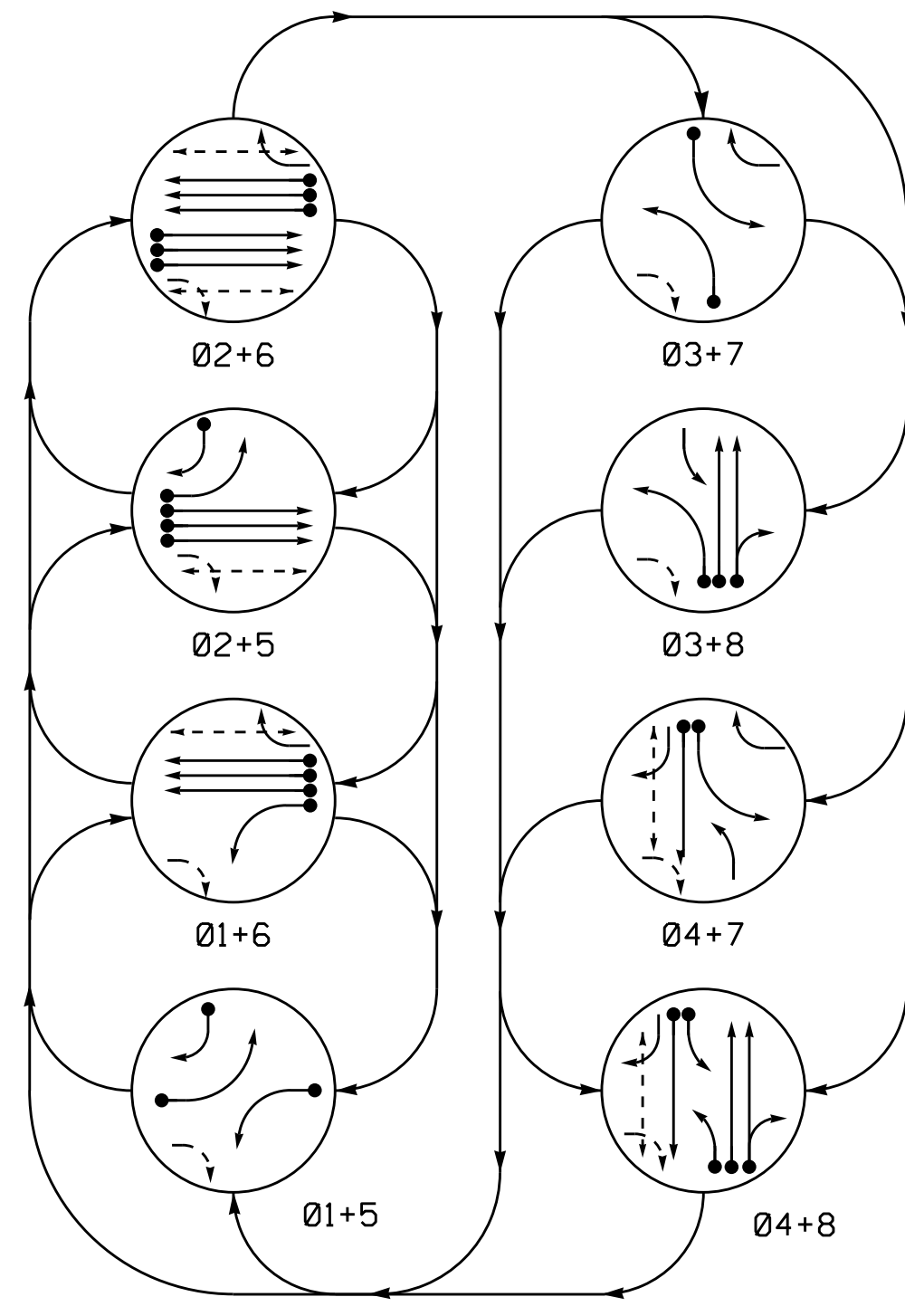


PHASING DIAGRAM

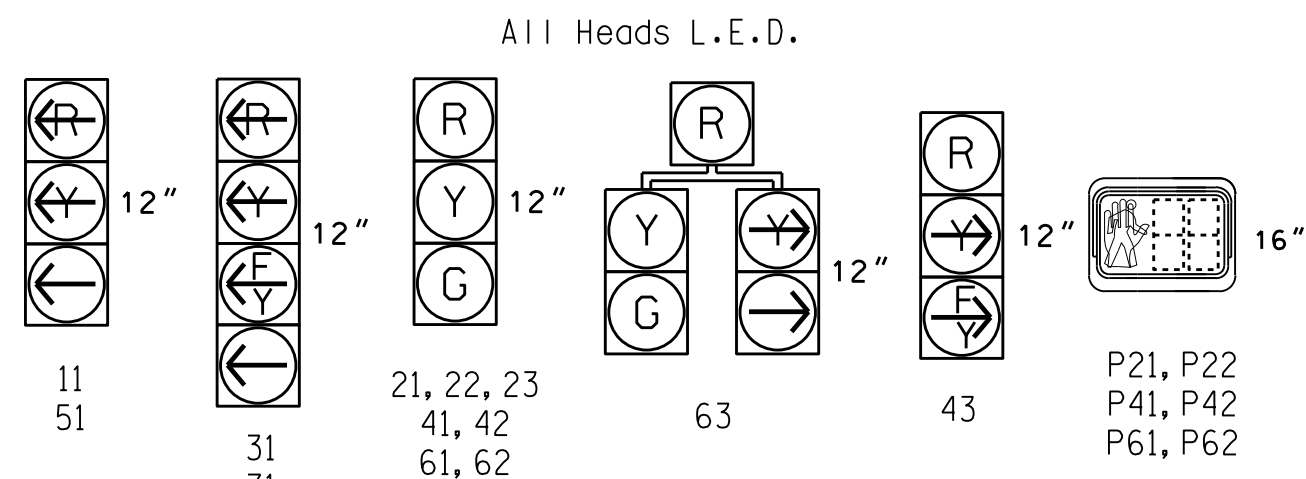


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11	---	---	---	---	---	---	---	---
21, 22, 23	R	R	G	G	R	R	R	Y
31	---	---	---	---	---	---	---	---
41, 42	R	R	R	R	R	R	G	G
43	F	F	F	F	F	F	F	F
51	---	---	---	---	---	---	---	---
61, 62	R	G	R	G	R	R	R	Y
63	R	G	R	G	R	R	R	Y
71	---	---	---	---	---	---	---	---
81, 82	R	R	R	R	R	G	R	G
P21, P22	DW	DW	W	W	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DRK

SIGNAL FACE I.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTENSION	STRETCH TIME		
1A	6X40	0	2-4-2	Y	1	Y	Y	-	-	-
2A	6X6	300	5	Y	2	Y	Y	-	-	-
2B	6X6	300	5	Y	2	Y	Y	-	-	-
2C	6X6	300	5	Y	2	Y	Y	-	-	-
3A	6X40	0	2-4-2	-	3	Y	Y	-	10	-
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	-
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	-
5B	6X40	0	2-4-2	-	5	Y	Y	-	15	-
6A	6X6	300	5	Y	6	Y	Y	-	-	-
6B	6X6	300	5	Y	6	Y	Y	-	-	-
6C	6X6	300	5	Y	6	Y	Y	-	-	-
7A	6X40	0	2-4-2	-	7	Y	Y	-	10	-
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	-
8B	6X40	0	2-4-2	-	8	Y	Y	-	-	-

8 Phase Fully Actuated Wilmington Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Reposition existing signal heads numbered 41.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Signal system data: Controller Asset # 0128.

LEGEND

- | | |
|--|--|
| PROPOSED | EXISTING |
| ○ Traffic Signal Head | ● Traffic Signal Head |
| ○ Modified Signal Head | N/A |
| ○ Sign | ○ Sign |
| ○ Pedestrian Signal Head With Push Button & Sign | ○ Pedestrian Signal Head |
| ○ Signal Pole with Guy | ○ Signal Pole with Guy |
| ○ Signal Pole with Sidewalk Guy | ○ Signal Pole with Sidewalk Guy |
| ○ Inductive Loop Detector | ○ Inductive Loop Detector |
| ○ Controller & Cabinet | ○ Controller & Cabinet |
| ○ Junction Box | ○ Junction Box |
| ○ 2-in Underground Conduit | ○ 2-in Underground Conduit |
| N/A | ○ Right of Way |
| ○ Directional Arrow | ○ Directional Arrow |
| (A) Right Arrow "ONLY" Sign (R-3-5R) | (A) Right Arrow "ONLY" Sign (R-3-5R) |
| (B) "U-TURN YIELD TO RIGHT TURN" | (B) "U-TURN YIELD TO RIGHT TURN" |
| (C) "YIELD" Sign (R1-2) | (C) "YIELD" Sign (R1-2) |
| (D) Yield Ahead Sign (W3-2) | (D) Yield Ahead Sign (W3-2) |
| (E) "TURNING VEHICLES YIELD TO Pedestrians Sign (R10-15) | (E) "TURNING VEHICLES YIELD TO Pedestrians Sign (R10-15) |
| (F) Street Name Sign | (F) Street Name Sign |

OASIS 2070 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	12	7	7	7	12	7	7
Extension 1 *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max Green 1 *	15	100	15	20	15	100	15	20
Yellow Clearance	3.0	4.5	3.0	4.2	3.0	4.5	3.0	4.2
Red Clearance	3.2	1.3	3.5	2.8	3.3	1.6	3.7	2.8
Walk 1 *	-	7	-	7	-	7	-	-
Don't Walk 1	-	15	-	29	-	22	-	-
Seconds Per Actuation *	-	1.3	-	-	-	1.3	-	-
Max Variable Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	45	-	-	-	45	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
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.

Signal Upgrade

US 117-NC 132 (S College Rd) at Randall Parkway/Randall Drive

Division 3 New Hanover County Wilmington

PLAN DATE: May 2016 REVIEWED BY: PLA

PREPARED BY: Jeff Spence REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Seal of Pamela L. Alexander, Professional Engineer, License No. 023489, State of North Carolina.

5/23/2016

SIG. INVENTORY NO. 03-0128

23 MAY 2016 1:43:38
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 J. Spence