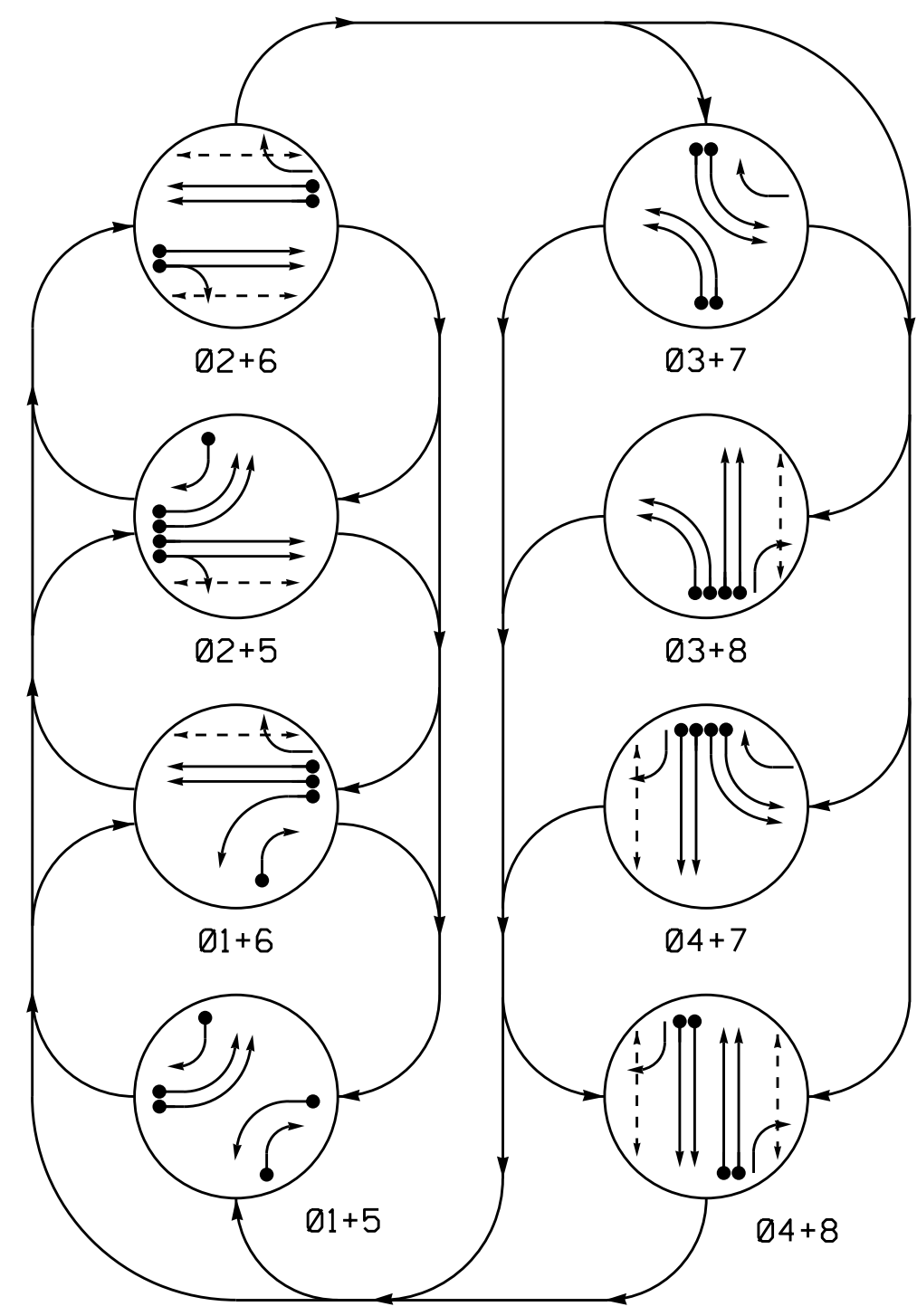
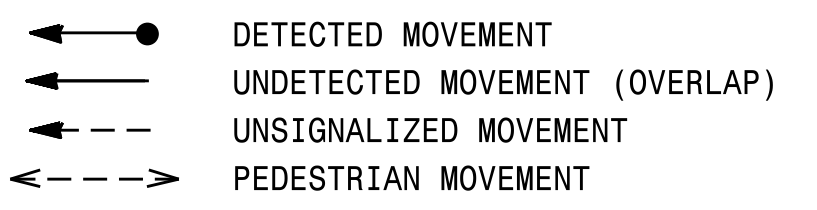


**PHASING DIAGRAM**

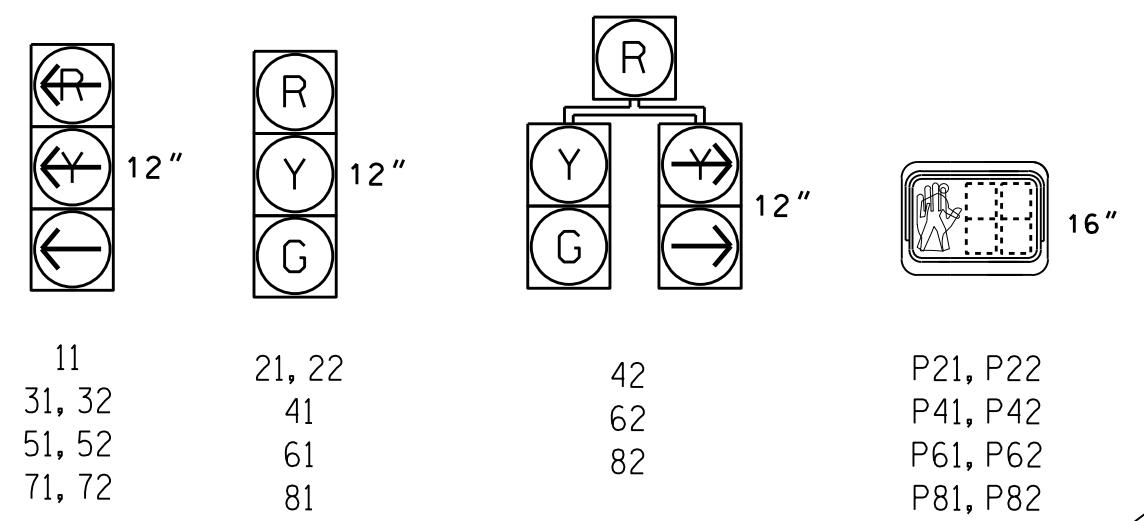


**PHASING DIAGRAM DETECTION LEGEND**



SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11	—	—	—	—	—	—	—	—
21, 22	R	R	G	G	R	R	R	Y
31, 32	—	—	—	—	—	—	—	—
41	R	R	R	R	R	R	G	G
42	R	R	R	R	R	R	G	G
51, 52	—	—	—	—	—	—	—	—
61	R	G	R	G	R	R	R	Y
62	R	G	R	G	R	R	R	Y
71, 72	—	—	—	—	—	—	—	—
81	R	R	R	R	R	G	R	G
82	R	R	R	R	R	G	R	G
P21, P22	DW	DW	W	W	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DRK
P81, P82	DW	DW	DW	DW	DW	W	DW	DRK

**SIGNAL FACE I.D.**  
All Heads L.E.D.



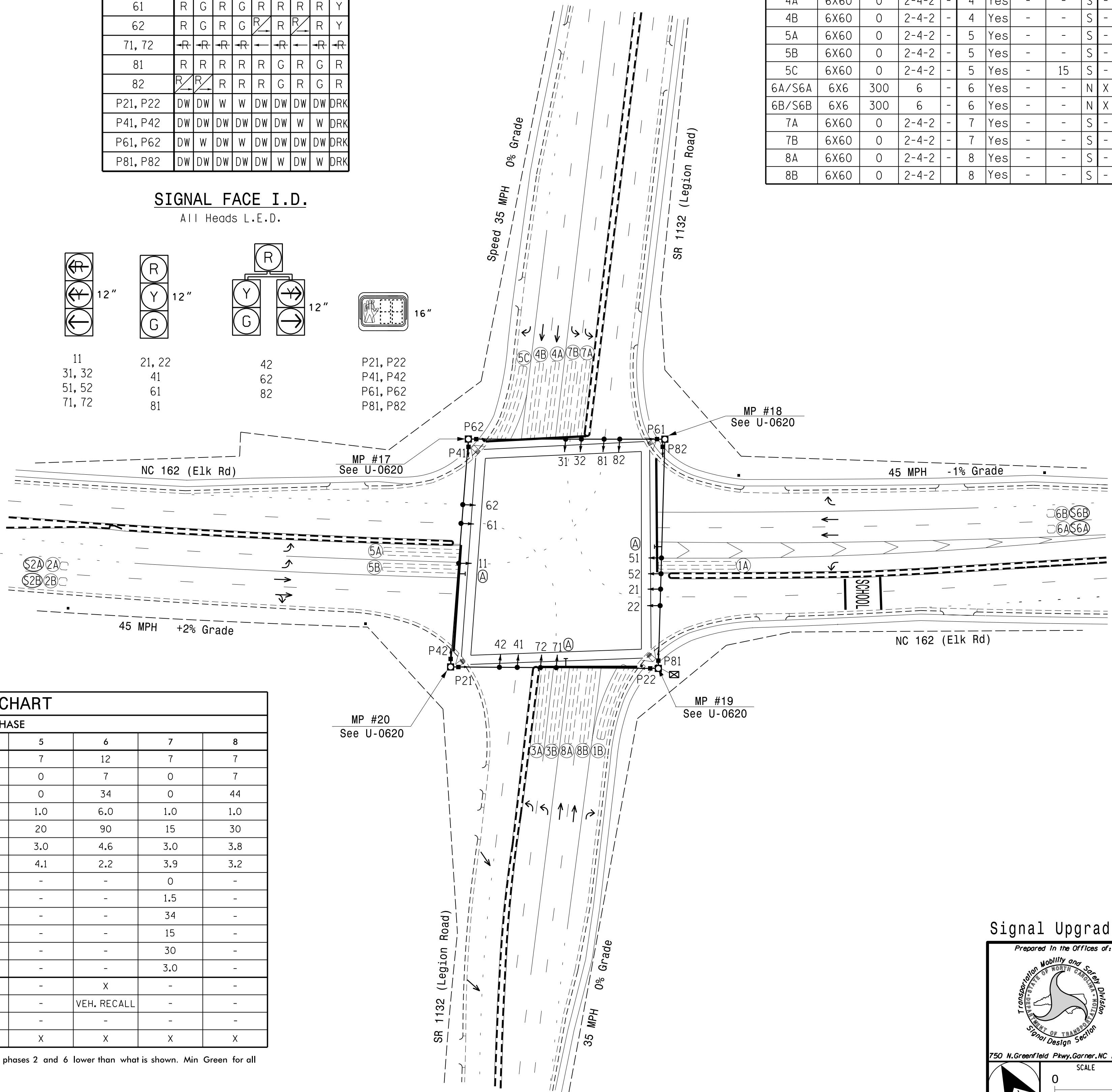
ASC/3 DETECTOR INSTALLATION CHART										
DETECTOR					PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	LOOP SYSTEM NEW CARD
1A	6X60	0	2-4-2	-	1	Yes	-	-	S	- X
1B	6X60	0	2-4-2	-	1	Yes	-	15	S	- X
2A/S2A	6X6	300	6	-	2	Yes	-	-	N	X X
2B/S2B	6X6	300	6	-	2	Yes	-	-	N	X X
3A	6X60	0	2-4-2	-	3	Yes	-	-	S	- X
3B	6X60	0	2-4-2	-	3	Yes	-	-	S	- X
4A	6X60	0	2-4-2	-	4	Yes	-	-	S	- X
4B	6X60	0	2-4-2	-	4	Yes	-	-	S	- X
5A	6X60	0	2-4-2	-	5	Yes	-	-	S	- X
5B	6X60	0	2-4-2	-	5	Yes	-	-	S	- X
5C	6X60	0	2-4-2	-	5	Yes	-	15	S	- X
6A/S6A	6X6	300	6	-	6	Yes	-	-	N	X X
6B/S6B	6X6	300	6	-	6	Yes	-	-	N	X X
7A	6X60	0	2-4-2	-	7	Yes	-	-	S	- X
7B	6X60	0	2-4-2	-	7	Yes	-	-	S	- X
8A	6X60	0	2-4-2	-	8	Yes	-	-	S	- X
8B	6X60	0	2-4-2	-	8	Yes	-	-	S	- X

**8 Phase Fully Actuated Fayetteville City 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.

LEGEND	
PROPOSED	EXISTING



FEATURE	ASC/3 TIMING CHART							
	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	38	0	44	0	34	0	44
Veh. Extension *	1.0	6.0	1.0	1.0	1.0	6.0	1.0	1.0
Max I *	20	90	15	30	20	90	15	30
Yellow	3.0	4.6	3.0	3.8	3.0	4.6	3.0	3.8
Red Clear	3.6	2.2	3.8	3.2	4.1	2.2	3.9	3.2
Actuations B4 Add *	-	0	-	-	-	-	0	-
Seconds / Actuation *	-	1.5	-	-	-	-	1.5	-
Max Initial *	-	34	-	-	-	-	34	-
Time Before Reduction *	-	15	-	-	-	-	15	-
Time To Reduce *	-	30	-	-	-	-	30	-
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	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:  
  
 750 N. Greenfield Pkwy, Garner, NC 27529

**NC 162 (Elk Rd) at SR 1132 (Legion Road)**

Division 6 Cumberland County Hope Mills  
 PLAN DATE: June 2016 REVIEWED BY: JPG, PE  
 PREPARED BY: EM Minshew REVIEWED BY:

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

Seal of the Professional Engineer:  
 JASON P. GALLAGHER  
 No. 029904  
 State of North Carolina  
 7/6/2016

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SIG. INVENTORY NO. 06-0455

06-JUL-2016 08:37  
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 emminshew