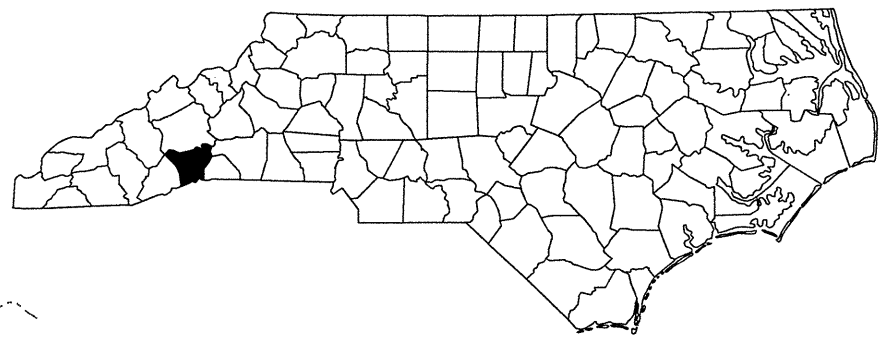
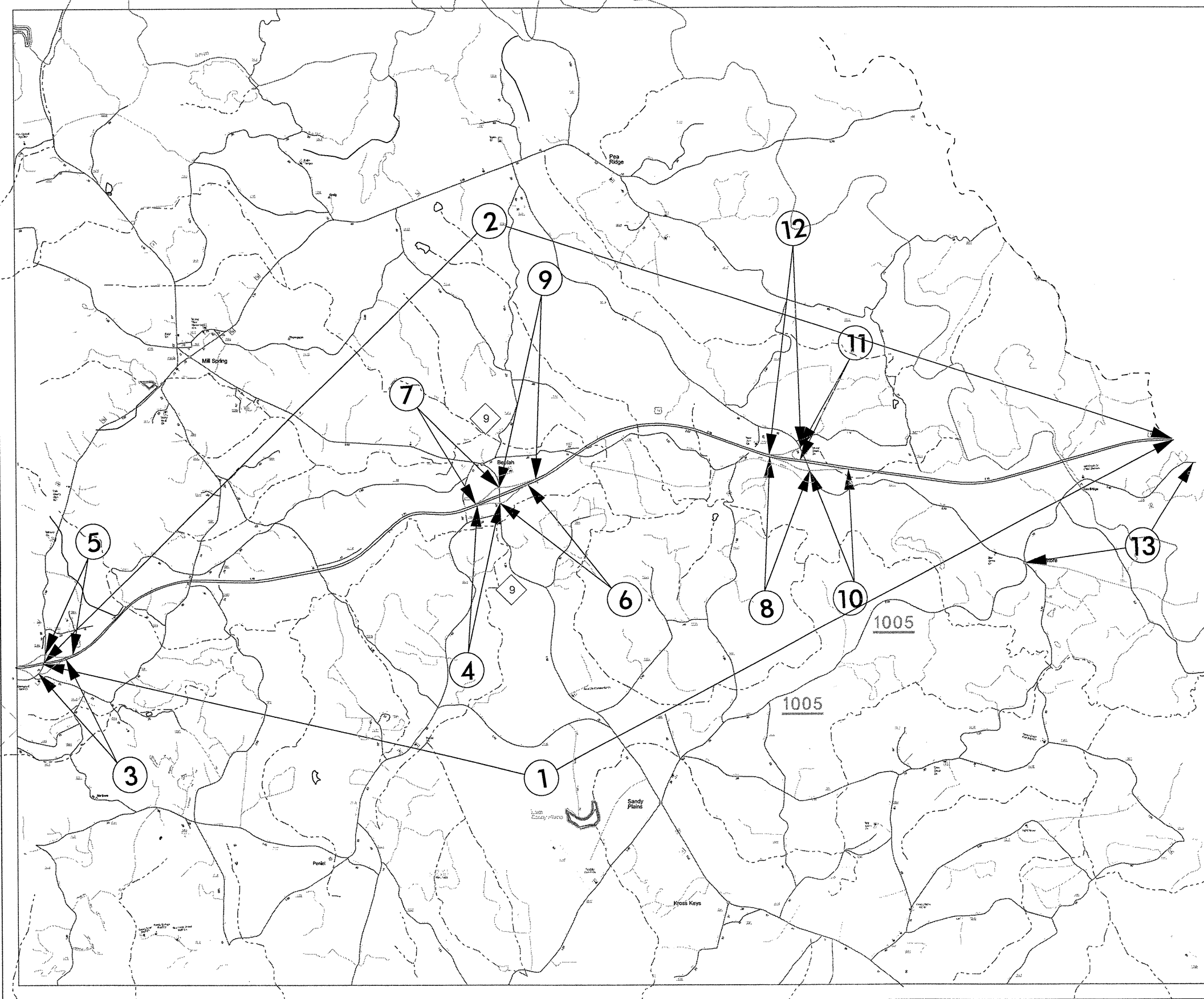


050197

2011 CONTRACT RESURFACING POLK COUNTY

PROJECT REFERENCE NO.		SHEET NO.
14CR.10751.3		1
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
14CR.10751.3		
14CR.20751.10		

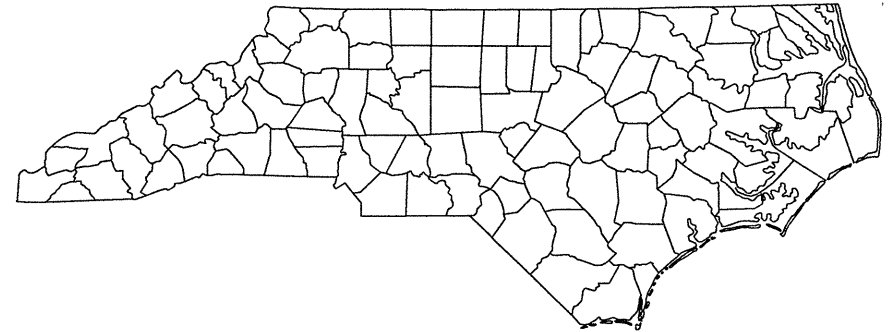
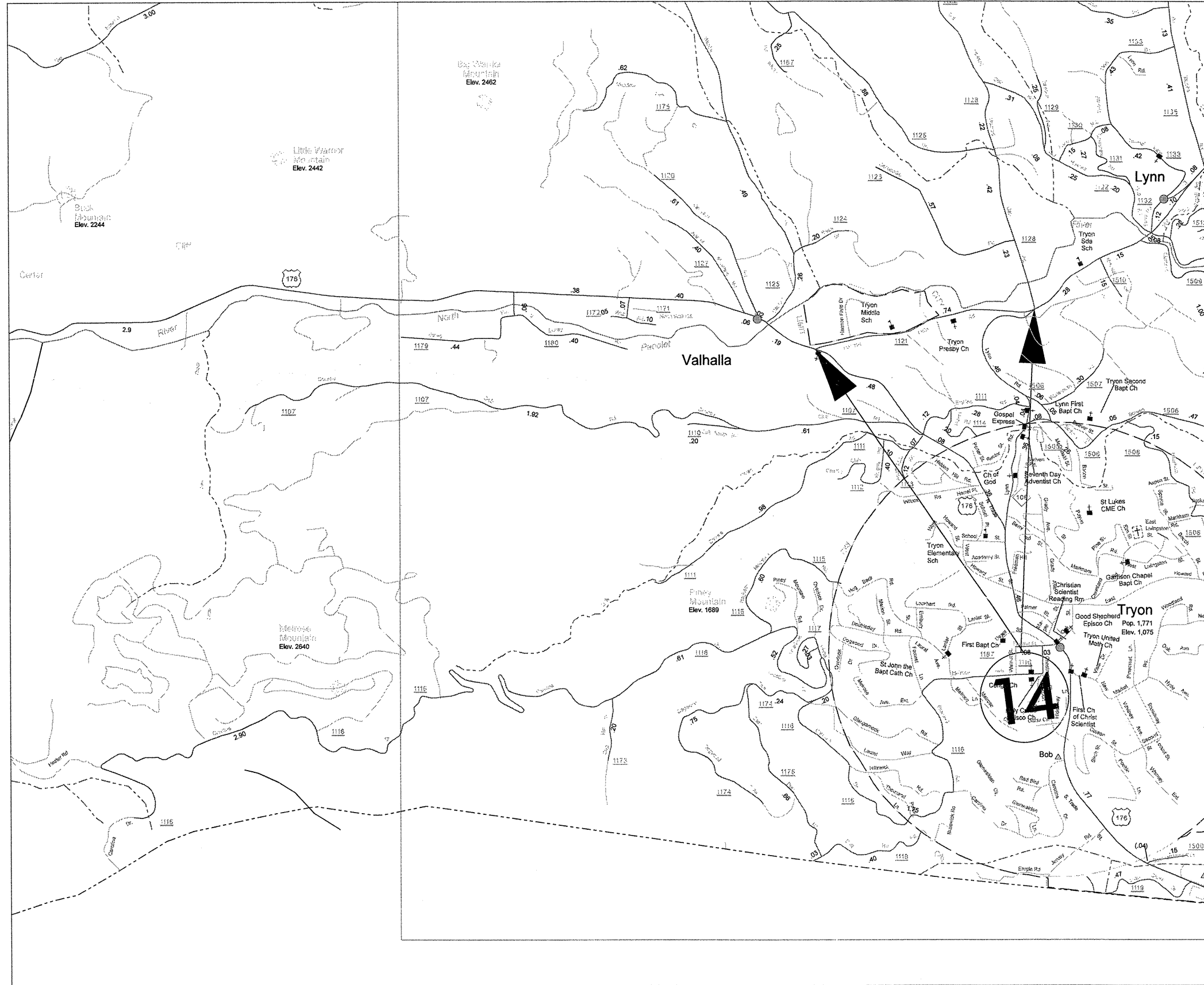


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 *****DGN*****
 *****USERNAME*****

050197

2011 CONTRACT RESURFACING POLK COUNTY

PROJECT REFERENCE NO.		SHEET NO.
14CR.10751.3		2
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
14CR.10751.3		
14CR.20751.10		

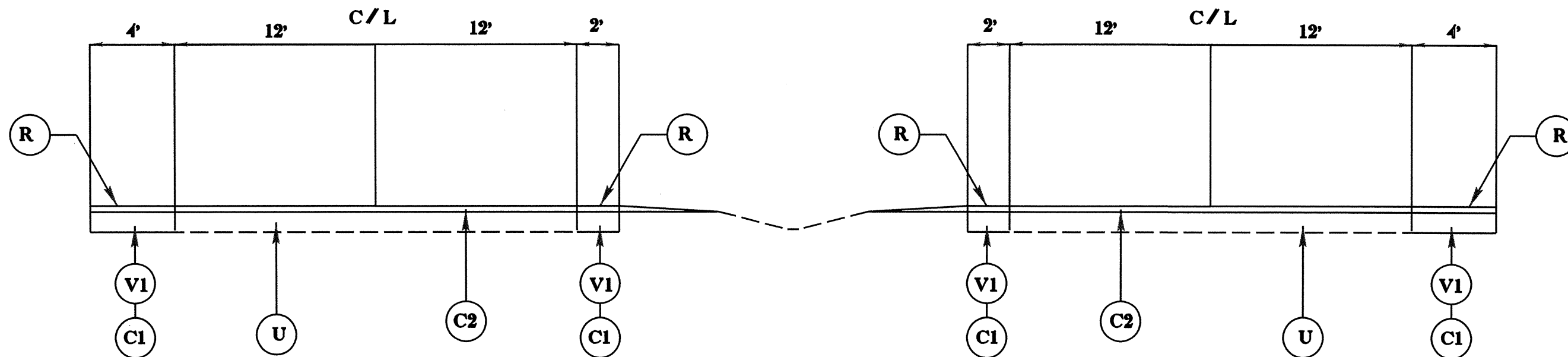


*****SYTIME*****
 *****\$*****\$DGN*****\$*****\$*****
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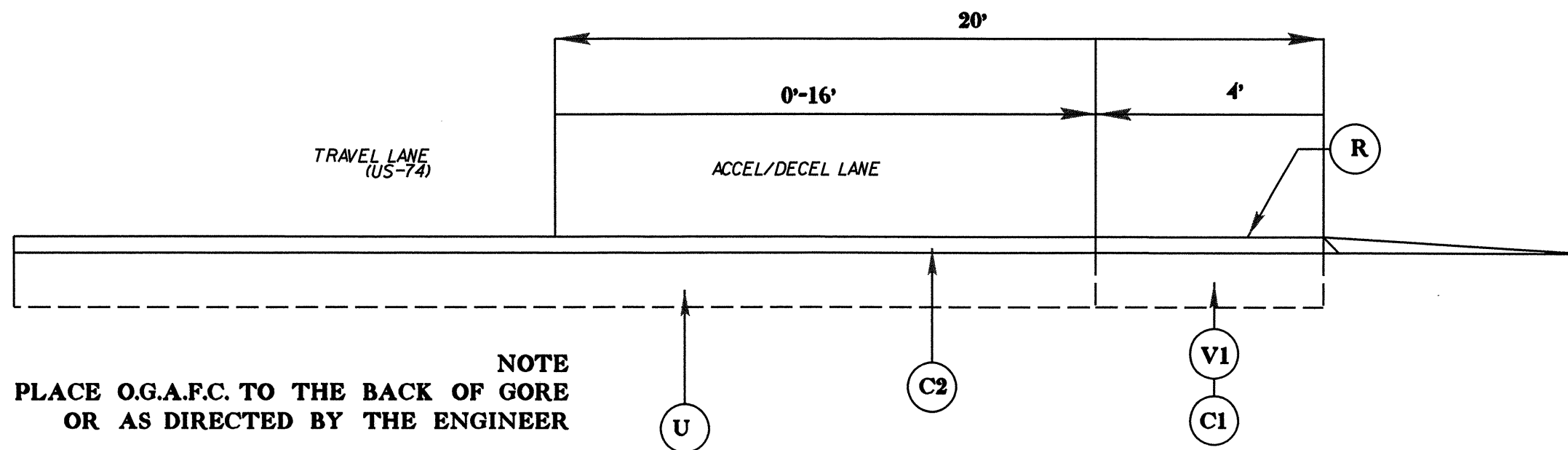
050197

PROJECT REFERENCE NO.		SHEET NO.
14CR.10751.3		3
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
14CR.10751.3		
14CR.20751.10		

TYPICAL 1



TYPICAL 2

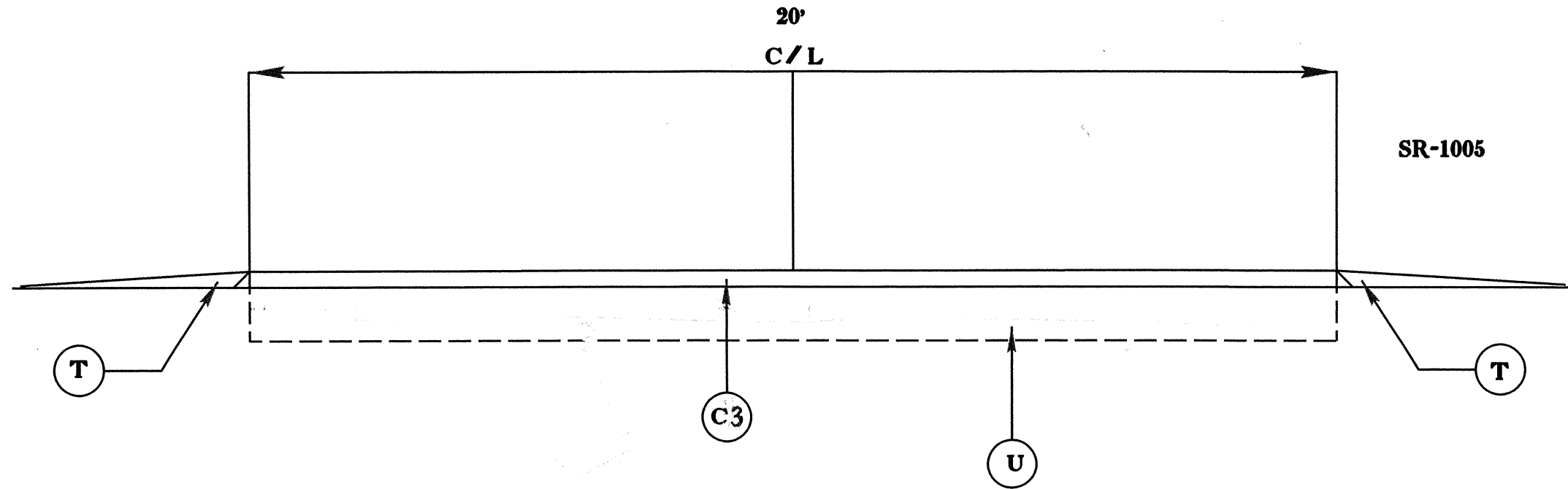


NOTE
PLACE O.G.A.F.C. TO THE BACK OF GORE
OR AS DIRECTED BY THE ENGINEER

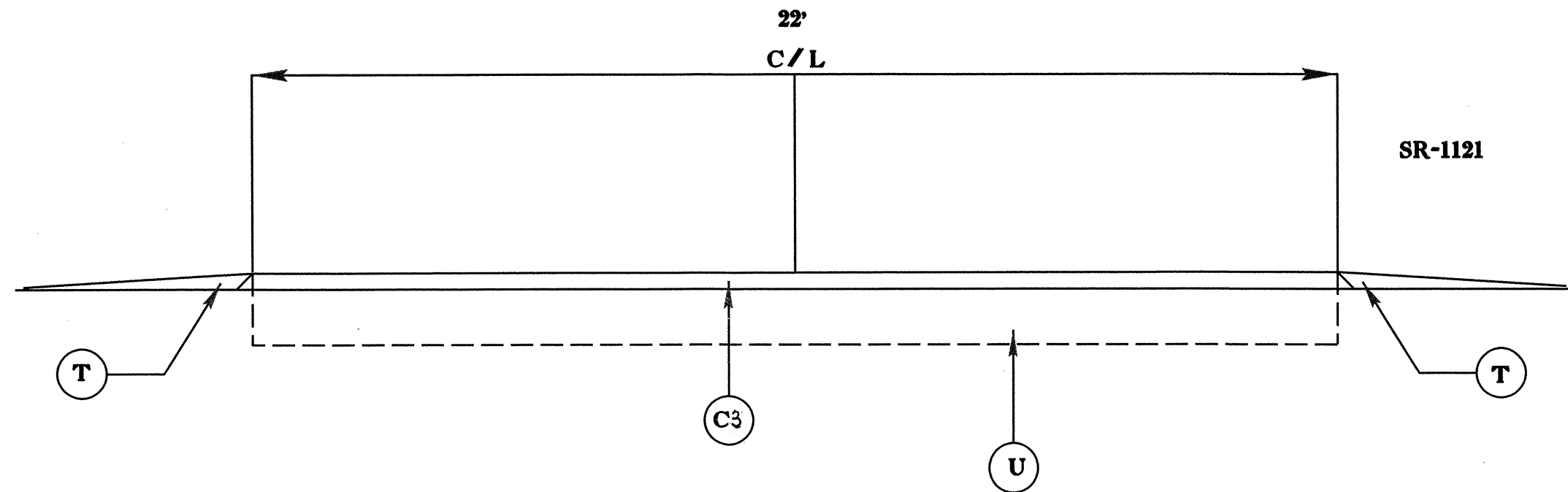
050197

PROJECT REFERENCE NO.		SHEET NO.
14CR.10751.3		4
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
14CR.10751.3		
14CR.20751.10		

TYPICAL 3



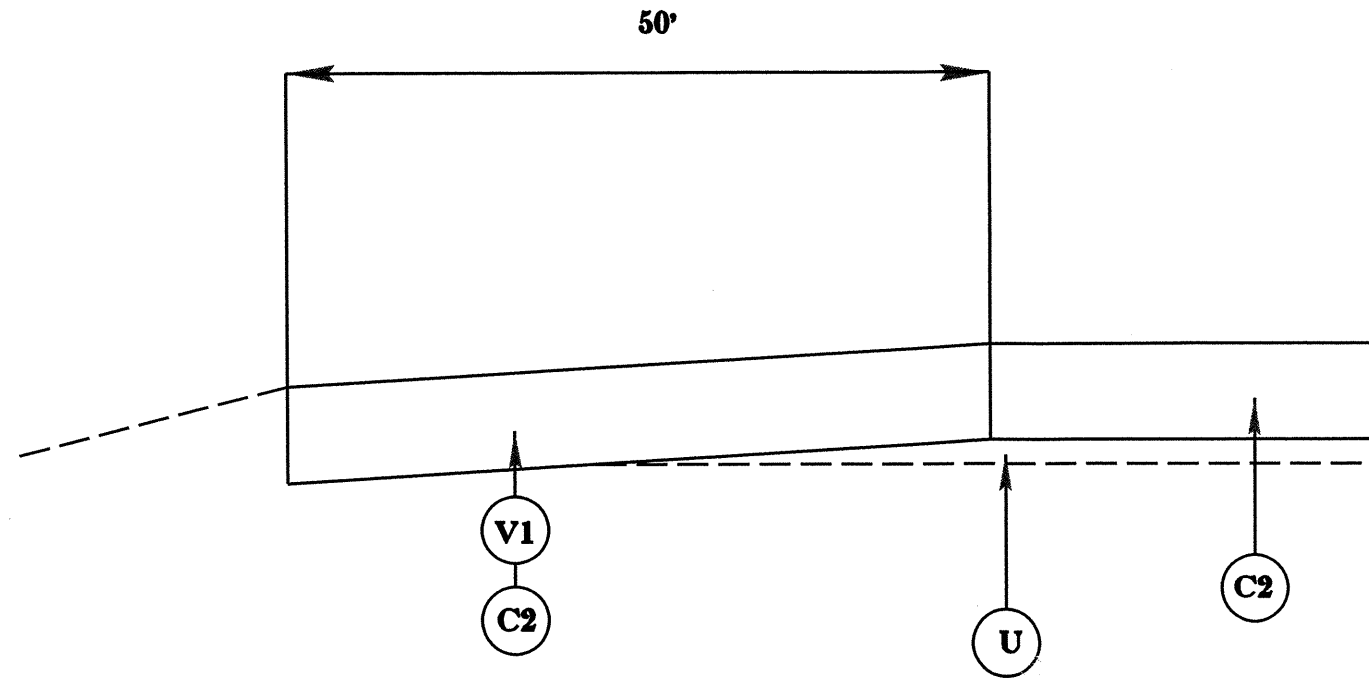
TYPICAL 4



050197

PROJECT REFERENCE NO.		SHEET NO.
14CR.10751.3		5
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
14CR.10751.3		
14CR.20751.10		

DETAIL TO TIE TO EXISTING ASPHALT

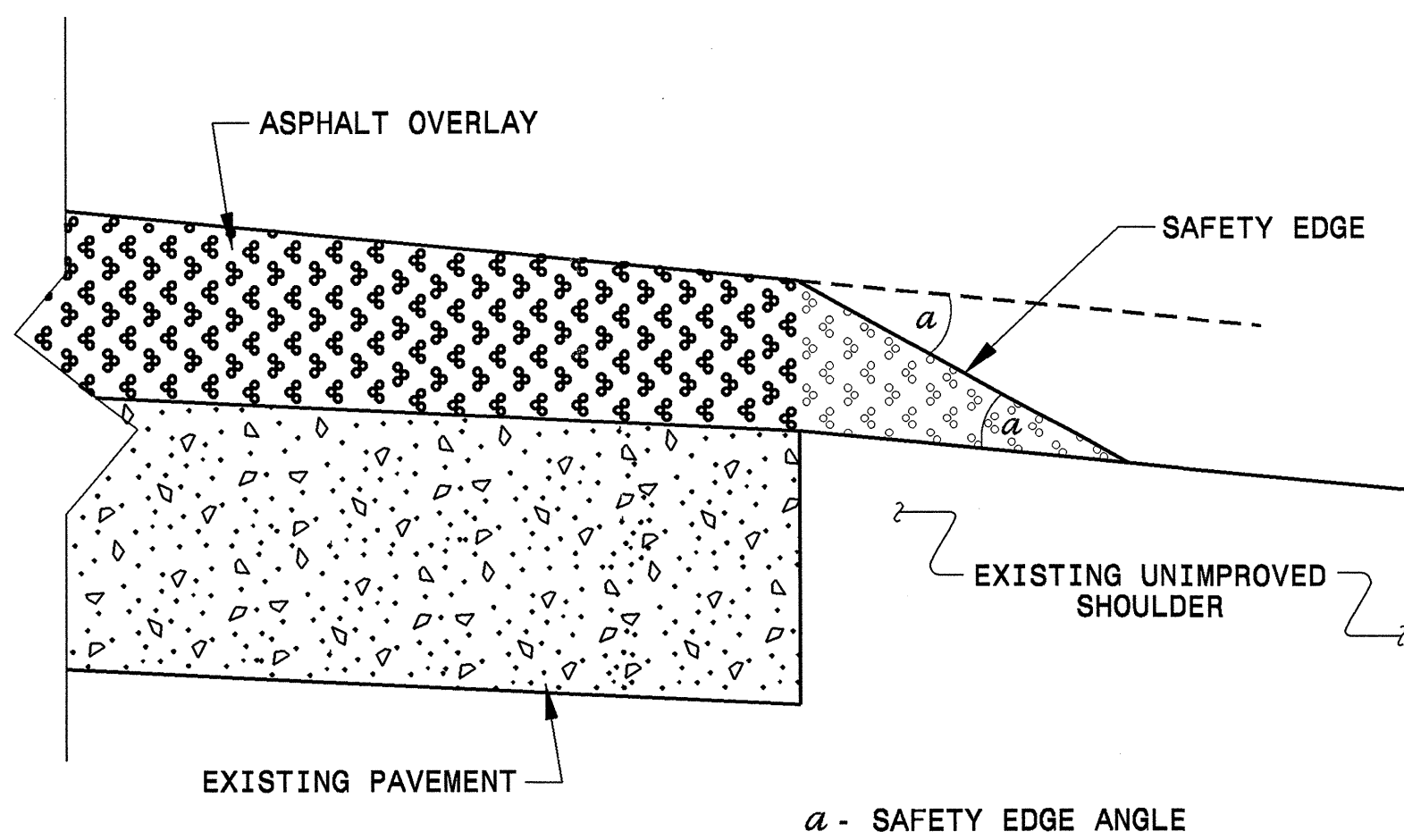


050197

PROJECT REFERENCE NO.		SHEET NO.
14CR.10751.3		4
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
14CR.10751.3		
14CR.20751.10		

SURFACING SCHEDULE

ITEM NO	DESCRIPTION
C1	ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 50 LBS. PER SQ. YD (1/2").
C2	PROPOSED ASPHALT CONCRETE SURFACE COURSE, TYPE O.G.F.C.-FC1, AT AN AVERAGE RATE OF 70 LBS PER SQ. YD. (5/8")
C3	ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS PER SQ. YD. (1 1/2")
V1	MILLING ASPHALT PAVEMENT 1/2" IN DEPTH ON THE SHOULDERS AS DIRECTED BY PROJECT ENGINEER
R	MILLED RUMBLE STRIPS
T	SHOULDER RECONSTRUCTION WITH ABCM-SEE SPECIAL PROVISIONS
U	EXISTING PAVEMENT



SAFETY EDGE DETAIL

20-JUL-2011 08:53
 S:\con\projects\contract\standards\details\howerton\safetyedgesdetail.dgn
 tspell AT CSD24452

CONTRACT STANDARDS AND DEVELOPMENT UNIT Office 919-250-4128 FAX 919-250-4119			
SAFETY EDGE DETAIL			
ORIGINAL BY:	T.SPELL	DATE:	7-18-11
MODIFIED BY:		DATE:	
CHECKED BY:		DATE:	
FILE SPEC:	s:\usr\details\stand\safetyedgesdetail.dgn		

PROJECT NO.	SHEET NO.	TOTAL NO.
14CR.10751.3, 14CR.20751.10	8	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	SHOULDER RECONSTRUCTION SMI	1/2" MILLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, SF9.5A LEVELING COURSE TONS	SURFACE COURSE, S4.75A TONS	ASPHALT BINDER FOR PLANT MIX TONS	POLYMER MODIFIED ASPHALT BINDER FOR PLANT MIX TONS	OGAFC, TYPE FC-1 MOD TONS	MILLED RUMBLE STRIPS LF	
14CR.10751.3	Polk	1	US 74 EAST	FROM NC108 TO RUTHERFORD COUNTY LINE	1	NO	10.41	30		36,643.0			1,019	69	430	7,053	109,930	
		2	US 74 WEST	FROM NC108 TO RUTHERFORD COUNTY LINE	1	NO	10.41	30		36,643.0			1,019	69	430	7,053	109,930	
		3	US 74 RAMP 1	ON RAMP FROM NC108 TO US 74 EAST	2	NO	0.23	20		360.0			10	1	7	107		
		4	US 74 RAMP 2	EXIT RAMP TO NC 9 EAST	2	NO	0.1	20		230.0			5		4	60		
		5	US 74 RAMP 3	EXIT RAMP TO NC 108 WEST	2	NO	0.1	20		230.0			5		4	60		
		6	US 74 RAMP 4	ON RAMP FROM NC 9 EAST	2	NO	0.25	20		260.0			10	1	8	123		
		7	US 74 RAMP 5	ON RAMP FROM NC 9 WEST	2	NO	0.22	20		260.0			13	1	7	107		
		8	US 74 RAMP 6	EXIT RAMP TO SR1326 EAST	2	NO	0.1	20		130.0			5		4	60		
		9	US 74 RAMP 7	EXIT RAMP TO NC 9 WEST	2	NO	0.15	20		220.0			8	1	6	94		
		10	US 74 RAMP 8	ON RAMP TO US 74 FROM SR 1326 EAST	2	NO	0.24	20		220.0			9	1	7	107		
		11	US 74 RAMP 9	EXIT RAMP FROM WEST US 74 TO SR 1326 WEST	2	NO	0.21	20		246.0			12	1	6	100		
		12	US 74 RAMP 10	ON RAMP TO WEST US 74 FROM SR 1326 WEST	2	NO	0.24	20		241.0			13	1	7	107		
TOTAL FOR PROJ NO. 14CR.10751.3							22.66			75,683.0			2,128	145	920	15,031	219,860	
14CR.20751.10	Polk	13	SR-1005	FROM SR 1326 TO SR 1302 AT RUTHERFORD CO. LINE	3	NO	2.1	20	4.20		2,193	913		193				
		14	SR 1121	FROM CHANGE OF PAVEMENT AT NC 108 TO US 176	4	NO	0.75	22	1.50		869			52				
TOTAL FOR PROJ NO. 14CR.20751.10							2.85		5.70		3,062	913		245				
GRAND TOTAL								25.51		5.70	75,683.0	3,062	913	2,128	390	920	15,031	219,860

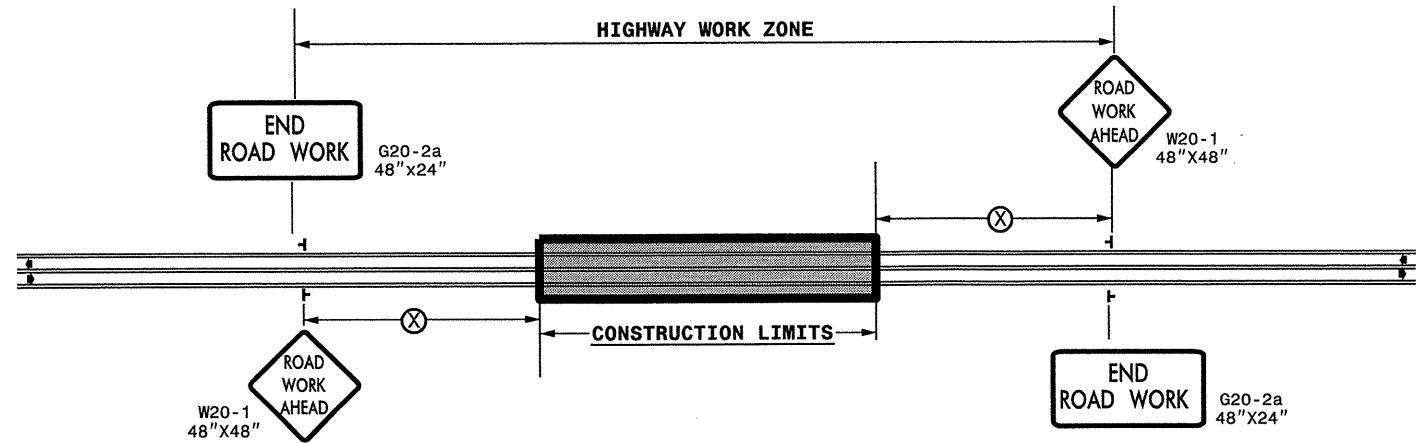
Note: Milled rumble strips for the ramps are included in the US 74 quantity.

PROJECT NO.	SHEET NO.	TOTAL NO.
14CR.10751.3, 14CR.20751.10	9	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LENGTH	WIDTH	4510000000-N	4400000000-E	4405000000-E	4415000000-N	4420000000-N	4430000000-N	4480000000-N	4516000000-N	4650000000-N	4685000000-E		4697000000-E	4686000000-E	4725000000-E	4840000000-N	4810000000-E		4820000000-E	4845000000-N	4905000000-N	
							LAW ENFORCEMENT	STATIONARY WORK ZONE SIGN	PORTABLE WORK ZONE SIGN	FLASHING ARROW PANELS, TYPE C	CHANGE MESSAGE BOARD	DRUMS	TMIA	SKINNY DRUMS	TEMP RAISED PAVEMENT MARKERS	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	8" X 120 M WHITE THERMO	4" X 120 M WHITE THERMO	THERMO STR ARROW 90 M	PAINT PAV'T MARK. CHARACTER	4" WHITE PAINT	4" YELLOW PAINT	8" WHITE PAINT	PAINT STR ARROW	CRYSTAL & RED SNOW PLOWABLE MARKERS	
NO		NO					HR	SF	SF	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	EA	EA	LF	LF	LF	EA	EA	
14CR.10751.3	Polk	1	US 74 EAST	FROM NC108 TO RUTHERFORD COUNTY LINE	10.41	30	60	192	1,026	1	2.0	50	1.0	300.0	2,110.0	57,047	54,965	4,164	13,741	23		169,058	110,971	8,328	46	765	
		2	US 74 WEST	FROM NC108 TO RUTHERFORD COUNTY LINE	10.41	30	60	192	1,026	1	2.0	50	1.0	300.0	2,110.0	57,047	54,965	4,164	13,741	22		169,058	110,971	8,328	44	765	
		3	US 74 RAMP 1	ON RAMP FROM NC108 TO US 74 EAST	0.23	20																					
		4	US 74 RAMP 2	EXIT RAMP TO NC 9 EAST	0.1	20																					
		5	US 74 RAMP 3	EXIT RAMP TO NC 108 WEST	0.1	20																					
		6	US 74 RAMP 4	ON RAMP FROM NC 9 EAST	0.25	20																					
		7	US 74 RAMP 5	ON RAMP FROM NC 9 WEST	0.22	20																					
		8	US 74 RAMP 6	EXIT RAMP TO SR1326 EAST	0.1	20																					
		9	US 74 RAMP 7	EXIT RAMP TO NC 9 WEST	0.15	20																					
		10	US 74 RAMP 8	ON RAMP TO US 74 FROM SR 1326 EAST	0.24	20																					
		11	US 74 RAMP 9	EXIT RAMP FROM WEST US 74 TO SR 1326 WEST	0.21	20																					
		12	US 74 RAMP 10	ON RAMP TO WEST US 74 FROM SR 1326 WEST	0.24	20																					
TOTAL FOR PROJ NO. 14CR.10751.3					22.66		120	384	2,052	2	4	100	2	600	4,220	114,094	109,930	8,328	27,482	45		338,116	221,942	16,656	90	1,530	
																224,024		27,482							560,058		
14CR.20751.10	Polk	13	SR-1005	FROM SR 1326 TO SR 1302 AT RUTHERFORD CO. LINE	2.1	20																45,192	38,252				
		14	SR 1121	FROM CHANGE OF PAVEMENT AT NC 108 TO US 176	0.75	22																24	16,140	16,140			
TOTAL FOR PROJ NO. 14CR.20751.10					2.85																	24	16,140	16,140			
																									115,724		
GRAND TOTAL					25.51		120	384	2,052	2	4	100	2	600	4,220	114,094	109,930	8,328	27,482	45	24	399,448	276,334	16,656	90	1,530	
																224,024		27,482							675,782		

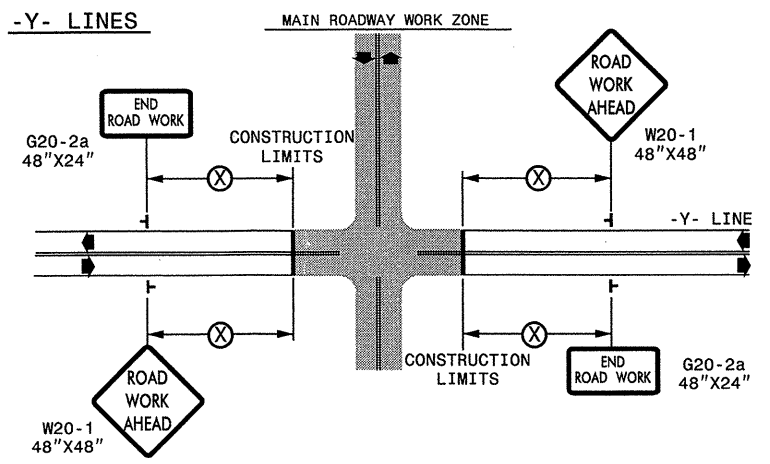
TWO-WAY UNDIVIDED ** (L-LINES)



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

SHEET 1 OF 1

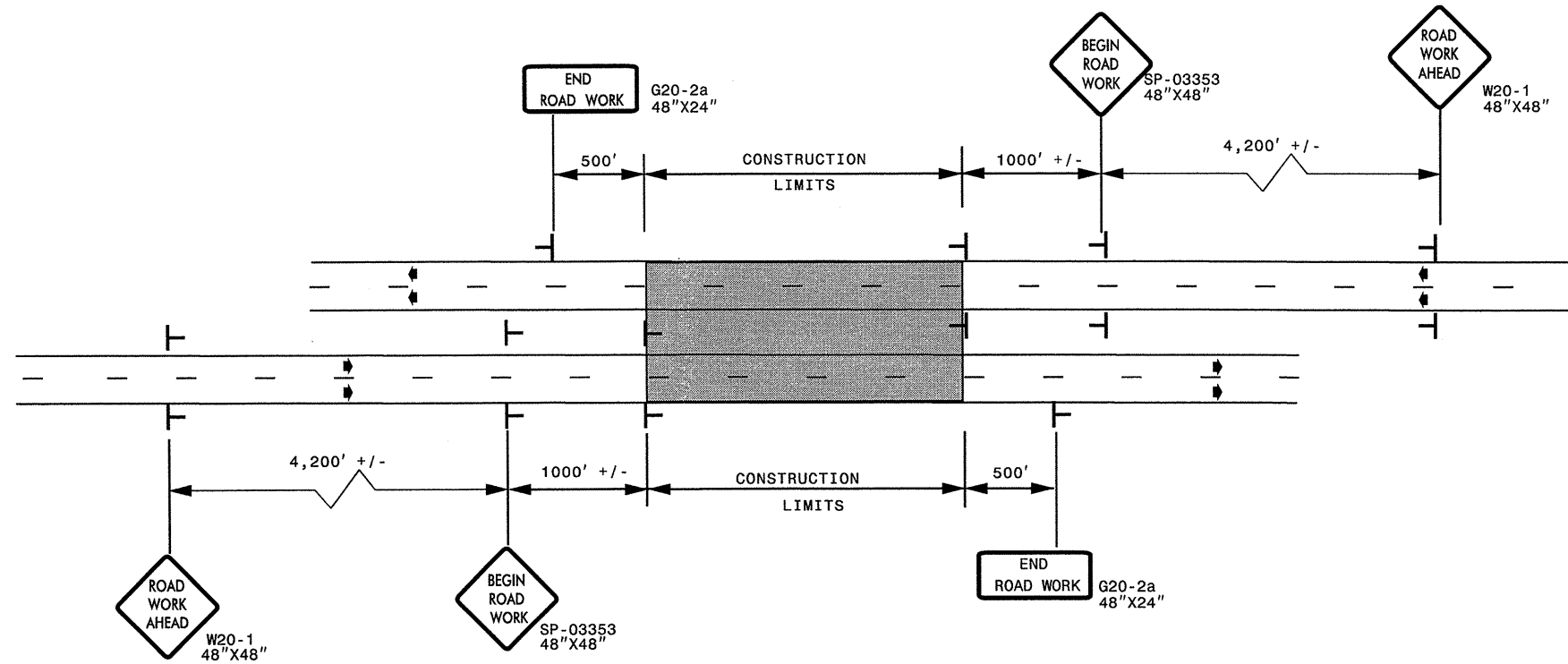
APPROVED: _____ DATE: _____	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS	
SEAL	SCALE: NONE	REVISIONS
	DATE: _____	7-98 10/01
	DWG. BY: _____	10-98 03/04
	DESIGN BY: _____	01/01 11/04
REVIEWED BY: _____		

14-JUL-2011 14:27
 \DOIT\DF\SR001\01\groups-WZTC\TMU\WZTC\Resur-facing\2011\Western\2011\Div14\C202833A-B_14CR.10751.3x2_Polk_US-75(isg)\C202833A-B_14CR.10751.3x2_Polk_2way_Undiv.&_Urban_FR.wys_stationary.dgn
 sngreen AT 12:44:33

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

PROJ. REFERENCE NO.	SHEET NO.
10CR.10751.3 & 10CR.20751.10	TCP-2

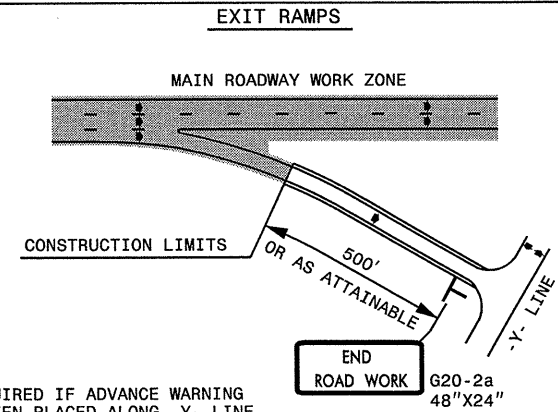
DETAIL A



LEGEND	
	STATIONARY SIGN
▶	DIRECTION OF TRAFFIC FLOW

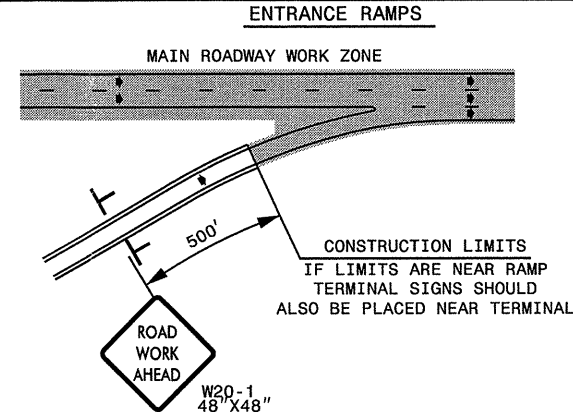
* USE THE "\$250 SPEEDING PENALTY" SIGN, SPEED LIMIT SIGN, AND ORANGE PANEL; ONLY WHEN A "\$250 SPEEDING PENALTY" ORDINANCE HAS BEEN ISSUED BY THE REGIONAL TRAFFIC ENGINEER.

DETAIL B

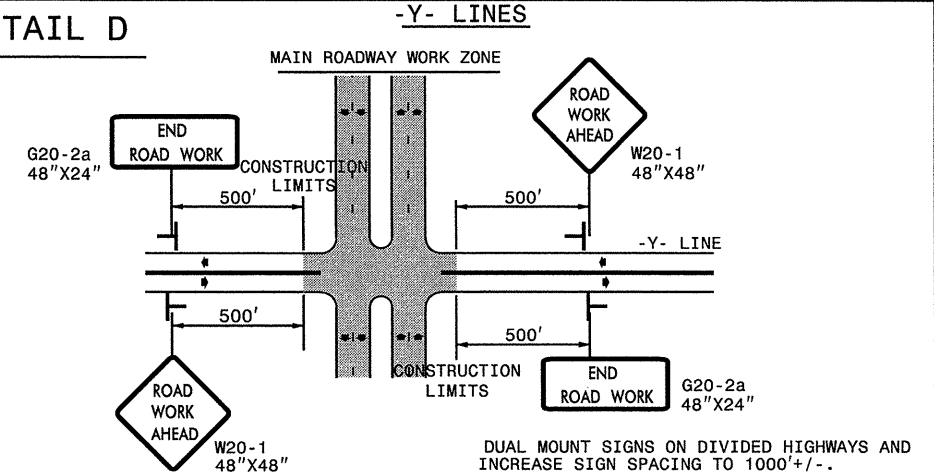


NOTE: SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

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)	
	SCALE: NONE	REVISIONS
	DATE: 8/03	03/04
	DWG. BY: JI	
	DESIGN BY: JI	
REVIEWED BY: _____		

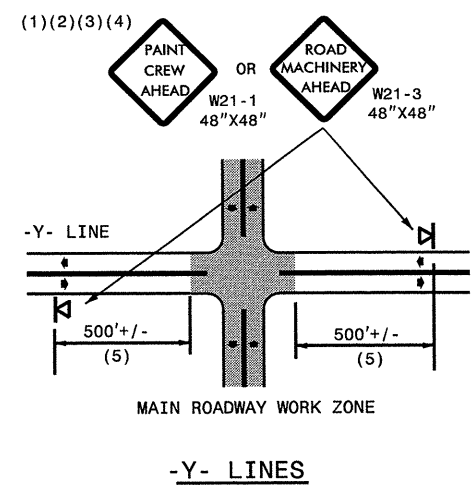
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GENERAL NOTES

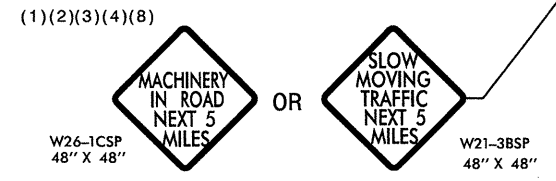
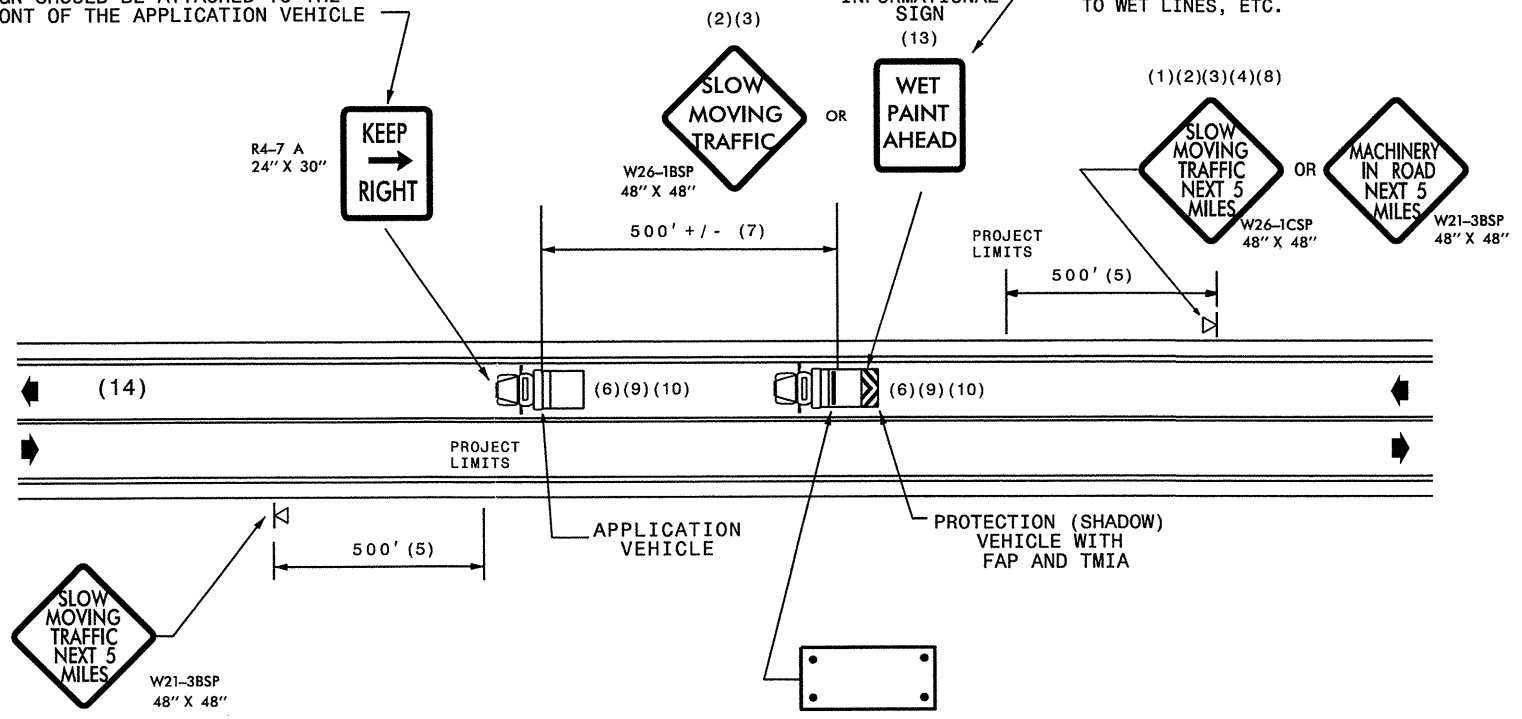
- (1) THE FOLLOWING OPTIONS MAY BE USED FOR ADVANCE WARNING SIGNS:
 - A. TRUCK MOUNTED SIGNS
 - B. TRUCK MOUNTED CHANGEABLE MESSAGE SIGN (CMS)
 - C. GROUND MOUNTED ADVANCE WARNING SIGNS (MUST CIRCLE TO PICK UP SIGNS)
 - D. GROUND MOUNTED CHANGEABLE MESSAGE SIGN (CMS) (MUST USE CIRCLE TO PICK UP SIGNS)
- (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 ACCOMMODATE SIGHT DISTANCE NEEDS.
- (8) ROUND UP MILEAGE TO NEXT WHOLE MILE. WORK ZONE SHOULD NOT EXCEED FIVE (5) MILES IN LENGTH.
- (9) RADIO COMMUNICATION BETWEEN VEHICLES IS REQUIRED.
- (10) USE OF A LIGHT BAR ON ALL VEHICLES IS PREFERRED, BUT A ROTATING BEACON MAY BE USED INSTEAD.
- (11) IF WORK IS PERFORMED AT NIGHT, THE WORK AREA MUST BE ILLUMINATED WITH MACHINE AND/OR TOWER LIGHTS AS APPROVED BY THE ENGINEER.
- (12) ALL TRAFFIC CONTROL DEVICES WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEMS FOR PAVEMENT MARKING AND MARKERS.
- (13) INFORMATIONAL SIGNS SHOULD BE ACTIVITY SPECIFIC, i.e. "PAINT CREW IN ROAD". SIGNS MAY BE RECTANGULAR OR DIAMOND SHAPE. SIGN SIZE SHOULD BE BASED ON THE MOTORIST ABILITY TO RECOGNIZE SIGN WHEN TRAVELING FIVE (5) MILES ABOVE POSTED SPEED LIMIT.
- (14) IF A LEAD VEHICLE IS ADDED TO OPERATION, IT SHOULD HAVE THE SAME ADVANCE WARNING SIGNS AS THE APPLICATION VEHICLE SHOWN BELOW.

LEGEND

-  PORTABLE SIGN. SIGNS MUST BE NCHRP-350 AND NCDOT APPROVED.
-  DIRECTION OF TRAFFIC FLOW
-  APPLICATION VEHICLE WITH LIGHT BAR
-  PROTECTION VEHICLE WITH TRUCK MOUNTED IMPACT ATTENUATOR (TMIA) AND LIGHT BAR (SEE ROADWAY STANDARD NO. 1165.01). TMIA MUST BE NCHRP-350 TEST LEVEL 3 (60+MPH) APPROVED.
-  FLASHING ARROW PANEL, TYPE "B" (60"X30" MIN.), "CAUTION MODE"



SIGN SHOULD BE ATTACHED TO THE FRONT OF THE APPLICATION VEHICLE










MOVING OPERATION CARAVAN
 (OPERATIONS TRAVELING 3 MPH OR FASTER)
 PLACING PAVEMENT MARKING OR MARKERS
 ON TWO-LANE TWO-WAY ROADWAYS

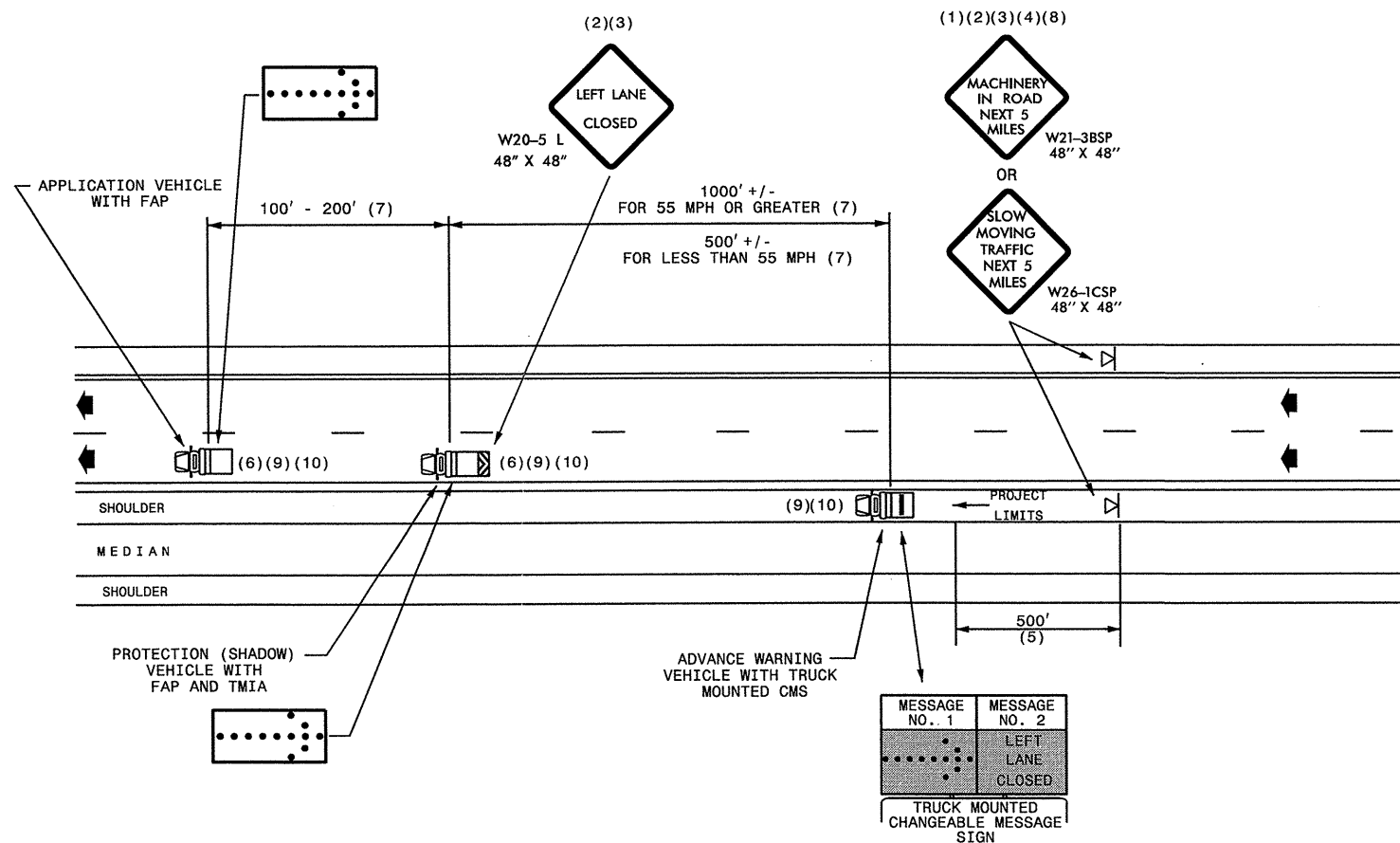
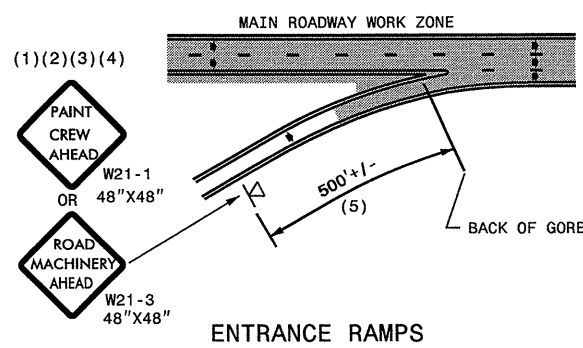
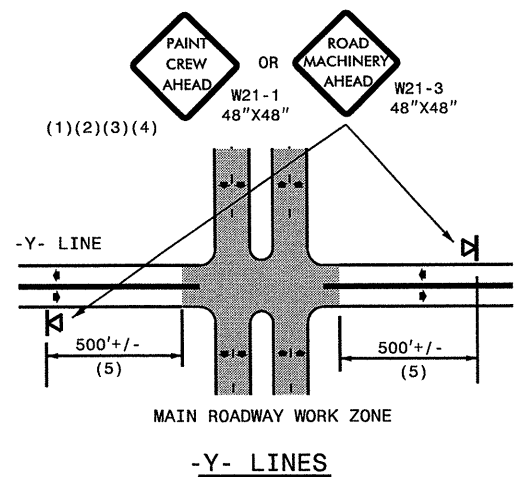
DRAWING NUMBER 6
 IMPLEMENTATION DATE: 07/01/97
 REVISED: 11/03/04

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 CHANGEABLE 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



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

DRAWING NUMBER 7
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