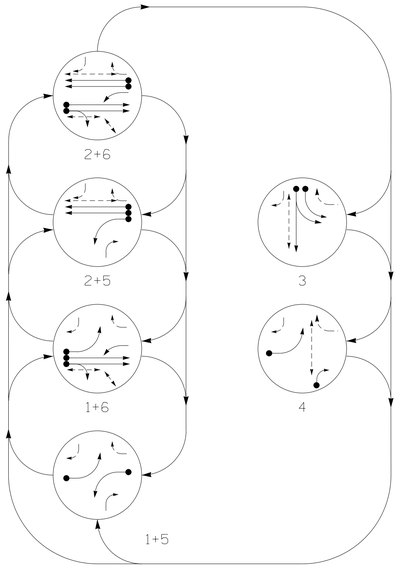
Docusign Envelope ID: 79B3A8A1-0FC4-4E1A-B88D-18F38FA00C9B

PROJECT REFERENCE NO.	SHEET NO.
R-5600	Sig-8.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

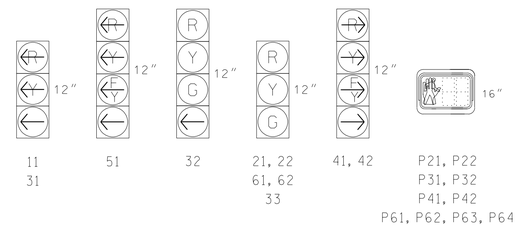
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	3	4	FLASH
11	←̄	←̄	←R	←R	←R	←̄	←R
21, 22	R	R	G	G	R	R	R
31	←R	←R	←R	←R	←̄	←R	←R
32	R	R	R	R	G←	R	R
33	R	R	R	R	G	R	R
41, 42	F↑	R→	F↑	R→	R→	→̄	R→
51	←̄	F↑	←̄	F↑	←R	←R	←R
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 P63, P64	DW	W	DW	W	DW	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

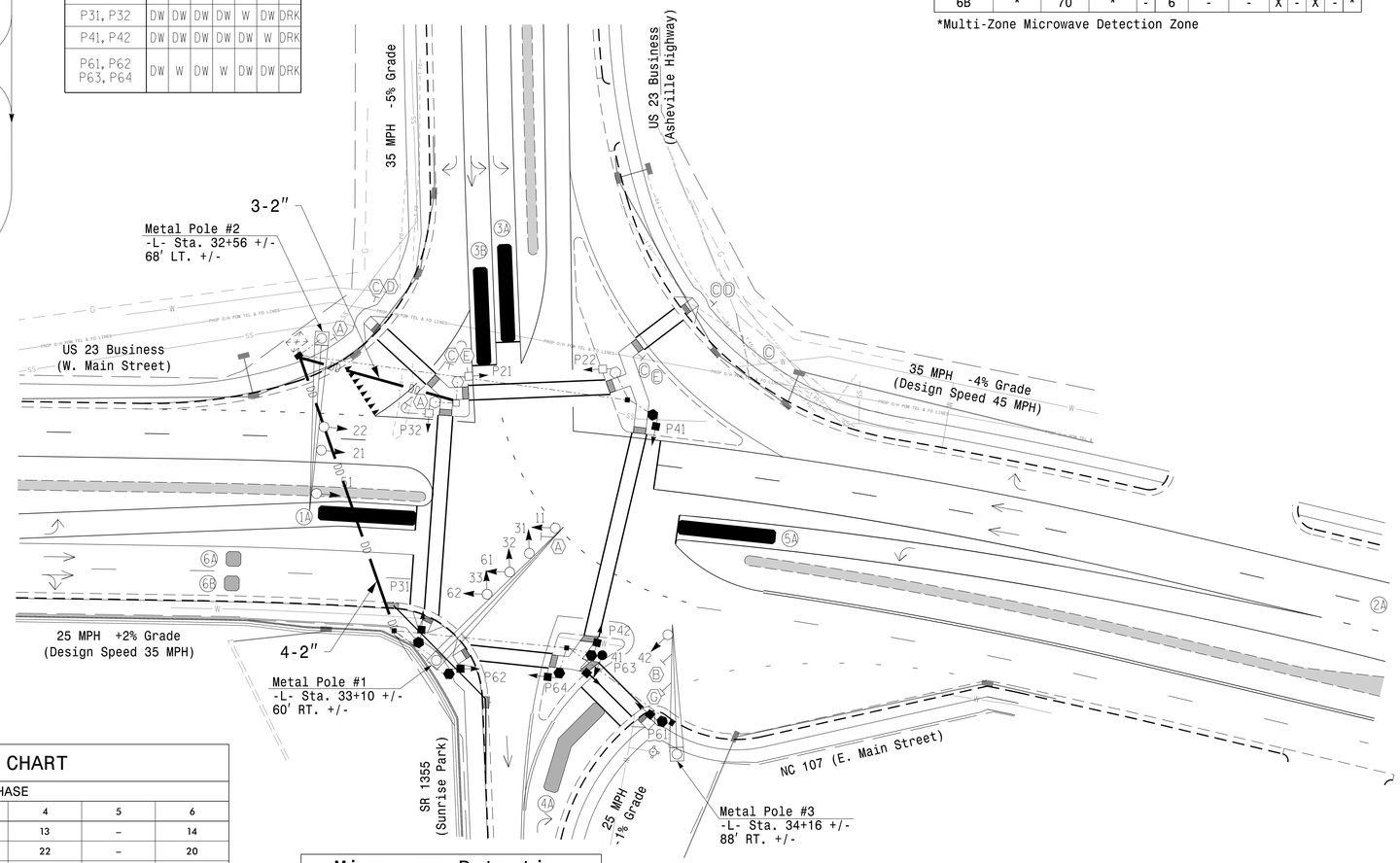
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	*	0	*	X	1	-	-	X	-	X	-	*
3A	*	0	*	X	3	3.0	-	X	-	X	-	*
3B	*	0	*	X	3	-	-	X	-	X	-	*
4A	*	0	*	-	4	5.0	-	X	-	X	-	*
5A	*	0	*	X	5	15.0	-	X	-	X	-	*
					2	-	-	X	-	X	-	*
6A	*	70	*	-	6	-	-	X	-	X	-	*
6B	*	70	*	-	6	-	-	X	-	X	-	*

*Multi-Zone Microwave Detection Zone

6 Phase Fully Actuated (Time Based Coordination)

NOTES

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. Unbag and reconnect pedestrian head and pushbutton P31.
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.



MAXTIME TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6
Walk *	–	14	12	13	–	14
Ped Clear	–	12	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	20	35	25	85
Yellow Change	3.0	4.9	4.2	3.0	3.0	4.9
Red Clear	2.8	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	5	6	–	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.

Microwave Detection

	(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	–

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
DD	Directional Drill	DD
N/A	Right of Way	
	Directional Arrow	
	Metal Pole with Mastarm	
N/A	Curb Ramp	
N/A	Truncated Domes	
	Non-Intrusive Detection Zone	
	Construction Zone	N/A
	Type I Pushbutton Post	
	Type II Signal Pedestal	
N/A	Work Zone Traffic Barricade	
N/A	Gas Line	8" GAS
N/A	U/G Sanitary Sewer	SS
N/A	U/G Water Line	W
	Prop. Drainage Pipe	
N/A	O/H Pwr. & Utl. Lines	
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	Right Downward Diagonal Arrow Plaque (W16-7pR)	E
F	No U Turn (R3-4) With "TRUCKS" Plaque	F
G	"RIGHT TURN ON RED MUST YIELD TO U-TURN" Sign (R10-30)	G

Signal Upgrade
Temporary Design 6 - TMP Ph3, S1

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Plans Prepared By:

DRMP
DRMP, INC.
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Prepared for the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 30 1"=30'

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

Division 14 Jackson County Sylva

PLAN DATE:	August 2025	REVIEWED BY:	ZM Esposito
PREPARED BY:	DJ White	REVIEWED BY:	BN Groome

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 052936 ENGINEER BRITTANY N GROOME
Signed by: Brittany Groome 1E0934DE1094454...
8/26/2025
DATE

SIG. INVENTORY NO. I4-0397T6

25-AUG-2025 12:33
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