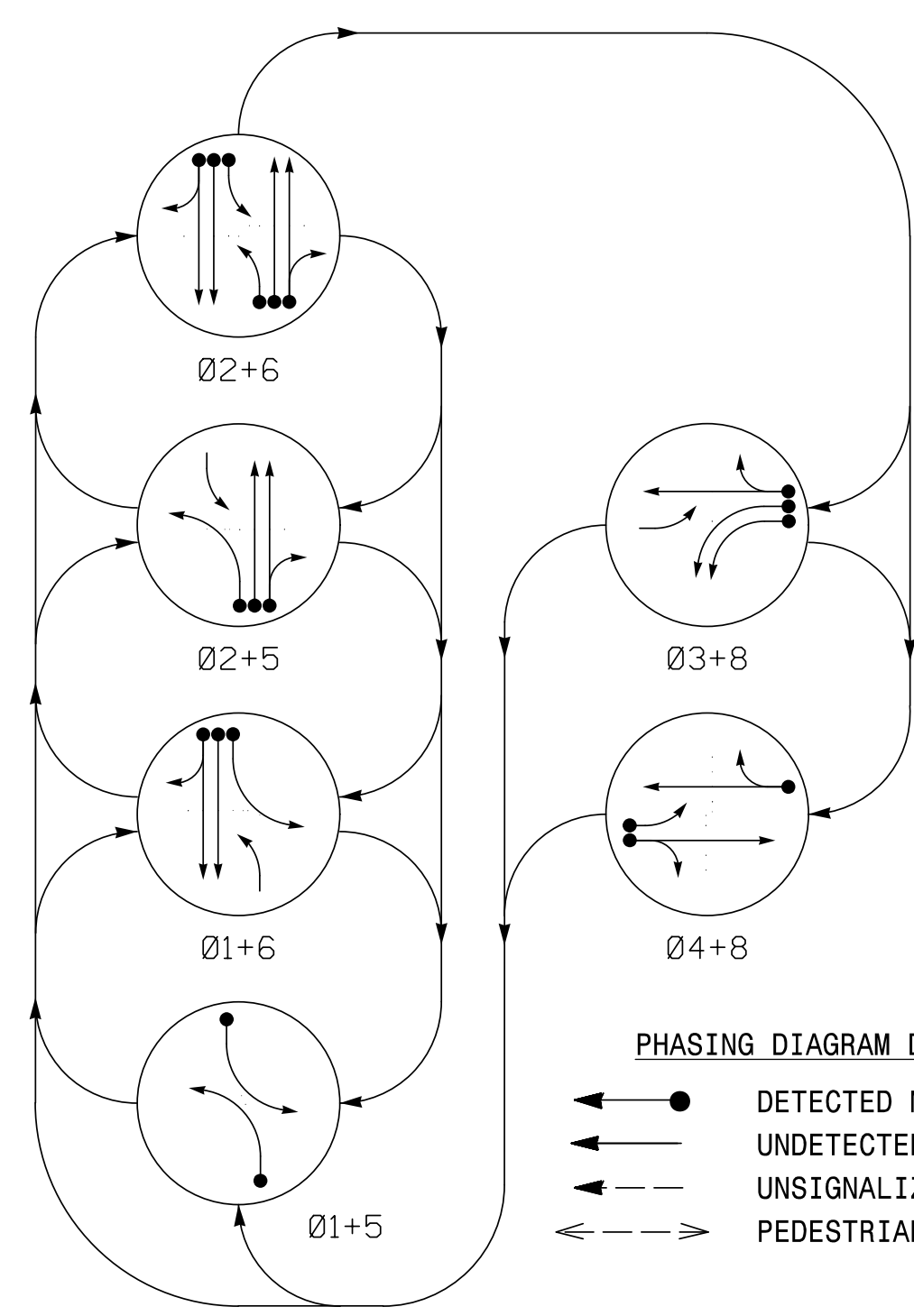


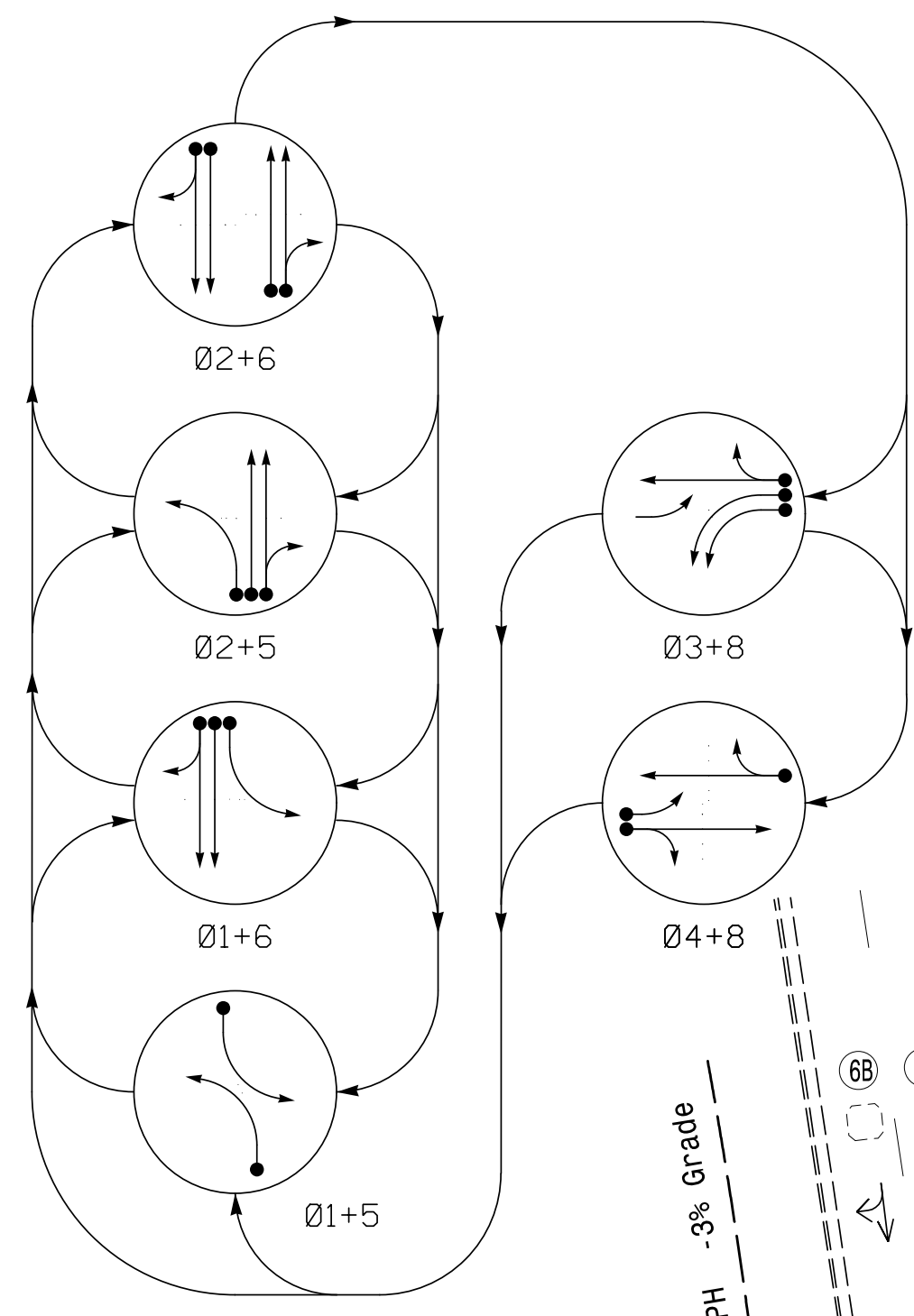
**DEFAULT PHASING DIAGRAM**



**DEFAULT PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3 + 8	Ø 4 + 8	F L T H S	Ø
11	←	←	←	←	←	←	←	←
21, 22	R	R	G	G	R	R	Y	
31, 32	←	←	←	←	←	←	←	←
41	←	←	←	←	←	←	←	←
42, 43	R	R	R	R	R	G	R	
51	←	←	←	←	←	←	←	←
61, 62	R	G	R	G	R	R	Y	
81, 82	R	R	R	R	G	G	R	

**ALTERNATIVE PHASING DIAGRAM**



**ALTERNATE PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3 + 8	Ø 4 + 8	F L T H S	Ø
11	←	←	←	←	←	←	←	←
21, 22	R	R	G	G	R	R	Y	
31, 32	←	←	←	←	←	←	←	←
41	←	←	←	←	←	←	←	←
42, 43	R	R	R	R	R	G	R	
51	←	←	←	←	←	←	←	←
61, 62	R	G	R	G	R	R	Y	
81, 82	R	R	R	R	G	G	R	

**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	-	15*	-	N	-	X
2A	6X6	70	EXIST	-	2	Yes	-	-	-	N	-	X
2B	6X6	70	EXIST	-	2	Yes	-	-	-	N	-	X
3A	6X40	0	2-4-2	-	3	Yes	-	3	-	N	-	X
3B	6X40	0	2-4-2	-	3	Yes	-	-	-	N	-	X
4A	6X40	0	2-4-2	-	4	Yes	-	3	-	N	-	X
4B	6X40	0	2-4-2	-	4	Yes	-	10	-	N	-	X
5A	6X40	0	2-4-2	-	5	Yes	-	15*	-	N	-	X
6A	6X6	70	EXIST	-	6	Yes	-	-	-	N	-	X
6B	6X6	70	EXIST	-	6	Yes	-	-	-	N	-	X
8A	6X40	0	2-4-2	-	8	Yes	-	10	-	N	-	X

\* Reduce Delay to 3 seconds during Alternate Phasing Operation.  
# Disable Phase call for loop during Alternate Phasing operation.

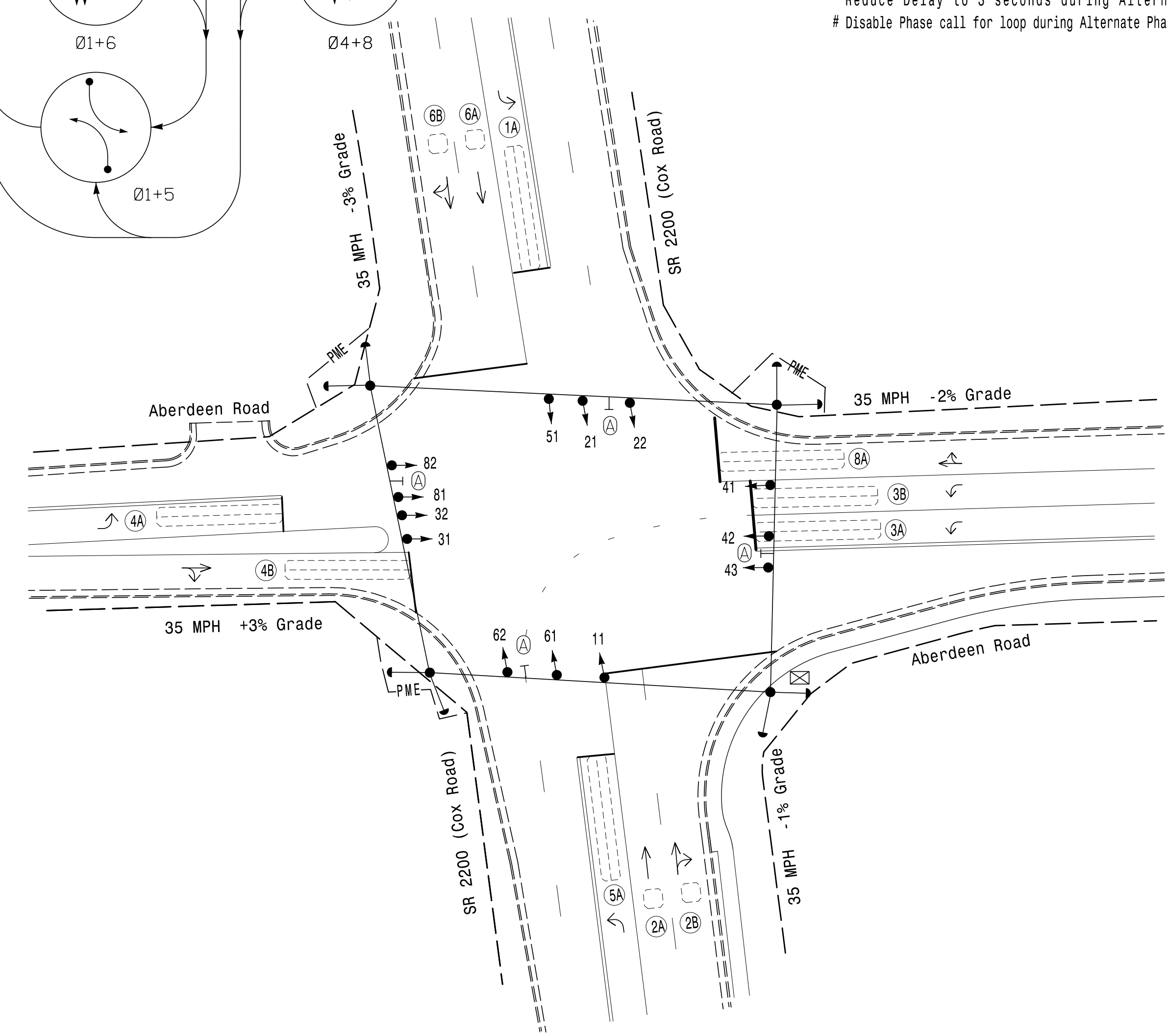
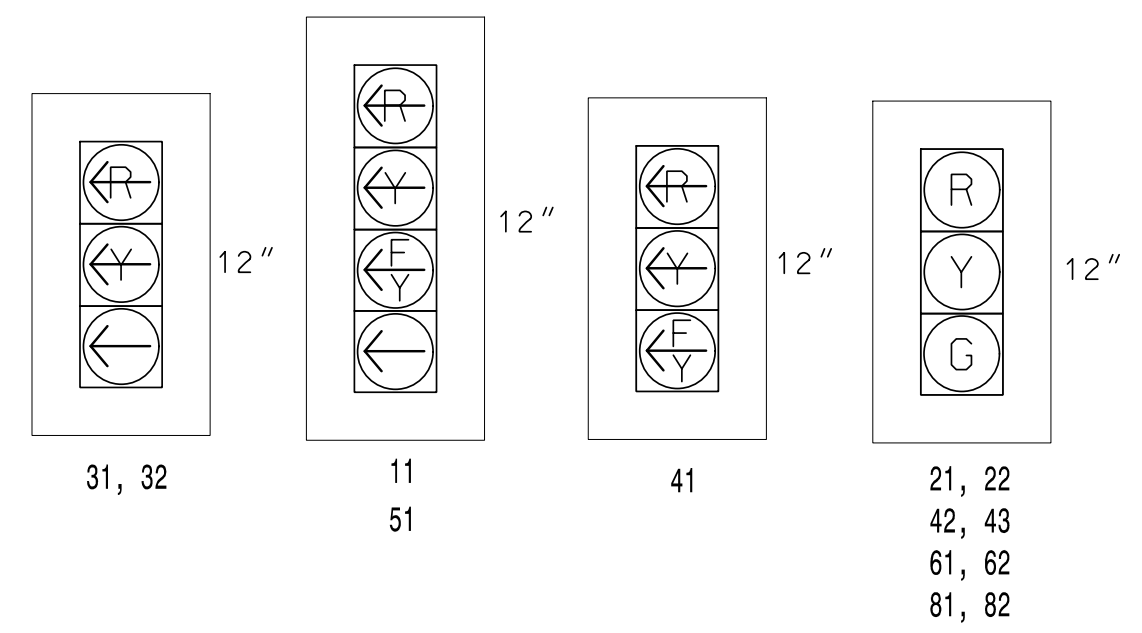
**6 Phase Fully Actuated w/ Alternate Phasing Operation Gastonia Signal System**

**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 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- The City Engineer or their representative will determine the hours of use for each phasing plan.
- 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 system data:  
Controller Asset #1282.

**SIGNAL FACE I.D.**

All Heads L.E.D.  
Backplates with reflective borders

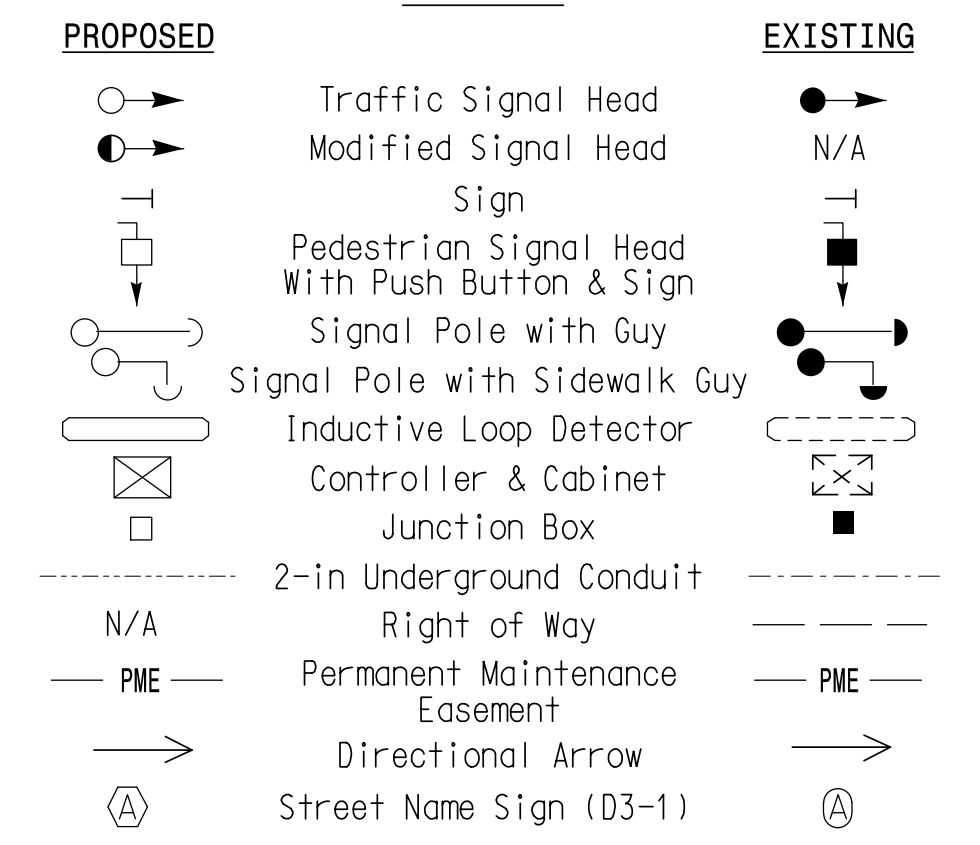


**TIMING CHART**

FEATURE	PHASE							
	1	2	3	4	5	6	8	
Min Green *	7	10	7	7	7	10	7	
Walk *	-	-	-	-	-	-	-	
Ped Clear	-	-	-	-	-	-	-	
Veh. Extension *	2.0	3.0	2.0	2.0	2.0	3.0	2.0	
Max 1 *	25	45	25	25	15	45	25	
Yellow	3.0	4.1	3.0	4.0	3.0	4.1	4.0	
Red Clear	3.3	2.4	2.9	2.6	3.3	2.4	2.6	
Red Revert	2.0	2.0	2.0	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	-	X	-	-	-	X	-	
Recall Position	-	MIN RECALL	-	-	-	MIN RECALL	-	
Dual Entry	-	-	-	X	-	-	-	
Simultaneous Gap	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**

Prepared For:  
**Kimley-Horn**  
750 N. Greenfield Pkwy, Garner, NC 27529  
NC License #0102  
421 Fayetteville Street, Suite 600  
Raleigh, NC 27601  
(919) 677-2000

**SR 2200 (Cox Road) at Aberdeen Road**

Division 12 Gaston County Gastonia

PLAN DATE: January 2022 REVIEWED BY: SL Phillips  
PREPARED BY: SP Pennington REVIEWED BY: KP Baumann

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Discussed by: *[Signature]* 3/11/2022  
DATE

SIG. INVENTORY NO. 12-1282

3/9/2022 11:17:13 AM Dantellb.Curr1 \*\*\*Imley-Horn.comSE\_RAL\MRAL\_TPIDL\_TIS01036569\_Gastonia Signal System9\_Signal.kws4 - Signal Design\121282-2021.dgn