

PHASING DIAGRAM

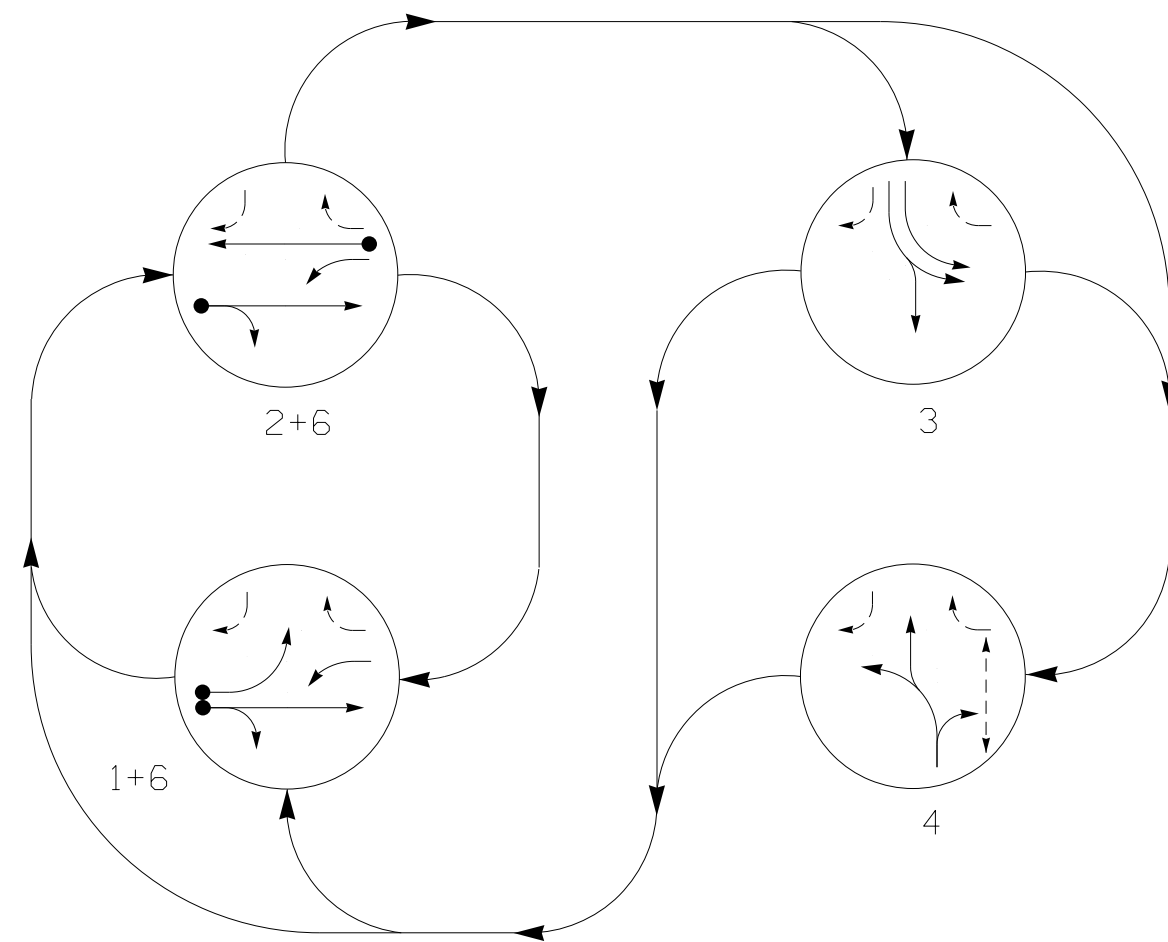
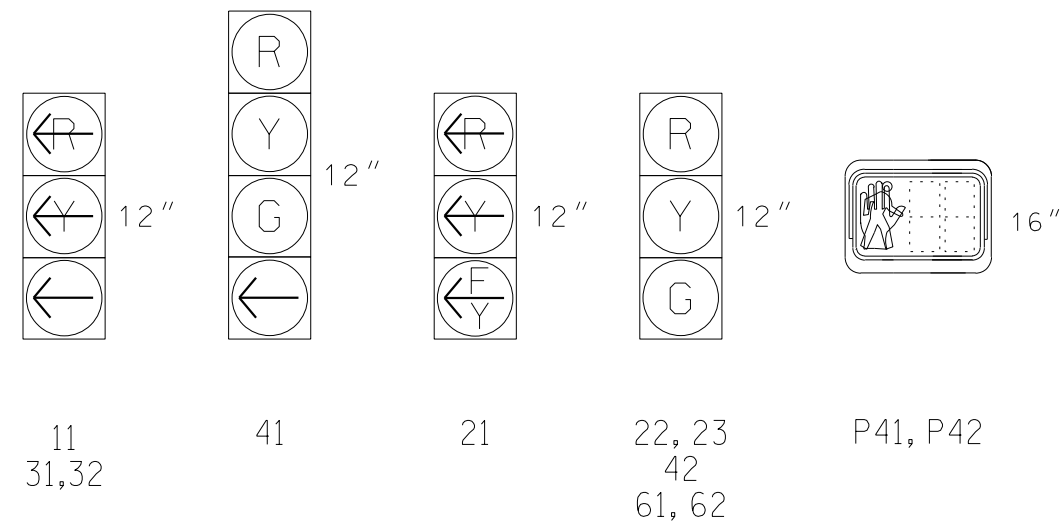


TABLE OF OPERATION					
SIGNAL FACE	PHASE				
	1 + 6	2 + 6	3	4	F A S H
11	←	→	→	→	→
21	→	→	→	→	→
22,23	R	G	R	R	R
31,32	→	→	←	→	→
41	R	R	R	<u>G</u>	R
42	R	R	R	G	R
61,62	G	G	R	R	R
P41,P42	DW	DW	DW	W	DRK

SIGNAL FACE I.D.

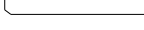
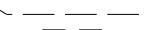
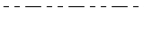
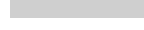
All Heads L.E.D.



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	*	X	1	-	-	X	-	X	-	*
2A	*	70	*	X	2	-	-	X	-	X	-	*
2B	*	0	*	X	2	-	-	X	-	X	-	*
3A	*	0	*	X	3	-	-	X	-	X	-	*
3B	*	0	*	X	3	-	-	X	-	X	-	*
4A	*	0	*	X	4	5.0	-	X	-	X	-	*
6A	*	70	*	X	6	-	-	X	-	X	-	*

* Multi-Zone Microwave Detection Zone

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 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
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. Remove existing Yield "HERE TO" Pedestrians Sign (R1-5)
10. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
11. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PROPOSED		EXISTING
	Traffic Signal Head	 N/A
	Modified Signal Head	
	Sign	
	Pedestrian Signal Head	
	With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	Oversized Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Curb Ramp	
	Truncated Dome	
	Non-Intrusive Detection Zone	
	Construction Zone	N/A
	Type I Pushbutton Post	
	Type II Signal Pedestal	
N/A	Tubular Markers	
N/A	Work Zone Traffic Barricade	
N/A	Construction Easement	
N/A	Perm. Drainage/Utility Easement	
N/A	Perm. Drainage Easement	
N/A	Drainage Removal	
N/A	Gas Line	
N/A	U/G Sanitary Sewer	
N/A	U/G Water Line	
N/A	Prop. Drainage Pipe	
N/A	O/H Pwr. & Util. Lines	
N/A	Telephone Fiber	
N/A	Utility Pole	
(A)	"YIELD" Sign (R1-2)	(A)
(B)	"NO TURN ON RED" Sign (R10-11a)	(B)
(C)	Pedestrian Crossing Sign (W11-2)	(C)
(D)	Left Downward Diagonal Arrow Plaque (W16-7pL)	(D)
(E)	"NO MERGE AREA" Plaque (W4-5P)	(E)
(G)	Yield Ahead Sign (W3-2)	(G)

MAXTIME TIMING CHART					
FEATURE	PHASE				
	1	2	3	4	6
Walk *	–	–	–	14	–
Ped Clear	–	–	–	13	–
Min Green *	7	10	7	7	10
Passage *	2.0	3.0	2.0	2.0	3.0
Max 1 *	30	70	50	30	85
Yellow Change	3.0	4.1	4.2	3.1	4.1
Red Clear	1.9	3.4	2.8	3.8	3.4
Added Initial *	–	–	–	–	–
Maximum Initial *	–	–	–	–	–
Time Before Reduction *	–	–	–	–	–
Time To Reduce *	–	–	–	–	–
Minimum Gap	–	–	–	–	–
Advance Walk	–	–	–	7	–
Non Lock Detector	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.



Signal Upgrade
Temporary Design 1 - TMP Ph1, S1

US 23 Bus./NC 107 (Main Street) at US 23 Bus. (Asheville Highway)/ SR 1355 (Sunrise Park)
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PLAN DATE:	August 2025	REVIEWED BY:	ZM Esposito
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es	PREPARED BY: DJ White	REVIEWED BY: BN Groome
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REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA
PROFESSIONAL
SEAL
052936
ENGINEER
BRITTANY N GROOM

Signed by: Brittany Groom 8/26/2025

TE09340E1094486... DATE

SIG. INVENTORY NO. 14-039771