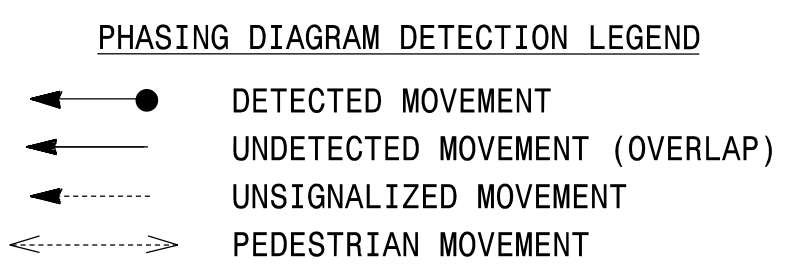
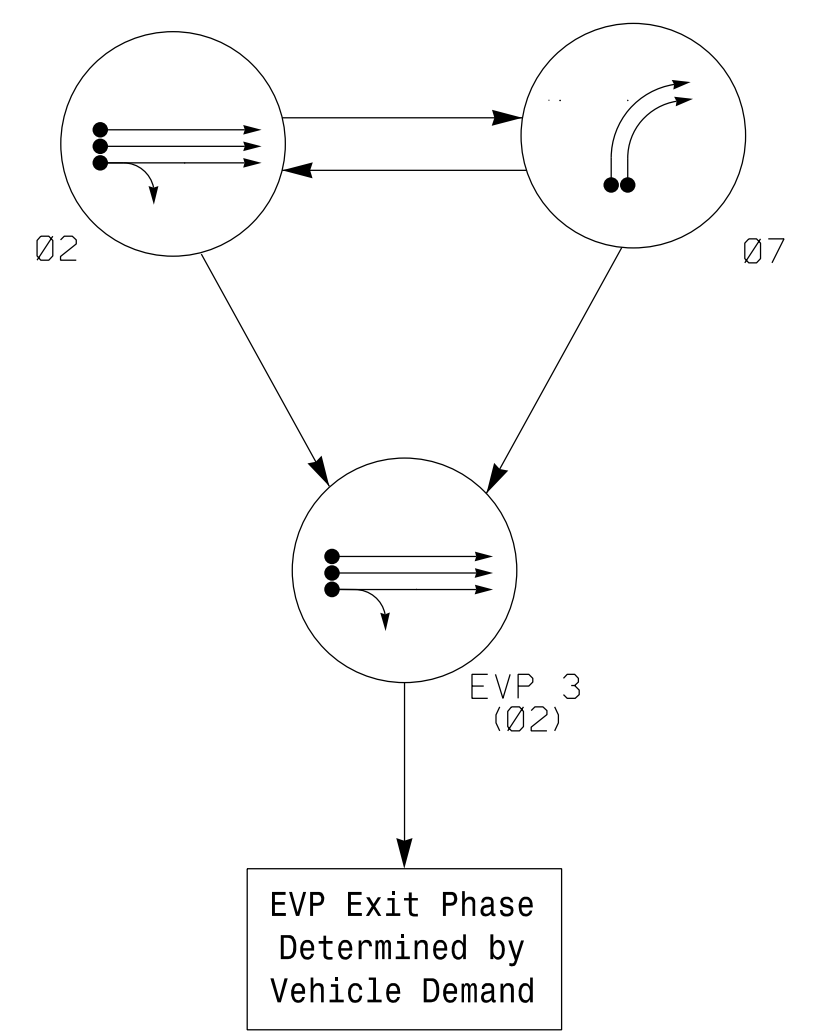


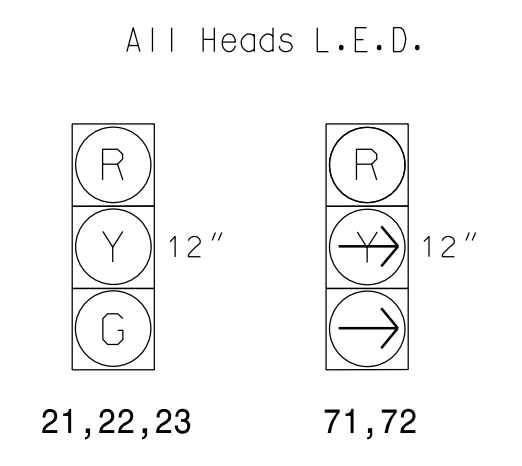
**PHASING DIAGRAM**



**TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	02	07	EVP 3	FLASH
21, 22, 23	G	R	G	Y
71, 72	R	→	R	R

**SIGNAL FACE I.D.**



**OASIS 2070 LOOP & DETECTOR INSTALLATION CHART**

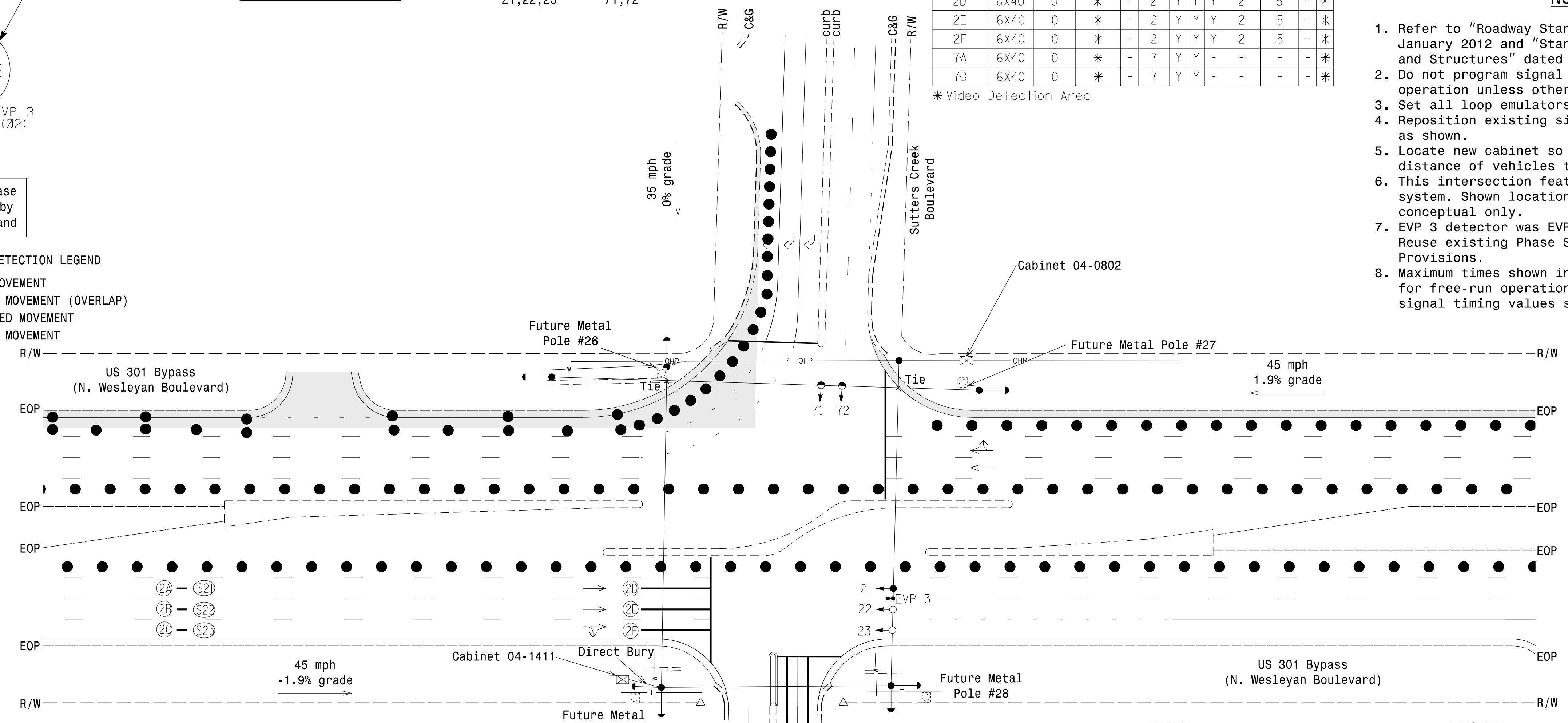
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING								
				NEW LOOP	PHASE	CALLING EXTENSION	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD		
2A/S21	6X6	300	*	-	2	Y	Y	-	-	-	Y	*
2B/S22	6X6	300	*	-	2	Y	Y	-	-	-	Y	*
2C/S23	6X6	300	*	-	2	Y	Y	-	-	-	Y	*
2D	6X40	0	*	-	2	Y	Y	Y	2	5	-	*
2E	6X40	0	*	-	2	Y	Y	Y	2	5	-	*
2F	6X40	0	*	-	2	Y	Y	Y	2	5	-	*
7A	6X40	0	*	-	7	Y	Y	-	-	-	-	*
7B	6X40	0	*	-	7	Y	Y	-	-	-	-	*

\* Video Detection Area

**2 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.
- Set all loop emulators to presence mode.
- Reposition existing signal head numbered 21 as shown.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- EVP 3 detector was EVP 5 in 04-0802 Temporary 1 Design. Reuse existing Phase Selector. 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	
	2	7
Min Green 1 *	12	7
Extension 1 *	6.0	2.0
Max Green 1 *	90	30
Yellow Clearance	4.7	3.1
Red Clearance	1.0	1.3
Red Revert	2.0	2.0
Walk 1 *	-	-
Don't Walk 1	-	-
Seconds Per Actuation *	-	-
Max Variable Initial *	-	-
Time Before Reduction *	15	-
Time To Reduce *	30	-
Minimum Gap	3.0	-
Recall Mode	MIN RECALL	-
Vehicle Call Memory	-	-
Dual Entry	-	-
Simultaneous Gap	ON	ON

**OASIS 2070 EV PREEMPT**

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

**LEGEND**

PROPOSED	EXISTING	PROPOSED	EXISTING
(A) Right Arrow "ONLY" Sign (R3-5R)	(A) Traffic Signal Head	(A) Signal Pole with Guy	(A) Signal Pole with Sidewalk Guy
(B) "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	(B) Modified Signal Head	(B) Inductive Loop Detector	(B) Controller & Cabinet
(C) Street Sign	(C) Sign	(C) Junction Box	(C) 2-in Underground Conduit
Construction Zone	Construction Zone Drums	UG Water Line	Right of Way
N/A	N/A	UG Telephone Line	Directional Arrow
N/A	N/A	Overhead Power Line	Emergency Vehicle Detector

\* 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.

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

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

**Signal Upgrade - Temporary Design 1 (Area 3 TMP Phase III)**

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

**NB US 301 Byp (N. Wesleyan Blvd) at Sutters Creek Blvd**

Division 04 Nash County Rocky Mount

PLAN DATE: November 2016 REVIEWED BY: MB Toth

PREPARED BY: AM Encarnacion REVIEWED BY:

REVISIONS: INIT. DATE

750 N. Greenfield Pkwy, Garner, NC 27529  
 SCALE: 0 40  
 1"=40'

Designed by: Melissa B. Toth 1/30/2017  
 SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH SEAL 025892  
 DATE: DATE  
 SIG. INVENTORY NO. 04-14111

**ATKINS** 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-8888 NCBEES #F-0326

30-JAN-2017 11:57 D:\P\3330\04\14111\04\14111.dgn U-3330 S:\signal\04-14111\04-14111.dgn