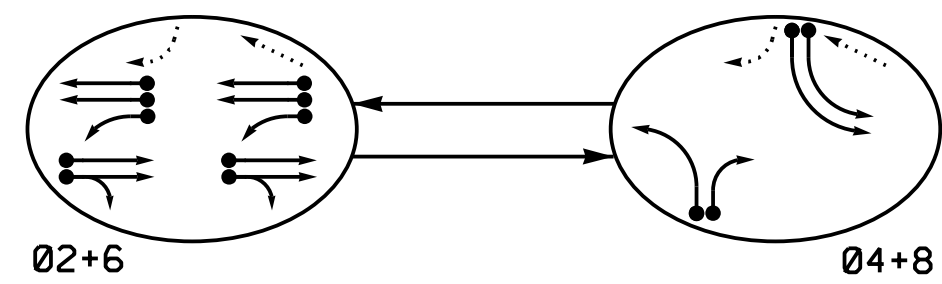


PHASING DIAGRAM



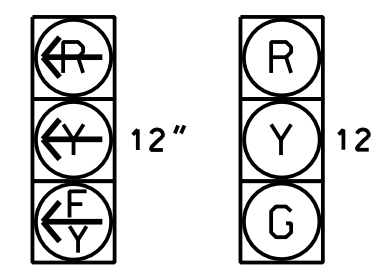
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE		
	02+6	04+8	FLASH
21,22,23,24	G	R	Y
41,42	R	G	R
61,64	Y	R	Y
62,63,65,66	G	R	Y
81,82	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.

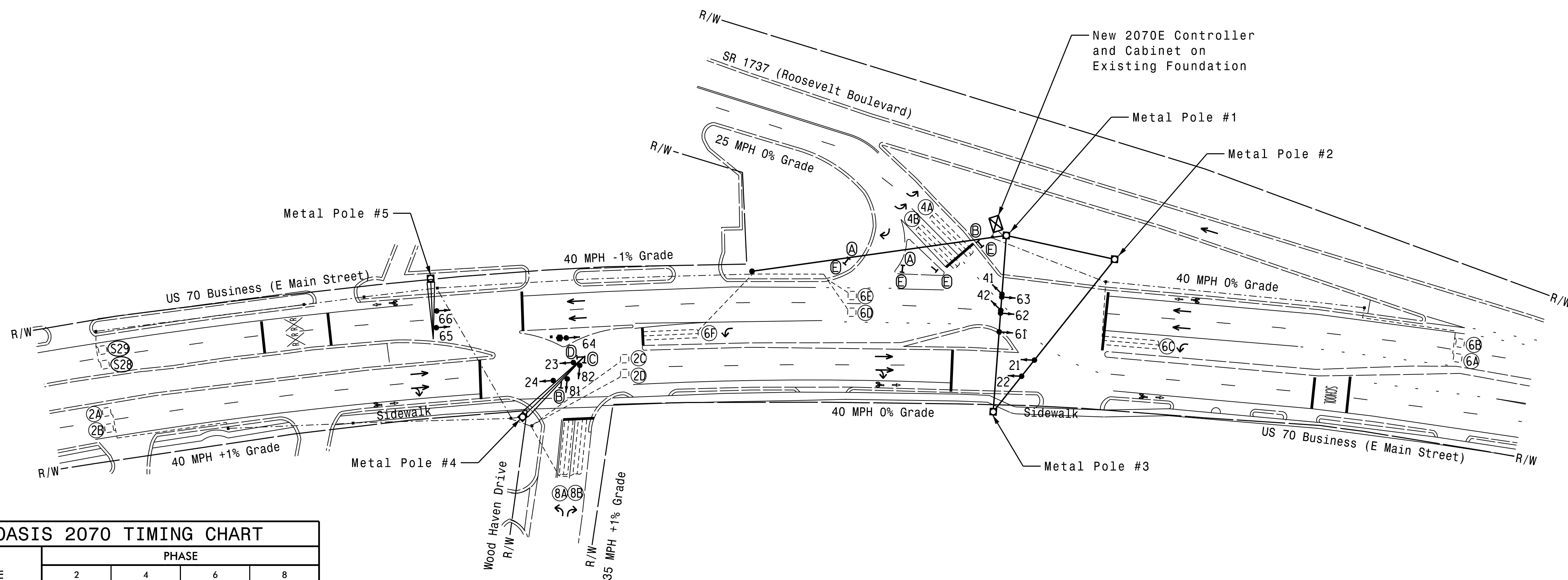


OASIS 2070 LOOP & DETECTOR INSTALLATION CHART											
INDUCTIVE LOOPS						DETECTOR PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP NEW CARD
2A	6X6	250	6	-	2	Y	Y	-	-	-	Y
2B	6X6	250	6	-	2	Y	Y	-	-	-	Y
2C	6X6	240	5	-	2	Y	Y	-	-	-	Y
2D	6X6	240	5	-	2	Y	Y	-	-	-	Y
4A	6X40	+5	2-4-2	-	4	Y	Y	-	-	-	Y
4B	6X40	+5	2-4-2	-	4	Y	Y	-	-	-	Y
6A	6X6	250	4	-	6	Y	Y	-	-	-	Y
6B	6X6	250	4	-	6	Y	Y	-	-	-	Y
6C	6X40	0	2-4-2	-	6	Y	Y	-	-	-	Y
6D	6X6	250	3	-	6	Y	Y	-	-	-	Y
6E	6X6	250	3	-	6	Y	Y	-	-	-	Y
6F	6X40	0	2-4-2	-	6	Y	Y	-	-	-	Y
8A	6X40	+5	2-4-2	-	8	Y	Y	-	-	-	Y
8B	6X40	+5	2-4-2	-	8	Y	Y	-	-	15	Y
S28	6X6	+300	6	-	-	-	-	-	-	-	Y
S29	6X6	+300	6	-	-	-	-	-	-	-	Y

2 Phase Fully Actuated Havelock US 70 Business CLS

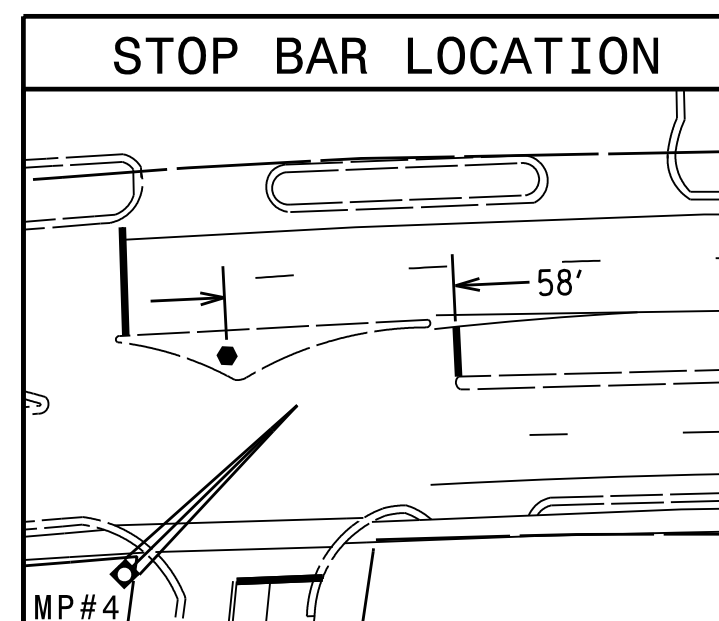
NOTES

- 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.
- 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.
- Repaint pavement markings as shown.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Signal system data: Controller Asset #0189



OASIS 2070 TIMING CHART				
FEATURE	PHASE			
	2	4	6	8
Min Green 1 *	12	7	12	7
Extension 1 *	6.0	2.0	6.0	2.0
Max Green 1 *	90	25	90	25
Yellow Clearance	4.2	3.0	4.2	3.0
Red Clearance	2.1	3.6	2.1	2.6
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	1.5	-	1.5	-
Max Variable Initial *	29	-	29	-
Time Before Reduction *	15	-	15	-
Time To Reduce *	45	-	45	-
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

* 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.



PROPOSED		EXISTING	
○	Traffic Signal Head	●	N/A
○	Modified Signal Head	○	N/A
○	Sign	○	N/A
○	Pedestrian Signal Head With Push Button & Sign	○	N/A
○	Signal Pole with Guy	○	N/A
○	Signal Pole with Sidewalk Guy	○	N/A
□	Inductive Loop Detector	□	N/A
□	Junction Box	□	N/A
---	2-in Underground Conduit	---	N/A
N/A	Right of Way	N/A	N/A
→	Directional Arrow	→	N/A
○	Metal Pole with Mastarm	○	N/A
○	Metal Strain Pole	○	N/A
○	Type II Signal Pedestal	○	N/A
A	"YIELD" Sign (R1-2)	A	N/A
B	Left Arrow "ONLY" Sign (R3-5L)	B	N/A
C	Right Arrow "ONLY" Sign (R3-5R)	C	N/A
D	No Left Turn Sign (R3-2)	D	N/A
E	"DO NOT ENTER" Sign (R5-1)	E	N/A

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Signal Upgrade

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 70 Business (E Main Street) at SR 1737 (Roosevelt Boulevard)/Wood Haven Drive

Division 02 Craven Co. Havelock

PLAN DATE: March 2018 REVIEWED BY: A.D. Klinskyk

PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
SEAL 031464
NATASHA R. SIMMONS

REVISIONS	INIT.	DATE

DocuSigned by: Natasha R. Simmons 12/7/2018
SIGNATURE DATE
SIG. INVENTORY NO. 02-0189