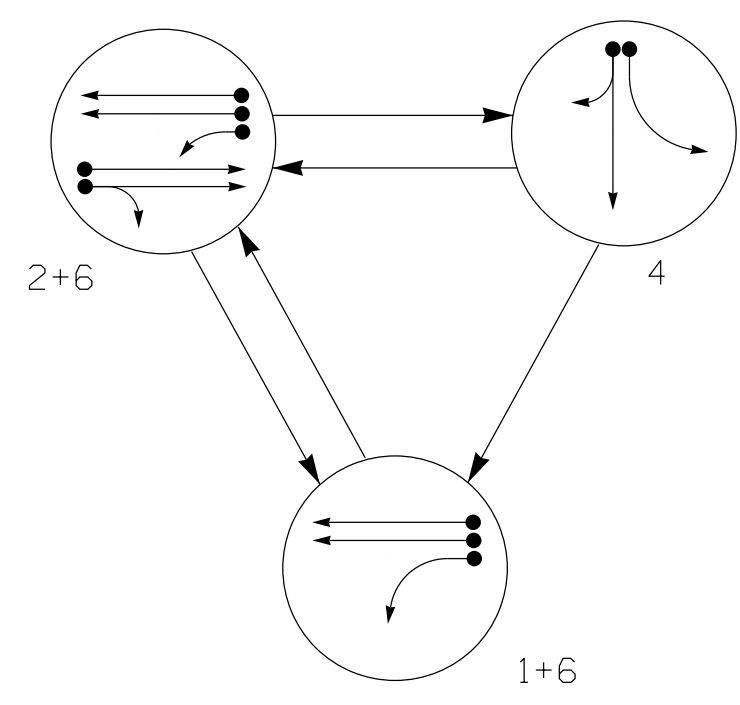
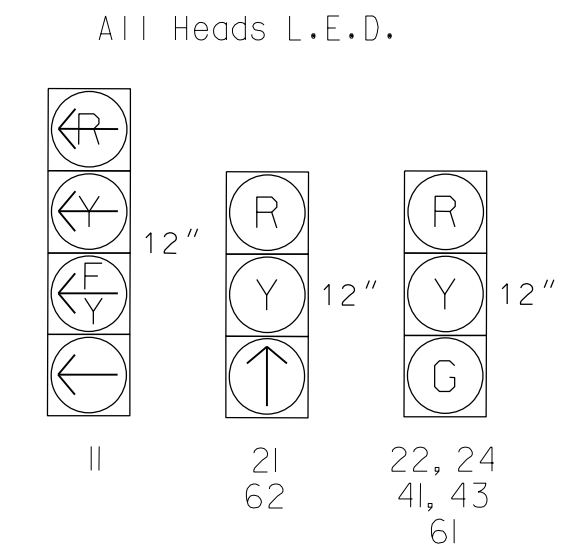


**PHASING DIAGRAM**



SIGNAL FACE	PHASE			
	1+6	2+6	4	6
II	←	←	←	←
21	R	↑	R	R
22, 24	R	G	R	R
41, 43	R	R	G	R
61	G	G	R	R
62	↑	↑	R	R

**SIGNAL FACE I.D.**



**LOOP & DETECTOR UNIT INSTALLATION CHART**  
TRAFFICWARE APOGEE SOFTWARE 2070 CONTROLLER

ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING								
					PHASE	SWITCH (PHASE)	DELAY TIME	STRETCH TIME	CALLING EXTENSION	ADDED INIT.	SYSTEM LOOP	NEW CARD	
1A*	6X40	0	*	*	1	-	15.0	-	X	X	-	-	*
2A*	6X6	300	*	*	2	-	-	-	X	X	X	-	*
4A*	6X40	0	*	*	4	-	-	-	X	X	-	-	*
4B*	6X40	0	*	*	4	-	10.0	-	X	X	-	-	*
6A*	6X6	300	*	*	6	-	-	-	X	X	X	-	*
6B*	6X6	300	*	*	6	-	-	-	X	X	X	-	*

\* Non-Intrusive Detection Zone

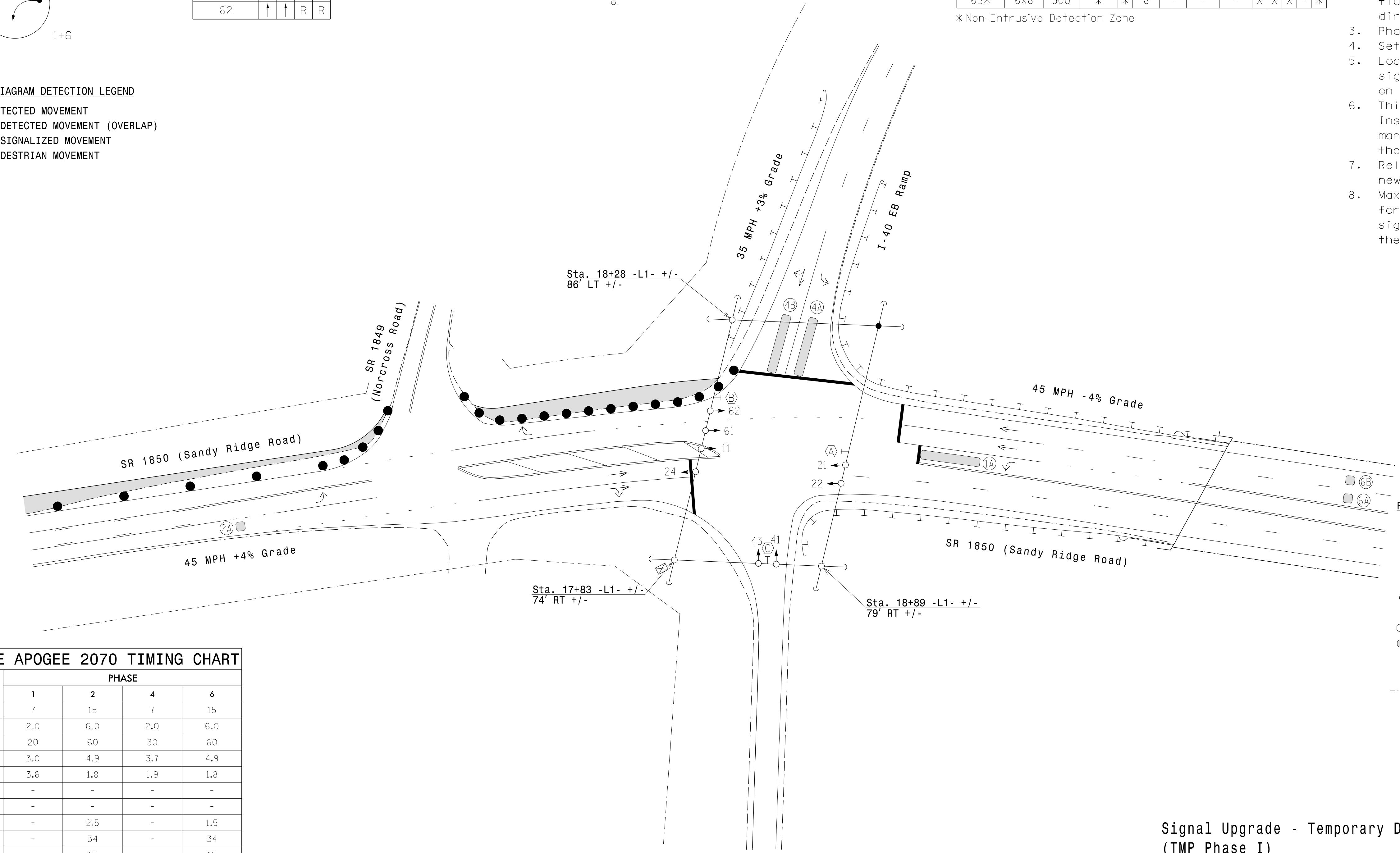
**3 Phase Fully Actuated (Greensboro Signal System)**

**NOTES**

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
7. Relocate existing Street Name Sign onto new spanwire from existing spanwire.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

**PHASING DIAGRAM DETECTION LEGEND**

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



**TRAFFICWARE APOGEE 2070 TIMING CHART**

FEATURE	PHASE			
	1	2	4	6
Min Green *	7	15	7	15
Gap, Extension *	2.0	6.0	2.0	6.0
Maximum Green 1 *	20	60	30	60
Yellow Clear	3.0	4.9	3.7	4.9
Red Clear	3.6	1.8	1.9	1.8
Walk *	-	-	-	-
Pedestrian Clear	-	-	-	-
Added Initial *	-	2.5	-	1.5
Maximum Initial *	-	34	-	34
Time Before Reduction *	-	15	-	15
Time To Reduce *	-	30	-	30
Minimum Gap	-	3.0	-	3.0
Recall Mode	-	MIN RECALL	-	MIN RECALL
Lock Calls	NO	YES	NO	YES
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

\* 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.

PROPOSED		EXISTING	
○→	Traffic Signal Head	●→	N/A
○→	Modified Signal Head	○→	N/A
○→	Sign	○→	N/A
○→	Pedestrian Signal Head With Push Button & Sign	○→	N/A
○→	Signal Pole with Guy	○→	N/A
○→	Signal Pole with Sidewalk Guy	○→	N/A
○→	Inductive Loop Detector	○→	N/A
○→	Non-Intrusive Detection Zone	○→	N/A
□	Controller & Cabinet	□	N/A
□	Junction Box	□	N/A
---	2-in Underground Conduit	---	N/A
N/A	Right of Way	---	N/A
N/A	Guardrail	---	N/A
N/A	Construction Zone	---	N/A
N/A	Construction Zone Drums	●●	N/A
Ⓐ	No Left Turn Sign (R3-2)	Ⓐ	N/A
Ⓑ	No Right Turn Sign (R3-1)	Ⓑ	N/A
Ⓒ	Street Name Sign (D3-1) By Others	Ⓒ	N/A

**Signal Upgrade - Temporary Design 1 (TMP Phase I)**

**AtkinsRéalis**  
1616 EAST MILLBROOK ROAD, SUITE 160  
RALEIGH, NORTH CAROLINA 27609  
(919) 876-6888 NCBEES #F-0326

Prepared for the Offices of:  
  
**SR 1850 (Sandy Ridge Road) at I-40 EB Ramps**  
 Division 7 Guilford County Greensboro  
 PLAN DATE: January 2025 REVIEWED BY: AM Encarnacion  
 PREPARED BY: JT Stiff REVIEWED BY: PL Alexander  
 SCALE: 1"=40'  
 SIGNATURE: James Stiff  
 DATE: 3/14/2025  
 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED  
 SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER JAMES T. STIFF  
 SIGNATURE: James Stiff  
 DATE: 3/14/2025  
 SIG. INVENTORY NO. 07-1648T1

13-MAR-2025 11:22 PW:///S:\00036343\work\1850\_SandyRidgeRoad\Documents\Roads and Br\ages\Projects\100059632 USSR S19 and ITS\Task 05\_11\_Signals\071648T1.s1g.dwg-2022mdd.dgn ST1F4683 - AT 10591089