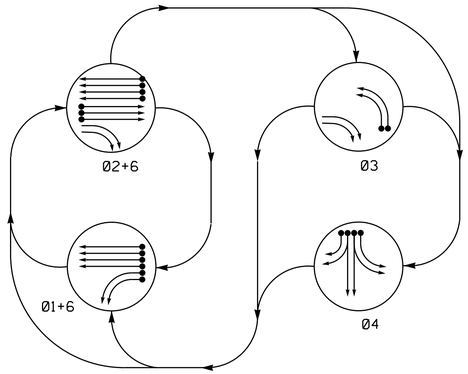
PROJECT REFERENCE NO.	SHEET NO.
U-5742	Sig. 233.0

4 Phase Fully Actuated Fayetteville Signal System

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

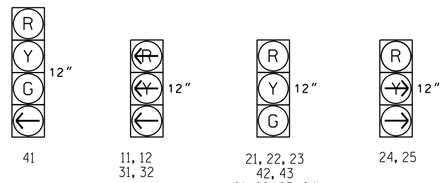
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+6	PHASE 02+6	PHASE 03	PHASE 04	FLASH
11, 12	←	~~R~~	~~R~~	~~R~~	~~R~~
21, 22, 23	R	G	R	R	Y
24, 25	R	→	→	R	~~Y~~
31, 32	~~R~~	~~R~~	←	~~R~~	~~R~~
41	R	R	R	G	R
42, 43	R	R	R	G	R
61,62,63,64	G	G	R	R	Y

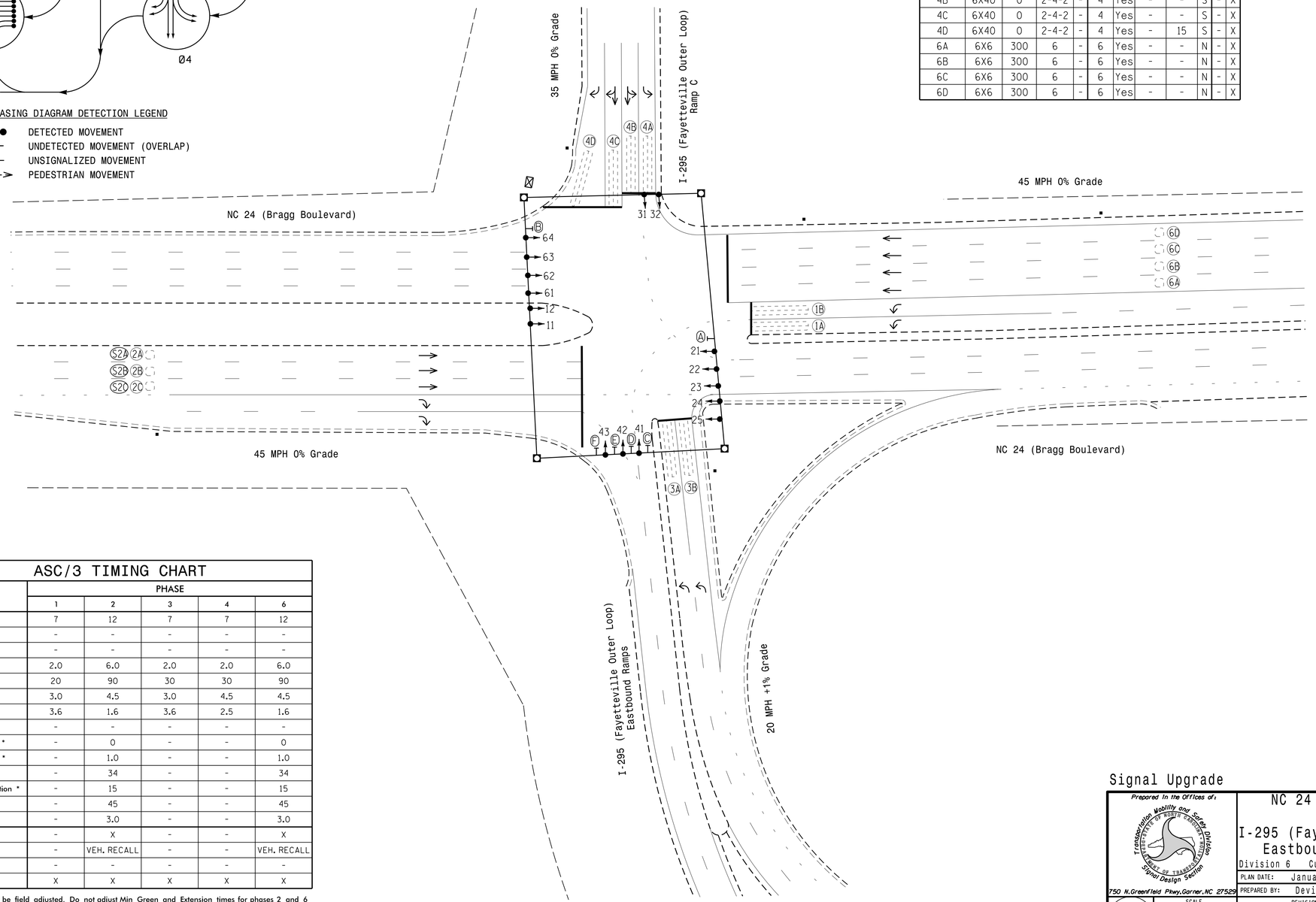
SIGNAL FACE I.D.

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	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Yes	-	-	S	-	X
1B	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
3A	6X40	0	2-4-2	-	3	Yes	-	-	S	-	X
3B	6X40	0	2-4-2	-	3	Yes	-	-	S	-	X
4A	6X40	0	2-4-2	-	4	Yes	-	-	S	-	X
4B	6X40	0	2-4-2	-	4	Yes	-	-	S	-	X
4C	6X40	0	2-4-2	-	4	Yes	-	-	S	-	X
4D	6X40	0	2-4-2	-	4	Yes	-	15	S	-	X
6A	6X6	300	6	-	6	Yes	-	-	N	-	X
6B	6X6	300	6	-	6	Yes	-	-	N	-	X
6C	6X6	300	6	-	6	Yes	-	-	N	-	X
6D	6X6	300	6	-	6	Yes	-	-	N	-	X



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	●
▣	Metal Strain Pole	■
▭	Inductive Loop Detector	▭
⊠	Controller & Cabinet	▩
□	Junction Box	■
·-·-·	2-in Underground Conduit	·-·-·
N/A	Right of Way	- - - -
→	Directional Arrow	→
Ⓐ	No Left Turn Sign (R3-2)	Ⓐ
Ⓑ	No Right Turn Sign (R3-1)	Ⓑ
Ⓒ	Left Arrow "ONLY" Sign (R3-5L)	Ⓒ
Ⓓ	Combined Through and Left Arrow Sign (R3-6L)	Ⓓ
Ⓔ	Combined Through and Left Arrow Sign (R3-6L)	Ⓔ
Ⓕ	Right Arrow "ONLY" Sign (R3-5R)	Ⓕ

ASC/3 TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 6
Min Green *	7	12	7	7	12
Walk *	-	-	-	-	-
Ped Clear	-	-	-	-	-
Veh. Extension *	2.0	6.0	2.0	2.0	6.0
Max 1 *	20	90	30	30	90
Yellow	3.0	4.5	3.0	4.5	4.5
Red Clear	3.6	1.6	3.6	2.5	1.6
Red Revert	-	-	-	-	-
Actuations B4 Add *	-	0	-	-	0
Seconds /Actuation *	-	1.0	-	-	1.0
Max Initial *	-	34	-	-	34
Time Before Reduction *	-	15	-	-	15
Time To Reduce *	-	45	-	-	45
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.

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 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

NC 24 (Bragg Boulevard)
at
I-295 (Fayetteville Outer Loop)
Eastbound (Ramp C/Loop D)

Division 6 Cumberland County Fayetteville

PLAN DATE: January 2016 REVIEWED BY: JG
PREPARED BY: Devin Smith REVIEWED BY:

REVISIONS	INIT.	DATE

SCALE 0 40 1"=40'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 029904 ENGINEER JASON P. GALLOWAY

DocuSigned by: Jason P. Galloway 5/6/2016
F7D0EA704B1841D... DATE

SIG. INVENTORY NO. 06-1301