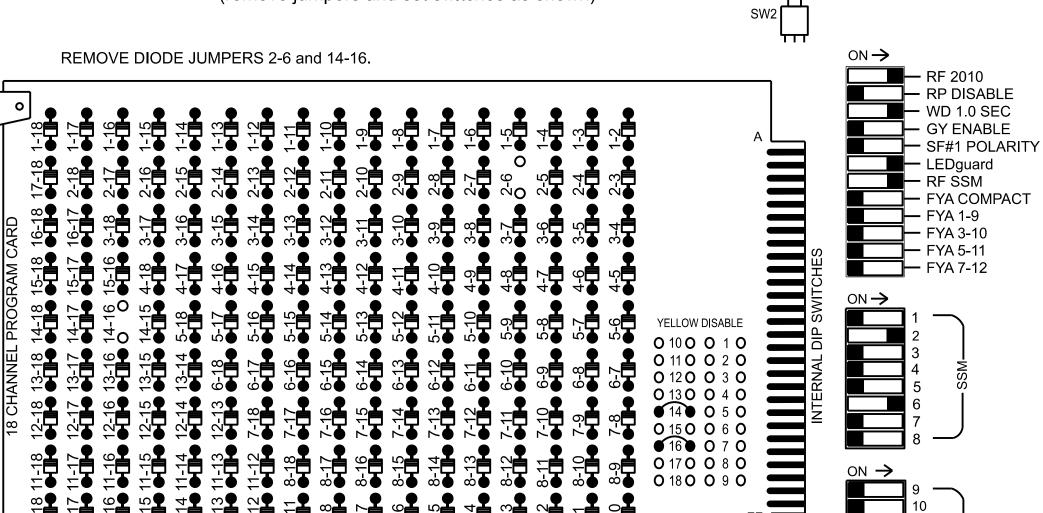
18 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



ON

= DENOTES POSITION OF SWITCH

WD ENABLE 🚺

REMOVE JUMPERS AS SHOWN

NOTES:

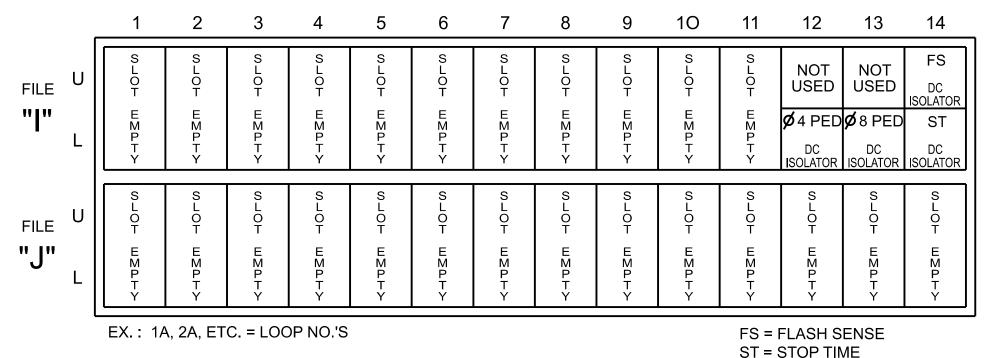
1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.

COMPONENT SIDE

- 2. Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
- 3. Ensure that the Red Enable is active at all times during normal operation.
- 4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

INPUT FILE POSITION LAYOUT

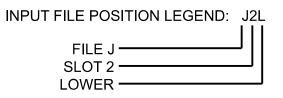
(front view)



INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DEĻAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
PED PUSH BUTTONS												
P41; P42	TB8-5,6	I12L	69	35	4	PED 4,8 ★						
P81; P82	TB8-8,9	I13L	7:0	36	8	PED 8,4*		DC ISOLAT FILE SLOT				
							I12 AND		0			

* FOR THE ABOVE DETECTORS TO CALL ANOTHER PHASE, SCROLL OVER AND ENTER SECOND PHASE IN "ADDITIONAL CALL PHASES" COLUMN.



NOTES

1. To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.

2. Install 332_NCDOT_HAWK_Default database onto controller.

- 3. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
- 4. Program phases 4 and 8 for No Startup Veh Call and No Startup Ped Call.
- 5. Program phases 4 and 8 for Ped Clear During Red Clear.
- 6. The cabinet and controller are part of the SR 3174 / 1501 (Idlewild Road) Closed Loop System.

EQUIPMENT INFORMATION

Controller	2070LX
Cabinet	332 w/ Aux
Software	Q-Free MAXTIME
Cabinet Mount	Base
Output File Positions	18 With Aux. Output File
Load Switches Used	S2, S6, S8, S12
Phases Used	2, 4*, 4PED, 6, 8*, 8PED
Overlaps	None
* Phase used for timing purposes only.	

PROJECT REFERENCE NO. U-4913A Sig. 3.

SIGNAL HEAD HOOK-UP CHART																		
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S 7	S8	S9	S10	S11	S12	AŲX S1	AŲX S2	AŲX S3	AŲX S4	AŲX S5	ΑŲ) S6
CMU CHANNEL NO.	1	2	1:3	3	4	14	5	6	15	7	8	16	9	1:0	1.7	1:1	1:2	1:8
PHASE	1	2	2 PÉD	3	4	4 PÉD	5	6	6 PED	7	8	8 PÉD	OL1	OL2	SPARE	OL3	OL4	SPAF
SIGŅAL HEAD NO.	ŊŪ	21,22 61,62	ŊŪ	ŊŪ	NC	P41, P42	ŊU	21,22 61,62	ŊŪ	ŊŪ	NC	P81, P82	ŊŪ	NU	Ν·U	NU	ŊŪ	N·L
RED		128						134										
YELLOW		129						*										
GREEN		*						*										
RED ARROW																		
YELĻOW ARROW																		
FLASHING YELLOW ARROW																		
GREEN ARROW																		
₩						104						110						
Ķ						106						112						

NU = Not Used NC = No Connection

* Denotes install load resistor. See load resistor installation detail this sheet.

TIMING INTERVAL

PHASE 2+6 = DARK DISPLAY PHASE 2+6 PRE CLEARANCE = FLASHING YELLOW DISPLAY PHASE 2+6 YELLOW CHANGE = STEADY YELLOW DISPLAY PHASE 2+6 RED CLEAR THROUGH 4+8 WALK = STEADY RED DISPLAY

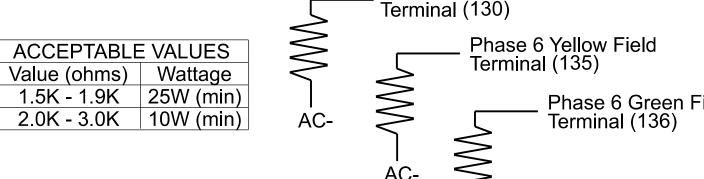
OPERATIONAL NOTES

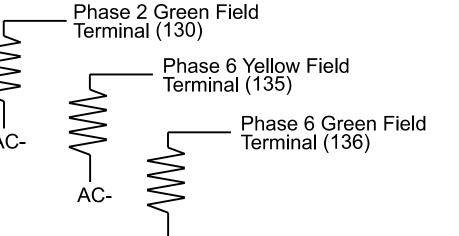
PED 4+8 DON'T WALK = ALTERNATING FLASHING RED DISPLAY

- 1. In order for the controller to perform the Pedestrian Hybrid Beacon (HAWK signal) sequence, the 332 NCDOT HAWK Default database must be installed on the controller.
- 2. The only Phase 6 load switch output that is being used drives one of the red signal faces of each signal head.
- 3. The Logic Processor flashes Phase 2 Yellow during the Phase 2 Pre-Clearance interval. Phase 2 Yellow drives the solid yellow signal face during the Phase 2 vehicle Yellow Change.
- 4. The Phase 2 and Phase 6 Red outputs drives the solid Red displays during the Phase 2 and 6 Red Clear and Ped 4 and 8 Walk interval. The Logic Processor flashes Phase 2 and 6 Red Outputs in a wig-wag pattern during Phase 4+8 Ped Clear interval.
- 5. The controller must be programmed for Ped Clear During Red Clear for Pedestrian Phases 4 and 8 so that Red displays continue to flash during Phases 4 and 8 Yellow Change and Red Clear.
- 6. Make sure that all Phase 2 and Phase 6 timings match each other and that all Phase 4 and Phase 8 timings match each other.
- 7. The Ped 4 push button is programmed to call Ped 4 and Ped 8. The Ped 8 push button is programmed to call Ped 8 and Ped 4.

LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

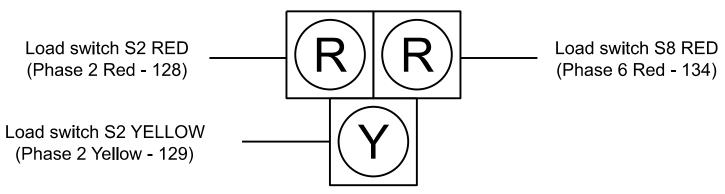




PLANS PREPARED IN THE OFFICE OF: **Kimley** » Horr NC License #F-0102 421 Fayetteville Street, Suite 600 750 N.Greenfield Pkwy.Garner.NC 27529 Raleigh, NC 27601

SIGNAL HEAD WIRING DETAIL

(wire signal heads as shown)



61, 62

COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

> THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 10-2590 DESIGNED: February 2025 SEALED: 05/12/2025 REVISED: N/A

Electrical Detail

ELECTRICAL AND PROGRAMMING DETAILS FOR:

SR 3174 (Idlewild Road) Pedestrian Hybrid Beacon

East of SR 3175 (Stallings Road) Davis Trace Drive

Mecklenburg County PLAN DATE: February 2025 REVIEWED BY: KP Baumann PREPARED BY: SP Pennington REVIEWED BY:

REVISIONS

ROFESSION SE'AL 044434 INIT. DATE

SIG. INVENTORY NO. 10-2590

DOCUMENT NOT CONSIDERED

FINAL UNLESS ALL

SIGNATURES COMPLETED