DocuSign Envelope ID: 7323A353-6A23-41A1-BB5E-8D9FE42560E4

PROJECT REFERENCE NO.	SHEET NO.
R-5020B	Sig. 2.0

PHASING DIAGRAM

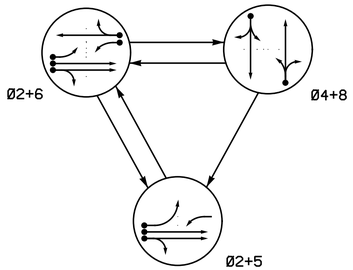
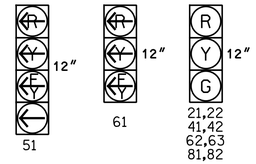


TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+5	Ø2+6	Ø4+8	FLASH
21,22	G	G	R	Y
41,42	R	R	G	R
51	—	F Y	~~R~~	~~Y~~
61	~~F Y~~	~~F Y~~	~~R~~	~~Y~~
62,63	R	G	R	Y
81,82	R	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
2A	6X6	300	✳	X	2	Yes	-	-	X	N	-	X
2B	6X6	300	✳	X	2	Yes	-	-	X	N	-	X
4A	6X40	0	✳	X	4	Yes	-	10	-	N	-	X
5A	6X40	0	✳	X	5	Yes	-	15	-	N	-	X
					2	Yes	-	3	-	G	-	X
6A	6X6	300	✳	X	6	Yes	-	-	X	N	-	X
6B	6X40	0	✳	X	6	Yes	-	-	X	N	-	X
8A	6X40	0	✳	X	8	Yes	-	10	-	N	-	X

✳ Video Detection Zone

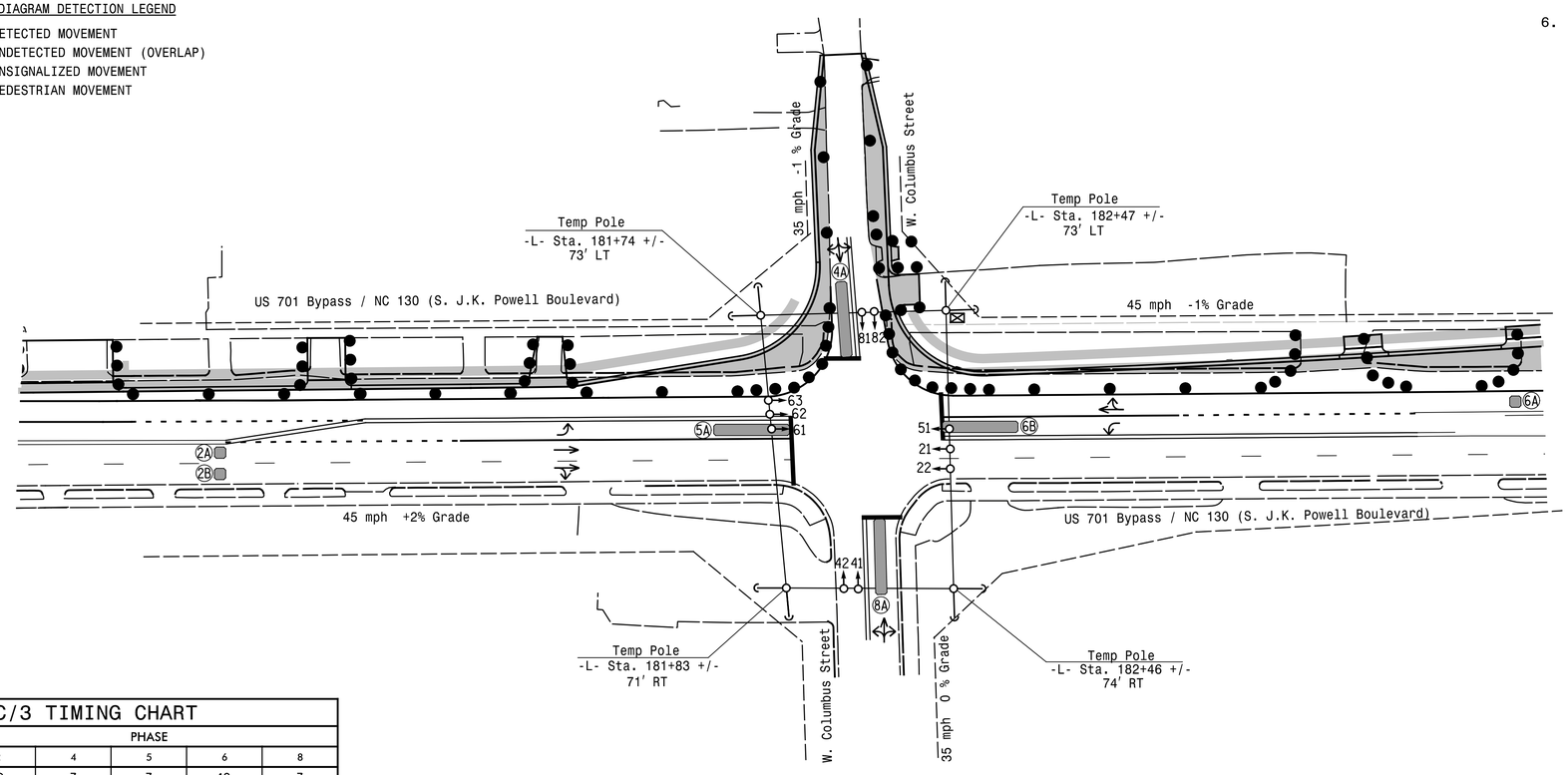
3 Phase
Fully Actuated
System #10605

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. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.

PHASING DIAGRAM DETECTION LEGEND

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



ASC/3 TIMING CHART

FEATURE	PHASE 2	4	5	6	8
Min Green *	12	7	7	12	7
Walk *	-	-	-	-	-
Ped Clear	-	-	-	-	-
Veh. Extension *	6.0	2.0	2.0	6.0	2.0
Max 1 *	90	30	15	90	30
Yellow	4.6	3.9	3.0	4.6	3.9
Red Clear	1.0	1.5	1.6	1.0	1.5
Actuations B4 Add *	0	-	-	0	-
Seconds /Actuation *	1.5	-	-	2.5	-
Max Initial *	34	-	-	34	-
Time Before Reduction *	15	-	-	15	-
Time To Reduce *	30	-	-	30	-
Minimum Gap	3.0	-	-	3.0	-
Locking Detector	X	-	-	X	-
Recall Position	VEH. RECALL	-	-	VEH. RECALL	-
Dual Entry	-	X	-	-	X
Simultaneous Gap	X	X	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.

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	
	Video Detection Zone	
	Construction Zone	N/A
	Drums	N/A

New Signal
Temporary Design 1 - (TMP Phases 1 & 1A)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEPI Engineering & Construction, Inc.
1 Glenwood Avenue
Raleigh, NC 27603
Tel:919.789.9977
Fax:919.789.9591
License: C-2197

Prepared for: Transportation Mobility and Safety Division, Signal Design Section, Department of Transportation, State of North Carolina
750 N.Greenfield Pkwy,Garner,NC 27529

US 701 Bypass/NC 130
(S. J.K. Powell Blvd)
at
W. Columbus Street

Division 06 Columbus County Whiteville

PLAN DATE: MARCH 2020	REVIEWED BY: G. G. Murr, Jr
PREPARED BY: B. Wynn	REVIEWED BY:

SCALE 0 40' 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 14543 ENGINEER GENE G. MURR, JR.

DocuSigned by: Gene G. Murr Jr. 5/15/2020
SIGNATURE DATE

SIG. INVENTORY NO. 06-138I TI

5/13/2020
X:\R2017\R5C17.135.00 R-5020B\TP\Traffic\Signals\DESIGN\SIGNALS\R2 - US 701 and Columbus Street - newSignal\MU-R5020B.sig.dsn.D6-138TI.dgn
MCopple