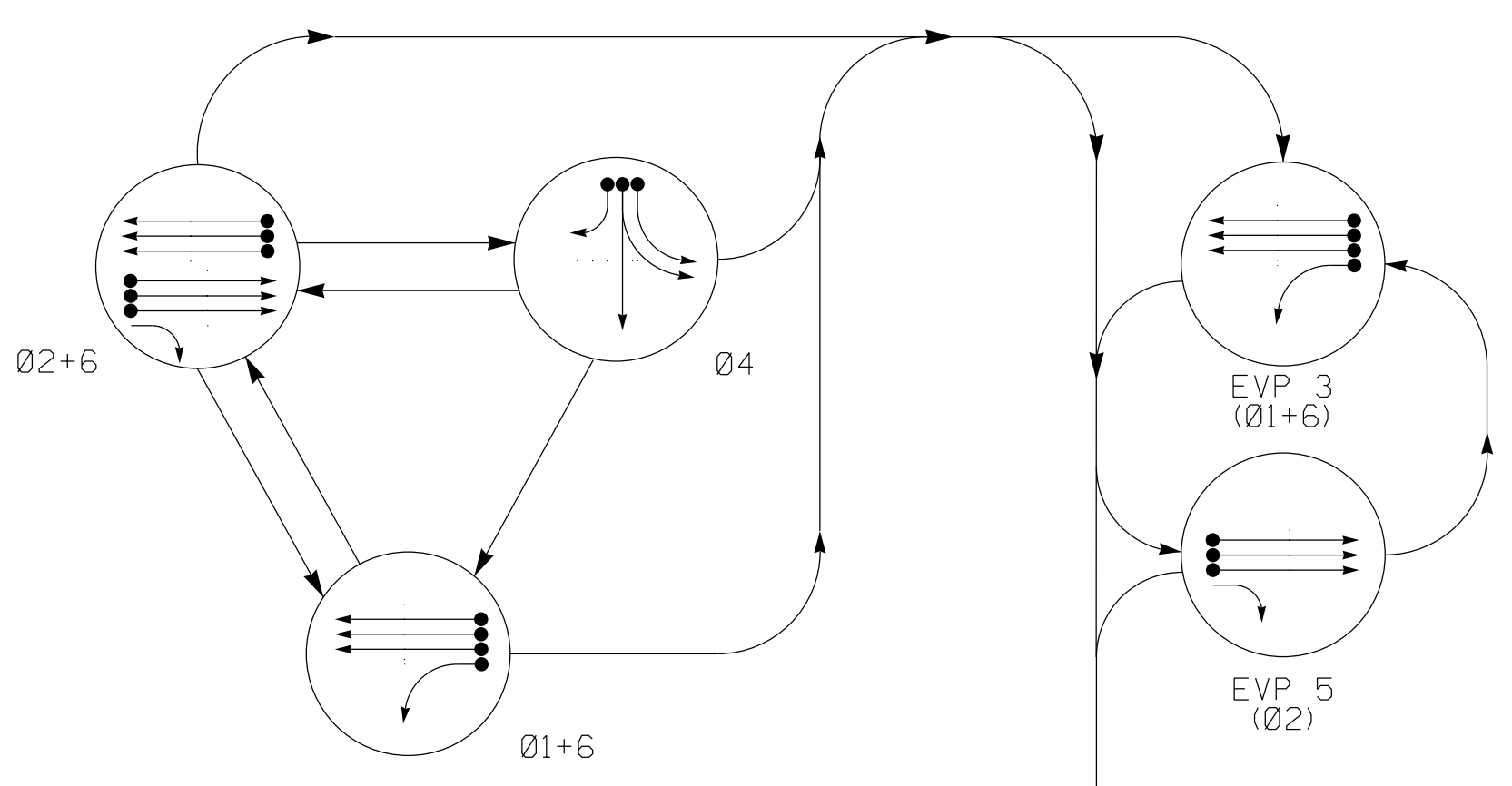


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

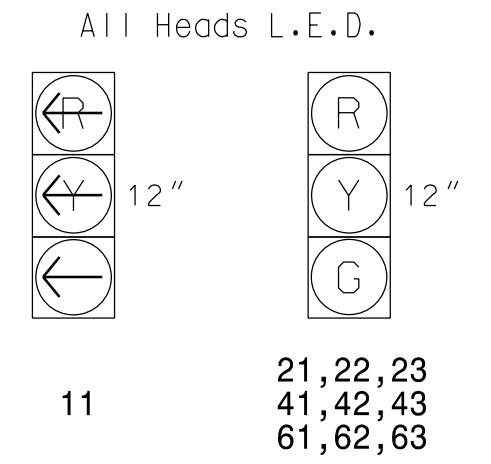
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- ⋯ UNSIGNALIZED MOVEMENT
- ⇄ PEDESTRIAN MOVEMENT

EVP Exit Phase Determined by Vehicle Demand

TABLE OF OPERATION

SIGNAL FACE	PHASE					
	Ø 1+6	Ø 2+6	Ø 4	EVP 3	EVP 5	F L S D
11	←	→	←	→	←	→
21, 22, 23	R	G	R	R	G	Y
41, 42, 43	R	R	G	R	R	R
61, 62, 63	G	G	R	G	R	Y

SIGNAL FACE I.D.



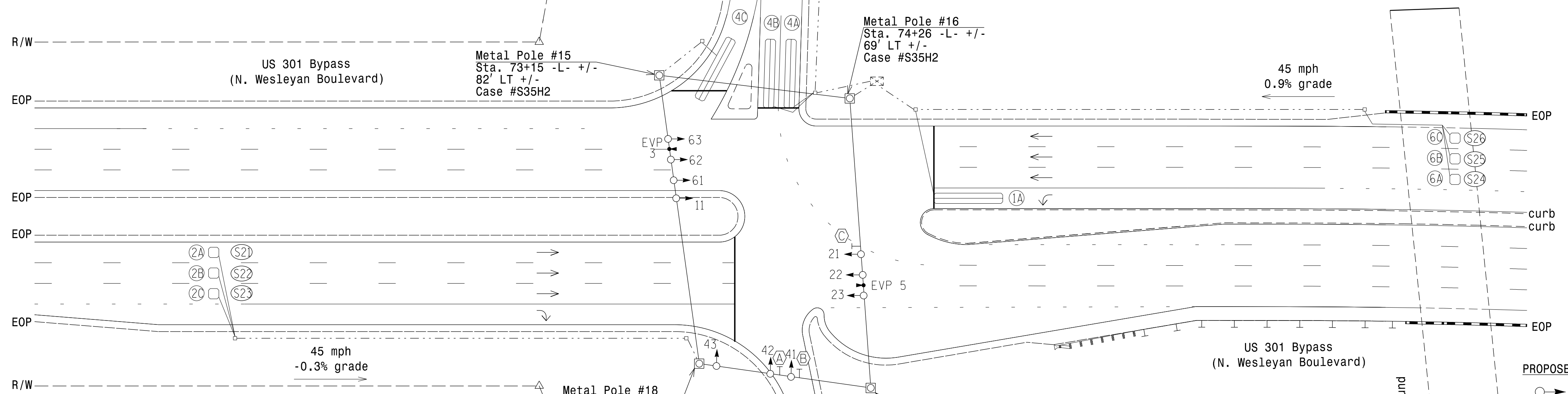
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

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	6X40	0	2-4-2	Y	1	Y	Y	-	-	-	-	Y
2A/S21	6X6	300	6	Y	2	Y	Y	-	-	-	-	Y
2B/S22	6X6	300	6	Y	2	Y	Y	-	-	-	-	Y
2C/S23	6X6	300	6	Y	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	Y
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	Y
4C	6X40	+5	2-4-2	Y	4	Y	Y	-	-	15	-	Y
6A/S24	6X6	300	4	Y	6	Y	Y	-	-	-	-	Y
6B/S25	6X6	300	4	Y	6	Y	Y	-	-	-	-	Y
6C/S26	6X6	300	4	Y	6	Y	Y	-	-	-	-	Y
S27	6X6	300	4	Y	-	-	-	-	-	-	-	Y

3 Phase W/ EV Preempt Fully Actuated Rocky Mount Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- 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.
- This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- Relocate EVP 3 and EVP 5 detectors onto new spans. Reuse Phase Selectors. See Project Special Provisions.
- Maximum times shown in timing charts are for free-run operation only. Coordinated signal timing values supersede these values.



OASIS 2070E TIMING CHART

FEATURE	PHASE			
	1	2	4	6
Min Green 1 *	7	12	7	12
Extension 1 *	2.0	6.0	2.0	6.0
Max Green 1 *	30	90	25	90
Yellow Clearance	3.0	4.6	3.9	4.5
Red Clearance	3.3	1.0	2.5	2.4
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	1.5	-	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	-	-	-	-
Simultaneous Gap	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.

2070 EV PREEMPT

FUNCTION	PRE 3	PRE 5
Interval 1 - Dwell Green	255	255
Interval 1 - Dwell Yellow	0.0*	0.0*
Interval 1 - Dwell Red	0.0*	0.0*
Interval 5 - Exit Green	0	0
Interval 5 - Yellow	0.0	0.0
Interval 5 - Red	0.0	0.0
Exit Phase(s)	-	-
Priority	MED	MED
Delay Time	0.0	0.0
Min Green Before Pre	1	1
Ped Clear Before Pre	0	0
Yellow Clear Before Pre	0.0*	0.0*
Red Clear Before Pre	0.0*	0.0*
Dwell Min Time	12	12
Enable Backup Protection	N	N
Ped Clear Through Yellow	N	N
Omit Overlaps	-	-
Preempt Extend**	5	5

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

LEGEND

- | PROPOSED | EXISTING |
|--|----------|
| ○ → Traffic Signal Head | ● → |
| ○ → Modified Signal Head | N/A |
| ⊥ Sign | ⊥ |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ |
| ⊥ Metal Strain Pole | ⊥ |
| ⊥ Inductive Loop Detector | ⊥ |
| ⊥ Controller & Cabinet | ⊥ |
| ⊥ Junction Box | ⊥ |
| ⊥ 2-in Underground Conduit | ⊥ |
| N/A Right of Way | --- |
| → Directional Arrow | → |
| N/A Guardrail | ⊥ |
| ○ Emergency Vehicle Detector | ● |
| ⊙ Combined Through and Left Arrow Sign (R3-6L) | ⊙ |
| ⊙ Left Arrow "ONLY" Sign (R3-5L) | ⊙ |
| ⊙ No Left Turn Sign (R3-2) | ⊙ |

Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

750 N. Greenfield Pkwy, Garner, NC 27529

US 301 Byp. (N. Wesleyan Blvd) at US 64 Eastbound Ramps

Division 04 Nash County Rocky Mount

PLAN DATE: November 2016 REVIEWED BY: MB Toth

PREPARED BY: AM Encarnacion REVIEWED BY:

SEAL

MELISSA B. TOTH

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

30-JAN-2017 17:44 D:\Projects\2017\01\00002135_U-3330_Signal\02_Signal\04\0618.dgn ENCL5986 AT US93021