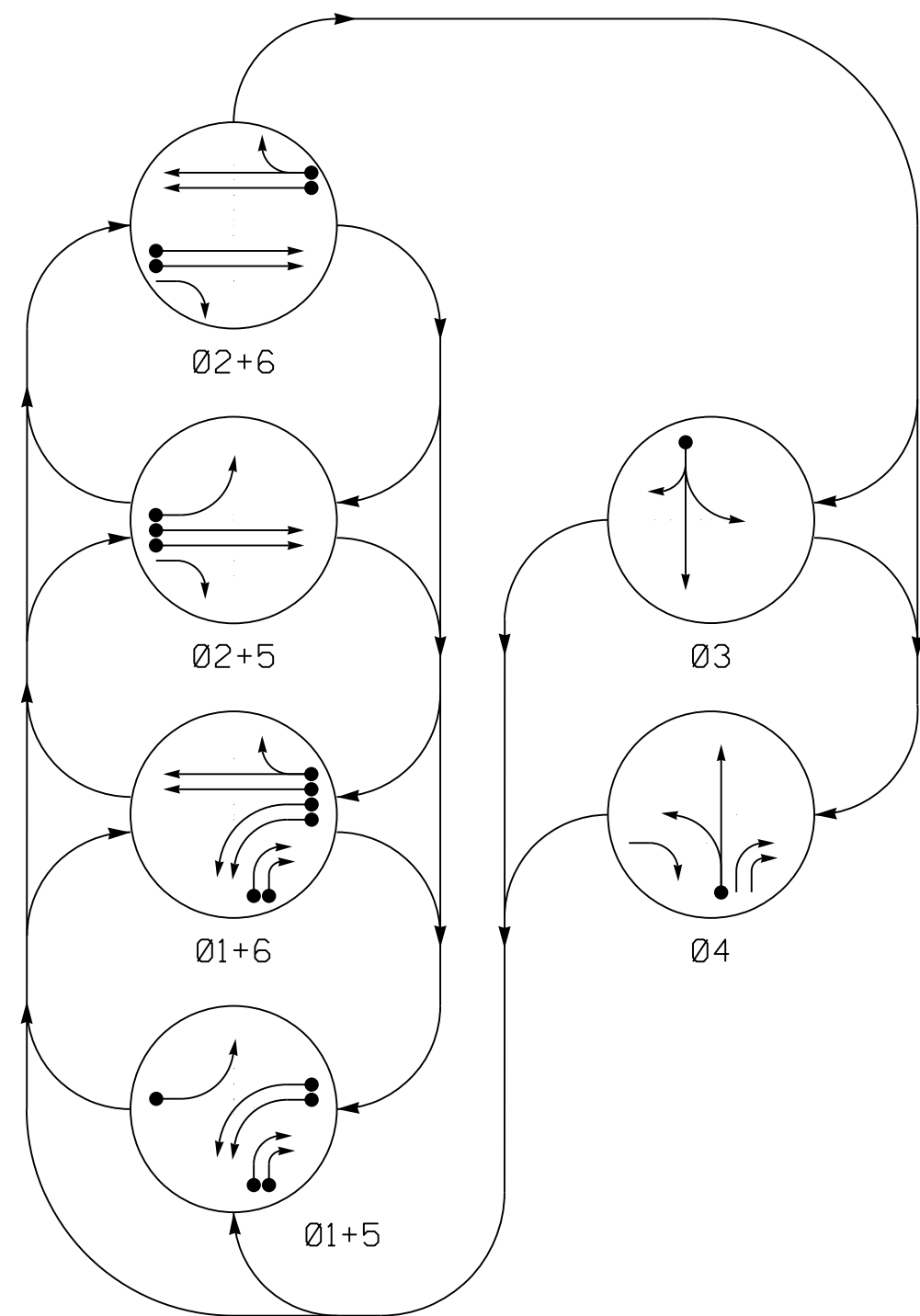


PHASING DIAGRAM



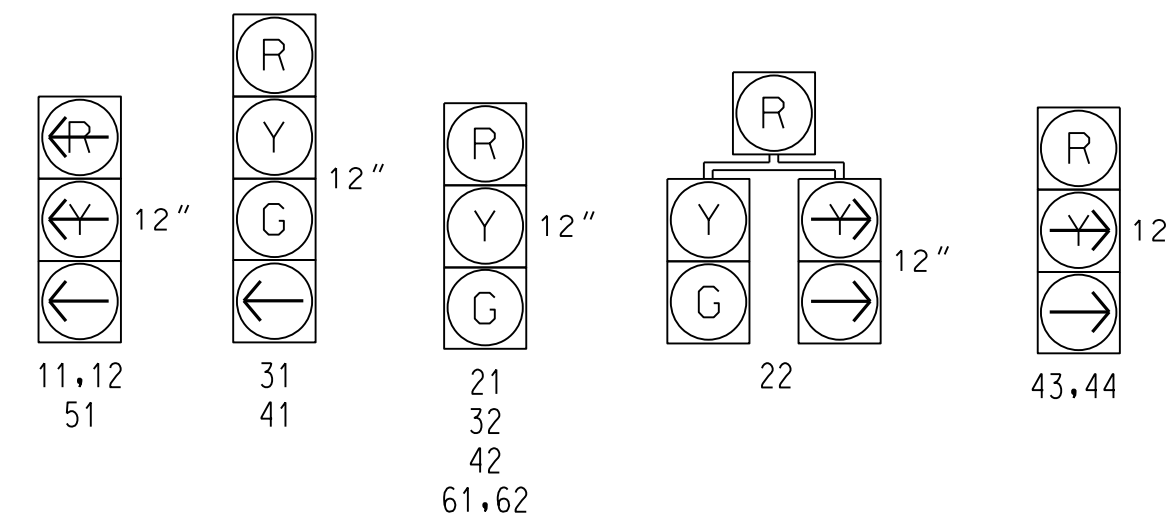
PHASING DIAGRAM DETECTION LEGEND

- ← ● → DETECTED MOVEMENT
- ← ○ → UNDETECTED MOVEMENT (OVERLAP)
- ← - - - → UNSIGNALIZED MOVEMENT
- ← - - - → PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE						FLSH
	Ø 1+5	Ø 2+5	Ø 2+6	Ø 3	Ø 4	FLSH	
11, 12	←	←	←	←	←	←	
21	R	R	G	G	R	R	Y
22	R	R	G	G	R	R	Y
31	R	R	R	R	G	R	Y
32	R	R	R	R	G	R	R
41	R	R	R	R	G	R	R
42	R	R	R	R	G	R	R
43, 44	→	→	R	R	R	→	R
51	←	←	←	←	←	←	
61, 62	R	G	R	G	R	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



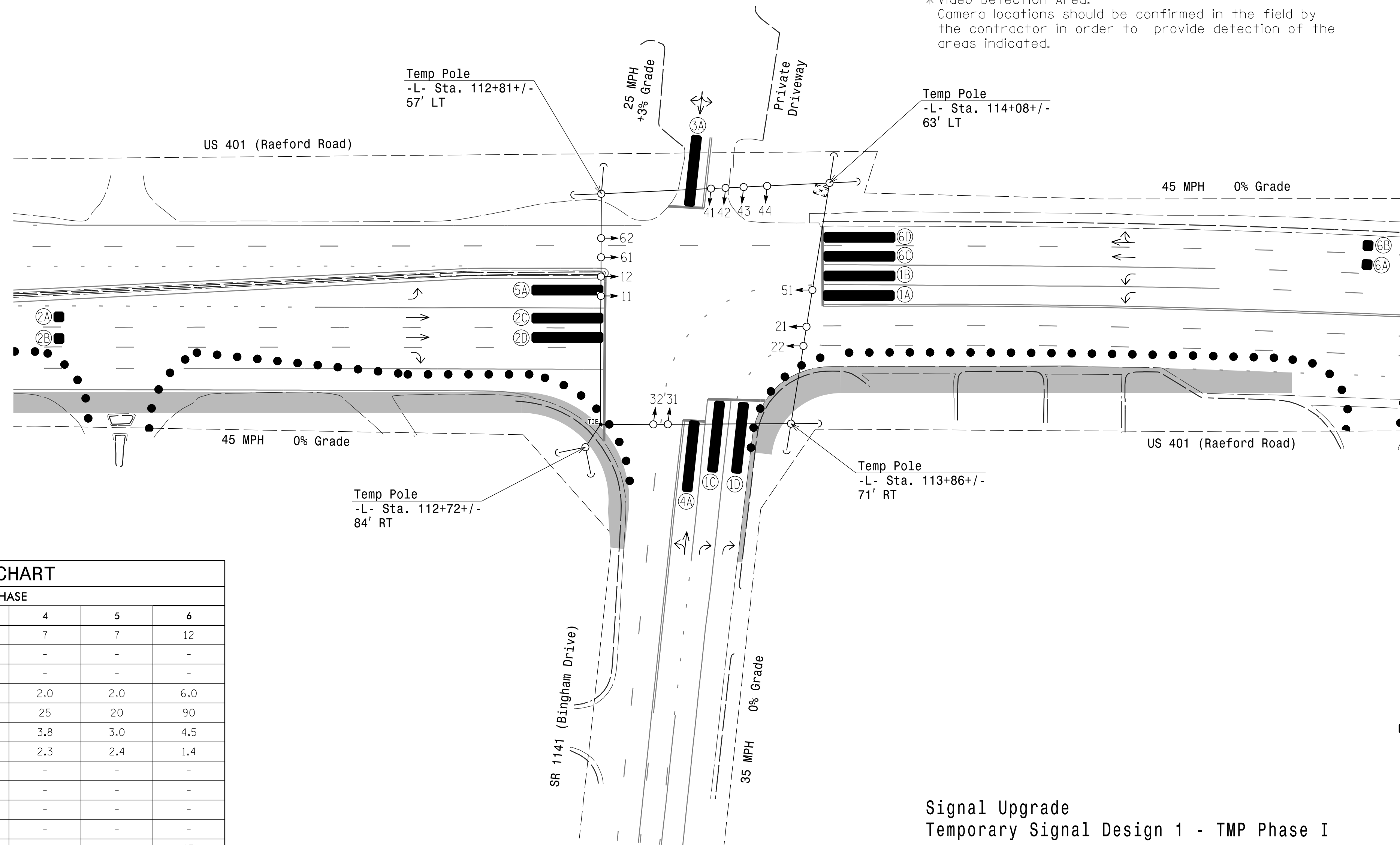
ASC/3 DETECTOR INSTALLATION CHART											
DETECTOR						PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP NEW CARD
1A	6X40	0	*	-	1	Yes	-	3	-	S	X
1B	6X40	0	*	-	1	Yes	-	-	-	S	X
1C	6X40	0	*	-	1	Yes	-	15	-	S	X
1D	6X40	0	*	-	1	Yes	-	15	-	S	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	-	5	-	S	X
4A	6X40	0	*	-	4	Yes	-	3	-	S	X
5A	6X40	0	*	-	5	Yes	-	-	-	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.
- Set all detector units to presence mode.
- 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Field adjust temporary poles as needed.



FEATURE	ASC/3 TIMING CHART					
	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 I *	50	90	20	25	20	90
Yellow	3.0	4.5	3.1	3.8	3.0	4.5
Red Clear	3.3	1.4	2.6	2.3	2.4	1.4
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

\* 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 With Push Button & Sign |
| ○ → Signal Pole with Guy                         | ○ → Signal Pole with Guy                         |
| ○ → Signal Pole with Sidewalk Guy                | ○ → Signal Pole with Sidewalk Guy                |
| ⊠ Controller & Cabinet                           | ⊠ Controller & Cabinet                           |
| □ Junction Box                                   | □ Junction Box                                   |
| --- 2-in Underground Conduit                     | --- 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  |

Signal Upgrade Temporary Signal Design 1 - TMP Phase I

**Stantec**  
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Prepared for the Offices of:  
  
 TRANSPORTATION MOBILITY AND SAFETY DIVISION  
 STATE OF NORTH CAROLINA  
 Signal Design Section  
 750 N. Greenfield Pkwy, Garner, NC 27526  
 SCALE: 0 40  
 1" = 40'

**US 401 (Raeford Road) at SR 1141 (Bingham Drive)**  
 Division 6 Cumberland County Fayetteville  
 PLAN DATE: March 2018 REVIEWED BY: E D Harris  
 PREPARED BY: G B Spell REVIEWED BY: B L Watson

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Betsy L. Watson  
 3/29/2018  
 SIG. INVENTORY NO. 06-035811

3/29/2018 10:11:11 AM  
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