

PROJECT REFERENCE NO.	SHEET NO.
U-3609B	SIG-3.0

6 Phase
Fully Actuated
(Goldsboro Signal System)
NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated 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.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Field adjust temporary pole as needed.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Reposition existing signal heads 21, 31, 32, 41, 42, 61, & 62.

MAXTIME DETECTOR INSTALLATION CHART											
DETECTOR						PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	URNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	NEW CARD
1A	6X40	0	*	*	1	3.0	-	X	-	X	*
3A	6X40	0	*	*	3	3.0	-	X	-	X	*
3B	6X40	0	*	*	3	-	-	X	-	X	*
4A	6X40	0	*	*	4	3.0	-	X	-	X	*
4B	6X40	0	*	*	4	-	-	X	-	X	*
5A	6X40	0	*	*	5	3.0	-	X	-	X	*

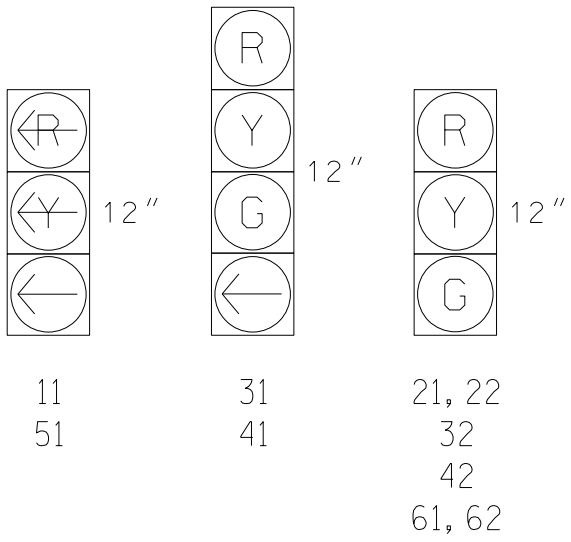
*Multi-zone Microwave Detection

Multi-zone Microwave Detection				
FUNCTION	2A Sensor 1	6A Sensor 2		
Channel	1	1		
Phase	2	6		
Direction of Travel	NB	SB		
Type	Priority	Priority		
Level	1	QUEUE	1	QUEUE
Detection Zone (ft)	100-500	100-150	100-500	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	-

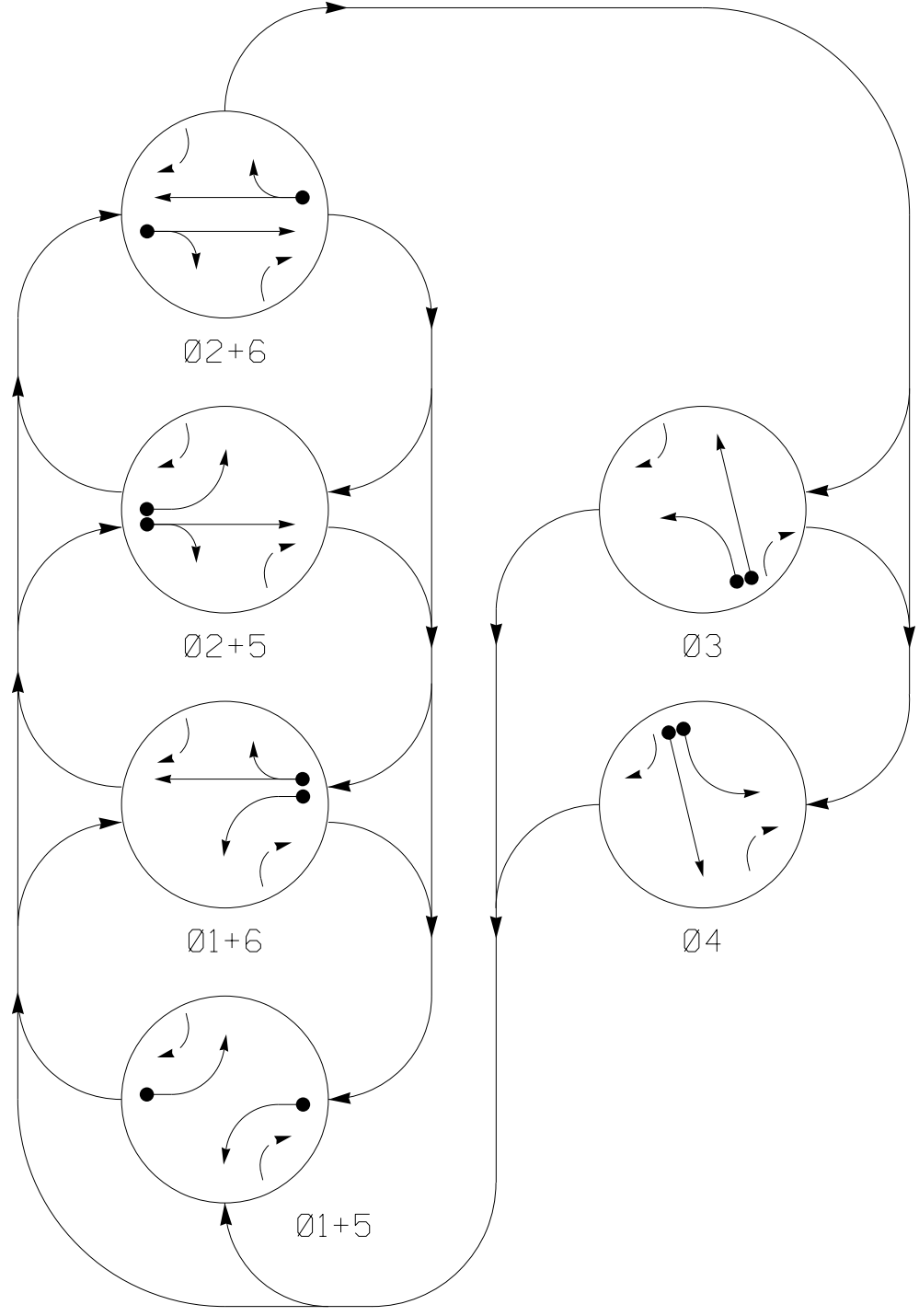
SIGNAL FACE	PHASE						
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3	Ø 4	FLIGHT
11	←	←	←	←	←	←	←
21, 22	R	R	G	G	R	R	R
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
51	←	←	←	←	←	←	←
61, 62	R	G	R	G	R	R	R

SIGNAL FACE I.D.

All Heads L.E.D.



PHASING DIAGRAM

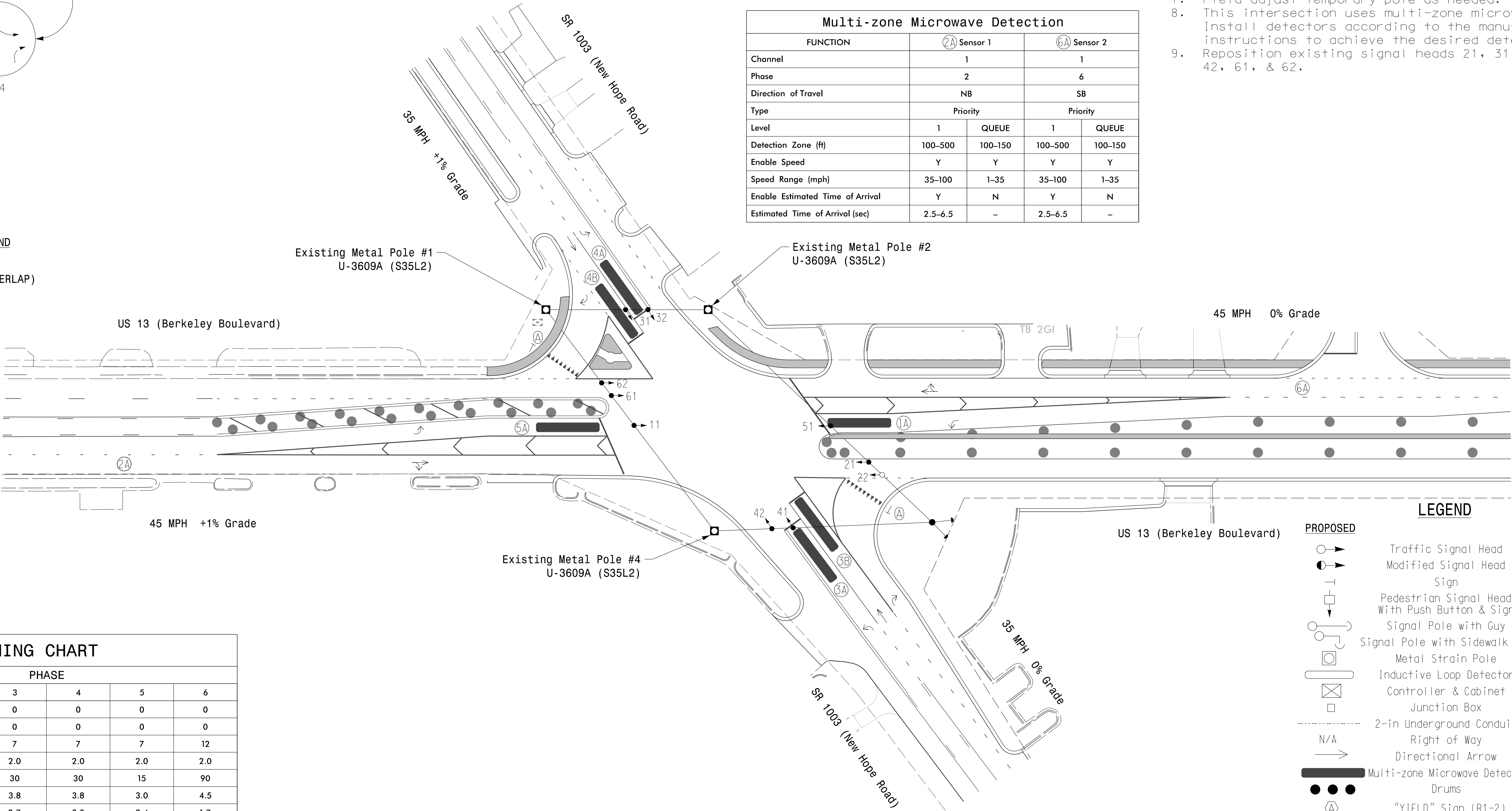


PHASING DIAGRAM DETECTION LEGEND

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

MAXTIME TIMING CHART						
FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0
Min Green *	7	12	7	7	7	12
Passage *	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	30	90	30	30	15	90
Yellow Change	3.0	4.5	3.8	3.8	3.0	4.5
Red Clear	2.1	1.7	2.7	3.0	2.4	1.7
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Advance Walk	-	-	-	-	-	-
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.



LEGEND

- | PROPOSED | EXISTING |
|--|----------|
| Traffic Signal Head | N/A |
| Modified Signal Head | N/A |
| Sign | N/A |
| Pedestrian Signal Head With Push Button & Sign | N/A |
| Signal Pole with Guy | N/A |
| Signal Pole with Sidewalk Guy | N/A |
| Metal Strain Pole | N/A |
| Inductive Loop Detector | N/A |
| Controller & Cabinet | N/A |
| Junction Box | N/A |
| 2-in Underground Conduit | N/A |
| Right of Way | N/A |
| Directional Arrow | N/A |
| Multi-zone Microwave Detection | N/A |
| Drums | N/A |
| "YIELD" Sign (R1-2) | N/A |
| Right Turn "ONLY" Sign (R3-5R) | N/A |

Signal Upgrade
Temporary Design 2 - TMP Phase III

Stantec Consulting Services Inc.
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Prepared for the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

US 13 (Berkeley Boulevard)
at
SR 1003 (New Hope Road)

Division 4 Wayne County Goldsboro

PLAN DATE: March 2025 REVIEWED BY: J. Galloway

PREPARED BY: J. Hambricht REVIEWED BY: R M Muncey

REVISIONS	INIT.	DATE

Seal of the State of North Carolina
Professional Engineer
JASON P. GALLOWAY
No. 029904
Exp. 8/18/2025

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

Signed by: J. Galloway 8/18/2025
DATE
SIC. INVENTORY NO. 04-0367T2