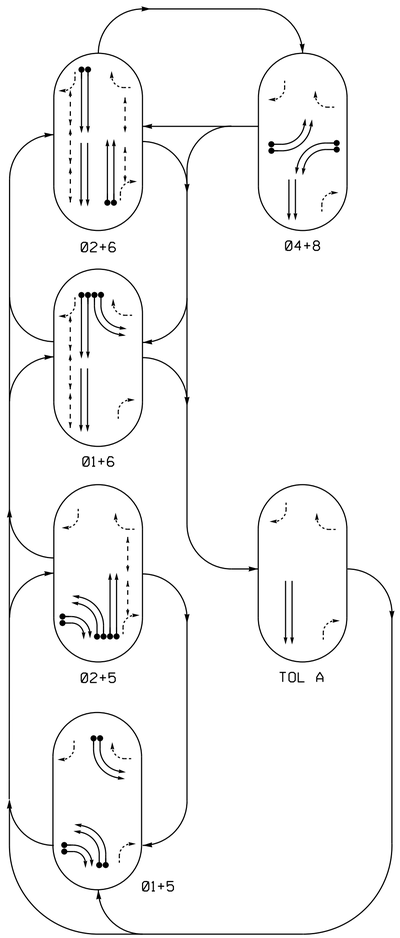
PROJECT REFERENCE NO.	SHEET NO.
U-2525C	Sig. 6.0

PHASING DIAGRAM



SIGNAL FACE I.D.

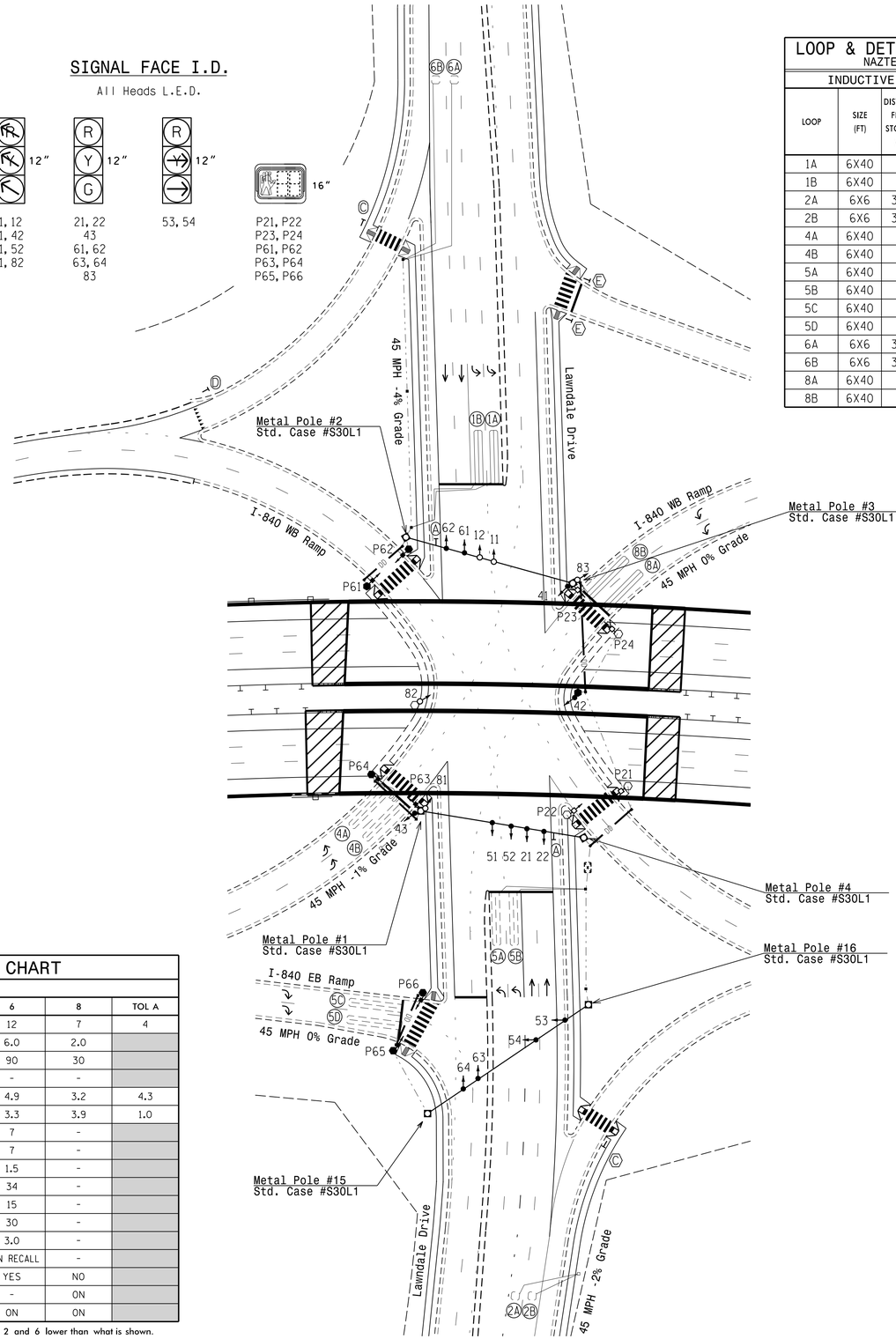
All Heads L.E.D.

11, 12
41, 42
51, 52
81, 82

21, 22
43
61, 62
63, 64
83

53, 54

P21, P22
P23, P24
P61, P62
P63, P64
P65, P66



LOOP & DETECTOR UNIT INSTALLATION CHART

NAZTEC APOGEE SOFTWARE 2070 CONTROLLER

INDUCTIVE LOOPS					DETECTOR PROGRAMMING								
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	SWITCH (PHASE)	DELAY TIME	STRETCH TIME	CALLING	EXTENSION	ADDED INIT.	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	X	1	-	-	-	X	X	-	-	X
1B	6X40	0	2-4-2	X	1	-	-	-	X	X	-	-	X
2A	6X6	300	5	-	2	-	-	-	X	X	X	-	-
2B	6X6	300	5	-	2	-	-	-	X	X	X	-	-
4A	6X40	0	2-4-2	-	4	-	-	-	X	X	-	-	-
4B	6X40	0	2-4-2	-	4	-	-	-	X	X	-	-	-
5A	6X40	0	2-4-2	-	5	-	-	-	X	X	-	-	-
5B	6X40	0	2-4-2	-	5	-	-	-	X	X	-	-	-
5C	6X40	0	2-4-2	-	5	-	15	-	X	X	-	-	-
5D	6X40	0	2-4-2	-	5	-	15	-	X	X	-	-	-
6A	6X6	300	5	-	6	-	-	-	X	X	X	-	-
6B	6X6	300	5	-	6	-	-	-	X	X	X	-	-
8A	6X40	0	2-4-2	X	8	-	-	-	X	X	-	-	X
8B	6X40	0	2-4-2	X	8	-	-	-	X	X	-	-	X

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	02+5	01+6	02+6	04+8	TOL A	FLASH
11, 12	↖	⚠	↖	⚠	⚠	⚠	⚠
21, 22	R	G	R	G	R	R	Y
41, 42	⚠	⚠	⚠	⚠	↖	⚠	⚠
43	R	R	R	R	G	R	R
51, 52	↖	↖	⚠	⚠	⚠	⚠	⚠
53, 54	→	→	R	R	R	R	R
61, 62	R	R	G	G	R	R	Y
63, 64	R	R	G	G	G	G	Y
81, 82	⚠	⚠	⚠	⚠	↖	⚠	⚠
83	R	R	R	R	G	R	R
P21, P22	DW	W	DW	W	DW	DW	DRK
P23, P24	DW	W	DW	W	DW	DW	DRK
P61, P62	DW	DW	W	W	DW	DW	DRK
P63, P64	DW	DW	W	W	DW	DW	DRK
P65, P66	DW	DW	W	W	DW	DW	DRK

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

5 Phase
Fully Actuated
(Greensboro Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or Phase 5 may be lagged.
4. Set all detector units to presence mode.
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. Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	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	
N/A	Guardrail	
N/A	Directional Drill	DD
	Metal Strain Pole	
N/A	Curb Ramp	
	Type II Signal Pedestal	
A	No Right Turn Sign (R3-1)	A
C	Pedestrian Crossing Sign (W11-2)	C
D	"YIELD" Sign (R1-2)	D
E	"STOP" Sign (R1-1)	E

NAZTEC APOGEE 2070 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8	TOL A
Min Green *	7	12	7	7	12	7	4
Gap, Extension *	2.0	6.0	2.0	2.0	6.0	2.0	
Maximum Green 1 *	15	90	30	15	90	30	
Maximum Green 2 *	-	-	-	-	-	-	
Yellow Clear	3.4	4.7	3.2	3.3	4.9	3.2	4.3
Red Clear	5.0	3.2	3.9	5.0	3.3	3.9	1.0
Walk *	-	7	-	-	7	-	
Pedestrian Clear	-	7	-	-	7	-	
Added Initial *	-	1.5	-	-	1.5	-	
Maximum Initial *	-	34	-	-	34	-	
Time Before Reduction *	-	15	-	-	15	-	
Time To Reduce *	-	30	-	-	30	-	
Minimum Gap	-	3.0	-	-	3.0	-	
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-	
Lock Calls	NO	YES	NO	NO	YES	NO	
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.

24-OCT-2017 13:10
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Users

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 1"=50' (0 – 50)

Lawndale Drive at I-840 Ramps

Division 7 Guilford County Greensboro

PLAN DATE: August 2017 REVIEWED BY:
PREPARED BY: I. O. Umozurike REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEGLER

DocuSigned by: 10/24/2017
SIGNATURE DATE

SIG. INVENTORY NO. 07-0535