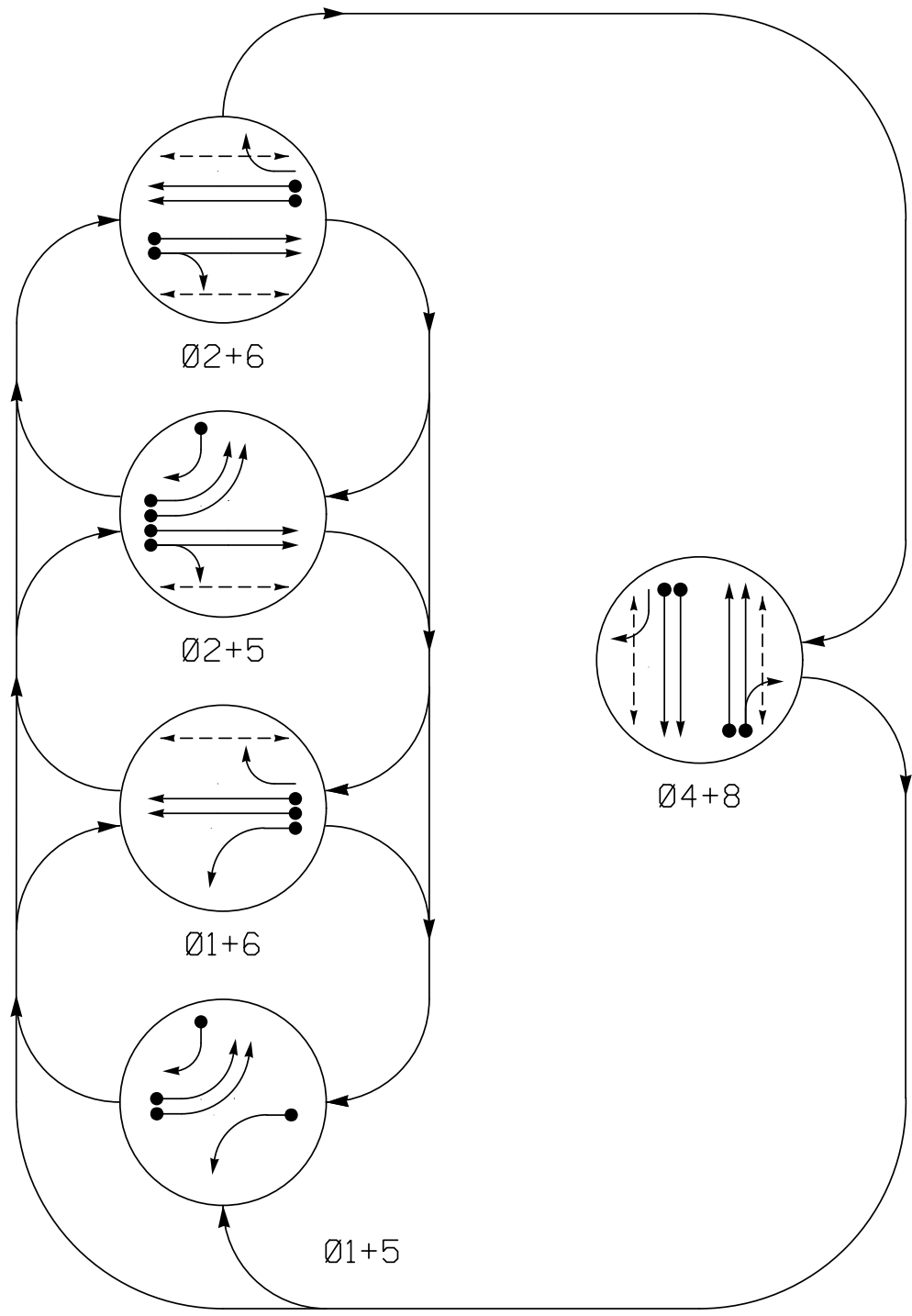


DEFAULT PHASING DIAGRAM



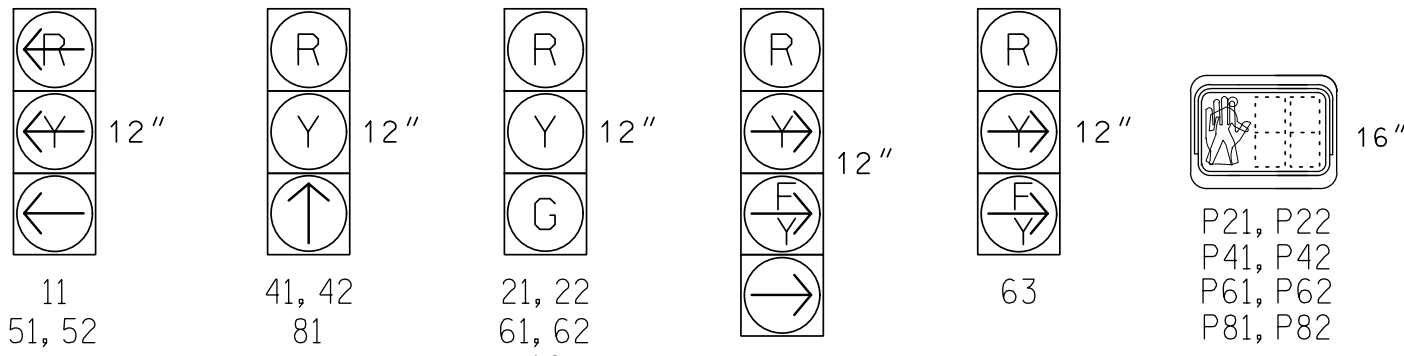
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE				
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 4 + 8
11	←	←	←	←	←
21, 22	R	R	G	G	R
41, 42	R	R	R	R	↑
43	→	→	→	→	→
51, 52	←	←	←	←	←
61, 62	R	G	R	G	R
63	R	←	R	←	R
81	R	R	R	R	↑
82	R	R	R	R	G
P21, P22	DW	DW	W	W	DW DRK
P41, P42	DW	DW	DW	DW	W DRK
P61, P62	DW	W	DW	W	DW DRK
P81, P82	DW	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)	URNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	NEW CARD
1A	6X40	0	*	*	1	-	-	X	-	X	*
4A	6X40	0	*	*	4	-	-	X	-	X	*
4B	6X40	0	*	*	4	-	-	X	-	X	*
5A	6X40	0	*	*	5	-	-	X	-	X	*
5B	6X40	0	*	*	5	-	-	X	-	X	*
5C	6X40	0	*	*	5	15	-	X	-	X	*
8A	6X40	0	*	*	8	-	-	X	-	X	*
8B	6X40	0	*	*	8	-	-	X	-	X	*
8C	6X6	0	*	*	8	15	-	X	-	X	*

* Multi-zone Microwave Detection Zone

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

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

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.
- Set all detector units to presence mode.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

- | PROPOSED | EXISTING |
|----------|----------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

MAXTIME TIMING CHART							
FEATURE	PHASE						
	1	2	4	5	6	8	
Walk *	-	12	13	-	14	14	
Ped Clear *	-	20	30	-	28	33	
Min Green	7	12	7	7	12	7	
Passage *	2.0	2.0	2.0	2.0	2.0	2.0	
Max I *	25	90	30	25	90	30	
Yellow Change	3.0	4.6	3.9	3.0	4.6	3.8	
Red Clear	3.1	1.9	3.1	3.4	1.9	3.1	
Added Initial *	-	-	-	-	-	-	
Maximum Initial *	-	-	-	-	-	-	
Time Before Reduction *	-	-	-	-	-	-	
Time To Reduce *	-	-	-	-	-	-	
Minimum Gap	-	-	-	-	-	-	
Advance Walk	-	5	6	-	7	7	
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 - Final Design

stv
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:

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. Woody
REVISIONS
INIT. DATE

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED
SEAL
NORTH CAROLINA
PROFESSIONAL
SEAL
040329
ENGINEER
RENT M. MOODY
DocuSigned by:
Rent M. Moody
2/10/2025
DATE
SIG. INVENTORY NO. 06-0170