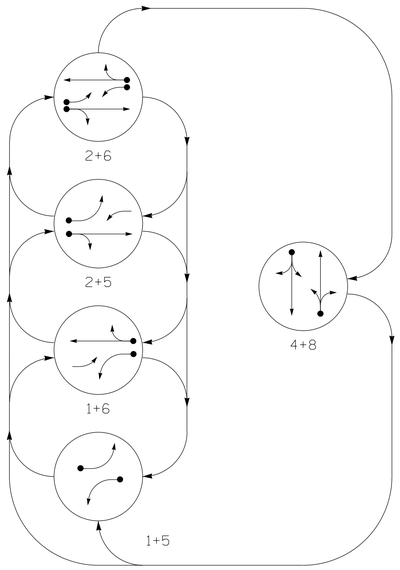
Docusign Envelope ID: 146ECB8F-98C7-44AB-94DA-73C983B75A42

PROJECT REFERENCE NO.	SHEET NO.
R-5711	Sig 2.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

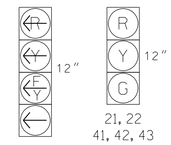
SIGNAL FACE	PHASE 1+5	1+6	2+5	2+6	4+8	FLASH
11	←	←	~~F Y~~	~~F Y~~	~~R~~	~~R~~
21, 22	R	R	G	G	R	R
41, 42, 43	R	R	R	R	G	R
51	←	~~F Y~~	←	~~F Y~~	~~R~~	~~R~~
61, 62	R	G	R	G	R	R
81, 82	R	R	R	R	G	R

MAXTIME DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	2-4-2	X	1	15.0	-	X	-	X	-	X
				X	6	3.0	-	X	-	X	X	X
2A	6X6	300	4	X	2	-	-	X	X	X	-	X
4A	6X6	300	4	X	4	-	-	X	-	-	-	X
4B	6X40	0	2-4-2	X	4	5.0	2.0	X	-	X	X	X
4C	6X15	0	3	X	4	15.0	-	X	-	X	-	X
5A	6X40	0	2-4-2	X	5	15.0	-	X	-	X	-	X
				X	2	3.0	-	X	-	X	X	X
6A	6X6	300	6	X	6	-	-	X	X	X	-	X
8A	6X6	300	4	X	8	-	-	X	-	-	-	X
8B	6X40	0	2-4-2	X	8	5.0	2.0	X	-	X	X	X
8C	6X15	0	3	X	8	15.0	-	X	-	X	-	X

SIGNAL FACE I.D.

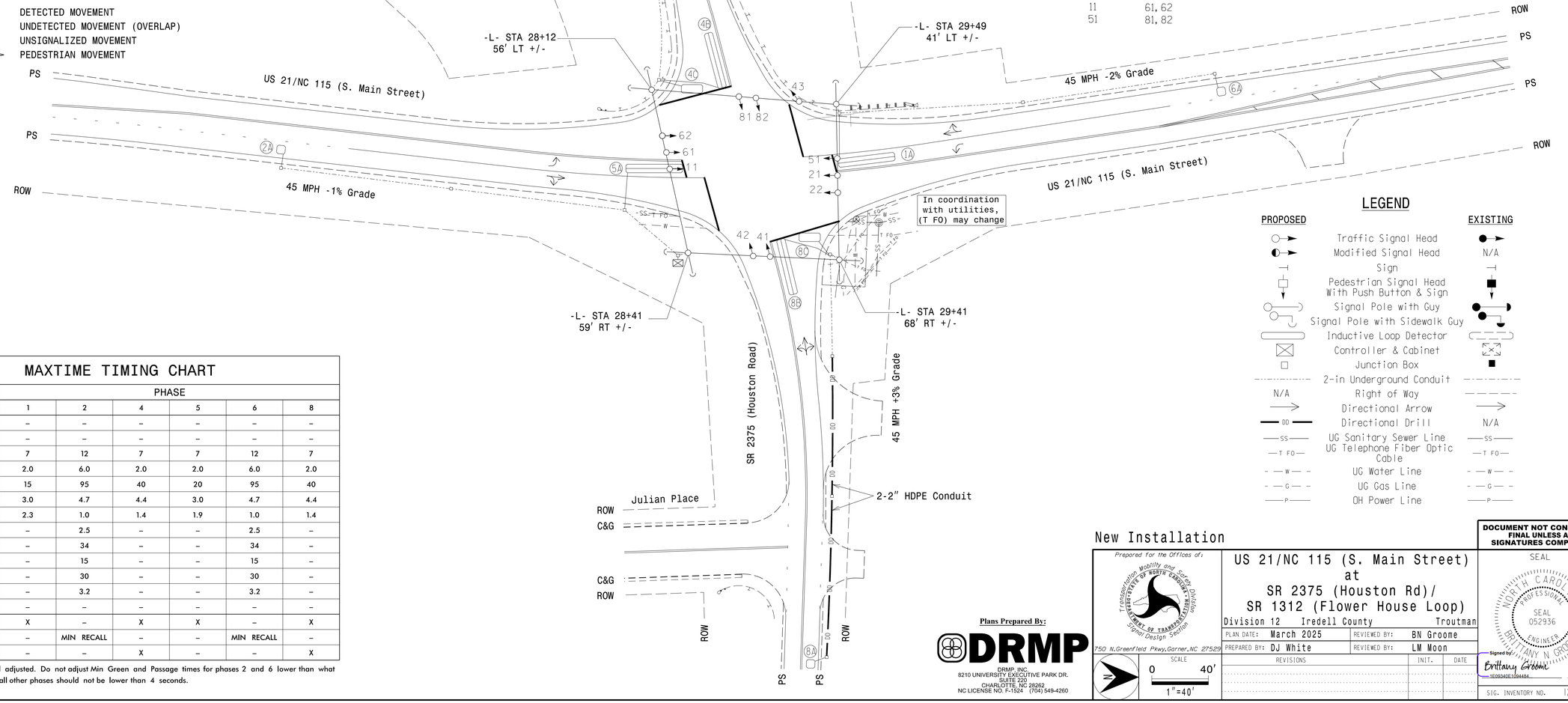
All Heads L.E.D.



5 Phase
Fully Actuated
012-10 TROUTMAN US 21/NC 115 CLS

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 phase 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. See pavement marking plans for new markings.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
8. Closed loop system data: Controller Asset 1859.



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	→
DD	Directional Drill	N/A
SS	UG Sanitary Sewer Line	SS
T FO	UG Telephone Fiber Optic Cable	T FO
W	UG Water Line	W
G	UG Gas Line	G
P	OH Power Line	P

MAXTIME TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Walk *	–	–	–	–	–	–
Ped Clear	–	–	–	–	–	–
Min Green *	7	12	7	7	12	7
Passage *	2.0	6.0	2.0	2.0	6.0	2.0
Max 1 *	15	95	40	20	95	40
Yellow Change	3.0	4.7	4.4	3.0	4.7	4.4
Red Clear	2.3	1.0	1.4	1.9	1.0	1.4
Added Initial *	–	2.5	–	–	2.5	–
Maximum Initial *	–	34	–	–	34	–
Time Before Reduction *	–	15	–	–	15	–
Time To Reduce *	–	30	–	–	30	–
Minimum Gap	–	3.2	–	–	3.2	–
Advance Walk	–	–	–	–	–	–
Non Lock Detector	X	–	X	X	–	X
Vehicle Recall	–	MIN RECALL	–	–	MIN RECALL	–
Dual Entry	–	–	X	–	–	X

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

17-SEP-2025 11:44
R:\R-5711\Traffic Signals\Design\Signals\12-1859.dgn
Plotted At 1"=40'
DWhite AT IRAL-DWHITE

Plans Prepared By:

DRMP

DRMP, INC.
8210 UNIVERSITY EXECUTIVE PARK DR.
SUITE 220
CHARLOTTE, NC 28262
NC LICENSE NO. F-1524 (704) 549-4260

New Installation

Prepared for the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
1750 N.Greenfield Pkwy.Garner,NC 27529

SCALE 0 40' 1"=40'

US 21/NC 115 (S. Main Street)
at
SR 2375 (Houston Rd)/
SR 1312 (Flower House Loop)

Division 12 Iredell County Troutman

PLAN DATE:	March 2025	REVIEWED BY:	BN Groome
PREPARED BY:	DJ White	REVIEWED BY:	LM Moon

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 052936 ENGINEER BRITTANY N. GROOME

Signed by: Brittany Groome 10/13/2025
1E0934DE1594484...
DATE

SIG. INVENTORY NO. 12-1859