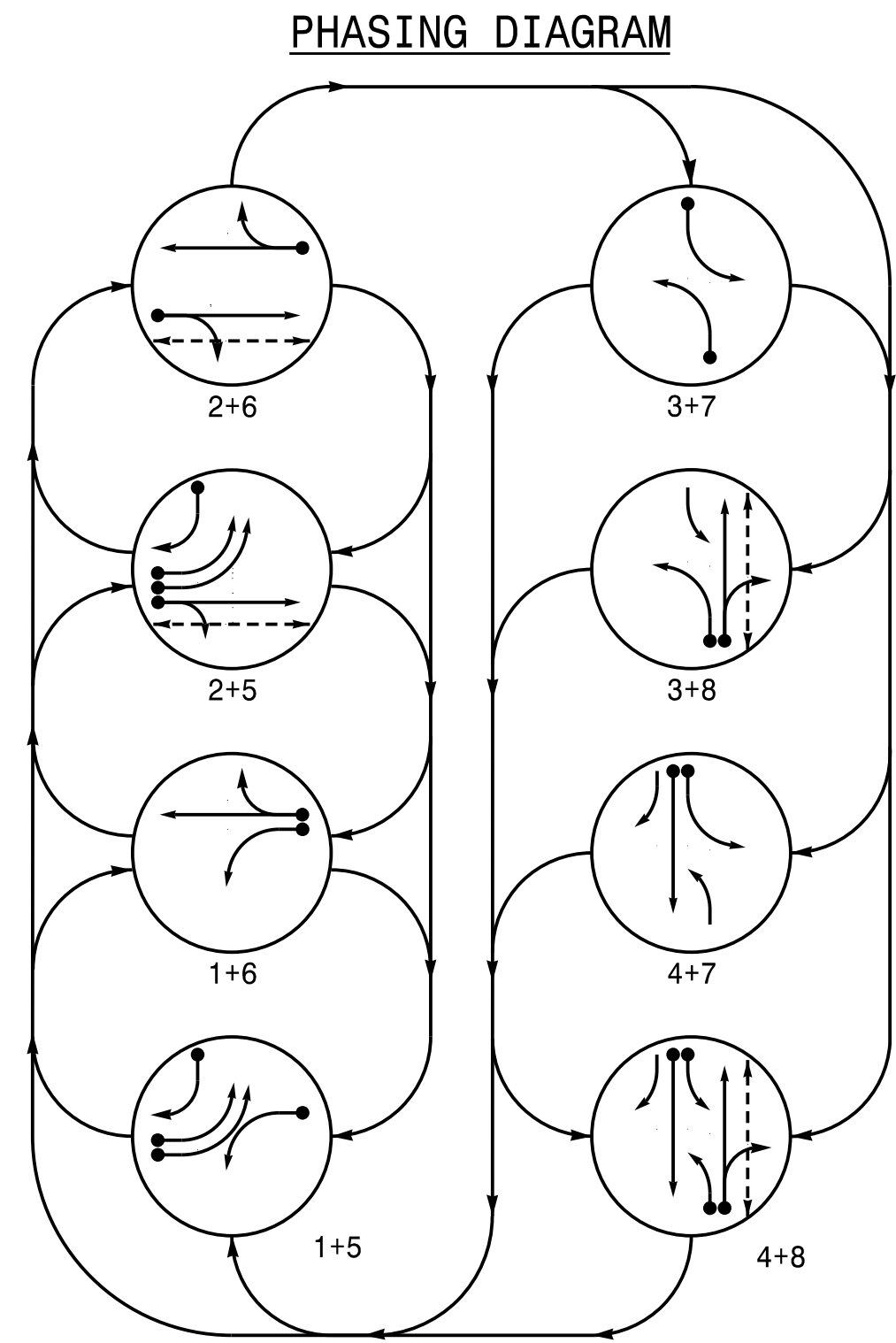




PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

RADAR DETECTION SYSTEM				
FUNCTION	Sensor 1 (2A)		Sensor 2 (6A)	
Channel	1		1	
Phase	2		6	
Direction of Travel	EB		WB	
Type	Priority		Priority	
Level	2	QUEUE	2	QUEUE
Discovery Zone (ft)	< 750	-	< 750	-
Range (ft)	100-600	100-150	100-600	100-150
Enable Speed	Y	Y	Y	Y
Speed Range (mph)	35-100	1-35	35-100	1-35
Enable Estimated Time of Arrival	Y	N	Y	N
Estimated Time of Arrival (sec)	2.5-6.5	-	2.5-6.5	-

FEATURE	MAXTIME TIMING CHART							
	1	2	3	4	5	6	7	8
Walk *	-	14	-	-	-	-	-	13
Ped Clear	-	14	-	-	-	-	-	11
Min Green *	7	10	7	7	7	10	7	7
Passage *	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	20	60	20	30	20	60	20	30
Yellow Change	3.3	4.6	3.0	3.9	3.0	4.6	3.0	3.9
Red Clear	2.9	2.1	2.9	2.6	3.9	2.1	3.5	2.6
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Added Initial *	-	-	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Advance Walk	-	7	-	-	-	-	-	6
Non Lock Detector	X	-	X	X	X	-	X	X
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Dual Entry	-	-	-	X	-	-	-	X

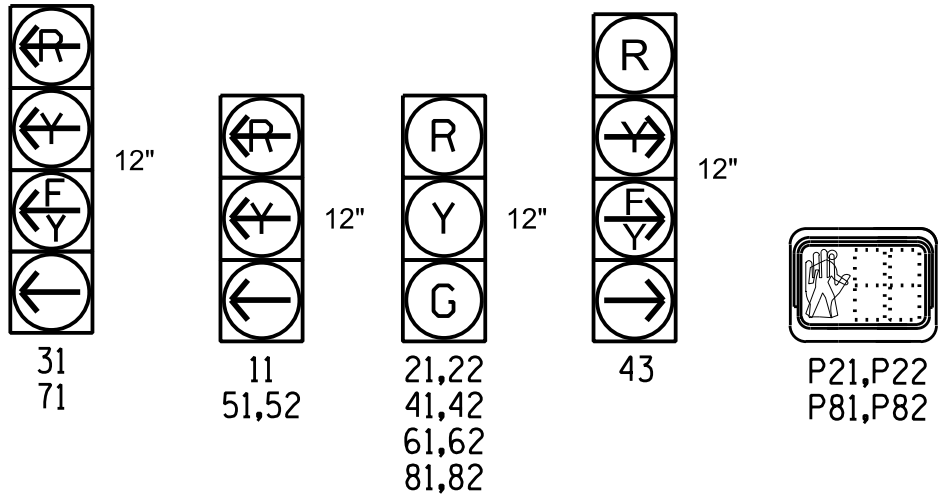
* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

** See Note 9.

SIGNAL FACE	TABLE OF OPERATION							
	1 + 5	1 + 6	2 + 5	2 + 6	3 + 7	3 + 8	4 + 7	4 + 8
11	←	←	←	←	←	←	←	←
21,22	R	R	G	G	R	R	R	R
31	←	←	←	←	←	←	←	←
41,42	R	R	R	R	R	R	G	G
43	←	R	←	R	R	R	←	←
51,52	←	←	←	←	←	←	←	←
61,62	R	G	R	G	R	R	R	R
71	←	←	←	←	←	←	←	←
81,82	R	R	R	R	R	G	R	G
P21,P22	DW	DW	W	W	DW	DW	DW	DRK
P81,P82	DW	DW	DW	DW	DW	W	DW	W

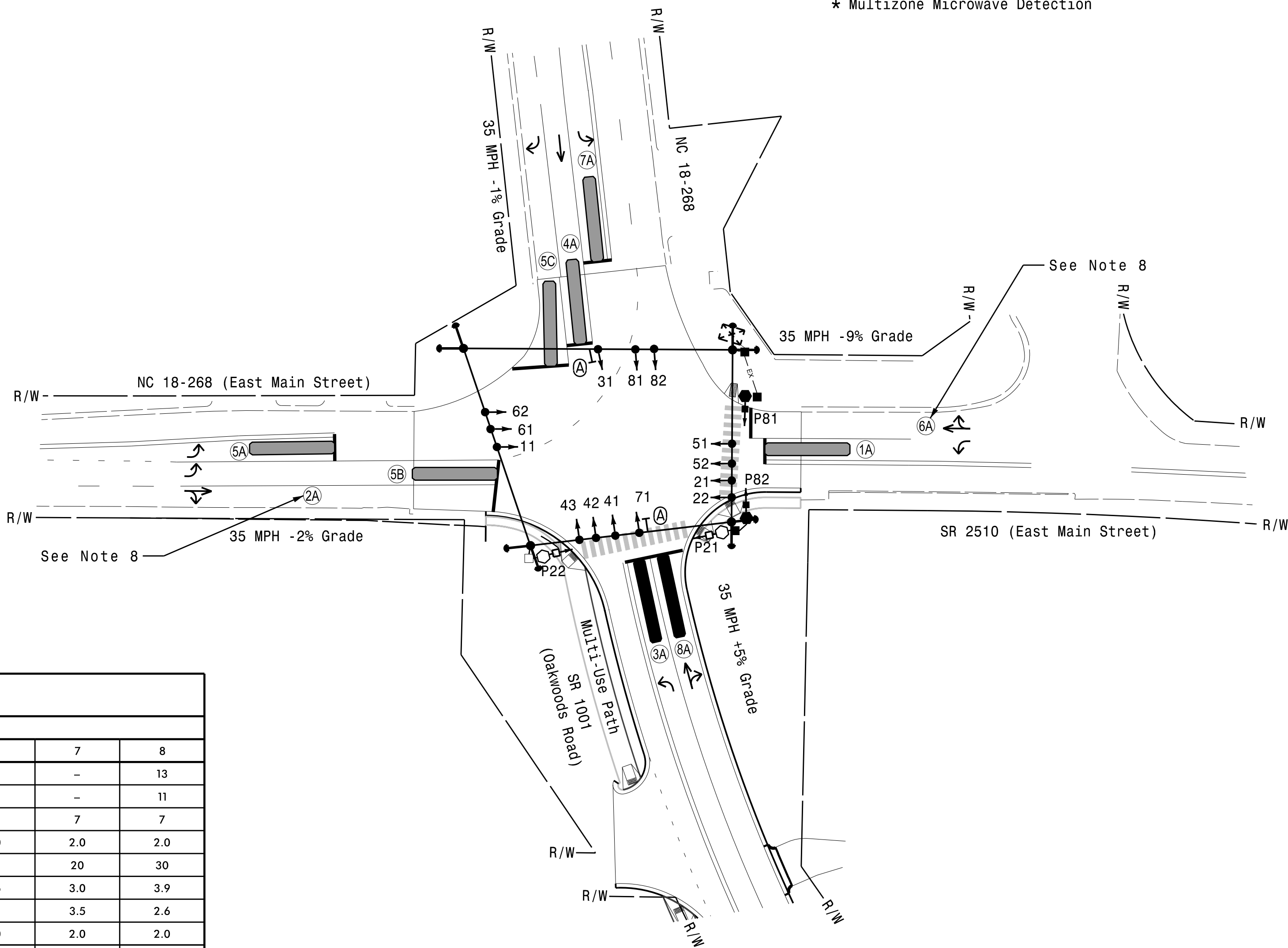
SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART												
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	3.0	-	X	-	X	-	*
2A	*	70	*	-	2	-	-	X	-	X	-	*
3A	*	0	*	-	3	15.0	-	X	-	X	-	*
4A	*	0	*	-	4	-	-	X	-	X	-	*
5A	*	0	*	-	5	3.0	-	X	-	X	-	*
5B	*	0	*	-	5	-	-	X	-	X	-	*
5C	*	0	*	-	5	15.0	-	X	-	X	-	*
6A	*	70	*	-	6	-	-	X	-	X	-	*
7A	*	0	*	-	7	15.0	-	X	-	X	-	*
8A	*	0	*	-	8	3.0	-	X	-	X	-	*
8A	*	0	*	-	8	10.0	-	X	-	X	-	*

* Multizone Microwave Detection



8 Phase
Fully Actuated
Isolated

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications January 2024.
- 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.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- See B-4676A PMP for pavement markings.

LEGEND

- | PROPOSED | EXISTING |
|--------------------------------|----------|
| Traffic Signal Head | N/A |
| Modified Signal Head | N/A |
| Sign | N/A |
| Pedestrian Signal Head | N/A |
| Signal Pole with Guy | N/A |
| Signal Pole with Sidewalk Guy | N/A |
| Non-Intrusive Detection Zone | N/A |
| Controller & Cabinet | N/A |
| Junction Box | N/A |
| 1-in Underground Conduit | N/A |
| 2-in Underground Conduit | N/A |
| Right of Way | N/A |
| Directional Arrow | N/A |
| Type II Signal Pedestal | N/A |
| Curb Ramp | N/A |
| Left Arrow "ONLY" Sign (R3-5L) | N/A |

Signal Upgrade - Final Design

Prepared for:

750 N. Greenfield Pkwy, Garner, NC 27526

NC 18-268 (E. Main St)/
SR 2510 (E. Main St)
at
NC 18-268/SR 1001 (Oakwoods Rd)

Division 11 Wilkes County Wilkesboro

PLAN DATE: July 2025 REVIEWED BY: N.K. Vianich

PREPARED BY: E.E. Tiller REVIEWED BY: N.R. Simmons

REVISIONS

INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

Wilkes County

Seal 031464

WILLIAM R. SIMMONS

ENGINEER

DocuSigned by:
Natalia R. Simmons
4/30/2026

SIGNATURE DATE

SIG. INVENTORY NO. 11-0898



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