

**3 Phase
Fully Actuated
Gastonia Signal System**

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 5 may be lagged.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signal Design Manual and submit a Plan of Record to the Signal Design Section.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- Install new cabinet on the existing cabinet foundation.
- All new cabinets and base extenders shall be black in color. See Project Special Provisions for details.
- City of system data:
Controller Asset #1718.

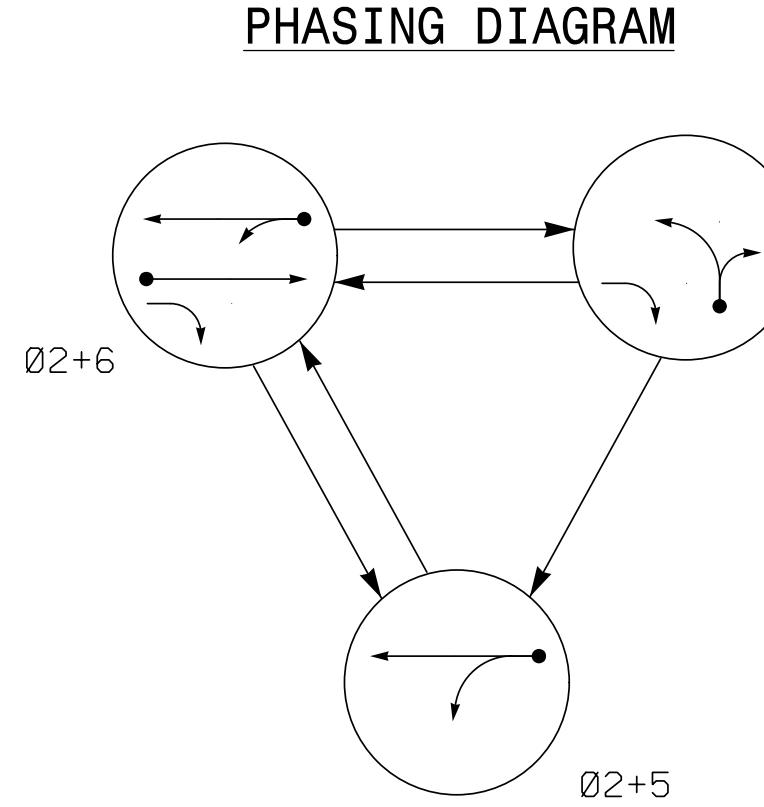


TABLE OF OPERATION

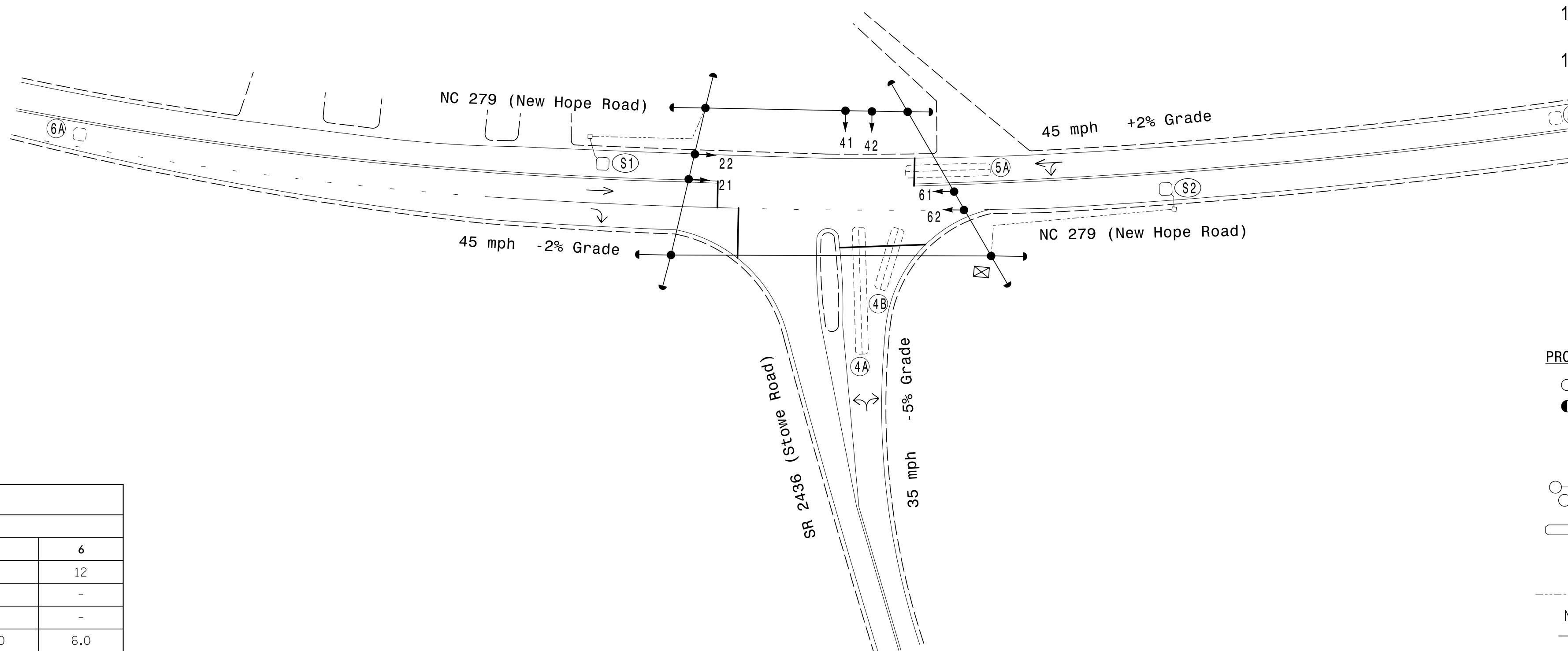
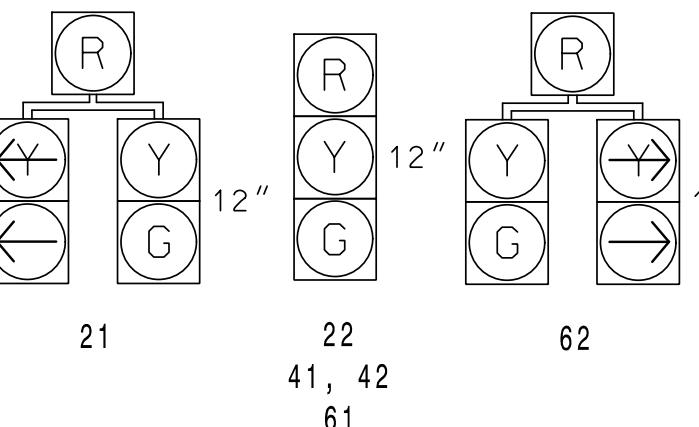
SIGNAL FACE	PHASE				
	Ø	Ø	Ø	F	H
21	X	G	R	Y	
22		G	R	Y	
41, 42	R	R	G	R	
61	R	G	R	Y	
62	R	G	R	X	Y

DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING		SYSTEM TYPE	NEW CARD			
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	SYSTEM TYPE	NEW CARD
2A	6X6	300	EXIST	-	2	Yes	-	-	-	N	- X
4A	6X60	+5	2-4-2	-	4	Yes	-	-	-	N	- X
4B	6X30	+5	2-4-2	-	4	Yes	-	15	-	N	- X
5A	6X40	+5	2-4-2	-	5	Yes	-	5	-	N	- X
6A	6X6	300	EXIST	-	6	Yes	-	-	X	N	- X
S1	6X6	+150	6	X	-	No	-	-	-	N	X X
S2	6X6	+200	6	X	-	No	-	-	-	N	X X

SIGNAL FACE I.D.

All Heads L.E.D.



TIMING CHART

FEATURE	PHASE			
	2	4	5	6
Min Green *	12	7	7	12
Walk *	-	-	-	-
Ped Clear	-	-	-	-
Veh. Extension *	6.0	1.0	1.0	6.0
Max 1 *	90	20	25	90
Yellow	4.7	3.1	3.0	4.7
Red Clear	1.4	2.6	2.1	1.4
Red Revert	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-
Seconds / Actuation *	-	-	-	2.5
Max Initial *	-	-	-	34
Time Before Reduction *	15	-	-	15
Time To Reduce *	40	-	-	40
Minimum Gap	3.0	-	-	3.0
Locking Detector	-	-	-	X
Recall Position	MIN RECALL	-	-	MIN RECALL
Dual Entry	-	-	-	-
Simultaneous Gap	X	X	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

Prepared For: Signal Design Section	NC 279 (New Hope Road) at SR 2436 (Stowe Road)	
Division 12	Gaston County	Gastonia
PLAN DATE: May 2021	REVIEWED BY: SL Phillips	
PREPARED BY: DM Curri	REVIEWED BY: KP Baumann	
REVISIONS	INIT. DATE	
0	40	
1"=40'		

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

SEAL
044434
NORTH CAROLINA
PROFESSIONAL
ENGINEER
KEVIN P. BAUMANN
3/11/2022
Signature
DATE
SIG. INVENTORY NO.
12-1718