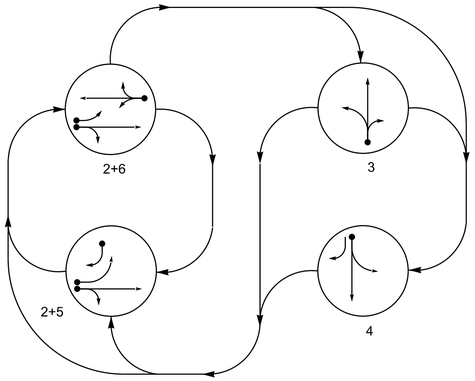
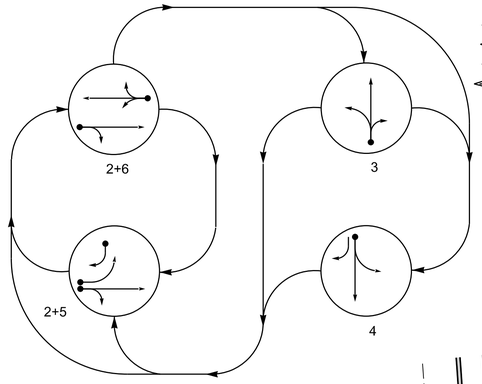
PROJECT REFERENCE NO.	SHEET NO.
HL-00081	Sig. 2.0

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

MAXTIME DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING						
ZONE	SIZE (FT)	DISTANCE FROM STOP LINE (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL DELAY DURING GREEN	NEW CARD
2A✳	6X6	300	*	*	2	-	-	X	X	X	-	*
3A✳	6X40	0	*	*	3	10.0	-	X	-	X	-	*
4A✳	6X40	0	*	*	4	3.0	-	X	-	X	-	*
5A✳	6X40	0	*	*	5	15.0**	-	X	-	X	-	*
					2#	3.0	-	X	-	X	X	*
5B✳	6X40	0	*	*	5	15.0	-	X	-	X	-	*
6A✳	6X6	300	*	*	6	-	-	X	X	X	-	*

** Disable Delay During Alternate Phasing Operation.
# Disable Phase Call for Loop during Alternate Phasing Operation.
✳ Non Intrusive Detection Zone.

4 Phase
Fully Actuated
(Isolated)

NOTES

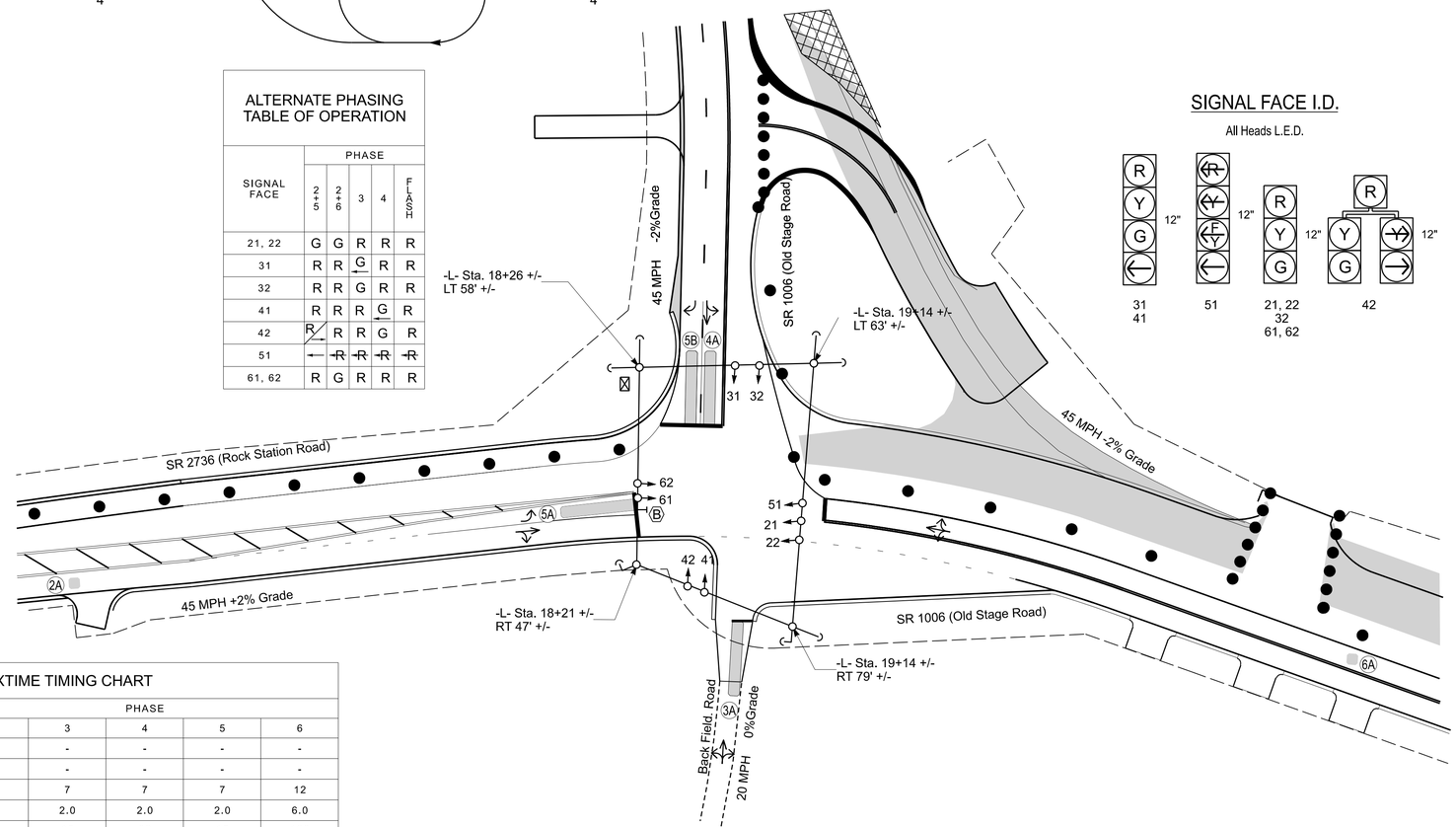
1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Enable Backup Protect for phase 2 to allow the controller to clear from phase 2+6 to phase 2+5 by progressing through an all red display.
4. The order of phase 3 and phase 4 may be reversed.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detail.
8. The Division Traffic Engineer will determine the hours of use for each phasing plan.

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE				
	2+5	2+6	3	4	FLASH
21, 22	G	G	R	R	R
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
51	←	F	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	R	R

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE				
	2+5	2+6	3	4	FLASH
21, 22	G	G	R	R	R
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
51	←	~~R~~	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	R	R



SIGNAL FACE I.D.

All Heads L.E.D.

MAXTIME TIMING CHART

FEATURE	PHASE				
	2	3	4	5	6
Walk *	-	-	-	-	-
Ped Clear	-	-	-	-	-
Min Green *	12	7	7	7	12
Passage *	6.0	2.0	2.0	2.0	6.0
Max 1 *	100	15	30	15	100
Yellow Change	4.7	3.0	4.7	3.0	4.7
Red Clear	1.3	2.9	1.7	2.1	1.3
Red Revert	5.0	2.0	2.0	2.0	2.0
Added Initial *	1.5	-	-	-	1.5
Maximum Initial *	34	-	-	-	34
Time Before Reduction *	15	-	-	-	15
Time To Reduce *	30	-	-	-	30
Minimum Gap	3.0	-	-	-	3.0
Advance Walk	-	-	-	-	-
Non Lock Detector	-	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		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
X-UC	2-in Underground Conduit	UC
N/A	Right of Way	
	Directional Arrow	
	Non-Intrusive Detection Zone	
	Construction Zone	
	Construction Zone Drums	
B	No U-Turn Sign (R3-4)	B

New Installation - Temporary. Design 1 (TMP Phase II)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N. Greenfield Pkwy, Garner, NC 27529

SR 1006 (Old Stage Road)
at
SR 2736 (Rock Service Station Road)
and Back Field Road

Division 5 | Wake County | Fuquay-Varina

PLAN DATE: May 2025 | REVIEWED BY:

PREPARED BY: I.O. Umozurike | REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
026486
NORTH CAROLINA
PROFESSIONAL
ENGINEER
ROBERT J. ZIEMBA

DocuSigned by:
Robert J. Ziemba
1B9B4B66774A494...
07/15/2025
DATE

SIG. INVENTORY NO. 05-1663T1

12-AUG-2025 12:17
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