

PHASING DIAGRAM

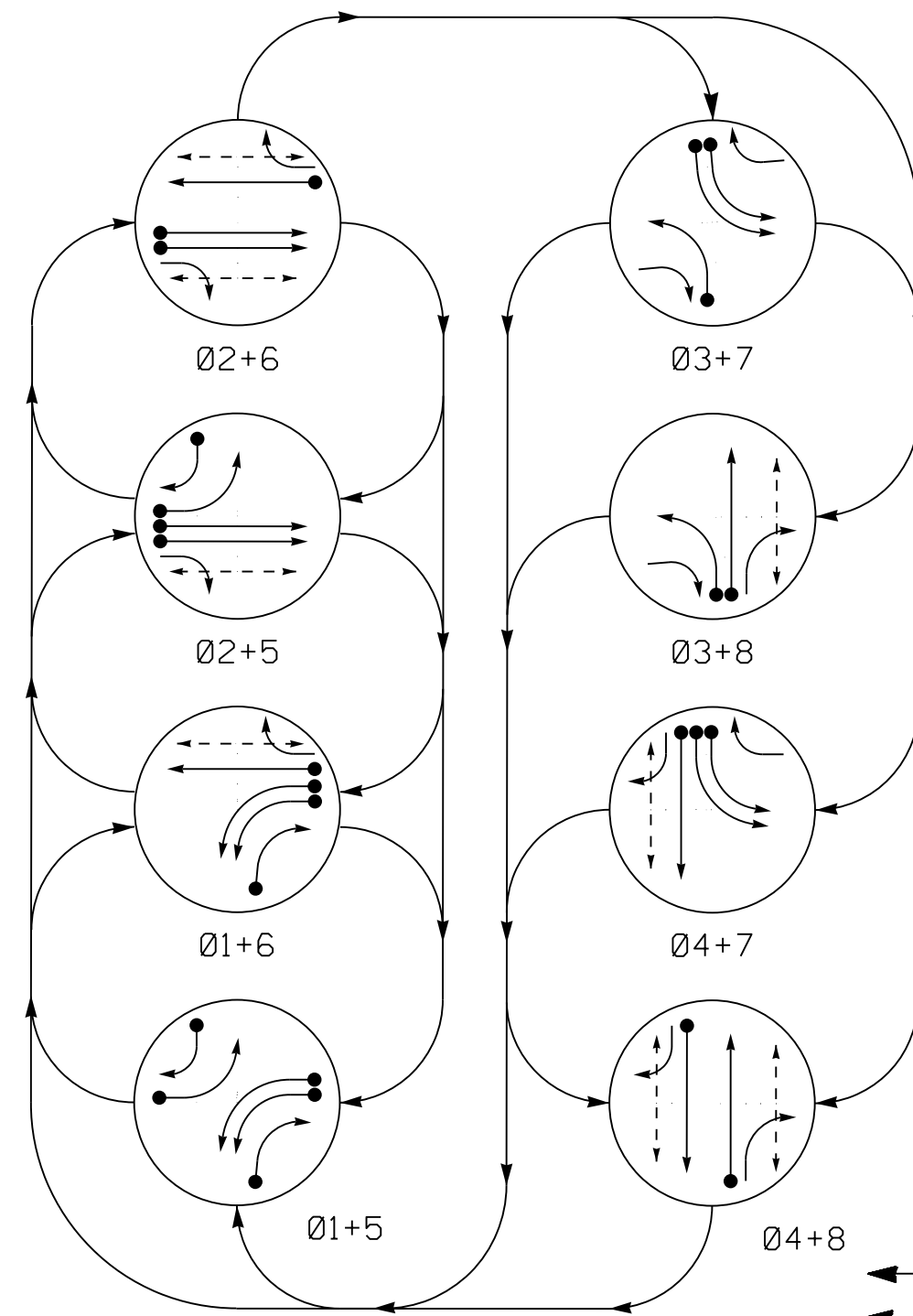
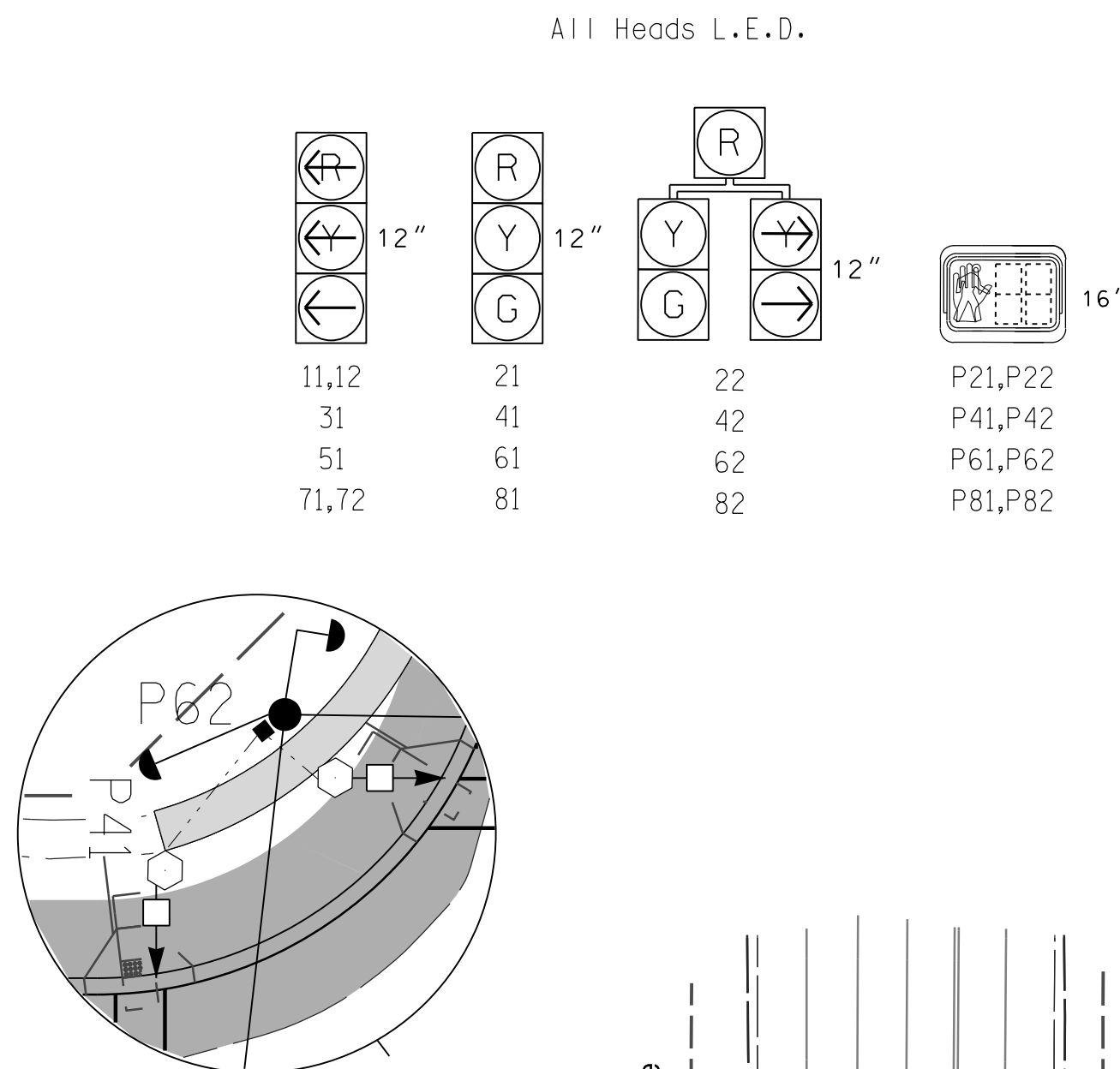


TABLE OF OPERATION

SIGNAL FACE	PHASE								FLASH
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	
11,12	←	←	←	←	←	←	←	←	←
21	R	R	G	G	R	R	R	Y	
22	R	R	G	G	R	R	R	Y	
31	←	←	←	←	←	←	←	←	
41	R	R	R	R	R	R	G	G	
42	R	R	R	R	R	R	G	G	
51	←	←	←	←	←	←	←	←	
61	R	G	R	G	R	R	R	Y	
62	R	G	R	G	R	R	R	Y	
71,72	←	←	←	←	←	←	←	←	
81	R	R	R	R	R	G	R	G	
82	R	R	R	R	R	G	R	G	
P21,P22	DW	DW	W	W	DW	DW	DW	DRK	
P41,P42	DW	DW	DW	DW	DW	DW	W	DRK	
P61,P62	DW	W	DW	DW	DW	DW	DW	DRK	
P81,P82	DW	DW	DW	DW	W	DW	W	DRK	

PHASING DIAGRAM DETECTION LEGEND
 ● DETECTED MOVEMENT
 ○ UNDETECTED MOVEMENT (OVERLAP)
 - UNSIGNALIZED MOVEMENT
 - PEDESTRIAN MOVEMENT

SIGNAL FACE I.D.



ASC/3 DETECTOR INSTALLATION CHART

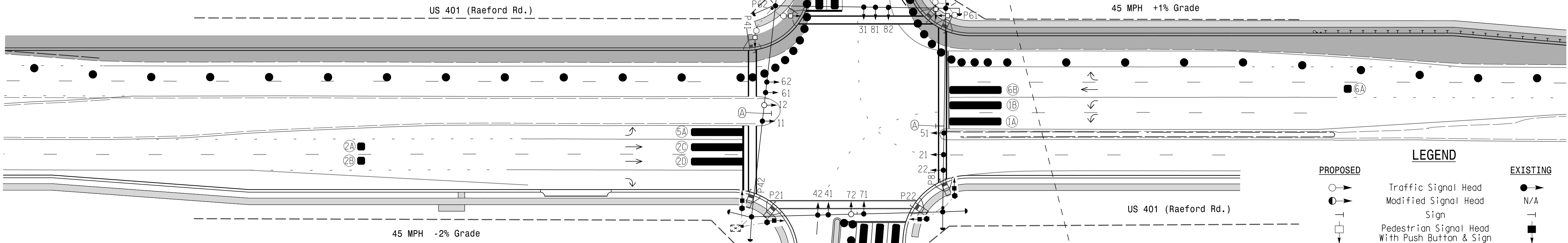
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP
1A	6X40	0	*	-	1	Yes	-	-	-	S	-
1B	6X40	0	*	-	1	Yes	-	-	-	S	-
1C	6X40	0	*	-	1	Yes	-	15	-	S	-
2A	6X6	300	*	-	2	Yes	-	-	-	N	-
2B	6X6	300	*	-	2	Yes	-	-	-	N	-
2C	6X40	0	*	-	2	Yes	2.0	5	-	G	x
2D	6X40	0	*	-	2	Yes	2.0	5	-	G	x
3A	6X40	0	*	-	3	Yes	-	-	-	S	-
4A	6X40	0	*	-	4	Yes	-	-	-	S	-
5A	6X40	0	*	-	5	Yes	-	-	-	S	-
5B	6X40	0	*	-	5	Yes	-	15	-	S	-
6A	6X6	300	*	-	6	Yes	-	-	-	N	-
6B	6X40	0	*	-	6	Yes	2.0	5	-	G	-
7A	6X40	0	*	-	7	Yes	-	3	-	S	-
7B	6X40	0	*	-	7	Yes	-	-	-	S	-
8A	6X40	0	*	-	8	Yes	-	-	-	S	-

*Video Detection Area Camera locations should be confirmed in the field by the contractor in order to provide detection of the areas indicated.

8 Phase Fully Actuated Fayetteville Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Reposition existing signal heads numbered 11,21,22,41,42,61,62.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Pedestrian pedestals are conceptual and shown for reference only. See 2018 NCDOT Roadway Standard Drawings 1705.04 Sheets 1-3 for push button location details.



LEGEND

PROPOSED	EXISTING
○ → Traffic Signal Head	● → Traffic Signal Head
○ → Modified Signal Head	N/A
○ → Sign	N/A
○ → Pedestrian Signal Head With Push Button & Sign	N/A
○ → Signal Pole with Guy	○ → Signal Pole with Guy
○ → Signal Pole with Sidewalk Guy	○ → Signal Pole with Sidewalk Guy
○ → Inductive Loop Detector	○ → Inductive Loop Detector
○ → Controller & Cabinet	○ → Controller & Cabinet
○ → Junction Box	○ → Junction Box
○ → 2-in Underground Conduit	○ → 2-in Underground Conduit
N/A → Right of Way	N/A
→ Directional Arrow	→ Directional Arrow
▬ Video Detection Area	N/A
○ Type II Signal Pedestal	○ Type II Signal Pedestal
▬ Construction Zone	N/A
● Drums	N/A
○ "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	○ "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)

ASC/3 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	-	7	-	7	-	7	-	7
Ped Clear	-	27	-	29	-	22	-	31
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max I *	30	90	25	25	30	90	25	25
Yellow	3.0	4.7	3.0	3.3	3.0	4.4	3.0	3.9
Red Clear	3.8	2.3	4.1	3.6	4.2	2.3	4.0	3.1
Red Revert	-	-	-	-	-	-	-	-
Actuations B4 Add *	-	-	-	-	-	-	-	-
Seconds /Actuation *	-	-	-	-	-	-	-	-
Max Initial *	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-
Simultaneous Gap	X	X	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 Signal Design 2 - TMP Phase II

Stantec Consulting Services Inc.
 801 Jones Franklin Road-Suite 300
 Raleigh, NC 27606
 Tel. (919) 851-6866
 Fax. (919) 851-7024
 www.stantec.com
 License No. F-0672

Prepared for the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27526

SCALE: 0 40
1"=40'

US 401 (Raeford Road) at SR 1104 (Strickland Bridge Road)

Division 6 Cumberland County Fayetteville

PLAN DATE: March 2018 REVIEWED BY: E D Harris

PREPARED BY: A D Smith REVIEWED BY: B L Watson

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

3/29/2018
 DATE: 3/29/2018
 SIG. INVENTORY NO. 06-059612

3/29/2018
 User: rfmuncy
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