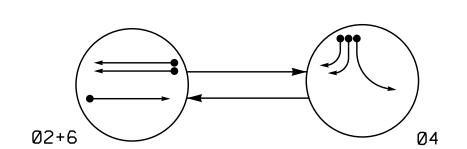
## PHASING DIAGRAM

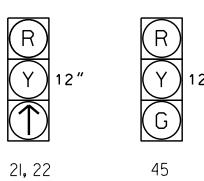


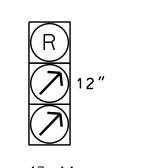
### PHASING DIAGRAM DETECTION LEGEND

<b>←</b>	DETECTED MOVEMENT
<b>←</b>	UNDETECTED MOVEMENT (OVERLA
<b>-</b>	UNSIGNALIZED MOVEMENT
<b>≪</b> >	PEDESTRIAN MOVEMENT

# TABLE OF OPERATION SIGNAL FACE 21, 22 41, 42 43,44 45 61,62

SIGNAL F	ACE I.D.
All Head	s L.E.D.
R	R





43, 44

LOOP & DETECTOR INSTALLATION CHART ASC/3-2070EN2 CONTROLLER W/ TS-2 CABINET																				
INDUCTIVE LOOPS				DETECTOR UNITS																
LOOP /	SIZE	DIST. FROM	TUDNIC	NEW	D NEMA ≥ U		NEMA PHASE	NEWA NEWA NEWASE NEWASE NEWASE NEWASE NEWASE NEW NEW NEW NEW NEW NEW NEW NEW NEW NE		NEMA   >		NEMA	NEMA	NEMA	NEMA	NEMA   >	TIMING		ADDED	DET.
ZONE NO.	(ft)	STOPBAR (ft)	TURNS	ᄬ	EXIST	PHASE	NEW	EXIST	FEATURE	TIME (sec)	INITIAL	TYPE								
2A <del>*</del>	6X6	300	*	Χ	-	2	-	*	-	-	Х	N								
4A <del>*</del>	6X40	0	*	Χ	1	4	*	-	-	-	-	S								
4B	6X40	0	2-4-2	Χ	-	4	_	Χ	DELAY	15	-	S								
4C	6X40	0	2-4-2	Χ	-	4	_	Χ	DELAY	15	-	S								
6A <del>*</del>	6X6	300	*	Χ	_	6	_	*	-	-	Х	N								
6B <del>*</del>	6X6	300	*	Χ	_	6	-	*	-	ı	Χ	N								

<sup>\*</sup> Video detection zone.

# 2 Phase Fully Actuated (Cary Signal System)

# NOTES

- 1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- 2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- 3. Reposition existing signal heads numbered 21, 22, 61, and 62.
- 4. Set all detector units to presence mode.
- 5. Pavement markings are existing unless otherwise shown.
- 6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- 7. Cary signal system data: Fiber channel #: 26.
- 8. This intersection features a video detection system. Shown locations of detectors are conceptual only. Refer to the manufacturer's guidelines for optimal detector placement.

# SR 3015 (Airport Boulevard) 45 MPH -2%\_Graḍe 45 MPH +2% Grade

TIMING CHART ASC/3-2070EN2 CONTROLLER								
PHASE	02		04		Ø6			
MINIMUM GREEN *	12	SEC.	7	SEC.	12	SEC.		
VEHICLE EXT. *	6.0	SEC.	2.0	SEC.	6.0	SEC.		
YELLOW CHANGE INT.	4.7	SEC.	3.0	SEC.	4.7	SEC.		
RED CLEARANCE	2.6	SEC.	2.1	SEC.	2.6	SEC.		
MAX. 1 *	120	SEC.	25	SEC.	120	SEC.		
RECALL POSITION	MIN. RECALL		NONE		MIN. RECALL			
LOCK DET.	ON		OFF		ON			
WALK *	1	SEC.	-	SEC.	_	SEC.		
PED. CLEAR	_	SEC.	_	SEC.	_	SEC.		
VOLUME DENSITY	40	l OFF		F	ON			
ACTUATION B4 ADD *	_	VEH.	_	VEH.	_	VEH.		
SEC. PER ACTUATION *	2.5	SEC.	_	SEC.	1.5	SEC.		
MAX. INITIAL *	34	SEC.	_	SEC.	34	SEC.		
TIME B4 REDUCTION *	15	SEC.	_	SEC.	15	SEC.		
TIME TO REDUCE *	45	SEC.	_	SEC.	45	SEC.		
MINIMUM GAP	3.0	SEC.	_	SEC.	3.0	SEC.		
DUAL ENTRY	OF	F OFF		OF	OFF			

\* These values may be field adjusted. Do not adjust in 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.

This plan supersedes the plan signed and sealed on 7/24/19.

	<b>EXISTING</b>
Traffic Signal Head	<b></b>
Modified Signal Head	N/A
Sign	$\dashv$
Pedestrian Signal Head	•
Signal Pole with Guy Signal Pole with Sidewalk Guy	
Inductive Loop Detector	
	د <u>×</u> عا
2-in Underground Conduit	
Right of Way	
Directional Arrow	$\longrightarrow$
Curb Ramp	
Guardrail	<del></del>
Construction Zone Drums	•
Construction Zone	·
Out of Pavement Detector	•
Video Detection Area	
No Right Turn Sign (R3-1)	lacksquare
U-Turn/No Left Turn Sign (R3-	_
No Left Turn Sign (R3-2)	$\overset{\smile}{\mathbb{O}}$
	Modified Signal Head Sign  Pedestrian Signal Head Signal Pole with Guy Signal Pole with Sidewalk Guy Inductive Loop Detector Controller & Cabinet Junction Box 2-in Underground Conduit Right of Way Directional Arrow Curb Ramp Guardrail Construction Zone Drums Construction Zone Out of Pavement Detector Video Detection Area No Right Turn Sign (R3-1) U-Turn/No Left Turn Sign (R3-

<u>LEGEND</u>

DOCUMENT NOT CONSIDERED Signal Upgrade - Temporary Design 3 (TMP Phase III, Step A) FINAL UNLESS ALL SIGNATURES COMPLETED SR 3015 (Airport Boulevard) I-40 EB Ramp Division 5 Wake County Morrisville PLAN DATE: September 2019 REVIEWED BY: 750 N.Greenfield Pkwy.Garner.NC 27529 PREPARED BY: J.A. LOhr REVIEWED BY:

SIMULTANEOUS GAP