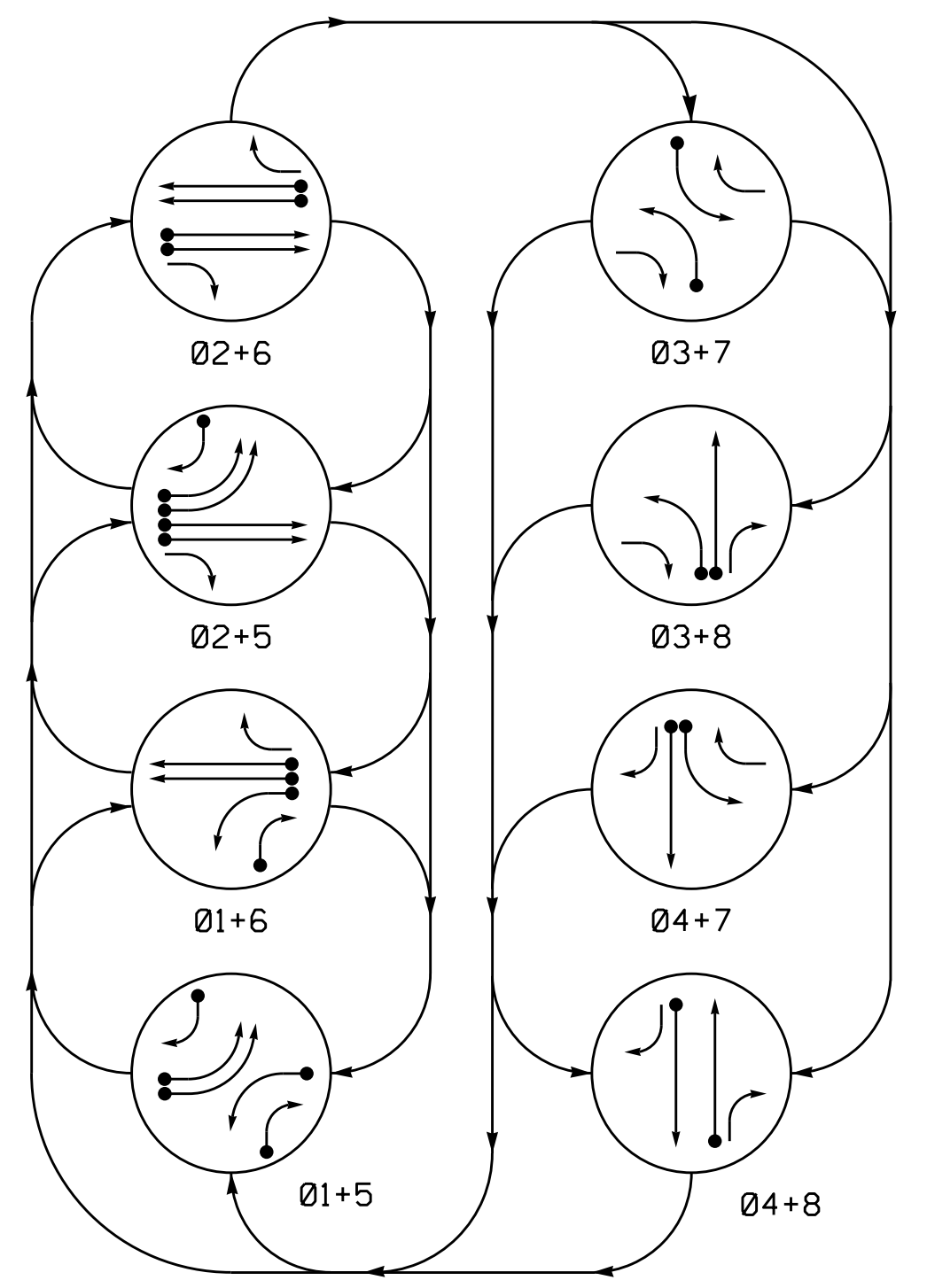


**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

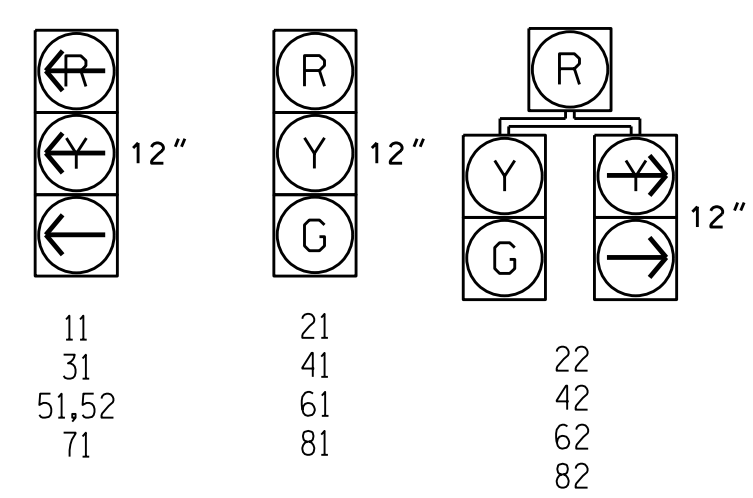
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE								L	T	R
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8			
11	---	---	---	---	---	---	---	---	---	---	---
21	R	R	G	G	R	R	R	R	Y		
22	R	R	G	G	R	R	R	R	Y		
31	---	---	---	---	---	---	---	---	---	---	---
41	R	R	R	R	R	R	G	G	R		
42	R	R	R	R	R	R	G	G	R		
51,52	---	---	---	---	---	---	---	---	---	---	---
61	R	G	R	G	R	R	R	R	Y		
62	R	G	R	G	R	R	R	R	Y		
71	---	---	---	---	---	---	---	---	---	---	---
81	R	R	R	R	R	G	R	G	R		
82	R	R	R	R	R	G	R	G	R		

**SIGNAL FACE I.D.**

All Heads L.E.D.



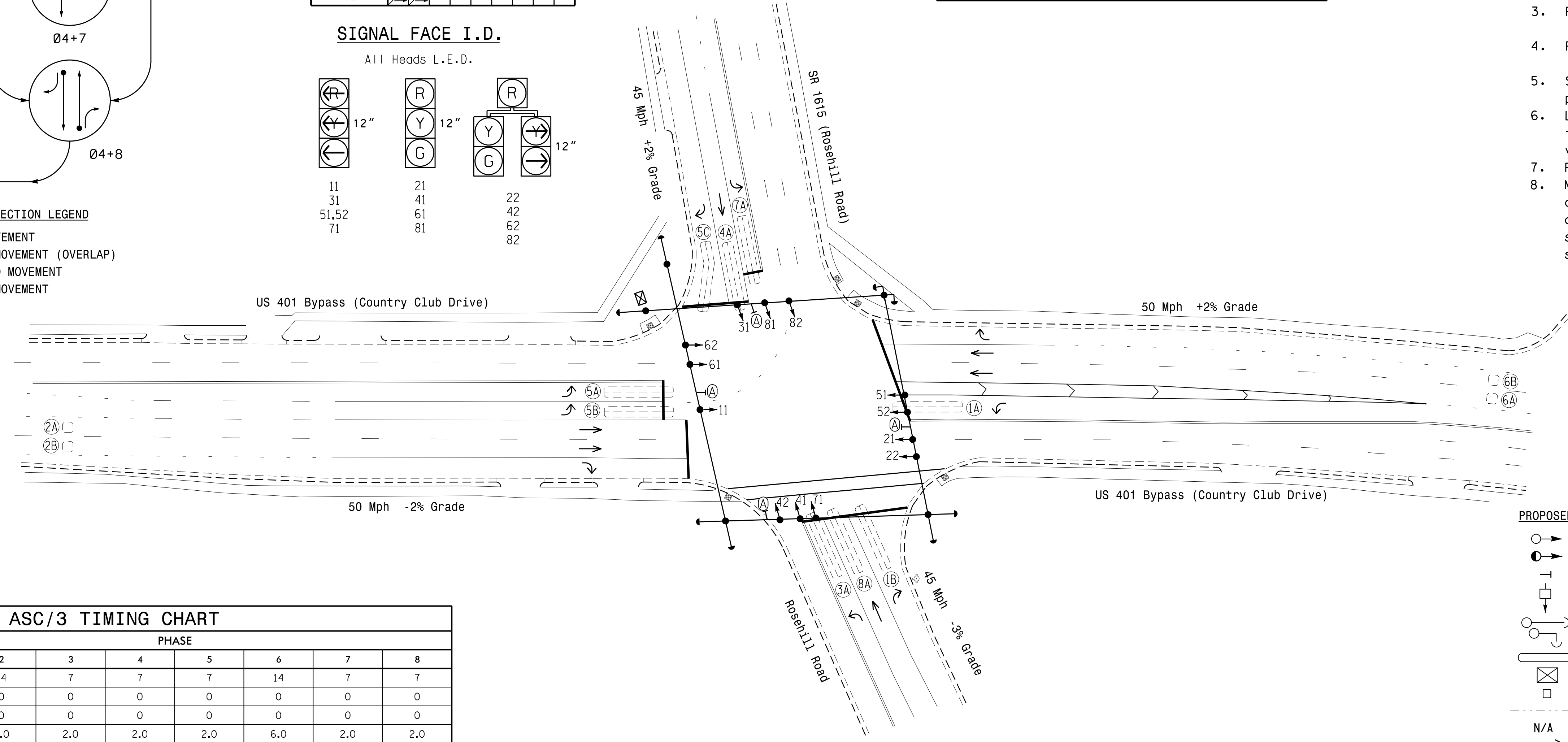
**ASC/3 DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DETECTOR			PROGRAMMING						
		DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	+5	2-4-2	-	1	Yes	-	3	S	-	X
1B	6X40	+5	2-4-2	-	1	Yes	-	15	S	-	X
2A	6X6	355	5	-	2	Yes	-	-	N	-	X
2B	6X6	355	5	-	2	Yes	-	-	N	-	X
3A	6X40	+5	2-4-2	-	3	Yes	-	3	S	-	X
4A	6X40	+5	2-4-2	-	4	Yes	-	-	S	-	X
5A	6X40	+5	2-4-2	-	5	Yes	-	3	S	-	X
5B	6X40	+5	2-4-2	-	5	Yes	-	3	S	-	X
5C	6X40	+5	2-4-2	-	5	Yes	-	15	S	-	X
6A	6X6	355	5	-	6	Yes	-	-	N	-	X
6B	6X6	355	5	-	6	Yes	-	-	N	-	X
7A	6X40	+5	2-4-2	-	7	Yes	-	3	S	-	X
8A	6X40	+5	2-4-2	-	8	Yes	-	-	S	-	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.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 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	14	7	7	7	14	7	7
Walk *	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max I *	20	50	30	40	20	50	20	40
Yellow	3.0	5.0	3.0	4.8	3.0	5.0	3.0	4.8
Red Clear	2.9	1.5	3.3	1.7	3.2	1.5	3.4	1.7
Actuations B4 Add *	-	0	-	-	-	0	-	-
Seconds / Actuation *	-	1.5	-	-	-	1.5	-	-
Max Initial *	-	40	-	-	-	40	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	15	-	-	-	15	-	-
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.

**LEGEND**

- |  |  |  |  |
|--|--|--|--|
|  | Proposed Traffic Signal Head           |  | Existing Traffic Signal Head           |
|  | Proposed Modified Signal Head          |  | Existing Modified Signal Head          |
|  | Proposed Pedestrian Signal Head        |  | Existing Pedestrian Signal Head        |
|  | Proposed Signal Pole                   |  | Existing Signal Pole                   |
|  | Proposed Signal Pole with Sidewalk Guy |  | Existing Signal Pole with Sidewalk Guy |
|  | Proposed Inductive Loop Detector       |  | Existing Inductive Loop Detector       |
|  | Proposed Controller & Cabinet          |  | Existing Controller & Cabinet          |
|  | Proposed Junction Box                  |  | Existing Junction Box                  |
|  | Proposed 2-in Underground Conduit      |  | Existing 2-in Underground Conduit      |
|  | Proposed Right of Way                  |  | Existing Right of Way                  |
|  | Proposed Directional Arrow             |  | Existing Directional Arrow             |
|  | Proposed Street Name Sign              |  | Existing Street Name Sign              |

**Signal Upgrade**

750 N. Greenfield Pkwy, Garner, NC 27529

**US 401 Byp (Country Club Drive) at SR 1615 (Rosehill Road)**

Division 6 Cumberland County Fayetteville

PLAN DATE: November 2015 REVIEWED BY: JPG

PREPARED BY: Jeff Spence REVIEWED BY:

SEAL

Jason P. Galloway  
4/20/2016

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

20-0495-2016\_10564  
 S:\IT\ASU\15\_Sig\01\Signal\_Design\_Section\Eastern\_Region\01\U-5742\_Fayetteville\ASC3\606-0079\600079\_s1a.dsn\_20160406.dgn  
 J. Spence