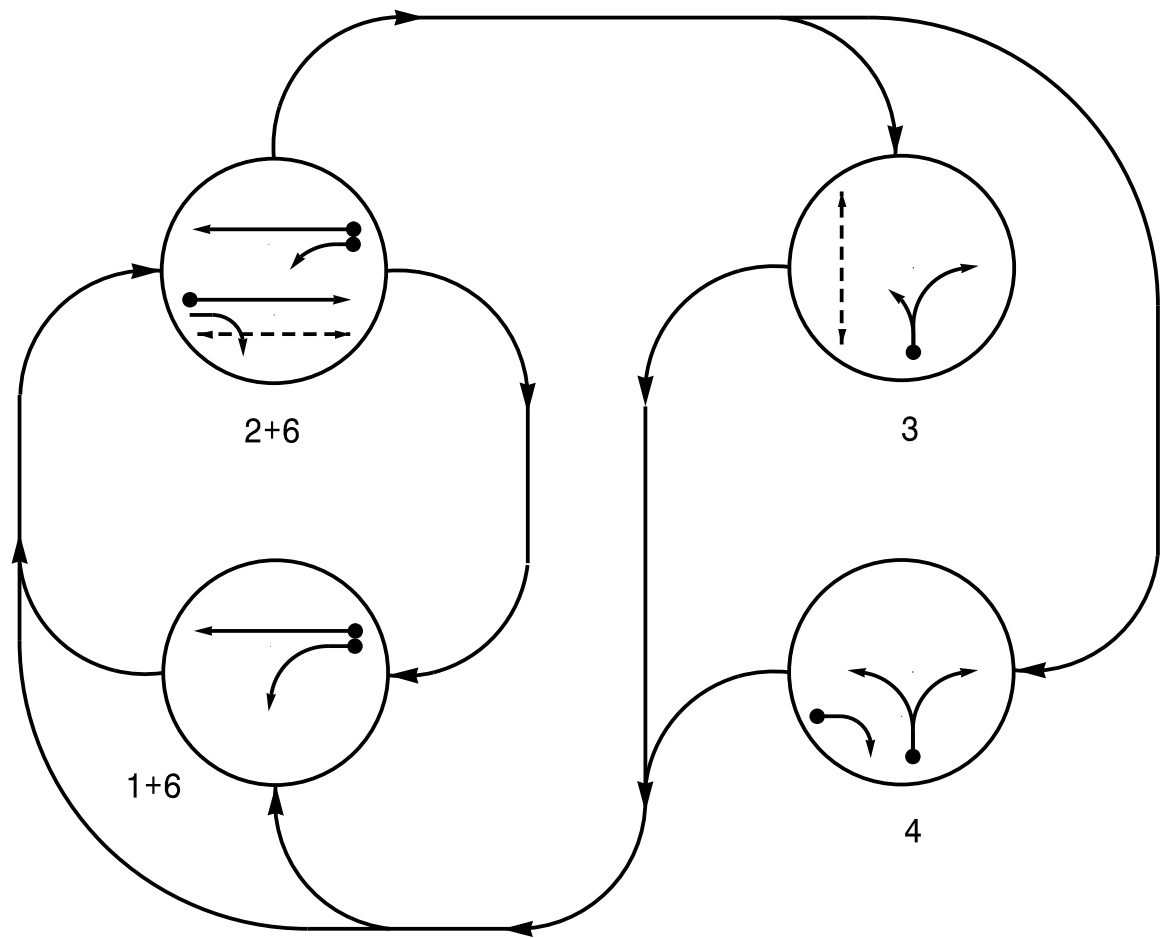


PHASING DIAGRAM

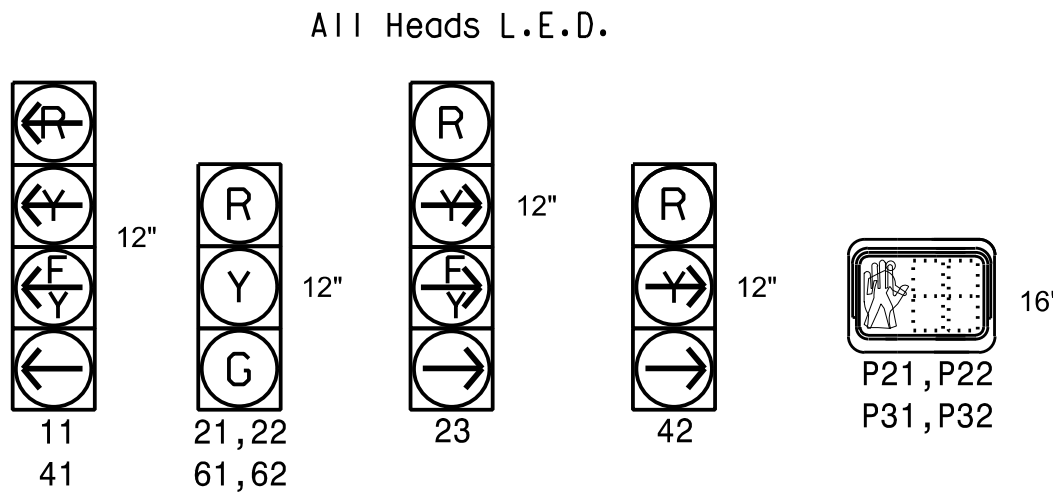


PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION					
SIGNAL FACE	PHASE				FLASH
	1 + 6	2 + 6	3	4	
11	←	←	←	←	
21,22	R	G	R	R	
23	R	←	←	←	
41	←	←	←	←	
42	R	R	←	←	
61,62	G	G	R	R	
P21,P22	DW	W	DW	DW	DRK
P31,P32	DW	DW	W	DW	DRK

SIGNAL FACE I.D.



MAXTIME DETECTOR INSTALLATION CHART											
DETECTOR						PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND INITIAL	ADDED INITIAL	CALL	NEW CARD
1A	6X40	0	2-4-2	X	1	15.0	-	X	-	X	-
2A	6X6	70	3	X	2	-	-	X	-	X	-
4A	6X40	0	2-4-2	X	4	3.0	-	X	-	X	-
4B	6X6	0	3	X	4	10.0	-	X	-	X	-
6A	6X6	70	EXIST	-	6	-	-	X	-	X	-

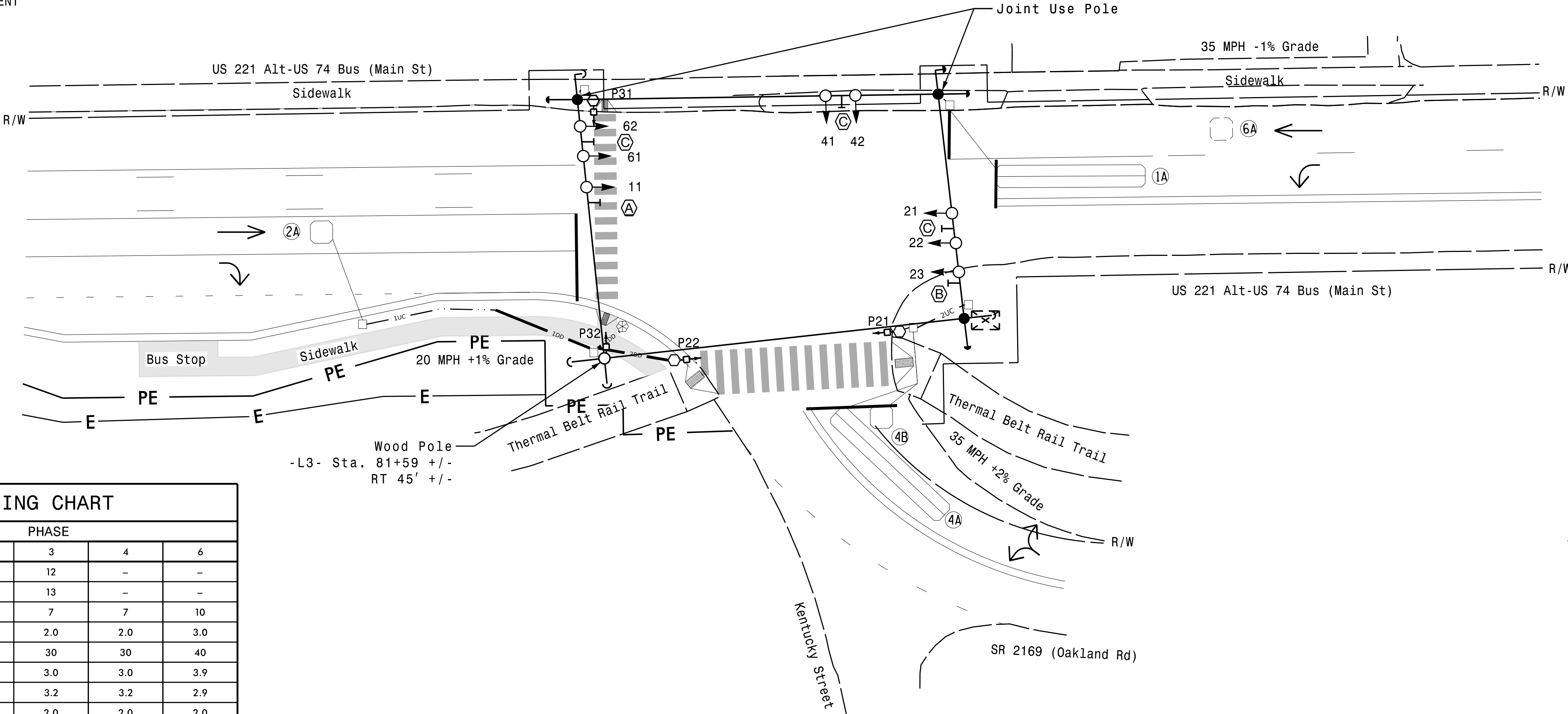
4 Phase
Fully Actuated
Isolated

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Omit phase 4 during phase 3 on.
- Enable Backup Protect to allow the controller to clear from phase 2+6 to phase 1+6 by progressing through an all red display.
- Phase 1 may be lagged.
- Set all detector units to presence mode.
- Install new 2070LX controller in existing cabinet.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- To provide a leading pedestrian interval on phase 2, program FYA heads numbered 11 & 23 to delay for 7 seconds after the start of the phase 2 walk interval. See Electrical Details for programming.

MAXTIME TIMING CHART					
FEATURE	PHASE				
	1	2	3	4	6
Walk *	-	14	12	-	-
Ped Clear	-	12	13	-	-
Min Green *	7	10	7	7	10
Passage *	2.0	3.0	2.0	2.0	3.0
Max 1 *	20	40	30	30	40
Yellow Change	3.0	3.9	3.0	3.0	3.9
Red Clear	2.8	2.9	3.2	3.2	2.9
Red Revert	2.0	2.0	2.0	2.0	2.0
Added Initial *	-	-	-	-	-
Maximum Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Advance Walk	-	**	5	-	-
Non Lock Detector	X	-	X	X	-
Vehicle Recall	-	MIN RECALL	-	-	MIN RECALL
Dual Entry	-	-	-	-	-

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.
** See Note 10.



LEGEND

PROPOSED	EXISTING
Traffic Signal Head	Modified Signal Head
Sign	Signal Pole with Guy
Pedestrian Signal Head	Signal Pole with Sidewalk Guy
Inductive Loop Detector	Controller & Cabinet
Junction Box	Type I Pushbutton Post
Type II Signal Pedestal	Type II Signal Pedestal
Directional Drill	2-in Underground Conduit
Right of Way	Construction Easement
Construction Easement	Directional Arrow
Curb Ramp	Left "TURNING VEHICLES" Yield "TO" Pedestrians Sign (R10-15L)
Right "TURNING VEHICLES" Yield "TO" Pedestrians Sign (R10-15R)	Street Name Sign

Signal Upgrade

Prepared for: 	US 221 Alt-US 74 Bus (Main St) at SR 2169 (Oakland Rd)/ Kentucky Street Division 13 Rutherford County Spindale PLAN DATE: February 2026 REVIEWED BY: N.K. Vianich PREPARED BY: E.E. Tiller REVIEWED BY: N.R. Simmons	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031464 WATASHA R. SIMMONS DocuSigned by: Watasha R. Simmons 5/12/2026 SIGNATURE DATE SIG. INVENTORY NO. 13-0173
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