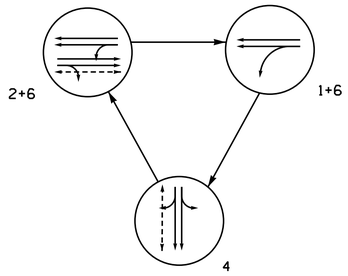
PROJECT REFERENCE NO.	SHEET NO.
U-5777	Sig. 3.0

3 Phase with EVP
Pre-Timed
Hickory City Signal System

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

EV PREEMPT PHASES

(Medium Priority)

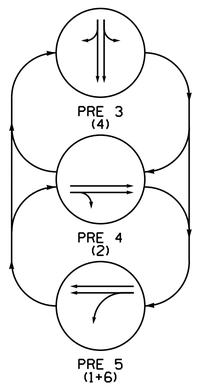
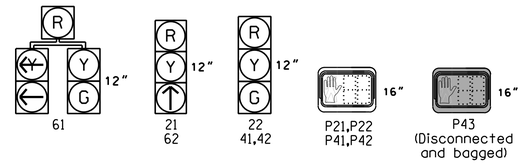


TABLE OF OPERATION

SIGNAL FACE	PHASE 1+6	2+6	4	PRE 3	PRE 4	PRE 5	FLASH
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
P21,P22	DW	W	DW	DW	DW	DW	DRK
P41,P42	DW	DW	W	DW	DW	DW	DRK

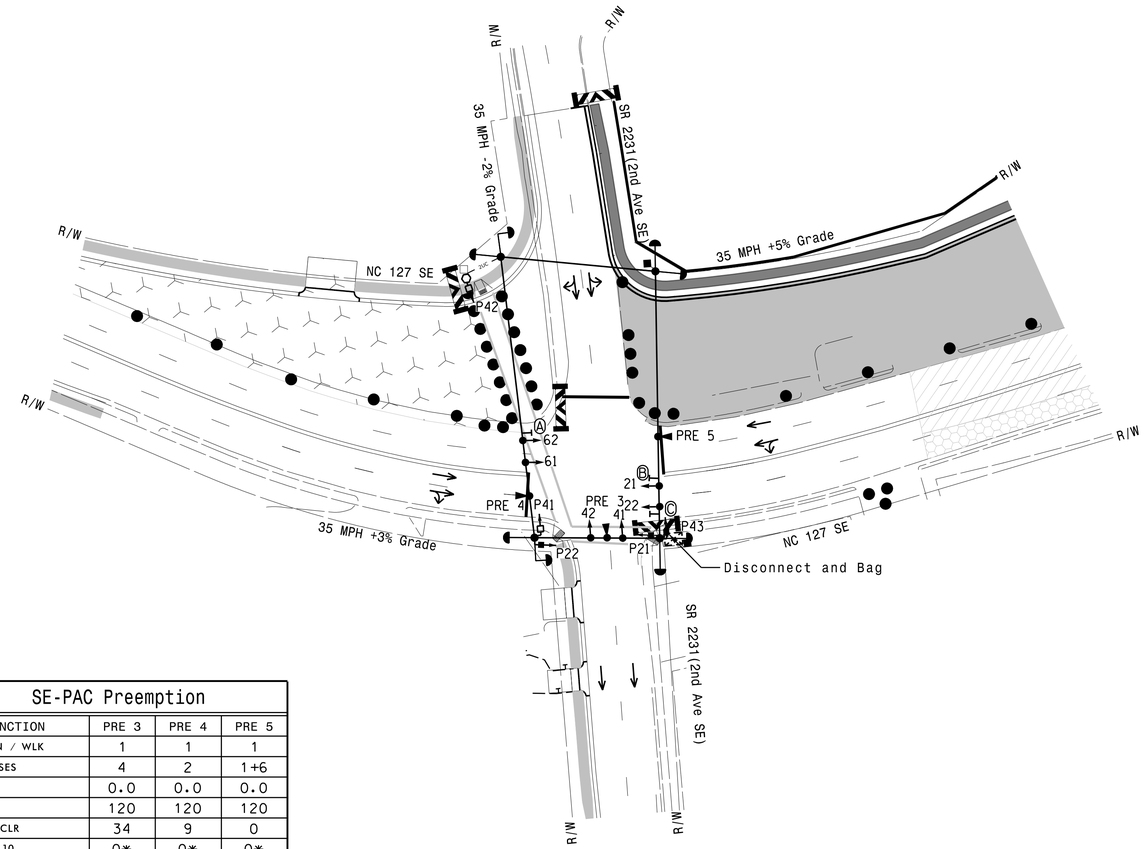
SIGNAL FACE I.D.

All Heads L.E.D.



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 may be lagged.
4. Disconnect and bag existing pedestrian head numbered P43.
5. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
6. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Hickory Signal System Data: Controller Asset #0316.



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	●
⋈	Out of Pavement Detector	⋈
⊠	Controller & Cabinet	⊠
□	Junction Box	■
-x-UC-	2-in Underground Conduit	-UC-
N/A	Right of Way	
▬	Barrier	N/A
→	Directional Arrow	→
●●●	Construction Zone Drums	●●●
▨	Construction Zone	N/A
▨	Wedge/Widen	▨
▨	Temporary Pavement	▨
▨	Ongoing Construction	▨
N/A	Curb Ramp	
⋈	Pedestrian Barricade	N/A
Ⓐ	No Right Turn Sign (R3-1)	Ⓐ
Ⓑ	No Left Turn Sign (R3-2)	Ⓑ
Ⓒ	"NO TURN ON RED" Sign (R10-11)	Ⓒ

SE-PAC 2070 TIMING CHART

FEATURE	PHASE 1	2	4	6
Min Green *	7	10	7	10
Passage Gap *	-	-	-	-
Maximum Green *	40	40	40	40
Yellow Change	3.0	3.7	4.0	3.7
Red Clear	1.6	1.3	1.4	1.3
Walk *	-	14	14	14
Pedestrian Clear	-	9	34	9
Advance Walk *	-	7	7	7
Added Initial *	-	-	-	-
Maximum Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MAX RECALL	MAX/PED 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	34	9	0
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.

Signal Upgrade -
Temporary Design 2
(Construction Phase 1, Step 4)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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(919) 546-8997

Prepared for:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

0 40
1"=40'

NC 127 SE
at
SR 2231 (2nd Ave SE)

Division 12 Catawba County Hickory

PLAN DATE:	October 2023	REVIEWED BY:	N.K. Vlanich
PREPARED BY:	E.E. Tiller	REVIEWED BY:	N.R. Simmons

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 031464 ENGINEER NATASHA R. SIMMONS

DocuSigned by: Natasha R. Simmons 9/6/2024
SIGNATURE DATE

SIG. INVENTORY NO. 12-0945T2