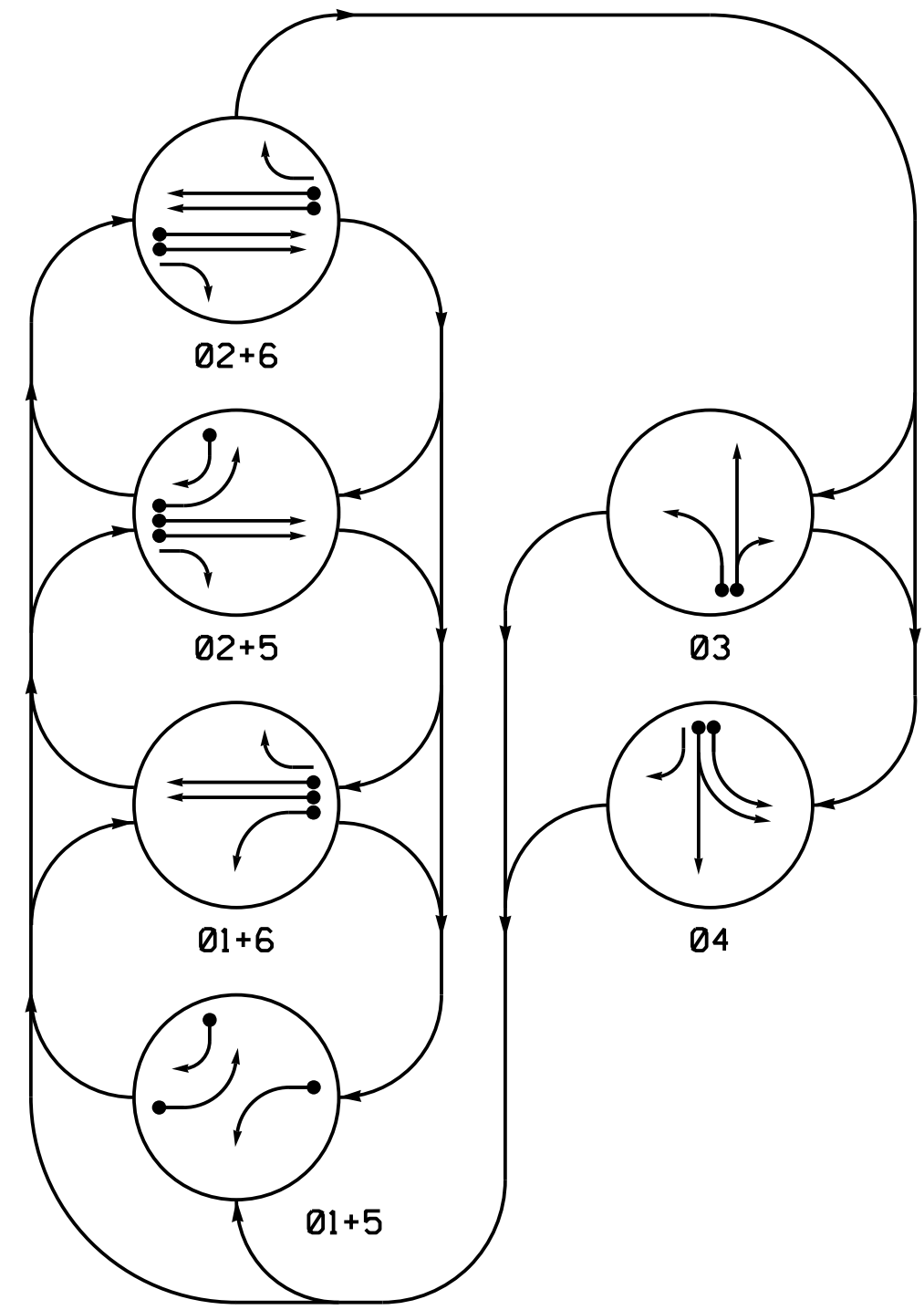


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

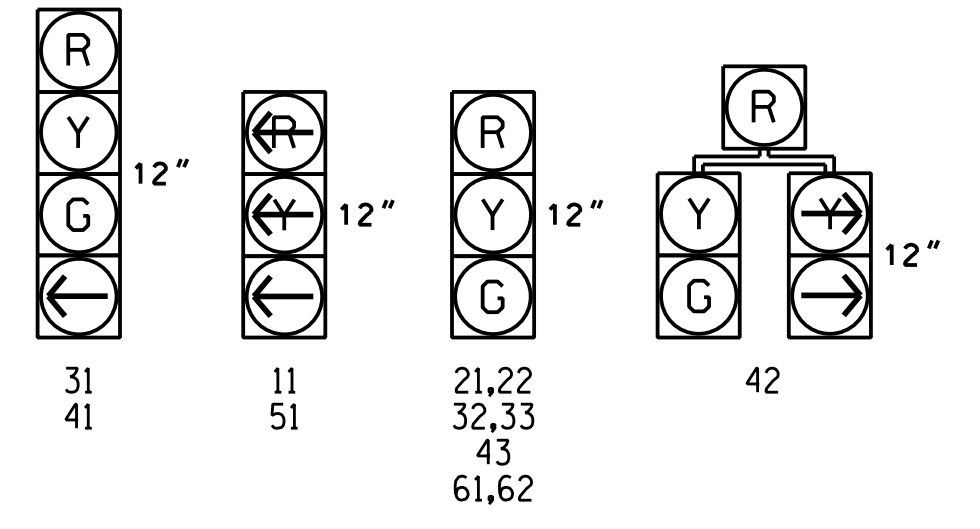
- ←●→ DETECTED MOVEMENT
- ←---→ UNDETECTED MOVEMENT (OVERLAP)
- ←.....→ UNSIGNALIZED MOVEMENT
- ←---> PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	03	04
11	---	---	---	---	---	---
21,22	R	R	G	G	R	Y
31	R	R	R	R	G	R
32,33	R	R	R	R	G	R
41	R	R	R	R	G	R
42	R	R	R	R	G	R
43	R	R	R	R	G	R
51	---	---	---	---	---	---
61,62	R	G	R	G	R	Y

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	DETECTOR PROGRAMMING							
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X60	0	*	-	1	Y	Y	-	-	-	-	Y
2A	6X6	355	*	-	2	Y	Y	-	-	-	-	Y
2B	6X6	355	*	-	2	Y	Y	-	-	-	-	Y
3A	6X30	0	*	-	3	Y	Y	-	-	-	-	Y
3B	6X30	0	*	-	3	Y	Y	-	-	10	-	Y
3C	6X30	0	*	-	3	Y	Y	-	2.0	10	-	Y
3D	6X30	0	*	-	3	Y	Y	-	2.0	10	-	Y
3E	6X6	0	*	-	3	Y	Y	-	2.0	15	-	Y
3F	6X6	0	*	-	3	Y	Y	-	2.0	15	-	Y
4A	6X60	0	*	-	4	Y	Y	-	-	-	-	Y
4B	6X60	0	*	-	4	Y	Y	-	-	-	-	Y
5A	6X60	0	*	-	5	Y	Y	-	-	-	-	Y
5B	6X60	0	*	-	5	Y	Y	-	-	15	-	Y
6A	6X6	355	*	-	6	Y	Y	-	-	-	-	Y
6B	6X6	355	*	-	6	Y	Y	-	-	-	-	Y
S05	6X6	+120	*	-	-	-	-	-	-	-	-	Y
S06	6X6	+120	*	-	-	-	-	-	-	-	-	Y

* Multizone Microwave Detection

6 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.
- Phase 1 and/or 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Reposition existing signal head numbered 41.
- Set all detector units to presence mode.
- The cabinet should be designed to include Auxiliary Output file for future use.
- 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.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #0421

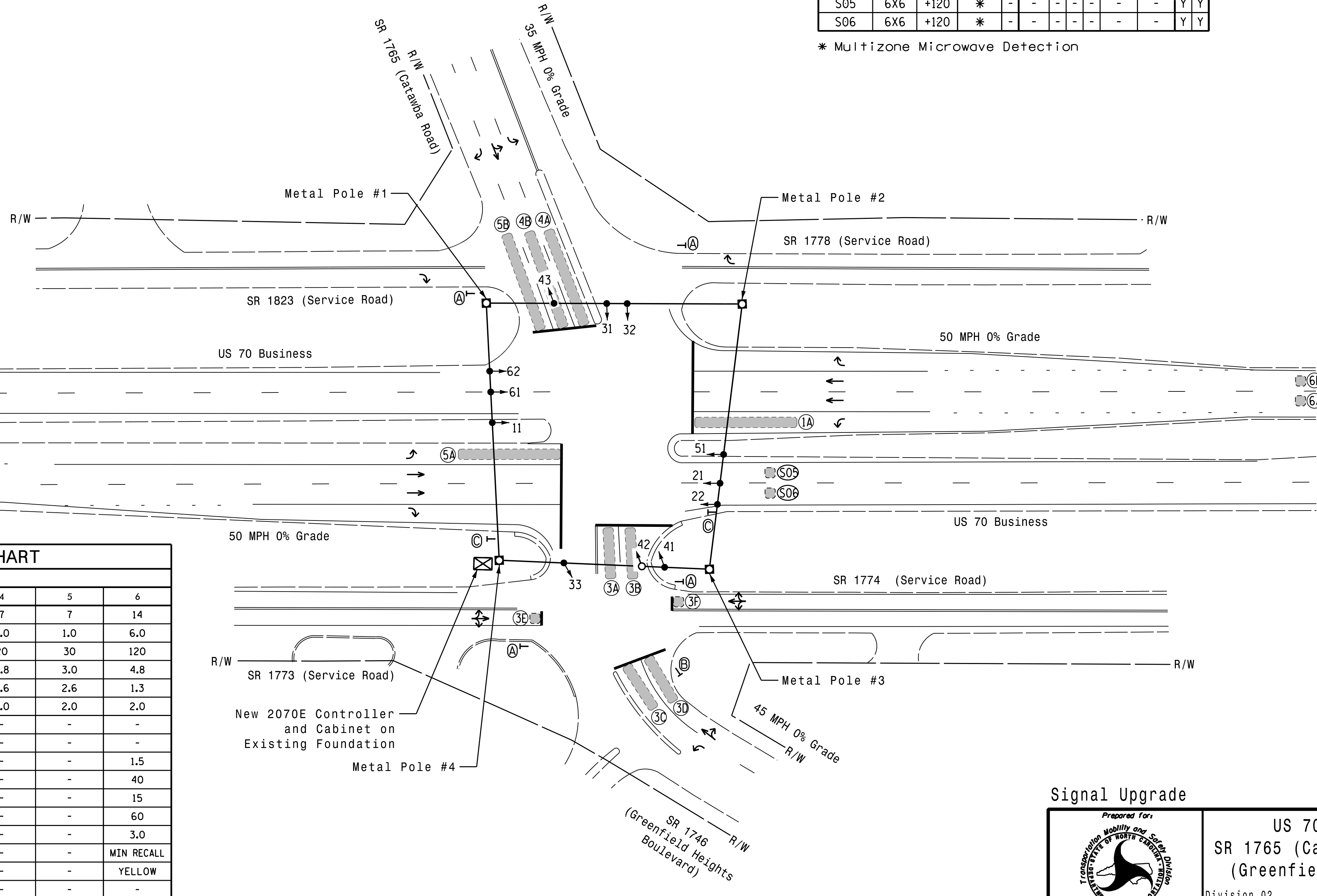
LEGEND

- | PROPOSED | EXISTING |
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OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	14	7	7	7	14
Extension 1 *	1.0	6.0	2.0	2.0	1.0	6.0
Max Green 1 *	15	120	25	20	30	120
Yellow Clearance	3.0	4.8	4.5	3.8	3.0	4.8
Red Clearance	3.1	1.0	1.6	2.6	2.6	1.3
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation *	-	1.5	-	-	-	1.5
Max Variable Initial *	-	40	-	-	-	40
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	60	-	-	-	60
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

* 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.



Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

HNTB NORTH CAROLINA, P.C.
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Raleigh, North Carolina 27609
NC License No: C-1554
(919) 546-8997

US 70 Business at
SR 1765 (Catawba Rd.)/SR 1746
(Greenfield Heights Blvd.)

Division 02 Craven Co. Havelock
PLAN DATE: March 2018 REVIEWED BY: A.D. Klinskiesk
PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons

SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
SEAL
031464
NATASHA R. SIMMONS

DocuSigned by:
Natasha R. Simmons
12/7/2018
DATE

REVISIONS	INIT.	DATE

SIC. INVENTORY NO. 02-0421