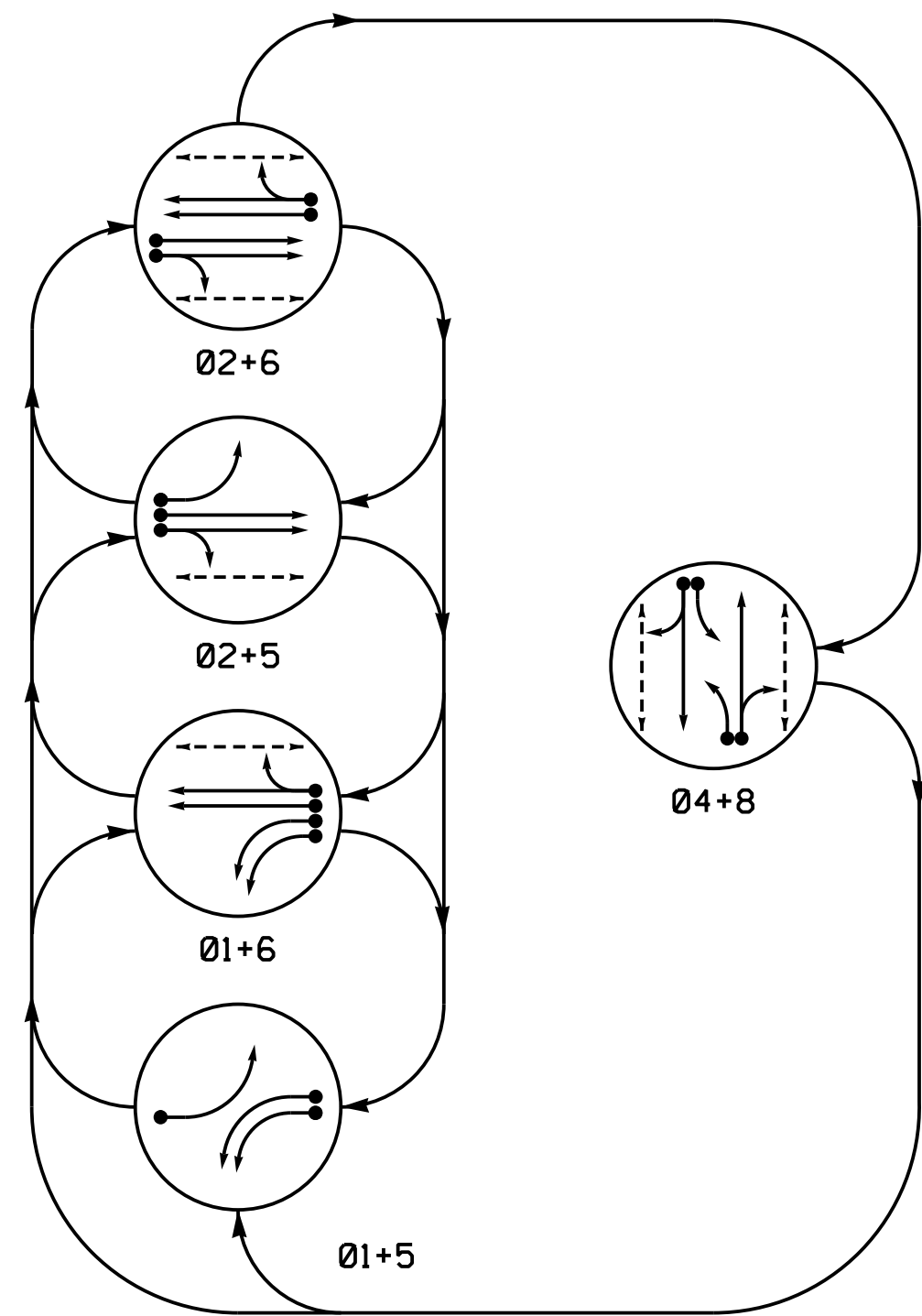


PHASING DIAGRAM



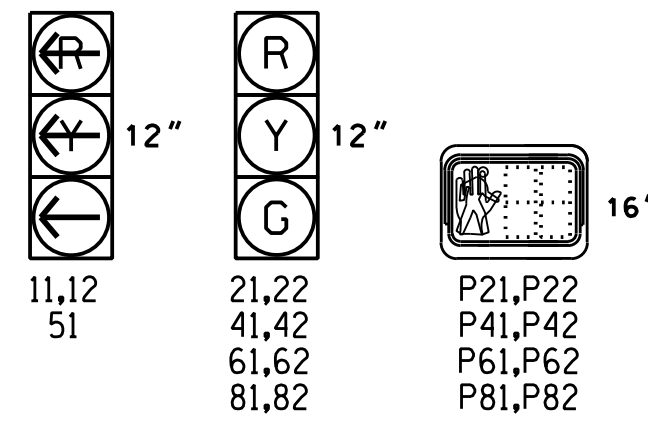
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE				
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4+8
11,12	---	---	---	---	---
21,22	R	R	G	G	R
41,42	R	R	R	R	G
51	---	---	---	---	---
61,62	R	G	R	G	R
81,82	R	R	R	R	G
P21,P22	DW	DW	W	W	DRK
P41,P42	DW	DW	DW	DW	DRK
P61,P62	DW	W	DW	W	DRK
P81,P82	DW	DW	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.

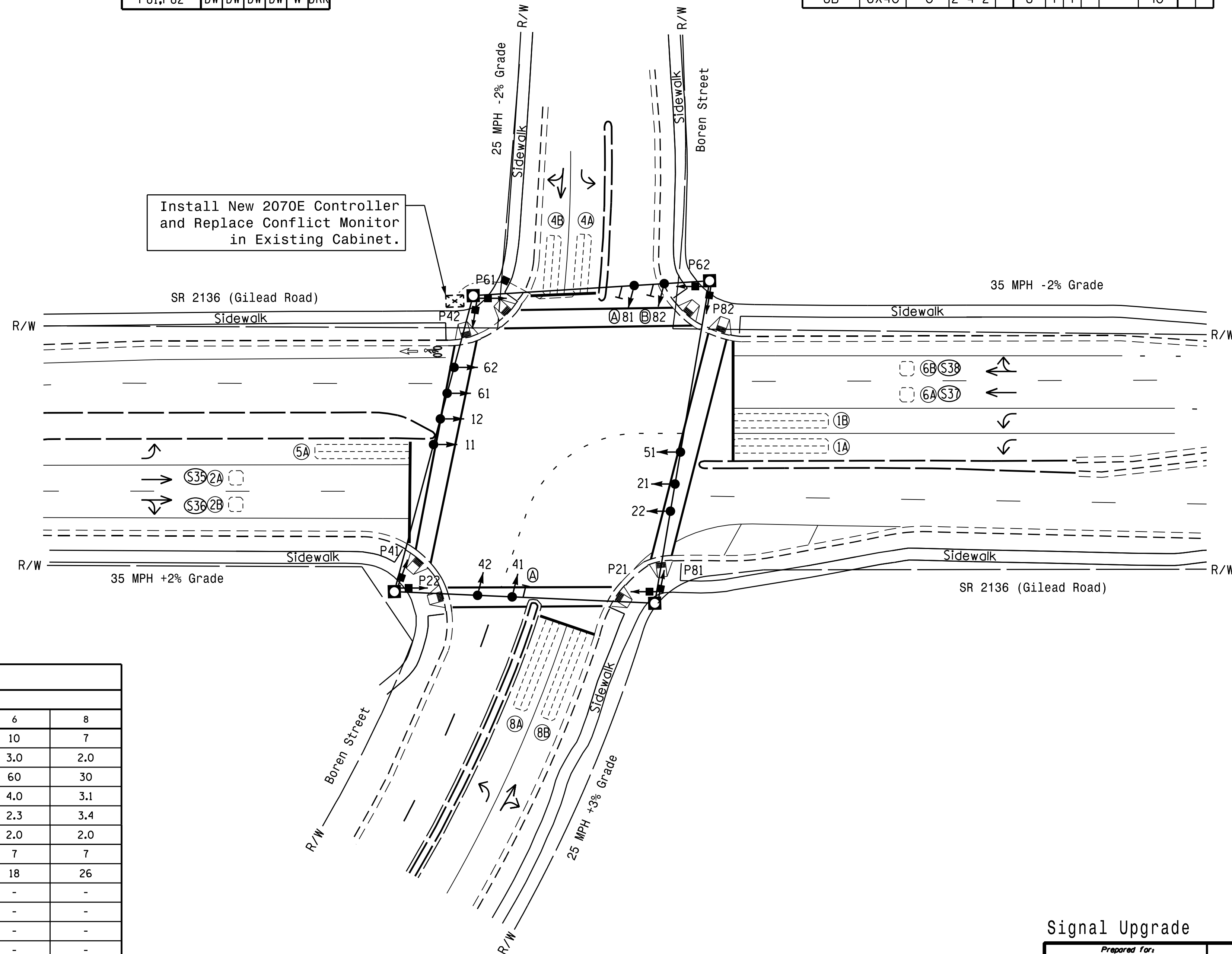


INDUCTIVE LOOPS				DETECTOR PROGRAMMING								
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	-	-	-
1B	6X40	0	2-4-2	-	1	Y	Y	-	-	-	-	-
2A/S35	6X6	70	5	-	2	Y	Y	-	-	-	-	Y
2B/S36	6X6	70	5	-	2	Y	Y	-	-	-	-	Y
4A	6X25	0	2-4-2	-	4	Y	Y	-	-	-	-	-
4B	6X25	0	2-4-2	-	4	Y	Y	-	-	10	-	-
5A	6X40	0	2-4-2	-	5	Y	Y	-	-	-	-	-
6A/S37	6X6	70	5	-	6	Y	Y	-	-	-	-	Y
6B/S38	6X6	70	5	-	6	Y	Y	-	-	-	-	Y
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	-	-	-
8B	6X40	0	2-4-2	-	8	Y	Y	-	-	10	-	-

5 Phase Fully Actuated Gilead Road Closed Loop 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.
- Set all detector units to presence mode.
- 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #1950.



FEATURE	PHASE					
	1	2	4	5	6	8
Min Green 1 *	7	10	7	7	10	7
Extension 1 *	2.0	3.0	3.0	2.0	3.0	2.0
Max Green 1 *	20	60	30	20	60	30
Yellow Clearance	3.0	3.7	3.3	3.0	4.0	3.1
Red Clearance	3.7	2.2	3.3	3.3	2.3	3.4
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	7	-	7	7
Don't Walk 1	-	17	25	-	18	26
Second Per Actuation *	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-
Dual Entry	-	-	ON	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON

* 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.

PROPOSED		EXISTING	
○→	Traffic Signal Head	●→	N/A
○→	Modified Signal Head	○→	N/A
○→	Sign	○→	N/A
○→	Pedestrian Signal Head With Push Button & 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	○→	N/A
○→	Right of Way	○→	N/A
○→	Directional Arrow	○→	N/A
○→	Metal Strain Pole	○→	N/A
○→	Wheelchair Ramp	○→	N/A
○→	Left Arrow "ONLY" Sign (R3-5L)	○→	N/A
○→	Combined Through and Right Arrow Sign (R3-6R)	○→	N/A

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	SR 2136 (Gilead Road) at Boren Street		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031464 M. TASHA R. SIMMONS
	Division 10 Mecklenburg Co., Huntersville PLAN DATE: December 2017 REVIEWED BY: A.D. Klinksiek PREPARED BY: J.T. Thibault REVIEWED BY: N.R. Simmons	REVISIONS: _____ INITI. _____ DATE _____ DocuSigned by: <i>M. Tasha R. Simmons</i> 4/23/2018 SIGNATURE DATE SIG. INVENTORY NO. 10-1950	

HNTB HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554
(919) 546-8997

