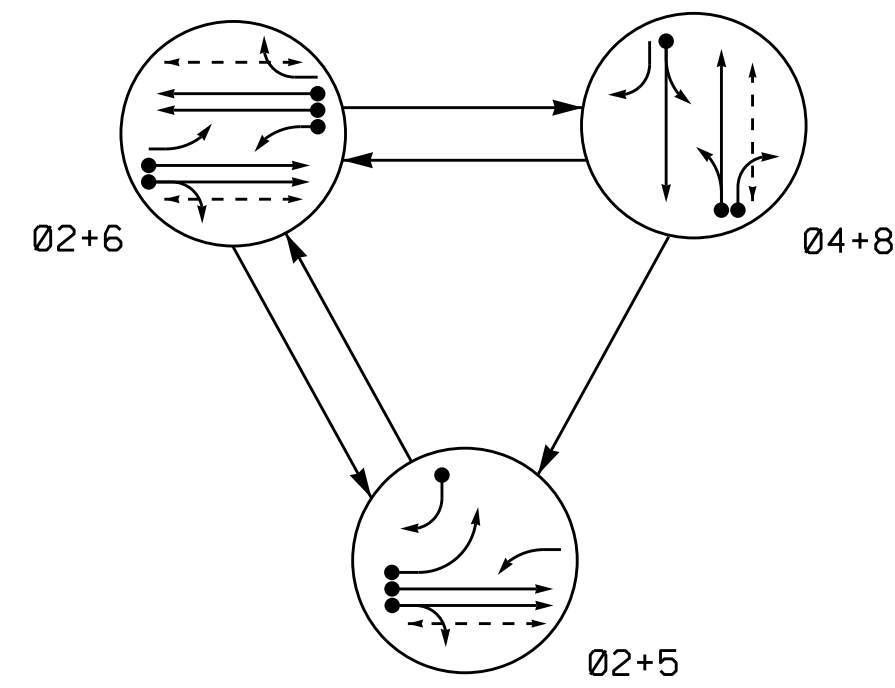


PHASING DIAGRAM



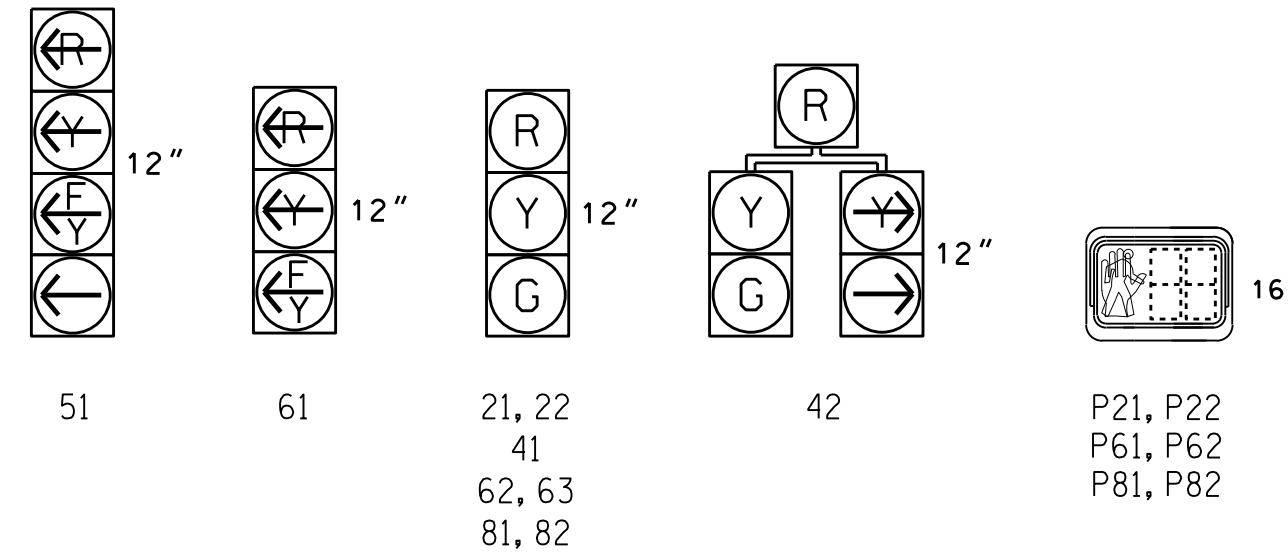
**PHASING DIAGRAM DETECTION LEGEND**  
 ● DETECTED MOVEMENT  
 ○ UNDETECTED MOVEMENT (OVERLAP)  
 - - - UNSIGNALIZED MOVEMENT  
 - - - PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE			
	02+5	02+6	04+8	FLASH
21, 22	G	G	R	Y
41	R	R	G	R
42	R	R	G	R
51	F	F	R	R
61	F	F	R	R
62, 63	R	G	R	Y
81, 82	R	R	G	R
P21, P22	W	W	DW	DRK
P61, P62	DW	W	DW	DRK
P81, P82	DW	DW	W	DRK

W - Walk  
 DW - Don't Walk  
 DRK - Dark

SIGNAL FACE I.D.

All Heads L.E.D.



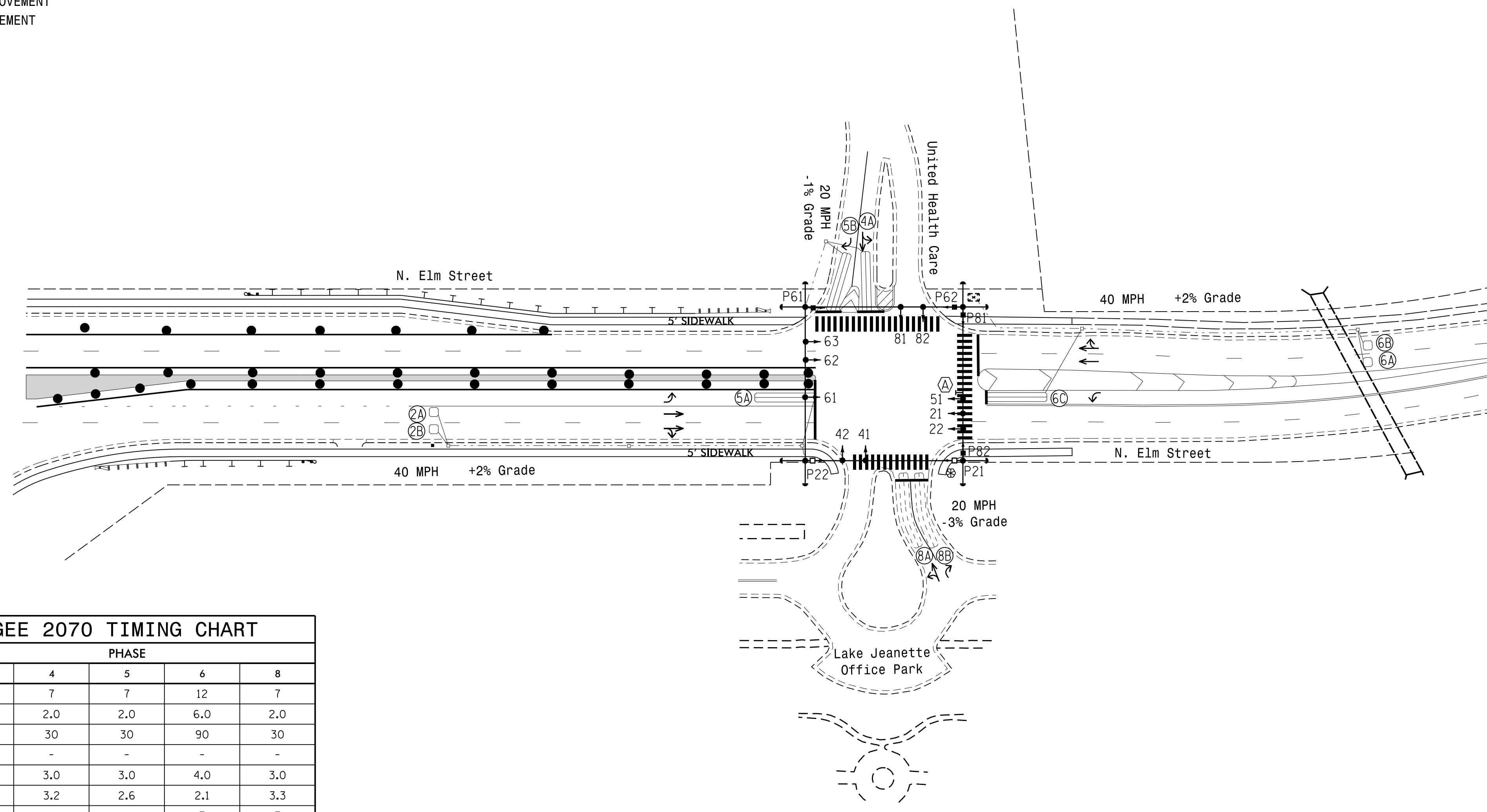
LOOP & DETECTOR UNIT INSTALLATION CHART  
 NAZTEC APOGEE SOFTWARE 2070 CONTROLLER

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING							
					PHASE	SWITCH (PHASE)	DELAY TIME	STRETCH TIME	CALLING	EXTENSION	ADDED INIT.	SYSTEM LOOP
2A	6X6	250	4	X	2	-	-	-	X	X	X	-
2B	6X6	250	4	X	2	-	-	-	X	X	X	-
4A	6X40	0	2-4-2	X	4	-	-	-	X	X	-	-
5A	6X40	0	2-4-2	X	5	-	15	-	X	X	-	-
5B	6X40	0	2-4-2	X	5	-	15	-	X	X	-	-
6A	6X6	250	4	X	6	-	-	-	X	X	X	-
6B	6X6	250	4	X	6	-	-	-	X	X	X	-
6C	6X40	0	2-4-2	X	6	-	-	-	X	X	-	-
8A	6X50	+5	2-4-2	-	8	-	-	-	X	X	-	-
8B	6X50	+5	2-4-2	-	8	-	10	-	X	X	-	-

3 Phase Fully Actuated (Greensboro 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.
- Reposition existing signal heads numbered 21, 22, 51, 61, 62, and 63.
- 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



NAZTEC APOGEE 2070 TIMING CHART

FEATURE	PHASE				
	2	4	5	6	8
Min Green *	12	7	7	12	7
Gap, Extension *	6.0	2.0	2.0	6.0	2.0
Maximum Green 1 *	90	30	30	90	30
Maximum Green 2 *	-	-	-	-	-
Yellow Clear	4.0	3.0	3.0	4.0	3.0
Red Clear	2.1	3.2	2.6	2.1	3.3
Walk *	7	-	-	7	7
Pedestrian Clear	11	-	-	25	18
Added Initial *	2.0	-	-	2.0	-
Maximum Initial *	29	-	-	29	-
Time Before Reduction *	15	-	-	15	-
Time To Reduce *	30	-	-	30	-
Minimum Gap	3.0	-	-	3.0	-
Recall Mode	MIN RECALL	-	-	MIN RECALL	-
Lock Calls	YES	NO	NO	YES	NO
Dual Entry	-	ON	-	-	ON
Simultaneous Gap	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	LEGEND	EXISTING
○	Traffic Signal Head	●
○	Modified Signal Head	N/A
○	Signal	○
○	Pedestrian Signal Head With Push Button & Sign	○
○	Signal Pole with Guy	○
○	Signal Pole with Sidewalk Guy	○
○	Inductive Loop Detector	○
○	Controller & Cabinet	○
○	Junction Box	○
○	2-in Underground Conduit	○
N/A	Right of Way	○
○	Directional Arrow	○
○	Type I Pushbutton Post	○
○	Construction Zone Drums	○
○	Construction Zone	○
N/A	Guardrail	○
○	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	○

Signal Upgrade  
 Temporary Design 3 (TMP Phase III)

	N. Elm Street at United Health Care and Lake Jeanette Office Park		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 026486 ROBERT J. ZIEBBA
	Division 7 Guilford County Greensboro	PLAN DATE: October 2017 REVIEWED BY:	
750 N. Greenfield Pkwy, Garner, NC 27529	SCALE 0 50 1" = 50'	REVISIONS INIT. DATE	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED DATE: 10/31/2017 SIG. INVENTORY NO. GB0-559T3

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