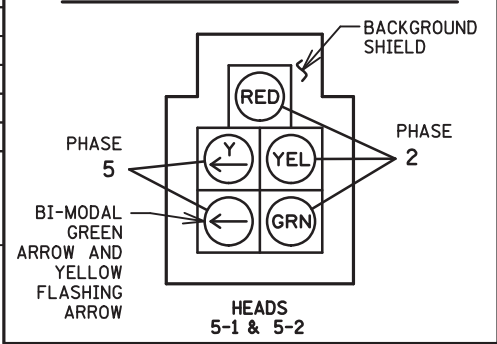


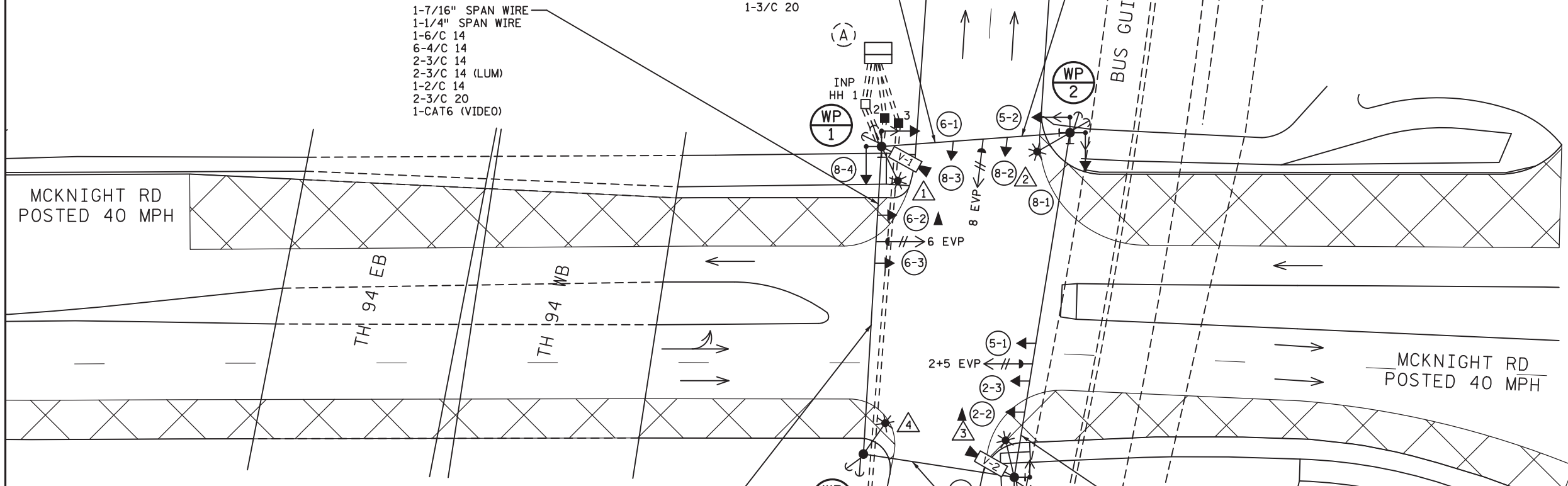
SIGNAL HEAD CHART						
FACE	R	Y	FYA	G	Y	G
2-1, 2-3	●	●		●		
▲ 2-2	●	●		●		
5-1, 5-2	●	●	←	●	←	←
6-1, 6-3	●	●		●		
▲ 6-2	●	●		●		
8-1, 8-2, 8-3, 8-4	●	●		●		

-ALL SIGNAL INDICATIONS SHALL BE 12" LED
 -ALL SIGNAL HEADS SHALL BE BLACK POLYCARBONATE WITH BACKGROUND SHIELDS
 -FYA DENOTES FLASHING YELLOW ARROW

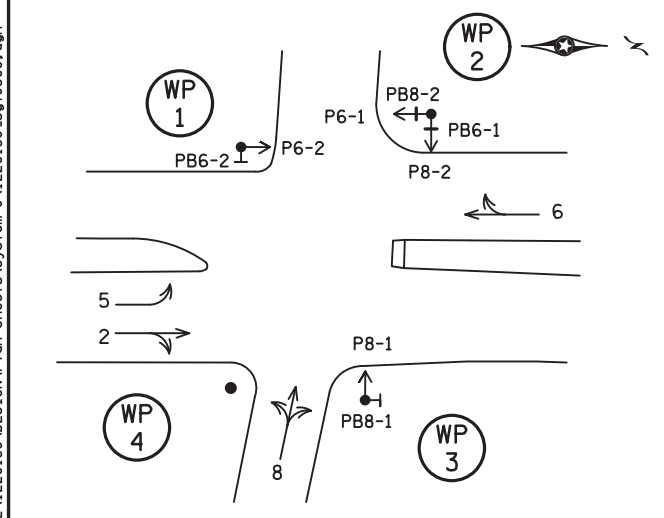
5 SECTION FYA CLUSTER HEAD DETAIL



VIDEO DETECTION				
NO.	CAMERA TYPE	LOCATION		PHASE
		POLE	MOUNT LOC.	
V-1	VIDEO	1	POLE	ALL
V-2	VIDEO	3	POLE	ALL



CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS



PEDESTRIAN PUSH BUTTONS SHALL BE LOCATED AS SHOWN ABOVE

1-7/16" SPAN WIRE
 1-1/4" SPAN WIRE
 1-6/C 14
 4-4/C 14
 1-3/C 14
 2-3/C 14 (LUM)
 1-2/C 14
 1-3/C 20
 1-CAT6 (VIDEO)



40

SCALE IN FEET

SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 4 PHASE, WITH PHASE 5 BEING FLASHING YELLOW ARROWS BY TIME OF DAY.
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

NOTES:

1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF HANDHOLES, POLES AND EQUIPMENT PAD IN THE FIELD.
2. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONNECTION OF THE POWER FOR THE TRAFFIC SIGNAL SYSTEM.
3. THIS PLAN SPECIFIES THE GENERAL LOCATION OF WOOD POLES, HANDHOLES AND PUSH BUTTON STATIONS. THE EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD. CONDUITS UNDER THE ROADWAY REQUIRE BORING.
4. USE PVC OR HDPE FOR NEW CONDUIT.
5. CONDUIT SIZES ARE NOMINAL DIAMETER.
6. THE CONTRACTOR SHALL VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.
7. ALL WIRED ARE AWG (AMERICAN WIRE GAUGE).
8. STAGING SHOULD BE PERFORMED IN 2 STAGES:
 STAGE 1: THIS STAGE WILL USE THE EXISTING TRAFFIC SIGNAL SYSTEM FOR TRAFFIC CONTROL.
 STAGE 2: WILL USE TRAFFIC CONTROL AS SHOWN IN THE PLANS. THE CONTRACTOR MAY FIELD ADJUST THE LOCATION OF THE VIDEO DETECTION TO ENSURE ADEQUATE STOP BAR AND ADVANCE DETECTION. IF NECESSARY, THE CONTRACTOR SHALL PROVIDE ADDITIONAL DETECTION FOR ADVANCE DETECTION.

▲ DENOTES HEADS TO BAG DURING STAGE 2

ID 5604750

7:10:22 AM 5/19/2023 J:\Projects\2022\1220138\DESIGN\Plan_Sheets\System_J\1220138_sglj500.dgn

NO	DATE	DWN	CKD	REVISIONS



I HEREBY CERTIFY THAT THIS SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: DEREK NIEVEEN
 SIGNATURE: *Derek Nieveen*
 DATE: 5/19/2023 LICENSE #: 52242

TRAFFIC CONTROL SIGNAL SYSTEM "J"
 TEMPORARY SIGNAL - STAGE 2 - INTERSECTION LAYOUT

GOLD LINE BRT TRAFFIC
 SHEET NO. 1 OF 3 SHEETS

WP
1

45' WOOD POLE
2-DOWN GUY, GUARD AND ANCHORS
1-TYPE 10A-WOOD POLE MOUNTED AT 90°
1-TYPE 10B-WOOD POLE MOUNTED AT 180°
15' MAST ARM AND LUMINAIRE (LED)
1-PEDESTRIAN PUSH BUTTON AND SIGN
1-VIDEO DETECTION CAMERA (V-1) POLE MOUNTED
METAL JUNCTION BOX WITH TERMINAL BLOCK

3" CONDUIT RISER AND WEATHERHEAD FROM INP HH 1 TO SPAN WIRES WITH:
1-6/C 14 1-6/C 14
6-4/C 14 8-4/C 14
2-3/C 14 1-3/C 14
1-2/C 14 3-2/C 14
2-3/C 20 1-3/C 20
1-CAT6 (VIDEO) 1-CAT6 (VIDEO)
1-1/C 6 INS. GR. 1-1/C 6 INS. GR.

3" CONDUIT ABOVE JUNCTION BOX TO SPAN WIRES WITH"
3-4/C 14
1-2/C 14
1-CAT6 (VIDEO)
1-1/C 6 INS. GR.

1" CONDUIT RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C 14 (LUM)

WP
4

45' WOOD POLE
2-DOWN GUY, GUARD AND ANCHOR
15' MAST ARM AND LUMINAIRE (LED)
METAL JUNCTION BOX WITH TERMINAL BLOCK

1" CONDUIT RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C 14 (LUM)

WP
2

45' WOOD POLE
2-DOWN GUY, GUARD AND ANCHOR
2-TYPE 10B-WOOD POLE MOUNTED AT 90° AND 180°
15' MAST ARM AND LUMINAIRE (LED)
2-PEDESTRIAN PUSH BUTTONS AND SIGNS
METAL JUNCTION BOX WITH TERMINAL BLOCK

3" CONDUIT ABOVE JUNCTION BOX SPAN WIRES WITH:
1-6/C 14
3-4/C 14
2-2/C 14
1-1/C 6 INS. GR.

1" CONDUIT RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C 14 (LUM)

WP
3

45' WOOD POLE
2-DOWN GUY, GUARD AND ANCHOR
1-TYPE 30A-WOOD POLE MOUNTED AT 90°
1-TYPE 10A-WOOD POLE MOUNTED AT 180°
15' MAST ARM AND LUMINAIRE (LED)
1-PEDESTRIAN PUSH BUTTON AND SIGN
1-VIDEO DETECTION CAMERA (V-2) POLE MOUNTED
METAL JUNCTION BOX WITH TERMINAL BLOCK

3" CONDUIT ABOVE JUNCTION BOX SPAN WIRES WITH:
2-4/C 14
1-2/C 14
1-CAT6 (VIDEO)
1-1/C 6 INS. GR.

1" CONDUIT RISER AND WEATHERHEAD ABOVE SPAN WIRE WITH:
1-3/C 14 (LUM)

(A)

INPLACE:
EQUIPMENT PAD
SERVICE CABINET (SSB)
CONTROLLER AND CABINET (SALVAGED)
F&I:

3" CONDUIT	3" CONDUIT
1-6/C 14	1-6/C 14
6-4/C 14	8-4/C 14
2-3/C 14	1-3/C 14
1-2/C 14	3-2/C 14
2-3/C 20	1-3/C 20
1-CAT6 (VIDEO)	1-CAT6 (VIDEO)
1-1/C 6 INS. GR.	1-1/C 6 INS. GR.

CONTROLLER CABINET TO HH 3:
2" CONDUIT
3-1/C 6

(B)

SOP - GROUND MOUNTED TRANSFORMER (XCEL ENERGY)
2" CONDUIT FROM SERVICE EQUIPMENT TO HH 3:
3-1/C 6
2" CONDUIT FROM HH 3 TO CONTROLLER CABINET:
3-1/C 6
2" CONDUIT, RISER AND WEATHERHEAD FROM SERVICE
EQUIPMENT TO HH 2:
4-3/C 14 (LUM)
FROM HH 2 TO ABOVE SPAN WIRE ON POLE 1:
2" CONDUIT:
4-3/C 14 (LUM)

7:10:34 AM
5/19/2023
C:\Users\jgarcia\Documents\2022\1220138\DESIGN\plan_Sheets\System J\1220138_sglj501.dgn

ID 5604750

NO	DATE	DWN	CKD	REVISIONS



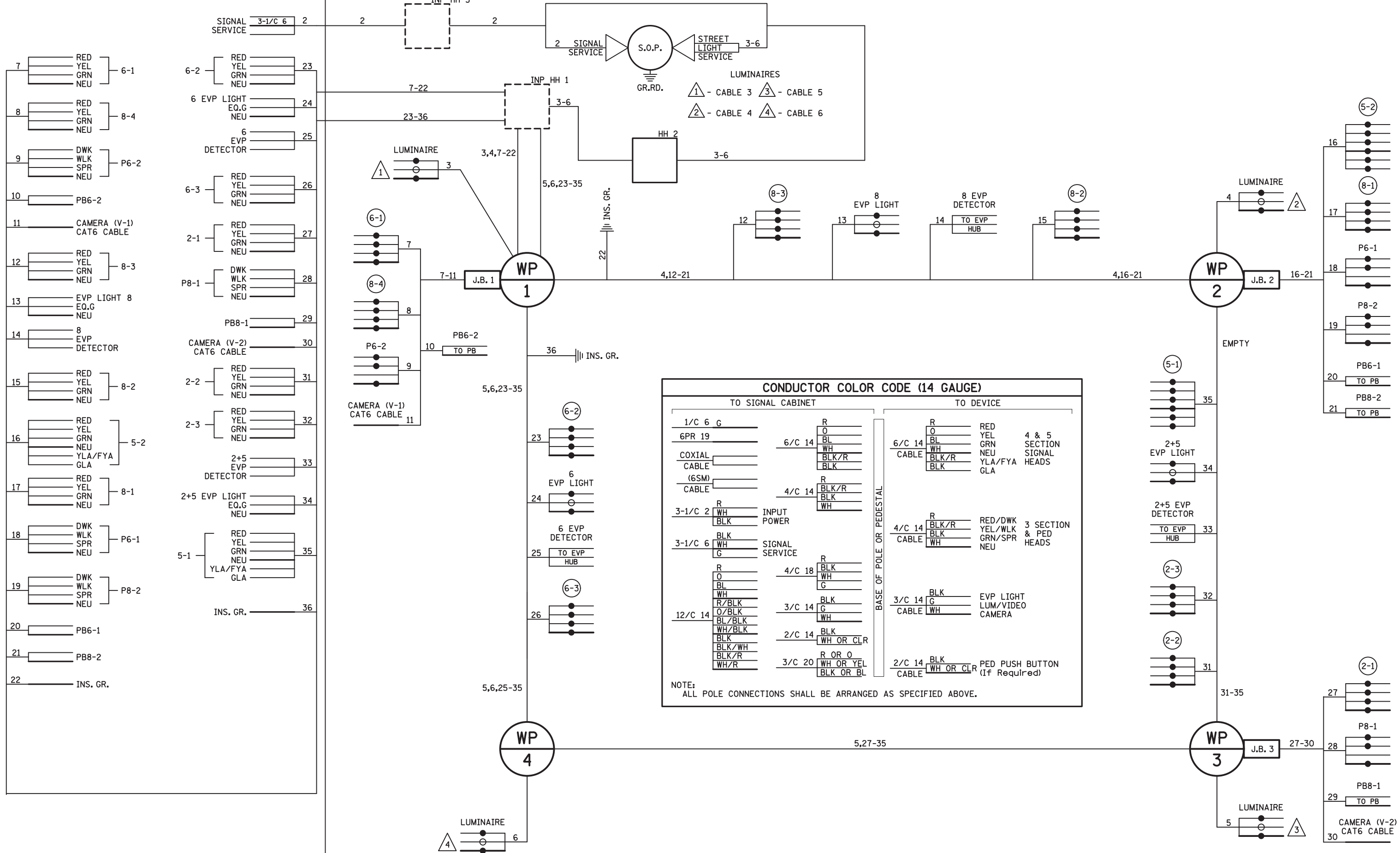
I HEREBY CERTIFY THAT THIS SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: DEREK NIEVEEN
SIGNATURE: *Derek Nieveen*
DATE: 5/19/2023 LICENSE #: 52242

TRAFFIC CONTROL SIGNAL SYSTEM "J"
TEMPORARY SIGNAL - INTERSECTION NOTES

GOLD LINE BRT TRAFFIC
SHEET NO. 2 OF 3 SHEETS

CONTROLLER CABINET



7:10:44 AM 5/19/2023 J:\Projects\2022\1220138\DESIGN\Plan_Sheets\System_V1220138_sgl\J502.dgn

NO	DATE	DWN	CKD	REVISIONS



I HEREBY CERTIFY THAT THIS SHEET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: DEREK NIEVEEN
 SIGNATURE: *Derek Nieveen*
 DATE: 5/19/2023 LICENSE #: 52242

TRAFFIC CONTROL SIGNAL SYSTEM "J"
 TEMPORARY SIGNAL - WIRING DIAGRAM

GOLD LINE BRT TRAFFIC
 SHEET NO. 3 OF 3 SHEETS

ID 5604750