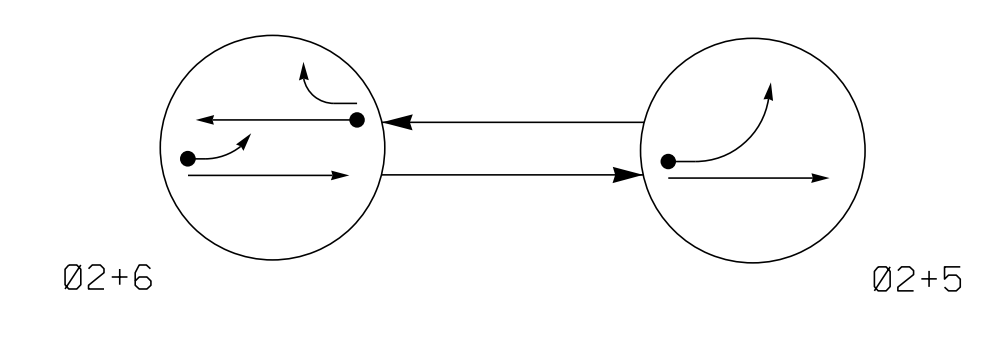


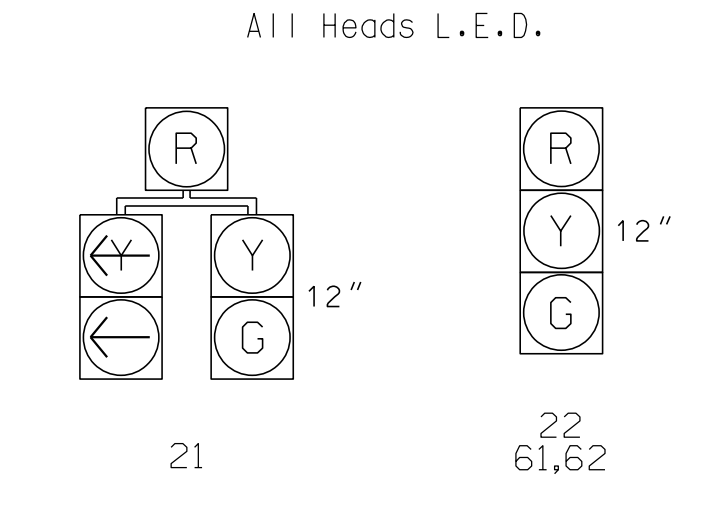
**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

- ←●→ DETECTED MOVEMENT
- ←---→ UNDETECTED MOVEMENT (OVERLAP)
- ←--- UN SIGNALIZED MOVEMENT
- ←---> PEDESTRIAN MOVEMENT

**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	SYSTEM LOOP	NEW CARD
5A	6X40	0	*	X	5	Yes	-	15	-	N	-	X
6A	6X6	70	*	X	6	Yes	-	-	-	N	-	X

\*Microwave Detection Zone

**TABLE OF OPERATION**

SIGNAL FACE	PHASE		
	Ø2+6	Ø2+5	FLASH
21	G	Y	Y
22	G	G	Y
61,62	G	R	Y

**2 Phase Fully Actuated Signal System #D04-20 Benson NC 50-242 (Main St)**

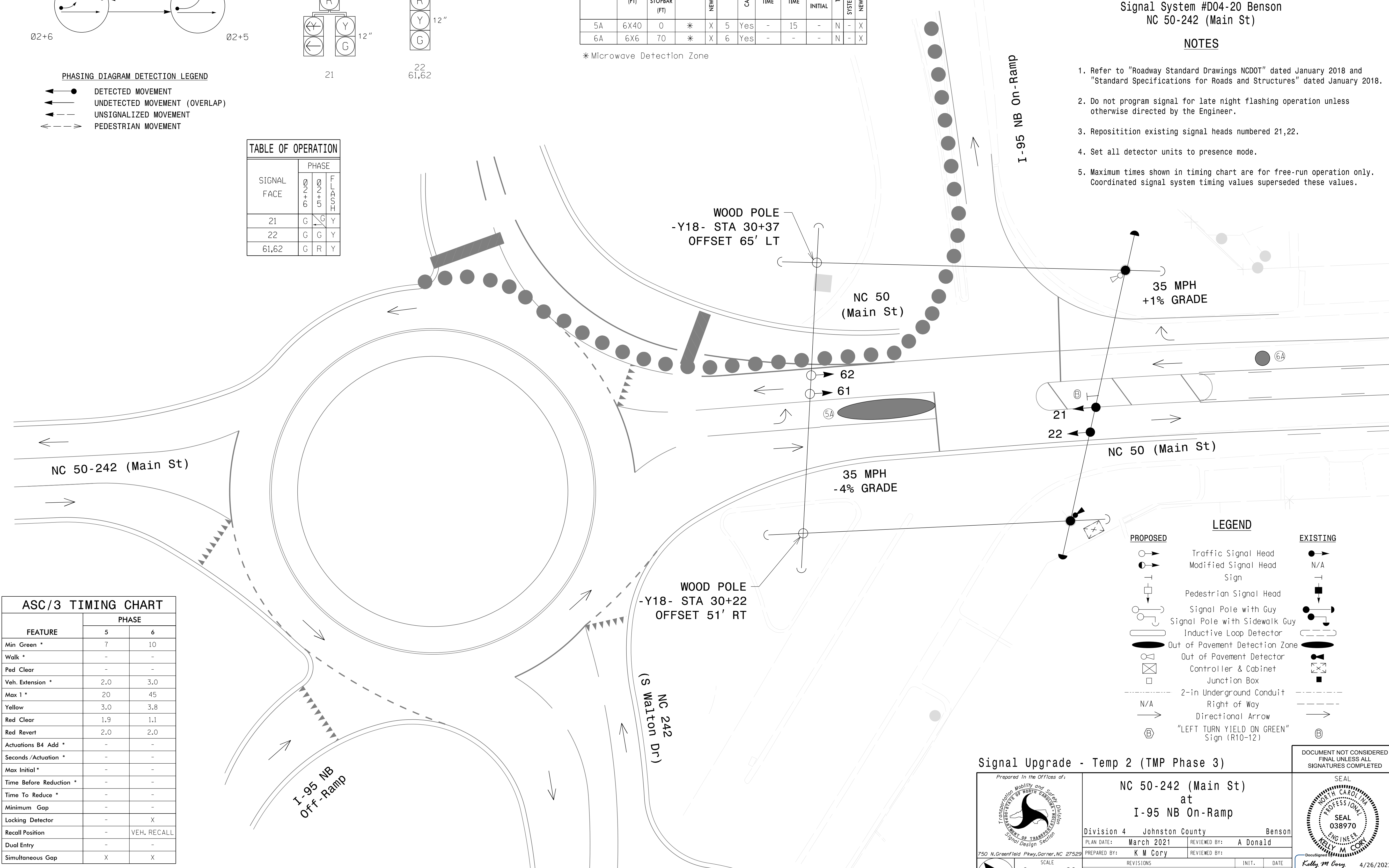
**NOTES**

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Reposition existing signal heads numbered 21,22.
4. Set all detector units to presence mode.
5. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values superseded these values.

**ASC/3 TIMING CHART**

FEATURE	PHASE	
	5	6
Min Green *	7	10
Walk *	-	-
Ped Clear	-	-
Veh. Extension *	2.0	3.0
Max 1 *	20	45
Yellow	3.0	3.8
Red Clear	1.9	1.1
Red Revert	2.0	2.0
Actuations B4 Add *	-	-
Seconds / Actuation *	-	-
Max Initial *	-	-
Time Before Reduction *	-	-
Time To Reduce *	-	-
Minimum Gap	-	-
Locking Detector	-	X
Recall Position	-	VEH. RECALL
Dual Entry	-	-
Simultaneous Gap	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 Traffic Signal Head		EXISTING Traffic Signal Head
	PROPOSED Modified Signal Head		EXISTING N/A
	PROPOSED Pedestrian Signal Head		EXISTING N/A
	PROPOSED Signal Pole with Guy		EXISTING Signal Pole with Guy
	PROPOSED Signal Pole with Sidewalk Guy		EXISTING Signal Pole with Sidewalk Guy
	PROPOSED Inductive Loop Detector		EXISTING Inductive Loop Detector
	PROPOSED Out of Pavement Detection Zone		EXISTING Out of Pavement Detection Zone
	PROPOSED Out of Pavement Detector		EXISTING Out of Pavement Detector
	PROPOSED Controller & Cabinet Junction Box		EXISTING Controller & Cabinet Junction Box
	PROPOSED 2-in Underground Conduit		EXISTING 2-in Underground Conduit
	PROPOSED Right of Way		EXISTING Right of Way
	PROPOSED Directional Arrow		EXISTING Directional Arrow
	PROPOSED "LEFT TURN YIELD ON GREEN" Sign (R10-12)		EXISTING "LEFT TURN YIELD ON GREEN" Sign (R10-12)

**Signal Upgrade - Temp 2 (TMP Phase 3)**

Prepared in the Offices of:  
  
 750 N. Greenfield Pkwy, Garner, NC 27529

**NC 50-242 (Main St) at I-95 NB On-Ramp**

Division 4 Johnston County Benson  
 PLAN DATE: March 2021 REVIEWED BY: A Donald  
 PREPARED BY: K M Cory REVIEWED BY:

REVISIONS: \_\_\_\_\_ INIT. DATE

SCALE: 0 20  
1" = 20'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 KELLY M. CORY  
 4/26/2021

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
 SIG. INVENTORY NO. 04-020912