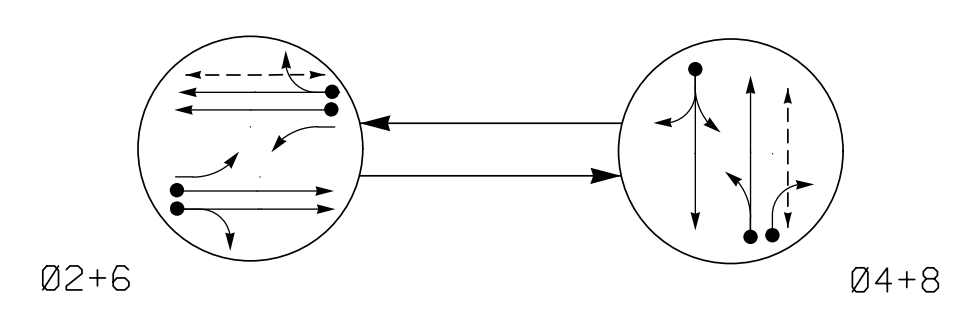


PHASING DIAGRAM



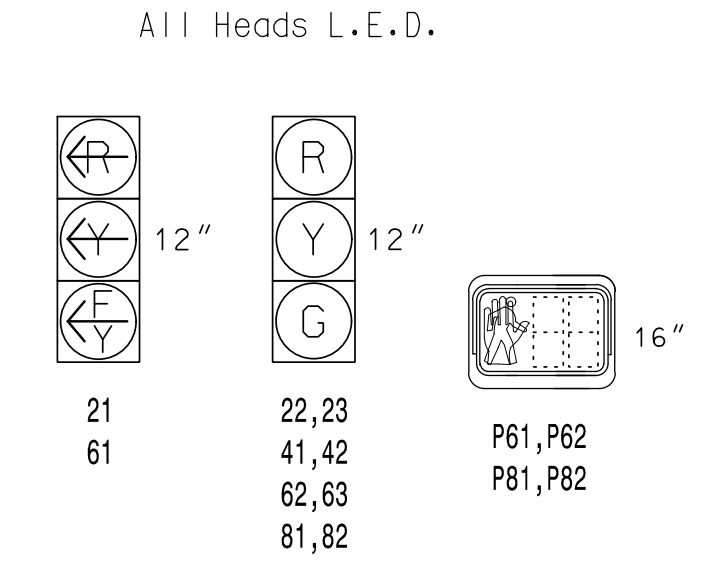
PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- ◄ UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ◄—► PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02+6	04+8	F	L
21	←	←	←	←
22, 23	G	R	Y	
41, 42	R	G	R	
61	←	←	←	←
62, 63	G	R	Y	
81, 82	R	G	R	
P61, P62	W	DW	DRK	
P81, P82	DW	W	DRK	

SIGNAL FACE I.D.



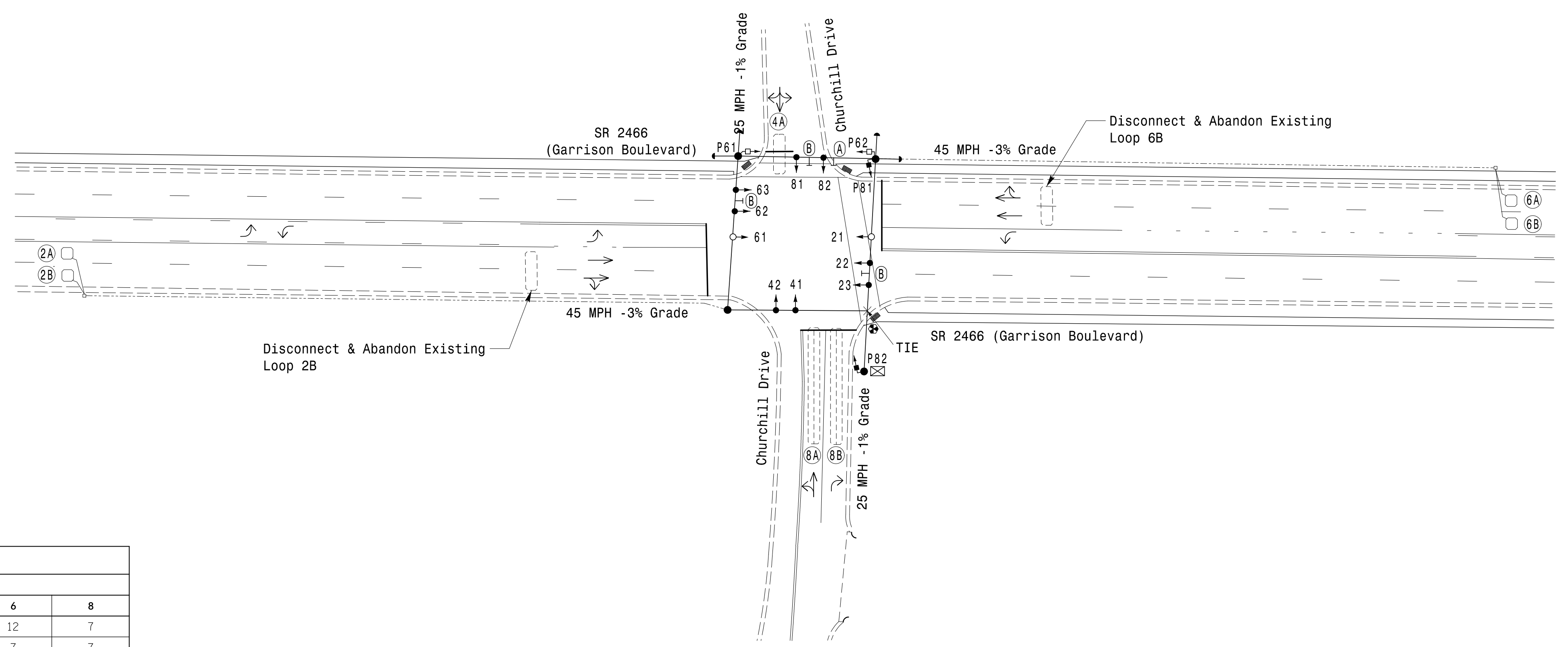
DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	PROGRAMMING								
				NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
2A	6X6	300	6	X	2	Yes	-	-	X	N	-	X
2B	6X6	300	6	X	2	Yes	-	-	X	N	-	X
4A	6X20	+10	EXIST	-	4	Yes	-	-	-	N	-	X
6A	6X6	300	6	X	6	Yes	-	-	X	N	-	X
6B	6X6	300	6	X	6	Yes	-	-	X	N	-	X
8A	6X60	0	2-4-2	-	8	Yes	-	-	-	N	-	X
8B	6X60	0	2-4-2	-	8	Yes	-	-	-	N	-	X

2 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.
- Reposition existing signal heads numbered 22, 23, 62, and 63.
- 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.
- Remove existing Left Arrow "ONLY" Signs-(R3-5L).
- 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.
- Disconnect and abandon existing loops 2B and 6B.
- 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.
- Existing signal heads 21, 22, 61, and 62 have been relabeled to 22, 23, 62, and 63, respectively.
- All proposed pedestrian signal heads shall be black in color. See Project Special Provisions for details.
- City system data: Controller Asset #0276.

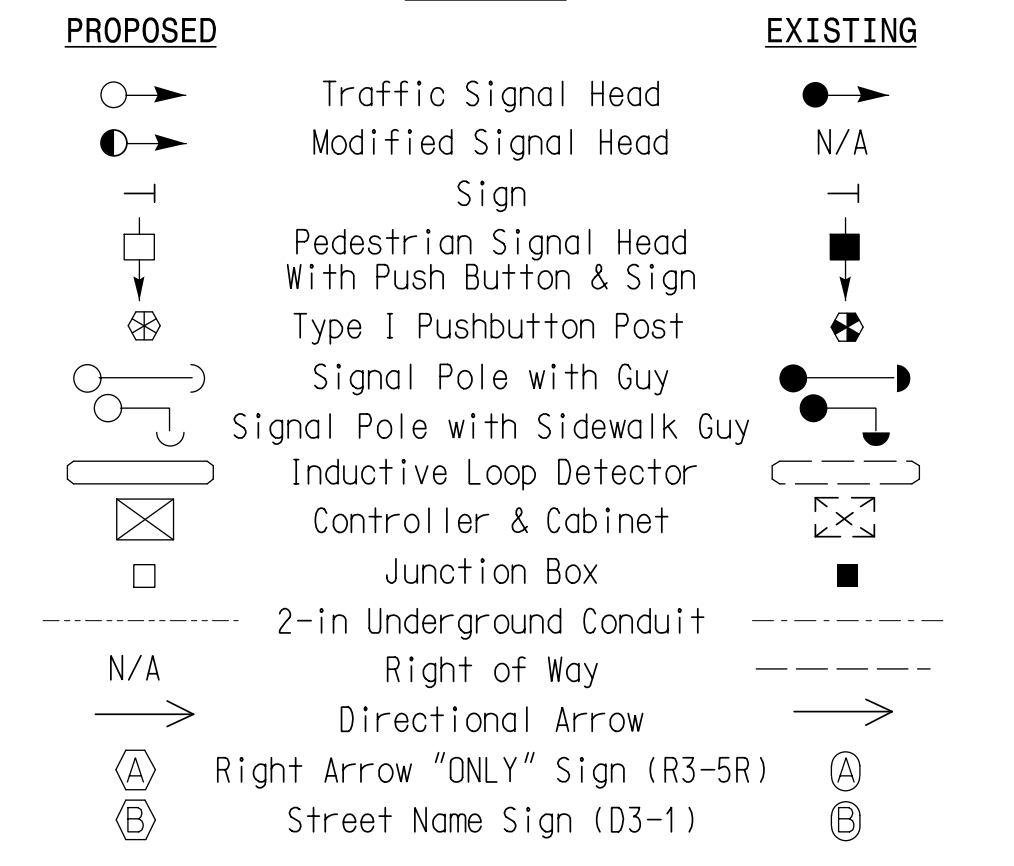


TIMING CHART

FEATURE	PHASE			
	2	4	6	8
Min Green *	12	7	12	7
Walk *	-	-	7	7
Ped Clear	-	-	11	20
Veh. Extension *	6.0	2.0	6.0	1.0
Max I *	60	20	60	20
Yellow	4.8	3.2	4.8	3.2
Red Clear	2.3	3.5	2.3	3.5
Red Revert	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

* 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

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

SR 2466 (Garrison Boulevard) at Churchill Drive

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: 0 40
1" = 40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DocuSigned by:
Kevin P. Baumann
3/11/2022
DATE

SIG. INVENTORY NO. 12-0276

3/9/2022 11:16:19 AM DanHelleCurri ***K:\meyer-horn.com\SE_RAL\MRAL_T\TDK-LTS\011036569_Gastonia Signal System\Signal\SW4 - Signal Design\120216-2021.dgn