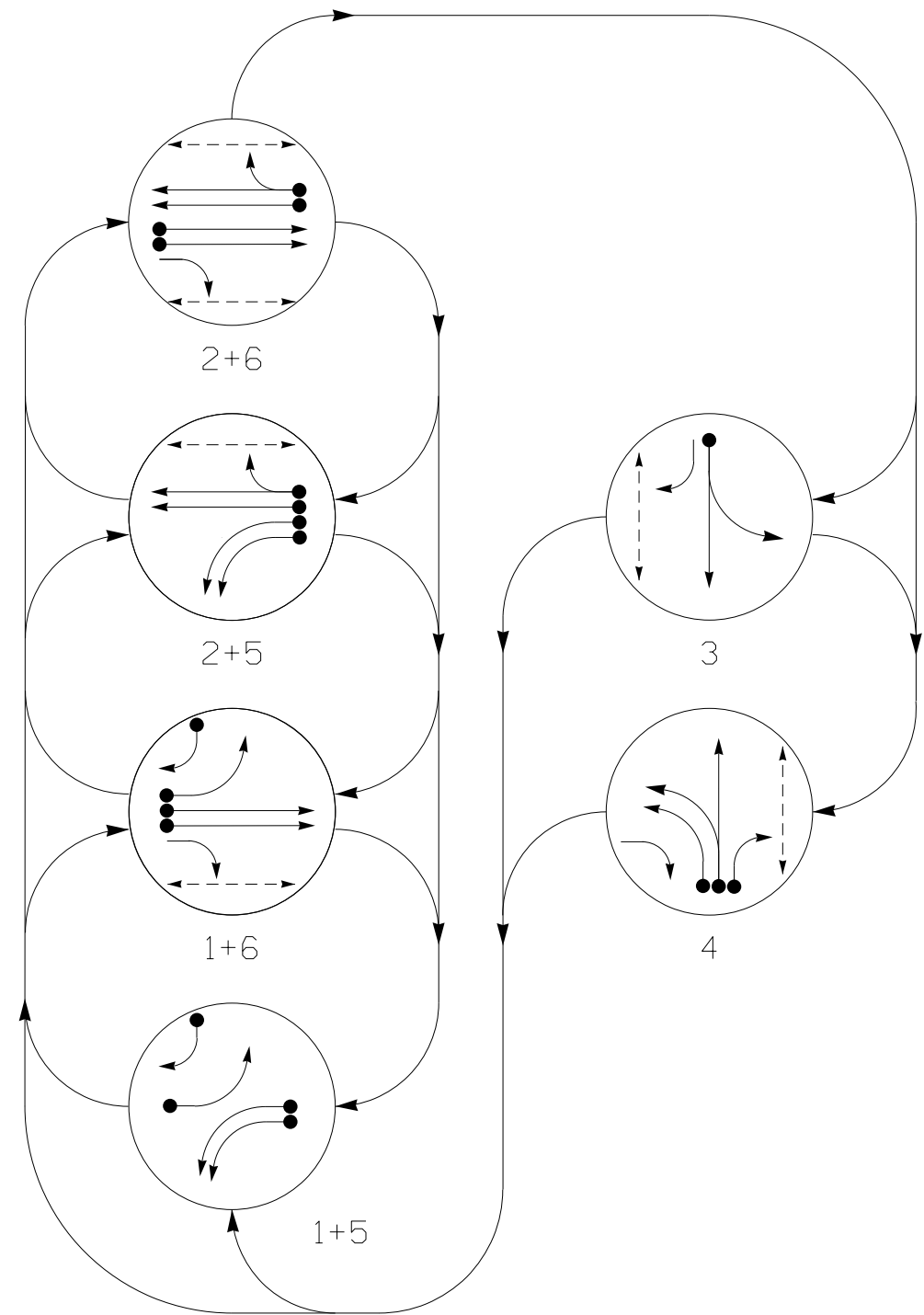


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

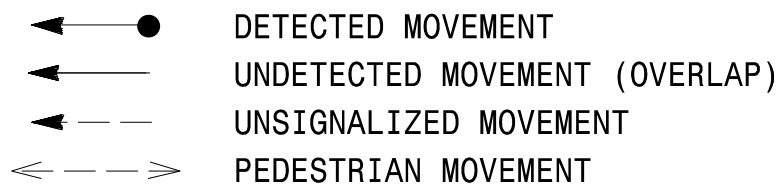
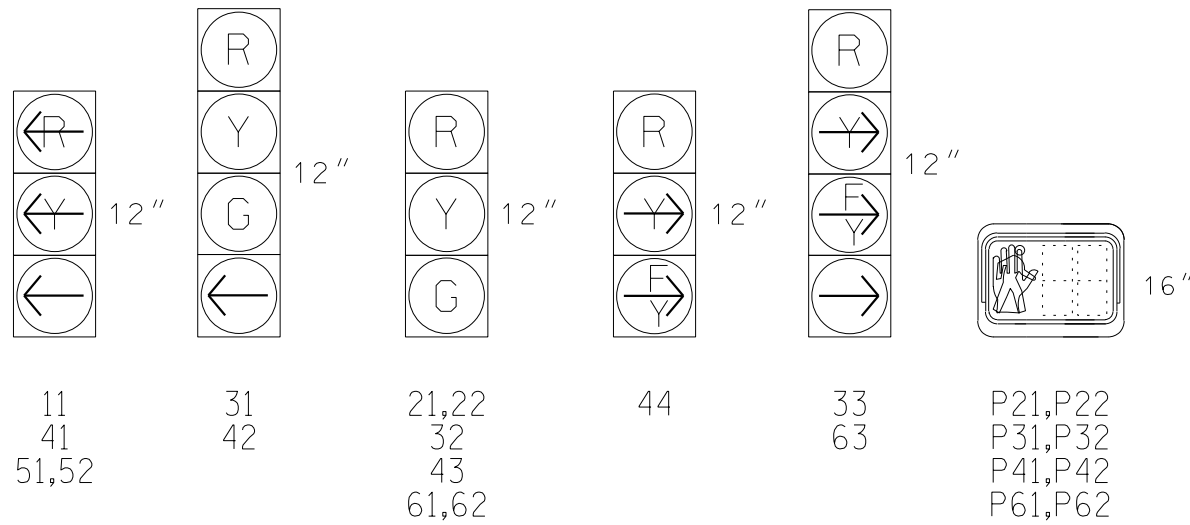


TABLE OF OPERATION

SIGNAL FACE	PHASE					
	1 + 5	1 + 6	2 + 5	2 + 6	3	4
11	←	←	←	←	←	←
21,22	R	R	G	G	R	R
31	R	R	R	R	G	R
32	R	R	R	R	G	R
33	→	→	R	R	←	←
41	←	←	←	←	←	←
42	R	R	R	R	R	G
43	R	R	R	R	R	G
44	R	R	R	R	R	←
51,52	←	←	←	←	←	←
61,62	R	G	R	G	R	R
63	R	←	R	←	→	→
P21,P22	DW	DW	W	W	DW	DRK
P31,P32	DW	DW	DW	DW	W	DRK
P41,P42	DW	DW	DW	DW	DW	DRK
P61,P62	DW	W	DW	W	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

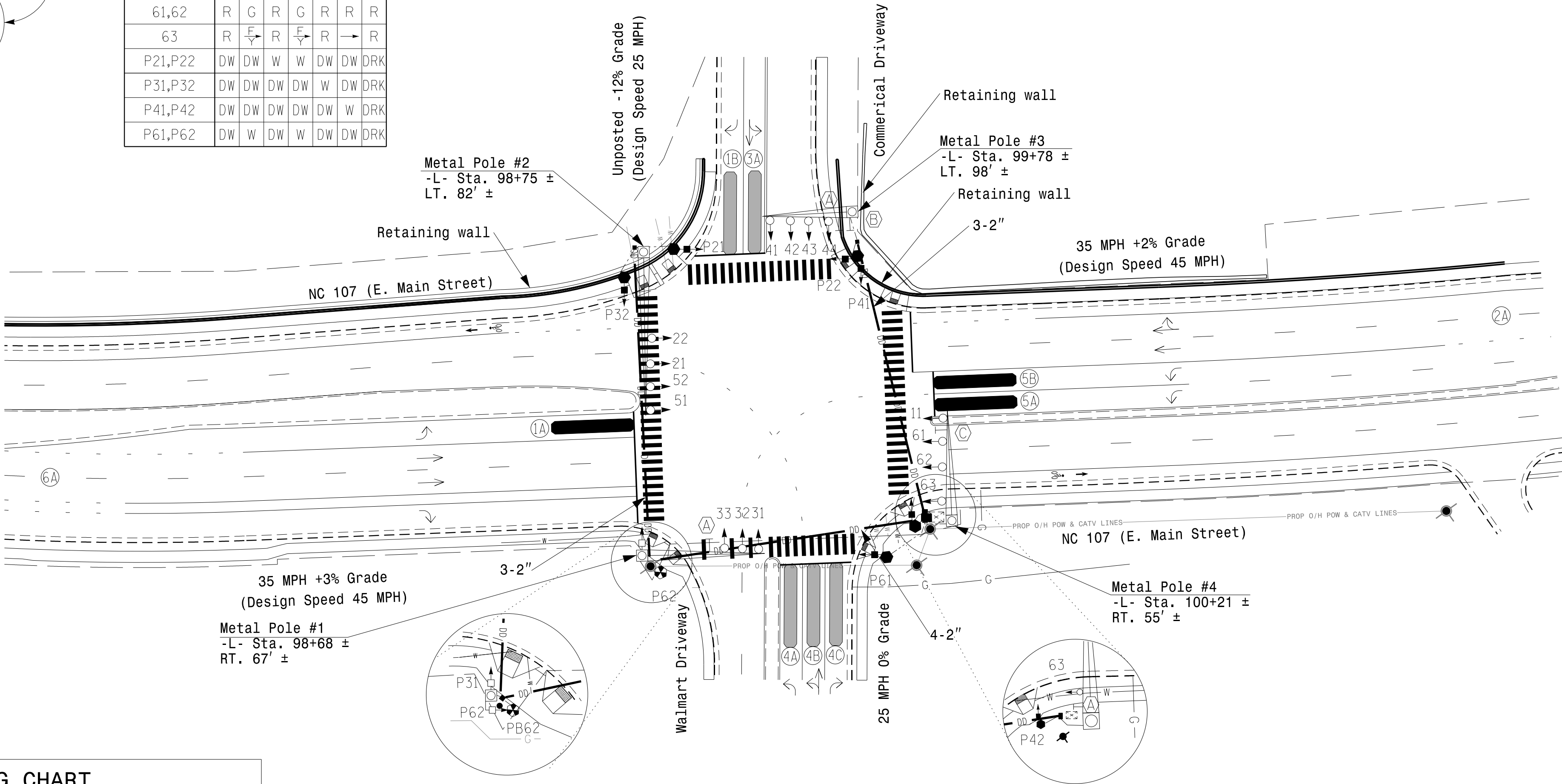
DETECTOR				PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	URNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL
1A	*	0	*	X	1	-	-	X	-	X
1B	*	0	*	-	1	15.0	-	X	-	X
3A	*	0	*	-	3	3.0	-	X	-	X
4A	*	0	*	-	4	-	-	X	-	X
4B	*	0	*	-	4	-	-	X	-	X
4C	*	0	*	-	4	15.0	-	X	-	X
5A	*	0	*	X	5	-	-	X	-	X
5B	*	0	*	X	5	-	-	X	-	X

* Multi-Zone Microwave Detection Zone

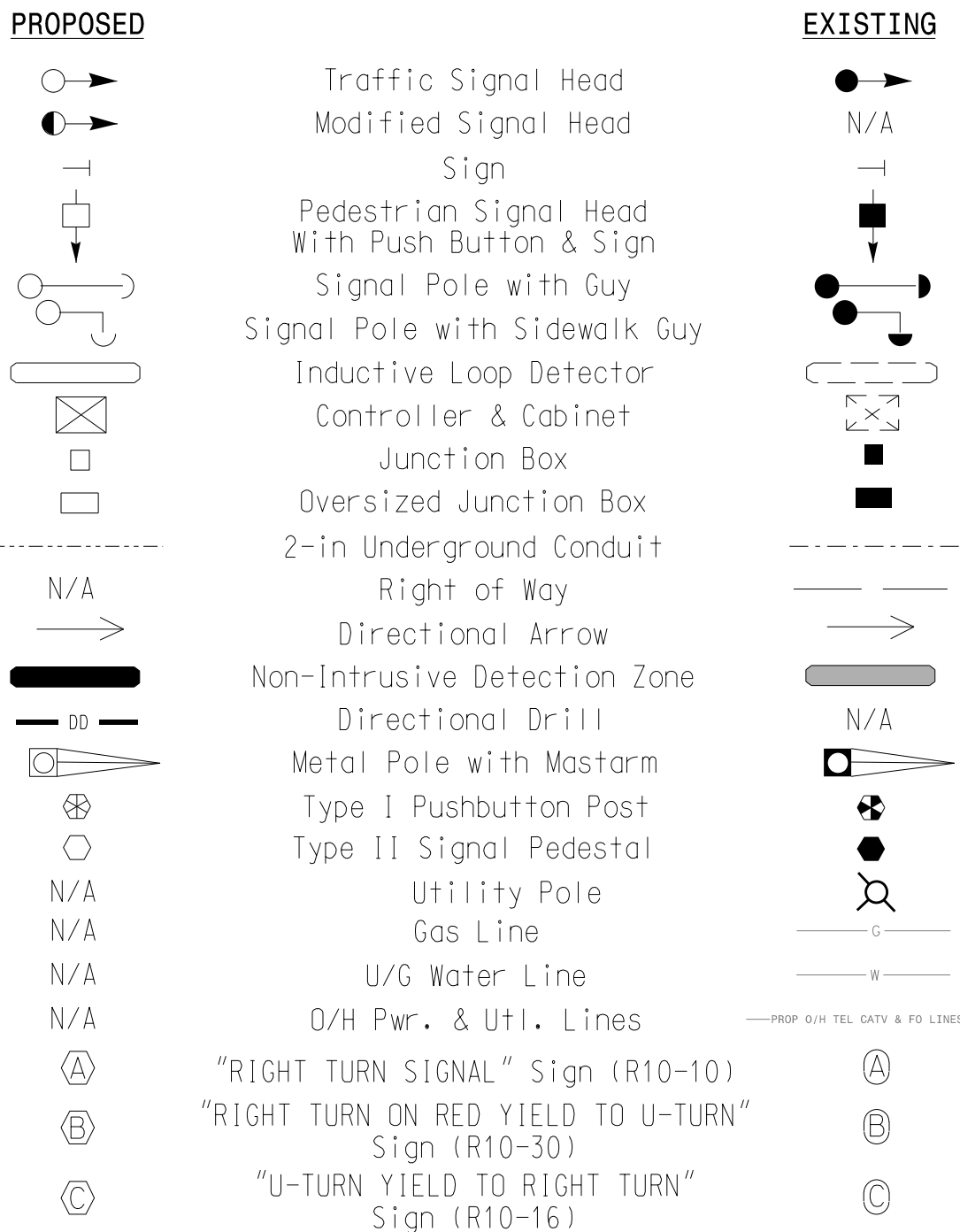
6 Phase Fully Actuated (NC 107-D14-14)

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 detectors units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- To provide a leading pedestrian interval on phase 3, program FYA head numbered 33 to delay for 7 seconds after the start of the phase 3 walk interval. See Electrical Details for programming.
- To provide a leading pedestrian interval on phase 4, program FYA head numbered 44 to delay for 7 seconds after the start of the phase 4 walk interval. See Electrical Details for programming.
- To provide a leading pedestrian interval on phase 6, program FYA head numbered 63 to delay for 7 seconds after the start of the phase 7 walk interval. See Electrical Details for programming.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



LEGEND

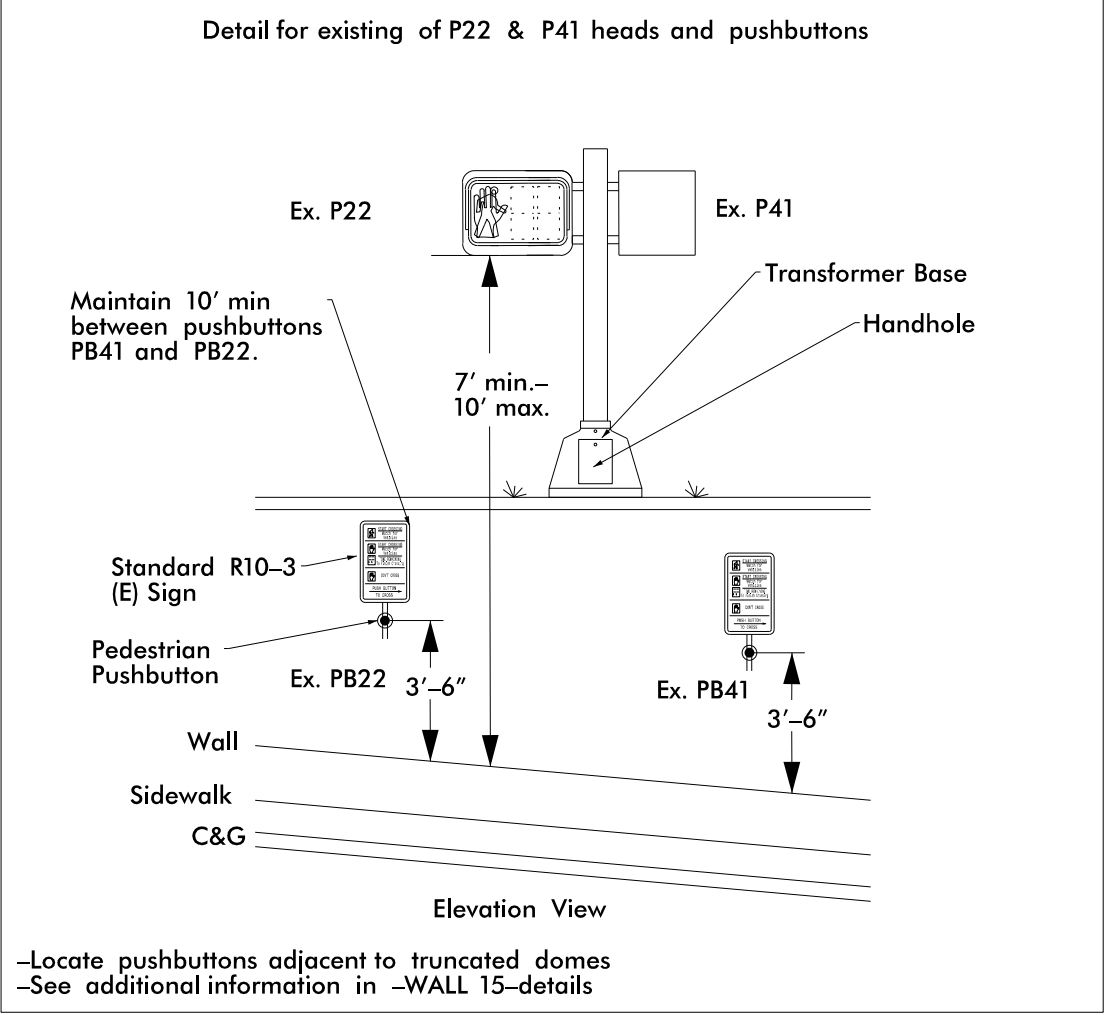


MAXTIME TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	-	14	14	14	-	14
Ped Clear	-	21	31	26	-	23
Min Green *	7	12	7	7	7	12
Passage *	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	20	45	45	40	20	45
Yellow Change	3.0	4.3	4.0	3.2	3.0	4.3
Red Clear	3.3	2.5	3.5	3.7	3.7	2.5
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Advance Walk	-	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 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.
** See note 8
*** See note 9
**** See note 10

PEDESTRIAN DETAIL



Microwave Detection

FUNCTION	2A		6A	
	Sensor 1	Sensor 2	Sensor 1	Sensor 2
Channel	1	1	1	1
Phase	2	6	2	6
Direction of Travel	NB	SB	NB	SB
Type	Priority	Priority	Priority	Priority
Level	2	2	2	2
Detection Zone (ft)	< 750	< 750	< 750	< 750
Range (ft)	600-100	150-100	600-100	150-100
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	-

Plans Prepared By:



Signal Upgrade - Final Design

Prepared for:
TRANSPORTATION MOBILITY AND SAFETY DIVISION
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
Signal Design Section

750 N. Greenfield Pkwy, Garner, NC 27529

NC 107 (E. Main Street)
at
Walmart Driveway /
Commerical Driveway

Division 14 Jackson County Sylva

PLAN DATE: August 2025 REVIEWED BY: ZM Esposito

PREPARED BY: KA Jones REVIEWED BY: BN Groome

REVISIONS INIT. DATE

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

SEAL

BRITTANY N. GROOME
ENGINEER
052936

Signed by: *Brittany Groome* 8/26/2025
DATE

SIG. INVENTORY NO. 14-1022