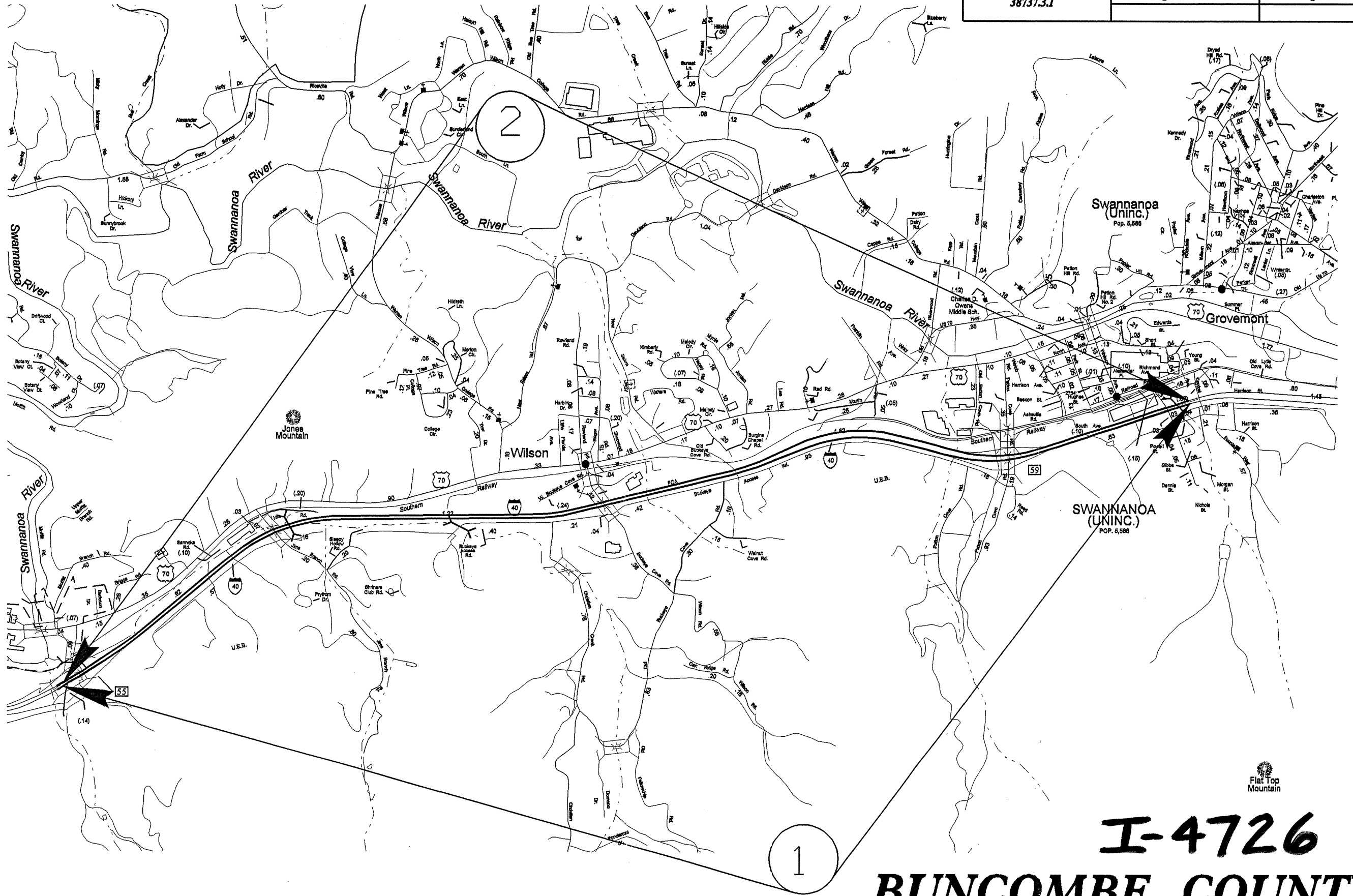
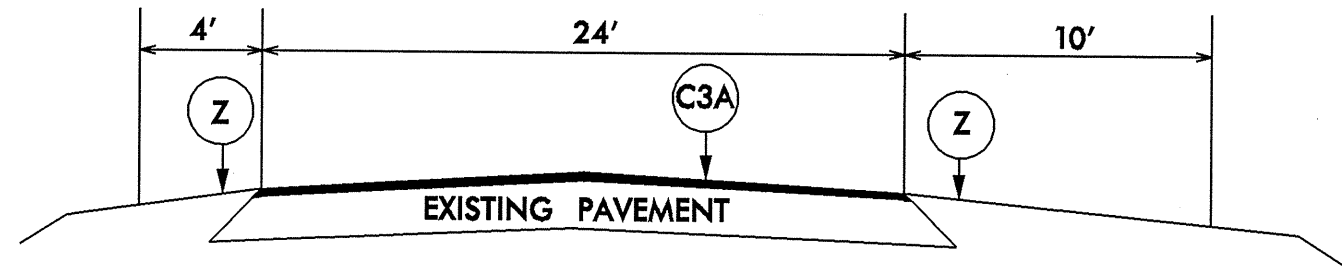


PROJECT NO.	SHEET NO.	TOTAL SHEETS
38737.3.1	1	3

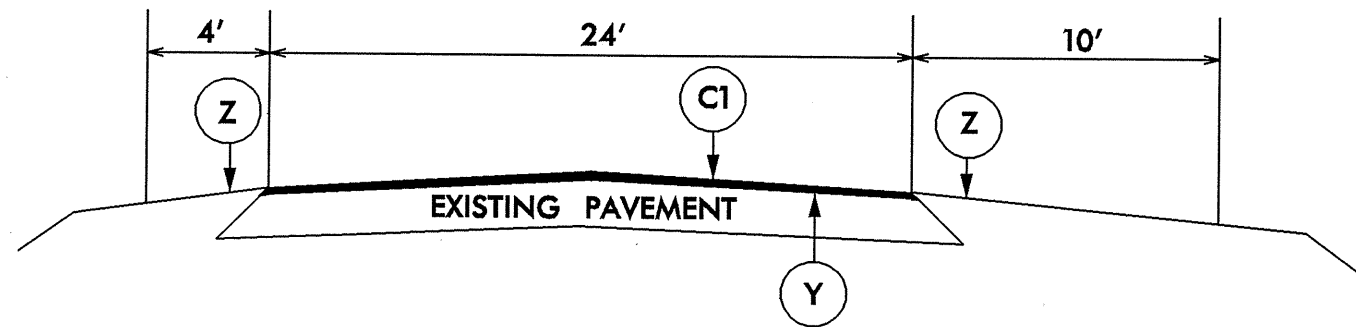


I-4726
BUNCOMBE COUNTY

PROJECT NO.	SHEET NO.	TOTAL SHEETS
38737.3.1	2	3



**TYPICAL SECTION NO.1
USE WITH ALTERNATE AA1**



**TYPICAL SECTION NO.2
USE WITH ALTERNATE AA2**

PAVEMENT SCHEDULE	
C1	PROPOSED APPROXIMATE 2" ASPHALT CONCRETE SURFACE COURSE TYPE SI2.5C AT AN AVERAGE RATE OF 224 LBS PER SQ. YD.
C3A	2" HOT IN PLACE ASPHALT RECYCLING USING APPROX. 45# ADMIXTURE PER SQ. YD.
Y	2" MILLING ON TRAVEL LANES ONLY
Z	MILLED RUMBLE STRIPS

PROJECT NO.	SHEET NO.	TOTAL NO.
38737.3.1	3	3

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH MI	WIDTH	MILLED RUMBLE STRIPS	6"X 90 M THERMO	6"X 120 M THERMO	12"X90 M THERMO	6" X40 M HOT SPRAY THERMO PVMNT. MARKING LINES LF	SNOW PLOWABLE MARKERS	FLASHING ARROW PANELS, TYPE C	TRUCK MTD. IMPACT ATTENUAT OR (60 MPH)
							FT	LF	LF	LF	EA	EA	EA		
38737.3.1	Buncombe	1	I-40 EAST BOUND	CONC PAVEMENT TO BRIDGE #484	1	4.4	24	46,464	46,464	5,808	1,800	46,464	376	1	1
		2	I-40 WEST BOUND	BRIDGE #484 TO CONC. PAVEMENT	1	4.4	24	46,464	46,464	5,808	1,800	46,464	380		
TOTAL FOR PROJ NO. 38737.3.1						8.8		92,928	92,928	11,616	3,600	92,928	756	1	1
GRAND TOTAL						8.8		92,928	92,928	11,616	3,600	92,928	756	1	1

SUMMARY OF QUANTITIES - ALTERNATE ONE

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH MI	WIDTH FT	EMULSIFIED ASPHALT REJUVENATING AGENT GAL	HOT MIX ASPHALT ADMIXTURE TONS	HIP RECYCLING 2", TYPE S12.5C SY	PG 64-22 PLANT MIX TONS
38737.3.1	Buncombe	1	I-40 EAST BOUND	CONC PAVEMENT TO BRIDGE #484	1	4.4	24	6,195	1,408	61,952	77
		2	I-40 WEST BOUND	BRIDGE #484 TO CONC. PAVEMENT	1	4.4	24	6,195	1,408	61,952	77
TOTAL FOR PROJ NO. 38737.3.1						8.8		12,390	2,816	123,904	154
GRAND TOTAL						8.8		12,390	2,816	123,904	154

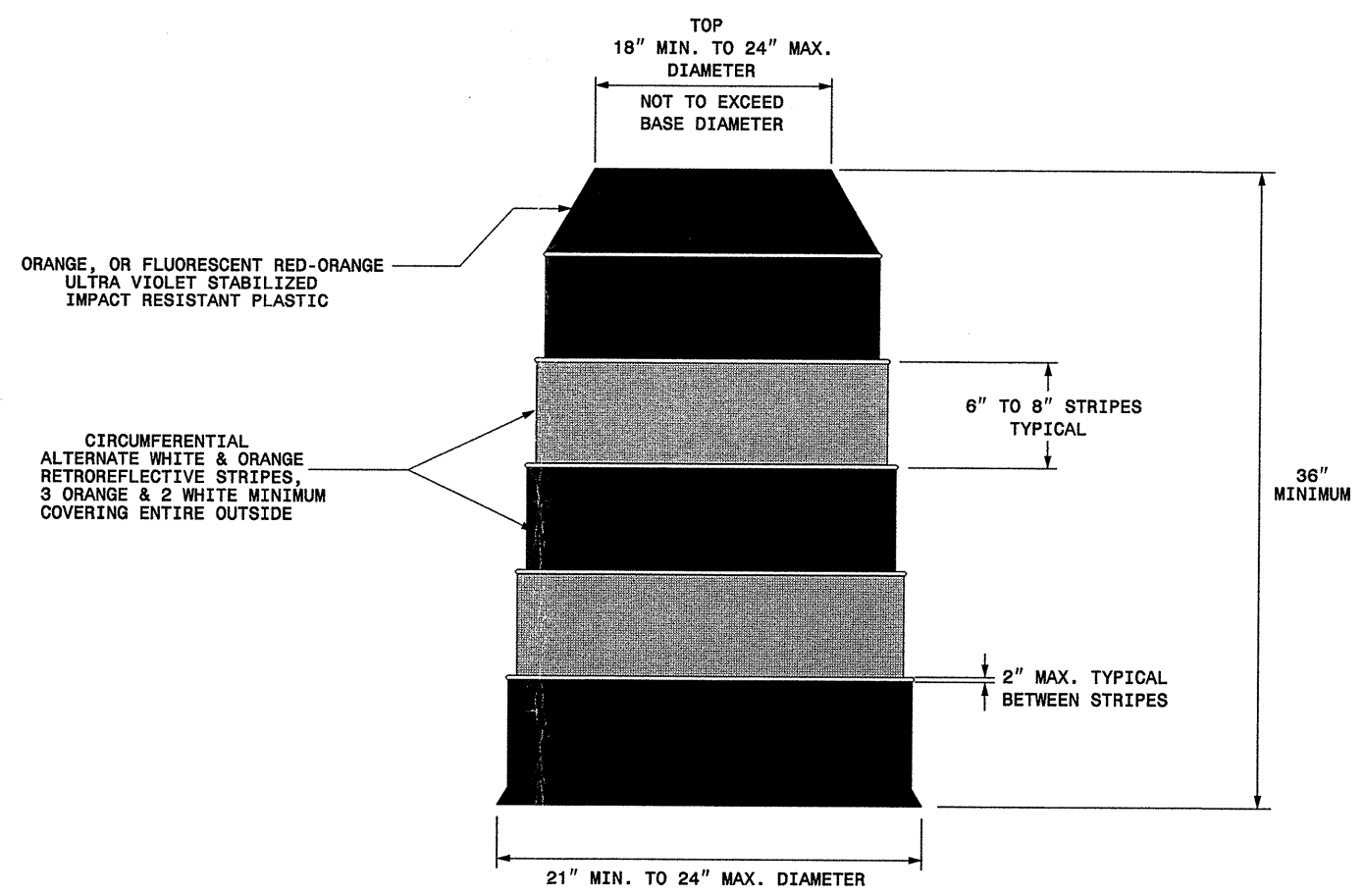
SUMMARY OF QUANTITIES - ALTERNATE TWO

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH MI	WIDTH FT	2" MILLING	ASPHALT CONCRETE SURFACE COURSE TYPE S12.5C TONS	PG 70-22 PLANT MIX TONS
								SY		
38737.3.1	Buncombe	1	I-40 EAST BOUND	CONC PAVEMENT TO BRIDGE #484	1	4.4	24	61,952	7685	423
		2	I-40 WEST BOUND	BRIDGE #484 TO CONC. PAVEMENT	1	4.4	24	61,952	7685	423
TOTAL FOR PROJ NO. 38737.3.1						8.8		123,904	15,370	846
GRAND TOTAL						8.8		123,904	15,370	846

STATE OF
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DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
DRUMS

SHEET 1 OF 1
1130D01



GENERAL NOTES

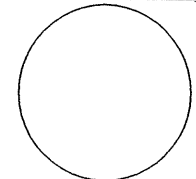

- BALLASTING SHALL BE ACHIEVED BY THE SAND BAG, TIRE-SIDEWALL BALLAST, OR PREFORMED WEIGHTED BASE BALLASTING METHODS. DO NOT PLACE BALLAST ON TOP OF THE DRUM.
- IF NECESSARY PLACE THE NAME OF THE AGENCY, CONTRACTOR, OR SUPPLIER ON NON-RETROREFLECTIVE DRUM SURFACES. SHOW THE LETTERS AND NUMBERS USING A NON-RETROREFLECTIVE COLOR AND NOT OVER 2" IN HEIGHT.

STATE OF
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RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
DRUMS

SHEET 1 OF 1
1130D01

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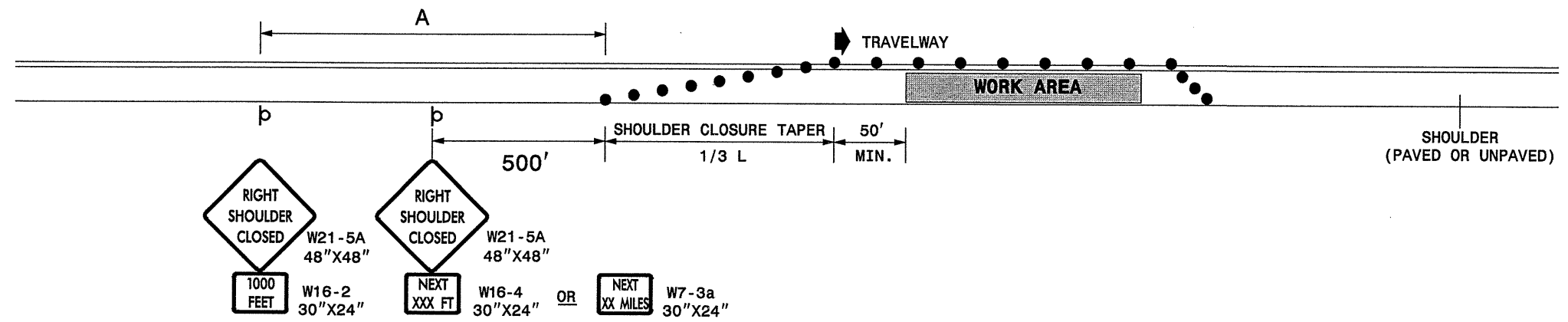
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DATE: 4/02		11/02
DWG. BY: MMM		
DESIGN BY: MMM		
REVIEWED BY: MMM		

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

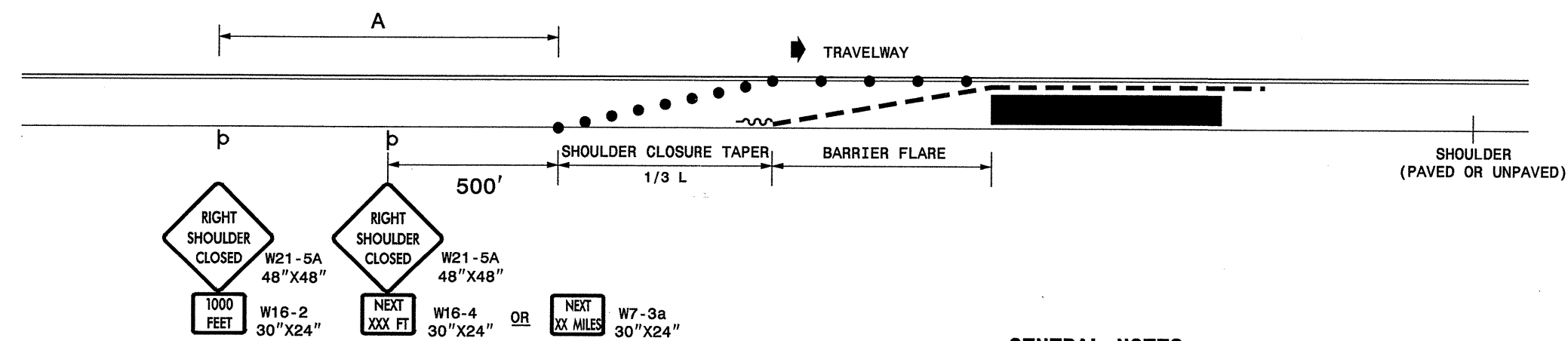
1-05

ENGLISH STANDARD DRAWING FOR
TEMPORARY SHOULDER CLOSURES

SHOULDER CLOSURES UTILIZING DRUMS



SHOULDER CLOSURES UTILIZING TEMPORARY BARRIER



GENERAL NOTES

- PLACE SHOULDER CLOSURE SIGNS ON THE SAME SIDE AS THE SHOULDER THAT IS CLOSED.
- PLACE DRUMS IN THE SHOULDER TAPER AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. THE MAXIMUM SPACING OF DRUMS ALONG THE WORK AREA AND BARRIER FLARE IS EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- FLARE THE APPROACH END OF PORTABLE CONCRETE BARRIER BEYOND THE SHOULDER AND USE A CRASH CUSHION FOR PROTECTION IF THE EXPOSED END OF THE BARRIER IS WITHIN THE "CLEAR ZONE".
- USE STATIONARY SIGNS FOR LONG TERM OPERATIONS (LONGER THAN 3 DAYS).
- REFER TO STD. 1101.11 SHEETS 1, 3, & 4, FOR "L" DISTANCE, BARRIER FLARE RATES, AND SIGN SPACING.

LEGEND

- ~ TEMPORARY CRASH CUSHION
- - - PORTABLE CONCRETE BARRIER
- DRUM
- p STATIONARY OR PORTABLE SIGN
- ➔ DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1
1101D04

SHEET 1 OF 1
1101D04

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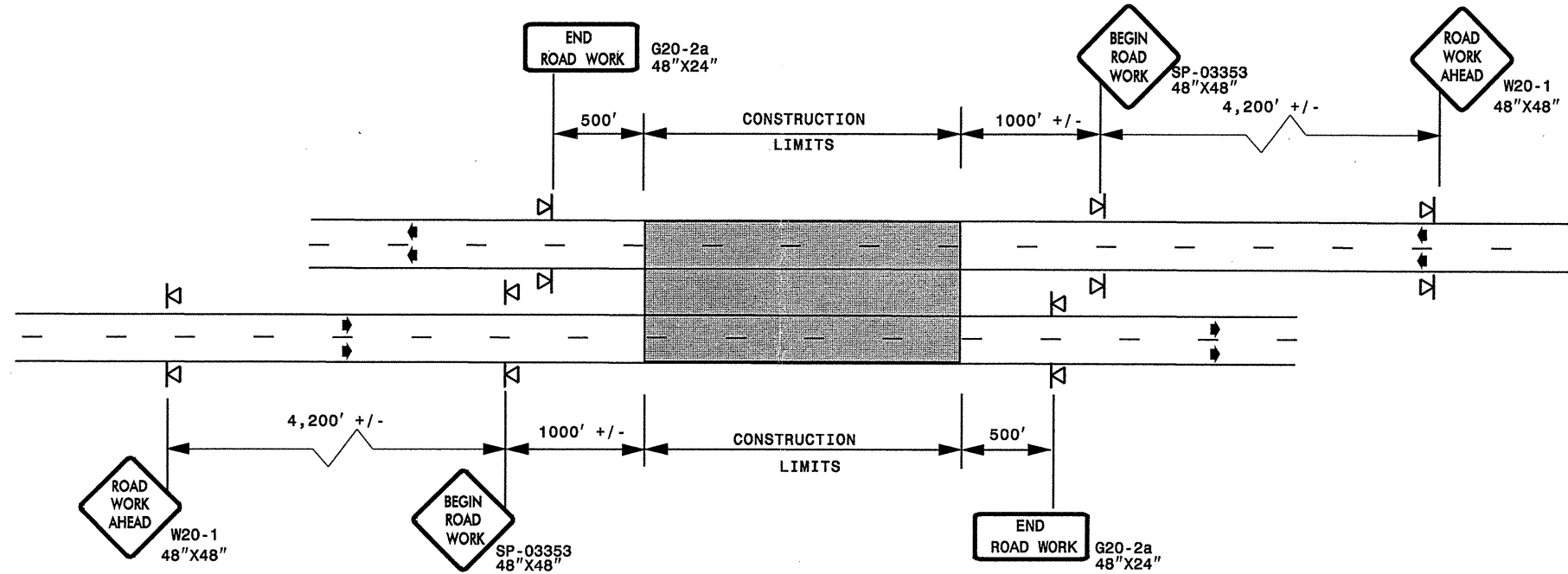
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REPLACEMENT DETAIL FOR RSD 1101.04

SCALE:	NONE		REVISIONS
DATE:	11/04		08/05
DWG. BY:	PS		
DESIGN BY:	JPG		
REVIEWED BY:	MMM		CHD FILE

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

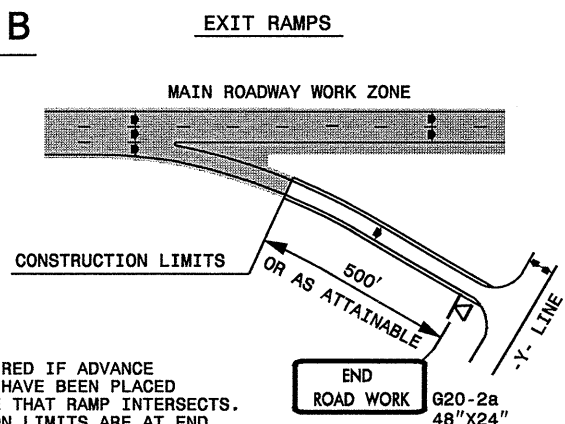
DETAIL A



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

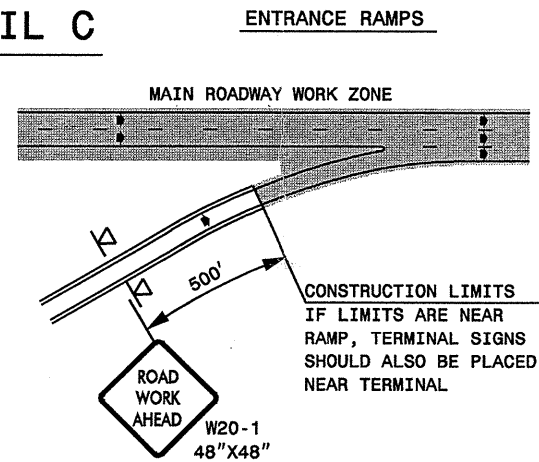
ROADWAYS INTERSECTING ALONG FREEWAY WORK ZONE (Y-LINES)

DETAIL B

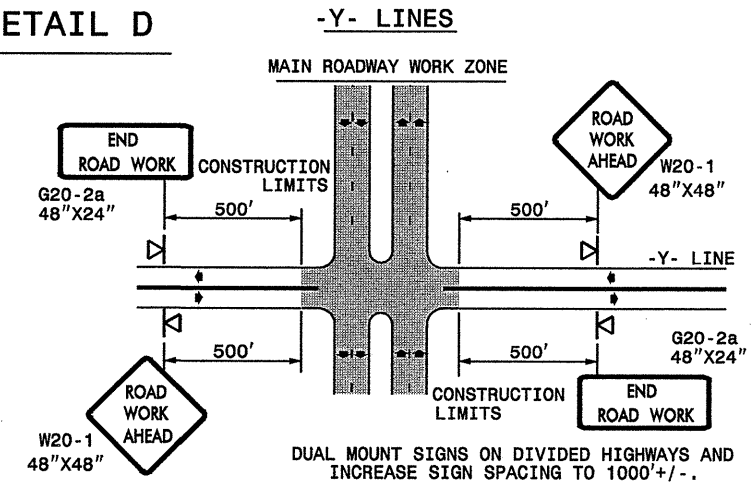


NOTE:
SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

DETAIL C



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 ADVANCED 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

SHEET 1 OF 1

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

30-MAR-2006 11:59 AM \\DOT\DRS\0010\GROUPS-WZ\TCCC\design\group4\resurfacing\div13\387373buncombel-4726\387373ifree4lanesgreatrev05.dgn pseymore AT WZTC206427

SP 03353

<p>SIGN NUMBER: SP-03353 TYPE: A QUANTITY: 1</p> <p>SIGN WIDTH: 4'-0" HEIGHT: 4'-0" TOTAL AREA: 16.0 Sq.Ft.</p> <p>BORDER TYPE: FLUSH RECESS: 0.59" WIDTH: 0.75" RADIUS: 1.38"</p> <p>NO. Z BARS: N/A LENGTH: N/A</p> <p>USE NOTES: 2, 4 1. Legend and border shall be direct applied Type VII reflective sheeting. 2. Legend and border shall be direct applied non-reflective sheeting. 3. Shields shall be Type VII reflective sheeting on 0.032" (0.8mm) aluminum and demountable. 4. Background shall be Type VII reflective sheeting. 5. Background shall be Type I reflective sheeting. 6. Center arrow(s) vertically on sign. 7. Bottom panel shall be yellow Type III sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:</p>	<p>BACKG COLOR: Fluorescent Orange COPY COLOR: Black</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SYMBOL</th> <th>X</th> <th>Y</th> <th>WID</th> <th>HT</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> <p>MAT'L:</p>	SYMBOL	X	Y	WID	HT																										<p>DESIGN BY: CL DOWNEY PROJECT ID: ALL PROJECTS</p> <p>CHECKED BY: CHECKED DIV: DIV</p> <p>STD #: W20-1 DATE: Aug 20,2003</p>																																											
SYMBOL	X	Y	WID	HT																																																																							
<p>LETTER POSITIONS</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="10">Letter spacings are to start of next letter</th> <th>Series/Size</th> <th>Text Length</th> </tr> </thead> <tbody> <tr> <td>22.4</td><td>5.3</td><td>4.8</td><td>5.4</td><td>2.5</td><td>3.8</td><td>22.4</td><td></td><td></td><td></td> <td>C7</td><td>21.6</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td>C7</td><td>19.6</td> </tr> <tr> <td>23.4</td><td>8</td><td>5.2</td><td>5.8</td><td>3.8</td><td>23.4</td><td></td><td></td><td></td><td></td> <td>C7</td><td>21.2</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td>C7</td><td></td> </tr> <tr> <td>22.6</td><td>6.4</td><td>5.6</td><td>5.2</td><td>4</td><td>22.6</td><td></td><td></td><td></td><td></td> <td>C7</td><td>21.2</td> </tr> </tbody> </table> <p>Spacing Factor is 1 unless specified otherwise</p>				Letter spacings are to start of next letter										Series/Size	Text Length	22.4	5.3	4.8	5.4	2.5	3.8	22.4				C7	21.6											C7	19.6	23.4	8	5.2	5.8	3.8	23.4					C7	21.2											C7		22.6	6.4	5.6	5.2	4	22.6					C7	21.2
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GENERAL NOTES FOR SIGN SP-03353 "BEGIN ROAD WORK"

- SIGN SP-03353 "BEGIN ROAD WORK" ONLY APPLIES TO FULL CONTROL AND PARTIAL CONTROL OF ACCESS ROADWAYS
- WHEN USED, INSTALL SIGN SP-03353 "BEGIN ROAD WORK" ACCORDING TO DETAIL FOR FREEWAY WORK ZONE SIGNS

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

**DETAIL DRAWING FOR
WORK ZONE SIGNS
BEGIN ROAD WORK**

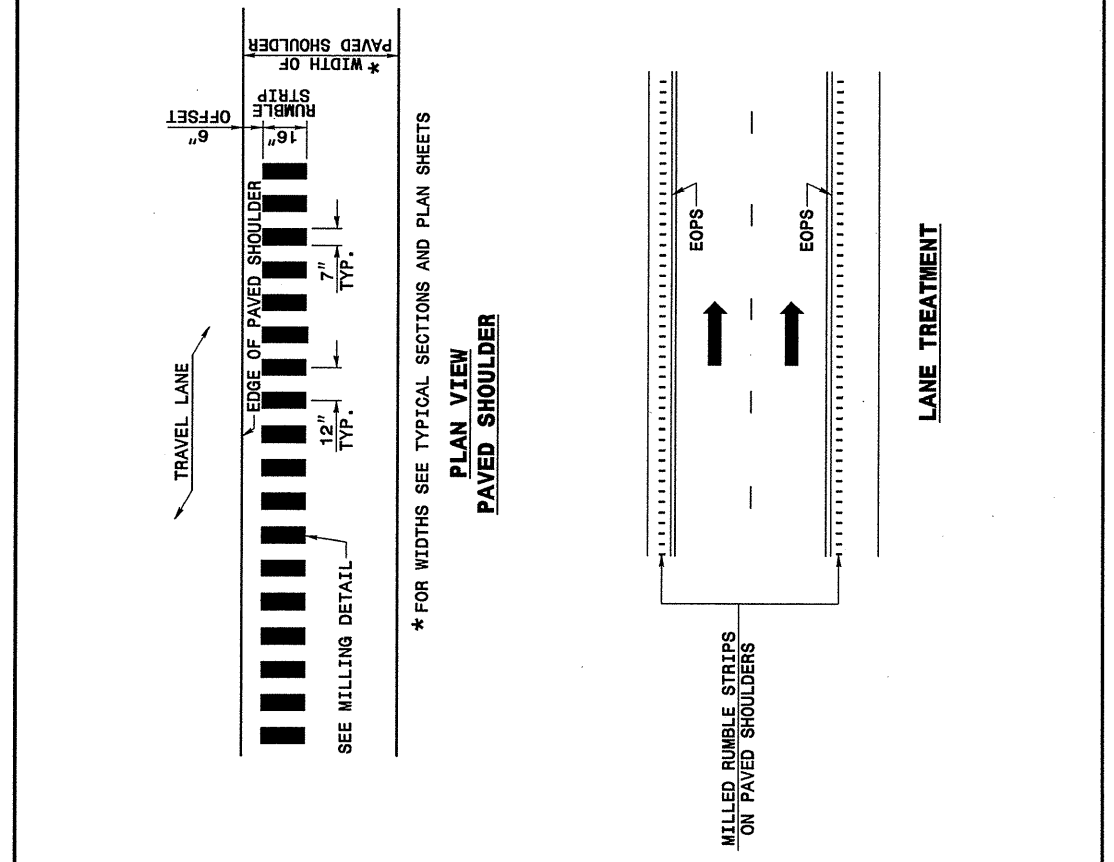
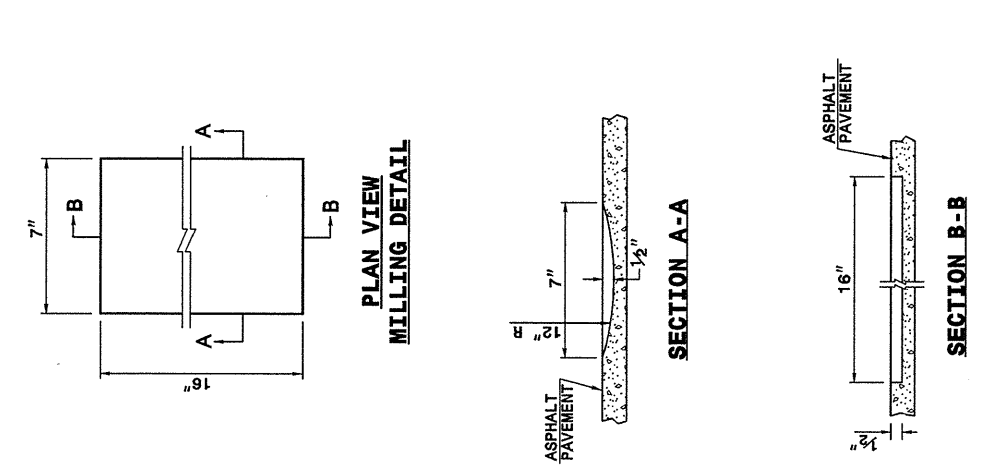
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pseymore AT WZTCCC

<p>APPROVED: _____ DATE: _____</p> <p align="center">SEAL</p>	<p>DETAIL DRAWING FOR ADVANCED WORK ZONE WARNING SIGN DESIGNS</p>	<p>SCALE: NONE DATE: 0803 DWG. BY: DESIGN BY: REVIEWED BY:</p>		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <td>0404</td> <td></td> </tr> <tr> <td>1104</td> <td></td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	REVISIONS		0404		1104			
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STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
**ASPHALT SHOULDERS
MILLED RUMBLE STRIPS**

SHEET 1 OF 2
665D01



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

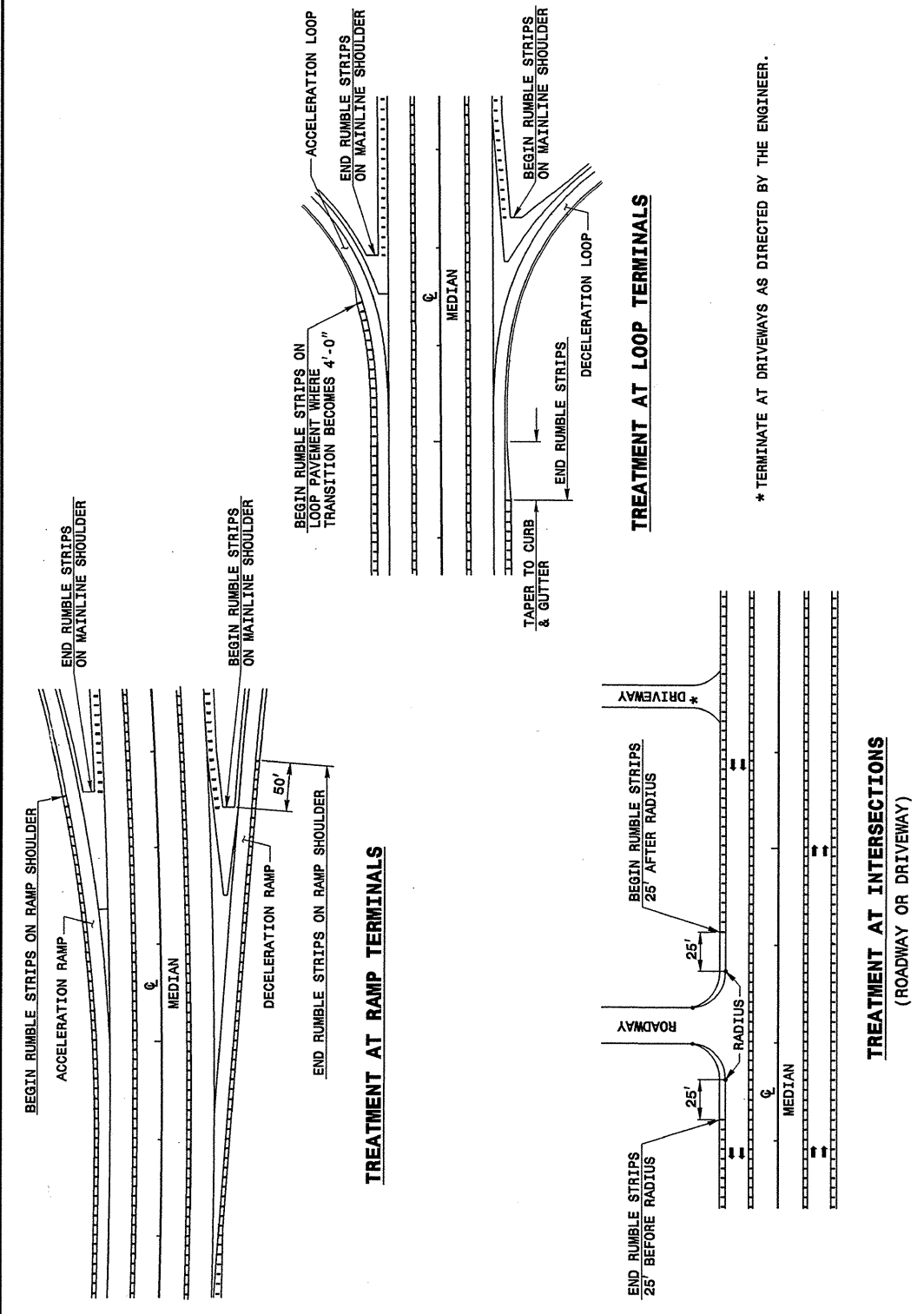
ENGLISH DETAIL DRAWING FOR
**ASPHALT SHOULDERS
MILLED RUMBLE STRIPS**

SHEET 1 OF 2
665D01

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

ENGLISH DETAIL DRAWING FOR
**ASPHALT SHOULDERS
MILLED RUMBLE STRIPS**

SHEET 2 OF 2
665D01



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

ENGLISH DETAIL DRAWING FOR
**ASPHALT SHOULDERS
MILLED RUMBLE STRIPS**

SHEET 2 OF 2
665D01

PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: 2002 STANDARDS DATE: 01-15-02
MODIFIED BY: E.E. WARD DATE: 09-16-04
CHECKED BY: DATE:
FILE SPEC.: stds/02stdstodetails/english/665d01.dgn

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