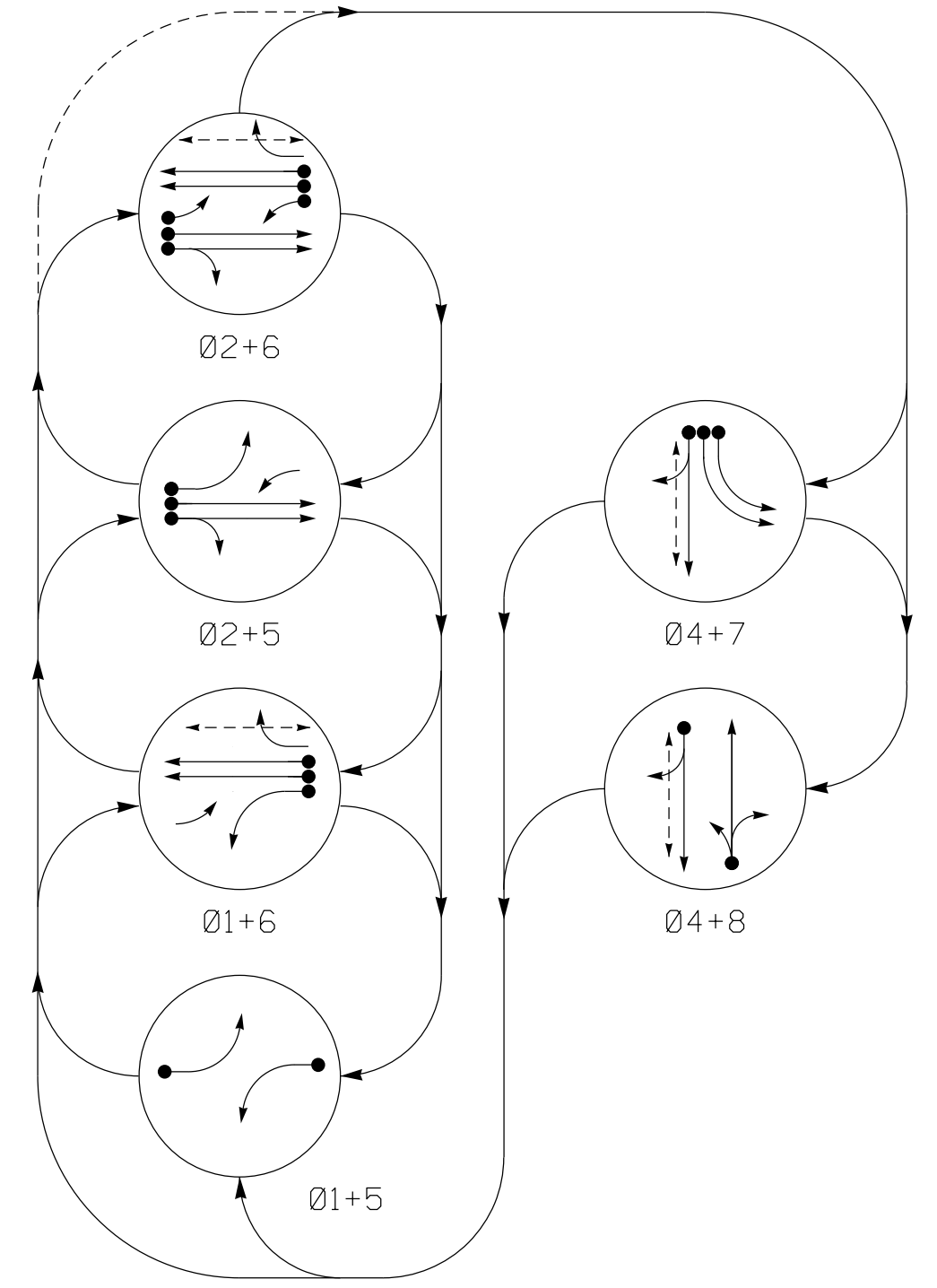


**PHASING DIAGRAM**



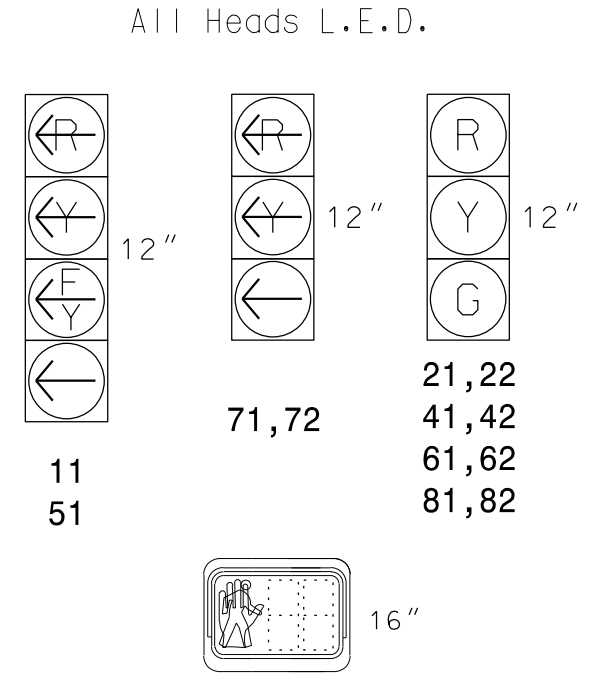
**PHASING DIAGRAM DETECTION LEGEND**

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

**TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	01+5	02+5	02+6	04+7	04+8	01+6	02+6	04+8
11	←	←	←	←	←	←	←	←
21,22	R	R	G	R	R	Y		
41,42	R	R	R	G	G	R		
51	←	←	←	←	←	←	←	←
61,62	R	G	R	G	R	Y		
71,72	←	←	←	←	←	←	←	←
81,82	R	R	R	R	G	R		
P41,P42	DW	DW	DW	W	W	DRK		
P61,P62	DW	W	DW	DW	DW	DRK		

**SIGNAL FACE I.D.**



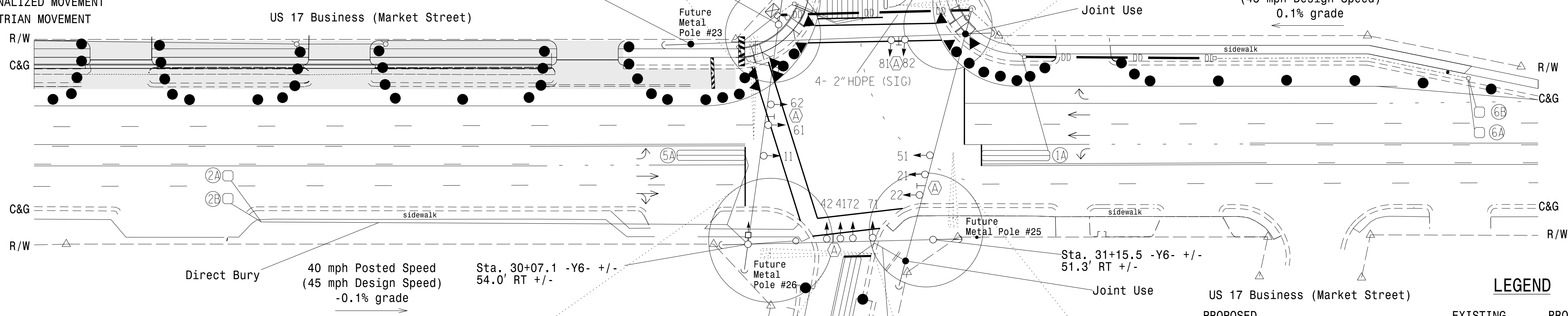
**OASIS 2070 LOOP & DETECTOR INSTALLATION**

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

**6 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. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
4. Phase 1 and/or phase 5 may be lagged.
5. Omit phase 7 during phase 8 on.
6. Program controller to clear from phase 8 to phase 7 through phase 2 (see Electrical Details).
7. Set all detector units to presence mode.
8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
9. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
10. Pedestrian Pushbutton and sign shall be mounted parallel with associated crosswalk.
11. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
12. Install new signal heads with enough signal cable to allow for the repositioning of the signal heads as shown in the subsequent temporary signal design.
13. Signal system data: Controller Asset #1081.



**LEGEND**

- |                              |                         |   |   |
|------------------------------|-------------------------|---|---|
| <b>PROPOSED</b>              | <b>EXISTING</b>         | <b>PROPOSED</b>                                   | <b>EXISTING</b>                                   |
| N/A 2-in Underground Conduit | — ss — Sewer Line       | ○ Traffic Signal Head                             | ● Traffic Signal Head                             |
| N/A UG Telephone Line        | — t — UG Telephone Line | □ Pedestrian Signal Head                          | ■ Pedestrian Signal Head                          |
| N/A UG Gas Line              | — g — UG Gas Line       | ⊕ Push Button & Sign                              | ⊕ Push Button & Sign                              |
| N/A Drainage Pipe            | — d — Drainage Pipe     | ⊕ Temporary Pedestrian Post w/ Push Button & Sign | ⊕ Temporary Pedestrian Post w/ Push Button & Sign |
| N/A UG Power Line            | — p — UG Power Line     | ○ Signal Pole with Guy                            | ● Signal Pole with Guy                            |
| N/A Right of Way             | — R/W — Right of Way    | ○ Type II Signal Pedestal                         | ● Type II Signal Pedestal                         |
| (A) Street Name Sign         | (A) Street Name Sign    | □ Inductive Loop Detector                         | □ Inductive Loop Detector                         |
| Construction Zone            | Construction Zone       | □ Controller & Cabinet                            | □ Controller & Cabinet                            |
| Construction Zone Drums      | Construction Zone Drums | □ Junction Box                                    | □ Junction Box                                    |
| Construction Zone Cones      | Construction Zone Cones | □ Oversize Junction Box                           | □ Oversize Junction Box                           |
| Construction Barricade       | Construction Barricade  | — DD — Directional Drill                          | — DD — Directional Drill                          |
|                              |                         | → Directional Arrow                               | → Directional Arrow                               |

**OASIS 2070 TIMING CHART**

FEATURE	PHASE							
	1	2	4	5	6	7	8	
Min Green 1 *	7	12	7	7	12	7	7	
Extension 1 *	2.0	6.0	2.0	2.0	6.0	2.0	2.0	
Max Green 1 *	15	100	40	15	100	35	40	
Yellow Clearance	3.0	4.6	3.8	3.0	4.6	3.0	3.8	
Red Clearance	2.9	2.0	2.2	3.6	2.0	3.3	2.6	
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Walk 1 *	-	-	7	-	7	-	-	
Don't Walk 1	-	-	22	-	19	-	-	
Seconds Per Actuation *	-	1.5	-	-	1.5	-	-	
Max Variable Initial *	-	34	-	-	34	-	-	
Time Before Reduction *	-	15	-	-	15	-	-	
Time To Reduce *	-	30	-	-	30	-	-	
Minimum Gap	-	3.2	-	-	3.2	-	-	
Recall Mode	-	SOFT RECALL	-	-	SOFT RECALL	-	-	
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-	-	
Dual Entry	-	-	ON	-	-	-	ON	
Simultaneous Gap	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 - Temporary Design 1 (TMP Phase II)**

13-JUL-2015 10:19  
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MILL2054 AT 20250140

Prepared for the Offices of:

**US 17 Business (Market Street)**  
at  
**Wilmington Avenue / Wilmington Avenue Extension**  
Division 03 New Hanover County Wilmington

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

750 N. Greenfield Pkwy, Garner, NC 27529  
1616 EAST MILLBROOK ROAD, SUITE 310 RALEIGH, NORTH CAROLINA 27609 (919) 876-8888 NGBEES #F-0326

SCALE 1"=40'

SEAL

**MELISSA B. TOTH**  
NORTH CAROLINA PROFESSIONAL ENGINEER  
025892

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

SIG. INVENTORY NO. 03-1081T1