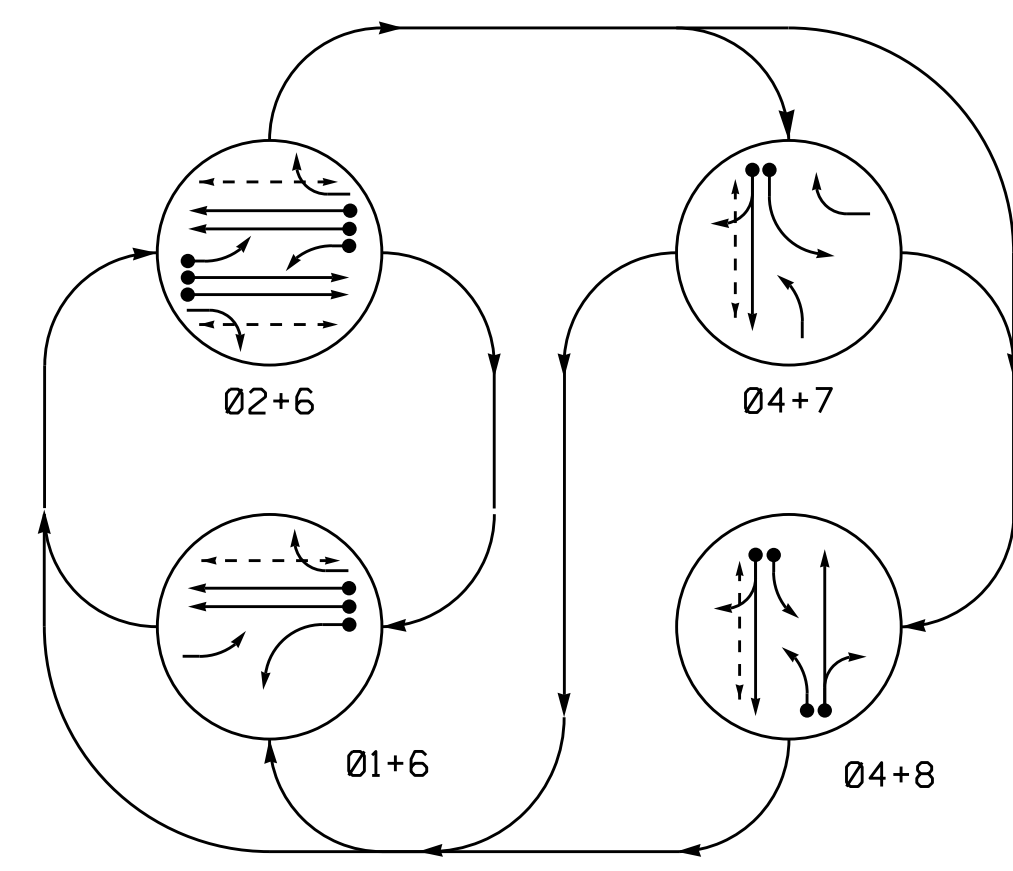


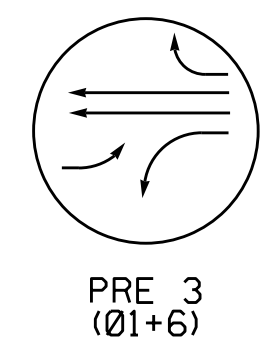
DEFAULT PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- ← UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

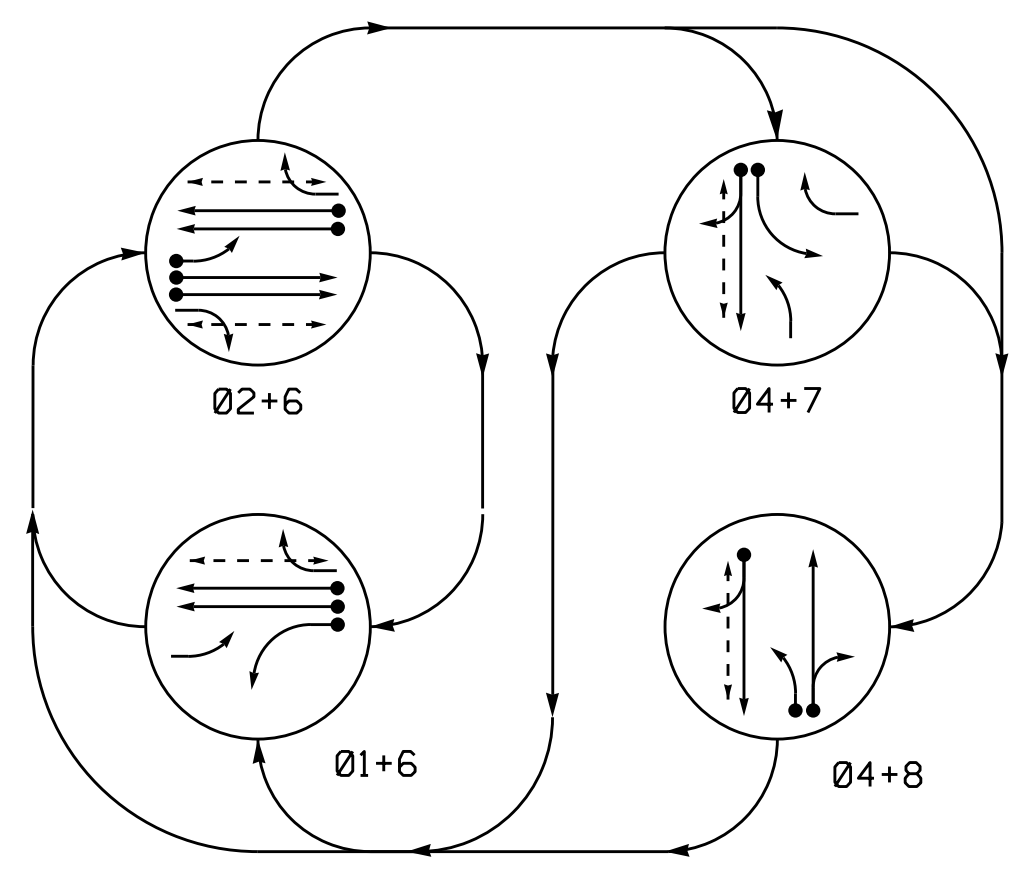
DEFAULT EV PREEMPT PHASES (Medium Priority)



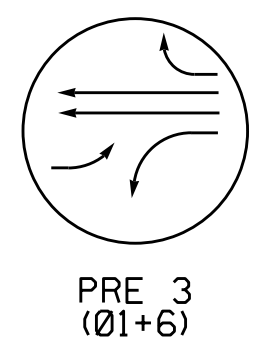
DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+6	02+6	04+7	PRE 3	FL	HL
11	←	←	←	←	←	←
21	←	←	←	←	←	←
22, 23	R	G	R	R	R	Y
41, 42	R	R	G	G	R	R
62	G	G	R	R	G	Y
63	G	G	R	R	G	Y
71	←	←	←	←	←	←
81, 82	R	R	R	G	R	R
83	←	←	←	←	←	←
P21, P22	DW	W	DW	DW	DRK	DRK
P41, P42	DW	DW	W	W	DW	DRK
P61, P62	W	W	DW	DW	DW	DRK

ALTERNATE PHASING DIAGRAM



ALTERNATE EV PREEMPT PHASES (Medium Priority)



ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+6	02+6	04+7	PRE 3	FL	HL
11	←	←	←	←	←	←
21	←	←	←	←	←	←
22, 23	R	G	R	R	R	Y
41, 42	R	R	G	G	R	R
62	G	G	R	R	G	Y
63	G	G	R	R	G	Y
71	←	←	←	←	←	←
81, 82	R	R	R	G	R	R
83	←	←	←	←	←	←
P21, P22	DW	W	DW	DW	DRK	DRK
P41, P42	DW	DW	W	W	DW	DRK
P61, P62	W	W	DW	DW	DW	DRK

4 Phase Fully Actuated w/ Emergency Vehicle Preemption (Salisbury Signal System)

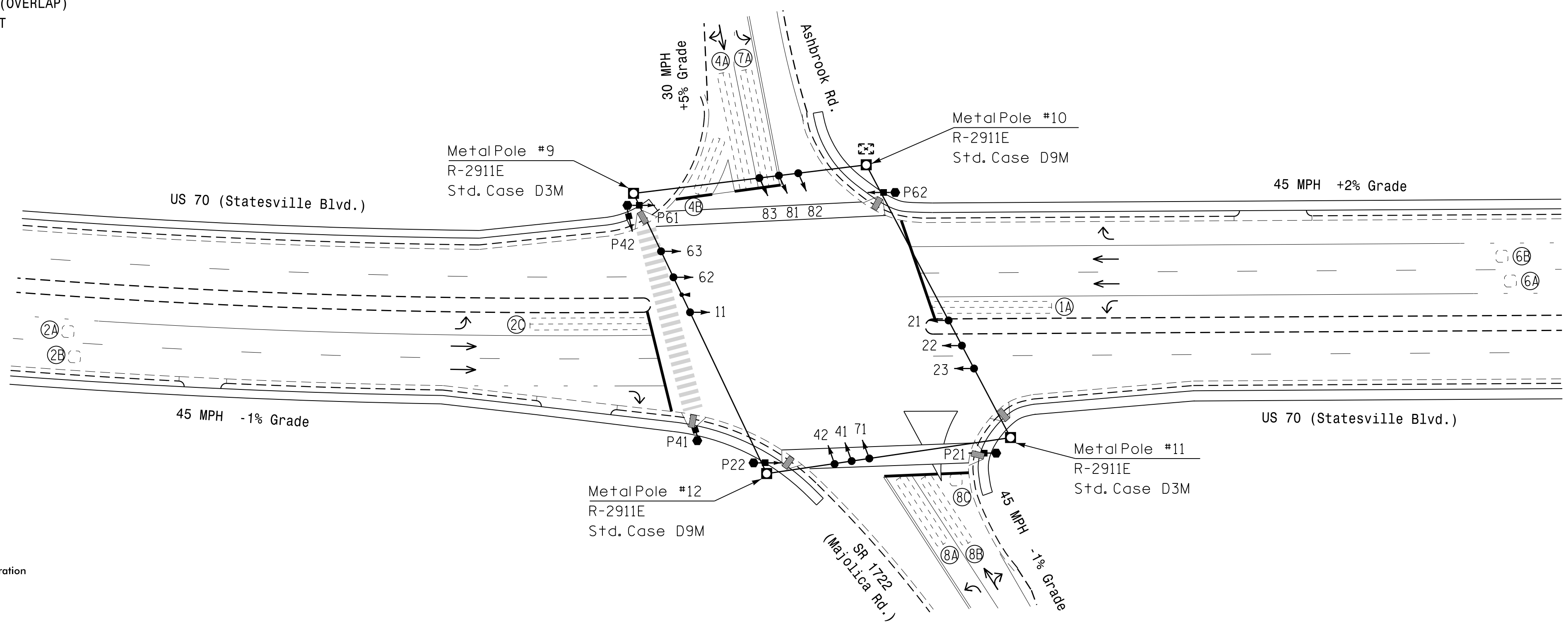
NOTES

- 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 may be lagged.
- Phase 7 may be lagged.
- 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.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- The Division (City) Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

OASIS 2070 EV PREEMPTION

FUNCTION	PRE 3
Interval 1 - Dwell Green	255
Interval 1 - Dwell Yellow	0.0*
Interval 1 - Dwell Red	0.0*
Interval 5 - Exit Green	1
Interval 5 - Yellow	0.0
Interval 5 - Red	0.0
Exit Phase(s)	2+6
Priority	MED
Delay Time	0
Min Green Before Pre	1
Ped Clear Before Pre	0*
Yellow Clear Before Pre	0.0*
Red Clear Before Pre	0.0*
Dwell Min Time	7
Dwell Max Time (Minutes)	2
Enable Backup Protection	N
Ped Clear Through Yellow	Y
Omit Overlaps	-
Preempt Extend**	2

* Time defaults to time used for phase during normal operation
 ** Program Timing on Optical Detection Unit



LEGEND

PROPOSED	EXISTING
○ Traffic Signal Head	● N/A
● Modified Signal Head	○ N/A
○ Sign	○ N/A
○ Pedestrian Signal Head	○ N/A
○ Signal Pole with Guy	○ Signal Pole with Sidewalk Guy
○ Inductive Loop Detector	○ Junction Box
○ Controller & Cabinet	○ 2-in Underground Conduit
○ Right of Way	○ Directional Arrow
○ Curb Ramp	○ Metal Strain Pole
○ Type II Signal Pedestal	○ Out of Pavement Detector

OASIS 2070 TIMING CHART

FEATURE	PHASE							
	1	2	4	6	7	8		
Min Green 1 *	7	12	7	12	7	7		
Extension 1 *	2.0	6.0	2.0	6.0	2.0	2.0		
Max Green 1 *	25	120	45	120	15	45		
Yellow Clearance	3.0	4.6	4.6	4.6	3.0	4.6		
Red Clearance	2.9	2.0	3.1	2.0	3.3	3.1		
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0		
Walk 1 *	-	7	7	7	-	-		
Don't Walk 1	-	21	25	27	-	-		
Seconds Per Actuation *	-	1.5	-	1.5	-	-		
Max Variable Initial *	-	34	-	34	-	-		
Time Before Reduction *	-	20	-	20	-	-		
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	ON	ON		

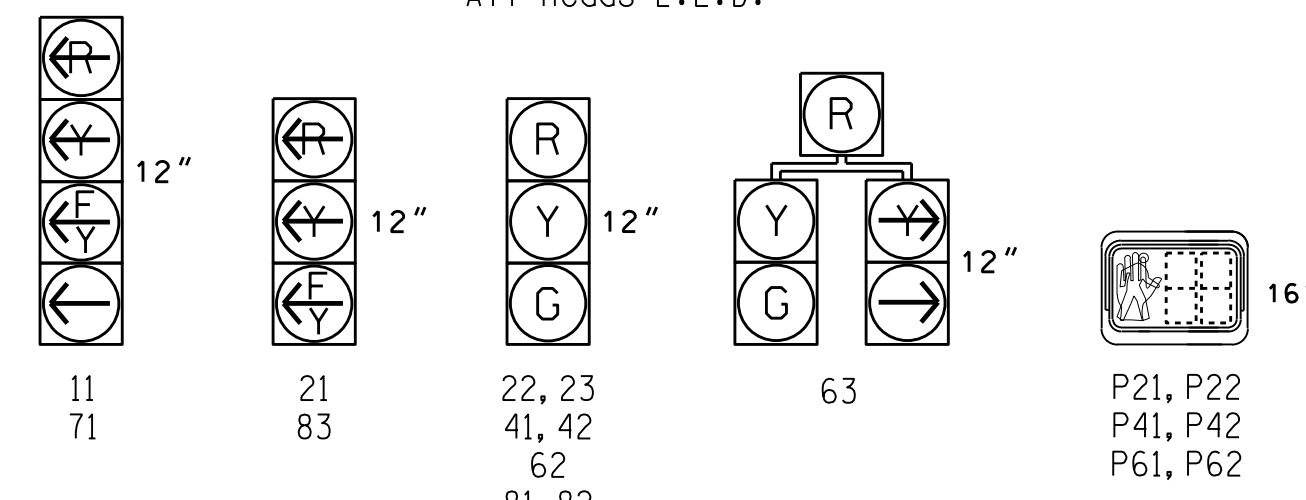
* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	STRETCH TIME			DELAY TIME
1A	6X60	0	2-4-2	-	1	Y	Y	-	15*	-	-
2A	6X6	300	EXISTING	-	2	Y	Y	-	-	-	-
2B	6X6	300	EXISTING	-	2	Y	Y	-	-	-	-
2C	6X60	0	2-4-2	-	2	Y	Y	Y	3	-	-
4A	6X60	0	2-4-2	-	4	Y	Y	-	10	-	-
4B	6X30	+5	2-4-2	-	4	Y	Y	-	15	-	-
6A	6X6	300	EXISTING	-	6	Y	Y	-	-	-	-
6B	6X6	300	EXISTING	-	6	Y	Y	-	-	-	-
7A	6X60	0	2-4-2	-	7	Y	Y	-	15**	-	-
8A	6X40	0	2-4-2	-	8	Y	Y	-	3	-	-
8B	6X40	0	2-4-2	-	8	Y	Y	-	10	-	-
8C	6X6	0	2-4-2	-	8	Y	Y	-	15	-	-

* Disable delay during alternate phasing operation.
 ** Reduce delay to 3 seconds during alternate phasing operation.
 # Disable phase call for loop during alternate phasing operation.

SIGNAL FACE I.D.
All Heads L.E.D.



Signal Upgrade

Prepared In the Offices of:
 TRANSPORTATION MOBILITY AND SAFETY DIVISION
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 Signal Design Section

US 70 (Statesville Boulevard) at SR 1722 (Majolica Road) and Ashbrook Road
 Rowan County, Salisbury

Division 9
 PLAN DATE: September 2021 REVIEWED BY:
 PREPARED BY: J.A. Lohr REVIEWED BY:
 REVISIONS: INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 026486
 ROBERT J. ZIEGLER
 9/30/2021
 DATE
 SIG. INVENTORY NO. 09-1068

SCALE: 1"=40'

09-SEP-2021 10:41
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