PROJECT REFERENCE NO.	SHEET NO.
W-5601CH	Sig. 1

PHASING DIAGRAM

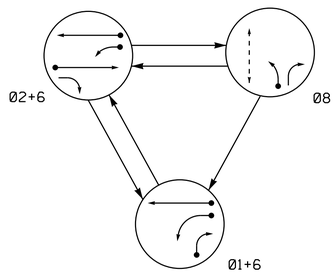


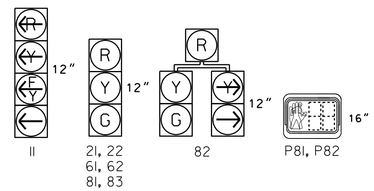
TABLE OF OPERATION

SIGNAL FACE	PHASE 01+6	PHASE 02+6	PHASE 08	FLASH
11	←	F Y	R	Y
21, 22	R	G	R	Y
61, 62	G	G	R	Y
81, 83	R	R	G	R
82	R/→	R	G	R
P81, P82	DW	DW	W	DRK

W - Walk
DW - Don't Walk
DRK - Dark

SIGNAL FACE I.D.

All Heads L.E.D.



LOOP & DETECTOR INSTALLATION CHART

ASC/3-2070LN2 CONTROLLER w/ TS-2 CABINET

INDUCTIVE LOOPS						DETECTOR UNITS					
LOOP NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW	EXISTING	NEMA PHASE	NEW	EXISTING	TIMING FEATURE	TIMING TIME	DET. TYPE
1A	6X40	0	2-4-2	X	-	1	X	-	DELAY	15	S
						6	X	-	DELAY	3	G
1B	6X40	0	2-4-2	X	-	1	X	-	DELAY	20	S
1C	6X6	0	4	X	-	1	X	-	DELAY	20	S
2A	6X6	300	5	X	-	2	X	-	-	-	N
6A	6X6	300	5	X	-	6	X	-	-	-	N
8A	6X40	0	2-4-2	X	-	8	X	-	DELAY	3	S

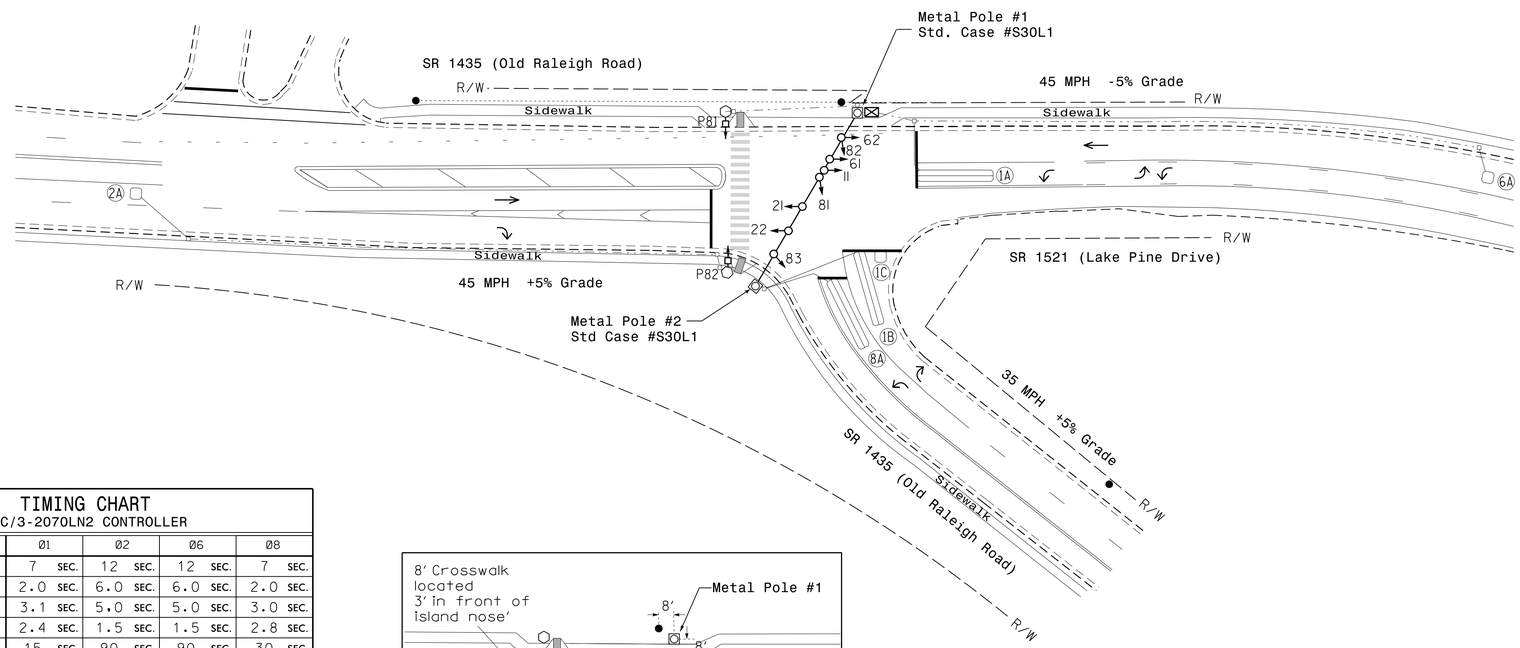
3 Phase
Fully Actuated
(Cary Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND

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



LEGEND

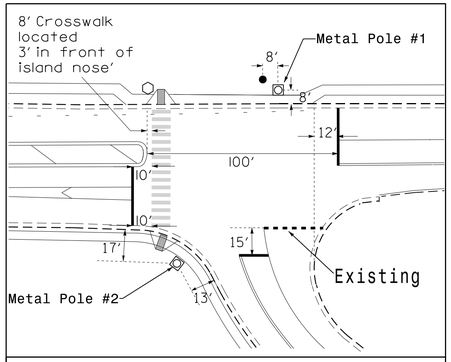
PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Metal Strain Pole	
N/A	Wheelchair Ramp	

TIMING CHART

ASC/3-2070LN2 CONTROLLER

PHASE	01	02	06	08
MINIMUM GREEN *	7 SEC.	12 SEC.	12 SEC.	7 SEC.
VEHICLE EXT. *	2.0 SEC.	6.0 SEC.	6.0 SEC.	2.0 SEC.
YELLOW CHANGE INT.	3.1 SEC.	5.0 SEC.	5.0 SEC.	3.0 SEC.
RED CLEARANCE	2.4 SEC.	1.5 SEC.	1.5 SEC.	2.8 SEC.
MAX. 1 *	15 SEC.	90 SEC.	90 SEC.	30 SEC.
RECALL POSITION	NONE	MIN. RECALL	MIN. RECALL	NONE
LOCK DET.	OFF	ON	ON	OFF
WALK *	– SEC.	– SEC.	– SEC.	7 SEC.
PED. CLEAR	– SEC.	– SEC.	– SEC.	16 SEC.
VOLUME DENSITY	OFF	ON	ON	OFF
ACTUATION B4 ADD *	– VEH.	0 VEH.	0 VEH.	– VEH.
SEC. PER ACTUATION *	– SEC.	2.5 SEC.	2.5 SEC.	– SEC.
MAX. INITIAL *	– SEC.	34 SEC.	34 SEC.	– SEC.
TIME B4 REDUCTION *	– SEC.	15 SEC.	15 SEC.	– SEC.
TIME TO REDUCE *	– SEC.	30 SEC.	30 SEC.	– SEC.
MINIMUM GAP	– SEC.	3.0 SEC.	3.0 SEC.	– 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.



Proposed Metal Pole, Crosswalk and Stopbar Locations

New Installation

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SR 1435 (Old Raleigh Road)
at
SR 1521 (Lake Pine Drive)

Division 5 Wake County Apex

PLAN DATE: December 2015 REVIEWED BY:
PREPARED BY: C.E. Carter REVIEWED BY:

SCALE 1"=40' (0 – 40)

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 036833 ENGINEER RYAN W. HOUGH
DocuSigned by: Ryan W. Hough 430320FAA2654C3 1/19/2016
DATE
SIG. INVENTORY NO. 05-1798

19-JAN-2016 14:39
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