

PHASING DIAGRAM

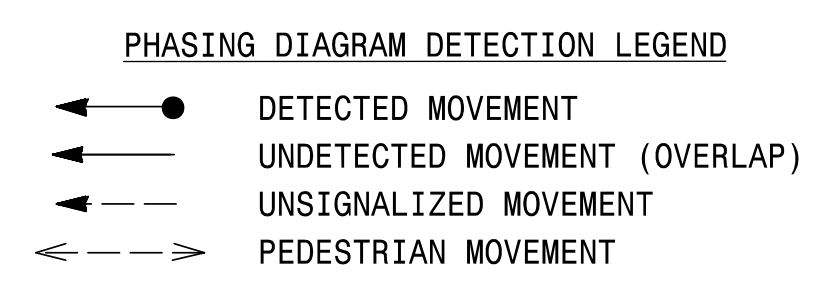
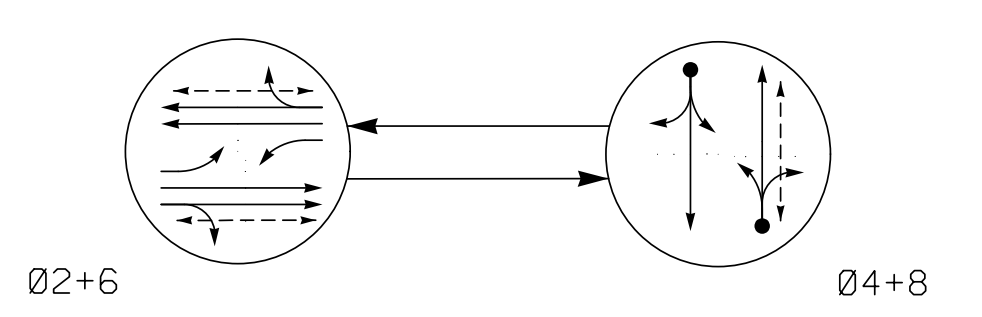


TABLE OF OPERATION

SIGNAL FACE	PHASE		
	Ø2+6	Ø4+8	Ø4+8
21	F	R	Y
22, 23	G	R	Y
41, 42	R	G	R
61	F	R	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

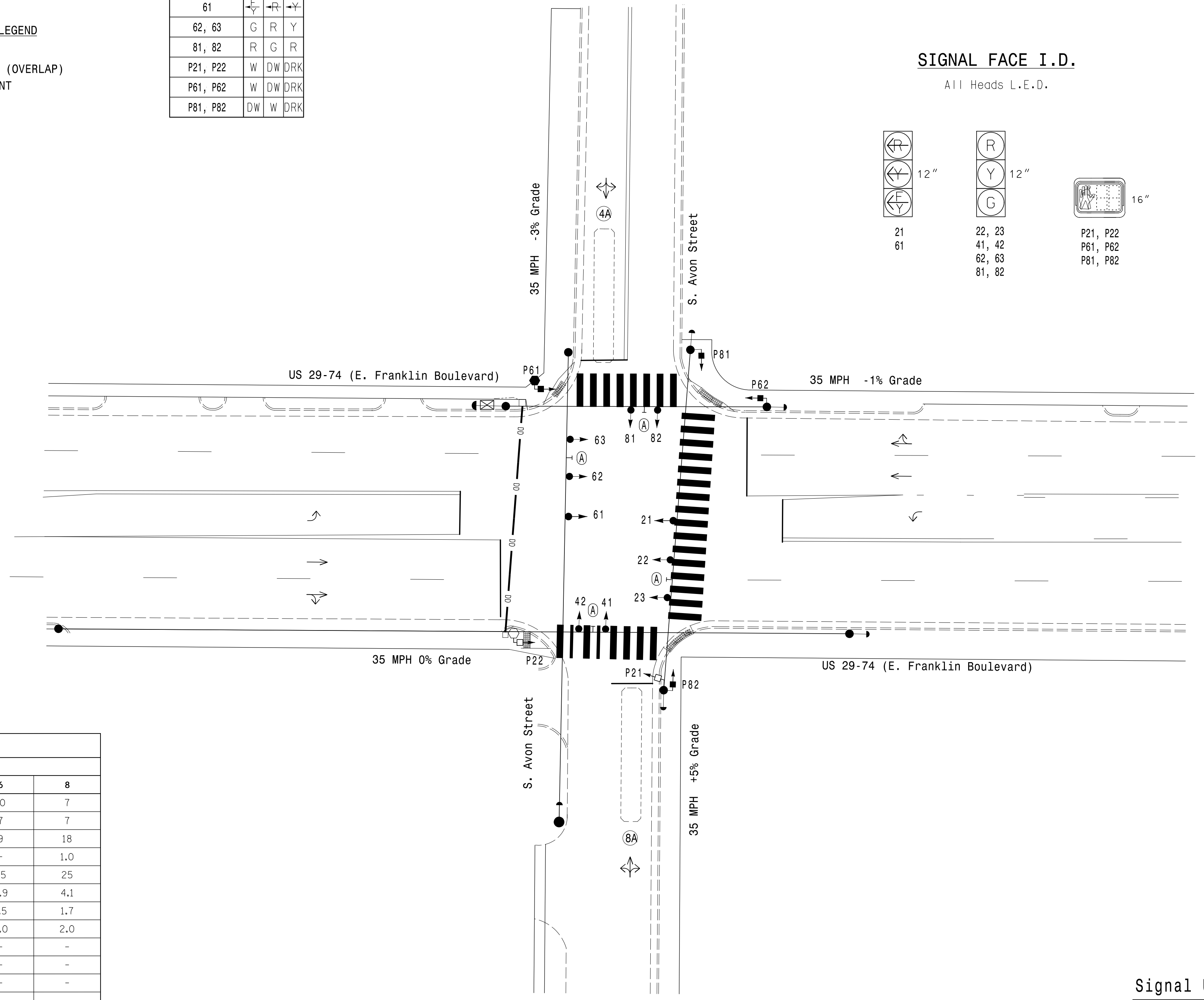
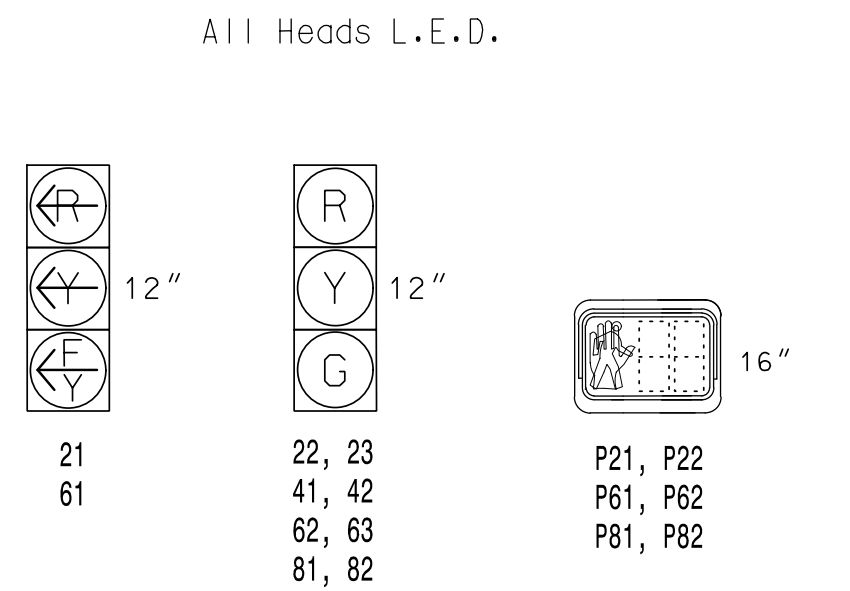
DETECTOR INSTALLATION CHART

DETECTOR				PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
4A	6X40	0	EXIST	-	4	Yes	-	5	-	N	X
8A	6X40	0	EXIST	-	8	Yes	-	5	-	N	X

2 Phase Semi-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.
- Set all detector units to presence mode.
- 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 on pedestrian phase 8.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- Loop data based on previous plan and/or field observations.
- 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.
- Pavement markings are existing.
- All proposed pedestrian signal heads shall be black in color. See Project Special Provisions for details.
- All proposed pedestrian pedestals and pushbutton posts shall be black in color. See Project Special Provisions for details.
- City system data:
Controller Asset #0044

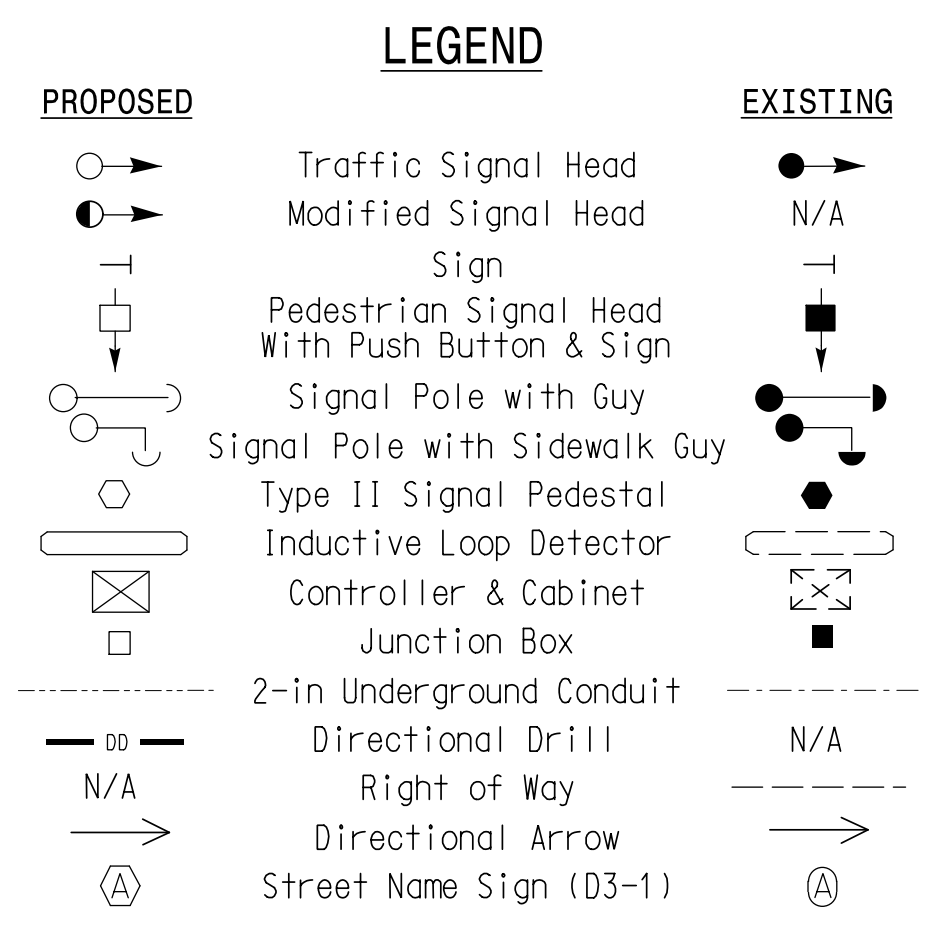
SIGNAL FACE I.D.



TIMING CHART

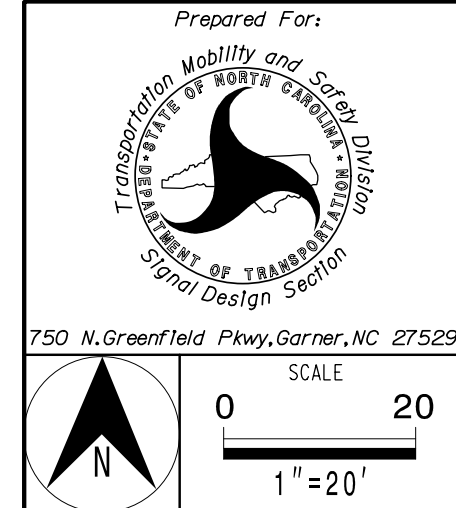
FEATURE	PHASE			
	2	4	6	8
Min Green *	10	7	10	7
Walk *	7	-	7	7
Ped Clear	8	-	9	18
Veh. Extension *	-	1.0	-	1.0
Max I *	45	25	45	25
Yellow	3.9	4.1	3.9	4.1
Red Clear	1.5	1.7	1.5	1.7
Red Revert	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-
Seconds /Actuation *	-	-	-	-
Max Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
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:
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Raleigh, NC 27601
(919) 677-2000



US 29-74 (E. Franklin Boulevard) at S. Avon 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

North Carolina Professional Engineer Seal for Kevin P. Baumann, License No. 044434.

3/11/2022

SIG. INVENTORY NO. 12-0044

3/9/2022 11:12:06 AM Don@le.curf1 ***kimley-horn.com\SELRAL\IP\OK-ITS\011036569 Gastonia Signal System\Signal Design\2004-2021.dgn