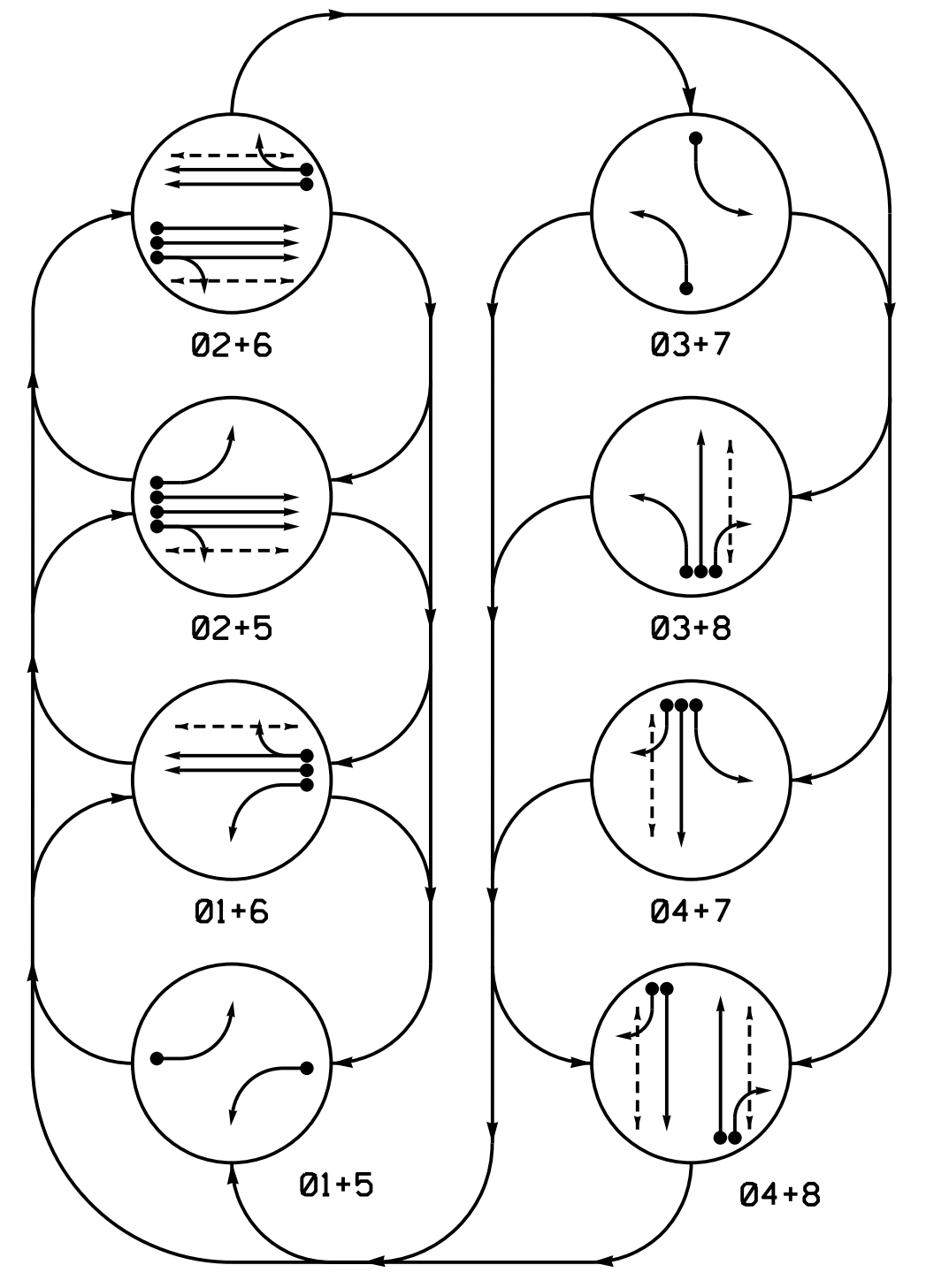


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

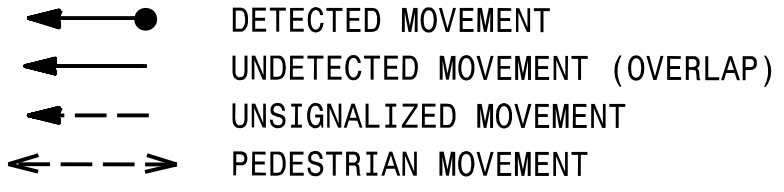
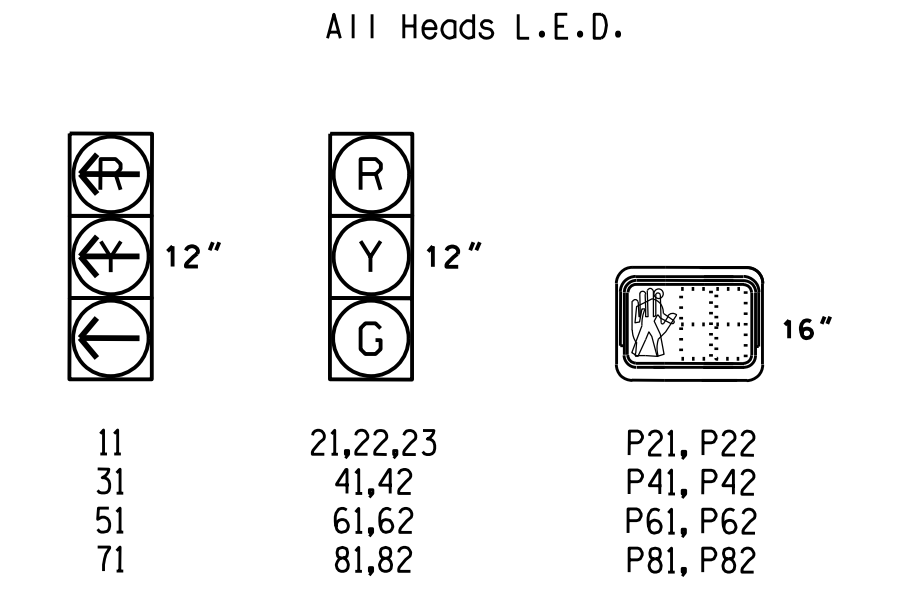


TABLE OF OPERATION

SIGNAL FACE	PHASE								FLASH
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	
11	-	-	-	-	-	-	-	-	-
21, 22, 23	R	R	G	G	R	R	R	R	Y
31	-	-	-	-	-	-	-	-	-
41, 42	R	R	R	R	R	G	G	R	Y
51	-	-	-	-	-	-	-	-	-
61, 62	R	G	R	G	R	R	R	R	Y
71	-	-	-	-	-	-	-	-	-
81, 82	R	R	R	R	R	G	G	R	Y
P21, P22	DW	DW	W	W	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	W	DRK	
P61, P62	DW	W	DW	W	DW	DW	DW	DRK	
P81, P82	DW	DW	DW	DW	DW	W	W	DRK	

SIGNAL FACE I.D.



ASC/3 DETECTOR INSTALLATION CHART

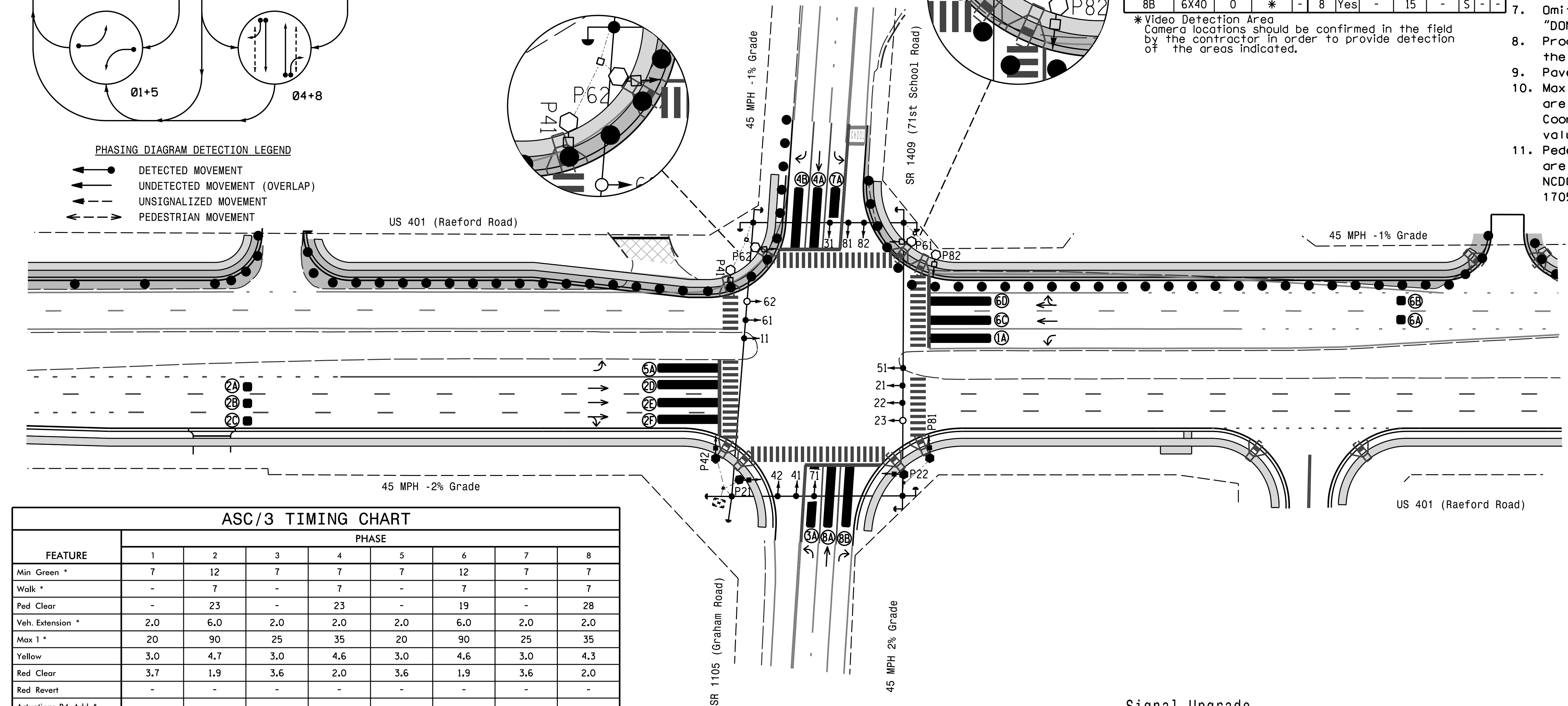
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	*	-	1	Yes	-	-	-	S	-	-
2A	6X6	300	*	-	2	Yes	-	-	-	N	-	-
2B	6X6	300	*	-	2	Yes	-	-	-	N	-	X
2C	6X6	300	*	-	2	Yes	-	-	-	N	-	X
2D	6X40	0	*	-	2	Yes	2.0	5	-	G	-	-
2E	6X40	0	*	-	2	Yes	2.0	5	-	G	-	-
2F	6X40	0	*	-	2	Yes	2.0	5	-	G	-	-
3A	6X40	0	*	-	3	Yes	-	3	-	S	-	-
4A	6X40	0	*	-	4	Yes	-	-	-	S	-	-
4B	6X40	0	*	-	4	Yes	-	15	-	S	-	-
5A	6X40	0	*	-	5	Yes	-	-	-	S	-	-
6A	6X6	300	*	-	6	Yes	-	-	-	N	-	-
6B	6X6	300	*	-	6	Yes	-	-	-	N	-	-
6C	6X40	0	*	-	6	Yes	2.0	5	-	G	-	-
6D	6X40	0	*	-	6	Yes	2.0	5	-	G	-	-
7A	6X40	0	*	-	7	Yes	-	3	-	S	-	-
8A	6X40	0	*	-	8	Yes	-	-	-	S	-	-
8B	6X40	0	*	-	8	Yes	-	15	-	S	-	-

\*Video Detection Area Camera locations should be confirmed in the field by the contractor in order to provide detection of the areas indicated.

8 Phase Fully Actuated Fayetteville 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 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Reposition existing signal heads numbered 11, 21, 22, 51, 61, & 62.
- Set all detector units to presence mode. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Pedestrian pedestals are conceptual and are shown for reference only. See 2018 NCDOT Roadway Standard Drawings 1705.04 sheets 1-3 for push button details.

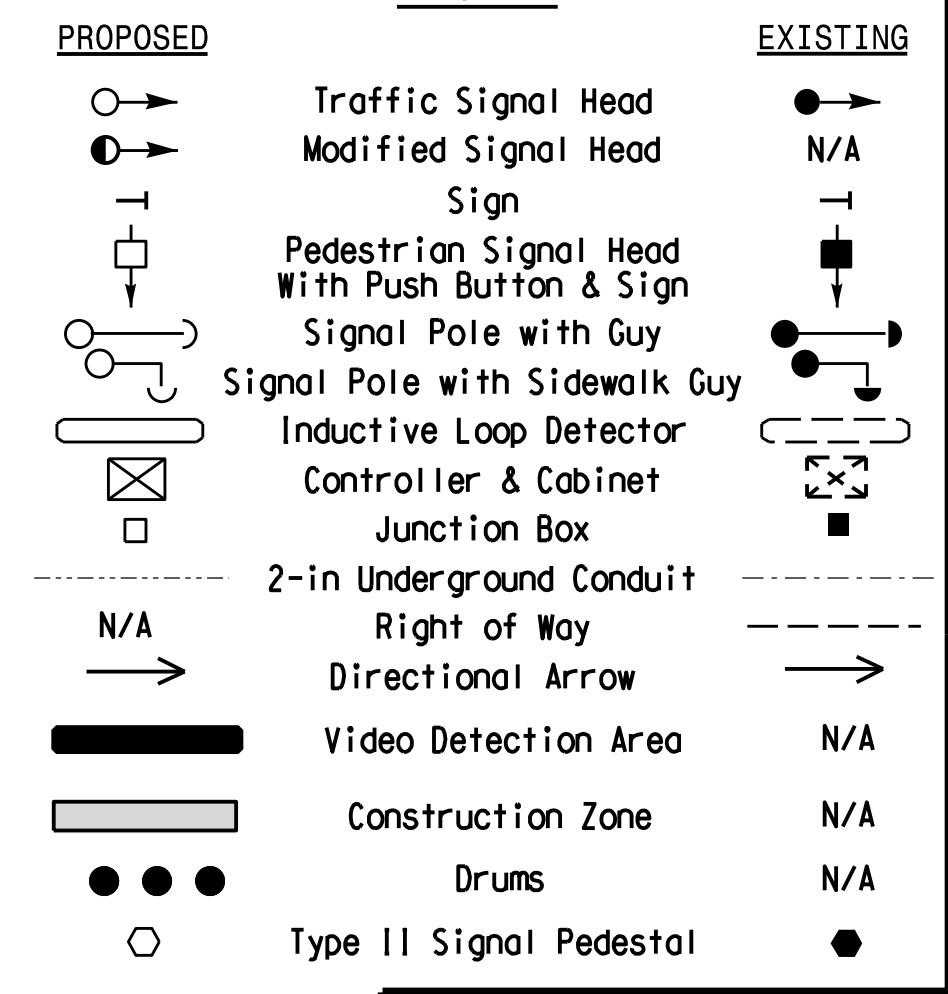


ASC/3 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	-	7	-	7	-	7	-	7
Ped Clear	-	23	-	23	-	19	-	28
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	20	90	25	35	20	90	25	35
Yellow	3.0	4.7	3.0	4.6	3.0	4.6	3.0	4.3
Red Clear	3.7	1.9	3.6	2.0	3.6	1.9	3.6	2.0
Red Revert	-	-	-	-	-	-	-	-
Actuations B4 Add *	-	-	-	-	-	-	-	-
Seconds / Actuation *	-	-	-	-	-	-	-	-
Max Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Locking Detector	-	-	-	-	-	-	-	-
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.

LEGEND



Signal Upgrade Temporary Signal Design 2 - TMP Phase II

**Stantec**  
 Stantec Consulting Services Inc.  
 801 Jones Franklin Road-Suite 300  
 Raleigh, NC 27606  
 Tel. (919) 851-6866  
 Fax. (919) 851-7024  
 www.stantec.com  
 License No. F-0672

Prepared for the Offices of:  
 Transportation Mobility and Safety Division  
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 Signal Design Section  
 750 N. Greenfield Pkwy, Garner, NC 27526

US 401 (Raeford Road) at  
 SR 1409 (71st School Road) /  
 SR 1105 (Graham Road)  
 Division 6 Cumberland County Fayetteville  
 PLAN DATE: June 2019 REVIEWED BY: E D Harris  
 PREPARED BY: A D Smith REVIEWED BY: B L Watson

Professional Engineer Seal  
 SEAL 29449  
 P. WATSON  
 DATE 6/5/2019  
 SIG. INVENTORY NO. 06-051612

6/5/2019 10:45 AM  
 U:\Projects\4405A\Sigs\4405A\_Sig.dwg  
 User: jhambert

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED