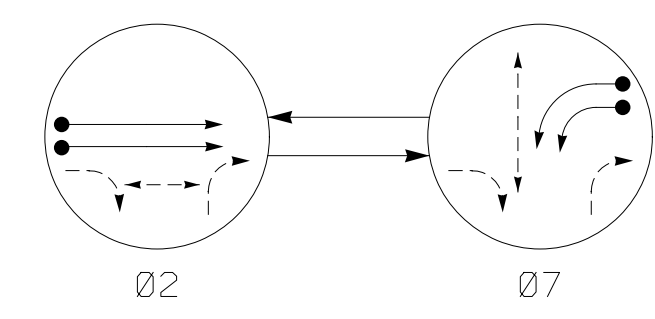


2 Phase Fully Actuated  
 NC 55 - Fuquay-Varina  
 Signal System #: D05-48\_Fuquay-Varina  
**NOTES**

**PHASING DIAGRAM**



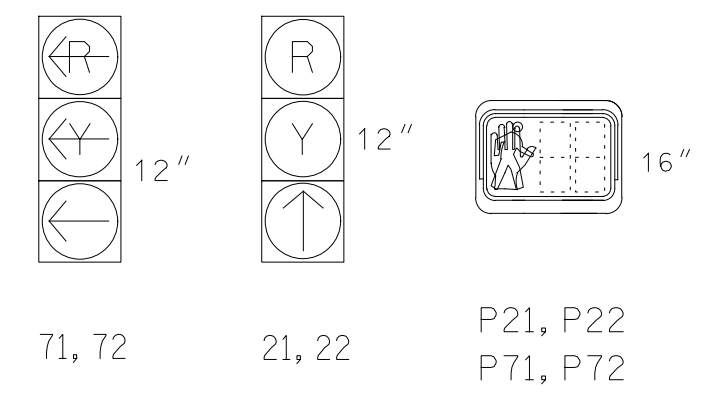
**PHASING DIAGRAM DETECTION LEGEND**

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- ←--- PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE		
	Ø 2	Ø 7	FLASH
21, 22	↑	R	Y
71, 72	←	→	→
P21, P22	W	DW	DRK
P71, P72	DW	W	DRK

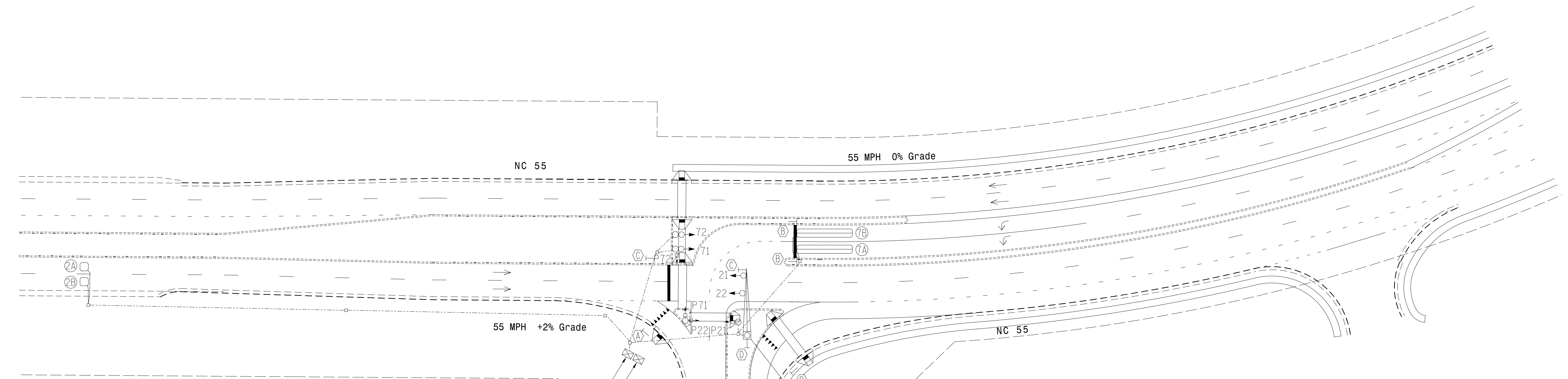
**SIGNAL FACE I.D.**  
 All Heads L.E.D.



**DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
2A	6X6	420	6	X	2	Yes	-	-	X	N	-	X
2B	6X6	420	6	X	2	Yes	-	-	X	N	-	X
7A	6X40	0	2-4-2	X	7	Yes	-	-	-	N	-	X
7B	6X40	0	2-4-2	X	7	Yes	-	-	-	N	-	X

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018 and all applicable sections of the latest version of the generic Project Special Provisions.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
5. Omit "Walk" and flashing "Don't Walk" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



**TIMING CHART**

FEATURE	PHASE	
	2	7
Min Green *	14	7
Walk *	7	7
Ped Clear	4	7
Veh. Extension *	6.0	2.0
Max I *	90	30
Yellow	5.0	3.0
Red Clear	1.0	3.1
Red Revert	2.0	2.0
Actuations B4 Add *	-	-
Seconds /Actuation *	1.5	-
Max Initial *	46	-
Time Before Reduction *	15	-
Time To Reduce *	50	-
Minimum Gap	3.4	-
Locking Detector	X	-
Recall Position	VEH RECALL	-
Dual Entry	-	-
Simultaneous Gap	X	X

\* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 2 lower than what is shown. Min Green for phase 7 should not be lower than 4 seconds.

**LEGEND**

PROPOSED	EXISTING
○ → Traffic Signal Head	● → Traffic Signal Head
⊕ Metal Pole with Mastarm	⊕ Metal Pole with Mastarm
⊗ Type I Pushbutton Post	⊗ Type I Pushbutton Post
○ Type II Signal Pedestal	● Type II Signal Pedestal
⊥ Sign	⊥ Sign
⊠ Inductive Loop Detector	⊠ Inductive Loop Detector
⊠ Controller & Cabinet	⊠ Controller & Cabinet
--- 2-in Underground Conduit	--- 2-in Underground Conduit
N/A Right of Way	N/A Right of Way
→ Directional Arrow	→ Directional Arrow
▲ Curb Ramp	▲ Curb Ramp
⊠ Directional Drill	N/A
(A) "Yield" Sign (R1-2)	(A) "Yield" Sign (R1-2)
(B) "Stop Here on Red" Sign (R10-6)	(B) "Stop Here on Red" Sign (R10-6)
(C) No Left Turn Sign (R3-2)	(C) No Left Turn Sign (R3-2)
(D) Pedestrian Warning Sign (W11-2)	(D) Pedestrian Warning Sign (W11-2)
(D) w/ Diagonal Downward Arrow Plaque (W16-7P)	(D) w/ Diagonal Downward Arrow Plaque (W16-7P)

**New Installation**

Prepared for the Office of:  
  
 VHB Engineering NC, P.C. (C-3705)  
 940 Main Campus Drive, Suite 500  
 Raleigh, NC 27606  
 919.829.0328

**NC 55 WB at NC 55 Business**

Division 5 Wake County Fuquay-Varina  
 PLAN DATE: July 2022 REVIEWED BY: J.L. Lewis  
 PREPARED BY: M.L. Stygles REVIEWED BY: J. Ma  
 REVISIONS: INIT. DATE

SCALE: 1" = 40'

7/11/2022  
 2:05:16:27  
 ms+ylg

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

SEAL  
  
 Matthew L. Stygles  
 ENGINEER  
 STATE OF NORTH CAROLINA  
 License No. 046057

DocuSigned by:  
  
 MATTHEW L. STYGLES  
 DATE: 7/11/2022  
 SIG. INVENTORY NO. 05-1627