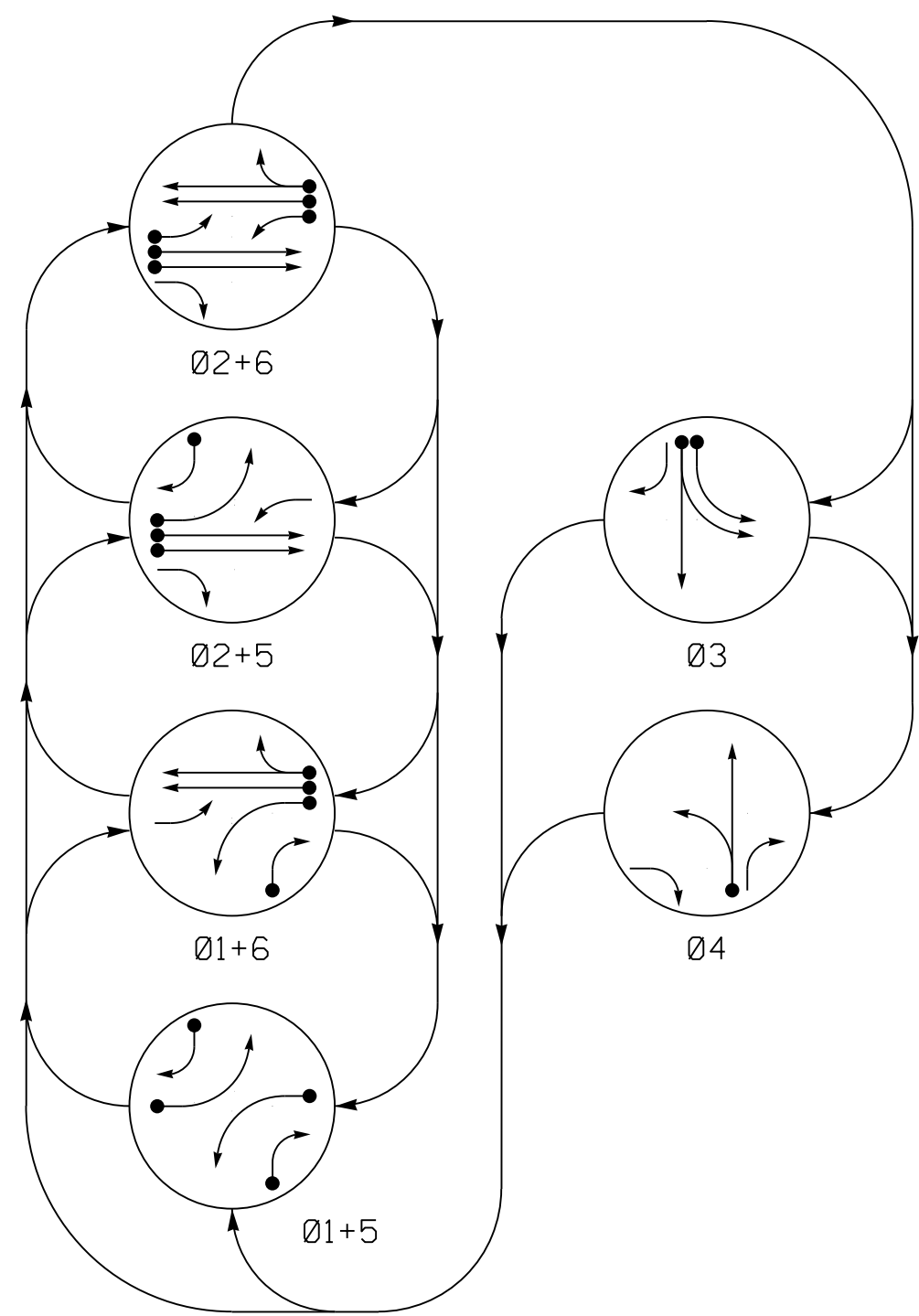


**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

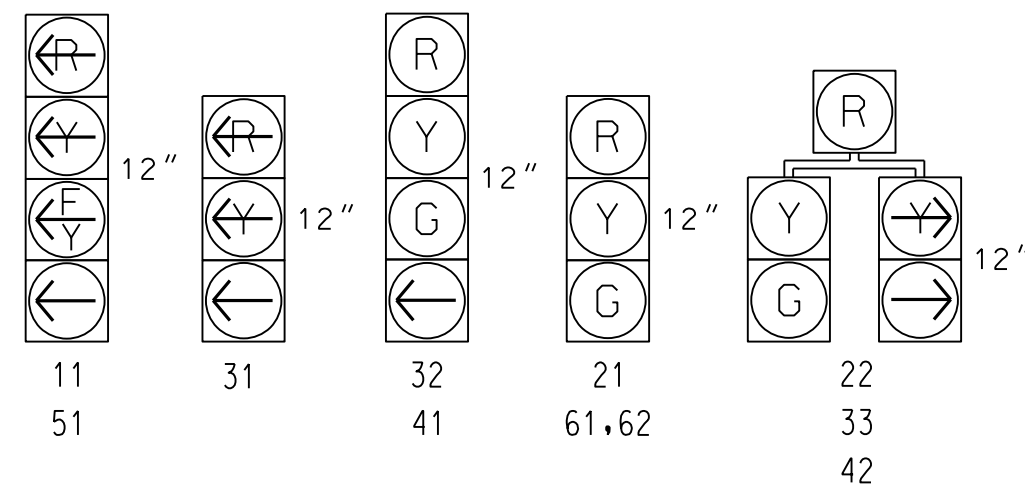
- ◄ ● DETECTED MOVEMENT
- ◄ ○ UNDETECTED MOVEMENT (OVERLAP)
- ◄ - - UNSIGNALIZED MOVEMENT
- ◄ - - - PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE						FL HEADS
	01+5	01+6	02+5	02+6	03	04	
11	←	←	←	←	←	←	Y
21	R	R	G	G	R	R	Y
22	R	R	G	G	R	R	Y
31	←	←	←	←	←	←	Y
32	R	R	R	R	G	R	R
33	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
51	←	←	←	←	←	←	Y
61,62	R	G	R	G	R	R	Y

**SIGNAL FACE I.D.**

All Heads L.E.D.



**ASC/3 DETECTOR INSTALLATION CHART**

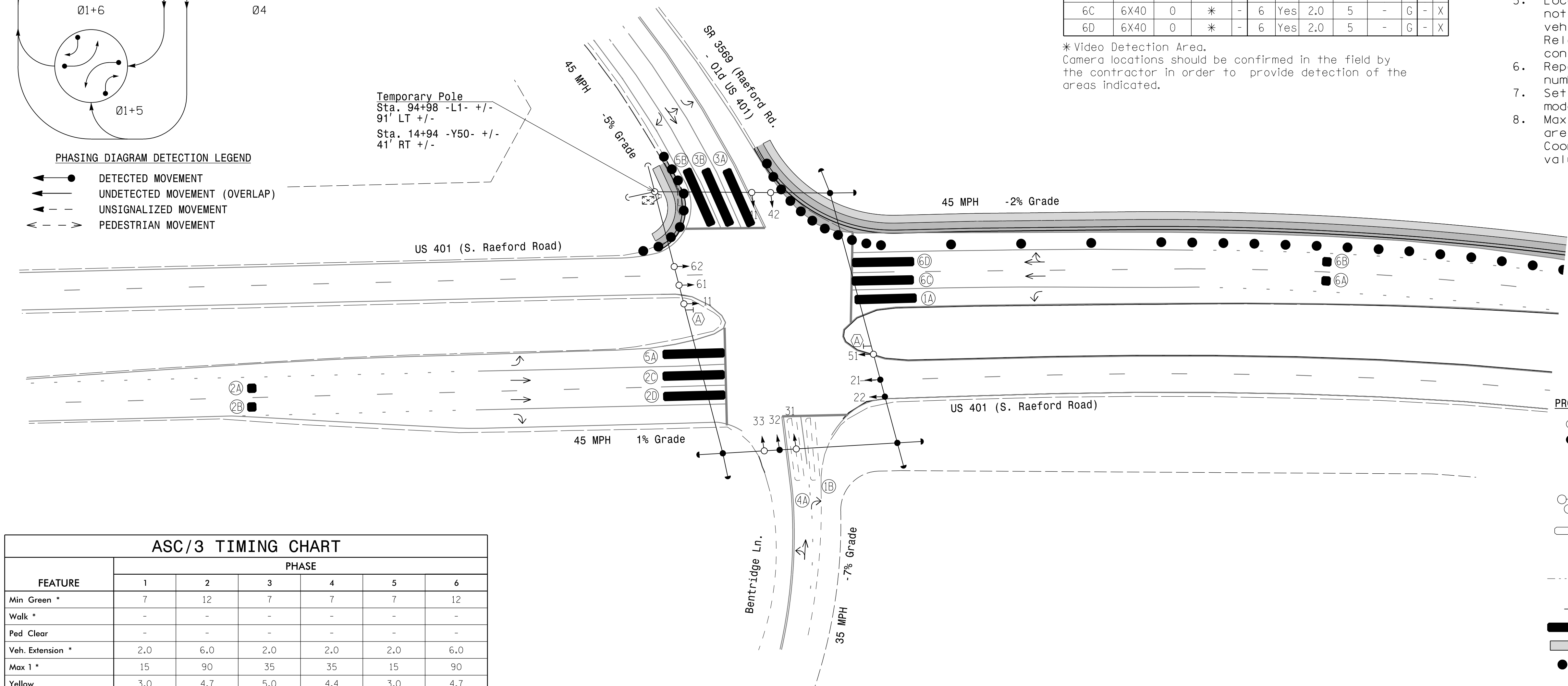
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP	NEW CARD
1A	6X40	0	*	-	1	Yes	-	15	-	S	-	X
1B	6X40	0	EXIST	-	6	Yes	-	3	-	G	-	X
2A	6X6	300	*	-	2	Yes	-	-	-	N	-	X
2B	6X6	300	*	-	2	Yes	-	-	-	N	-	X
2C	6X40	0	*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

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

**6 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.
- The order of phase 3 and phase 4 may be reversed.
- Locate new cabinet foundation so as not to obstruct sight distance of vehicles turning right on red. Relocate existing cabinet and controller onto new foundation.
- Reposition existing signal head numbered 32.
- 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					
	1	2	3	4	5	6
Min Green *	7	12	7	7	7	12
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0
Max 1 *	15	90	35	35	15	90
Yellow	3.0	4.7	5.0	4.4	3.0	4.7
Red Clear	3.3	1.6	2.0	2.1	2.8	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	-	X	-	-	-	X
Recall Position	-	VEH. RECALL	-	-	-	VEH. RECALL
Dual Entry	-	-	-	-	-	-
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.

**LEGEND**

- | PROPOSED   | EXISTING                                     |
|--|--|
| ○ → Traffic Signal Head                          | ● → N/A                                      |
| ○ → Modified Signal Head                         | ○ → N/A                                      |
| ⊥ Sign   | ⊥ Sign                                       |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ Pedestrian Signal Head                     |
| ○ → 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 → 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)     | Ⓐ "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) |

**Signal Upgrade Temporary Design 1 - TMP Phase II**

<p>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</p>		<p>US 401 (South Raeford Rd.) at SR 3569 (Raeford Rd-Old US 401) Bentrbridge Ln.</p>	
		<p>Division 6 Cumberland County Fayetteville</p> <p>PLAN DATE: March 2018 REVIEWED BY: E D Harris</p> <p>PREPARED BY: R M Muncey REVIEWED BY: B L Watson</p>	<p>750 N. Greenfield Pkwy, Garner, NC 27526</p> <p>SCALE: 0 40 1"=40'</p>

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

3/29/2018  
User: rfmuncy