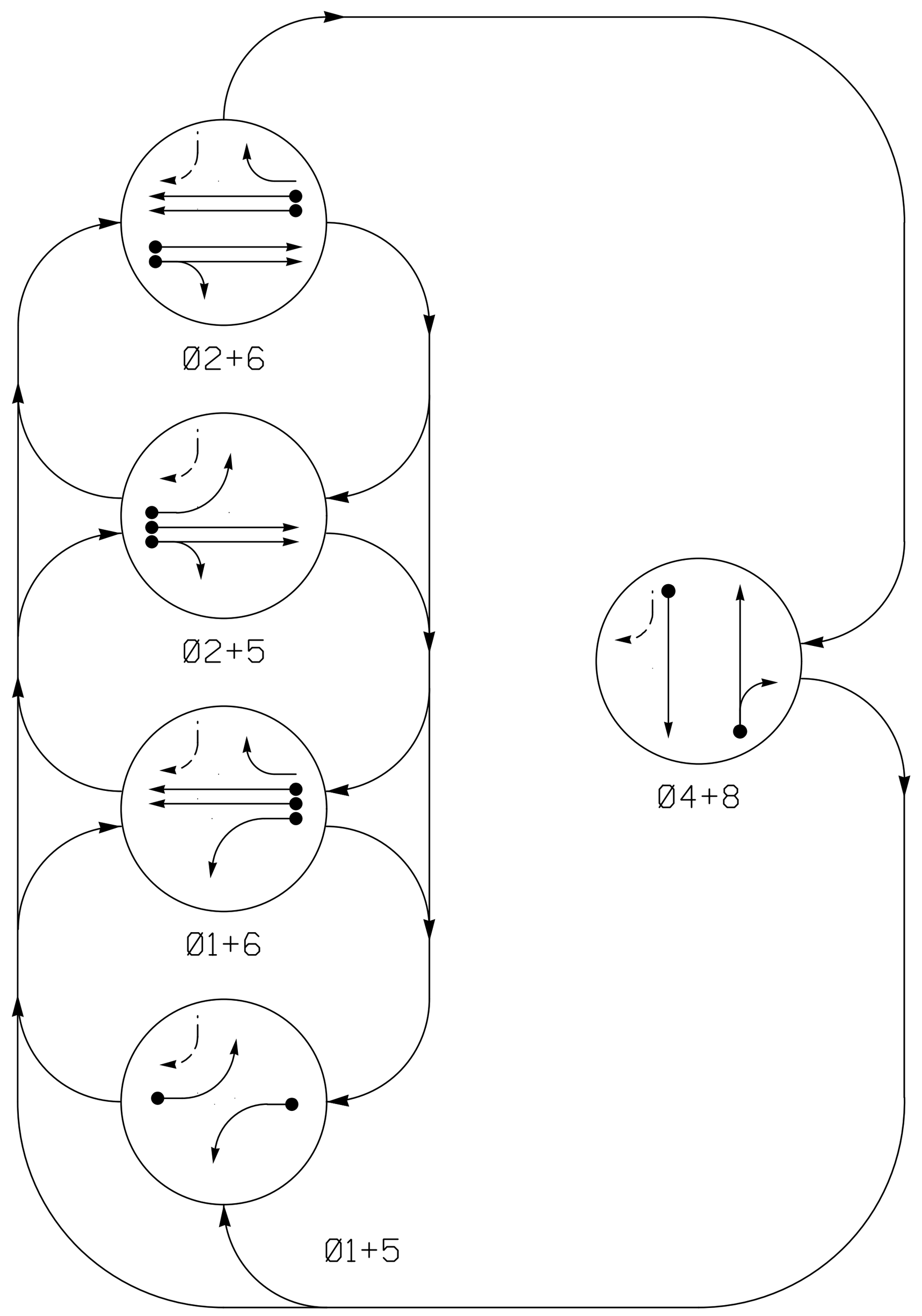
PROJECT REFERENCE NO.	SHEET NO.
U-5797	Sig. 5.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

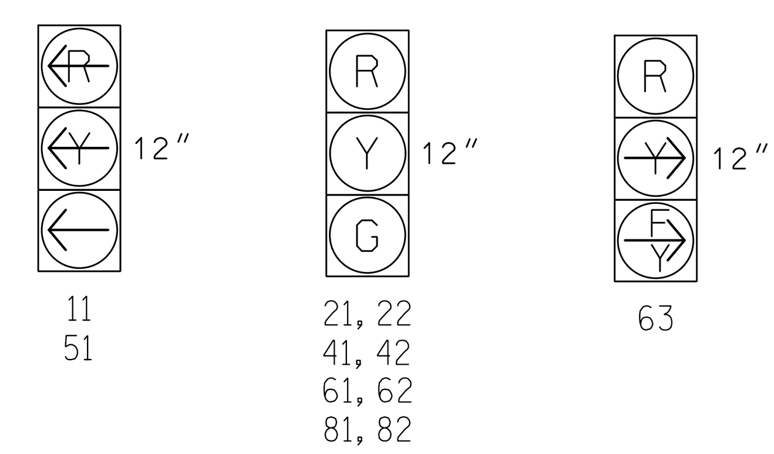
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4+8	FLASH
11	←	←	←R	←R	←R	←R
21, 22	R	R	G	G	R	R
41, 42	R	R	R	R	G	R
51	←	←R	←	←R	←R	←R
61, 62	R	G	R	G	R	R
63	R	F/Y →	R	F/Y →	R	R
81, 82	R	R	R	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



RADAR DETECTION SYSTEM

FUNCTION	SENSOR 1 – 2A	SENSOR 2 – 6A
Channel	1	2
Phase	2	6
Direction of Travel	EB	WB
Detection Zone (ft)	500 – 100	500 –100
Enable Speed	Y	Y
Speed Range (mph)	35 – 100	35 – 100
Enable Estimated Time of Arrival	Y	Y
Estimated Time of Arrival (sec)	2.5 – 6.5	2.5 – 6.5

MAXTIME DETECTOR INSTALLATION CHART

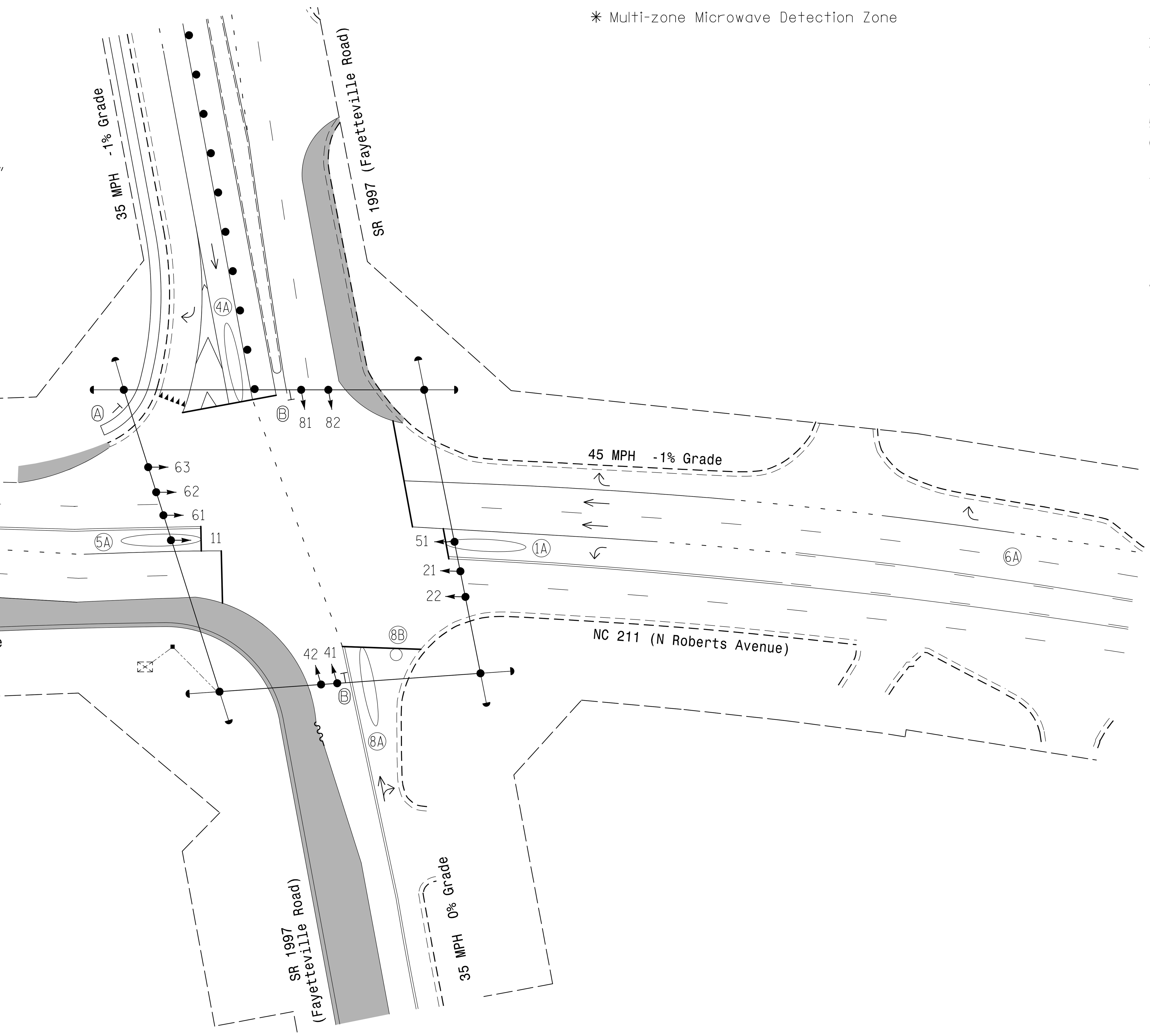
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	✳	✳	1	3	-	X	-	X	-	✳
4A	6X40	0	✳	✳	4	-	-	X	-	X	-	✳
5A	6X40	0	✳	✳	5	3	-	X	-	X	-	✳
8A	6X40	0	✳	✳	8	10	-	X	-	X	-	✳
8B	6X40	0	✳	✳	8	15	-	X	-	X	-	✳

✳ Multi-zone Microwave Detection Zone

5 Phase
Fully Actuated
Signal System #D06-18 Lumberton
NC 211 (N. Roberts Avenue)

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. Reposition existing signal heads numbered 41 and 42.
5. Reposition existing sign labeled "B".
6. Set all detector units to presence mode.
7. This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



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	
N/A	Right of Way	
→	Directional Arrow	→
	Microwave Detection Zone	
	Construction Zone	
	Construction Zone Drums	
Ⓐ	"YIELD" Sign (R1-2)	Ⓐ
Ⓑ	No Left Turn/No U-Turn Sign (R3-18)	Ⓑ

MAXTIME TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Walk *	–	–	–	–	–	–
Ped Clear *	–	–	–	–	–	–
Min Green	7	12	7	7	12	7
Passage *	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	20	90	30	20	90	30
Yellow Change	3.0	4.6	3.9	3.0	4.6	3.8
Red Clear	2.4	1.5	2.1	2.4	1.6	2.0
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	–	–	X	–	–	X

* These values may be field adjusted. Do not adjust Min Green and Extension 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 3 - TMP Phase V, Step 1

STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
(704) 372-1885
NC License Number F-0991

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 40 — 1"=40'

NC 211 (N. Roberts Avenue) at SR 1997 (Fayetteville Road)

Division 6	Robeson County		Lumberton
PLAN DATE:	Feb 2025	REVIEWED BY:	H.M. Surti
PREPARED BY:	R.L. Aristondo	REVIEWED BY:	T.M. Moody

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
North Carolina Professional Engineer — SEAL 040329 — Trent M. Moody

DocuSigned by: Trent Moody 45EA1D4836704E0... SIGNATURE 2/10/2025 DATE

SIG. INVENTORY NO. 06-0170T3