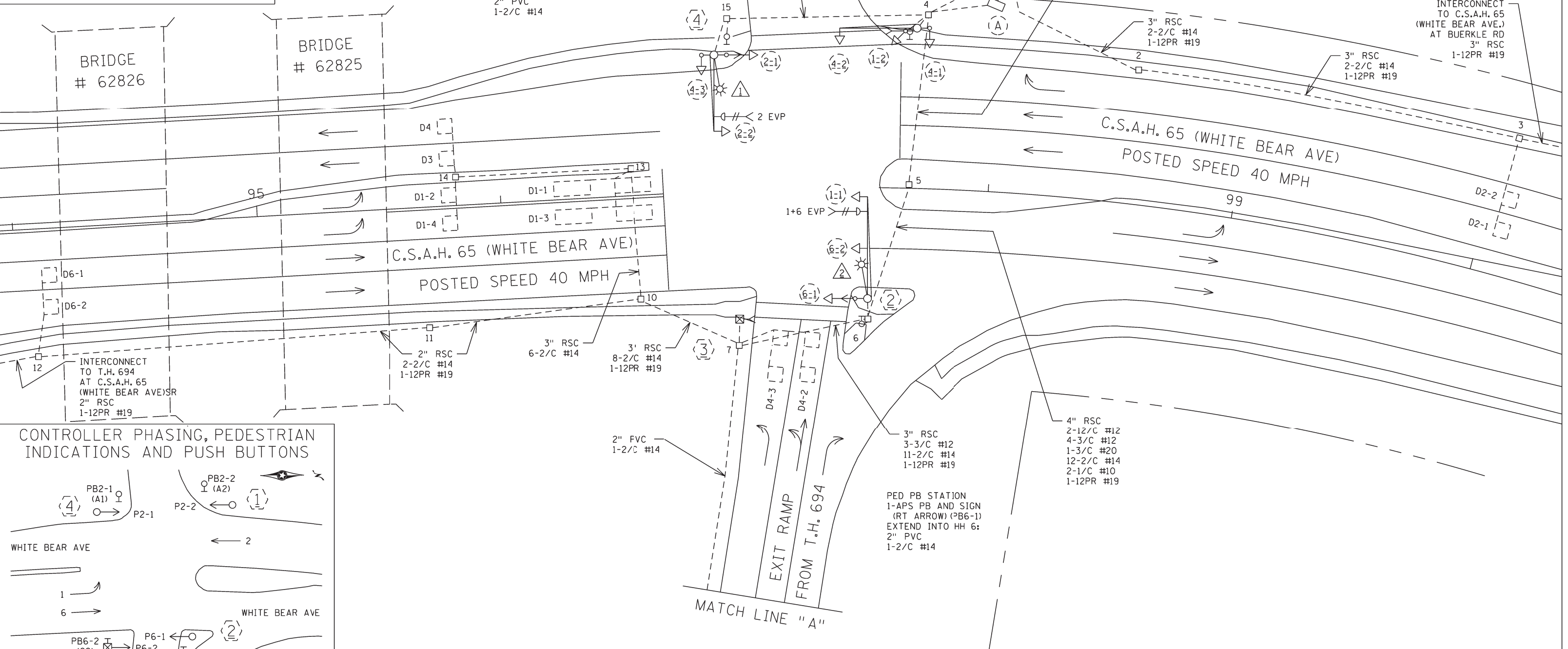
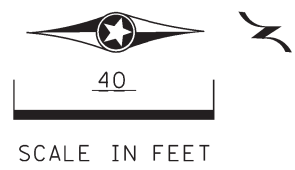


NUMBER	SIZE (FT)	LOCATION
D1-1	2-6x15	5 & 30
D1-2, D1-4	6x6	85
D1-3	2-6x15	5 & 30
D2-1, D2-2	6x6	250
D4-1	2-6x6	250
D4-2	2-6x6	5 & 20
D4-3	2-6x6	5 & 20
D6-1, D6-2	6x6	250
D3, D4	6x6	-180

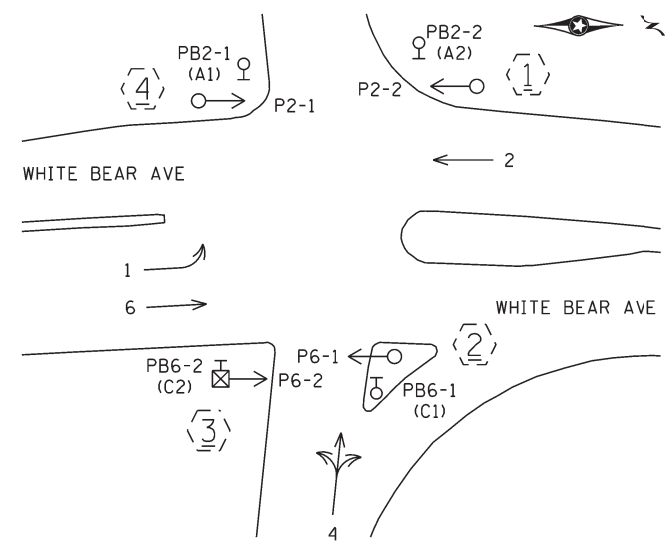
-LOCATION: DISTANCE FROM CROSSWALK/STOP BAR IN FEET

SIGNAL FACE CHART			
FACE	R	Y	G
2-1, 2-2	←	←	←
2-3, 2-4	○	○	○
6-1, 6-2	○	○	○
8-1, 8-2, 8-3, 8-4	○	○	○

-ALL SIGNAL INDICATIONS ARE 12"
-ALL RED CIRCULAR AND RED ARROW INDICATIONS ARE LED
-ALL SIGNAL HEADS HAVE BACKGROUND SHIELDS



CONTROLLER PHASING, PEDESTRIAN INDICATIONS AND PUSH BUTTONS



PEDESTRIAN PUSH BUTTONS SHALL BE LOCATED AS SHOWN ABOVE

SIGNAL SYSTEM OPERATION

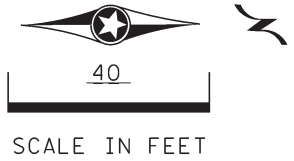
- THE SIGNAL SYSTEM FLASH MODE IS ALL RED.
- NORMAL OPERATION IS 4 PHASE, WITH PHASE 1 BEING A PROTECTED LEFT TURN PHASE.
- PHASES 2 AND 6 SHALL BE ON VEHICLE RECALL.

BY	DATE	REVISIONS
EJA	9-24-12	AS-BUILT OF SP 6286-56
EJA	12-30-15	CORRECTED LANE ARROWS

SYSTEM ID: 21745	T.E.
METER ADDRESS:	
MASTER ID:	T.E.

INTERSECTION LAYOUT
T.H. 694 AT C.S.A.H. 65 (WHITE BEAR AVE)
NORTH RAMP
IN WHITE BEAR LAKE, RAMSEY COUNTY

S.A.P. NO.	DRAWN BY: GDS	CKD BY: BIJ	DATE: 05-16-11
CERTIFIED BY: <i>Michael P. Subrany</i>	LIC. NO. 19863	DATE: 02-10-12	
STATE PROJ. NO. (T.H. 694)		SHEET NO. 1 OF 4 SHEETS	



(4) PA90 POLE FOUNDATION
 TYPE PA90-A-30-T40-10
 1-ONE WAY SIGNAL OVERHEAD
 TYPE 10B POLE MOUNTED AT 270 DEG
 TYPE 10A POLE MOUNTED AT 90 DEG
 1-C.D.PED IND
 1-ONE WAY EVP DETECTOR AND
 CONFIRMATORY LIGHT (PHASE 2)
 LUMINAIRE-200W HPS
 1-R9-30 SIGN (18" x 18") (NO PED)
 FACING POLE 3
 EXTEND INTO HH 15:
 3" RSC
 1-12/C #12
 2-3/C #12
 1-3/C #20
 2-1/C #10

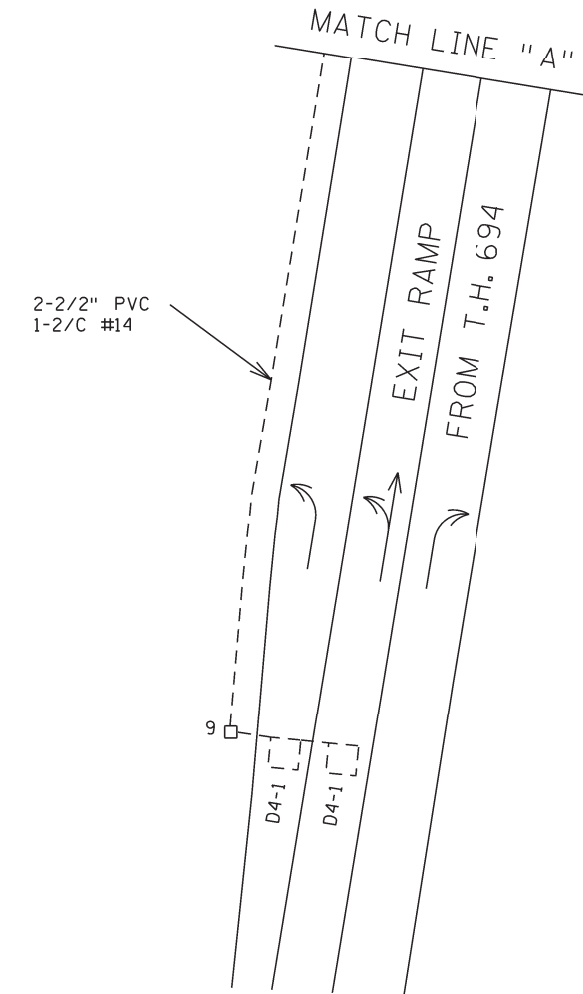
(1) PA90 POLE FOUNDATION
 TYPE PA90-A-30
 1-ONE WAY SIGNAL CVERHEAD
 TYPE 10B POLE MOUNTED AT 0 DEG
 TYPE 10A POLE MOUNTED AT 180 DEG
 1-C.D.PED IND
 1-ONE WAY EVP DETECTOR AND
 CONFIRMATORY LIGHT (PHASE 4)
 1-R9-30 SIGN (18" x 18") (NO PED)
 FACING POLE 2
 EXTEND INTO HH 4:
 3" RSC
 1-12/C #12
 3-3/C #12
 1-3/C #20

(3) PEDESTAL FOUNDATION
 PEDESTAL POLE AND BASE
 TYPE 4A
 1-C.D.PED IND
 1-APS PB AND SIGN
 (LT ARROW) (PB6-2)
 1-R9-30 SIGN (18" x 18") (NO PED)
 FACING POLE 4
 EXTEND INTO HH 7:
 3" RSC
 2-3/C #12

(2) PA100 POLE FOUNDATION
 TYPE PA100-A-40-D40-9
 2-ONE WAY SIGNAL OVERHEAD
 (0' AND 23' FROM END OF MAST ARM)
 TYPE 10B POLE MOUNTED AT 270 DEG
 1-C.D.PED IND
 1-ONE WAY EVP DETECTOR AND
 CONFIRMATORY LIGHT (PHASE 1+6)
 LUMINAIRE-200W HPS
 1-R9-30 SIGN (18" x 18") (NO PED)
 FACING POLE 1
 EXTEND INTO HH 6:
 3" RSC
 2-12/C #12
 2-3/C #12
 1-3/C #20
 2-1/C #10

(A) EQUIPMENT PAD
 CONTROLLER & CABINET
 4" IMC INTO HH 4:
 4-12/C #12
 10-3/C #12
 3-3/C #20
 14-2/C #14
 1-12PR #19
 CONTROLLER CABINET TO HH 1:
 3" IMC
 2-1/C #6
 1-1/C # 6 BR. GR.
 1-2/C #14
 CONTROLLER CABINET TO HH 1:
 2" IMC
 2-2/C #14
 1-12PR #19
 HH 1 TO HH 4:
 2" IMC
 4-1/C #10

(B) S.O.P. - WOOD POLE (BY XCEL)
 1 1/4" RSC RISER WITH WEATHERHEAD
 EXTEND 2" RSC INTO HH 1 WITH:
 2-1/C #6
 1-1/C #6 BR. GR.
 4-1/C #10



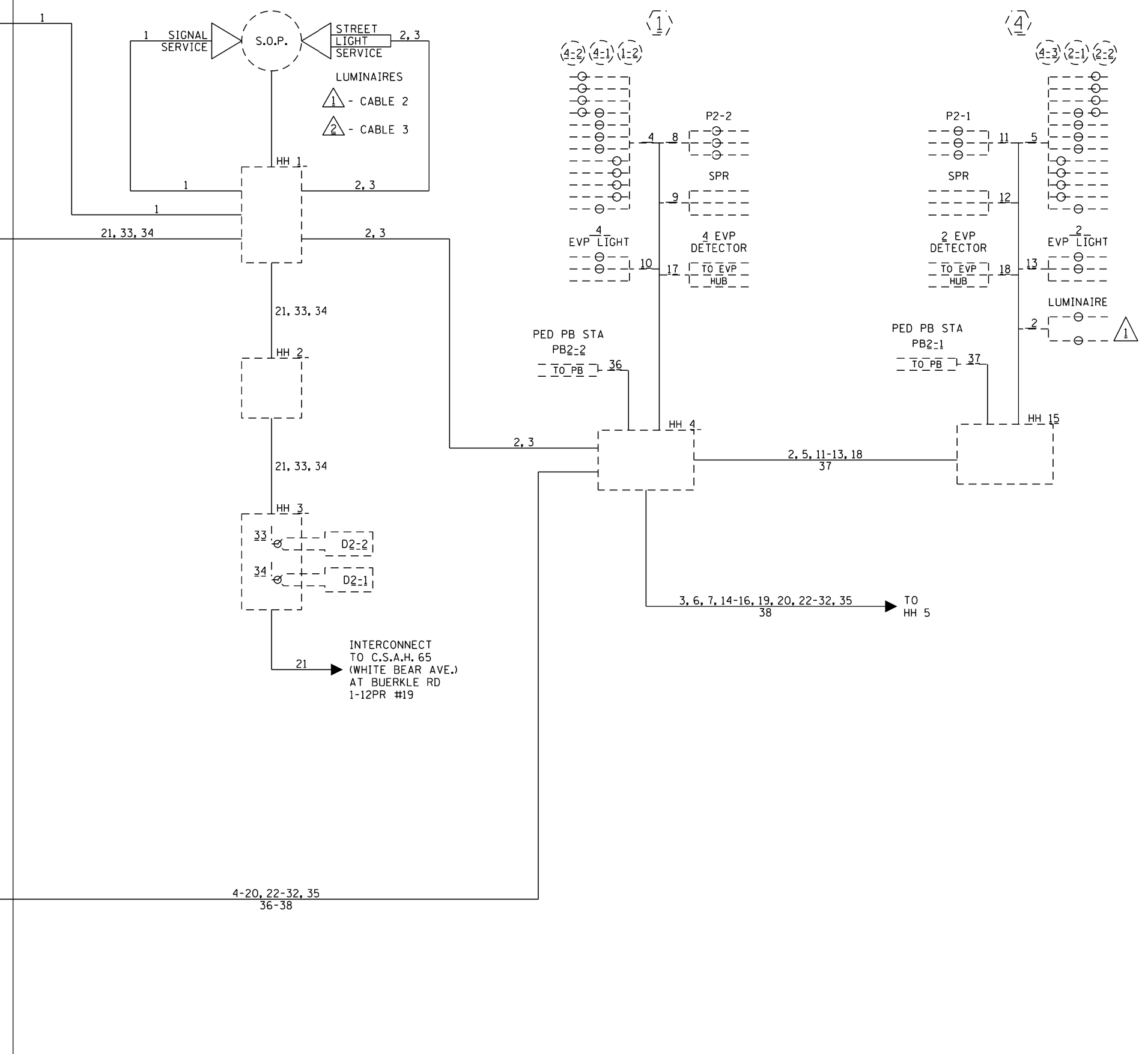
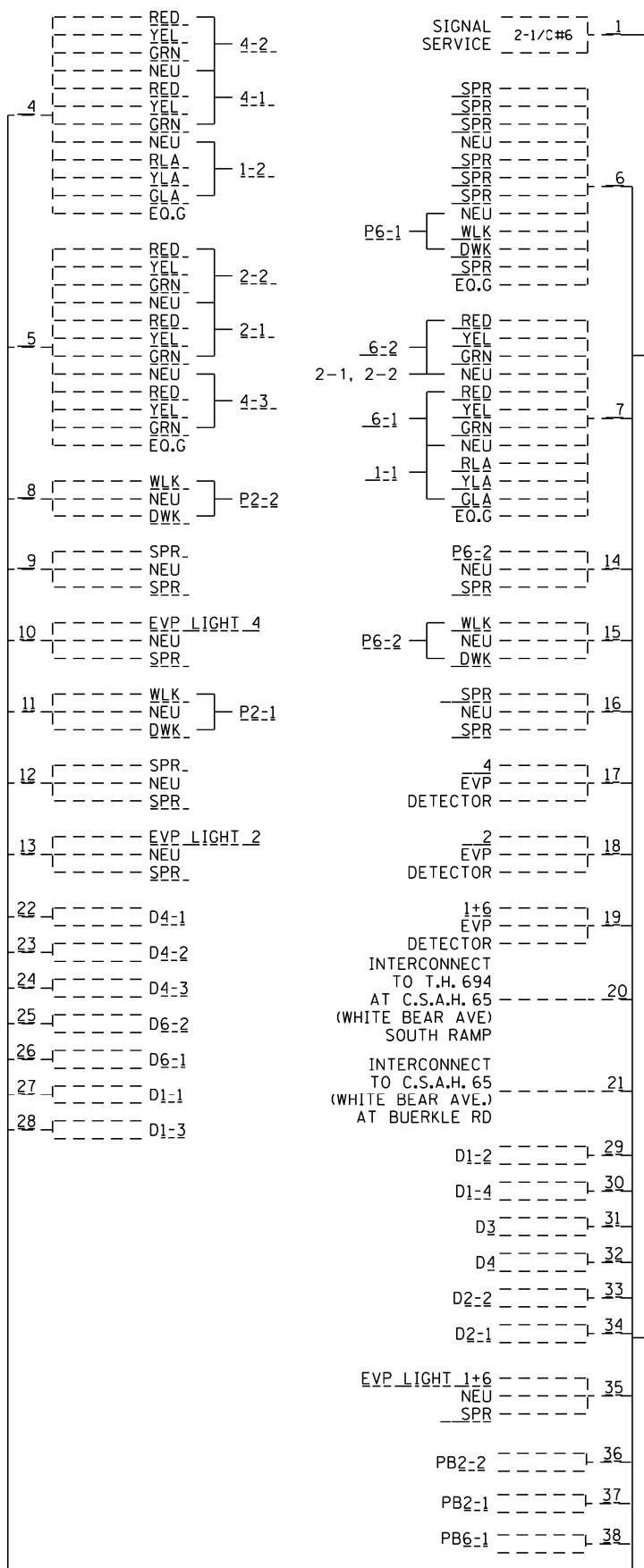
BY	DATE	REVISIONS
EJA	9-24-12	AS-BUILT OF SP 6286-56

SYSTEM ID: 21745	T.E.
METER ADDRESS: _____	
MASTER ID: _____	T.E.

MATCH LINE LAYOUTS AND NOTES
 T.H. 694 AT C.S.A.H. 65 (WHITE BEAR AVE)
 NORTH RAMP
 IN WHITE BEAR LAKE, RAMSEY COUNTY

S.A.P. NO. _____	DRAWN BY: GDS	CKD BY: BIJ	DATE: 05-16-11
CERTIFIED BY: <i>Michael P. Sulway</i>	LIC. NO. 19863	DATE: 02-10-12	
STATE PROJ. NO. (T.H. 694) _____		SHEET NO. 2 OF 4 SHEETS	

CONTROLLER CABINET



CONDUCTOR COLOR CODING

R		R OR O
O	3/C#20	WH OR YEL
BL		BLK OR BL
WH		R
R/BLK	3/C#12	WH
O/BLK		BLK
BL/BLK		BLK
WH/BLK		BLK
BLK	2-1/C#6	BLK
BLK/WH	2-1/C#6	WH
G/BLK		WH
G		BLK
12PR#19	2/C#14	CLR

NOTE: ALL TERMINAL BLOCK CONNECTIONS SHALL BE ARRANGED AS SPECIFIED ABOVE

BY	DATE	REVISIONS
EJA	9-24-12	AS-BUILT OF SP 6286-56

SYSTEM ID: 21745 T.E. _____
 METER ADDRESS: _____
 MASTER ID: _____ T.E. _____

FIELD WIRING DIAGRAM (1 OF 2)
 T.H. 694 AT C.S.A.H. 65 (WHITE BEAR AVE)
 NORTH RAMP
 IN WHITE BEAR LAKE, RAMSEY COUNTY

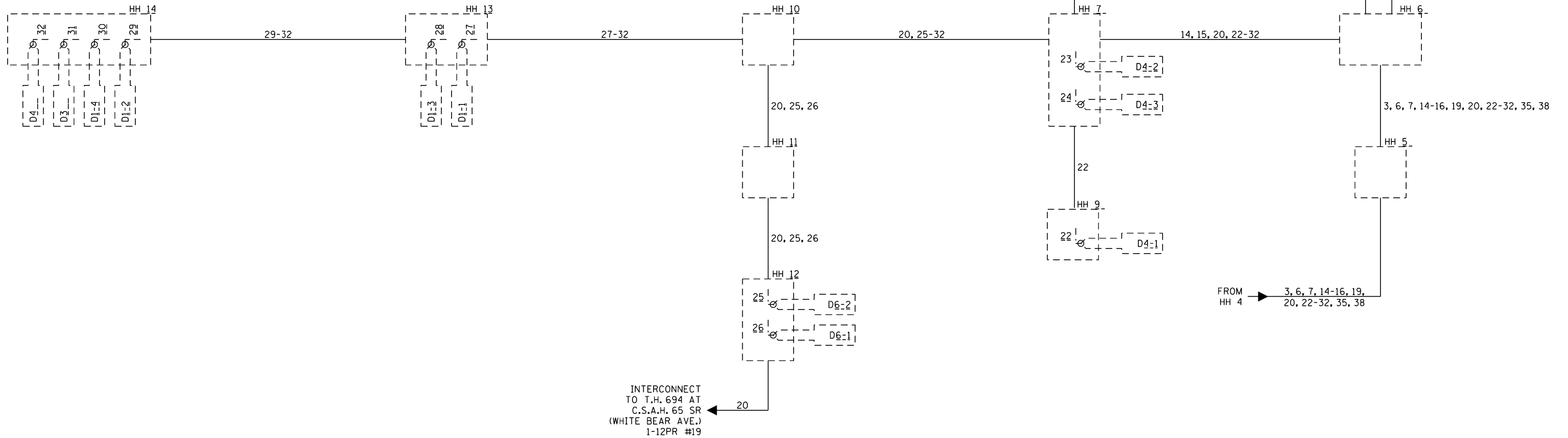
S.A.P. NO. _____
 CERTIFIED BY *Michael P. Lubinsky*
 LICENSED PROFESSIONAL ENGINEER

DRAWN BY: GDS CKD BY: BIJ DATE: 05-16-11
 LIC. NO. 19863 DATE: 02-10-12
 STATE PROJ. NO. (T.H. 694) _____ SHEET NO. 3 OF 4 SHEETS

CONDUCTOR COLOR CODING

R		R OR O
O	3/C#20	WH OR YEL
BL		BLK OR BL
WH		
R/BLK		R
O/BLK	3/C#12	WH
BL/BLK		BLK
WH/BLK		
BLK		BLK
BLK/WH	2-1/C#6	
G/BLK	2-1/C10	WH
G		
12PR#19	2/C#14	BLK CLR

NOTE: ALL TERMINAL BLOCK CONNECTIONS SHALL BE ARRANGED AS SPECIFIED ABOVE



BY	DATE	REVISIONS
EJA	9-24-12	AS-BUILT OF SP 6286-56

SYSTEM ID: 21745	T.E.
METER ADDRESS:	
MASTER ID:	T.E.

FIELD WIRING DIAGRAM (2 OF 2)
 T.H. 694 (NR) AT C.S.A.H. 65 (WHITE BEAR AVE.)
 NORTH RAMP
 IN MWHITE BEAR LAKE, RAMSEY COUNTY

S.A.P. NO.	DRAWN BY: GDS	CKD BY: BIJ	DATE: 05-16-11
CERTIFIED BY: <i>Michael P. Lubinsky</i>	LIC. NO. 19863	DATE: 02-10-12	
STATE PROJ. NO. (T.H. 694)	SHEET NO. 4 OF 4 SHEETS		