2 Phase Fully Actuated 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. Set all detector units to presence mode. 4. In the event of loop replacement, refer to the current
- ITS and Signal Design Manual and submit a Plan of Record to the Signal Design Section. 5. Locate new cabinet so as not to obstruct sight distance
- of vehicles turning right on red. 6. Omit "WALK" and flashing "DON'T WALK" with no
- pedestrian calls. 7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- 9. Install new cabinet on the existing cabinet foundation.
- 10. All new cabinets and base extenders shall be black in color. See Project Special Provisions for details.
- 11. City system data:

Controller Asset: #0165

DETECTOR
2A 6X6 70 EXIST - 2 Yes - - - N - X 2B 6X60 +13 2-4-2 - 2 Yes - - N - X 4A 6X60 +5 2-4-2 - 4 Yes - 3 - N - X 4B 6X40 0 2-4-2 - 4 Yes - 3 - N - X 6A 6X6 70 EXIST - 6 Yes - - - N - X 6B 6X40 0 2-4-2 - 6 Yes - - - N - X 8A 6X60 +5 2-4-2 - 8 Yes - 3 - N - X
2B 6X60 +13 2-4-2 - 2 Yes - - N - X 4A 6X60 +5 2-4-2 - 4 Yes - 3 - N - X 4B 6X40 0 2-4-2 - 4 Yes - 3 - N - X 6A 6X6 70 EXIST - 6 Yes - - - N - X 6B 6X40 0 2-4-2 - 6 Yes - - - N - X 8A 6X60 +5 2-4-2 - 8 Yes - 3 - N - X
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4B 6X40 0 2-4-2 - 4 Yes - 3 - N - X 6A 6X6 70 EXIST - 6 Yes - - - N - X 6B 6X40 0 2-4-2 - 6 Yes - - - N - X 8A 6X60 +5 2-4-2 - 8 Yes - 3 - N - X
6A 6X6 70 EXIST - 6 Yes - - - N - X 6B 6X40 0 2-4-2 - 6 Yes - - - N - X 8A 6X60 +5 2-4-2 - 8 Yes - 3 - N - X
6B 6X40 0 2-4-2 - 6 Yes N - X 8A 6X60 +5 2-4-2 - 8 Yes - 3 - N - X
8A 6X60 +5 2-4-2 - 8 Yes - 3 - N - X
8B 6X40 0 2-4-2 - 8 Yes - 3 - N - X

16"	
P21, P22 P41, P42 P61, P62 P81, P82	
	=
	=

SR 1136 (Davis Park Road)

PHASING DIAGRAM

PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT

← − → PEDESTRIAN MOVEMENT

SIGNAL FACE I.D.

All Heads L.E.D.

22, 23

42, 43

62, 63 82, 83

UNSIGNALIZED MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

Ø2+6

TIMING CHART PHASE				
FEATURE	2	4	6	8
Min Green *	10	7	10	7
Walk *	7	7	7	7
Ped Clear	8	12	8	12
Veh. Extension *	3.0	2.0	3.0	2.0
Max 1 *	45	25	45	25
Yellow	3.9	3.9	3.9	3.9
Red Clear	2.3	3.1	2.3	3.1
Red Revert	2.0	2.0	2.0	2.0

35 MPH -1% Grade

81 82 83

35 MPH

0% Grade

-ì **6B** √

Myrtle School Road

TABLE OF OPERATION

SIGNAL

FACE

22, 23

41

42, 43

62, 63

81

82, 83

P21, P22

P41, P42

P61, P62

P81, P82

LEGEND EXISTING PROPOSED Modified Signal Head Sign Type II Signal Pedestal 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 Curb Ramp "YIELD" Sign (R1-2) "TURNING VEHICLES YIELD TO PEDESTRIANS" Sign (R10-15) Pedestrian Crossing Sign (W11-2) w/ Downward Arrow Plaque (W16-7P)

Street Name Sign (D3-1)

Signal Upgrade SR 1136 (Davis Park Rd.)/ Myrtle School Road

1"=30'

PLANS PREPARED IN THE OFFICE OF: Kimley » Horn NC License #F-0102 421 Fayetteville Street, Suite 600 Raleigh, NC 27601 (919) 677-2000

SR 1131 (Linwood Rd.) Division 12 Gaston County Gastonia May 2021 REVIEWED BY: SL Phillips 750 N.Greenfield Pkwy,Garner,NC 27529 PREPARED BY: REVIEWED BY: KP Baumann CF Davis

FINAL UNLESS ALL SIGNATURES COMPLETED 044434

DOCUMENT NOT CONSIDERED

Ken Barran 3/11/2022 DATE 12-0165 SIG. INVENTORY NO.

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

MIN RECAL

MIN RECALL

Actuations B4 Add Seconds / Actuation *

Time Before Reduction

Time To Reduce *

Minimum Gap

Locking Detector

Simultaneous Gap

Recall Position