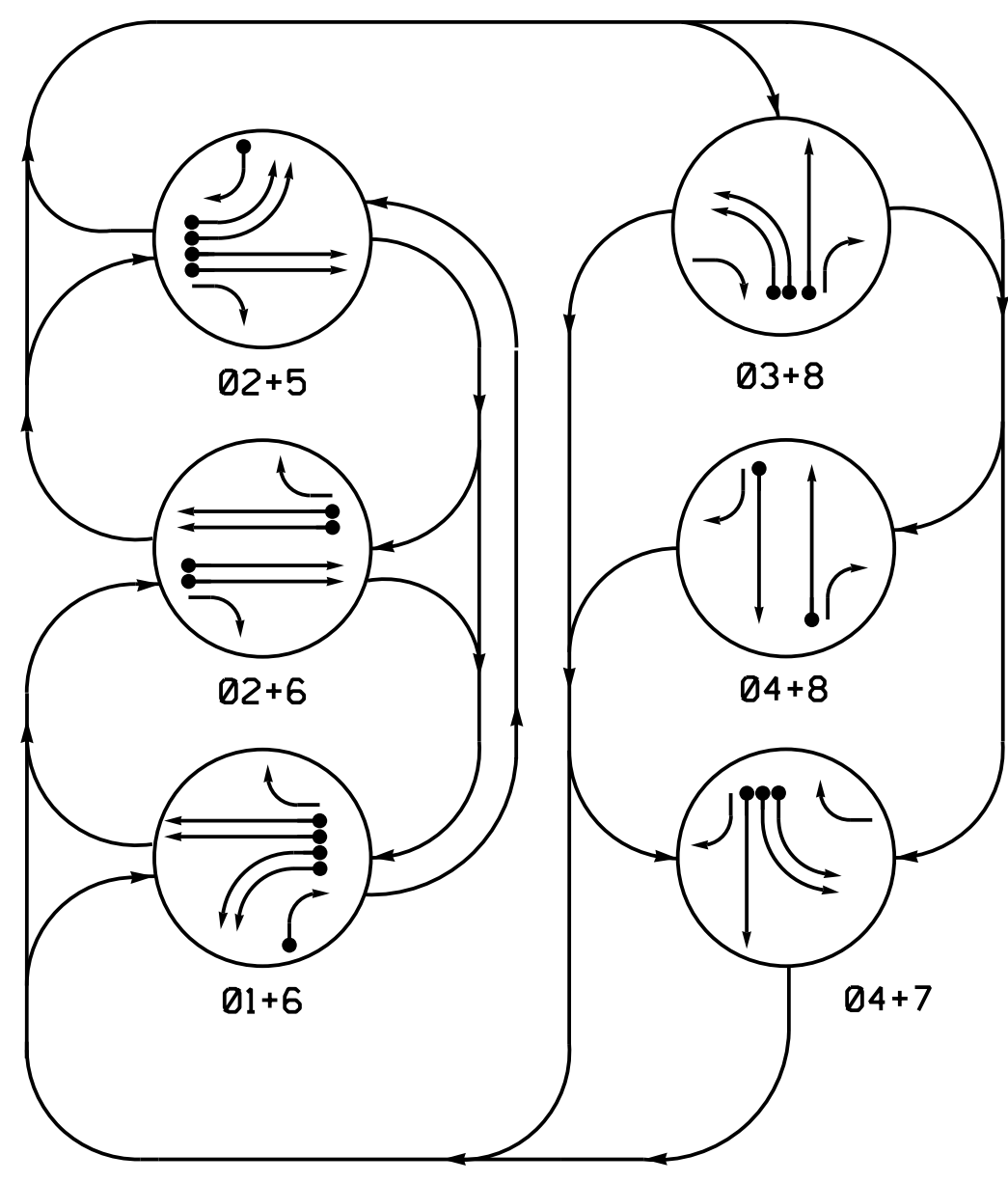


PHASING DIAGRAM



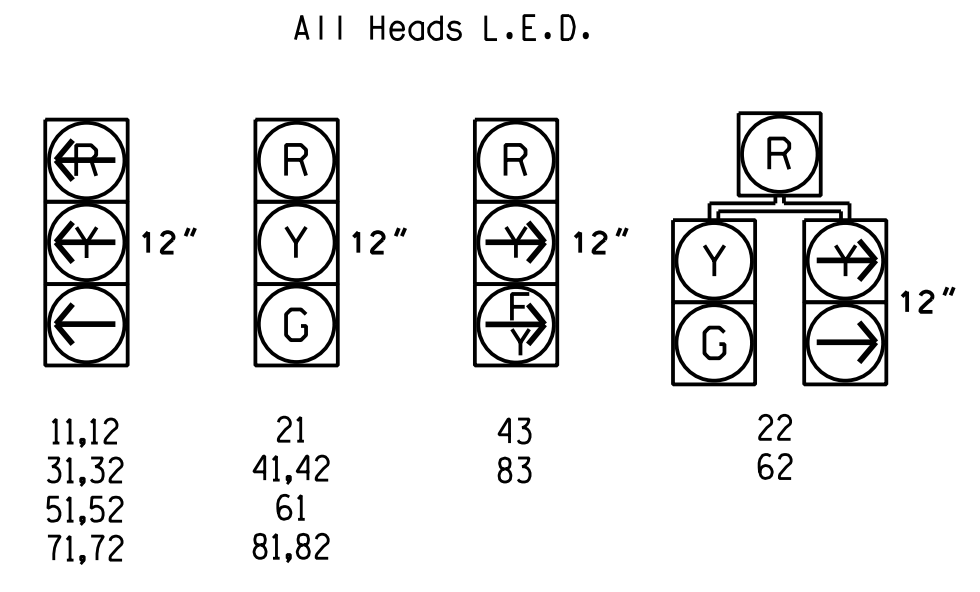
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+6	02+5	02+6	03+8	04+7	04+8	FL	HS
11,12	-	R	G	R	R	R	R	Y
21	R	G	G	R	R	R	Y	-
22	R	G	G	R	R	R	Y	-
31,32	R	R	R	R	R	R	Y	-
41,42	R	R	R	R	G	G	R	-
43	R	R	F	R	F	F	R	-
51,52	R	R	-	R	R	R	R	-
61	G	G	R	R	R	R	Y	-
62	G	G	R	R	R	R	Y	-
71,72	R	R	R	R	R	-	R	-
81,82	R	R	R	G	G	R	R	-
83	F	R	R	F	F	R	R	-

SIGNAL FACE I.D.



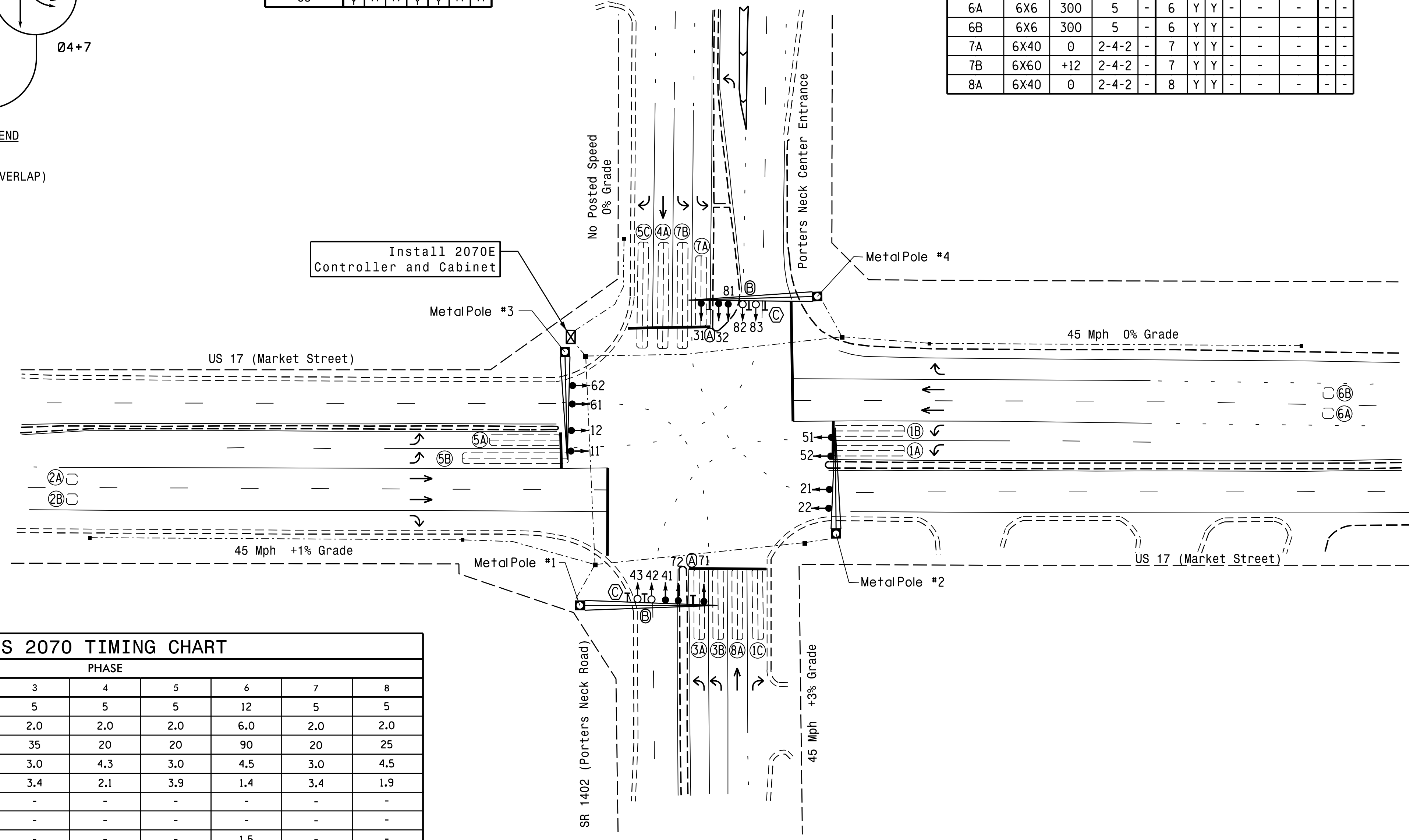
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING						
				NEW LOOP	PHASE	CALLING	EXTENSION	STRETCH TIME	DELAY TIME	
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	-
1B	6X40	0	2-4-2	-	1	Y	Y	-	-	-
1C	6X40	0	2-4-2	-	1	Y	Y	-	15	-
2A	6X6	300	5	-	2	Y	Y	-	-	-
2B	6X6	300	5	-	2	Y	Y	-	-	-
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	-
3B	6X40	0	2-4-2	-	3	Y	Y	-	-	-
4A	6X60	+12	2-4-2	-	4	Y	Y	-	-	-
5A	6X40	0	2-4-2	-	5	Y	Y	-	-	-
5B	6X60	+4	2-4-2	-	5	Y	Y	-	-	-
5C	6X60	+12	2-4-2	-	5	Y	Y	-	15	-
6A	6X6	300	5	-	6	Y	Y	-	-	-
6B	6X6	300	5	-	6	Y	Y	-	-	-
7A	6X40	0	2-4-2	-	7	Y	Y	-	-	-
7B	6X60	+12	2-4-2	-	7	Y	Y	-	-	-
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	-

6 Phase Fully Actuated Wilmington 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.
- The order of phase 1 and phase 5 may be reversed, but phase 1 and phase 5 shall not operate simultaneous.
- The order of phase 3 and phase 7 may be reversed, but phase 3 and phase 7 shall not operate simultaneous.
- Set all detector units to presence mode.
- 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.
- Reposition existing signal heads 81 and 41 and sign 8.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Remove "U-TURN MUST YIELD TO RIGHT TURN" Sign (R10-16) on Metal Poles #2 and #3.
- Signal system data: Controller Asset # 0380.

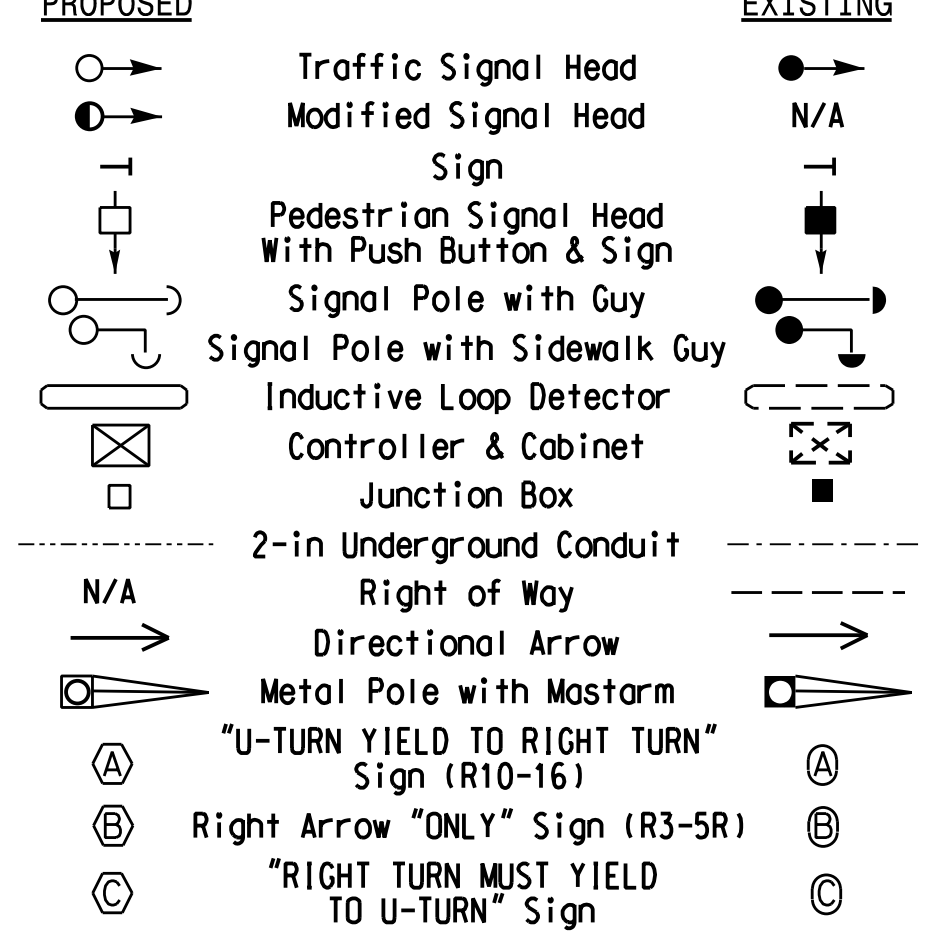


OASIS 2070 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	5	12	5	5	5	12	5	5
Extension 1 *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max Green 1 *	15	90	35	20	20	90	20	25
Yellow Clearance	3.0	4.4	3.0	4.3	3.0	4.5	3.0	4.5
Red Clearance	3.7	1.5	3.4	2.1	3.9	1.4	3.4	1.9
Walk 1 *	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-
Seconds Per Actuation *	-	1.5	-	-	-	1.5	-	-
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	-	-	-	-	-	-	-	-
Simultaneous Gap	ON	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.

LEGEND



Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HNTB NORTH CAROLINA, P.C.
343 E. Six Forks Road, Suite 200
Raleigh, North Carolina 27609
NC License No: C-1554
(919) 546-8997

US 17 (Market Street) at
SR 1402 (Porters Neck Road)/
Porters Neck Center Entrance

Division 03 New Hanover Co. Wilmington
PLAN DATE: February 2018 REVIEWED BY: A.D. Klinsky
PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons

750 N. Greenfield Pkwy, Cary, NC 27529

SCALE: 0 40
1"=40'

SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
SEAL
031464
W. TASHA R. SIMMONS

DocuSigned by:
Tasha R. Simmons 8/1/2018
SIGNATURE DATE
SIG. INVENTORY NO. 03-0380