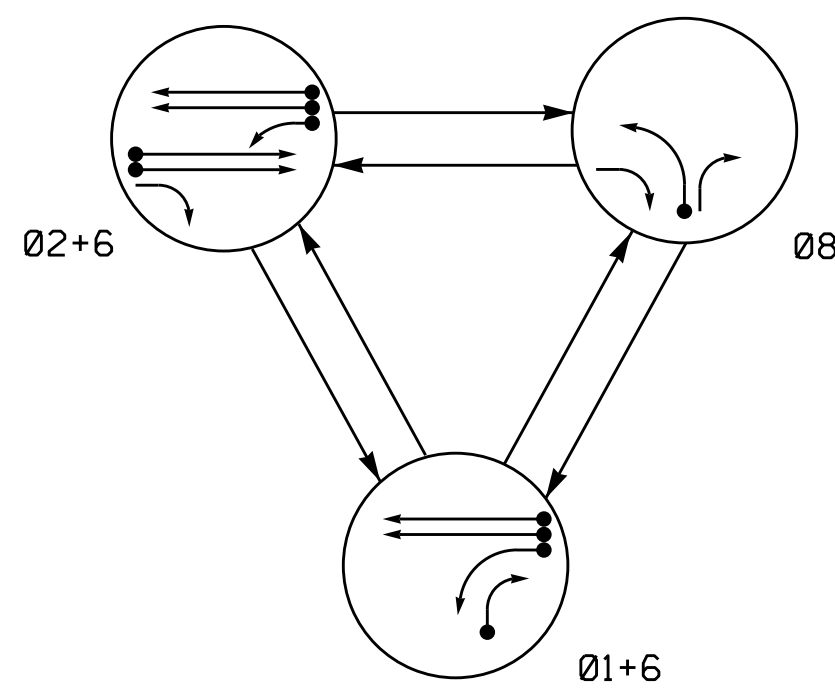


**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

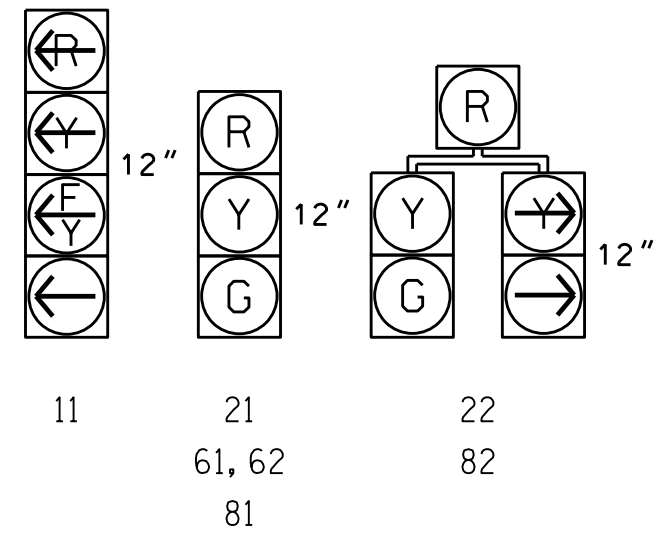
- ◄● DETECTED MOVEMENT
- ◄◄ UNDETECTED MOVEMENT (OVERLAP)
- ◄- UN SIGNALIZED MOVEMENT
- ◄- - PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	01+6	02+6	08	08
11	←	→	→	←
21	R	G	R	Y
22	R	G	R	Y
61, 62	G	G	R	Y
81	R	R	G	R
82	R	R	G	R

**SIGNAL FACE I.D.**

All Heads L.E.D.



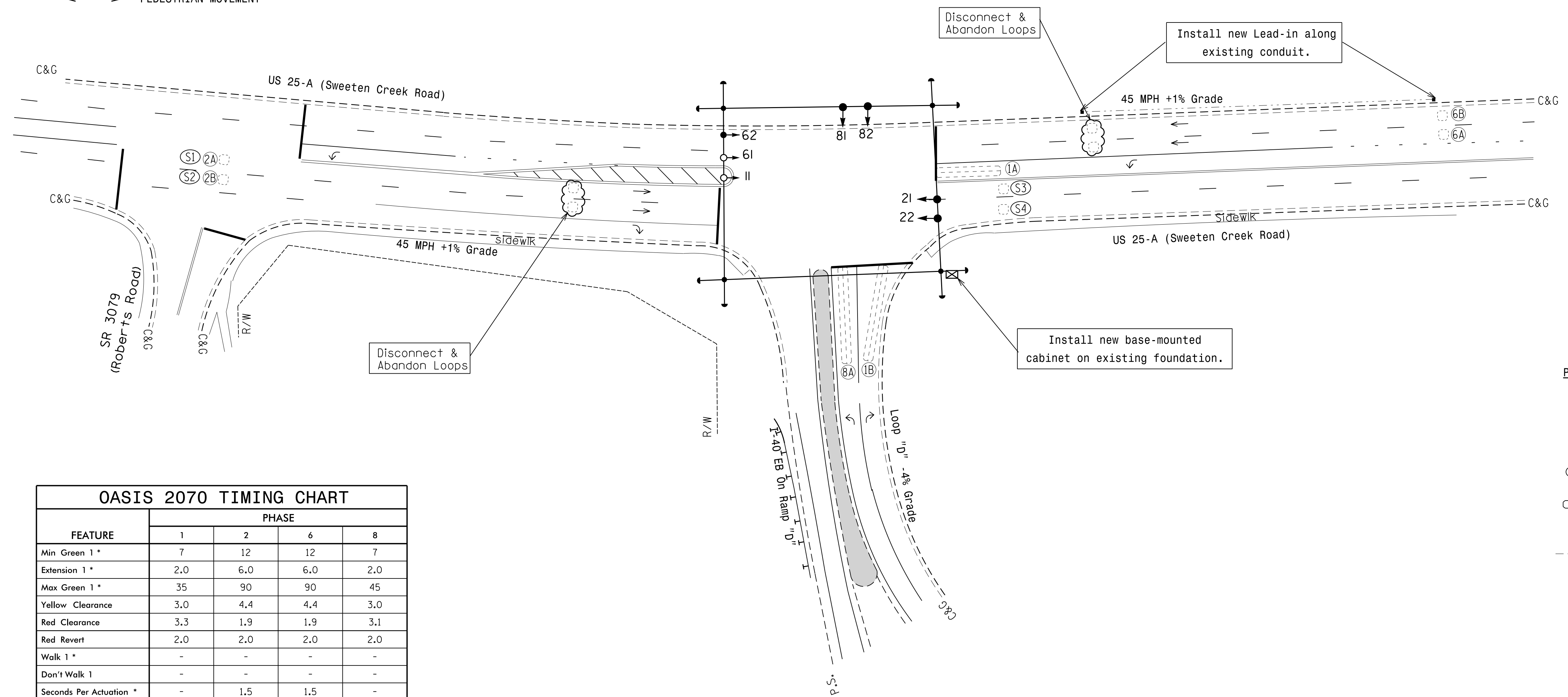
**OASIS 2070 LOOP & DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING					SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME			DELAY TIME
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	15	-	Y
1B	6X60	0	2-4-2	-	1	Y	Y	-	-	20	-	Y
2A/S1	6X6	300	EXIST	-	2	Y	Y	-	-	-	-	Y
2B/S2	6X6	300	EXIST	-	2	Y	Y	-	-	-	-	Y
6A	6X6	300	EXIST	-	6	Y	Y	-	-	-	-	Y
6B	6X6	300	EXIST	-	6	Y	Y	-	-	-	-	Y
8A	6X60	0	2-4-2	-	8	Y	Y	-	-	-	-	Y
S3	6X6	+164	EXIST	-	-	-	-	-	-	-	-	Y
S4	6X6	+164	EXIST	-	-	-	-	-	-	-	-	Y

**3 Phase Fully Actuated Asheville 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. Disconnect and abandon existing loops as shown.
5. Set all detector units to presence mode.
6. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
8. Pavement markings are existing
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



**OASIS 2070 TIMING CHART**

FEATURE	PHASE			
	1	2	6	8
Min Green 1 *	7	12	12	7
Extension 1 *	2.0	6.0	6.0	2.0
Max Green 1 *	35	90	90	45
Yellow Clearance	3.0	4.4	4.4	3.0
Red Clearance	3.3	1.9	1.9	3.1
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	1.5	1.5	-
Max Variable Initial *	-	34	34	-
Time Before Reduction *	-	15	15	-
Time To Reduction *	-	30	30	-
Minimum Gap	-	3.0	3.0	-
Recall Mode	-	SOFT RECALL	SOFT RECALL	-
Vehicle Call Memory	-	YELLOW	YELLOW	-
Dual Entry	-	-	-	-
Simultaneous Gap	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 Traffic Signal Head                            |  | EXISTING Traffic Signal Head                            |
|  | PROPOSED Modified Signal Head                           |  | EXISTING Modified Signal Head                           |
|  | PROPOSED Sign   |  | EXISTING Sign   |
|  | PROPOSED Pedestrian Signal Head With Push Button & Sign |  | EXISTING Pedestrian Signal Head With Push Button & Sign |
|  | PROPOSED Signal Pole with Guy                           |  | EXISTING Signal Pole with Guy                           |
|  | PROPOSED Signal Pole with Sidewalk Guy                  |  | EXISTING Signal Pole with Sidewalk Guy                  |
|  | PROPOSED Inductive Loop Detector                        |  | EXISTING Inductive Loop Detector                        |
|  | PROPOSED Controller & Cabinet                           |  | EXISTING Controller & Cabinet                           |
|  | PROPOSED Junction Box                                   |  | EXISTING Junction Box                                   |
|  | PROPOSED 2-in Underground Conduit                       |  | EXISTING 2-in Underground Conduit                       |
|  | PROPOSED Right of Way                                   |  | EXISTING Right of Way                                   |
|  | PROPOSED Directional Arrow                              |  | EXISTING Directional Arrow                              |
|  | PROPOSED Guardrail                                      |  | EXISTING Guardrail                                      |

09-AUG-2016 1:56:00  
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 mmb0000

**Signal Upgrade**

Prepared in the Offices of:  
  
 TRANSPORTATION MOBILITY AND SAFETY SOLUTIONS  
 DIVISION OF NORTH CAROLINA TRANSPORTATION  
 SIGNAL DESIGN SECTION  
 750 N. Greenfield Pkwy, Garner, NC 27529

**US 25-A (Sweeten Creek Road) at I-40 EB Ramp "D" / EB Off Loop "D"**

Division 13 Buncombe County Near Fairview  
 PLAN DATE: January 2016 REVIEWED BY: T. Williams  
 PREPARED BY: M. Mahbooba REVIEWED BY:  
 REVISIONS: INIT. DATE

750 N. Greenfield Pkwy, Garner, NC 27529  
 SCALE: 1"=40'  
 0 40  
 1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 024393  
 J. G. WILLIAMS  
 8/9/2016  
 DATE  
 SIG. INVENTORY NO. 13-0669