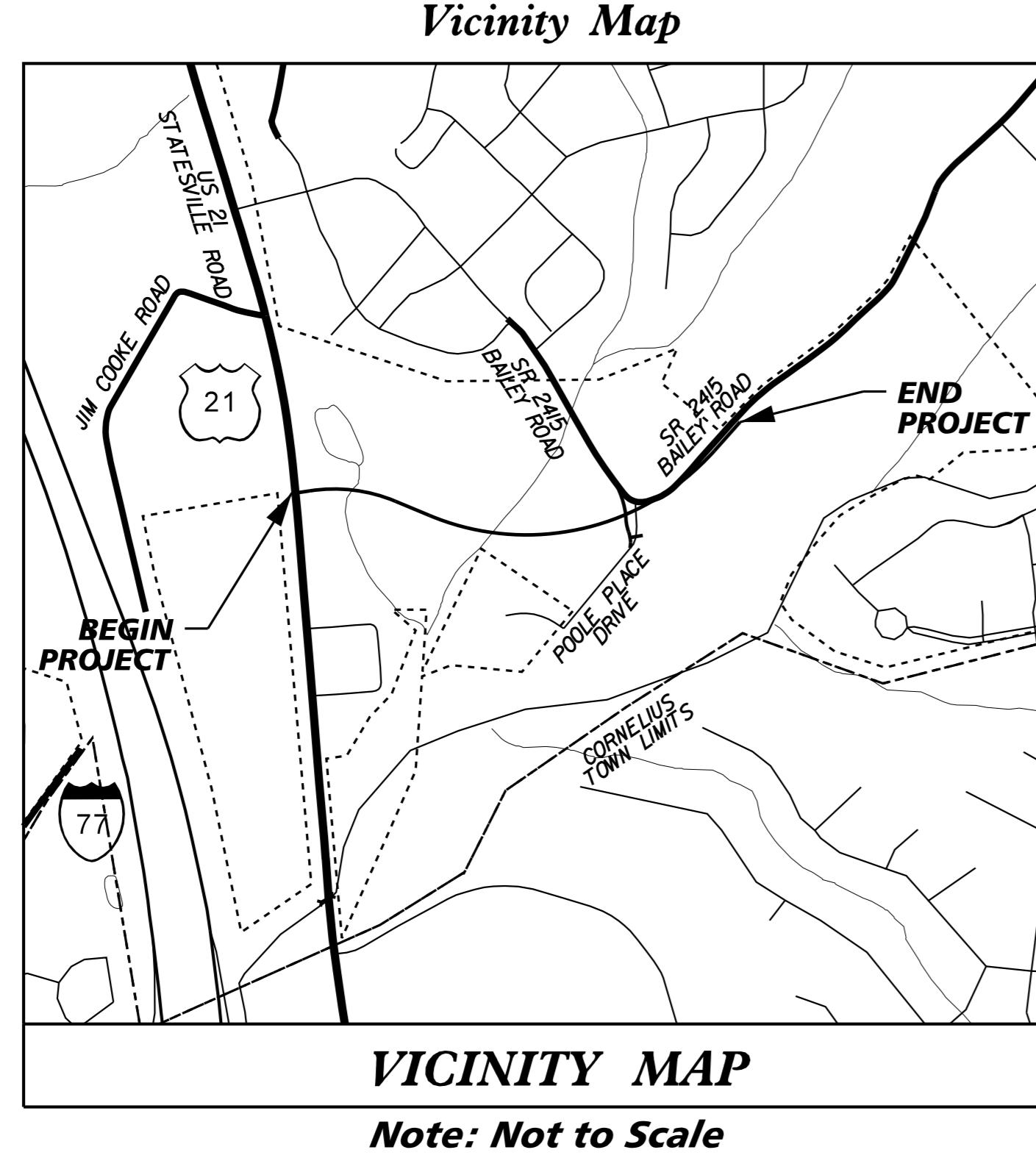


CONTRACT: C205095

TIP PROJECT: U-6105

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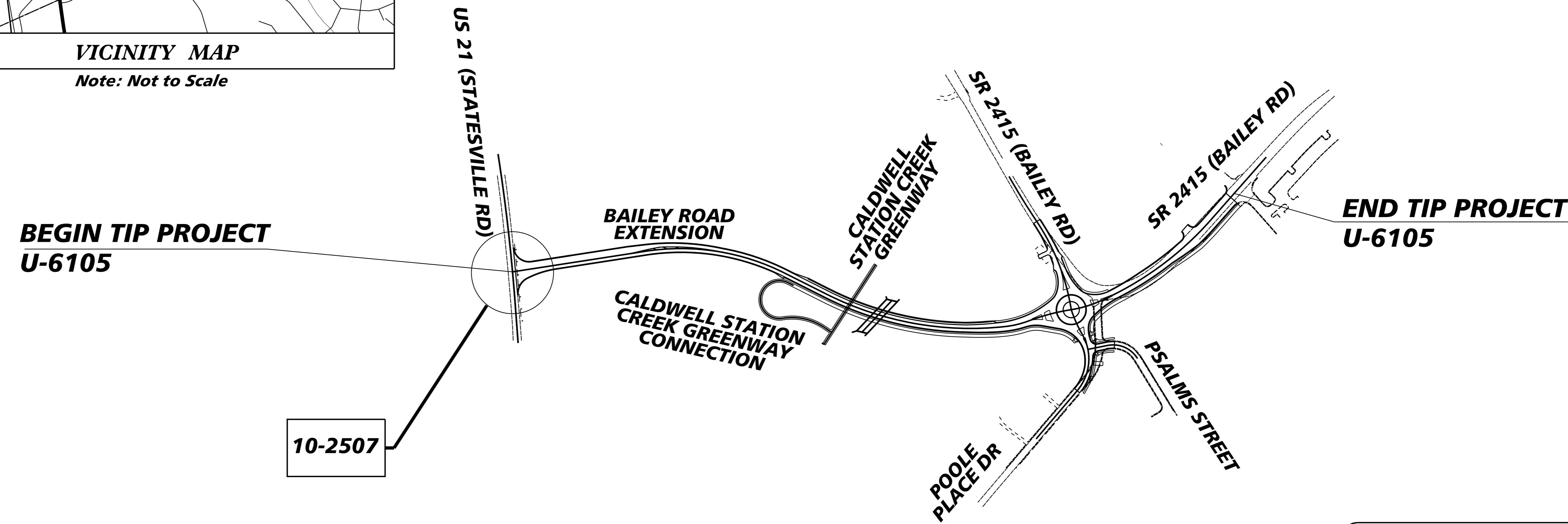


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**MECKLENBURG COUNTY**

**LOCATION: SR 2415 (BAILEY ROAD) FROM POOLE PLACE DRIVE TO US 21 (STATESVILLE ROAD)  
IN CORNELIUS  
CONSTRUCT ROADWAY ON NEW LOCATION**

**TYPE OF WORK: TRAFFIC SIGNAL**



Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.

**Sheet #**  
Sig. 0.0  
Sig. 1.0-1.3

**Reference #**  
10-2507

**Index of Plans**

**Location/Description**  
Title Sheet  
US 21 (Statesville Road) at Bailey Road Extension

**NCDOT SIGNAL CONTACTS:**

R. Nicholas Zinser, P.E.  
WESTERN REGION SIGNALS ENGINEER

Keith M. Mims, P.E.  
STATE SIGNAL EQUIPMENT ENGINEER

Gregg A. Green  
SIGNAL COMMUNICATIONS PROJECT ENGINEER

**PLANS PREPARED BY:**  
**Kimley»Horn**

421 Fayetteville Street, Suite 600  
Raleigh, North Carolina 27601  
PE NO. P-0102

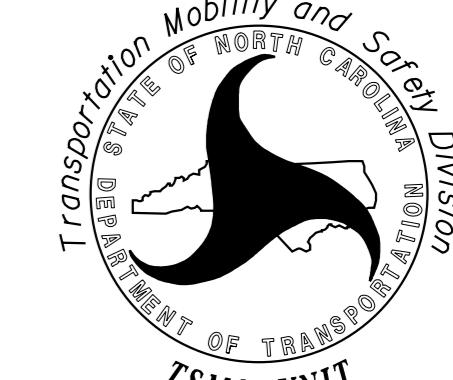
STACIE L. PHILLIPS, P.E.  
TRAFFIC SIGNAL ENGINEER



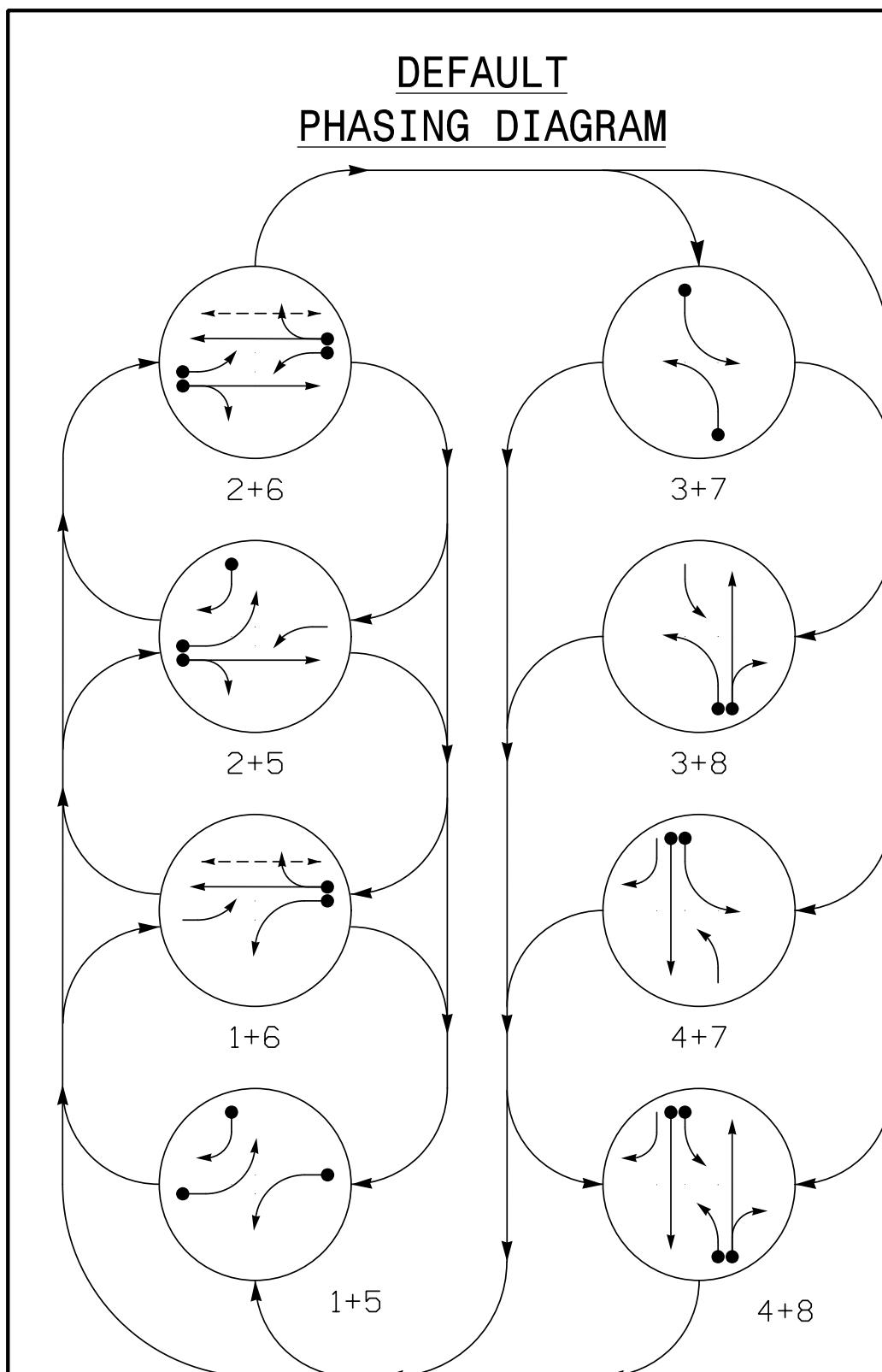
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SAC-PH  
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SIGNATURE:

7/24/2025  
P.E.

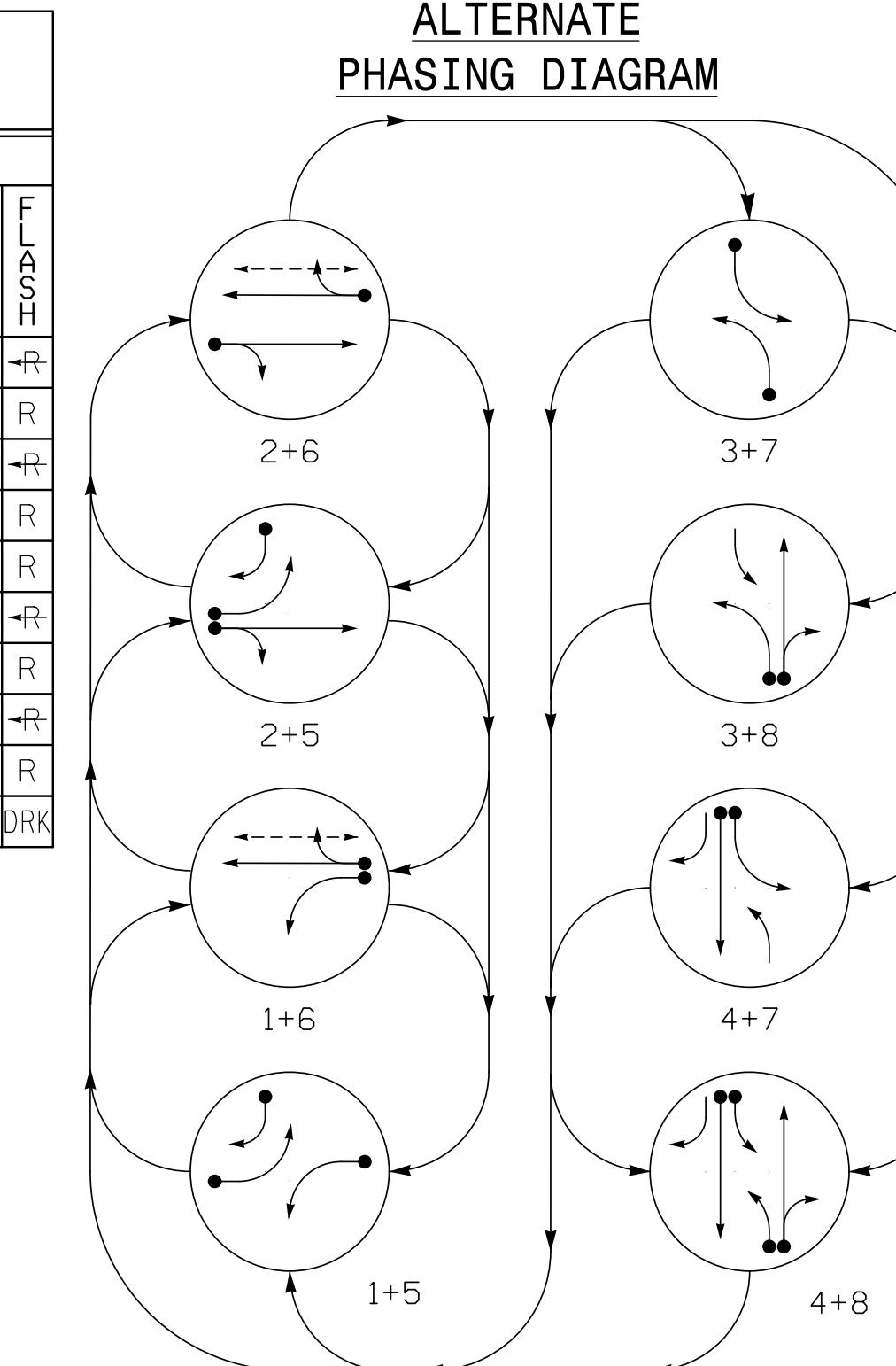
Prepared For:  
DIVISION OF HIGHWAYS  
TRANSPORTATION MOBILITY & SAFETY DIVISION



750 N. Greenfield Parkway, Garner, NC 27529



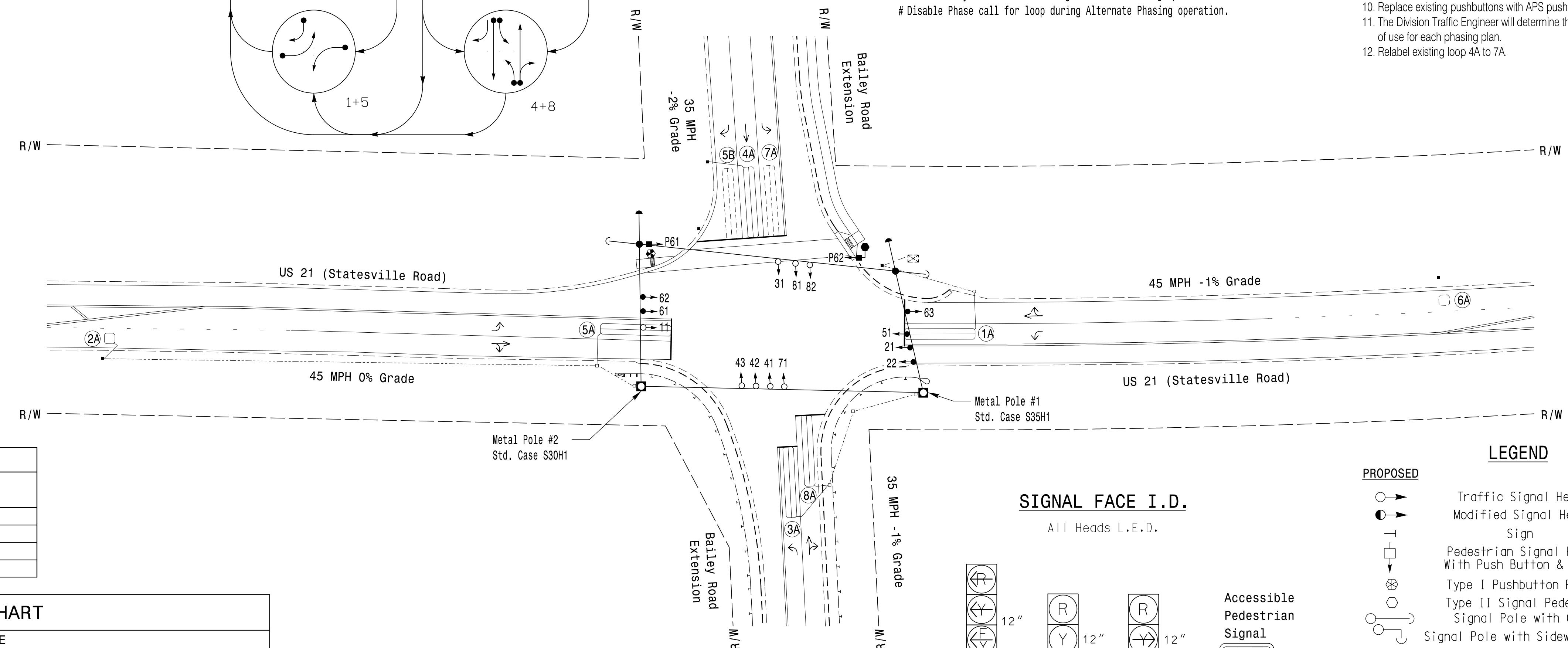
# DEFAULT PHASING TABLE OF OPERATION



ALTERNATE PHASING TABLE OF OPERATION									
SIGNAL FACE	PHASE								
	1	1	2	2	3	3	4	4	F
	+	+	+	+	+	+	+	+	A
	5	6	5	6	7	8	7	8	S
									H
	11	←	←	→R	→R	→R	→R	→R	→R
21,22	R	R	G	G	R	R	R	R	R
31	→R	→R	→R	→R	←	←	→F <sub>Y</sub>	→F <sub>Y</sub>	→R
41,42	R	R	R	R	R	R	G	G	R
43	F <sub>Y</sub> →	R	F <sub>Y</sub> →	R	R	R	→F <sub>Y</sub>	→F <sub>Y</sub>	R
51	←	→R	←	→R	→R	→R	→R	→R	→R
61,62,63	R	G	R	G	R	R	R	R	R
71	→R	→R	→R	→R	←	→F <sub>Y</sub>	←	→F <sub>Y</sub>	→R
81,82	R	R	R	R	R	G	R	G	R
P61,P62	DW	W	DW	W	DW	DW	DW	DW	DRK

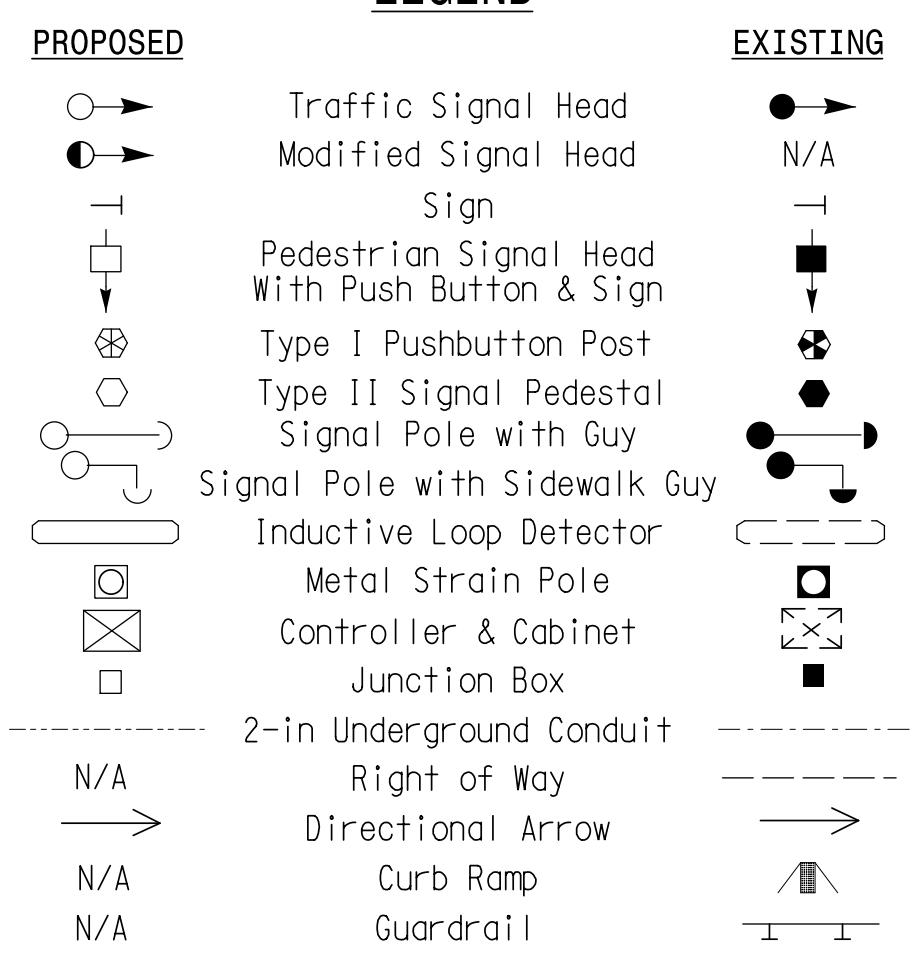
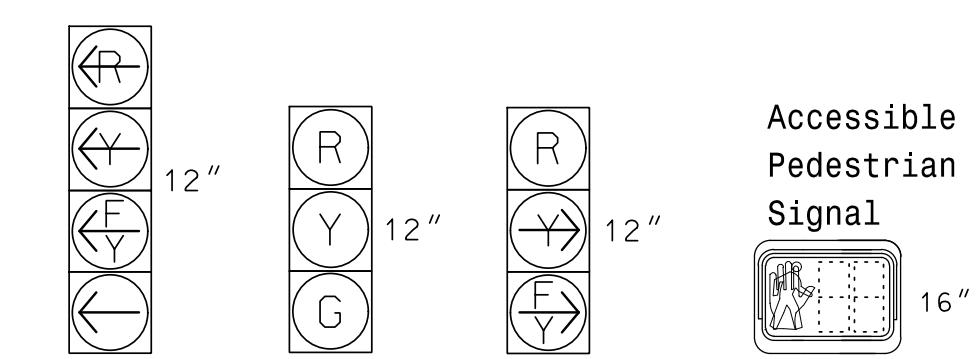
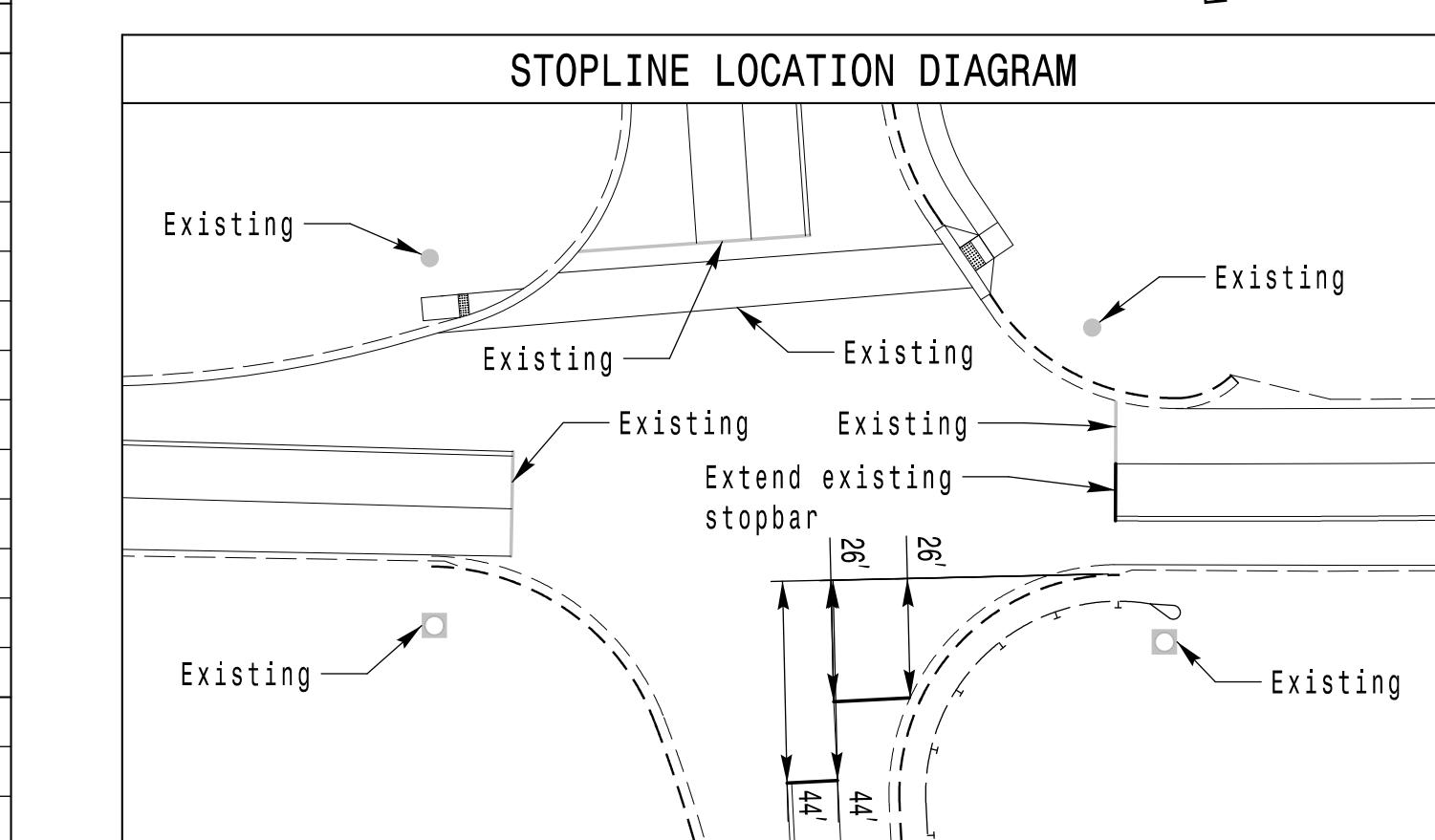
MAXTIME DETECTOR INSTALLATION CHART												
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	2-4-2	X	1	15.0*	-	X	-	X	-	X
					6#	3.0	-	X	-	X	X	X
2A	6X6	300	6	X	2	-	-	X	X	X	-	-
3A	6X40	0	2-4-2	X	3	15.0	-	X	-	X	-	X
					8	3.0	-	X	-	X	-	X
4A	6X40	0	2-4-2	X	4	-	-	X	-	X	-	-
5A	6X40	0	2-4-2	X	5	15.0*	-	X	-	X	-	-
					2#	3.0	-	X	-	X	X	-
5B	6X40	0	2-4-2	-	5	15.0	-	X	-	X	-	-
6A	6X6	300	EXIST	-	6	-	-	X	X	X	-	-
7A	6X40	0	2-4-2	-	7	15.0	-	X	-	X	-	X
					4	3.0	-	X	-	X	-	X
8A	6X40	0	2-4-2	X	8	10.0	-	X	-	X	-	X

- \* Reduce Delay to 3 seconds during Alternate Phasing operation.
- # Disable Phase call for loop during Alternate Phasing operation.



		UN SIGNALIZED MOVEMENT	
		PEDESTRIAN MOVEMENT	
<b>ACCESSIBLE PEDESTRIAN SIGNAL OPERATION</b>			
SIGNAL FACE	VOICE	TONES	INTERVAL
P61	-	X	Walk
	X	-	Flashing Don't Walk / Don't Walk
P62	-	X	Walk
	X	-	Flashing Don't Walk / Don't Walk

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Walk *	—	—	—	—	—	7	—	—
Ped Clear	—	—	—	—	—	27	—	—
Min Green *	7	12	7	7	7	12	7	7
Passage *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	20	90	20	30	20	90	20	30
Yellow Change	3.0	4.6	3.0	4.0	3.0	4.6	3.0	4.0
Red Clear	2.8	1.6	2.9	2.0	2.8	1.6	2.4	2.0
Added Initial *	—	2.5	—	—	—	2.5	—	—
Maximum Initial *	—	34	—	—	—	34	—	—
Time Before Reduction *	—	15	—	—	—	15	—	—
Time To Reduce *	—	30	—	—	—	30	—	—
Minimum Gap	—	3.0	—	—	—	3.0	—	—
Advance Walk	—	—	—	—	—	7	—	—
Non Lock Detector	X	—	X	X	X	—	X	X
Vehicle Recall	—	MIN RECALL	—	—	—	MIN RECALL	—	—
Dual Entry	—	—	—	X	—	—	—	X



**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

 <p>Prepared For: US 21 (Statesville Road) at Bailey Road Extension</p> <p>750 N. Greenfield Pkwy, Garner, NC 27529</p>	<p>Division 10      Mecklenberg County      Cornelius</p> <table border="1" data-bbox="5117 3805 5979 3886"> <tr> <td>PLAN DATE: April 2024</td> <td>REVIEWED BY: MC Burke</td> </tr> <tr> <td>PREPARED BY: EE Dogbe</td> <td>REVIEWED BY: SL Phillips</td> </tr> </table> <p>REVISIONS</p> <p>INIT.</p> <p>DATE</p>	PLAN DATE: April 2024	REVIEWED BY: MC Burke	PREPARED BY: EE Dogbe	REVIEWED BY: SL Phillips	<p>SEAL</p>  <p>032607</p> <p>STACIE L. PHILLIPS</p> <p>DocuSigned by: </p> <p>6/3/2024</p> <p>DATE</p> <p>SIG. INVENTORY NO. 10-2507</p>
PLAN DATE: April 2024	REVIEWED BY: MC Burke					
PREPARED BY: EE Dogbe	REVIEWED BY: SL Phillips					

PLANS PREPARED IN THE OFFICE OF:  
**Kimley >> Horn**  
NC License #F-0102  
421 Fayetteville Street, Suite 600

6/2/2002 1 7:49:45 PM Elizabeth doche



### MAXTIME OVERLAP PROGRAMMING DETAIL FOR DEFAULT PHASING

## Front Panel

Main Menu &gt;Controller &gt;Overlap &gt;Overlap Parameters/Overlap Timings

## Web Interface

Home &gt;Controller &gt;Overlap Configuration &gt;Overlaps

## Overlap Plan 1

Overlap	1	2	3	4	6
Type	FYA 4 - Section				
Included Phases	2	4	6	8	4,5
Modifier Phases	1	3	5	7	-
Modifier Overlaps	-	-	-	-	-
Trail Green	0	0	0	0	0
Trail Yellow	0.0	0.0	0.0	0.0	0.0
Trail Red	0.0	0.0	0.0	0.0	0.0

### MAXTIME DETECTOR PROGRAMMING DETAIL FOR ALTERNATE PHASING LOOPS 1A & 5A

## Front Panel

Main Menu &gt;Controller &gt;Detector &gt;Veh Det Plans

## Web Interface

Home &gt;Controller &gt;Detector Configuration &gt;Vehicle Detectors

In the table view of web interface right click on "Detector" in the top left corner of the table. Copy the entire contents of Detector Plan 1. Paste Detector Plan 1 into Detector Plan 2. Modify Detector Plan 2 as shown below and save changes.

## Plan 2

Detector	Call Phase	Delay
1	1	3
29	0	-

1A

5A

Detector	Call Phase	Delay
15	5	3
31	0	-

### MAXTIME OVERLAP PROGRAMMING DETAIL FOR ALTERNATE PHASING

## Front Panel

Main Menu &gt;Controller &gt;Overlap &gt;Overlap Parameters/Overlap Timings

## Web Interface

Home &gt;Controller &gt;Overlap Configuration &gt;Overlaps

In the table view of the web interface, right click on "Overlap" in the top left corner of the table. Copy the entire contents of Overlap Plan 1. Paste Overlap Plan 1 into Overlap Plan 2. Modify Overlap Plan 2 as shown below and save changes.

## Overlap Plan 2

Overlap	1	2	3	4	6
Type	FYA 4 - Section				
Included Phases	-	4	-	8	4,5
Modifier Phases	1	3	5	7	-
Modifier Overlaps	-	-	-	-	-
Trail Green	0	0	0	0	0
Trail Yellow	0.0	0.0	0.0	0.0	0.0
Trail Red	0.0	0.0	0.0	0.0	0.0

NOTICE INCLUDED PHASE

THIS ELECTRICAL DETAIL IS FOR  
THE SIGNAL DESIGN: 10-2507  
DESIGNED: APRIL 2024  
SEALED: 06/03/2024  
REVISED:

ELECTRICAL AND PROGRAMMING  
DETAILS FOR:  
Prepared For:  
All Transportation, Mobility and Safety Division  
Division 10 Mecklenburg County Cornelius  
PLAN DATE: April 2024 REVIEWED BY: SL Phillips  
PREPARED BY: EE Dogbe REVIEWED BY:  
REVISED: INIT. DATE  
REVISIONS  
750 N. Greenfield Pkwy, Garner, NC 27529  
(919) 677-2000

DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL  
SIGNATURES COMPLETED

SEAL  
NORTH CAROLINA  
PROFESSIONAL  
ENGINEER  
STACE L. PHILLIPS  
032607

6/3/2024  
SIGNATURE  
DATE  
S16. INVENTORY NO. 10-2507

