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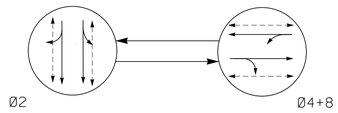
PROJECT REFERENCE NO.	SHEET NO.
C-5703	Sig.41.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

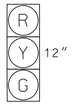
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2	PHASE Ø4+8	PHASE FLASH
21, 22	G	R	Y
41, 42	R	G	R
81, 82	R	G	R
P21, P22 P23, P24	W	DW	DRK
P41, P42	DW	W	DRK
P81, P82	DW	W	DRK

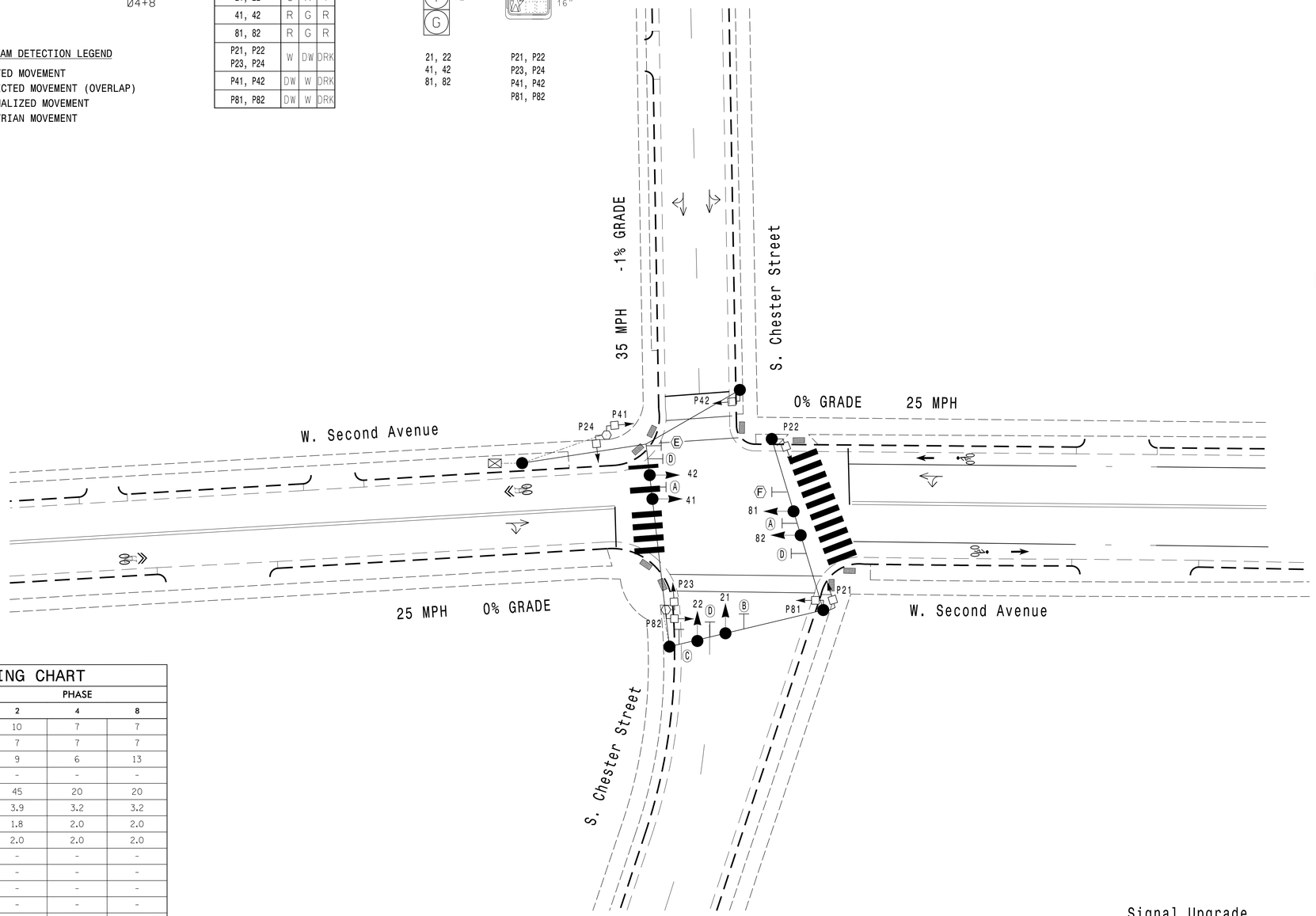
SIGNAL FACE I.D.

All Heads L.E.D.



21, 22
41, 42
81, 82

P21, P22
P23, P24
P41, P42
P81, P82



TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 8
Min Green *	10	7	7
Walk *	7	7	7
Ped Clear	9	6	13
Veh. Extension *	-	-	-
Max 1 *	45	20	20
Yellow	3.9	3.2	3.2
Red Clear	1.8	2.0	2.0
Red Revert	2.0	2.0	2.0
Actuations B4 Add *	-	-	-
Seconds /Actuation *	-	-	-
Max Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Locking Detector	-	-	-
Recall Position	PED/MAX	PED/MAX	PED/MAX
Dual Entry	-	X	X
Simultaneous Gap	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.

2 Phase
Pre-Timed
Gastonia Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Install new cabinet on a new cabinet foundation.
4. All new cabinets and base extenders shall be black in color. See Project Special Provisions for details.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. Pavement markings are existing.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
9. Rewire all intersection equipment to new cabinet
10. All proposed pedestrian signal heads and pedestals shall be black in color. See Project Special Provisions for details.
11. City system data:
    Controller Asset: #0074

LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◐→	Modified Signal Head	N/A
⊣	Sign	⊣
▯↓	Pedestrian Signal Head with 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	→
→	Pavement Marking Arrow	→
Ⓐ	"One Way" Sign (R6-1)	Ⓐ
Ⓑ	Combined Through and Left Arrow Sign (R3-6L)	Ⓑ
Ⓒ	Combined Through and Right Arrow Sign (R3-6R)	Ⓒ
Ⓓ	Street Name Sign (D3-1)	Ⓓ
Ⓔ	No Right Turn Sign (R3-1)	Ⓔ
Ⓕ	No Left Turn Sign (R3-2)	Ⓕ

Signal Upgrade

PLANS PREPARED IN THE OFFICE OF:
Kimley»Horn
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421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

Prepared For: Transportation Mobility and Safety Division — North Carolina Department of Transportation — Signal Design Section

750 N.Greenfield Pkwy,Garner,NC 27529

N

SCALE 0 20 1"=20'

S. Chester Street
at
W. Second Avenue

Division 12 Gaston County Gastonia

PLAN DATE:	May 2021	REVIEWED BY:	SL Phillips
PREPARED BY:	DM Curri	REVIEWED BY:	KP Baumann

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA PROFESSIONAL SEAL 044434 ENGINEER KEVIN P. BAUMANN

DocuSigned by: 3/11/2022
SIGNATURE DATE

SIG. INVENTORY NO. 12-0074

3/9/2022 11:13:32 AM Danielle.Curri ***kimley-horn.com*SE_RAL1*RAL_TPTO*_ITS*01036569 Gastonia Signal System*s Signals*54 - Signal Design*8120074-2021.dgn