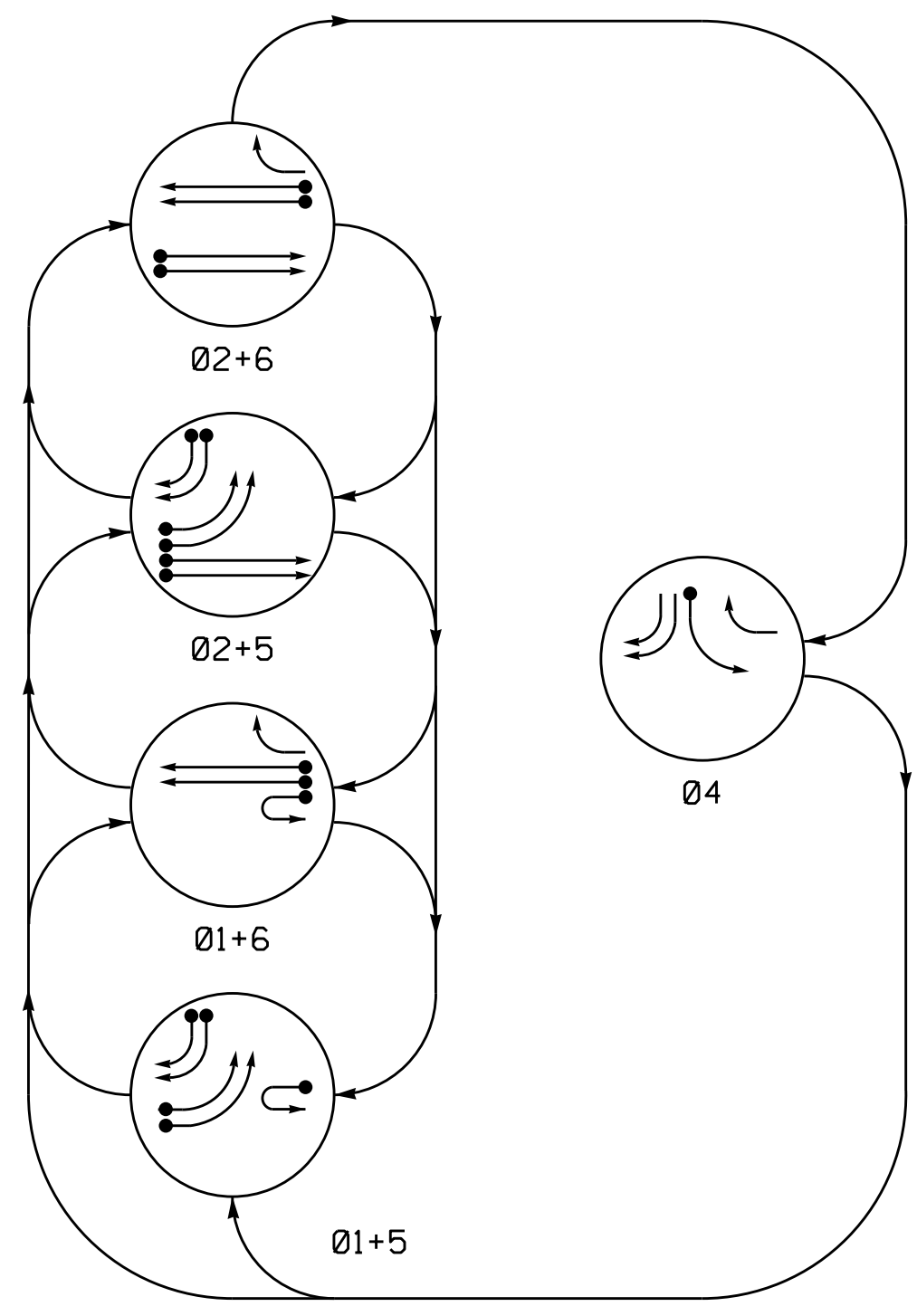


PHASING DIAGRAM

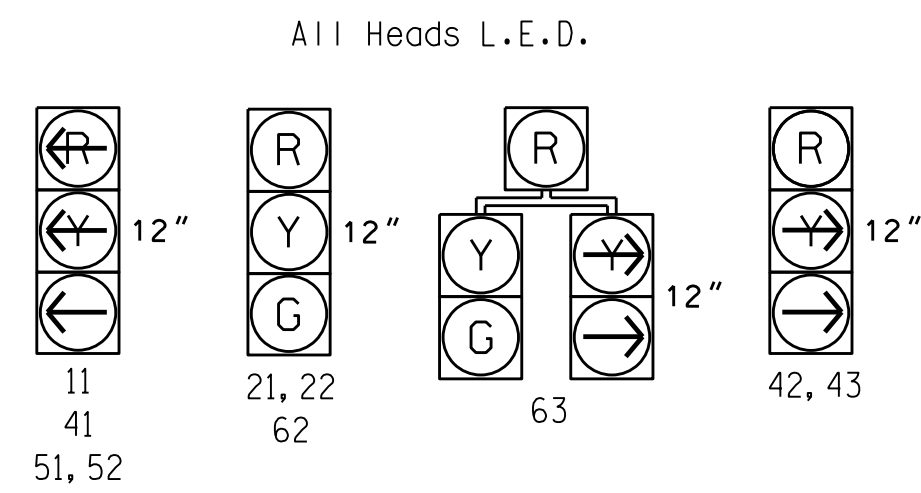


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE					
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4	F LUSH
11	—	—	—	—	—	—
21, 22	R	R	G	G	R	Y
41	—	—	—	—	—	—
42, 43	—	R	—	R	—	R
51, 52	—	—	—	—	—	—
62	R	G	R	G	R	Y
63	R	G	R	G	R	Y

SIGNAL FACE I.D.

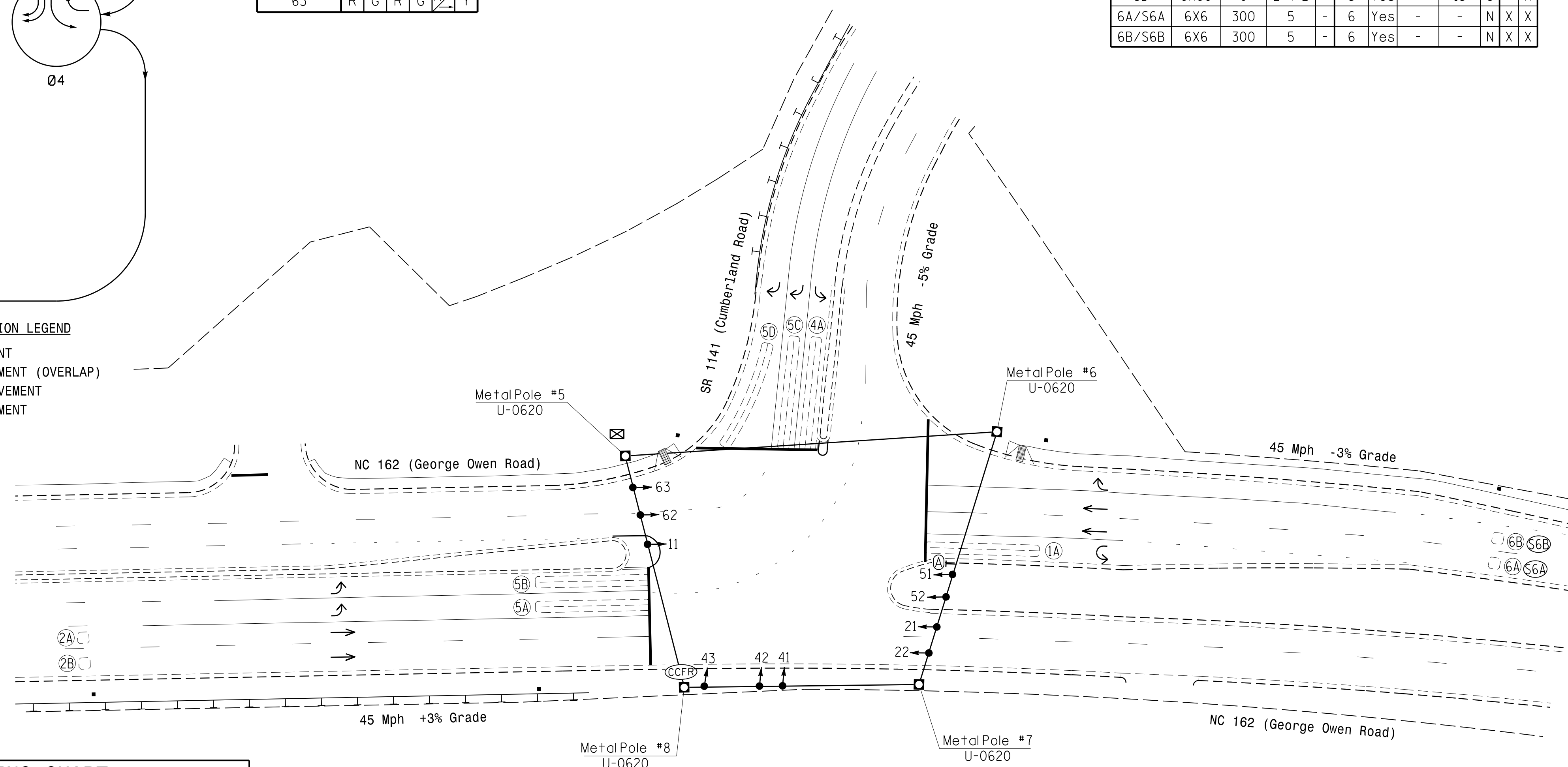


ASC/3 DETECTOR INSTALLATION CHART										
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING					
					PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	LOOP NEW CARD
1A	6X60	0	2-4-2	-	1	Yes	-	-	S	- X
2A	6X6	300	5	-	2	Yes	-	-	N	- X
2B	6X6	300	5	-	2	Yes	-	-	N	- X
4A	6X60	0	2-4-2	-	4	Yes	-	-	S	- X
5A	6X60	0	2-4-2	-	5	Yes	-	-	S	- X
5B	6X60	0	2-4-2	-	5	Yes	-	-	S	- X
5C	6X60	0	2-4-2	-	5	Yes	-	15	S	- X
5D	6X60	0	2-4-2	-	5	Yes	-	15	S	- X
6A/S6A	6X6	300	5	-	6	Yes	-	-	N	X X
6B/S6B	6X6	300	5	-	6	Yes	-	-	N	X X

5 Phase Fully Actuated Fayetteville Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



FEATURE	PHASE				
	1	2	4	5	6
Min Green *	7	12	7	7	12
Walk *	0	0	0	0	0
Ped Clear	0	0	0	0	0
Veh. Extension *	1.0	6.0	1.0	1.0	6.0
Max I *	10	90	30	20	90
Yellow	3.0	4.8	3.1	3.0	4.8
Red Clear	2.9	1.9	3.3	3.9	1.9
Actuations B4 Add *	-	0	-	-	0
Seconds / Actuation *	-	1.5	-	-	1.5
Max Initial *	-	34	-	-	34
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

* 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 | — Sign |
| ⊥ Pedestrian Signal Head | ⊥ Signal Pole with Guy |
| ⊥ With Push Button & Sign | ⊥ Signal Pole with Sidewalk Guy |
| ⊥ Signal Pole with Guy | ⊥ Inductive Loop Detector |
| ⊥ Signal Pole with Sidewalk Guy | ⊥ Controller & Cabinet |
| ⊥ Inductive Loop Detector | ⊥ Junction Box |
| ⊥ Controller & Cabinet | ⊥ 2-in Underground Conduit |
| ⊥ Junction Box | ⊥ Right of Way |
| ⊥ 2-in Underground Conduit | → Directional Arrow |
| ⊥ Right of Way | — Guardrail |
| → Directional Arrow | — Wheelchair Ramp |
| — Guardrail | — Curb Cut for Future Ramp |
| — Wheelchair Ramp | ⊥ U-Turn "MUST YIELD" Sign (R3-27) |
| — Curb Cut for Future Ramp | ⊥ U-Turn "MUST YIELD" Sign (R3-27) |

Signal Upgrade

	<p>NC 162 (George Owen Road) at SR 1141 (Cumberland Road)</p>		
	<p>Division 6 Cumberland County Hope Mills</p>	<p>PLAN DATE: June 2016 REVIEWED BY: JPG</p>	
<p>750 N. Greenfield Pkwy, Garner, NC 27529</p>	<p>PREPARED BY: Jeff Spence</p>	<p>REVIEWED BY:</p>	<p>DocuSigned by Jason P. Gallaway 8/3/2016</p>
<p>SCALE 0 40 1"=40'</p>	<p>REVISIONS</p>	<p>INIT. DATE</p>	<p>SIG. INVENTORY NO. 06-1254</p>

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED