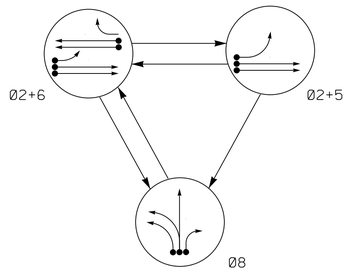
PROJECT REFERENCE NO.	SHEET NO.
I-5972	Sig. 7.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE 02+5	PHASE 02+6	PHASE 08	PHASE FLASH
21,22	G	G	R	Y
51	←	F Y	~~R~~	~~Y~~
61,62	R	G	R	Y
81	~~R~~	~~R~~	←	~~R~~
82	R	R	G ←	R
83	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
2A	6X6	70	3	X	2	-	-	X	-	X	-	X
2B	6X6	70	3	X	2	-	-	X	-	X	-	X
5A	6X40	0	2-4-2	X	5	15.0	-	X	-	X	-	X
					2	-	-	X	-	X	-	X
6A	6X6	70	5	X	6	-	-	X	-	X	-	X
6B	6X6	70	5	X	6	-	-	X	-	X	-	X
8A	6X40	0	2-4-2	X	8	-	-	X	-	X	-	X
8B	6X40	0	2-4-2	X	8	-	-	X	-	X	-	X
8C	6X40	0	2-4-2	X	8	15.0	-	X	-	X	-	X
8D	6X6	0	3	X	8	15.0	-	X	-	X	-	X

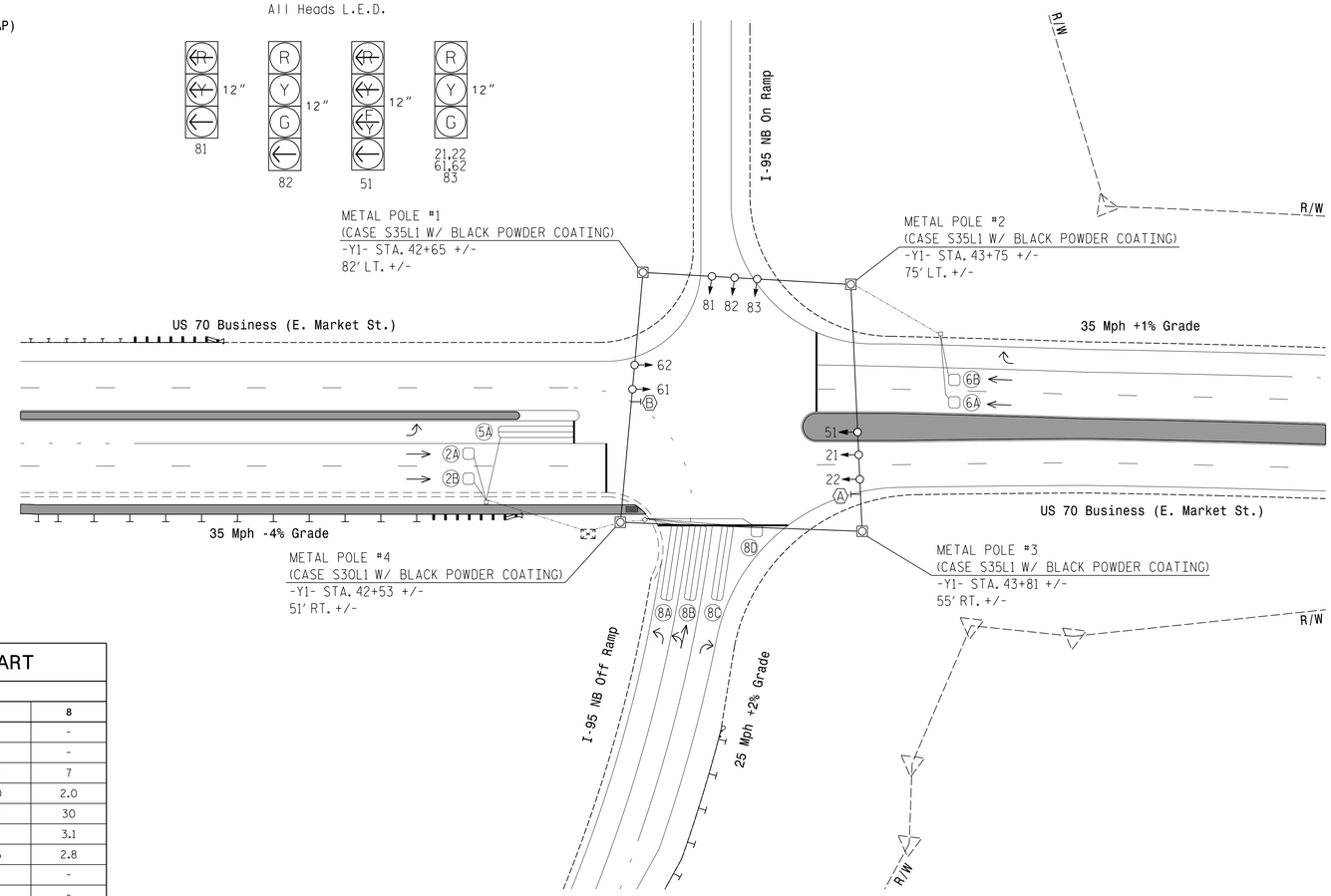
3 Phase
Fully Actuated
(D04-07_Smithfield Signal System)

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. Phase 5 may be lagged.
4. Set all detector units to presence mode.
5. See Pavement Marking Plans for stop bar details.
6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
7. Closed loop system data: Controller Asset #1453.

SIGNAL FACE I.D.

All Heads L.E.D.



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	
	Metal Strain Pole	
	No Right Turn Sign (R3-1)	
	No Left Turn Sign (R3-2)	
N/A	Curb Ramp	

MAXTIME TIMING CHART

FEATURE	PHASE 2	PHASE 5	PHASE 6	PHASE 8
Walk *	-	-	-	-
Ped Clear *	-	-	-	-
Min Green	10	7	10	7
Passage *	3.0	2.0	3.0	2.0
Max 1 *	60	20	60	30
Yellow Change	4.1	3.0	4.1	3.1
Red Clear	2.6	3.2	2.6	2.8
Added Initial *	-	-	-	-
Maximum Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Non Lock Detector	-	X	-	X
Vehicle Recall	MIN RECALL	-	MIN RECALL	-
Dual Entry	-	-	-	-

* 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.

9/19/2023
R:\Traffic\Signals\Designs\Signals\I5972_04-1453.dgn
dsears

New Location - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

RK&K
P: (919) 878-9560
8601 Six Forks Road Suite 700 | Raleigh, North Carolina 27615-2965
NC License No. F-0112
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

Prepared for the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

US 70 Business (E. Market St.) at I-95 NB Ramps

Division 04 Johnston County Smithfield

PLAN DATE: September 2023 REVIEWED BY: DT Sears
PREPARED BY: WP Erickson-Jones REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 044558 ENGINEER DAVID T. SEARS

DocuSigned by:
David T Sears
0691B5F28E9741F...
SIGNATURE 9/19/2023 DATE

SIG. INVENTORY NO. 04-1453