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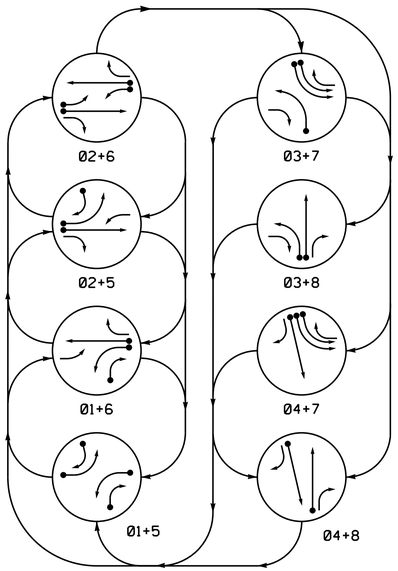
PROJECT REFERENCE NO.	SHEET NO.
R-5021	Sig. 2.0

DEFAULT PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

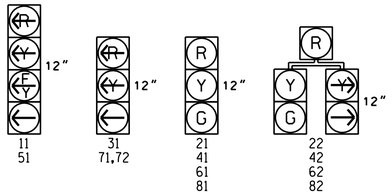
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	FLASH
11	~~←~~	~~←~~	~~↰~~	~~↰~~	~~R~~	~~R~~	~~R~~	~~R~~	~~Y~~
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R/	R/	R	R	Y
31	~~R~~	~~R~~	~~R~~	~~R~~	~~←~~	~~←~~	~~R~~	~~R~~	~~R~~
41	R	R	R	R	R	R	G	G	R
42	R/	R	R/	R	R	R	G	G	R
51	~~←~~	~~↰~~	~~←~~	~~↰~~	~~R~~	~~R~~	~~R~~	~~R~~	~~Y~~
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R/	R	R/	R	Y
71,72	~~R~~	~~R~~	~~R~~	~~R~~	~~←~~	~~R~~	~~←~~	~~R~~	~~R~~
81	R	R	R	R	R	G	R	G	R
82	R/	R/	R	R	R	G	R	G	R

SIGNAL FACE I.D.

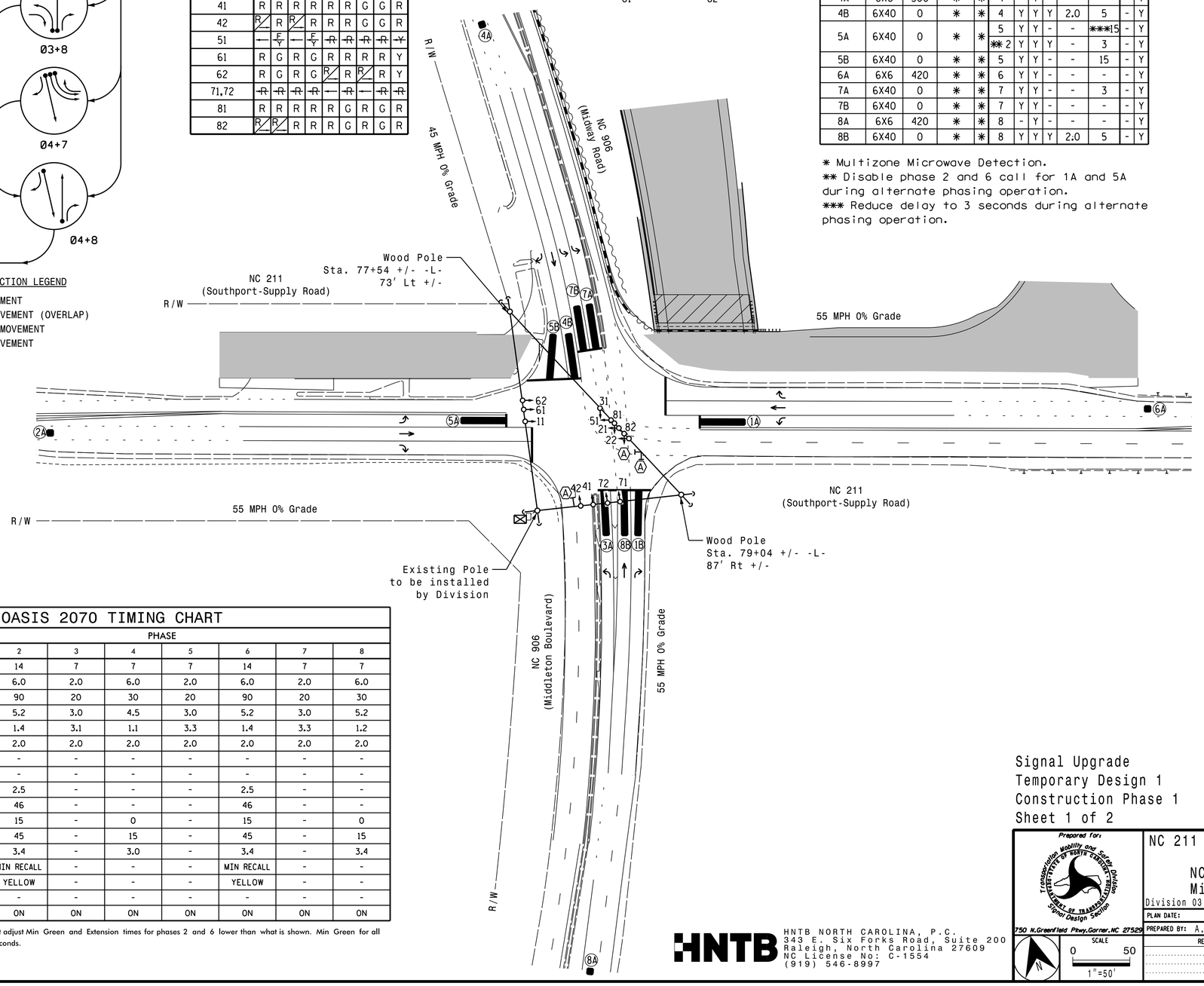
All Heads L.E.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING: 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	-	3	-	Y
1B	6X40	0	*	*	1	Y	Y	-	-	15	-	Y
2A	6X6	420	*	*	2	Y	Y	-	-	-	-	Y
3A	6X40	0	*	*	3	Y	Y	-	-	3	-	Y
4A	6X6	300	*	*	4	-	Y	-	-	-	-	Y
4B	6X40	0	*	*	4	Y	Y	Y	2.0	5	-	Y
5A	6X40	0	*	*	5	Y	Y	-	-	***15	-	Y
					** 2	Y	Y	Y	-	3	-	Y
5B	6X40	0	*	*	5	Y	Y	-	-	15	-	Y
6A	6X6	420	*	*	6	Y	Y	-	-	-	-	Y
7A	6X40	0	*	*	7	Y	Y	-	-	3	-	Y
7B	6X40	0	*	*	7	Y	Y	-	-	-	-	Y
8A	6X6	420	*	*	8	-	Y	-	-	-	-	Y
8B	6X40	0	*	*	8	Y	Y	Y	2.0	5	-	Y

* Multizone Microwave Detection.
** Disable phase 2 and 6 call for 1A and 5A during alternate phasing operation.
*** Reduce delay to 3 seconds during alternate phasing operation.



OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green 1 *	7	14	7	7	7	14	7	7
Extension 1 *	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0
Max Green 1 *	20	90	20	30	20	90	20	30
Yellow Clearance	3.0	5.2	3.0	4.5	3.0	5.2	3.0	5.2
Red Clearance	3.3	1.4	3.1	1.1	3.3	1.4	3.3	1.2
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-
Seconds Per Actuation *	-	2.5	-	-	-	2.5	-	-
Max Variable Initial *	-	46	-	-	-	46	-	-
Time Before Reduction *	-	15	-	0	-	15	-	0
Time To Reduce *	-	45	-	15	-	45	-	15
Minimum Gap	-	3.4	-	3.0	-	3.4	-	3.4
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	ON	ON	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.

8 Phase
Fully Actuated
Isolated

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
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. Phase 3 and/or phase 7 may be lagged.
5. Set all detector units to presence mode.
6. Locate new cabinet so as to not obstruct sight distance of vehicles turning right on red.
7. The Division Traffic Engineer will determine the hours of use for each phasing plan.
8. Incorporate Microwave Detection system for vehicle detection.
9. Provide the Engineer with the Manufacturer's approved Microwave Detection locations and mounting heights to obtain detection zones as shown.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Microwave Detection Zone	
	Guardrail	
	Construction Zone	N/A
	Construction Barrier	N/A
Ⓐ	Right Arrow "ONLY" Sign (R3-5R)	Ⓐ

Signal Upgrade
Temporary Design 1
Construction Phase 1
Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HNTB NORTH CAROLINA, P.C.
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Prepared for: Transportation Mobility and Safety Division, Traffic Engineering Branch, Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

SCALE 0 50 1"=50'

NC 211 (Southport-Supply Road)
at
NC 906 (Midway Road/
Middleton Boulevard)
Division 03 Brunswick Co. Southport

PLAN DATE: June 2017	REVIEWED BY: A.D. Klinksiek
PREPARED BY: A.H. Thornburg	REVIEWED BY: N.R. Simmons

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 031464 ENGINEER NATASHA R. SIMMONS

DocuSigned by: Natasha Simmons F8DA880F3AD445A...
SIGNATURE 9/10/2021 DATE

SIG. INVENTORY NO. 03-0901T1