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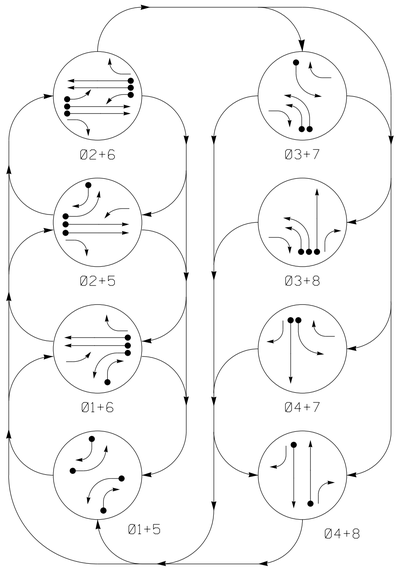
PROJECT REFERENCE NO.	SHEET NO.
U-4751	Sig. 8.0

DEFAULT PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

DEFAULT TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	FLASH
11	←●	←●	←Y	←Y	←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, 32	←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	←●	←Y	←●	←Y	←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	←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

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING						
LOOP	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	2-4-2	Y	1	Y	Y	-	-	*15	-	Y
					6**	Y	Y	Y	-	3	-	Y
1B	6x40	0	2-4-2	Y	1	Y	Y	-	-	15	-	Y
2A	6x6	300	6	Y	2	Y	Y	-	-	-	-	Y
2B	6x6	300	6	Y	2	Y	Y	-	-	-	-	Y
3A	6x40	0	2-4-2	Y	3	Y	Y	-	-	3	-	Y
3B	6x40	0	2-4-2	Y	3	Y	Y	-	-	-	-	Y
4A	6x40	0	2-4-2	Y	4	Y	Y	-	-	-	-	Y
5A	6x40	0	2-4-2	Y	5	Y	Y	-	-	*15	-	Y
					2**	Y	Y	Y	-	3	-	Y
5B	6x40	0	2-4-2	Y	5	Y	Y	-	-	15	-	Y
6A	6x6	300	5	Y	6	Y	Y	-	-	-	-	Y
6B	6x6	300	5	Y	6	Y	Y	-	-	-	-	Y
7A	6x40	0	2-4-2	Y	7	Y	Y	-	-	3	-	Y
8A	6x40	0	2-4-2	Y	8	Y	Y	-	-	10	-	Y

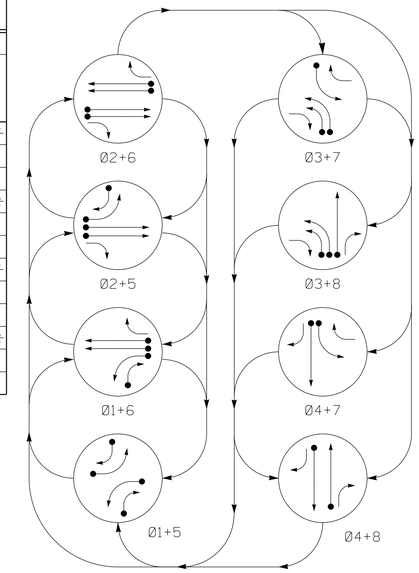
* Reduce Delay during Alternative Phasing Operation to 3 secs.

** Disable Phase 2/6 Call for Loops 1A, and 5A During Alternative Phasing Operation.

ALTERNATE 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	←R	←R	←Y
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R↘	R→	R	R	Y
31, 32	←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	←R	←R	←Y
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R↘	R	R↘	R	Y
71	←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

ALTERNATE PHASING DIAGRAM



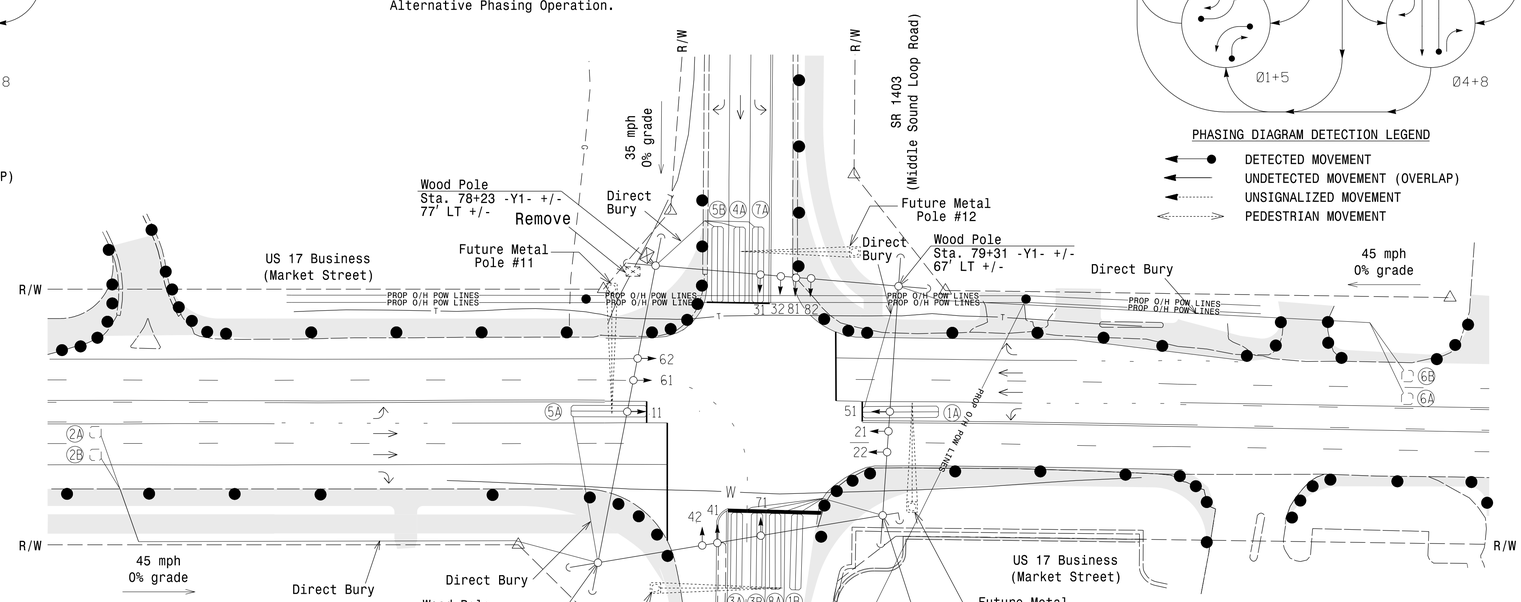
PHASING DIAGRAM DETECTION LEGEND

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

8 Phase
Fully Actuated
Wilmington Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
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 not to obstruct sign distance of vehicle turning right on red.
7. The Division Traffic Engineer will determine the hours of use for each phasing plan.
8. Maximum times shown in timing charts are for free-run operation only. Coordinated signal system timing values supersede these values.
9. Signal system data: Controller Asset #0076

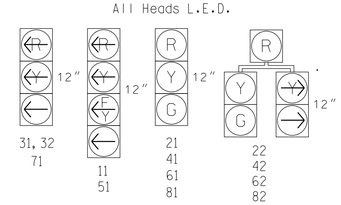


LEGEND

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	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	UG Water Line	
N/A	UG Gas Line	
N/A	UG Telephone Line	
—PROP O/H POW LINES—	OH Power Line	N/A
N/A	Right of Way	
	Directional Arrow	
	Metal Pole with Mastarm	
	Construction Zone Drums	
	Construction Zone	

SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070E TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green 1 *	5	12	5	5	5	12	5	5
Extension 1 *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max Green 1 *	20	100	30	30	15	100	20	30
Yellow Clearance	3.0	4.5	3.0	3.8	3.0	4.5	3.0	3.8
Red Clearance	3.1	1.6	2.8	2.1	2.8	1.6	2.6	1.9
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 *	-	1.5	-	-	-	1.5	-	-
Max Variable Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
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.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Signal Upgrade - Temporary Design 1 (TMP Phase II)

Prepared for the Offices of: Transportation Mobility and Safety Division, Signal Design Section, Department of Transportation, State of North Carolina

750 N.Greenfield Pkwy,Garner,NC 27529

US 17 Business
(Market Street)
at
SR 1403(Middle Sound Loop Road)

Division 03 New Hanover County Wilmington

PLAN DATE:	April 2017	REVIEWED BY:	MB Toth
PREPARED BY:	LD Stouchko	REVIEWED BY:	

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH

DocuSigned by: Melissa B. Toth 6/15/2017
SIGNATURE DATE

SIG. INVENTORY NO. 03-0076T1

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Date Plotted: 6/15/2017
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