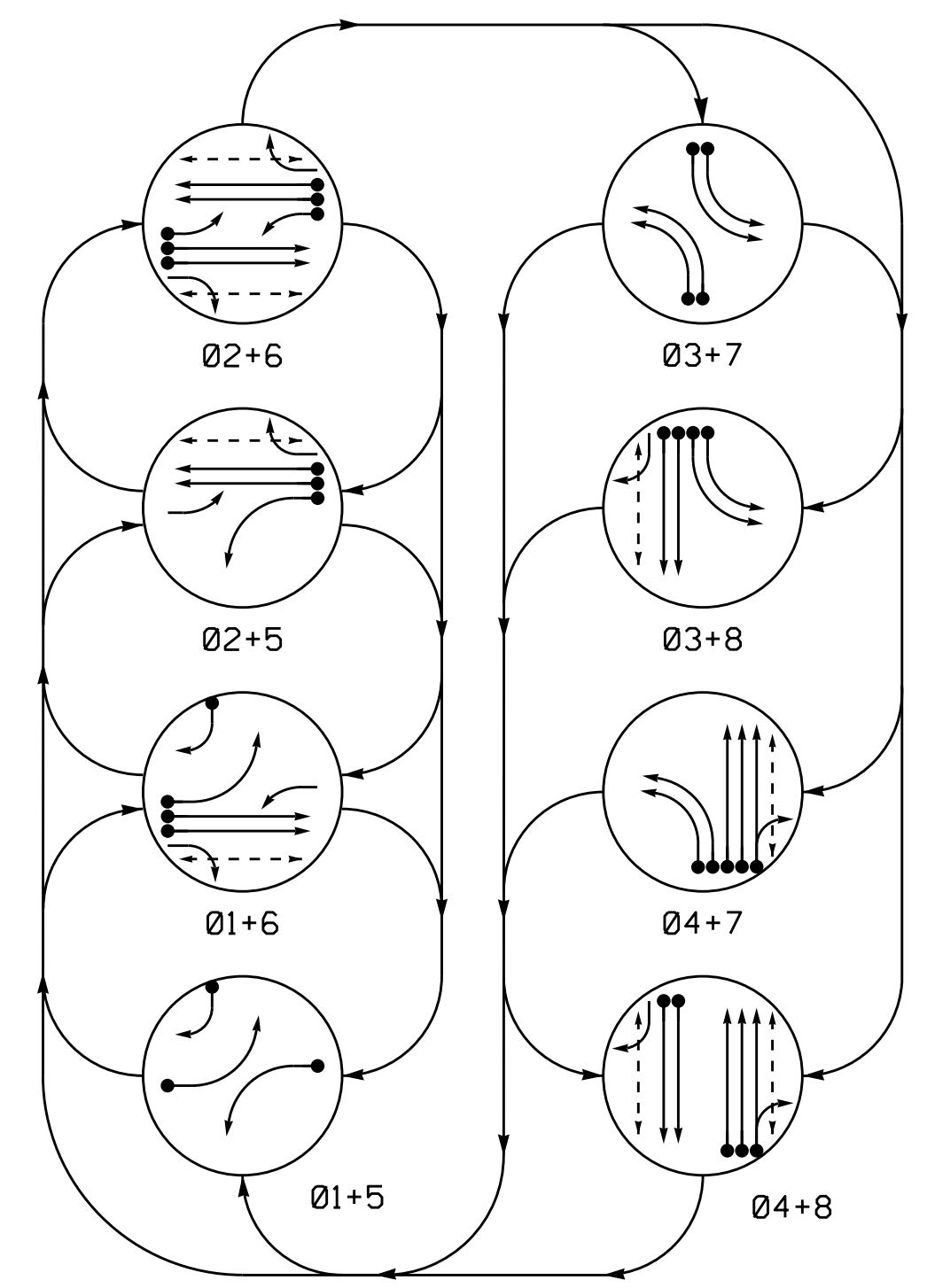


8 Phase Fully Actuated Fayetteville Signal System

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

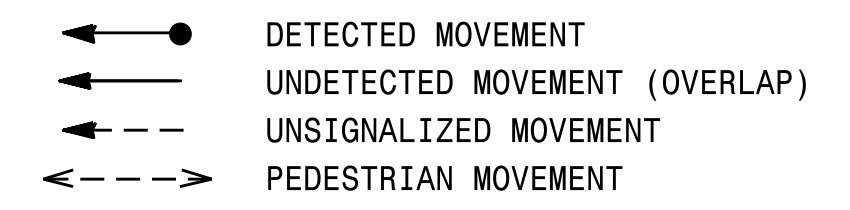


TABLE OF OPERATION

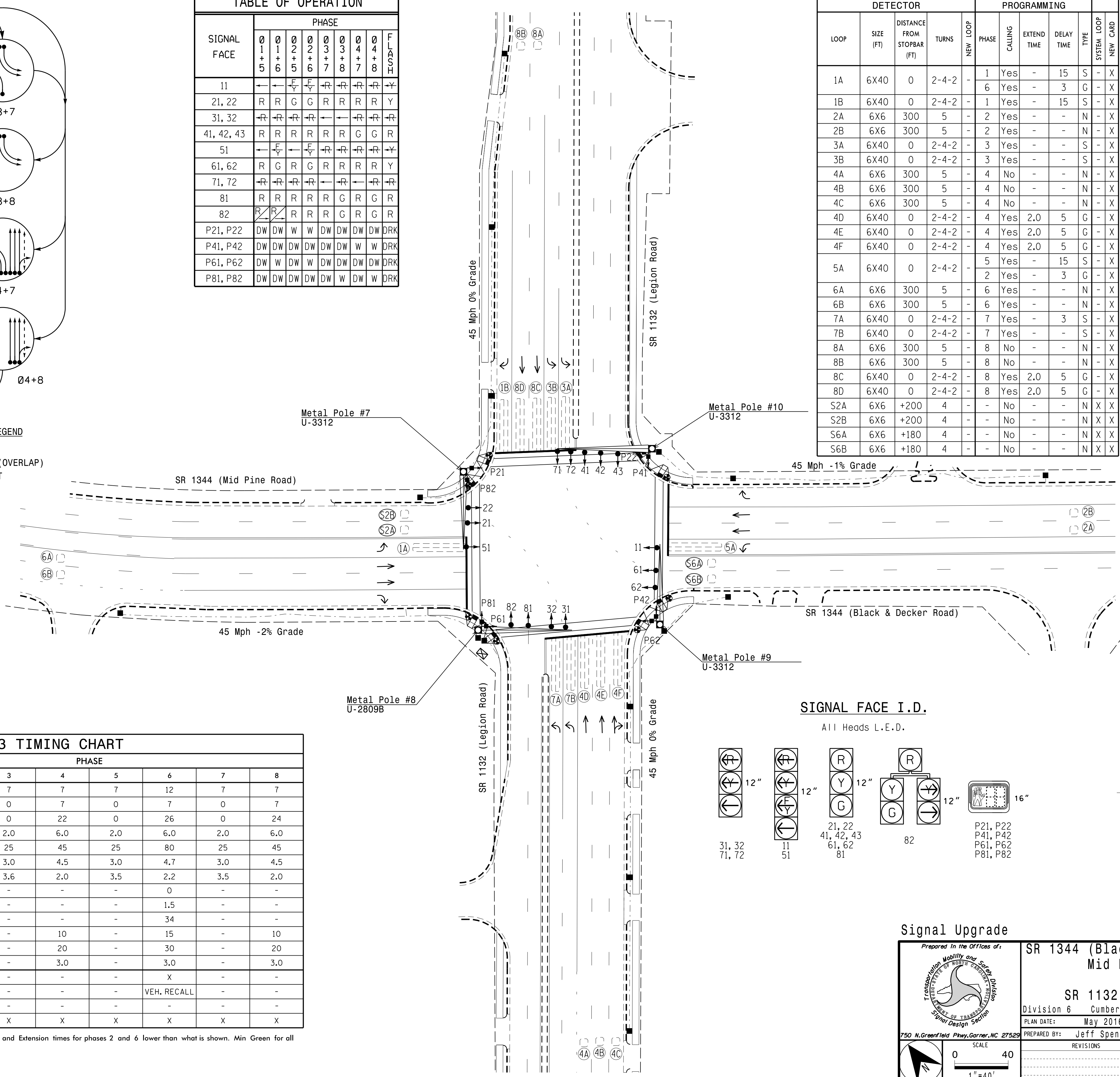
SIGNAL FACE	PHASE								L	F
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8		
11	←	←	←	←	←	←	←	←	←	Y
21, 22	R	R	G	G	R	R	R	R	R	Y
31, 32	←	←	←	←	←	←	←	←	←	Y
41, 42, 43	R	R	R	R	R	R	G	G	R	
51	←	←	←	←	←	←	←	←	←	Y
61, 62	R	G	R	G	R	R	R	R	R	Y
71, 72	←	←	←	←	←	←	←	←	←	Y
81	R	R	R	R	R	G	R	G	R	
82	R	R	R	R	R	G	R	G	R	
P21, P22	DW	DW	W	W	DW	DW	DW	DRK		
P41, P42	DW	DW	DW	DW	DW	DW	W	W	DRK	
P61, P62	DW	W	DW	W	DW	DW	DW	DRK		
P81, P82	DW	DW	DW	DW	W	DW	W	DRK		

ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING				TYPE	SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTEND TIME	DELAY TIME			
1A	6X40	0	2-4-2	-	1	Yes	-	15	S	-	X
1B	6X40	0	2-4-2	-	1	Yes	-	15	S	-	X
2A	6X6	300	5	-	2	Yes	-	-	N	-	X
2B	6X6	300	5	-	2	Yes	-	-	N	-	X
3A	6X40	0	2-4-2	-	3	Yes	-	-	S	-	X
3B	6X40	0	2-4-2	-	3	Yes	-	-	S	-	X
4A	6X6	300	5	-	4	No	-	-	N	-	X
4B	6X6	300	5	-	4	No	-	-	N	-	X
4C	6X6	300	5	-	4	No	-	-	N	-	X
4D	6X40	0	2-4-2	-	4	Yes	2.0	5	G	-	X
4E	6X40	0	2-4-2	-	4	Yes	2.0	5	G	-	X
4F	6X40	0	2-4-2	-	4	Yes	2.0	5	G	-	X
5A	6X40	0	2-4-2	-	5	Yes	-	15	S	-	X
6A	6X6	300	5	-	6	Yes	-	-	N	-	X
6B	6X6	300	5	-	6	Yes	-	-	N	-	X
7A	6X40	0	2-4-2	-	7	Yes	-	3	S	-	X
7B	6X40	0	2-4-2	-	7	Yes	-	-	S	-	X
8A	6X6	300	5	-	8	No	-	-	N	-	X
8B	6X6	300	5	-	8	No	-	-	N	-	X
8C	6X40	0	2-4-2	-	8	Yes	2.0	5	G	-	X
8D	6X40	0	2-4-2	-	8	Yes	2.0	5	G	-	X
S2A	6X6	+200	4	-	-	No	-	-	N	X	X
S2B	6X6	+200	4	-	-	No	-	-	N	X	X
S6A	6X6	+180	4	-	-	No	-	-	N	X	X
S6B	6X6	+180	4	-	-	No	-	-	N	X	X

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. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
8. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
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.

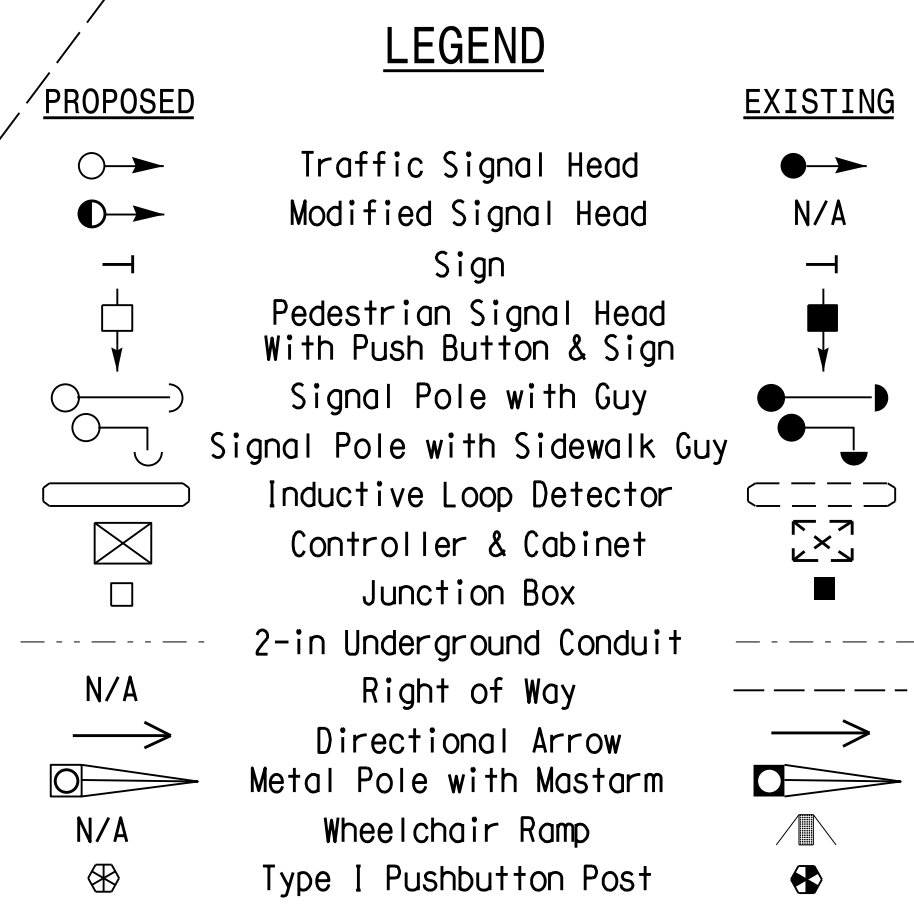
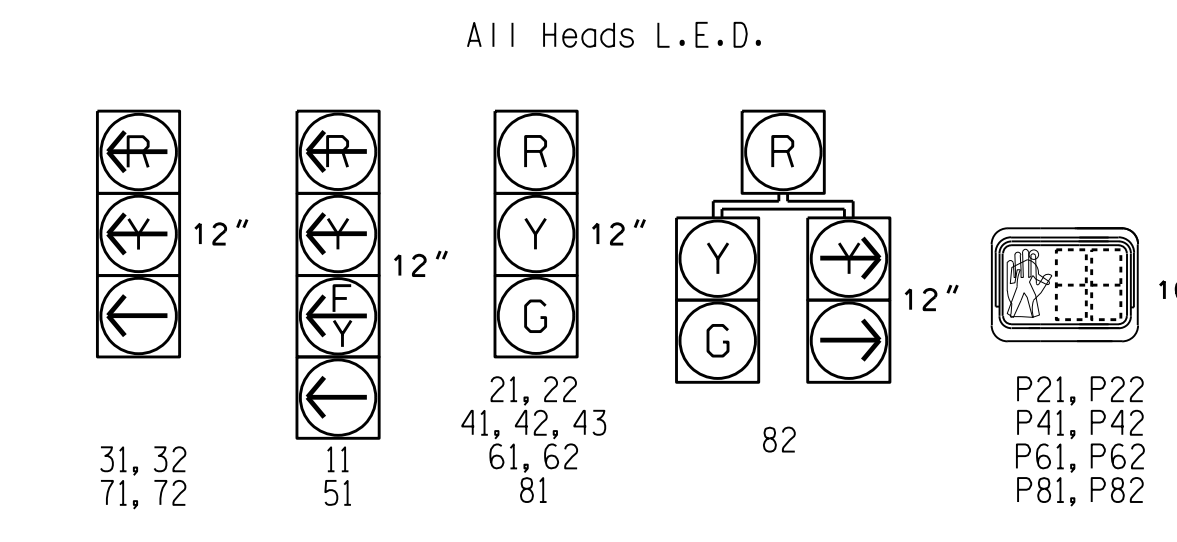


ASC/3 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	0	7	0	7	0	7	0	7
Ped Clear	0	28	0	22	0	26	0	24
Veh. Extension *	2.0	6.0	2.0	6.0	2.0	6.0	2.0	6.0
Max I *	25	80	25	45	25	80	25	45
Yellow	3.0	4.7	3.0	4.5	3.0	4.7	3.0	4.5
Red Clear	3.4	2.2	3.6	2.0	3.5	2.2	3.5	2.0
Actuations B4 Add *	-	0	-	-	-	0	-	-
Seconds / Actuation *	-	1.5	-	-	-	1.5	-	-
Max Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	10	-	15	-	10
Time To Reduce *	-	30	-	20	-	30	-	20
Minimum Gap	-	3.0	-	3.0	-	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 FACE I.D.



Signal Upgrade

Prepared In the Offices of:

SR 1344 (Black & Decker Road / Mid Pine Road) at SR 1132 (Legion Road)

Division 6 Cumberland County Fayetteville

PLAN DATE: May 2016 REVIEWED BY: JPG

PREPARED BY: Jeff Spence REVIEWED BY:

REVISIONS

SCALE: 1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: Jason P. Gallaway, Professional Engineer, No. 029904, State of North Carolina

DATE: 7/20/2016

SIG. INVENTORY NO. 06-0275

16-SEP-2016 16:53
 S:\PROJECTS\16-5742 Fayetteville\16-5742 Fayetteville\16-5742 Fayetteville\16-5742 Fayetteville.dgn
 16-SEP-2016 16:53
 S:\PROJECTS\16-5742 Fayetteville\16-5742 Fayetteville\16-5742 Fayetteville.dgn
 16-SEP-2016 16:53
 S:\PROJECTS\16-5742 Fayetteville\16-5742 Fayetteville\16-5742 Fayetteville.dgn