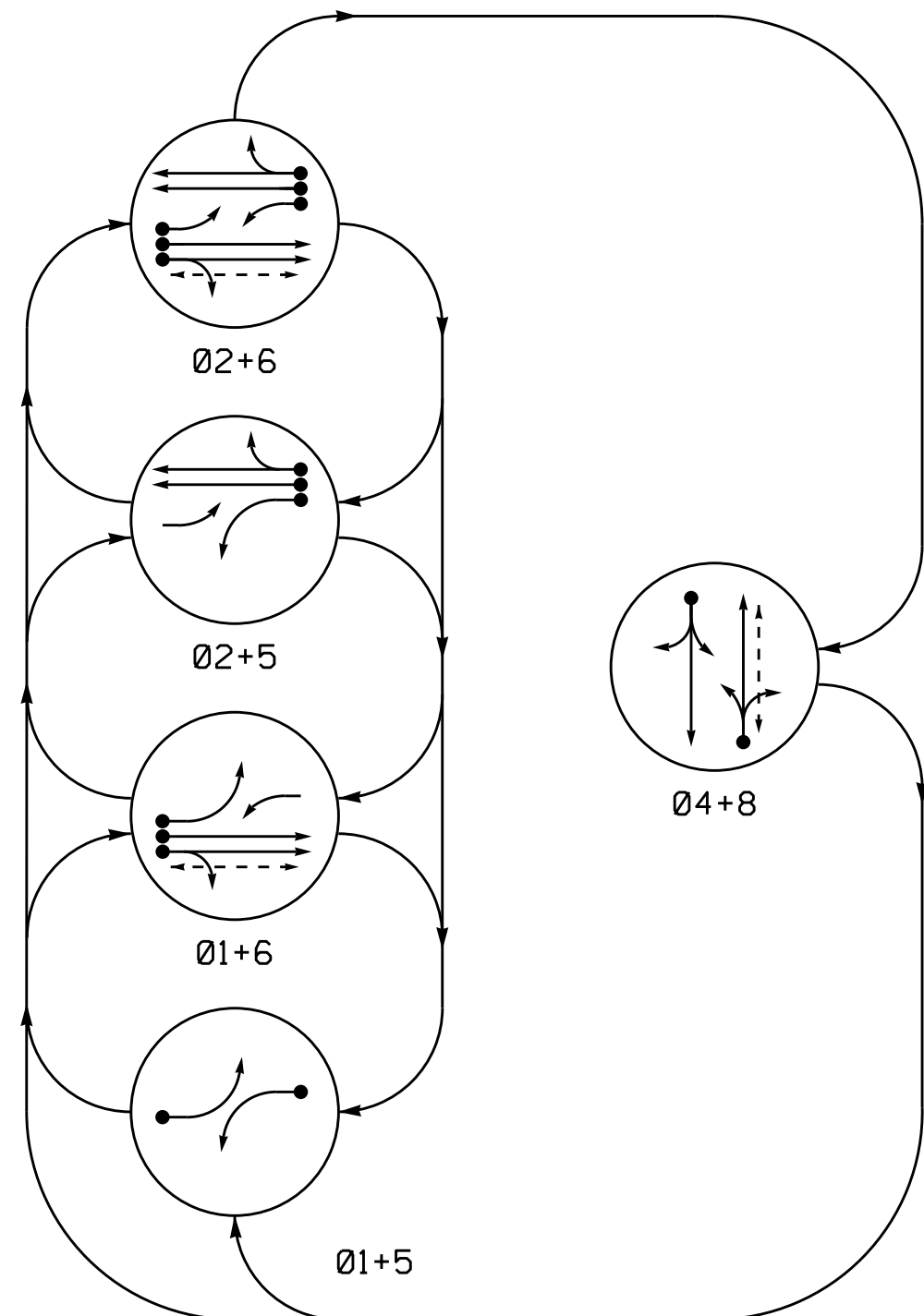


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

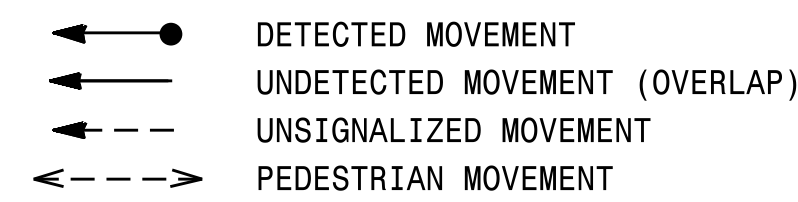
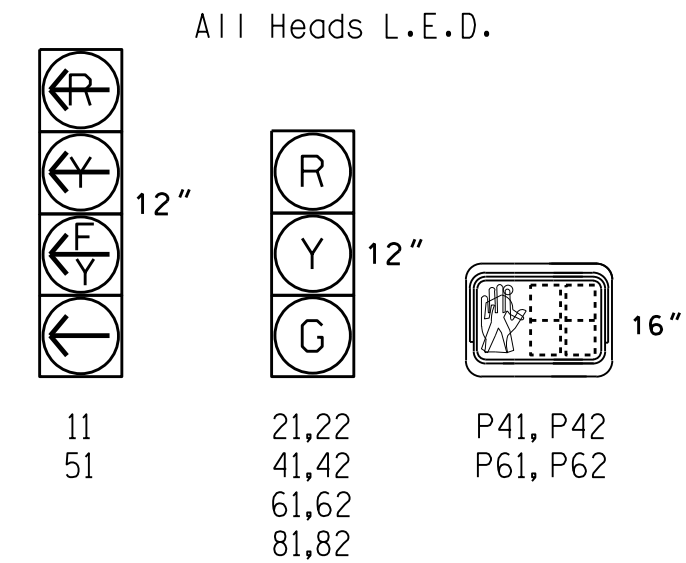


TABLE OF OPERATION

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

SIGNAL FACE I.D.



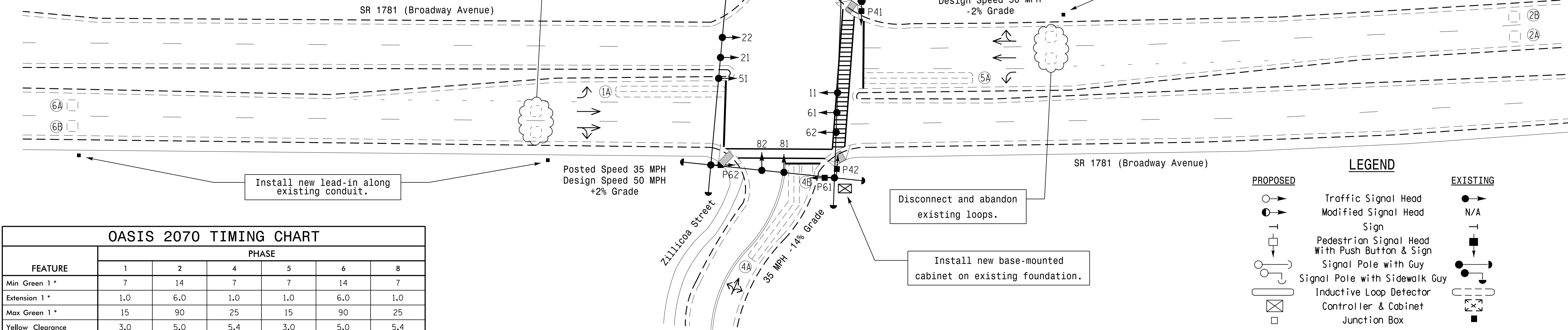
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

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	6X60	0	2-4-2	-	1	Y	Y	-	15	-	Y	
2A	6X6	355	EXIST	-	2	Y	Y	-	-	-	Y	
2B	6X6	355	EXIST	-	2	Y	Y	-	-	-	Y	
4A	6X60	0	2-4-2	-	4	Y	Y	-	10	-	Y	
4B	6X6	0	EXIST	-	4	Y	Y	-	15	-	Y	
5A	6X60	0	2-4-2	-	5	Y	Y	-	15	-	Y	
6A	6X6	355	EXIST	-	2	Y	Y	-	3	-	Y	
6B	6X6	355	EXIST	-	6	Y	Y	-	-	-	Y	
8A	6X60	0	2-4-2	-	8	Y	Y	-	10	-	Y	
8B	6X6	0	EXIST	-	8	Y	Y	-	15	-	Y	

5 Phase Fully Actuated Asheville Signal System

NOTES

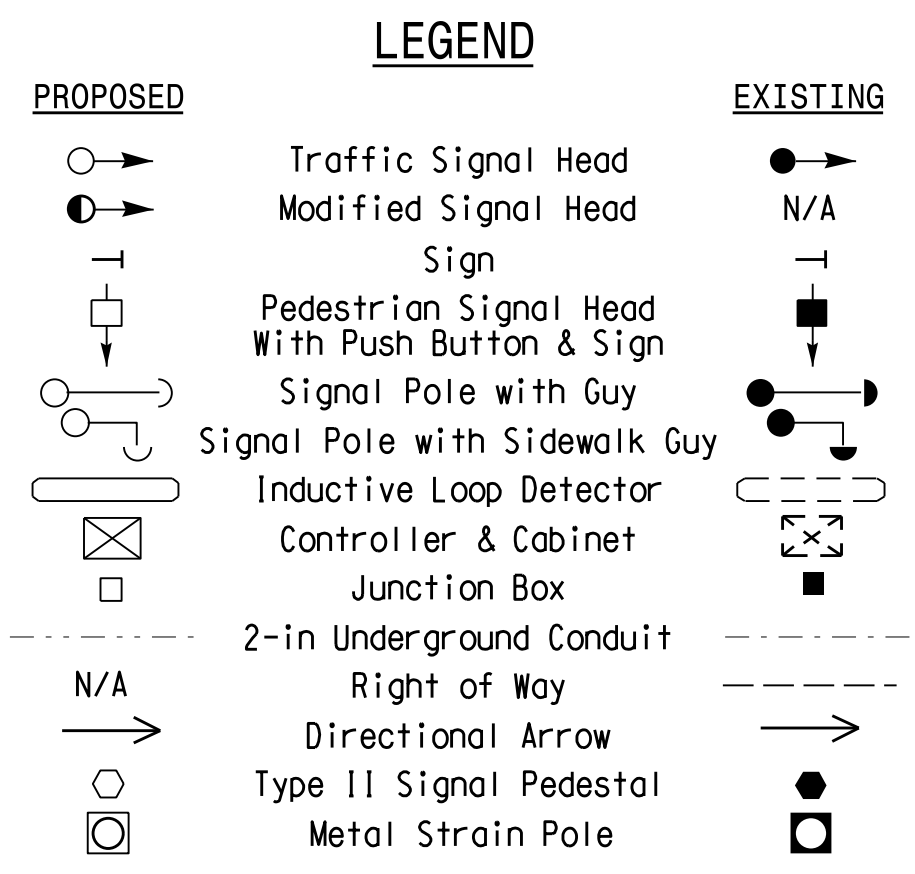
1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Disconnect and 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. 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. Pavement markings are existing.
11. 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	4	5	6	8
Min Green 1 *	7	14	7	7	14	7
Extension 1 *	1.0	6.0	1.0	1.0	6.0	1.0
Max Green 1 *	15	90	25	15	90	25
Yellow Clearance	3.0	5.0	5.4	3.0	5.0	5.4
Red Clearance	1.9	1.0	1.7	2.3	1.0	1.7
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	7	-	7	-
Don't Walk 1	-	-	18	-	13	-
Seconds Per Actuation *	-	1.5	-	-	1.5	-
Max Variable Initial *	-	40	-	-	40	-
Time Before Reduction *	-	15	-	-	15	-
Time To Reduce *	-	30	-	-	30	-
Minimum Gap	-	3.2	-	-	3.2	-
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.



Signal Upgrade

Prepared in the Offices of:

 SR 1781 (Broadway Avenue) at SR 1683 (Campus Drive)/ Zillicoa Street
 Division 13 Buncombe County Asheville
 PLAN DATE: June 2016 REVIEWED BY: T.J. Williams
 PREPARED BY: R.N. Zinser REVIEWED BY:
 REVISIONS: INIT. DATE
 SCALE: 1"=30'
 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

 R.N. Zinser 11/4/2016
 SIG. INVENTORY NO. 13-1023

04-1023-2016-13-154
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 R.N.Z.