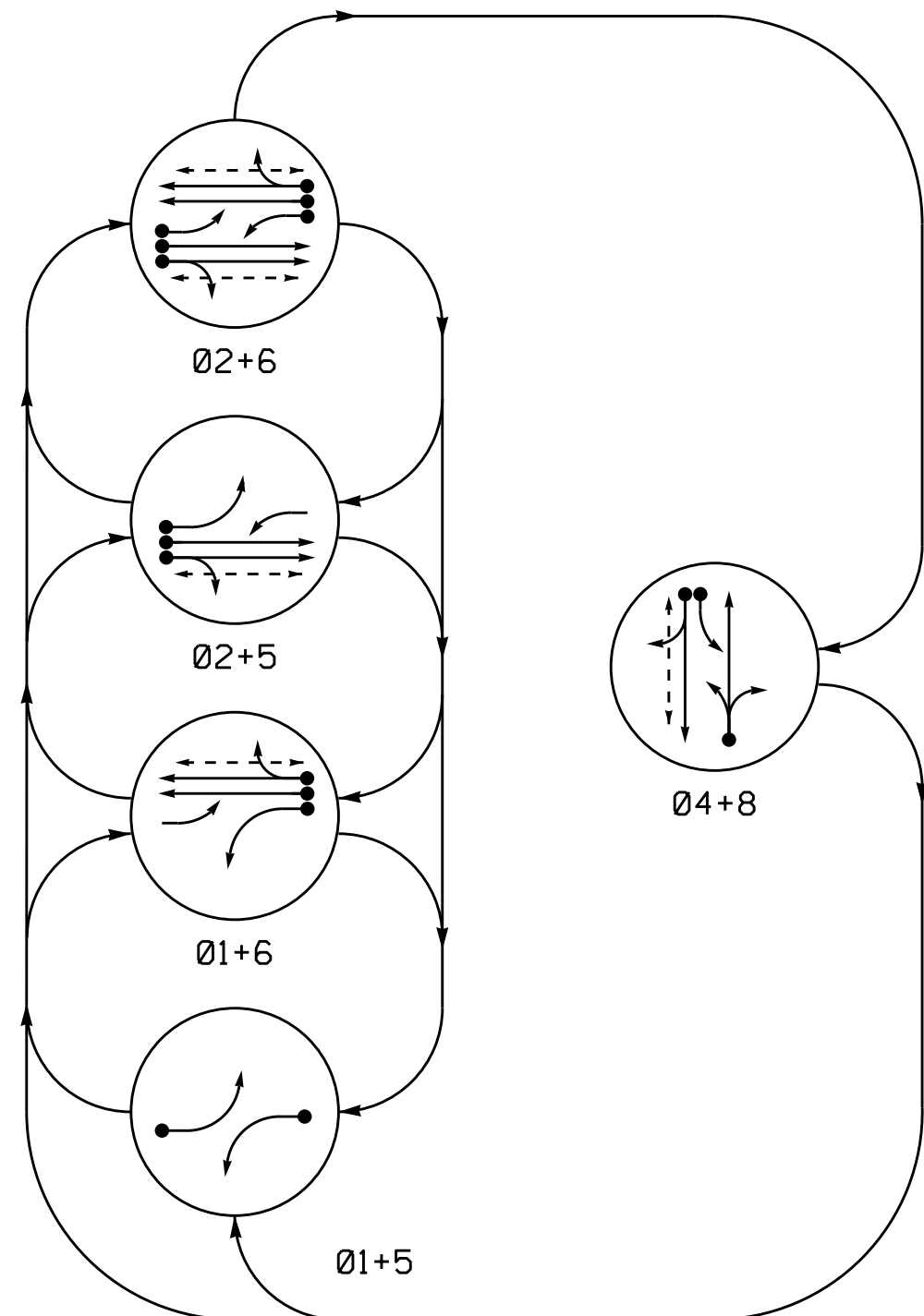


**PHASING DIAGRAM**

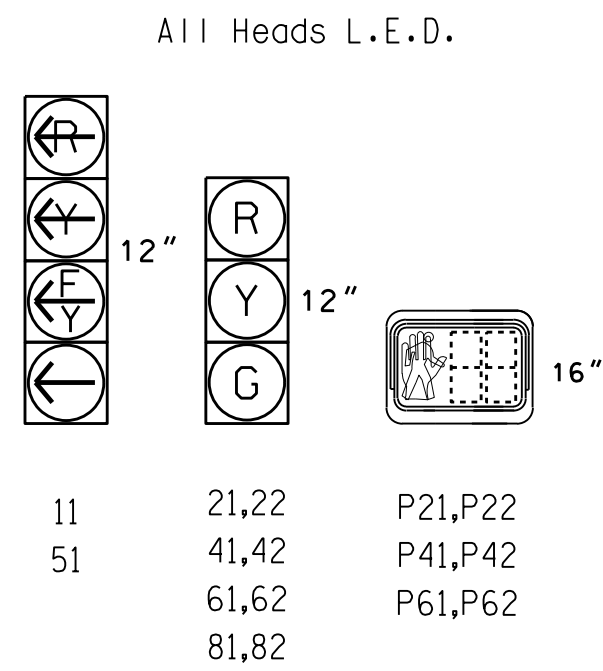


**PHASING DIAGRAM DETECTION LEGEND**

- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- ←---→ UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE					
	01+5	02+5	02+6	04+8	FLASH	F
11	←	←	←	←	←	←
21,22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
51	←	←	←	←	←	←
61,62	R	G	R	G	R	Y
81,82	R	R	R	R	G	R
P21,P22	DW	DW	W	W	DW	DRK
P41,P42	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DRK

**SIGNAL FACE I.D.**

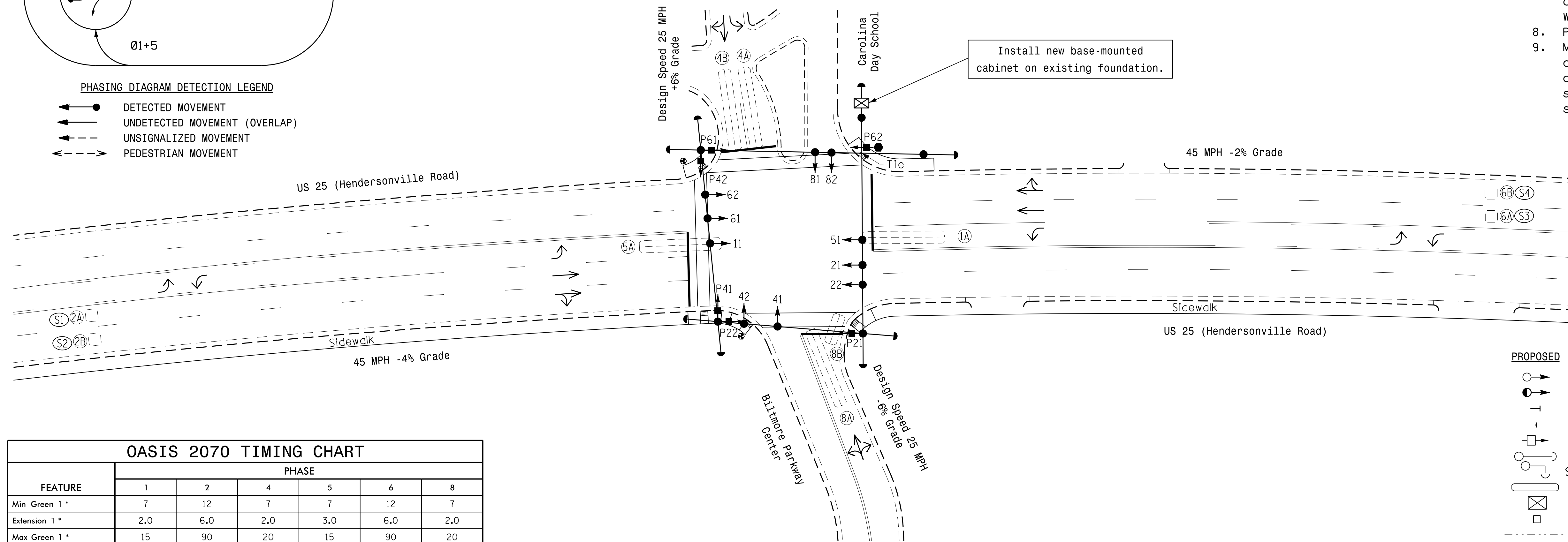


OASIS 2070 LOOP & DETECTOR INSTALLATION CHART												
INDUCTIVE LOOPS						DETECTOR PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	+5	2-4-2	-	1	Y	Y	-	-	15	-	Y
2A/S1	6X6	289	5	-	2	Y	Y	-	-	-	-	Y
2B/S2	6X6	289	5	-	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	-	-	Y
4B	6X40	0	2-4-2	-	4	Y	Y	-	-	10	-	Y
5A	6X40	+16	2-4-2	-	5	Y	Y	-	-	15	-	Y
6A/S3	6X6	300	4	-	6	Y	Y	-	-	-	-	Y
6B/S4	6X6	300	4	-	6	Y	Y	-	-	-	-	Y
8A	6X40	+2	2-4-2	-	8	Y	Y	-	-	5	-	Y
8B	6X15	+10	2-4-2	-	8	Y	Y	-	-	5	-	Y

**5 Phase Fully Actuated Asheville 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.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



Install new base-mounted cabinet on existing foundation.

FEATURE	OASIS 2070 TIMING CHART							
	PHASE							
	1	2	4	5	6	8		
Min Green 1 *	7	12	7	7	12	7		
Extension 1 *	2.0	6.0	2.0	3.0	6.0	2.0		
Max Green 1 *	15	90	20	15	90	20		
Yellow Clearance	3.0	4.9	3.5	3.0	4.9	3.5		
Red Clearance	1.9	1.3	2.4	2.4	1.3	2.4		
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0		
Walk 1 *	-	7	7	-	7	-		
Don't Walk 1	-	10	19	-	17	-		
Seconds Per Actuation *	-	1.5	-	-	1.5	-		
Max Variable Initial *	-	33	-	-	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	-	-	ON	-	-	ON		
Simultaneous Gap	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          | ●→ Traffic Signal Head          |
| ●→ Modified Signal Head         | N/A                             |
| ⊥ Sign                          | ⊥ Sign                          |
| + Pushbutton & Sign             | + Pushbutton & Sign             |
| ⊥ Pedestrian Signal Head        | ⊥ 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                | N/A Right of Way                |
| → Directional Arrow             | → Directional Arrow             |
| ⊗ Type I Pushbutton Post        | ⊗ Type I Pushbutton Post        |
| ○ Type II Signal Pedestal       | ● Type II Signal Pedestal       |

**Signal Upgrade**

**US 25 (Hendersonville Road) at Biltmore Parkway Center / Carolina Day School**

Division 13 Buncombe County Asheville

PLAN DATE: February 2016 REVIEWED BY: P. Alexander

PREPARED BY: M. Mahbooba REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

DATE: 8/22/2016

SIG. INVENTORY NO. 13-0528

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 1"=30'

02-4715-2016-11-11  
 S:\13-0528\13-0528\SIG\13-0528\Sig\_121.0.dgn  
 Design: J. Williams  
 System: Signal  
 Region: Eastern  
 Date: 8/22/2016  
 Time: 11:11 AM  
 User: jwilliams