

PLOTTED/REVISED: 5-SEP-2018

IPLOT NAME: T20301.sgl  
PATH & FILENAME: Projects\DM\_R05\013\0000\TrafficSignals\20301.sgl.dgn

### SIGNAL HEAD CHART

ALL SIGNAL INDICATIONS ARE 12" LED

SIGNAL FACE	R	Y	G	RLTA	YLTA	GLTA
1-1,1-2				←	←	←
2-1,2-2,2-3	○	○	○			
3-1	○	○	○			
3-2	○	○	○			
3-3,3-4	○	○	○	←	←	←
4-1	○	○	○			
4-2	○	○	○			
4-3	○	○	○	←	←	←
5-1,5-2	○	○	○	←	←	←
6-1,6-2,6-3	○	○	○			

### LOOP DETECTOR CHART

DESIGNATION	SIZE	TYPE	LOCATION
DI-1	6' X 6'	PVC	40'
DI-2	6' X 6'	PVC	10'
D2-1,D2-2	6' X 6'	PVC	400'
D3-1	3-6' X 6'	SAWN	200'
D3-2	2-6' X 6'	PVC	0',15'
D3-3,D3-4	6' X 6'	PVC	40'
D3-5,D3-6	6' X 6'	PVC	10'
D4-1	6' X 6'	SAWN	40'
D4-2	2-6' X 6'	SAWN	0',15'
D4-3	6' X 6'	SAWN	10'
D5-1	6' X 6'	PVC	40'
D5-2	6' X 6'	PVC	10'
D6-1,D6-2	6' X 6'	PVC	400'

(C) SOURCE OF POWER  
XCEL ENERGY WOOD POLE  
2" RSC RISER AND  
WEATHERHEAD WITH:  
3 - 1/C #2  
3" RSC  
TO HH-14 WITH:  
3 - 1/C #3

APS PB STATION (PB6-2)  
L-APS PB & SIGN (RT ARROW)  
TO HH 2  
1-2" PVC  
1-2/C #14

APS PB STATION (PB6-1)  
L-APS PB & SIGN (LT ARROW)  
TO HH 4  
1-2" PVC  
1-2/C #14

APS PB STATION (PB3-2)  
L-APS PB & SIGN (RT ARROW)  
TO HH 4  
1-2" PVC  
1-2/C #14

APS PB STATION (PB3-1)  
L-APS PB & SIGN (LT ARROW)  
TO HH 8  
1-2" PVC  
1-3/C #12

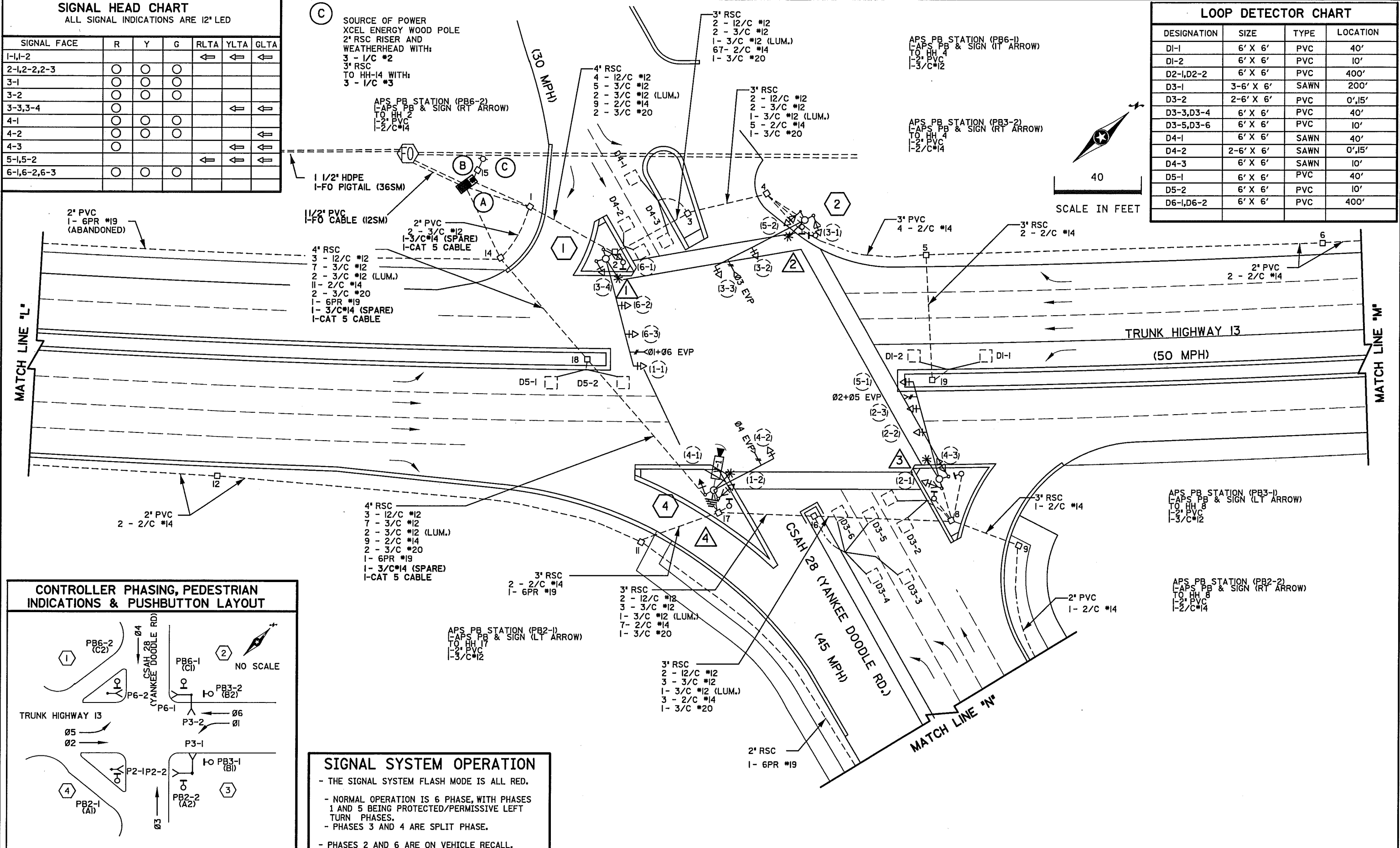
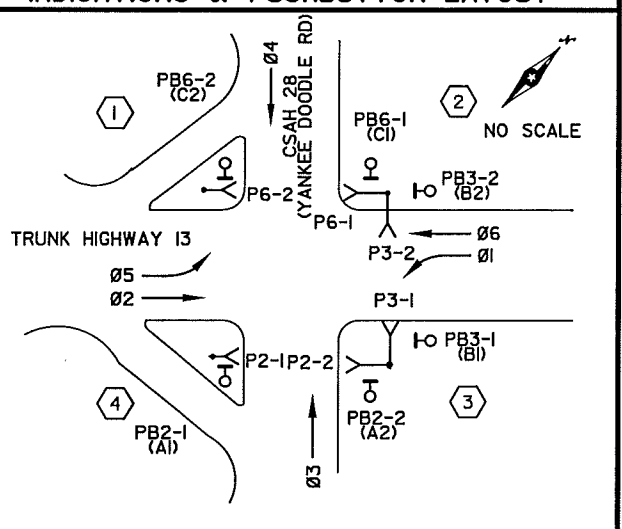
APS PB STATION (PB2-2)  
L-APS PB & SIGN (RT ARROW)  
TO HH 8  
1-2" PVC  
1-2/C #14

APS PB STATION (PB2-1)  
L-APS PB & SIGN (LT ARROW)  
TO HH 17  
1-2" PVC  
1-3/C #12

### SIGNAL SYSTEM OPERATION

- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 6 PHASE, WITH PHASES 1 AND 5 BEING PROTECTED/PERMISSIVE LEFT TURN PHASES.
- PHASES 3 AND 4 ARE SPLIT PHASE.
- PHASES 2 AND 6 ARE ON VEHICLE RECALL.

### CONTROLLER PHASING, PEDESTRIAN INDICATIONS & PUSHBUTTON LAYOUT



BY	DATE	REVISIONS
EJA	04/7/14	AS-BUILT OF SP 1901-168 (APS)
SJK	09/05/18	AS-BUILT PLAN SP 7001-103

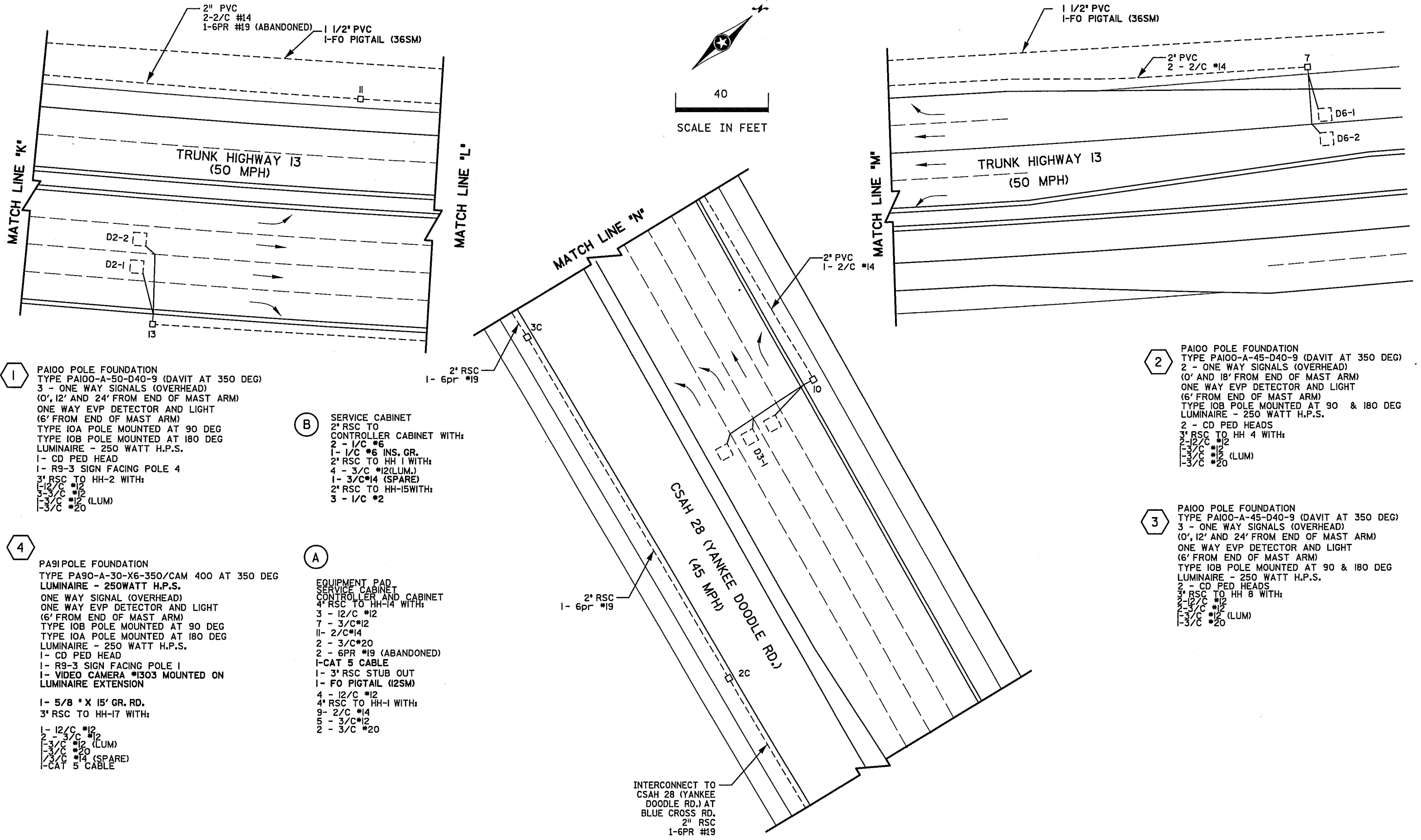
SYSTEM ID: 1735111 T.E.  
METER ADDRESS: 3401 SIBLEY MEMORIAL HWY  
MASTER ID: 20301 T.E.

INTERSECTION LAYOUT  
T.H. 13 AT C.S.A.H. 28  
(YANKEE DOODLE RD.)  
IN EGAN, DAKOTA COUNTY

S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
CERTIFIED BY _____	LIC. NO. _____	DATE: _____	
STATE PROJ. NO.	(T.H.)	SHEET NO. 1 OF 3 SHEETS	

PLOTTED/REVISED: 5-SEP-2018

I/PLOT NAME: T20301.sgl  
 PATH & FILENAME: Projects\DM\_ROMS\013\0000\Traffic\Signals\20301\T20301.sgl.dgn



**1** PA100 POLE FOUNDATION  
 TYPE PA100-A-50-D40-9 (DAVIT AT 350 DEG)  
 3 - ONE WAY SIGNALS (OVERHEAD)  
 (0', 12' AND 24' FROM END OF MAST ARM)  
 ONE WAY EVP DETECTOR AND LIGHT  
 (6' FROM END OF MAST ARM)  
 TYPE IOB POLE MOUNTED AT 90 DEG  
 TYPE IOA POLE MOUNTED AT 180 DEG  
 LUMINAIRE - 250 WATT H.P.S.  
 1 - CD PED HEAD  
 1 - R9-3 SIGN FACING POLE 4  
 3' RSC TO HH-2 WITH:  
 1- 12/C #12  
 1- 3/C #12  
 1- 3/C #12 (LUM)  
 1- 3/C #20

**B** SERVICE CABINET  
 2' RSC TO  
 CONTROLLER CABINET WITH:  
 2 - 1/C #6  
 1 - 1/C #6 INS. GR.  
 2' RSC TO HH-1 WITH:  
 4 - 3/C #12(LUM.)  
 1 - 3/C #14 (SPARE)  
 2' RSC TO HH-15 WITH:  
 3 - 1/C #2

**4** PA91 POLE FOUNDATION  
 TYPE PA90-A-30-X6-350/CAM 400 AT 350 DEG  
 LUMINAIRE - 250WATT H.P.S.  
 ONE WAY SIGNAL (OVERHEAD)  
 ONE WAY EVP DETECTOR AND LIGHT  
 (6' FROM END OF MAST ARM)  
 TYPE IOB POLE MOUNTED AT 90 DEG  
 TYPE IOA POLE MOUNTED AT 180 DEG  
 LUMINAIRE - 250 WATT H.P.S.  
 1 - CD PED HEAD  
 1 - R9-3 SIGN FACING POLE 1  
 1 - VIDEO CAMERA #1303 MOUNTED ON  
 LUMINAIRE EXTENSION  
 1 - 5/8" X 15' GR. RD.  
 3' RSC TO HH-17 WITH:  
 1 - 12/C #12  
 2 - 3/C #12  
 1 - 3/C #12 (LUM)  
 1 - 3/C #20  
 1 - 3/C #14 (SPARE)  
 1 - CAT 5 CABLE

**A** EQUIPMENT PAD  
 SERVICE CABINET  
 CONTROLLER AND CABINET  
 4' RSC TO HH-14 WITH:  
 3 - 12/C #12  
 7 - 3/C #12  
 11 - 2/C #14  
 2 - 3/C #20  
 2 - 6PR #19 (ABANDONED)  
 1 - CAT 5 CABLE  
 1 - 3' RSC STUB OUT  
 1 - FO PIGTAIL (12SM)  
 4 - 12/C #12  
 4' RSC TO HH-1 WITH:  
 9 - 2/C #14  
 5 - 3/C #12  
 2 - 3/C #20

**2** PA100 POLE FOUNDATION  
 TYPE PA100-A-45-D40-9 (DAVIT AT 350 DEG)  
 2 - ONE WAY SIGNALS (OVERHEAD)  
 (0' AND 18' FROM END OF MAST ARM)  
 ONE WAY EVP DETECTOR AND LIGHT  
 (6' FROM END OF MAST ARM)  
 TYPE IOB POLE MOUNTED AT 90 & 180 DEG  
 LUMINAIRE - 250 WATT H.P.S.  
 2 - CD PED HEADS  
 3' RSC TO HH 4 WITH:  
 2 - 12/C #12  
 1 - 3/C #12  
 1 - 3/C #12 (LUM)  
 1 - 3/C #20

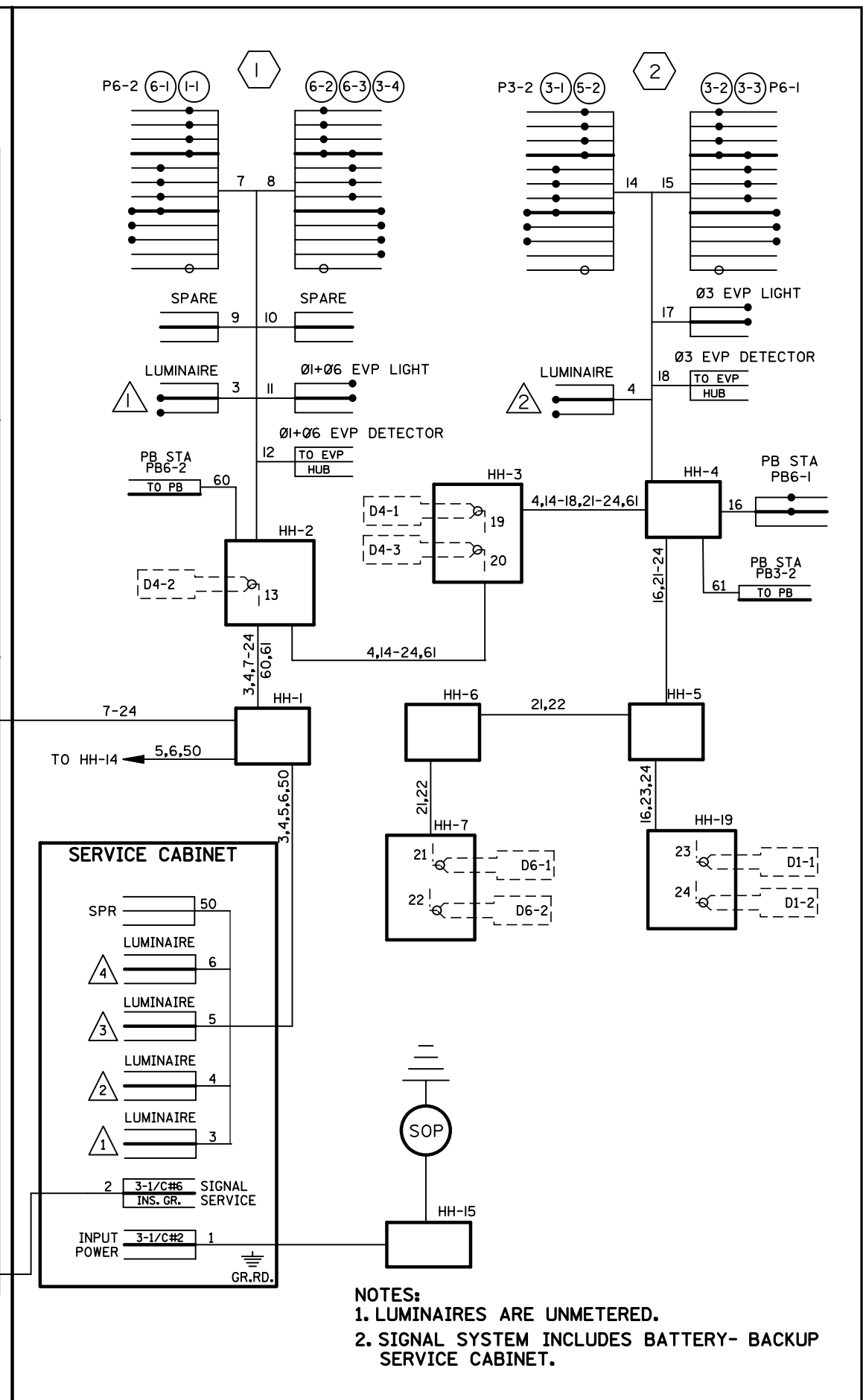
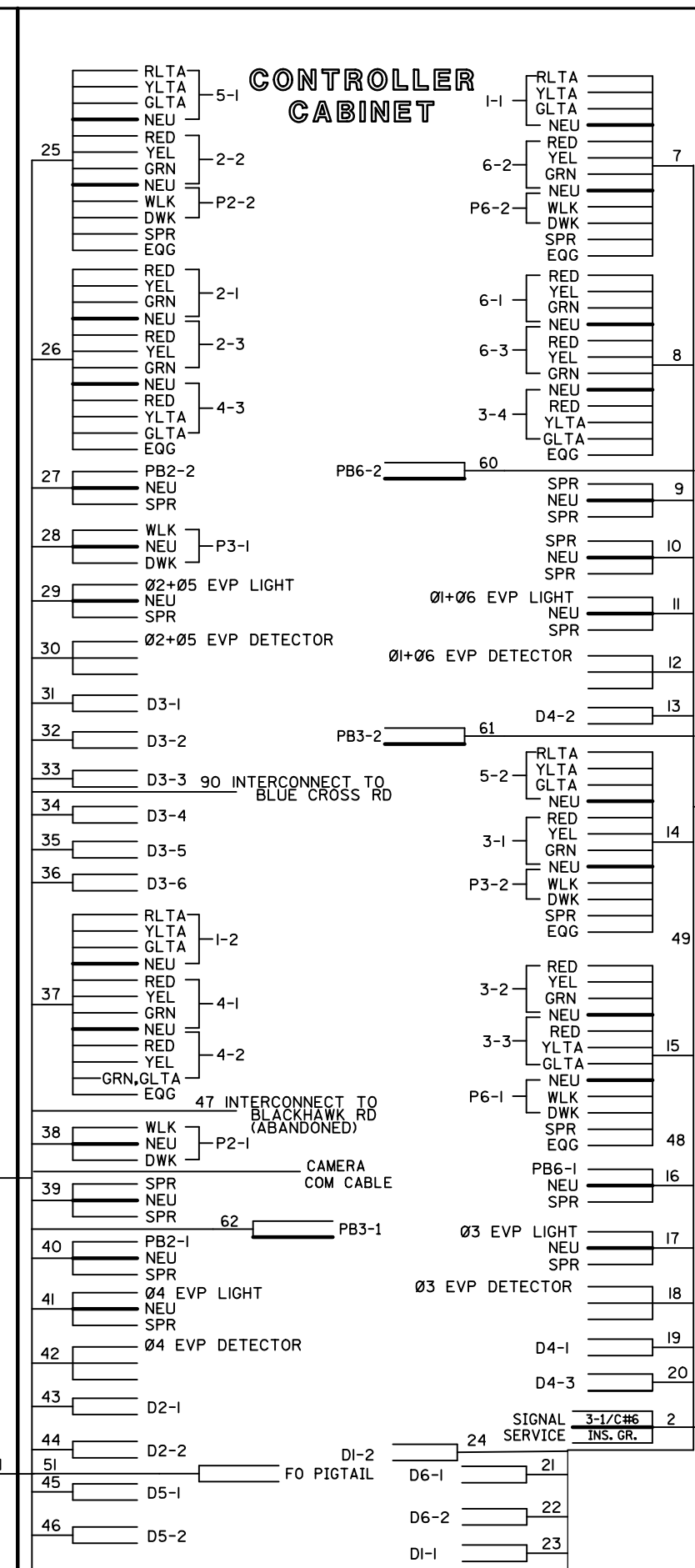
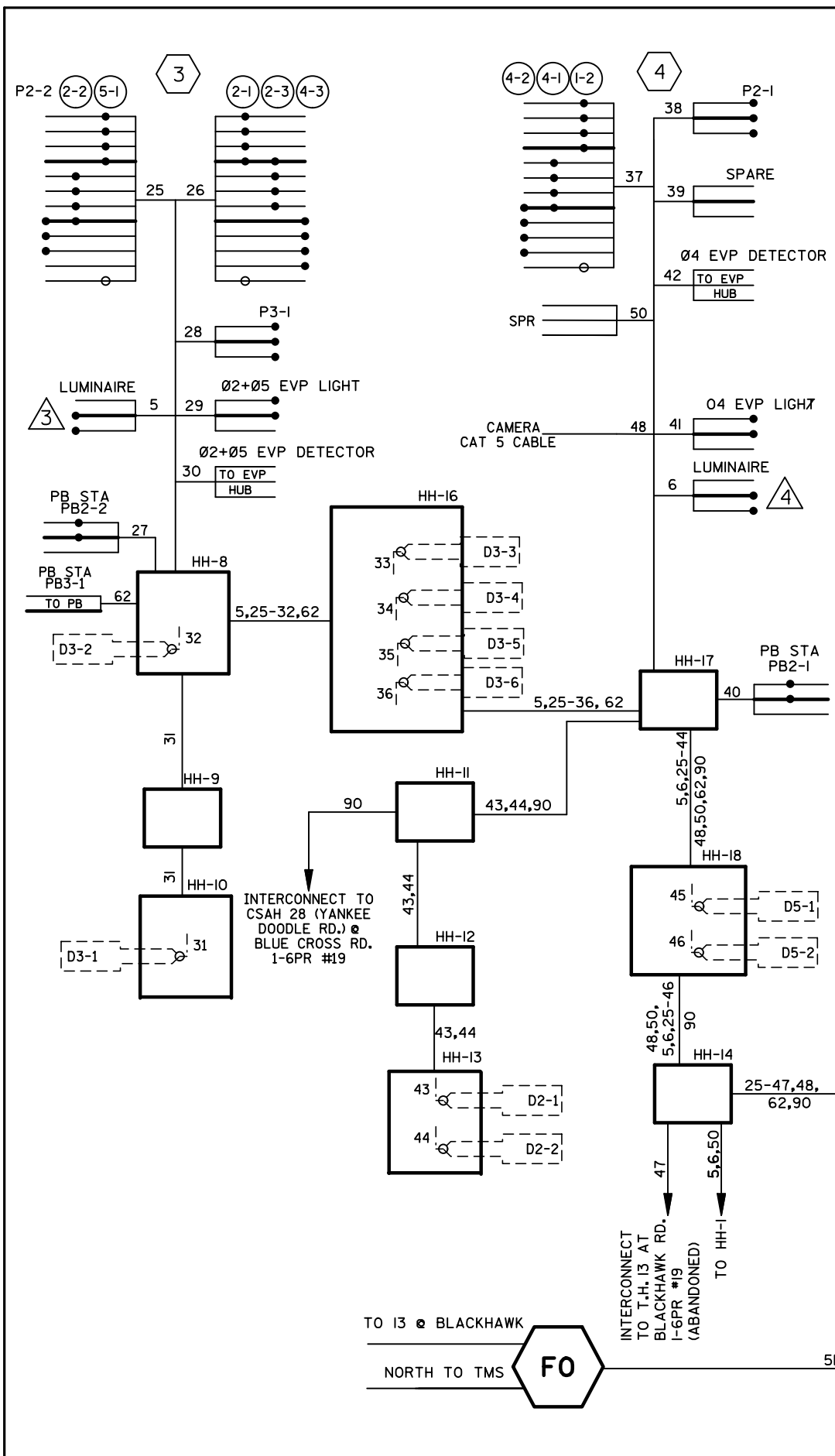
**3** PA100 POLE FOUNDATION  
 TYPE PA100-A-45-D40-9 (DAVIT AT 350 DEG)  
 3 - ONE WAY SIGNALS (OVERHEAD)  
 (0', 12' AND 24' FROM END OF MAST ARM)  
 ONE WAY EVP DETECTOR AND LIGHT  
 (6' FROM END OF MAST ARM)  
 TYPE IOB POLE MOUNTED AT 90 & 180 DEG  
 LUMINAIRE - 250 WATT H.P.S.  
 2 - CD PED HEADS  
 3' RSC TO HH 8 WITH:  
 2 - 12/C #12  
 1 - 3/C #12 (LUM)  
 1 - 3/C #20

INTERCONNECT TO  
 CSAH 28 (YANKEE  
 DOODLE RD.) AT  
 BLUE CROSS RD.  
 2" RSC  
 1-6PR #19

BY	DATE	REVISIONS	SYSTEM ID: 1735111	T.E.	MATCH LINES AND POLE NOTES	S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
EJA	02/07/14	AS-BUILT OF SP 1901-168 (APS)	METER ADDRESS: 3401 SIBLEY MEMORIAL HWY		T.H. 13 AT C.S.A.H. 28	CERTIFIED BY _____			
SJK	09/05/18	AS-BUILT PLAN SP 7001-103	MASTER ID: 20301	T.E.	(YANKEE DOODLE RD.)	LICENSED PROFESSIONAL ENGINEER	LIC. NO. _____		DATE: _____
					IN EAGAN, DAKOTA COUNTY	STATE PROJ. NO.	(T.H.	SHEET NO.	2 OF 3 SHEETS

PLOTTED/REVISED: 2-MAY-2024

DISTRICT #: Metro  
PLOT NAME: TT735111.sgl  
PATH & FILENAME: Projects\DM\_POS\013\0000\Traffic\Signals\03.03\_(28)YANKEE DOODLE RD-T735111-T735111.sgl.dgn

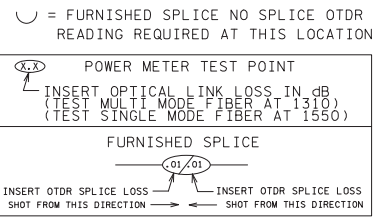


BY	DATE	REVISIONS
EJA	04/7/14	AS-BUILT OF SP 1901-168 (APS)
SJK	09/05/18	AS-BUILT PLAN SP 7001-103
SJK	5/2/24	REMOVED BATTERY BACKUP

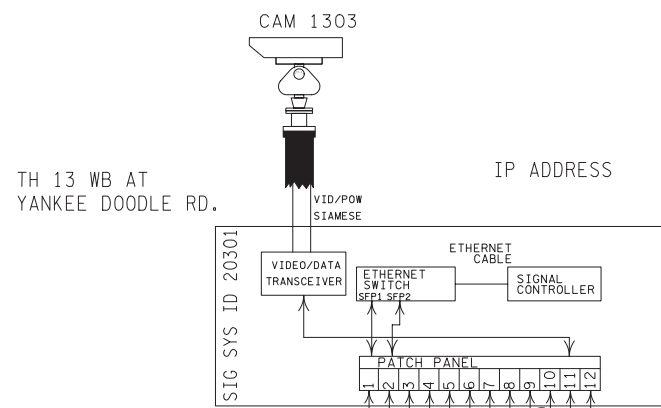
SYSTEM ID: 1735111	T.E.
METER ADDRESS: 3401 SIBLEY MEMORIAL HWY	
MASTER ID: 20301	T.E.

**FIELD WIRING DIAGRAM**  
**T.H. 13 AT C.S.A.H. 28**  
**(YANKEE DOODLE RD.)**  
**IN EAGAN, DAKOTA COUNTY**

S.A.P. NO.	DRAWN BY:	CKD BY:	DATE:
CERTIFIED BY _____	LICENSED PROFESSIONAL ENGINEER	LIC. NO. _____	DATE: _____
STATE PROJ.NO.	(T.H.)	SHEET NO. 3 OF 3 SHEETS	



INDEX OF REFRACTION



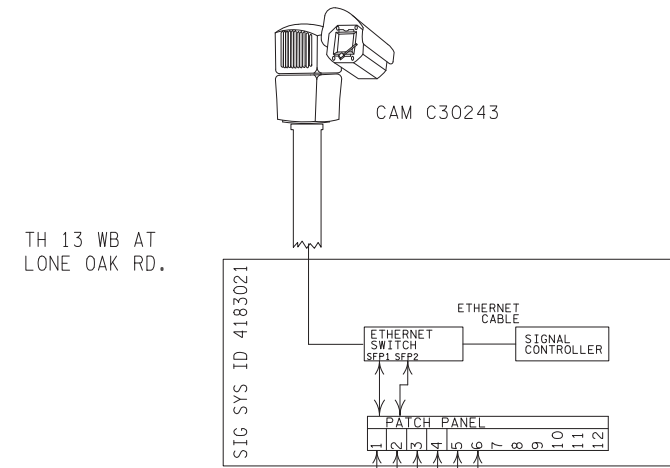
TH 13 WB AT YANKEE DOODLE RD.

IP ADDRESS

SIG SYS ID 20301

PIGTAIL ID#: CAM1303

94 m B  
 41 m E



TH 13 WB AT LONE OAK RD.

SIG SYS ID 4183021

PIGTAIL ID#: SIG 4183021

PIGTAIL OTRD LENGTH  
 km

TRUNK ID# 13-18

TRUNK ID# 13-16

TRUNK ID# 13-17

- 1 CAMERA 1305 BU
- 2 CAMERA 1304 BU
- 3 CAMERA 1303
- 4
- 5
- 6
- 7
- 8
- 9 CAM TO CAM
- 10 DATALINK BACKUP SERIAL RING
- 11 DATALINK CABINET SERIAL RING
- 12
- 13 ETHERNET RING-TMC
- 14 ETHERNET RING-SIGNALS
- 15 ETHERNET RING-SIGNALS BACKUP
- 16 DTX 38 TX-B\*
- 17
- 18
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FIBER OPTIC CABLE MARKINGS @  
 SPlice ENCLOSURE 7024m  
 VAULT ENTRY 7058m

FIBER OPTIC CABLE MARKINGS @  
 SPlice ENCLOSURE 3357m  
 VAULT ENTRY 3389m

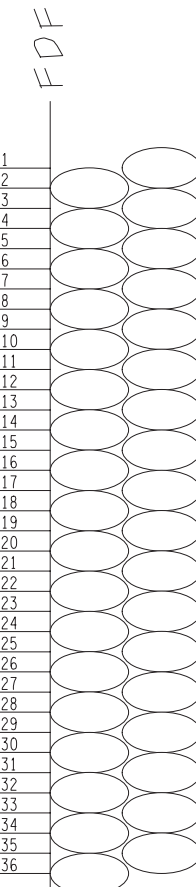
FIBER OPTIC CABLE MARKINGS @  
 SPlice ENCLOSURE 5274m  
 VAULT ENTRY 5231m

FIBER OPTIC CABLE MARKINGS @  
 SPlice ENCLOSURE 7006m  
 VAULT ENTRY 6960m

OTDR LENGTH  
 TO SHELTER  
 OTDR LENGTH  
 TO SHELTER

SPLICE VAULT TH 13YANKEE DOODLE

SPLICE VAULT TH 13LONE OAK



SHELTER TH13 AT TH494