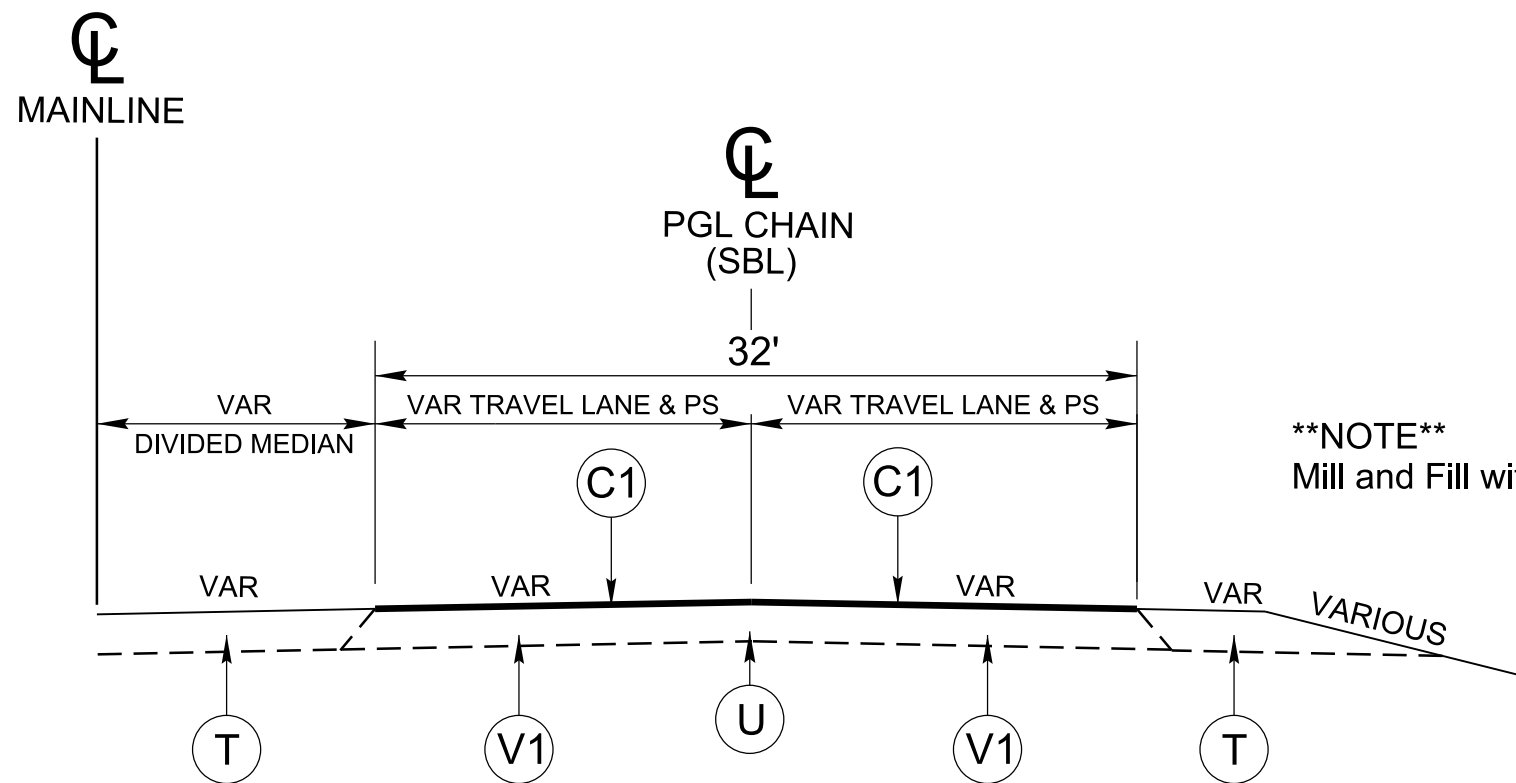


8/17/99  
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 \$\$\$USE ENRME \$\$\$  
 Maps\Caldwell\Primary - DK00399\MicroStation\Typicals\DK00399-Caldwell\Primary.dgn

\* INCIDENTAL MILLING AT LOCATIONS AS DIRECTED BY THE ENGINEER

PROJECT REFERENCE NO. DK00399	SHEET NO. 01
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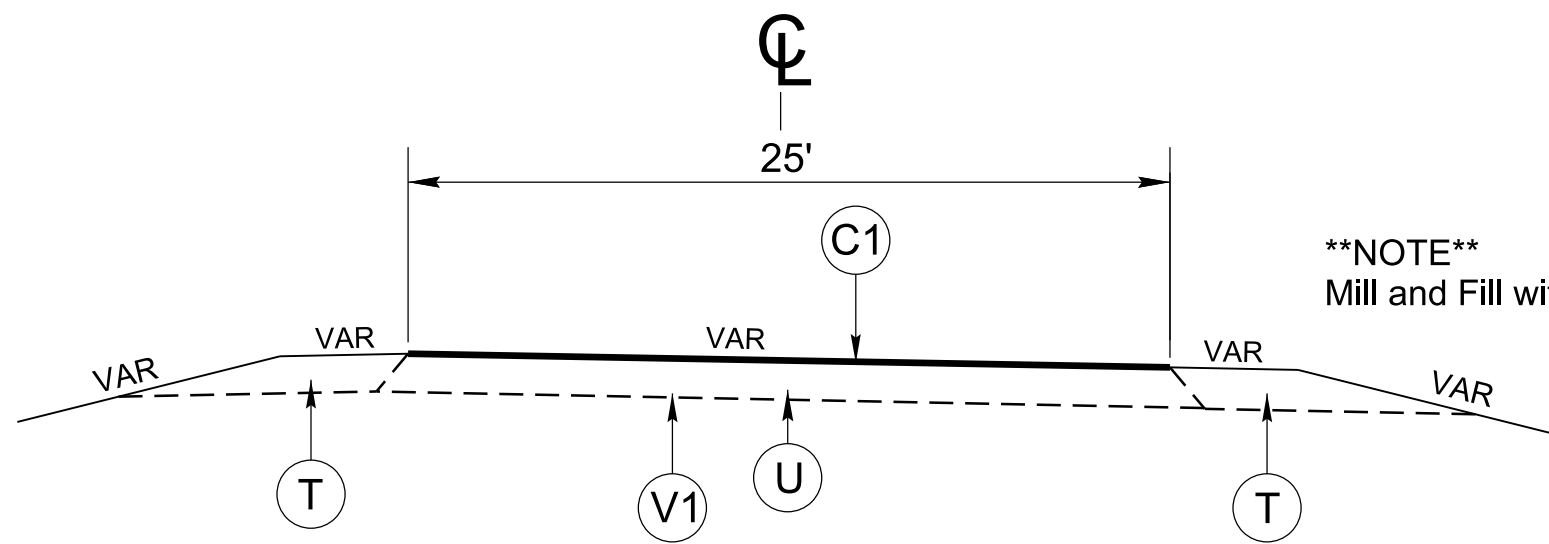
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V2	INCIDENTAL MILLING (See Tie in Detail)



**\*\*NOTE\*\***  
Mill and Fill with 1.5" S9.5C

### TYPICAL SECTION NO. 1

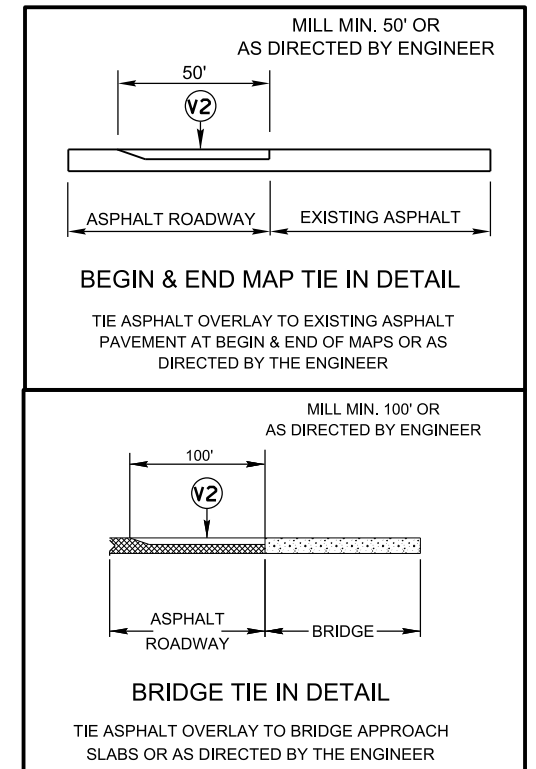
MAP 1 - US 321 SB FROM ~1600' S. OF SR 1108 TO ~350' S. OF US 321A



**\*\*NOTE\*\***  
Mill and Fill with 1.5" S9.5C

### TYPICAL SECTION NO. 2

MAP 2 - RMP-2283 FROM US 321 SB TO ARCHER ST (NS)

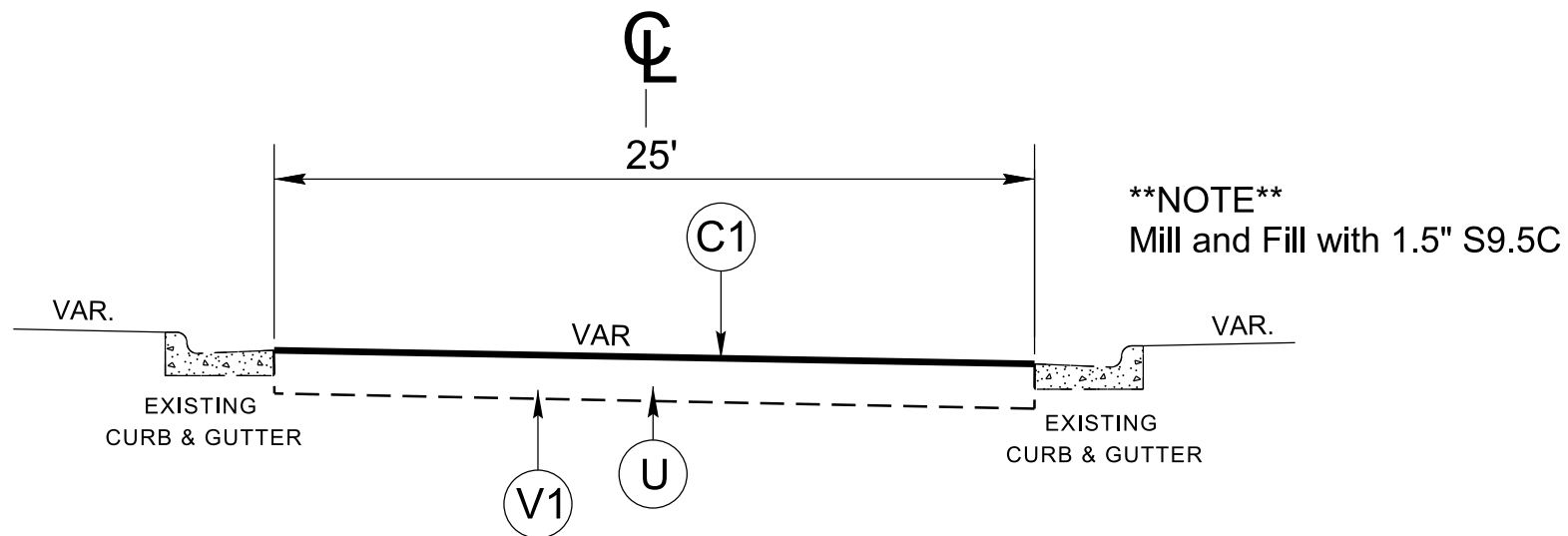


NOTE: TYPICALS ARE NOT TO SCALE

CALDWELL COUNTY PRIMARY ROADS 2025 ASPHALT RESURFACING			
REVISIONS	INT.	DATE	
			SCALE: N/A
			DATE: 9/10/2024
N.C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DIVISION ELEVEN			PREPARED BY: DLH REVIEWED BY: REVIEWED BY:

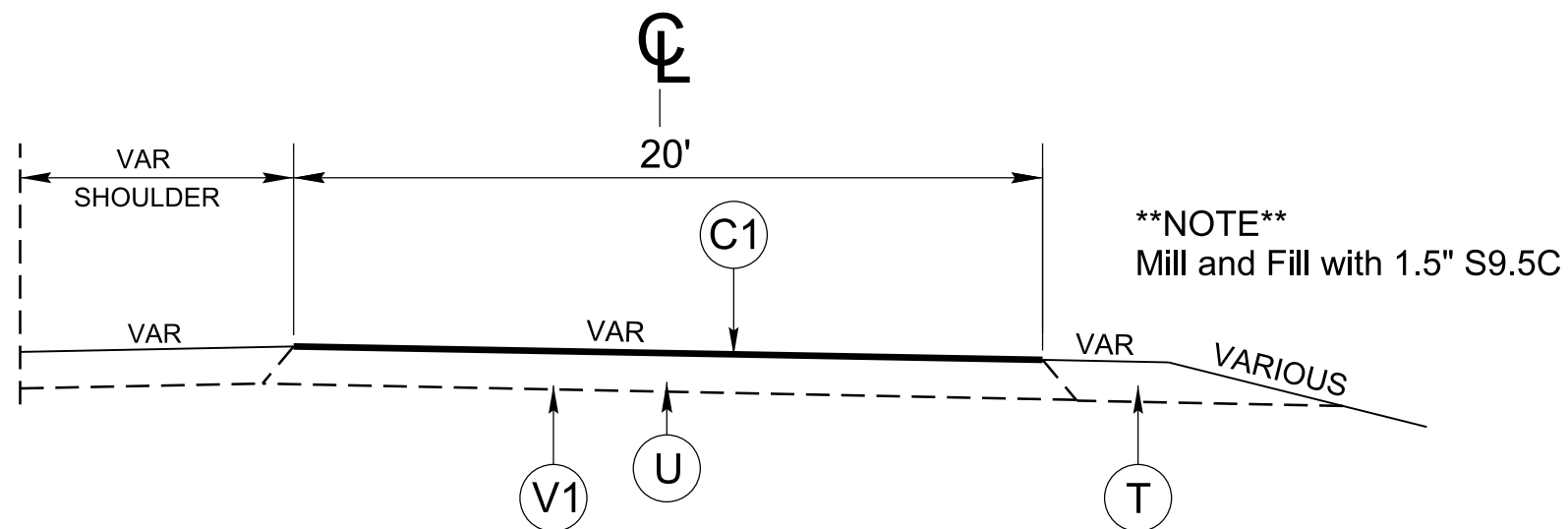
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 \$\$\$USE ENRME \$\$\$  
 Maps\Caldwell\Primary - DK00399\MicroStation\Typicals\DK00399-Caldwell\Pr-ima-2025 -Typical3.dgn

\* INCIDENTAL MILLING AT LOCATIONS AS DIRECTED BY THE ENGINEER



### TYPICAL SECTION NO. 3

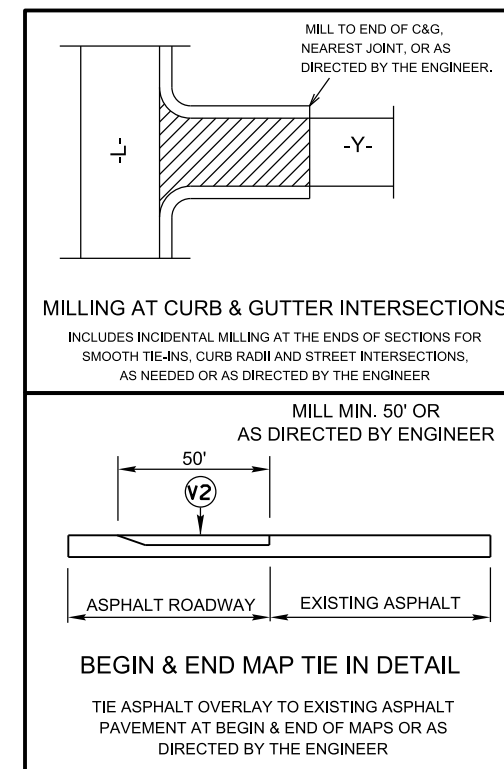
MAP 3 - RMP-2284 FROM ARCHER ST (NS) TO US 321 SB



### TYPICAL SECTION NO. 4

MAP 4 - RMP-2287 FROM US 321 SB TO US 321 ALT  
 MAP 5 - RMP-2288 FROM US 321 ALT TO US 321 SB

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V2	INCIDENTAL MILLING (See Tie In Detail)



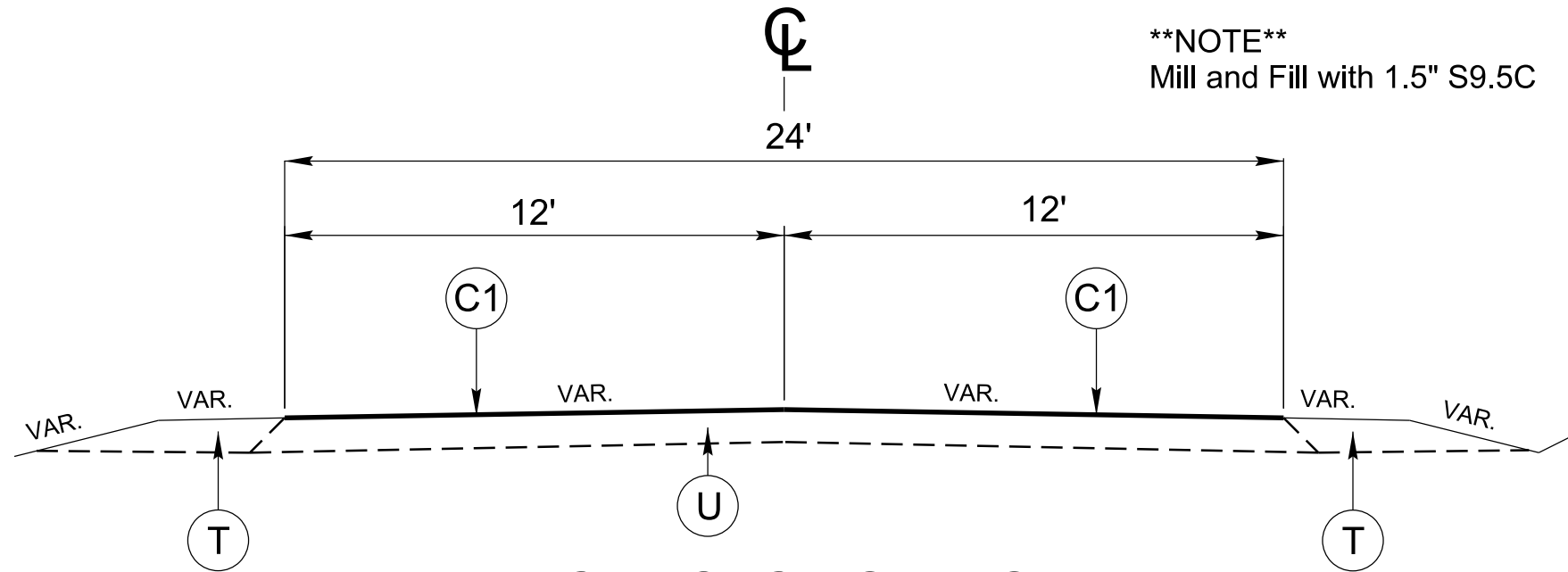
NOTE: TYPICALS ARE NOT TO SCALE

CALDWELL COUNTY PRIMARY ROADS 2025 ASPHALT RESURFACING																					
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REVISIONS	INT.	DATE																			
SCALE: N/A	DATE: 9/10/2024																				
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REVIEWED BY:																					
N.C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DIVISION ELEVEN																					

8/17/99  
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 \$\$\$USE ENVELOPE \$\$\$

\* INCIDENTAL MILLING AT LOCATIONS AS DIRECTED BY THE ENGINEER

PROJECT REFERENCE NO.	SHEET NO.
DK00399	03

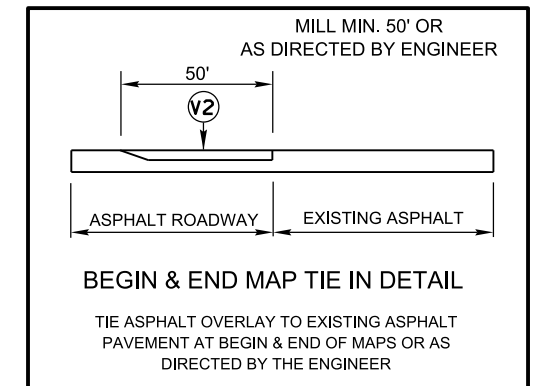


**\*\*NOTE\*\***  
Mill and Fill with 1.5" S9.5C

## TYPICAL SECTION NO. 5

MAP 6 - US 321 ALT FROM SR 1108 TO ~150' NORTH OF SR 1130

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V2	INCIDENTAL MILLING (See Tie In Detail)



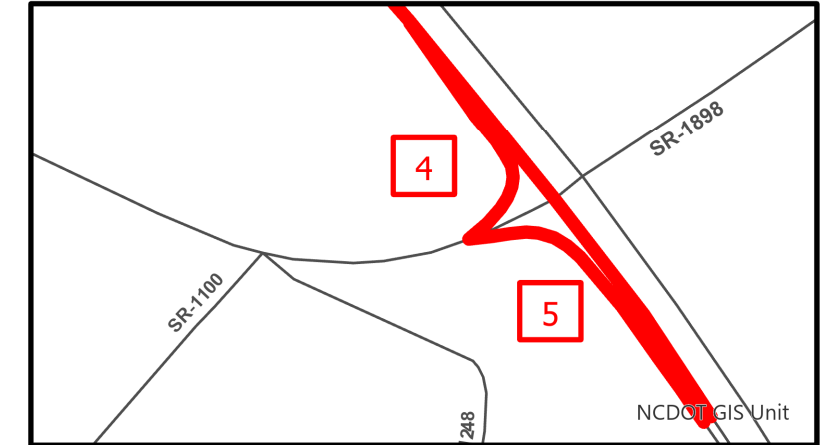
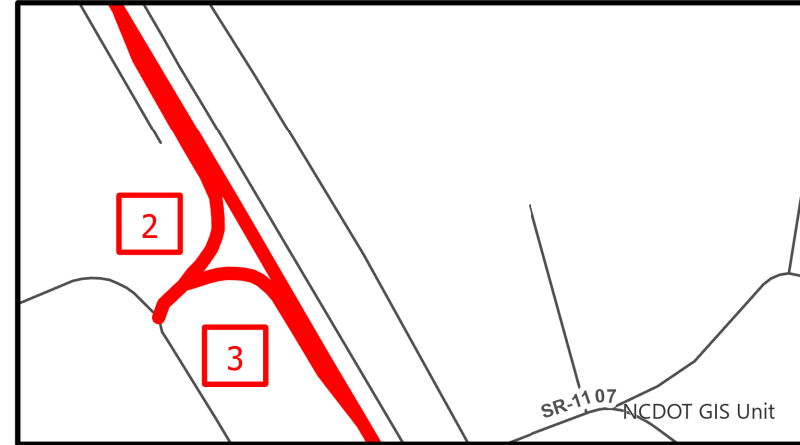
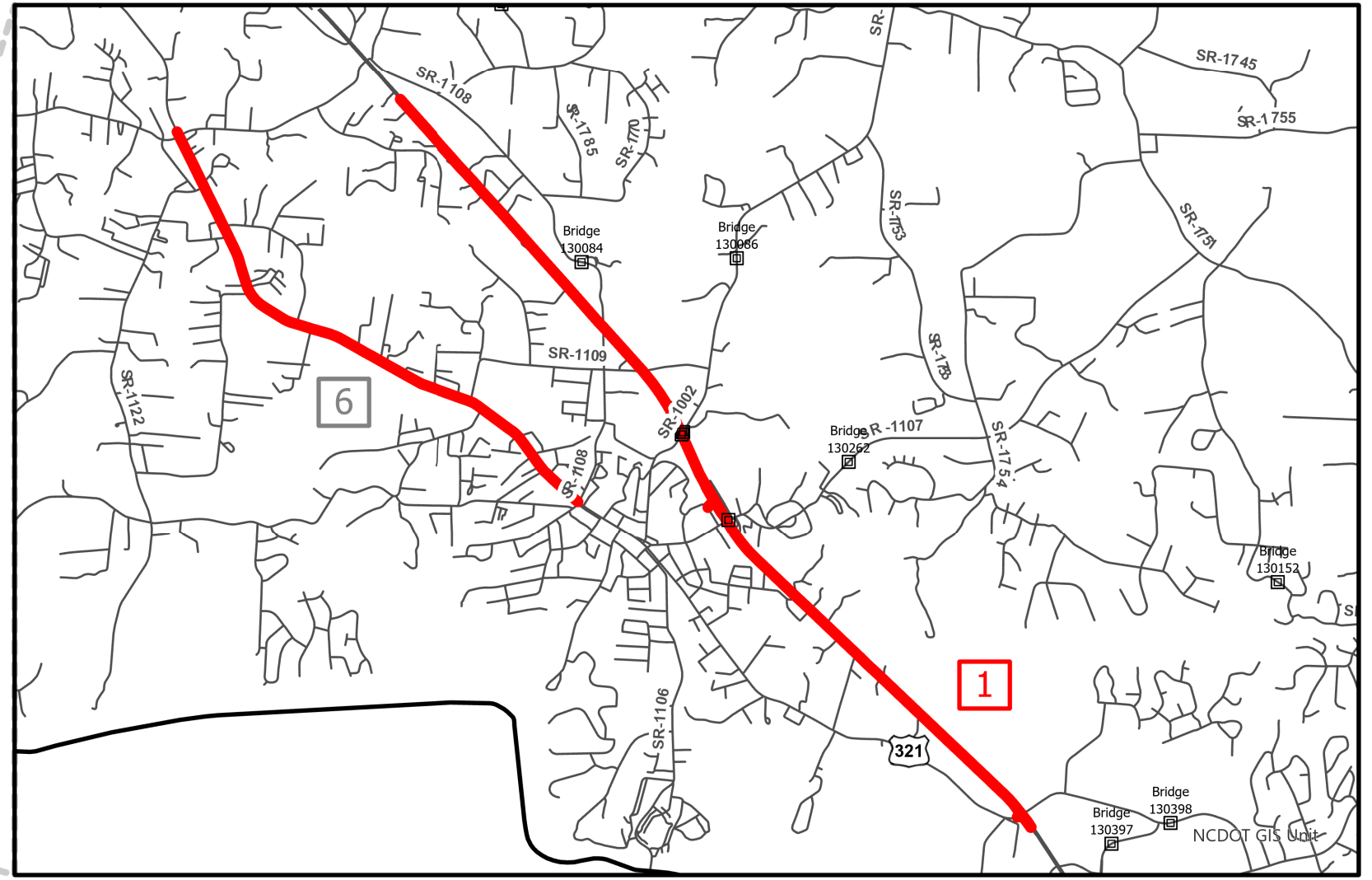
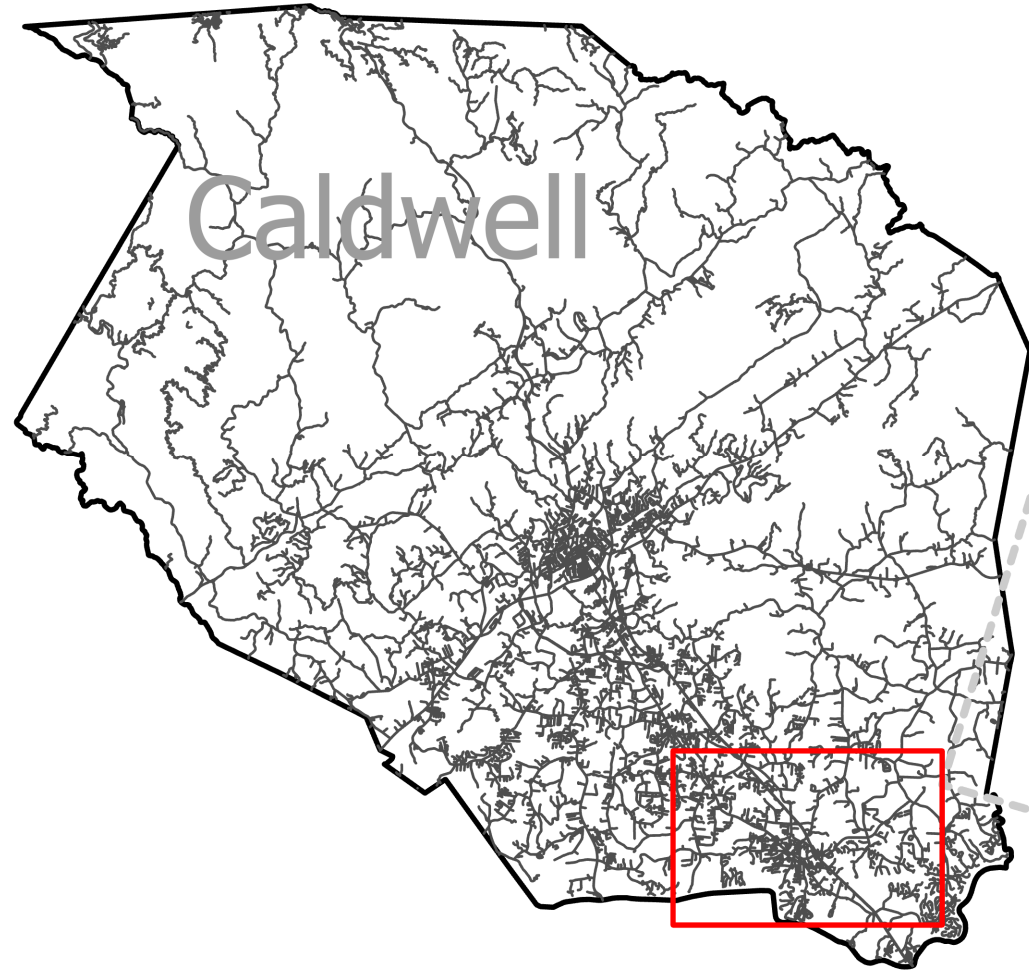
NOTE: TYPICALS ARE NOT TO SCALE

CALDWELL COUNTY PRIMARY ROADS 2025 ASPHALT RESURFACING			
REVISIONS	INT.	DATE	
N.C. DEPARTMENT of TRANSPORTATION DIVISION of HIGHWAYS DIVISION ELEVEN			SCALE: N/A    DATE: 9/10/2024 PREPARED BY: DLH REVIEWED BY:



# Maps #1-6

## 2025 Primary Resurfacing



PROJECT NO.	SHEET NO.
DK00399	5

### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	1220000000-E	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1523000000-E	1575000000-E	2846000000-N	2815000000-N	2830000000-N	2845000000-N	7324000000-N	7444000000-E
												INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	1½" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	ADJUST OVERSIZED MANHOLE	ADJUST DROP INLET	ADJUST MANHOLES	ADJUST METER OR VALVE BOX	JUNCTION BOX (STANDARD SIZE)	INDUCTIVE LOOP SAWCUT
												TONS	SMI	TON	SY	SY	TONS	TON	EA	EA	EA	EA	EA	LF
2025CPT.11.02.10141	Caldwell	1	US-321 SB	FROM ±1600' SOUTH OF SR 1108 TO ±350' SOUTH OF US 321A	1	2		5.13	32	25.80	30.93	103	5.1	1,411	104,004	2,500	9,340	551			6	6	4	1,525
2025CPT.11.02.10141	Caldwell	2	RMP-2283 OI	FROM US 321 SB TO ARCHER ST (NS)	2	2	2WU	0.15	25	0.00	0.15	3	0.2	41	2,200	139	214	13						
2025CPT.11.02.10141	Caldwell	3	RMP-2284 OI	FROM ARCHER ST (NS) TO US 321 SB	3	2	2WU	0.11	25	0.02	0.13	2			1,907	139	157	9						
2025CPT.11.02.10141	Caldwell	4	RMP-2287 OI	FROM US 321 SB TO US 321 ALT	4	2		0.08	20	0.00	0.08		0.1	22	939	111	91	5						
2025CPT.11.02.10141	Caldwell	5	RMP-2288 OI	FROM US 321 ALT TO US 321 SB	4	2		0.06	20	0.00	0.06		0.1	17	704	222	68	4						
2025CPT.11.02.10141	Caldwell	6	US-321 ALT	FROM SR 1108 TO ±150' NORTH OF SR 1130	5	2	2WU	3.05	24	3.04	6.09	61	3.1	839	42,944	533	4,170	246	2	4		32	1	1,500
<b>TOTAL FOR PROJ NO. 2025CPT.11.02.10141</b>								<b>8.58</b>				<b>169</b>	<b>8.5</b>	<b>2,330</b>	<b>152,698</b>	<b>3,644</b>	<b>14,040</b>	<b>828</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>38</b>	<b>5</b>	<b>3,025</b>
<b>GRAND TOTAL</b>								<b>8.58</b>				<b>169</b>	<b>8.5</b>	<b>2,330</b>	<b>152,698</b>	<b>3,644</b>	<b>14,040</b>	<b>828</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>38</b>	<b>5</b>	<b>3,025</b>

[Mileage Maps](#)

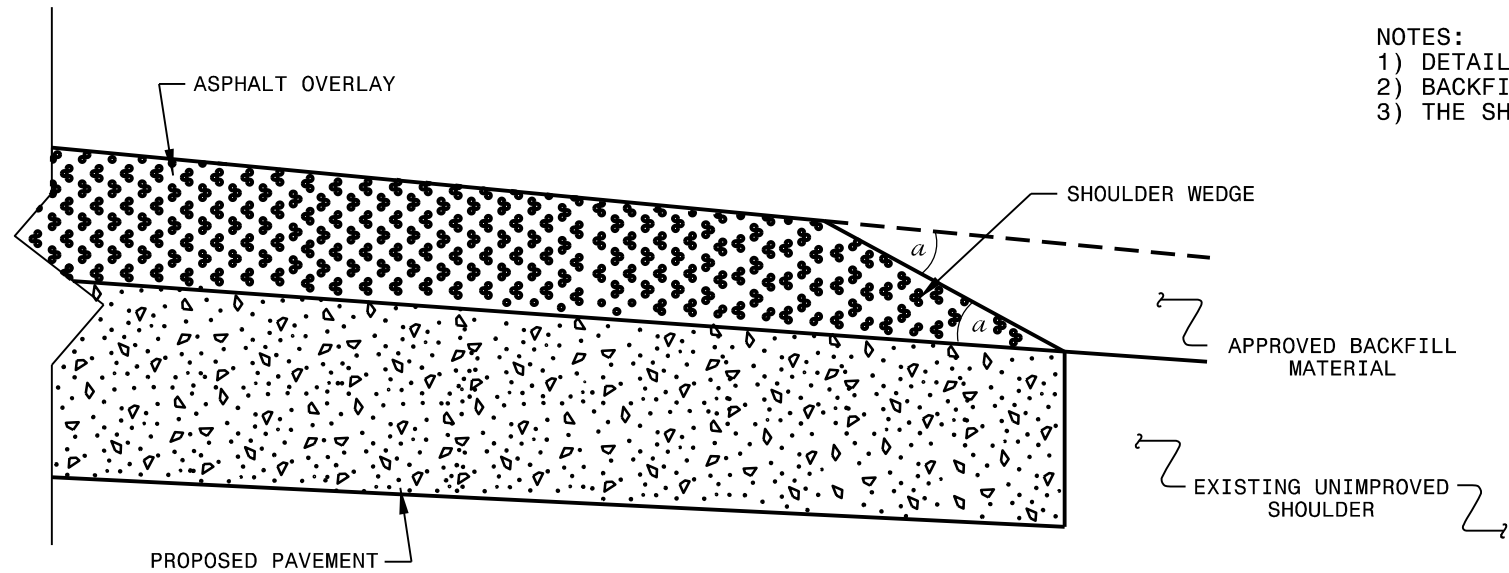
PROJECT NO. DK00399	SHEET NO. 6
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**THERMOPLASTIC AND PAINT QUANTITIES**

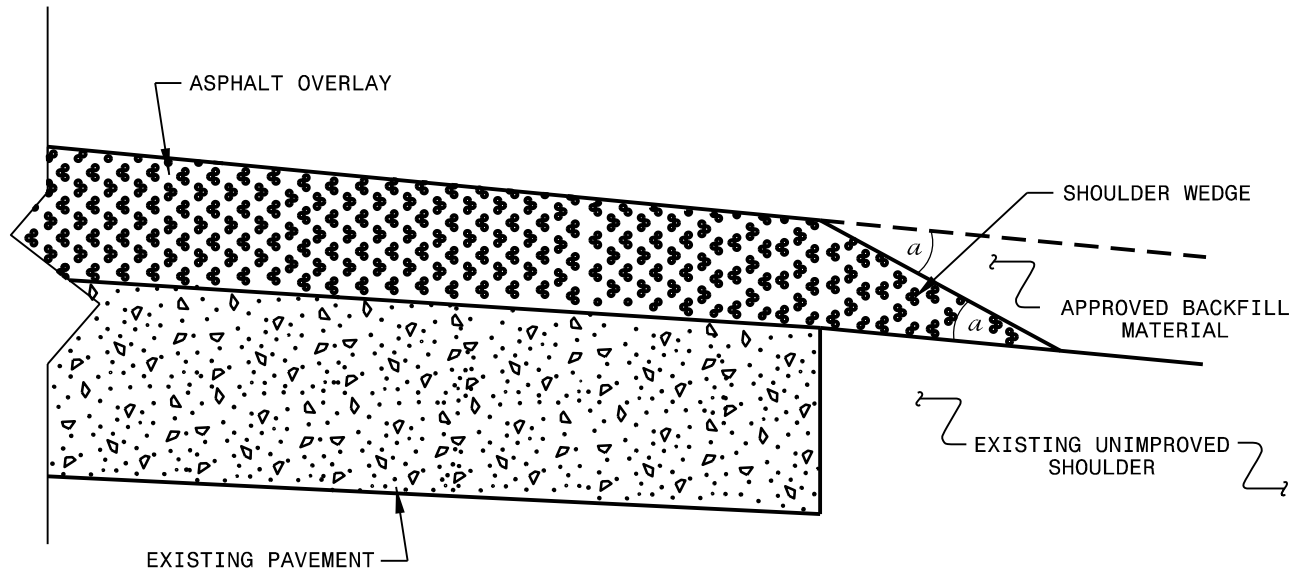
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN HP	END HP	4413000000-E	4510000000-N	4695000000-E	4725000000-E					4709000000-E	4890000000-E		4895000000-N										
												WORK ZONE ADVANCE/GENERAL WARNING SIGNING	LAW ENFORCEMENT	THERMOPLASTIC PAVEMENT MARKING LINES, 8", 90 MIL	THERMOPLASTIC STRAIGHT ARROW 90 MIL	THERMOPLASTIC STRAIGHT & LEFT ARROW 90 MIL	THERMOPLASTIC LEFT ARROW 90 MIL	THERMOPLASTIC MERGE ARROW 90 MIL	THERMOPLASTIC STRAIGHT & LEFT ARROW 90 MIL	THERMOPLASTIC STRAIGHT & RIGHT ARROW 90 MIL	THERMOPLASTIC LEFT & RIGHT ARROW 90 MIL	THERMOPLASTIC LEFT STRAIGHT RIGHT ARROW 90 MIL	THERMOPLASTIC PAVEMENT MARKING LINES, 24", 55 MIL	GENERIC MARKING ITEM HOT SPRAY PAVEMENT MARKING LINES, 4", 55 MIL	GENERIC MARKING ITEM HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINES, 8", 55 MIL	GENERIC MARKING ITEM POLYCARBONATE H-SHAPED MARKER							
2025CPT.11.02.10141	Caldwell	1	US-321 SB	FROM +1600' SOUTH OF SR 1108 TO +350' SOUTH OF US 321A	1	2		5.13	32	25.80	30.93	298	40	750	14	15	33	1	1	2			200	60,945	1,000	677							
2025CPT.11.02.10141	Caldwell	2	RMP-2283 OI	FROM US 321 SB TO ARCHER ST (NS)	2	2	ZWU	0.15	25	0.00	0.15	112											1,585										
2025CPT.11.02.10141	Caldwell	3	RMP-2284 OI	FROM ARCHER ST (NS) TO US 321 SB	3	2	ZWU	0.11	25	0.02	0.13	112												1,802									
2025CPT.11.02.10141	Caldwell	4	RMP-2287 OI	FROM US 321 SB TO US 321 ALT	4	2		0.08	20	0.00	0.08	112				2								880		135							
2025CPT.11.02.10141	Caldwell	5	RMP-2288 OI	FROM US 321 ALT TO US 321 SB	4	2		0.06	20	0.00	0.06	112				1								660		265							
2025CPT.11.02.10141	Caldwell	6	US-321 ALT	FROM SR 1108 TO +150' NORTH OF SR 1130	5	2	ZWU	3.05	24	3.04	6.09	226	40	750	2		3			1	1	1	250	65,030	200	261							
TOTAL FOR PROJ NO. 2025CPT.11.02.10141																972	80	750	16	18	36	1	77	1	3	1	1	450	130,868	1,600	878		
GRAND TOTAL															8.58			972	80	750	16	18	36	1	77	1	3	1	1	450	130,868	1,600	878

[Message Maps](#)

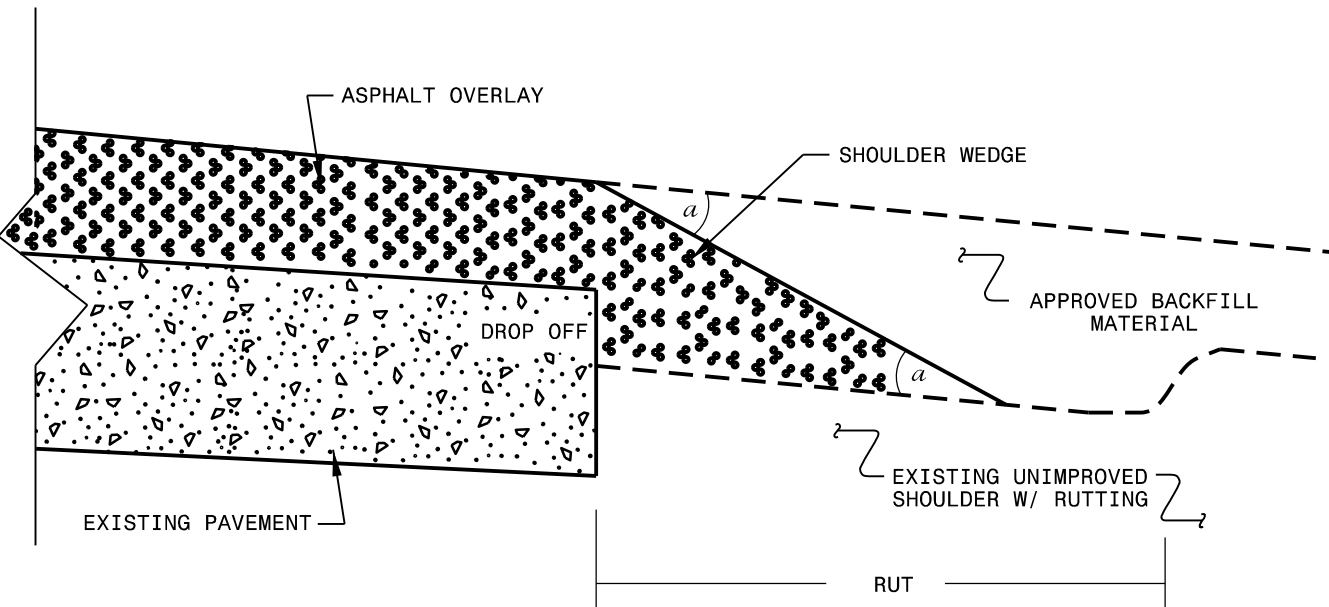
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFD AND ULTRA-THIN BONDED WEARING COURSE.
  - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ Widening or  
 with Existing Paved Shoulder having no dropoffs)



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ NO Widening)



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Adjacent to  
 Rutted Shoulder)

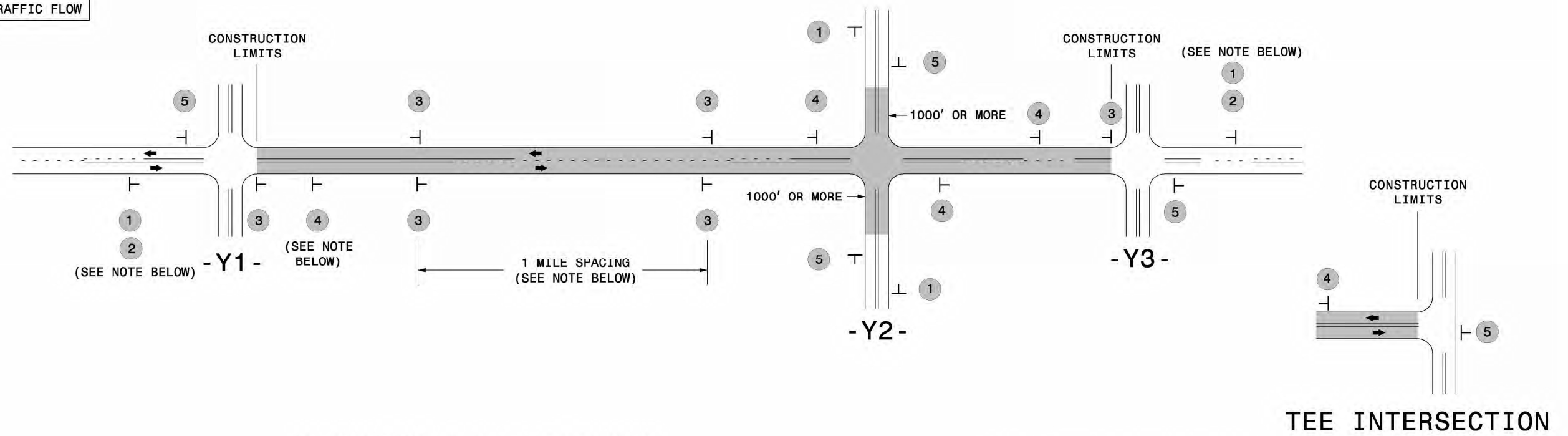
- SHOULDER WEDGE ANGLE = 30°

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>			
Office 919-707-6950		FAX 919-250-4119	
<b>SHOULDER WEDGE DETAILS</b>			
ORIGINAL BY: T.SPELL	DATE: 7-19-11		
MODIFIED BY:	DATE: 10/16/12		
CHECKED BY:	DATE:		
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn			

SYSTEMS DESIGN USER NAME

# SIGNING FOR RESURFACING PROJECTS

**LEGEND**  
 ┆ STATIONARY SIGN  
 ← DIRECTION OF TRAFFIC FLOW



## MAINLINE (-L-) SIGNING

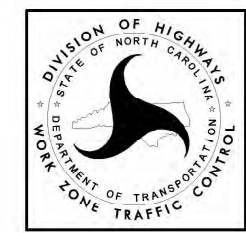
## -Y- LINE SIGNING

<b>SIGNING NOTES AND PLACEMENT PER DIRECTION</b>	1		PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p><b>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>SUBDIVISION ROADS</li> <li>DEAD END ROADS</li> </ol> <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">             W20-1 48" X 48"            PLACED 500' IN ADVANCE OF FLAGGER.         </div> <div style="text-align: center;">             W20-7 A 48" X 48"            PLACED 250' IN ADVANCE OF FLAGGER.         </div> </div>
	2		#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3		<ul style="list-style-type: none"> <li>PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</li> <li>AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</li> </ul>	
	4		<ul style="list-style-type: none"> <li>THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</li> <li>INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</li> <li>FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH.</li> <li>A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</li> <li>FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</li> </ul>	
	5		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

### MAPS LESS THAN 2 MILES

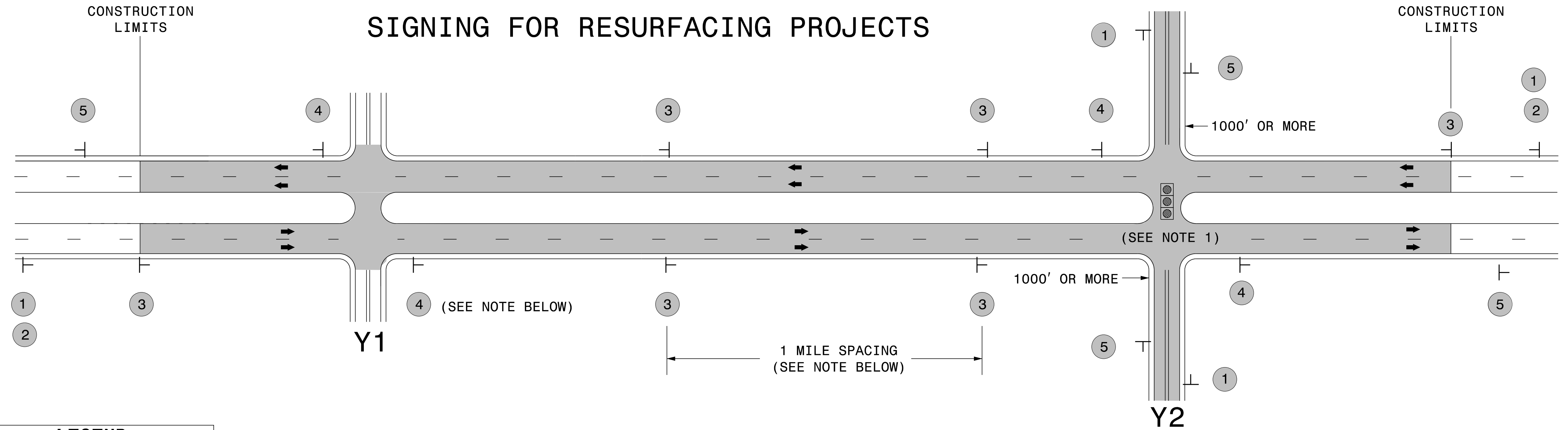
FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



**ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING**

5/15/2017 5:11:11 PM WZTC:\Resurfacing\Details\Resurfacing\_AdvWarn\_2Lndgn User:keidls





**LEGEND**  
 T STATIONARY SIGN  
 ← DIRECTION OF TRAFFIC FLOW

**MAINLINE (-L-) SIGNING**

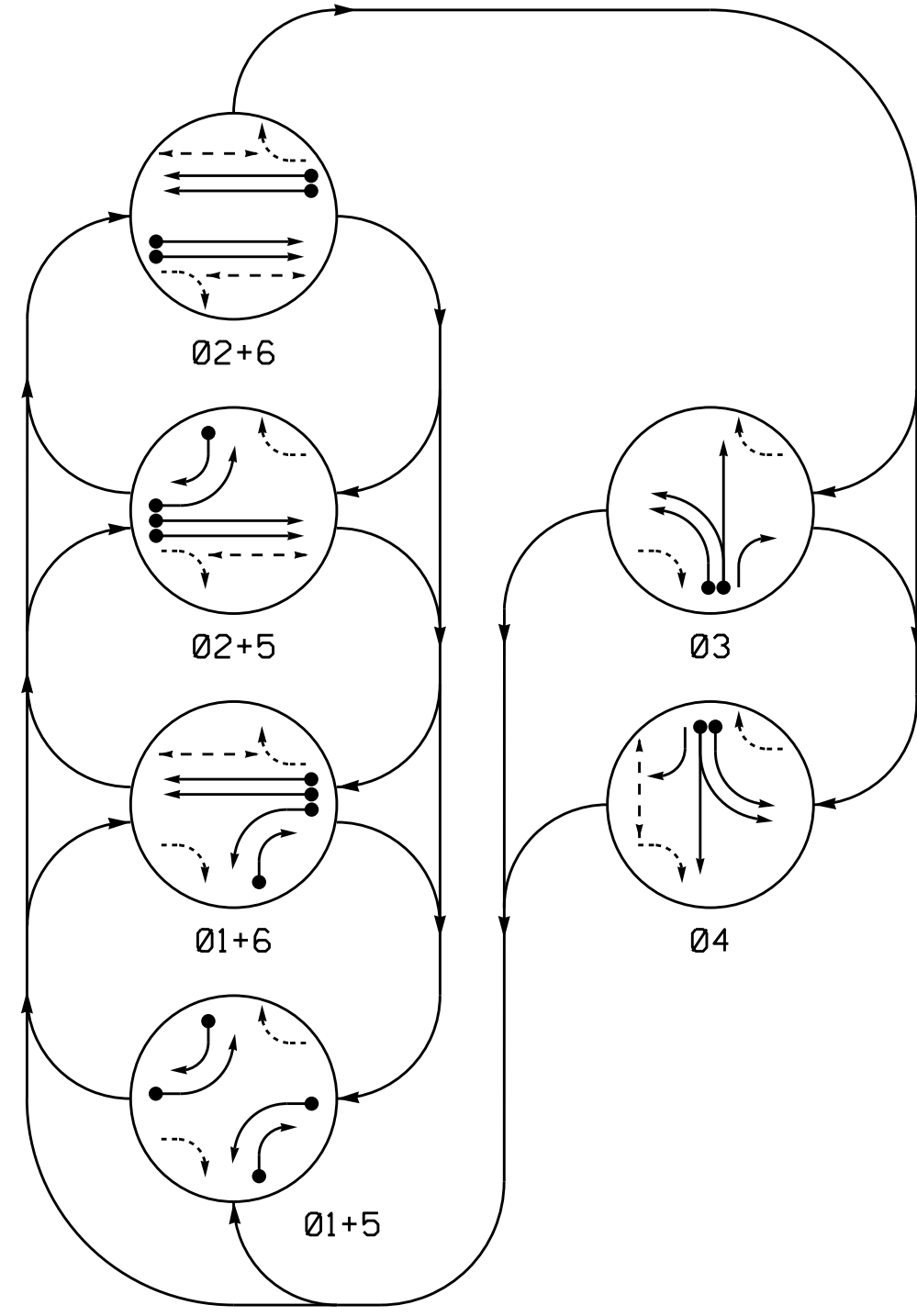
**-Y- LINE SIGNING**

SIGNING NOTES AND PLACEMENT PER DIRECTION	1	 W20-1 48" X 48"	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p><b>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">           W20-1          48" X 48"       </div> <div style="text-align: center;">           W20-7 A          48" X 48"       </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>1) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.</li> </ol>
	2	 W7-3aP 24" X 18"	#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3	 SP 13107 48" X 48"	PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.	
	4	 SP 13106 48" X 48"	THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.	
	5	 G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	

**RESURFACING  
 ADVANCE WARNING SIGNS  
 FOR RURAL AND SUBURBAN  
 MULTI-LANE ROADWAYS  
 W/ SHOULDER SECTIONS**



PHASING DIAGRAM

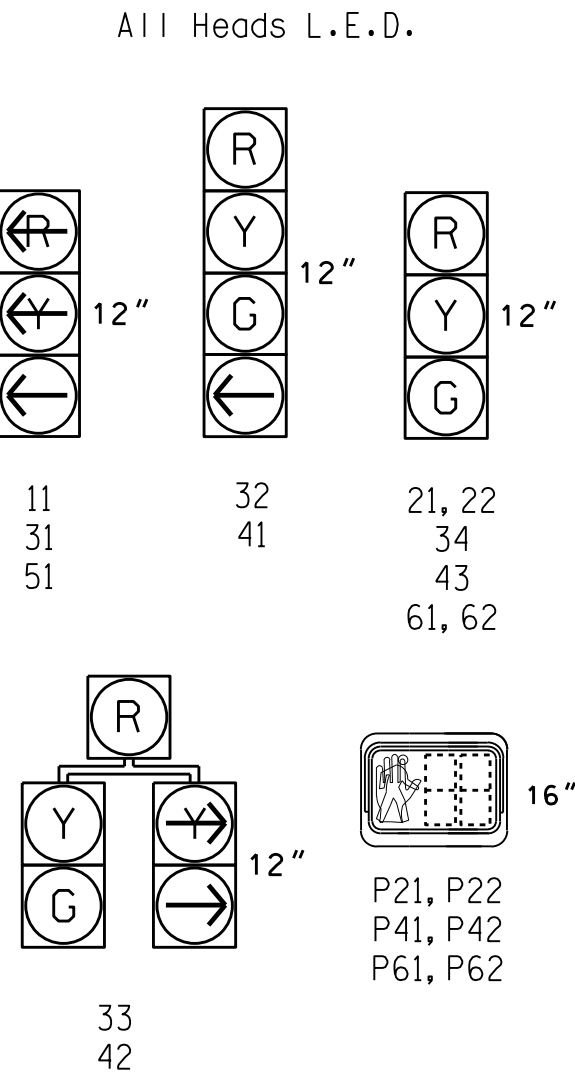


PHASING DIAGRAM DETECTION LEGEND

- ← ● DETECTED MOVEMENT
- ← ○ UNDETECTED MOVEMENT (OVERLAP)
- ← - - - UNSIGNALIZED MOVEMENT
- ← - - - PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE					
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3	Ø 4
11	←	←	←	←	←	←
21, 22	R	R	G	G	R	Y
31	←	←	←	←	←	←
32	R	R	R	G	R	R
33	R	R	R	G	R	R
34	R	R	R	G	R	R
41	R	R	R	R	G	R
42	R	R	R	R	G	R
43	R	R	R	R	G	R
51	←	←	←	←	←	←
61, 62	R	G	R	G	R	Y
P21, P22	DW	DW	W	DW	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	W	DW	DW	DRK

SIGNAL FACE I.D.



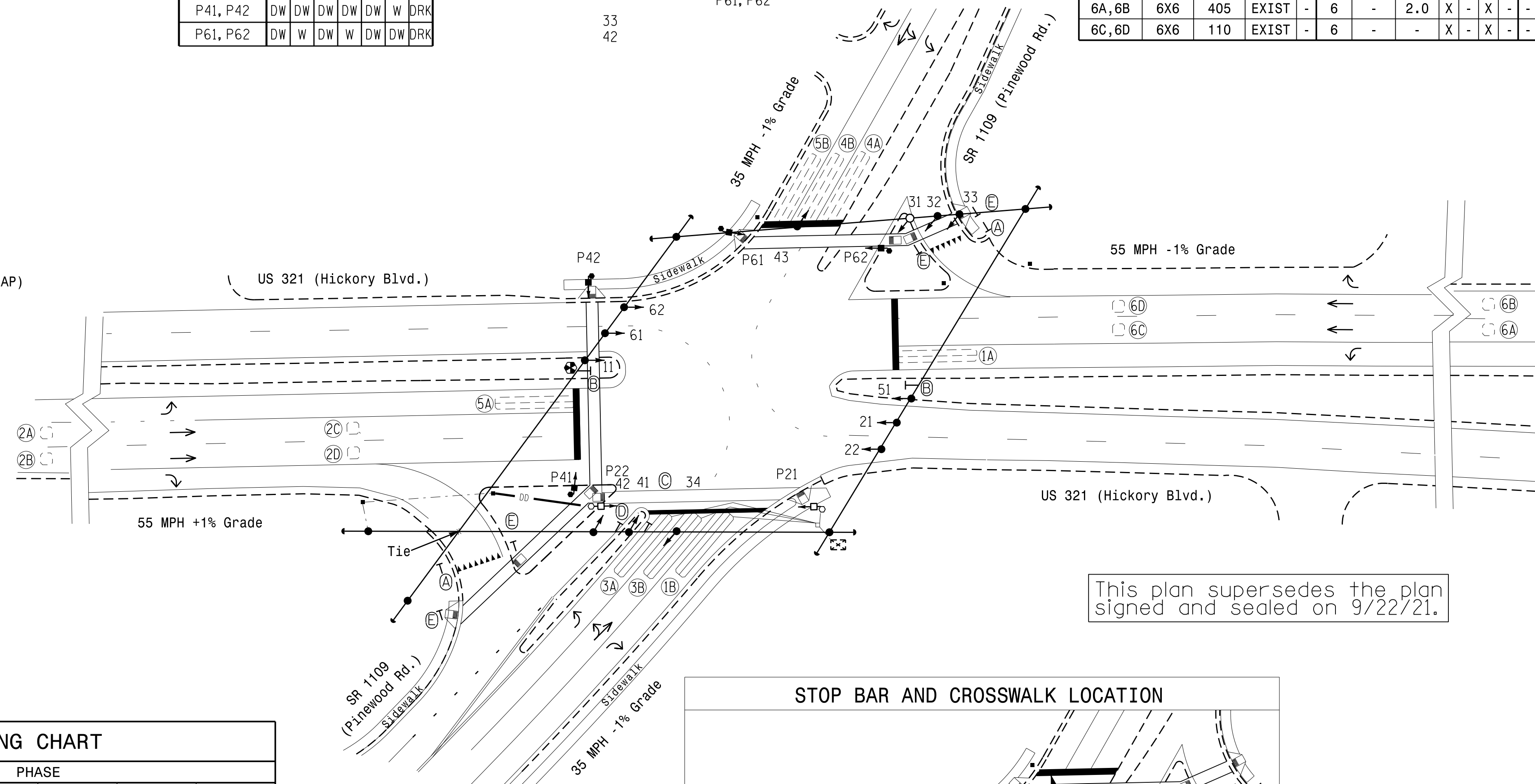
MAXTIME DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	2-4-2	-	1	-	-	X	-	X	-	-
1B	6X40	0	2-4-2	X	1	15.0	-	X	-	X	-	X
2A	6X6	405	EXIST	-	2	-	2.0	X	-	X	-	-
2B	6X6	405	EXIST	-	2	-	2.0	X	-	X	-	-
2C, 2D	6X6	110	EXIST	-	2	-	-	X	-	X	-	-
3A	6X40	0	2-4-2	X	3	-	-	X	-	X	-	X
3B	6X40	0	2-4-2	X	3	-	-	X	-	X	-	X
4A	6X40	0	2-4-2	-	4	-	-	X	-	X	-	-
4B	6X40	0	2-4-2	-	4	-	-	X	-	X	-	-
5A	6X40	0	2-4-2	-	5	-	-	X	-	X	-	-
5B	6X40	0	2-4-2	-	5	15.0	-	X	-	X	-	-
6A, 6B	6X6	405	EXIST	-	6	-	2.0	X	-	X	-	-
6C, 6D	6X6	110	EXIST	-	6	-	-	X	-	X	-	-

6 Phase Fully Actuated Isolated

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024, "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Reposition existing signal heads numbered 32 and 33.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.



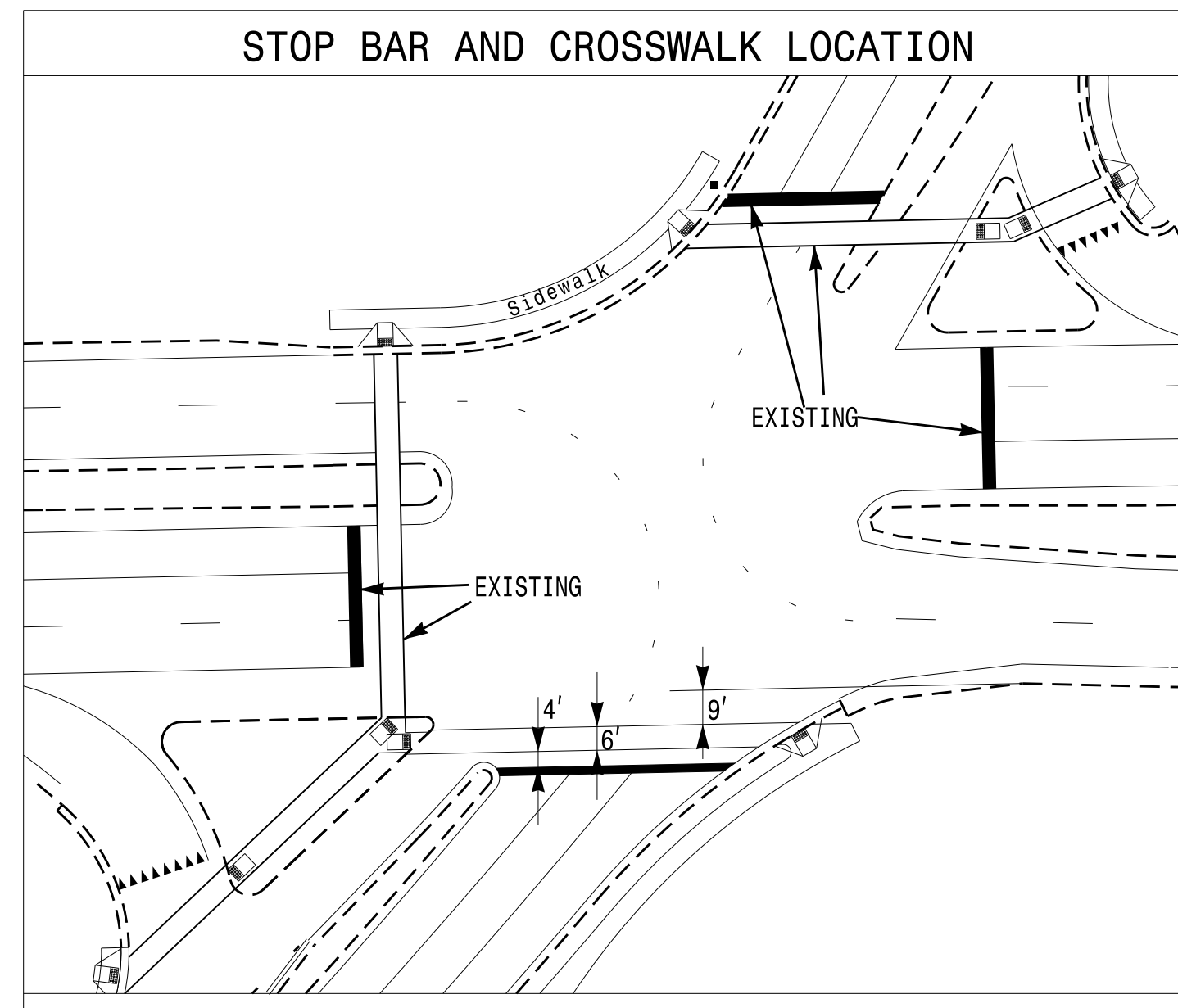
This plan supersedes the plan signed and sealed on 9/22/21.

FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	-	7	-	7	-	7
Ped Clear *	-	23	-	24	-	17
Min Green *	7	14	7	7	7	14
Passage *	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	15	75	30	30	15	75
Yellow Change	3.0	5.3	3.9	3.9	3.0	5.3
Red Clear	4.0	1.9	3.1	3.2	4.4	1.9
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Advance Walk	-	-	-	-	-	-
Non Lock Detector	X	-	X	X	X	-
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL
Dual Entry	-	-	-	-	-	-

\* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

LEGEND

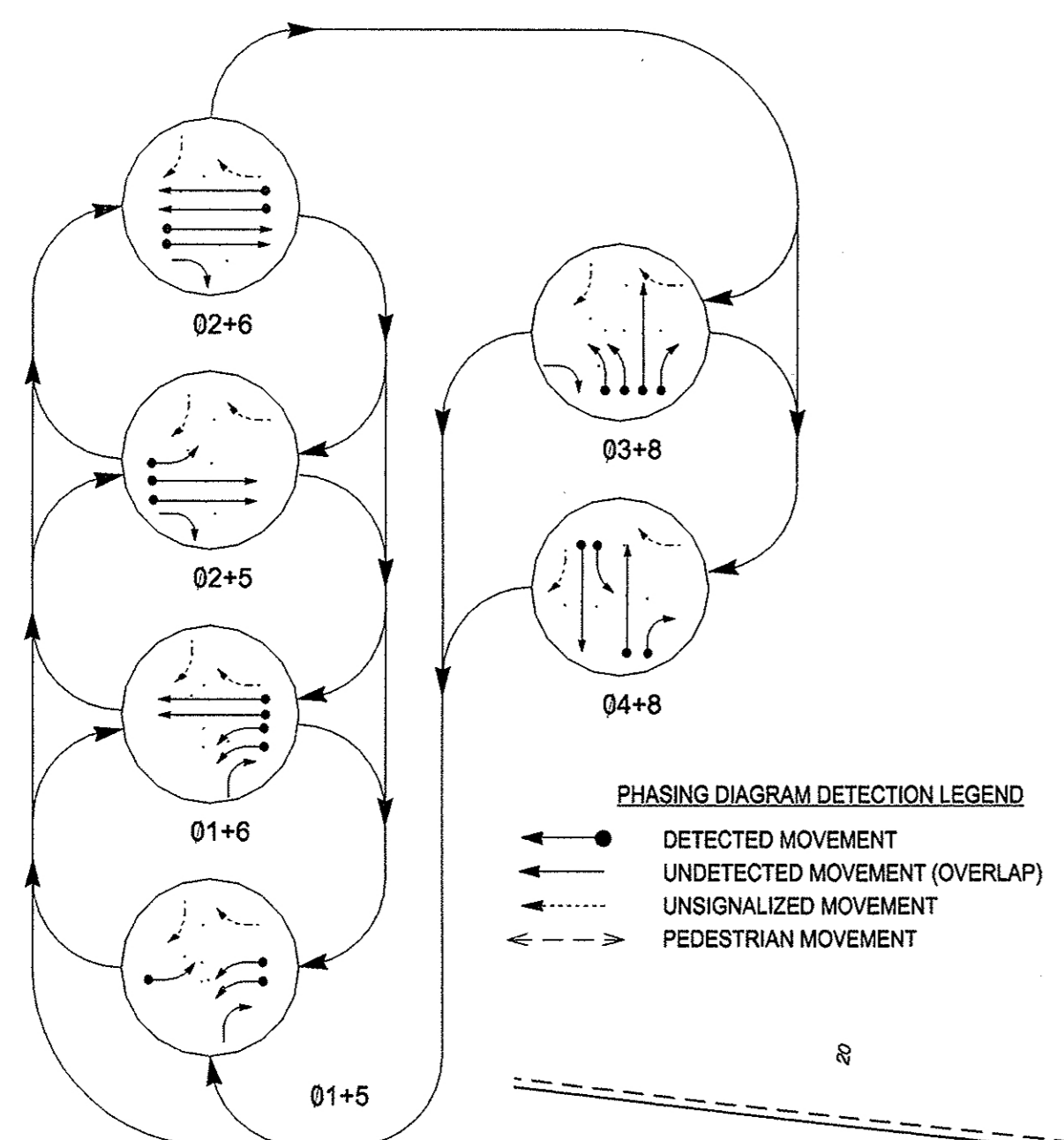
- |  |   |  |   |
|--|---|--|---|
|  | PROPOSED Traffic Signal Head  |  | EXISTING Traffic Signal Head  |
|  | PROPOSED Modified Signal Head   |  | EXISTING Modified Signal Head   |
|  | PROPOSED Pedestrian Signal Head                                       |  | EXISTING Pedestrian Signal Head                                       |
|  | PROPOSED Signal Pole with Guy   |  | EXISTING Signal Pole with Guy   |
|  | PROPOSED Signal Pole with Sidewalk Guy                                |  | EXISTING Signal Pole with Sidewalk Guy                                |
|  | PROPOSED Inductive Loop Detector                                      |  | EXISTING Inductive Loop Detector                                      |
|  | PROPOSED Controller & Cabinet   |  | EXISTING Controller & Cabinet   |
|  | PROPOSED Junction Box   |  | EXISTING Junction Box   |
|  | PROPOSED 2-in Underground Conduit                                     |  | EXISTING 2-in Underground Conduit                                     |
|  | PROPOSED Right of Way   |  | EXISTING Right of Way   |
|  | PROPOSED Directional Arrow  |  | EXISTING Directional Arrow  |
|  | PROPOSED Type I Pushbutton Post                                       |  | EXISTING Type I Pushbutton Post                                       |
|  | PROPOSED Type II Signal Pedestal                                      |  | EXISTING Type II Signal Pedestal                                      |
|  | PROPOSED Curb Ramp  |  | EXISTING Curb Ramp  |
|  | PROPOSED Directional Drill  |  | EXISTING Directional Drill  |
|  | PROPOSED "YIELD" Sign (R1-2)  |  | EXISTING "YIELD" Sign (R1-2)  |
|  | PROPOSED "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)                   |  | EXISTING "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)                   |
|  | PROPOSED Left Turn Only Sign (R3-5L)                                  |  | EXISTING Left Turn Only Sign (R3-5L)                                  |
|  | PROPOSED Left/Straight Arrow Sign (R3-6L)                             |  | EXISTING Left/Straight Arrow Sign (R3-6L)                             |
|  | PROPOSED Pedestrian Sign (W11-2) and Diagonal Downward Arrow (W16-7p) |  | EXISTING Pedestrian Sign (W11-2) and Diagonal Downward Arrow (W16-7p) |



Signal Upgrade-Final Design

	US 321 (Hickory Blvd.) at SR 1109 (Pinewood Rd.)		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 043914 RICHARD N. ZINSER, ENGINEER
	Division 11 Caldwell County Granite Falls PLAN DATE: August 2023 PREPARED BY: T.A. Kenion	REVIEWED BY: R.N. Zinser REVIEWED BY:	

PHASING DIAGRAM



SIGNAL FACE I.D.

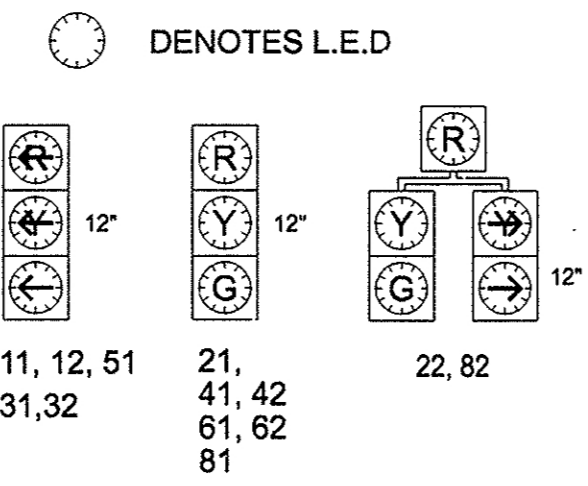
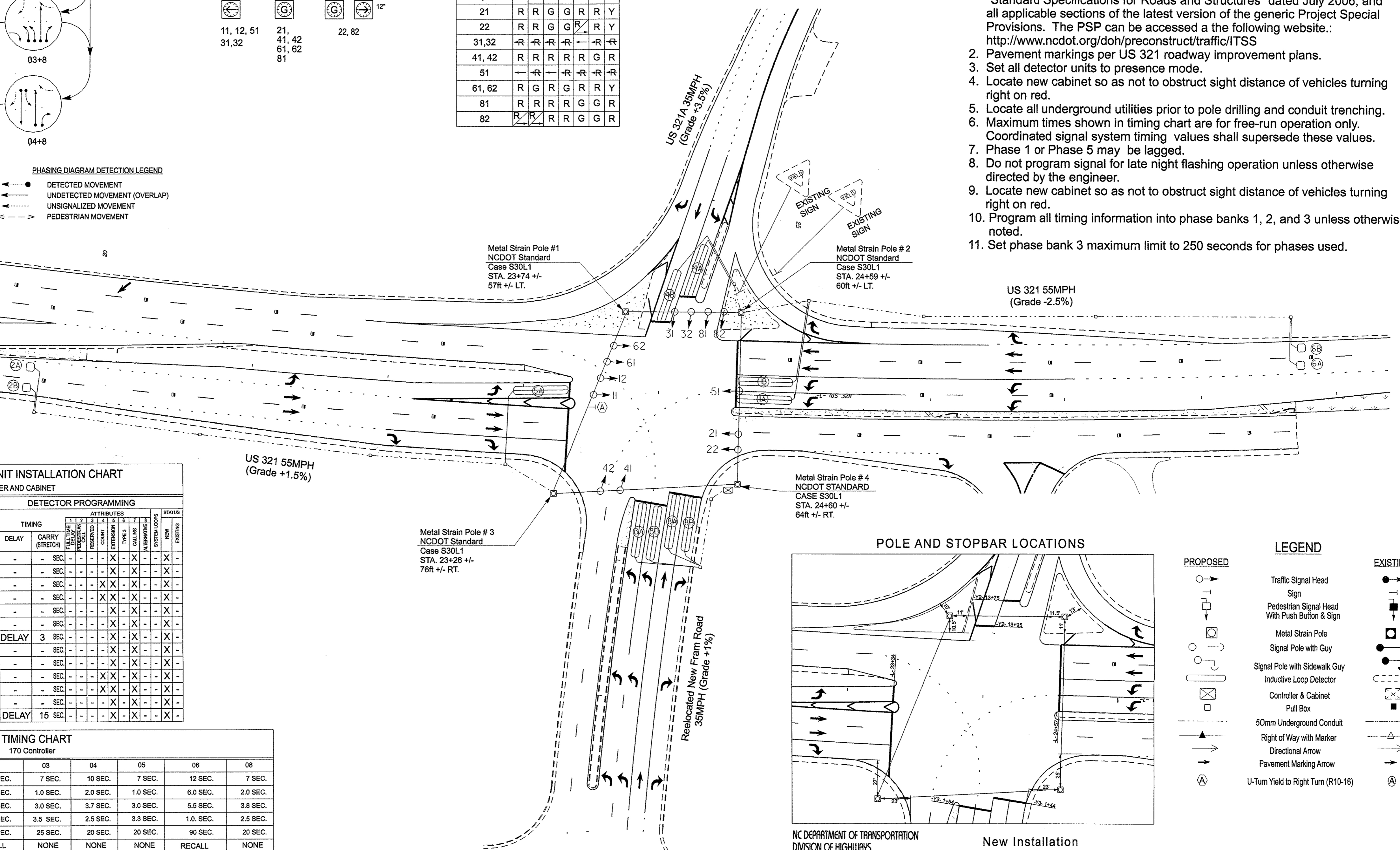


TABLE OF OPERATION table with columns for SIGNAL FACE and PHASE (01-08, FLASH). It lists the sequence of phases for each signal face across different times of day.

6 Phase Fully Actuated Hickory City System

NOTES

- 11 numbered list of notes providing technical specifications and instructions for the signal system installation and timing.



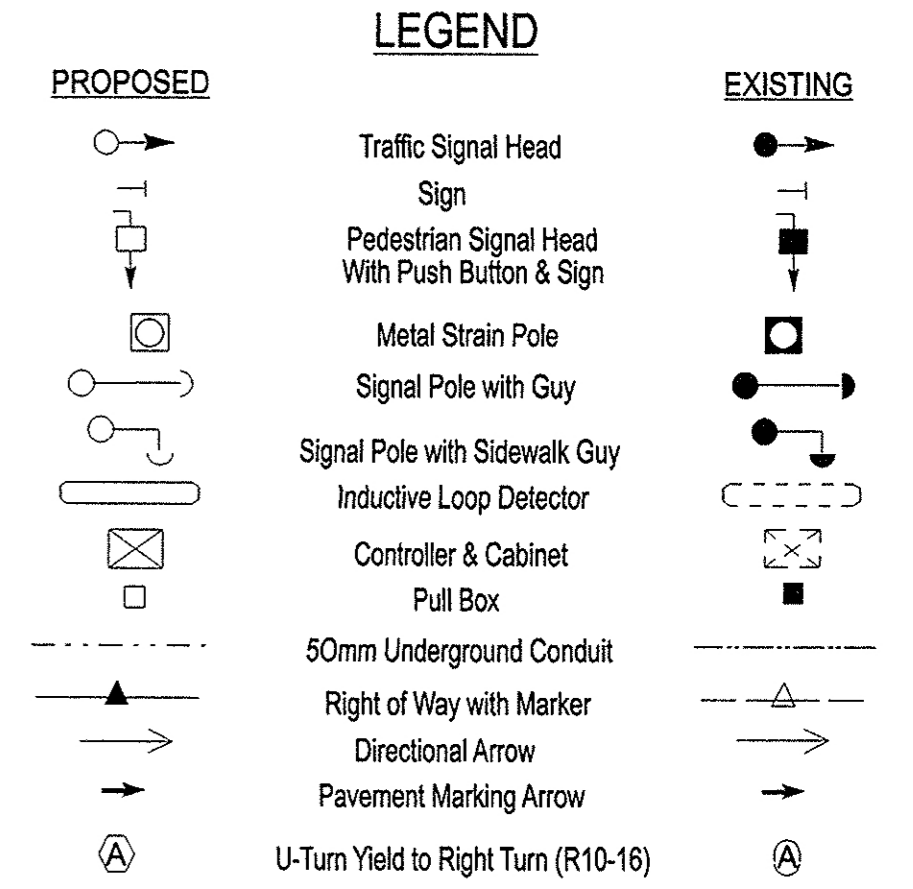
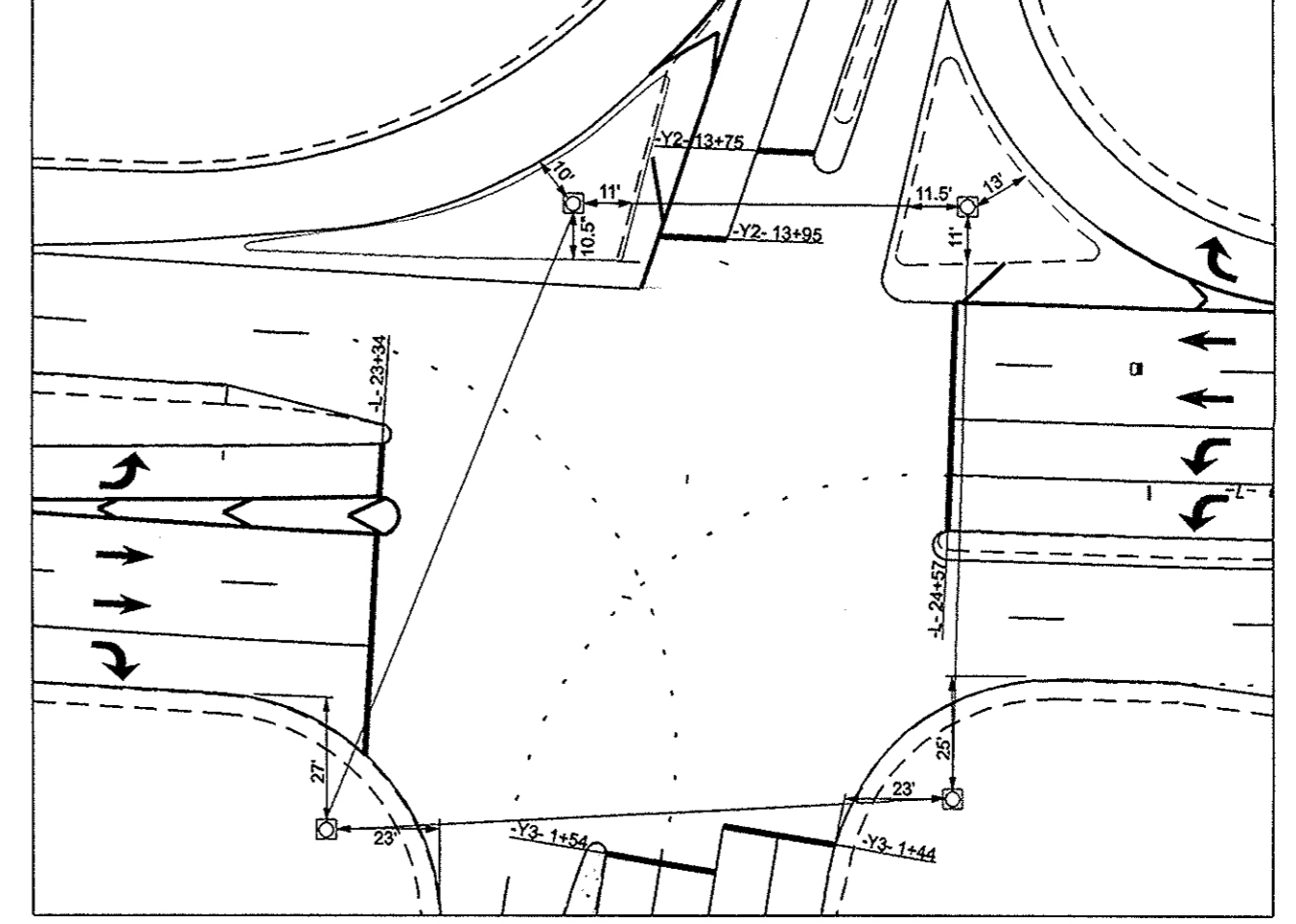
LOOP & DETECTOR UNIT INSTALLATION CHART

Table with columns for LOOP NO., SIZE, TURNS, DIST. FROM STOPBAR, and DETECTOR PROGRAMMING (TIMING, ATTRIBUTES, STATUS).

TIMING CHART

Timing chart table for a 170 Controller, showing phase sequences (01-08) and timing values for various signal aspects like minimum initial, vehicle extension, and red clearance.

POLE AND STOPBAR LOCATIONS



NC DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

New Installation

FINAL DRAWING Date: 6/21/07 Traffic Engineering Branch Prepared in the Offices of: PARSONS BRINCKERHOFF

Professional seal and project information block including project name (US 321 at US 321A / Relocated New Farm Road), division (Caldwell County), and signatures of R. Combs and H. Zhang.

\* THESE VALUES MAY BE FIELD ADJUSTED. DO NOT ADJUST MIN GREEN AND EXTENSION TIMES FOR PHASES 2 AND 6 LOWER THAN WHAT IS SHOWN. MIN GREEN FOR ALL OTHER PHASES SHOULD NOT BE LOWER THAN 4 SECONDS.