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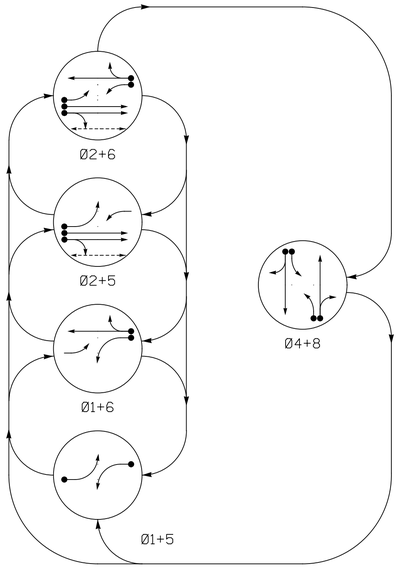
PROJECT REFERENCE NO.	SHEET NO.
R-5020B	Sig. 4.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

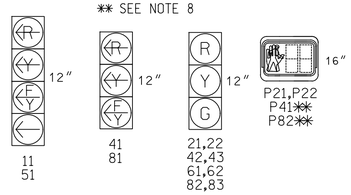
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4+8	FLASH
11	~~←~~	~~←~~	~~F Y~~	~~F Y~~	~~R~~	~~Y~~
21,22	R	R	G	G	R	Y
41	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~R~~
42,43	R	R	R	R	G	R
51	~~←~~	~~F Y~~	~~←~~	~~F Y~~	~~R~~	~~Y~~
61,62	R	G	R	G	R	Y
81	~~R~~	~~R~~	~~R~~	~~R~~	~~F Y~~	~~R~~
82,83	R	R	R	R	G	R
P21,P22	DW	DW	W	W	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.
** SEE NOTE 8



ASC/3 DETECTOR INSTALLATION CHART

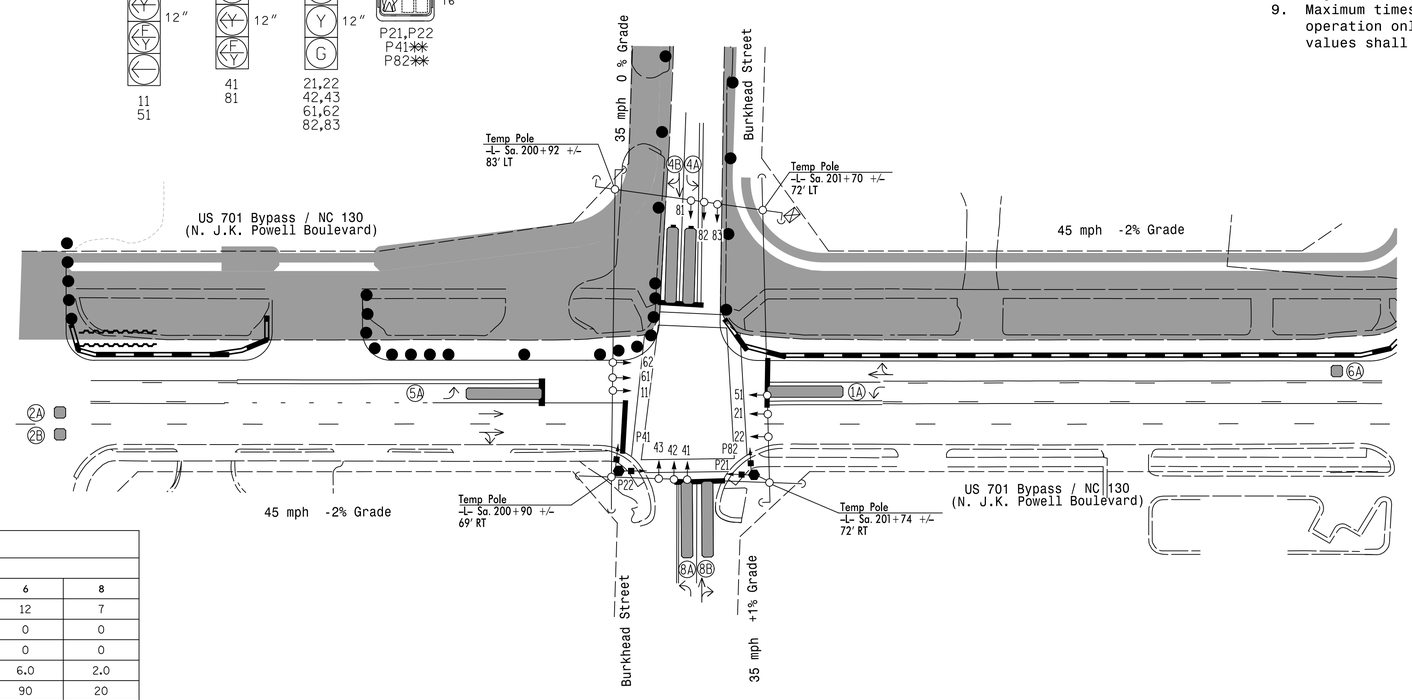
DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X40	0	*	X	1	Yes	-	15	-	N	-	X
					6	Yes	-	3	-	G	-	X
2A	6X6	300	*	X	2	Yes	-	-	X	N	-	X
2B	6X6	300	*	X	2	Yes	-	-	X	N	-	X
4A	6X40	0	*	X	4	Yes	-	3	-	N	-	X
4B	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
8A	6X40	0	*	X	8	Yes	-	3	-	N	-	X
8B	6X40	0	*	X	8	Yes	-	10	-	N	-	X

* Video Detection Zone

5 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 1 and/or 5 may be lagged.
4. Set all detection zones to presence mode.
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. Bag and disconnect pedstrian signal heads P41, P82 and remove Phase 4 and 8 push buttons & educational signs.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.



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	
	Construction Zone	N/A
	Video Detection Zone	
	Drums	N/A
	PORTABLE CONCRETE BARRIER	
	Type II Signal Pedestal	

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	4	5	6	8
Min Green *	7	12	7	7	12	7
Walk *	0	7	0	0	0	0
Ped Clear	0	10	0	0	0	0
Veh. Extension *	2.0	6.0	2.0	2.0	6.0	2.0
Max 1 *	15	90	20	15	90	20
Yellow	3.0	4.7	3.8	3.0	4.7	3.8
Red Clear	2.3	1.4	1.7	3.1	1.4	1.3
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	-	-	-	-	-	-
Recall Position	-	VEH. RECALL	-	-	VEH. RECALL	-
Dual Entry	-	-	X	-	-	X
Simultaneous Gap	X	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.

Signal Upgrade -
Temporary Design 1 - (TMP Phase I)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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Prepared for:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 M.Greenfield Pkwy,Garner,NC 27529

US 701 Bypass/NC 130
(N. J.K. Powell Blvd)
at
Burkhead Street

Division 06 Columbus County Whiteville

PLAN DATE:	December 2019	REVIEWED BY:	G. G. Murr, Jr.
PREPARED BY:	M. Ishak	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
14453 SIGNATURE DATE

SIG. INVENTORY NO. 06-0514TI

5/13/2020
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