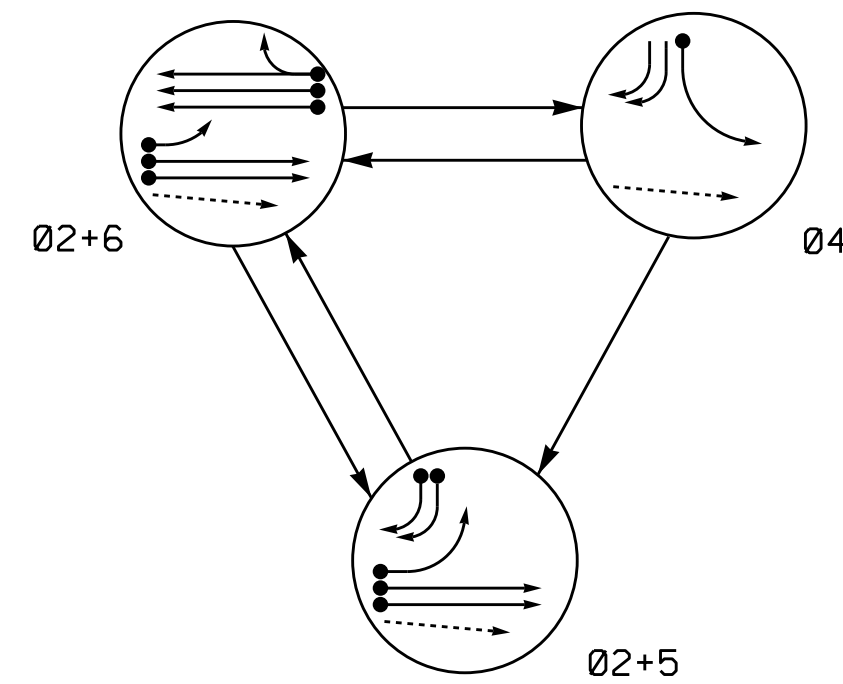


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

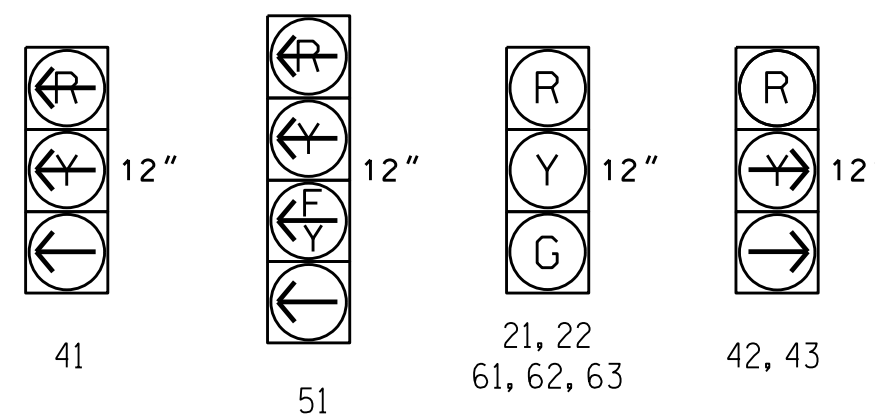
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- - - UNSIGNALIZED MOVEMENT
- ⤴ PEDESTRIAN MOVEMENT

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	Y	R	R
51	Y	Y	R	Y
61, 62, 63	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

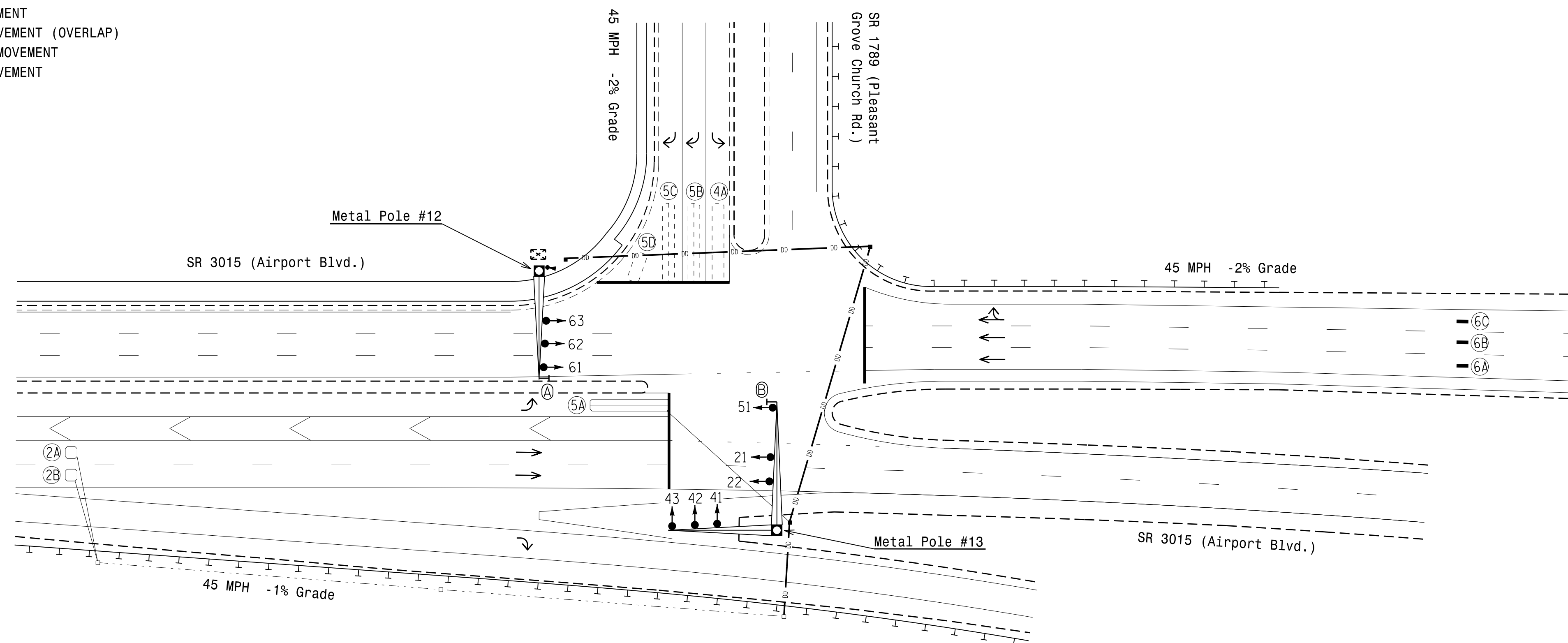
LOOP / ZONE NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW EXISTING	NEMA PHASE	NEW EXISTING	TIMING		ADDED INITIAL	DET. TYPE
							FEATURE	TIME		
2A	6X6	300	5	X	2	- X	-	-	X	N
2B	6X6	300	5	X	2	- X	-	-	X	N
4A	6X40	0	2-4-2	- X	4	- X	-	-	-	S
5A	6X40	0	2-4-2	X	5	- X	DELAY	15	-	S
5B	6X40	0	2-4-2	- X	5	- X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



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.	2.8 SEC.	1.8 SEC.
MAX. I *	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.	1.0 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.

LEGEND

- | PROPOSED | EXISTING |
|--|--|
| ○ → Traffic Signal Head | ● → N/A |
| ● → Modified Signal Head | — N/A |
| ⊥ Sign | ⊥ Sign |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ 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 | ⊠ Junction Box |
| ⊠ Junction Box | ⊠ Junction Box |
| — 2-in Underground Conduit | — Right of Way |
| → Directional Arrow | → Directional Arrow |
| ⊠ Metal Pole with Mastarm | ⊠ Metal Pole with Mastarm |
| — Guardrail | — 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) |

Signal Upgrade - Temporary Design 4 (TMP Phase IV)

SR 3015 (Airport Blvd.)
at
SR 1789
(Pleasant Grove Church Rd.)

Division 5 Wake County Morrisville

PLAN DATE: March 2019 REVIEWED BY: J.A. Lohr

PREPARED BY: J.A. Lohr REVIEWED BY: J.A. Lohr

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 1" = 40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

SEAL 026486

DATE: 7/24/2019

SIG. INVENTORY NO. 05-1906T4