

6 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.
- The order of phase 3 and phase 4 may be reversed.
- 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.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing 'Don't Walk' time only.
- Reposition existing signal heads 21, 22, 51, 61, and 62.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM

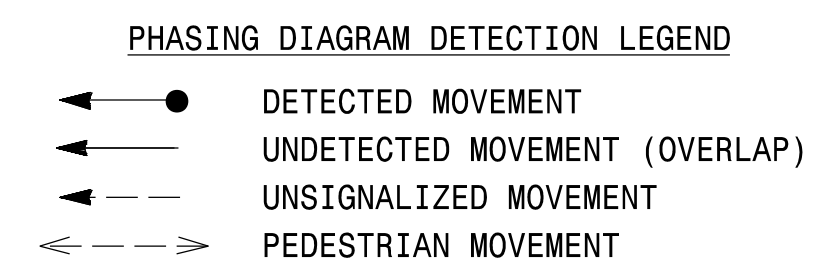
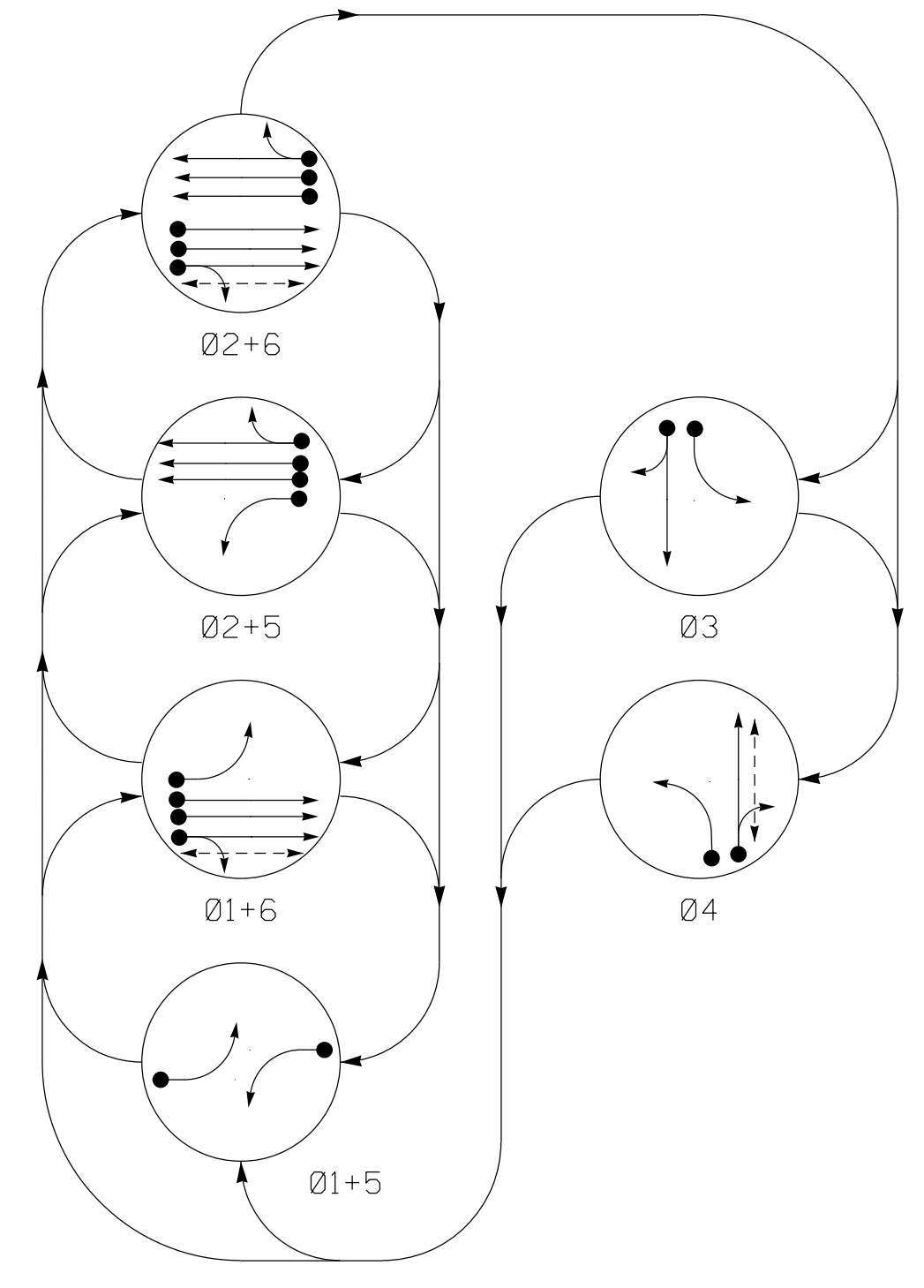
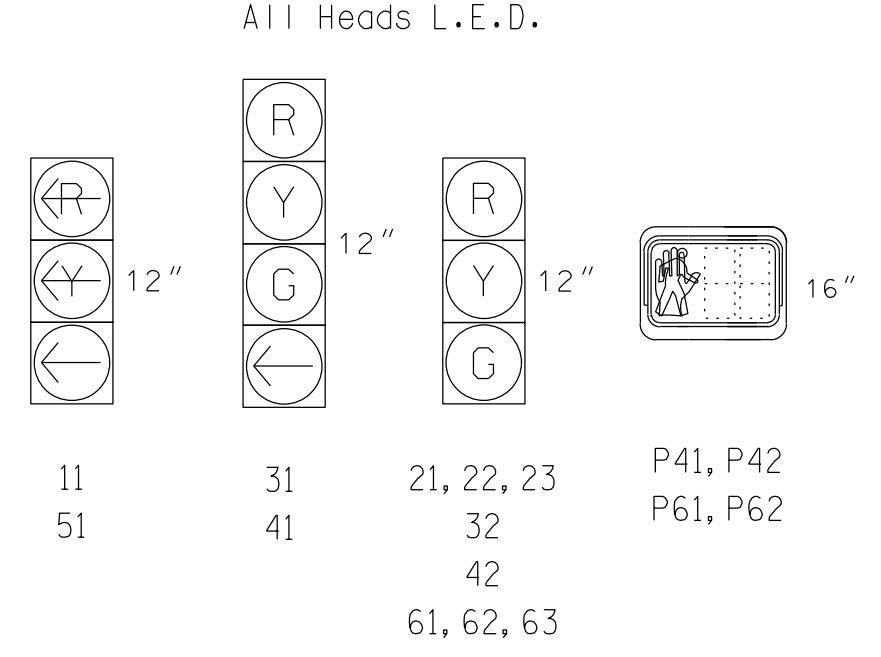


TABLE OF OPERATION

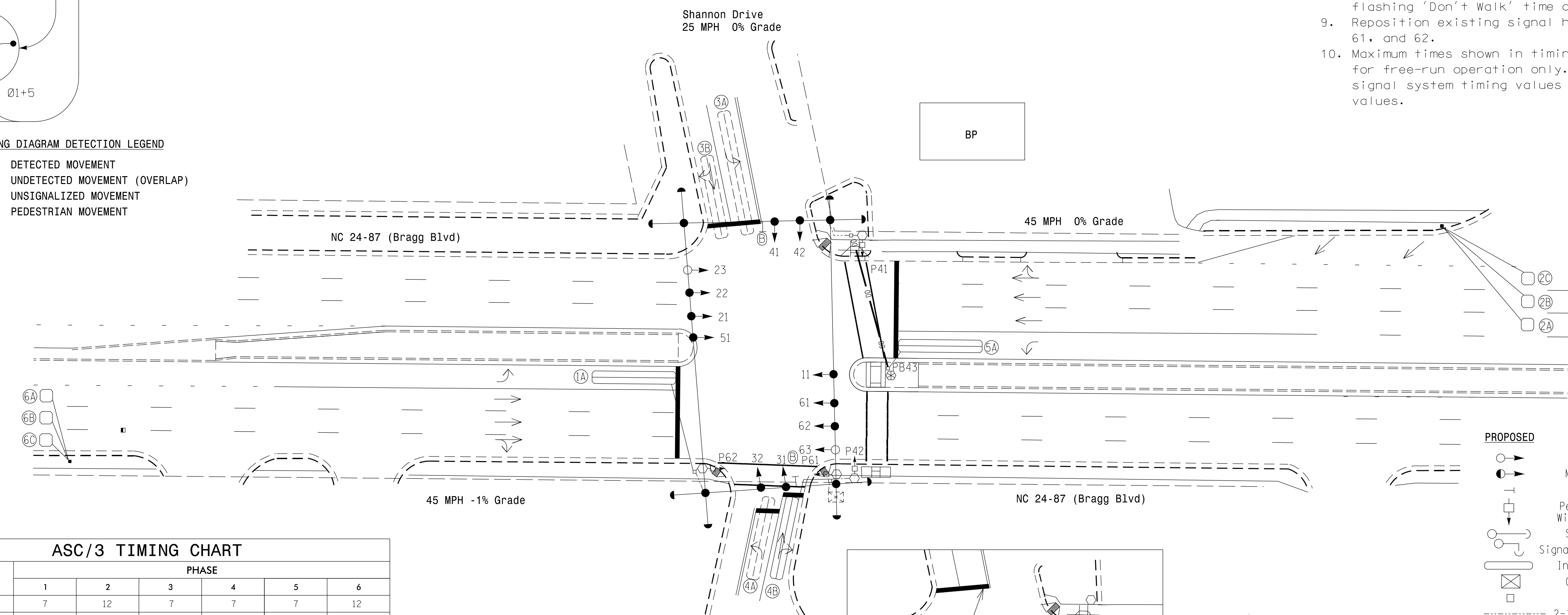
SIGNAL FACE	PHASE					
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 6	Ø 3	Ø 4	FLASH
11	←	←	←	←	←	←
21,22,23	R	R	G	G	R	Y
31	R	R	R	G	R	R
32	R	R	R	G	R	R
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	←	←	←	←	←	←
61,62,63	R	G	R	G	R	Y
P41,P42	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DRK

SIGNAL FACE I.D.



ASC/3 DETECTOR INSTALLATION CHART

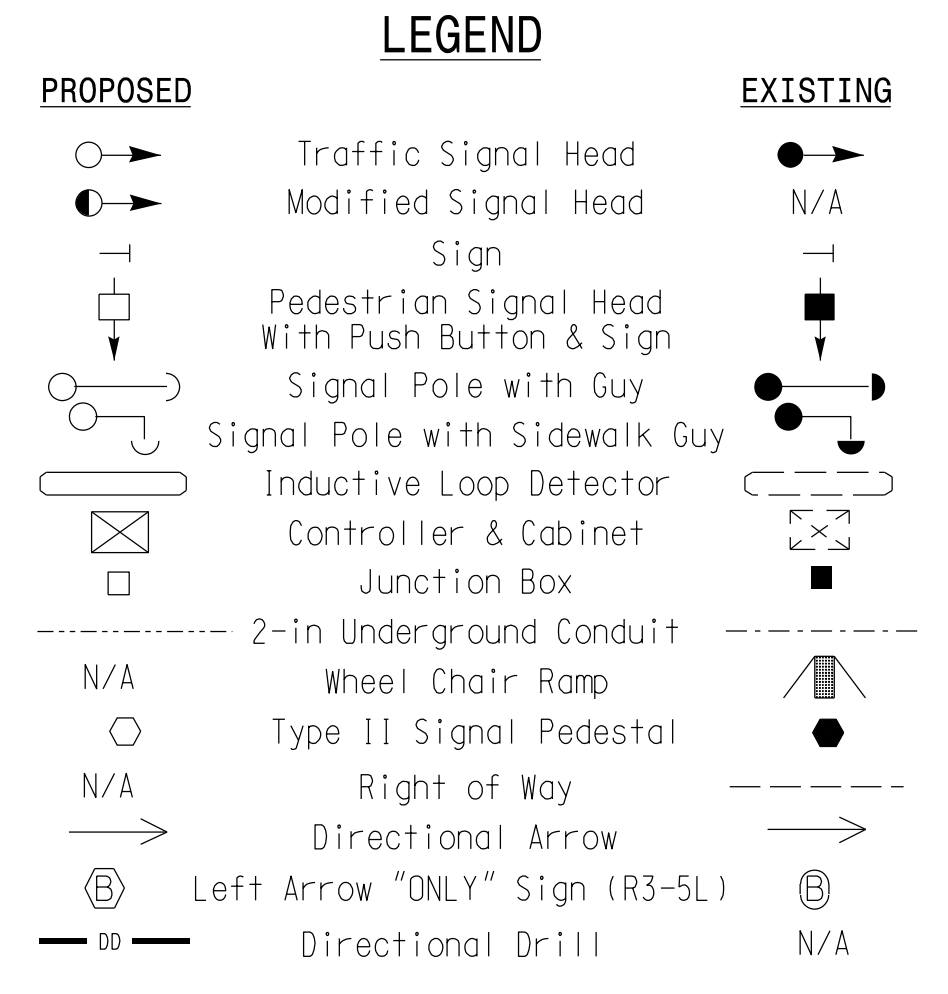
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	
1A	6X40	0	2-4-2	X	1	Yes	-	-	-	S	-
2A	6X6	300	4	-	2	Yes	-	-	X	N	-
2B	6X6	300	4	-	2	Yes	-	-	X	N	-
2C	6X6	300	4	-	2	Yes	-	-	X	N	-
3A	6X60	+5	2-4-2	-	3	Yes	-	3	-	S	-
3B	6X40	+5	2-4-2	-	3	Yes	-	-	-	S	-
4A	6X40	+5	2-4-2	-	4	Yes	-	3	-	S	-
4B	6X40	0	2-4-2	X	4	Yes	-	10	-	S	-
5A	6X40	0	2-4-2	X	5	Yes	-	-	-	S	-
6A	6X6	300	4	-	6	Yes	-	-	X	N	-
6B	6X6	300	4	-	6	Yes	-	-	X	N	-
6C	6X6	300	4	-	6	Yes	-	-	X	N	-



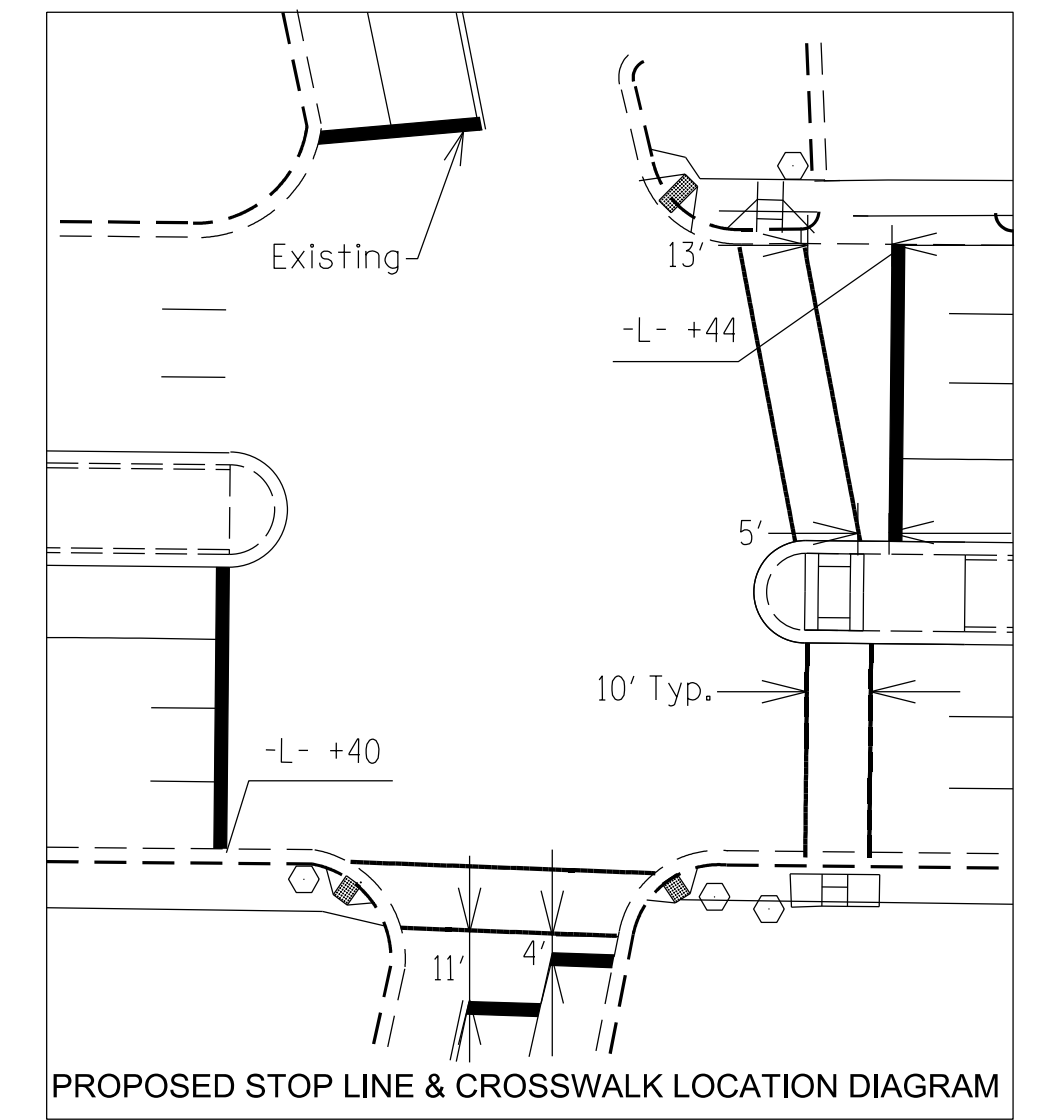
ASC/3 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green *	7	12	7	7	7	12
Walk *	0	0	0	7	0	7
Ped Clear	0	0	0	27	0	7
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0
Max I *	15	90	15	15	15	90
Yellow	3.0	4.6	3.2	3.1	3.0	4.6
Red Clear	2.8	1.5	3.1	3.2	3.3	1.5
Actuations B4 Add *	-	-	-	-	-	-
Seconds /Actuation *	-	1.0	-	-	-	1.0
Max Initial *	-	32	-	-	-	32
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	45	-	-	-	45
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

* 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.



Flea Market Entrance
No Posted Speed
Design Speed 25 MPH +3% Grade



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Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	<p>NC 24-87 (Bragg Blvd) at Shannon Dr/Flea Market Entrance</p> <p>Division 6 Cumberland County Fayetteville</p> <p>PLAN DATE: December 2022 REVIEWED BY: M. L. Styles</p> <p>PREPARED BY: J. Ma REVIEWED BY:</p> <p>REVISIONS</p>	<p>SEAL</p> <p>STATE OF NORTH CAROLINA</p> <p>PROFESSIONAL ENGINEER</p> <p>SEAL 033108</p> <p>STANXIN MA</p> <p>DocuSigned by: <i>Stanxin Ma</i></p> <p>827E1963081444F DATE 1/6/2023</p> <p>SIG. INVENTORY NO. 06-0153</p>
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