

FOUNDATION PLACEMENT SKETCH  
NOT TO SCALE

**NOTES:**

1. ALL WIRING IN THE BUNGALOW IS #16 AWG FLEX UNLESS OTHERWISE NOTED.
2. ALL CROSSING CONTROL EQUIPMENT IS DESIGNED TO PROVIDE A MINIMUM WARNING TIME OF 20 SECONDS AT THE MAXIMUM AUTHORIZED TRAIN SPEED FOR EACH MAIN TRACK APPROACH.
3. CROSSING APPROACHES WERE LENGTHENED 10 SECONDS TO COMPENSATE FOR ACCELERATING TRAINS AND BALLAST CHANGES.
4. CROSSING APPROACHES WERE LENGTHENED 5 SECONDS FOR EQUIPMENT REACTION TIME.

**LEGEND**

- ① TRACK ARRESTER
- ② EQUALIZER
- ③ LINE ARRESTER
- ⚠ NO 6 AWG THNN/THWN FLEX WIRE WITH RED SHEATH (B12)
- ⚠ NO 6 AWG THNN/THWN FLEX WIRE WITH BLACK SHEATH (N12)
- ⚠ NO 6 AWG THNN/THWN FLEX WIRE WITH GREEN SHEATH (SAFETY GROUND)
- ⊕ TWISTED WIRE TWO TURNS PER FOOT

<i>The ALASKA RAILROAD CORPORATION</i>	
SIGNAL ENGINEERING	P.O. BOX 107500, ANCHORAGE, AK 99510-7500
CHERI LAKE ROAD RAILROAD-HIGHWAY GRADE CROSSING WARNING SYSTEM DOT 868325J	HOUSTON, AK M.P. 171.26
DRAWN: <i>DSD</i> DATE: 10-11-02	DWG NO. <b>017128X</b>
1 SHEET OF 10	

LAT: 61.605	<b>REVISIONS</b>
LONG: -149.756	
DESIGNED 10-11-02 NEW CROSSING	
DSD/MAT SEQ #	

IN SERVICE DATE: 07-21-16 UPDATED	IN SERVICE DATE: 12-03-13 UPDATED LAMPS TO L.E.D.	IN SERVICE DATE: 05-17-11 UPDATED	DESIGNED 10-11-02 NEW CROSSING
COR: TRS      CHK:	COR: TAM      CHK:	COR: FWK      CHK:	

**PROGRAM INFORMATION**  
LEVEL "E" SOFTWARE OR LATER

FREQUENCY	285 HZ
APPLICATION	BI
TRANSMIT LEVEL	* MAX
MODE of OPERATION	PRED
WARNING TIME	30
APP DISTANCE-SELECTED	2567'
APP DISTANCE-CALCULATED	* ( )
UAX2/ENA PU DELAY	0
ISLAND DISTANCE	*
SLAVING	MASTER
PASSWORD	DISABLED
DATA RECORDER	INSTALLED

**FUNCTION INFORMATION**

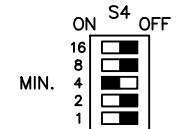
SWITCH TO MS/EZ LEVEL	20
TRANSFER DELAY MS>GCP	0
PRIME PRED OFFSET	0
PRIME PICKUP DELAY	15
COMPENSATION VALUE	* ( )
NUMBER OF TRACK WIRES	4

\* FIELD ADJUSTMENTS PER MANUFACTURER'S INSTRUCTION MANUAL

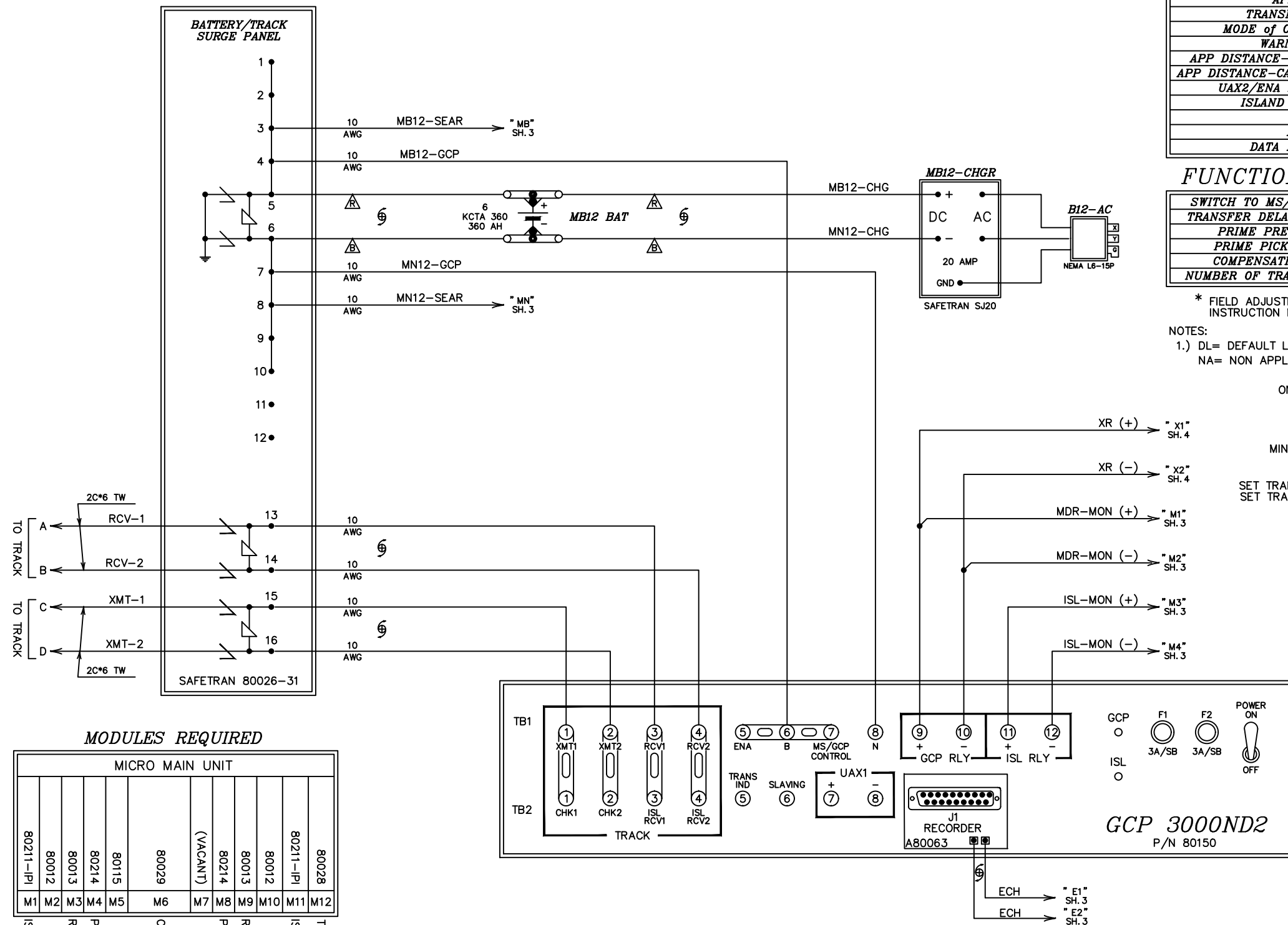
NOTES:

- 1.) DL= DEFAULT LEVEL
- NA= NON APPLICABLE

ON MODULE 80028



SET TRANSFER SWITCH TO AUTO  
SET TRANSFER TIME FOR 4 MIN.



**MODULES REQUIRED**

MICRO MAIN UNIT											
80211-IP1	80012	80013	80014	80015	80029	(VACANT)	80214	80013	80012	80211-IP1	80028
M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
ISLAND #1 MODULE	RELAY DRIVE MODULE	PROCESSOR MODULE	CONTROL INTERFACE				RELAY DRIVE MODULE	PROCESSOR MODULE	ISLAND #1 MODULE	TRANSFER MODULE	

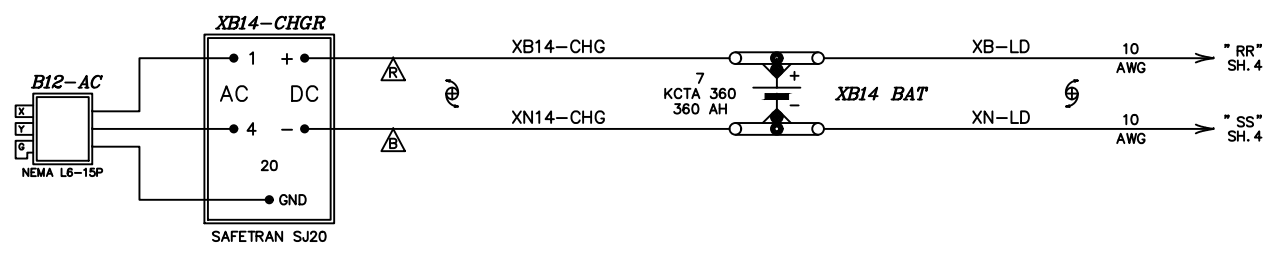
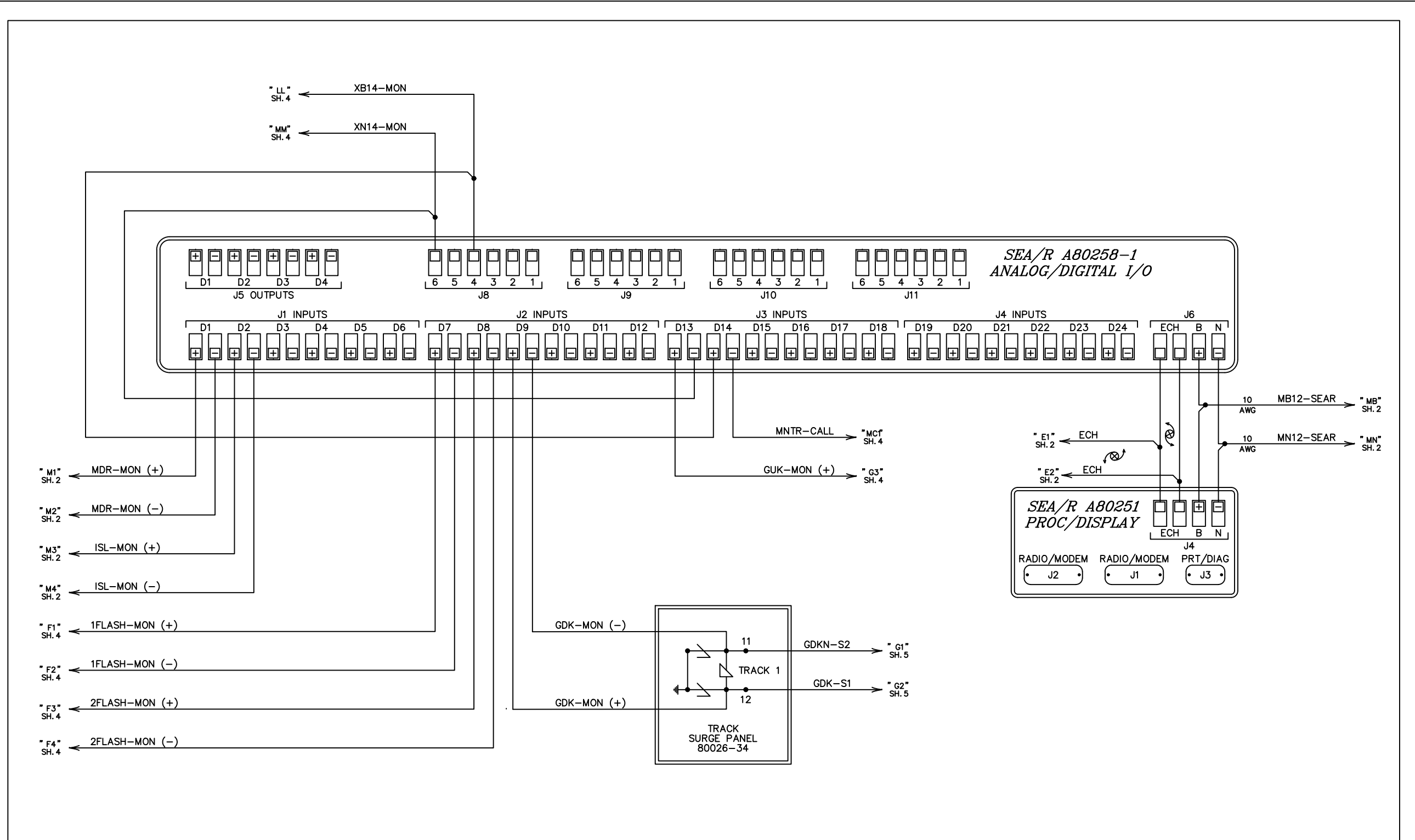
**GCP 3000**  
MICRO GCP/MS  
MODEL 3000ND2  
285 HZ BI-DIRECTIONAL

**GCP 3000ND2**  
P/N 80150

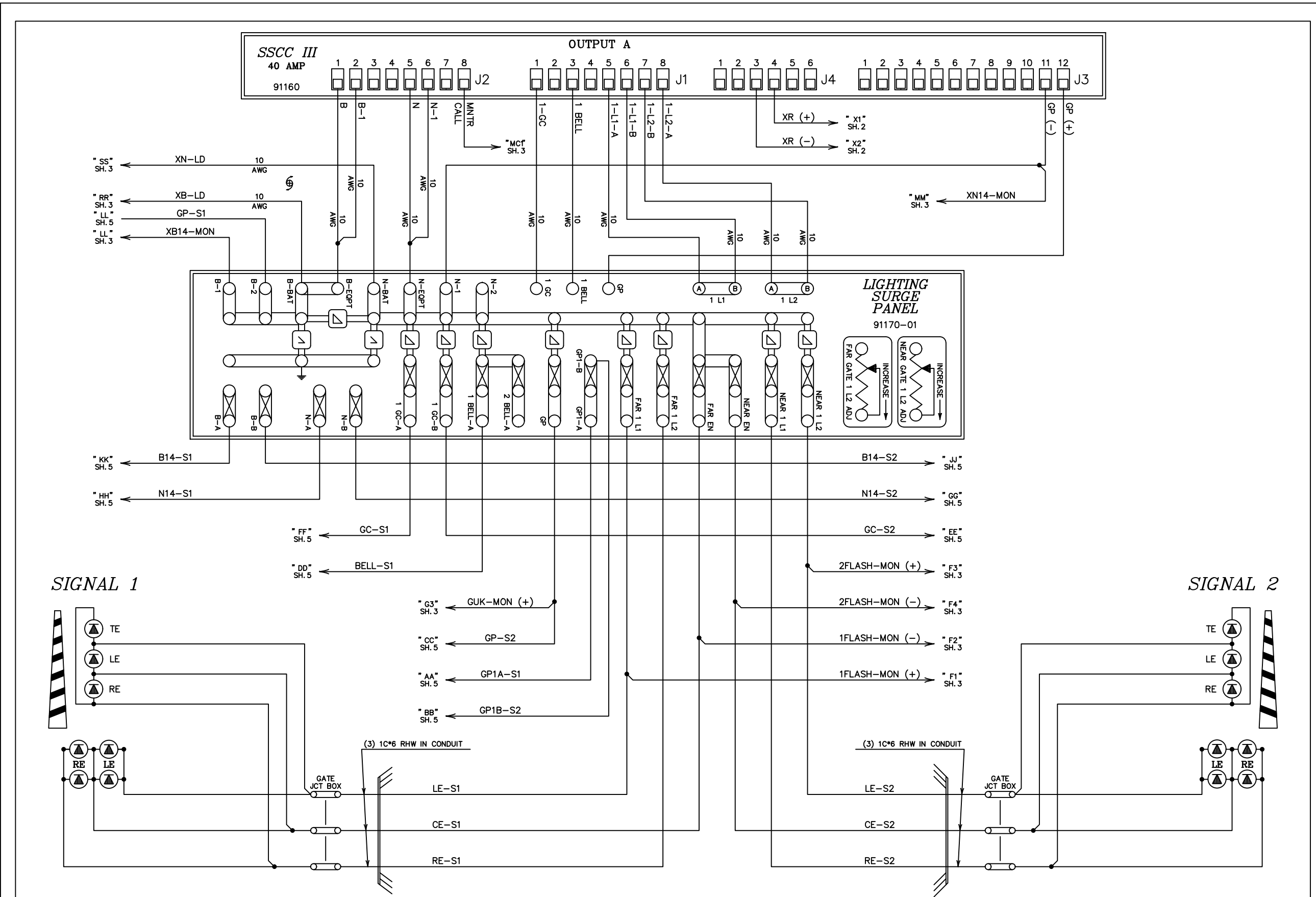
The ALASKA RAILROAD CORPORATION  
SIGNAL ENGINEERING P.O. BOX 107500, ANCHORAGE, AK 99510-7500

LAT: 61.605  
LONG: -149.756  
CHERI LAKE ROAD HOUSTON, AK  
RAILROAD-HIGHWAY GRADE CROSSING WARNING SYSTEM  
DOT 868325J M.P. 171.26

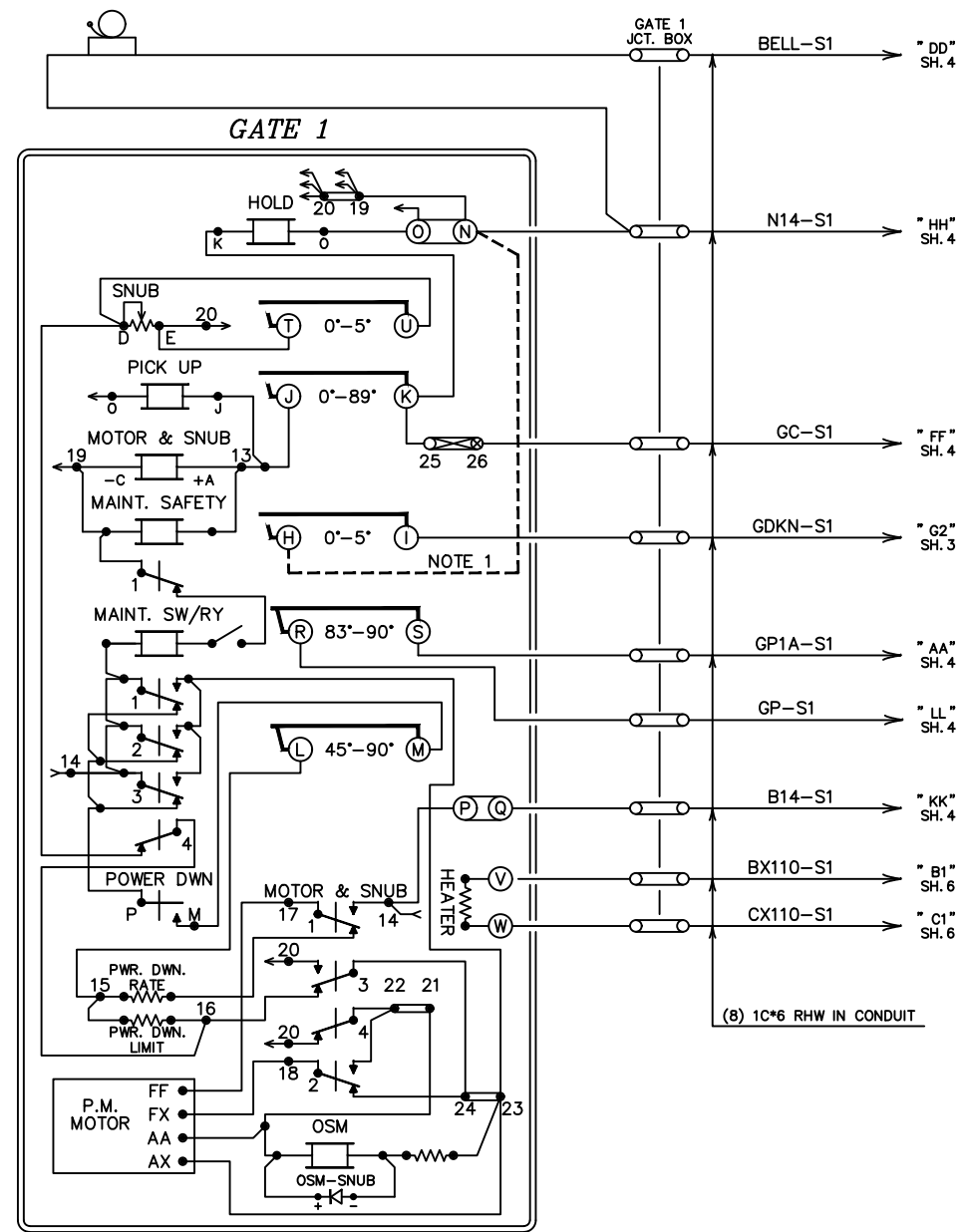
IN SERVICE DATE: 07-21-16 UPDATED	IN SERVICE DATE: 03-11-15 UPDATED	IN SERVICE DATE: 12-03-13 UPDATED LAMPS TO L.E.D.	IN SERVICE DATE: 05-17-11 UPDATED	AS-INSTALLED PER SHOP WIRE 05/15/03	DESIGNED NEW CROSSING 10-11-02	REVISIONS	DRAWN: DSD	DWG NO. 017128X	2 SHEET OF 10
COR: TRS	CHK: JAK	COR: TAM	CHK: FWK	DSD/DWH	SEQ #		DATE: 10-11-02		



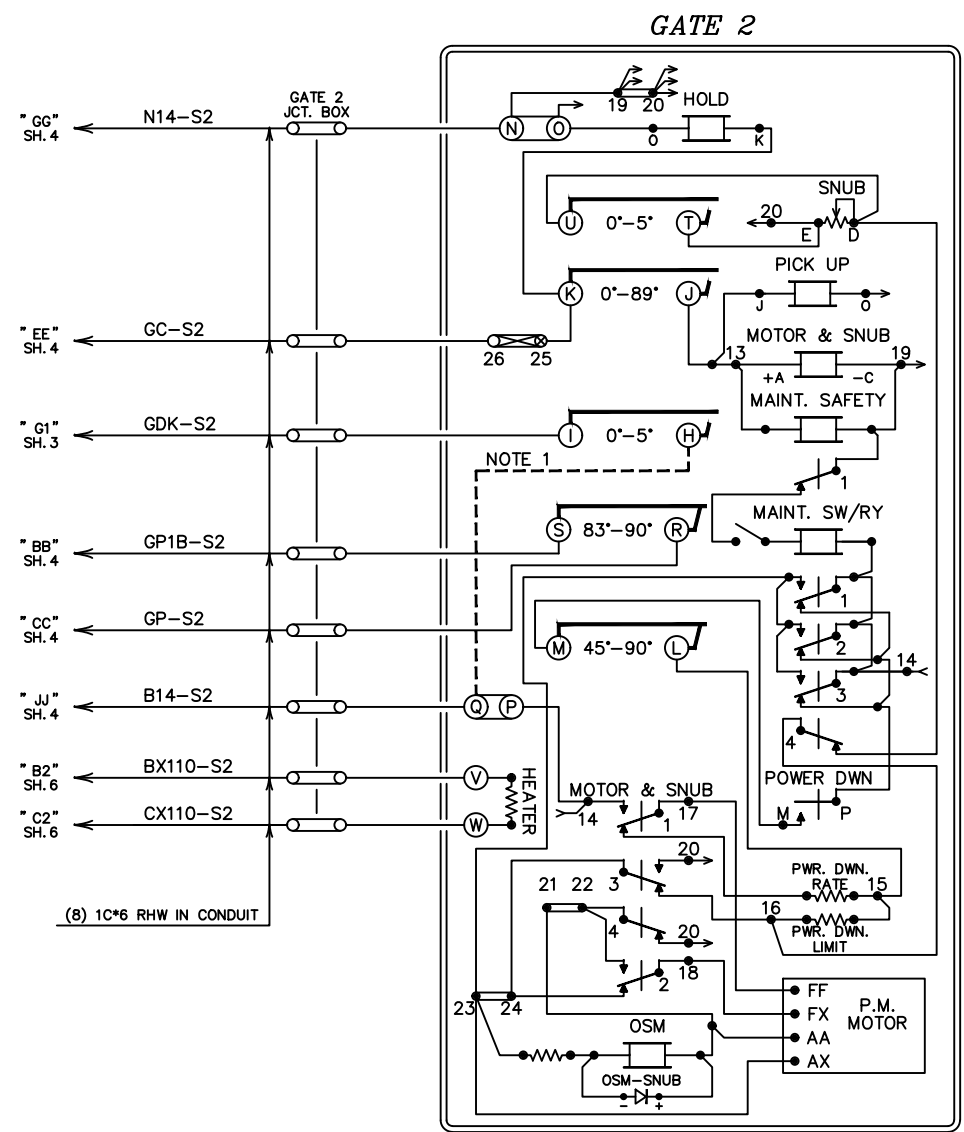
<b>The ALASKA RAILROAD CORPORATION</b> SIGNAL ENGINEERING		P.O. BOX 107500, ANCHORAGE, AK 99510-7500	
LAT: 61.605 LONG: -149.756		<b>CHERI LAKE ROAD</b> RAILROAD-HIGHWAY GRADE CROSSING WARNING SYSTEM DOT 868325J M.P. 171.26	
IN SERVICE DATE: 07-21-16 UPDATED COR: TRS CHK:	IN SERVICE DATE: 03-11-15 UPDATED COR: JAK CHK:	IN SERVICE DATE: 12-03-13 UPDATED LAMPS TO L.E.D. COR: TAM CHK:	IN SERVICE DATE: 05-17-11 UPDATED COR: FWK CHK:
AS-INSTALLED PER SHOP WIRE 05/15/03 DSD/DWH SEQ #	DESIGNED NEW CROSSING 10-11-02 DSD/MAT SEQ #	<b>REVISIONS</b>	DRAWN: <b>DSD</b> DATE: 10-11-02 DWG NO. <b>017128X</b>
			<b>3</b> SHEET OF <b>10</b>



<b>The ALASKA RAILROAD CORPORATION</b>									
SIGNAL ENGINEERING					P.O. BOX 107500, ANCHORAGE, AK 99510-7500				
LAT: 61.605					CHERI LAKE ROAD HOUSTON, AK				
LONG: -149.756					RAILROAD-HIGHWAY GRADE CROSSING WARNING SYSTEM				
DOT 868325J					M.P. 171.26				
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COR: TRS	CHK: JAK	COR: TAM	CHK: FWK	DSD/DWH	SEQ #		DATE: 10-11-02		
0171_28X01M_DWG - MAY 15, '03 - 11:21 AM - DENVER SIGNAL DESIGN, INC (JLH)									



SAFETRAN MODEL "S-40"



SAFETRAN MODEL "S-40"

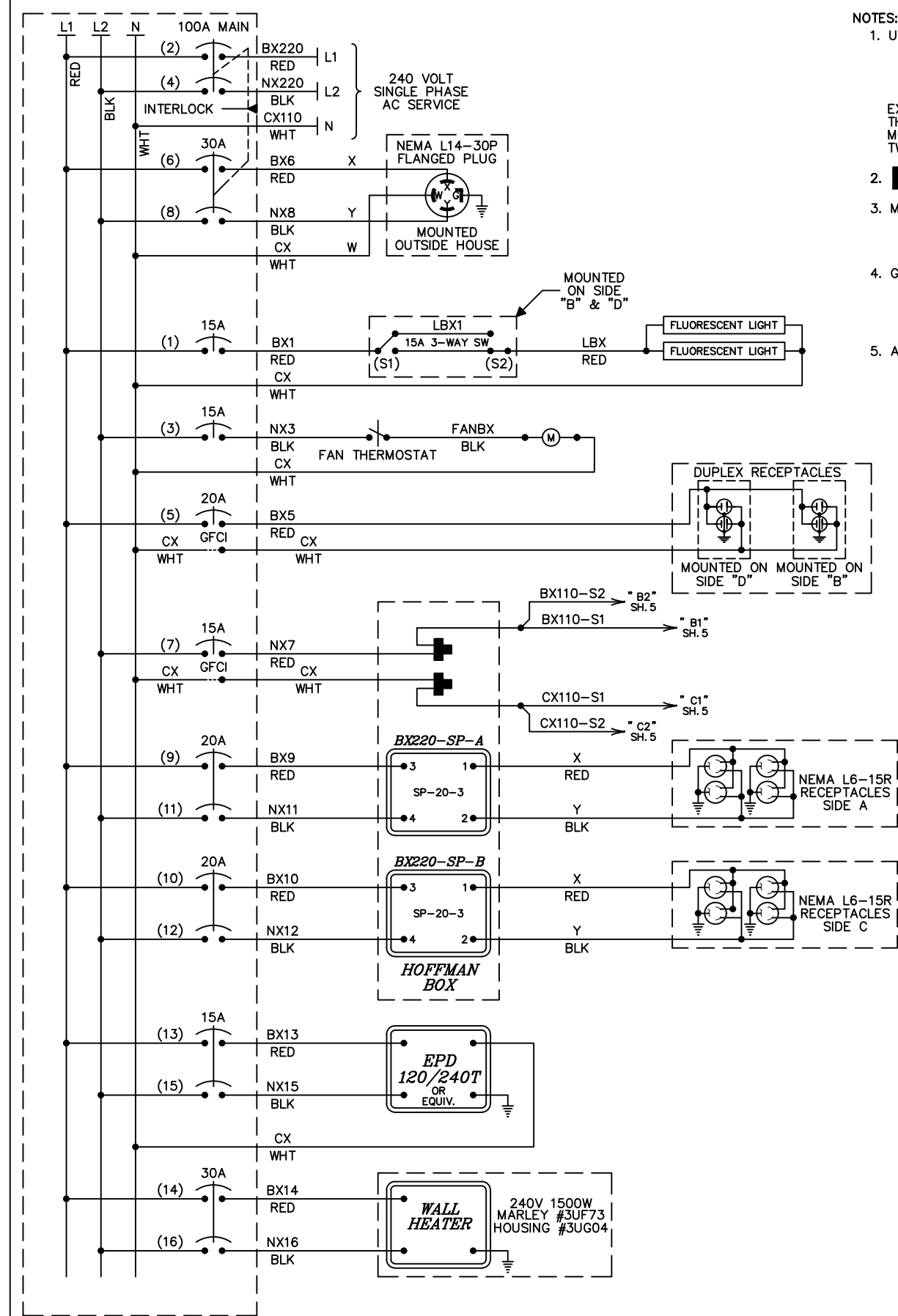
NOTES:  
1. JUMPERS MUST BE ADDED TO EACH GATE AS SHOWN.

LEGEND  
⑨ TWISTED WIRE TWO TURNS PER FOOT

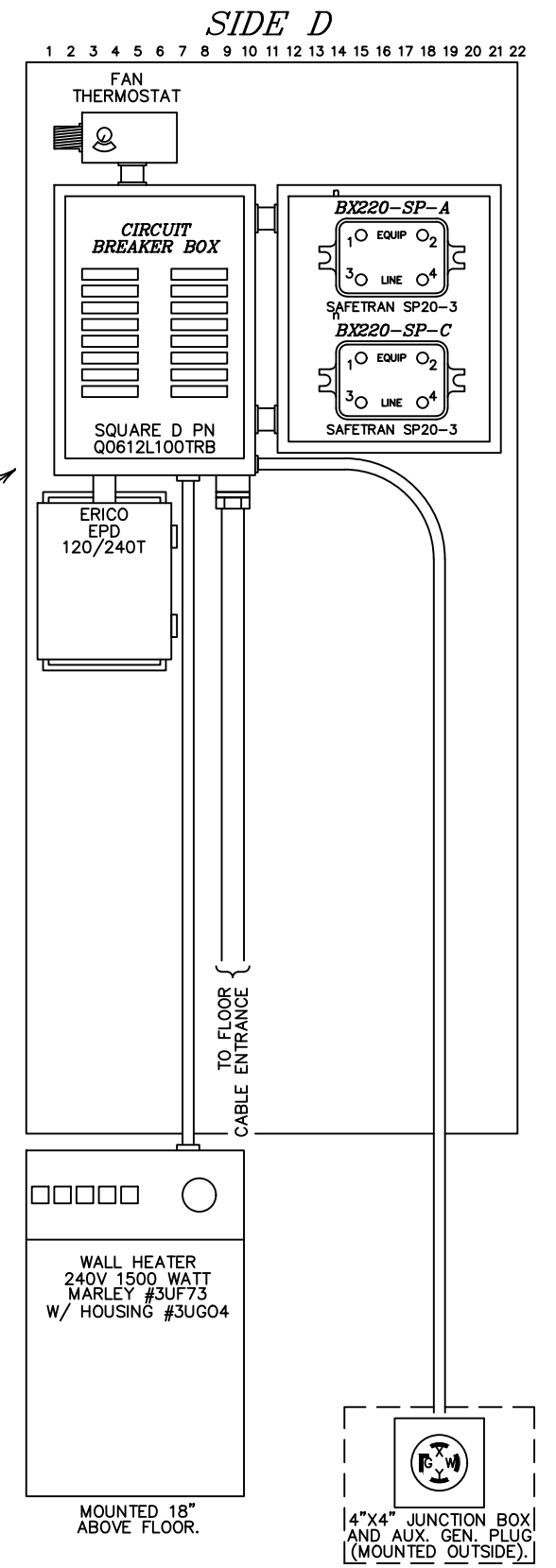
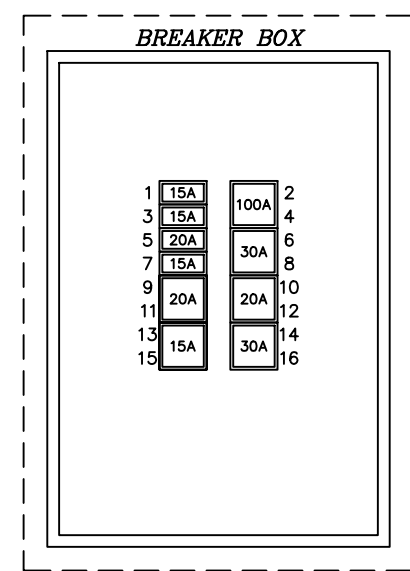
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COR: TRS CHK:	COR: JAK CHK:	COR: TAM CHK:	COR: FWK CHK:	DSD/MAT SEQ #	

LAT: 61.605	CHERI LAKE ROAD RAILROAD-HIGHWAY GRADE CROSSING WARNING SYSTEM DOT 868325J
LONG: -149.756	

<b>The ALASKA RAILROAD CORPORATION</b>	
SIGNAL ENGINEERING	P.O. BOX 107500, ANCHORAGE, AK 99510-7500
HOUSTON, AK M.P. 171.26	
DRAWN: DSD DATE: 10-11-02	DWG NO. 017128X
5 SHEET OF 10	



- NOTES:**
- USE THE FOLLOWING COLOR CODE:  
 GRN - GREEN - SAFETY EQUIPMENT GROUND  
 WHT - WHITE - CX110 (NEUTRAL)  
 BLK - BLACK - NX220 (L2)  
 RED - RED - BX220 (L1)
  - = WIRE NUT
  - MINIMUM WIRE SIZE  
 10 AMP - NO. 14 AWG THHN OR THWN SOLID  
 20 AMP - NO. 12 AWG THHN OR THWN SOLID  
 30 AMP - NO. 10 AWG THHN OR THWN SOLID
  - GROUND FAULT INTERRUPT (GFCI) MUST BE USED ON ALL CIRCUITS SERVING CONVENIENCE OUTLETS AND ANY EQUIPMENT OUTSIDE THE BUNGALOW. RECEPTACLE MOUNTED GFCI MAY BE USED INSTEAD OF BREAKER TYPE.
  - ALL GROUND WIRES RUN TO BREAKER BOX GROUND BUSS

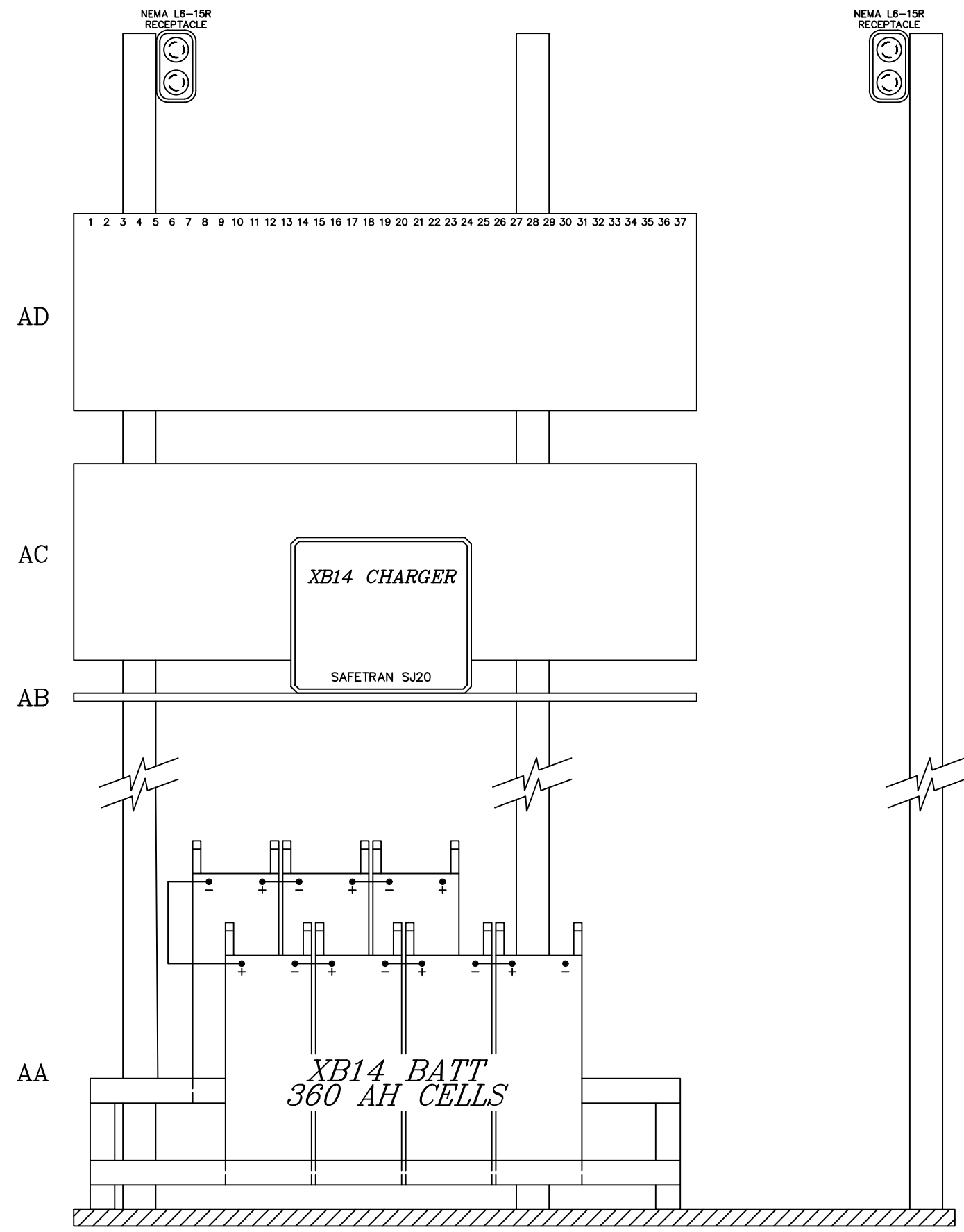


**The ALASKA RAILROAD CORPORATION**  
 SIGNAL ENGINEERING P.O. BOX 107500, ANCHORAGE, AK 99510-7500

LAT: 61.605      LONG: -149.756

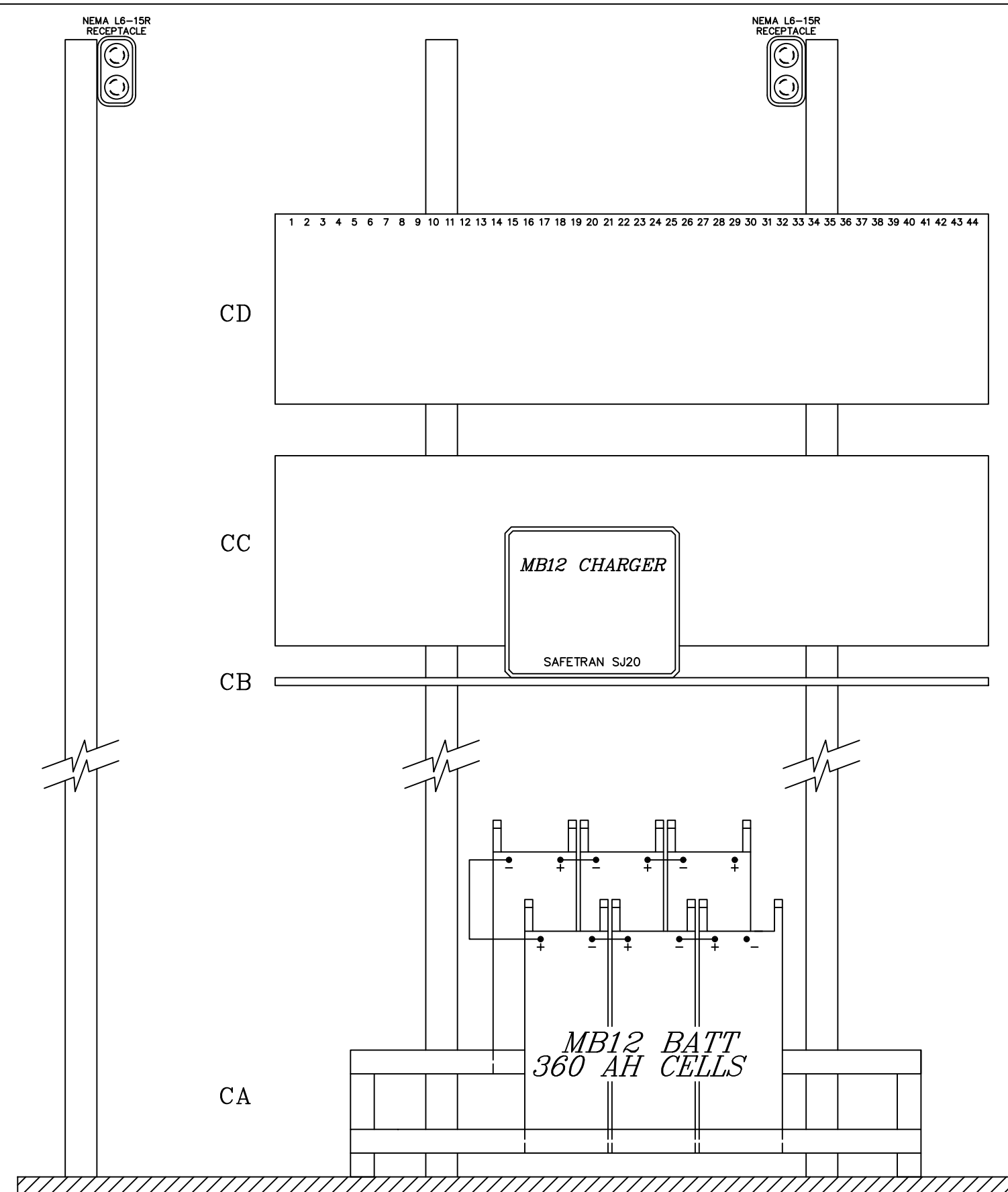
CHERI LAKE ROAD      HOUSTON, AK  
 RAILROAD-HIGHWAY GRADE CROSSING WARNING SYSTEM  
 DOT 868325J      M.P. 171.26

IN SERVICE DATE: 07-21-16 COR: TRS    CHK:	IN SERVICE DATE: 03-11-15 COR: JAK    CHK:	IN SERVICE DATE: 12-03-13 COR: TAM    CHK:	IN SERVICE DATE: 05-17-11 COR: FWK    CHK:
DESIGNED 10-11-02    NEW CROSSING    DSD/MAT    SEQ #			
DRAWN: DSD    DATE: 10-11-02		DWG NO. 017128X	
REVISIONS		6 SHEET OF 10	



SIDE "A"

<i>The ALASKA RAILROAD CORPORATION</i> SIGNAL ENGINEERING		P.O. BOX 107500, ANCHORAGE, AK 99510-7500	
LAT: 61.605		CHERI LAKE ROAD HOUSTON, AK	
LONG: -149.756		RAILROAD-HIGHWAY GRADE CROSSING WARNING SYSTEM DOT 868325J M.P. 171.26	
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COR: TRS CHK:	COR: JAK CHK:	COR: TAM CHK:	COR: FWK CHK:
AS-INSTALLED 05/15/03 PER SHOP WIRE		DESIGNED 10-11-02 NEW CROSSING	REVISIONS
DSD/DWH SEQ #		DSD/MAT SEQ #	DRAWN: DSD DATE: 10-11-02
		DWG NO. 017128X	SHEET 7 OF 10

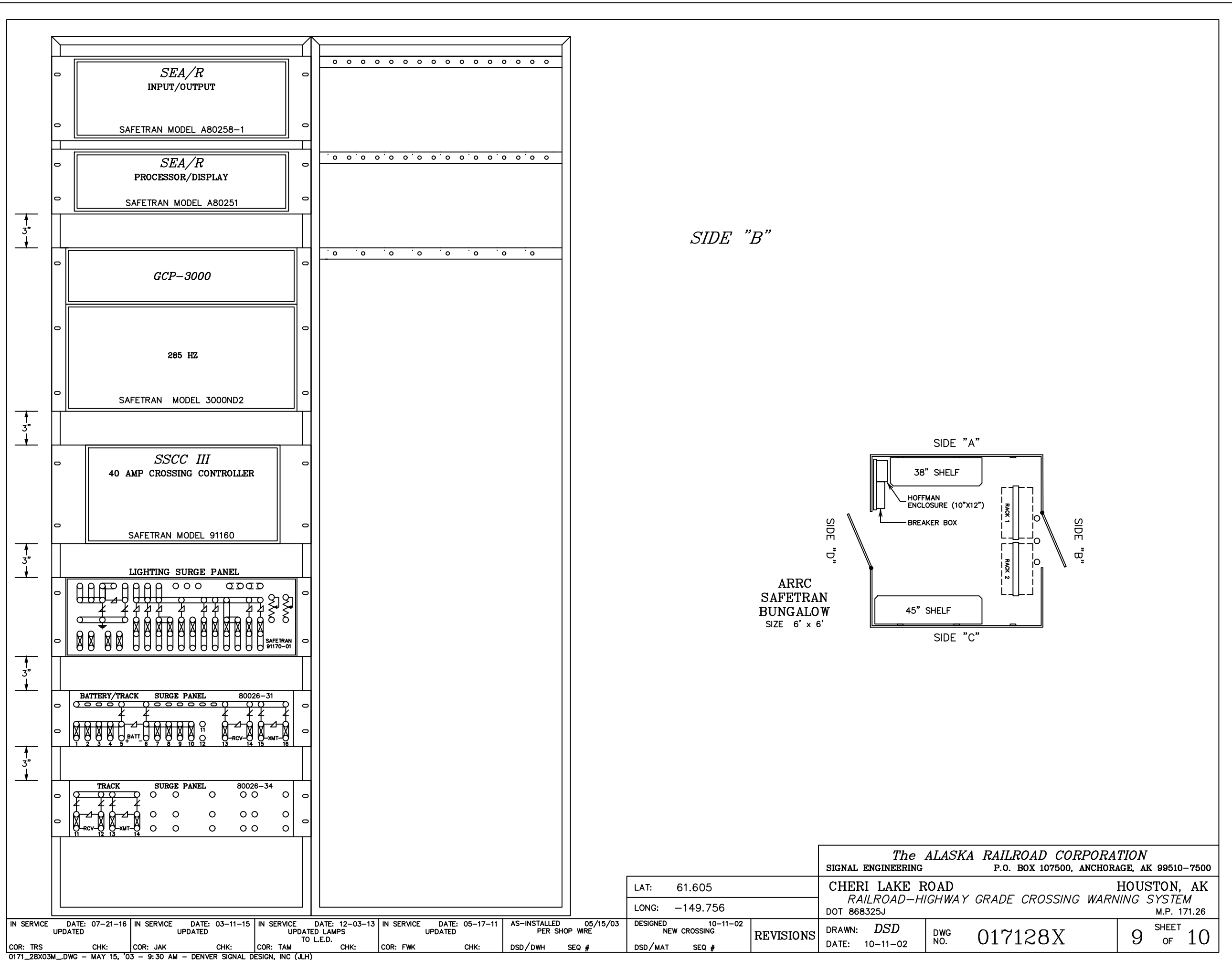


SIDE "C"

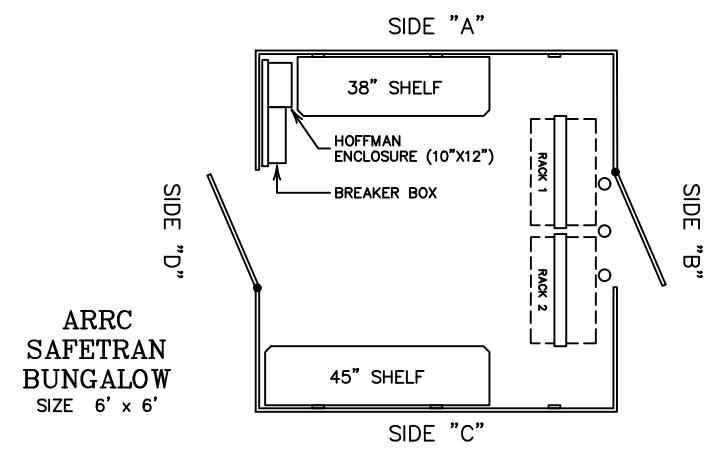
1. SHELVES AND BACKBOARDS ARE DRAWN TO A SCALE OF 1" = 0.20".

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LAT: 61.605 LONG: -149.756												8 SHEET OF 10	
0171_28X02M.DWG - MAY 15, '03 - 9:30 AM - DENVER SIGNAL DESIGN, INC (JLH)													





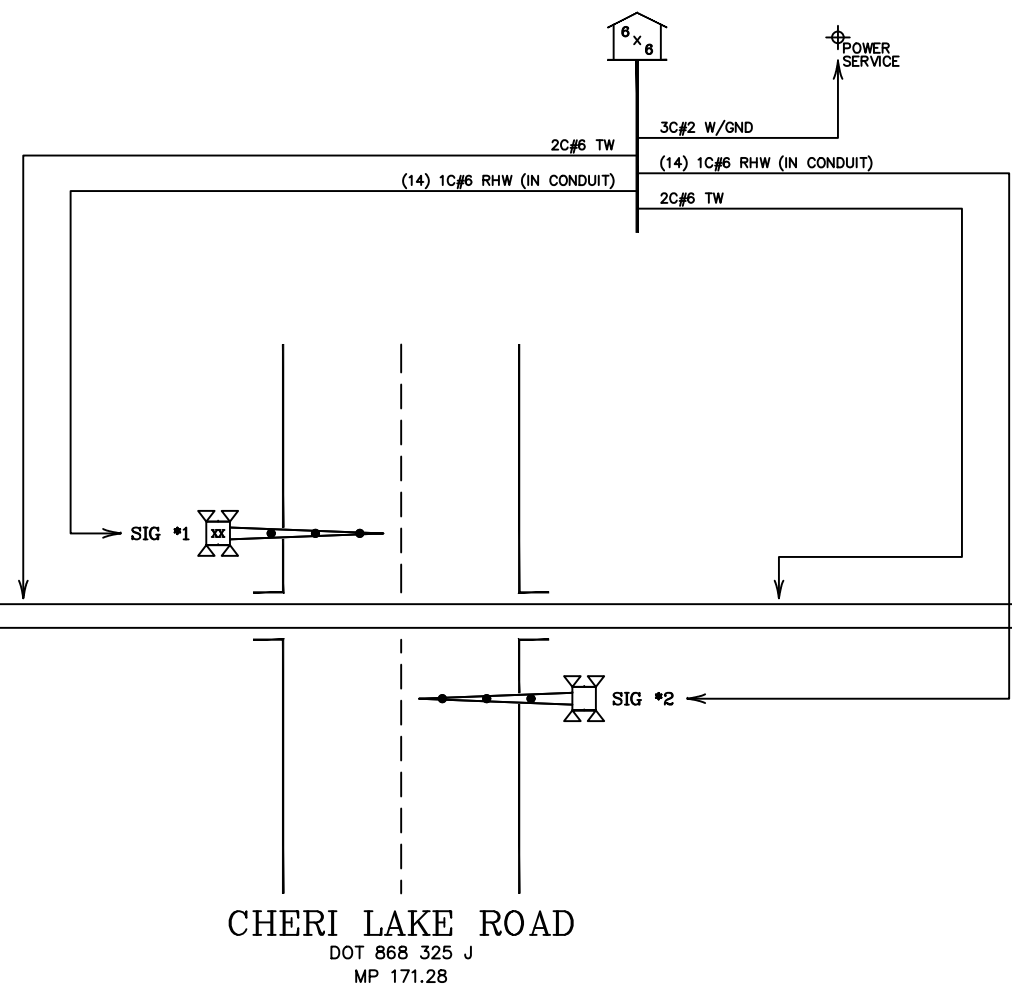
SIDE "B"



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COR: TRS	CHK: JAK	COR: TAM	CHK: FWK	DSD/DWH SEQ #

LAT: 61.605	DESIGNED 10-11-02 NEW CROSSING
LONG: -149.756	DSD/MAT SEQ #

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CHERI LAKE ROAD	HOUSTON, AK
RAILROAD-HIGHWAY GRADE CROSSING WARNING SYSTEM	
DOT 868325J	M.P. 171.26
DRAWN: DSD	DWG NO. 017128X
DATE: 10-11-02	9 SHEET OF 10



CHERI LAKE ROAD  
 DOT 868 325 J  
 MP 171.28

<i>The ALASKA RAILROAD CORPORATION</i>	
SIGNAL ENGINEERING	P.O. BOX 107500, ANCHORAGE, AK 99510-7500
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LONG: -149.756	RAILROAD-HIGHWAY GRADE CROSSING WARNING SYSTEM
	DOT 868325J M.P. 171.26
DESIGNED 10-11-02 NEW CROSSING	REVISIONS
DRAWN: DSD	DWG NO. 017128X
DATE: 10-11-02	10 SHEET OF 10

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CHK:	CHK:	CHK:	CHK:	