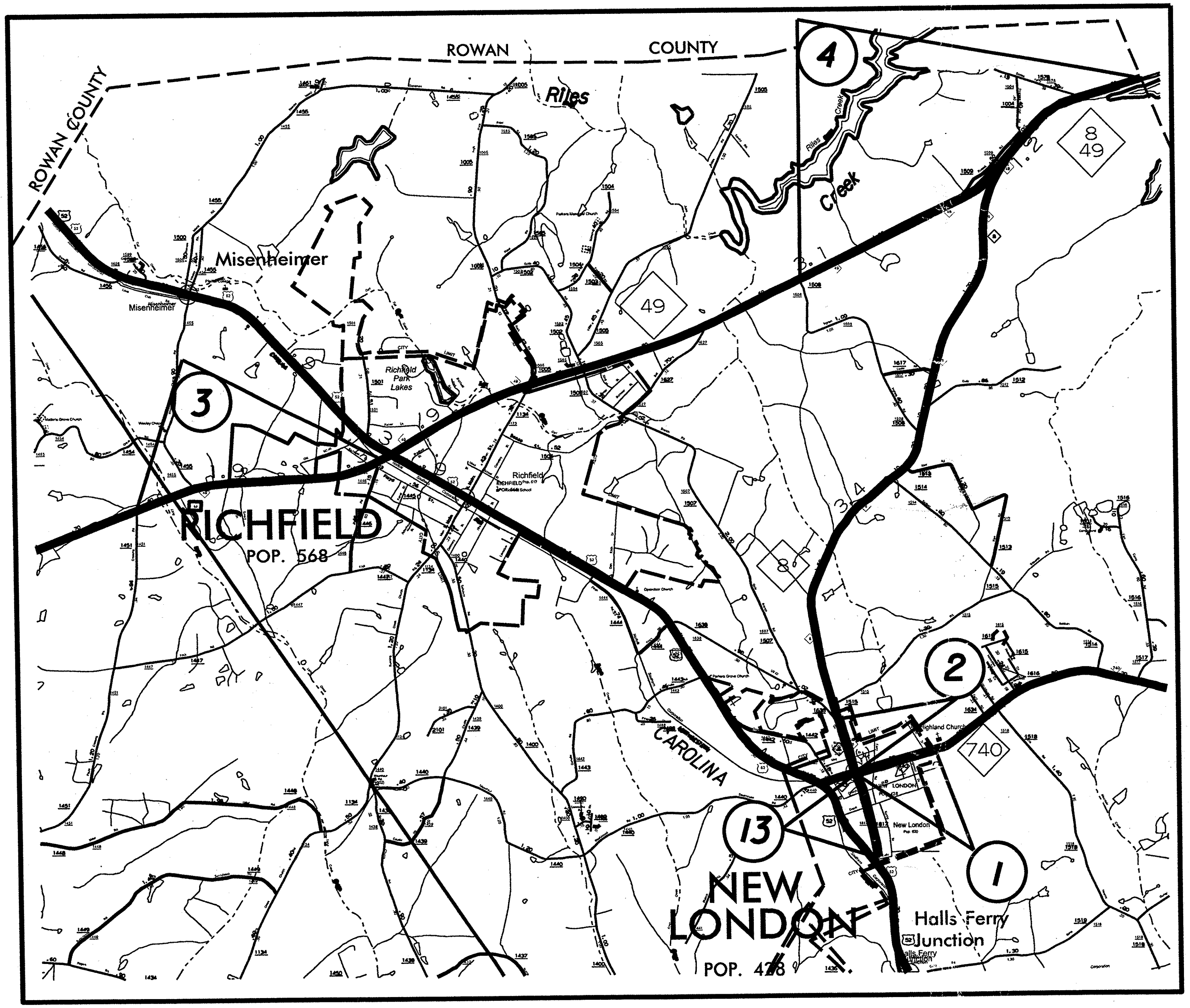
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	10CRJ0841.25.	1	10
F.A. PROJECT NO.			



N

S

ENLARGED MUNICIPAL AND SUBURBAN AREAS

STANLY COUNTY

NORTH CAROLINA

PREPARED BY THE

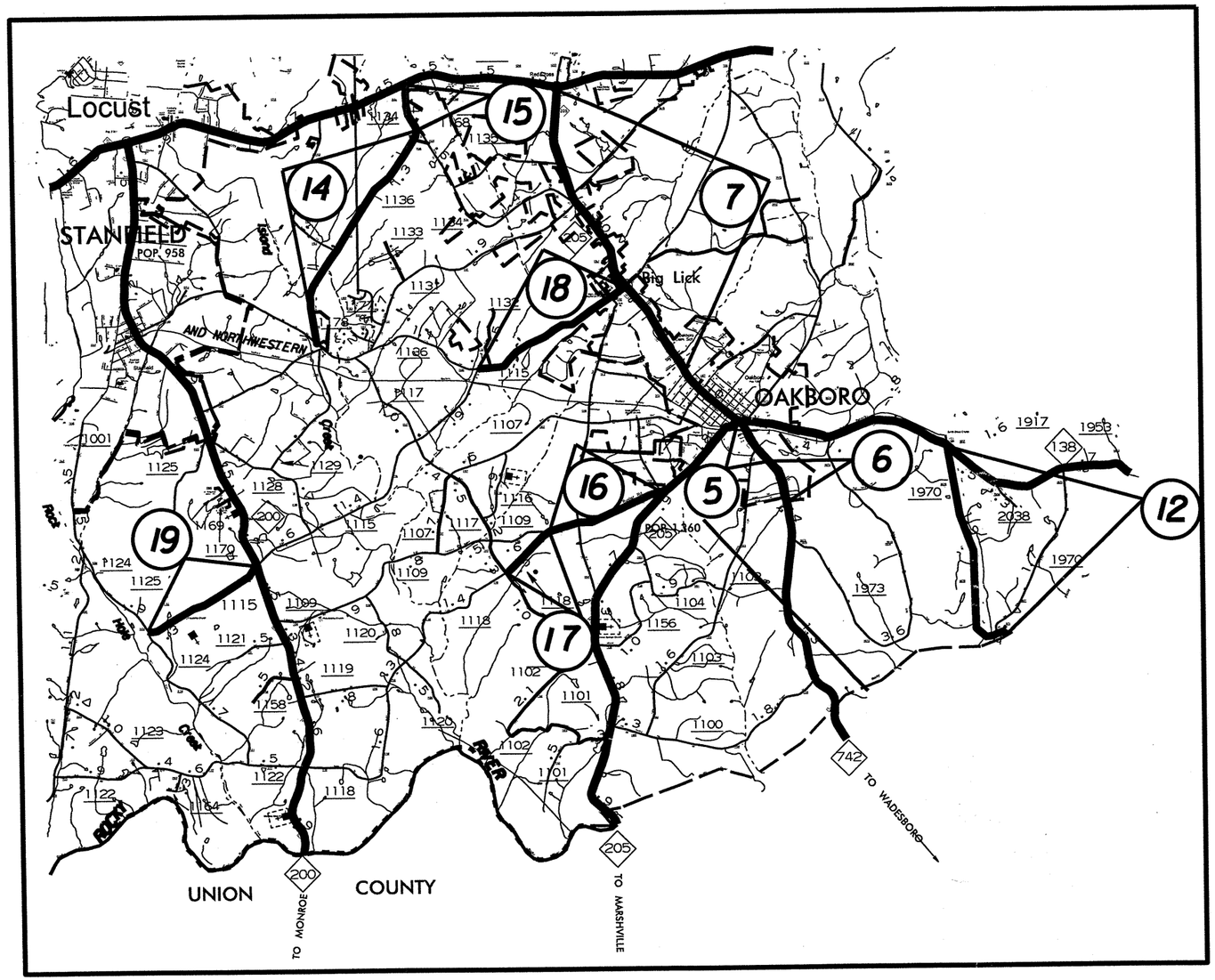
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS - GIS UNIT

IN COOPERATION WITH THE

U.S.DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

MAP #	ROUTE	DESCRIPTION
1	NC 740	FROM NC 8 TO PAVEMENT CHANGE
2	NC 8	FROM NC 740 TO PAST TRAFFIC ISLANDS
3	NC 49	FROM RAILROAD TRACKS TO SR 1451 (PAULS CROSSING ROAD)
4	NC 49	FROM SR 1508 (INGRAM ROAD) TO ROWAN COUNTY LINE
5	NC 742	FROM NC 205 TO BEGIN CURB AND GUTTER SECTION
6	NC 742	FROM BEGIN CURB AND GUTTER SECTION TO SCL OAKBORO
7	NC 205	FROM END CURB AND GUTTER SECTION TO PAVEMENT JOINT BEFORE NC 24/27
8	US 52	FROM SR 1744 (SNUGGS ROAD) TO NCL NORWOOD
9	US 52	FROM NCL NORWOOD TO BEGIN CURB AND GUTTER SECTION
10	SR 1535 (MTN CRK RD)	FROM SR 1535 (PK RIDGE ROAD) TO BRIDGE BEFORE SR 1650 (NE CONNECTOR)
11	SR 1535 (MTN CRK RD)	FROM PAVT. JT. @ SR 1650 (NE CONNECT) TO PAVT JT. PAST SR 1524 (AIRPORT RD)
12	SR 1970 (HILLS FORD ROAD)	FROM NC 138 TO UNION COUNTY LINE
13	SR 1817 (OLD US 52)	FROM US 52 TO NC 740
14	SR 1136 (PLESS MILL ROAD)	FROM 1130 BIG LICK ROAD TO SR 1134 (HILLTOP ROAD)
15	SR 1134 (PLESS MILL ROAD)	FROM SR 1136 (PLESS MILL ROAD) TO NC 24/27
16	SR 1109 (BUSTER ROAD)	FROM NC 205 TO SR 1118 (BUSTER ROAD)
17	SR 1118 (BUSTER ROAD)	FROM SR 1109 (BUSTER ROAD) TO SR 1117 (GRIFFIN GREENE ROAD)
18	SR 1115 (BIG LICK ROAD)	FROM NC 205 TO SR 1130 (BIG LICK ROAD)
19	SR 1115 (OAKGROVE ROAD)	FROM NC 200 TO PAVT. JT. PAST SR1124 (RUSHING ROAD)

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	10CRJ0841.25.	2	10
F.A. PROJECT NO.			



N

S

ENLARGED MUNICIPAL AND SUBURBAN AREAS

STANLY COUNTY

NORTH CAROLINA

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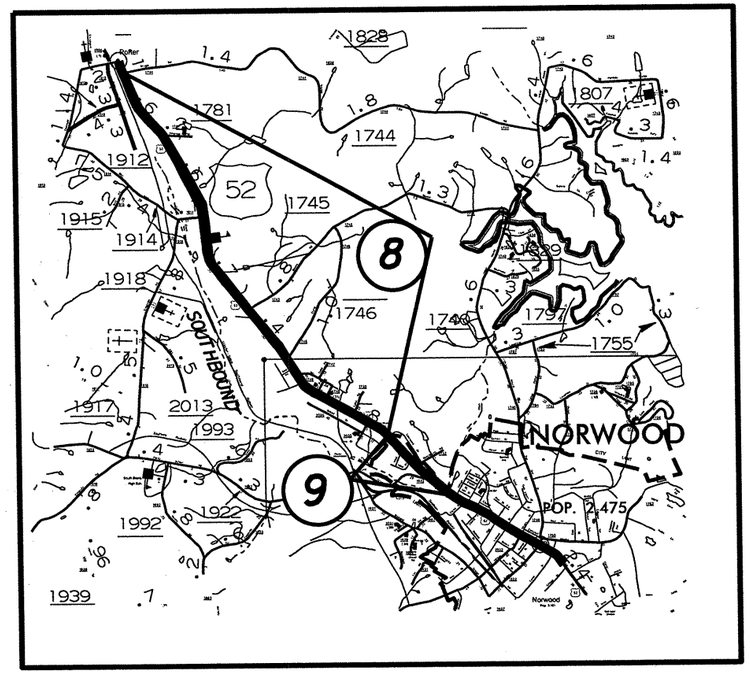
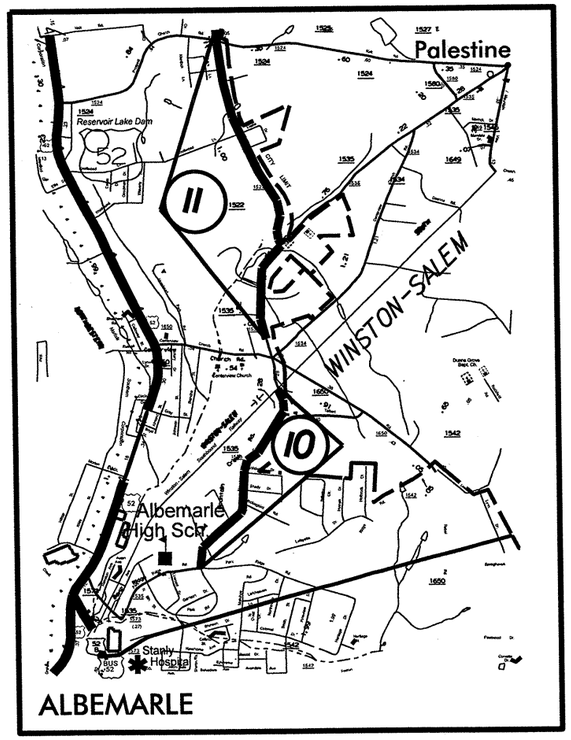
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	10CRJ0841.25.	3	10
F.A. PROJECT NO.			





ENLARGED MUNICIPAL AND SUBURBAN AREAS

STANLY COUNTY

NORTH CAROLINA

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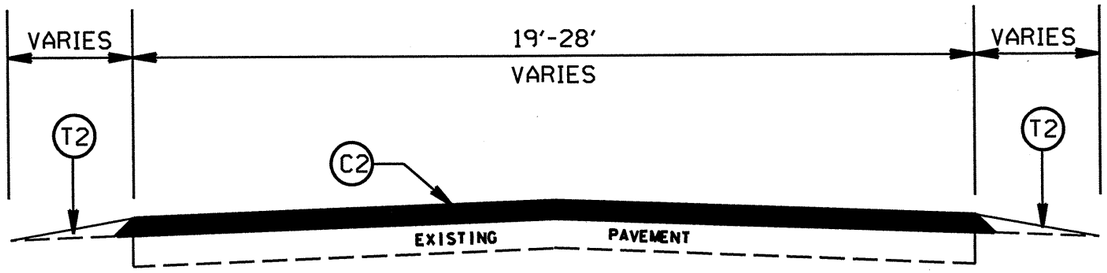
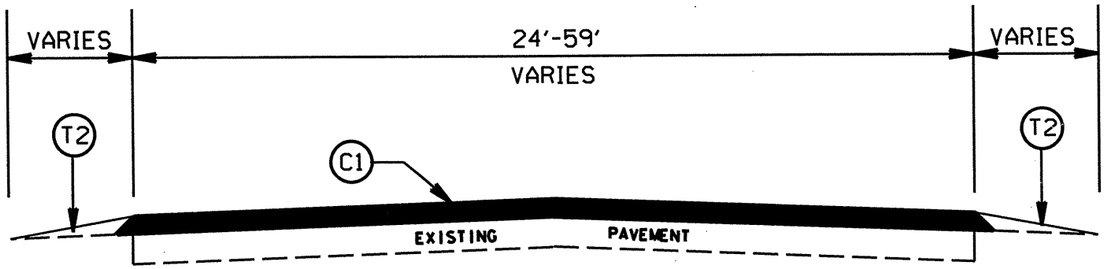
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		4	10
F.A. PROJECT NO.			

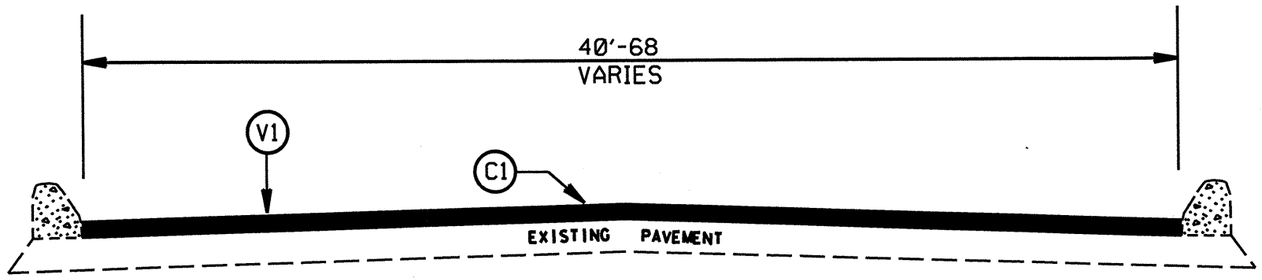
10CR.10841.25, etc.



TYPICAL SECTION NO. 3

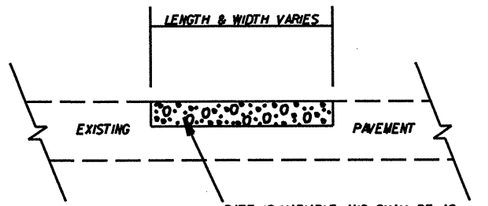


TYPICAL SECTION NO. 2



TYPICAL SECTION NO. 1

PATCHING DETAIL



RATE IS VARIABLE AND SHALL BE AS DIRECTED BY THE ENGINEER. ASPHALT TYPE I-19.0C OR B25.0C SHALL BE PLACED.

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.5C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 8.0" ASPHALT CONCRETE SURFACE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
T1	SHOULDER CONSTRUCTION
T2	SHOULDER RECONSTRUCTION
V1	MILLING BITUMINOUS PAVEMENT. 1.5" DEPTH.
V2	MILLING BITUMINOUS PAVEMENT. 2.5" DEPTH.

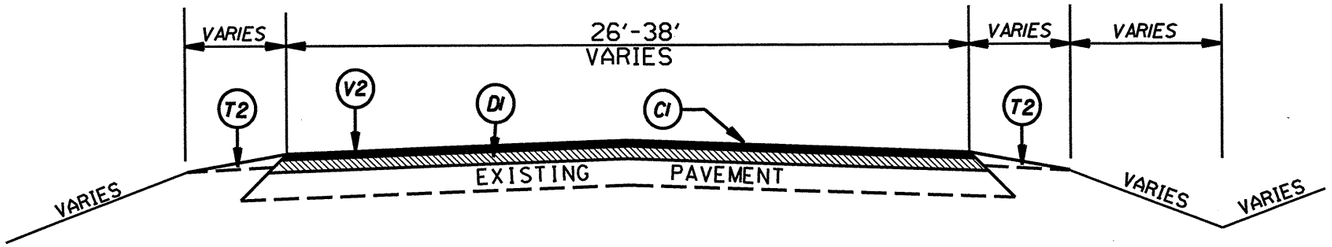
STANLY COUNTY
RESURFACING 2011

SCALE	-NA-
DATE	1/11
DWG. BY	JDA
DESIGN BY	JDA
APPROVED	MPW

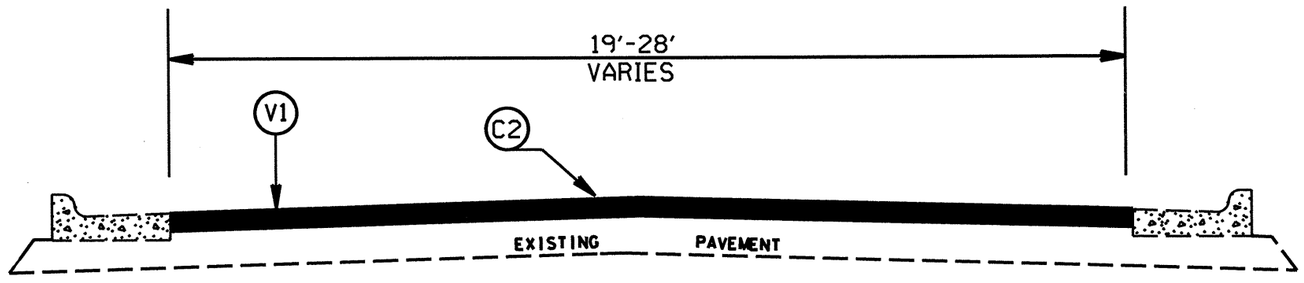
REVISIONS	

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		5	10
F.A. PROJECT NO.			

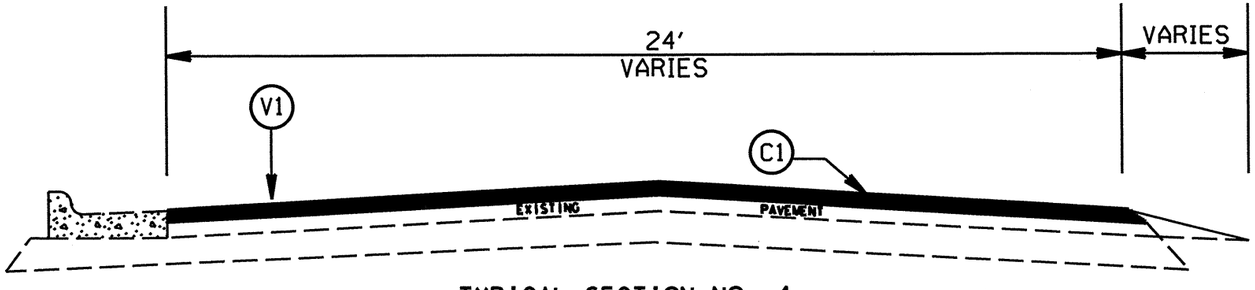
10CR.10841.25, etc.



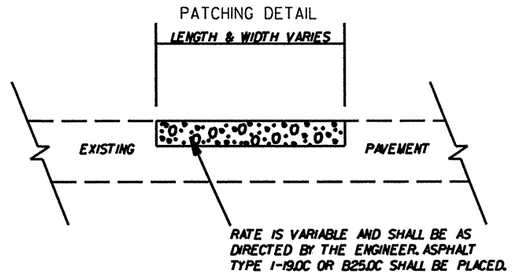
TYPICAL SECTION NO. 6



TYPICAL SECTION NO. 5



TYPICAL SECTION NO. 4



PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.5C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 8.0" ASPHALT CONCRETE SURFACE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
T1	SHOULDER CONSTRUCTION
T2	SHOULDER RECONSTRUCTION
V1	MILLING BITUMINOUS PAVEMENT. 1.5" DEPTH.
V2	MILLING BITUMINOUS PAVEMENT. 2.5" DEPTH.

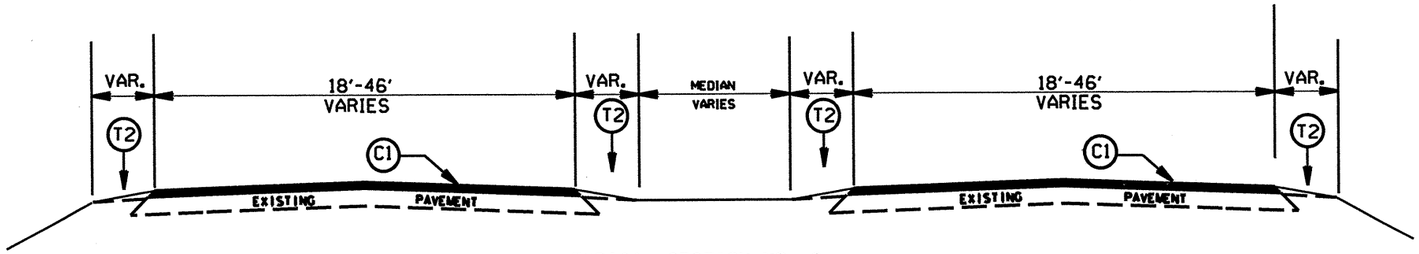
STANLY COUNTY
RESURFACING 2011

SCALE	-NA-
DATE	1/11
DWG. BY	JDA
DESIGN BY	JDA
APPROVED	MPW

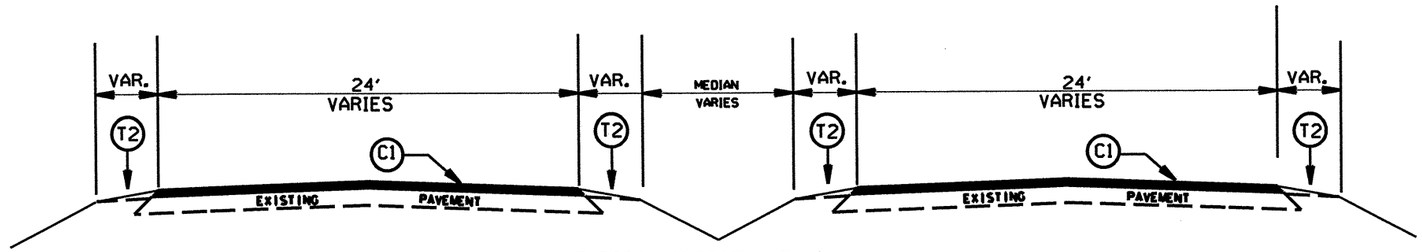
REVISIONS	

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		6	10
F.A. PROJECT NO.			

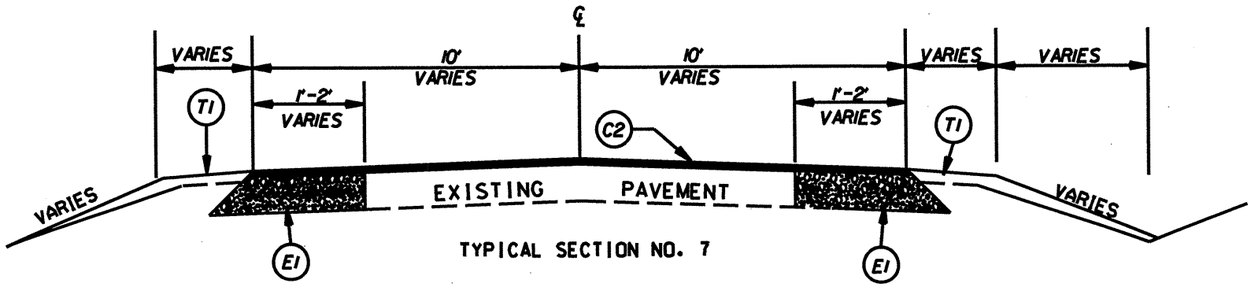
10CR.10841.25, etc.



TYPICAL SECTION NO. 9

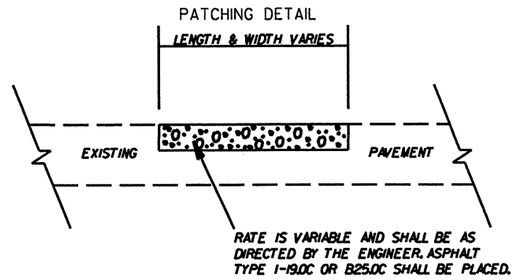


TYPICAL SECTION NO. 8



TYPICAL SECTION NO. 7

NOTE: WHEN WIDENING WITH THE MILLING MACHINE, MILL 6" OF THE EXISTING PAVEMENT EDGE TO ENSURE A SOLID EDGE TO TIE INTO BEFORE PLACING B25.0B BASE OR AS DIRECTED BY THE ENGINEER



PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.5C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E1	PROP. APPROX. 8.0" ASPHALT CONCRETE SURFACE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. IN EACH OF TWO LAYERS
T1	SHOULDER CONSTRUCTION
T2	SHOULDER RECONSTRUCTION
V1	MILLING BITUMINOUS PAVEMENT. 1.5" DEPTH.
V2	MILLING BITUMINOUS PAVEMENT. 2.5" DEPTH.

STANLY COUNTY
RESURFACING 2011

SCALE	-NA-
DATE	1/11
DWG. BY	JDA
DESIGN BY	JDA
APPROVED	MPW

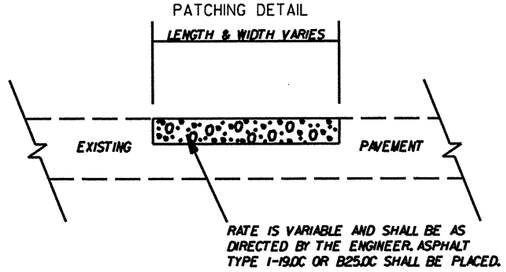
DIVISION OF HIGHWAYS

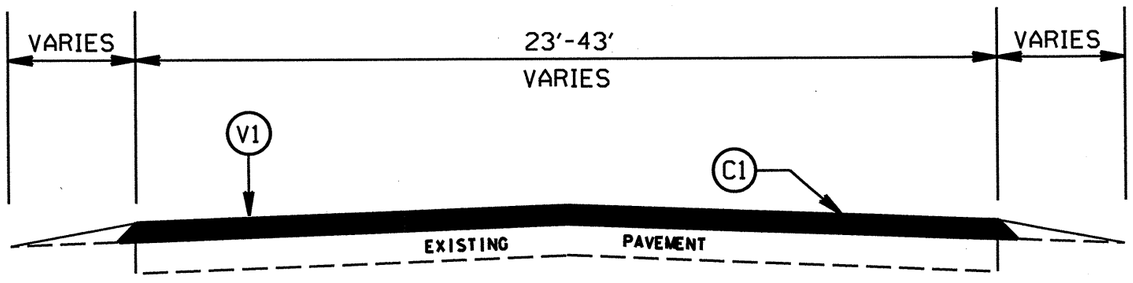
REVISIONS	

STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.		7	10
F.A. PROJECT NO.			

10CR.10841.25, etc.

PATCHING DETAIL





TYPICAL SECTION NO. 10

PAVEMENT SCHEDULE	
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C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
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T2	SHOULDER RECONSTRUCTION
V1	MILLING BITUMINOUS PAVEMENT. 1.5" DEPTH.
V2	MILLING BITUMINOUS PAVEMENT. 2.5" DEPTH.

STANLY COUNTY
RESURFACING 2011

SCALE	-NA-
DATE	1/11
DWG. BY	JDA
DESIGN BY	JDA
APPROVED	MPW

REVISIONS	

PROJECT NO.	SHEET NO.	TOTAL NO.
10CR.10841.25, 10CR.10841.26 10CR.10841.27, ETC.	8	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	BORROW EXCAVATION CY	INCIDENTAL STONE BASE TONS	SHOULDER CONSTRUCTION SMI	SHOULDER RECONSTRUCTION SMI	DITCHING LF	1½" MILLING SY	2.5" MILLING SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	INTERMEDIATE COURSE, I19.0C TONS	SURFACE COURSE, S9.5B TONS	LEVELING COURSE, S9.5B TONS
10CR.10841.25	Stanly	1	NC 8	FROM NC 740 TO PAST TRAFFIC ISLAND ONTO NC 8	1	NO	0.33	42						8,686						
10CR.10841.26	Stanly	2	NC 740	FROM NC 8 TO PAVEMENT CHANGE	1	NO	0.47	40						11,029						
10CR.10841.27	Stanly	3	NC49	FROM R/R TRACKS WEST OF US 52 TO SR 1451 (PAULS CROSSING ROAD)	2	NO	1.44	26-59	58	72		2.88				130				
10CR.10841.28	Stanly	4	NC 49	FROM SR 1508 (INGRAM ROAD.) TO ROWAN COUNTY LINE	2,8,9	NO	2.47	26-59	99	124		5.32				150				
10CR.10841.29	Stanly	5	NC 742	FROM NC 205 TO END C & G SECTION	1	NO	0.4	45		10				10,560						
10CR.10841.30	Stanly	6	NC 742	FROM END C & G TO THE SCL OAKBORO	10	NO	0.5	23		25				8,080						
10CR.10841.31	Stanly	7	NC 205	FROM END C & G SECTION TO PAVEMENT JOINT BEFORE NC 24/27	4,10	NO	2.83	24		142				40,500						
10CR.10841.32	Stanly	8	US 52	FROM SR 1744 (SNUGGS ROAD) TO NCL NORWOOD	6	NO	3	26	168	150		6.00			47,720			7,230		
10CR.10841.33	Stanly	9	US 52	FROM NCL NORWOOD TO BEGIN C & G SECTION	6	NO	0.54	26	26	27		1.08			9,200			1,466		
10CR.20841.27	Stanly	10	SR 1535 (MOUNTAIN CREEK ROAD)	FROM SR 1535 (PARK RIDGE ROAD) TO BRIDGE BEFORE SR 1650 (NE CONNECTOR)	3,5	NO	0.93	19-28	37	46		1.86		900					1,022	140
10CR.20841.28	Stanly	11	SR 1535 (MOUNTAIN CREEK ROAD)	FROM PAVEMENT JOINT BEFORE SR 1650 (NE CONNECTOR) TO THE PAVEMENT JOINT PAST SR 1524 (PROSPECT CH. ROAD)	3	NO	1.47	19	59	74		2.94				150			1,634	221
10CR.20841.29	Stanly	12	SR 1970 (HILLSFORD ROAD.)	FROM NC 138 TO UNION COUNTY LINE	7	NO	1.95	20		98	3.90		800			120	2,678		2,365	300
10CR.20841.30	Stanly	13	SR 1817 (OLD US 52)	FROM PAVEMENT JOINT NEAR US 52 TO NC 740	1	NO	0.44	43						11,100						
10CR.20841.31	Stanly	14	SR 1136 (PLESS MILL ROAD)	FROM SR 1130 (BIG LICK ROAD) TO SR 1134 (HILLTOP ROAD)	7	NO	2.25	20		113	4.50		800			240	3,145		2,684	350
10CR.20841.32	Stanly	15	SR 1134 (PLESS MILL ROAD)	FROM SR 1136 (PLESS MILL ROAD) TO NC 24/27	7	NO	0.39	20		20	0.78		200			130	537		471	60
10CR.20841.33	Stanly	16	SR 1109 (BUSTER ROAD)	FROM NC 205 TO SR 1118 (BUSTER ROAD)	3	NO	1.12	21	45	56		2.24				150			1,393	150
10CR.20841.34	Stanly	17	SR 1118 (BUSTER ROAD)	FROM SR 1109 (BUSTER ROAD) TO SR 1117 (GRIFFIN GREENE ROAD)	3	NO	0.57	21	23	28		1.14				120			680	225
10CR.20841.18	Stanly	18	SR 1115 (BIG LICK ROAD)	FROM NC 205 TO SR 1130 (BIG LICK ROAD)	3	NO	1.6	23	64	80		3.20				130			2,061	640
10CR.20841.35	Stanly	19	SR 1115 (OAKGROVE ROAD)	FROM NC 200 TO PAVEMENT JOINT PAST SR1124 (RUSHING ROAD)	3	NO	1.22	21	49	61		2.44				120			1,425	185
GRAND TOTAL							23.92		628	1126	9.18	29.1	1800	90855	56920	1440	6360	8696	13735	2271

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	SURFACE COURSE, S9.5C TONS	LEVELING COURSE, S9.5C TONS	PG 64-22 PLANT MIX TONS	PG 70-22 PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	WHEELCHAIR RAMPS EA	6" DRIVEWAYS SY	RETROFIT EXISTING WHEELCHAIR RAMPS EA	ADJ. OF CATCH BASIN EA	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	TEMPORARY SILT FENCE LF	MATTING (EROSION CONTROL) SY	WATTLE LF	SEED & MULCHING AC
10CR.10841.25	Stanly	1	NC 8	FROM NC 740 TO PAST TRAFFIC ISLAND ONTO NC 8	1	809			49	83	5		2	1	5	1				
10CR.10841.26	Stanly	2	NC 740	FROM NC 8 TO PAVEMENT CHANGE	1	1,022			61	118				1	4	2				
10CR.10841.27	Stanly	3	NC49	FROM R/R TRACKS WEST OF US 52 TO SR 1451 (PAULS CROSSING ROAD)	2	2,094	216		140	360							300	384	240	
10CR.10841.28	Stanly	4	NC 49	FROM SR 1508 (INGRAM ROAD.) TO ROWAN COUNTY LINE	2,8,9	4,048	370		267	620							100	1,024	640	
10CR.10841.29	Stanly	5	NC 742	FROM NC 205 TO END C & G SECTION	1	1,040			62	100	1		1	1	1	1				
10CR.10841.30	Stanly	6	NC 742	FROM END C & G TO THE SCL OAKBORO	10	751			45	100					1	1				
10CR.10841.31	Stanly	7	NC 205	FROM END C & G SECTION TO PAVEMENT JOINT BEFORE NC 24/27	4,10	3,640			218	500					1	1				
10CR.10841.32	Stanly	8	US 52	FROM SR 1744 (SNUGGS ROAD) TO NCL NORWOOD	6	4,524		340	271	750		165					100	1,150	720	
10CR.10841.33	Stanly	9	US 52	FROM NCL NORWOOD TO BEGIN C & G SECTION	6	895		69	54	135					1	1	100	128	80	
10CR.20841.27	Stanly	10	SR 1535 (MOUNTAIN CREEK ROAD)	FROM SR 1535 (PARK RIDGE ROAD) TO BRIDGE BEFORE SR 1650 (NE CONNECTOR)	3,5			70		93							30	640	400	
10CR.10841.28	Stanly	11	SR 1535 (MOUNTAIN CREEK ROAD)	FROM PAVEMENT JOINT BEFORE SR 1650 (NE CONNECTOR) TO THE PAVEMENT JOINT PAST SR 1524 (PROSPECT CH. ROAD)	3			112		368							60	640	400	
10CR.20841.29	Stanly	12	SR 1970 (HILLSFORD ROAD.)	FROM NC 138 TO UNION COUNTY LINE	7			277		300		15					400	648	400	5
10CR.20841.30	Stanly	13	SR 1817 (OLD US 52)	FROM PAVEMENT JOINT NEAR US 52 TO NC 740	1	1,029			62	110	5		4	1	4	2				
10CR.20841.31	Stanly	14	SR 1136 (PLESS MILL ROAD)	FROM SR 1130 (BIG LICK ROAD) TO SR 1134 (HILLTOP ROAD)	7			319		575							400	768	480	5
10CR.20841.32	Stanly	15	SR 1134 (PLESS MILL ROAD)	FROM SR 1136 (PLESS MILL ROAD) TO NC 24/27	7			55		100		25					50	512	320	1
10CR.1620841.33	Stanly	16	SR 1109 (BUSTER ROAD)	FROM NC 205 TO SR 1118 (BUSTER ROAD)	3			93		300							100	640	400	
10CR.20841.34	Stanly	17	SR 1118 (BUSTER ROAD)	FROM SR 1109 (BUSTER ROAD) TO SR 1117 (GRIFFIN GREENE ROAD)	3			55		225							200	384	240	
10CR.20841.18	Stanly	18	SR 1115 (BIG LICK ROAD)	FROM NC 205 TO SR 1130 (BIG LICK ROAD)	3			165		640		50					300	768	480	
10CR.20841.35	Stanly	19	SR 1115 (OAKGROVE ROAD)	FROM NC 200 TO PAVEMENT JOINT PAST SR1124 (RUSHING ROAD)	3			97		300							200	1,024	640	
GRAND TOTAL						19852	586	1652	1229	5777	11	255	7	4	17	9	2340	8710	5440	11.0

PROJECT NO.	SHEET NO.	TOTAL NO.
10CR.10841.25, 10CR.10841.26 10CR.10841.27, ETC.	9	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4685000000-E 4" X 90 M WHITE THERMO LF	4685000000-E 4" X 90 M YELLOW THERMO LF	4686000000-E 4" X 120 M YELLOW THERMO LF	4686000000-E 4" X 120 M WHITE THERMO LF	4695000000-E 8" X 90 M YELLOW THERMO LF	4695000000-E 8" X 90 M WHITE THERMO LF	4702000000-E 12" X 120 M WHITE THERMO LF	4705000000-E 16" X 120 M WHITE THERMO LF	4710000000-E 24" X 120 M WHITE THERMO LF	4721000000-E THERMO RXR 120 M EA	4721000000-E THERMO MSG STOP 120 M EA	4721000000-E THERMO MSG SCHOOL 120 M EA	4725000000-E THERMO STR & RT ARROW 90 M EA	4725000000-E THERMO LT ARROW 90 M EA	4725000000-E THERMO STR ARROW 90 M EA	4810000000-E 4" YELLOW PAINT LF	4810000000-E 4" WHITE PAINT LF	4835000000-E 24" WHITE PAINT LF	4900000000-N YELLOW & YELLOW MARKERS EA	4900000000-N CRYSTAL & RED MARKERS EA
10CR.10841.25	Stanly	1	NC 8	FROM NC 740 TO PAST TRAFFIC ISLAND ONTO NC 8	1,600		3,700	75			84						1	1		3,700			22	8
10CR.10841.26	Stanly	2	NC 740	FROM NC 8 TO PAVEMENT CHANGE			5,000				80		20							5,000			31	
10CR.10841.27	Stanly	3	NC49	FROM R/R TRACKS WEST OF US 52 TO SR 1451 (PAULS CROSSING ROAD)	15,494		9,504					50	25	2									95	
10CR.10841.28	Stanly	4	NC 49	FROM SR 1508 (INGRAM ROAD.) TO ROWAN COUNTY LINE	26,577	35,000	18,500	500	250	120			60		4				3				163	26
10CR.10841.29	Stanly	5	NC 742	FROM NC 205 TO END C & G SECTION	800		4,224	200	100			100	150	4				2		4,224			40	8
10CR.10841.30	Stanly	6	NC 742	FROM END C & G TO THE SCL OAKBORO	5,380		5,280													5,280			33	
10CR.10841.31	Stanly	7	NC 205	FROM END C & G SECTION TO PAVEMENT JOINT BEFORE NC 24/27	30,451			150	250				160			12		1		30,000			187	8
10CR.10841.32	Stanly	8	US 52	FROM SR 1744 (SNUGGS ROAD) TO NCL NORWOOD	32,280		19,800													30,000			198	
10CR.10841.33	Stanly	9	US 52	FROM NCL NORWOOD TO BEGIN C & G SECTION	5,810		5,700	200	450	100			20					2		5,700			36	10
10CR.20841.27	Stanly	10	SR 1535 (MOUNTAIN CREEK ROAD)	FROM SR 1535 (PARK RIDGE ROAD) TO BRIDGE BEFORE SR 1650 (NE CONNECTOR)																6,138	10,007	30	61	
10CR.20841.28	Stanly	11	SR 1535 (MOUNTAIN CREEK ROAD)	FROM PAVEMENT JOINT BEFORE SR 1650 (NE CONNECTOR) TO THE PAVEMENT JOINT PAST SR 1524 (PROSPECT CH. ROAD)											4					9,702	15,817	40	97	
10CR.20841.29	Stanly	12	SR 1970 (HILLSFORD ROAD.)	FROM NC 138 TO UNION COUNTY LINE																12,870	20,982		129	
10CR.20841.30	Stanly	13	SR 1817 (OLD US 52)	FROM PAVEMENT JOINT NEAR US 52 TO NC 740	2,700		4,700	75			84		42				1	1		4,700			42	8
10CR.20841.31	Stanly	14	SR 1136 (PLESS MILL ROAD)	FROM SR 1130 (BIG LICK ROAD) TO SR 1134 (HILLTOP ROAD)																14,850	24,210		149	
10CR.20841.32	Stanly	15	SR 1134 (PLESS MILL ROAD)	FROM SR 1136 (PLESS MILL ROAD) TO NC 24/27																2,574	4,196		26	
10CR.20841.33	Stanly	16	SR 1109 (BUSTER ROAD)	FROM NC 205 TO SR 1118 (BUSTER ROAD)																7,392	12,051		74	
10CR.20841.34	Stanly	17	SR 1118 (BUSTER ROAD)	FROM SR 1109 (BUSTER ROAD) TO SR 1117 (GRIFFIN GREENE ROAD)																3,762	6,133		38	
10CR.20841.18	Stanly	18	SR 1115 (BIG LICK ROAD)	FROM NC 205 TO SR 1130 (BIG LICK ROAD)																10,560	17,216	20	106	
10CR.20841.35	Stanly	19	SR 1115 (OAKGROVE ROAD)	FROM NC 200 TO PAVEMENT JOINT PAST SR1124 (RUSHING ROAD)																8,052	13,127		81	
GRAND TOTAL					121,092	35,000	76,408	1,200	1,050	220	248	150	477	6	8	12	2	7	3	164,504	123,739	90	1,608	68
					156,092		77,608		1,270					26			12			288,243			1,676	

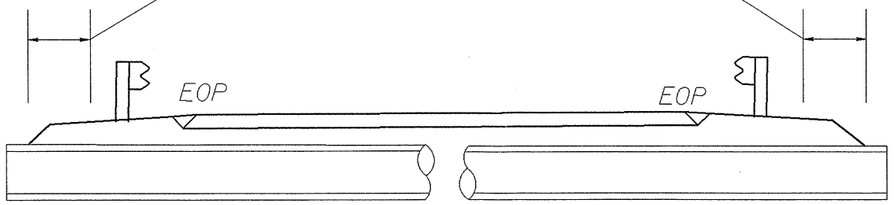
PROJECT REFERENCE NO.	SHEET NO.
10CR.10841.25.	EC-1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

BMP Options: Wattle or Silt Fence

EROSION CONTROL DETAIL

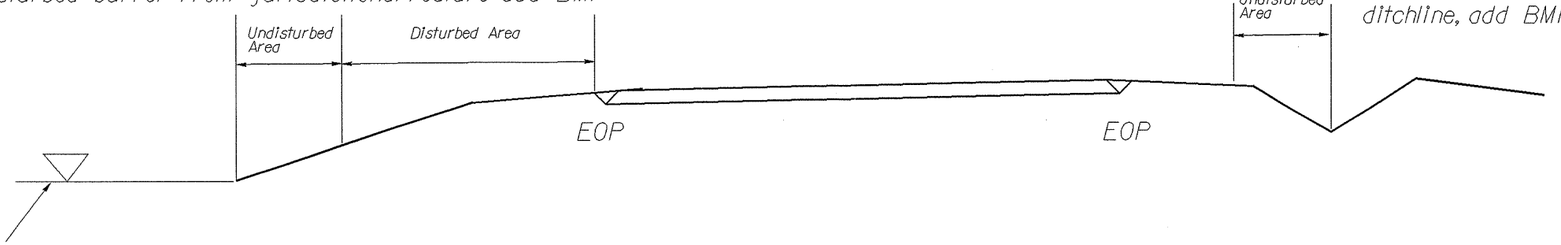
< 5' - 10' Undisturbed buffer add BMP



Pipe/Culvert

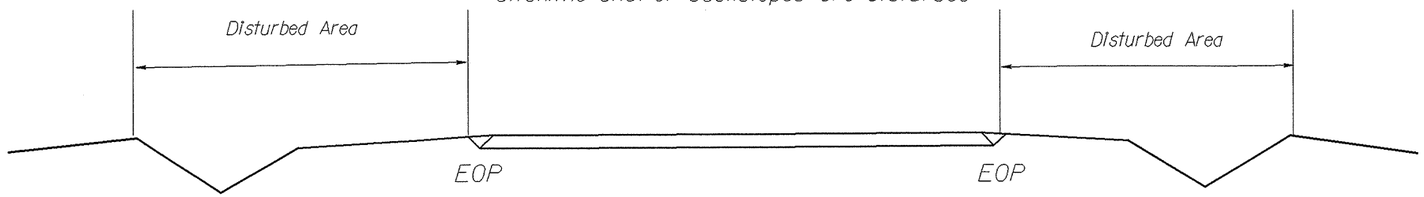
< 5' - 10' Undisturbed buffer from jurisdictional feature add BMP

< 5' - 10' Undisturbed buffer from ditchline, add BMP

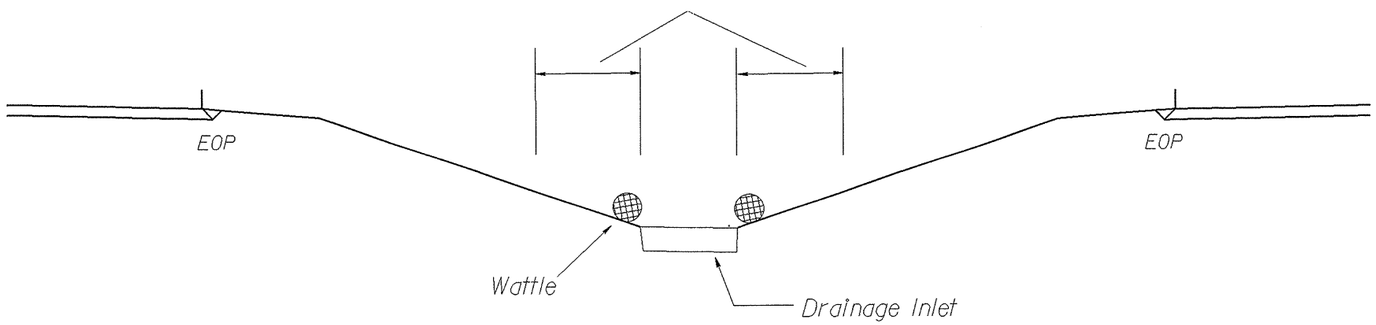


Jurisdictional Feature

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



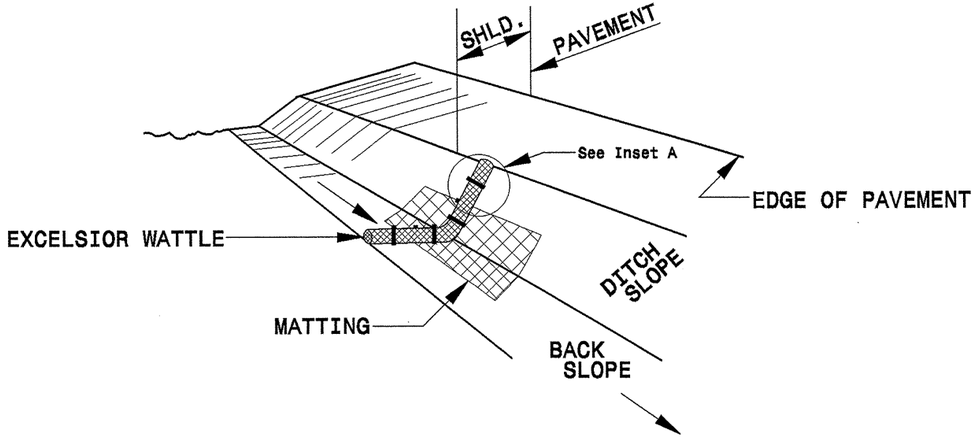
< 5' - 10' Undisturbed buffer from inlet, add wattle



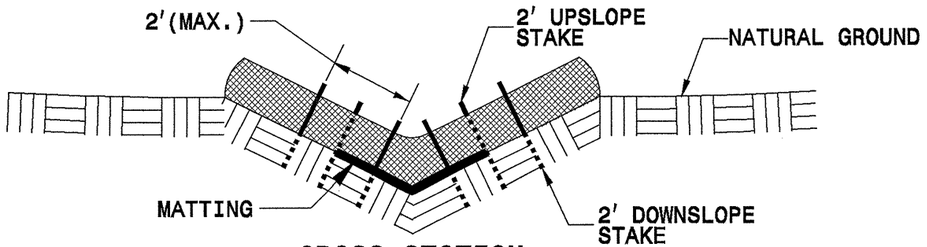
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
10CRJ084125.	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

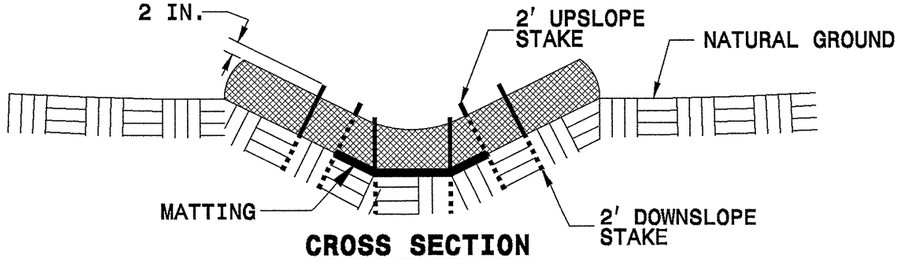
WATTLE DETAIL



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.

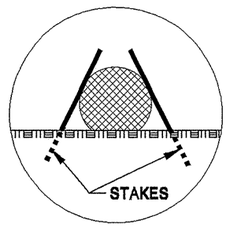
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

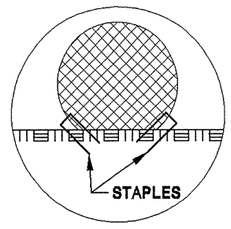
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

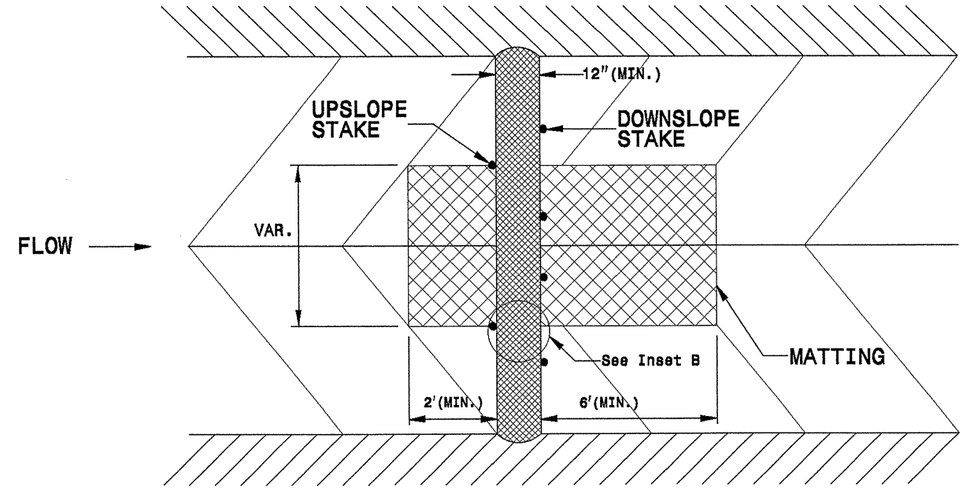
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



INSET A



INSET B



TOP VIEW

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

ENGLISH DETAIL DRAWING FOR

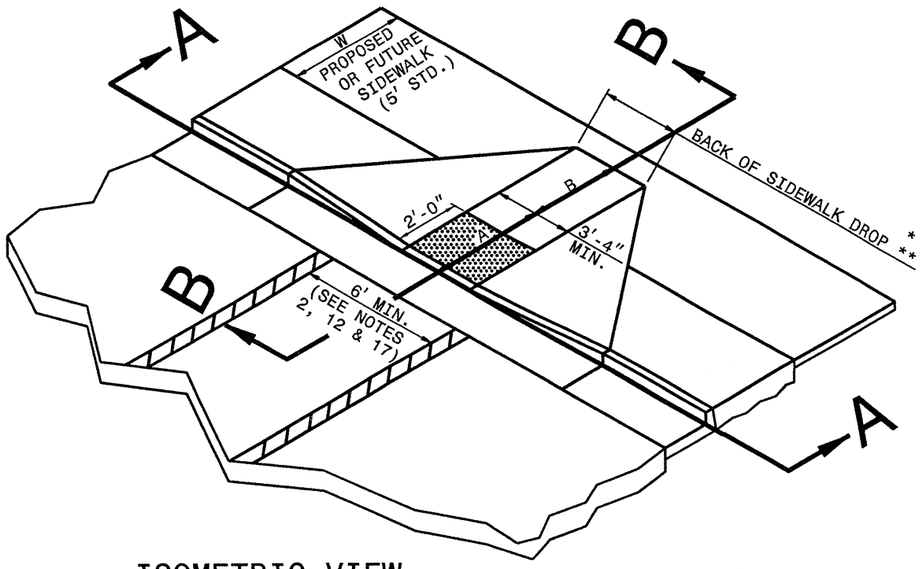
WHEELCHAIR RAMP

PROPOSED CURB AND GUTTER

SHEET 1 OF 3

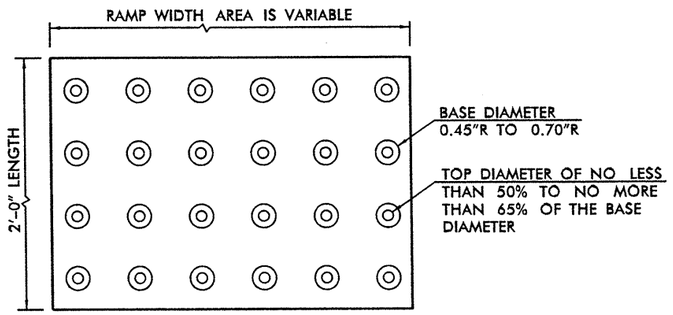
848D05

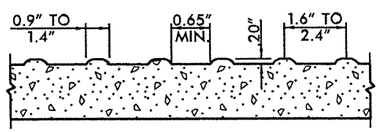
10CR. 10841.25, etc.



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.

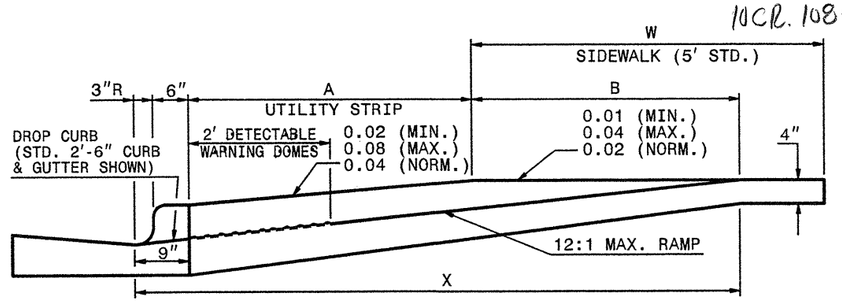




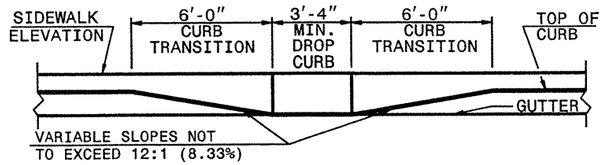
DETECTABLE WARNING DOMES

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'

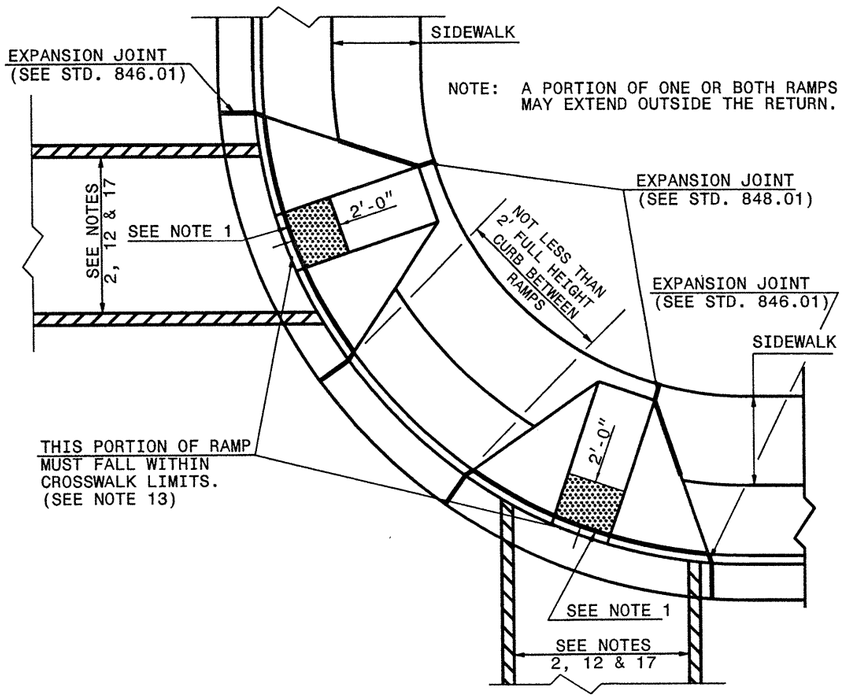
B = X-(A+9")
B = DISTANCE FROM FRONT EDGE OF SIDEWALK TO BACK POINT OF 12:1 (8.33%) SLOPE.
* BACK OF SIDEWALK DROP REQUIRED FOR ALL SIDEWALK SLOPES.
** BACK OF SIDEWALK DROP REQUIRED FOR SIDEWALK SLOPES 0.04.



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.

ENGLISH DETAIL DRAWING FOR

WHEELCHAIR RAMP

PROPOSED CURB AND GUTTER

SHEET 1 OF 3

848D05

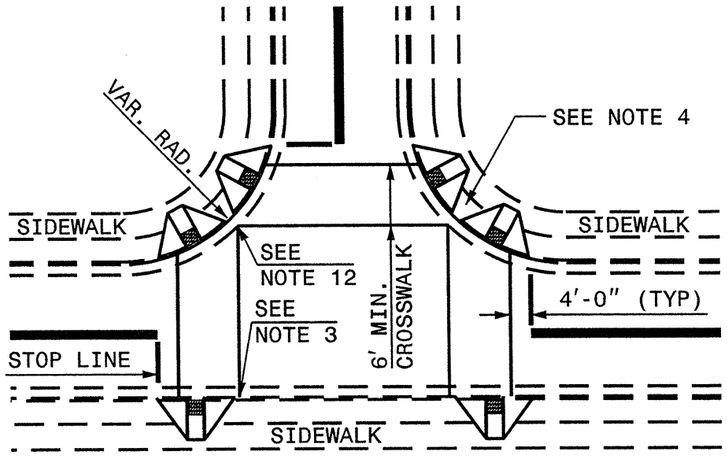
10Cl. 10841.25, etc.

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

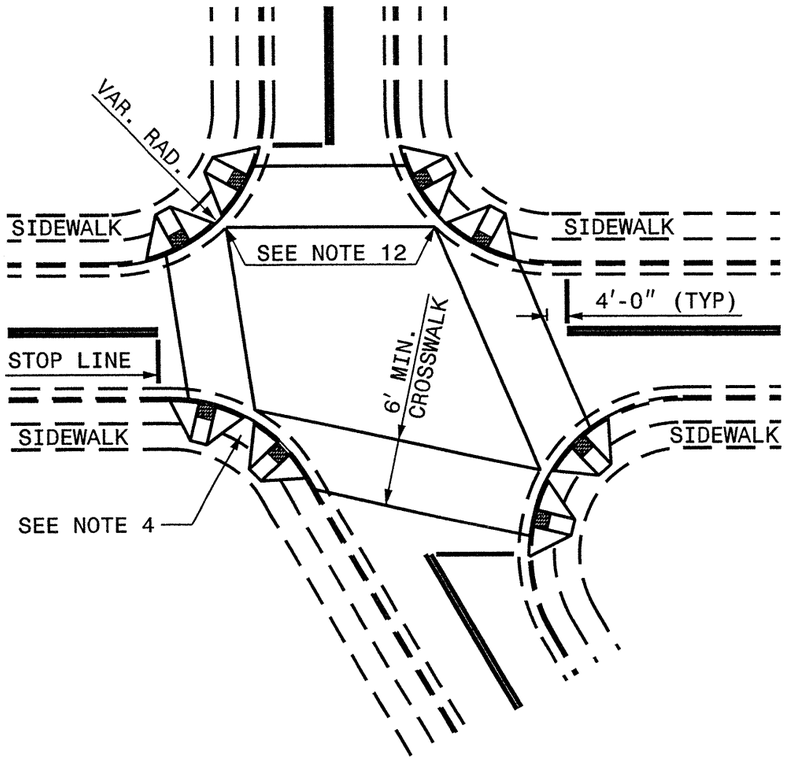
ENGLISH DETAIL DRAWING FOR

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

SHEET 2 OF 3

848D05

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

ENGLISH DETAIL DRAWING FOR

WHEELCHAIR RAMP

PROPOSED CURB AND GUTTER

SHEET 2 OF 3

848D05

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

ENGLISH DETAIL DRAWING FOR

WHEELCHAIR RAMP

PROPOSED CURB AND GUTTER

SHEET 3 OF 3

848D05

10CR.10841.25, etc.

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 UTILTIES 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 ½" 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
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RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR

WHEELCHAIR RAMP

PROPOSED CURB AND GUTTER

SHEET 3 OF 3

848D05

10CL.10841.25, etc.

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

ENGLISH DETAIL DRAWING FOR

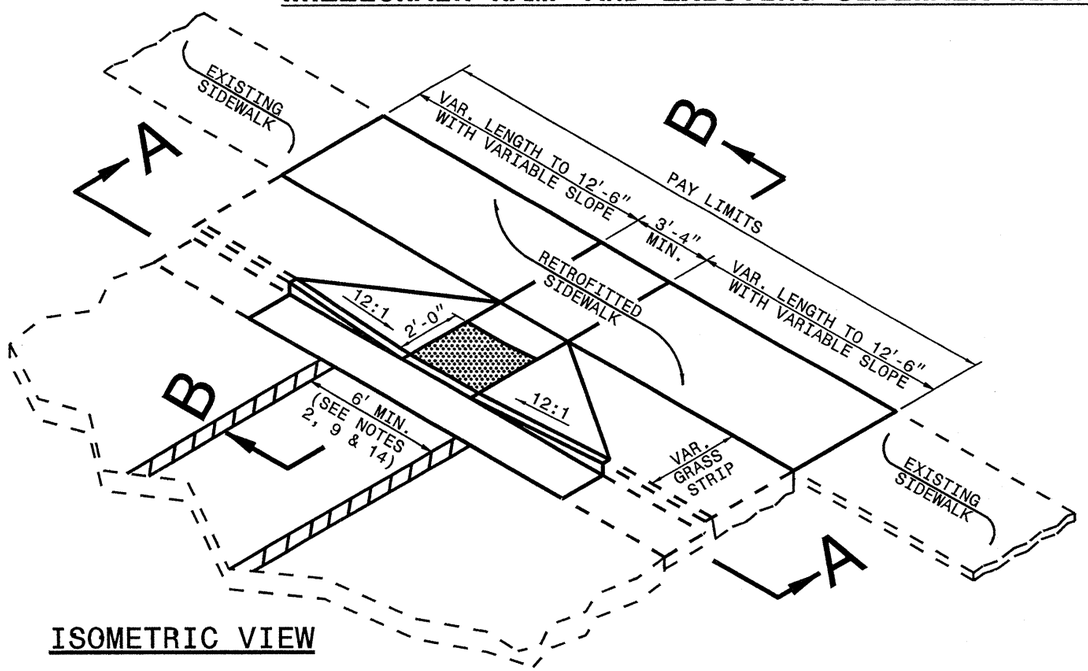
WHEELCHAIR RAMP

EXISTING CURB AND GUTTER

SHEET 1 OF 5

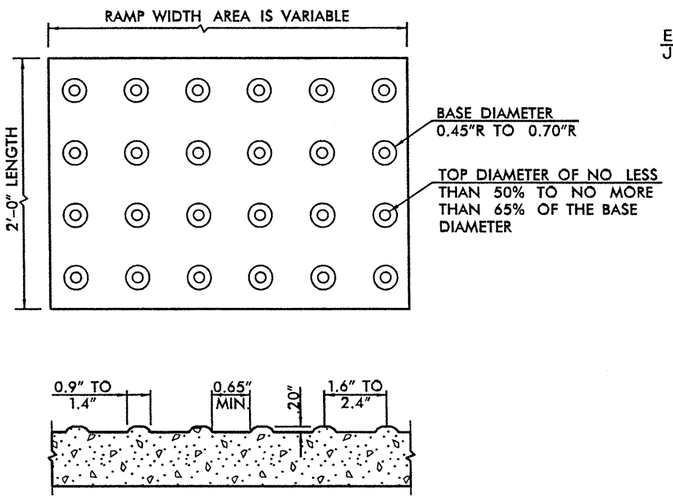
848D06

WHEELCHAIR RAMP AND EXISTING SIDEWALK WITH GRASS STRIP

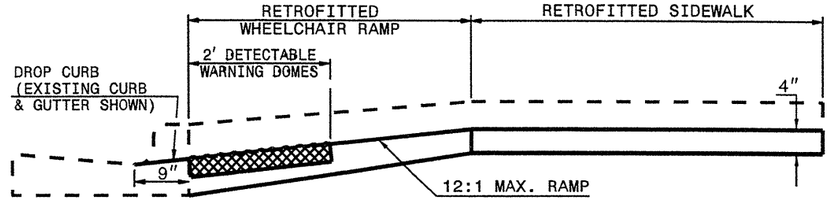


ISOMETRIC VIEW

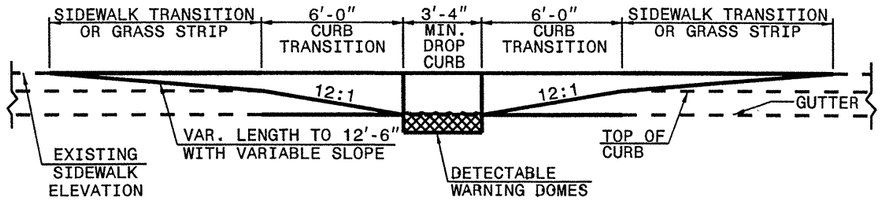
NOTES:
1. DETECTABLE WARNING DOMES SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
2. OBTAIN 70% CONTRAST VISIBILITY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



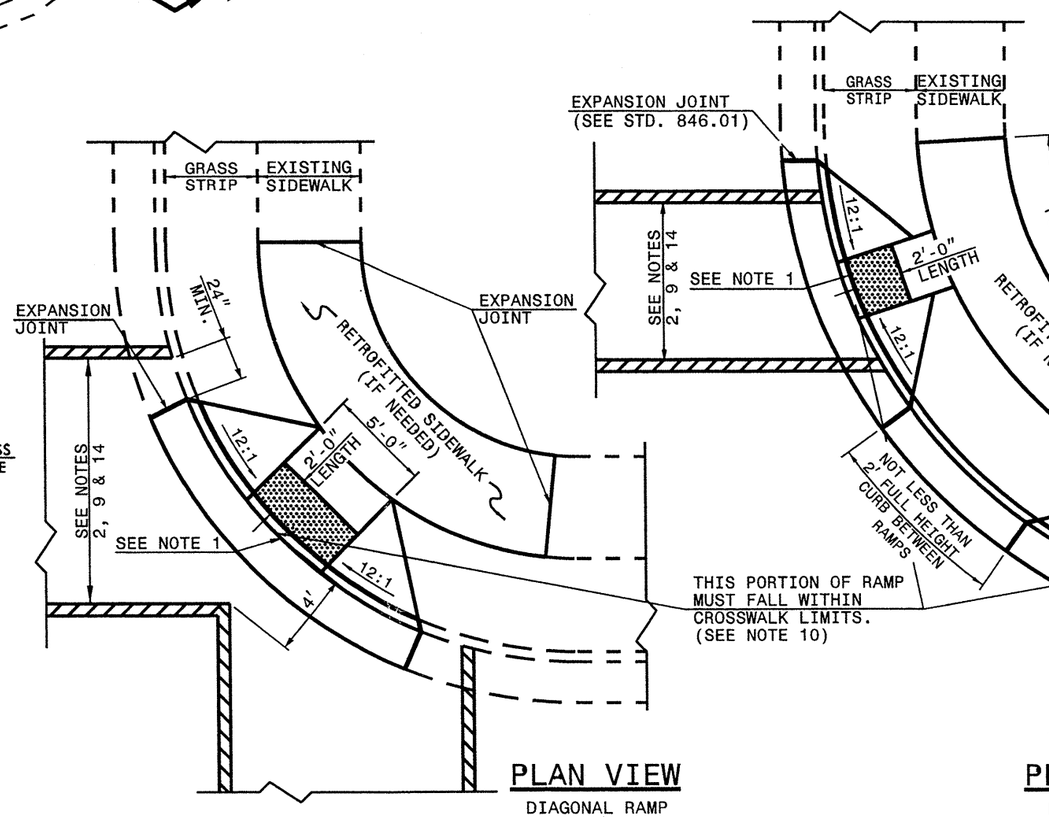
DETECTABLE WARNING DOMES



SECTION B-B

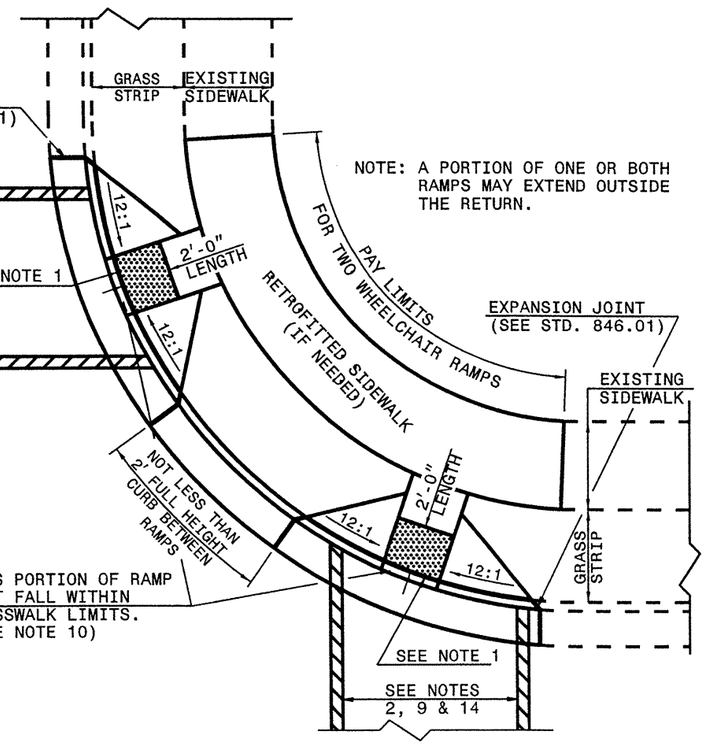


SECTION A-A



PLAN VIEW

DIAGONAL RAMP
MAX. 25' RADII
(60" MIN. FLOOR WIDTH)



PLAN VIEW

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

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

ENGLISH DETAIL DRAWING FOR

WHEELCHAIR RAMP

EXISTING CURB AND GUTTER

SHEET 1 OF 5

848d06

10CR.10841, 25, etc.

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

ENGLISH DETAIL DRAWING FOR

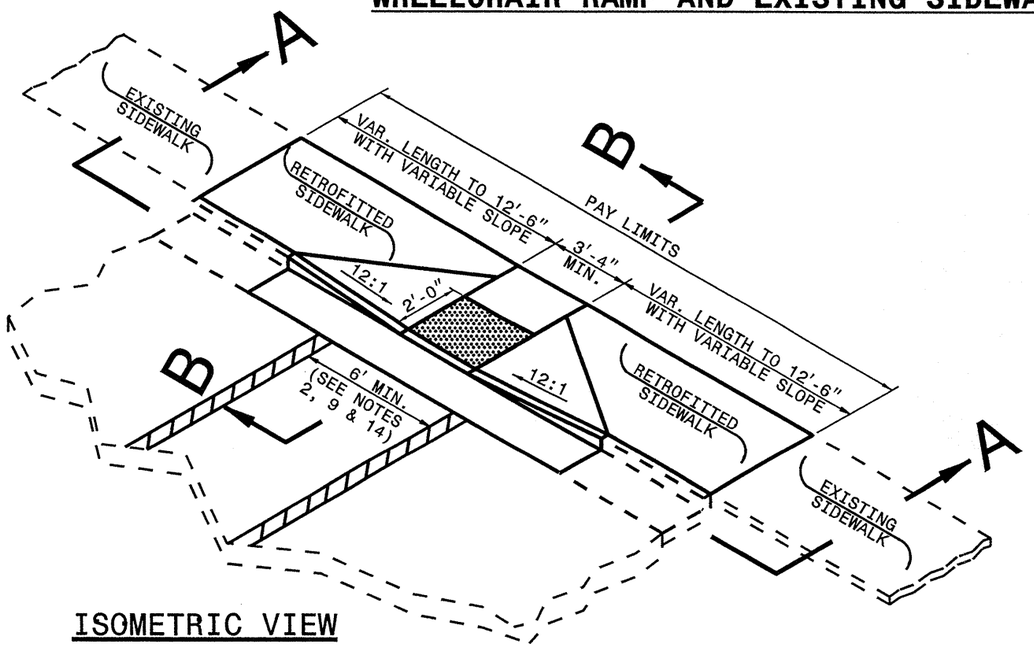
WHEELCHAIR RAMP

EXISTING CURB AND GUTTER

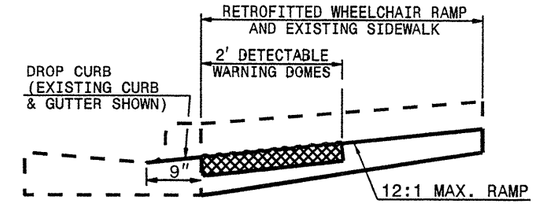
SHEET 2 OF 5

848D06

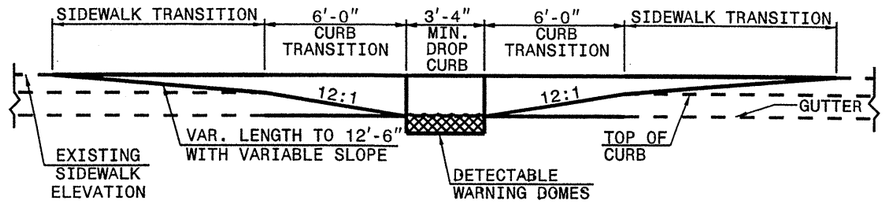
WHEELCHAIR RAMP AND EXISTING SIDEWALK ADJACENT TO CURB



ISOMETRIC VIEW

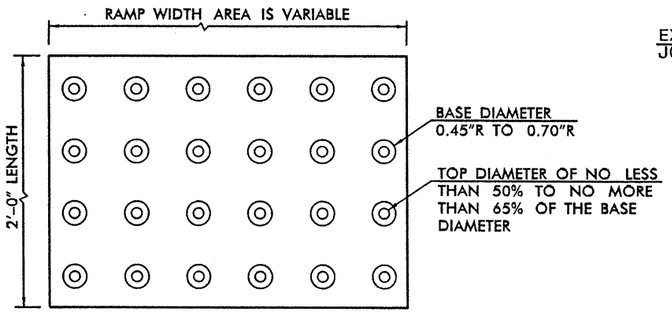


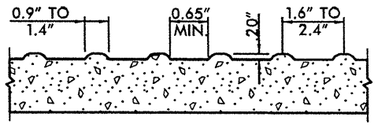
SECTION B-B



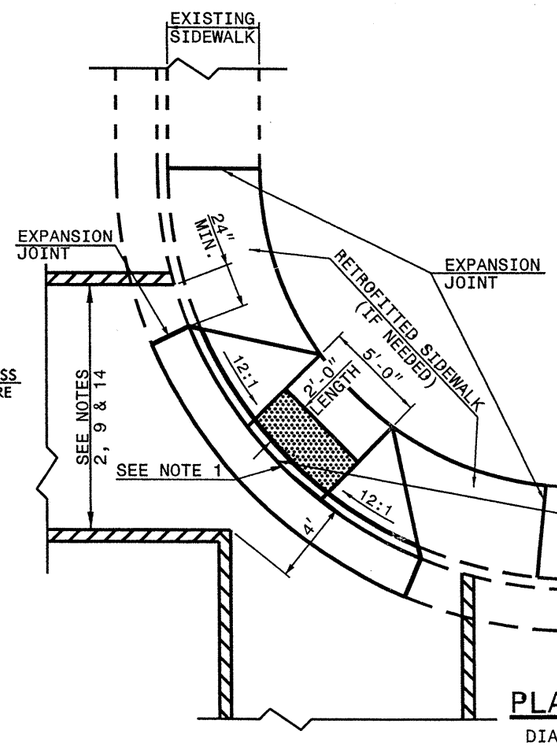
SECTION A-A

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.



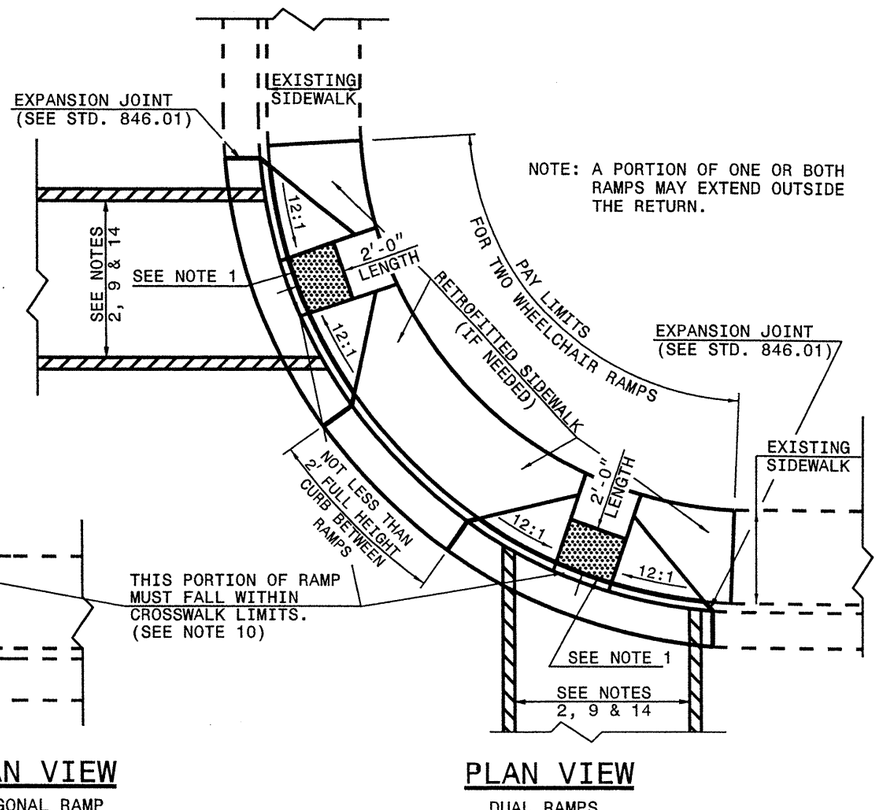


DETECTABLE WARNING DOMES



PLAN VIEW

DIAGONAL RAMP
MAX. 25' RADII
(60" MIN. FLOOR WIDTH)



PLAN VIEW

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

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

ENGLISH DETAIL DRAWING FOR

WHEELCHAIR RAMP

EXISTING CURB AND GUTTER

SHEET 2 OF 5

848D06

10CR.10841.25, etc.

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

ENGLISH DETAIL DRAWING FOR

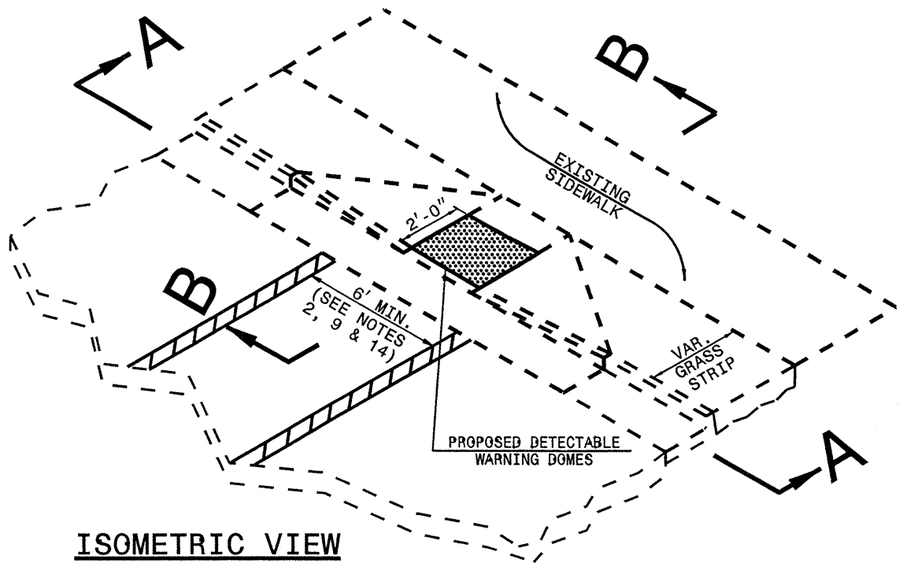
WHEELCHAIR RAMP

EXISTING CURB AND GUTTER

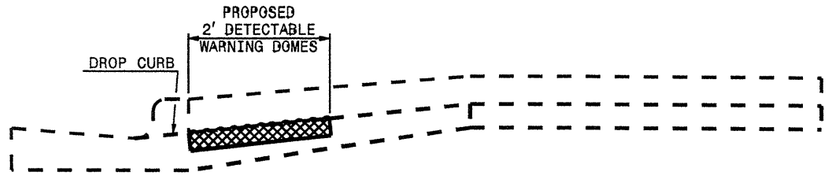
SHEET 3 OF 5

848D06

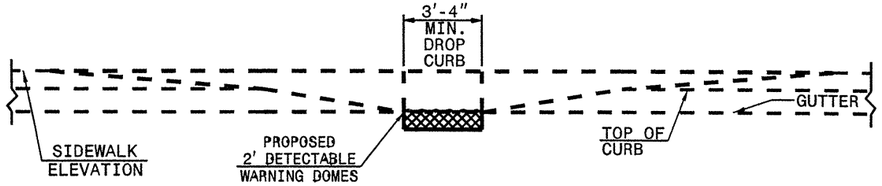
RETROFITTING DETECTABLE WARNING DOMES ONTO EXISTING WHEELCHAIR RAMP



ISOMETRIC VIEW

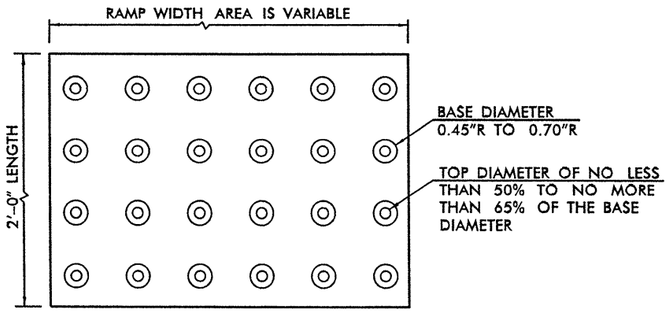


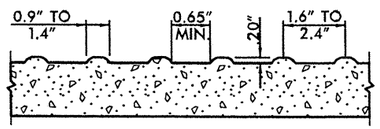
SECTION B-B



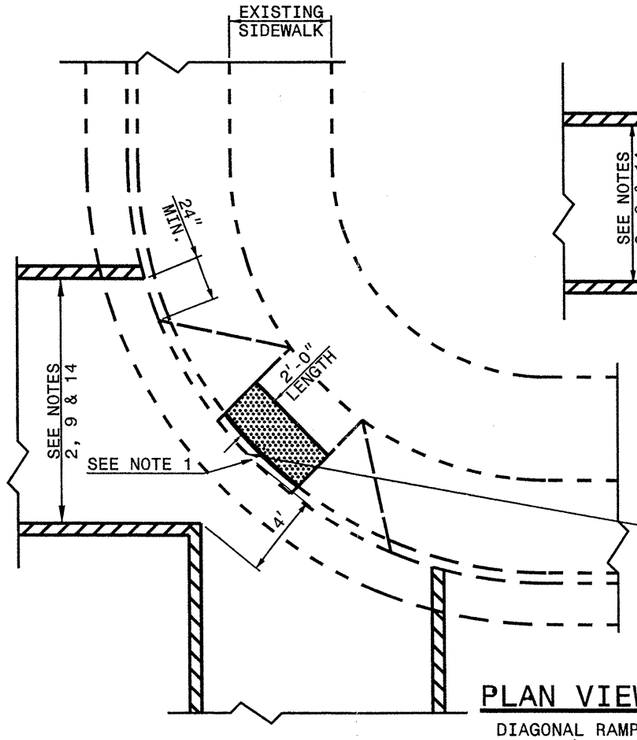
SECTION A-A

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.



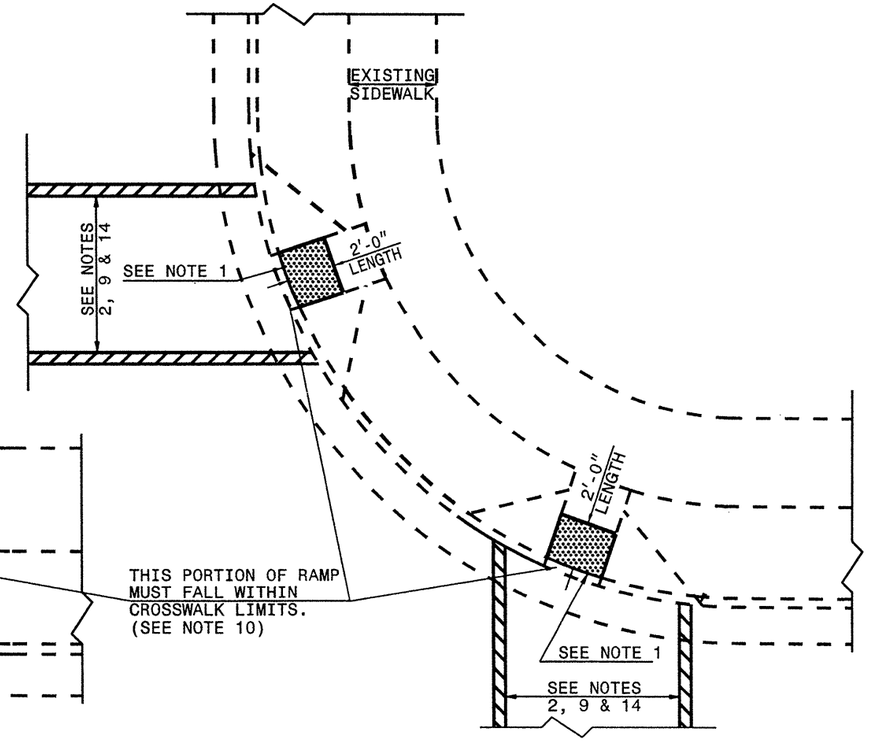


DETECTABLE WARNING DOMES



PLAN VIEW

DIAGONAL RAMP
MAX. 25' RADII
(60" MIN. FLOOR WIDTH)



PLAN VIEW

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

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

ENGLISH DETAIL DRAWING FOR

WHEELCHAIR RAMP

EXISTING CURB AND GUTTER

SHEET 3 OF 5

848D06

10CR.10841, 25, etc.

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

ENGLISH DETAIL DRAWING FOR

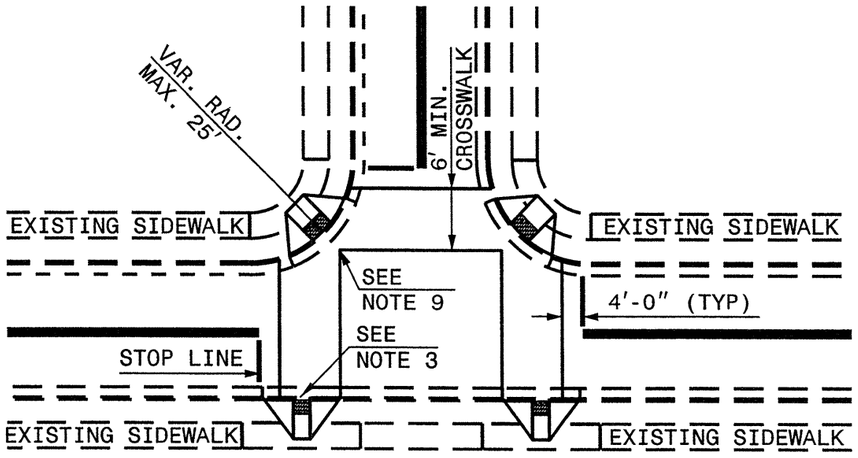
WHEELCHAIR RAMP

EXISTING CURB AND GUTTER

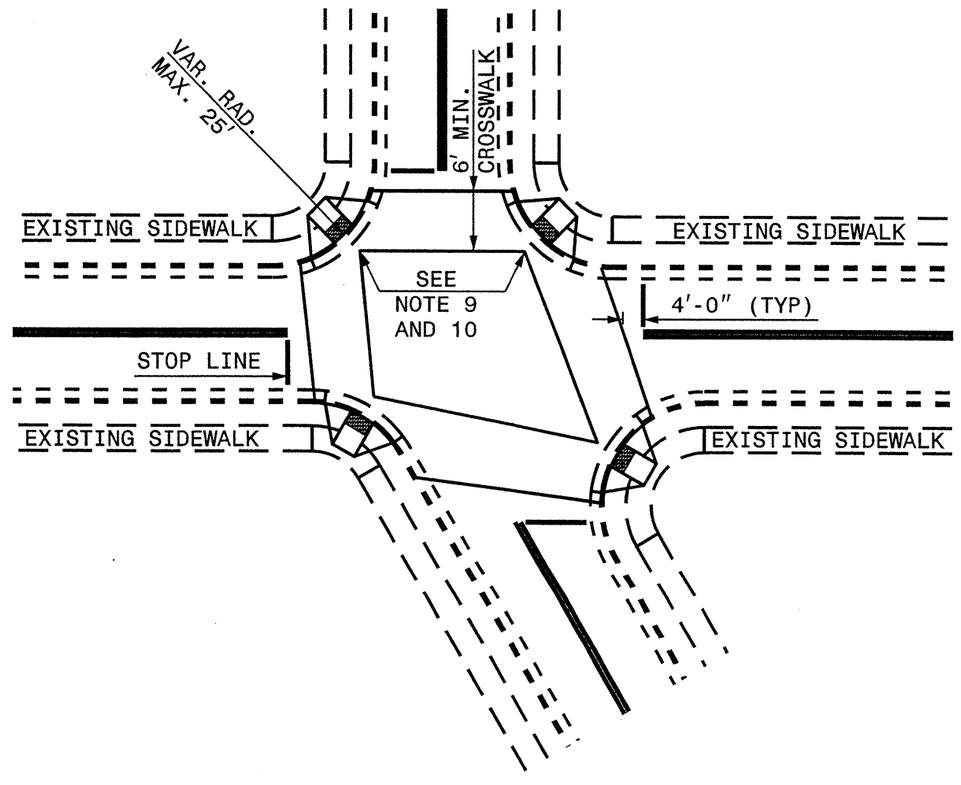
SHEET 4 OF 5

848D06

WHEELCHAIR RAMP AND EXISTING SIDEWALK



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

RESURFACING PROJECTS

PROPOSED WHEELCHAIR RAMP FOR RESURFACING PROJECTS

EXISTING SIDEWALK

ALLOWABLE LOCATIONS

DIAGONAL RAMP RADII...MAX. 25'

STATE OF
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DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR

WHEELCHAIR RAMP

EXISTING CURB AND GUTTER

SHEET 4 OF 5

848D06

10CL.10841.25, etc.

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

ENGLISH DETAIL DRAWING FOR

WHEELCHAIR RAMP

EXISTING CURB AND GUTTER

SHEET 5 OF 5

848D06

WHEELCHAIR RAMP AND EXISTING SIDEWALK

NOTES:

1. CONSTRUCT THE WALKING SURFACE WITH SLIP RESISTANCE 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 AND 60" (5'-0") OR GREATER FOR DIAGONAL RAMPS.

7. USE CLASS "B" CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NON-SKID TYPE SURFACE.

8. PLACE A ½" 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 14)

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
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DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR

WHEELCHAIR RAMP

EXISTING CURB AND GUTTER

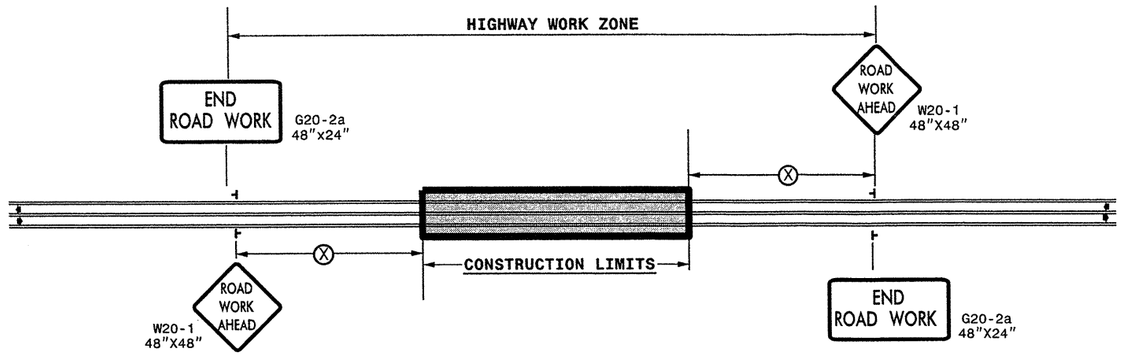
SHEET 5 OF 5

848D06

10CR.10841.25, 10CR.10841.26, 10CR.10841.27, 10CR.10841.28, 10CR.10841.29,
10CR.10841.30, 10CR.10841.31, 10CR.10841.32, 10CR.10831.33, 10CR.20841.27,
10CR.20841.28, 10CR.20841.29, 10CR.20841.30, 10CR.20841.31, 10CR.20841.32,
10CR.20841.33, 10CR.20841.34, 10CR.20841.35, 10CR.20841.36

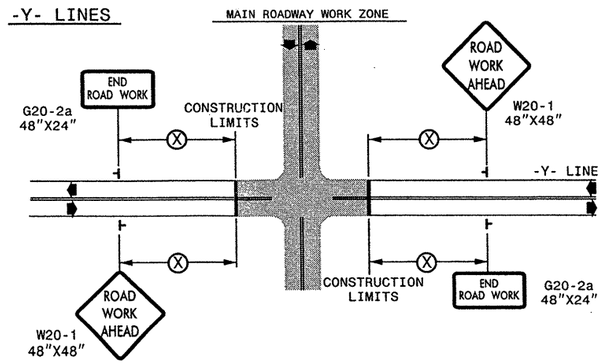
PROJ. REFERENCE NO.	SHEET NO.
SEE LEFT	TCP-1

TWO-WAY UNDIVIDED ** (L-LINES)



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING (X)
≤ 50	500′
≥ 55	1000′

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)



GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED 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.
- 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.
- ** 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

- ⊢ STATIONARY SIGN
- ⬅ DIRECTION OF TRAFFIC FLOW

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

DETAIL DRAWING FOR TWO-WAY UNDIVIDED WORK ZONE WARNING SIGNS

SHEET 1 OF 1

APPROVED: _____ DATE: _____

SEAL

DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS

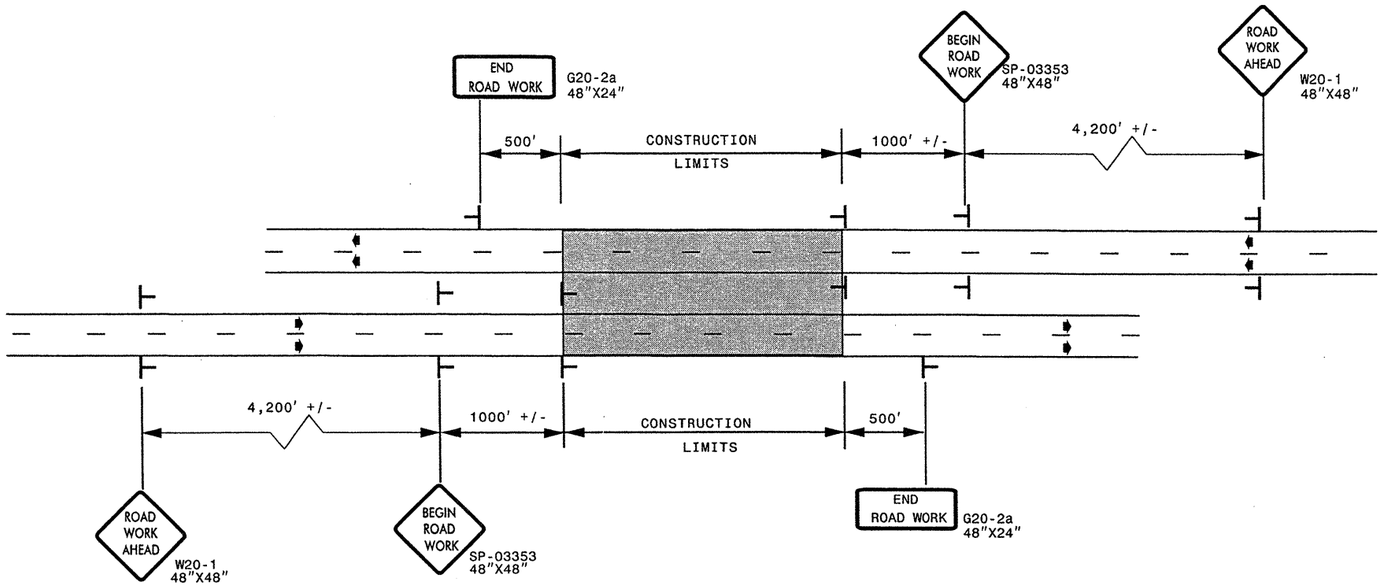
SCALE: NONE	REVISIONS	
DATE:	7-98	10/01
DWG. BY:	10-98	03/04
DESIGN BY:	01/01	11/04
REVIEWED BY:	CADD FILE	

ADVANCED WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)

PROJ. REFERENCE NO.	SHEET NO.
SEE BELOW	TCP-2

10CR.10841.25, 10CR.10841.26, 10CR.10841.27, 10CR.10841.28, 10CR.10841.29, 10CR.10841.30, 10CR.10841.31, 10CR.10841.32, 10CR.10831.33, 10CR.20841.27, 10CR.20841.28, 10CR.20841.29, 10CR.20841.30, 10CR.20841.31, 10CR.20841.32, 10CR.20841.33, 10CR.20841.34, 10CR.20841.35, 10CR.20841.36

DETAIL A

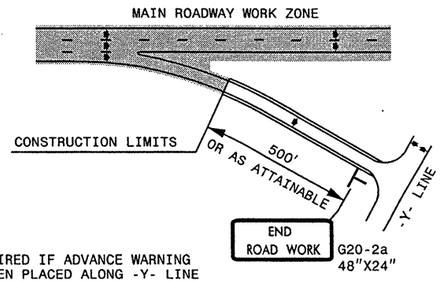


LEGEND
- ⊢ STATIONARY SIGN
- ➧ DIRECTION OF TRAFFIC FLOW

* USE THE "$250 SPEEDING PENALTY" SIGN, SPEED LIMIT SIGN, AND ORANGE PANEL; ONLY WHEN A "$250 SPEEDING PENALTY" ORDINANCE HAS BEEN ISSUED BY THE REGIONAL TRAFFIC ENGINEER.

DETAIL B

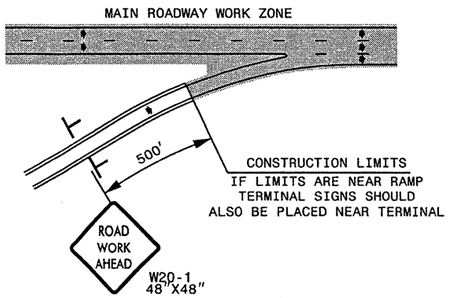
EXIT RAMPS



NOTE: SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

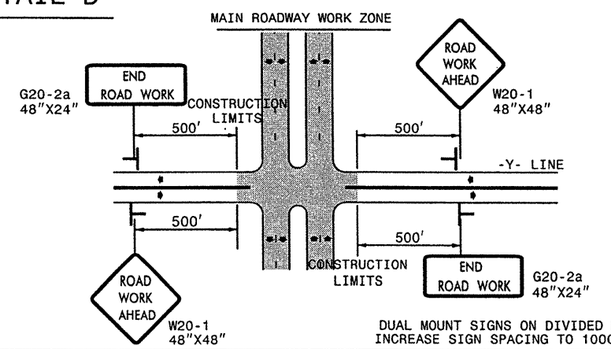
DETAIL C

ENTRANCE RAMPS



DETAIL D

-Y- LINES



DUAL MOUNT SIGNS ON DIVIDED HIGHWAYS AND INCREASE SIGN SPACING TO 1000'+/-.

GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED 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.
- 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.

APPROVED:_____ DATE:_____

SEAL

ADVANCED WORK ZONE WARNING SIGNS FOR FREEWAYS (4 LANES OR GREATER)

SCALE:	NONE
DATE:	8/03
DWG. BY:	JI
DESIGN BY:	JI
REVIEWED BY:	

REVISIONS	
03/04	
CADD FILE	

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.

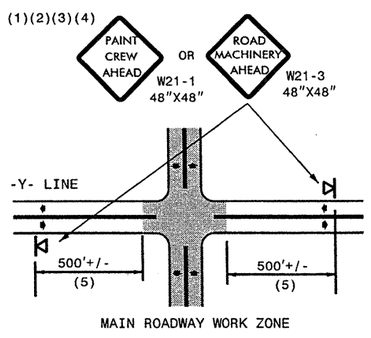
(12) ALL TRAFFIC CONTROL DEVICES WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEMS FOR PAVEMENT MARKING AND MARKERS.

(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"



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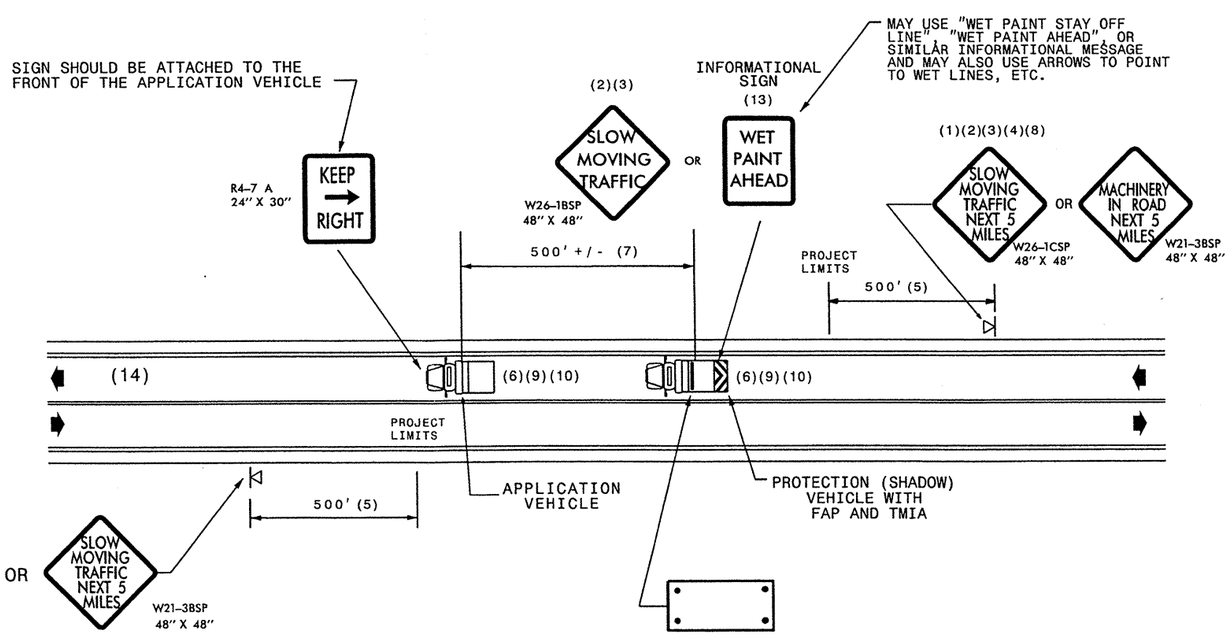


MOVING OPERATION CARAVAN

(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

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 FIVE (5) FEET 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.

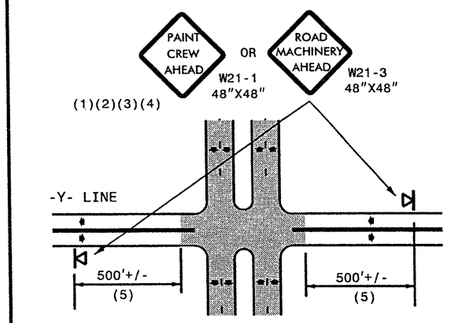
(10) USE OF A LIGHT BAR ON ALL VEHICLES IS PREFERRED, BUT A ROTATING BEACON MAY BE USED INSTEAD.

(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.

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.
- ADVANCE WARNING VEHICLE WITH TRUCK MOUNTED CHANGEBLE MESSAGE SIGN (CMS) AND LIGHT BAR. MESSAGE SIGN LETTER HEIGHT SHOULD BE A MINIMUM OF 10 INCHES.
- FLASHING ARROW PANEL, TYPE "B" (60"X30" MIN.), APPROPRIATE DIRECTION INDICATED
- CHANGEABLE MESSAGE SIGN



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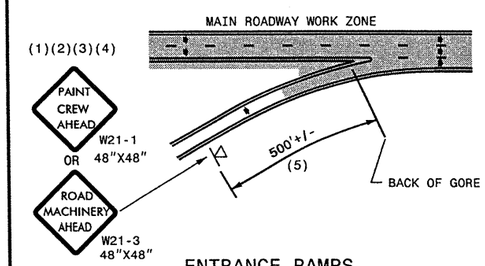
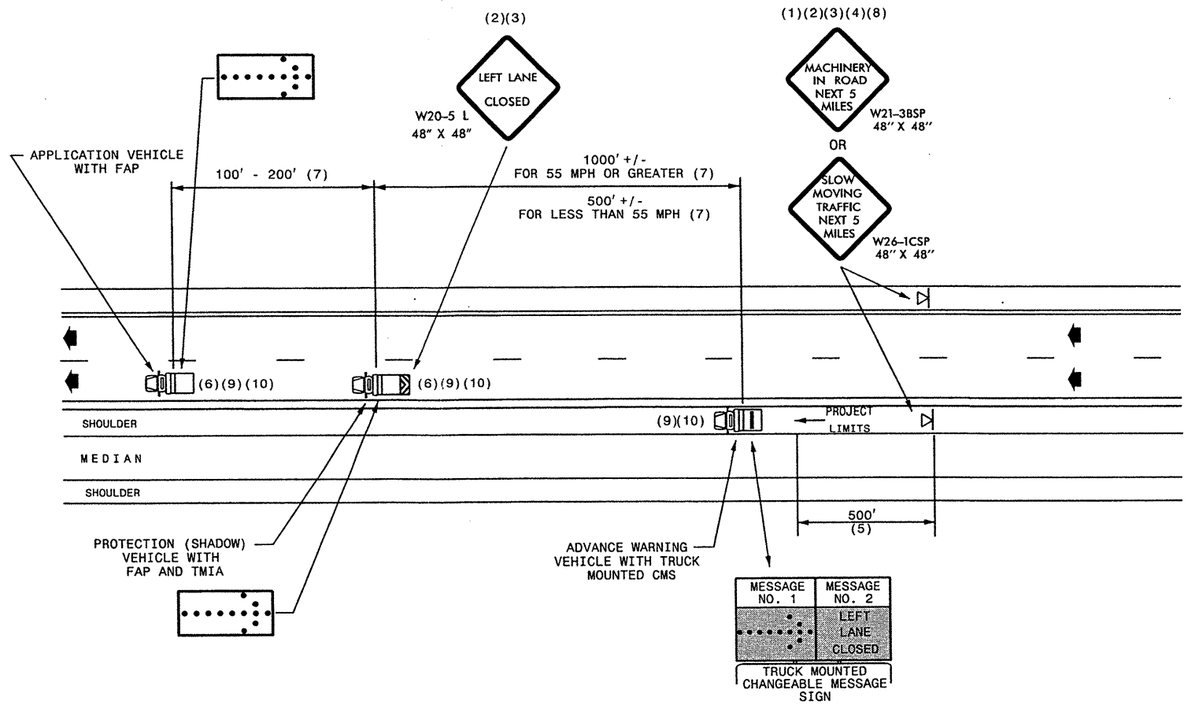


ENTRANCE RAMPS



MOVING OPERATION CARAVAN

(OPERATIONS TRAVELING 3 MPH OR FASTER)
PLACING PAVEMENT MARKING OR MARKERS
ON NON-INTERSTATE MULTILANE DIVIDED ROADWAYS

DRAWING NUMBER 7
IMPLEMENTATION DATE: 07/01/97
REVISED: 11/03/04