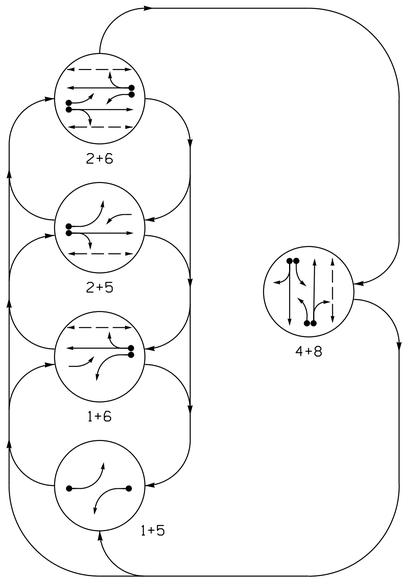
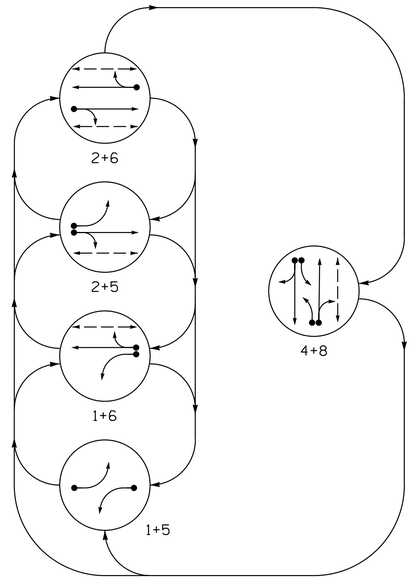
PROJECT REFERENCE NO.	SHEET NO.
U-6018	Sig-12.0

DEFAULT PHASING DIAGRAM

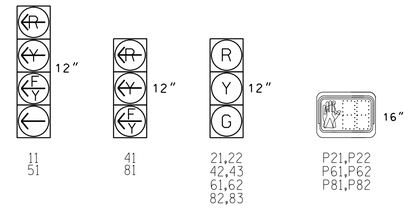


ALTERNATE PHASING DIAGRAM



SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	X	1	Yes	-	15.0✳✳	-	N	-	X
					6#	Yes	-	3.0	-	G	-	X
2A	6X6	300	5	X	2	Yes	-	-	X	N	-	X
4A	6X40	0	2-4-2	X	4	Yes	-	3.0	-	N	-	X
4B	6X40	0	2-4-2	X	4	Yes	-	10.0	-	N	-	X
5A	6X40	0	2-4-2	X	5	Yes	-	15.0✳	-	N	-	X
					2#	Yes	-	3.0	-	G	-	X
6A	6X6	300	5	X	6	Yes	-	-	X	N	-	X
8A	6X40	0	2-4-2	X	8	Yes	-	3.0	-	N	-	X
8B	6X40	0	2-4-2	X	8	Yes	-	10.0	-	N	-	X

✳ Disable delay during Alternate Phasing operation.
✳✳ Reduce delay to 3.0 seconds during Alternate Phasing operation.
Disable phase call for loop during Alternate Phasing operation.

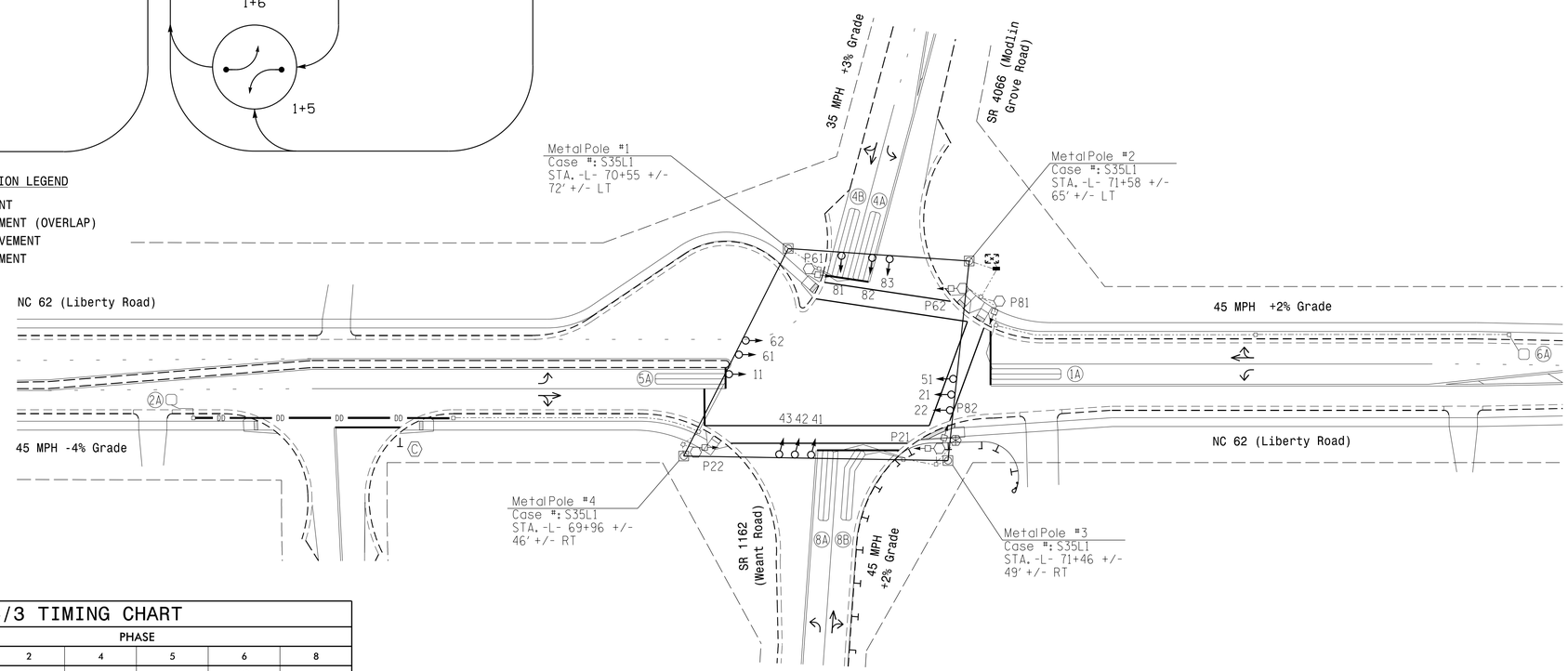
5 Phase
Fully Actuated
(High Point Signal System)

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. Disable Backup Prevent for phase 6.
4. Phase 1 and/or Phase 5 may be lagged.
5. Set all detector units to presence mode.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "DON'T WALK" time only.
8. The City Traffic Engineer will determine the hours of use for each phasing plan.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND

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



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	
	Oversized Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Type I Pushbutton Post	
	Type II Signal Pedestal	
N/A	Guardrail	
N/A	Curb Ramp	
DD	Directional Drill	N/A
A	"STOP" Sign (R1-1)	A

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green *	7	12	7	7	12	7
Delayed Green	-	7	-	-	7	7
Walk *	-	14	-	-	14	14
Ped Clear	-	31	-	-	20	15
Veh. Extension *	2.0	6.0	2.0	2.0	6.0	2.0
Max 1 *	20	75	30	20	75	30
Yellow	3.0	4.9	4.3	3.0	4.9	4.3
Red Clear	3.3	2.1	2.2	3.5	2.1	2.2
Actuations B4 Add *	-	-	-	-	-	-
Seconds /Actuation *	-	2.5	-	-	2.5	-
Max Initial *	-	34	-	-	34	-
Time Before Reduction *	-	15	-	-	15	-
Time To Reduce *	-	30	-	-	30	-
Minimum Gap	-	3.0	-	-	3.0	-
Locking Detector	-	X	-	-	X	-
Recall Position	-	VEH RECALL	-	-	VEH RECALL	-
Dual Entry	-	-	X	-	-	X
Simultaneous Gap	X	X	X	X	X	X

* 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.

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	4+8	FLASH
11	←	←	F Y	F Y	R	R
21,22	R	R	G	G	R	R
41	R	R	R	R	F Y	R
42,43	R	R	R	R	G	R
51	←	F Y	←	F Y	R	R
61,62	R	G	R	G	R	R
81	R	R	R	R	F Y	R
82,83	R	R	R	R	G	R
P21,P22	DW	DW	W	W	DW	DRK
P61,P62	DW	W	DW	W	DW	DRK
P81,P82	DW	DW	DW	DW	W	DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	4+8	FLASH
11	←	←	R	R	R	R
21,22	R	R	G	G	R	R
41	R	R	R	R	F Y	R
42,43	R	R	R	R	G	R
51	←	R	←	R	R	R
61,62	R	G	R	G	R	R
81	R	R	R	R	F Y	R
82,83	R	R	R	R	G	R
P21,P22	DW	DW	W	W	DW	DRK
P61,P62	DW	W	DW	W	DW	DRK
P81,P82	DW	DW	DW	DW	W	DRK

Signal Upgrade - Final Design

DRMP
DRMP, INC.
8210 UNIVERSITY EXECUTIVE PARK DR.
SUITE 220
CHARLOTTE, NC 28262
PHONE: 704-549-4260
NC LICENSE NO. F-1524
www.drmp.com

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

SCALE 0 40 1"=40'

NC 62 (Liberty Road)
at
SR 1162 (Weant Road) /
SR 4066 (Modlin Grove Road)

Division 7 Guilford County Archdale

PLAN DATE: March 2025		REVIEWED BY: ZM Esposito	
PREPARED BY: AW Poole		RKA PROJ. NO: 17380 (040)	
REVISIONS		INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 054155 ENGINEER ZACHARY M. ESPOSITO

Signed by: Zachary M Esposito
8A47D07AD48A4E8...
SIGNATURE 3/17/2025 DATE

SIG. INVENTORY NO. 07-2100