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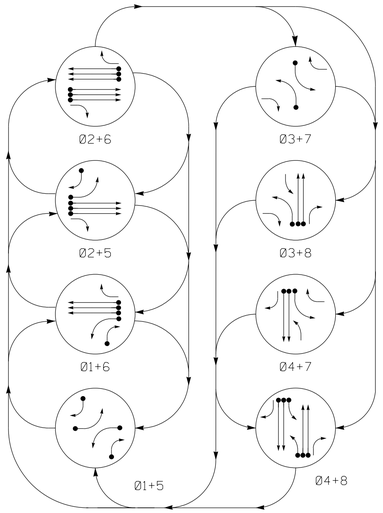
PROJECT REFERENCE NO.	SHEET NO.
U-3338B	Sig. 20.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

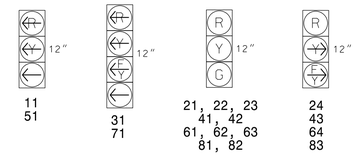
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

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	←R
21, 22, 23	R	R	G	G	R	R	R	R	Y
24	R	R	F Y→	F Y→	F Y→	F Y→	R	R	Y→
31	R	R	R	R	←●	←●	F Y→	F Y→	←R
41, 42	R	R	R	R	R	R	G	G	R
43	F Y→	R	F Y→	R	R	R	F Y→	F Y→	R
51	←●	←R	←●	←R	←R	←R	←R	←R	←R
61, 62, 63	R	G	R	G	R	R	R	R	Y
64	R	F Y→	R	F Y→	F Y→	R	F Y→	R	Y→
71	R	R	R	R	←●	F Y→	←●	F Y→	←R
81, 82	R	R	R	R	R	G	R	G	R
83	F Y→	F Y→	R	R	R	F Y→	R	F Y→	R

SIGNAL FACE I.D.

All Heads L.E.D.



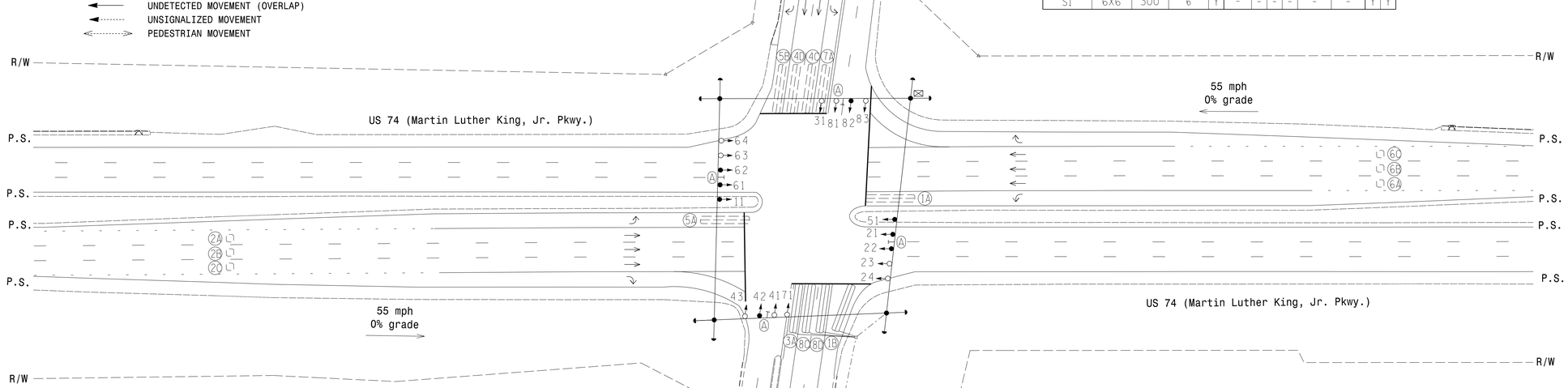
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

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	-	1	Y	Y	-	-	-	-	Y
1B	6X40	0	2-4-2	Y	1	Y	Y	-	-	15	-	Y
2A	6X6	420	Existing	-	2	Y	Y	-	-	-	-	Y
2B	6X6	420	Existing	-	2	Y	Y	-	-	-	-	Y
2C	6X6	420	Existing	-	2	Y	Y	-	-	-	-	Y
3A	6X40	0	2-4-2	Y	3	Y	Y	-	-	15	-	Y
					8	Y	Y	-	-	3	-	Y
4A	6X6	300	Existing	-	4	-	Y	-	-	-	-	Y
4B	6X6	300	Existing	-	4	-	Y	-	-	-	-	Y
4C	6X40	0	2-4-2	-	4	Y	Y	Y	2.0	5	-	Y
4D	6X40	0	2-4-2	-	4	Y	Y	Y	2.0	5	-	Y
5A	6X40	+5	2-4-2	-	5	Y	Y	-	-	-	-	Y
5B	6X40	0	2-4-2	-	5	Y	Y	-	-	15	-	Y
6A	6X6	420	Existing	-	6	Y	Y	-	-	-	-	Y
6B	6X6	420	Existing	-	6	Y	Y	-	-	-	-	Y
6C	6X6	420	Existing	-	6	Y	Y	-	-	-	-	Y
7A	6X40	0	2-4-2	-	7	Y	Y	-	-	15	-	Y
					4	Y	Y	-	-	3	-	Y
8A	6X6	300	6	Y	8	-	Y	-	-	-	-	Y
8B	6X6	300	6	Y	8	-	Y	-	-	-	-	Y
8C	6X40	0	2-4-2	Y	8	Y	Y	Y	2.0	5	-	Y
8D	6X40	0	2-4-2	Y	8	Y	Y	Y	2.0	5	-	Y
S1	6X6	300	6	Y	-	-	-	-	-	-	Y	Y

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 or phase 5 may be lagged.
4. Phase 3 or phase 7 may be lagged.
5. Reposition all existing signal heads except for heads numbered 11 and 51
6. Set all detector units to presence mode.
7. Replace conflict monitor with new ethernet capable conflict monitor when convert to ethernet system.
8. Existing backplates on signal heads numbered 21, 22, and 51.
9. Install backplates on signal heads 11, 23, 24, 61, 62, 63, and 64.
10. Maximum times shown in timing charts are for free-run operation only. Coordinated signal timing values supercede these values.
11. Signal system data: Controller Asset #0786.



OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green 1 *	7	14	7	12	7	14	7	12
Extension 1 *	1.0	6.0	1.0	6.0	1.0	6.0	1.0	6.0
Max Green 1 *	20	120	30	90	20	120	20	90
Yellow Clearance	3.0	5.2	3.0	4.6	3.0	5.2	3.0	4.6
Red Clearance	3.7	1.2	3.2	2.4	3.6	1.2	3.3	2.4
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 *	-	35	-	-	-	35	-	-
Time Before Reduction *	-	15	-	15	-	15	-	15
Time To Reduce *	-	50	-	30	-	50	-	30
Minimum Gap	-	3.5	-	3.5	-	3.5	-	3.5
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-
Dual Entry	-	-	-	ON	-	-	-	ON
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.

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	Right of Way	
	Directional Arrow	
	Street Sign	

Signal Upgrade - Final Design - Traffic Control Phase II

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

US 74
(Martin Luther King, Jr. Pkwy.)
at
SR 1175 (N. Kerr Avenue)

Division 03 New Hanover County Wilmington

PLAN DATE: June 2014 REVIEWED BY: MB Toth
PREPARED BY: AM Encarnacion REVIEWED BY: LM Moon

SCALE 0 50 1"=50'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH

DocuSigned by: Melissa B. Toth 12/19/2014
C9B0DCF8E5AD0AAF... DATE

SIG. INVENTORY NO. 03-0786

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

13-JUL-2015 10:19
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