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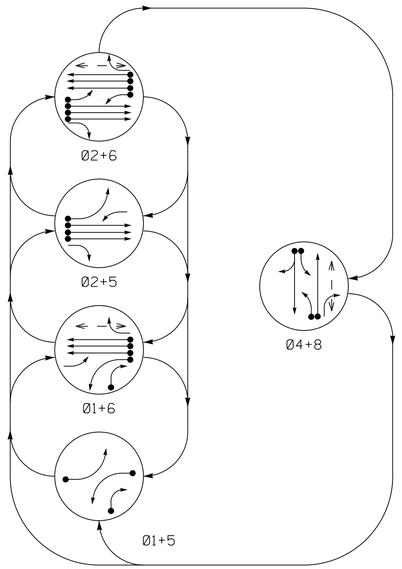
PROJECT REFERENCE NO.	SHEET NO.
W-5203AA	SIG-4.0

PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM

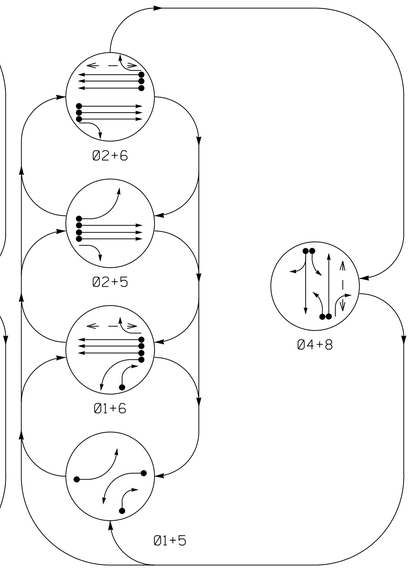


TABLE OF OPERATION

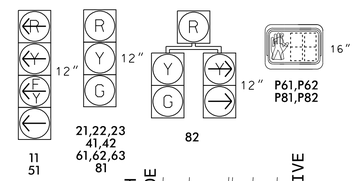
SIGNAL FACE	PHASE 01+5	PHASE 01+6	PHASE 02+5	PHASE 02+6	PHASE 04+8	FLASH
11	←-	←-	←F Y	←F Y	←R	←Y
21,22,23	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
51	←-	←F Y	←-	←F Y	←R	←Y
61,62,63	R	G	R	G	R	Y
81	R	R	R	R	G	R
82	R/→	R/→	R	R	G	R
P61,P62	DW	W	DW	W	DW	DRK
P81,P82	DW	DW	DW	DW	W	DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	PHASE 01+6	PHASE 02+5	PHASE 02+6	PHASE 04+8	FLASH
11	←-	←-	←R	←R	←R	←Y
21,22,23	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
51	←-	←R	←-	←R	←R	←Y
61,62,63	R	G	R	G	R	Y
81	R	R	R	R	G	R
82	R/→	R/→	R	R	G	R
P61,P62	DW	W	DW	W	DW	DRK
P81,P82	DW	DW	DW	DW	W	DRK

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	Y	1	Y	Y	-	-	*10	-	-
					**6	Y	Y	Y	-	3	-	-
1B	6X40	0	2-4-2	Y	1	Y	Y	-	-	15	-	-
2A	6X6	300	5	Y	2	Y	Y	-	-	-	-	-
2B	6X6	300	5	Y	2	Y	Y	-	-	-	-	-
2C	6X6	300	5	Y	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	3	-	-
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	10	-	-
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	*10	-	-
					**2	Y	Y	Y	-	3	-	-
6A	6X6	300	6	Y	6	Y	Y	-	-	-	-	-
6B	6X6	300	6	Y	6	Y	Y	-	-	-	-	-
6C	6X6	300	6	Y	6	Y	Y	-	-	-	-	Y
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	3	-	-
8B	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	-

* Disable Delay During Alternate Phasing Operation.
** Disable Phase 2+6 Call for Loop 1A and 5A During Alternate Phasing.

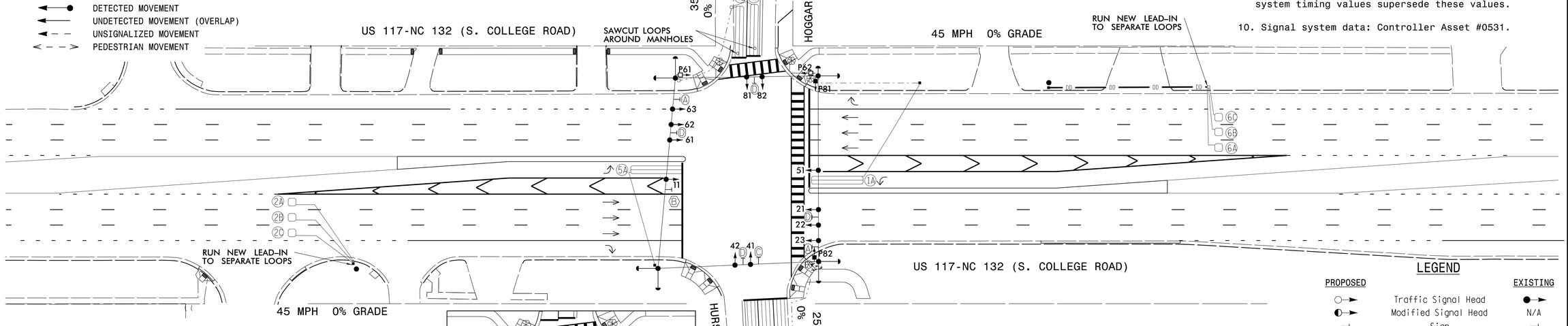
5 Phase Fully Actuated (Wilmington Signal System)

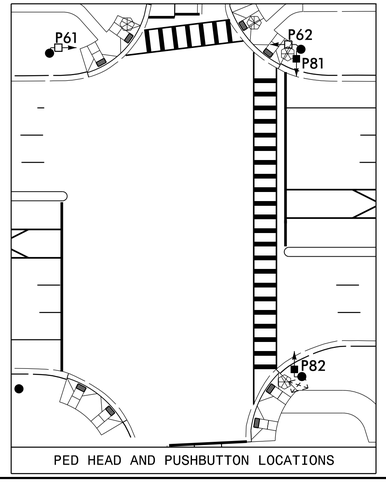
NOTES

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. Reposition existing signal heads numbered 11 and 51.
4. Phase 1 and/or phase 5 may be lagged.
5. Set all detector units to presence mode.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "DON'T WALK" time only.
8. Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Signal system data: Controller Asset #0531.

PHASING DIAGRAM DETECTION LEGEND

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





PED HEAD AND PUSHBUTTON LOCATIONS

OASIS 2070 TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 4	PHASE 5	PHASE 6	PHASE 8
Min Green 1 *	5	12	5	5	12	5
Extension 1 *	2.0	6.0	2.0	2.0	6.0	2.0
Max Green 1 *	15	90	20	15	90	20
Yellow Clearance	3.0	4.5	3.8	3.0	4.5	3.2
Red Clearance	3.2	1.9	3.1	3.4	1.9	3.9
Walk 1 *	-	-	-	-	7	4
Don't Walk 1	-	-	-	-	10	39
Seconds Per Actuation *	-	1.2	-	-	1.2	-
Max Variable 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	-
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.

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	Wheelchair Ramp	
N/A	Type I Pushbutton Post & Sign	
N/A	Directional Drill	N/A

SIGNS

PROPOSED		EXISTING
A	Right Arrow "ONLY" Sign (R3-5R)	A
B	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	B
C	Left Arrow "ONLY" Sign (R3-5L)	C
D	Street Name Sign	D

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PLANS PREPARED BY :
PARSONS
5540 CENTERVIEW DR., SUITE 207
RALEIGH, NORTH CAROLINA 27606
NC LICENSE NO: F-0246
FOR NORTH CAROLINA DEPT. OF TRANSPORTATION

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

SCALE 0 40 1" = 40'

US 117-NC 132 (S. College Road)
at
Hoggard Drive / Hurst Drive

Division 3 New Hanover County Wilmington

PLAN DATE:	March 2016	REVIEWED BY:	
PREPARED BY:	J. M. Pickens	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 37950 ENGINEER JASON M. PICKENS

DocuSigned by: Jason M. Pickens 5/5/2016
DOCUSIGNATURE DATE

SIG. INVENTORY NO. 03-0531

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