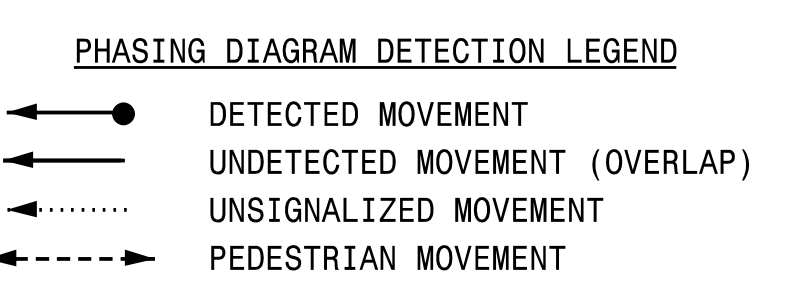
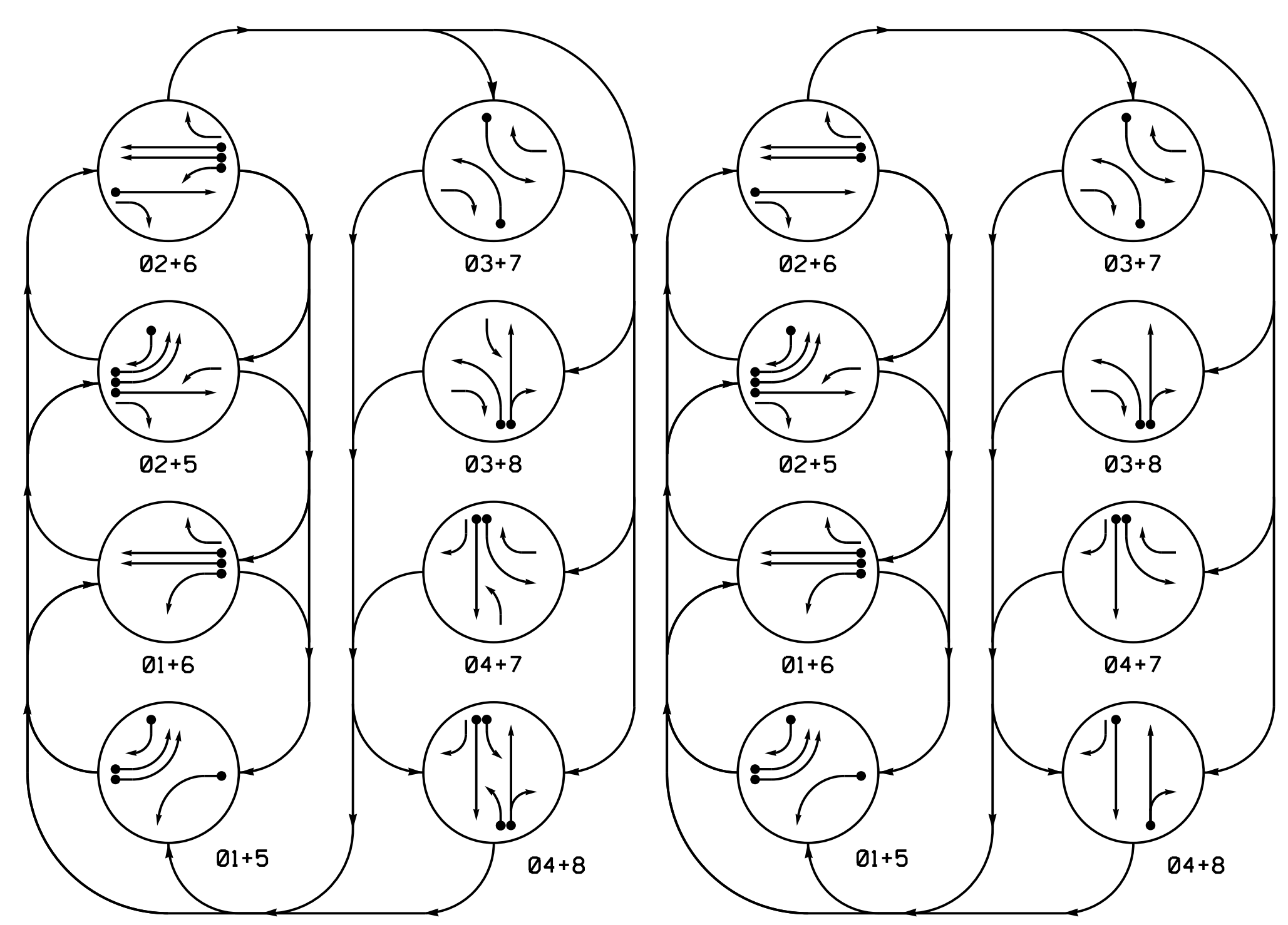
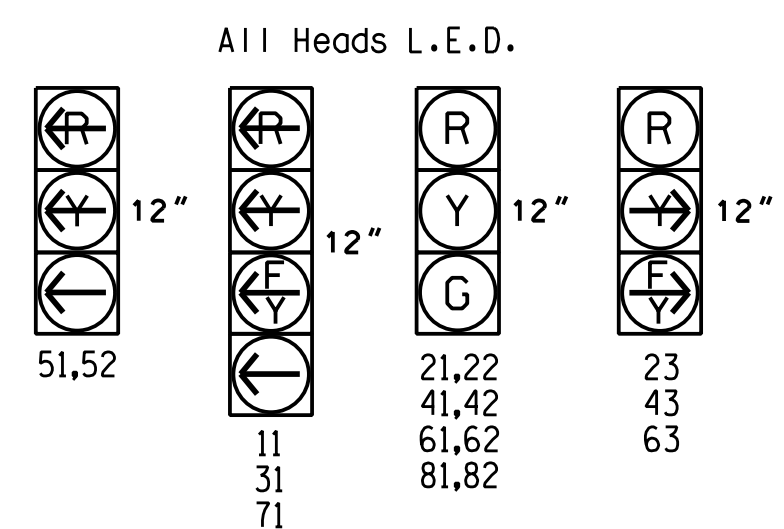


DEFAULT PHASING DIAGRAM

ALTERNATE PHASING DIAGRAM



SIGNAL FACE I.D.



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11	—	—	F	F	R	R	R	Y
21,22	R	R	G	G	R	R	R	Y
23	R	R	F	F	F	F	R	Y
31	R	R	R	R	—	—	F	R
41,42	R	R	R	R	R	R	G	R
43	F	F	F	F	R	R	F	R
51,52	—	—	—	—	R	R	R	R
61,62	R	G	R	G	R	R	R	Y
63	R	F	R	F	F	R	F	Y
71	R	R	R	R	—	—	F	R
81,82	R	R	R	R	R	G	R	G

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11	—	—	R	R	R	R	R	Y
21,22	R	R	G	G	R	R	R	Y
23	R	R	F	F	F	F	R	Y
31	R	R	R	R	—	—	R	R
41,42	R	R	R	R	R	R	G	R
43	F	F	F	F	R	R	F	R
51,52	—	—	—	—	R	R	R	R
61,62	R	G	R	G	R	R	R	Y
63	R	F	R	F	F	R	F	Y
71	R	R	R	R	—	—	R	R
81,82	R	R	R	R	R	G	R	G

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

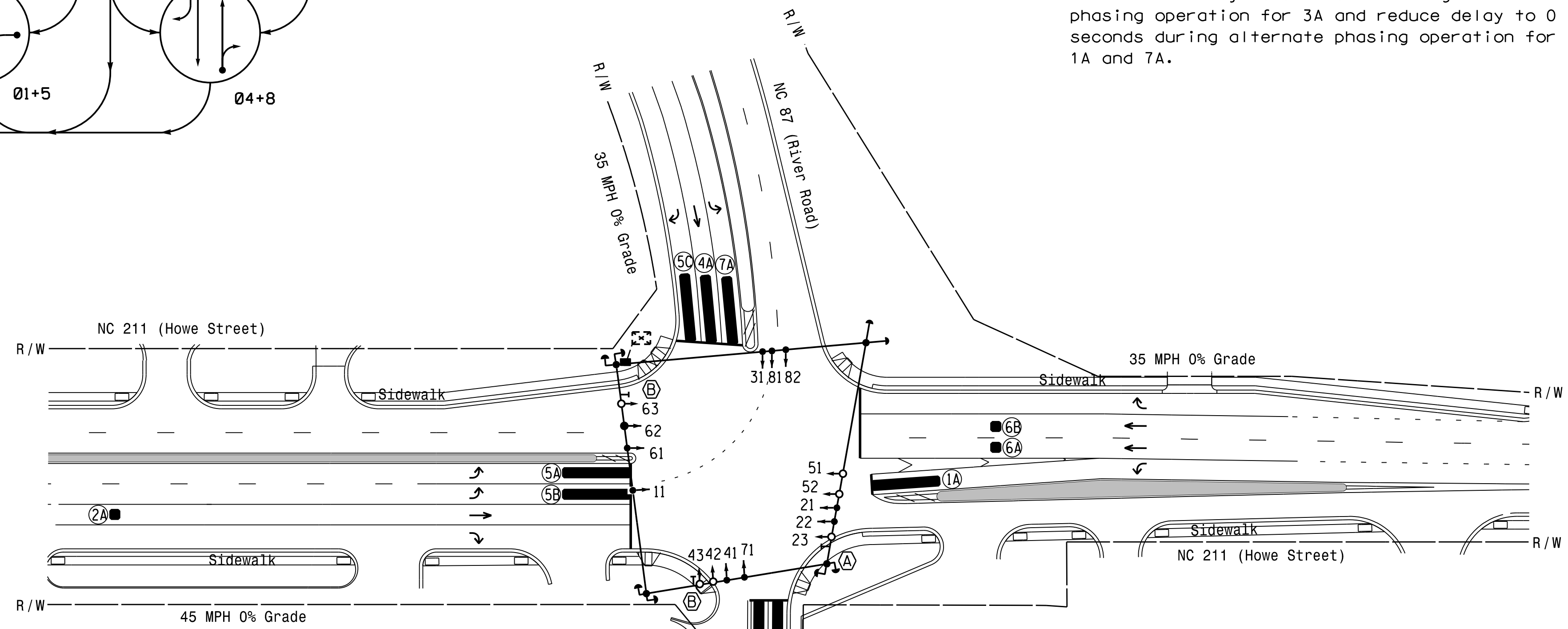
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTENSION	STRETCH TIME		
1A	6X40	0	*	*	1	Y	Y	-	***15	-
2A	6X6	300	*	*	2	Y	Y	-	-	-
3A	6X40	0	*	*	3	Y	Y	-	***15	-
4A	6X40	0	*	*	4	Y	Y	-	-	-
5A	6X40	0	*	*	5	Y	Y	-	-	-
5B	6X40	0	*	*	5	Y	Y	-	-	-
5C	6X40	0	*	*	5	Y	Y	-	-	15
6A	6X6	70	*	*	6	Y	Y	-	-	-
6B	6X6	70	*	*	6	Y	Y	-	-	-
7A	6X40	0	*	*	7	Y	Y	-	***15	-
8A	6X40	0	*	*	8	Y	Y	-	-	10

* Multizone Microwave Detection.
 ** Disable phase 4,6, and 8 call for 1A,3A, and 7A during alternate phasing operation.
 *** Reduce delay to 3 seconds during alternate phasing operation for 3A and reduce delay to 0 seconds during alternate phasing operation for 1A and 7A.

8 Phase Fully Actuated (NC 133 Closed Loop System)

NOTES

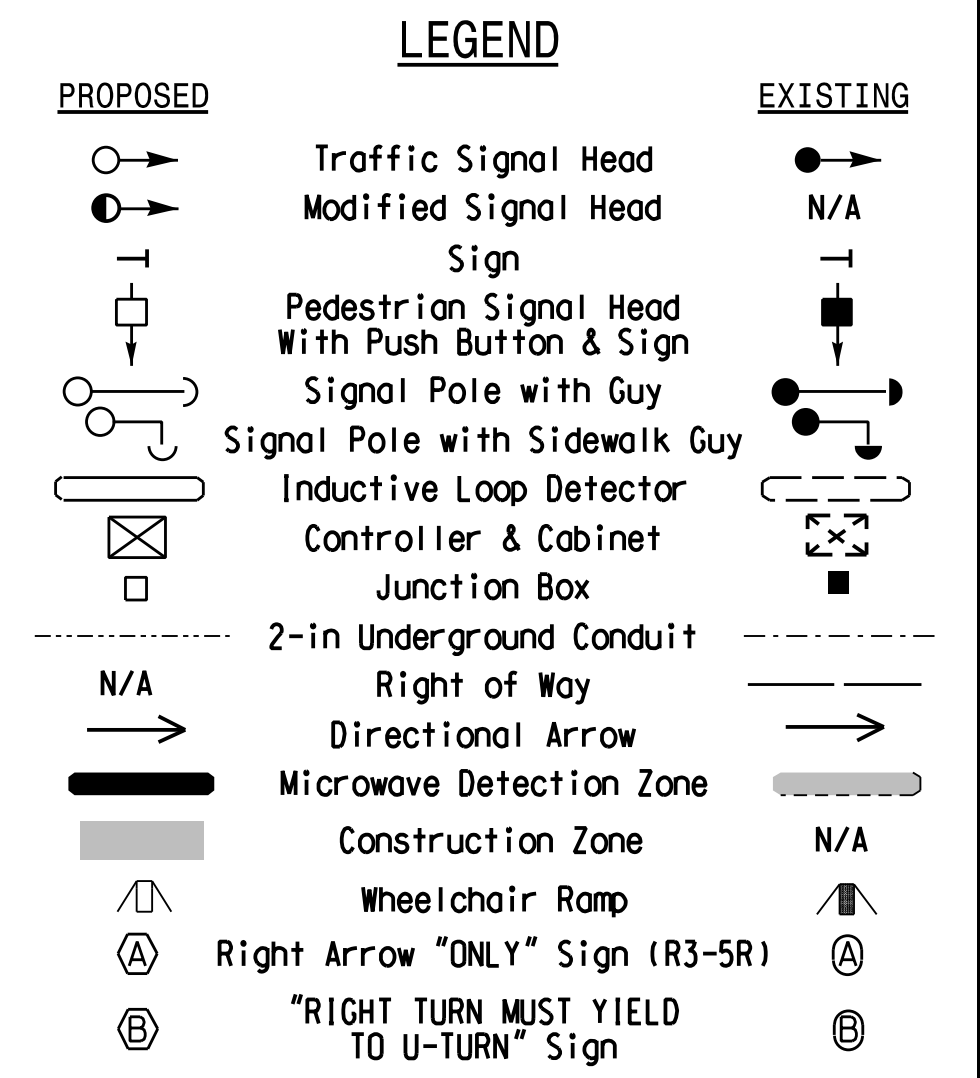
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Reposition existing signal heads numbered 11,21,22,41,61,62,and 71. Set all detector units to presence mode.
- Set all detector units to presence mode.
- Incorporate Microwave Detection system for vehicle detection.
- Provide the Engineer with the Manufacturer's approved Microwave Detection locations and mounting heights to obtain detection zones as shown.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #: 0215.



OASIS 2070 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	12	7	7	7	10	7	7
Extension 1 *	2.0	6.0	2.0	2.0	2.0	3.0	2.0	2.0
Max Green 1 *	20	60	20	30	20	60	20	30
Yellow Clearance	3.0	4.5	3.0	3.8	3.0	4.5	3.0	3.8
Red Clearance	2.9	2.1	3.3	2.5	3.4	2.1	3.3	2.5
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-
Seconds Per Actuation *	-	2.5	-	-	-	-	-	-
Max Variable Initial *	-	34	-	-	-	-	-	-
Time Before Reduction *	-	15	-	-	-	-	-	-
Time To Reduce *	-	30	-	-	-	-	-	-
Minimum Gap	-	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	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 6
 Construction Phase 2,3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	Prepared For: NC 211 (Howe Street) at NC 87 (River Road)/ SR 1852 (Robert Ruark Drive) Division 03 Brunswick Co. Southport	SEAL Natasha R. Simmons ENGINEER No. 031464
	PLAN DATE: June 2017 PREPARED BY: A.H. Thornburg REVIEWED BY: A.D. Klinksiek	REVIEWED BY: N.R. Simmons DATE: 9/10/2021

