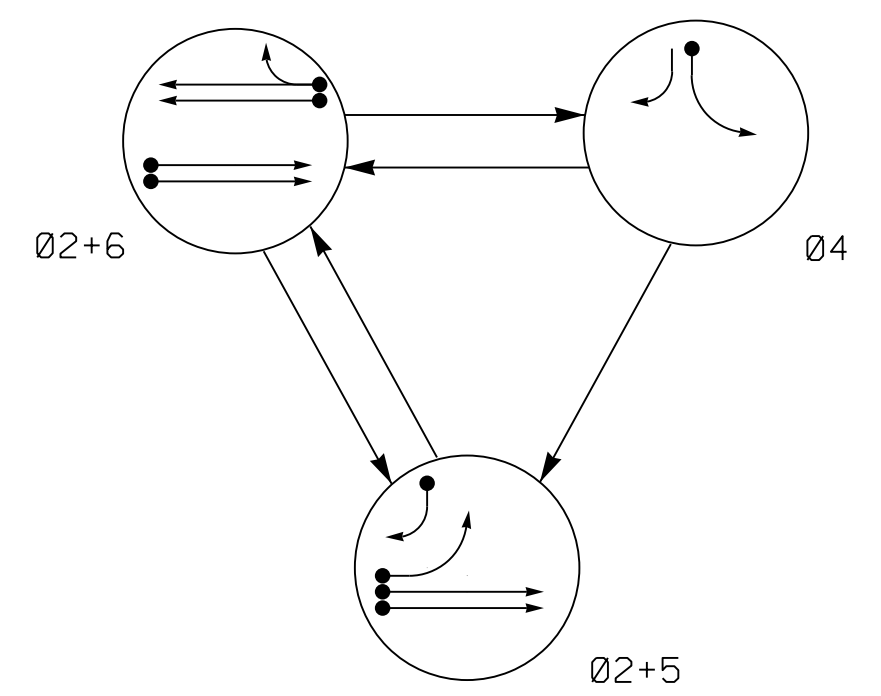


**PHASING DIAGRAM**



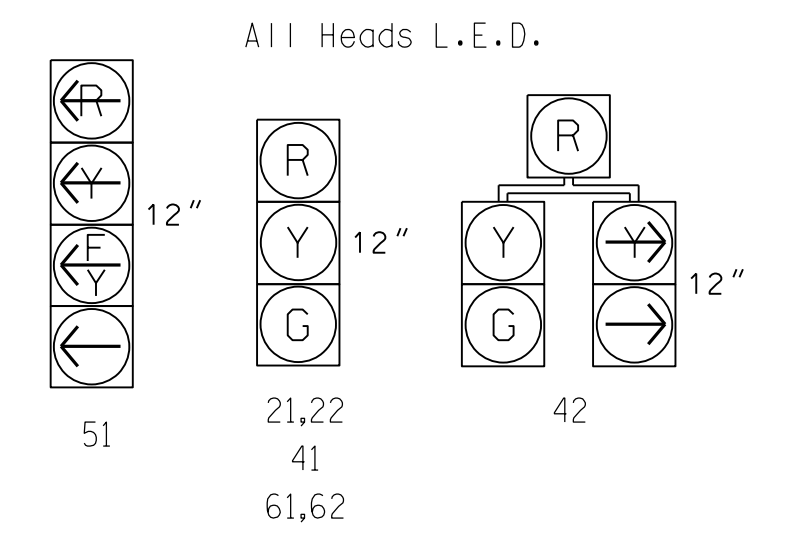
**PHASING DIAGRAM DETECTION LEGEND**

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

**TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	02+5	02+6	04	FLASH
21,22	G	G	R	Y
41	R	R	G	R
42	R	R	G	R
51	←	←	←	←
61,62	R	G	R	Y

**SIGNAL FACE I.D.**



**ASC/3 DETECTOR INSTALLATION CHART**

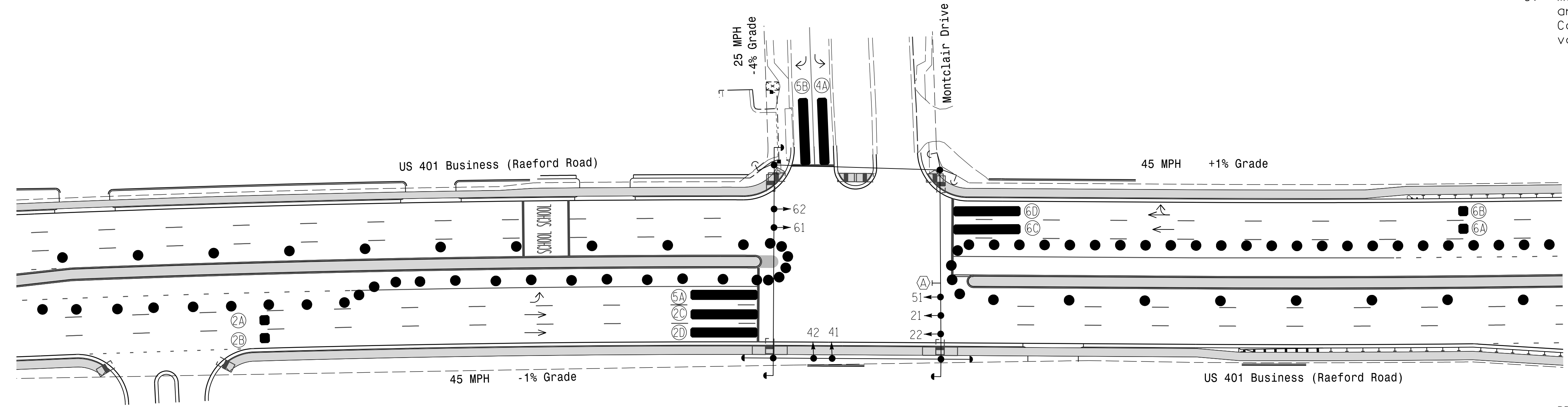
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP SYSTEM
2A	6X6	300	*	-	2	Yes	-	-	-	N	-
2B	6X6	300	*	-	2	Yes	-	-	-	N	-
2D	6X40	0	*	-	2	Yes	2.0	5	-	G	-
2E	6X40	0	*	-	2	Yes	2.0	5	-	G	-
4A	6X40	0	*	-	4	Yes	-	-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

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

**3 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 5 may be lagged.
- Reposition existing signal heads numbered #21, 22, 51, 61, and 62.
- Set all detector units to presence mode.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



**ASC/3 TIMING CHART**

FEATURE	PHASE			
	2	4	5	6
Min Green *	12	7	7	12
Walk *	-	-	-	-
Ped Clear	-	-	-	-
Veh. Extension *	6.0	1.0	1.0	6.0
Max 1 *	90	25	15	90
Yellow	4.6	3.0	3.0	4.6
Red Clear	1.6	3.3	3.2	1.6
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

\* 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	● → N/A
○ → Modified Signal Head	○ → N/A
□ → Pedestrian Signal Head	□ → N/A
□ → Signal Pole with Guy	□ → N/A
□ → Signal Pole with Sidewalk Guy	□ → N/A
□ → Inductive Loop Detector	□ → N/A
□ → Controller & Cabinet	□ → N/A
□ → Junction Box	□ → N/A
□ → 2-in Underground Conduit	□ → N/A
--- Right of Way	--- Right of Way
→ Directional Arrow	→ Directional Arrow
■ Video Detection Area	N/A
■ Construction Zone	N/A
● Drums	N/A
ⓐ "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	ⓐ

**Signal Upgrade Temporary Design 3 - TMP Phase III**

**Stantec**  
 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 Business (Raeford Road) at Montclair Drive**  
 Division 6 Cumberland County Fayetteville  
 PLAN DATE: March 2018 REVIEWED BY: E D Harris  
 PREPARED BY: R M Muncey REVIEWED BY: B L Watson

REVISIONS	INIT.	DATE

**Professional Engineer Seal**  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 29449  
 JEFFRY L. WATSON  
 3/29/2018  
 DATE: 3/29/2018  
 SIG. INVENTORY NO. 06-033413

3/29/2018 10:41:11 AM  
 User: rfmuncey  
 C:\Users\jgarnes\Documents\Signal Design\Phase 3\U-4405\sig.dgn  
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