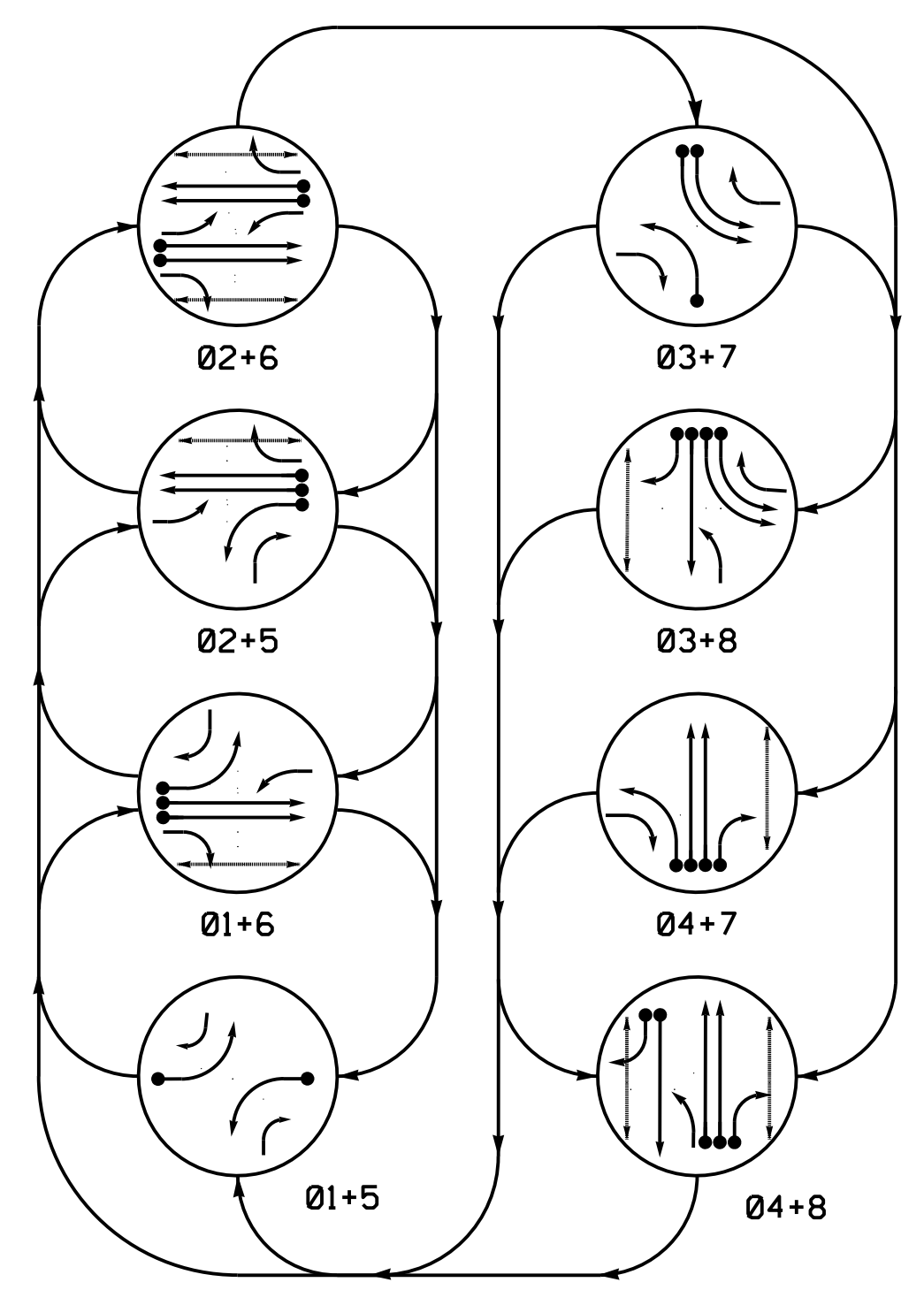
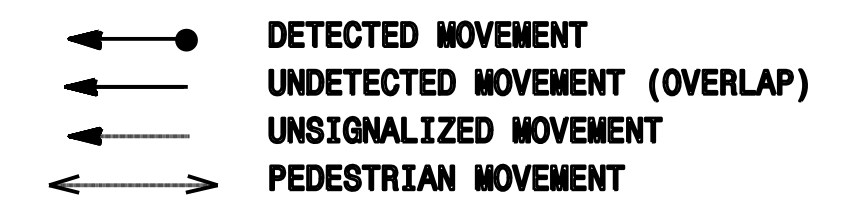


**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

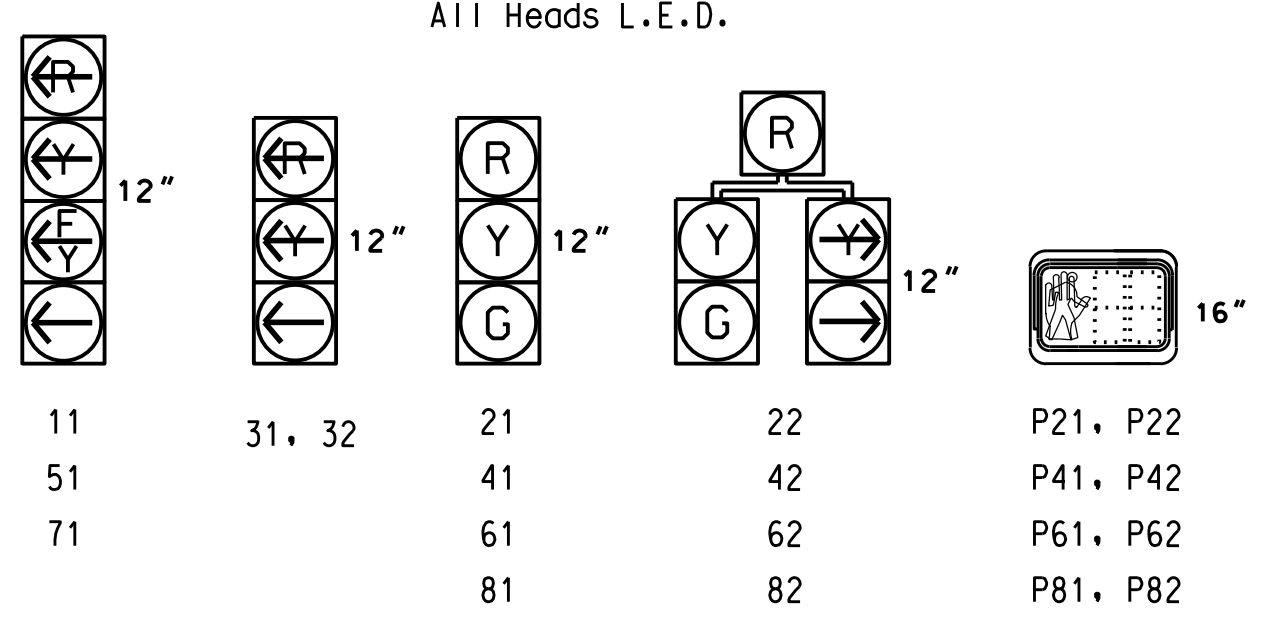


**TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	01+5	02+6	03+7	04+8	05+9	06+0	07+1	08+2
11								
21	R	R	G	G	R	R	R	Y
22	R	R	G	G	R	R	R	Y
31, 32	R	R	R	R				R
41	R	R	R	R	R	R	G	G
42	R	R	R	R	R	R	G	G
51								
61	R	G	R	G	R	R	R	Y
62	R	G	R	G	R	R	R	Y
71	R	R	R	R				R
81	R	R	R	R	G	R	G	R
82	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	W	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DRK
P81, P82	DW	DW	DW	DW	DW	W	W	DRK

W - Walk  
 DW - Do not walk  
 DRK - Dark  
 F - Flashing Yellow Arrow

**SIGNAL FACE I.D.**



**ASC/3 DETECTOR INSTALLATION CHART**

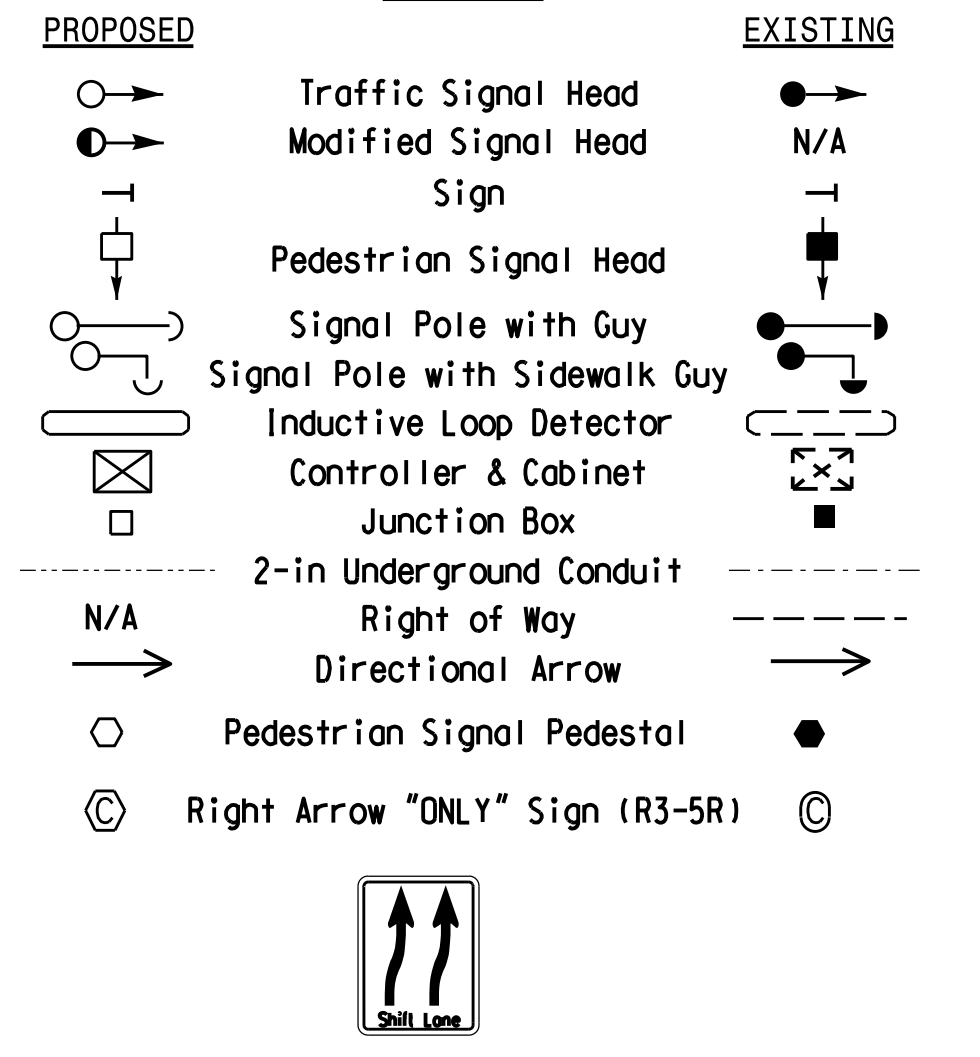
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING				SYSTEM LOOP	NEW CARD
					PHASE	EXTEND TIME	DELAY TIME	TYPE		
1A	6X60	0	2-4-2	-	1	-	15	S	-	Y
2A,2B	6X6	70	4	-	2	-	-	S	-	Y
3A	6X60	0	2-4-2	-	3	-	-	S	-	Y
3B	6X60	0	2-4-2	-	3	-	-	S	-	Y
4A	6X60	0	2-4-2	-	4	-	-	S	-	Y
4B	6X60	0	2-4-2	-	4	-	-	S	-	Y
4C	6X60	0	2-4-2	-	4	-	20	S	-	Y
5A	6X60	+10	2-4-2	-	5	-	15	S	-	Y
6A,6B	6X6	70	4	-	6	-	-	S	-	Y
7A	6X60	0	2-4-2	-	7	-	15	S	-	Y
8A	6X60	0	2-4-2	-	8	-	-	S	-	Y
8B	6X60	0	2-4-2	-	8	-	15	S	-	Y
S2A	6X6	+275	5	-	SYS	-	-	Y	-	Y
S2B	6X6	+275	5	-	SYS	-	-	Y	-	Y
S4A	6X6	+280	5	-	SYS	-	-	Y	-	Y
S4B	6X6	+280	5	-	SYS	-	-	Y	-	Y
S6A	6X6	+200	5	-	SYS	-	-	Y	-	Y
S6B	6X6	+200	5	-	SYS	-	-	Y	-	Y

**8 Phase Fully Actuated Fayetteville Signal System**

**NOTES**

- Refer to "Roadway Standard Drawings NCDOT" dated July 2012 and "Standard Specifications for Roads and Structures" dated July 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 or phase 5 may be lagged.
- Phase 3 or phase 7 may be lagged.
- 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Locate new cabinet on existing foundation.

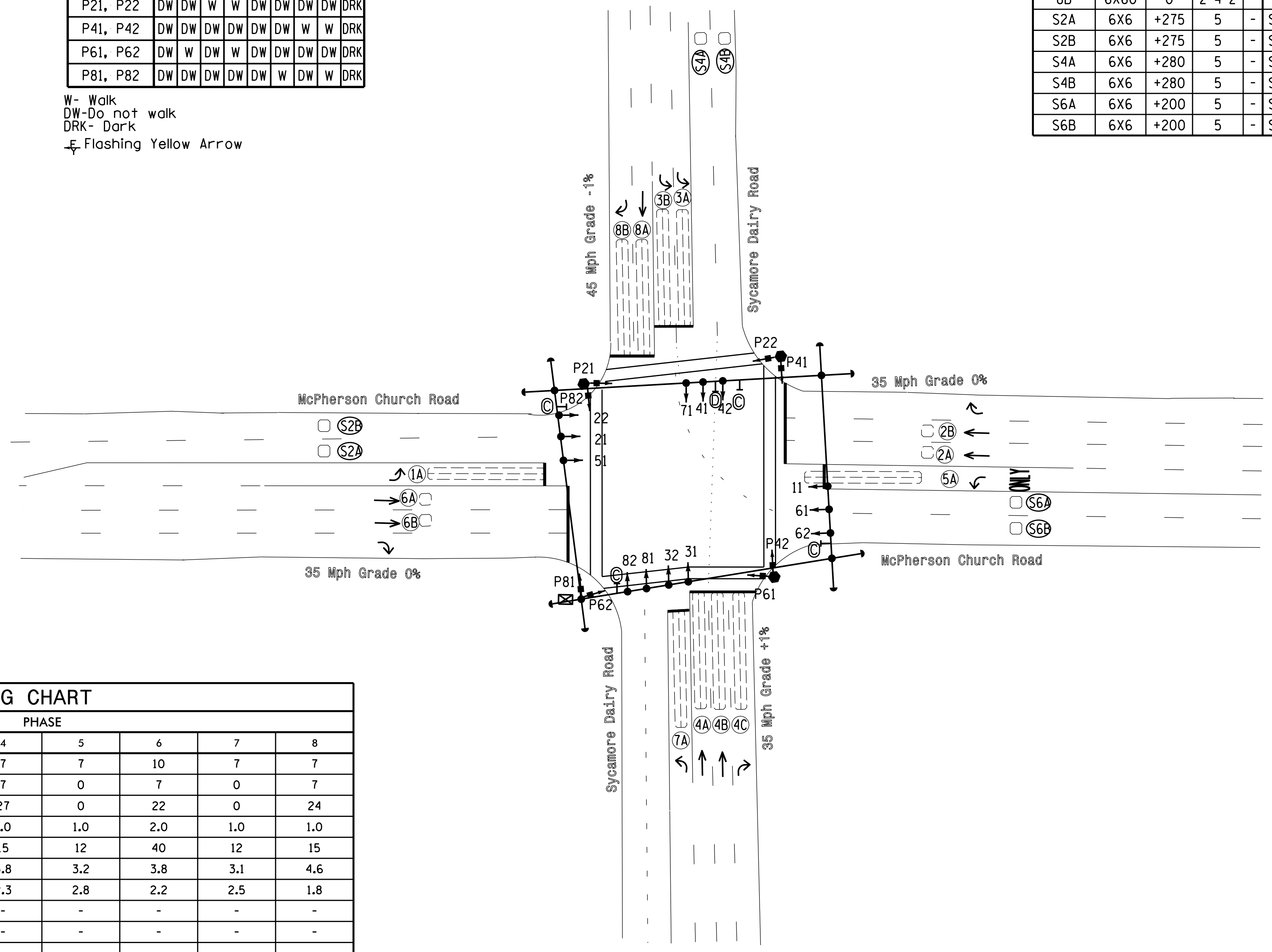
**LEGEND**



**ASC/3 TIMING CHART**

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	10	7	7	7	10	7	7
Walk *	0	7	0	7	0	7	0	7
Ped Clear	0	20	0	27	0	22	0	24
Veh. Extension *	1.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0
Max 1 *	12	40	12	15	12	40	12	15
Yellow	3.2	3.8	3.2	3.8	3.2	3.8	3.1	4.6
Red Clear	2.8	2.2	3.1	2.3	2.8	2.2	2.5	1.8
Actuations B4 Add *	-	-	-	-	-	-	-	-
Seconds /Actuation *	-	-	-	-	-	-	-	-
Max Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Locking Detector	-	X	-	-	-	X	-	-
Recall Position	-	MIN. RECALL	-	-	-	MIN. RECALL	-	-
Dual Entry	-	-	-	-	-	-	-	X
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  
**Hatch Mott MacDonald**  
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**Fayetteville**  
 NORTH CAROLINA  
 PROFESSIONAL ENGINEER  
 SEAL 032711  
 RUSSELL W. THOMPSON

**McPHERSON CHURCH ROAD AT SYCAMORE DAIRY ROAD**

DIV 06 CUMBERLAND COUNTY FAYETTEVILLE  
 PLAN DATE: NOVEMBER 2016 REVIEWED BY: RWT  
 PREPARED BY: BLR REVIEWED BY:  
 REVISIONS INIT. DATE

DocuSigned by:  
 Russell W Thompson 11/21/2016  
 SIGNATURE DATE  
 SIG. INVENTORY NO. C015

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