

09/08/09

CONTRACT NO.: WBS ELEMENT : 1CR.10211.7, ETC.

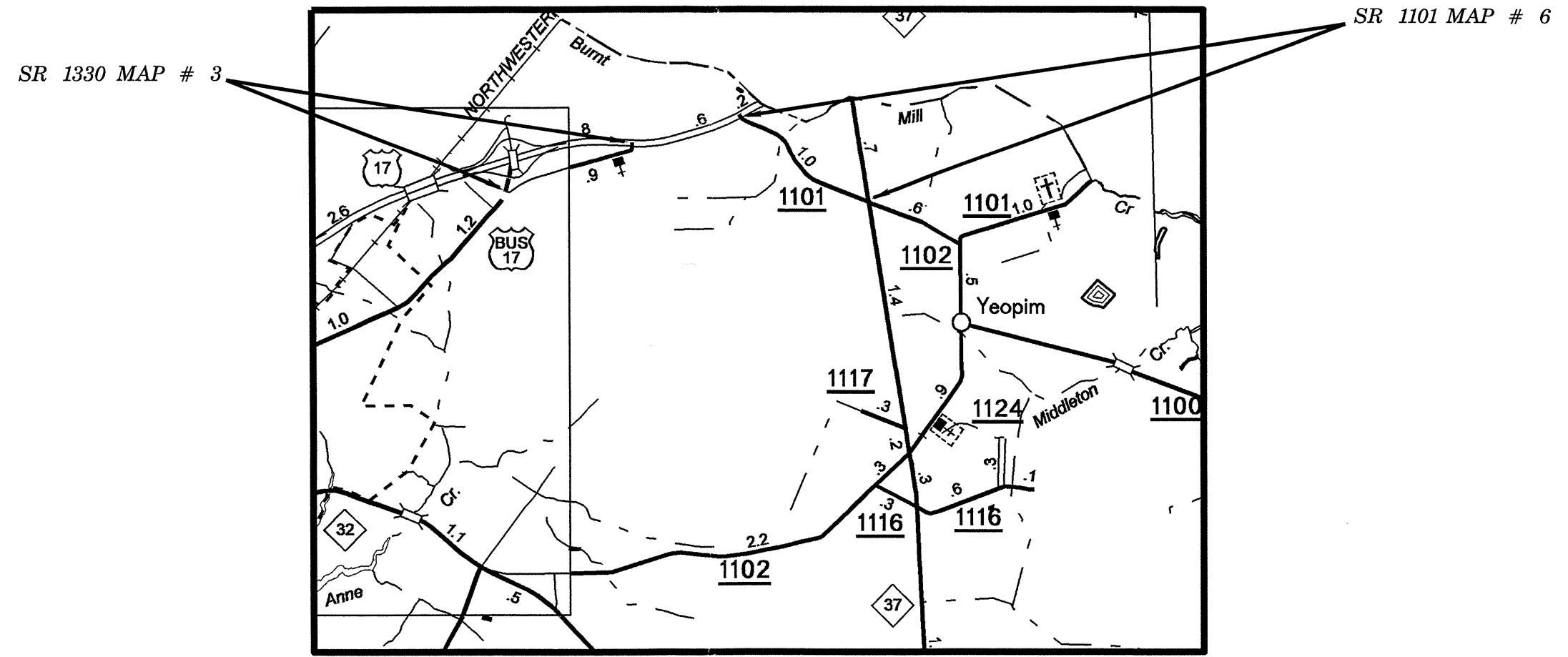
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\$\$\$\$\$DGN\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
CHOWAN COUNTY

LOCATION: MAP #2 SR 1330 FROM US 17 BUS. TO US 17
MAP #6 SR 1101 FROM US 17 TO NC 32
TYPE OF WORK: MILLING AND RESURFACING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	1CR.10211.7, ETC.	1	7
STATE FUND NO.	F.A.FUND NO.	DESCRIPTION	



NOT TO SCALE

PROJECT LENGTH

MAP# 3 = WBS# 1CR.20211.15 = 1.0 MI.
MAP# 6 = WBS# 1CR.20211.18 = 1.0 MI.

Prepared in the Office of
DIVISION OF HIGHWAYS

2006 STANDARD SPECIFICATIONS

LETTING DATE:
DECEMBER 21, 2010

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

C.E. SLACHTA
DIVISION PROPOSALS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA



CONTRACT NO.: WBS ELEMENT : ICR.10211.7, ETC.

09/08/09

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
CHOWAN COUNTY

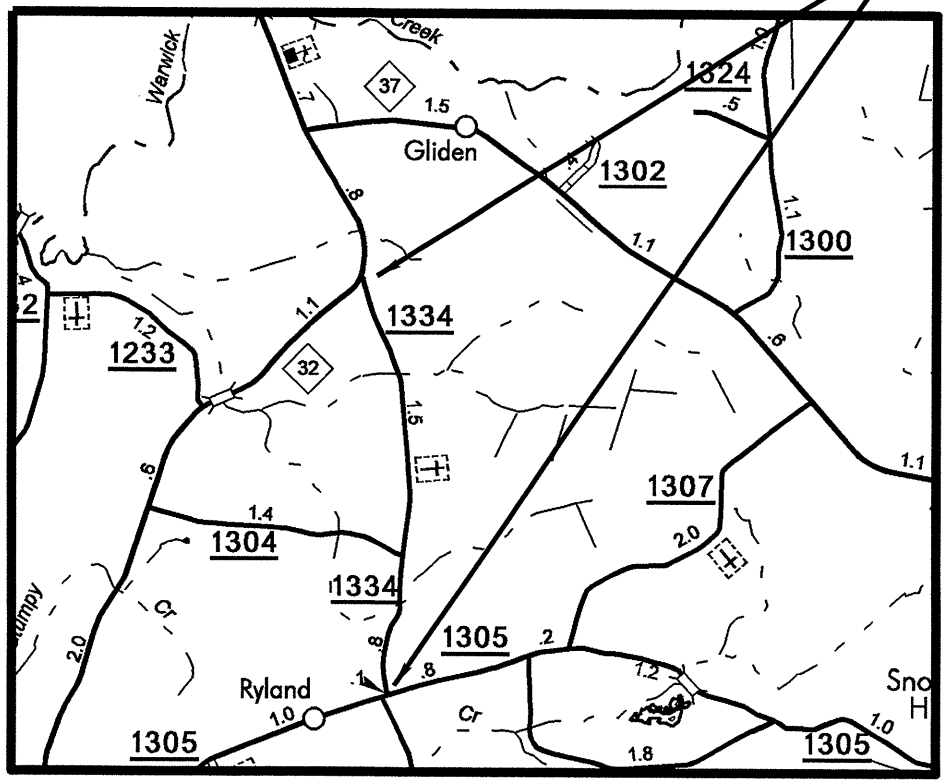
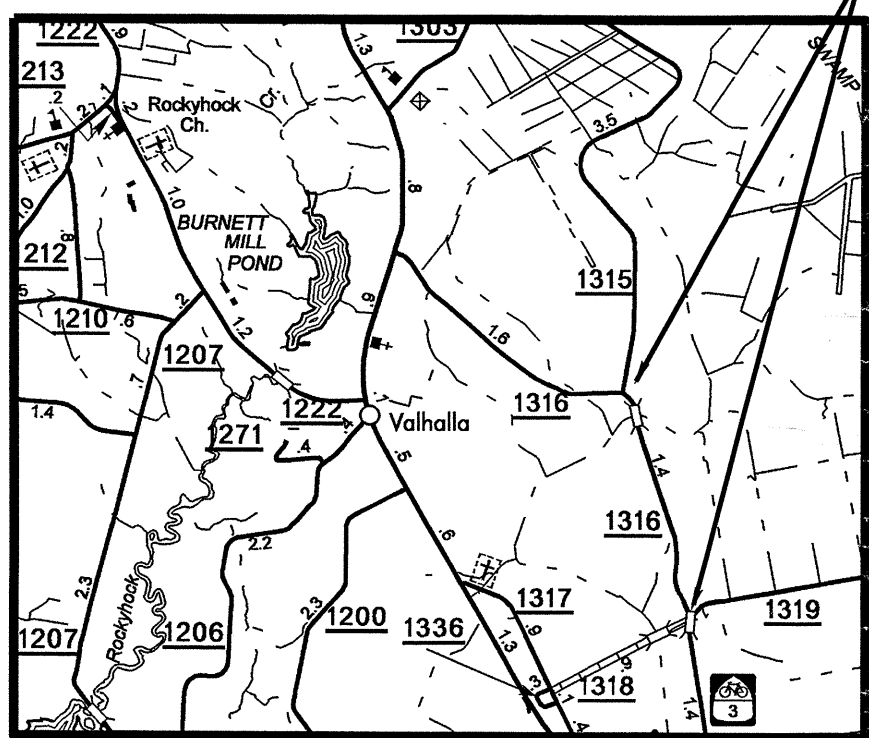
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	ICR.10211.7, ETC.	2	7
STATE FUND NO.	F.A.FUND NO.	DESCRIPTION	

LOCATION: MAP #4 SR 1316 FROM SR 1319 TO SR 1315
MAP #5 SR 1334 FROM SR 1305 TO NC 32
TYPE OF WORK: MILLING AND RESURFACING



SR 1316 MAP # 4


SR 1334 MAP # 5



NOT TO SCALE

PROJECT LENGTH
MAP# 4 = WBS# ICR.20211.16 = 1.4 MI.
MAP# 5 = WBS# ICR.20211.17 = 2.3 MI.

Prepared in the Office of:
DIVISION OF HIGHWAYS
2006 STANDARD SPECIFICATIONS
LETTING DATE:
DECEMBER 21, 2010
W.B. HOBBS, P.E.
DIVISION PROJECT MANAGER
C.E. SLACHTA
DIVISION PROPOSALS ENGINEER

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STATE OF NORTH CAROLINA


05/08/09

CONTRACT NO.: WBS ELEMENT : ICR.10211.7, ETC.

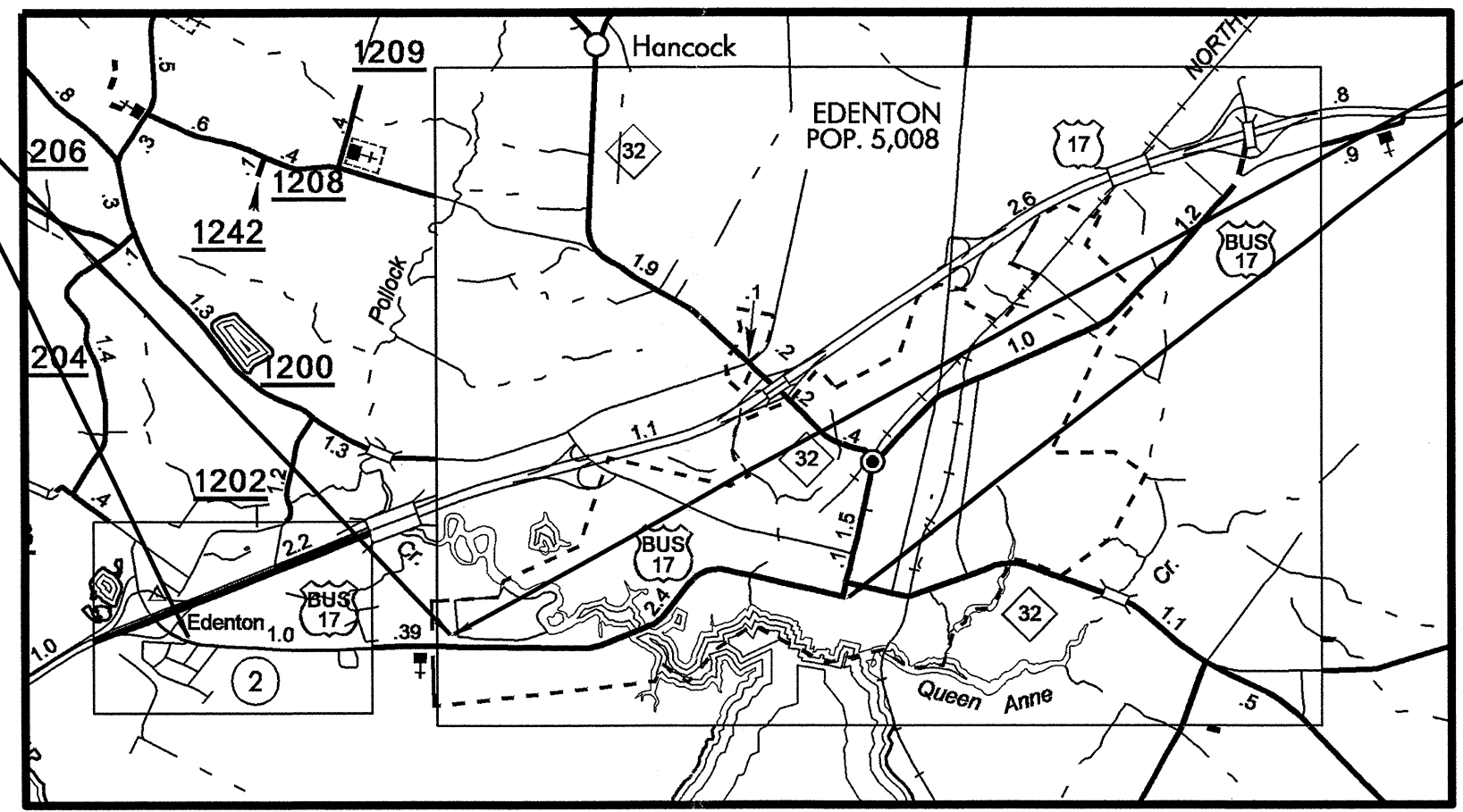
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
CHOWAN COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	ICR.10211.7, ETC.	3	7
STATE FUNDING	F.A.F.F. NO.	DESCRIPTION	

LOCATION: MAP #1 US 17 BUS. FROM BROAD STREET TO END CURB & GUTTER
MAP #2 US 17 BUS. FROM END CURB AND GUTTER TO SR 1201
TYPE OF WORK: MILLING AND RESURFACING

US 17 BUS. MAP # 1

US 17 BUS. MAP # 2



\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$SDGN\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$

NOT TO SCALE

PROJECT LENGTH

MAP# 1 = WBS# ICR.10211.7 = 1.71 MI.
MAP# 2 = WBS# ICR.10211.7 = 1.82 MI.

Prepared in the Office of.
DIVISION OF HIGHWAYS

2006 STANDARD SPECIFICATIONS

LETTING DATE:
DECEMBER 21, 2010

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

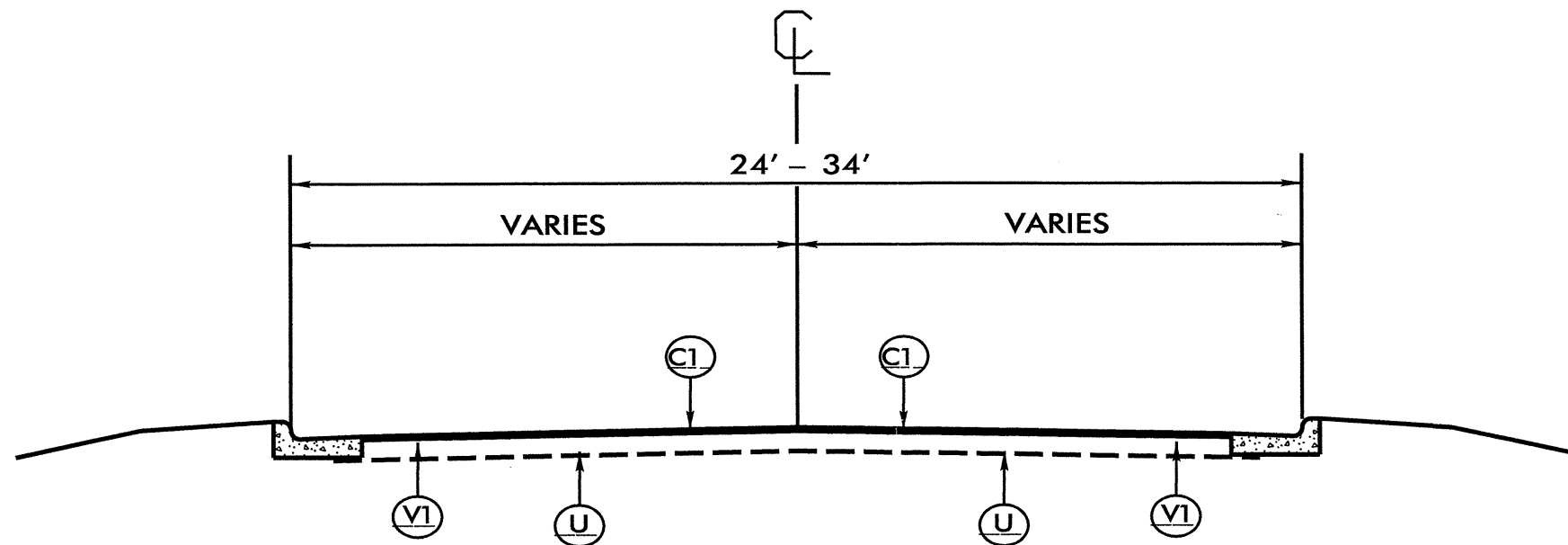
C.E. SLACHTA
DIVISION PROPOSALS ENGINEER

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.10211.7, ETC.	4 OF 7

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

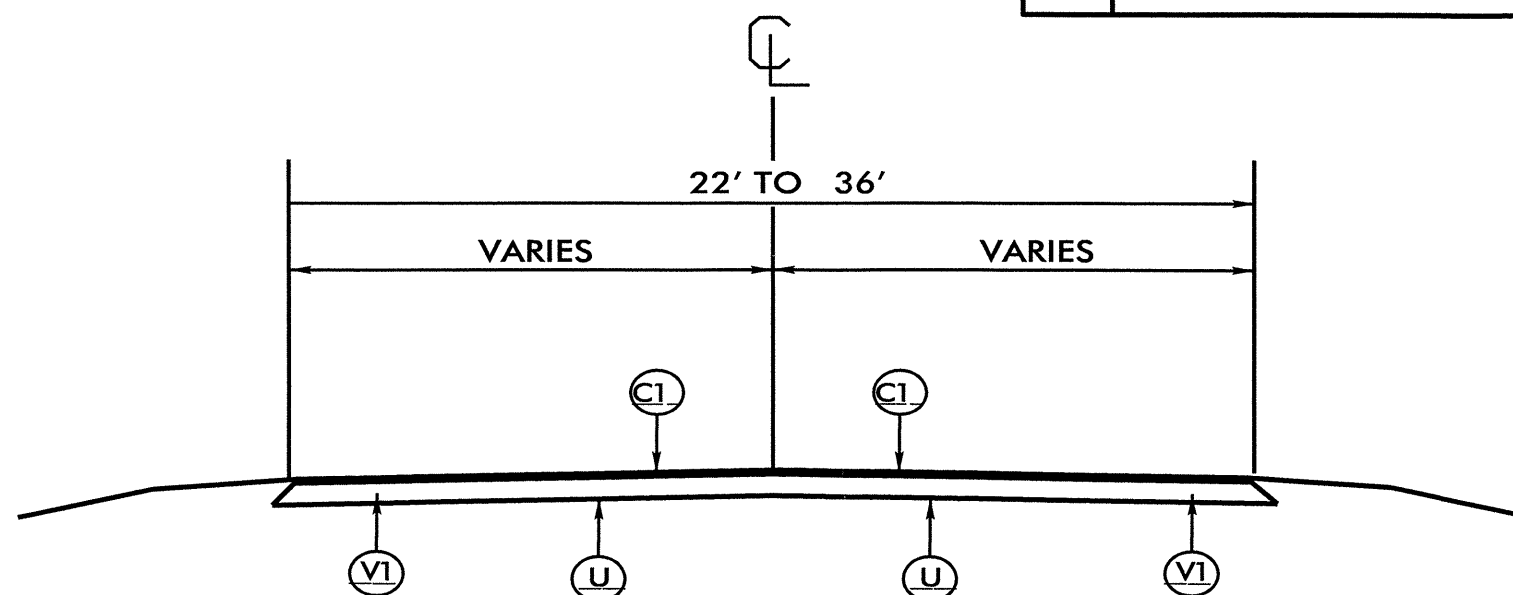
USE WITH MAP #1

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.10211.7, ETC.	5 OF 7

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 #2

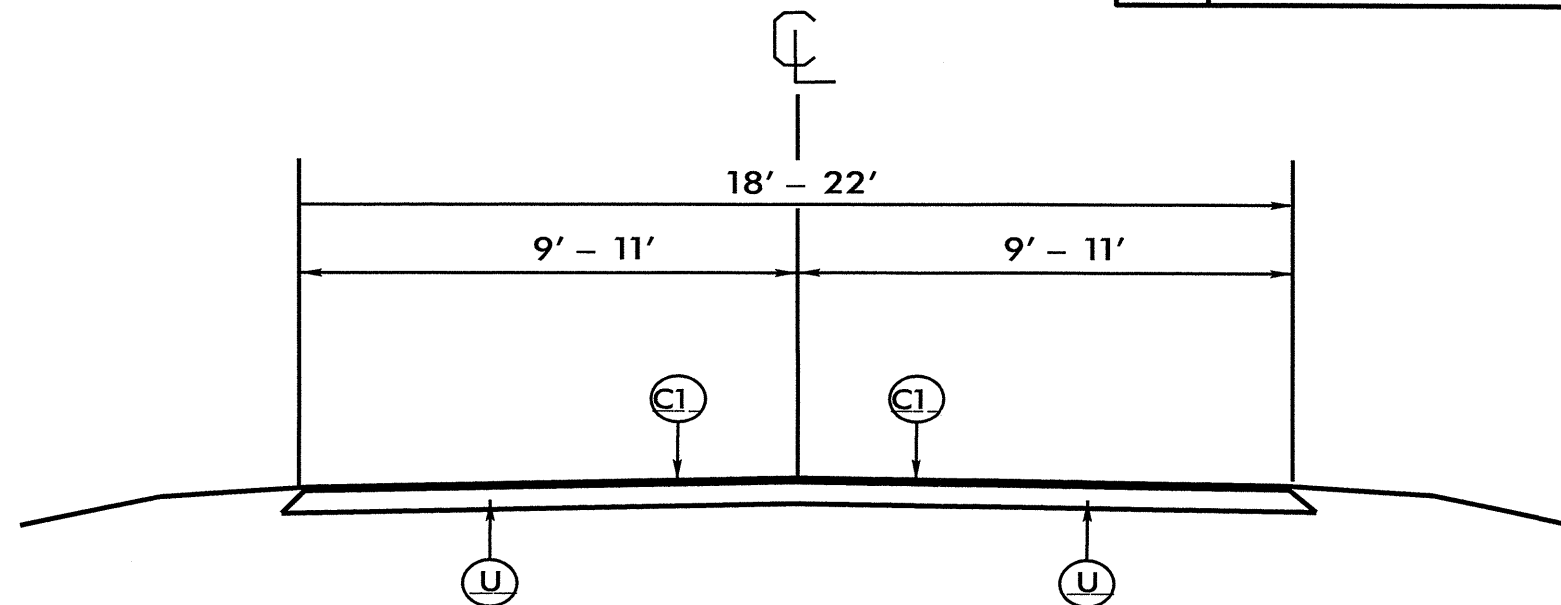
USE WITH MAP 2

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.10211.7, 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 MAP 3, 4, 5 & 6

PROJECT NO.	SHEET NO.	TOTAL NO.
1CR.10211.7, ETC.	7	7

SUMMARY OF QUANTITIES

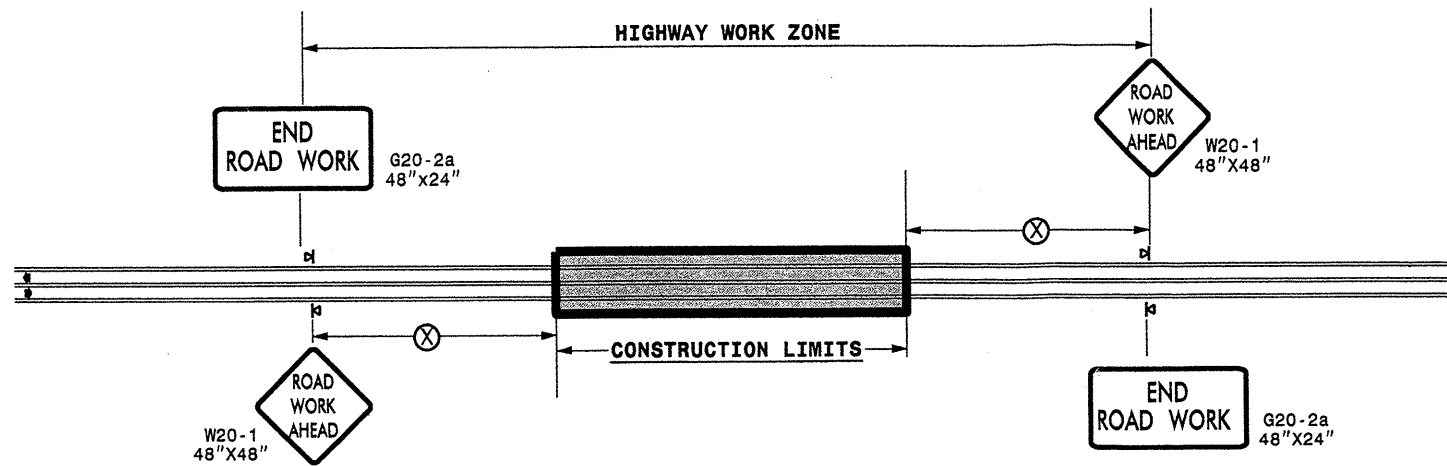
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	MOBILIZATION LS	MILLING ASPHALT PAVEMENT, 2" DEPTH SY	SURFACE COURSE, S9.5B TON	SURFACE COURSE, SF9.5A TON	PG 64-22 PLANT MIX TON	2'-6" CURB & GUTTER LF	WHEELCHAIR RAMPS EA	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA
1CR.10211.7	Chowan	1	US 17 BUS.	FROM SOUTH BROAD ST TO END CURB & GUTTER	1	NO	1.71	24 - 34	1	34,965	4,223		253	700	18	21	1
1CR.10211.7	Chowan	2	US-17 BUS.	FROM END CURB & GUTTER TO SR 1201	2	NO	1.82	22 - 36	*	32,032	3,968		238				
1CR.20211.15	Chowan	3	SR 1330	FROM US17 BUS. TO US 17	3	NO	1	22	*			1,178	77				
1CR.20211.16	Chowan	4	SR1316	FROM SR 1319 TO 1315	3	NO	1.4	18	*			1,351	88				
1CR.20211.17	Chowan	5	SR 1334	FROM SR 1305 TO NC 32	3	NO	2.3	18	*			2,219	144				
1CR.20211.18	Chowan	6	SR 1101	FROM US 17 TO NC 37	3	NO	1	20	*			1,071	70				
GRAND TOTAL							9.23		1	66,997	8,191	5,819	870	700	18	21	1

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 (LUMP SUM) LS	24" X WHITE THERMO LF	THERMO LT ARROW EA	THERMO RT ARROW EA	THERMO STR ARROW EA	4" WHITE PAINT LF	4" YELLOW PAINT LF	8" WHITE PAINT LF	8" YELLOW PAINT LF	YELLOW & YELLOW MARKERS EA	CRYSTAL & RED MARKERS EA
1CR.10211.7	Chowan	1	US 17 BUS.	FROM SOUTH BROAD ST TO END CURB & GUTTER	1	100	15	15	20		48,576	250		150	
1CR.10211.7	Chowan	2	US-17 BUS.	FROM END CURB & GUTTER TO SR 1201	*	100		6		38,802	39,166		250		150
1CR.20211.15	Chowan	3	SR 1330	FROM US17 BUS. TO US 17	*					21,520	16,240				
1CR.20211.16	Chowan	4	SR1316	FROM SR1319 TO 1315	*					30,128	23,100				
1CR.20211.17	Chowan	5	SR 1334	FROM SR 1305 TO NC 32	*					49,496	37,950				
1CR.20211.18	Chowan	6	SR 1101	FROM US 17 TO NC 37	*					23,520	17,160				
GRAND TOTAL					1	200	15	21	20	163,466	182,192	250	250	150	150

19-OCT-2010 10:37
 \\DOT\DP\SR001\1909\ups-wz7ccc\M&S_Division\Share\Resur\Facing\2010Resur\Facing\2010Eastern\2010_Div\01\C202638A-E_ICR.10211.7x5_Chowan_USITBus_m6_AKP\C202638A-E_ICR.10211.7x6_2wayundivurbf.r.wysJuly2006.porTable.dgn
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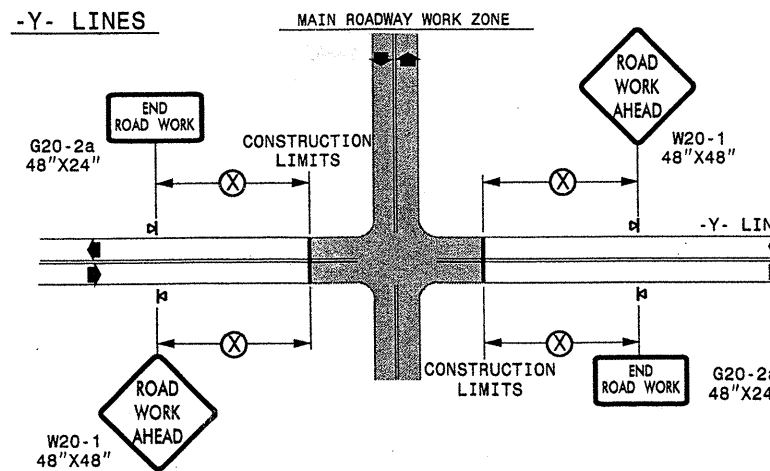
TWO-WAY UNDIVIDED ** (L-LINES)



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

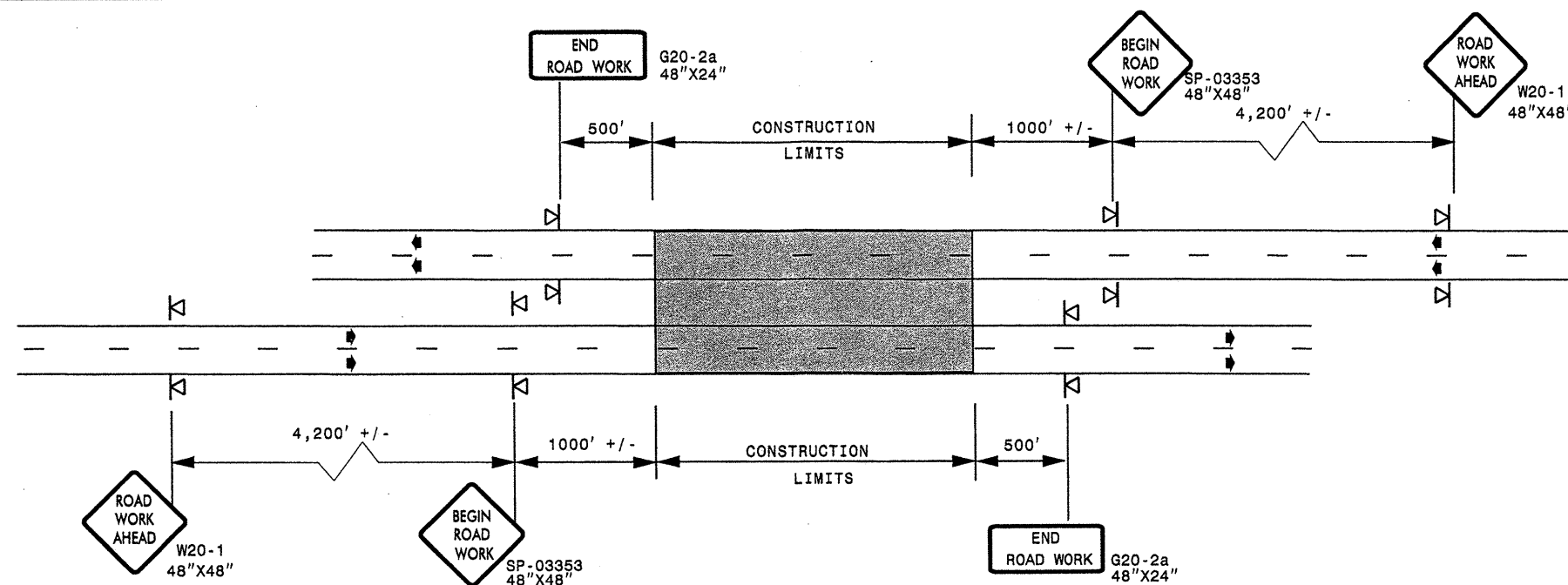
**DETAIL DRAWING
 FOR TWO-WAY UNDIVIDED
 WORK ZONE WARNING SIGNS**

SHEET 1 OF 1

APPROVED:	DATE:	DETAIL DRAWING FOR TWO-WAY UNDIVIDED ADVANCED WORK ZONE WARNING SIGNS	
SEAL 	SCALE: NONE		
	DATE: 10/10	7-98	10/0
	DESIGN BY:	10-98	03/0
	REVIEWED BY:	01/01	11/0

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

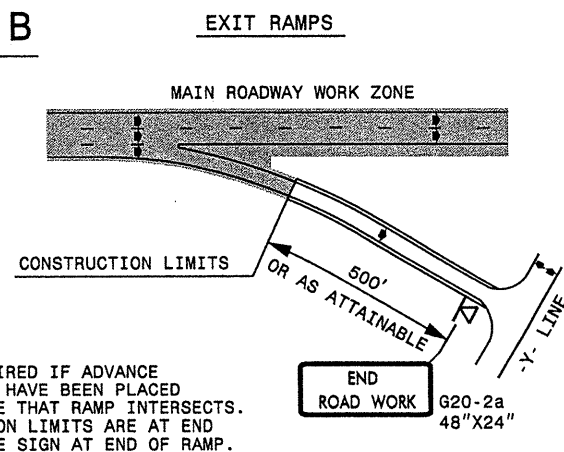
DETAIL A



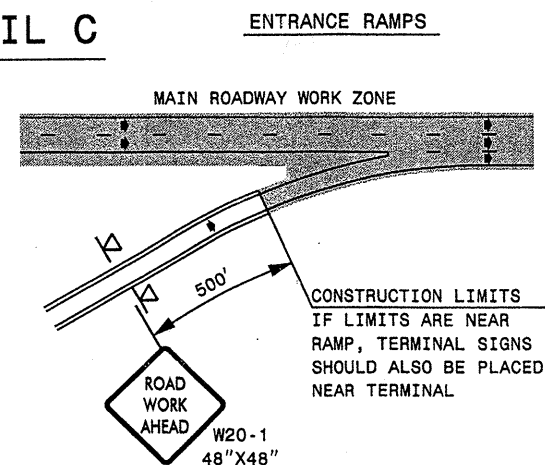
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAYS INTERSECTING ALONG FREEWAY WORK ZONE (Y-LINES)

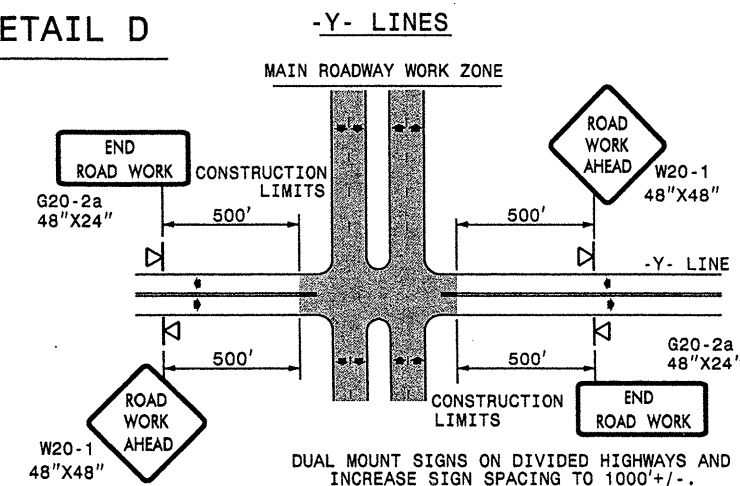
DETAIL B



DETAIL C



DETAIL D



DETAIL DRAWING
FOR FREEWAYS
WORK ZONE WARNING SIGNS
(SHORT-DURATION LANE CLOSURES)

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 MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

LEGEND

▣ PORTABLE SIGN

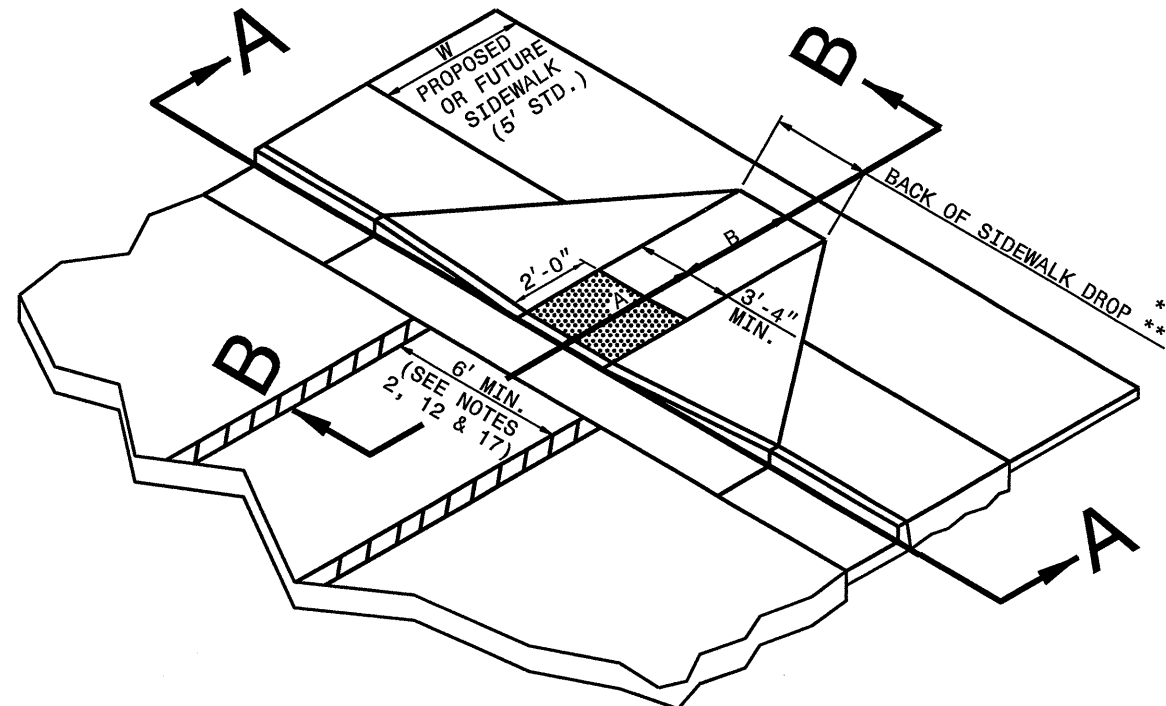
➔ DIRECTION OF TRAFFIC FLOW

APPROVED: _____ DATE: _____

SEAL

DETAIL DRAWING FOR FREEWAYS WORK ZONE WARNING SIGNS	
SCALE: NONE	REVISIONS
DATE: 10/10	7-98 10/01
DWG. BY:	10-98 03/04
DESIGN BY:	01/01 11/04
REVIEWED BY:	

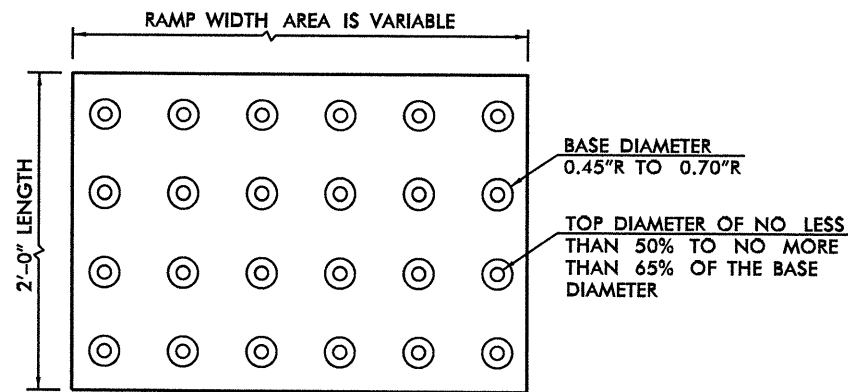
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ISOMETRIC VIEW

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.



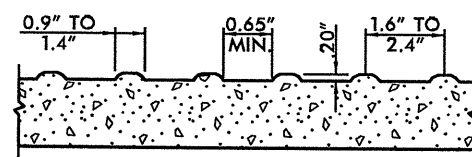
W	A	W+A+9"	X	B
5'	0.0'	5.8'	5.8'	5.0'*
6'	0.0'	6.8'	6.8'	6.0'***
7'	0.0'	7.8'	7.3'	6.5'***
8'	0.0'	8.8'	7.3'	6.5'***
5'	2.0'	7.8'	7.8'	5.0'
5'	2.5'	8.3'	8.1'	4.8'
5'	3.0'	8.8'	8.3'	4.4'
5'	3.5'	9.3'	8.4'	4.1'
5'	4.0'	9.8'	8.6'	3.8'
5'	4.5'	10.3'	8.7'	3.4'
5'	5.0'	10.8'	8.9'	3.1'

$B = X - (A + 9")$

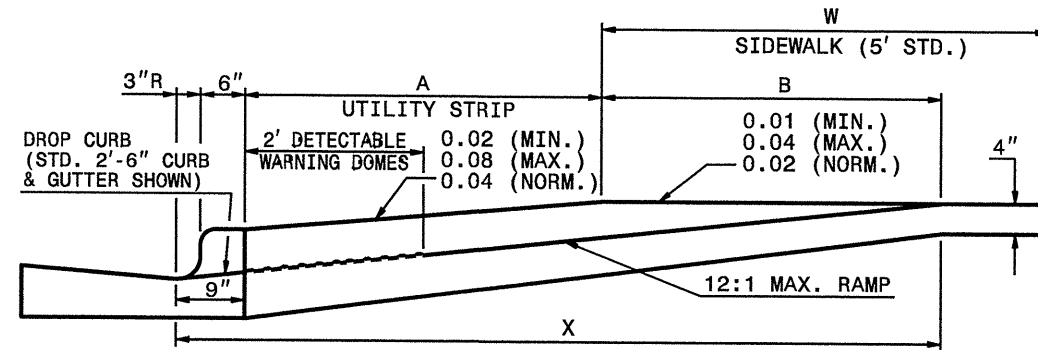
B = DISTANCE FROM FRONT EDGE OF SIDEWALK TO BACK POINT OF 12:1 (8.33%) SLOPE.

* BACK OF SIDEWALK DROP REQUIRED FOR ALL SIDEWALK SLOPES.

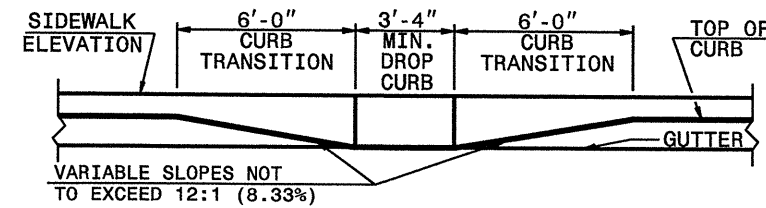
** BACK OF SIDEWALK DROP REQUIRED FOR SIDEWALK SLOPES 0.04.



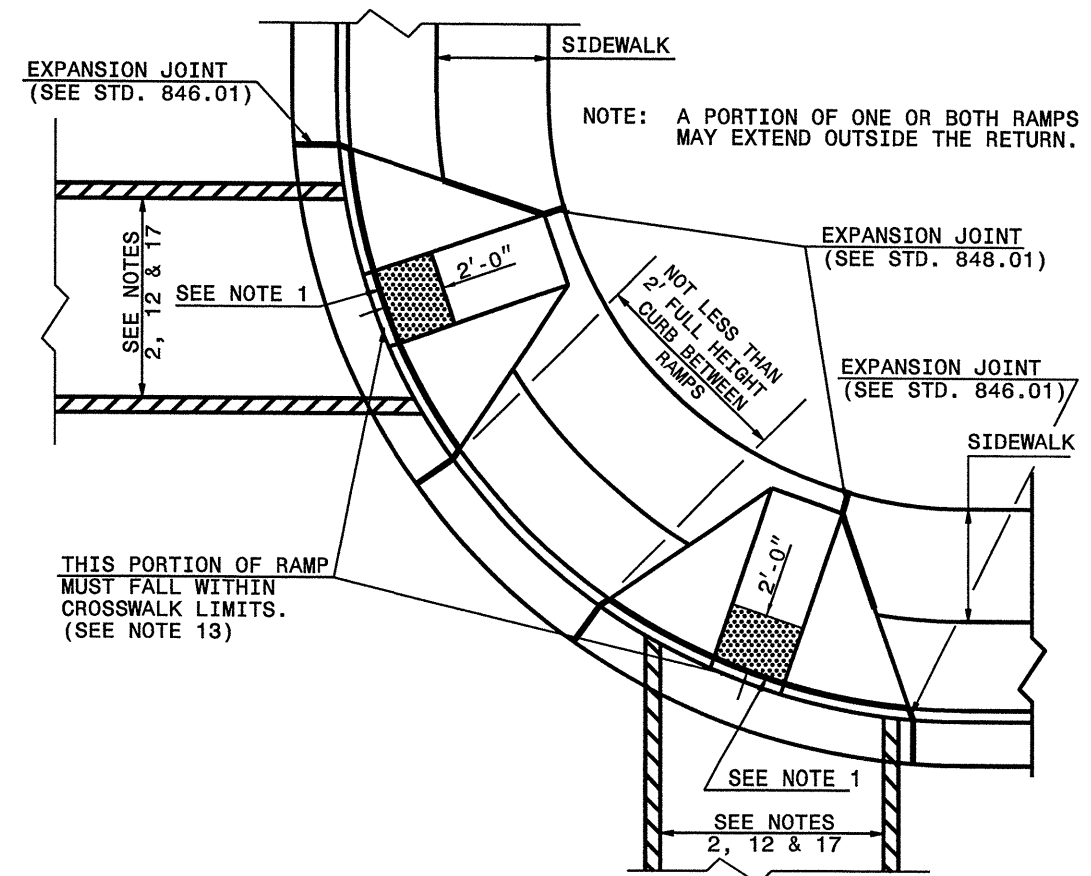
DETECTABLE WARNING DOMES



SECTION B-B

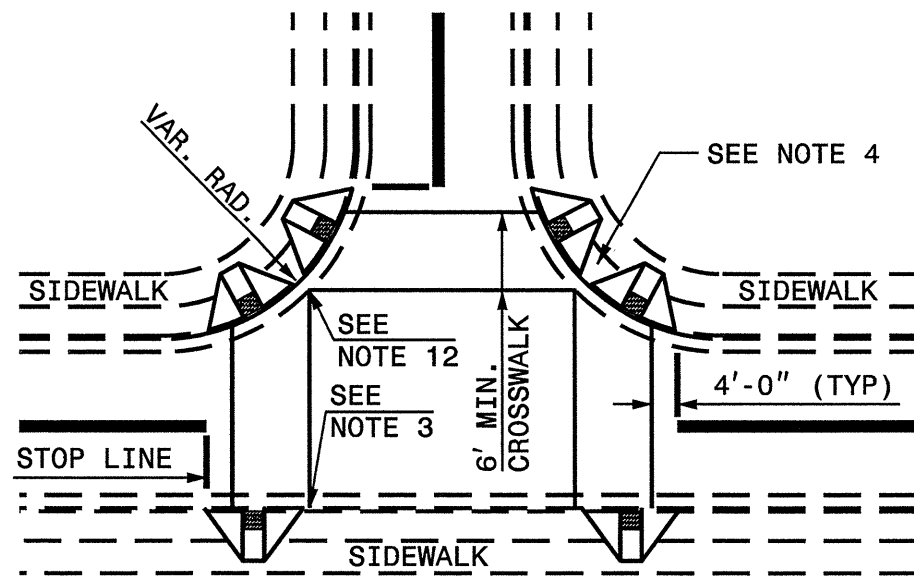


SECTION A-A

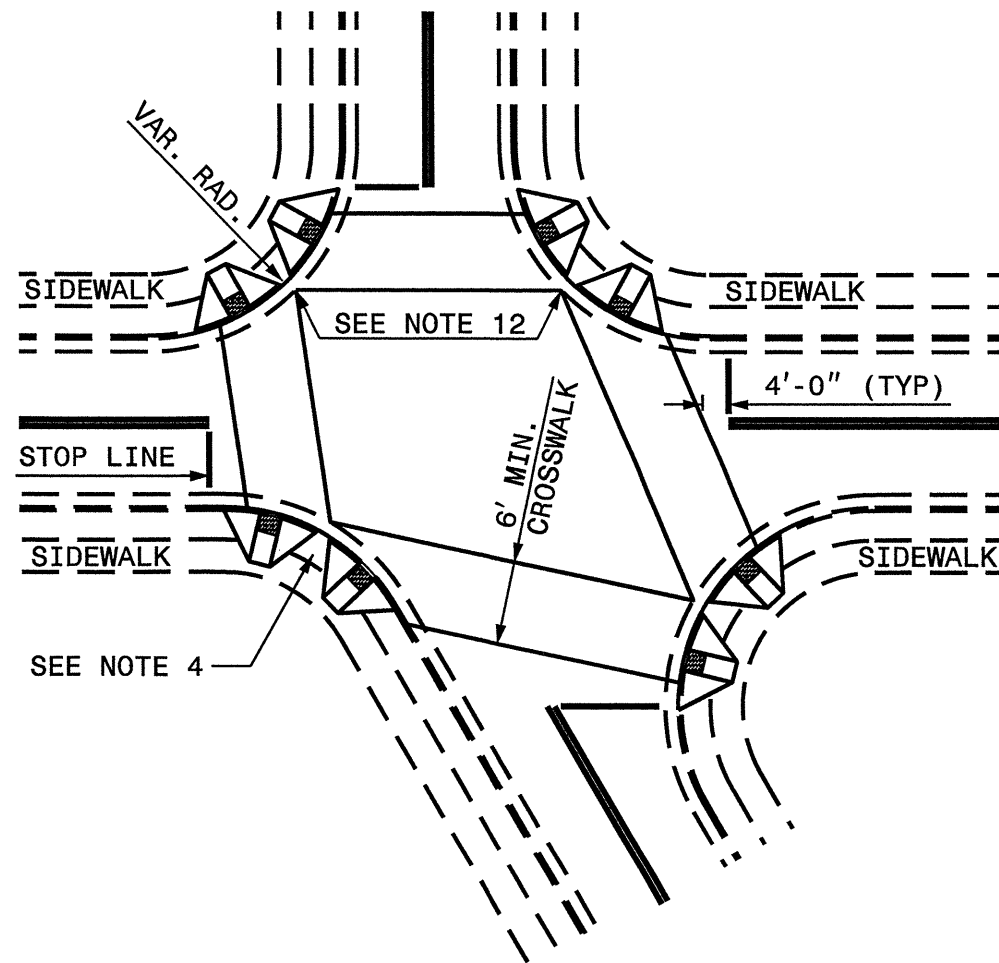


PLAN VIEW

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


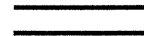


DETAIL SHOWING TYPICAL LOCATION OF WHEELCHAIR RAMPS, PEDESTRIAN CROSSWALKS AND STOP LINES FOR TEE INTERSECTIONS



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:

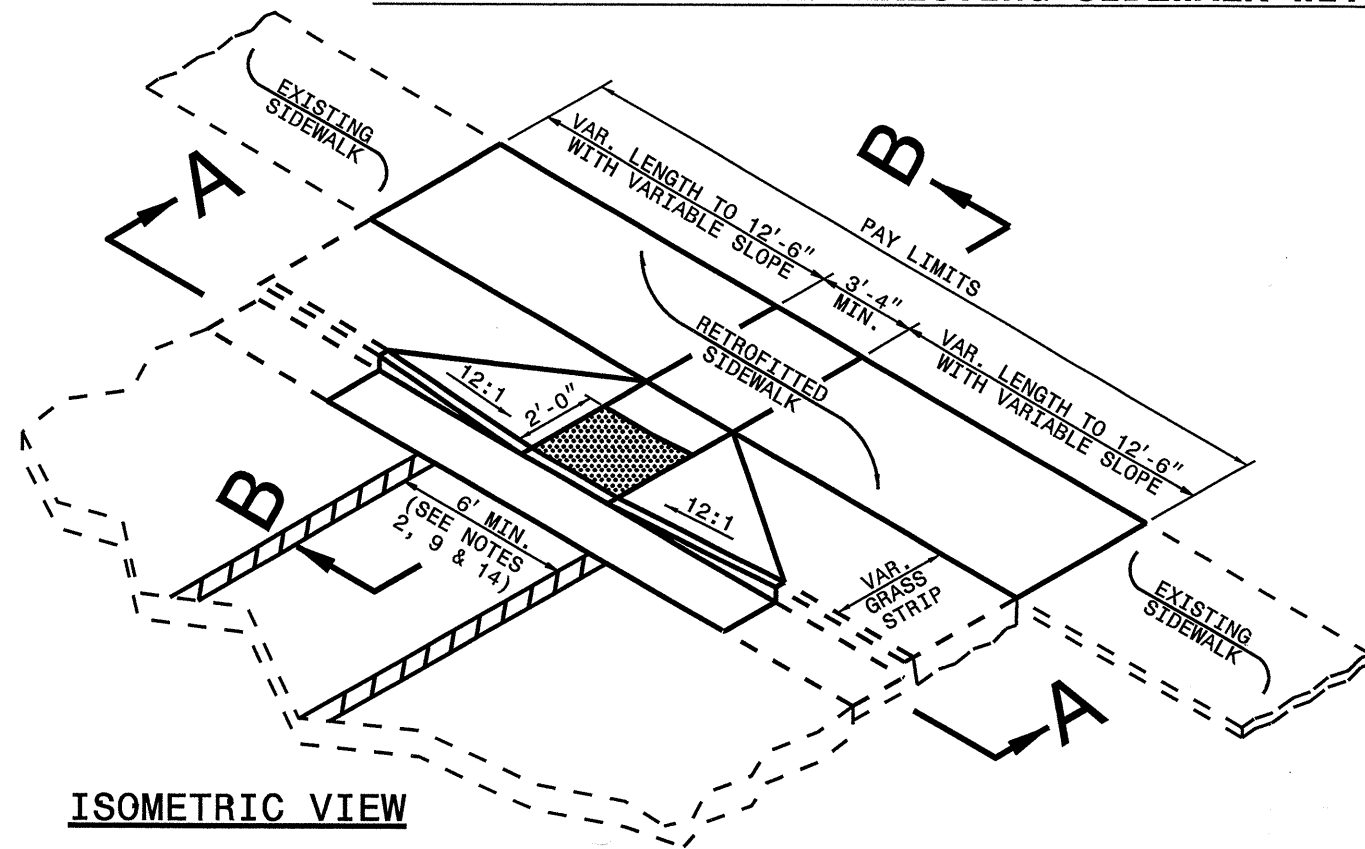
1. CONSTRUCT THE WALKING SURFACE WITH SLIP RESISTANTANCE AND A 70% CONTRASTING COLOR TO THE SIDEWALK.
2. CROSSWALK WIDTHS AND CONFIGURATION VARY BUT MUST CONFORM TO TRAFFIC DESIGN STANDARDS.
3. NORTH CAROLINA GENERAL STATUTE 136-44.14 REQUIRES THAT ALL STREET CURBS BEING CONSTRUCTED OR RECONSTRUCTED 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.

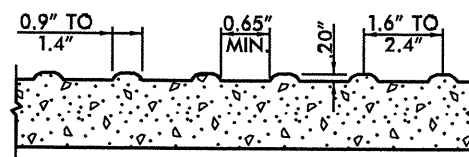
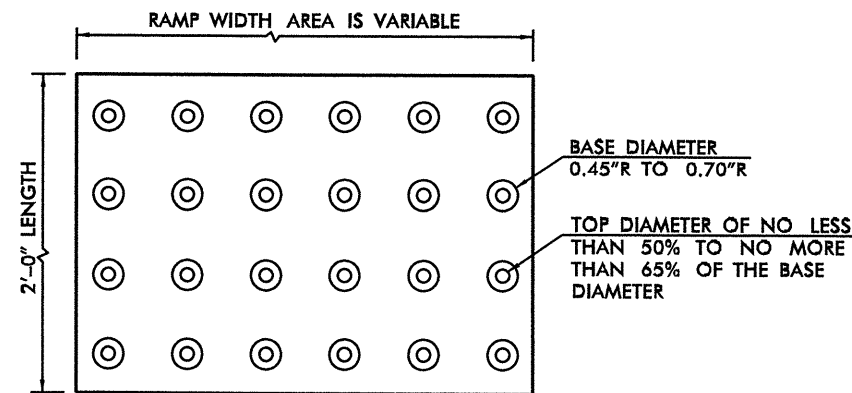
WHEELCHAIR RAMP AND EXISTING SIDEWALK WITH GRASS STRIP



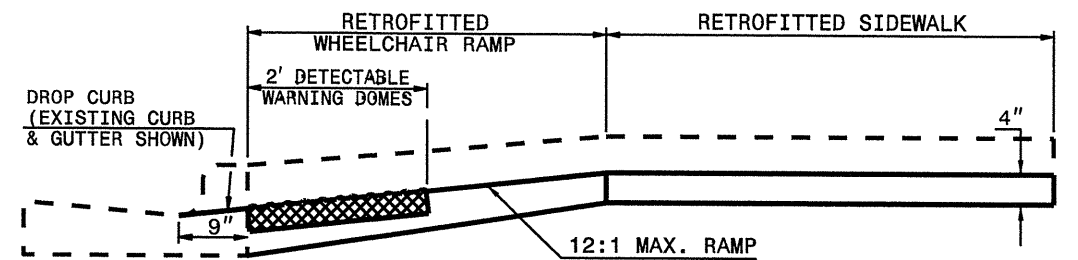
ISOMETRIC VIEW

NOTES:

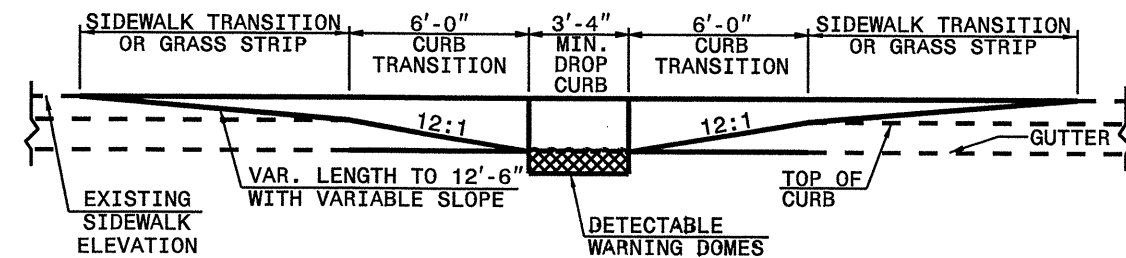
1. DETECTABLE WARNING DOMES SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
2. OBTAIN 70% CONTRAST VISIBILITY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.



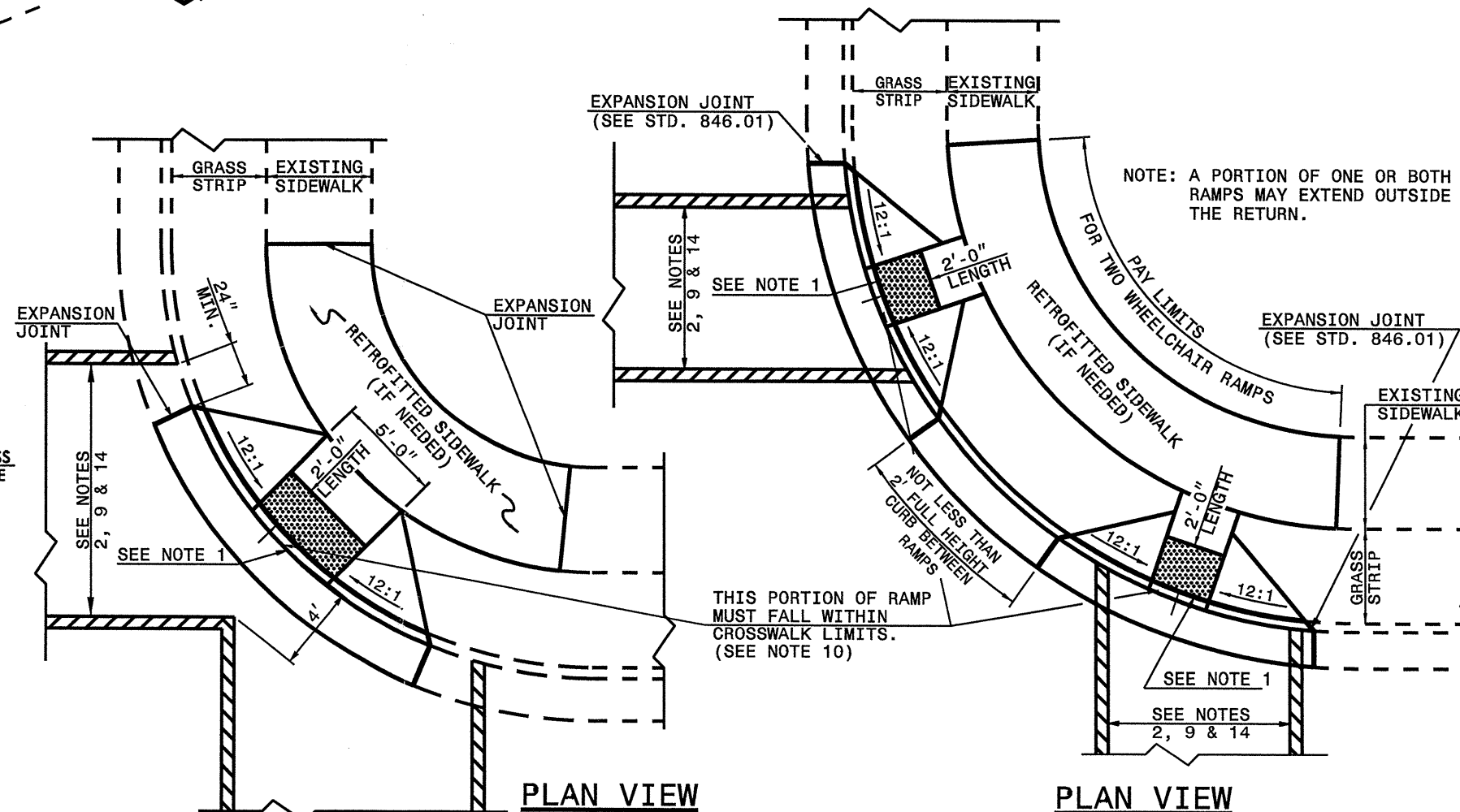
DETECTABLE WARNING DOMES



SECTION B-B



SECTION A-A



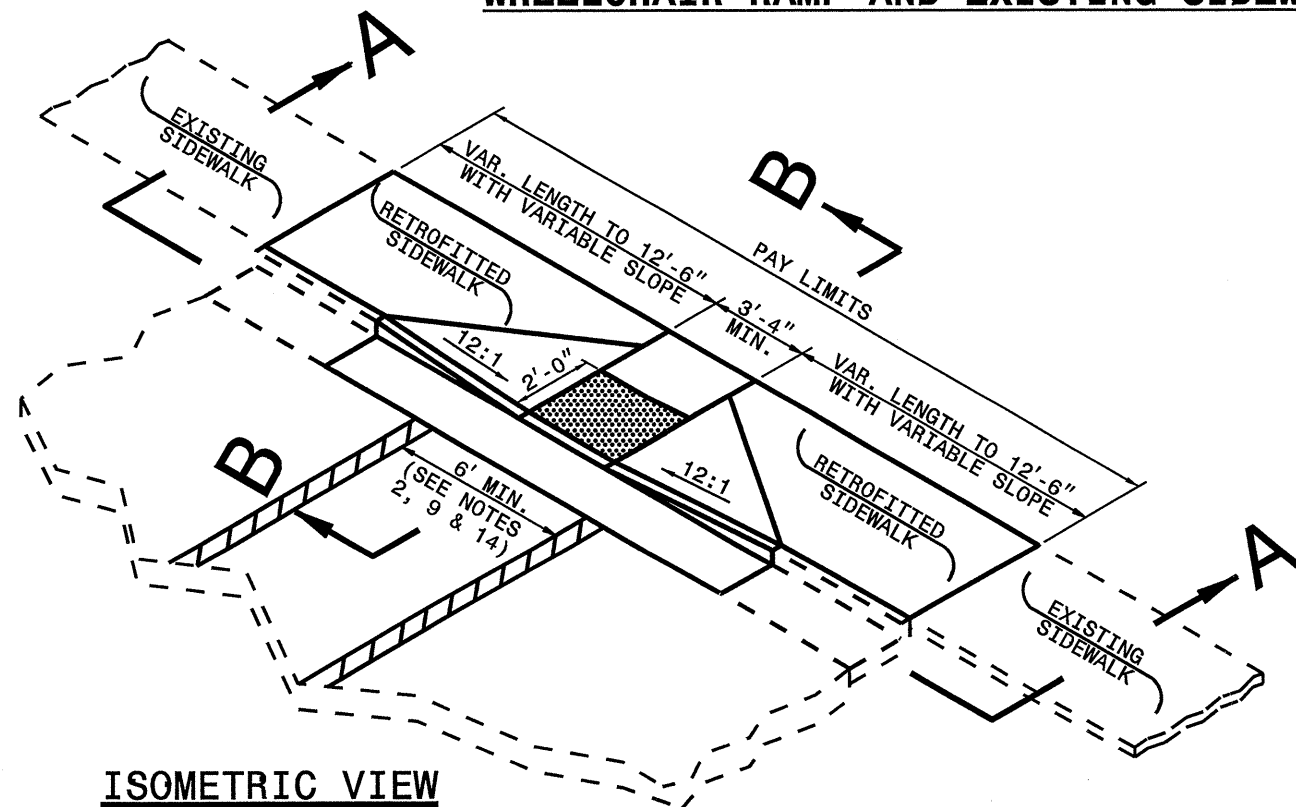
PLAN VIEW

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

PLAN VIEW

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

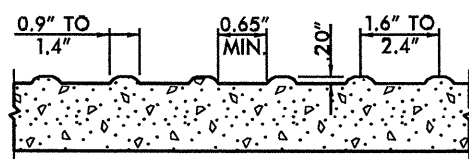
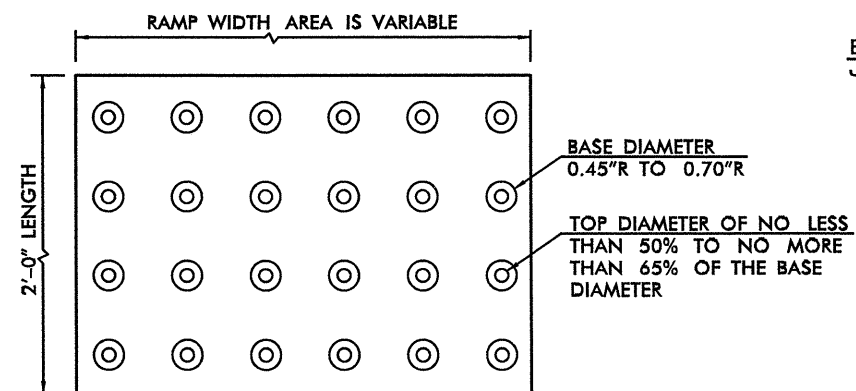
WHEELCHAIR RAMP AND EXISTING SIDEWALK ADJACENT TO CURB



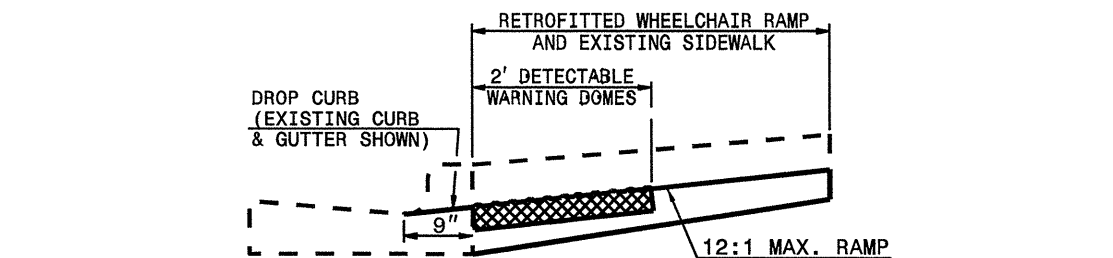
ISOMETRIC VIEW

NOTES:

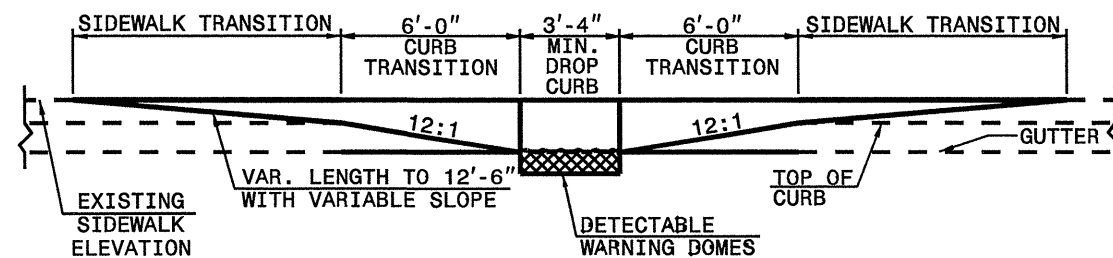
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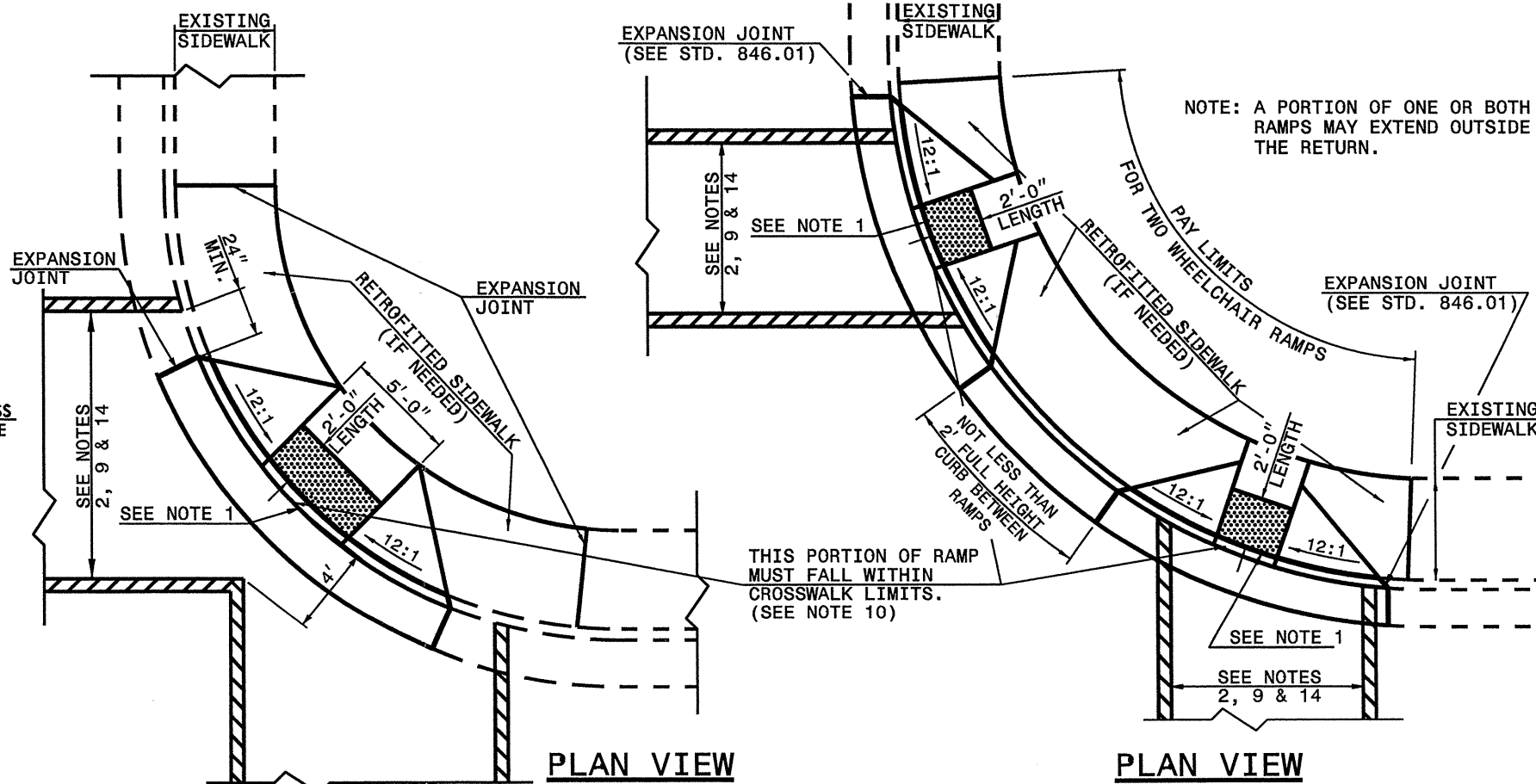
DETECTABLE WARNING DOMES



SECTION B-B



SECTION A-A



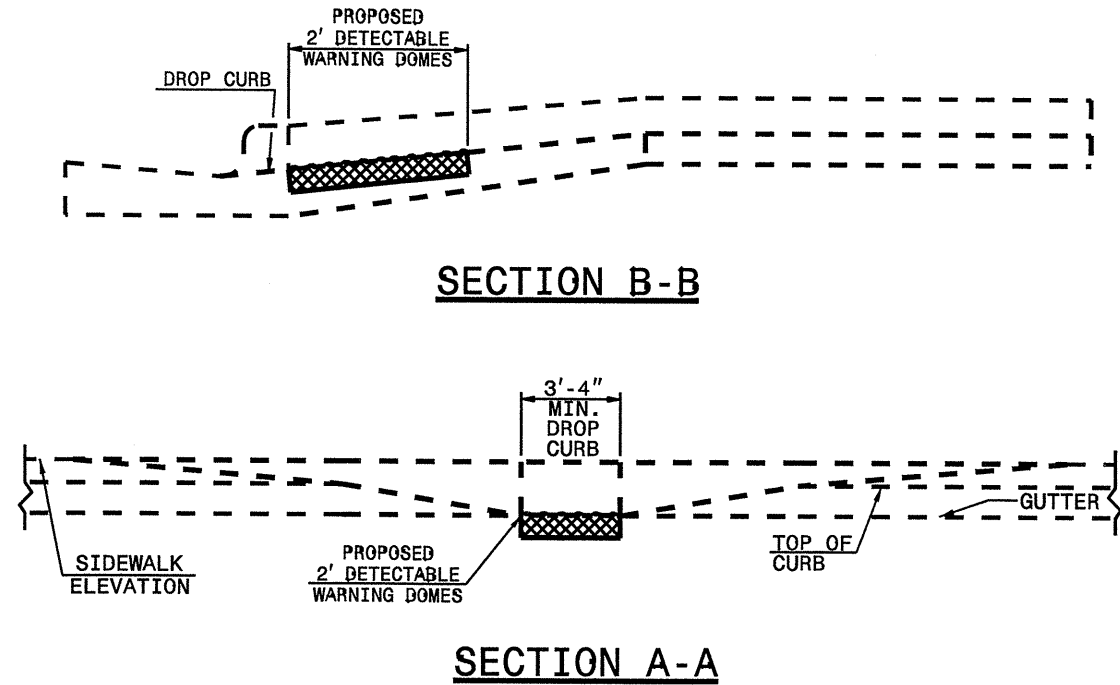
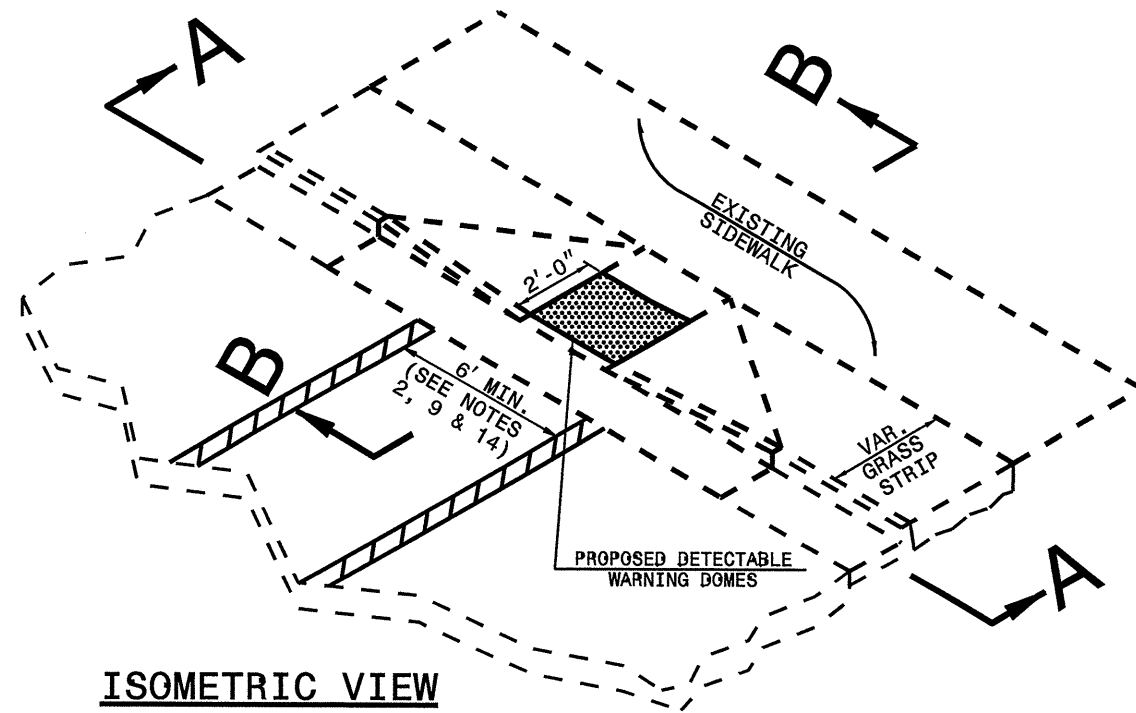
PLAN VIEW

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

PLAN VIEW

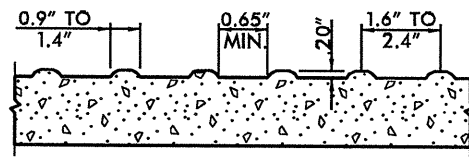
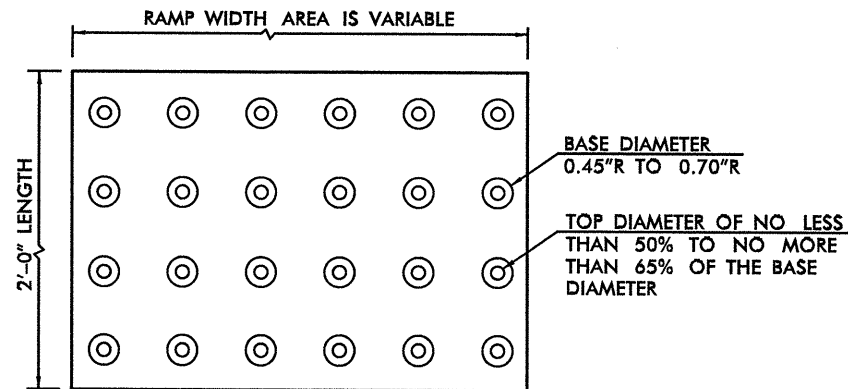
DUAL RAMPS
ANY RADII
(40" MIN. FLOOR WIDTH)

RETROFITTING DETECTABLE WARNING DOMES ONTO EXISTING WHEELCHAIR RAMP

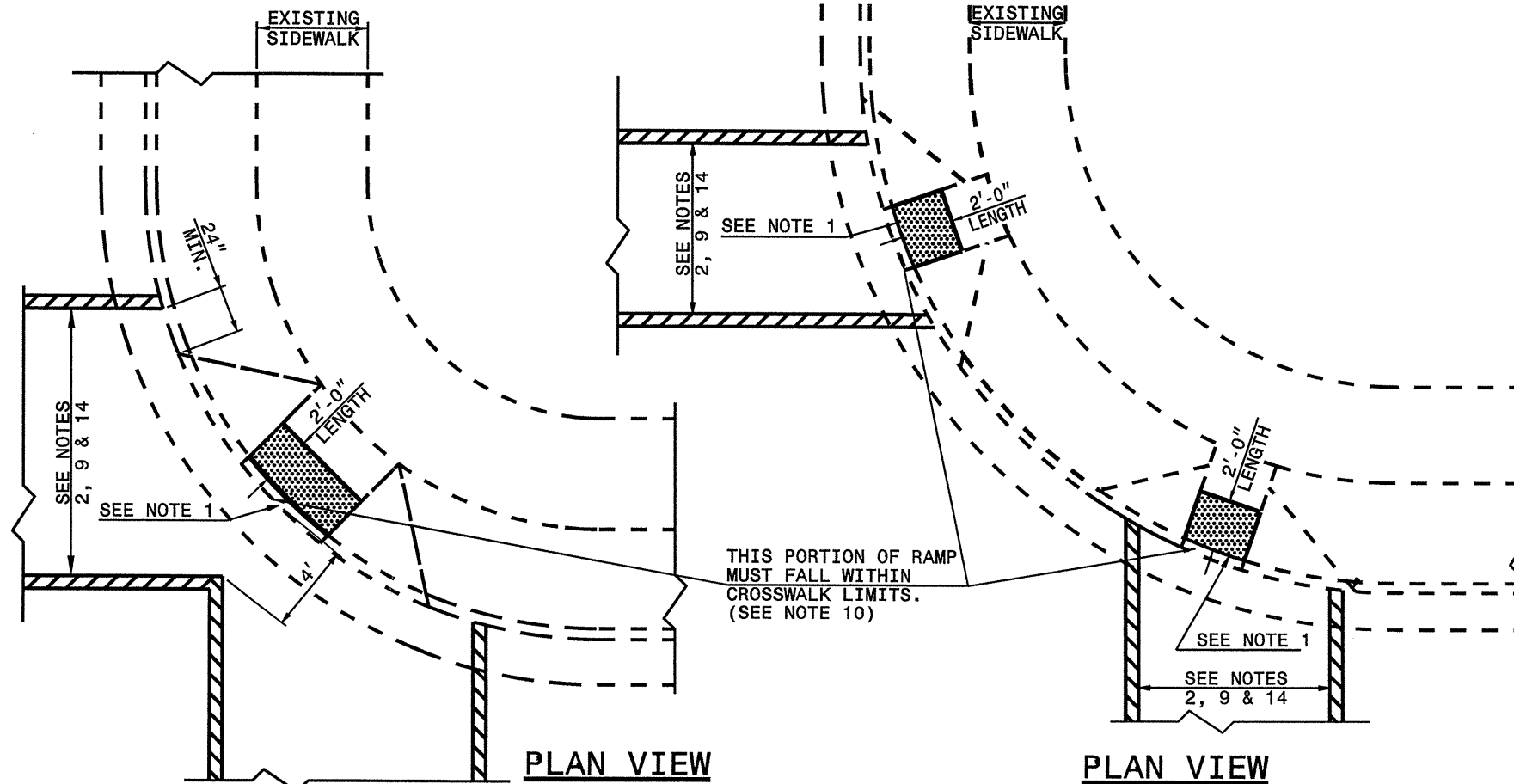


NOTES:

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DETECTABLE WARNING DOMES



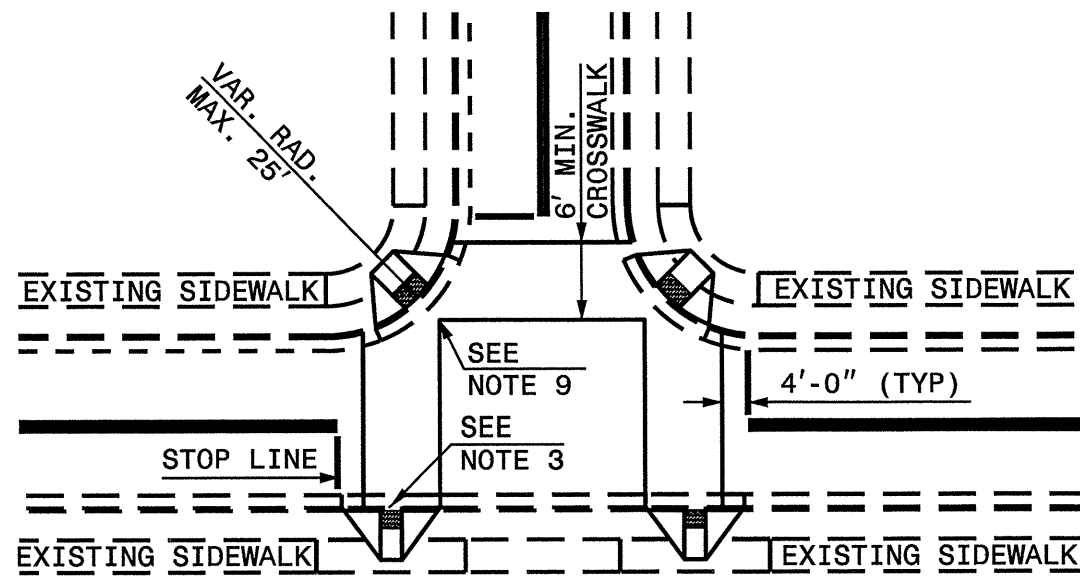
PLAN VIEW

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

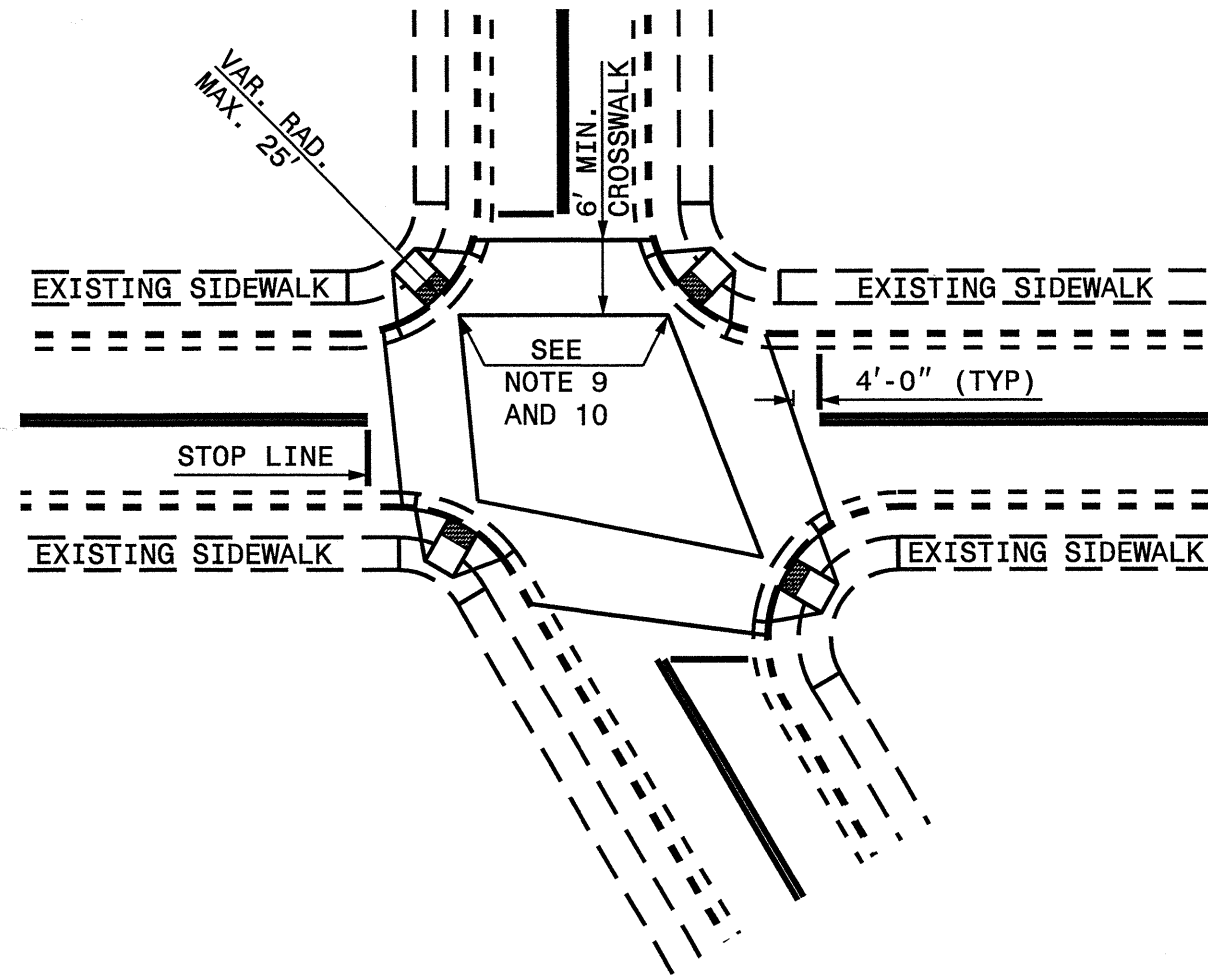
PLAN VIEW

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

WHEELCHAIR RAMP AND EXISTING SIDEWALK

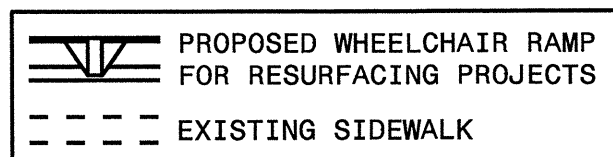


DETAIL SHOWING TYPICAL LOCATION OF WHEELCHAIR RAMPS, PEDESTRIAN CROSSWALKS AND STOP LINES FOR TEE INTERSECTIONS



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

RESURFACING PROJECTS



ALLOWABLE LOCATIONS

DIAGONAL RAMP RADII...MAX. 25'

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
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 SIMILAR 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 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 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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ENGLISH DETAIL DRAWING FOR
WHEELCHAIR RAMP
EXISTING CURB AND GUTTER

SHEET 5 OF 5

848D06