

8 Phase Fully Actuated Fayetteville 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. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Set all detector units to presence mode.
6. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
8. The cabinet should be designed to include an Auxiliary Output file for future use.
9. Pavement markings are existing.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM

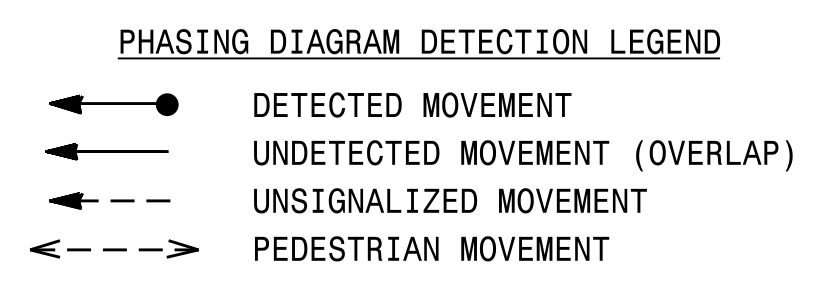
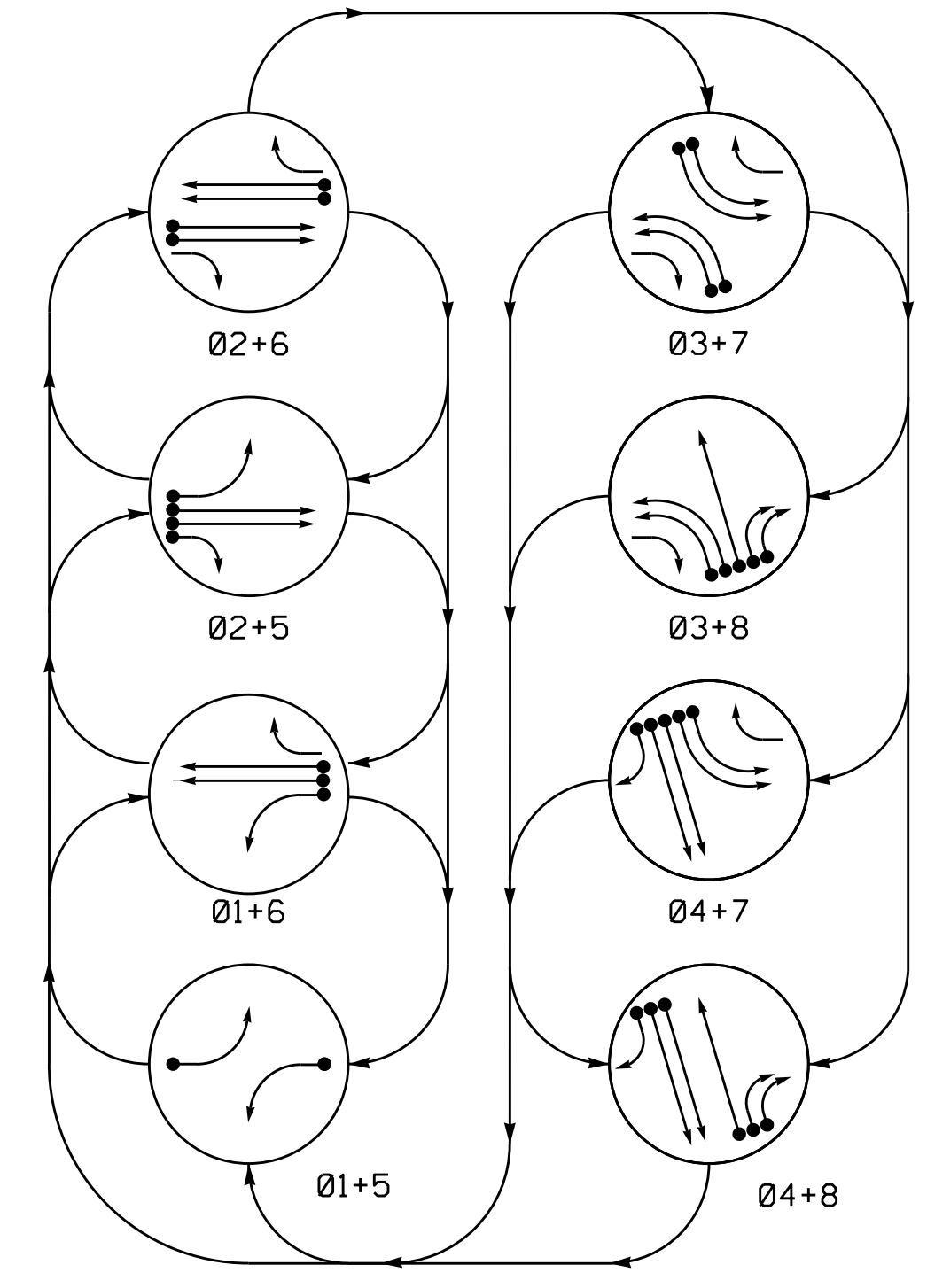
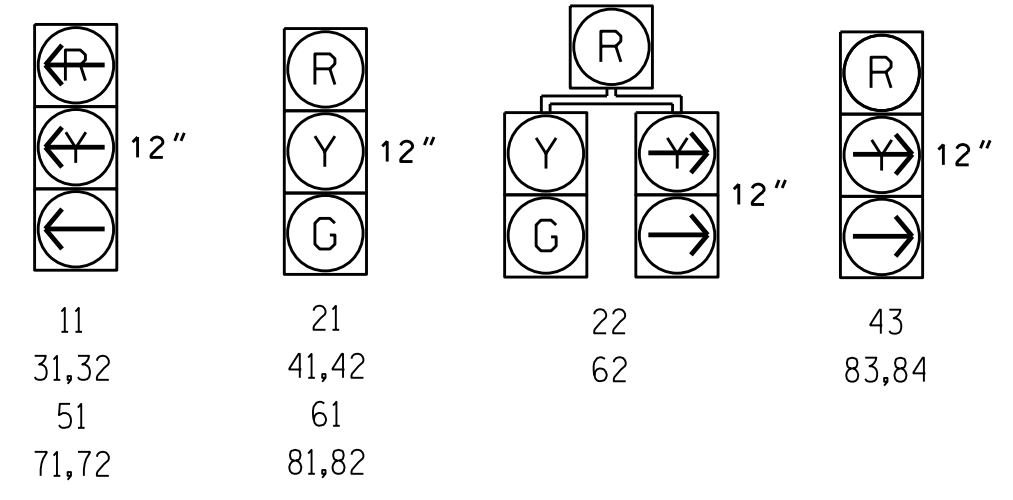


TABLE OF OPERATION

SIGNAL FACE	PHASE								FL	
	01+5	02+6	03+7	04+8	01+6	02+5	03+8	04+7		
11	---	---	---	---	---	---	---	---	---	---
21	R	R	G	G	R	R	R	R	Y	---
22	R	R	G	G	R	R	R	R	Y	---
31,32	---	---	---	---	---	---	---	---	---	---
41,42	R	R	R	R	R	R	G	G	R	---
43	R	R	R	R	R	R	---	---	R	---
51	---	---	---	---	---	---	---	---	---	---
61	R	G	R	G	R	R	R	R	Y	---
62	R	G	R	G	R	R	R	R	Y	---
71,72	---	---	---	---	---	---	---	---	---	---
81,82	R	R	R	R	R	R	G	G	R	---
83,84	R	R	R	R	R	R	---	---	R	---

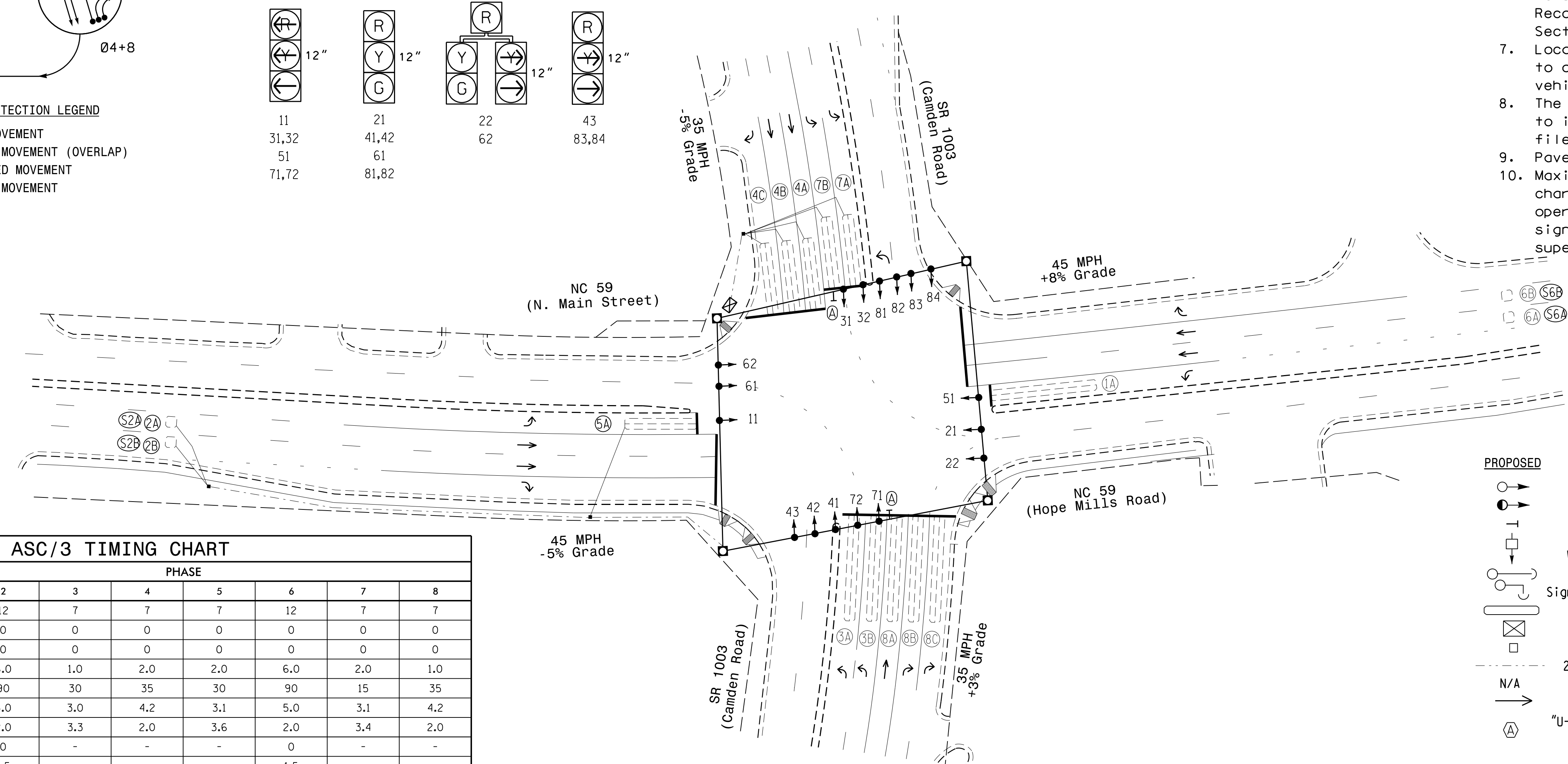
SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 DETECTOR INSTALLATION CHART

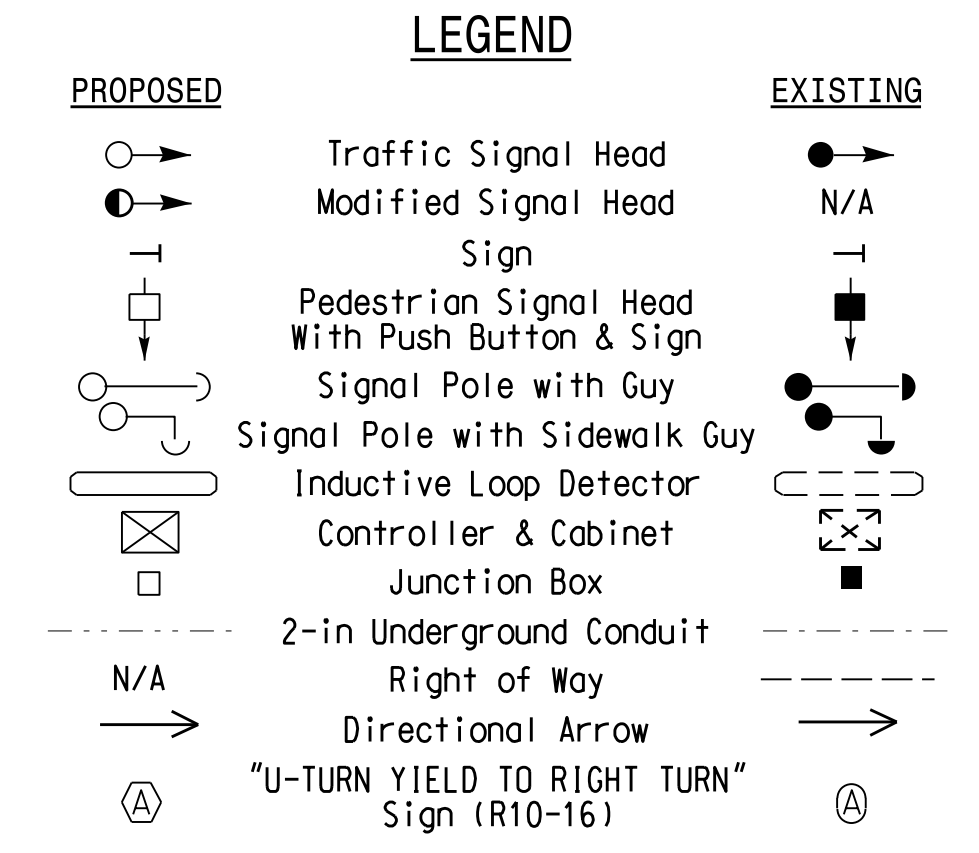
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X60	0	2-4-2	-	1	Yes	-	-	S	-	X
2A/S2A	6X6	300	5	-	2	Yes	-	-	N	X	X
2B/S2B	6X6	300	5	-	2	Yes	-	-	N	X	X
3A	6X60	0	2-4-2	-	3	Yes	-	-	S	-	X
3B	6X60	0	2-4-2	-	3	Yes	-	-	S	-	X
4A	6X40	0	2-4-2	-	4	Yes	-	-	S	-	X
4B	6X40	0	2-4-2	-	4	Yes	-	-	S	-	X
4C	6X40	0	2-4-2	-	4	Yes	-	25	S	-	X
5A	6X40	0	2-4-2	-	5	Yes	-	-	S	-	X
6A/S6A	6X6	300	5	-	6	Yes	-	-	N	X	X
6B/S6B	6X6	300	5	-	6	Yes	-	-	N	X	X
7A	6X40	0	2-4-2	-	7	Yes	-	-	S	-	X
7B	6X40	0	2-4-2	-	7	Yes	-	-	S	-	X
8A	6X60	0	2-4-2	-	8	Yes	-	-	S	-	X
8B	6X60	0	2-4-2	-	8	Yes	-	25	S	-	X
8C	6X60	0	2-4-2	-	8	Yes	-	25	S	-	X



ASC/3 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0
Veh. Extension *	1.0	6.0	1.0	2.0	2.0	6.0	2.0	1.0
Max 1 *	30	90	30	35	30	90	15	35
Yellow	3.0	5.0	3.0	4.2	3.1	5.0	3.1	4.2
Red Clear	3.3	2.0	3.3	2.0	3.6	2.0	3.4	2.0
Actuations B4 Add *	-	0	-	-	-	0	-	-
Seconds / Actuation *	-	1.5	-	-	-	1.5	-	-
Max Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Locking Detector	-	X	-	-	-	X	-	-
Recall Position	-	VEH. RECALL	-	-	-	VEH. RECALL	-	-
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	X	X	X	X	X	X	X	X

* 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.



Signal Upgrade

Prepared In the Offices of:

TRANSPORTATION MOBILITY AND SAFETY DIVISION
STATE OF NORTH CAROLINA
Signal Design Section

750 N. Greenfield Pkwy, Garner, NC 27529

NC 59 (N. Main St./Hope Mills Rd.) at SR 1003 (Camden Road)

Division 6 Cumberland County Hope Mills

PLAN DATE: May 2016 REVIEWED BY: JPG

PREPARED BY: KGP, Jr. REVIEWED BY:

REVISIONS: INIT. DATE

SCALE: 0 40
1" = 40'

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
JASON P. GALLOWAY
029904
7/20/2016
SIG. INVENTORY NO. 06-0357

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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