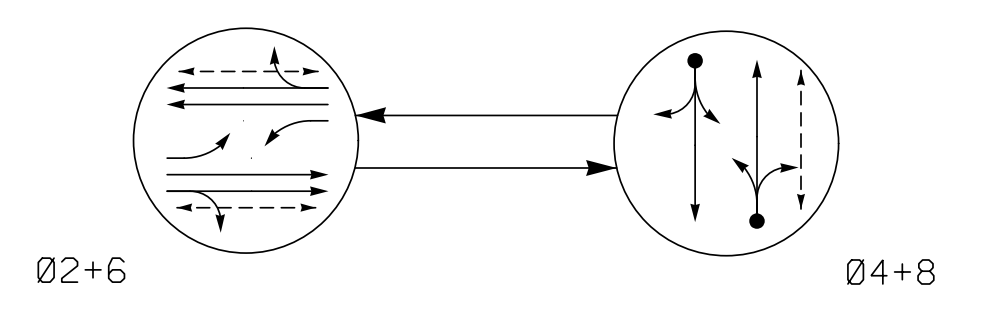


PHASING DIAGRAM



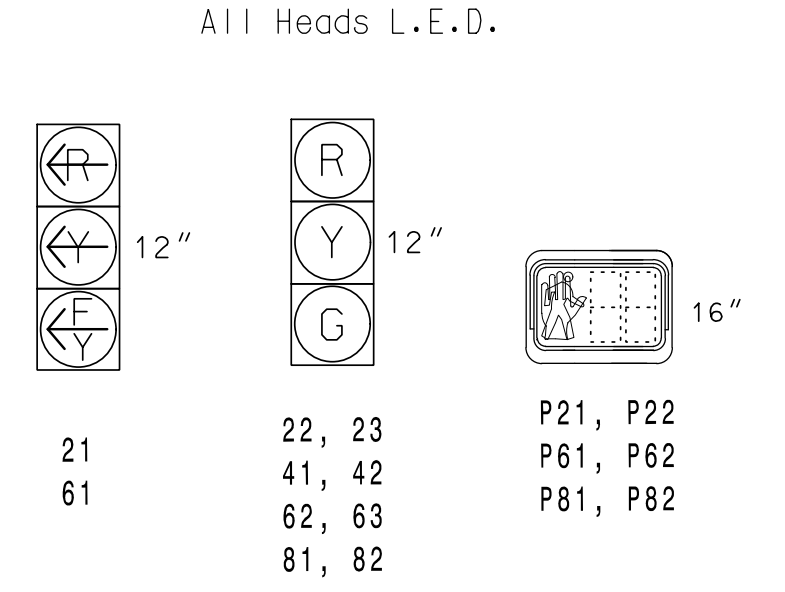
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE		
	Ø2+6	Ø4+8	FLASH
21	←	→	Y
22, 23	G	R	Y
41, 42	R	G	Y
61	←	→	Y
62, 63	G	R	Y
81, 82	R	G	R
P21, P22	W	DW	DRK
P61, P62	W	DW	DRK
P81, P82	DW	W	DRK

SIGNAL FACE I.D.



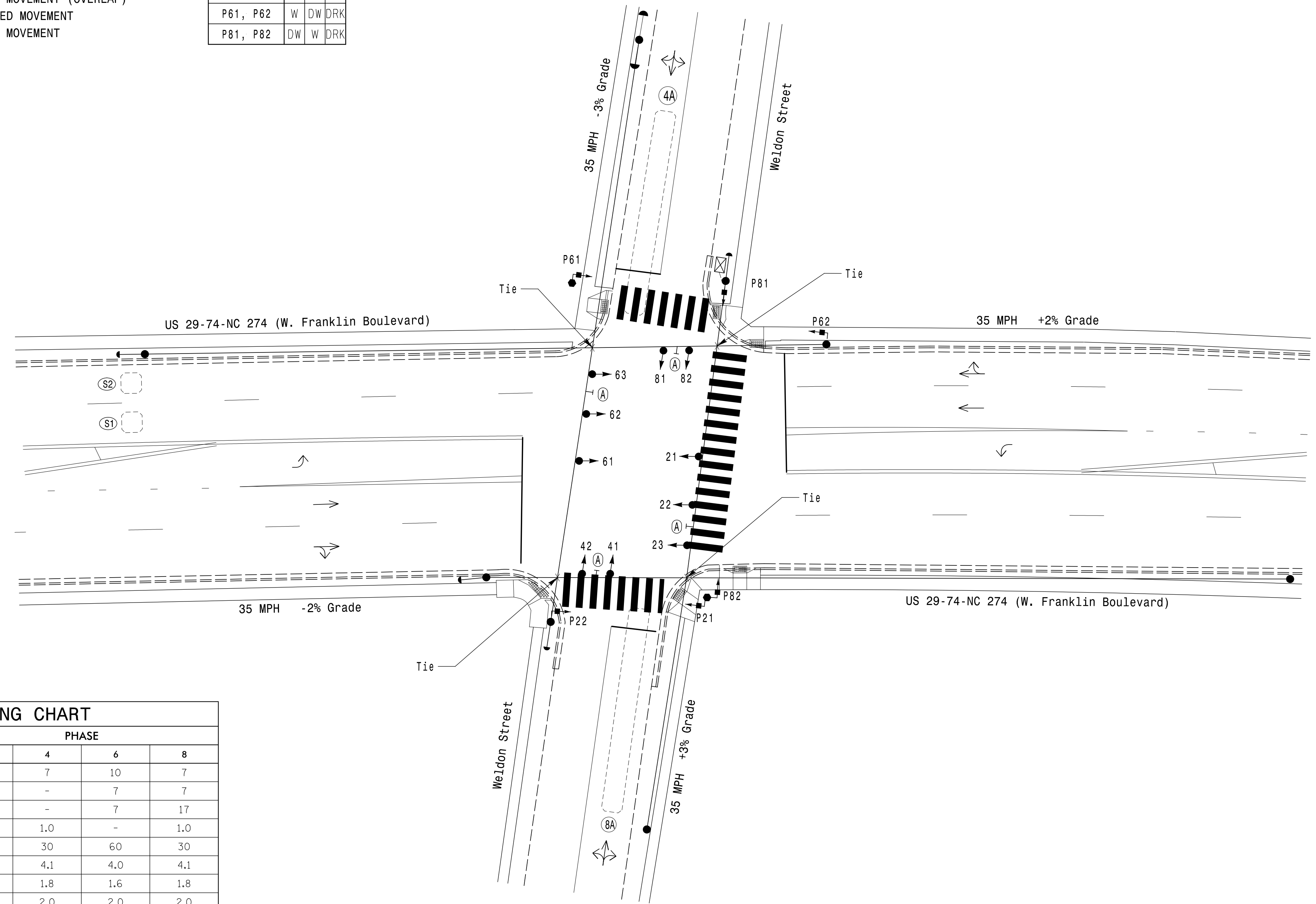
DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP SYSTEM	NEW CARD
4A	6X60	+10	EXIST	-	4	Yes	-	5	-	N	-	X
8A	6X60	+5	EXIST	-	8	Yes	-	5	-	N	-	X
S1	6X6	+180	EXIST	-	-	-	-	-	-	N	X	X
S2	6X6	+180	EXIST	-	-	-	-	-	-	N	X	X

2 Phase Semi-Actuated Gastonia Signal System

NOTES

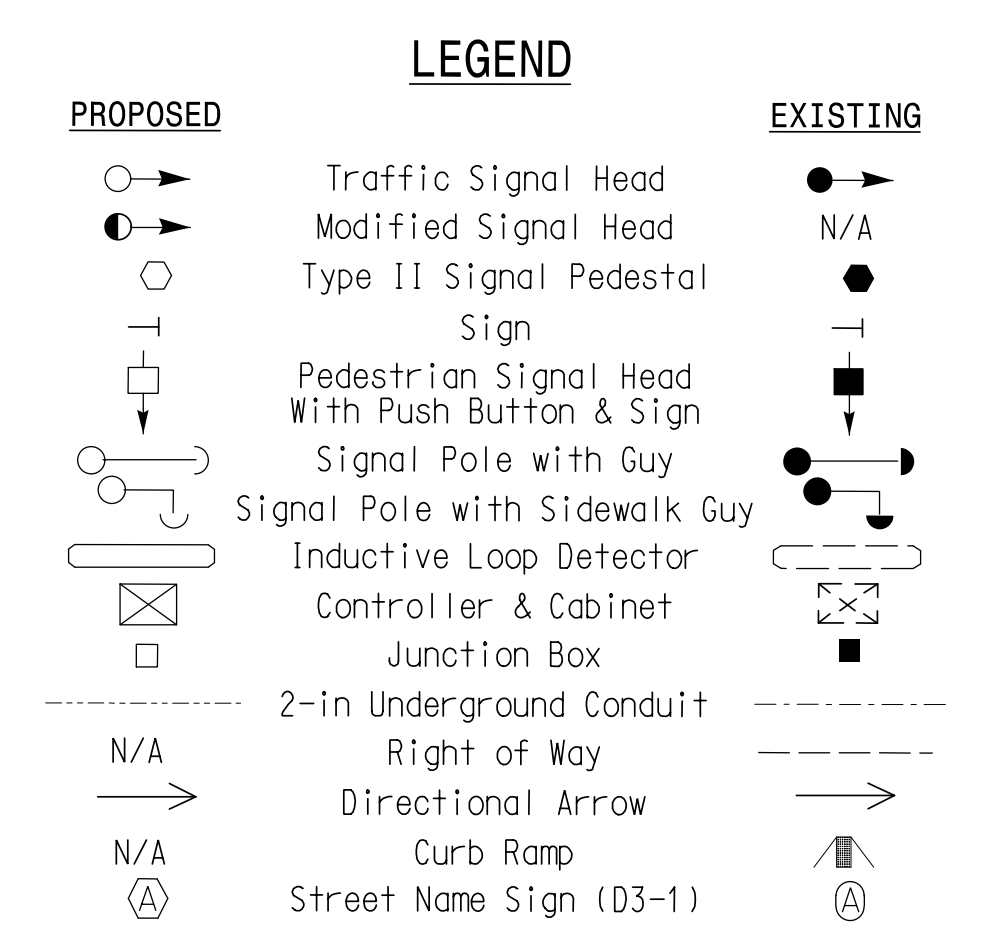
1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. In the event of loop replacement, refer to the current ITS and Signal Design Manual and submit a Plan of Record to the Signal Design Section.
5. Install new cabinet on a new cabinet foundation.
6. All new cabinets and base extenders shall be black in color. See Project Special Provisions for details.
7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls for phase 8.
9. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
10. Pavement markings are existing.
11. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
12. Rewire all intersection equipment to new cabinet.
13. City system data:
Controller Asset: #0035



TIMING CHART

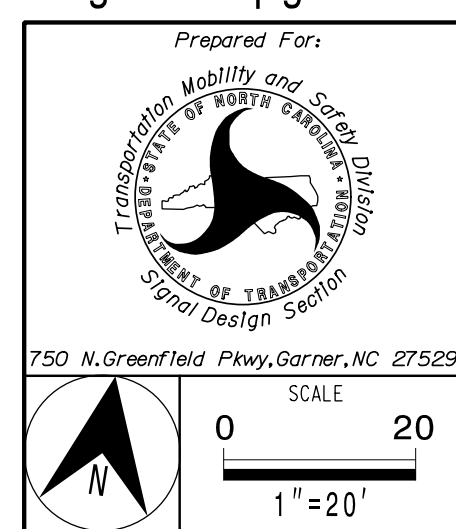
FEATURE	PHASE			
	2	4	6	8
Min Green *	10	7	10	7
Walk *	7	-	7	7
Ped Clear	8	-	7	17
Veh. Extension *	-	1.0	-	1.0
Max I *	60	30	60	30
Yellow	4.0	4.1	4.0	4.1
Red Clear	1.6	1.8	1.6	1.8
Red Revert	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-
Seconds / Actuation *	-	-	-	-
Max Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Locking Detector	-	-	-	-
Recall Position	PED/MAX	-	PED/MAX	-
Dual Entry	-	X	-	X
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

PLANS PREPARED IN THE OFFICE OF:
Kimley»Horn
NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000



US 29-74-NC 274 (W. Franklin Boulevard) at Weldon Street

Division 12 Gaston County Gastonia

PLAN DATE: May 2021	REVIEWED BY: SL Phillips
PREPARED BY: CF Davis	REVIEWED BY: KP Baumann

REVISIONS: _____ INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Notary Public Seal for Kevin P. Baumann, State of North Carolina, License No. 044434.

3/11/2022

SIG. INVENTORY NO. 12-0035

3/9/2022 11:13:06 AM Don@le.curf1 ***kimley-horn.com\SELRAL\IP\OK-ITS\01036569 Gastonia Signal System\Signal Design\20035-2021.dgn