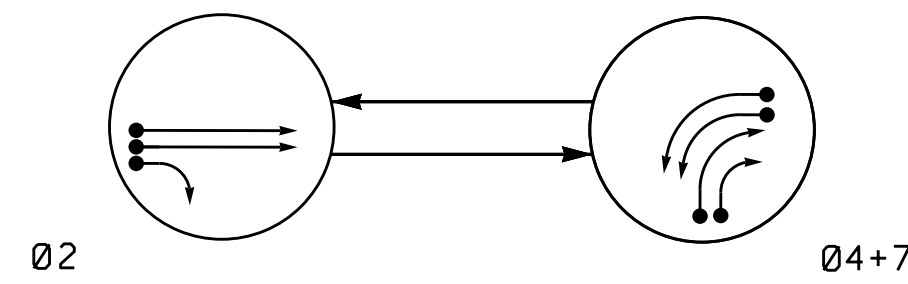


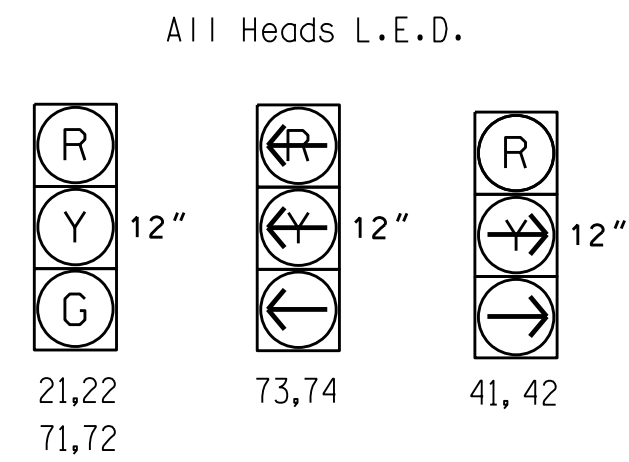
PHASING DIAGRAM



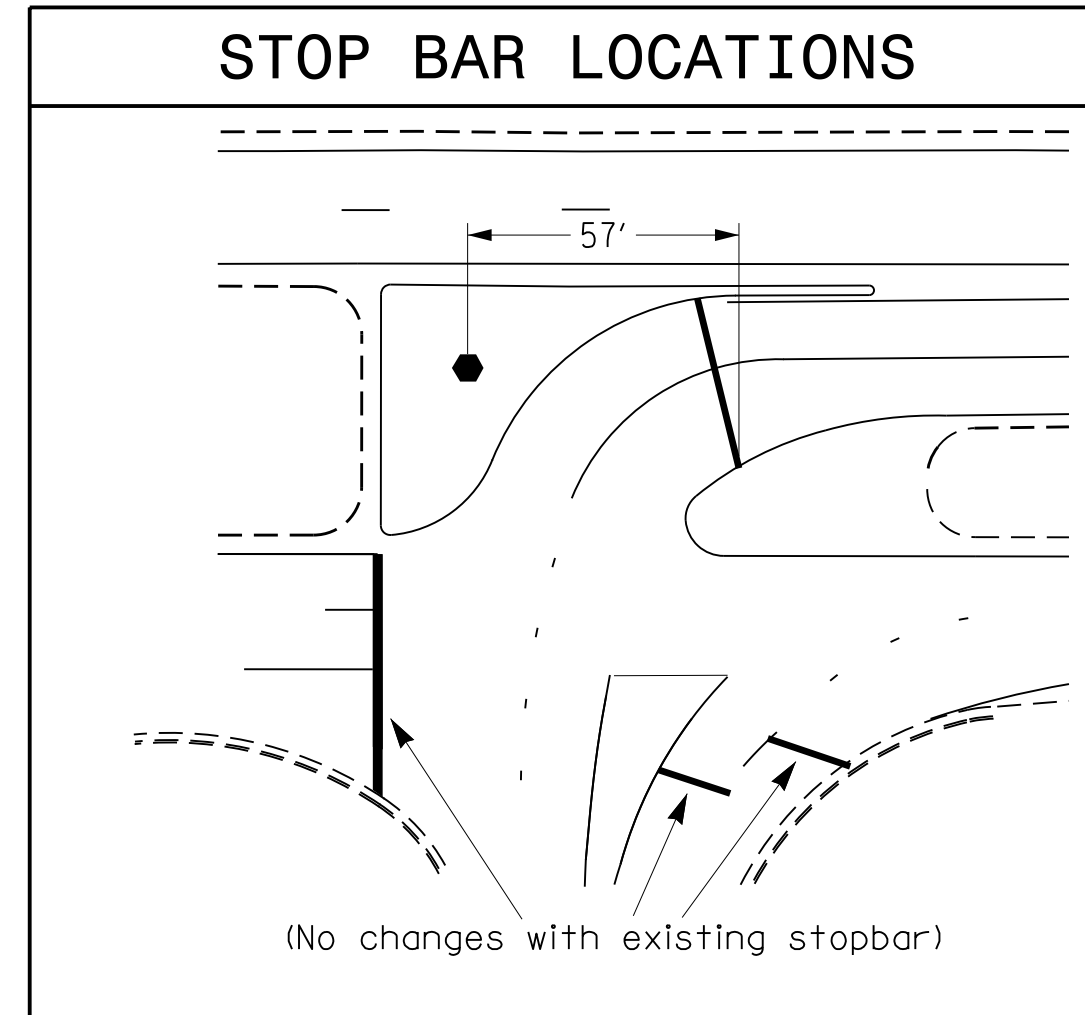
**PHASING DIAGRAM DETECTION LEGEND**  
 ● ← DETECTED MOVEMENT  
 ○ ← UNDETECTED MOVEMENT (OVERLAP)  
 - - ← UNSIGNALIZED MOVEMENT  
 - - - - ← PEDESTRIAN MOVEMENT

SIGNAL FACE	Ø2	PHASE		FLASH
		Ø4+7		
21, 22	G	R	Y	
41, 42	R	-	R	
71, 72, 73, 74	R	G	R	

SIGNAL FACE I.D.



STOP BAR LOCATIONS



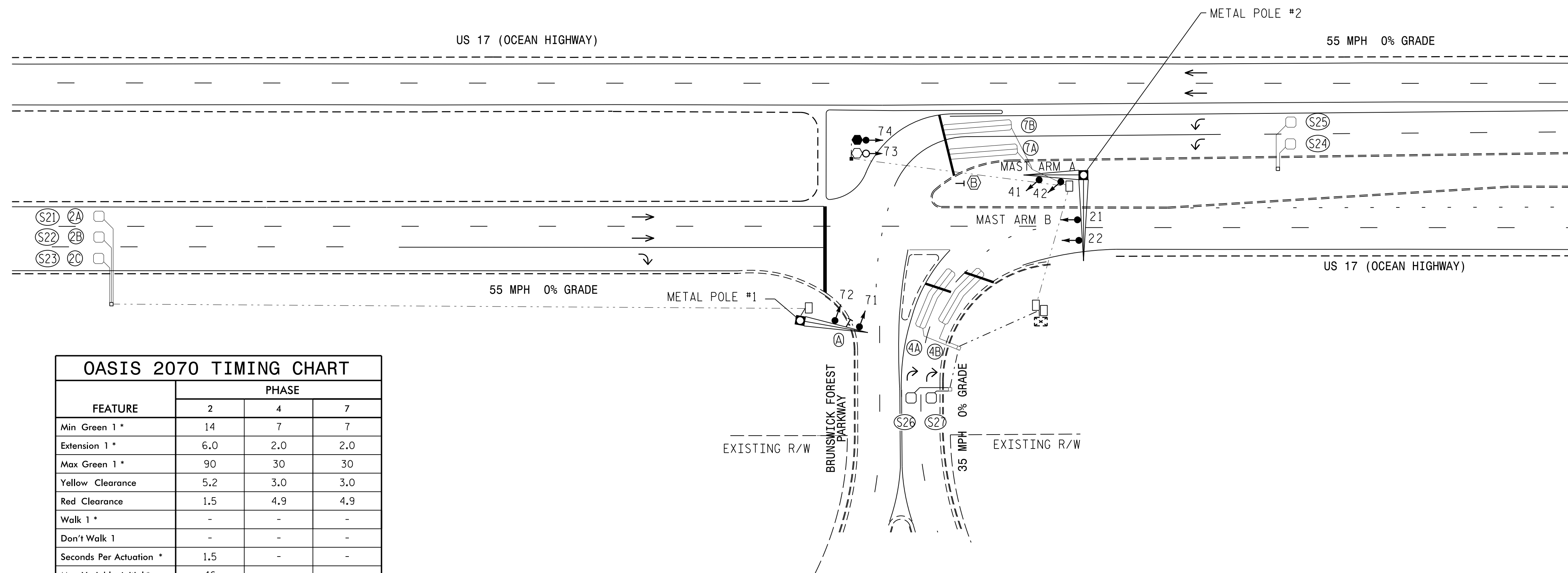
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING								
				NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A/S21	6X6	420	6	Y	2	Y	Y	-	-	-	Y	-
2B/S22	6X6	420	6	Y	2	Y	Y	-	-	-	Y	-
2C/S23	6X6	420	6	Y	2	Y	Y	-	-	-	Y	-
4A	6X40	+10	2-4-2	Y	4	Y	Y	-	-	15	-	-
4B	6X40	+5	2-4-2	Y	4	Y	Y	-	-	15	-	-
7A	6X40	0	2-4-2	Y	7	Y	Y	-	-	-	-	-
7B	6X40	0	2-4-2	Y	7	Y	Y	-	-	-	-	-
S24	6X6	200	3	Y	-	-	-	-	-	-	Y	-
S25	6X6	200	3	Y	-	-	-	-	-	-	Y	-
S26	6X6	75	3	Y	-	-	-	-	-	-	Y	-
S27	6X6	75	3	Y	-	-	-	-	-	-	Y	-

2 PHASE  
 FULLY ACTUATED  
 D03-12 Leland  
 US 17 (Ocean Hwy)-Leland Superstreet

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
5. Closed loop system data: Controller Asset #0979.

EXISTING R/W



FEATURE	PHASE		
	2	4	7
Min Green 1 *	14	7	7
Extension 1 *	6.0	2.0	2.0
Max Green 1 *	90	30	30
Yellow Clearance	5.2	3.0	3.0
Red Clearance	1.5	4.9	4.9
Walk 1 *	-	-	-
Don't Walk 1	-	-	-
Seconds Per Actuation *	1.5	-	-
Max Variable Initial *	46	-	-
Time Before Reduction *	15	-	-
Time To Reduce *	50	-	-
Minimum Gap	3.4	-	-
Recall Mode	MIN RECALL	-	-
Vehicle Call Memory	YELLOW	-	-
Dual Entry	-	ON	ON
Simultaneous Gap	ON	ON	ON

\* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 2 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
○ → Pedestrian Signal Head	○ → N/A
○ → Signal Pole with Push Button & Sign	○ → N/A
○ → Signal Pole with Guy	○ → N/A
○ → Signal Pole with Sidewalk Guy	○ → N/A
○ → Inductive Loop Detector	○ → N/A
○ → Controller & Cabinet	○ → N/A
○ → Junction Box	○ → N/A
○ → 2-in Underground Conduit	○ → N/A
○ → Right of Way	○ → N/A
○ → Directional Arrow	○ → N/A
○ → Metal Pole with Mastarm	○ → N/A
○ → Type II Signal Pedestal	○ → N/A
○ → Through Arrow "ONLY" Sign (R3-5A)	○ → N/A
○ → Stop Here on Red (R10-6)	○ → N/A

Signal Upgrade

Prepared in the Offices of:  
 Transportation Mobility and Safety Solutions  
 NORTH CAROLINA PROFESSIONAL ENGINEERS  
 Signal Design Section

US 17 (OCEAN HIGHWAY)  
 at  
 BRUNSWICK FOREST PARKWAY

DIVISION 3 BRUNSWICK COUNTY LELAND  
 PLAN DATE: October 2021 REVIEWED BY: MEL  
 PREPARED BY: X. Han REVIEWED BY:

750 N. Greenfield Pkwy, Garner, NC 27529  
 SCALE: 1" = 40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEERS  
 SEAL 042608  
 MICHAN E. LEBLANC  
 ENGINEER

10/26/2021  
 DATE

SIG. INVENTORY NO. 03-0979