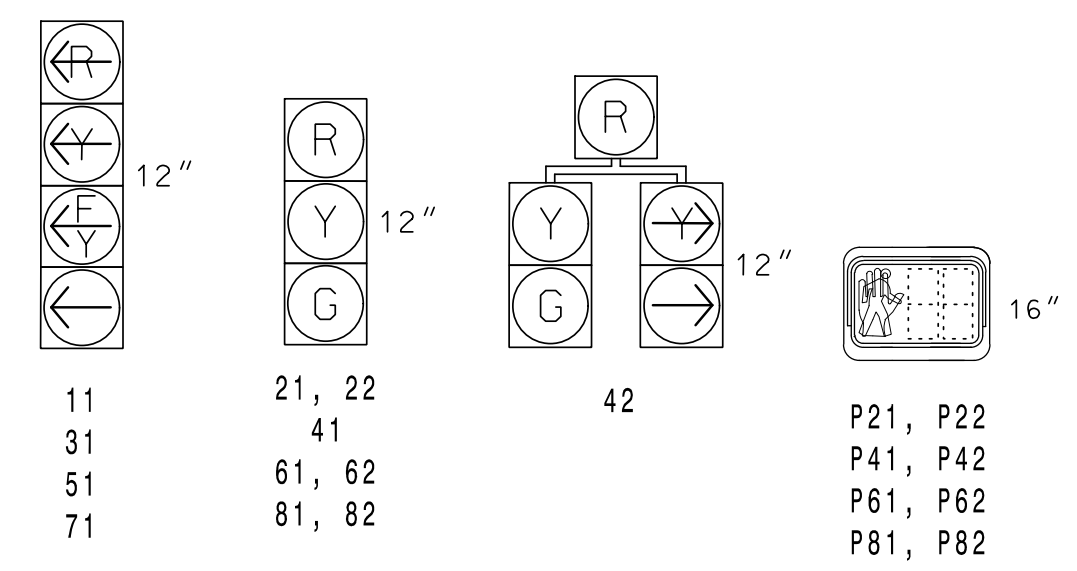


SIGNAL FACE I.D.

All Heads L.E.D.



DETECTOR INSTALLATION CHART

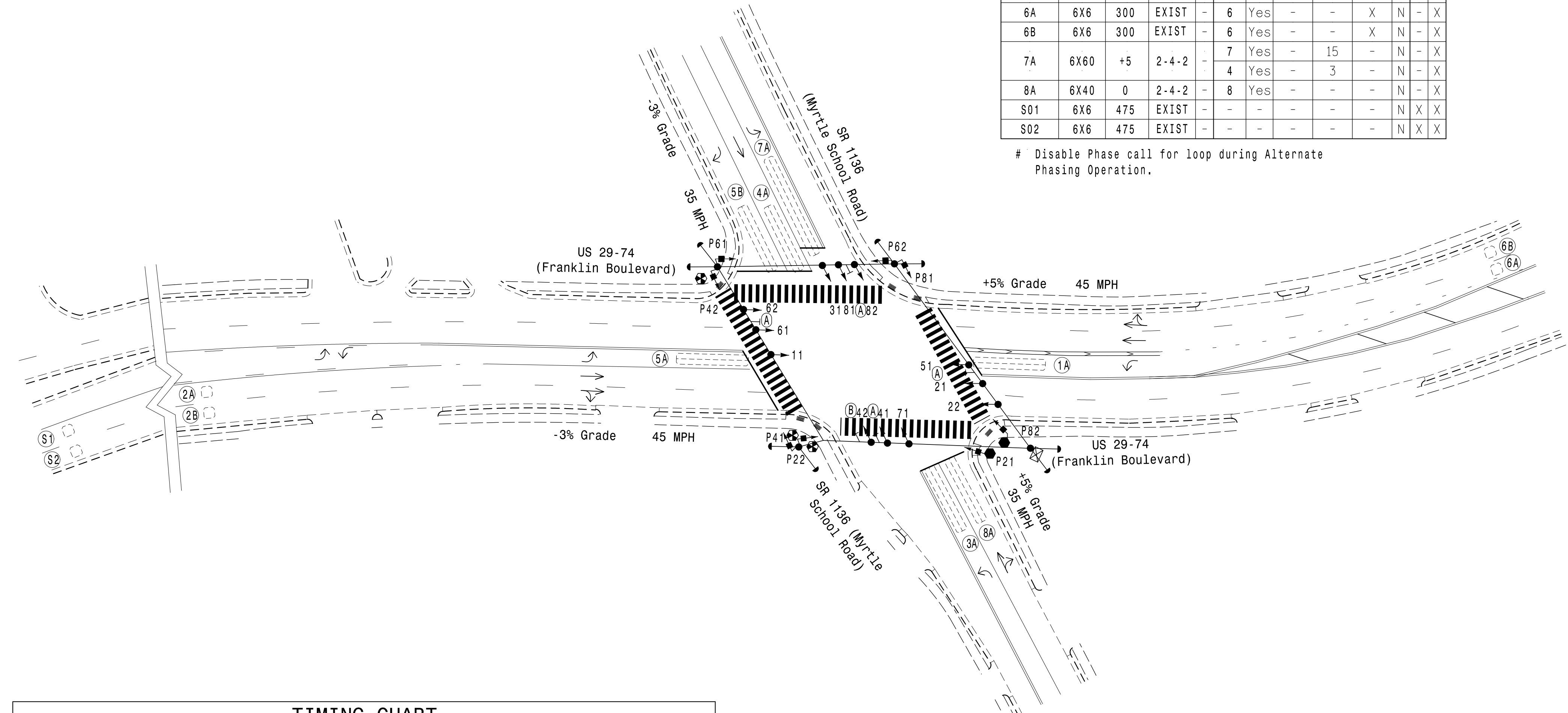
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP SYSTEM	NEW CARD
1A	6X40	0	2-4-2	-	1	Yes	-	3	-	N	-	X
2A	6X6	300	EXIST	-	6#	Yes	-	3	-	G	-	X
2B	6X6	300	EXIST	-	2	Yes	-	-	X	N	-	X
3A	6X40	0	2-4-2	-	3	Yes	-	15	-	N	-	X
4A	6X40	0	2-4-2	-	8	Yes	-	3	-	N	-	X
5A	6X40	0	2-4-2	-	4	Yes	-	-	-	N	-	X
5B	6X40	0	2-4-2	-	5	Yes	-	15	-	N	-	X
6A	6X6	300	EXIST	-	6	Yes	-	-	X	N	-	X
6B	6X6	300	EXIST	-	6	Yes	-	-	X	N	-	X
7A	6X60	+5	2-4-2	-	7	Yes	-	15	-	N	-	X
8A	6X40	0	2-4-2	-	4	Yes	-	3	-	N	-	X
S01	6X6	475	EXIST	-	-	-	-	-	-	N	X	X
S02	6X6	475	EXIST	-	-	-	-	-	-	N	X	X

Disable Phase call for loop during Alternate Phasing Operation.

8 Phase Fully Acutated w/ Alternate Phasing Operation and Emergency Vehicle Preemption 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 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 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.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- The City Engineer or their representative will determine the hours of use for each phasing plan.
- 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.
- Install GPS emergency preemption system per manufacturer's instructions to achieve preemption needed, as shown in phasing diagram.
- City System Data: Controller Asset: #0029

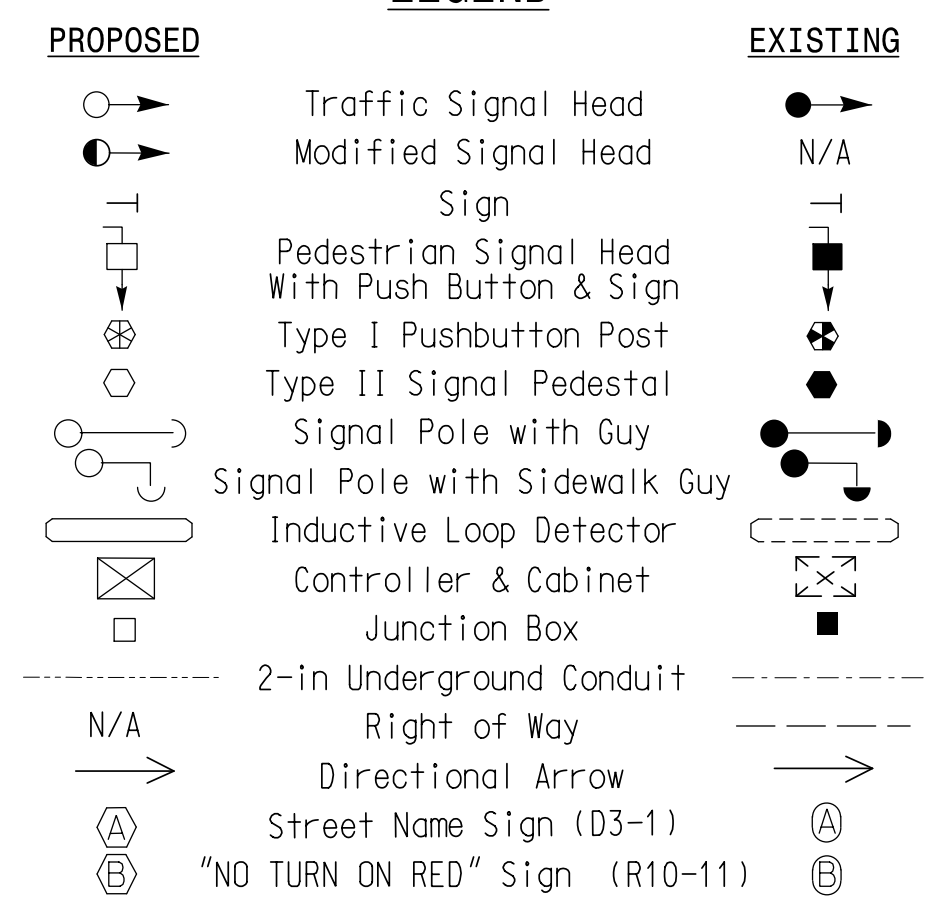


TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	-	7	-	7	-	7	-	7
Ped Clear	-	21	-	21	-	26	-	20
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	1.0	2.0
Max I *	20	90	15	30	20	90	15	30
Yellow	3.0	4.8	3.0	4.1	3.0	4.8	3.0	4.1
Red Clear	2.1	1.7	3.5	2.9	2.4	1.7	3.4	2.9
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-	-	-	-	-
Seconds /Actuation *	-	1.5	-	-	-	1.5	-	-
Max Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Locking Detector	-	X	-	-	-	X	-	-
Recall Position	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Dual Entry	-	-	-	X	-	-	-	X
Simultaneous Gap	X	X	X	X	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.

LEGEND



Signal Upgrade - Sheet 1 of 2

Prepared For:
Kimley-Horn

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

US 29/74 (Franklin Boulevard) at SR 1136 (Myrtle School Road)

Division 12 Gaston County Gastonia

PLAN DATE: May 2021 REVIEWED BY: SL Phillips
PREPARED BY: DM Curri REVIEWED BY: KP Baumann

750 N. Greenfield Pkwy, Garner, NC 27529
SCALE: 1" = 40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Seal of Kevin P. Baumann, Professional Engineer, No. 044434

Signature: *Kevin P. Baumann* DATE: 3/11/2022

SIG. INVENTORY NO. 12-0029

3/9/2022 11:12:56 AM Dan.Hell@khor.com