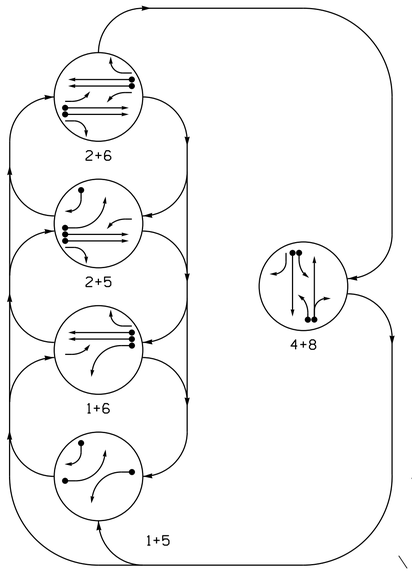
PROJECT REFERENCE NO.	SHEET NO.
U-5302	Sig. 18.0

DEFAULT PHASING DIAGRAM

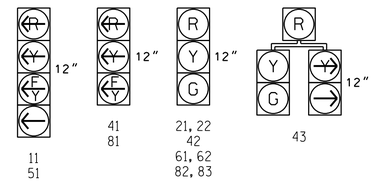


DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	4+8	FLASH
11	←	←	F Y	F Y	~~R~~	~~R~~
21, 22	R	R	G	G	R	R
41	~~R~~	~~R~~	~~R~~	~~R~~	F Y	~~R~~
42	R	R	R	R	G	R
43	R ↗	R	R ↗	R	G	R
51	←	F Y	←	F Y	~~R~~	~~R~~
61, 62	R	G	R	G	R	R
81	~~R~~	~~R~~	~~R~~	~~R~~	F Y	~~R~~
82, 83	R	R	R	R	G	R

SIGNAL FACE I.D.

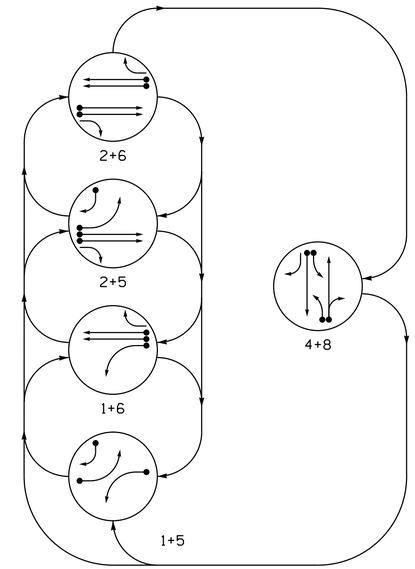
All Heads L.E.D.



PHASING DIAGRAM DETECTION LEGEND

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

ALTERNATE PHASING DIAGRAM



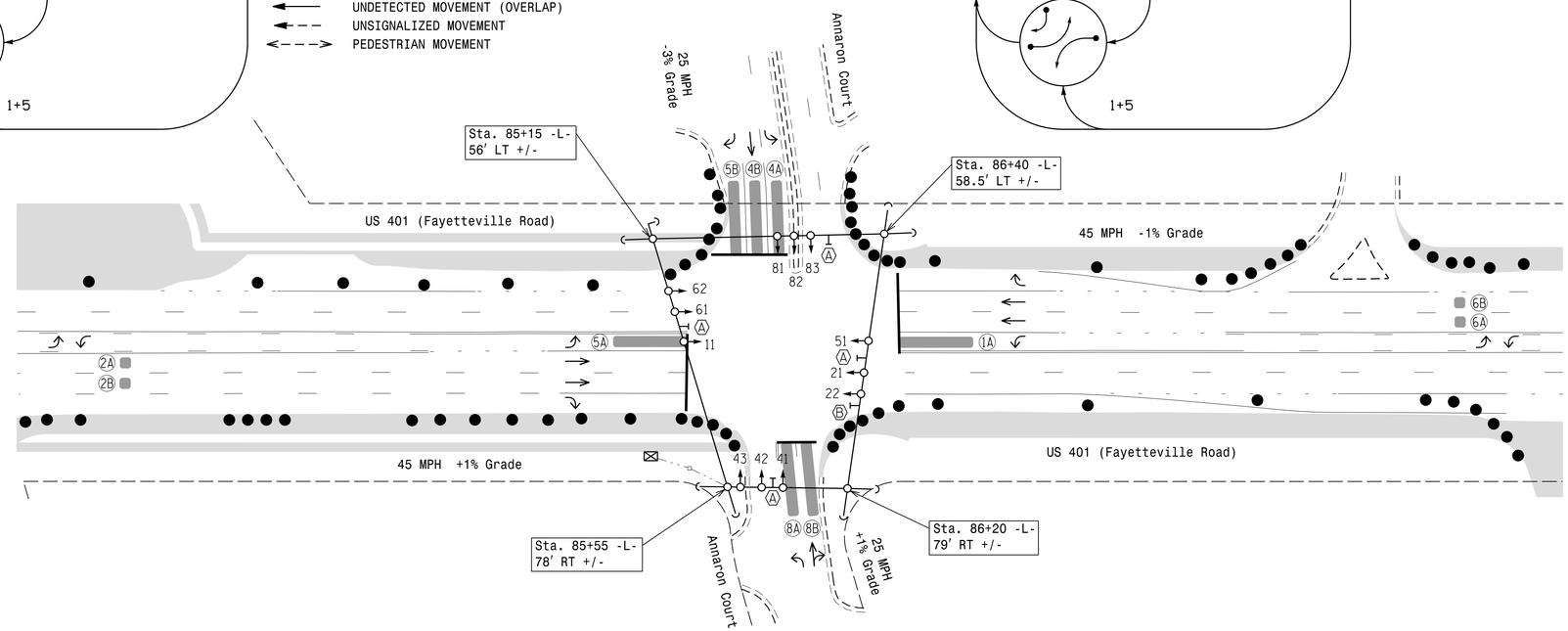
ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	4+8	FLASH
11	←	←	~~R~~	~~R~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	R
41	~~R~~	~~R~~	~~R~~	~~R~~	F Y	~~R~~
42	R	R	R	R	G	R
43	R ↗	R	R ↗	R	G	R
51	←	~~R~~	←	~~R~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	R
81	~~R~~	~~R~~	~~R~~	~~R~~	F Y	~~R~~
82, 83	R	R	R	R	G	R

5 Phase
Fully Actuated
(Raleigh Signal System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or 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. The City Traffic Engineer will determine the hours of use for each phasing plan.
7. This intersection uses non-intrusive detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
8. 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	■
○	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	→
▬	Non-Intrusive Detection Zone	▬
▭	Construction Zone	▭
● ●	Construction Zone Drums	● ●
Ⓐ	Street Name Sign (D3-1)	Ⓐ
Ⓑ	Right Arrow "ONLY" Sign (R3-5R)	Ⓑ

SE-PAC 2070 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green *	7	12	7	7	12	7
Passage Gap *	2.0	6.0	2.0	2.0	6.0	2.0
Maximum Green *	20	75	30	20	75	30
Yellow Change	3.0	4.6	3.3	3.0	4.6	3.3
Red Clear	2.8	1.5	2.6	2.8	1.5	2.6
Walk *	-	-	-	-	-	-
Pedestrian Clear	-	-	-	-	-	-
Added Initial *	-	1.5	-	-	1.5	-
Maximum Initial *	-	34	-	-	34	-
Time Before Reduction *	-	15	-	-	15	-
Time To Reduce *	-	30	-	-	30	-
Minimum Gap	-	3.0	-	-	3.0	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	LOCK	NON-LOCK
Dual Entry	-	-	ON	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON

* 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.

SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART

INDUCTIVE LOOPS						DETECTOR PROGRAMMING													
							TIMING		OPERATION MODE									STATUS	
ZONE	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	ASSIGNED PHASE	DELAY	EXTEND (STRETCH)	0 VEHICLE	1 PEDESTRIAN	2 1 CALL	3 STOP A	4 STOP B	5 PROTPER LEFT	6 PROTPER THROUGH	7 AND	SWITCH	SYSTEM LOOPS	NEW	EXISTING
1A	6X40	✳	0	X	-	1	5.0 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-
2A	6X6	✳	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-
2B	6X6	✳	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-
4A	6X40	✳	0	X	-	4	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-
4B	6X40	✳	0	X	-	4	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-
5A	6X40	✳	0	X	-	5	5.0 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-
5B	6X40	✳	0	X	-	5	15.0SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-
6A	6X6	✳	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-
6B	6X6	✳	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-
8A	6X40	✳	0	X	-	8	3.0 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-
8B	6X40	✳	0	X	-	8	10.0SEC.	- SEC.	X	-	-	-	-	-	-	-	-	✳	-

* Non-intrusive detection zone.

Signal Upgrade - Temporary Design 1 (TMP Phases I & II)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

US 401 (Fayetteville Road) at Annaron Court

Division 5 Wake County Raleigh

PLAN DATE: February 2025 REVIEWED BY:
PREPARED BY: J.A. Lohr REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA
DocuSigned by: Robert J. Ziemba 1B0B4A9B027A4A94...
03/27/2025
DATE
SIG. INVENTORY NO. 05-17141

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