

DISTRICT #: Metro
 IPLOT NAME: T1735693...sdl
 PATH & FILENAME: Projects\DM_R05\69\00001Traffic\Signals\97.9 TH169 @ TH282 (9) T1735693\T1735693...sdl.dgn
 PLOTTED/REVISED: 7-MAY-2024

1 PA100 POLE FOUNDATION
 TYPE PA100-A55-D40-9 (DAVIT AT 350 DEG)
 LUMINAIRE-200W HPS WITH PEC AND CH. SW.
 3-ONE WAY SIGNALS OVERHEAD
 AT 0, 12, AND 24'
 1-EVP DETECTOR & LIGHT (2+5)
 2-TYPE 10B MOUNTED AT 0 AND 270 DEG
 2-C.D. PED HEADS AT 0 AND 270 DEG
 3" CONDUIT TO HH 1:
 2-12/C #12
 4-3/C #12
 1-3/C #12 (LUM)
 1-3/C #20
 3-2/C #14

2 PA100 POLE FOUNDATION
 TYPE PA100-A55
 2-ONE WAY SIGNALS OVERHEAD 0' AND 13'
 2 WAY EVP DETECTOR (3+8 & 4+7)
 EVP LIGHT (3+8), EVP LIGHT 4+7
 1-TYPE 10A POLE MOUNTED AT 270 DEG
 1-TYPE 10B POLE MOUNTED AT 0 DEG
 1-C.D. PED HEAD AT 0 DEG
 1-R9-3 SIGN (NO PED) FACING POLE 3
 3" CONDUIT TO HH 5:
 2-12/C #12
 1-3/C #12
 1-3/C #20
 2-2/C #14

4 PA100 POLE FOUNDATION
 TYPE PA100 A-50
 2-ONE WAY SIGNALS OVERHEAD AT 0' AND 13'
 2 WAY EVP DETECTOR (3+8 & 4+7), EVP LIGHT (3+8)
 2-TYPE 10B-POLE MOUNTED AT 0 AND 270 DEG
 2-C.D. PED HEADS AT 0 AND 270 DEG
 3" CONDUIT TO HH 15:
 2-12/C #12
 3-3/C #12
 1-3/C #20
 3-2/C #14

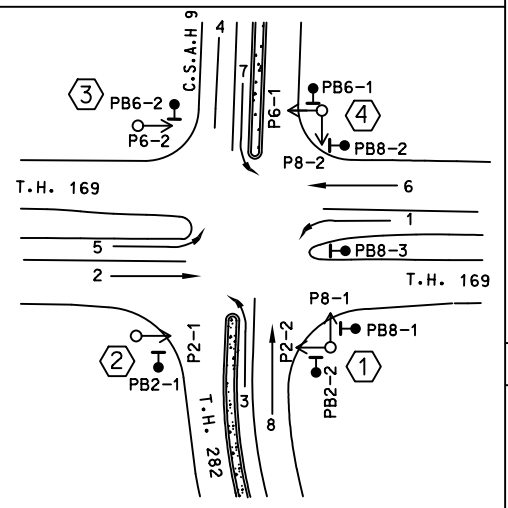
3 PA100 POLE FOUNDATION
 TYPE PA100-A55-D40-9 (DAVIT AT 350 DEG)
 LUMINAIRE-200W HPS WITH PEC AND CH. SW.
 3-ONE WAY SIGNALS OVERHEAD AT 0, 12, AND 24'
 EVP DETECTOR & LIGHT (6+1)
 TYPE 10A POLE MOUNTED AT 0 DEG
 TYPE 10B POLE MOUNTED AT 270 DEG
 1-C.D. PED HEAD AT 270 DEG
 1-R9-3 SIGN (NO PED) FACING POLE 2
 3" CONDUIT TO HH 11:
 2-12/C #12
 2-3/C #12
 1-3/C #12 (LUM)
 1-3/C #20
 1-2/C #14
 2-2/C #14

PED PB STATION
 1-APS PB AND SIGN
 (RT ARROW) (PB8-2)
 EXTEND INTO HH 15:
 1" CONDUIT
 1-2/C #14 (FROM POLE 4)

PED PB STATION
 1-APS PB AND SIGN
 (LT ARROW) (PB6-1)
 EXTEND INTO HH 15:
 1" CONDUIT
 1-2/C #14 (FROM POLE 4)

PVC LOOP DETECTORS		
NUMBER	SIZE (FT)	LOCATION FROM STOP BAR
D1-1	2-6X6	20' & 50'
D1-2	2-6X6	5' & 35'
D2-1, D2-2	6X6	475'
D3-1	6X12	40'
D4-1, D4-2	6X6	180'
D4-3	2-6X6	AS SHOWN
D4-4, D4-5	6X6	10'
D5-1	2-6X6	20' & 50'
D5-2	2-6X6	5 & 35'
D6-1, D6-2	6X6	475'
D7-1	6X12	40'
D8-1, D8-2	6X6	180'
D8-3	2-6X6	AS SHOWN
D8-4, D8-5	6X6	10'

CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSHBUTTONS LAYOUT

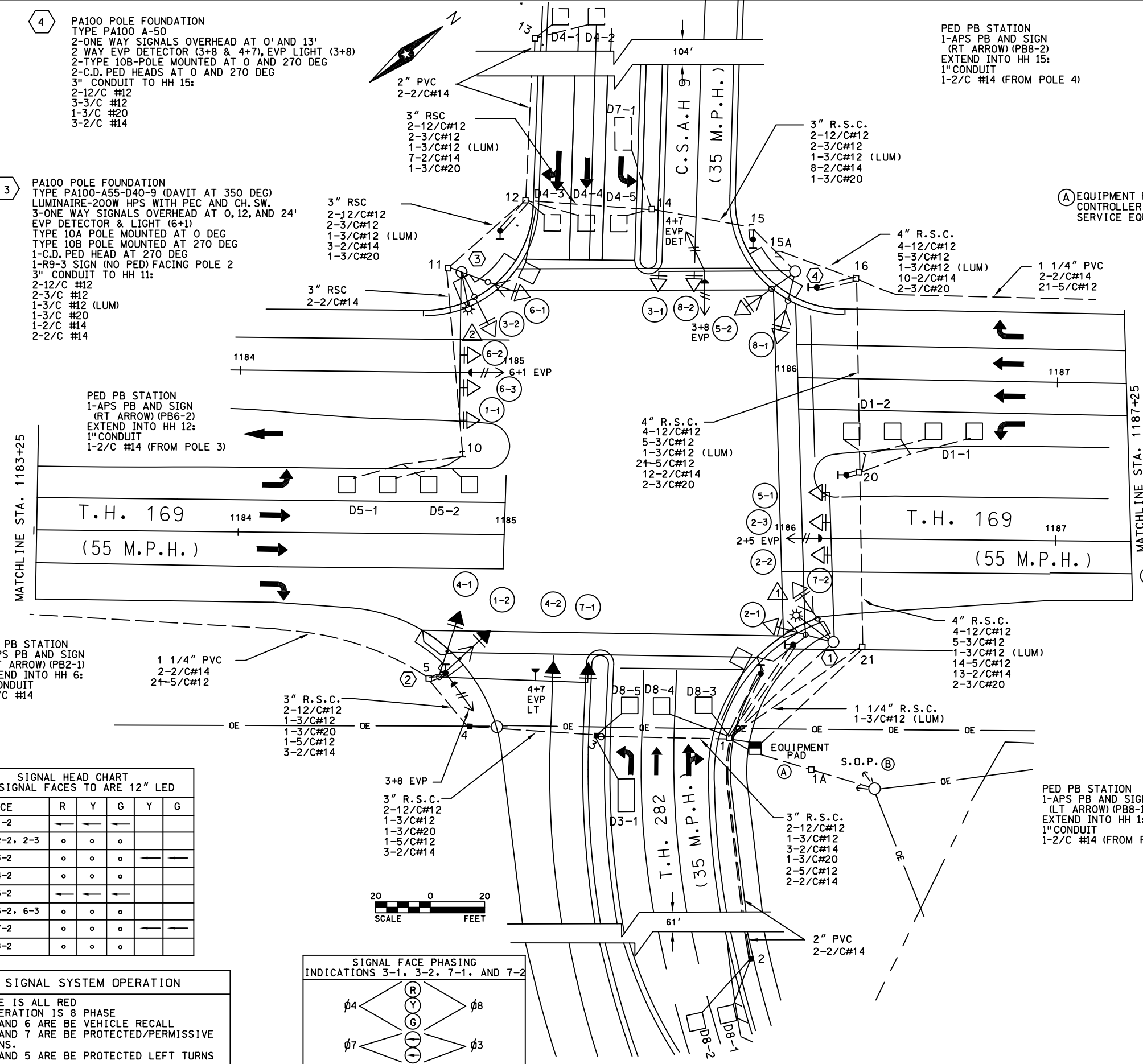
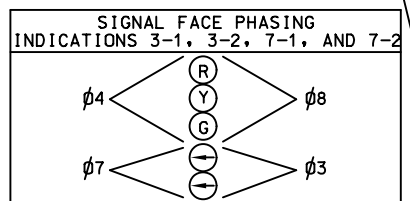


SIGNAL HEAD CHART
ALL SIGNAL FACES TO ARE 12" LED

FACE	R	Y	G	Y	G
1-1, 1-2	←	←	←		
2-1, 2-2, 2-3	○	○	○		
3-1, 3-2	○	○	○	←	←
4-1, 4-2	○	○	○		
5-1, 5-2	←	←	←		
6-1, 6-2, 6-3	○	○	○		
7-1, 7-2	○	○	○	←	←
8-1, 8-2	○	○	○		

SIGNAL SYSTEM OPERATION

FLASH MODE IS ALL RED
 NORMAL OPERATION IS 8 PHASE
 PHASES 2 AND 6 ARE BE VEHICLE RECALL
 PHASES 3 AND 7 ARE BE PROTECTED/PERMISSIVE LEFT TURNS.
 PHASES 1 AND 5 ARE BE PROTECTED LEFT TURNS



(A) EQUIPMENT PAD
 CONTROLLER AND CABINET
 SERVICE EQUIPMENT (PAD MOUNTED)

LOAD CENTER TO CABINET:
 1-1/4" R.S.C.
 2-1/C #6
 1-1/C #6 BR. GRD.

LOAD CENTER TO HH1:
 1-1/4" R.S.C.
 2-3/C #12 (LUM)

CABINET TO HH21:
 4" R.S.C.
 4-12/C#12
 5-3/C#12
 2-5/C#12
 15-2/C#14
 2-3/C#20

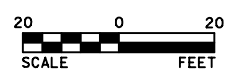
CABINET TO HH1:
 4" R.S.C.
 2-12/C#12
 4-3/C#12
 1-3/C#20
 2-12/C#12
 1-3/C#12
 8-2/C#14
 1-3/C#20
 2-5/C#12
 2-2/C#14

(B) WOOD POLE (S.O.P.)
 DISCONNECT SWITCH - WOOD POLE MOUNTED

ABOVE DISCONNECT:
 2" R.S.C. RISER AND WEATHERHEAD
 3-1/C#2
 BELOW DISCONNECT TO HH 1A:
 2" R.S.C.
 3-1/C#2

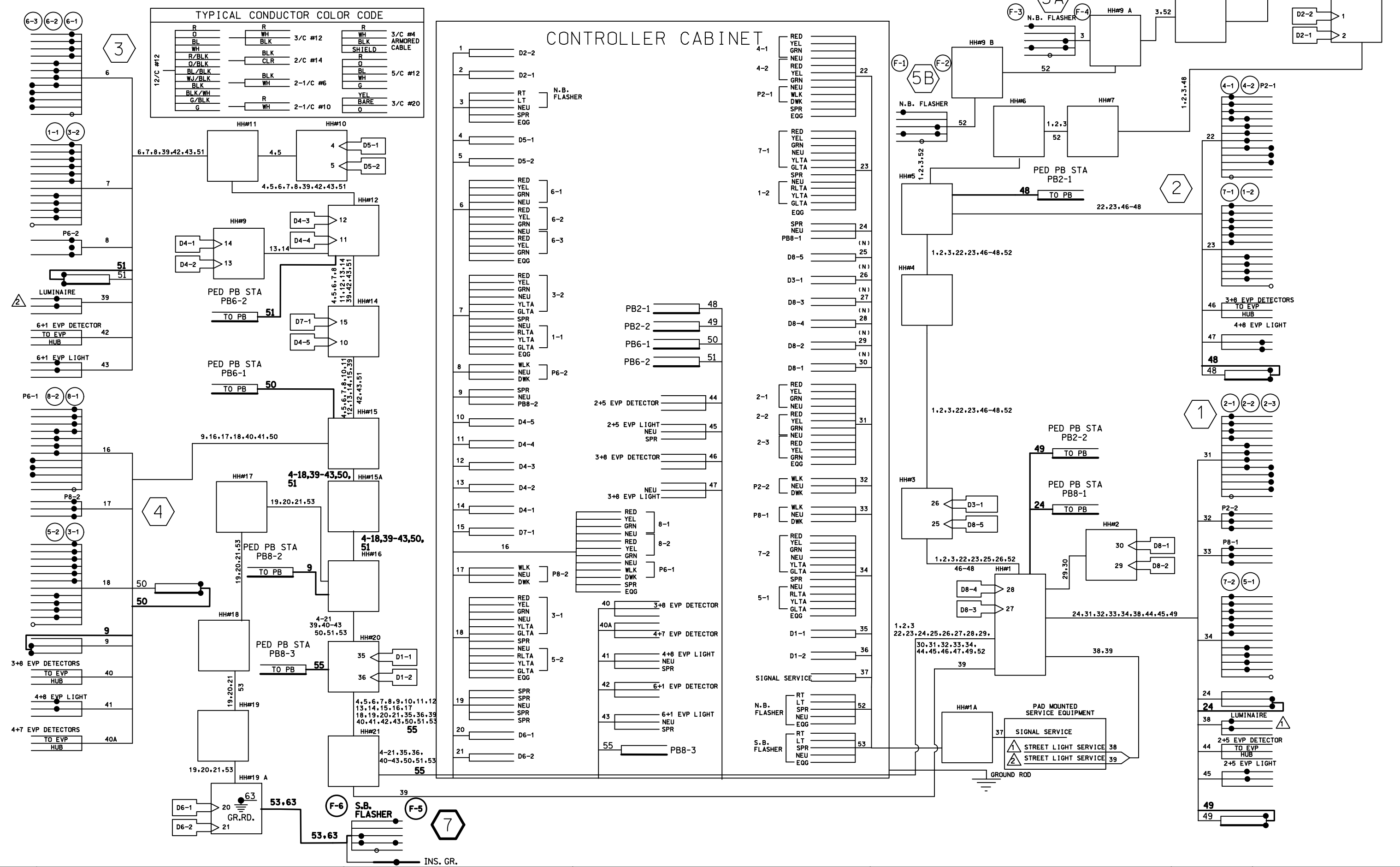
PED PB STATION
 1-APS PB AND SIGN
 (RT ARROW) (PB2-2)
 EXTEND INTO HH 1:
 1" CONDUIT
 1-2/C #14 (FROM POLE 1)

PED PB STATION
 1-APS PB AND SIGN
 (LT ARROW) (PB8-1)
 EXTEND INTO HH 1:
 1" CONDUIT
 1-2/C #14 (FROM POLE 1)



BY: SJK	DATE: 5/9/24	OPERATION PLAN	REVISIONS	SYSTEM ID: 1735693	T.E.	TRAFFIC CONTROL SIGNAL SYSTEM	S.A.P. NO.	DRAWN BY: BAM	CKD BY: CDB	DATE:
				METER ADDRESS: 601 2ND STREET WEST		T.H. 169 AT T.H. 282 /C.S.A.H. 9	CERTIFIED BY: _____	LICENSED PROFESSIONAL ENGINEER		
				MASTER ID:	T.E.	IN JORDAN, SCOTT COUNTY	STATE PROJ. NO. 7005-117 (T.H. 169)		SHEET NO. SS1 OF SS3 SHEETS	

DISTRICT #: Metro
 IPLOT NAME: T1735693...sgl
 PATH & FILENAME: Projects\DM_ROS\69\0000\Traffic\Signals\97.9 TH169 @ TH282 (9) T1735693\T1735693...sgl.dgn
 PLOTTED/REVISED: 7-MAY-2024

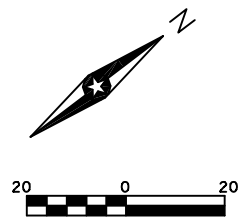
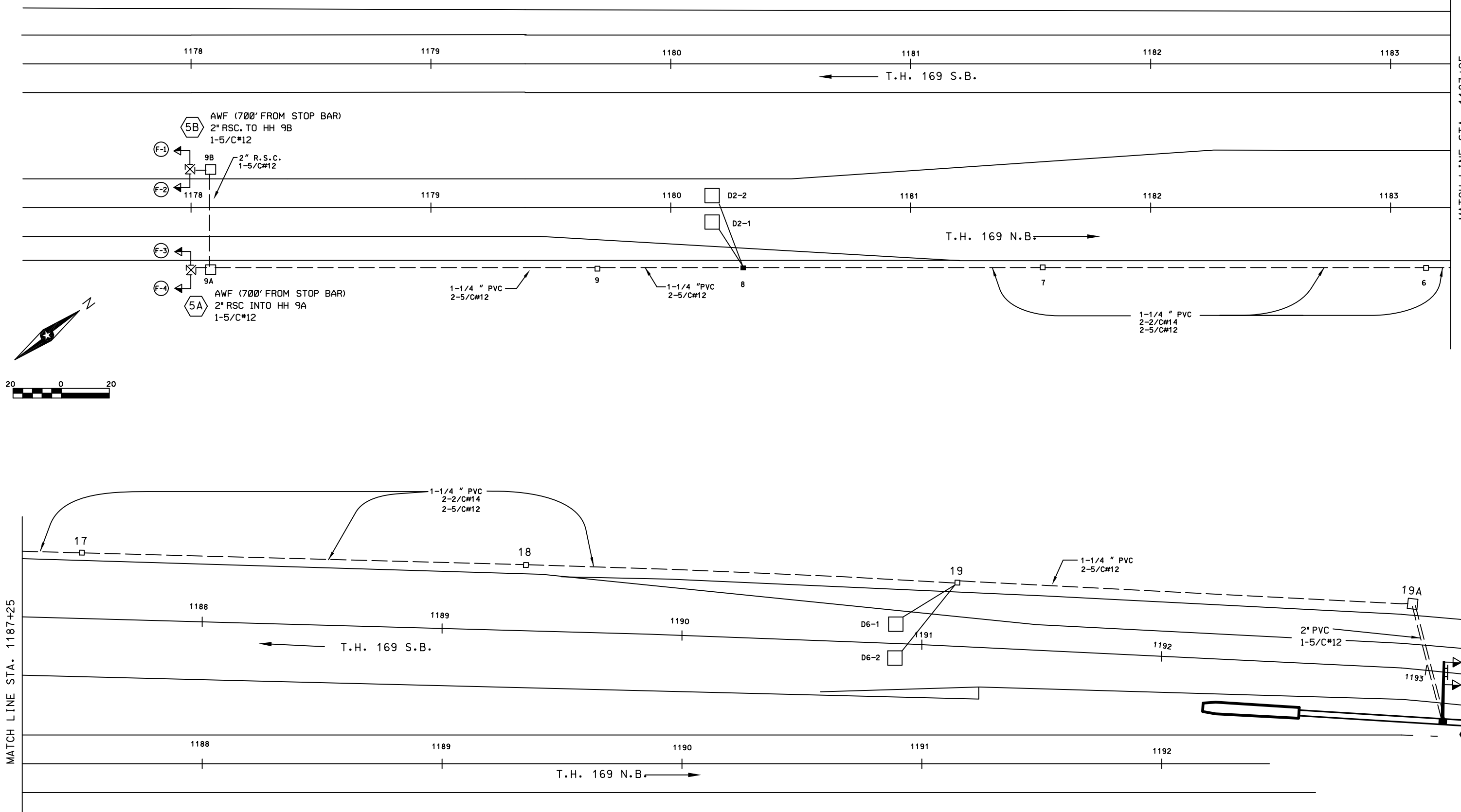


BY	DATE	REVISIONS	SYSTEM ID: 1735693	T.E.	S.A.P. NO.	DRAWN BY: BAM	CKD BY: CDB	DATE:
SJK	5/9/24	OPERATION PLAN	METER ADDRESS: 601 2ND STREET WEST		CERTIFIED BY: _____			LIC. NO. _____ DATE: _____
			MASTER ID: _____	T.E.	STATE PROJ. NO. 7005-117 (T.H.169) SHEET NO. SS3 OF SS3 SHEETS			

FIELD WIRING DIAGRAM
TRAFFIC CONTROL SIGNAL SYSTEM
 T.H. 169 AT T.H. 282 /C.S.A.H. 9
 IN JORDAN, SCOTT COUNTY

PLOTTED/REVISED: 7-MAY-2024

DISTRICT #: Metro
IPLOT NAME: T1735693...sgl
PATH & FILENAME: Projects\DM_ROS\169\0000\Traffic\Signals\97.9 TH169 @ TH282 (9) T1735693\T1735693...sgl.dgn



7 PA100 POLE FOUNDATION NB169 STA. 1193+00 20.4' LT (SEE DETAIL)
 TYPE PA100 A-25 (W/POLE HEIGHT MODIFIED TO BE 2' SHORTER-SEE DETAIL)
 1-ANGLE MOUNT SIGNAL (12" YELLOW LED FLASHING BEACON) AT 0'
 1-STRAIGHT MOUNT SIGNAL OVERHEAD (12" YELLOW LED FLASHING BEACON) AT 11.5'
 1- SIGN "PREPARE TO STOP WHEN FLASHING" (84" X 54") AT 2'
 2" CONDUIT TO HH 19A:
 1-5/C #12

BY	DATE	REVISIONS
SJK	5/9/24	OPERATION PLAN

SYSTEM ID: 1735693 T.E.
 METER ADDRESS: 601 2ND STREET WEST
 MASTER ID: T.E.

MATCH LINE
TRAFFIC CONTROL SIGNAL SYSTEM
T.H. 169 AT T.H. 282 /C.S.A.H. 9
IN JORDAN, SCOTT COUNTY

S.A.P. NO. _____ DRAWN BY: BAM CKD BY: CDB DATE: _____
 CERTIFIED BY: _____ LIC. NO. _____ DATE: _____
 STATE PROJ. NO. 7005-117 (T.H. 169) SHEET NO. SS2 OF SS3 SHEETS

PLOTTED/REVISED: 11/3/2014

DISTRICT #: METRO
IPLOT NAME: layout
PATH & FILENAME: IP_PWP-d0784308VT21479.dgn

1 PA100 POLE FOUNDATION
 TYPE PA100-A55-D40-9 (DAVIT AT 350°)
 3-ONE WAY SIGNALS OVERHEAD (0', 12' AND 24' FROM END OF MAST ARM)
 TYPE 10B-POLE MOUNTED AT 0°
 TYPE 10B-POLE MOUNTED AT 270°. REMOVE BAG OVER PEDESTRIAN INDICATORS
 LUMINAIRE-200 WATT HPS W/P.E.C. AND CH.SW.
 2-PEDESTRIAN PUSH BUTTONS W/2-PEDESTRIAN INSTRUCTIONS SIGNS (R10-4C)
 INTO H.H.1: 3" RSC WITH 2-12/C#12;
 4-3/C#12; 1-3/C#12 (LUM.); 1-3/C#20, 1-2/C#14

2 PA100 POLE FOUNDATION
 TYPE PA100-A55
 2-ONE WAY SIGNALS OVERHEAD (0' AND 13' FROM END OF MAST ARM)
 TYPE 10B-POLE MOUNTED AT 0°
 TYPE 10A-POLE MOUNTED AT 270°
 1-R9-3A SIGN FACING POLE #3
 EXTEND INTO H.H.5: 3" RSC WITH 2-12/C#12;
 1-3/C#12; 1-3/C#20, 1-2/C#14

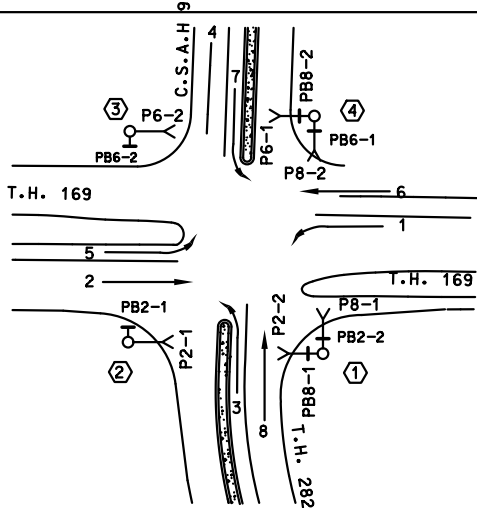
4 PA100 POLE FOUNDATION
 TYPE PA100 A-50
 2-ONE WAY SIGNALS OVERHEAD (0' AND 13' FROM END OF MAST ARM)
 TYPE 10B-POLE MOUNTED AT 0°
 TYPE 10B-POLE MOUNTED AT 270°
 2-PEDESTRIAN PUSH BUTTONS W/2-PEDESTRIAN INSTRUCTIONS SIGNS (R10-4C)
 INTO H.H.15: 3" RSC WITH 2-12/C#12; 3-3/C#12;
 1-3/C#20, 1-2/C#14

3 PA100 POLE FOUNDATION
 TYPE PA100-A55-D40-9 (DAVIT AT 350°)
 3-ONE WAY SIGNALS OVERHEAD (0', 12' AND 24' FROM END OF MAST ARM)
 TYPE 10A-POLE MOUNTED AT 0°
 TYPE 10B-POLE MOUNTED AT 270 33/64
 LUMINAIRE-200 WATT HPS W/P.E.C. AND CH.SW.
 1-R9-3A SIGN FACING POLE #2
 EXTEND INTO H.H.5: 3" RSC WITH 2-12/C#12, 1-2/C#14

PVC LOOP DETECTORS		
NUMBER	SIZE (FT)	LOCATION FROM STOP BAR
D1-1	6X6	40'
D1-2	6X6	10'
D2-1, D2-2	6X6	475'
D3-1	6X12	40'
D4-1, D4-2	6X6	180'
D4-3	2-6X6	AS SHOWN
D4-4, D4-5	6X6	10'
D5-1	6X6	40'
D5-2	6X6	10'
D6-1, D6-2	6X6	475'
D7-1	6X12	40'
D8-1, D8-2	6X6	180'
D8-3	6X6 6X12	AS SHOWN
D8-4, D8-5	6X6	10'

(1) CALL AND EXTEND
 (3) EXTEND ONLY
 (7) DELAY CALL, IMMEDIATE EXTEND

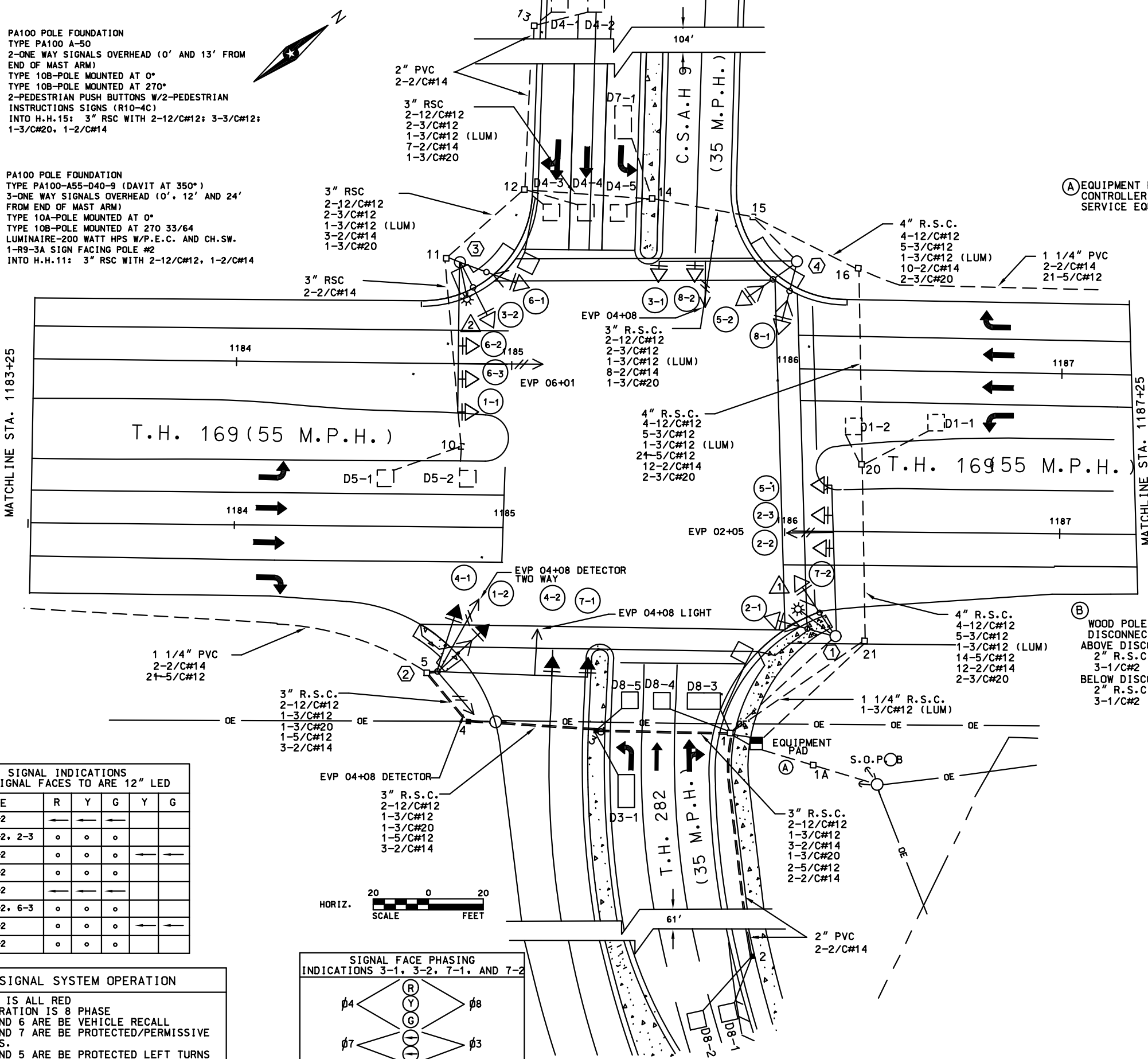
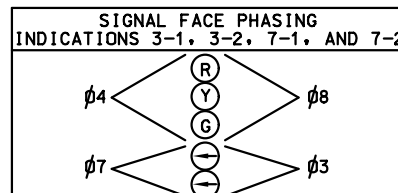
CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSHBUTTONS LAYOUT



SIGNAL INDICATIONS						
ALL SIGNAL FACES TO ARE 12" LED						
FACE	R	Y	G	Y	G	
1-1, 1-2	←	←	←			
2-1, 2-2, 2-3	○	○	○			
3-1, 3-2	○	○	○	←	←	
4-1, 4-2	○	○	○			
5-1, 5-2	←	←	←			
6-1, 6-2, 6-3	○	○	○			
7-1, 7-2	○	○	○	←	←	
8-1, 8-2	○	○	○			

SIGNAL SYSTEM OPERATION

FLASH MODE IS ALL RED
 NORMAL OPERATION IS 8 PHASE
 PHASES 2 AND 6 ARE BE VEHICLE RECALL
 PHASES 3 AND 7 ARE BE PROTECTED/PERMISSIVE LEFT TURNS.
 PHASES 1 AND 5 ARE BE PROTECTED LEFT TURNS



(A) EQUIPMENT PAD
 CONTROLLER AND CABINET
 SERVICE EQUIPMENT (PAD MOUNTED)

LOAD CENTER TO CABINET:
 1-1/4" R.S.C.
 2-1/C #6
 1-1/C #6 BR. GRD.

LOAD CENTER TO HH1:
 1-1/4" R.S.C.
 2-3/C #12 (LUM)

CABINET TO HH21:
 4" R.S.C.
 4-12/C#12
 5-3/C#12
 2-5/C#12
 14-2/C#14
 2-3/C#20

CABINET TO HH1:
 4" R.S.C.
 2-12/C#12
 4-3/C#12
 1-3/C#20
 2-12/C#12
 1-3/C#12
 8-2/C#14
 2-5/C#12
 2-2/C#14

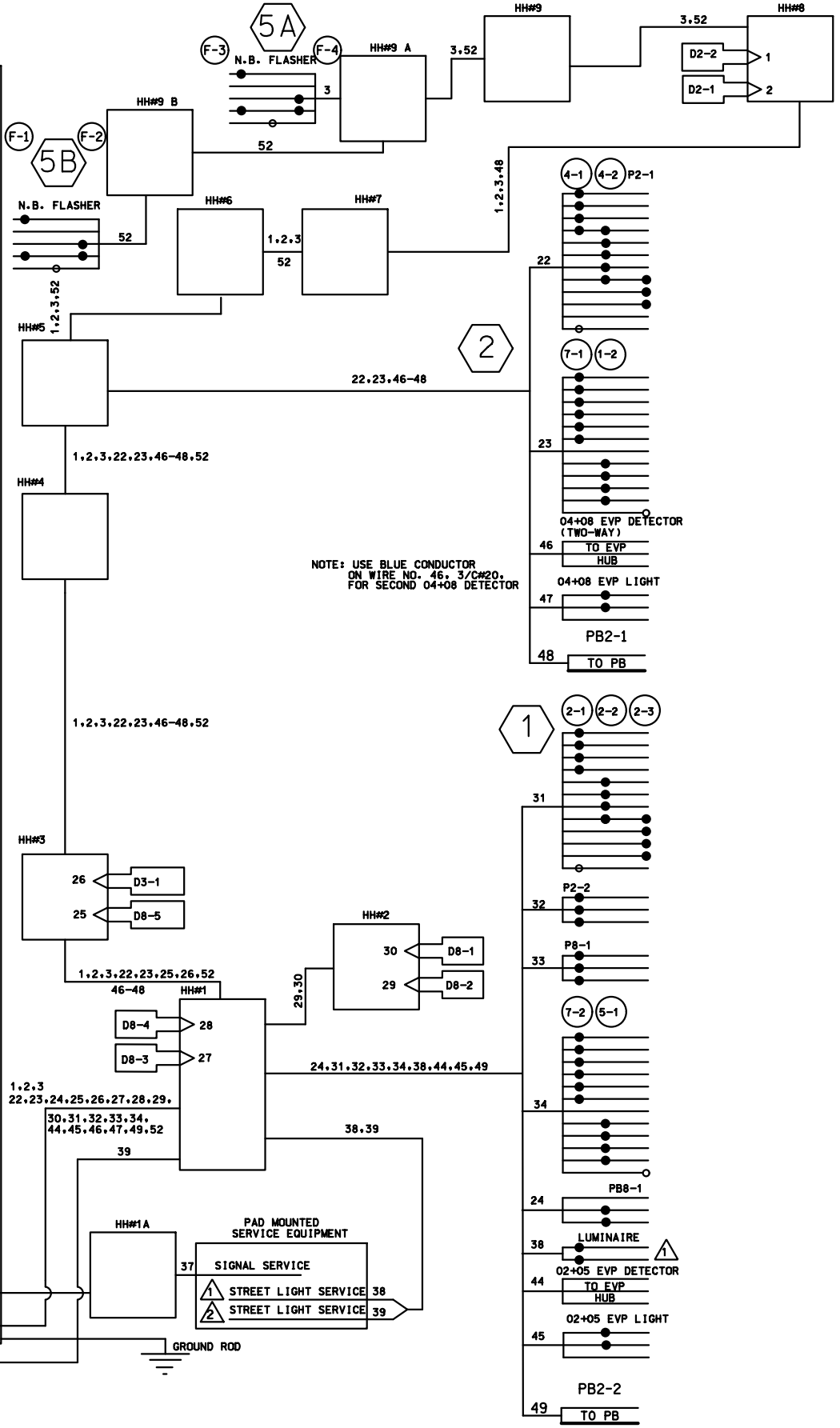
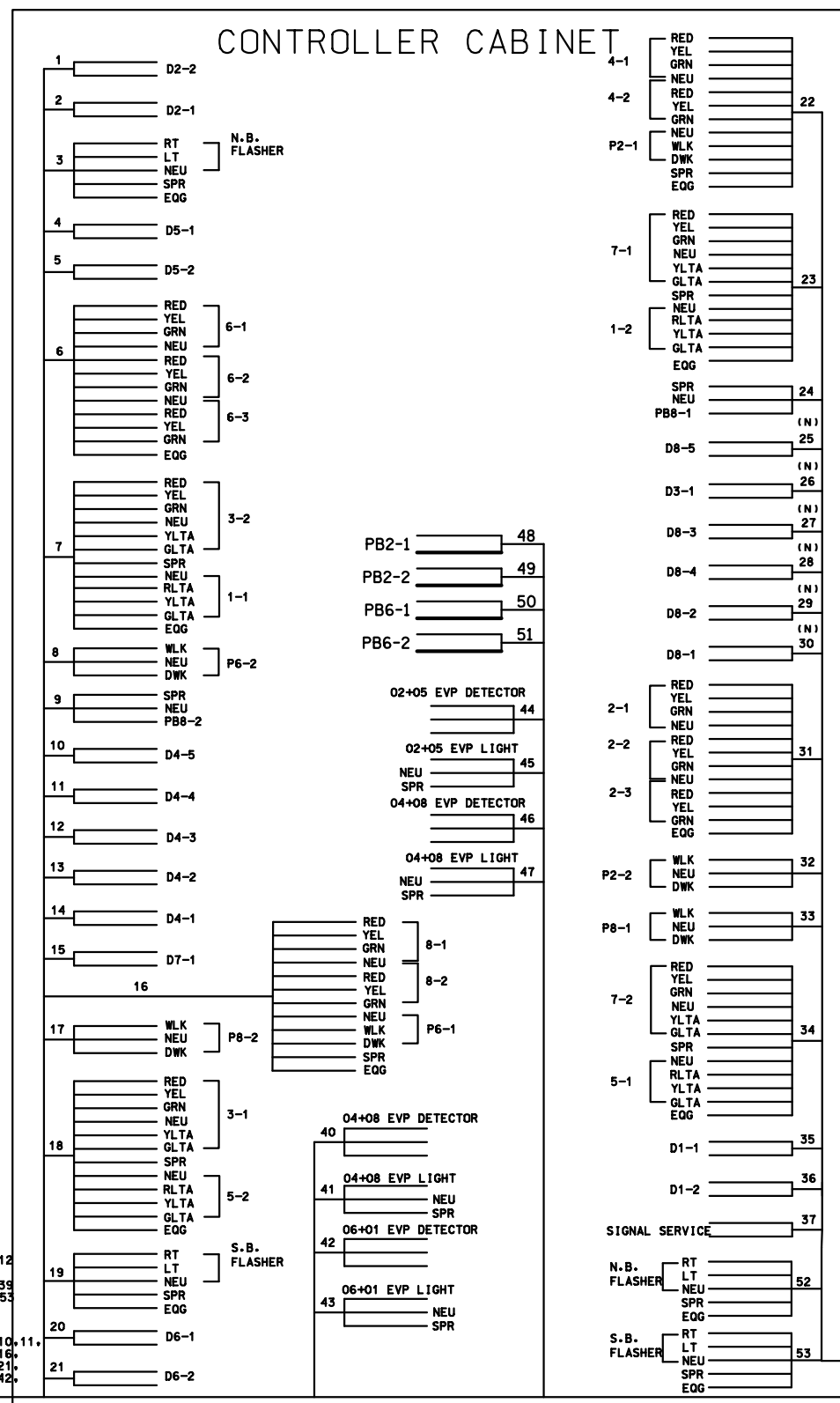
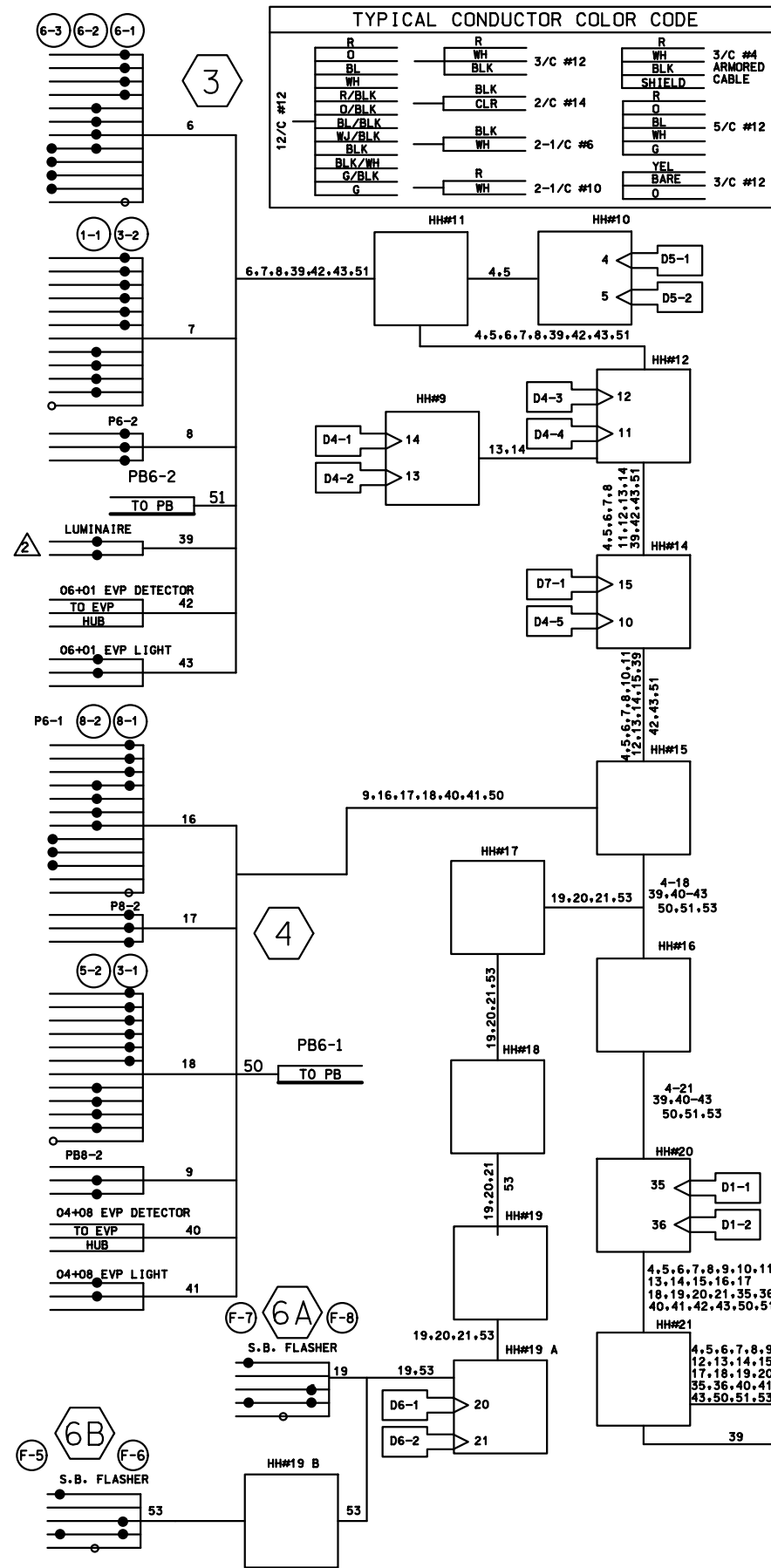
(B) WOOD POLE (S.O.P.)
 DISCONNECT SWITCH - WOOD POLE MOUNTED
 ABOVE DISCONNECT:
 2" R.S.C. RISER AND WEATHERHEAD
 3-1/C#2
 BELOW DISCONNECT TO HH 1A:
 2" R.S.C.
 3-1/C#2



BY: SJK	DATE: 01-2014	REVISIONS: AS-BUILT PLAN FOR TE 5928	SYSTEM ID: 21479	T.E. 5928	INTERSECTION LAYOUT TH 169 AT TH 282/CSAH 9 IN JORDAN, SCOTT COUNTY	S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
MASTER ID:			METER ADDRESS: 601 2ND STREET WEST		CERTIFIED BY:	LIC. NO.:		DATE:	
STATE PROJ.NO. (T.H.169)						SHEET NO. 1 OF 3 SHEETS			

PLOTTED/REVISED: 11/13/2014

DISTRICT #: METRO
IPLOT NAME: wiring diagram
PATH & FILENAME: IP_PWP-d0784308\T21479.dgn



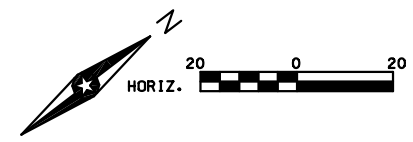
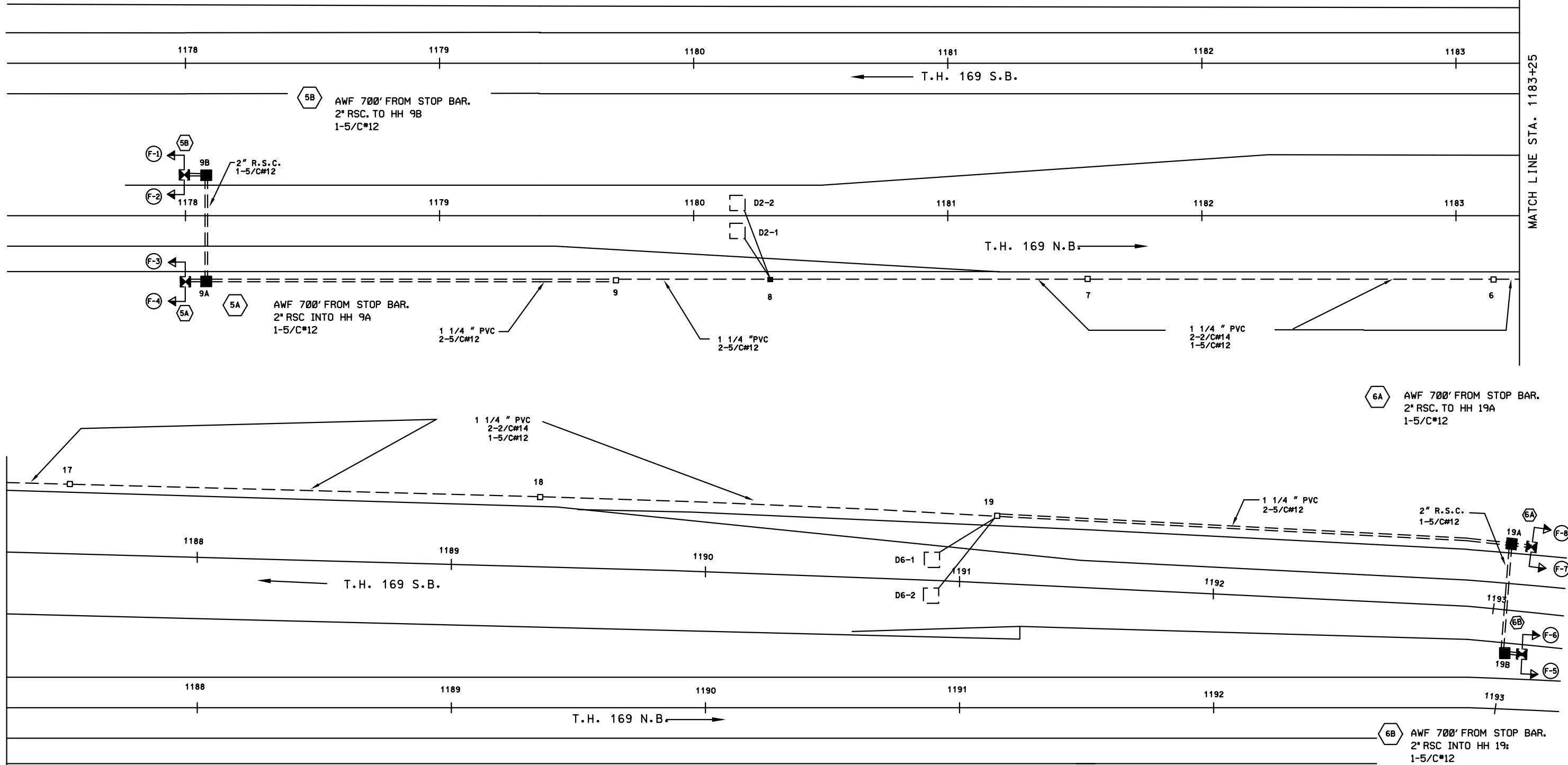
BY	DATE	REVISIONS	SYSTEM ID: 21479	T.E. 5928	WIRING DIAGRAM TH 169 AT TH 282/CSAH 9 IN JORDAN, SCOTT COUNTY	S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
SJK	01-2014	AS-BUILT PLAN FOR TE 5928	METER ADDRESS: 601 2ND STREET WEST	T.E.		CERTIFIED BY _____	LIC. NO. _____	DATE: _____	
			MASTER ID:	T.E.		STATE PROJ.NO.	(T.H.169)	SHEET NO.	3 OF 3 SHEETS

PLOTTED/REVISED: 11/13/2014

DISTRICT #: METRO
IPLOT NAME: match lines
PATH & FILENAME: IP_PWP-d0784308\T21479.dgn

MATCH LINE STA. 1187+25

MATCH LINE STA. 1183+25



BY	DATE	REVISIONS	SYSTEM ID: 21479	T.E. 5928	S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
SJK	01-2014	AS-BUILT PLAN FOR TE 5928	METER ADDRESS: 601 2ND STREET WEST		CERTIFIED BY _____	LIC. NO. _____	DATE: _____	
			MASTER ID:	T.E.	STATE PROJ.NO.	(T.H.169)	SHEET NO.	2 OF 3 SHEETS