

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
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. The order of phase 3 and 4 may be reversed.
5. Reposition existing signal heads numbered 61 and 62.
6. Set all detector units to presence mode.
7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
8. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
9. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PROPOSED

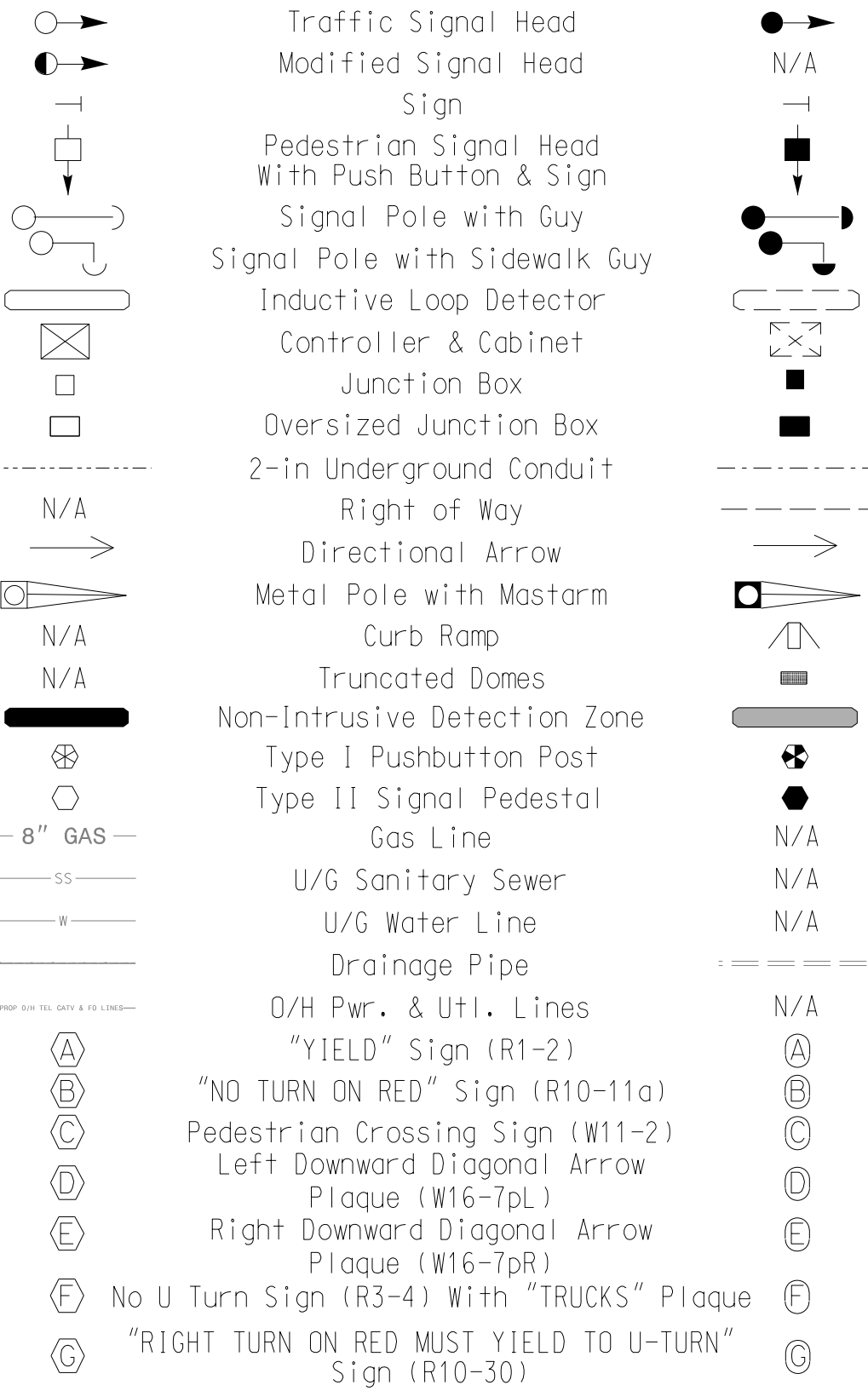
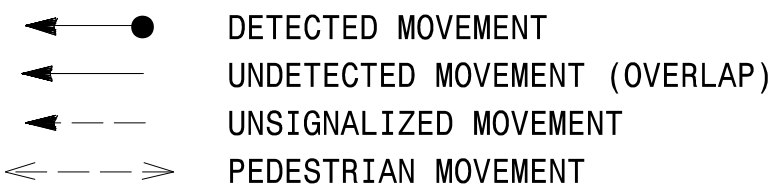


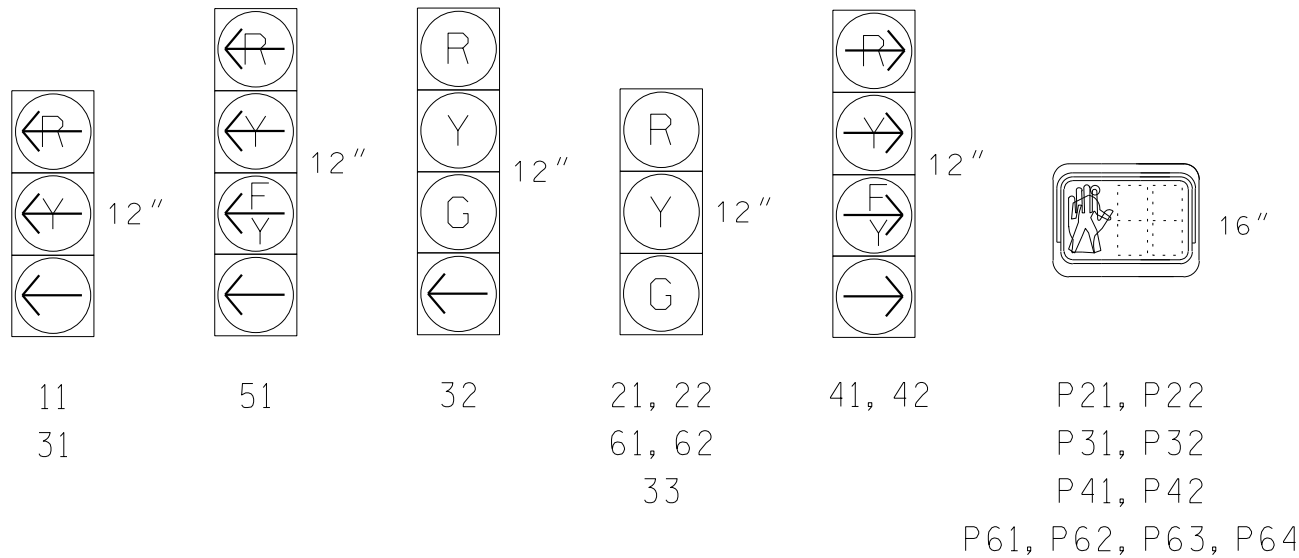
Figure 1 illustrates a directed graph representing the evolution of a system. The graph consists of five circular nodes arranged in two columns. The left column contains four nodes labeled 2+6, 2+5, 1+6, and 1+5 from top to bottom. The right column contains two nodes labeled 3 and 4. Directed edges connect the nodes: 2+6 to 2+5, 2+5 to 1+6, 1+6 to 1+5, 1+5 to 3, 3 to 4, 4 to 2+6, 4 to 2+5, 4 to 1+6, and 4 to 1+5. Each node contains a diagram of a system with particles (dots) and arrows indicating their movement.

PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE	PHASE						
	1 + 5	1 + 6	2 + 5	2 + 6	3	4	F L A S H
11	←	←	←	←	←	←	←
21, 22	R	R	G	G	R	R	R
31	←	←	←	←	←	←	←
32	R	R	R	R	G	R	R
33	R	R	R	R	G	R	R
41, 42	←	←	←	←	←	←	←
51	←	←	←	←	←	←	←
61, 62	R	G	R	G	R	R	R
P21, P22	DW	DW	W	W	DW	DW	DRK
P31, P32	DW	DW	DW	DW	W	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DRK

All Heads L.E.D.



DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	*	0	*	-	1	-	-	X	-	X	-	*
3A	*	0	*	X	3	3.0	-	X	-	X	-	*
3B	*	0	*	X	3	-	-	X	-	X	-	*
4A	*	0	*	-	4	-	-	X	-	X	-	*
5A	*	0	*	X	5	15.0	-	X	-	X	-	*
					2	-	-	X	-	X	-	*
6A	*	70	*	X	6	-	-	X	-	X	-	*
6B	*	70	*	X	6	-	-	X	-	X	-	*

*Multi-Zone Microwave Detection Zone

FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	–	14	14	14	–	14
Ped Clear	–	13	20	22	–	20
Min Green *	7	12	7	7	7	12
Passage *	2.0	2.0	2.0	2.0	2.0	3.0
Max 1 *	25	85	35	40	25	85
Yellow Change	3.0	4.9	4.2	3.0	3.0	4.9
Red Clear	2.6	2.1	2.3	1.9	2.9	2.1
Added Initial *	–	–	–	–	–	–
Maximum Initial *	–	–	–	–	–	–
Time Before Reduction *	–	–	–	–	–	–
Time To Reduce *	–	–	–	–	–	–
Minimum Gap	–	–	–	–	–	–
Advance Walk	–	7	7	7	–	7
Non Lock Detector	X	–	X	X	X	–
Vehicle Recall	–	MIN RECALL	–	–	–	MIN RECALL
Dual Entry	–	–	–	–	–	–

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

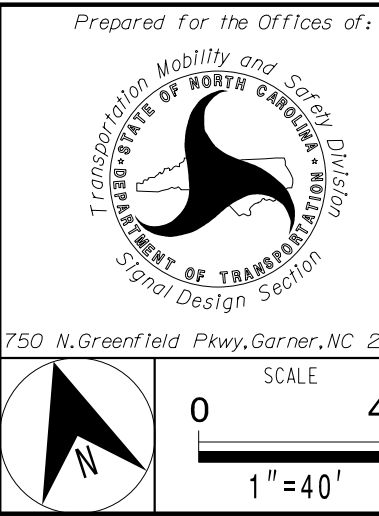
		(2A)
FUNCTION		Sensor 1
Channel		1
Phase		2
Direction of Travel		WB
Type		Priority
Level	2	QUEUE
Detection Zone (ft)	< 750	–
Range (ft)	600–100	150–100
Enable Speed	Y	Y
Speed Range (mph)	35–100	1–35
Enable Estimated Time of Arrival	Y	N
Estimated Time of Arrival (sec)	2.5–6.5	–

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

Plans Prepared By:

 **DRMP**

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US 23 Bus./NC 107 (Main Street)
at
US 23 Bus. (Asheville Highway)/
SR 1355 (Sunrise Park)

PLAN DATE:	August 2025	REVIEWED BY:	ZM Esposito
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PREPARED BY: DJ White	REVIEWED BY: BN Groome
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REVISIONS	INIT.	DATE
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SEAL

NORTH CAROLINA

PROFESSIONAL

SEAL
052936

ENGINEER

BRITTANY N GROOM

—Signed by—

Brittany Groome

8/26/2023

1-EE0345070 to #484

DATE

SIC, INVENTORY NO.

14-0397