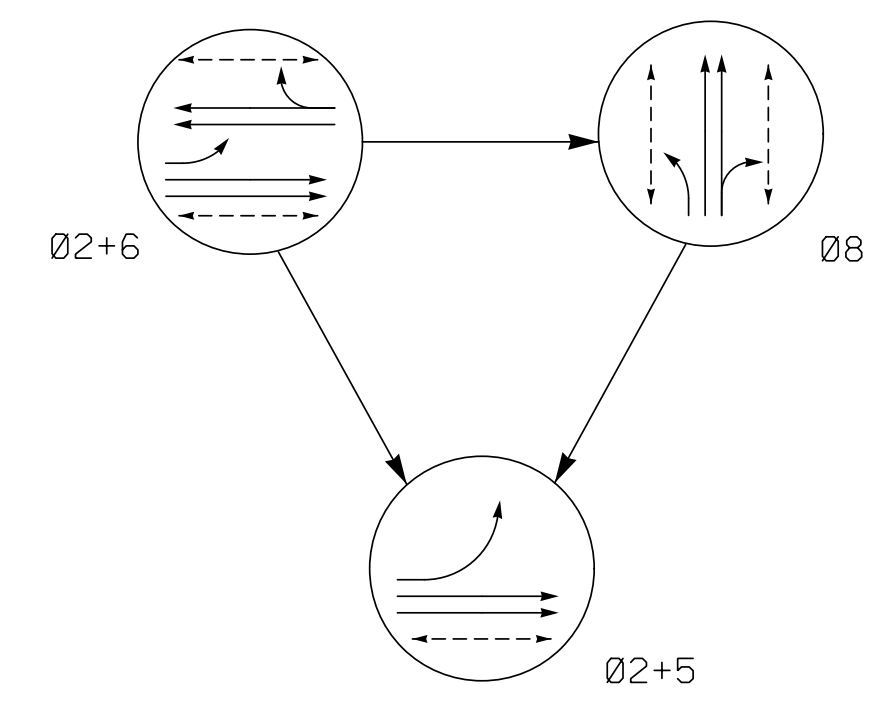


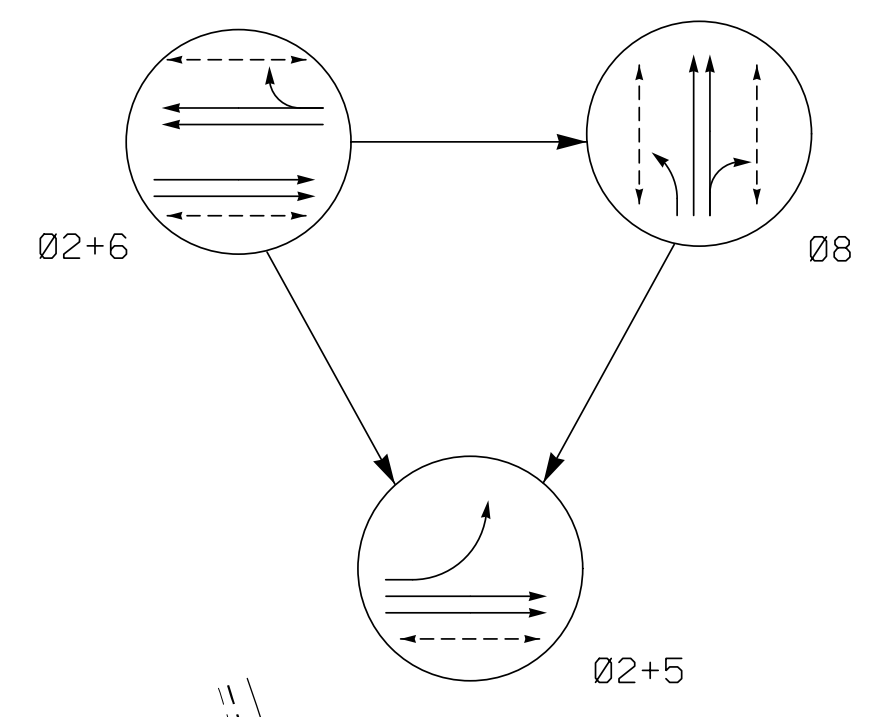
**DEFAULT PHASING DIAGRAM**



**DEFAULT PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	Ø2+5	Ø2+6	Ø8	FLASH
21,22	↑	↑	R	Y
51	←	←	←	←
61,62,63	R	G	R	Y
81,82,83	R	R	G	R
P21,P22	W	W	DW	DRK
P61,P62	DW	W	DW	DRK
P81,P82 P83,P84	DW	DW	W	DRK

**ALTERNATE PHASING DIAGRAM**



**ALTERNATE PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	Ø2+5	Ø2+6	Ø8	FLASH
21,22	↑	↑	R	Y
51	←	←	←	←
61,62,63	R	G	R	Y
81,82,83	R	R	G	R
P21,P22	W	W	DW	DRK
P61,P62	DW	W	DW	DRK
P81,P82 P83,P84	DW	DW	W	DRK

**3 Phase Pre-Timed 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 5 may be lagged.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- Install backplate with reflective border on signal head 63.
- 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.
- Existing phase 4 has been changed to phase 8 on this plan. Change all signal heads, pedestrian signal heads, pedestrian push buttons, and loops as needed to achieve the phasing shown.
- All new cabinets and base extenders shall be black in color. See Project Special Provisions for details.
- City of system data: Controller Asset #0925.

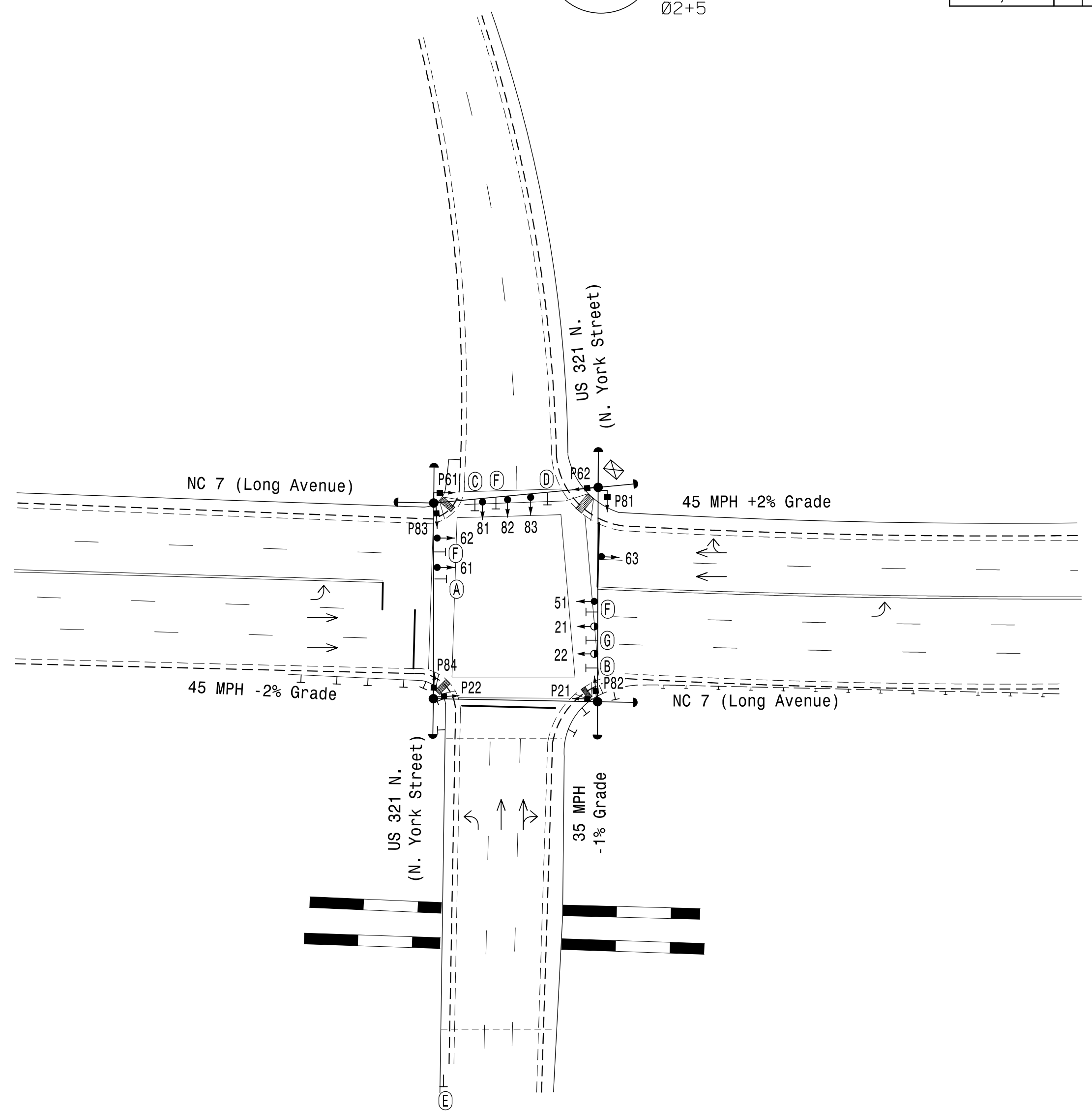
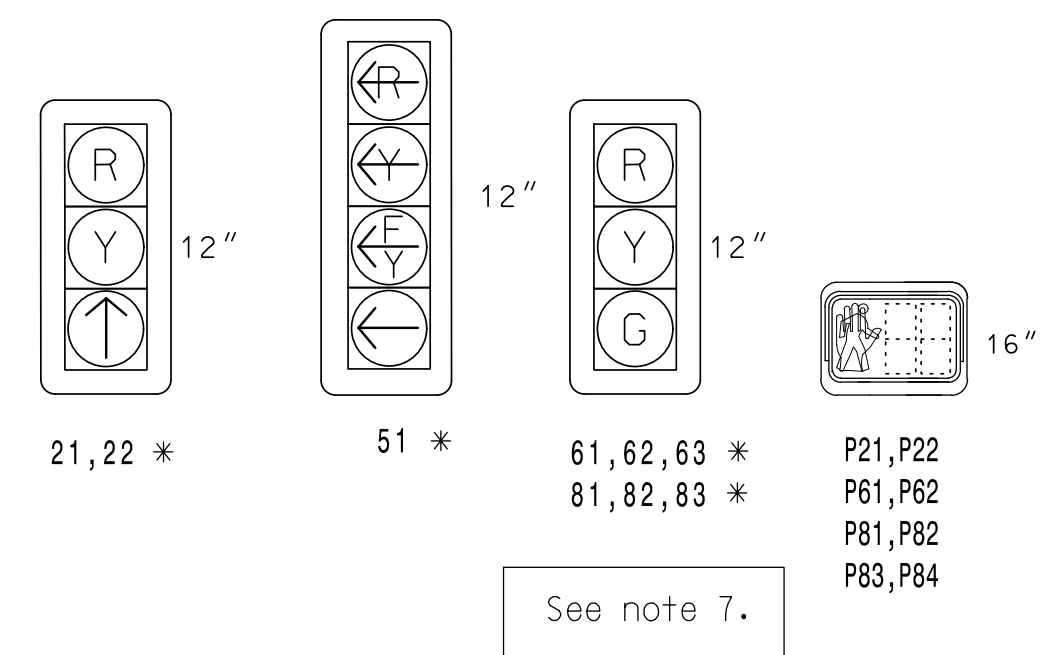
**PHASING DIAGRAM DETECTION LEGEND**

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

**SIGNAL FACE I.D.**

All Heads L.E.D.

\* Backplates with reflective borders



FEATURE	PHASE			
	2	5	6	8
Min Green *	12	7	12	7
Walk *	4	-	4	4
Ped Clear	14	-	12	19
Veh. Extension *	-	-	-	-
Max 1 *	45	15	45	30
Yellow	4.7	3.0	4.7	3.9
Red Clear	1.1	2.4	1.1	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	MAX RECALL	PED/MAX	PED/MAX
Dual Entry	-	-	-	-
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**

- | PROPOSED                                    | EXISTING                                    |
|---|---|
| ○→ Traffic Signal Head                      | ●→ N/A                                      |
| ○→ Modified Signal Head                     | ○→ N/A                                      |
| □→ Pedestrian Signal Head With Sign         | □→ N/A                                      |
| ○→ Signal Pole with Guy                     | ○→ N/A                                      |
| ○→ Signal Pole with Sidewalk Guy            | ○→ N/A                                      |
| □→ Inductive Loop Detector                  | □→ N/A                                      |
| □→ Controller & Cabinet                     | □→ N/A                                      |
| □→ Junction Box                             | □→ N/A                                      |
| --- 2-in Underground Conduit                | --- 2-in Underground Conduit                |
| N/A → Right of Way                          | N/A → Right of Way                          |
| N/A → Directional Arrow                     | N/A → Directional Arrow                     |
| N/A → Guardrail                             | N/A → Guardrail                             |
| (A) No Left Turn Sign (R3-2)                | (A) No Left Turn Sign (R3-2)                |
| (B) No Right Turn Sign (R3-1)               | (B) No Right Turn Sign (R3-1)               |
| (C) Left Arrow "ONLY" Sign (R3-5L)          | (C) Left Arrow "ONLY" Sign (R3-5L)          |
| (D) "NO TURN ON RED" Sign (R10-11)          | (D) "NO TURN ON RED" Sign (R10-11)          |
| (E) "LEFT LANE MUST TURN LEFT" Sign (R3-71) | (E) "LEFT LANE MUST TURN LEFT" Sign (R3-71) |
| (F) Street Name Sign (D3-1)                 | (F) Street Name Sign (D3-1)                 |
| (G) One Way Sign (R6-1)                     | (G) One Way Sign (R6-1)                     |

**Signal Upgrade**

**US 321 N. (N. York Street) at NC 7 (Long Avenue)**

Division 12 Gaston County Gastonia

PLAN DATE: May 2021 REVIEWED BY: SL Phillips

PREPARED BY: CF Davis REVIEWED BY: KP Baumann

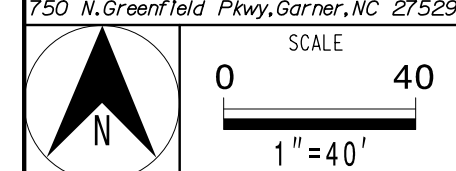
REVISIONS: \_\_\_\_\_

INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

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



3/9/2022 11:15:44 AM Dan.Hill@khor.com RAL:MRAL:JPD:K:ITS:001:036569 Gastonia Signal System9 Signal:SW54 - Signal Design:120925-2021.dgn