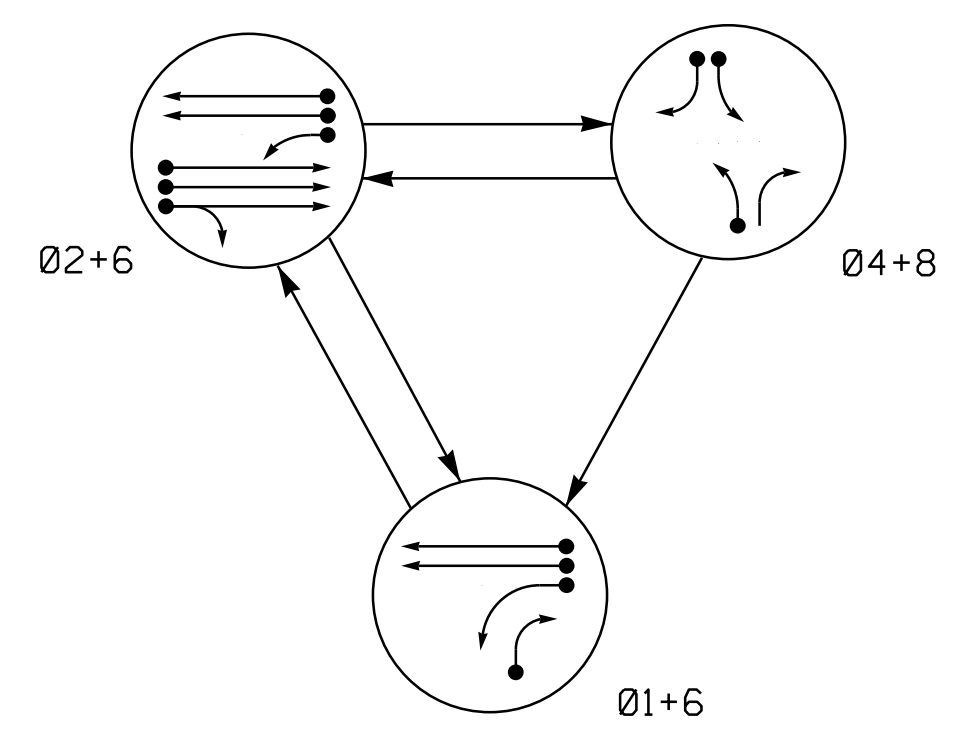


PHASING DIAGRAM

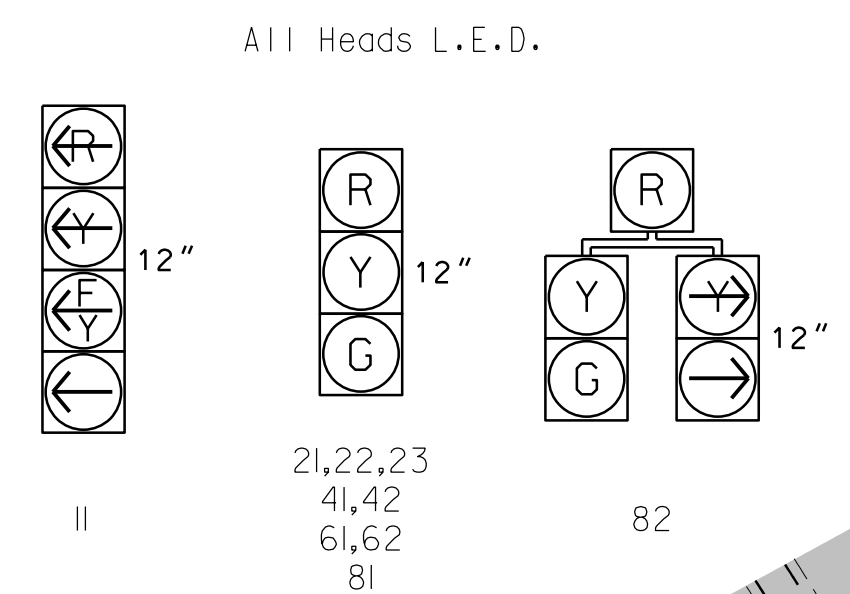


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE				
	Ø1+6	Ø2+6	Ø4+8	F	LASH
11	←	←	←	←	←
21,22,23	R	G	R	Y	
41,42	R	R	G	R	
61,62	G	G	R	Y	
81	R	R	G	R	
82	R	R	G	R	

SIGNAL FACE I.D.



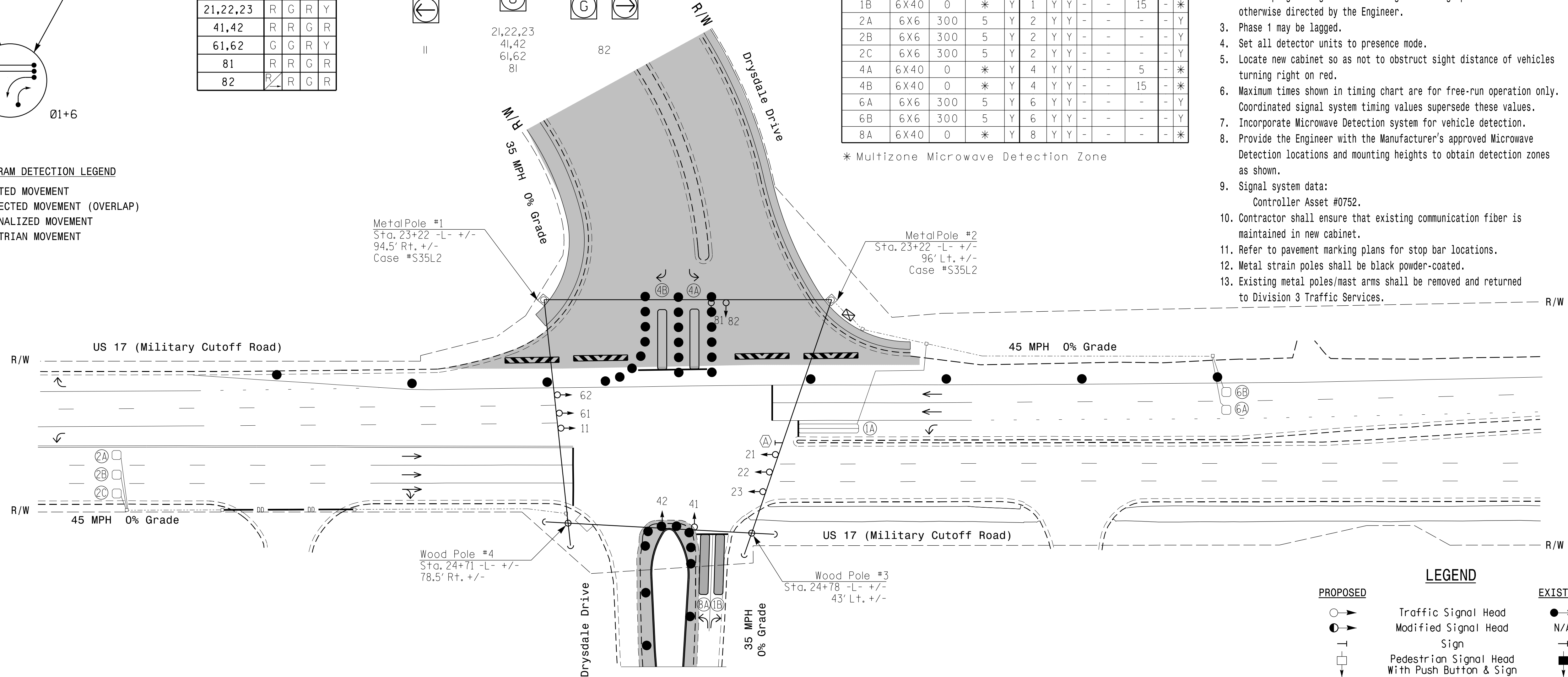
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP/ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING					SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME			DELAY TIME
1A	6X40	0	2-4-2	Y	1	Y	Y	-	-	10	-	Y
1B	6X40	0	*	Y	1	Y	Y	-	-	15	-	*
2A	6X6	300	5	Y	2	Y	Y	-	-	-	-	Y
2B	6X6	300	5	Y	2	Y	Y	-	-	-	-	Y
2C	6X6	300	5	Y	2	Y	Y	-	-	-	-	Y
4A	6X40	0	*	Y	4	Y	Y	-	-	5	-	*
4B	6X40	0	*	Y	4	Y	Y	-	-	15	-	*
6A	6X6	300	5	Y	6	Y	Y	-	-	-	-	Y
6B	6X6	300	5	Y	6	Y	Y	-	-	-	-	Y
8A	6X40	0	*	Y	8	Y	Y	-	-	-	-	*

* Multizone Microwave Detection Zone

3 Phase Fully Actuated (Wilmington Signal System)

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018, "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Incorporate Microwave Detection system for vehicle detection.
- Provide the Engineer with the Manufacturer's approved Microwave Detection locations and mounting heights to obtain detection zones as shown.
- Signal system data:
Controller Asset #0752.
- Contractor shall ensure that existing communication fiber is maintained in new cabinet.
- Refer to pavement marking plans for stop bar locations.
- Metal strain poles shall be black powder-coated.
- Existing metal poles/mast arms shall be removed and returned to Division 3 Traffic Services.



OASIS 2070 TIMING CHART

FEATURE	PHASE				
	1	2	4	6	8
Min Green 1 *	5	12	5	12	5
Extension 1 *	2.0	6.0	2.0	6.0	2.0
Max Green 1 *	15	100	25	100	25
Yellow Clearance	3.0	4.5	3.0	4.5	3.0
Red Clearance	3.6	2.1	2.1	2.1	3.1
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	-	1.2	-	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	-	-	ON	-	ON
Simultaneous Gap	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.

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
⊠	Controller & Cabinet	⊠	N/A
⊠	Junction Box	⊠	N/A
---	2-in Underground Conduit	---	N/A
→	Right of Way	→	N/A
→	Directional Arrow	→	N/A
○	Metal Strain Pole	○	N/A
○	Video Detection Zone	○	N/A
(A)	No Left Turn Sign (R3-2)	(A)	N/A

Signal Upgrade - Temporary Design

<p>RKA RAYEY KEMP ASSOCIATES 888 Fallsheen Place Raleigh, North Carolina 27609 Phone: 919-872-5115 www.rkainc.com NC License No. C-0810</p>	<p>Prepared for:</p> <p>Division 3 New Hanover County Wilmington</p>	<p>SEAL</p> <p>SEAL 32396 ENGINEER WILLIAM J. HAMILTON</p>
	<p>US 17 (Military Cutoff Road) at Drysdale Drive</p> <p>PLAN DATE: November 2021 REVIEWED BY: WJ Hamilton</p> <p>PREPARED BY: A. Andrews RKA PROJ. NO.: 19258 (040)</p>	

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