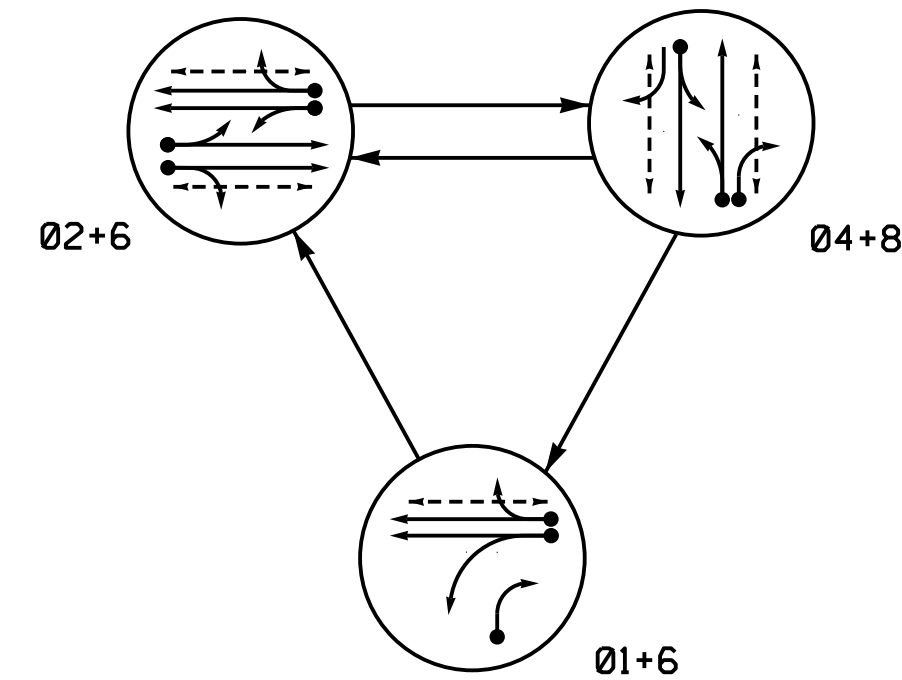


PHASING DIAGRAM

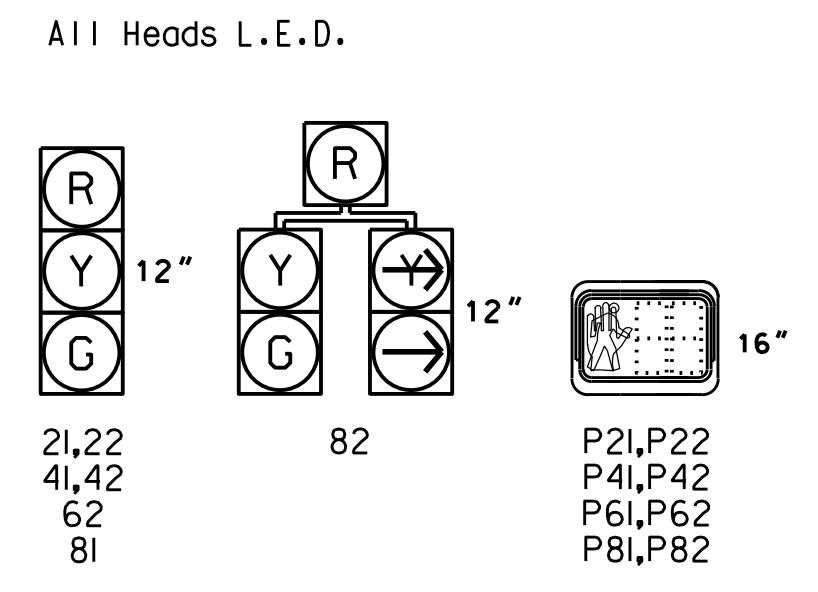


PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- ←---→ UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE			
	01+6	02+6	04+8	FLASH
21,22	R	G	R	Y
41,42	R	R	G	R
61	G	G	R	Y
62	G	G	R	Y
81	R	R	G	R
82	R	R	G	R
P21,P22	DW	W	DW	DRK
P41,P42	DW	DW	W	DRK
P61,P62	W	W	DW	DRK
P81,P82	DW	DW	W	DRK

SIGNAL FACE I.D.

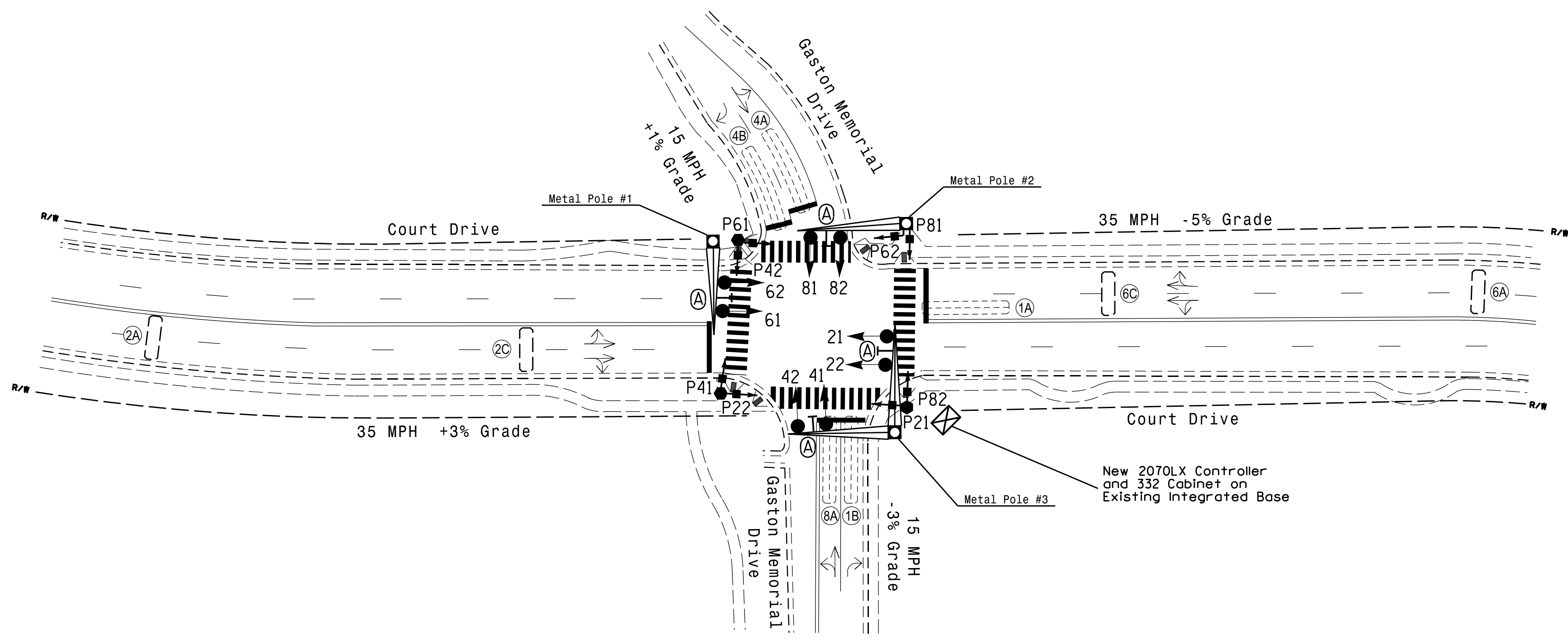


DETECTOR INSTALLATION CHART											
DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	SYSTEM LOOP	NEW CARD
1A	6X40	+2	2-4-2	-	1	Yes	-	10	-	-	X
1B	6X40	+2	2-4-2	-	1	Yes	-	10	-	-	X
2A	6X20	250	3	-	2	Yes	1.9	-	-	-	X
2C	6X20	80	3	-	2	Yes	-	-	-	-	X
4A	6X40	+2	2-4-2	-	4	Yes	-	3	-	-	X
4B	6X40	+2	2-4-2	-	4	Yes	-	10	-	-	X
6A	6X20	250	3	-	6	Yes	1.9	-	-	-	X
6C	6X20	80	3	-	6	Yes	-	-	-	-	X
8A	6X40	+2	2-4-2	-	8	Yes	-	3	-	-	X

3 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.
- Omit phase 1 during phase 2 on.
- Program controller to clear from phase 2+6 to phase 1 by progressing through phases 4+8 (see Electrical Details).
- Existing phase 4 has been changed to phase 8 on this plan. Change all signal heads, pedestrian signal heads, pedestrian pushbuttons, and loops as needed to achieve the phasing shown.
- 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.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing unless otherwise noted.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- All cabinets and base extenders shall be black in color. See Project Special Provisions for details.
- City system data:
Controller Asset #0014.



FEATURE	PHASE				
	1	2	4	6	8
Min Green *	7	12	7	12	7
Walk *	0	4	4	4	4
Ped Clear	0	13	12	9	12
Veh. Extension *	1.0	3.0	2.0	3.0	2.0
Max I *	20	45	25	45	25
Yellow	3.1	3.7	3.0	4.2	3.0
Red Clear	2.4	1.8	3.5	1.7	3.5
Red Revert	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	-	VEH. RECALL	-	VEH. RECALL	-
Dual Entry	-	-	X	-	X
Simultaneous Gap	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

- | PROPOSED | EXISTING |
|--|----------|
| ○→ Traffic Signal Head | ●→ N/A |
| ●→ Modified Signal Head | N/A |
| ⊥ Sign | ⊥ |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ |
| ⊥ Metal Pole with Mastarm | ⊥ |
| ○ Type II Signal Pedestal | ● |
| ⊗ Inductive Loop Detector | ⊗ |
| ⊠ Controller & Cabinet | ⊠ |
| □ Junction Box | □ |
| --- 2-in Underground Conduit | --- |
| N/A Right of Way | --- |
| → Directional Arrow | → |
| N/A Curb Ramp | ▲ |
| Ⓐ Street Name Sign | Ⓐ |

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of: NC FIRM LICENSE No: P-0339 320 Executive Court Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX)	Prepared For: Great Place. Great People. Great Promise. 181 S. South St. Gastonia, NC 28052	Court Drive at Gaston Memorial Drive Division 12 Gaston County Gastonia PLAN DATE: May 2021 REVIEWED BY: J. Smith PREPARED BY: W. Parker REVIEWED BY: E. Sirgany REVISIONS: INIT. DATE	SEAL Edward W. Sirgany DATE: 2/11/2022 SIG. INVENTORY NO. City-14
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