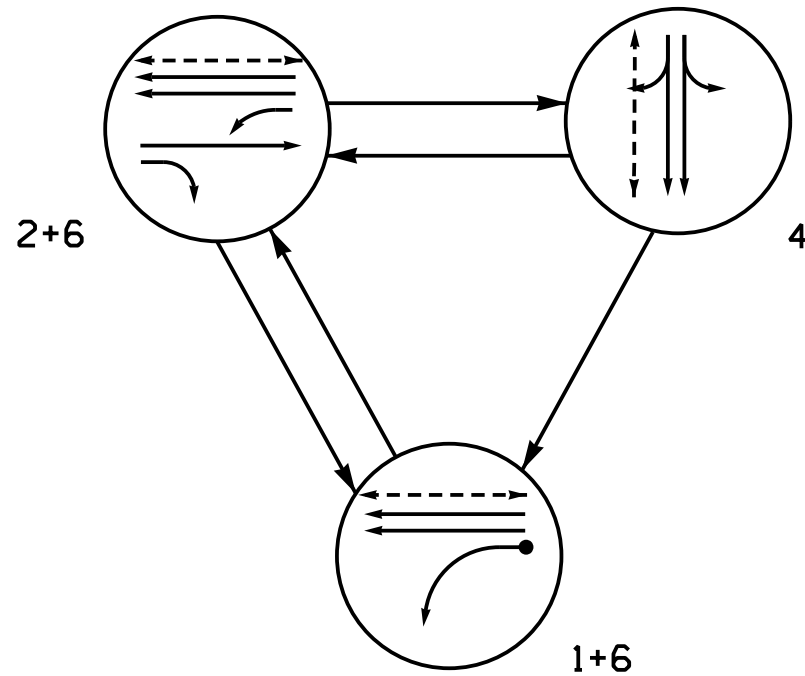
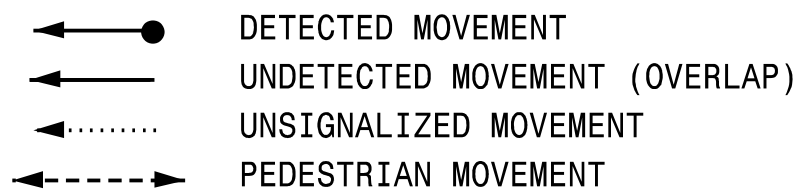


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND



EV PREEMPT PHASES

(Medium Priority)

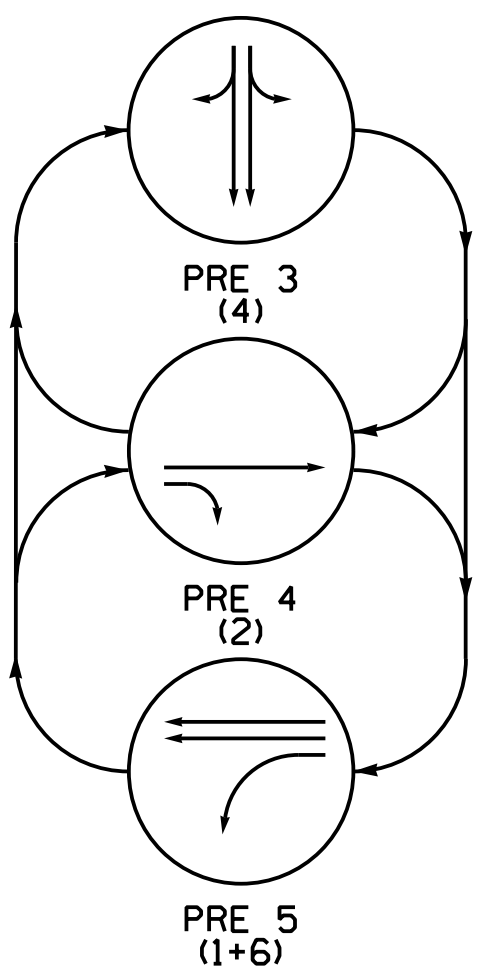


TABLE OF OPERATION

SIGNAL FACE	PHASE							
	1 + 6	2 + 6	4	PRE 3	PRE 4	PRE 5	FLASH	
11	---	---	---	---	---	---	---	
21	R	↑	R	R	↑	R	R	
22	R	G	R	R	G	R	R	
41,42	R	R	G	G	R	R	R	
61	G	G	R	R	R	G	R	
62	↑	↑	R	R	R	↑	R	
P41,P42	DW	DW	W	DW	DW	DW	DRK	
P61,P62	W	W	DW	DW	DW	DW	DRK	

SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART

INDUCTIVE LOOPS						DETECTOR PROGRAMMING													
ZONE	SIZE (ft)	TURNS	DIST. FROM STOP LINE (ft)	NEW	EXISTING	ASSIGNED PHASE	TIMING		OPERATION MODE							SWITCH	SYSTEM LOOPS	STATUS	
									0	1	2	3	4	5	6			7	NEW
							DELAY	EXTEND (STRETCH)	VEHICLE	PEDESTRIAN	1 CALL	2	3 STOP A	4 STOP B	5 PROTECT LEFT			6 PROTECT RIGHT	
1A*	6X40	*	0	-	*	1	15 SEC.	-	SEC.	X	-	-	-	-	-	-	-	*	-

* Multizone Microwave Detection

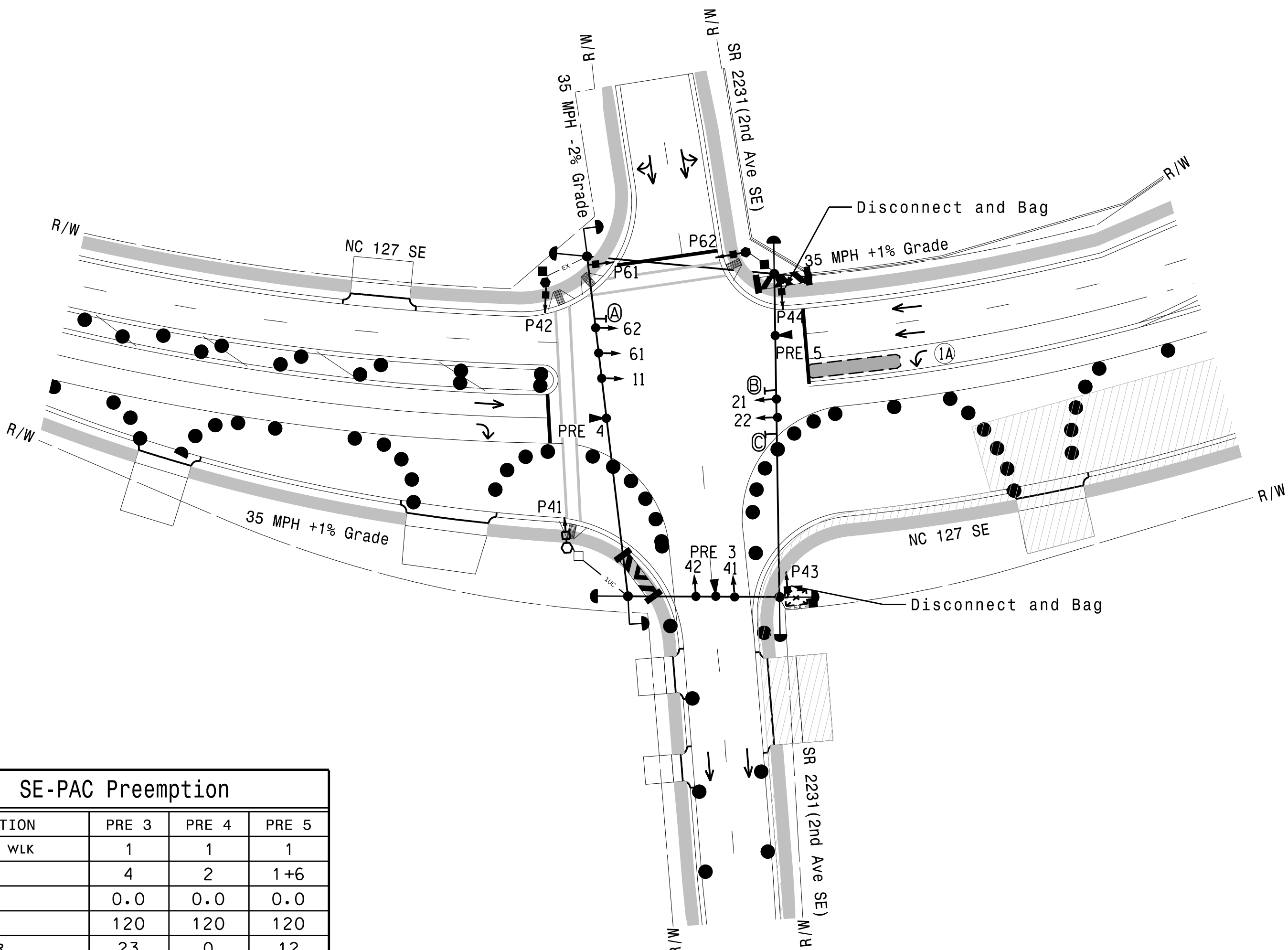
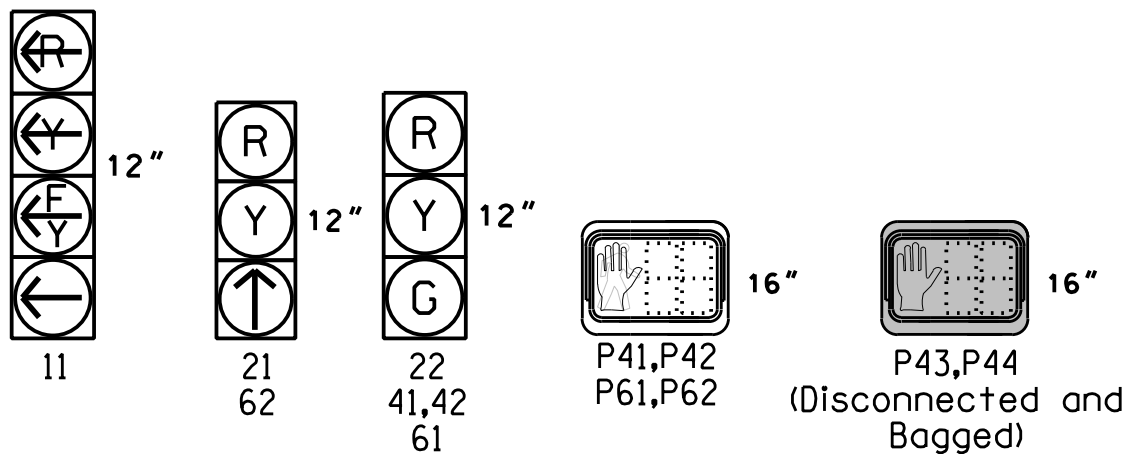
3 Phase with EVP
Semi-Actuated
Hickory City Signal System

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 may be lagged.
- Disconnect and bag existing pedestrian heads numbered P43 and P44.
- Set all detector units to presence mode.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- This intersection uses multi-zone microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Hickory Signal System Data: Controller Asset #0316.

SIGNAL FACE I.D.

All Heads L.E.D.



SE-PAC 2070 TIMING CHART

FEATURE	PHASE			
	1	2	4	6
Min Green *	7	10	7	10
Passage Gap *	2.0	-	-	-
Maximum Green *	40	40	40	40
Yellow Change	3.0	3.8	4.0	3.8
Red Clear	1.8	2.1	1.7	2.1
Walk *	-	-	12	14
Pedestrian Clear	-	-	24	14
Advance Walk *	-	-	5	7
Added Initial *	-	-	-	-
Maximum Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	-	MAX RECALL	MAX/PED RECALL	MAX/PED RECALL
Vehicle Call Memory	NON-LOCK	NON-LOCK	NON-LOCK	NON-LOCK
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

* 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.

SE-PAC Preemption

FUNCTION	PRE 3	PRE 4	PRE 5
MIN GRN / WLK	1	1	1
EXIT PHASES	4	2	1+6
DELAY	0.0	0.0	0.0
MXCALL	120	120	120
SEL PED CLR	23	0	12
SEL YEL / 10	0*	0*	0*
SEL RED / 10	0*	0*	0*
TRACK GREEN	0	0	0
TRK PED CLR	0	0	0
TRK YEL / 10	0	0	0
TRK RED / 10	0	0	0
DWELL GRN	7	10	10
RET PED CLR	0	0	0
RET YEL / 10	0*	0*	0*
RET RED / 10	0*	0*	0*
PREEMPT EXTEND**	2.0	2.0	2.0

* Time defaults to time used for phase during normal operation.

** Program Timing on Optical Detection Unit.

LEGEND

PROPOSED	EXISTING
	N/A
N/A	
	N/A
	N/A
	N/A
N/A	
	N/A

Signal Upgrade -
Temporary Design 4
(Construction Phase 2, Step 2)

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

	NC 127 SE at SR 2231 (2nd Ave SE)			
	Division 12	Catawba County		Hickory
750 N. Greenfield Hwy, Garner, NC 27529	PLAN DATE: October 2023	REVIEWED BY: N.K. Vianich	REVIEWED BY: N.R. Simmons	
	REVISIONS		INIT.	DATE
	0 40 1" = 40'			
DocuSigned by:		9/6/2024		SIG. INVENTORY NO. 12-094574

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