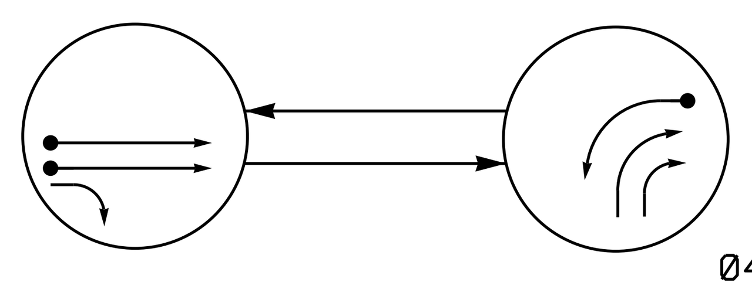
PROJECT REFERENCE NO.	SHEET NO.
2021CPT.03.31.10101	Sig.11.0

2 Phase
Fully Actuated
US 17 (Ocean Highway) - Leland Superstreet
D03-12 Leland

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

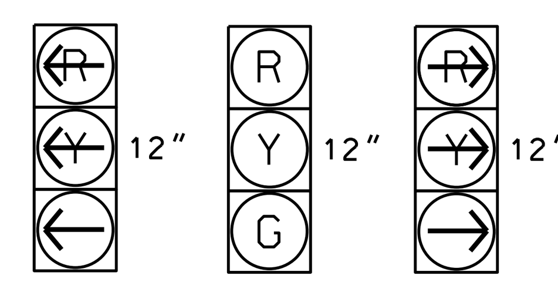
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

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

SIGNAL FACE I.D.

All Heads L.E.D.



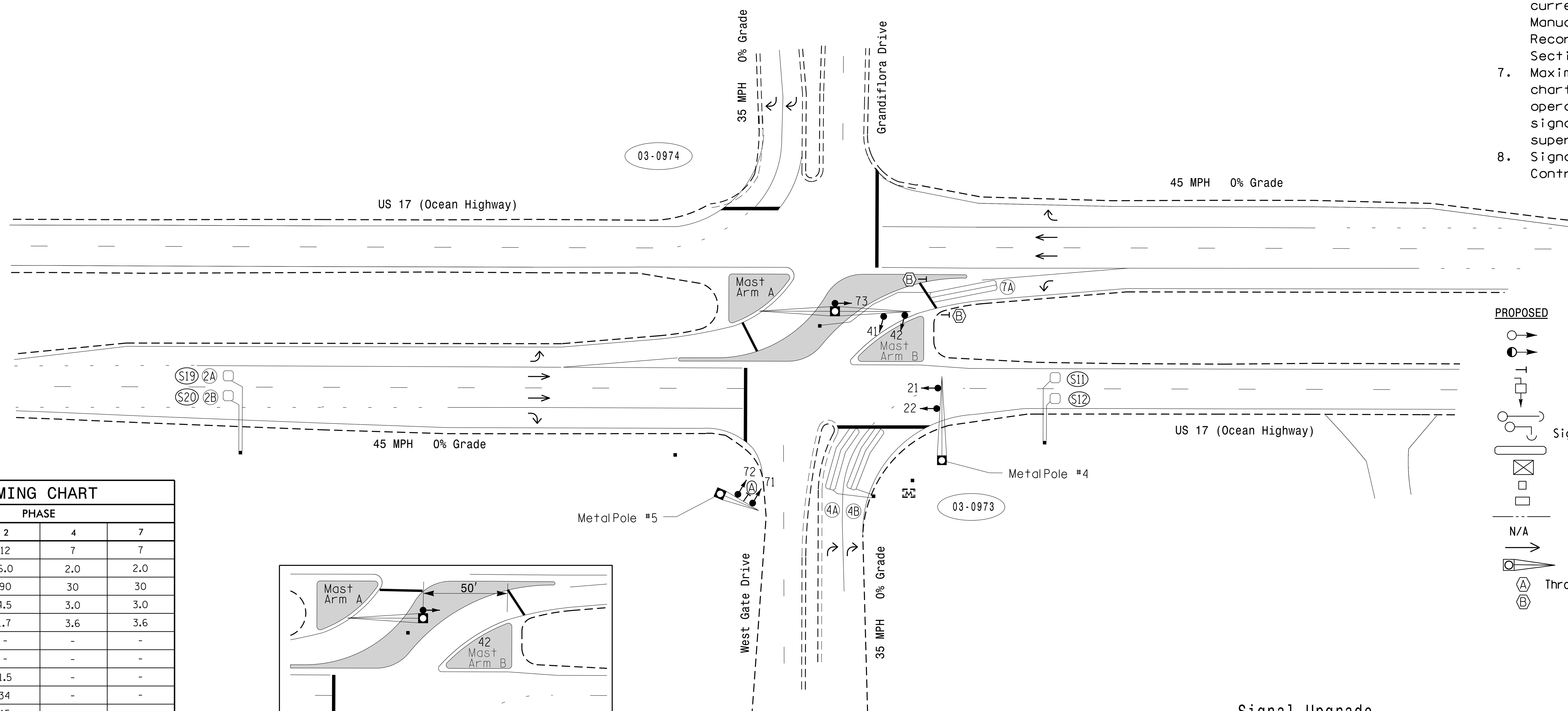
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

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/S19	6X6	300	4	Y	2	Y	Y	-	-	-	Y	-
2B/S20	6X6	300	4	Y	2	Y	Y	-	-	-	Y	-
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	20	-	-
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	20	-	-
7A	6X40	0	2-4-2	Y	7	Y	Y	-	-	-	-	-
S11	6X6	+180	3	Y	-	-	-	-	-	-	Y	-
S12	6X6	+180	3	Y	-	-	-	-	-	-	Y	-

(INDUCTIVE LOOPS: LOOP through NEW LOOP; DETECTOR PROGRAMMING: PHASE through DELAY TIME)

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. Renumber existing heads 11,12, and 13 as 71,72, and 73, respectively. Renumber existing heads 14 and 15 as 41 and 42, respectively.
5. Renumber existing loops 1A,1B, and 1C as 7A, 4A, and 4B, respectively.
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. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Signal System data: Controller Asset # 0973.



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	
	Oversized Junction Box	
	2-in Underground Conduit	
N/A	Right of Way with Marker	
	Directional Arrow	
	Metal Pole with Mastarm	
A	Through Arrow "ONLY" Sign (R3-5A)	A
B	Stop Here on Red (R10-6)	B

OASIS 2070 TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 7
Min Green 1 *	12	7	7
Extension 1 *	6.0	2.0	2.0
Max Green 1 *	90	30	30
Yellow Clearance	4.5	3.0	3.0
Red Clearance	1.7	3.6	3.6
Walk 1 *	-	-	-
Don't Walk 1	-	-	-
Seconds Per Actuation *	1.5	-	-
Max Variable Initial *	34	-	-
Time Before Reduction *	15	-	-
Time To Reduction *	50	-	-
Minimum Gap	3.0	-	-
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.

Stopbar Location

Signal Upgrade

Prepared in the Offices of: Transportation Mobility and Safety Division, Signal Design Section

750 N.Greenfield Pkwy.Garner,NC 27529

US 17 (Ocean Highway) at West Gate Drive

Division 3 Brunswick County Leland

PLAN DATE:	October 2021	REVIEWED BY:	MEL
PREPARED BY:	Jeff Spence	REVIEWED BY:	

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 042608 ENGINEER MEGHAN E. LEBLANC

DocuSigned by: Meghan E LeBlanc B236DA823630498... 10/26/2021 DATE

SIG. INVENTORY NO. 03-0973

26-OCT-2021 11:50
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