PROJECT REFERENCE NO.	SHEET NO.
U-5758	Sig. 2.0

6 Phase
Fully Actuated
NC 42 (Salisbury St)/
US 220 Bus (Fayetteville St) CLS

DEFAULT PHASING DIAGRAM

ALTERNATE PHASING DIAGRAM

PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.

31	21	22	P21, P22
71		41, 42	P41, P42
		61, 62	P61, P62
		81, 82	P81, P82

This plan supersedes the plan signed and sealed on 5/30/16.

OASIS 2070L LOOP & DETECTOR INSTALLATION CHART

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
2A	6X6	70	4	Y	2	Y	Y	-	-	-	-	-
2B	6X6	70	4	Y	2	Y	Y	-	-	-	-	-
3A	6X40	0	2-4-2	Y	3	Y	Y	-	-	15 *	-	Y
					8 #	Y	Y	-	-	3	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	10	-	-
5A	6X15	50	4	Y	5	Y	Y	-	-	15	-	Y
6A	6X6	70	4	Y	6	Y	Y	-	-	-	-	-
6B	6X6	70	4	Y	6	Y	Y	-	-	-	-	-
7A	6X40	0	2-4-2	Y	7	Y	Y	-	-	15 *	-	Y
					4 #	Y	Y	-	-	3	-	Y
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	10	-	Y
S11	6X6	+125	4	-	-	-	-	-	-	-	Y	-
S12	6X6	+125	4	-	-	-	-	-	-	-	Y	-
S13	6X6	+135	4	-	-	-	-	-	-	-	Y	-
S14	6X6	+135	4	-	-	-	-	-	-	-	Y	-

* Disable Delay During Alternate Phasing Operation.
\# Disable Phase Call For Loop(s) During Alternate Phasing Operation.

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Enable Backup Protect for phase 2 to allow the controller to clear from phase 2+6 to phase 2+5 by progressing through an all red display.
4. Phase 3 and/or phase 7 may be lagged.
5. Renumber existing phase 3 as phase 8.
6. Reposition existing signal heads as necessary.
7. Set all detector units to presence mode.
8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
9. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
10. Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
11. The Division Traffic Engineer will determine the hours of use for each phasing plan.
12. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
13. Closed loop system data: Controller Asset #: 0125.

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	
N/A	Permanent Easement	PUE
	Directional Arrow	
	Type I Pushbutton Post	
	Type II Signal Pedestal	
N/A	Curb Ramp	

OASIS 2070 TIMING CHART

FEATURE	PHASE 2	3	4	5	6	7	8
Min Green 1 *	10	7	7	7	10	7	7
Extension 1 *	3.0	2.0	2.0	3.0	3.0	2.0	2.0
Max Green 1 *	60	20	20	20	60	20	20
Yellow Clearance	3.8	3.0	4.5	3.0	3.9	3.3	4.5
Red Clearance	1.7	2.6	2.4	2.3	1.6	2.8	2.4
Red Revert	5.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	7	-	7	-	7	-	7
Don't Walk 1	10	-	13	-	13	-	15
Seconds 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	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.

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 02+5	02+6	03+7	03+8	04+7	04+8	FLASH
21	G	G	R	R	R	R	Y
22	G	G	R	R	R	R	Y
31	R	R	←	←	F Y	F Y	R
41, 42	R	R	R	R	G	G	R
61, 62	R	G	R	R	R	R	Y
71	R	R	←	F Y	←	F Y	R
81, 82	R	R	R	G	R	G	R
P21, P22	W	W	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	W	W	DRK
P61, P62	DW	W	DW	DW	DW	DW	DRK
P81, P82	DW	DW	DW	W	DW	W	DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 02+5	02+6	03+7	03+8	04+7	04+8	FLASH
21	G	G	R	R	R	R	Y
22	G	G	R	R	R	R	Y
31	R	R	←	←	R	R	R
41, 42	R	R	R	R	G	G	R
61, 62	R	G	R	R	R	R	Y
71	R	R	←	R	←	R	R
81, 82	R	R	R	G	R	G	R
P21, P22	W	W	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	W	W	DRK
P61, P62	DW	W	DW	DW	DW	DW	DRK
P81, P82	DW	DW	DW	W	DW	W	DRK

Signal Upgrade
Final Design (Sheet 1 of 2)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 20 1"=20'

US 220 Business
(N. Fayetteville Street)
at
SR 1462/SR 2344 (Presnell Street)

Division 8 Randolph County Asheboro

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

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: Robert J. Ziemba 1B0B0A3A0A3A4A0... SIGNATURE 6/13/2017 DATE

SIG. INVENTORY NO. 08-0125

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