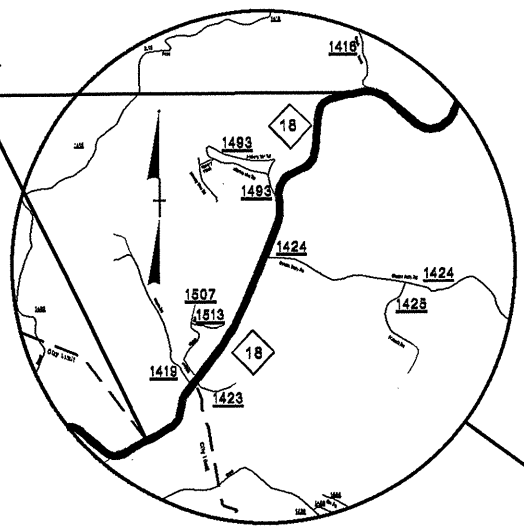
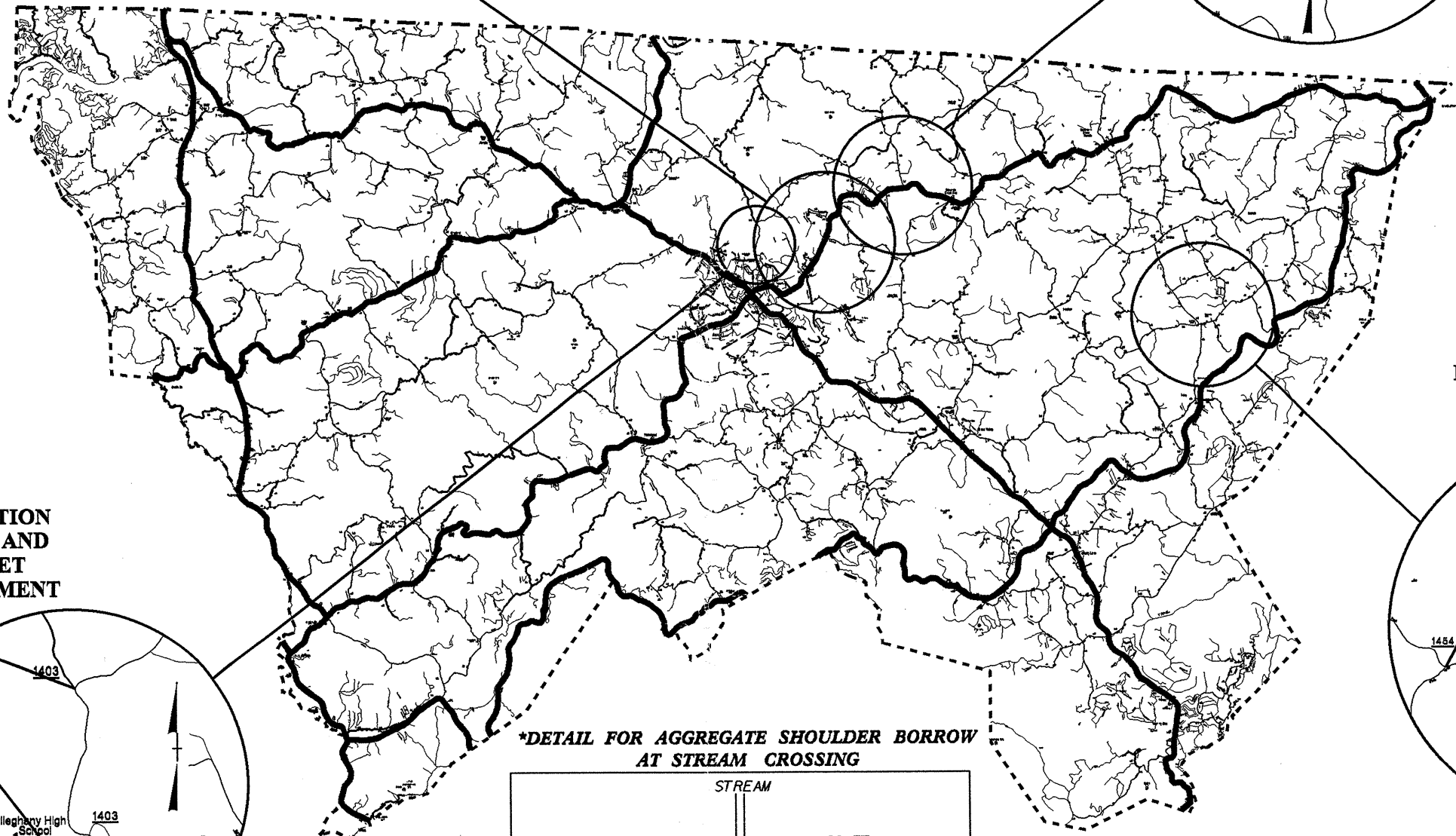
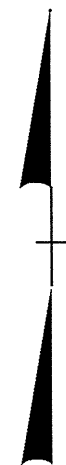
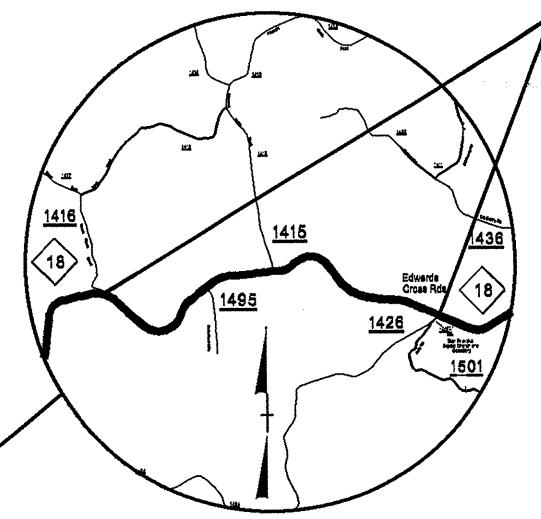


MAP #1 NC 18
FROM SPARTA NORTHERN
CITY LIMITS TO SR 1416
RESURFACE STATIONS
0+00 - 115+90



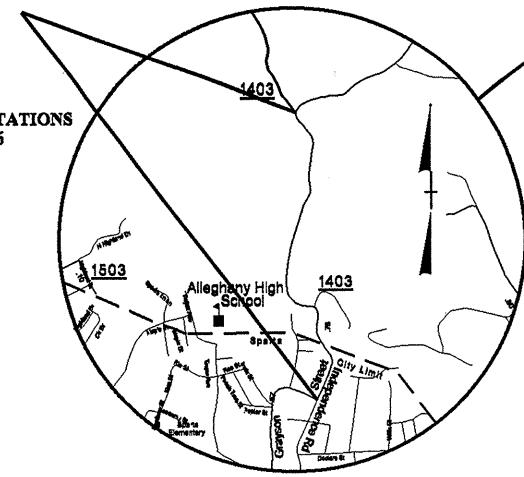
STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
ALLEGHANY COUNTY

MAP #2 NC 18
FROM SR 1416 TO SR 1426
RESURFACE STATIONS
115+90 - 218+90

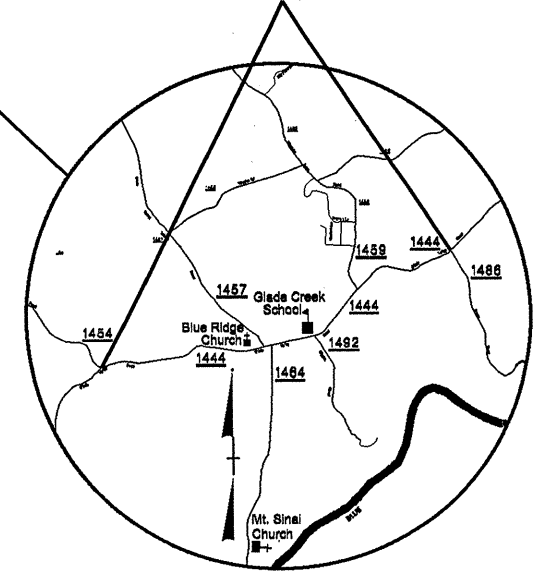


MAP #3 SR 1403
FROM THE INTERSECTION
OF GRAYSON STREET AND
INDEPENDENCE STREET
TO THE END OF PAVEMENT

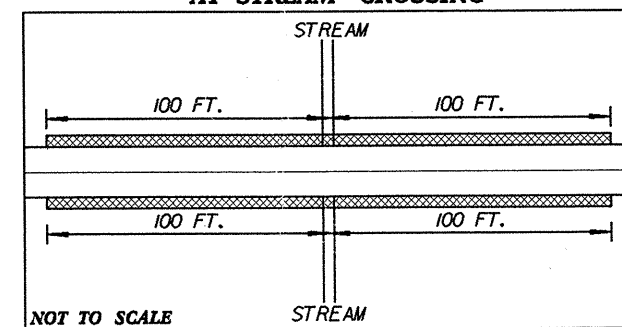
RESURFACE STATIONS
0+00 - 62+06



MAP #4 SR 1444
FROM SR 1486 TO SR 1454



***DETAIL FOR AGGREGATE SHOULDER BORROW AT STREAM CROSSING**



NOT TO SCALE

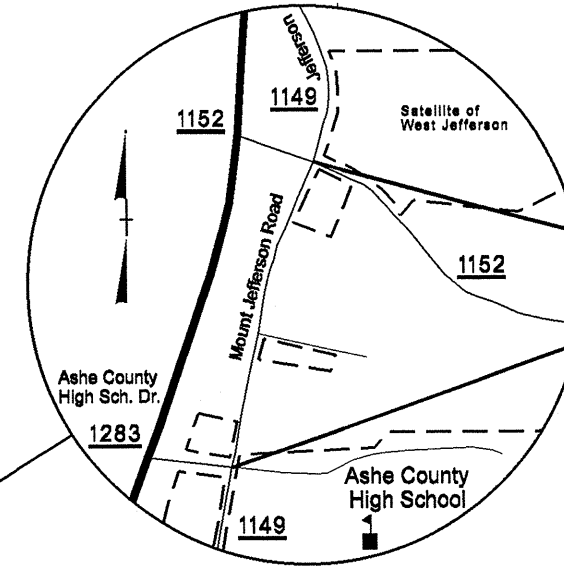
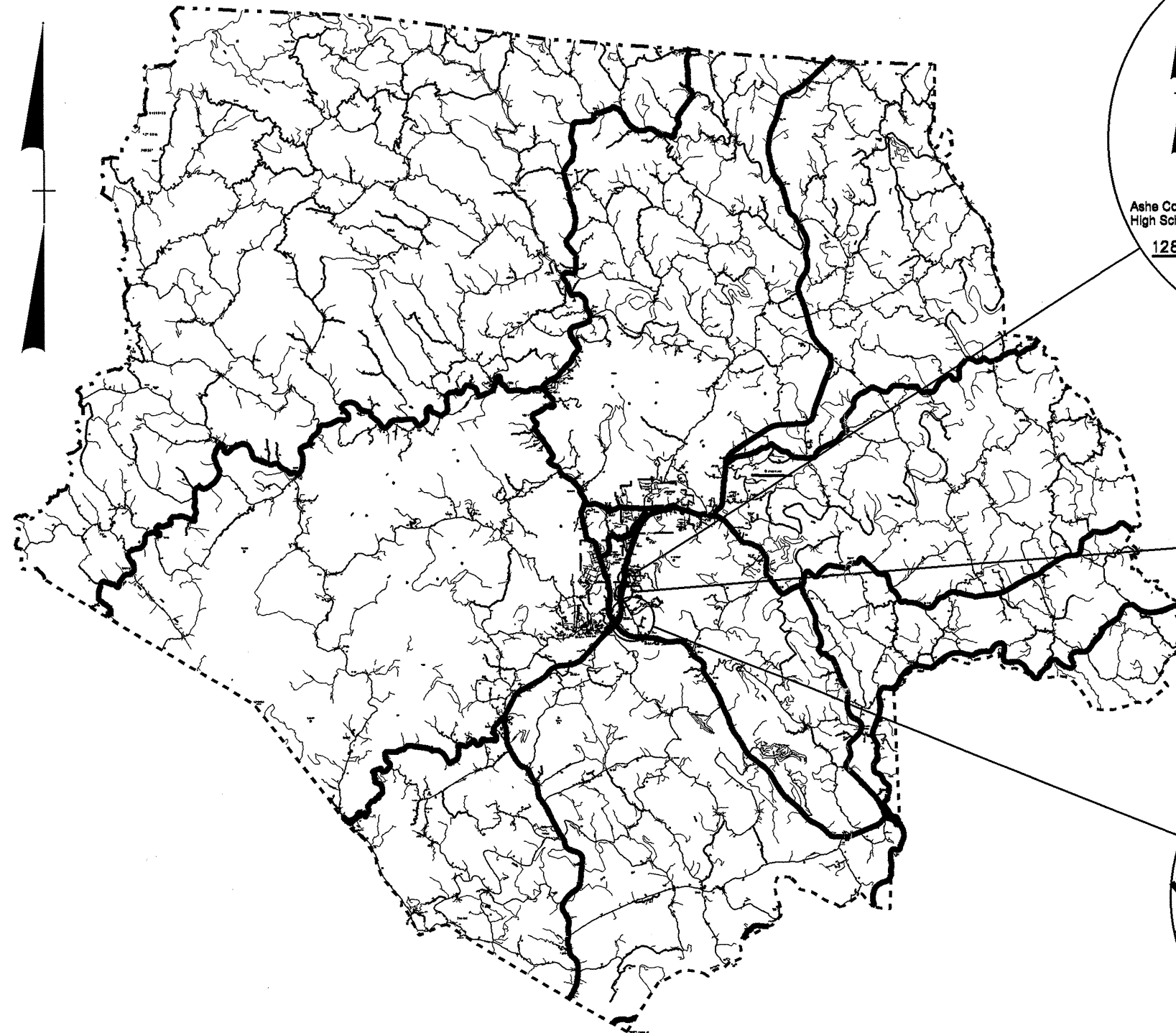
HATCHED AREA SHOWS PLACEMENT OF AGGREGATE SHOULDER BORROW

- NOTE: AGGREGATE SHOULDER BORROW TO BE PLACED**
- * MAP #1 APPROX. STATION 19+70 400' (SEE DETAIL)
 - * MAP #1 APPROX. STATION 56+16 400' (SEE DETAIL)
 - * MAP #2 APPROX. STATION 119+75 400' (SEE DETAIL)
 - * MAP #2 APPROX. STATION 167+36 400' (SEE DETAIL)
 - * MAP #3 APPROX. STATION 47+74 400' (SEE DETAIL)

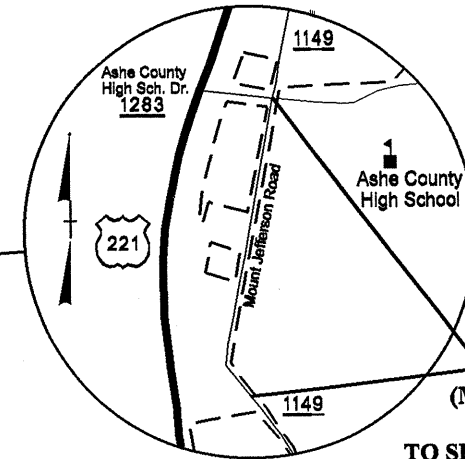
B.17/99
 SYSTEMS
 DESIGN
 CONSULTANTS
 INC.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

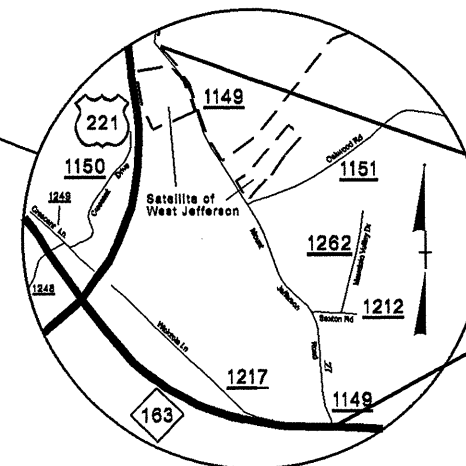
ASHE COUNTY



**MAP #11 SR 1149
(MOUNT JEFFERSON ROAD)
FROM SR 1283 (HIGH SCHOOL ACCESS)
TO 1152 (MOUNT JEFFERSON STATE PARK)**



**MAP #10 SR 1149
(MOUNT JEFFERSON ROAD)
FROM MILEPOST 92
TO SR 1283 (HIGH SCHOOL ACCESS)**



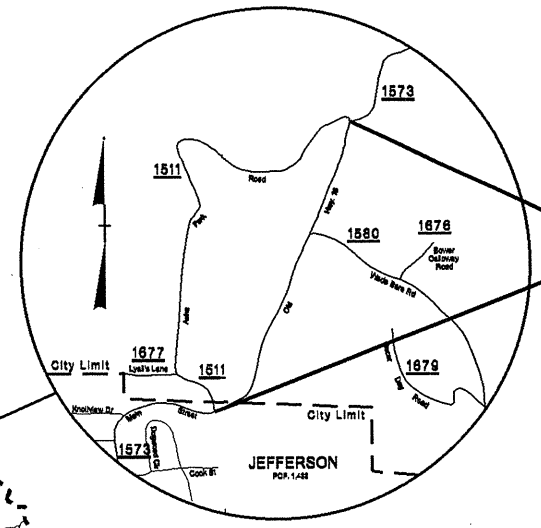
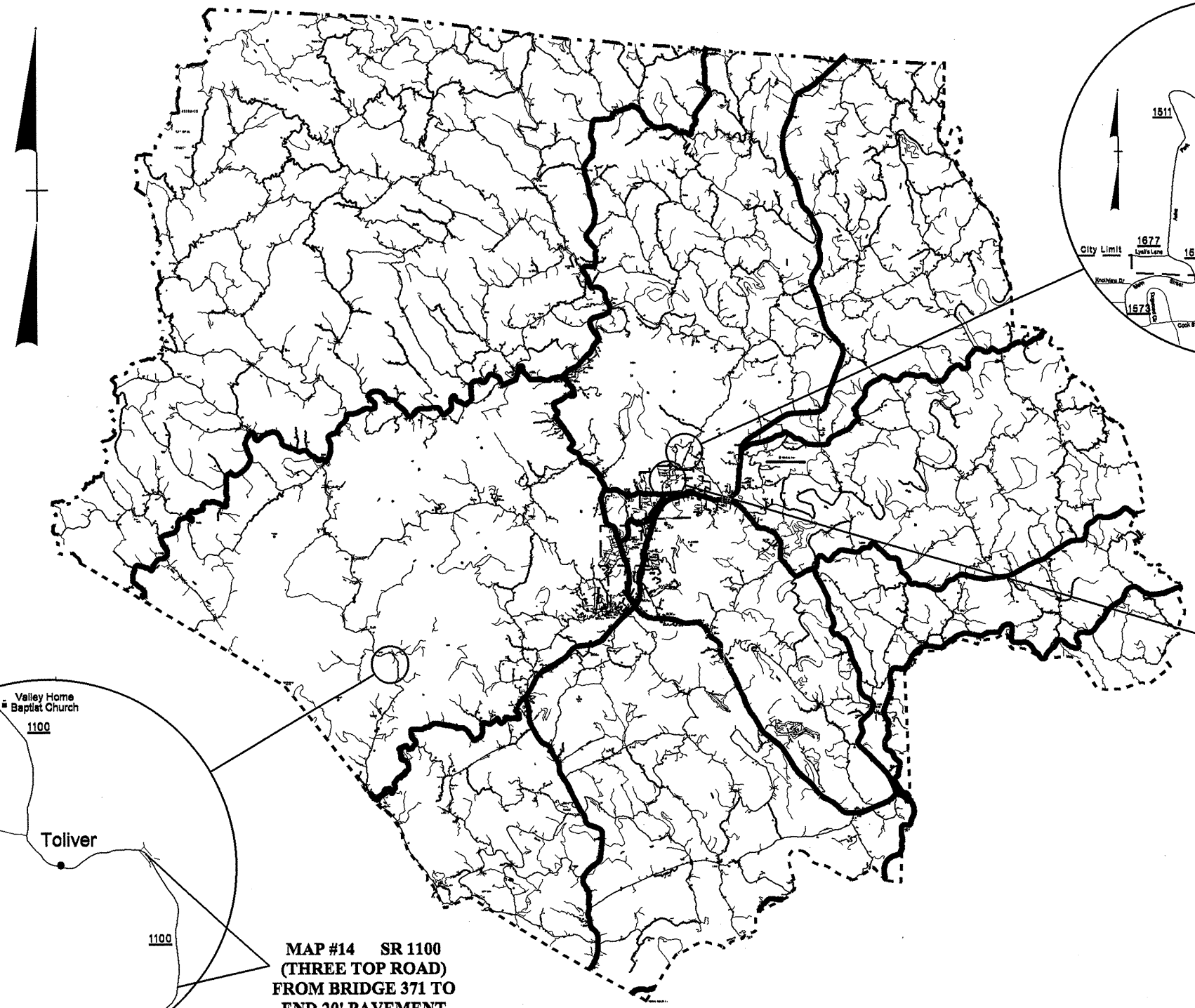
**MAP #9 SR 1149
(MOUNT JEFFERSON ROAD)
FROM NC 163 TO MILEPOST 92**

8/17/99

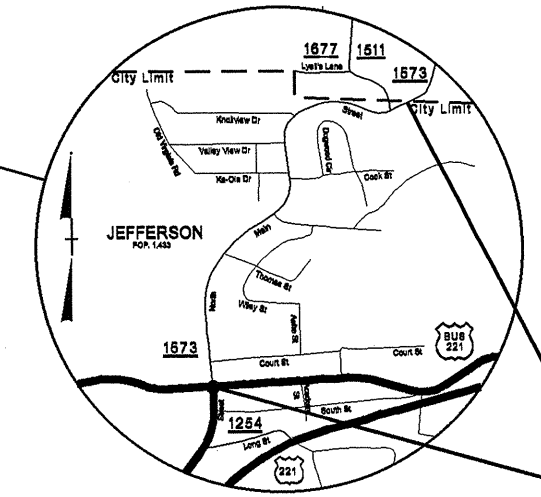
*****SYSTIME*****
*****DGN*****
*****PLAN*****

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

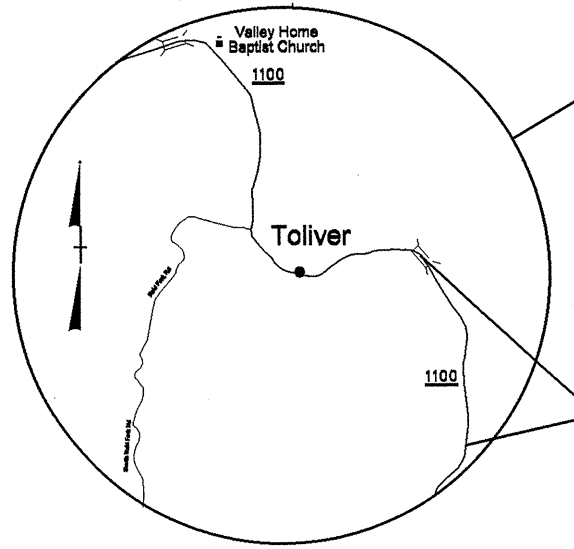
ASHE COUNTY



**MAP #13 SR 1511
(ASHE PARK ROAD)
FROM SR 1573 (N. OVERPASS ROAD)
TO 1573 (N. OVERPASS ROAD)**

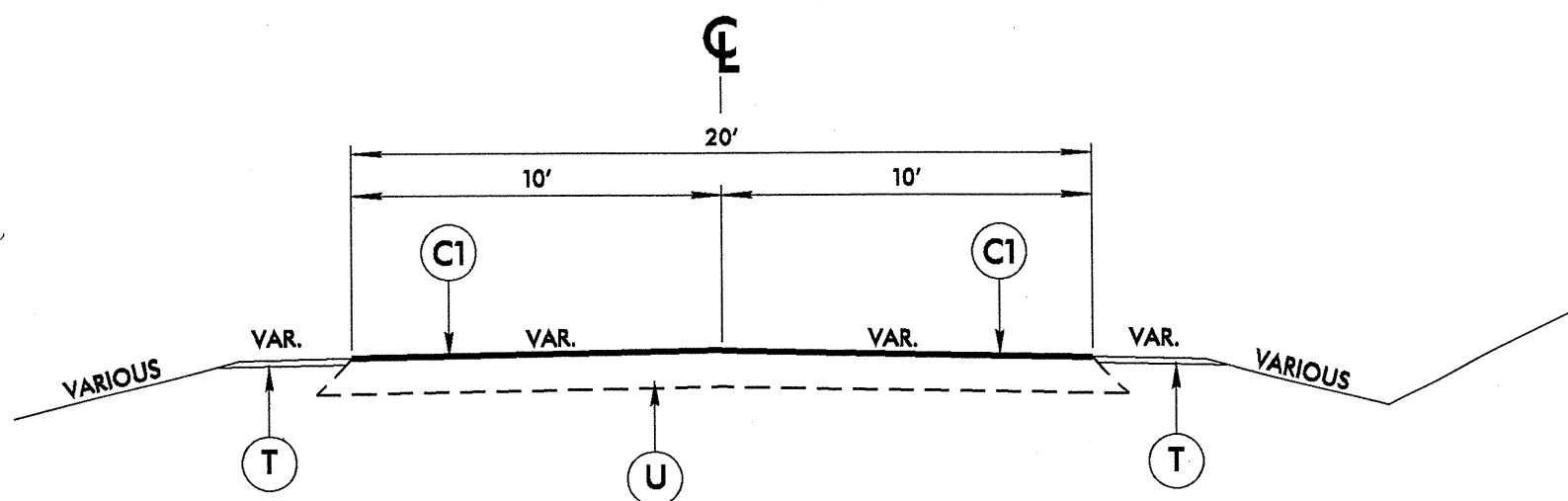


**MAP #12 SR 1573
(N. OVERPASS ROAD)
FROM NC 88 TO
JEFFERSON CITY LIMITS**



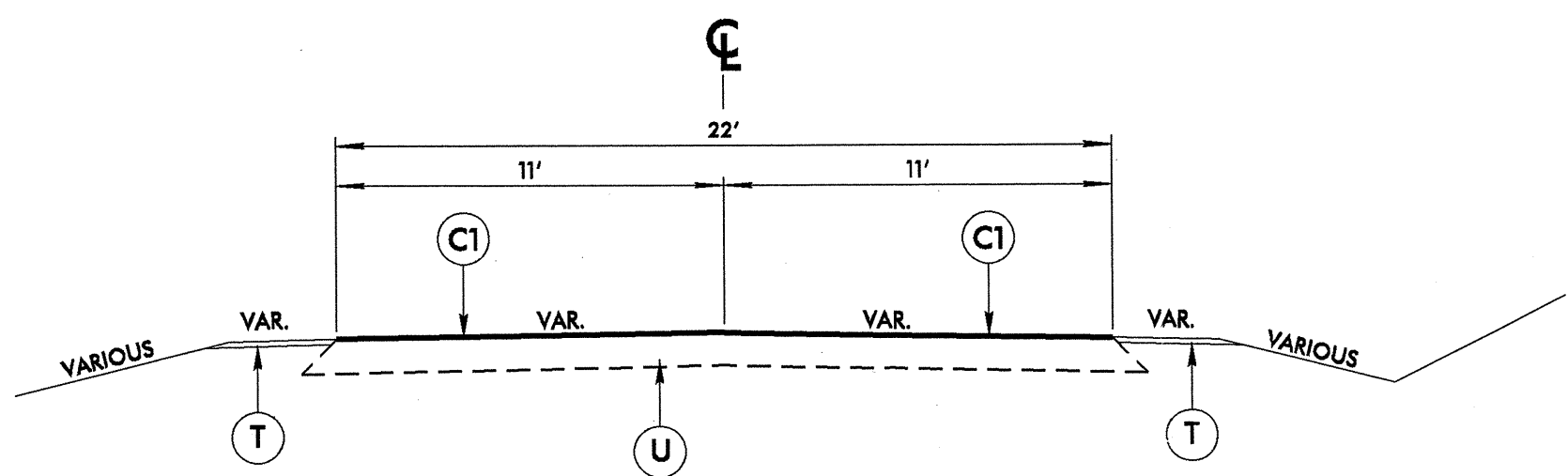
**MAP #14 SR 1100
(THREE TOP ROAD)
FROM BRIDGE 371 TO
END 20' PAVEMENT**

8/17/99
SYSTEMS DIVISION
PLANNING SECTION



TYPICAL SECTION NO. 2

- MAP 3 - SR 1403 FROM THE INTERSECTION OF GRAYSON STREET AND INDEPENDENCE STREET TO THE END OF PAVEMENT
- MAP 4 - SR 1444 FROM SR 1486 TO SR 1454
- MAP 9 - SR 1149 FROM NC 163 TO MILEPOST 92
- MAP 14 - SR 1100 FROM BRIDGE # 371 TO END 20' PAVEMENT



TYPICAL SECTION NO. 1

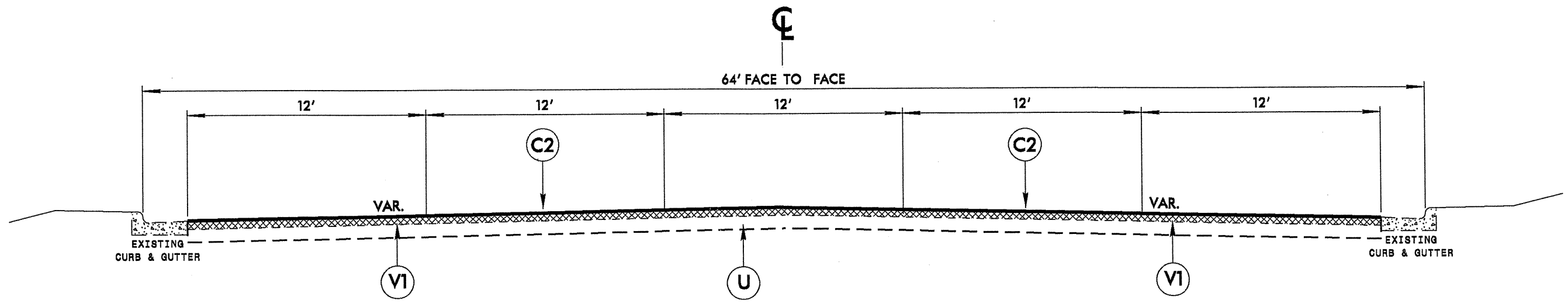
- MAP 1 - NC 18 FROM SPARTA NORTHERN CITY LIMITS TO SR 1416
- MAP 2 - NC 18 FROM SR 1416 TO SR 1426
- MAP 11 - SR 1149 FROM SR 1283 TO SR 1152

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C3	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1" - 4"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V3	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 2" - 3"

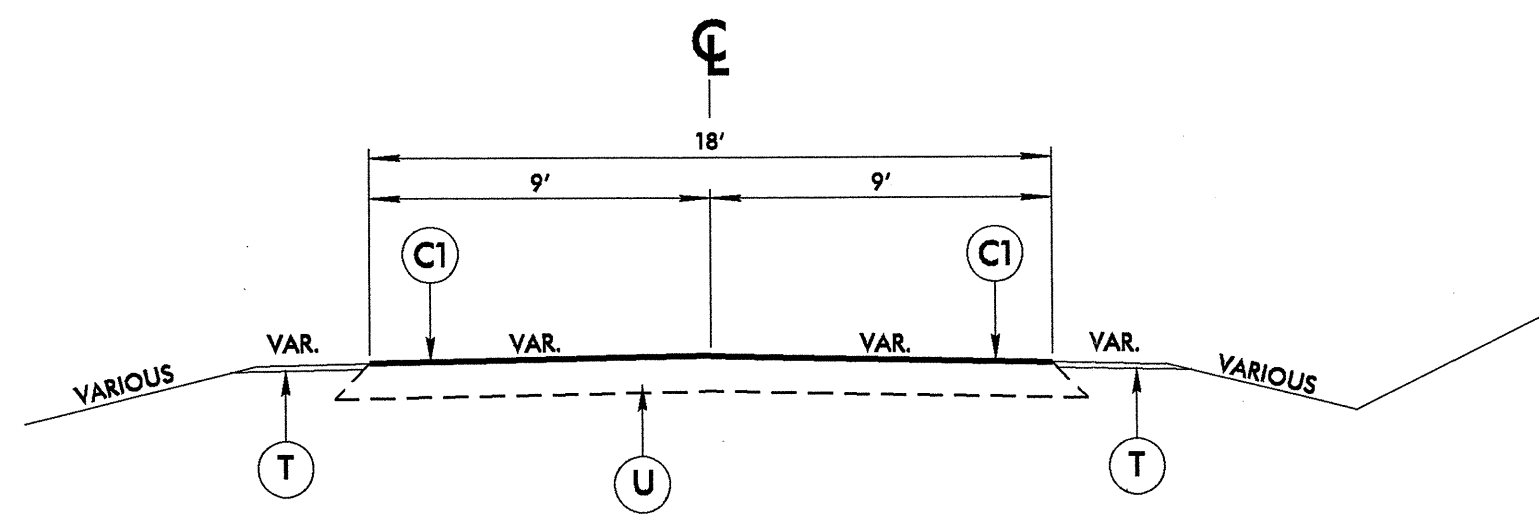
ALLEGHANY AND ASHE COUNTIES PRIMARY AND SECONDARY RESURFACING		
DIVISION II		
REVISIONS	INIT.	DATE
N.C. DEPARTMENT of TRANSPORTATION DIVISION of HIGHWAYS DIVISION ELEVEN		SCALE: N/A DATE: 12/2010 PREPARED BY: J. L. LAWS REVIEWED BY:

8/17/09

8/17/99



TYPICAL SECTION NO. 4
 MAP 6 - US 221 BUSINESS FROM HAMILTON STREET TO LONG STREET

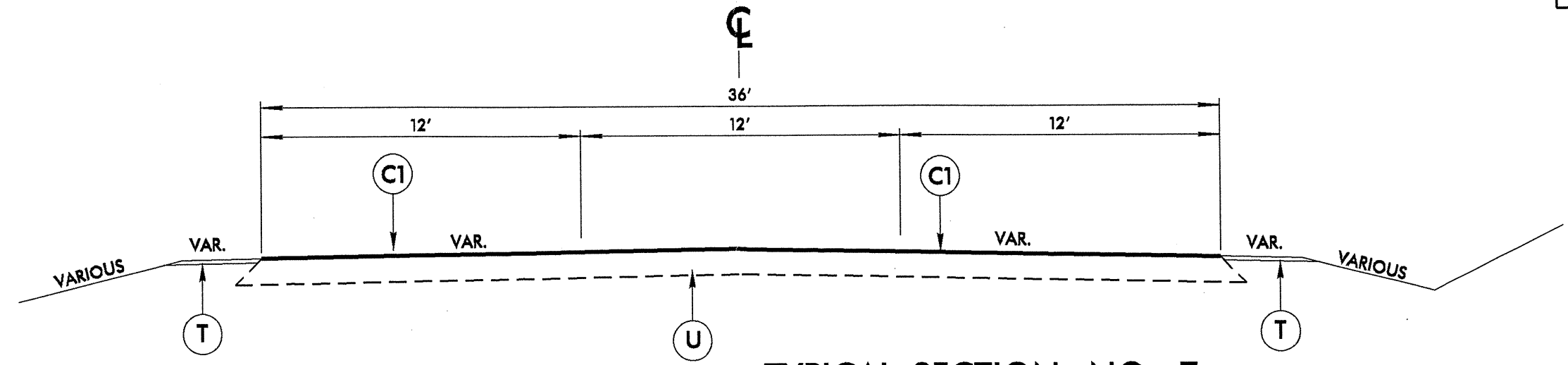


TYPICAL SECTION NO. 3
 MAP 5 - US 221 FROM ALLEGHANY COUNTY LINE TO PROJECT LIMITS OF B-1037
 MAP 12 - SR 1573 FROM NC 88 TO JEFFERSON NORTHERN CITY LIMITS
 MAP 13 - SR 1511 FROM SR 1573 TO SR 1573

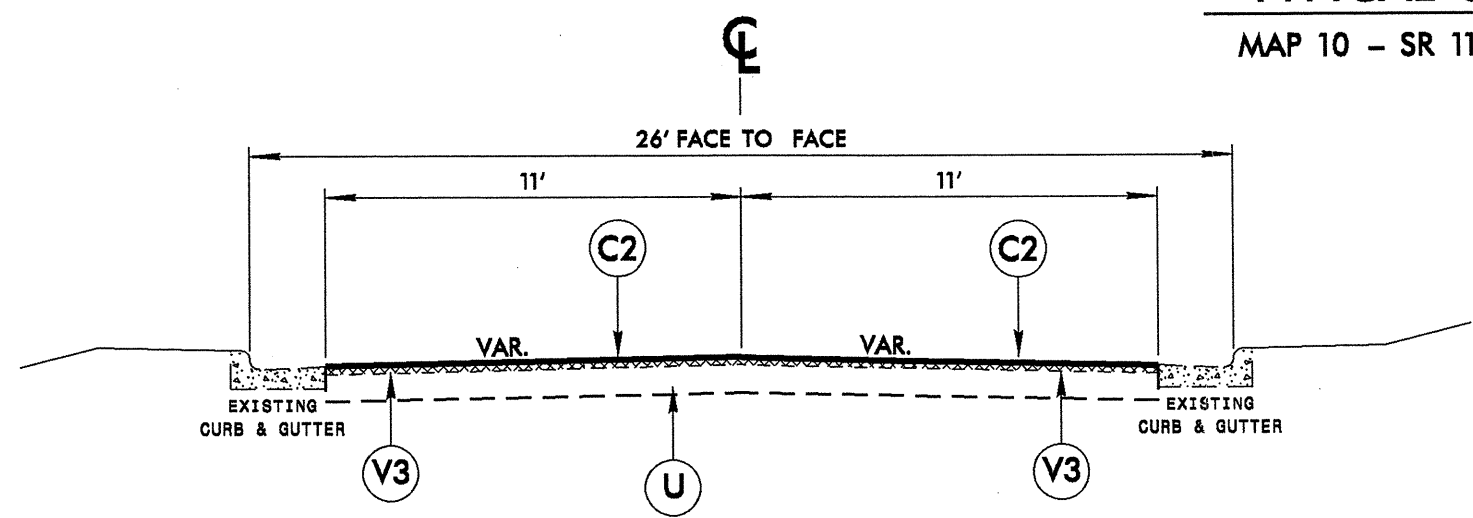
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C3	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1" - 4"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V3	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 2" - 3"

ALLEGHANY AND ASHE COUNTIES PRIMARY AND SECONDARY RESURFACING		
DIVISION II		
REVISIONS	INT.	DATE
N.C. DEPARTMENT of TRANSPORTATION DIVISION of HIGHWAYS DIVISION ELEVEN		SCALE: N/A DATE: 12/2010 PREPARED BY: J. L. LAWS REVIEWED BY: REVIEWED BY:

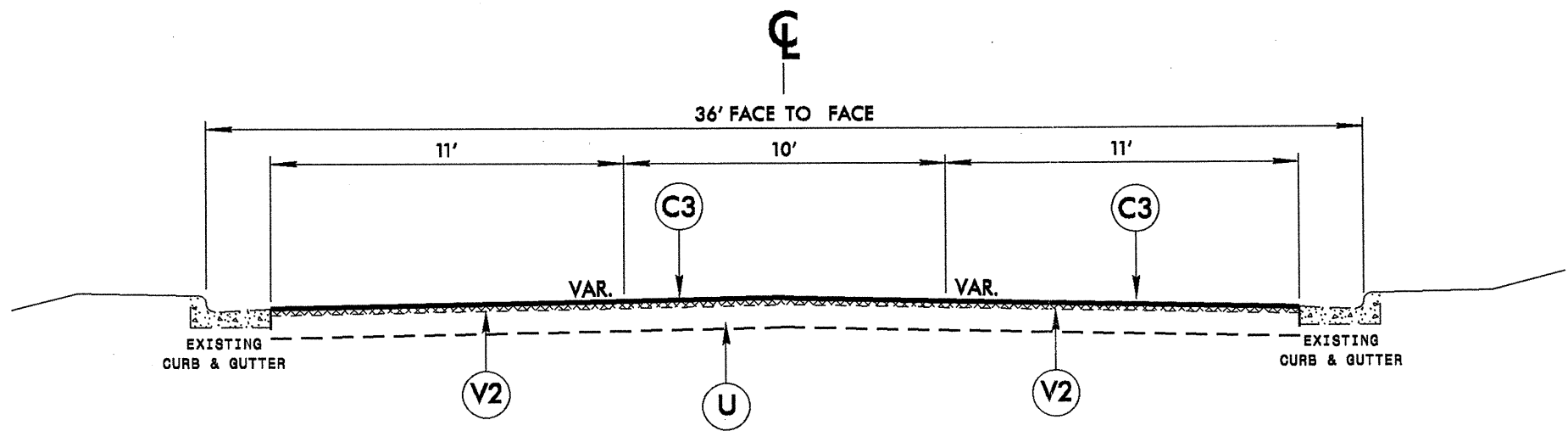
8/17/99



TYPICAL SECTION NO. 7
MAP 10 - SR 1149 MILEPOST 92 TO SR 1283



TYPICAL SECTION NO. 6
MAP 8 - NC 194 FROM US 221 BUSINESS TO 7TH STREET



TYPICAL SECTION NO. 5
MAP 7 - US 221 BUSINESS FROM 2ND STREET TO WIDTH CHANGE

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 166 LBS. PER SQ. YD.
C2	PROP. APPROX. 2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
C3	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 166 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1" - 4"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1 1/2"
V3	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 2" - 3"

ALLEGHANY AND ASHE COUNTIES PRIMARY AND SECONDARY RESURFACING		
DIVISION II		
REVISIONS	INIT.	DATE
N.C. DEPARTMENT of TRANSPORTATION DIVISION of HIGHWAYS DIVISION ELEVEN		SCALE: N/A DATE: 12/2010 PREPARED BY: J. L. LAWS REVIEWED BY:

PROJECT NO.	SHEET NO.	TOTAL NO.
11CR.10031.18, 11CR.20031.18 11CR.10051.18, ETC.	9	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	BORROW CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	1 1/2" MILLING SY	1" TO 4" MILLING SY	2" TO 3" MILLING SY	INCIDENTAL MILLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, SF9.5A TONS	PG 64-22 PLANT MIX TONS	ADJ. OF CATCH BASIN EA	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	SEED & MULCHING AC	INDUCTIVE LOOP LF
11CR.10031.18	Alleghany	1	NC 18	FROM SPARTA NCL TO SR 1416	1	NO	2.2	22	660	50	4.40						2,500	163				2.70	
TOTAL FOR MAP NO. 1							2.2		660	50	4.40						2,500	163				2.70	
		2	NC 18	FROM SR 1416 TO SR 1426	1	NO	2	22	600	50	4.00						2,200	143				2.40	
TOTAL FOR MAP NO. 2							2		600	50	4.00						2,200	143				2.40	
TOTAL FOR PROJ NO. 11CR.10031.18							4.2		1,260	100	8.40						4,700	306				5.10	
11CR.20031.18	Alleghany	3	SR 1403	FROM THE INTERSECTION OF GRAYSON STREET AND INDEPENDENCE STREET TO THE END OF PAVEMENT	2	NO	1.1	20	330	50	2.20						1,100	71				1.30	
TOTAL FOR MAP NO. 3							1.1		330	50	2.20						1,100	71				1.30	
		4	SR 1444	FROM SR 1486 TO SR 1454	2	NO	2	20	600	50	4.00						2,050	133				2.40	
TOTAL FOR MAP NO. 4							2		600	50	4.00						2,050	133				2.40	
TOTAL FOR PROJ NO. 11CR.20031.18							3.1		930	100	6.20						3,150	204				3.70	
11CR.10051.18	Ashe	5	US 221	FROM ALLEGHANY CO. LINE TO PROJ. LIMITS B-1037	3	NO	2.02	18	606		4.04						3,525	229				2.40	
TOTAL FOR MAP NO. 5							2.02		606		4.04						3,525	229				2.40	
		6	US 221 BUS	HAMILTON STREET TO LONG STREET	4	NO	0.34	64					12,766			1,460		88	1	10	12		410
TOTAL FOR MAP NO. 6							0.34						12,766			1,460		88	1	10	12		410
		7	US 221 BUS	2ND STREET TO WIDTH CHANGE	5	NO	0.19	32				3,570				325		20	1	2			390
TOTAL FOR MAP NO. 7							0.19					3,570				325		20	1	2			390
		8	NC 194	US 221 BUS TO EAST 7TH STREET	6	NO	0.35	26						5,340		602		36	1	10	3		310
TOTAL FOR MAP NO. 8							0.35							5,340		602		36	1	10	3		310
TOTAL FOR PROJ NO. 11CR.10051.18							2.9		606		4.04	3,570	12,766	5,340		2,387	3,525	373	3	22	15	2.40	1,110
11CR.20051.18	Ashe	9	SR 1149	FROM NC 163 TO MILEPOST 92	2	NO	0.92	20	276		1.84						941	61				0.56	
TOTAL FOR MAP NO. 9							0.92		276		1.84						941	61				0.56	
		10	SR 1149	FROM MILEPOST 92 TO SR 1283	7	NO	0.37	36	111		0.74				50		647	42		1		0.45	260
TOTAL FOR MAP NO. 10							0.37		111		0.74				50		647	42		1		0.45	260
		11	SR 1149	FROM SR 1283 TO SR 1152	1	NO	0.25	22	75		0.50						299	19				0.30	340
TOTAL FOR MAP NO. 11							0.25		75		0.50						299	19				0.30	340
		12	SR 1573	FROM NC 88 TO JEFFERSON NCL	3	NO	0.91	18									798	52		6			190
TOTAL FOR MAP NO. 12							0.91										798	52		6			190
		13	SR 1511	FROM SR 1573 TO SR 1573	3	NO	1.15	18	345		2.30						1,009	66				1.40	
TOTAL FOR MAP NO. 13							1.15		345		2.30						1,009	66				1.40	
		14	SR 1100	FROM BRIDGE #371 TO END 20' PAVEMENT	2	NO	1.27	20	381		2.54						2,075	135				1.55	
TOTAL FOR MAP NO. 14							1.27		381		2.54						2,075	135				1.55	
TOTAL FOR PROJ NO. 11CR.20051.18							4.87		1,188		7.92				50		5,769	375		7		4.26	790
GRAND TOTAL							15.07		3,984	200	26.56	3,570	12,766	5,340	50	2,387	17,144	1,258	3	29	15	15.46	1,900

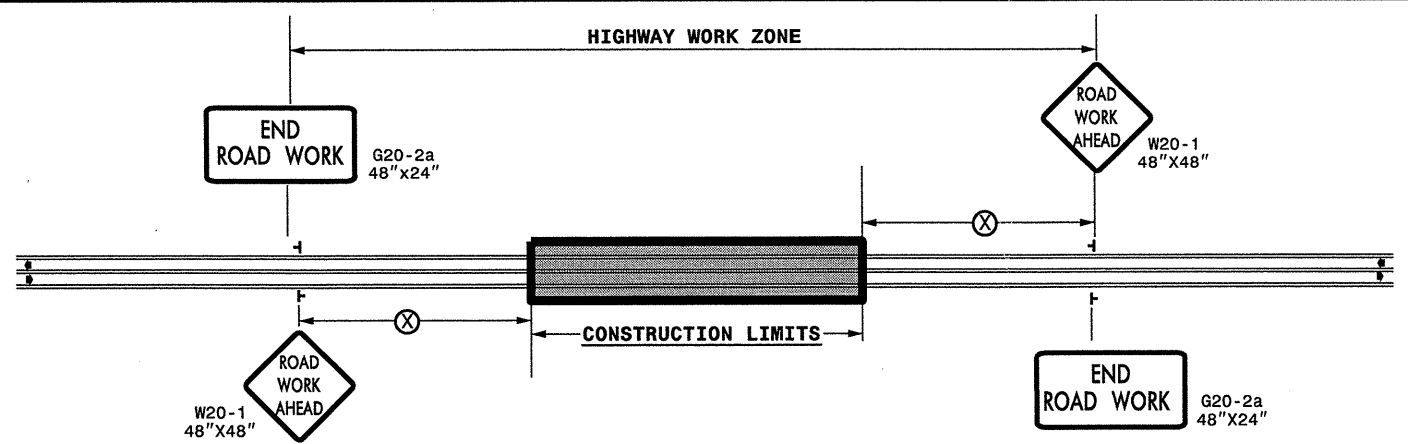
PROJECT NO.	SHEET NO.	TOTAL NO.
11CR.10031.18, 11CR.20031.18 11CR.10051.18, ETC.	10	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4810000000-E		4820000000-E	4835000000-E	4840000000-N		4845000000-N				4905000000-N	5255000000-N
					4" WHITE PAINT LF	4" YELLOW PAINT LF	8" YELLOW PAINT LF	24" WHITE PAINT LF	PAINT MSG SCHOOL EA	PAINT MSG ONLY EA	PAINT LT ARROW EA	PAINT STR & LT ARROW EA	PAINT STR & RT ARROW EA	PAINT RT ARROW EA	SNOW PLOWABLE MARKERS EA	PORTABLE LIGHTING LS
11CR.10031.18	Alleghany	1	NC 18	FROM SPARTA NCL TO SR 1416	46,464	46,464									175	
TOTAL FOR MAP NO. 1					46,464	46,464									175	
		2	NC 18	FROM SR 1416 TO SR 1426	42,240	42,240									160	
TOTAL FOR MAP NO. 2					42,240	42,240									160	
TOTAL FOR PROJ NO. 11CR.10031.18					88,704	88,704									335	
					177,408											
11CR.20031.18	Alleghany	3	SR 1403	FROM THE INTERSECTION OF GRAYSON STREET AND INDEPENDENCE STREET TO THE END OF PAVEMENT	23,232	23,232										
TOTAL FOR MAP NO. 3					23,232	23,232										
		4	SR 1444	FROM SR 1486 TO SR 1454	42,240	42,240		160	12							
TOTAL FOR MAP NO. 4					42,240	42,240		160	12							
TOTAL FOR PROJ NO. 11CR.20031.18					65,472	65,472		160	12							
					130,944				12							
11CR.10051.18	Ashe	5	US 221	FROM ALLEGHANY CO. LINE TO PROJ. LIMITS B-1037	42,662	42,662									267	
TOTAL FOR MAP NO. 5					42,662	42,662									267	
		6	US 221 BUS	HAMILTON STREET TO LONG STREET	8,200	7,181	125	240		4	3	1	3	2	90	LS
TOTAL FOR MAP NO. 6					8,200	7,181	125	240		4	3	1	3	2	90	LS
		7	US 221 BUS	2ND STREET TO WIDTH CHANGE	200	4,020		24					1		50	LS
TOTAL FOR MAP NO. 7					200	4,020		24					1		50	LS
		8	NC 194	US 221 BUS TO EAST 7TH STREET	200	7,392		24					1			LS
TOTAL FOR MAP NO. 8					200	7,392		24					1			LS
TOTAL FOR PROJ NO. 11CR.10051.18					51,262	61,255	125	288		4	4	13	1	5	407	LS
					112,517				4		21					
11CR.20051.18	Ashe	9	SR 1149	FROM NC 163 TO MILEPOST 92	19,900	20,100	160									
TOTAL FOR MAP NO. 9					19,900	20,100	160									
		10	SR 1149	FROM MILEPOST 92 TO SR 1283	7,814	7,814		62	6							
TOTAL FOR MAP NO. 10					7,814	7,814		62	6							
		11	SR 1149	FROM SR 1283 TO SR 1152	5,280	5,280		74	6							
TOTAL FOR MAP NO. 11					5,280	5,280		74	6							
		12	SR 1573	FROM NC 88 TO JEFFERSON NCL	19,219	19,219		12							60	
TOTAL FOR MAP NO. 12					19,219	19,219		12							60	
		13	SR 1511	FROM SR 1573 TO SR 1573	24,288	24,288										
TOTAL FOR MAP NO. 13					24,288	24,288										
		14	SR 1100	FROM BRIDGE #371 TO END 20' PAVEMENT	26,822	26,822										
TOTAL FOR MAP NO. 14					26,822	26,822										
TOTAL FOR PROJ NO. 11CR.20051.18					103,323	103,523	160	148	12		23			4	60	
					206,846				12		27					
GRAND TOTAL					308,761	318,954	285	596	24	4	36	1	9	2	802	LS
					627,715				28		48					

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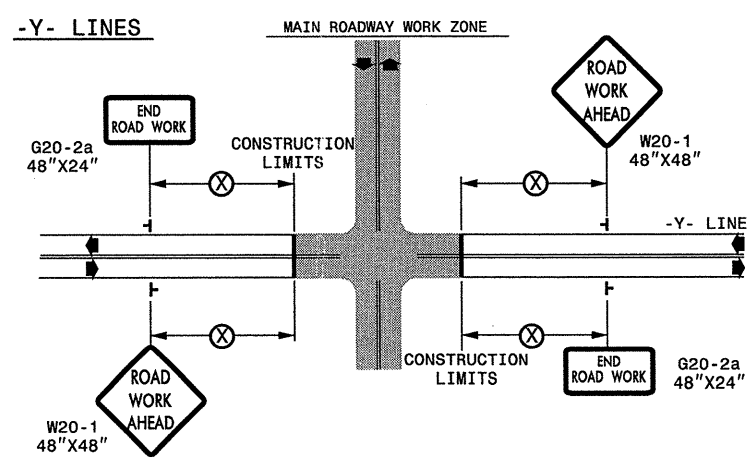
TWO-WAY UNDIVIDED ** (L-LINES)



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 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

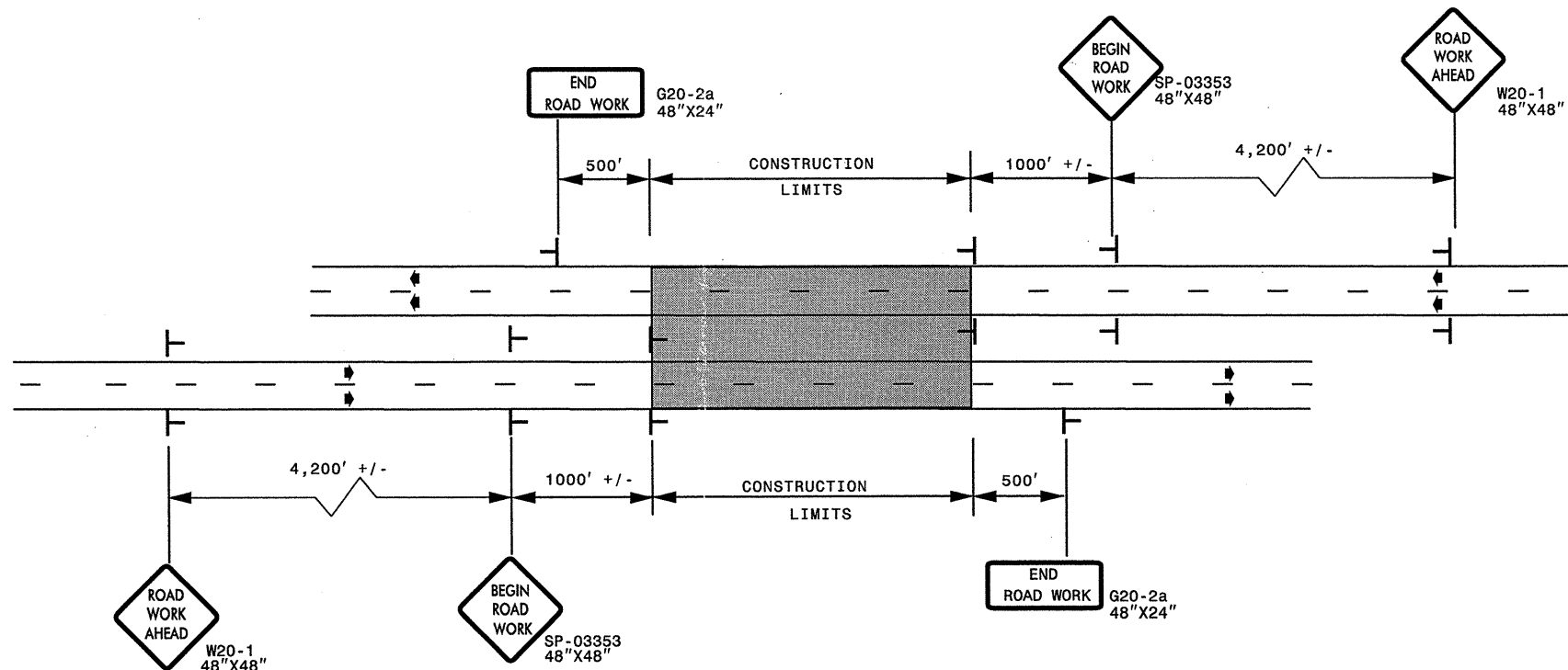
DETAIL DRAWING FOR
 TWO-WAY UNDIVIDED
 WORK ZONE WARNING SIGNS

APPROVED: _____ DATE: _____	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS		
SEAL 	SCALE: NONE		
	DATE: _____		REVISIONS
	DWG. BY: _____		7-98 10/01
	DESIGN BY: _____		10-98 03/04
REVIEWED BY: _____	01/01 11/04	CADD FILE	

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

PROJ. REFERENCE NO.	SHEET NO.
11CR.10031.18, 11CR.20031.18 11CR.10051.18, 11CR.20051.18	TCP-2

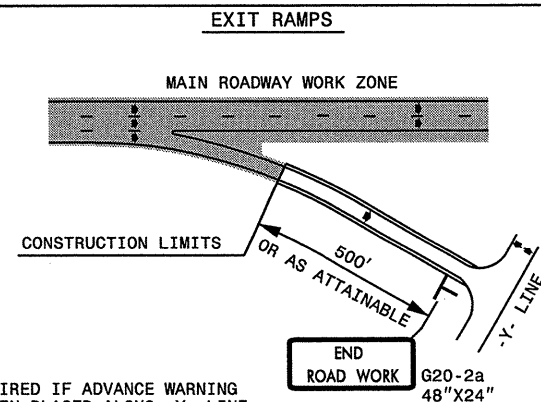
DETAIL A



LEGEND	
	STATIONARY SIGN
◆	DIRECTION OF TRAFFIC FLOW

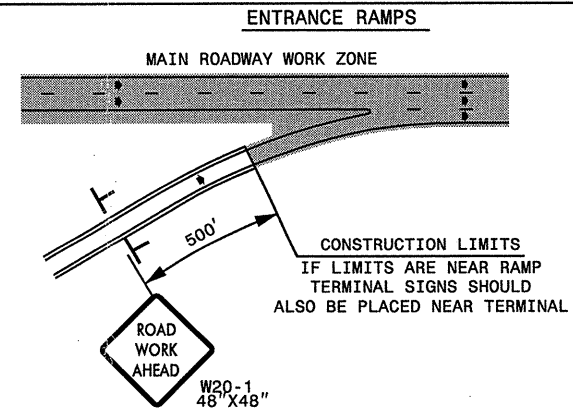
* USE THE "\$250 SPEEDING PENALTY" SIGN, SPEED LIMIT SIGN, AND ORANGE PANEL; ONLY WHEN A "\$250 SPEEDING PENALTY" ORDINANCE HAS BEEN ISSUED BY THE REGIONAL TRAFFIC ENGINEER.

DETAIL B

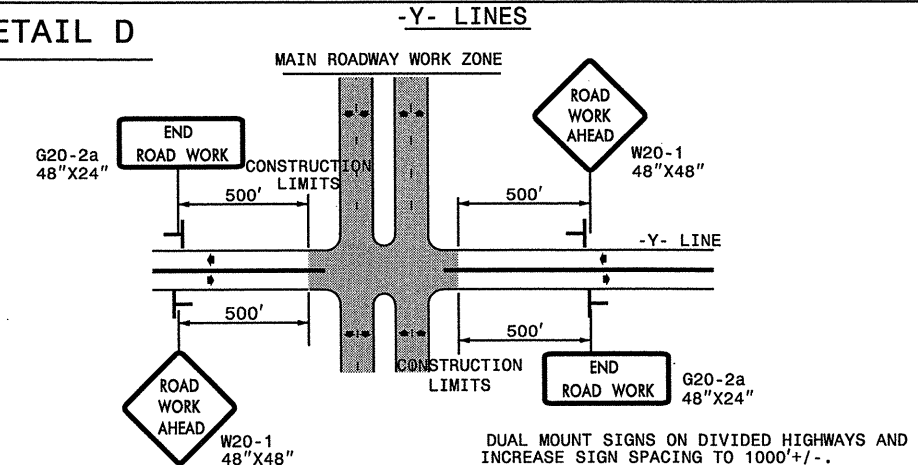


NOTE: SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

DETAIL C



DETAIL D



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: _____	ADVANCED WORK ZONE WARNING SIGNS FOR FREEWAYS (4 LANES OR GREATER)	
SEAL	SCALE: NONE		REVISIONS
	DATE: 8/03		03/04
	DWG. BY: JI		
	DESIGN BY: JI		
REVIEWED BY: _____		CADD	

23-DEC-2010 14:43 \\DOT\DFS\0070\GROUPOFS-WZTCCC\MAS Division\Share\Resurfacing\2010Resurfacing\2010Western\2010Div\202704A-D\ICR.10031.18x4_freeways_4lanes_or_greater_stationary.dgn

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RALEIGH, N.C.

11-08

ENGLISH DETAIL DRAWING FOR
INDUCTIVE DETECTION LOOPS

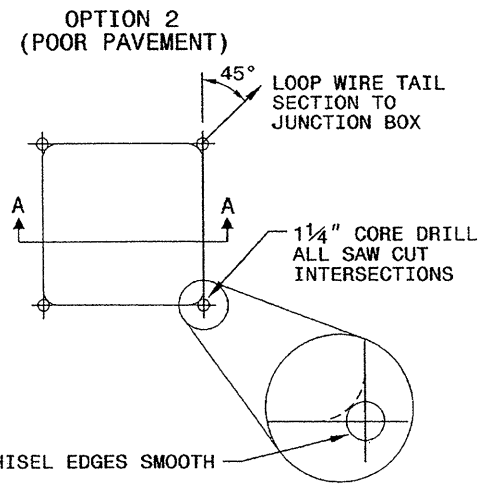
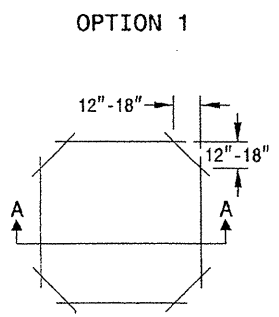
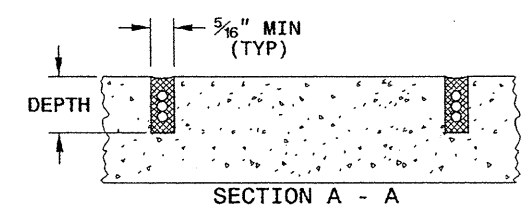
SHEET 1 OF 3
1725D01

CONVENTIONAL 4-SIDED LOOP

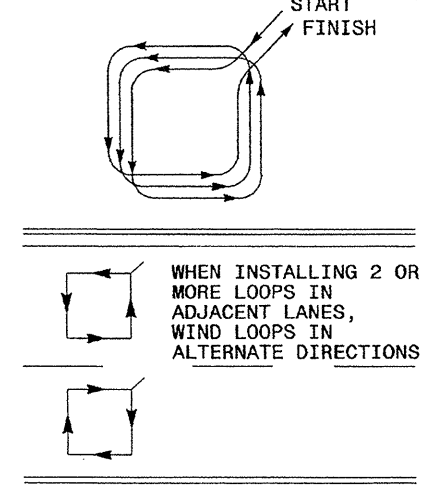
SAW CUT OPTIONS

SAW SLOT DEPTH CHART

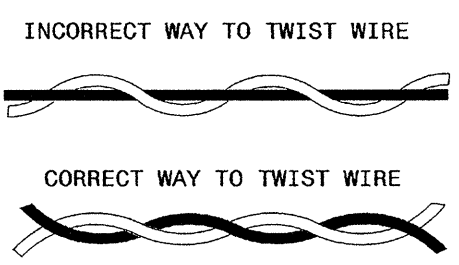
DEPTH (IN)	NO. OF WIRE TURNS					
	2	3	4	5	6	
CONCRETE	2.0	2.0	2.5	2.5	3.0	
ASPHALT	2.0	2.5	3.0	3.0	3.0	



LOOP WINDING METHOD



LOOP WIRE TWISTING METHOD

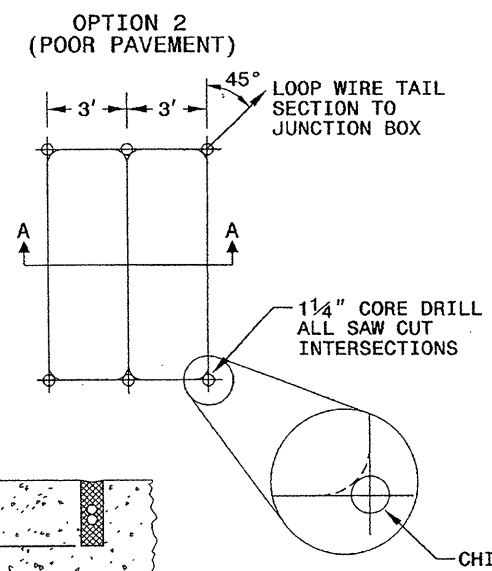
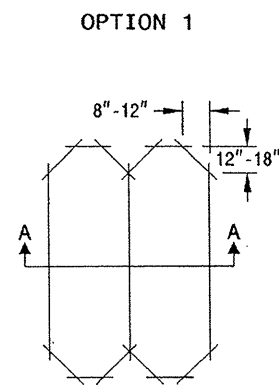


NOTES

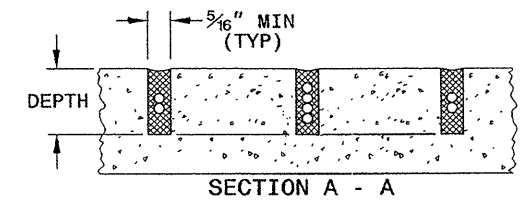
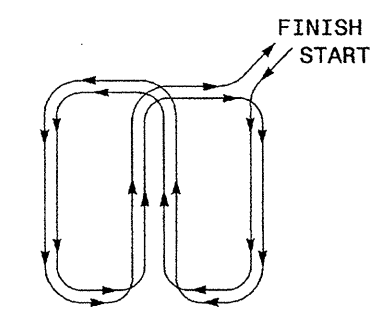
1. OVERLAP SAW CUTS AT CORNERS AND INTERSECTION POINTS TO ENSURE UNIFORM SAW SLOT DEPTH.
2. MAINTAIN 12" SPACING BETWEEN LOOP WIRE TAIL SECTIONS.
3. WIRE LOOPS CONNECTED TO THE SAME DETECTOR CHANNEL IN SERIES.
4. LOCATE LOOPS IN CENTER OF LANES UNLESS OTHERWISE SHOWN ON PLANS OR APPROVED BY ENGINEER.

QUADRUPOLE LOOP

SAW CUT OPTIONS



LOOP WINDING METHOD



DEPTH IS 2.5" FOR CONCRETE AND 3.0" FOR ASPHALT

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ENGLISH DETAIL DRAWING FOR
INDUCTIVE DETECTION LOOPS

SHEET 1 OF 3
1725D01

See Plate for Title

Prepared in the Offices of

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Garner, NC 27529

SEAL

SIGNATURE: *Michael J. Dean* DATE: 4/24/08

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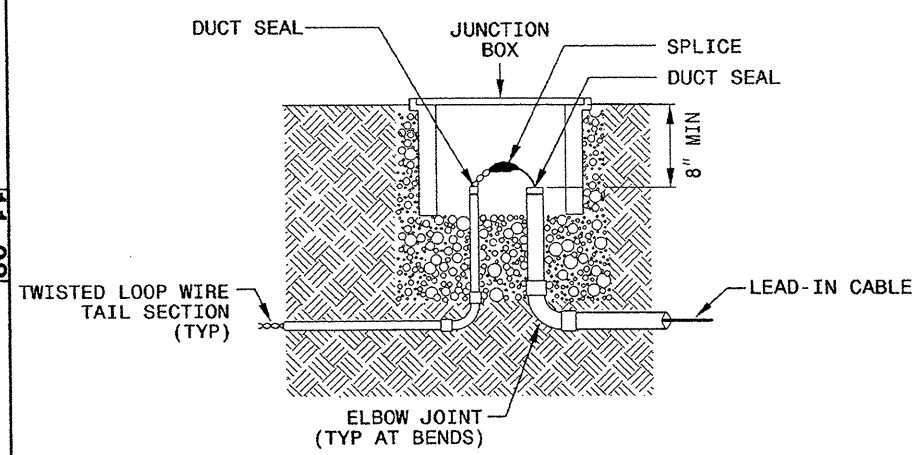
11-08

ENGLISH DETAIL DRAWING FOR
INDUCTIVE DETECTION LOOPS
LOOP WIRE DETAILS

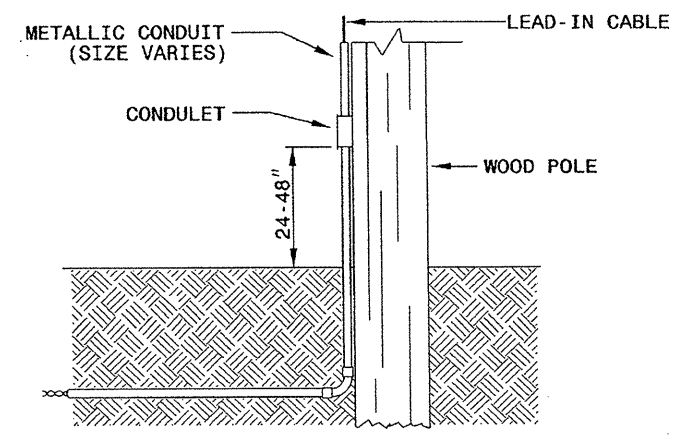
SHEET 2 OF 3
1725D01

LOOP WIRE SPLICE POINT DETAILS

LOOP WIRE AT JUNCTION BOX



LOOP WIRE AT POLE

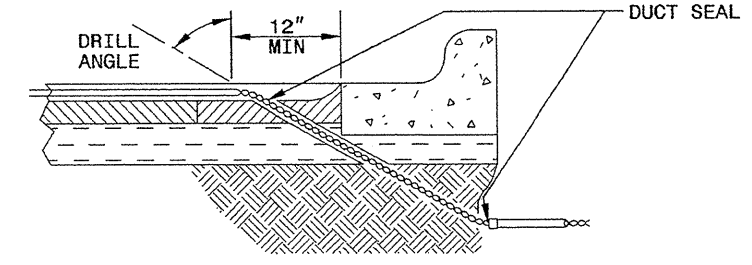


NOTE

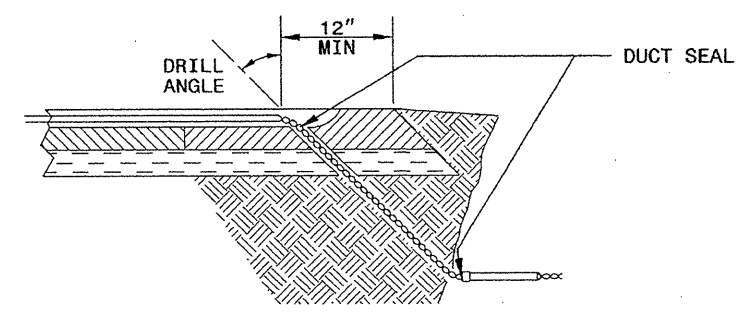
SPLICE ALL LOOP WIRE TAIL SECTIONS/LEAD-IN CABLE IN JUNCTION BOXES OR APPROVED CONDULETS.

LOOP WIRE PAVEMENT EDGE DETAILS

LOOP WIRE AT CURB & GUTTER SECTION



LOOP WIRE AT PAVEMENT SECTION



NOTES

1. DO NOT EXCAVATE UNDER CURB AND GUTTER SECTIONS FOR CONDUIT INSTALLATION.
2. TWIST LOOP WIRE TAIL SECTIONS FROM WHERE LOOP WIRE TAIL LEAVES SAW CUT TO JUNCTION BOX, INCLUDING THROUGH CONDUIT.
3. BEFORE SEALING LOOPS, INSTALL DUCT SEAL WHERE LOOP WIRE TAIL SECTION LEAVES SAW CUT IN PAVEMENT AND AT ENTRANCE OF CONDUIT TO JUNCTION BOX.

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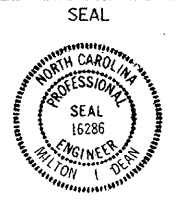
ENGLISH DETAIL DRAWING FOR
INDUCTIVE DETECTION LOOPS
LOOP WIRE DETAILS

SHEET 2 OF 3
1725D01

See Plate for Title



750 N. Greenfield Parkway
Garner, NC 27529



Milton L. Dean 11/24/08
SIGNATURE DATE

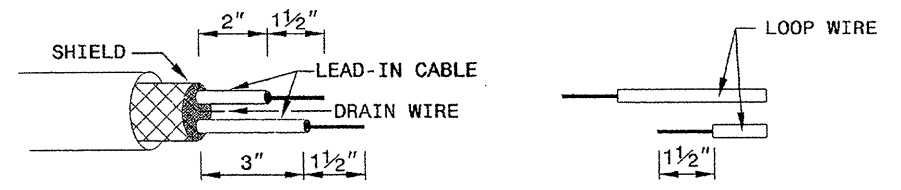
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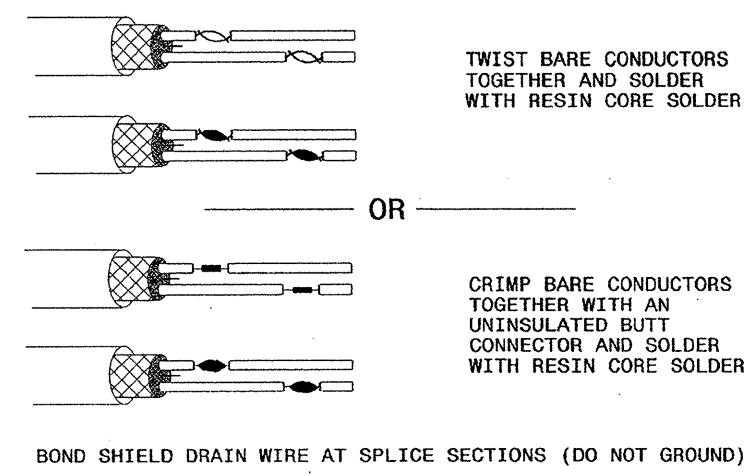
ENGLISH DETAIL DRAWING FOR
INDUCTIVE DETECTION LOOPS
 SPLICING FOR LEAD-IN CABLE AND LOOP WIRE

SHEET 3 OF 3
1725D01

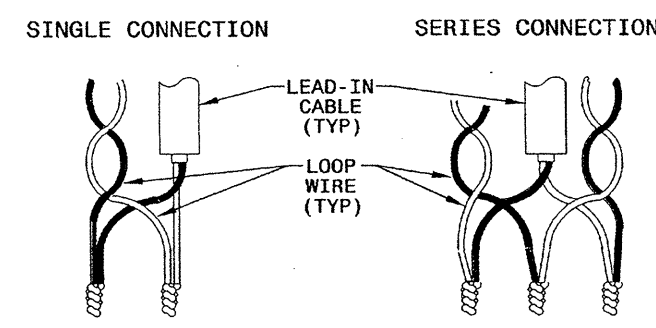
STEP 1. STRIP LOOP WIRE AND LEAD-IN CABLE



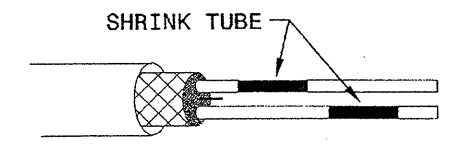
STEP 2. CONNECT AND SOLDER



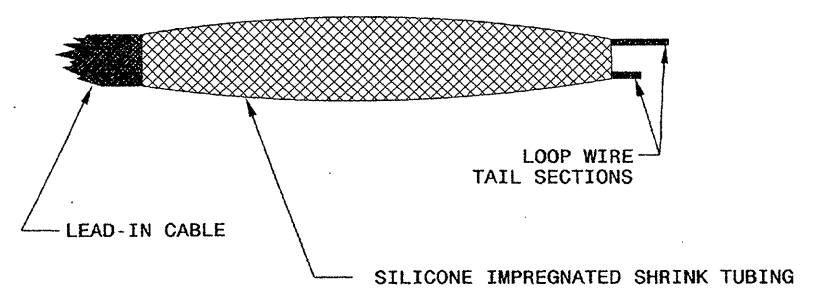
LOOP WIRE AND LEAD-IN CABLE CONNECTION DETAILS



STEP 3. INSULATE EACH SOLDER JOINT SEPARATELY



STEP 4. ENVIRONMENTALLY PROTECT SPLICE



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ENGLISH DETAIL DRAWING FOR
INDUCTIVE DETECTION LOOPS
 SPLICING FOR LEAD-IN CABLE AND LOOP WIRE

SHEET 3 OF 3
1725D01

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Milton I. Dean 11/24/08
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