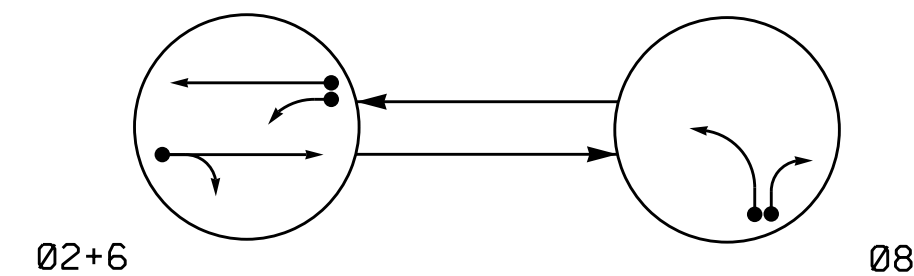


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- ◄●► DETECTED MOVEMENT
- ◄◄◄ UNDETECTED MOVEMENT (OVERLAP)
- ◄--- UNSIGNALIZED MOVEMENT
- ◄---> PEDESTRIAN MOVEMENT

TABLE OF OPERATION

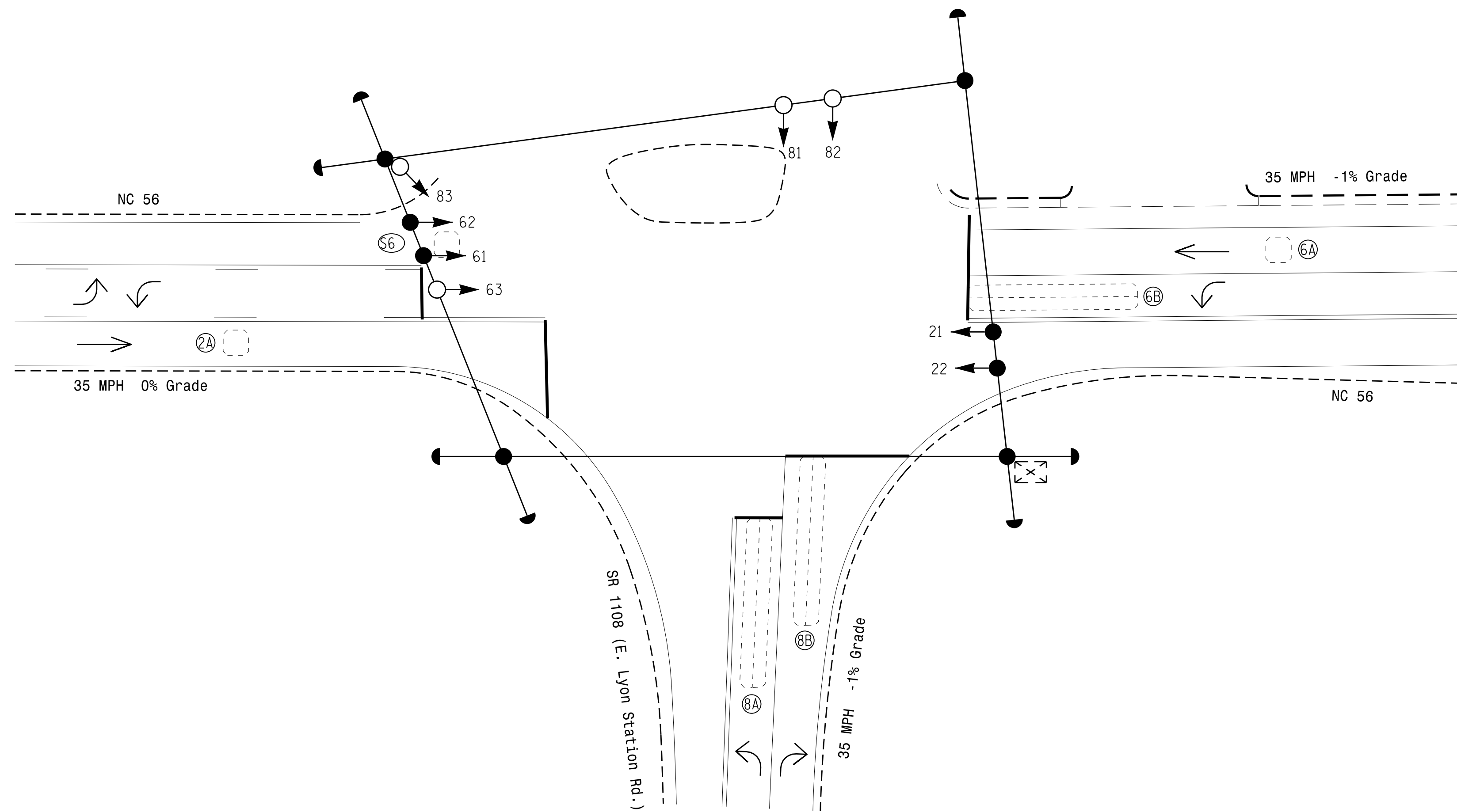
SIGNAL FACE	PHASE		
	G	R	Y
21, 22	G	R	Y
61, 62	G	R	Y
63	F	R	Y
81, 83	R	←	R
82	R	→	R

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 DURING GREEN	NEW CARD
2A	6X6	70	EXIST	-	2	-	-	X	-	X	-
6A	6X6	70	EXIST	-	6	-	-	X	-	X	-
6B	6X40	0	2-4-2	-	6	-	-	X	-	X	-
8A	6X40	0	2-4-2	-	8	3.0	-	X	-	X	-
8B	6X40	0	2-4-2	-	8	10.0	-	X	-	X	-
S6	6X6	+120	EXIST	-	-	-	-	-	-	-	-

2 Phase Fully Actuated (NC 56 (Butner) CLS)
Signal System #: D05-56_Butner

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Set all detector units to presence mode.
- Pavement markings are existing.
- Reposition existing signal heads 61 and 62.
- Install new controller in existing cabinet.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

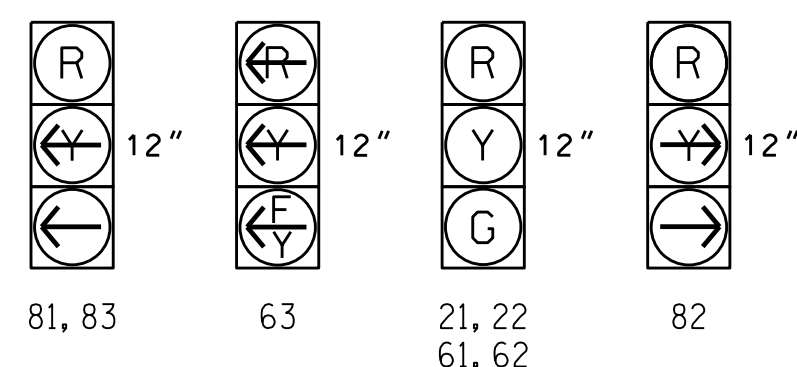


FEATURE	PHASE		
	2	6	8
Walk *	-	-	-
Ped Clear	-	-	-
Min Green *	10	10	7
Passage *	3.0	3.0	2.0
Max 1 *	45	45	20
Yellow Change	3.9	3.9	3.0
Red Clear	1.8	1.8	2.6
Added Initial *	-	-	-
Maximum Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Advance Walk	-	-	-
Non Lock Detector	-	-	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.

SIGNAL FACE I.D.

All Heads L.E.D.



PROPOSED		EXISTING	
○	Traffic Signal Head	●	N/A
◐	Modified Signal Head	-	N/A
◒	Sign	-	N/A
◓	Pedestrian Signal Head With Push Button & Sign	◓	N/A
◔	Signal Pole with Guy	◔	N/A
◕	Signal Pole with Sidewalk Guy	◕	N/A
▭	Inductive Loop Detector	▭	N/A
▣	Controller & Cabinet	▣	N/A
▢	Junction Box	▢	N/A
- - -	2-in Underground Conduit	- - -	N/A
→	Right of Way	- - -	N/A
→	Directional Arrow	→	N/A

Signal Upgrade

Prepared in the Offices of:
Transposition Mobility and Safety Solutions
TRANSPORTATION MOBILITY AND SAFETY SOLUTIONS
750 N. Greenfield Pkwy, Garner, NC 27529

NC 56 at SR 1104 (E. Lyon Station Rd.)
Division 5 Granville County Butner

PLAN DATE: February 2024 REVIEWED BY: J.A. Lohr
PREPARED BY: J.A. Lohr REVIEWED BY: R. J. Zimmerman

SCALE: 1"=20'

REVISIONS: _____ INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER ROBERT J. ZIMMERMAN 026486

03/14/2024
DATE: _____
SIG. INVENTORY NO. 05-0929