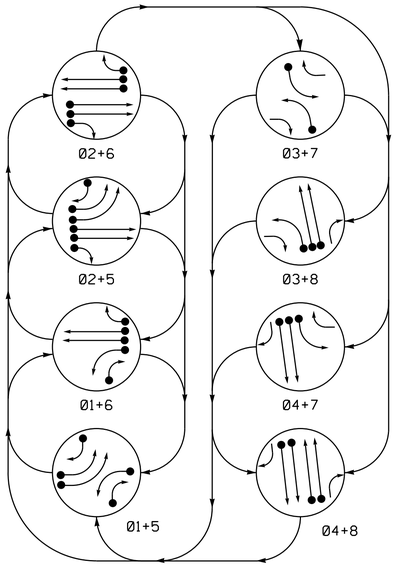
PROJECT REFERENCE NO.	SHEET NO.
U-5742	Sig. 54.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

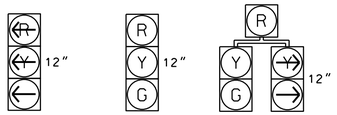
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	FLASH
11	←	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R/←	R/→	R	R	Y
31	~~R~~	~~R~~	~~R~~	~~R~~	←	←	~~R~~	~~R~~	~~R~~
41,42	R	R	R	R	R	R	G	G	R
43	R/←	R	R/←	R	R	R	G	G	R
51,52	←	~~R~~	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R/←	R	R/←	R	Y
71	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~	←	~~R~~	~~R~~
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.



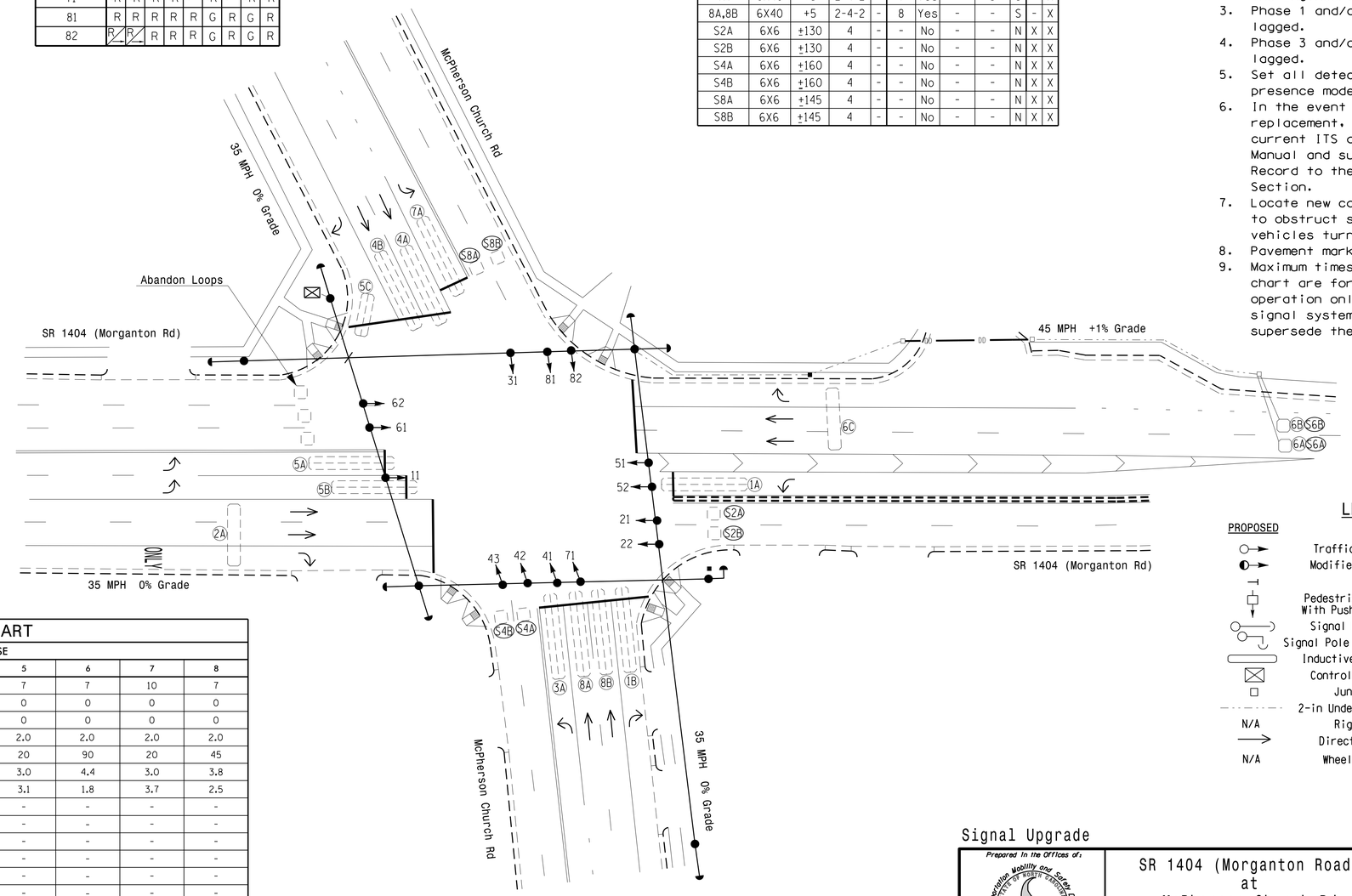
11
31
51, 52
71

21
41, 42
61
81

22
43
62
82

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	+5	2-4-2	-	1	Yes	-	-	S	-	X
1B	6X40	+5	2-4-2	-	1	Yes	-	15	S	-	X
2A	6X29	90	2	-	2	Yes	-	-	S	-	X
3A	6X40	+5	2-4-2	-	3	Yes	-	3	S	-	X
4A,4B	6X40	+5	2-4-2	-	4	Yes	-	-	S	-	X
5A,5B	6X40	+5	2-4-2	-	5	Yes	-	3	S	-	X
5C	6X20	+5	2-4-2	-	5	Yes	-	15	S	-	X
S6A/6A	6X6	300	6	X	6	Yes	1.6	-	N	-	X
S6B/6B	6X6	300	6	X	6	Yes	1.6	-	N	-	X
6C	6X30	70	6	-	6	Yes	-	-	S	-	X
7A	6X40	+5	2-4-2	-	7	Yes	-	3	S	-	X
8A,8B	6X40	+5	2-4-2	-	8	Yes	-	-	S	-	X
S2A	6X6	±130	4	-	-	No	-	-	N	X	X
S2B	6X6	±130	4	-	-	No	-	-	N	X	X
S4A	6X6	±160	4	-	-	No	-	-	N	X	X
S4B	6X6	±160	4	-	-	No	-	-	N	X	X
S8A	6X6	±145	4	-	-	No	-	-	N	X	X
S8B	6X6	±145	4	-	-	No	-	-	N	X	X



8 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. Phase 3 and/or phase 7 may be lagged.
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	Wheel Chair Ramp	

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green *	7	10	7	7	7	7	10	7
Walk *	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0
Veh. Extension *	2.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	20	90	20	45	20	90	20	45
Yellow	3.0	4.4	3.0	3.8	3.0	4.4	3.0	3.8
Red Clear	2.8	1.8	3.2	2.5	3.1	1.8	3.7	2.5
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	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.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Signal Upgrade

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

SR 1404 (Morganton Road) at McPherson Church Rd

Division 6 Cumberland County Fayetteville

PLAN DATE: February 2016 REVIEWED BY: JPG, PE

PREPARED BY: EM Minshew REVIEWED BY:

REVISIONS	INIT.	DATE

SCALE 0 30 1"=30'

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 029904 ENGINEER JASON P. GALLOWAY

DocuSigned by: Jason P. Galloway 10/17/2016
SIGNATURE DATE

SIG. INVENTORY NO. 06-0233

17-OCT-2016 11:13
S:\TISG\ITS Signals\Signal Design Section\Eastern Region\Div-06\U-5742 Fayetteville ASC3\06-0233\06233_sig_dsn_2016mmdd.dgn
emminshew