALL SIDEWALK SLOPES.
 ** BACK OF SIDEWALK DROP REQUIRED FOR SIDEWALK SLOPES 0.04.



SECTION B-B



SECTION A-A



PLAN VIEW

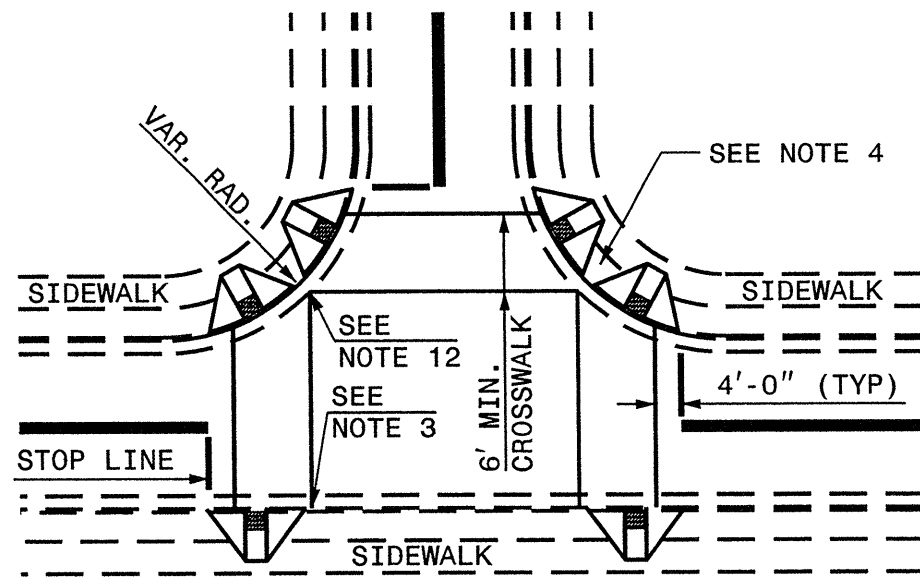
DUAL RAMPS
ANY RADII
(40" MIN. FLOOR WIDTH)

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

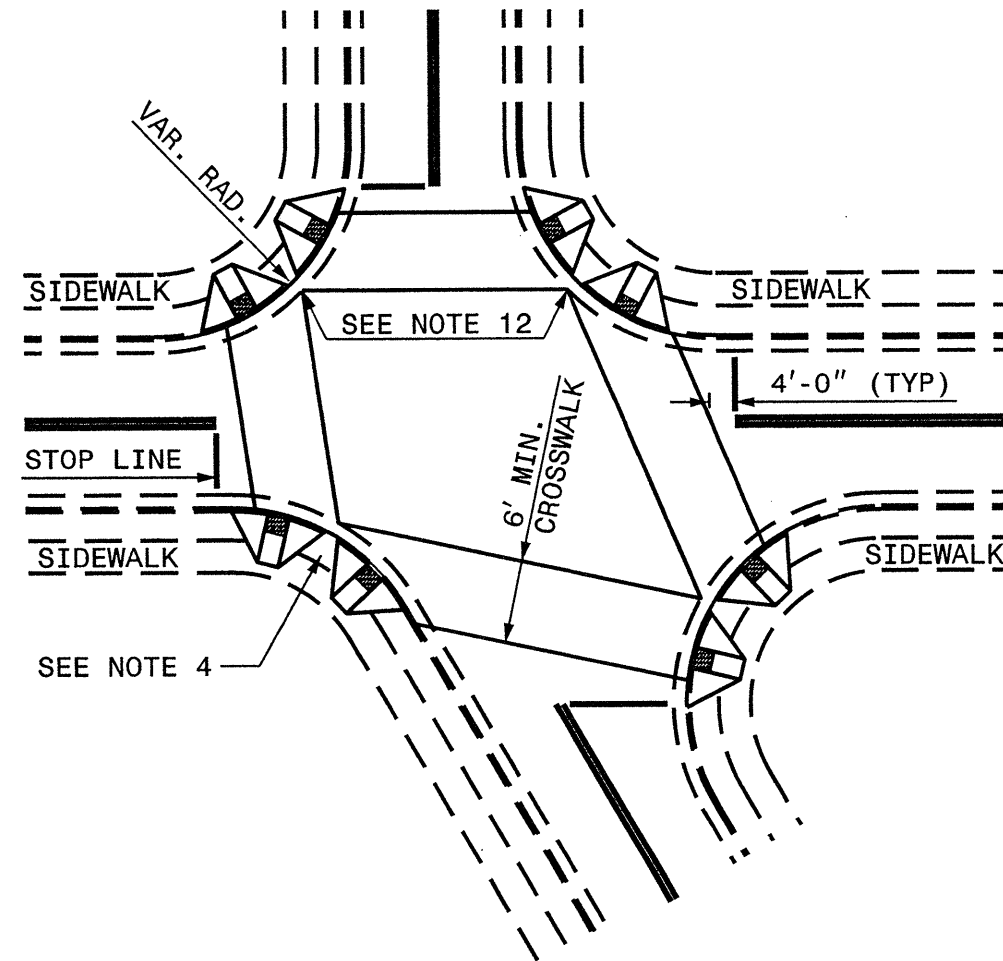
STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
WHEELCHAIR RAMP
PROPOSED CURB AND GUTTER

ENGLISH DETAIL DRAWING FOR
WHEELCHAIR RAMP
PROPOSED CURB AND GUTTER



DETAIL SHOWING TYPICAL LOCATION OF WHEELCHAIR RAMPS, PEDESTRIAN CROSSWALKS AND STOP LINES FOR TEE INTERSECTIONS



DETAIL SHOWING TYPICAL LOCATION OF WHEELCHAIR RAMPS, PEDESTRIAN CROSSWALKS AND STOP LINES

ROADWAY
PLAN SYMBOL
WCR
FOR PROPOSED
WHEELCHAIR RAMP

PROPOSED WHEELCHAIR RAMP
 PROPOSED OR FUTURE SIDEWALK

ALLOWABLE LOCATIONS

DUAL RAMP RADII.....ANY

NOTES:

1. CONSTRUCT THE WALKING SURFACE WITH SLIP RESISTANTANCE AND A 70% CONTRASTING COLOR TO THE SIDEWALK.
2. CROSSWALK WIDTHS AND CONFIGURATION VARY BUT MUST CONFORM TO TRAFFIC DESIGN STANDARDS.
3. NORTH CAROLINA GENERAL STATUTE 136-44.14 REQUIRES THAT ALL STREET CURBS BEING CONSTRUCTED OR RECONSTRUCTED FOR MAINTENANCE PROCEDURES, TRAFFIC OPERATIONS, REPAIRS, CORRECTION OF UTILITIES OR ALTERED FOR ANY REASON AFTER SEPTEMBER 1, 1973 SHALL PROVIDE WHEELCHAIR RAMPS FOR THE PHYSICALLY DISABLED AT ALL INTERSECTIONS WHERE BOTH CURB AND GUTTER AND SIDEWALKS ARE PROVIDED AND AT OTHER POINTS OF PEDESTRIAN FLOW.

IN ADDITION, SECTION 228 OF THE 1973 FEDERAL AID HIGHWAY SAFETY ACT REQUIRES PROVISION OF CURB RAMPS ON ANY CURB CONSTRUCTION AFTER JULY 1, 1976 WHETHER A SIDEWALK IS PROPOSED INITIALLY OR IS PLANNED FOR A FUTURE DATE.

THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990 EXTENDS TO INDIVIDUALS WITH DISABILITIES. COMPREHENSIVE CIVIL RIGHTS PROTECTIONS SIMILIAR TO THOSE PROVIDED TO PERSONS ON THE BASIS OF RACE, SEX, NATIONAL ORIGIN AND RELIGION UNDER THE CIVIL RIGHTS ACT OF 1964. THESE CURB RAMPS HAVE BEEN DESIGNED TO COMPLY WITH THE CURRENT ADA STANDARDS.
4. PROVIDE WHEELCHAIR RAMPS AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. LOCATE WHEELCHAIR RAMPS AS DIRECTED BY THE ENGINEER WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT. WHERE TWO RAMPS ARE INSTALLED PLACE NOT LESS THAN 2 FEET OF FULL HEIGHT CURB BETWEEN THE RAMPS. PLACE DUAL RAMPS AS NEAR PERPENDICULAR TO THE TRAVEL LANE BEING CROSSED AS POSSIBLE.
5. DO NOT EXCEED 0.08 (12:1) SLOPE ON THE WHEELCHAIR RAMP IN RELATIONSHIP TO THE GRADE OF THE STREET.
6. CONSTRUCT WHEELCHAIR RAMPS 40" (3'-4") OR GREATER FOR DUAL RAMPS.
7. USE CLASS "B" CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NON-SKID TYPE SURFACE.
8. PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE WHEELCHAIR RAMP JOINS THE CURB AND AS SHOWN ON STD. DWG. 848.01.
9. PLACE THE INSIDE PEDESTRIAN CROSSWALK LINES NO CLOSER IN THE INTERSECTION BY BISECTING THE INTERSECTION RADII, WITH ALLOWANCE OF A 4' CLEAR ZONE IN THE VEHICULAR TRAVELWAY WHEN ONE RAMP IS INSTALLED. (SEE NOTE 17)
10. COORDINATE THE CURB CUT AND THE PEDESTRIAN CROSSWALK LINES SO THE FLOOR OF THE WHEELCHAIR RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES. PLACE DIAGONAL RAMPS WITH FLARED SIDES SO 24" OF FULL HEIGHT CURB FALLS WITHIN THE CROSSWALK MARKINGS ON EACH SIDE OF THE FLARES.
11. CONSTRUCT THE PEDESTRIAN CROSSWALK A MINIMUM OF 6 FEET. A CROSSWALK WIDTH OF 10 FEET OR GREATER IS DESIRABLE.
12. USE STOP LINES, NORMALLY PERPENDICULAR TO THE LANE LINES, WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN OR OTHER LEGAL REQUIREMENT. AN UNUSUAL APPROACH SKEW MAY REQUIRE THE PLACEMENT OF THE STOP LINE TO BE PARALLEL TO THE INTERSECTING ROADWAY.
13. TERMINATE PARKING A MINIMUM OF 20 FEET BACK OF PEDESTRIAN CROSSWALK.
14. PLACE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION AND THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD.

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

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DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
WHEELCHAIR RAMP
PROPOSED CURB AND GUTTER

ENGLISH DETAIL DRAWING FOR
WHEELCHAIR RAMP
PROPOSED CURB AND GUTTER

PROJECT NO.	SHEET NO.	TOTAL NO.
1CR.10581.20, ETC.	11	

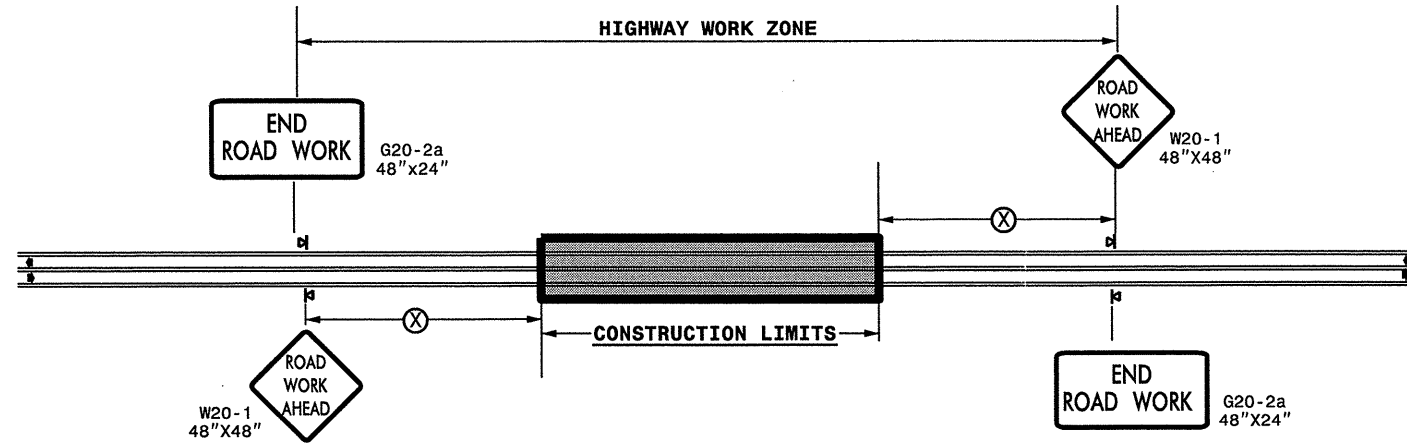
SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	0000100000-N	1237000000-E	1519000000-E	1525000000-E	1560000000-E	2549000000-E	2605000000-E	2830000000-N	2845000000-N
									MOBILIZATION	MILLING ASPHALT PAVEMENT 2" DEPTH SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, SF9.5A TONS	PG 64-22 PLANT MIX TONS	2'-6" CURB & GUTTER LF	WHEELCHAIR RAMPS EA	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA
1CR.10581.20	Martin	1	NC 125	FROM WILLIAMSTON C/L TO NC 903	3	NO	7.5	24	0.44		9,808		588				
1CR.10581.21	Martin	2	NC 125	HAMILTON SOUTH C/L TO NC 903	1	NO	0.4	50	0.02	11,733	1,450		87	580	2	10	4
1CR.10581.21	Martin	3	NC 125	FROM NC 903 TO WEST C/L OF HAMILTON	1	NO	0.4	36	0.02	8,448	1,046		63			11	3
1CR.10581.22	Martin	4	NC 903	FROM NC 125 TO HAMILTON NORTH C/L	1	NO	0.4	54	0.02	12,672	1,566		94	320	2		
1CR.20581.29	Martin	5	SR 1169	FROM NC 125 TO US 64 ALT.	4	NO	0.73	20	0.04			782	51				
1CR.20581.30	Martin	6	SR 1180	FROM SR 1124 TO SR 1123	4	NO	0.45	20	0.03			482	31				
1CR.20581.31	Martin	7	SR 1001	FROM US 17 TO NORTH C/L	4	NO	5.5	20	0.32			5,893	383				
1CR.20581.32	Martin	8	SR 1001	FROM NORTH C/L TO SOUTH C/L	2	NO	0.53	38	0.03	12,996		1,436	93			6	6
1CR.20581.33	Martin	9	SR 1108	FROM SR 1001 TO SR1109	4	NO	1.2	20	0.07			1,286	84				
GRAND TOTAL							17.11		1	45,849	13,870	9,879	1,474	900	4	27	13

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4589000000-N	4710000000-E	4725000000-E		4810000000-E		4820000000-E	4900000000-N
					GENERIC TRAFFIC CONTROL ITEM LS	24" X 120 M WHITE THERMO LF	THERMO LT ARROW 90 M EA	THERMO RT ARROW 90 M EA	4" YELLOW PAINT LF	4" WHITE PAINT EA	8" WHITE PAINT EA	YELLOW & YELLOW MARKERS EA
1CR.10581.20	Martin	1	NC 125	FROM WILLIAMSTON C/L TO NC 903	1.00		10	11	127,638	164,400	50	750
1CR.10581.21	Martin	2	NC 125	HAMILTON SOUTH C/L TO NC 903	*	45			6,780	4,292		40
1CR.10581.21	Martin	3	NC 125	FROM NC 903 TO WEST C/L OF HAMILTON	*				6,780	4,292		40
1CR.10581.22	Martin	4	NC 903	FROM NC 125 TO HAMILTON NORTH C/L	*	45			6,780	4,292		40
1CR.20581.29	Martin	5	SR 1169	FROM NC 125 TO US 64 ALT.	*				17,280	19,272		
1CR.20581.30	Martin	6	SR 1180	FROM SR 1124 TO SR 1123	*				5,940	9,684		
1CR.20581.31	Martin	7	SR 1001	FROM US 17 TO NORTH C/L	*				79,860	128,596		
1CR.20581.32	Martin	8	SR 1001	FROM NORTH C/L TO SOUTH C/L	*				13,992			
1CR.20581.33	Martin	9	SR 1108	FROM SR 1001 TO SR1109	*				17,424	28,406		
GRAND TOTAL					1	90	10	11	282,474	363,234	50	870

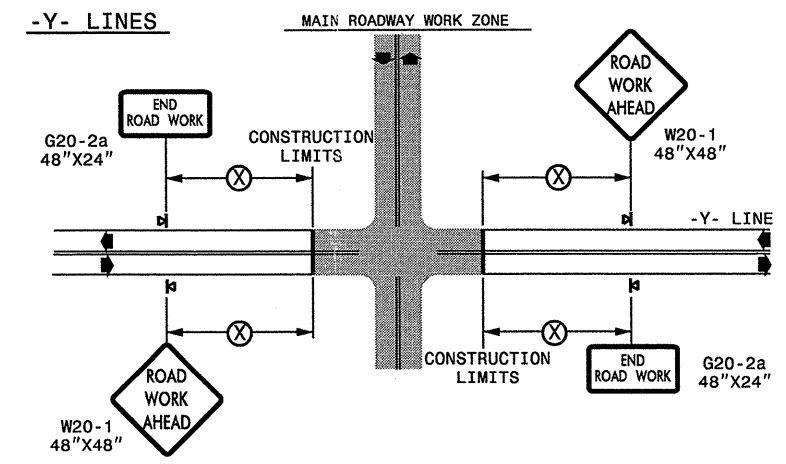
TWO-WAY UNDIVIDED ** (L-LINES)



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.


LEGEND

▣ PORTABLE SIGN

➔ DIRECTION OF TRAFFIC FLOW

DETAIL DRAWING
FOR TWO-WAY UNDIVIDED
WORK ZONE WARNING SIGNS

SHEET 1 OF 1






APPROVED: _____ DATE: _____	DETAIL DRAWING FOR TWO-WAY UNDIVIDED ADVANCED WORK ZONE WARNING SIGNS									
SEAL	SCALE: NONE	<table border="1"> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	REVISIONS							
	REVISIONS									
DATE: 12/10										
DWG. BY: _____										
DESIGN BY: _____										
REVIEWED BY: _____	<table border="1"> <tr> <td>CAO</td> <td>RE</td> </tr> </table>	CAO	RE							
CAO	RE									

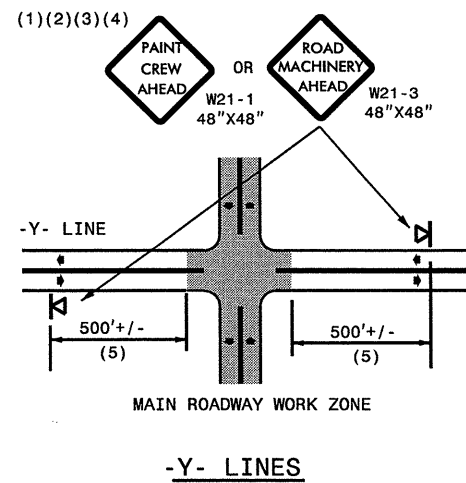
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 Documents\C-202694A-H_ICR.0581.20etc.m8_Martin_NC125 NC903 mSRs.SDM\C202665A-F_ICR.02812etc.m6_2wayundivurbf.r.wysJuly2006-por-table.dgn

GENERAL NOTES

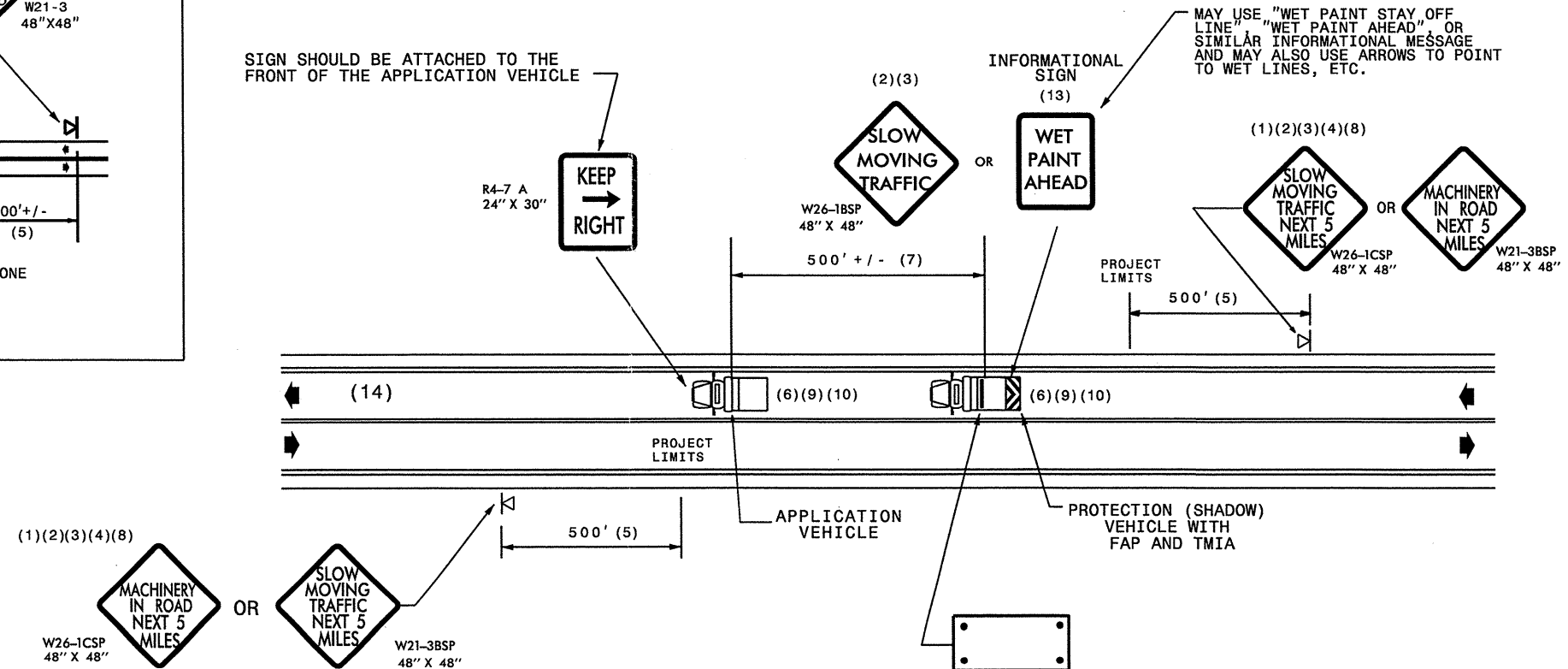
- (1) THE FOLLOWING OPTIONS MAY BE USED FOR ADVANCE WARNING SIGNS:
 - A. TRUCK MOUNTED SIGNS
 - B. TRUCK MOUNTED CHANGEABLE MESSAGE SIGN (CMS)
 - C. GROUND MOUNTED ADVANCE WARNING SIGNS (MUST CIRCLE TO PICK UP SIGNS)
 - D. GROUND MOUNTED CHANGEABLE MESSAGE SIGN (CMS) (MUST USE CIRCLE TO PICK UP SIGNS)
- (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 ACCOMODATE 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