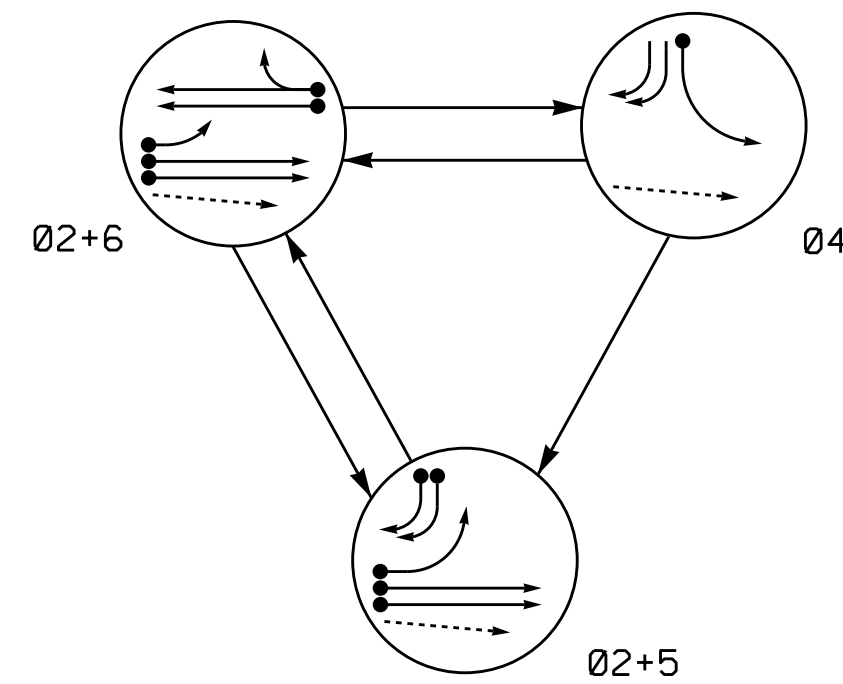


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

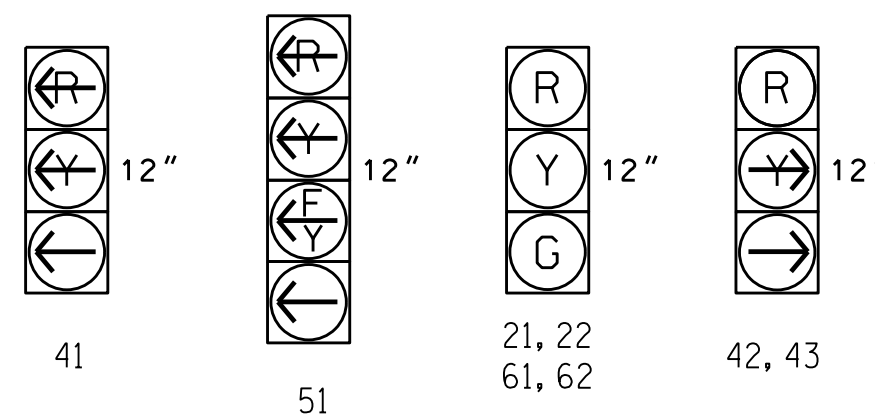
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02+5	02+6	04	05
21, 22	G	G	R	Y
41	R	R	Y	R
42, 43	Y	R	Y	R
51	Y	R	Y	R
61, 62	R	G	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



LOOP & DETECTOR INSTALLATION CHART
ASC/3-2070EN2 CONTROLLER w/ TS-2 CABINET

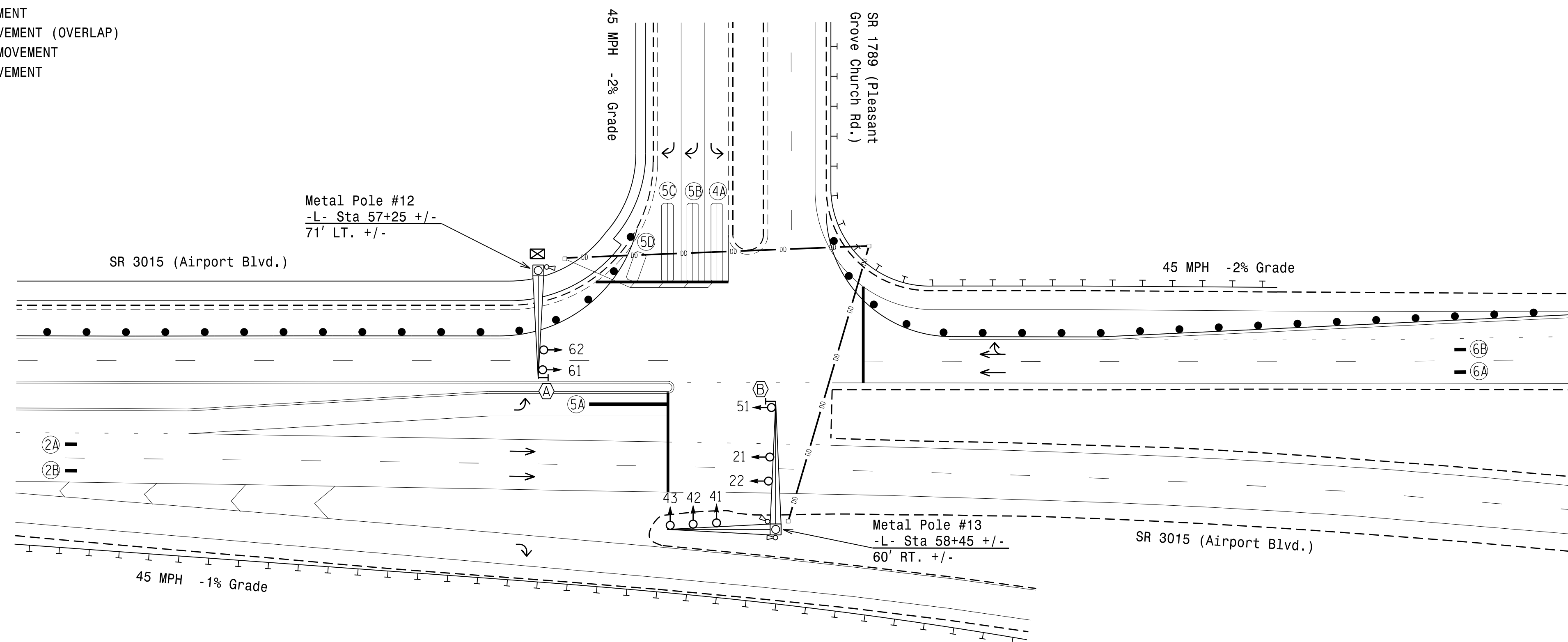
LOOP / ZONE NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW EXISTING	NEMA PHASE	NEW EXISTING	TIMING		ADDED INITIAL	DET. TYPE	
							FEATURE	TIME			
2A*	6X6	300	*	X	-	2	*	-	-	X	N
2B*	6X6	300	*	X	-	2	*	-	-	X	N
4A	6X40	0	2-4-2	X	-	4	X	-	-	-	S
5A*	6X40	0	*	X	-	5	*	DELAY	15	-	S
5B	6X40	0	2-4-2	X	-	5	X	DELAY	15	-	S
5C	6X40	0	2-4-2	X	-	5	X	DELAY	15	-	S
5D	6X15	0	3	X	-	5	X	DELAY	15	-	S
6A*	6X6	300	*	X	-	6	*	-	-	X	N
6B*	6X6	300	*	X	-	6	*	-	-	X	N

* Video detection zone.

3 Phase Fully Actuated (Cary 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 5 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Cary signal system data:
Fiber channel #: 26.
- This intersection features a video detection system. Shown locations of detectors are conceptual only. Refer to the manufacturer's guidelines for optimal detector placement.



LEGEND

- | PROPOSED | EXISTING |
|--|--|
| ○ → Traffic Signal Head | ● → Traffic Signal Head |
| ○ → Modified Signal Head | N/A |
| ○ → Sign | ○ → Sign |
| ○ → Pedestrian Signal Head With Push Button & Sign | ○ → Pedestrian Signal Head With Push Button & Sign |
| ○ → Signal Pole with Guy | ○ → Signal Pole with Guy |
| ○ → Signal Pole with Sidewalk Guy | ○ → Signal Pole with Sidewalk Guy |
| ○ → Inductive Loop Detector | ○ → Inductive Loop Detector |
| ○ → Controller & Cabinet | ○ → Controller & Cabinet |
| ○ → Junction Box | ○ → Junction Box |
| ○ → 2-in Underground Conduit | ○ → 2-in Underground Conduit |
| N/A → Right of Way | N/A → Right of Way |
| ○ → Directional Arrow | ○ → Directional Arrow |
| ○ → Metal Pole with Mastarm | ○ → Metal Pole with Mastarm |
| N/A → Guardrail | N/A → Guardrail |
| ○ → Directional Drill | N/A |
| ○ → Out of Pavement Detector | ○ → Out of Pavement Detector |
| ○ → Video Detection Area | ○ → Video Detection Area |
| ○ → Construction Zone Drums | ○ → Construction Zone Drums |
| ○ → No U-Turn Sign (R3-4) | ○ → No U-Turn Sign (R3-4) |
| ○ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | ○ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) |

TIMING CHART ASC/3-2070EN2 CONTROLLER				
PHASE	02	04	05	06
MINIMUM GREEN *	12 SEC.	7 SEC.	7 SEC.	12 SEC.
VEHICLE EXT. *	6.0 SEC.	2.0 SEC.	2.0 SEC.	6.0 SEC.
YELLOW CHANGE INT.	4.7 SEC.	3.0 SEC.	3.0 SEC.	4.7 SEC.
RED CLEARANCE	1.8 SEC.	3.3 SEC.	2.3 SEC.	1.8 SEC.
MAX. 1 *	120 SEC.	30 SEC.	15 SEC.	120 SEC.
RECALL POSITION	MIN. RECALL	NONE	NONE	MIN. RECALL
LOCK DET.	ON	OFF	OFF	ON
WALK *	- SEC.	- SEC.	- SEC.	- SEC.
PED. CLEAR	- SEC.	- SEC.	- SEC.	- SEC.
VOLUME DENSITY	ON	OFF	OFF	ON
ACTUATION B4 ADD *	- VEH.	- VEH.	- VEH.	- VEH.
SEC. PER ACTUATION *	1.5 SEC.	- SEC.	- SEC.	1.5 SEC.
MAX. INITIAL *	34 SEC.	- SEC.	- SEC.	34 SEC.
TIME B4 REDUCTION *	15 SEC.	- SEC.	- SEC.	15 SEC.
TIME TO REDUCE *	30 SEC.	- SEC.	- SEC.	30 SEC.
MINIMUM GAP	3.0 SEC.	- SEC.	- SEC.	3.0 SEC.
DUAL ENTRY	OFF	OFF	OFF	OFF
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.

New Installation - Temporary Design 2 (TMP Phase II)

	SR 3015 (Airport Blvd.) at SR 1789 (Pleasant Grove Church Rd.) Division 5 Wake County Morrisville		SEAL STATE OF NORTH CAROLINA PROFESSIONAL ENGINEER ROBERT J. LOHR License No. 026486 7/24/2019
	PLAN DATE: March 2019 PREPARED BY: J.A. Lohr	REVIEWED BY: REVIEWED BY:	