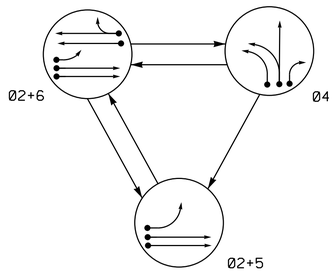
PROJECT REFERENCE NO.	SHEET NO.
U-5742	Sig.52.0

3 Phase
Fully Actuated
Fayetteville Signal System

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

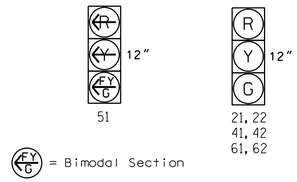
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 02+5	PHASE 02+6	PHASE 04	FLASH
21,22	G	G	R	Y
41,42	R	R	G	R
51	←FY	←FY	~~R~~	~~Y~~
61,62	R	G	R	Y

SIGNAL FACE I.D.

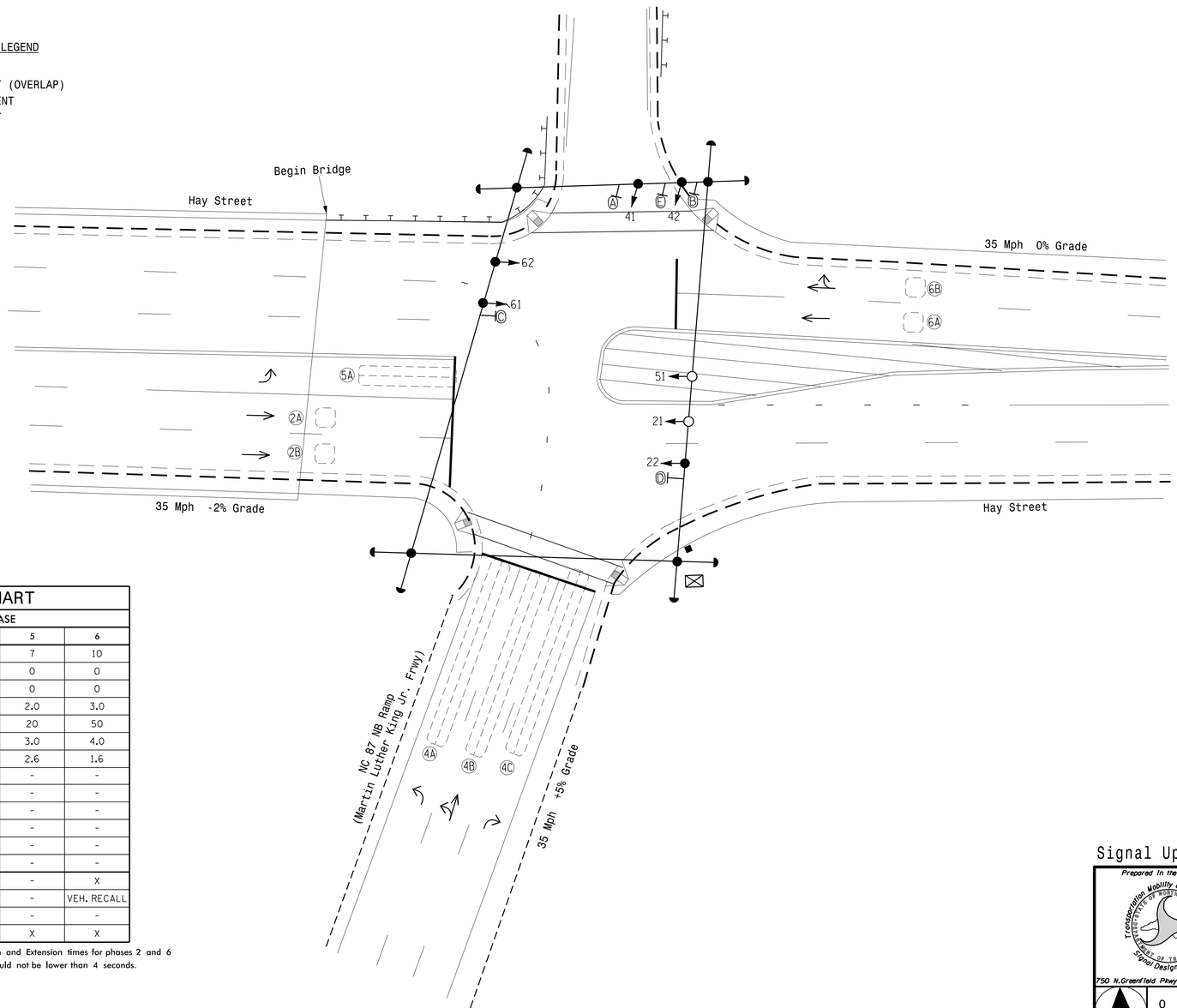
All Heads L.E.D.



FY/G = Bimodal Section

ASC/3 DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
2A	6X6	37	4	-	2	Yes	-	-	S	-	X
2B	6X6	37	4	-	2	Yes	-	-	S	-	X
4A	6X60	0	2-4-2	-	4	Yes	-	-	S	-	X
4B	6X60	0	2-4-2	-	4	Yes	-	-	S	-	X
4C	6X60	+5	2-4-2	-	4	Yes	-	15	S	-	X
5A	6X30	0	2-4-2	-	5	Yes	-	15	S	-	X
					2	Yes	-	-	S	-	X
6A	6X6	70	4	-	6	Yes	-	-	S	-	X
6B	6X6	70	4	-	6	Yes	-	-	S	-	X



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 5 may be lagged.
4. Reposition existing signal heads numbered 22.
5. Set all detector units to presence mode.
6. 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.
7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
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.

LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◐→	Modified Signal Head	N/A
⊣	Sign	⊣
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
□	Junction Box	■
	2-in Underground Conduit	
N/A	Right of Way	
→	Directional Arrow	→
N/A	Guardrail	
N/A	Wheelchair Ramp	
Ⓐ	Left Arrow "ONLY" Sign (R3-5L)	Ⓐ
Ⓑ	Right Arrow "ONLY" Sign (R3-5R)	Ⓑ
Ⓒ	No Left Turn Sign (R3-2)	Ⓒ
Ⓓ	No Right Turn Sign (R3-1)	Ⓓ
Ⓔ	Combined Through and Left Arrow Sign (R3-6L)	Ⓔ

ASC/3 TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 5	PHASE 6
Min Green *	10	7	7	10
Walk *	0	0	0	0
Ped Clear	0	0	0	0
Veh. Extension *	3.0	1.0	2.0	3.0
Max 1 *	50	30	20	50
Yellow	4.0	3.6	3.0	4.0
Red Clear	1.6	2.3	2.6	1.6
Actuations B4 Add *	-	-	-	-
Seconds /Actuation *	-	-	-	-
Max Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Locking Detector	X	-	-	X
Recall Position	VEH. RECALL	-	-	VEH. RECALL
Dual Entry	-	-	-	-
Simultaneous Gap	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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

Hay Street
at
NC 87 Northbound Ramp
(Martin Luther King Jr. Frwy)

Division 6 Cumberland County Fayetteville

PLAN DATE: June 2016 REVIEWED BY: JPG

PREPARED BY: Jeff Spence REVIEWED BY:

SCALE 0 20 1"=20'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 029904 ENGINEER JASON P. GALLOWAY

DocuSigned by: Jason P. Galloway 8/3/2016
F700EA704818411... DATE

SIG. INVENTORY NO. 06-0231

03-AUG-2016 08:36
S:*ITS\Signals\Signal Design Section\Eastern Region\Div-06\U-5742 Fayetteville ASC3\06-0231*060231_sig_dsn_2016mmds.dgn
jrspence