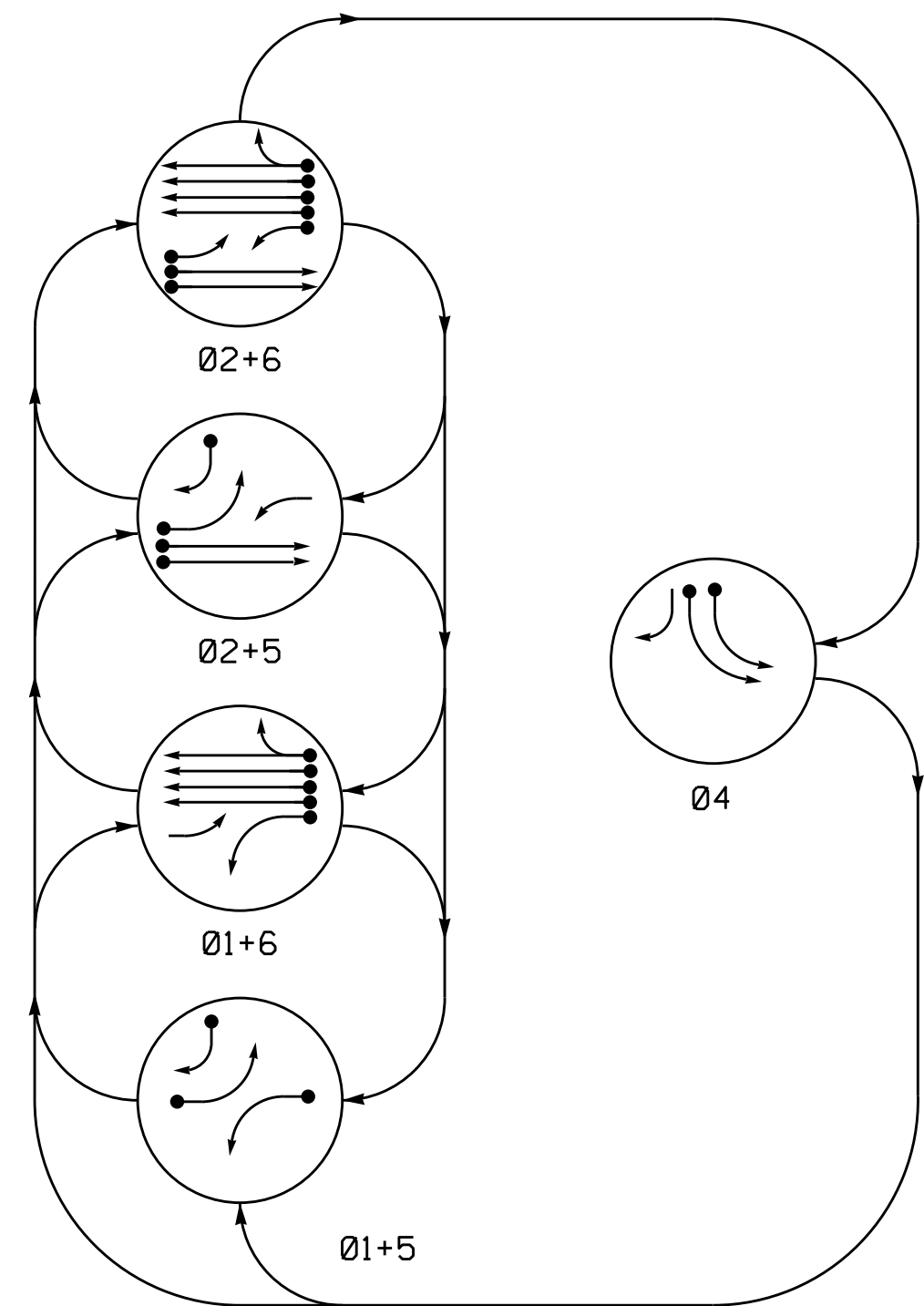
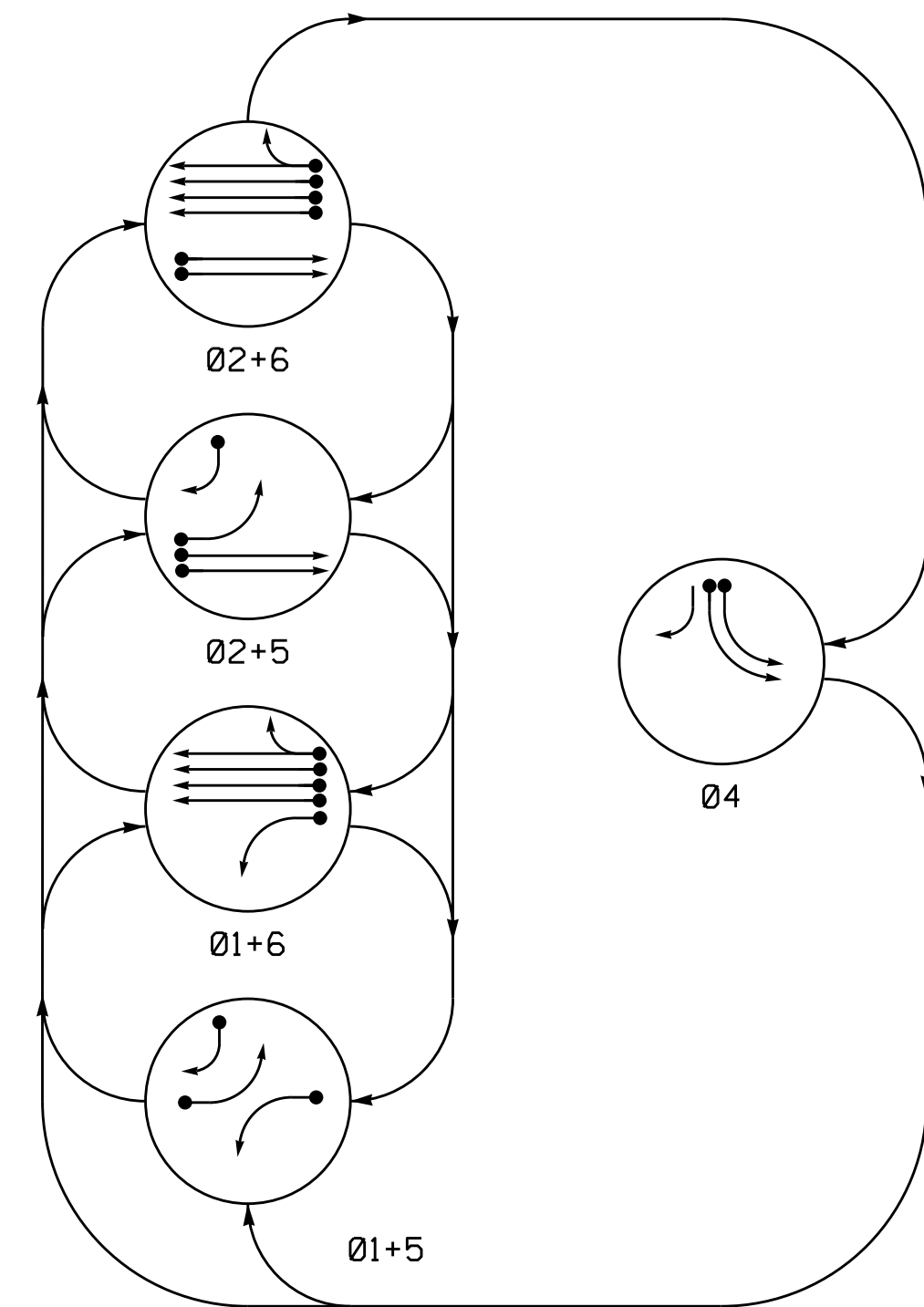


DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	04	FLASH
11	---	---	---	---	---	---
21,22	R	R	G	G	R	Y
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	---	---	---	---	---	---
61,62,63	R	G	R	G	R	Y

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	04	FLASH
11	---	---	---	---	---	---
21,22	R	R	G	G	R	Y
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	---	---	---	---	---	---
61,62,63	R	G	R	G	R	Y

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	-	*15	S	-	X
2A,2B	6X6	300	6	-	2	Yes	-	-	N	-	X
4A	6X60	0	2-4-2	-	4	Yes	-	3	S	-	X
4B	6X60	0	2-4-2	-	4	Yes	-	-	S	-	X
5A	6X60	0	2-4-2	-	5	Yes	-	*15	S	-	X
5B	6X60	0	2-4-2	-	5	Yes	-	15	S	-	X
6A,6B,6C,6D	6X6	300	6	-	6	Yes	-	-	N	-	X

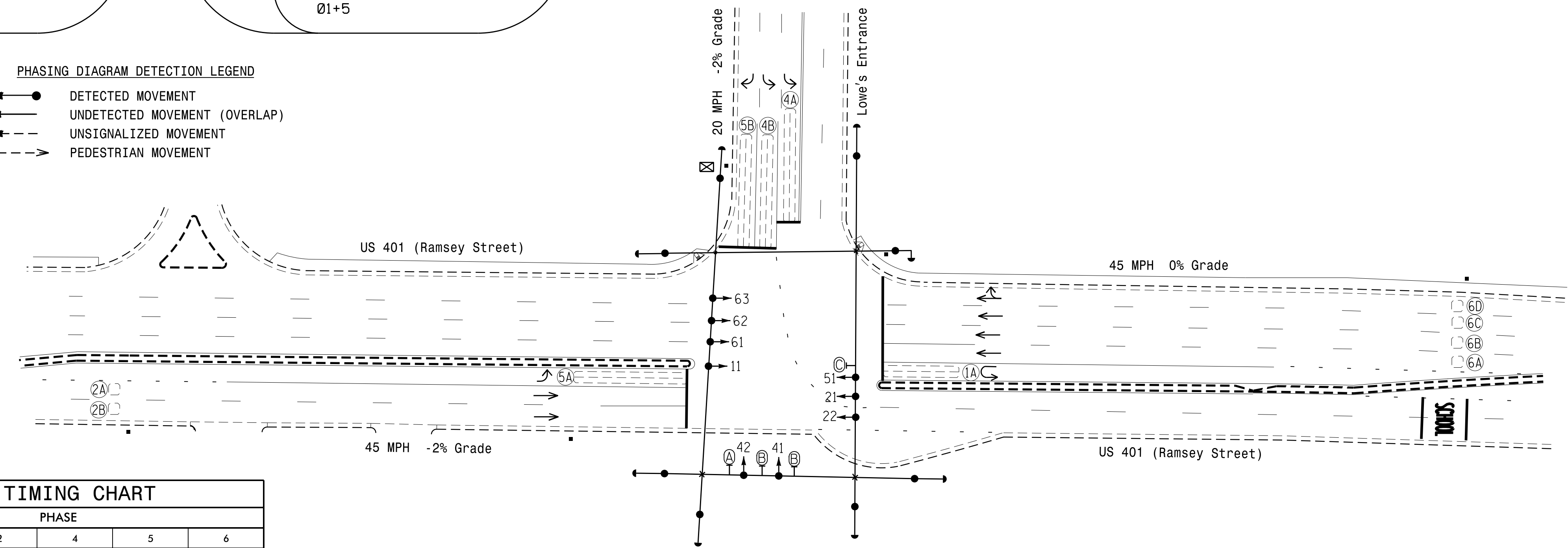
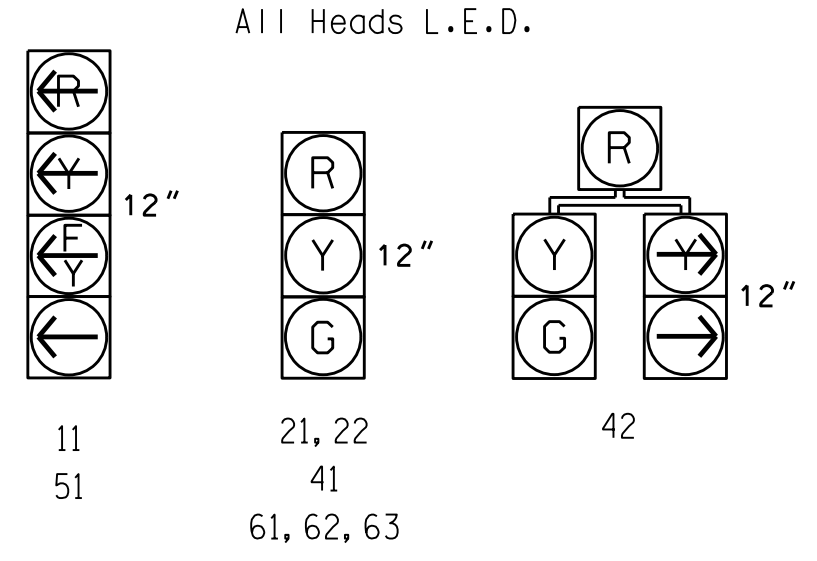
* Disable Delay During Alternate Phasing Operation.
 ** Disable Phase 2/6 Call for Loop 1A/5A During Alternate Phasing Operation.

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. 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.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Pavement markings are existing.
8. The Division Traffic Engineer will determine the hours of use for each phasing plan.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

SIGNAL FACE I.D.



ASC/3 TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	
Min Green *	7	12	7	7	12	
Walk *	-	-	-	-	-	
Ped Clear	-	-	-	-	-	
Veh. Extension *	2.0	6.0	2.0	2.0	6.0	
Max I *	20	60	20	20	60	
Yellow	3.0	4.7	3.0	3.0	4.7	
Red Clear	3.5	2.0	3.3	2.9	2.0	
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	

* 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	EXISTING
○→ Traffic Signal Head	●→ N/A
○→ Modified Signal Head	○→ N/A
○→ Pedestrian Signal Head With Push Button & Sign	○→ N/A
○→ Signal Pole with Guy	○→ N/A
○→ Signal Pole with Sidewalk Guy	○→ N/A
⊗ Inductive Loop Detector	⊗ Inductive Loop Detector
⊗ Controller & Cabinet	⊗ Controller & Cabinet
⊗ Junction Box	⊗ Junction Box
--- 2-in Underground Conduit	--- 2-in Underground Conduit
N/A Right of Way	--- Right of Way
→ Directional Arrow	→ Directional Arrow
N/A Wheel Chair Ramp	→ Wheel Chair Ramp
(A) Right Arrow "ONLY" Sign (R3-5R)	(A) Right Arrow "ONLY" Sign (R3-5R)
(B) Left Arrow "ONLY" Sign (R3-5L)	(B) Left Arrow "ONLY" Sign (R3-5L)
(C) U-Turn "MUST YIELD" Sign (R3-27)	(C) U-Turn "MUST YIELD" Sign (R3-27)

Signal Upgrade

Prepared In the Offices of:

US 401 (Ramsey Street) at Lowe's Entrance

Division 6 Cumberland County Fayetteville

PLAN DATE: December 2015 REVIEWED BY: JPG, PE

PREPARED BY: EM Minshew REVIEWED BY:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 0 40 1"=40'

REVISIONS: _____ INIT. DATE

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

SIG. INVENTORY NO. 06-1224

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

24-AUG-2016 08:55
 S:\ITS\ASIS\ITS_Signal\Signal_Design_Section\Eastern_Region\01\U-5742_Fayetteville\06\U-5742_Fayetteville\224\06\1224_dsm_sig_2015.mxd.dgn
 emminshew