

PLOTTED/REVISED: 11-FEB-2022

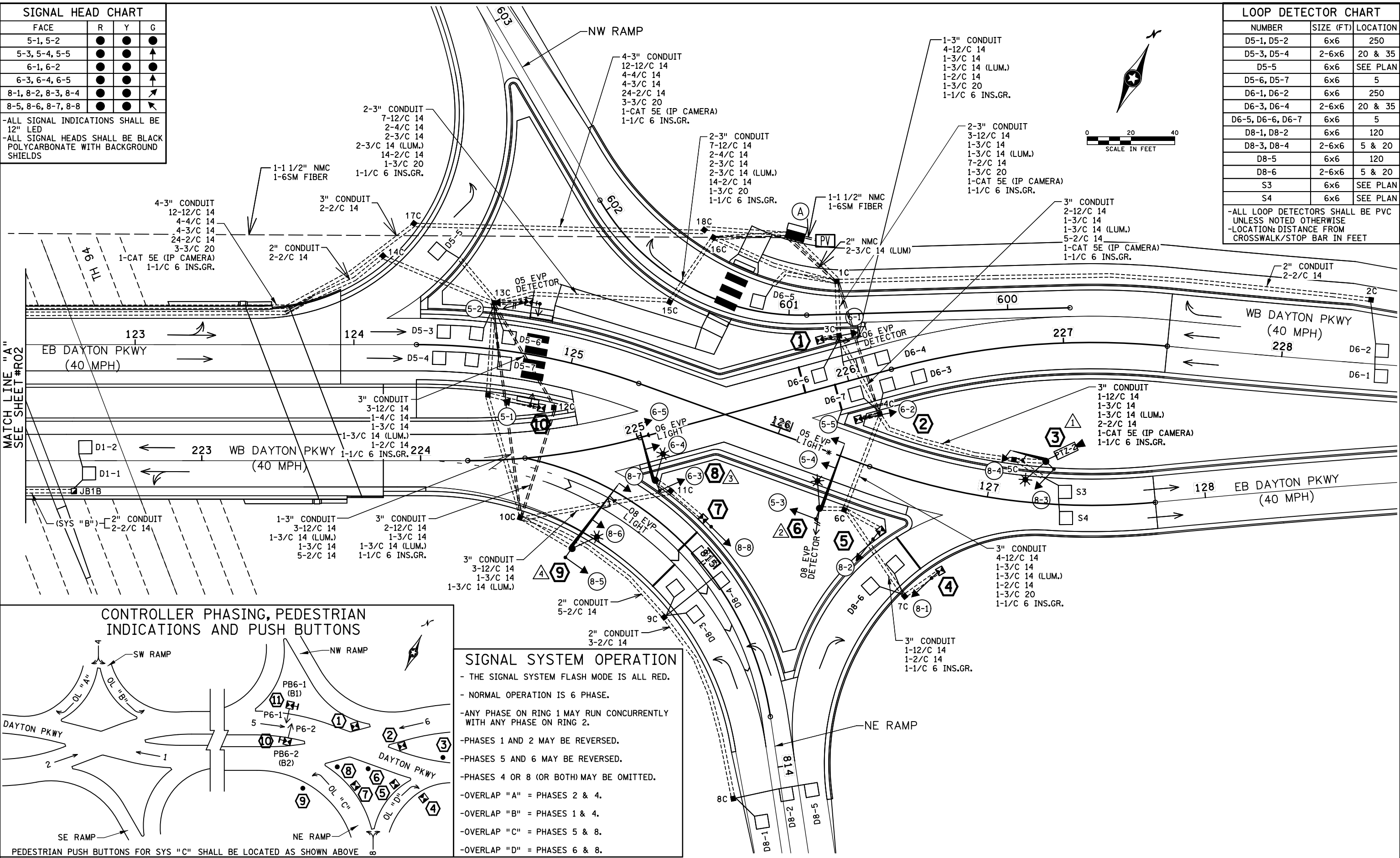
DISTRICT \*: Metro  
 PLOT NAME: 10472\_r03\_sheet 2  
 FILENAME: Projects\DM\_R03\0940000\Traffic\Signals\249882 TH 94 at Dayton Pkwy DDI E.Ramp\PEND\10472\_r03.dgn

SIGNAL HEAD CHART				
FACE	R	Y	G	
5-1, 5-2	●	●	●	●
5-3, 5-4, 5-5	●	●	●	▲
6-1, 6-2	●	●	●	●
6-3, 6-4, 6-5	●	●	●	▲
8-1, 8-2, 8-3, 8-4	●	●	●	▲
8-5, 8-6, 8-7, 8-8	●	●	●	▲

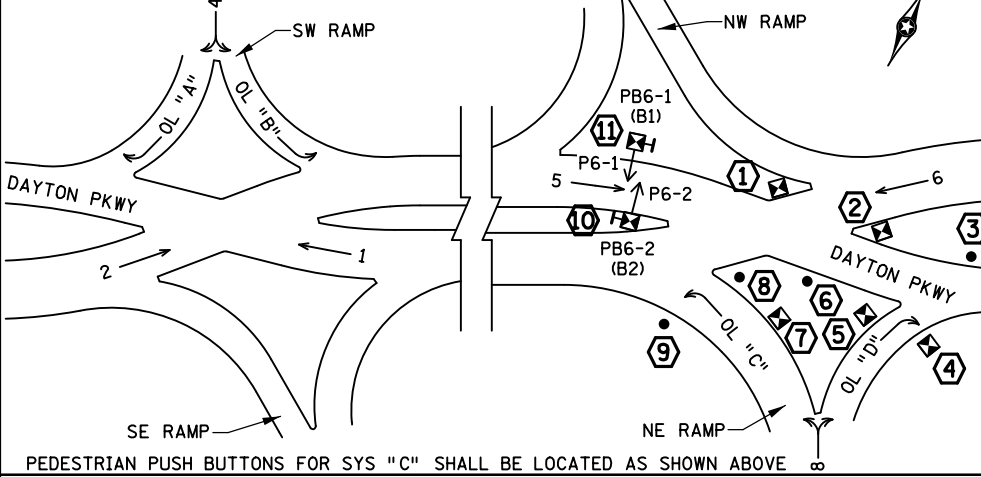
-ALL SIGNAL INDICATIONS SHALL BE 12" LED  
 -ALL SIGNAL HEADS SHALL BE BLACK POLYCARBONATE WITH BACKGROUND SHIELDS

LOOP DETECTOR CHART		
NUMBER	SIZE (FT)	LOCATION
D5-1, D5-2	6x6	250
D5-3, D5-4	2-6x6	20 & 35
D5-5	6x6	SEE PLAN
D5-6, D5-7	6x6	5
D6-1, D6-2	6x6	250
D6-3, D6-4	2-6x6	20 & 35
D6-5, D6-6, D6-7	6x6	5
D8-1, D8-2	6x6	120
D8-3, D8-4	2-6x6	5 & 20
D8-5	6x6	120
D8-6	2-6x6	5 & 20
S3	6x6	SEE PLAN
S4	6x6	SEE PLAN

-ALL LOOP DETECTORS SHALL BE PVC UNLESS NOTED OTHERWISE  
 -LOCATION: DISTANCE FROM CROSSWALK/STOP BAR IN FEET



**CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS**



**SIGNAL SYSTEM OPERATION**

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 6 PHASE.
- ANY PHASE ON RING 1 MAY RUN CONCURRENTLY WITH ANY PHASE ON RING 2.
- PHASES 1 AND 2 MAY BE REVERSED.
- PHASES 5 AND 6 MAY BE REVERSED.
- PHASES 4 OR 8 (OR BOTH) MAY BE OMITTED.
- OVERLAP "A" = PHASES 2 & 4.
- OVERLAP "B" = PHASES 1 & 4.
- OVERLAP "C" = PHASES 5 & 8.
- OVERLAP "D" = PHASES 6 & 8.

BY	DATE	REVISIONS
HRL	01-18-22	CONSTRUCTION REDLINES FOR SP-2780-100

SYSTEM ID: 249882 T.E. 17689  
 METER ADDRESS:  
 OLD SYSTEM ID:

**TRAFFIC SIGNAL PLANS  
 INTERSECTION LAYOUT  
 T.H. 94 E RAMP AT DAYTON PARKWAY**

S.A.P. NO.	DRAWN BY: HRL	CKD BY: CDB	DATE:
CERTIFIED BY _____	LIC. NO. _____		DATE: _____
STATE PROJ. NO. 2780-100 (T.H.94)		SHEET NO. 2 OF	5 SHEETS

**INTERSECTION NOTES**

① PEDESTAL FOUNDATION  
 13' PEDESTAL POLE PLUS BASE  
 1-STRAIGHT MOUNT SIGNAL AT 270 DEG  
 1-ONE WAY EVP DETECTOR (PHASE 6)  
 3" CONDUIT TO HH 3C:  
 1-12/C 14  
 1-3/C 20  
 2-1/C 6 INS. GR.

② PEDESTAL FOUNDATION  
 13' PEDESTAL POLE PLUS BASE  
 1-STRAIGHT MOUNT SIGNAL AT 90 DEG  
 3" CONDUIT TO HH 4C:  
 1-12/C 14  
 2-1/C 6 INS. GR.

③ PA85 POLE FOUNDATION  
 TYPE PA85-A-15-X6-350/CAM 400 EXTENSION  
 (DAVIT AT 350 DEG)  
 (INCLUDES LIGHTNING ROD, 7/16" GROUND BRAID  
 AND GROUND ROD)  
 1-IP CAMERA (PTZ-2) WITH MOUNT (STATE FURNISHED)  
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'  
 1-ANGLE MOUNT SIGNAL AT 180 DEG  
 1-ONE WAY EVP CONFIRMATORY LIGHT (PHASE 8)  
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)  
 1-TYPE D SIGN (D-1) (SEE SIGN DETAILS)  
 1-R10-11B SIGN (FACING NE RAMP)  
 3" CONDUIT TO HH 5C:  
 1-12/C 14  
 1-3/C 14  
 1-3/C 14 (LUM.)  
 1-CAT 5E (IP CAMERA)  
 1-1/C 6 INS. GR.

④ PEDESTAL FOUNDATION  
 13' PEDESTAL POLE PLUS BASE  
 1-STRAIGHT MOUNT SIGNAL AT 270 DEG  
 1-R10-11B SIGN (FACING NE RAMP)  
 3" CONDUIT TO HH 7C:  
 1-12/C 14  
 1-1/C 6 INS. GR.

⑤ PEDESTAL FOUNDATION  
 13' PEDESTAL POLE PLUS BASE  
 1-STRAIGHT MOUNT SIGNAL AT 270 DEG  
 1-R10-11B SIGN (FACING NE RAMP)  
 3" CONDUIT TO HH 7C:  
 1-12/C 14  
 1-1/C 6 INS. GR.

⑥ PA90 POLE FOUNDATION  
 TYPE PA90-A-30-D40-9 (DAVIT AT 350 DEG)  
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'  
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'  
 1-ANGLE MOUNT SIGNAL AT 180 DEG  
 1-ONE WAY EVP DETECTOR (PHASE 8)  
 1-ONE WAY EVP CONFIRMATORY LIGHT (PHASE 5)  
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)  
 1-TYPE D SIGN (D-2) (SEE SIGN DETAILS)  
 3" CONDUIT TO HH 6C:  
 2-12/C 14  
 1-3/C 14  
 1-3/C 14 (LUM.)  
 1-3/C 20  
 1-1/C 6 INS. GR.

⑦ PEDESTAL FOUNDATION  
 13' PEDESTAL POLE PLUS BASE  
 1-STRAIGHT MOUNT SIGNAL AT 270 DEG  
 3" CONDUIT TO HH 11C:  
 1-12/C 14  
 1-1/C 6 INS. GR.

⑧ PA85 POLE FOUNDATION  
 TYPE PA85-A-25-D40-9 (DAVIT AT 350 DEG)  
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'  
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 11'  
 1-ANGLE MOUNT SIGNAL AT 180 DEG  
 1-ONE WAY EVP CONFIRMATORY LIGHT (PHASE 6)  
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)  
 1-TYPE D SIGN (D-2) (SEE SIGN DETAILS)  
 1-R10-11B SIGN (FACING NE RAMP)  
 3" CONDUIT TO HH 11C:  
 2-12/C 14  
 1-3/C 14  
 1-3/C 14 (LUM.)  
 1-1/C 6 INS. GR.

⑨ PA90 POLE FOUNDATION  
 TYPE PA90-A-35-D40-9 (DAVIT AT 350 DEG)  
 1-ANGLE MOUNT SIGNAL OVERHEAD AT 0'  
 1-STRAIGHT MOUNT SIGNAL OVERHEAD AT 19'  
 1-ANGLE MOUNT SIGNAL AT 180 DEG  
 1-ONE WAY EVP CONFIRMATORY LIGHT (PHASE 8)  
 LUMINAIRE-LED (FOR 40' MOUNTING HEIGHT)  
 1-TYPE D SIGN (D-2) (SEE SIGN DETAILS)  
 1-R10-11B SIGN (FACING NE RAMP)  
 3" CONDUIT TO HH 10C:  
 2-12/C 14  
 1-3/C 14  
 1-3/C 14 (LUM.)  
 1-1/C 6 INS. GR.

⑩ PEDESTAL FOUNDATION  
 13' PEDESTAL POLE PLUS BASE  
 1-STRAIGHT MOUNT SIGNAL AT 270 DEG  
 1-STRAIGHT MOUNT C.D. PED HEAD AT 270 DEG  
 1-APS PB AND SIGN (LT ARROW) (PB6-2)  
 AND APS PB MOUNTING SPACERS  
 3" CONDUIT TO HH 12C:  
 1-12/C 14  
 1-4/C 14  
 1-2/C 14  
 2-1/C 6 INS. GR.

⑪ PEDESTAL FOUNDATION  
 13' PEDESTAL POLE PLUS BASE  
 1-STRAIGHT MOUNT SIGNAL AT 90 DEG  
 1-STRAIGHT MOUNT C.D. PED HEAD AT 270 DEG  
 1-ONE WAY EVP DETECTOR (PHASE 5)  
 1-APS PB AND SIGN (LT ARROW) (PB6-1)  
 AND APS PB MOUNTING SPACERS  
 3" CONDUIT TO HH 13C:  
 1-12/C 14  
 1-4/C 14  
 1-2/C 14  
 1-3/C 20  
 2-1/C 6 INS. GR.

Ⓐ EQUIPMENT PAD (SEE DETAIL SHEET)  
 SERVICE CABINET (SSB)  
 CONTROLLER AND CABINET (STATE FURNISHED)  
 3" CONDUIT TO HH 16C: 3" CONDUIT TO HH 1C:  
 2-12/C 14 3-12/C 14  
 2-3/C 14 1-3/C 14  
 1-4/C 14 1-3/C 20  
 1-3/C 20 1-CAT 5E (IP CAMERA)  
 3" CONDUIT TO HH 16C: 3" CONDUIT TO HH 1C:  
 5-12/C 14 4-12/C 14  
 2-3/C 14 4-12/C 14  
 1-1/C 6 INS. GR. 1-3/C 14  
 1-3/C 20 1-3/C 20  
 1-CAT 5E (IP CAMERA) 1-1/C 6 INS. GR.  
 3" CONDUIT TO HH 16C: 3" CONDUIT TO HH 1C:  
 14-2/C 14 10-2/C 14  
 4-3" CONDUIT TO HH 18C:  
 12-12/C 14  
 4-4/C 14  
 4-3/C 14  
 24-2/C 14  
 3-3/C 20  
 1-CAT 5E (IP CAMERA)  
 1-1/C 6 INS. GR.

GROUND WIRE AND GROUND ROD - MIN 8' OUT FROM PAD  
 2-2" AND 1-3" CONDUIT STUBBED OUT (CAPPED BOTH ENDS)  
 1 1/2" CONDUIT STUBBED OUT (FOR TELEPHONE LINE/FIBER)  
 CONTROLLER CABINET TO SERVICE CABINET:  
 2" CONDUIT  
 2-1/C 6  
 1-1/C 6 INS. GR.  
 CONTROLLER CABINET TO SERVICE CABINET (COMMS):  
 2" CONDUIT  
 1-6PR 19  
 SERVICE CABINET TO HH 1C:  
 2" CONDUIT  
 4-3/C 14 (LUM.)  
 SERVICE CABINET TO EXTERNAL GR. RD.:  
 1" CONDUIT  
 1-1/C 6 INS. GR.  
 (SEE EQUIPMENT PAD LAYOUT)  
 HH 16C TO HH 1C:  
 2" CONDUIT  
 2-3/C 14 (LUM.)

Ⓑ SOP-GROUND MOUNTED TRANSFORMER (XCEL)  
 2" CONDUIT INTO SERVICE CABINET:  
 3-1/C 2

PLOTTED/REVISED: 11-FEB-2022

DISTRICT \*: Metro  
 PLOT NAME: 10472\_r03\_ssheet3  
 FILENAME: Projects\DM\_F05\09\00000\Traffic\Signals\2498822 TH 94 at Dayton PRMY DDI E.Ramp\ENDING\10472\_r03.dgn

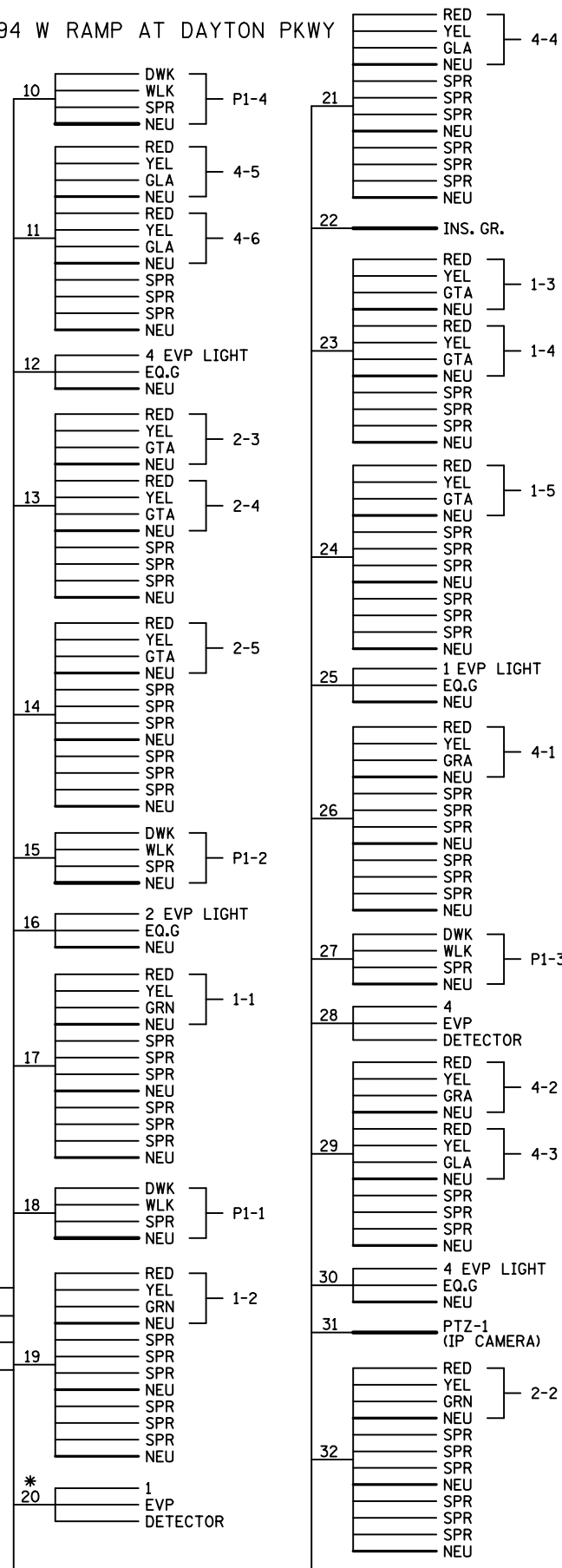
BY	DATE	REVISIONS	SYSTEM ID: 2498822	T.E. 17689	S.A.P. NO.	DRAWN BY:HRL	CKD BY:CDB	DATE:
HRL	01-18-22	CONSTRUCTION REDLINES FOR SP-2780-100	METER ADDRESS:		CERTIFIED BY _____	LIC. NO. _____	DATE: _____	
			OLD SYSTEM ID:		STATE PROJ.NO. (T.H.94 ) SHEET NO. 3 OF 5 SHEETS			

**TRAFFIC SIGNAL PLANS  
 INTERSECTION NOTES  
 T.H. 94 E RAMP AT DAYTON PARKWAY**

PLOTTED/REVISED: 11-FEB-2022

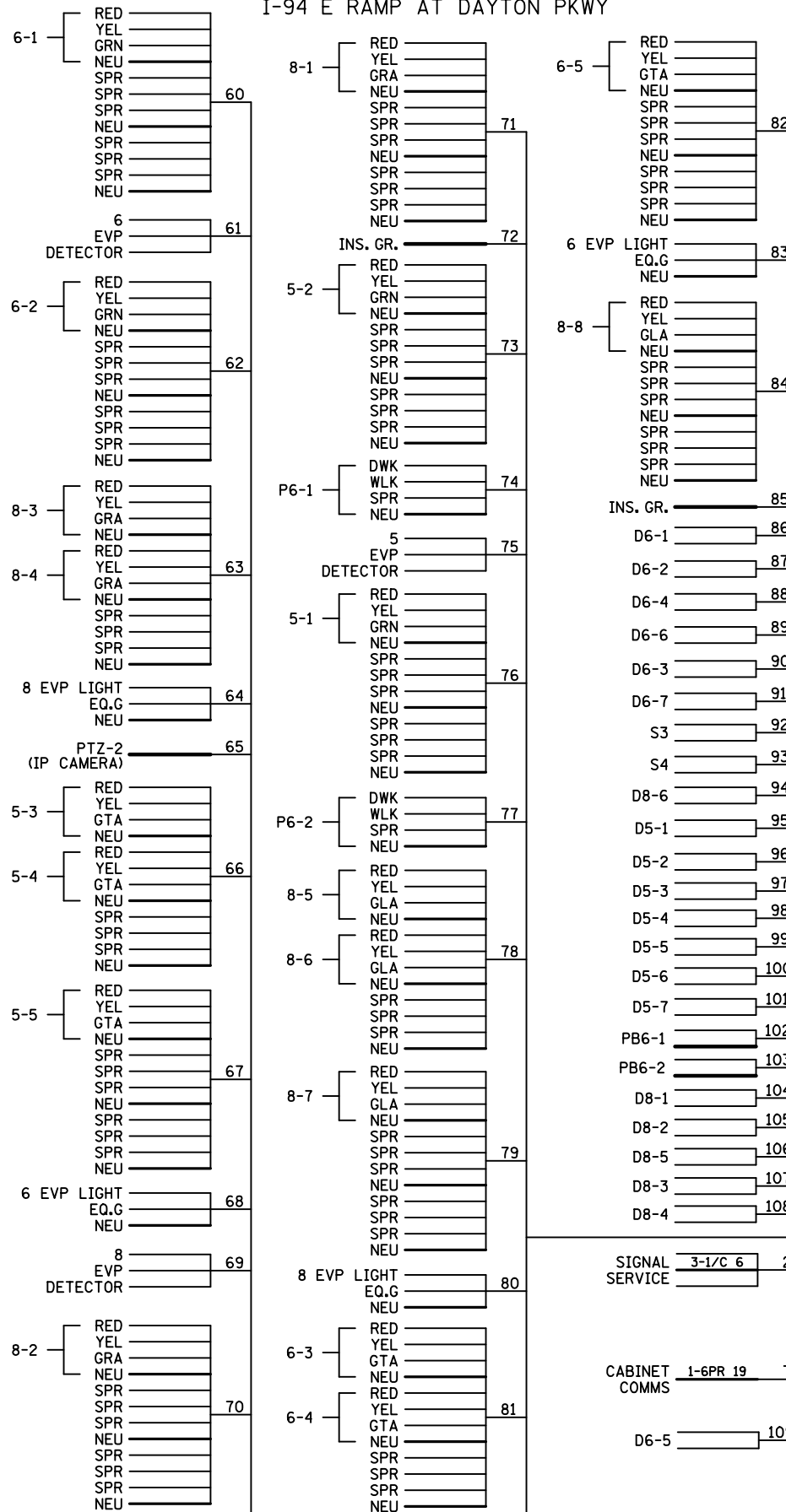
DISTRICT \*: Metro  
I/PLOT NAME: 10472\_r03\_sheet 4  
FILENAME: Projects\DM\_FOS\09\0000\Traffic\Signals\2498822 TH 94 at Dayton PRMY DDI E-Ramp\ENDING\0472\_r03.dgn

I-94 W RAMP AT DAYTON PKWY

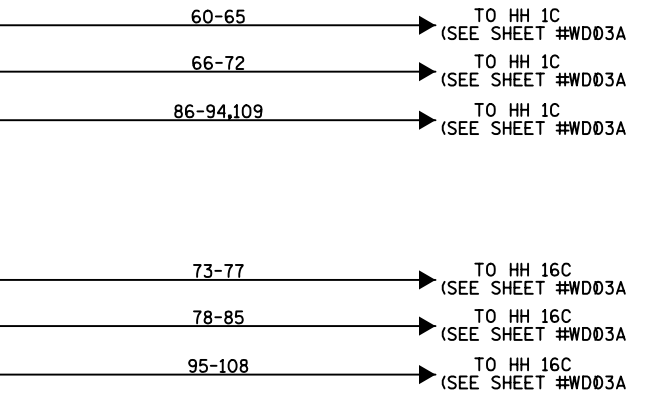


CONTROLLER CABINET

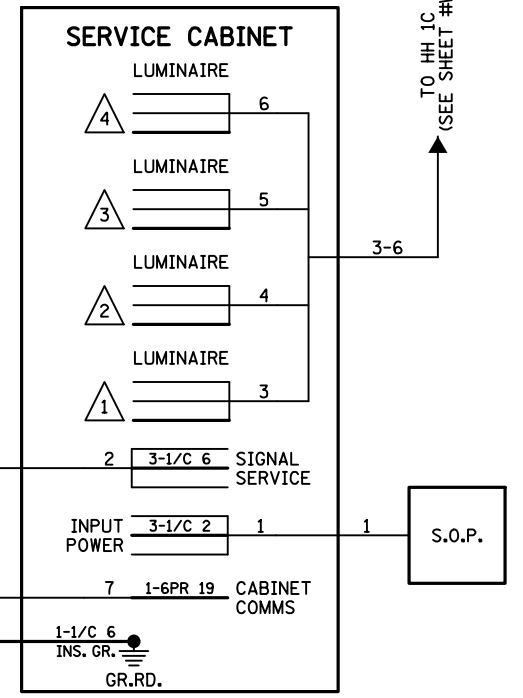
I-94 E RAMP AT DAYTON PKWY



- NOTES:**
1. SIGNAL SYSTEM INCLUDES BATTERY BACKUP SERVICE CABINET (NO BATTERIES).
  2. FOR CONDUCTOR COLOR CODE SEE TRAFFIC SIGNAL POLE WIRING CONNECTOR DETAIL.
  3. ITEMS DENOTED WITH AN \* ARE INCLUDED IN PAYMENT FOR THE EVP SYSTEM PAY ITEM.



6 SM FIBER TO WEST RAMP SIGNAL CABINET



TO HH 1C (SEE SHEET #WD03A)

BY	DATE	REVISIONS
HRL	01-18-22	CONSTRUCTION REDLINES FOR SP-2780-100

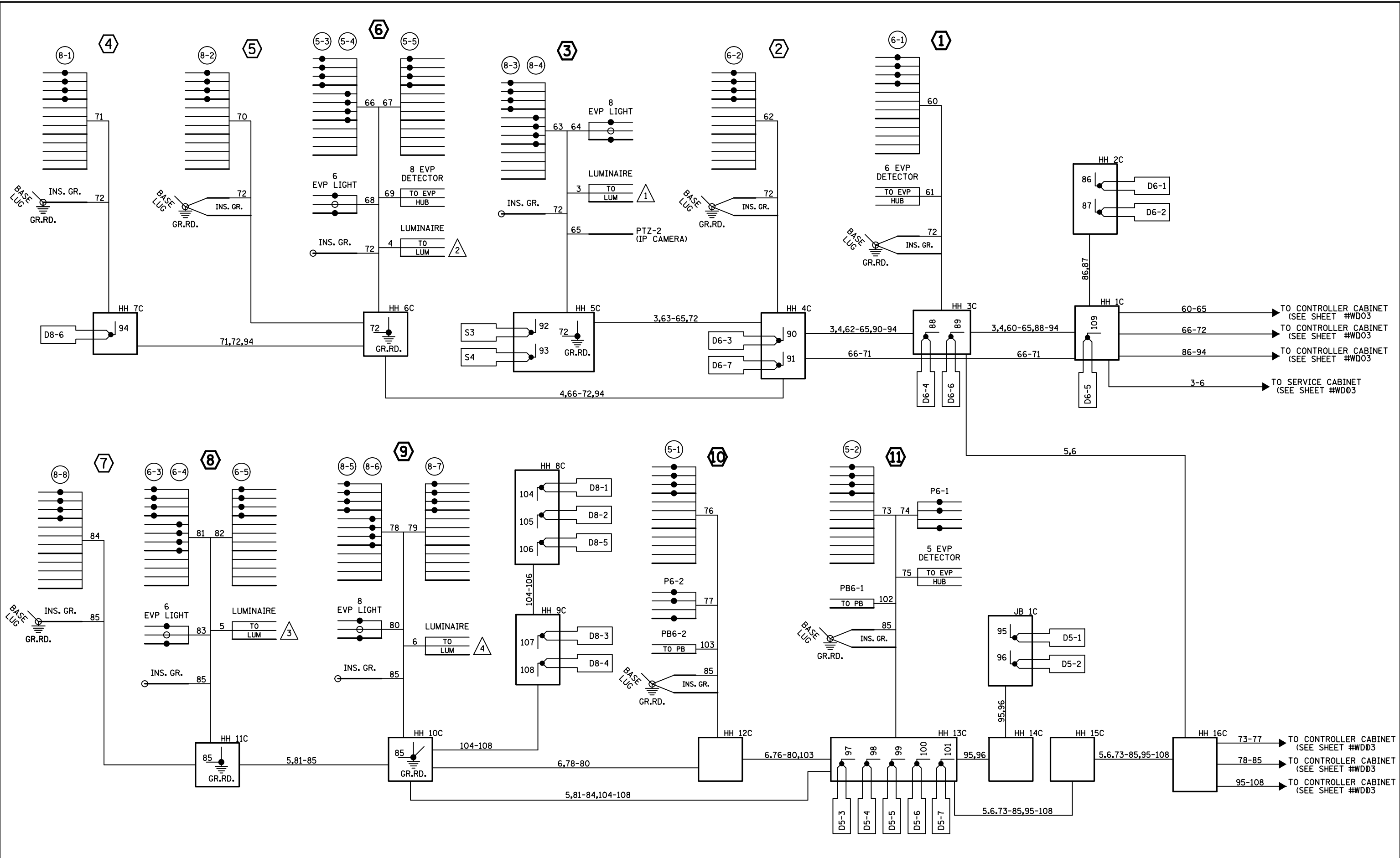
SYSTEM ID: 2498822 T.E. 17689  
 METER ADDRESS:  
 OLD SYSTEM ID:

TRAFFIC SIGNAL PLANS  
FIELD WIRING DIAGRAM  
T.H. 94 E RAMP AT DAYTON PARKWAY

S.A.P. NO.	DRAWN BY:HRL	CKD BY:CDB	DATE:
CERTIFIED BY _____	LIC. NO. _____		DATE: _____
STATE PROJ.NO. 2780-100 (T.H.94)		SHEET NO. 4	OF 5 SHEETS

PLOTTED/REVISED: 11-FEB-2022

DISTRICT \*: Metro  
PLOT NAME: 10472\_r03\_sheet 5  
FILENAME: Projects\DM\_FOS\09400001Traffic\Signals\2498822 TH 94 at Dayton PRMY DDI E-Ramp\ENDING\0472\_r03.dgn



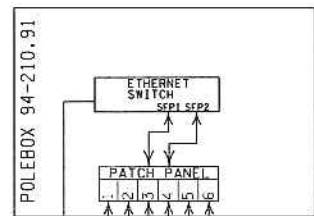
BY	DATE	REVISIONS
HRL	01-18-22	CONSTRUCTION REDLINES FOR SP-2780-100

SYSTEM ID: 2498822 T.E. 17689  
 METER ADDRESS:  
 OLD SYSTEM ID:

**TRAFFIC SIGNAL PLANS  
 FIELD WIRING DIAGRAM  
 T.H. 94 E RAMP AT DAYTON PARKWAY**

S.A.P. NO.	DRAWN BY: HRL	CKD BY: CDB	DATE:
CERTIFIED BY _____	LIC. NO. _____	DATE: _____	
STATE PROJ. NO. 2780-100 (T.H. 94)		SHEET NO. 5 OF	5 SHEETS

CAM C30143

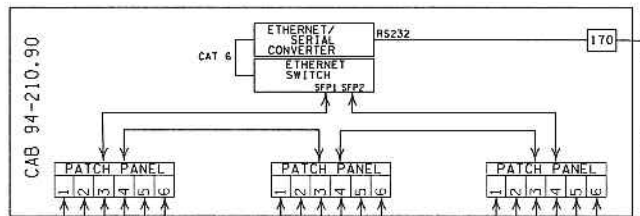


TH94 EB AT  
MP 210.91

PIGTAIL OTDR  
LENGTH  
\_\_\_\_\_ km

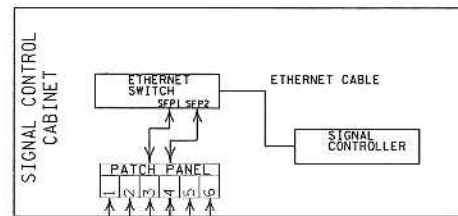
PIGTAIL ID#:  
POLE94-210.91

PIGTAIL OTDR  
LENGTH  
\_\_\_\_\_ km



TH94 EB AT  
MP 210.90

PIGTAIL ID#:  
CAB94-210.90



TH94 EB AT  
MP 210.90

PIGTAIL ID#:  
SIC2498821

TO SPLICE VAULT (BY SP 2780-97)

11:55:45 AM  
12/19/2019  
R:\Projects\10000\10472\Design\PlanSheets\Final\Plan\10472\_tmc31.dgn

NO	DATE	BY	CKD	APPR	REVISION
	6/27/18				

I hereby certify that this plan, specification, or report 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: **JACOB FOLKERINGA**

*Jacob Folkeringa*

Date 12/02/19 License # 50911

STATE PROJECT NO.  
2780-100 (TH 94)  
027-681-040  
027-701-036  
229-112-002

COUNTY PROJECT NO.  
1018

CITY PROJECT NO. X

DRAWN BY  
K. HVIKDOS

DESIGNED BY  
K. HVIKDOS

CHECKED BY  
J. FOLKERINGA

COMM. NO. 1810472



CITY OF DAYTON  
TRAFFIC MANAGEMENT SYSTEM  
DAYTON PARKWAY INTERCHANGE  
COMMUNICATIONS SCHEMATIC

SHEET  
432  
OF  
593