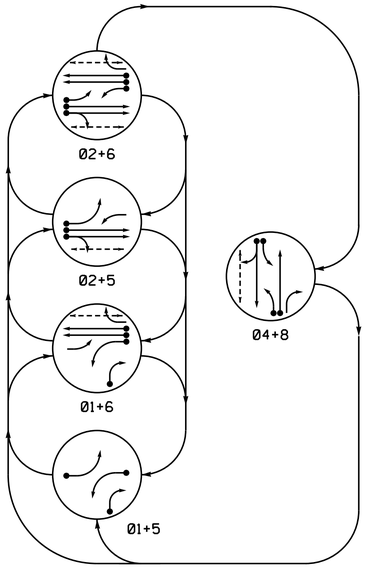
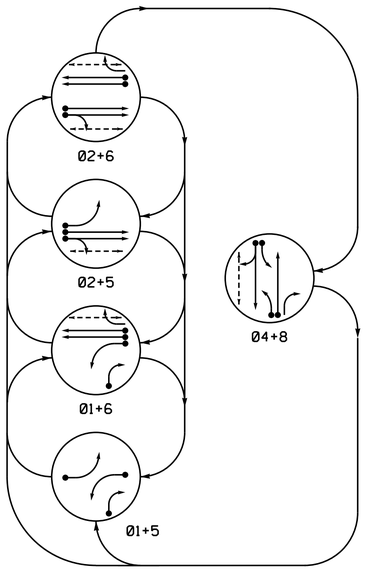
PROJECT REFERENCE NO.	SHEET NO.
U-6202	Sig. 15.0

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	FLASH
11	~~—~~	~~—~~	~~F Y~~	~~F Y~~	~~R~~	~~Y~~
21,22	R	R	G	G	R	Y
41	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~R~~
42,43	R	R	R	R	G	R
51	~~—~~	~~F Y~~	~~—~~	~~F Y~~	~~R~~	~~Y~~
61,62	R	G	R	G	R	Y
63	R	F Y	R	F Y	R	~~Y~~
81	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~R~~
82	R	R	R	R	G	R
83	R/	R/	R	R	G	R
P21,P22	DW	DW	W	W	DW	DRK
P41,P42	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	FLASH
11	~~—~~	~~—~~	~~R~~	~~R~~	~~R~~	~~Y~~
21,22	R	R	G	G	R	Y
41	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~R~~
42,43	R	R	R	R	G	R
51	~~—~~	~~R~~	~~—~~	~~R~~	~~R~~	~~Y~~
61,62	R	G	R	G	R	Y
63	R	F Y	R	F Y	R	~~Y~~
81	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~R~~
82	R	R	R	R	G	R
83	R/	R/	R	R	G	R
P21,P22	DW	DW	W	W	DW	DRK
P41,P42	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DRK

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING						
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP NEW CARD
1A	6x40	0	*	*	1	Y	Y	-	-	15**	- Y
					6#	Y	Y	-	-	-	- Y
1B	6x40	0	*	*	1	Y	Y	-	-	15	- Y
4A	6x40	0	*	*	4	Y	Y	-	-	-	- Y
4B	6x40	0	*	*	4	Y	Y	-	-	10	- Y
4C	6x6	0	*	*	4	Y	Y	-	-	15	- Y
5A	6x40	0	*	*	5	Y	Y	-	-	15**	- Y
					2#	Y	Y	-	-	-	- Y
8A	6x40	0	*	*	8	Y	Y	-	-	-	- Y
8B	6x40	0	*	*	8	Y	Y	-	-	-	- Y

* Multizone Microwave Detection
** Disable Delay During Alternate Phasing Operation.
# Disable phase call for loop(s) during alternate phasing.

RADAR DETECTION SYSTEM

FUNCTION	Sensor 1 (2A)	Sensor 2 (6A)
Channel	1	1
Phase	2	6
Direction of Travel	EB	WB
Detection Zone (ft)	500-100	500-100
Enable Speed	Y	Y
Speed Range (mph)	35-100	35-100
Enable Estimated Time of Arrival	Y	Y
Estimated Time of Arrival (sec)	2.5-6.5	2.5-6.5

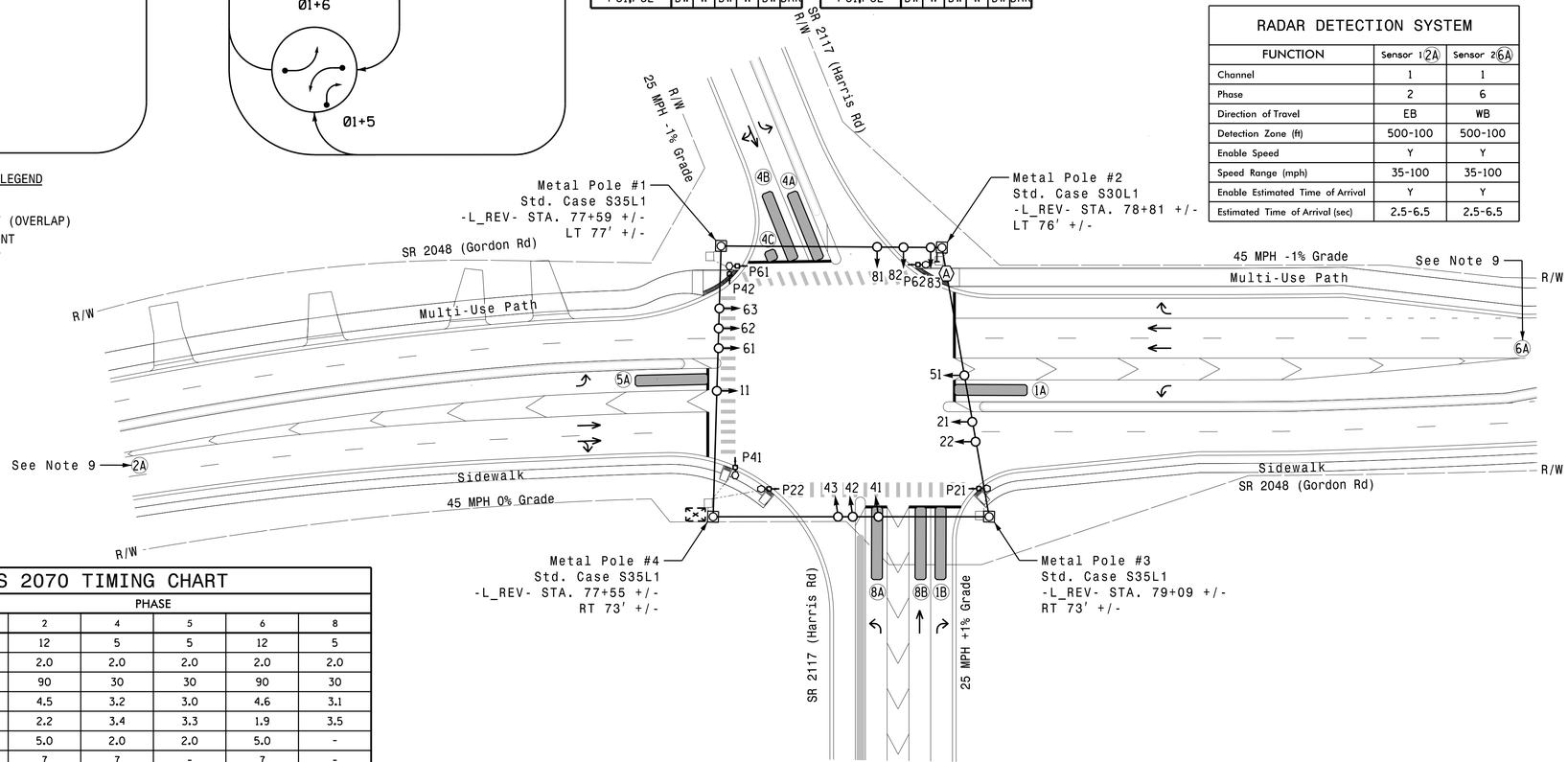
5 Phase
Fully Actuated
Wilmington Signal System

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. Phases 1 and/or 5 may be lagged.
4. Set all detector units to presence mode.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. All pedestrian pushbuttons shall be located in the field by the Divison Traffic Engineer before installation.
8. The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
9. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
11. Signal system data: Controller Asset #0840.

PHASING DIAGRAM DETECTION LEGEND

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



OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green 1 *	5	12	5	5	12	5
Extension 1 *	2.0	2.0	2.0	2.0	2.0	2.0
Max Green 1 *	30	90	30	30	90	30
Yellow Clearance	3.0	4.5	3.2	3.0	4.6	3.1
Red Clearance	2.8	2.2	3.4	3.3	1.9	3.5
Red Revert	2.0	5.0	2.0	2.0	5.0	-
Walk 1 *	-	7	7	-	7	-
Don't Walk 1	-	27	25	-	26	-
Advanced Walk *	-	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-
Dual Entry	-	-	ON	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON

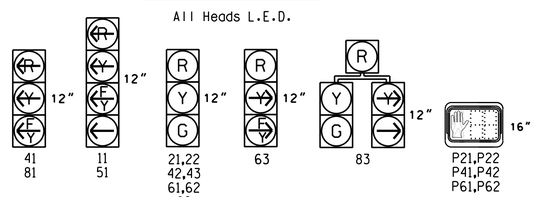
* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

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	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
DD	Directional Drill	N/A
	Metal Pole with Mastarm	
	Type II Signal Pedestal	
N/A	Curb Ramp	
(A)	Right Arrow "ONLY" Sign (R3-5R)	(A)

SIGNAL FACE I.D.

All Heads L.E.D.



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Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

SR 2048 (Gordon Rd)
at
SR 2117 (Harris Rd)

Division 3 | New Hanover County | Wilmington

PLAN DATE:	May 2022	REVIEWED BY:	N.K. Vlanich
PREPARED BY:	E.E. Tiller	REVIEWED BY:	N.R. Simmons

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 031464 ENGINEER NATASHA R. SIMMONS
DocuSigned by: Natasha R Simmons 5/17/2024
SIGNATURE DATE
SIG. INVENTORY NO. 03-0840