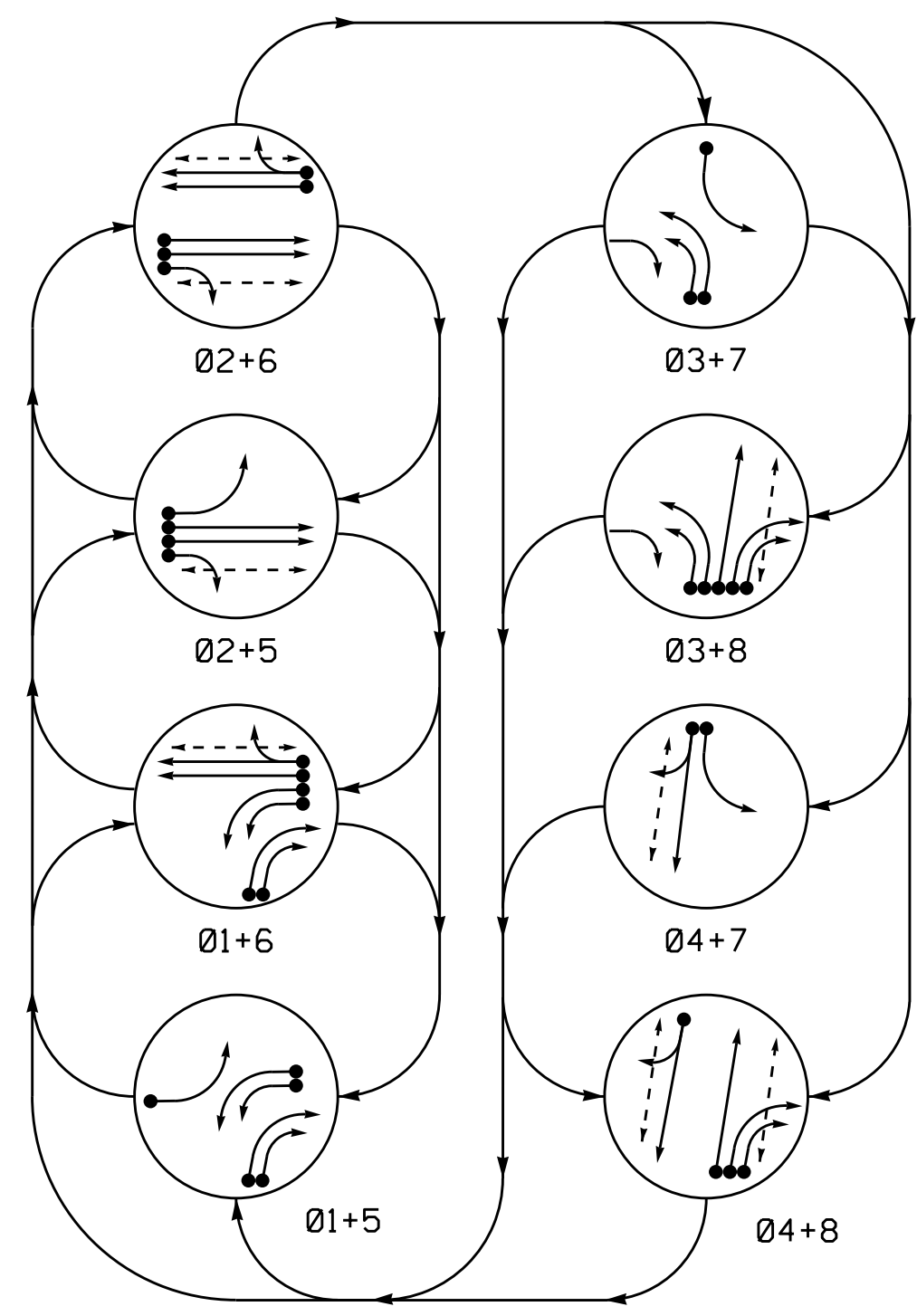
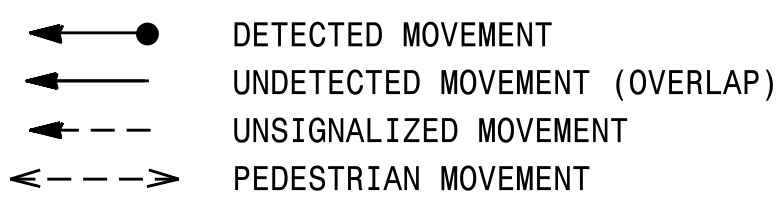


**PHASING DIAGRAM**



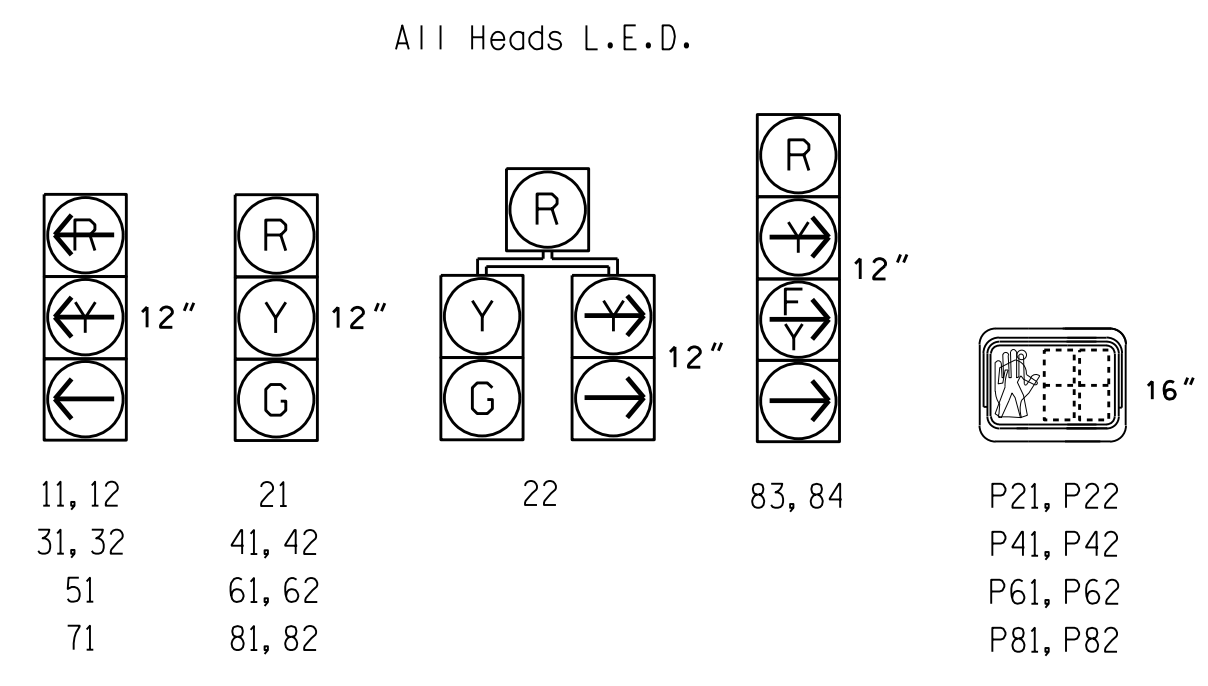
**PHASING DIAGRAM DETECTION LEGEND**



**TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11, 12	←	←	←	←	←	←	←	←
21	R	R	G	G	R	R	R	Y
22	R	R	G	G	R	R	R	Y
31, 32	←	←	←	←	←	←	←	←
41, 42	R	R	R	R	R	R	G	G
51	←	←	←	←	←	←	←	←
61, 62	R	G	G	G	R	R	R	Y
71	←	←	←	←	←	←	←	←
81, 82	R	R	R	R	R	G	R	G
83, 84	←	←	R	R	R	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	W	DW	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	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	+5	2-4-2	-	1	Yes	-	-	S	-	X
1B	6X40	+5	2-4-2	-	1	Yes	-	-	S	-	X
1C	6X40	0	2-4-2	-	1	Yes	-	15	S	-	X
1D	6X40	0	2-4-2	-	1	Yes	-	15	S	-	X
2A	6X30	330	2	-	2	Yes	-	-	S	-	X
3A	6X40	+5	2-4-2	-	3	Yes	-	-	S	-	X
3B	6X40	+5	2-4-2	-	3	Yes	-	-	S	-	X
4A	6X40	+5	2-4-2	-	4	Yes	-	-	S	-	X
5A	6X40	+5	2-4-2	-	5	Yes	-	-	S	-	X
6A, 6B	6X6	330	5	-	6	Yes	-	-	S	-	X
7A	6X40	+5	2-4-2	-	7	Yes	-	-	S	-	X
8A	6X40	0	2-4-2	-	8	Yes	-	-	S	-	X
S2A	6X6	+400	5	-	-	No	-	-	N	X	X
S2B	6X6	+400	5	-	-	No	-	-	N	X	X
S4A	6X6	+314	5	-	-	No	-	-	N	X	X
S4B	6X6	+314	5	-	-	No	-	-	N	X	X

**8 Phase Fully Actuated Fayetteville Signal System**

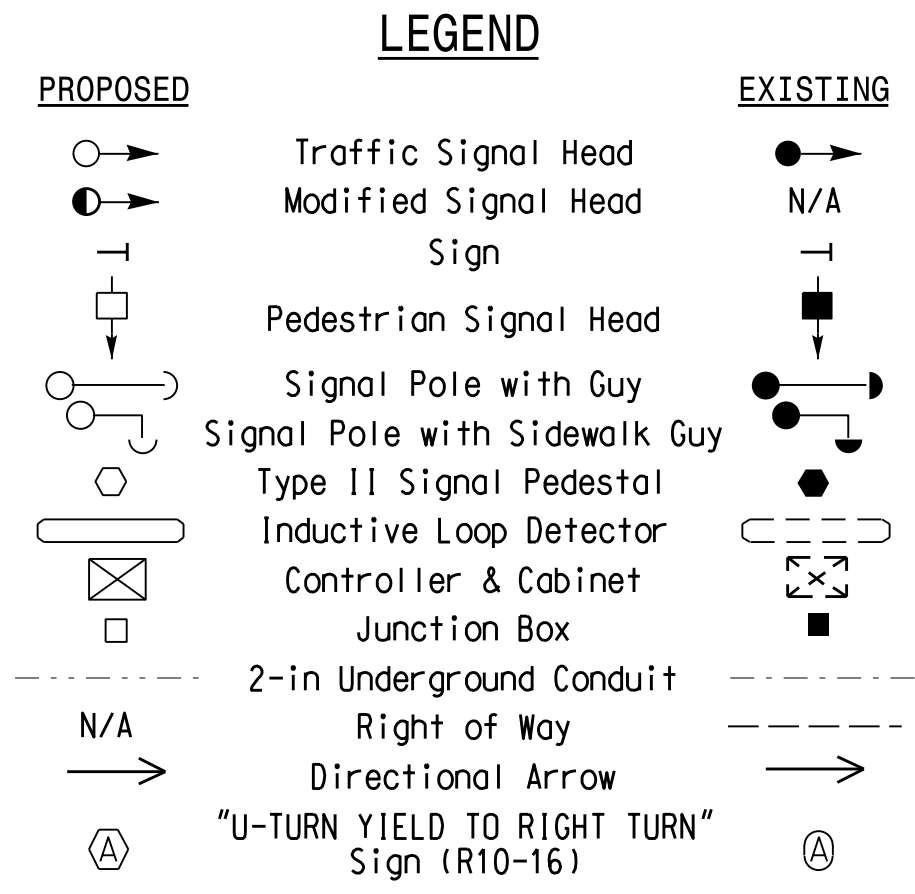
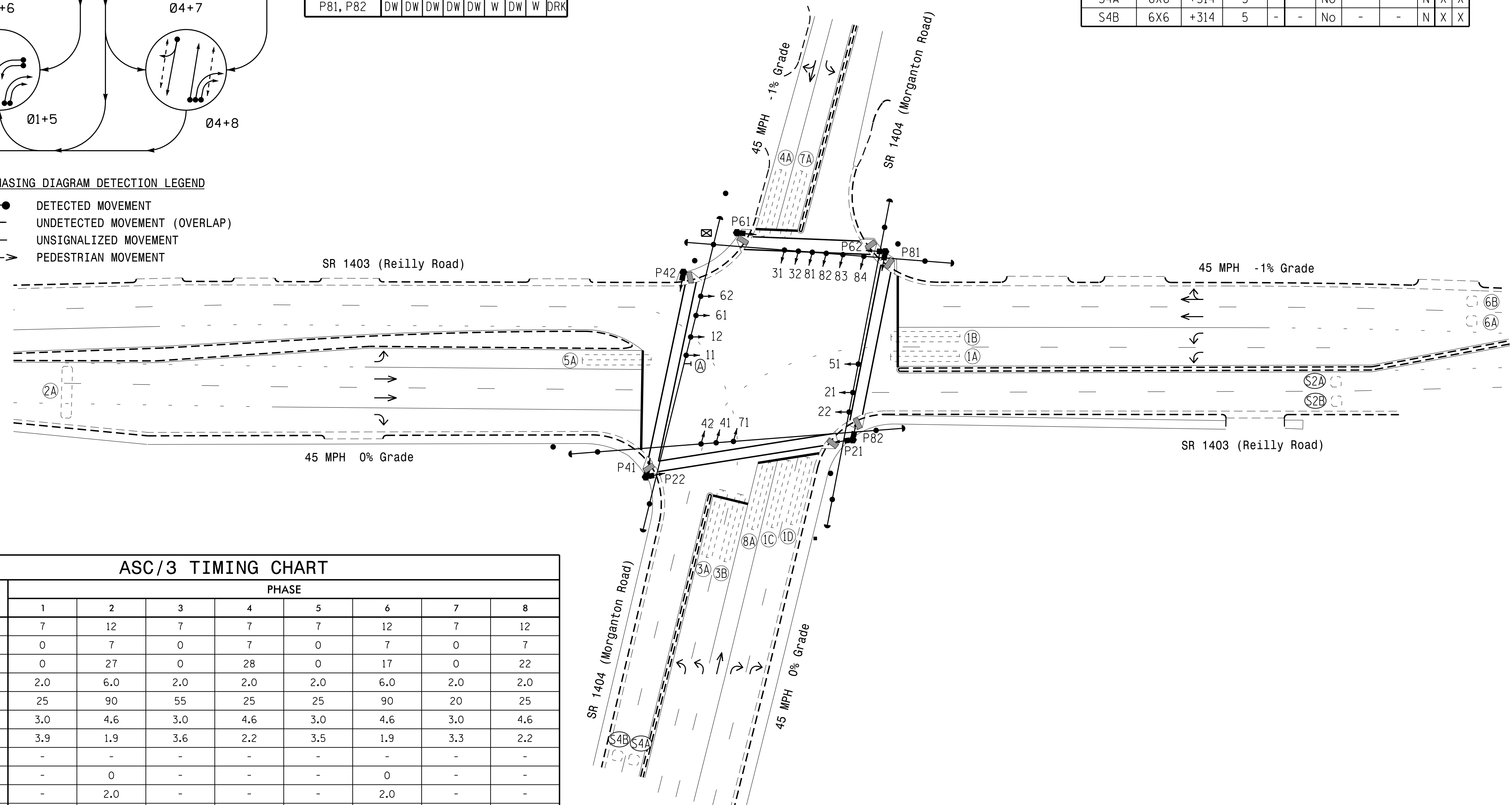
**NOTES**

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- 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.
- Set all detector units to presence mode.
- 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.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 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.

**ASC/3 TIMING CHART**

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	12
Walk *	0	7	0	7	0	7	0	7
Ped Clear	0	27	0	28	0	17	0	22
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	25	90	55	25	25	90	20	25
Yellow	3.0	4.6	3.0	4.6	3.0	4.6	3.0	4.6
Red Clear	3.9	1.9	3.6	2.2	3.5	1.9	3.3	2.2
Red Revert	-	-	-	-	-	-	-	-
Actuations B4 Add *	-	0	-	-	-	0	-	-
Seconds / Actuation *	-	2.0	-	-	-	2.0	-	-
Max Initial *	-	37	-	-	-	37	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	45	-	-	-	45	-	-
Minimum Gap	-	3.5	-	-	-	3.5	-	-
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:

**SR 1403 (Reilly Road) at SR 1404 (Morganton Road)**

Division 6 Cumberland County Fayetteville

PLAN DATE: February 2016 REVIEWED BY: JPG

PREPARED BY: EMM/DJS REVIEWED BY:

REVISIONS: \_\_\_\_\_ INIT. DATE

0 SCALE 40  
1"=40'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

DocuSigned by: Jason P. Gallaway 8/24/2016

SIG. INVENTORY NO. 06-0369

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