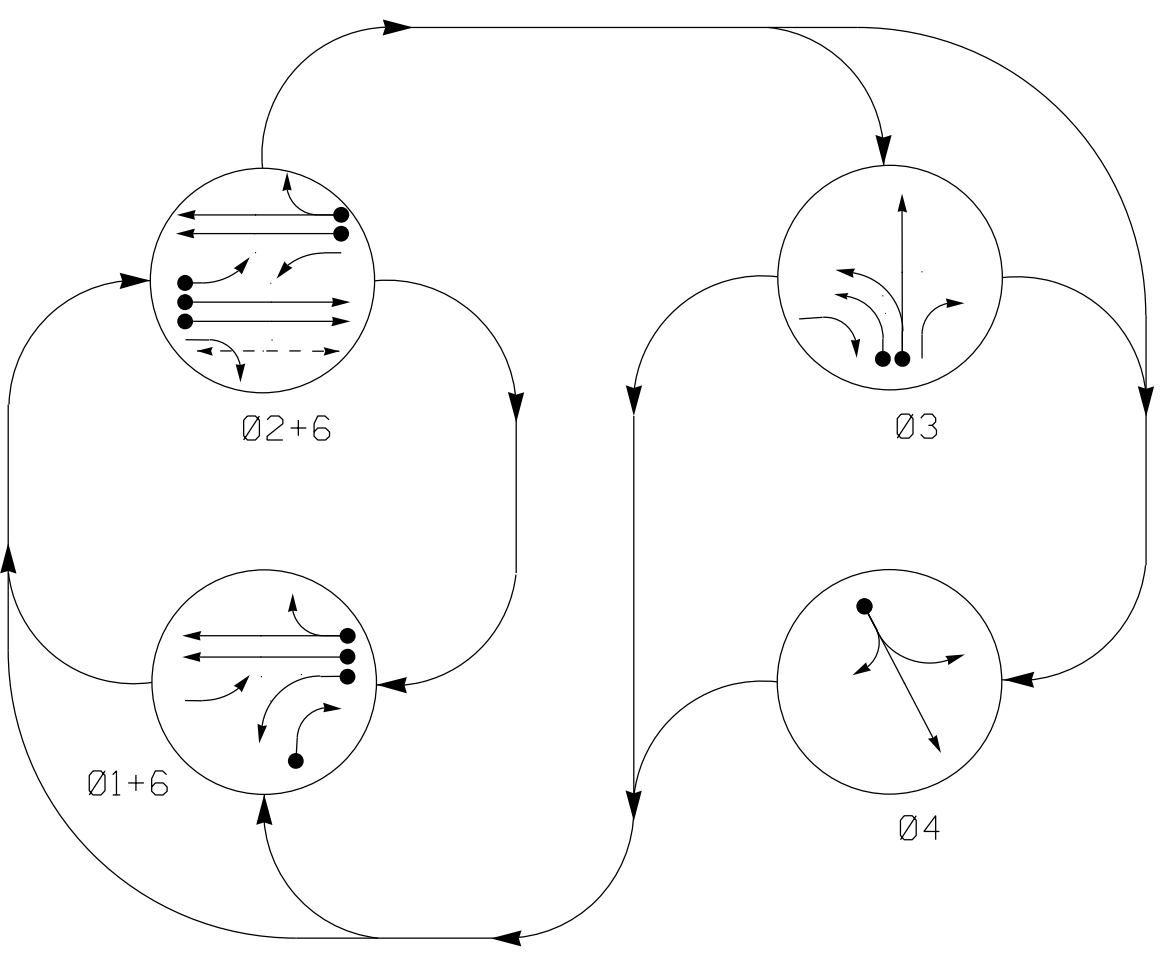
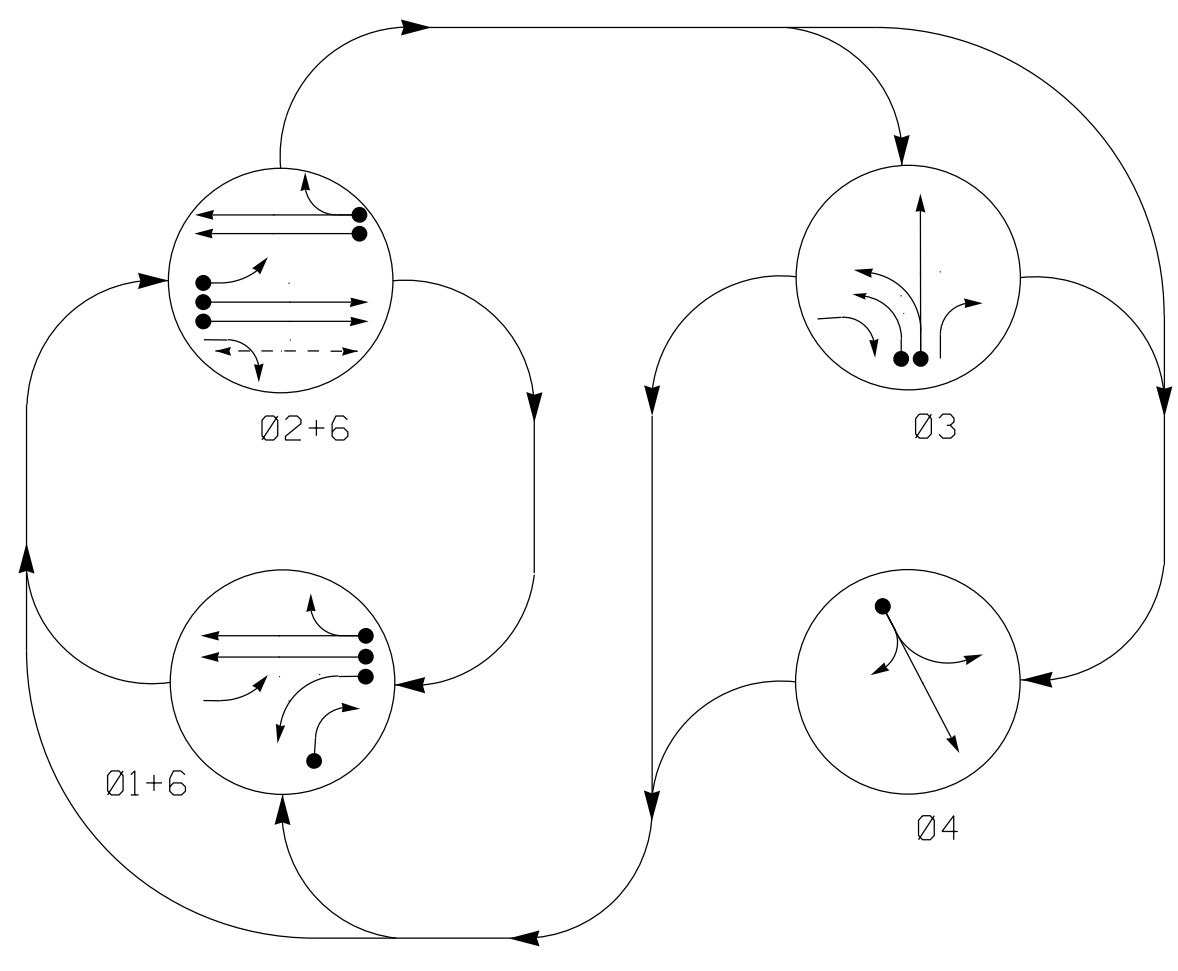


DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- ← UNDETECTED MOVEMENT (OVERLAP)
- ⋯ UNSIGNALIZED MOVEMENT
- ⇄ PEDESTRIAN MOVEMENT

DEFAULT TABLE OF OPERATION

SIGNAL FACE	PHASE				
	Ø 1+6	Ø 2+6	Ø 3	Ø 4	F L
11	←	←	←	←	←
21	←	←	←	←	←
22	R	G	R	R	Y
23	R	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
61, 62	G	G	R	R	Y
P21, P22	DW	W	DW	DRK	

W - Walk
DW - Don't Walk
DRK - Dark

ALTERNATE TABLE OF OPERATION

SIGNAL FACE	PHASE				
	Ø 1+6	Ø 2+6	Ø 3	Ø 4	F L
11	←	←	←	←	←
21	←	←	←	←	←
22	R	G	R	R	Y
23	R	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
61, 62	G	G	R	R	Y
P21, P22	DW	W	DW	DRK	

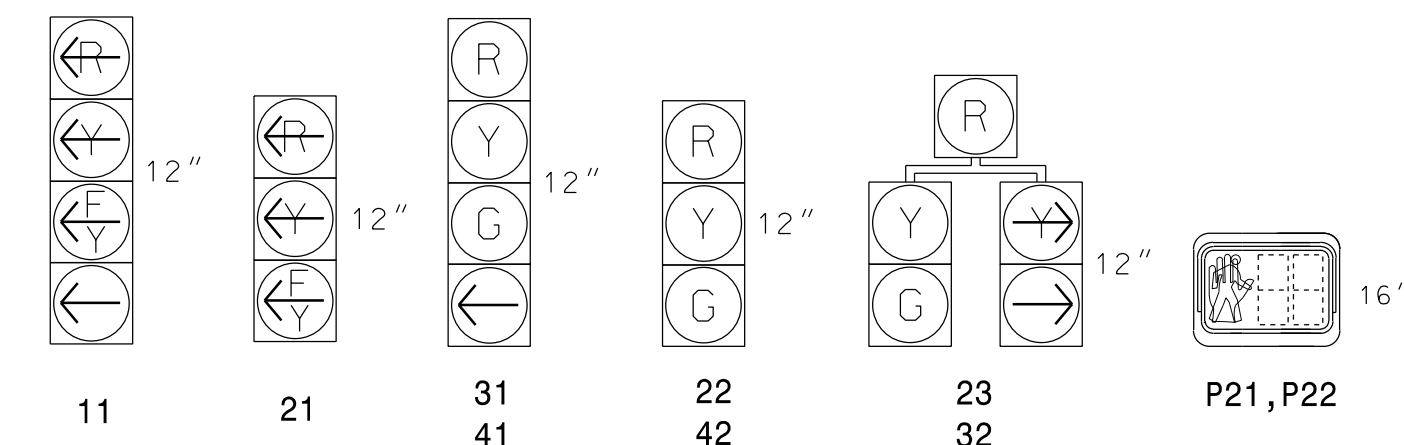
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING								
				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	-	-	*15	-	-
1B	6X60	0	2-4-2	-	1	Y	Y	-	-	15	-	-
2A	6X6	300	5	-	2	Y	Y	-	-	-	-	-
2B	6X6	300	5	-	2	Y	Y	-	-	-	-	-
2C	6X60	0	2-4-2	-	2	Y	Y	Y	-	-	3	-
3A	6X60	0	2-4-2	-	3	Y	Y	-	-	-	3	-
3B	6X60	0	2-4-2	-	3	Y	Y	-	-	-	-	-
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	10	-	-
6A	6X6	300	5	-	6	Y	Y	-	-	-	-	-
6B	6X6	300	5	-	6	Y	Y	-	-	-	-	-

* Disable delay during alternate phasing operation.
** Disable phase 2 call during alternate phasing operation.

SIGNAL FACE I.D.

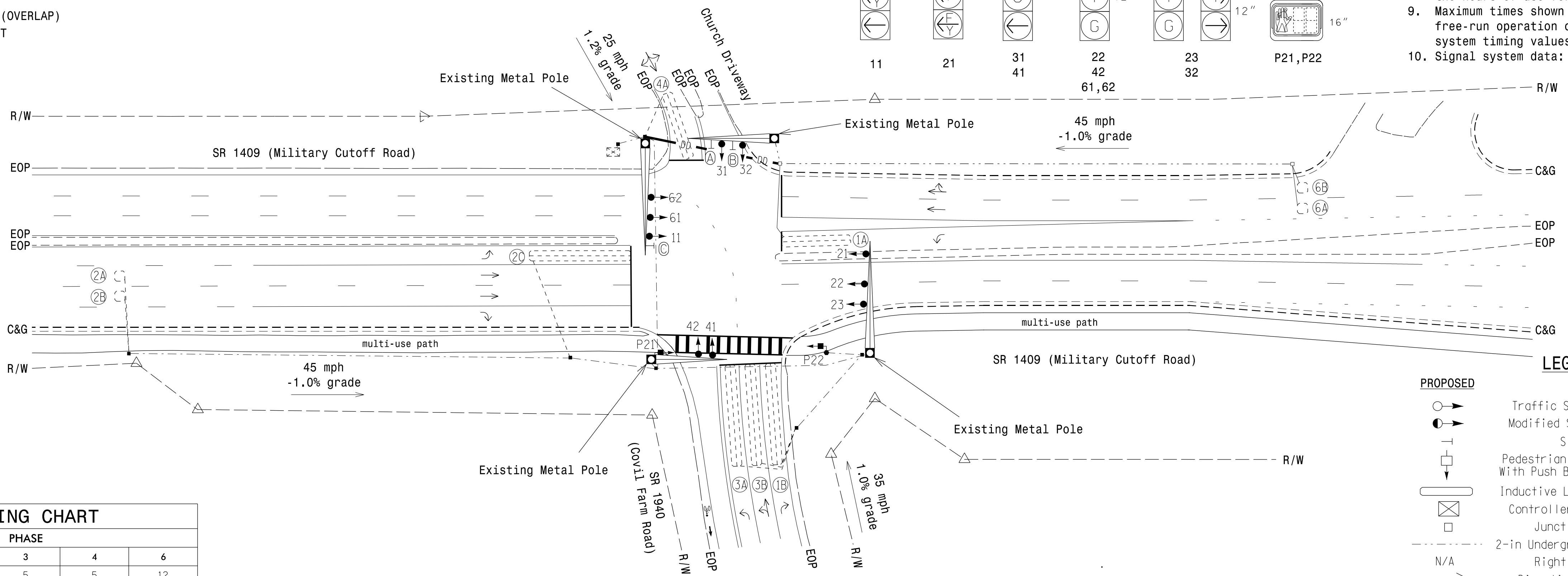
All Heads L.E.D.



4 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 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
5. Set all detector units to presence mode.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. The Division Traffic Engineer will determine the hours of use for each phasing plan.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Signal system data: Controller Asset #0882.



OASIS 2070 TIMING CHART

FEATURE	PHASE				
	1	2	3	4	6
Min Green 1 *	5	12	5	5	12
Extension 1 *	2.0	6.0	2.0	2.0	6.0
Max Green 1 *	15	100	25	25	100
Yellow Clearance	3.0	4.6	3.8	3.1	4.6
Red Clearance	2.9	1.3	2.6	3.0	1.3
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	4	-	-	-
Don't Walk 1	-	14	-	-	-
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

* 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	● N/A
○ Modified Signal Head	○ N/A
□ Pedestrian Signal Head With Push Button & Sign	□ N/A
□ Inductive Loop Detector	□ N/A
□ Controller Junction Box	□ N/A
--- 2-in Underground Conduit	--- N/A
N/A Right of Way	--- N/A
→ Directional Arrow	→ N/A
○ Metal Pole with Mastarm	○ N/A
○ Pedestrian Pedestal	● N/A
(A) Left Arrow "ONLY" Sign (R3-5L)	(A) N/A
(B) Combined Through and Left Arrow Sign (R3-6L)	(B) N/A
(C) "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	(C) N/A

Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-8888 NCBEES #F-0326

SR 1409 (Military Cutoff Road)
at
SR 1940 (Covall Farm Road)
Division 03 New Hanover County Wilmington

PLAN DATE: April 2017 REVIEWED BY: MB Toth

PREPARED BY: AM Encarnacion REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
SEAL
025892
MELISSA B. TOTH

750 N. Greenfield Pkwy, Garner, NC 27529
SCALE 1"=40'
6/6/2017
SIG. INVENTORY NO. 03-0882

06-JUN-2017 13:47
 D:\Projects\1409 Military Cutoff\Signal\03-0882.dgn
 03-0882.dwg
 AT 05:50:21