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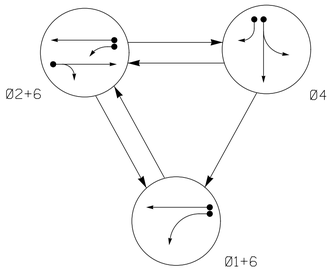
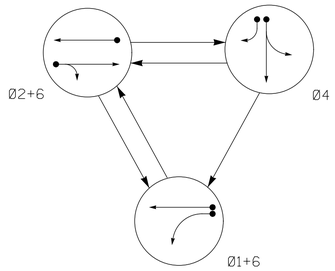
PROJECT REFERENCE NO.	SHEET NO.
I-5781	Sig. 1

3 Phase
Fully Actuated
NC 210 Closed Loop System

DEFAULT PHASING DIAGRAM

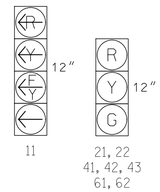


ALTERNATE PHASING DIAGRAM



SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070 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
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	15**	-	Y
					6 *	Y	Y	-	-	-	-	Y
2A	6X6	70	3	-	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	Y
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	15	-	Y
4C	6X15	0	2-4-2	Y	4	Y	Y	-	-	15	-	Y
6A	6X6	70	3	-	6	Y	Y	-	-	-	-	Y
S1	6X6	+150	3	-	-	-	-	-	-	-	Y	Y

* - Disable Phase Call for loop(s) during Alternate Phasing operation.

** - Reduce Delay to three (3) seconds during Alternate Phasing operation.

NOTES

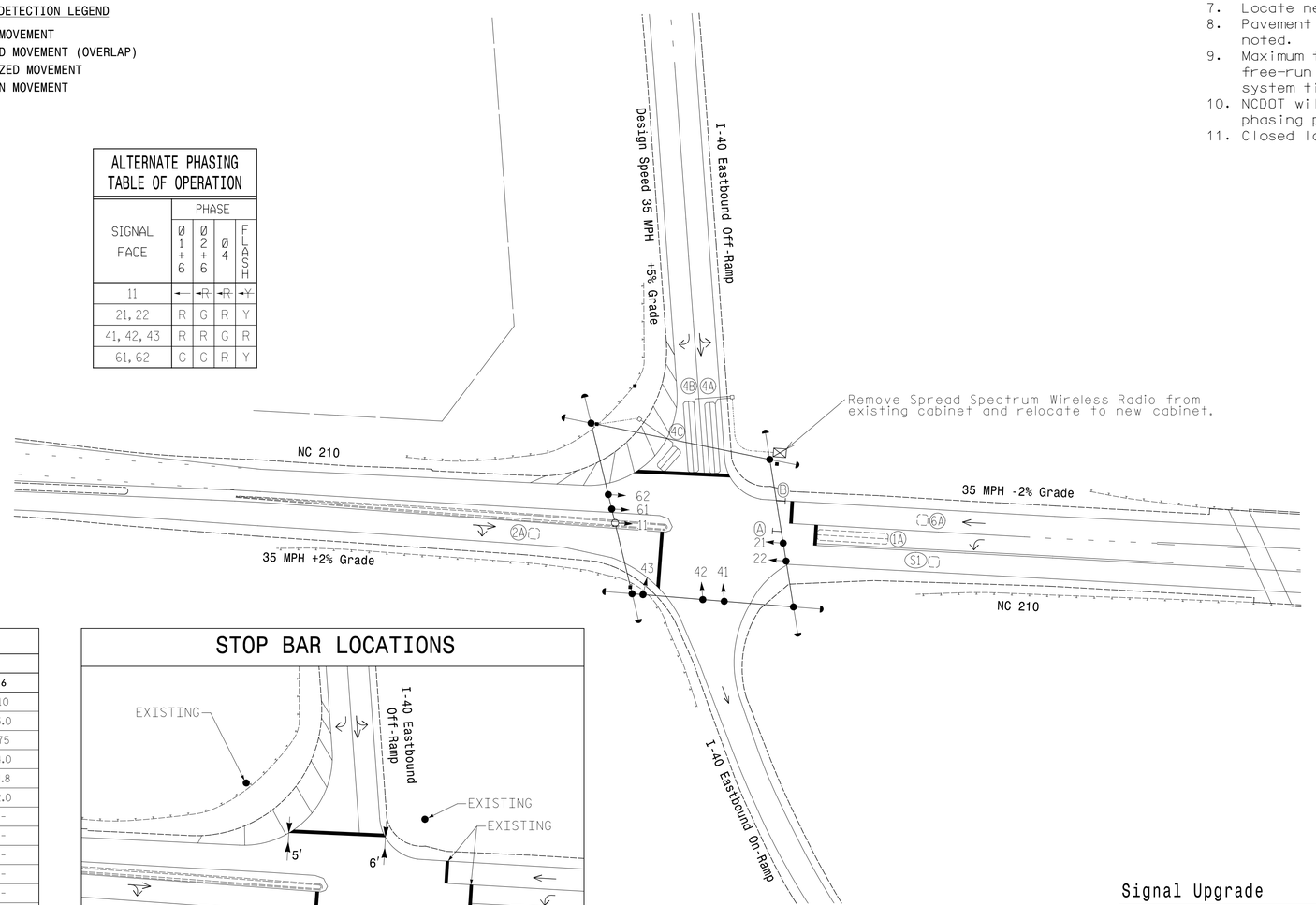
1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Reposition existing signal headS 41, 42 and 43.
4. Phase 1 may be lagged.
5. Set all detector units to presence mode.
6. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
7. Locate new cabinet on existing foundation.
8. Pavement markings are existing, unless otherwise noted.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. NCDOT will determine the hours of use for each phasing plan.
11. Closed loop system data: Controller Asset # 1088

PHASING DIAGRAM DETECTION LEGEND

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

DEFAULT PHASING TABLE OF OPERATION				
SIGNAL FACE	PHASE 0 1 + 6	PHASE 0 2 + 6	PHASE 0 4	FLASH
11	←	←F Y	←R	←Y
21, 22	R	G	R	Y
41, 42, 43	R	R	G	R
61, 62	G	G	R	Y

ALTERNATE PHASING TABLE OF OPERATION				
SIGNAL FACE	PHASE 0 1 + 6	PHASE 0 2 + 6	PHASE 0 4	FLASH
11	←	←R	←R	←Y
21, 22	R	G	R	Y
41, 42, 43	R	R	G	R
61, 62	G	G	R	Y



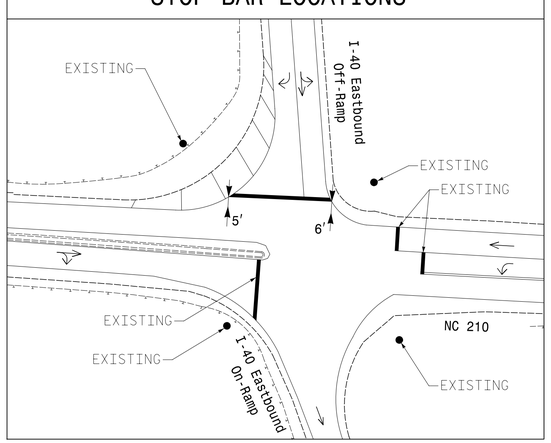
LEGEND

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	
A	No Left Turn Sign (R3-2)	A
B	No Right Turn Sign (R3-1)	B

OASIS 2070 TIMING CHART				
FEATURE	PHASE 1	PHASE 2	PHASE 4	PHASE 6
Min Green 1 *	7	10	7	10
Extension 1 *	2.0	3.0	2.0	3.0
Max Green 1 *	20	75	20	75
Yellow Clearance	3.0	4.0	3.6	4.0
Red Clearance	1.9	1.8	1.0	1.8
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
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	-	-	-	-
Simultaneous Gap	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.

STOP BAR LOCATIONS



THESE PLANS SUPERSEDE PLANS SEALED BY JOSEPH B. KOPASKIE ON 07-31-2017

Signal Upgrade

SEPI ENGINEERING & CONSTRUCTION
1025 Wade Avenue
Raleigh, NC 27605
Tel:919-789-9977
Fax:919-789-9591
License: C-2197

Prepared for the Offices of: Transportation Mobility and Safety Division, Signal Design Section, Department of Transportation, State of North Carolina
750 N.Greenfield Pkwy,Garner,NC 27529

NC 210
at
I-40 Eastbound Off/On Ramps

Division 4 Johnston County Near Benson

PLAN DATE:	June 2017	REVIEWED BY:	BL Johnson
PREPARED BY:	J. Kopaskie	REVIEWED BY:	

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 029669 ENGINEER JOSEPH B. KOPASKIE

DocuSigned by: Joseph Kopaskie 9CD6EAEF80A54FA... 8/16/2017
SIGNATURE DATE

SIG. INVENTORY NO. 04-1088

8/14/2017
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jkopaskie