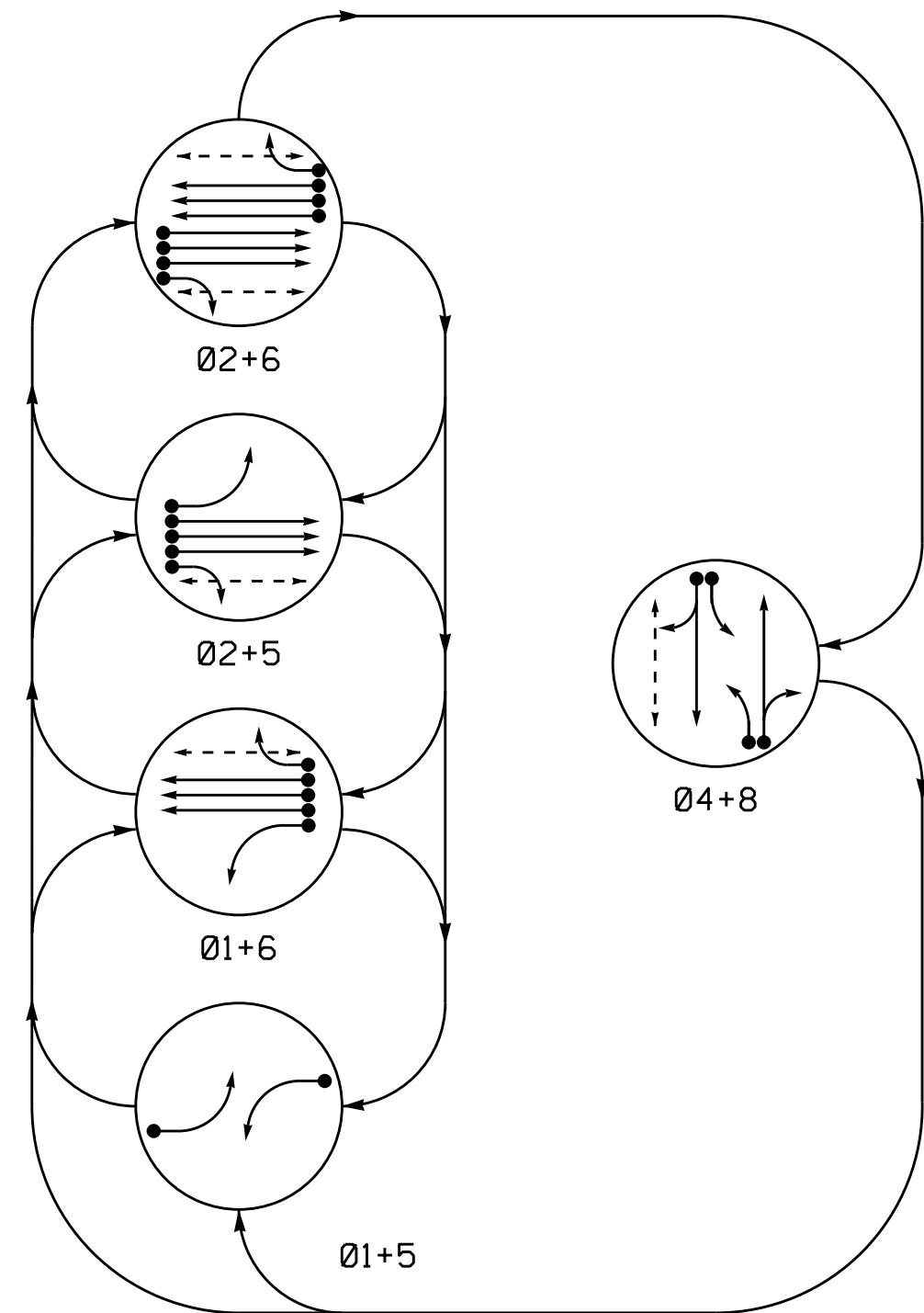


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

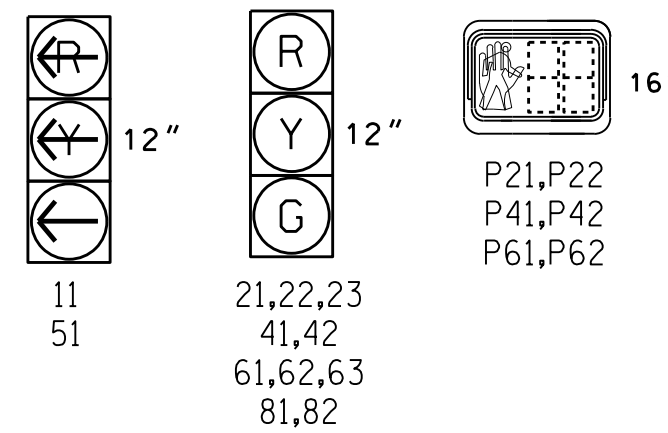
- ← ● → DETECTED MOVEMENT
- ← ○ → UNDETECTED MOVEMENT (OVERLAP)
- ← - - - → UNSIGNALIZED MOVEMENT
- ← - - - → PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE					FLASH
	01+5	01+6	02+5	02+6	04+8	
11	-	-	-R	-R	-R	-R
21,22,23	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
51	-	-R	-	-R	-R	-R
61,62,63	R	G	R	G	R	Y
81,82	R	R	R	R	G	R
P21,P22	DW	DW	W	W	DW	DRK
P41,P42	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



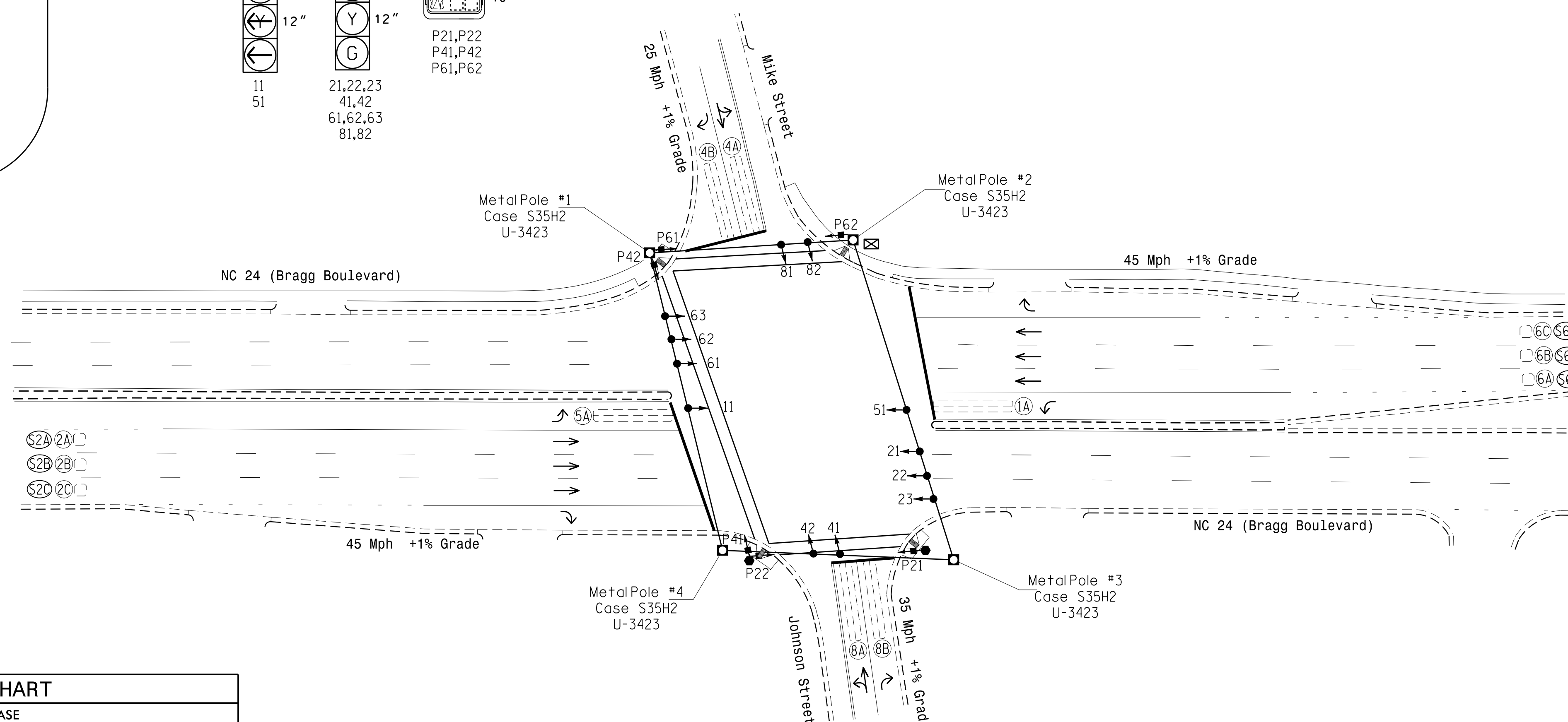
ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Yes	-	-	S	-	X
2A/S2A	6X6	300	6	-	2	Yes	-	-	N	X	X
2B/S2B	6X6	300	6	-	2	Yes	-	-	N	X	X
2C/S2C	6X6	300	6	-	2	Yes	-	-	N	X	X
4A	6X40	0	2-4-2	-	4	Yes	-	3	S	-	X
4B	6X40	0	2-4-2	-	4	Yes	-	10	S	-	X
5A	6X40	0	2-4-2	-	5	Yes	-	-	S	-	X
6A/S6A	6X6	300	4	-	6	Yes	-	-	N	X	X
6B/S6B	6X6	300	4	-	6	Yes	-	-	N	X	X
6C/S6C	6X6	300	4	-	6	Yes	-	-	N	X	X
8A	6X40	0	2-4-2	-	8	Yes	-	3	S	-	X
8B	6X40	0	2-4-2	-	8	Yes	-	10	S	-	X

5 Phase Fully Actuated Fayetteville Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. Pavement markings are existing.
9. 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	4	5	6	8
Min Green *	7	12	7	7	12	7
Walk *	0	7	7	0	7	0
Ped Clear	0	17	41	0	22	0
Veh. Extension *	2.0	6.0	2.0	2.0	6.0	2.0
Max I *	25	90	30	20	90	30
Yellow	3.0	4.4	3.8	3.0	4.4	3.8
Red Clear	3.2	2.0	3.7	3.5	2.0	3.7
Actuations B4 Add *	-	0	-	-	0	-
Seconds / Actuation *	-	1.0	-	-	1.0	-
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	-	-	X	-	-	X
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.

LEGEND

- |       |   |       |   |
|-------|---|-------|---|
| ○ →   | PROPOSED Traffic Signal Head                            | ● →   | EXISTING Traffic Signal Head                            |
| ○ →   | PROPOSED Modified Signal Head                           | N/A   | EXISTING Modified Signal Head                           |
| ○     | PROPOSED Sign   | ○     | EXISTING Sign   |
| ○     | PROPOSED Pedestrian Signal Head With Push Button & Sign | ○     | EXISTING Pedestrian Signal Head With Push Button & Sign |
| ○     | PROPOSED Signal Pole with Guy                           | ○     | EXISTING Signal Pole with Guy                           |
| ○     | 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                              |

Signal Upgrade

NC 24 (Bragg Boulevard) at Johnson Street / Mike Street

Division 6 Cumberland County Fayetteville

PLAN DATE: September 2015 REVIEWED BY: JPG

PREPARED BY: Jeff Spence REVIEWED BY:

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER

SEAL 029904

J. P. GALLAGHER

DATE 5/11/2016

SIG. INVENTORY NO. 06-0265

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE 0 40 1"=40'

09-MAY-2016 10:33 S:\MIS\5742\SIG\15\_Signal\Signal Design Section\Eastern Region\01\U-5742 Fayetteville ASC\3\06-0265\060265.sig.dsn\_2015.mxd.dgn