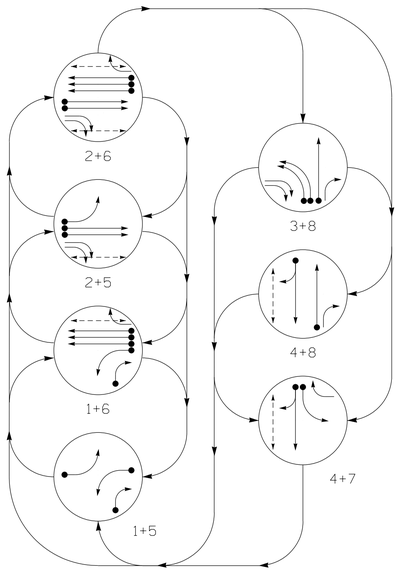
Docusign Envelope ID: 68D05315-339F-8877-826C-A54DFA71DCDF

PROJECT REFERENCE NO.	SHEET NO.
U-3422B	Sig-4.6

7 Phase Fully Actuated Camden Road CLS

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

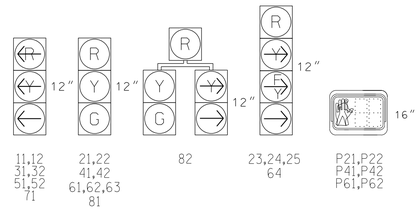
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	3+8	4+7	4+8	FLASH
11,12	←R	←R	↱R	↱R	↱R	↱R	↱R	↱R
21,22	R	R	G	G	R	R	R	R
23,24,25	R	R	F↱Y	F↱Y	→R	R	R	R
31,32	←R	←R	↱R	↱R	←R	↱R	↱R	↱R
41,42	R	R	R	R	G	G	R	
51,52	←R	↱R	←R	↱R	↱R	↱R	↱R	↱R
61,62,63	R	G	R	G	R	R	R	R
64	R	F↱Y	R	F↱Y	→R	R	R	R
71	←R	←R	↱R	↱R	←R	←R	↱R	↱R
81	R	R	R	R	G	R	G	R
82	R/→R	R/→R	R	R	G	R	G	R
P21,P22	DW	DW	W	W	DW	DW	DW	DRK
P41,P42	DW	DW	DW	DW	DW	W	W	DRK
P61,P62	DW	W	DW	W	DW	DW	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

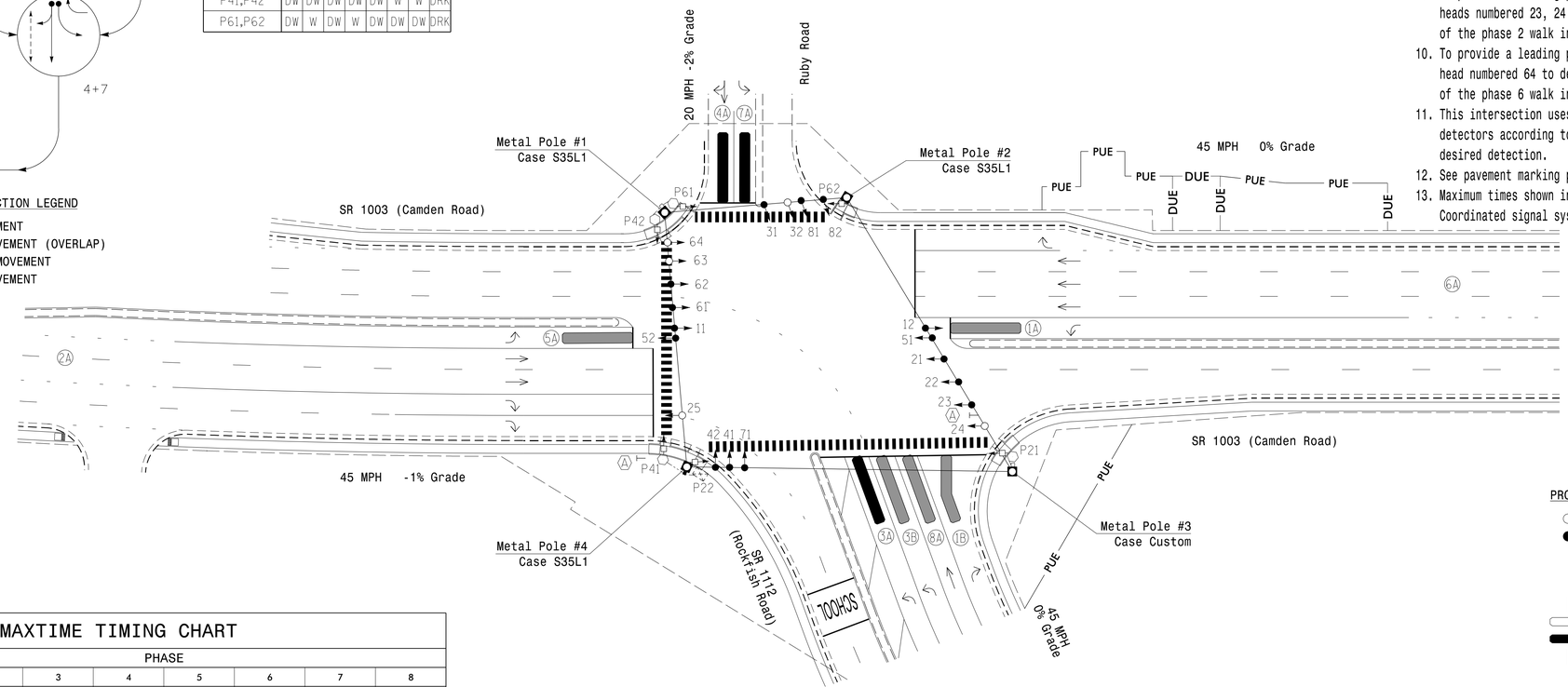
DETECTOR ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	**	-	1	-	-	X	-	X	-	**
1B	6X40	0	**	-	1	15.0	-	X	-	X	-	**
2A	@	@	**	X	2	-	-	X	-	X	-	**
3A	6X40	0	**	X	3	-	-	X	-	X	-	**
3B	6X40	0	**	-	3	-	-	X	-	X	-	**
4A	6X40	0	**	X	4	10.0	-	X	-	X	-	**
5A	6X40	0	**	-	5	-	-	X	-	X	-	**
6A	@	@	**	X	6	-	-	X	-	X	-	**
7A	6X40	0	**	X	7	-	-	X	-	X	-	**
8A	6X40	0	**	-	8	-	-	X	-	X	-	**

** Microwave Detection Zone

@ Size and distance vary. See Microwave Detection chart for more details.

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. The order of phase 3 and phase 7 may be reversed, but phase 3 and phase 7 shall not operate simultaneously.
5. Reposition existing signal heads 11, 21, 22, 31, 52, 61 & 62 as shown on plans.
6. Set all detector units to presence mode.
7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
8. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
9. To provide a leading pedestrian interval on phase 2, program FYA heads numbered 23, 24 and 25 to delay for 7 seconds after the start of the phase 2 walk interval. See Electrical Details for programming.
10. To provide a leading pedestrian interval on phase 6, program FYA head numbered 64 to delay for 7 seconds after the start of the phase 6 walk interval. See Electrical Details for programming.
11. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve desired detection.
12. See pavement marking plans for stop line and crosswalk locations.
13. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



MAXTIME TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Walk *	–	14	–	13	–	14	–	–
Ped Clear	–	44	–	31	–	20	–	–
Min Green *	7	12	7	7	7	12	7	7
Passage *	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	15	90	15	45	15	90	15	45
Yellow Change	3.0	4.6	3.0	4.5	3.0	4.6	3.0	4.5
Red Clear	3.4	2.2	4.2	3.9	3.3	2.2	3.6	3.9
Added Initial *	–	–	–	–	–	–	–	–
Maximum Initial *	–	–	–	–	–	–	–	–
Time Before Reduction *	–	–	–	–	–	–	–	–
Time To Reduce *	–	–	–	–	–	–	–	–
Minimum Gap	–	–	–	–	–	–	–	–
Advance Walk	–	**	–	6	–	***	–	–
Non Lock Detector	X	–	X	X	X	–	X	X
Vehicle Recall	–	MIN RECALL	–	–	–	MIN RECALL	–	–
Dual Entry	–	–	–	–	–	–	–	–

* 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.
** See note #9.
*** See note #10.

Microwave Detection

	2A			6A		
FUNCTION	Sensor 1			Sensor 2		
Channel	1			1		
Phase	2			6		
Direction of Travel	EB			WB		
Type	Priority			Priority		
Level	1	2	QUEUE	1	2	QUEUE
Discovery Zone (ft)	>= 750	< 750	-	>= 750	< 750	-
Range (ft)	900-100	600-100	150-100	900-100	600-100	150-100
Enable Speed	Y	Y	Y	Y	Y	Y
Speed Range (mph)	35-100	35-100	1-35	35-100	35-100	1-35
Enable Estimated Time of Arrival	Y	Y	N	Y	Y	N
Estimated Time of Arrival (sec)	2.5-10.0	2.5-6.5	-	2.5-10.0	2.5-6.5	-

THIS PLAN SUPERSEDES THE PLAN SEALED ON 12/22/2023

LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◐→	Modified Signal Head	N/A
⊣	Sign	⊣
⊡↓	Pedestrian Signal Head With Push Button & Sign	■↓
◎	Metal Strain Pole	■
▭	Inductive Loop Detector	▭
▬	Non-Intrusive Detection Zone	▬
⊠	Controller & Cabinet	⊠
□	Junction Box	■
----------	2-in Underground Conduit	----------
N/A	Right of Way	- - - - -
→	Directional Arrow	→
⬡	Type II Signal Pedestal	⬢
PUE	Proposed Utility Easement	N/A
DUE	Drainage Utility Easement	N/A
Ⓐ	Turning Vehicles Yield to Pedestrian Sign (R10-15)	Ⓐ

Signal Upgrade
Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for: Transportation Mobility and Safety Division, North Carolina Department of Transportation, Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SR 1003 (Camden Road) at SR 1112 (Rockfish Road)/ Ruby Road

Division 6 Cumberland County Hope Mills

PLAN DATE: September 2026 REVIEWED BY: BN Groome
PREPARED BY: DS Griffith DRMP PROJ. NO.: 24941 (040)

REVISIONS	INIT.	DATE

SCALE 0 40 1"=40'

SEAL 052936 NORTH CAROLINA PROFESSIONAL ENGINEER BRITTANY N GROOME

Signed by: Brittany Groome 1E0B0A0E1D6A4AA...
09/11/2026
SIGNATURE DATE

SIG. INVENTORY NO. 06-1412

Plans Prepared By:
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