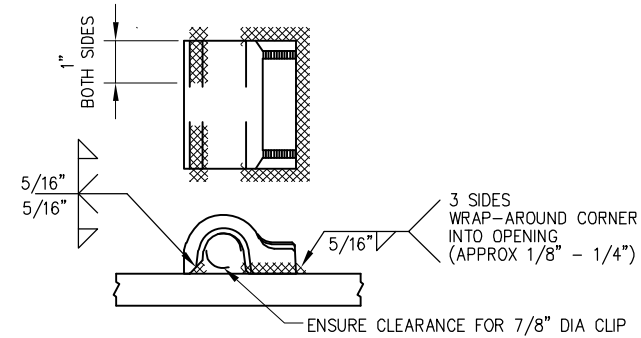


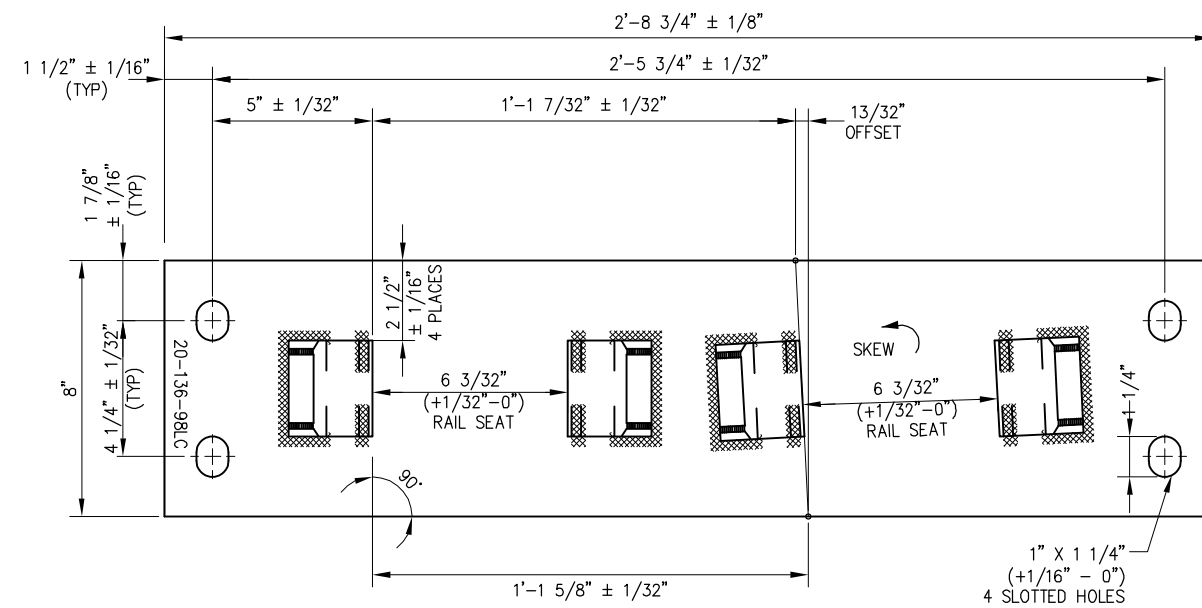
BILL OF MATERIAL				
ITEM	QTY FOR 20-98LC	QTY FOR 20-99LC	DESCRIPTION	DWG NO
1	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-8 3/4" LONG	-
2	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-10" LONG	-
3	4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



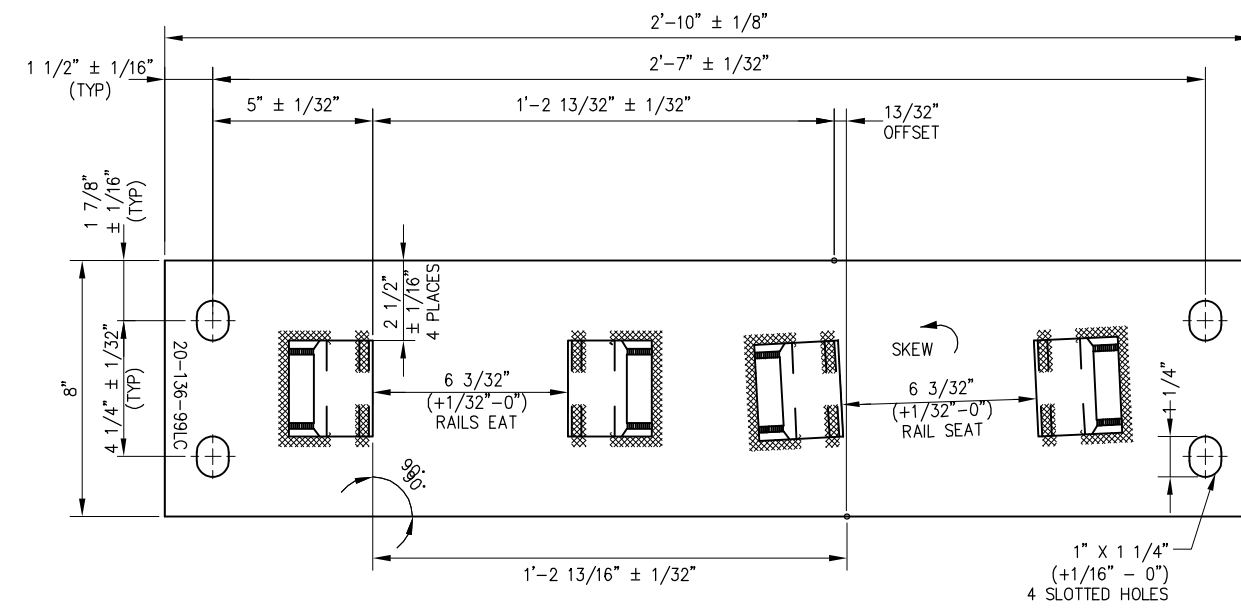
NOTES:

1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
3. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

FORGED SHOULDER WELDING DETAIL



FROG BASE PLATE 20-136-98LC



FROG BASE PLATE 20-136-99LC

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

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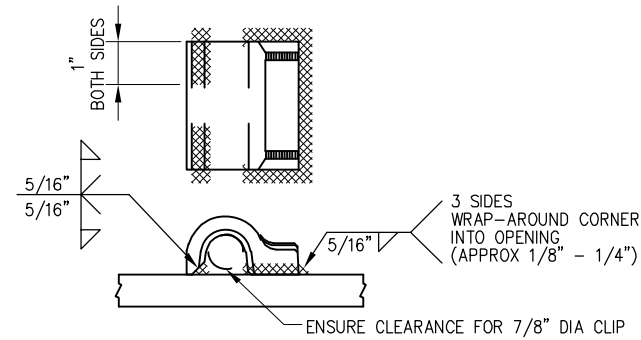
DEPUTY DIRECTOR, ENGINEERING

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG LH
FROG BASE PLATES
20-98LC AND 20-99LC

CADD FILE NAME:	SD-2735
REV:	EDITION:
	FOURTH
	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2735

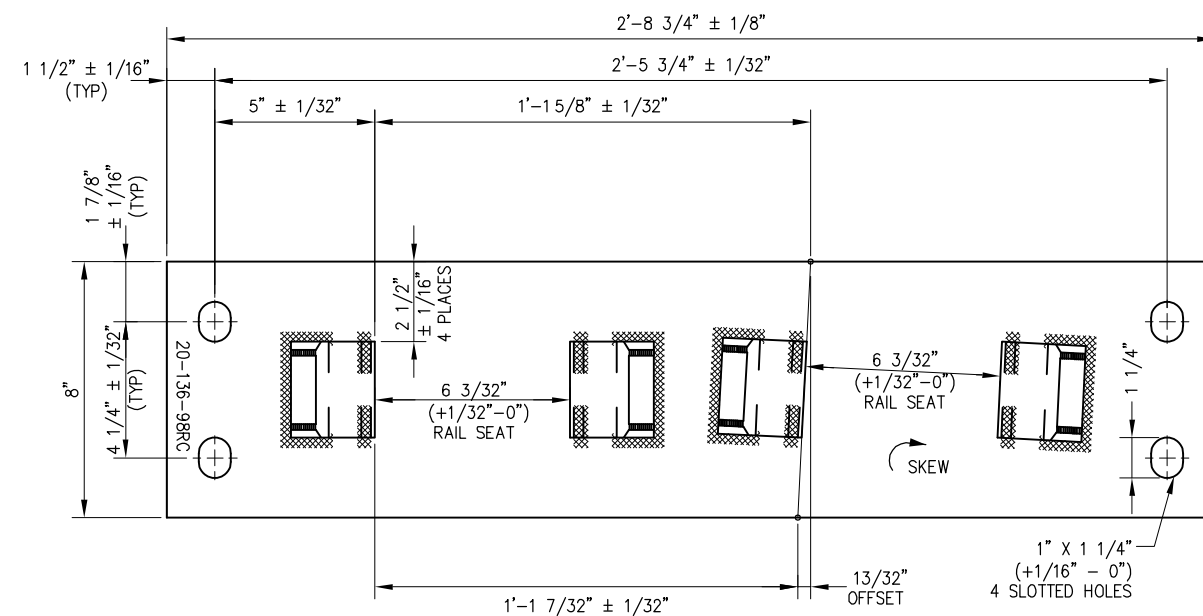
BILL OF MATERIAL				
ITEM	QTY FOR 20-98RC	QTY FOR 20-99RC	DESCRIPTION	DWG NO
1	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-8 3/4" LONG	-
2	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-10" LONG	-
3	4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



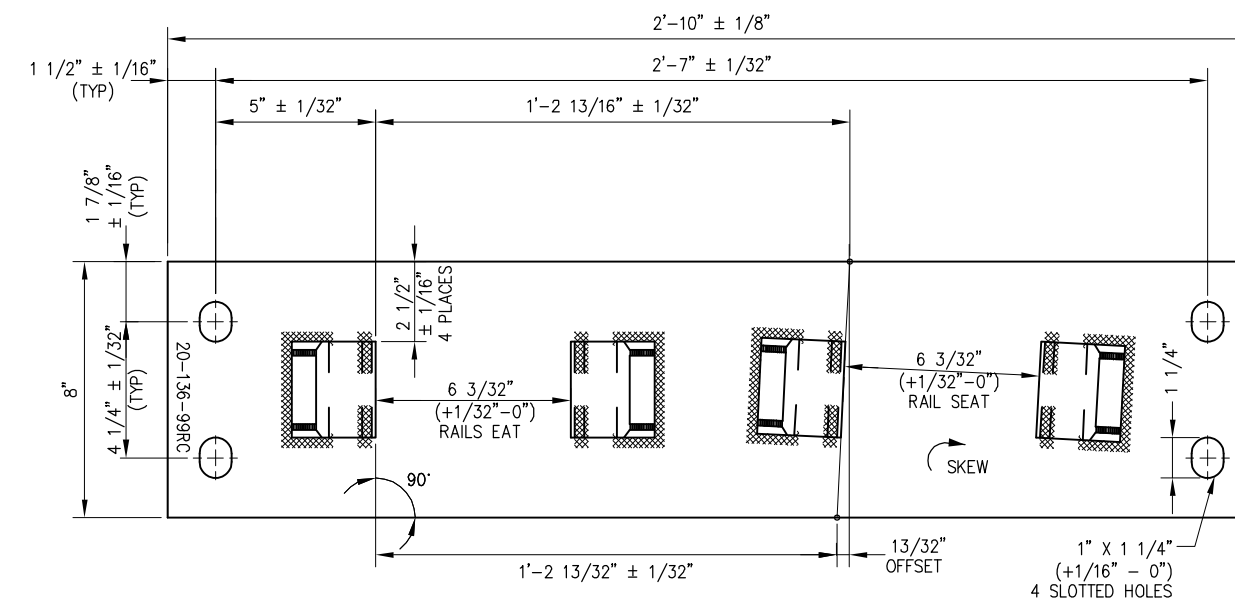
NOTES:

1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
3. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

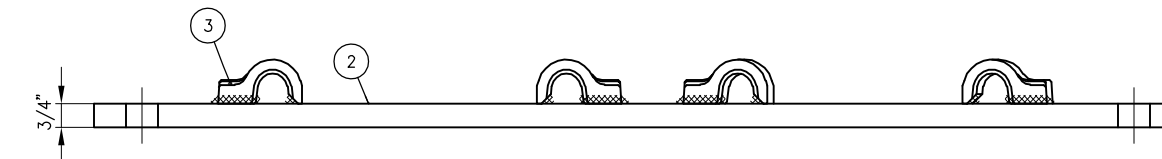
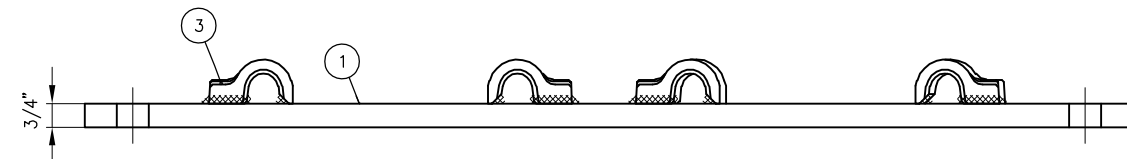
FORGED SHOULDER WELDING DETAIL



FROG BASE PLATE 20-136-98RC



FROG BASE PLATE 20-136-99RC



REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

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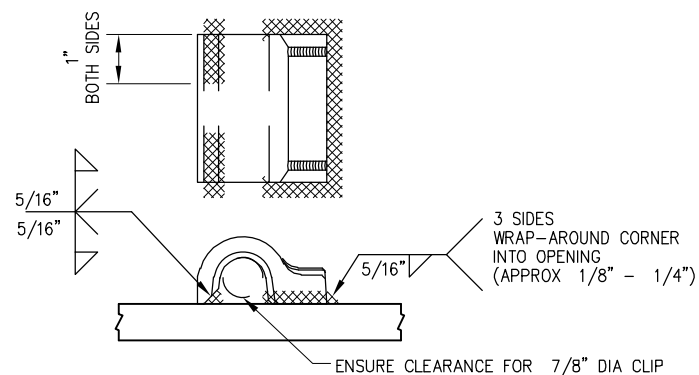
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

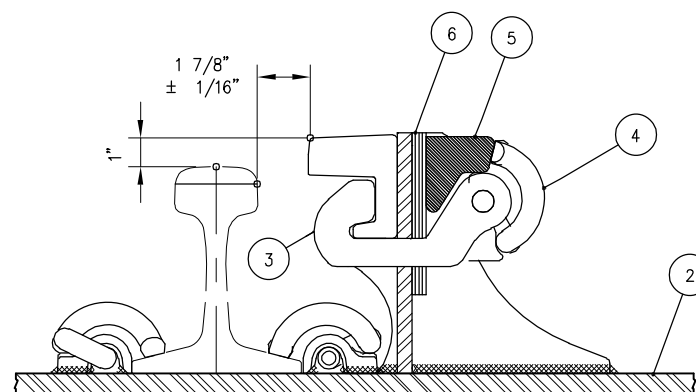
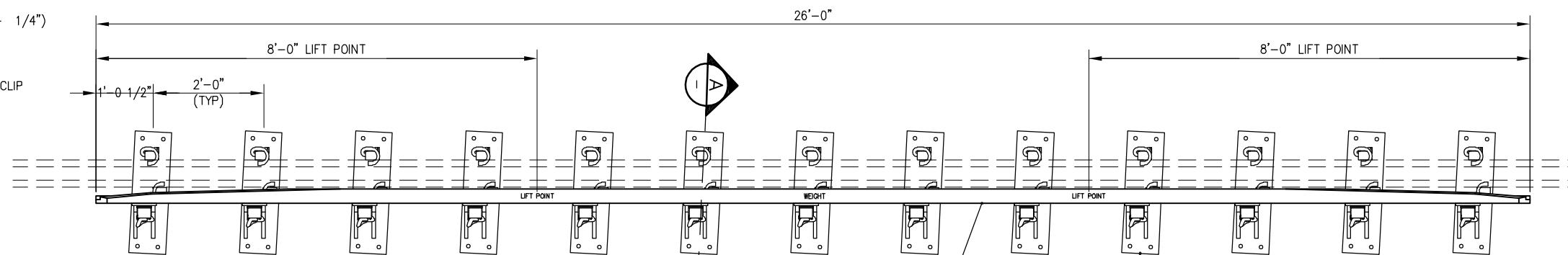
SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG RH
FROG BASE PLATES
20-98RC AND 20-99RC

CADD FILE NAME: SD-2736	REV: EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO: SD-2736	

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	GUARD BAR, UIC33 1200 SERIES x 26'-0" LONG	-
2	13	GUARD RAIL PLATE ASSEMBLY, RAISED 1", LH SKEWED	-
3	13	H-CLAMP	-
4	39	CLIP, PANDROL, E2055	-
5	13	LOCKING BLOCK	-
6	52	SHIM, 1/8" x 3" X 6"	-

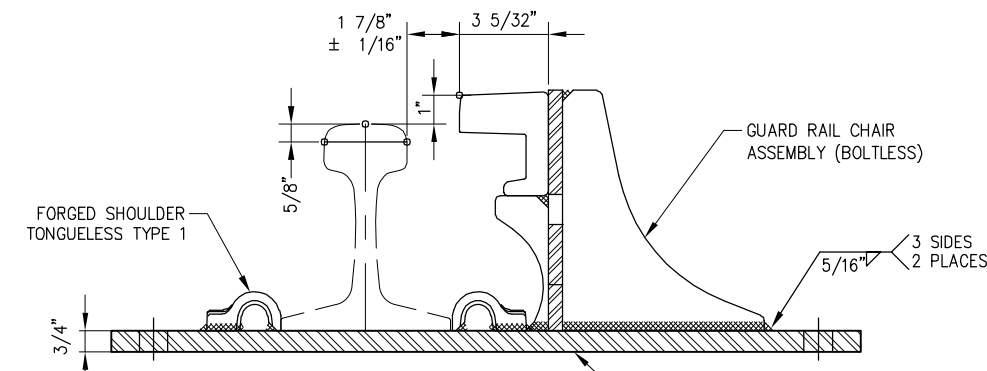


FORGED SHOULDER WELDING DETAIL

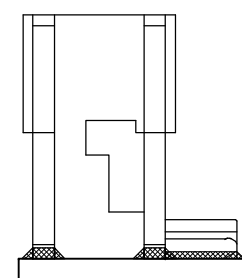


GUARD RAIL HARDWARE ASSEMBLY

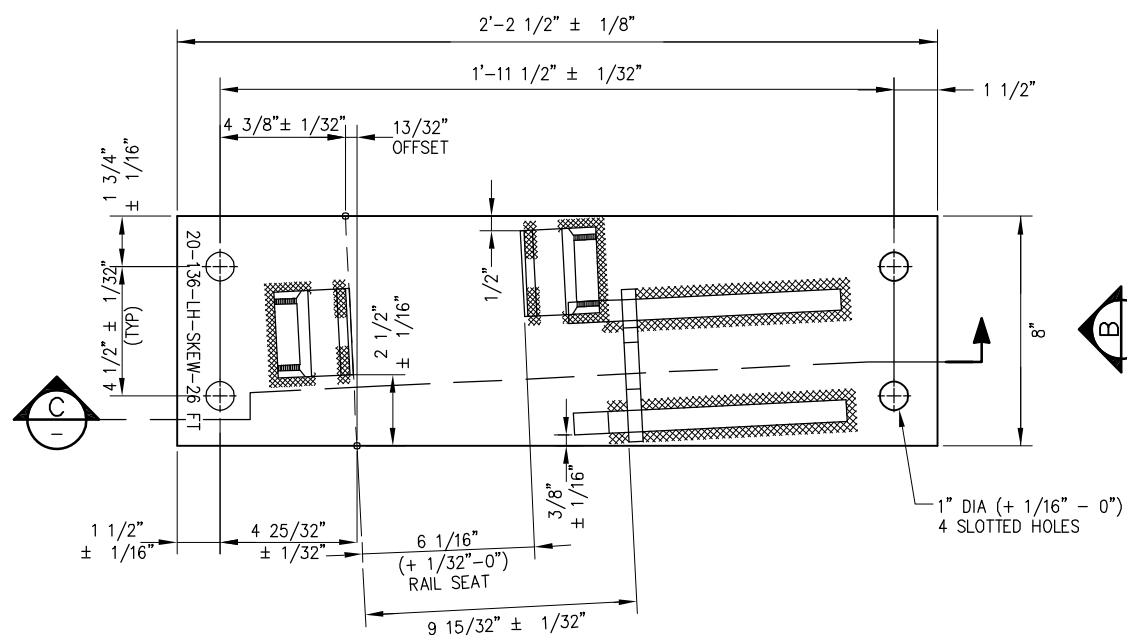
(A) PARTIAL SECTION
SCALE: NTS



(C) SECTION
SCALE: NTS



(B) VIEW
SCALE: NTS



GUARD RAIL PLATE ASSEMBLY


NOTES:

1. PLATE SPACING SHALL BE SET FOR SHIPPING ONLY. FINAL PLATE SPACING SHALL BE DETERMINED BY TIE SPACING AT TIME OF INSTALLATION
2. PANDROL SPRING CLIPS (E2055) SHALL BE INCLUDED IN ASSEMBLY
3. LIFT POINTS AND WEIGHT OF ASSEMBLY SHALL BE MARKED ON HEAD OF WEAR BAR WITH WHITE PAINT
4. PLATE SHALL BE STAMPED WITH PLATE I.D. WITH 1/2" HIGH CHARACTERS AS SHOWN
5. GRIND AWAY CORNER OF PANDROL SHOULDER TO CLEAR FOOT OF CHAIR ASSEMBLY
6. SEE SD-2301 FOR STRAIGHT SIDE GUARD RAIL

REV	DATE	BY	CHK	APP	DESCRIPTION	REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION						

PENINSULA CORRIDOR JOINT POWERS BOARD

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DEPUTY DIRECTOR, ENGINEERING

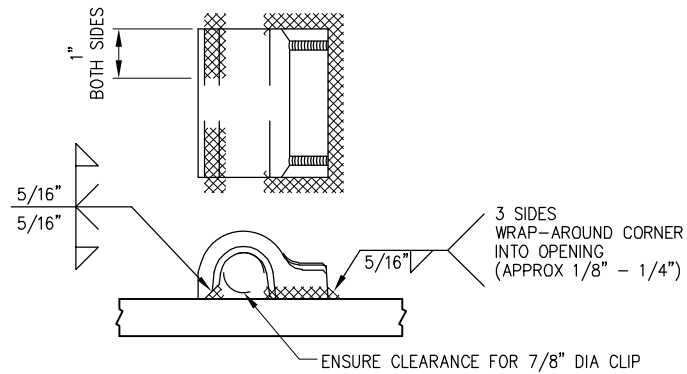


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STANDARD DRAWINGS

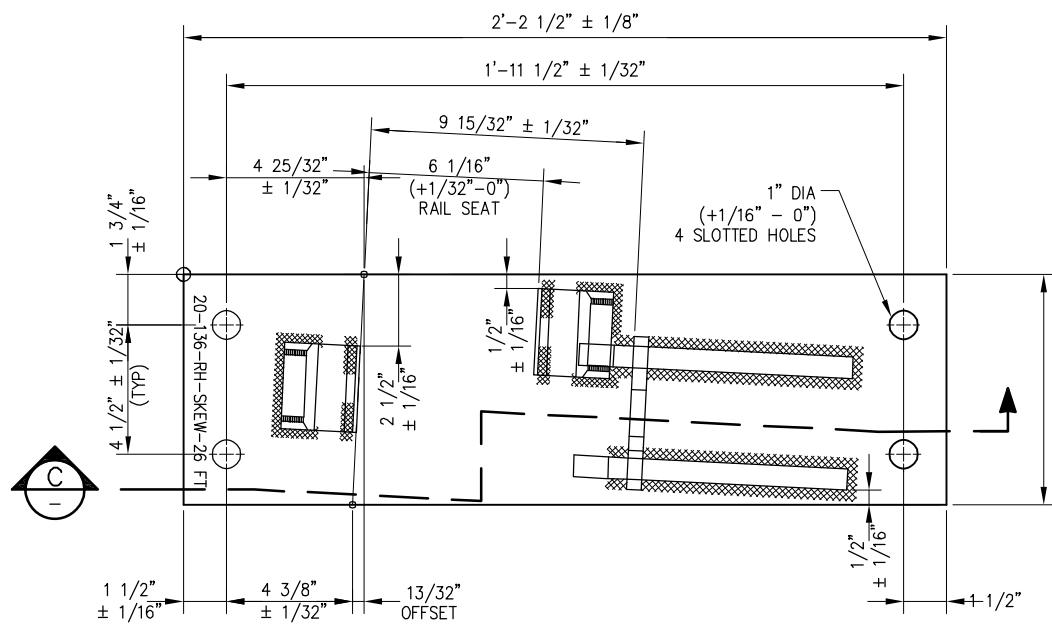
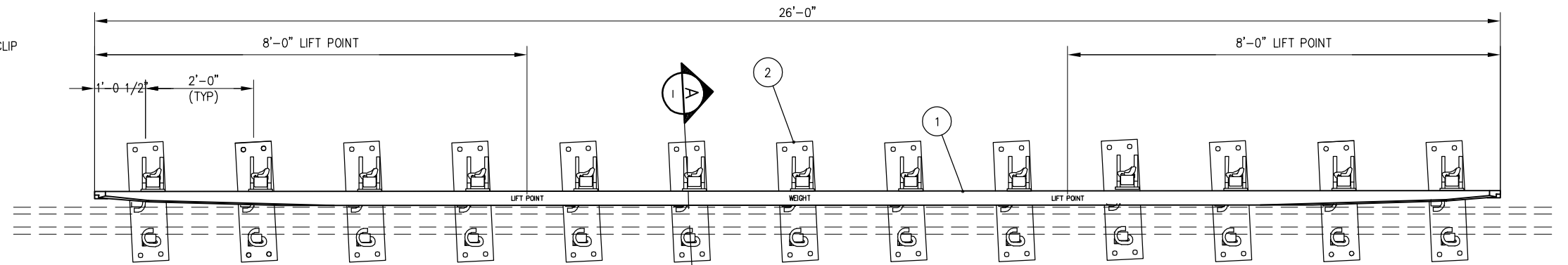
SPECIAL TRACKWORK
NO. 20 TURNOUT
GUARD RAIL ASSEMBLY
LH SKEWED WITH
PLATES 26'-0" LONG

CADD FILE NAME: SD-2737
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO.: SD-2737

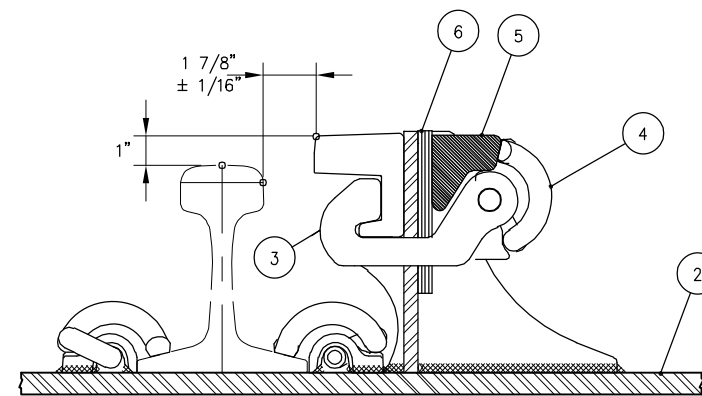


FORGED SHOULDER WELDING DETAIL

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	GUARD BAR, UIC33 1200 SERIES x 26'-0" LONG	-
2	13	GUARD RAIL PLATE ASSEMBLY, RAISED 1", RH SKEWED	-
3	13	H-CLAMP	-
4	39	CLIP, PANDROL, E2055	-
5	13	LOCKING BLOCK	-
6	52	SHIM, 1/8" x 3" X 6"	-

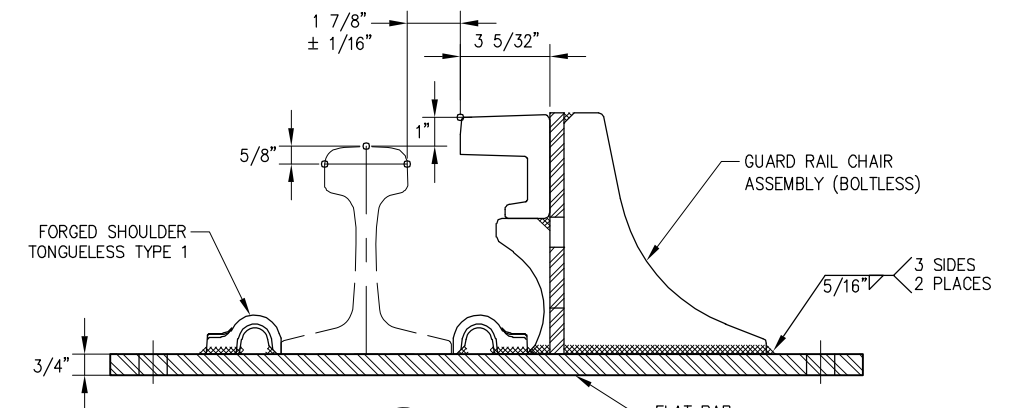


GUARD RAIL PLATE ASSEMBLY

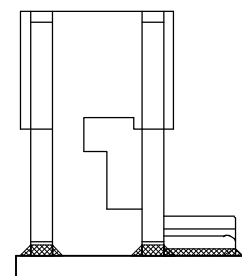


GUARD RAIL HARDWARE ASSEMBLY

A PARTIAL SECTION
SCALE: NTS



C SECTION
SCALE: NTS



B VIEW
SCALE: NTS


NOTES:

1. PLATE SPACING IS SET FOR SHIPPING ONLY. FINAL PLATE SPACING SHALL BE DETERMINED BY TIE SPACING AT TIME OF INSTALLATION
2. PANDROL SPRING CLIPS (E2055) SHALL BE INCLUDED IN ASSEMBLY
3. LIFT POINTS AND WEIGHT OF ASSEMBLY SHALL BE MARKED ON HEAD OF WEAR BAR WITH WHITE PAINT
4. PLATE SHALL BE STAMPED WITH PLATE I.D. WITH 1/2" HIGH CHARACTERS AS SHOWN
5. GRIND AWAY CORNER OF PANDROL SHOULDER TO CLEAR FOOT OF CHAIR ASSEMBLY
6. SEE SD-2301 FOR STRAIGHT SIDE GUARD RAIL

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING

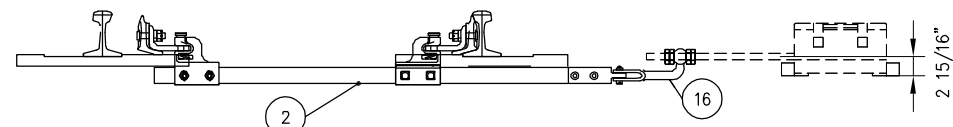


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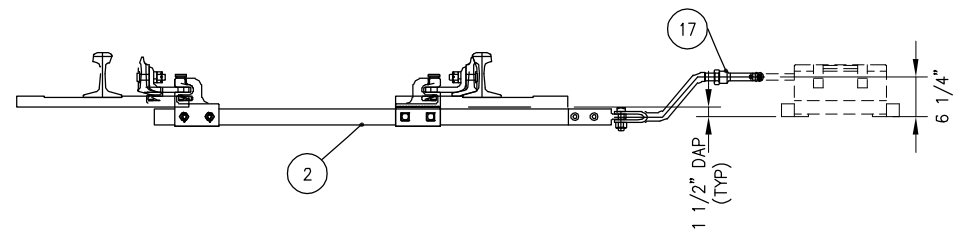
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
GUARD RAIL ASSEMBLY
RH SKEWED WITH
PLATES 26'-0" LONG

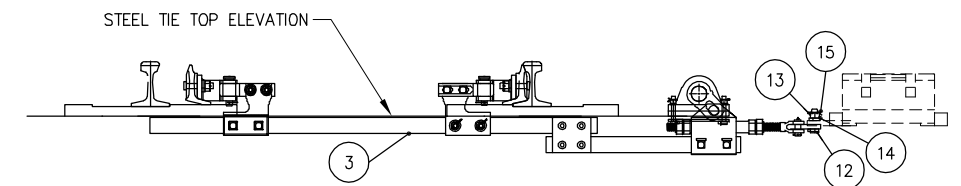
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REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO.: SD-2738



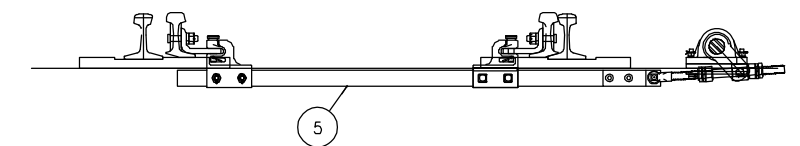
SWITCH ROD ASSEMBLY NO 1
LOCK ROD CONNECTION SHOWN
(VIEW FROM HEEL TOWARDS PS)



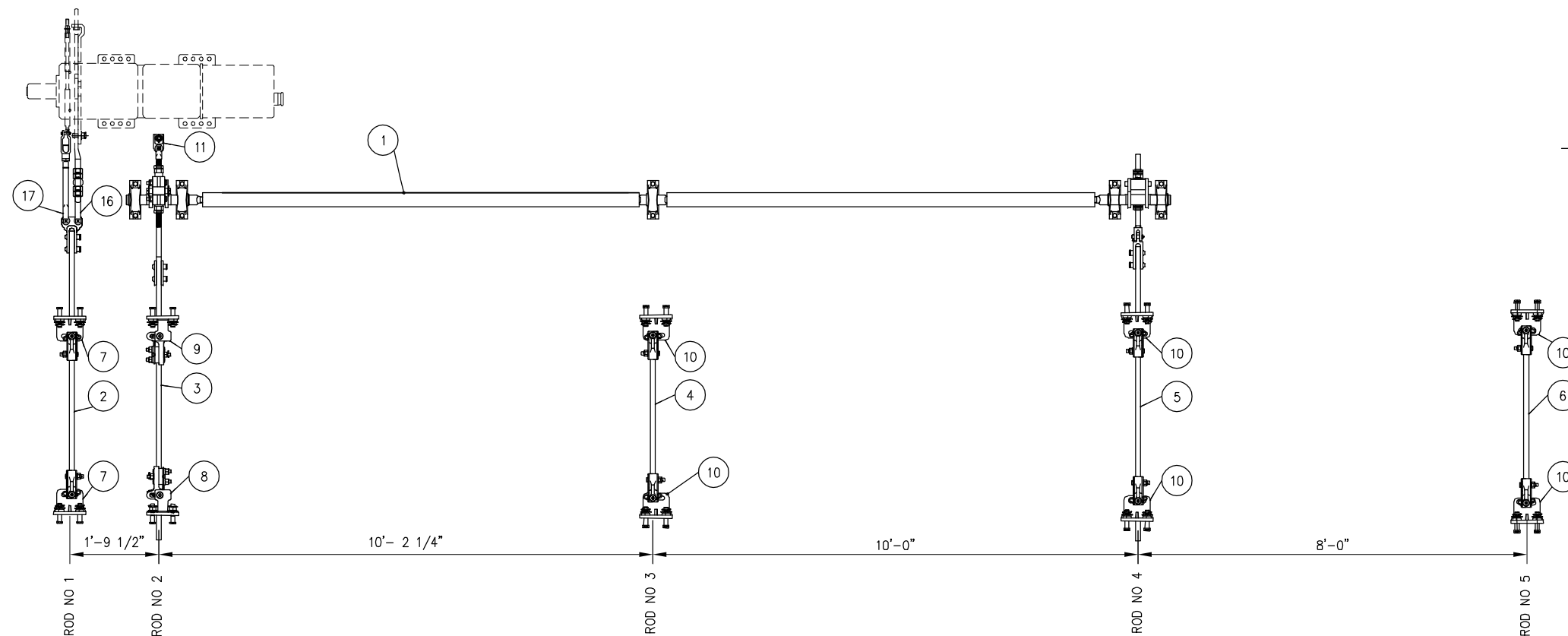
SWITCH ROD ASSEMBLY NO 1
POINT DETECTOR ROD CONNECTION SHOWN
(VIEW FROM HEEL TOWARDS PS)



DRIVE ROD (ROD NO 2) ASSEMBLY
FRONT HELPER ROD CRANK ATTACHES TO BASKET
(VIEW FROM HEEL TOWARDS PS)



REAR HELPER (ROD NO 4) DRIVE ROD
ASSEMBLY REAR HELPER ROD CRANK
ATTACHES TO ROD PIN



BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	ROTARY ASSIST ASSEMBLY FOR NO 20-136 LB RE TURNOUT	-
2	1	SWITCH ROD NO 1, FOR POINT DETECTOR/LOCK ROD, (20-136-1)	SD-2741
3	1	SWITCH ROD NO 2, DRIVE, C/W BASKET (20-136-2)	SD-2741
4	1	SWITCH ROD NO 3, THROW, (20-136-3)	SD-2741
5	1	SWITCH ROD NO 4, THROW, (20-136-4)	SD-2742
6	1	SWITCH ROD NO 5, THROW, (20-136-5)	SD-2742
7	2	ROD POINT BRACKET, DETECTOR/LOCK ROD, HOLES AT 2 7/8" ARB*	-
8	1	ROD POINT BRACKET, THROW ROD, ANTI-ROLL, HOLES AT 2 7/8" ARB* LH	-
9	1	ROD POINT BRACKET, THROW ROD, ANTI-ROLL, HOLES AT 2 7/8" ARB* RH	-
10	6	ROD POINT BRACKET, HOLES AT 2 3/8" ARB* C/W SQUARE BOLTS	-
11	1	DROP LUG FOR US&S M23 SWITCH MACHINE DRIVE BAR	-
12	1	BOLT, 7/8" DIA X 3" LONG, DRILLED 2 9/16" BELOW HEAD, HEAVY HEX, GR 5	-
13	1	NUT, 7/8" DIA SLOTTED HEAVY HEX, GR 8	-
14	1	SPRING WASHER, 7/8" DIA	-
15	1	COTTER PIN, 3/16" DIA X 1 3/4" LONG	-
16	1	LOCK ROD, FOR M23 SWITCH MACHINE, HST	-
17	1	DETECTOR ROD, FOR M23 SWITCH MACHINE, HST	-

ARB*- ABOVE RAIL BASE


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

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1250 San Carlos Avenue
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STANDARD DRAWINGS

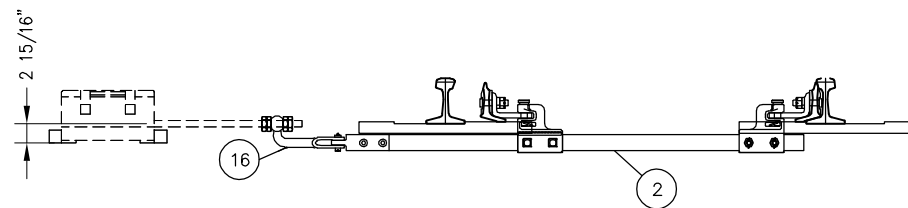
SPECIAL TRACKWORK
NO. 20 TURNOUT
HOLLOW STEEL TIE ROD ASSEMBLY
SWITCH MACHINE ON LH SIDE

CADD FILE NAME: SD-2739

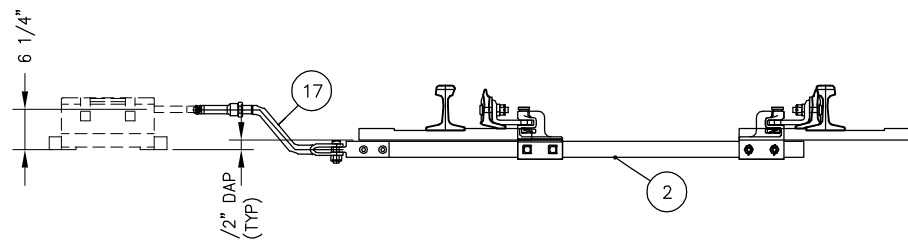
REV: EDITION: FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO.: SD-2739



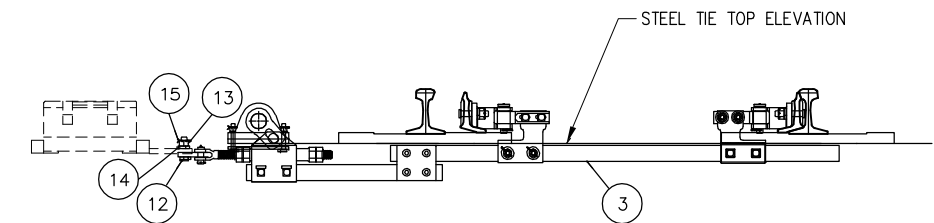
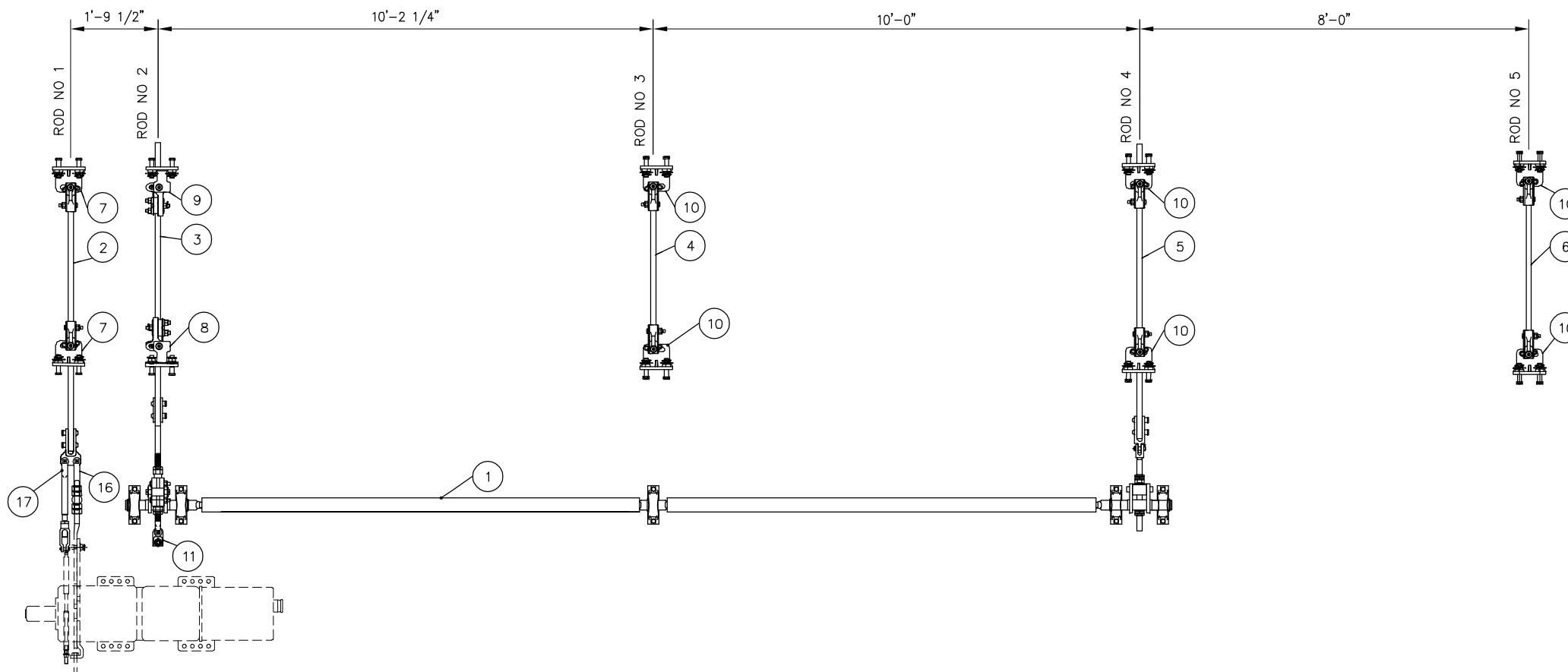
SWITCH ROD ASSEMBLY NO 1
LOCK ROD CONNECTION SHOWN
(VIEW FROM HEEL TOWARDS PS)



SWITCH ROD ASSEMBLY NO 1
POINT DETECTOR ROD CONNECTION SHOWN
(VIEW FROM HEEL TOWARDS PS)

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	ROTARY ASSIST ASSEMBLY FOR NO 20-136 LB RE TURNOUT	-
2	1	SWITCH ROD NO 1, FOR POINT DETECTOR/LOCK ROD, (20-136-1)	SD-2741
3	1	SWITCH ROD NO 2, DRIVE, C/W BASKET (20-136-2)	SD-2741
4	1	SWITCH ROD NO 3, THROW, (20-136-3)	SD-2741
5	1	SWITCH ROD NO 4, THROW, (20-136-4)	SD-2742
6	1	SWITCH ROD NO 5, THROW, (20-136-5)	SD-2742
7	2	ROD POINT BRACKET, DETECTOR/LOCK ROD, HOLES AT 2 7/8" ARB*	-
8	1	ROD POINT BRACKET, THROW ROD, ANTI-ROLL, HOLES AT 2 7/8" ARB* LH	-
9	1	ROD POINT BRACKET, THROW ROD, ANTI-ROLL, HOLES AT 2 7/8" ARB* RH	-
10	6	ROD POINT BRACKET, HOLES AT 2 3/8" ARB* C/W SQUARE BOLTS	-
11	1	DROP LUG FOR US&S M23 SWITCH MACHINE DRIVE BAR	-
12	1	BOLT, 7/8" DIA X 3" LONG, DRILLED 2 9/16" BELOW HEAD, HEAVY HEX, GR 8	-
13	1	NUT, 7/8" DIA SLOTTED HEAVY HEX, GR 8	-
14	1	SPRING WASHER, 7/8" DIA	-
15	1	COTTER PIN, 3/16" DIA X 1 3/4" LONG	-
16	1	LOCK ROD, FOR M23 SWITCH MACHINE, HST	-
17	1	DETECTOR ROD, FOR M23 SWITCH MACHINE, HST	-

ARB*- ABOVE RAIL BASE



DRIVE ROD (ROD NO 2) ASSEMBLY
FRONT HELPER ROD CRANK ATTACHES TO BASKET
(VIEW FROM HEEL TOWARDS PS)



REAR HELPER (ROD NO 4) DRIVE ROD ASSEMBLY
REAR HELPER ROD CRANK ATTACHES TO ROD PIN

PENINSULA CORRIDOR JOINT POWERS BOARD

STANDARD DRAWINGS

CADD FILE NAME:
SD-2740

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SPECIAL TRACKWORK
NO. 20 TURNOUT
HOLLOW STEEL TIE ROD ASSEMBLY
SWITCH MACHINE ON RH SIDE

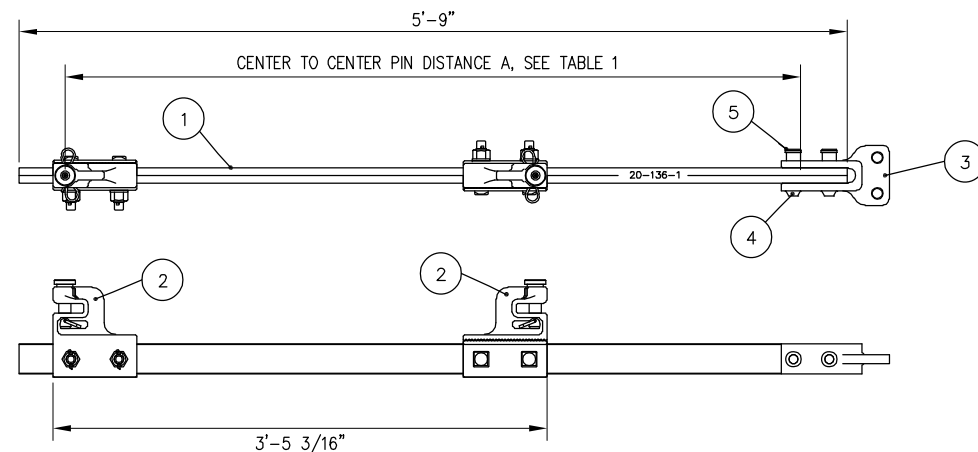
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FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO.:
SD-2740

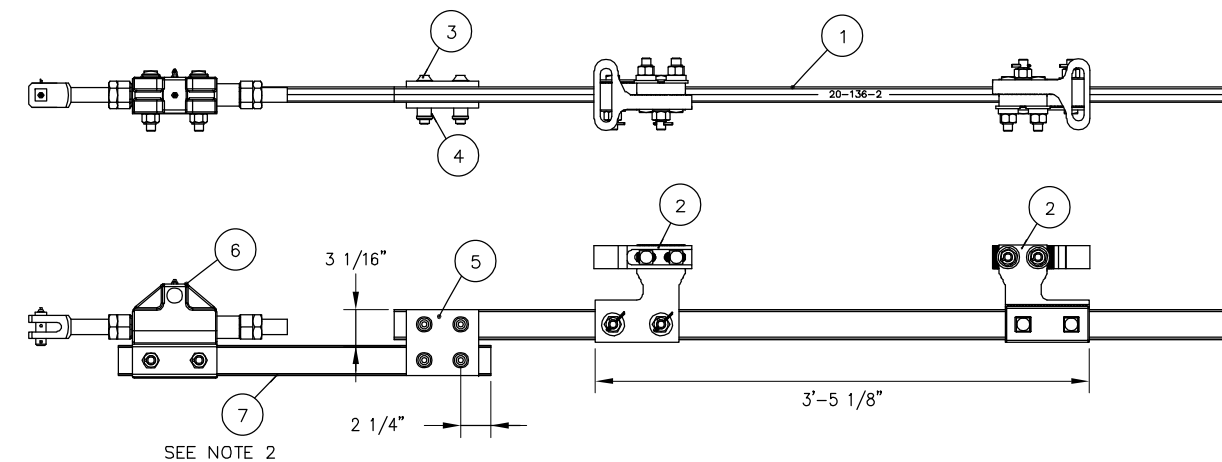
REV	DATE	BY	CHK	APP	DESCRIPTION	REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION						

BILL OF MATERIALS FOR SWITCH ROD 20-136-1			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH ROD 20-136-1	-
2	2	SWITCH CLIP ASSEMBLY, ADJUSTABLE, FOR HOLLOW TIE COMPOSITE RODS	-
3	1	CONNECTOR LUG FOR POINT DETECTOR/LOCK RODS	-
4	2	HUCK BOLT, 3/4" DIA (C50LR-BR24-36)	-
5	2	HUCK COLLAR, 3/4" DIA (LC-2R24B)	-



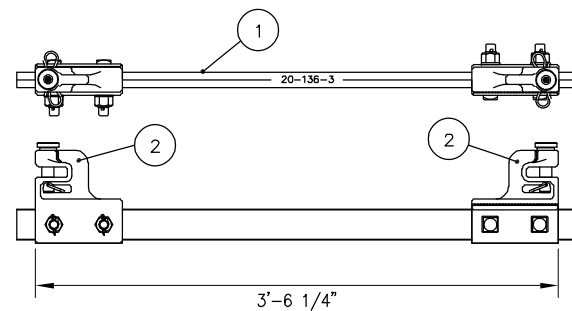
SWITCH ROD ASSEMBLY 20-136-1

BILL OF MATERIALS FOR SWITCH ROD 20-136-2			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BLUE ROD, PULTRUDED COMPOSITE, 1 1/4" x 2 1/4" x 5'-10" LONG, 20-136-2	-
2	2	CLIP/LUG ASSEMBLY, HST SWITCH, ANTI-ROLLOVER DESIGN, LH	-
3	4	HUCK BOLT, 3/4" DIA (C50LR-BR24-36)	-
4	4	HUCK COLLAR, 3/4" DIA (LC-2R24B)	-
5	2	SPLICE PLATE, FOR BLUE ROD BASKET ASSEMBLY RODS	-
6	1	BASKET/ROD ASSEMBLY FOR HST WITH ROTARY ASSIST	-
7	1	BLUE ROD, PULTRUDED COMPOSITE, 1 1/4" x 2 1/4" x 2'-7" LONG, 1-B	-



SWITCH ROD ASSEMBLY 20-136-2

BILL OF MATERIALS FOR SWITCH ROD 20-136-3			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH ROD 20-136-3	-
2	2	SWITCH CLIP ASSEMBLY, ADJUSTABLE, FOR HOLLOW TIE	-



SWITCH ROD ASSEMBLY 20-136-3

TABLE 1

ROD #	A
SWITCH ROD ASSEMBLY 20-136-1	3'- 3 15/16"
SWITCH ROD ASSEMBLY 20-136-2	3'- 4 1/8"
SWITCH ROD ASSEMBLY 20-136-3	3'- 4 13/16"
SWITCH ROD ASSEMBLY 20-136-4	3'- 5 7/8"
SWITCH ROD ASSEMBLY 20-136-5	3'- 7"

NOTES:

- ROD IDENTIFICATION SHALL BE ENGRAVED ON ROD CLEARLY AS SHOWN, 3/8" MIN HEIGHT
- SWITCH RODS SHALL BE PARALLEL WITHIN 1/16" OVER LENGTH OF 1-B ROD

REV	DATE	BY	CHK	APP	DESCRIPTION	REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION						

PENINSULA CORRIDOR JOINT POWERS BOARD

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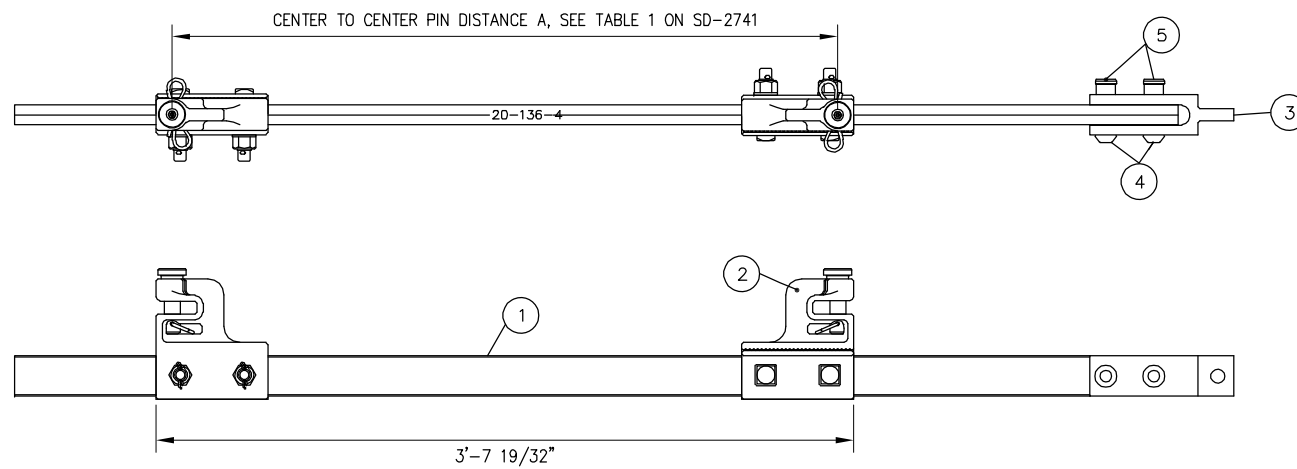
STANDARD DRAWINGS

SPECIAL TRACKWORK
 NO. 20 TURNOUT
 HOLLOW STEEL TIE SWITCH RODS
 20-1, 20-2 AND 20-3

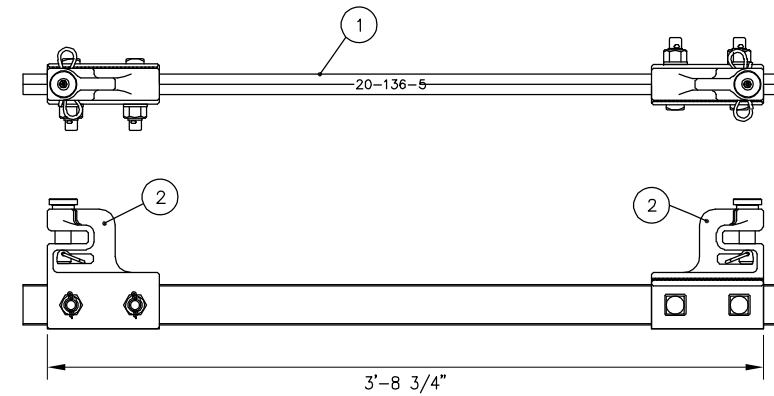
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REV:	EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2741	

BILL OF MATERIALS FOR SWITCH ROD 20-136-4			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH ROD 20-136-4	-
2	2	SWITCH CLIP ASSEMBLY, ADJUSTABLE, FOR HOLLOW TIES	-
3	1	CONNECTOR LUG FOR REAR DRIVE ROD	-
4	2	HUCK BOLT, 3/4" DIA (C50LR-BR24-36)	-
5	2	HUCK COLLAR, 3/4" DIA (LC-2R24B)	-

BILL OF MATERIALS FOR SWITCH ROD 20-136-5			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH ROD 20-136-5	-
2	2	SWITCH CLIP ASSEMBLY, ADJUSTABLE, FOR HOLLOW TIES	-



SWITCH ROD ASSEMBLY 20-136-4



SWITCH ROD ASSEMBLY 20-136-5

NOTES:

1. ROD IDENTIFICATION SHALL BE ENGRAVED ON ROD CLEARLY AS SHOWN, 3/8" MIN HEIGHT


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

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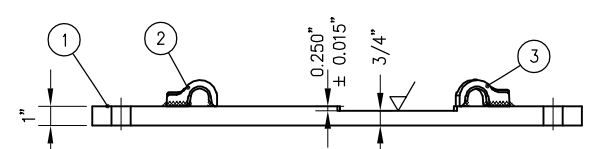
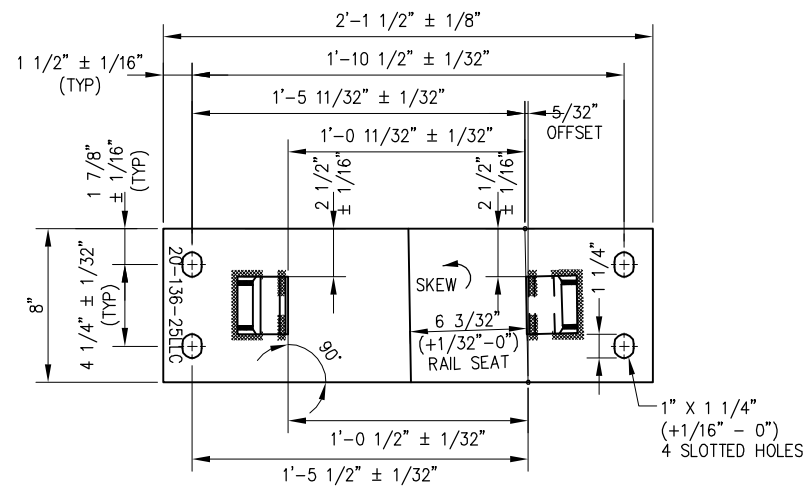


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San Carlos, CA 94070

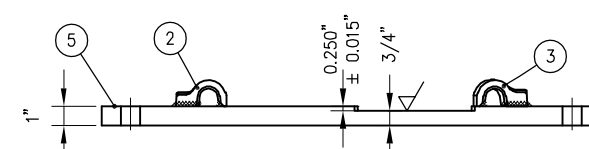
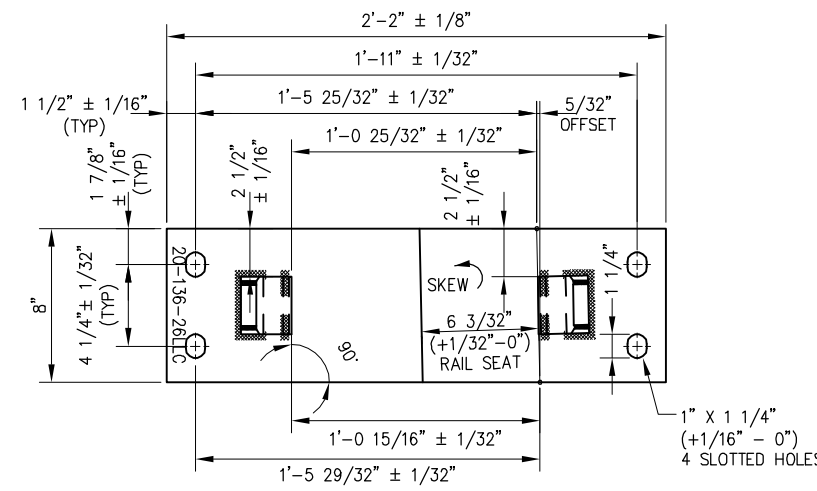
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
HOLLOW STEEL TIE SWITCH RODS
20-4 AND 20-5

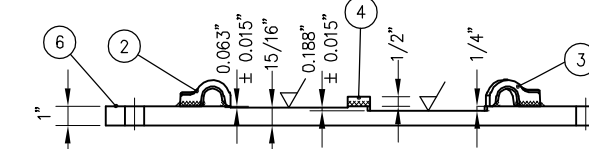
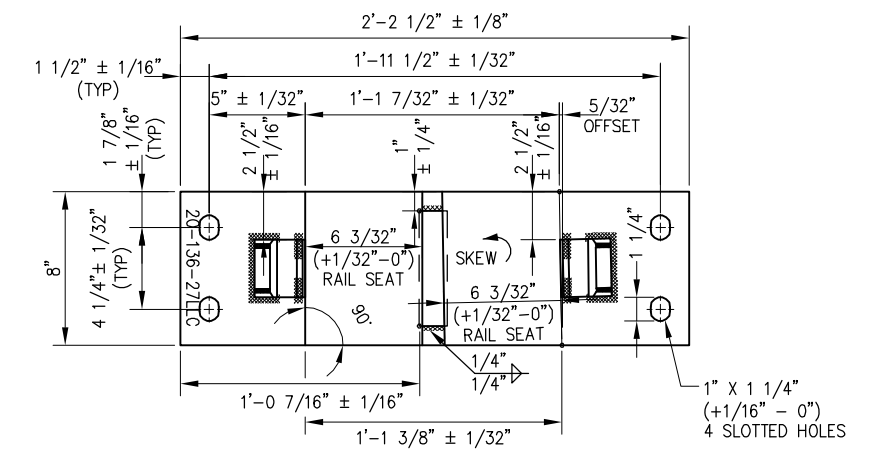
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REV:	EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2742	



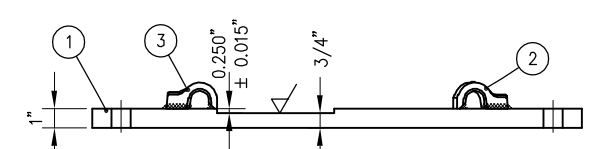
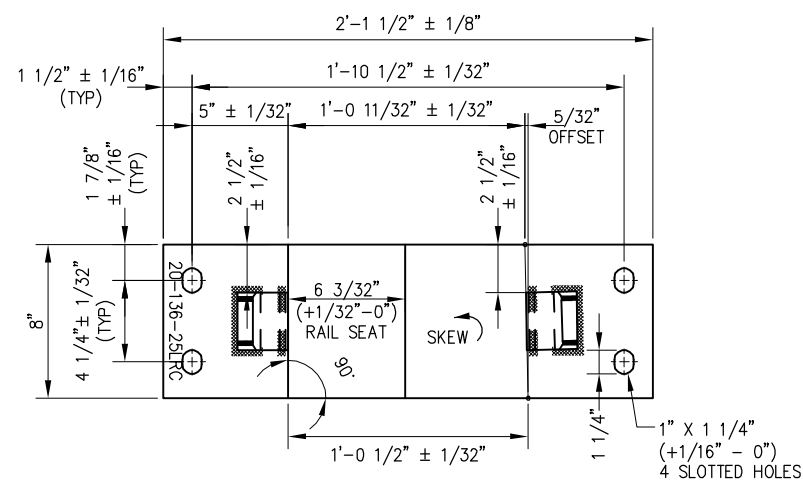
SWITCH PLATE P20-136-25LLC



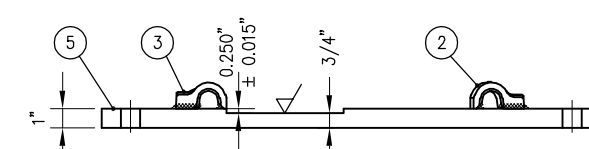
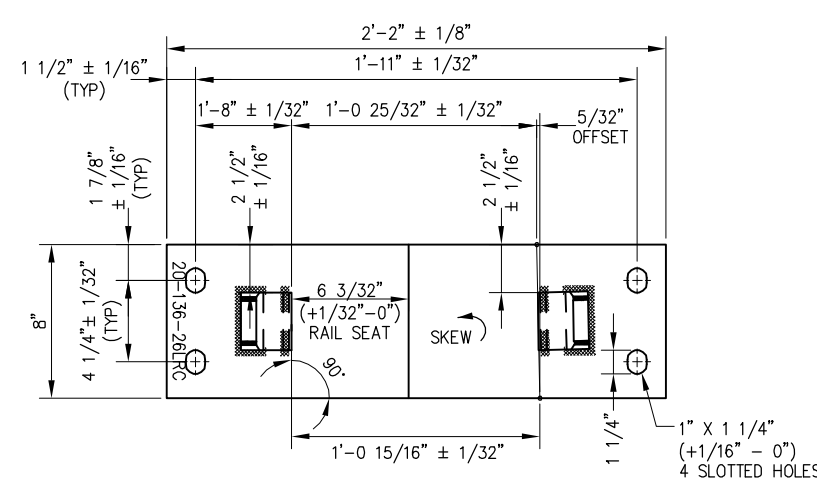
SWITCH PLATE P20-136-26LLC



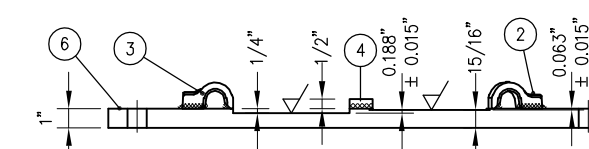
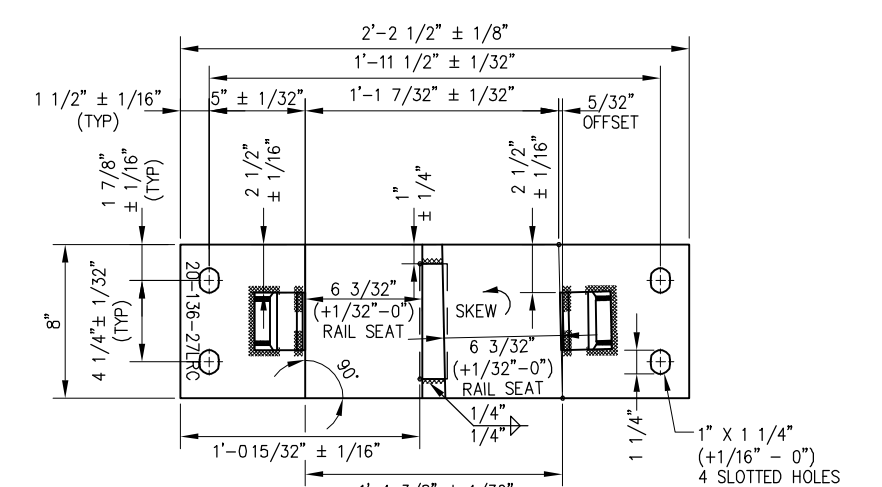
SWITCH PLATE P20-136-27LLC



SWITCH PLATE P20-136-25LRC



SWITCH PLATE P20-136-26LRC



SWITCH PLATE P20-136-27LRC

BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 1" x 8" x 2'-1 1/2"
2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1
3	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 5

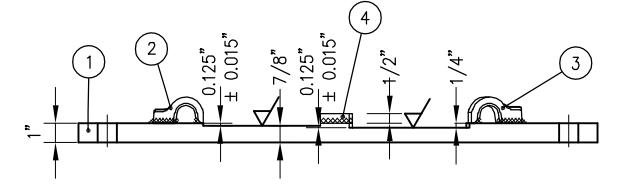
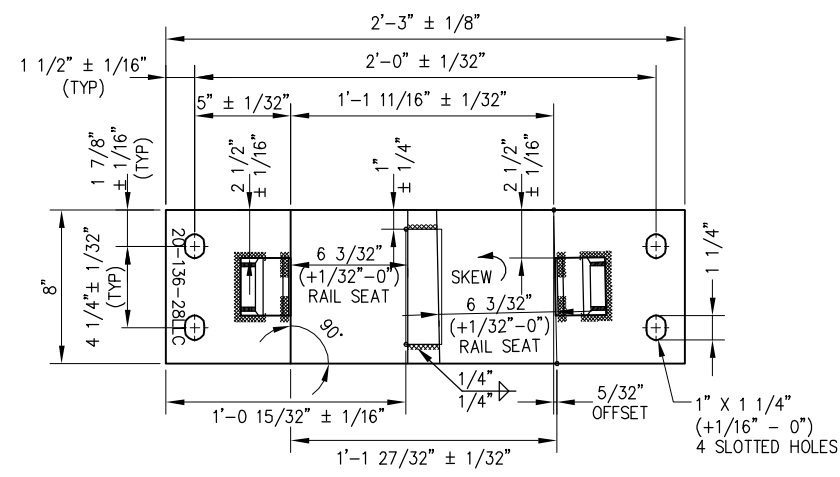
BILL OF MATERIALS	
ITEM	DESCRIPTION
4	FLAT BAR, ASTM A36, 1/2" x 6" x 1 7/16"
5	FLAT BAR, ASTM A36, 1" x 8" x 2'-2"
6	FLAT BAR, ASTM A36, 1" x 8" x 2'-2 1/2"

NOTES:

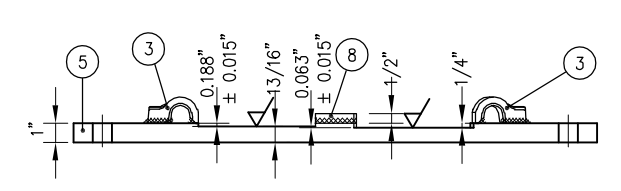
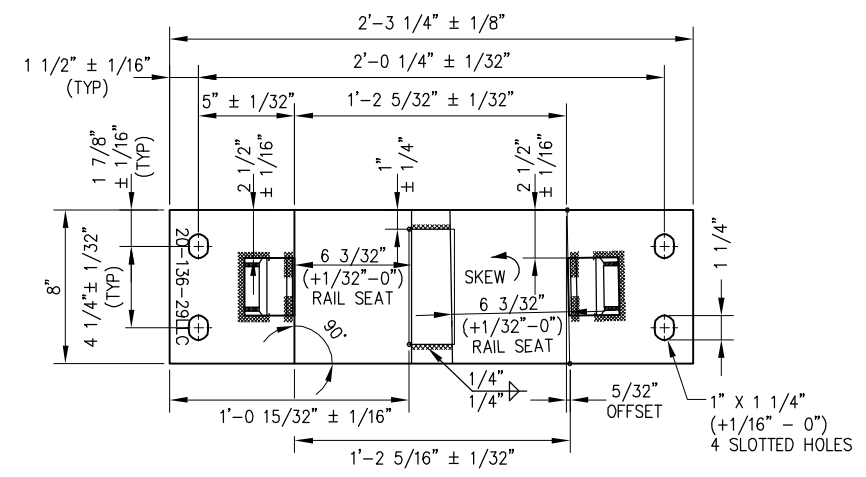
1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
3. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

REV	DATE	BY	CHK	APP	DESCRIPTION

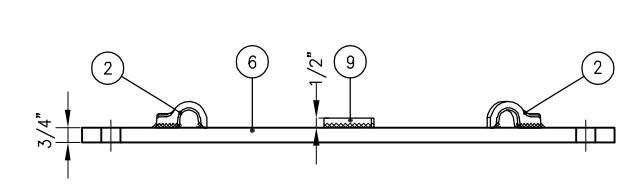
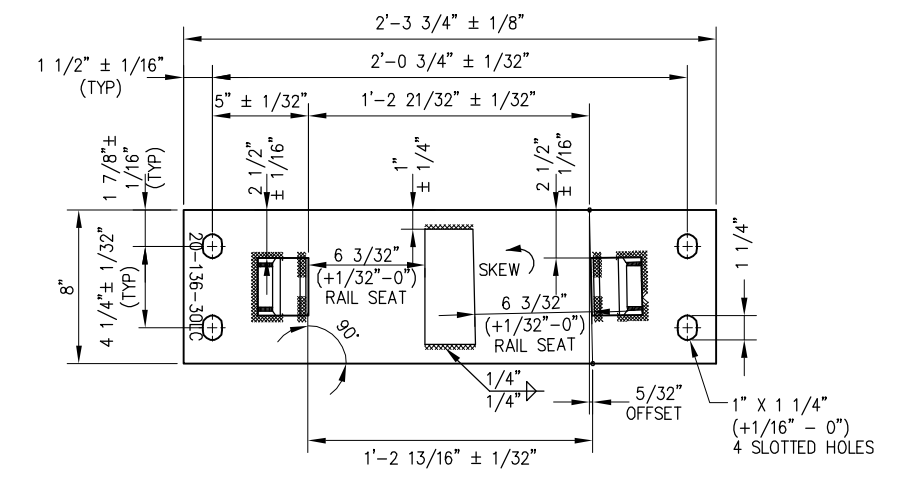
PENINSULA CORRIDOR JOINT POWERS BOARD		STANDARD DRAWINGS		CADD FILE NAME: SD-2743
APPROVED BY: <i>Bin Zhang</i> DEPUTY DIRECTOR, ENGINEERING		Caltrain 1250 San Carlos Avenue San Carlos, CA 94070		REV: EDITION: FOURTH
01012024 FOURTH EDITION		SPECIAL TRACKWORK NO. 20 TURNOUT SWITCH PLATES FOR LH TURNOUT 20-25LLC/LRC THRU 20-27LLC/LRC		SPECIAL TRACKWORK
REV DATE BY CHK APP DESCRIPTION		REV DATE BY CHK APP DESCRIPTION		STANDARD DRAWING NO: SD-2743



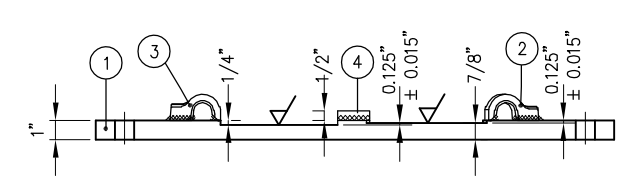
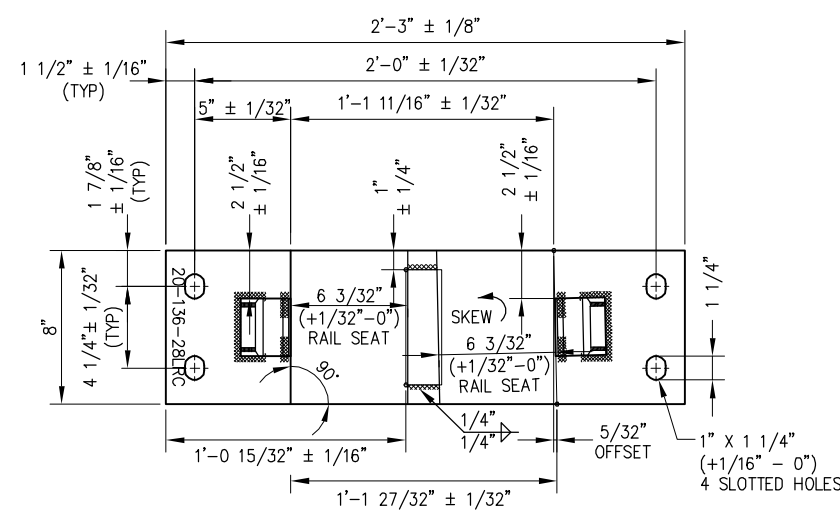
SWITCH PLATE P20-136-28LLC



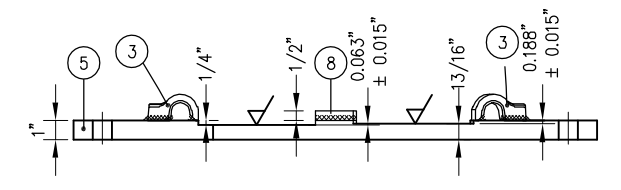
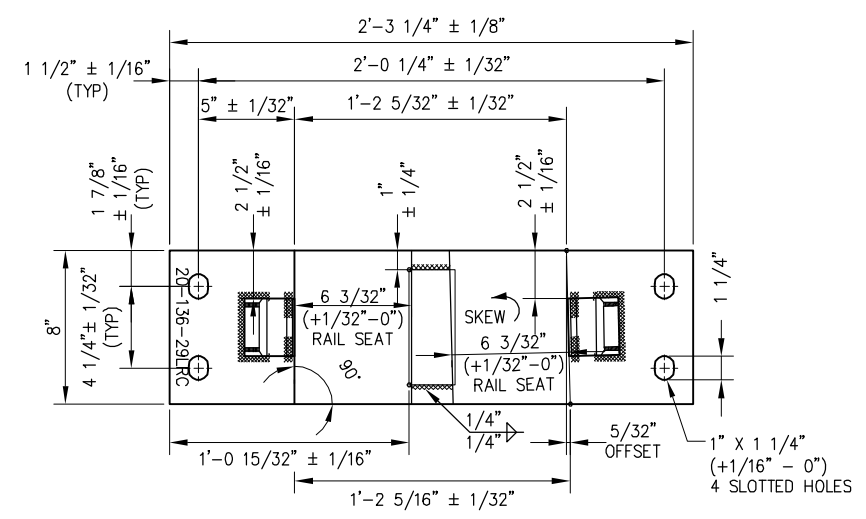
SWITCH PLATE P20-136-29LLC



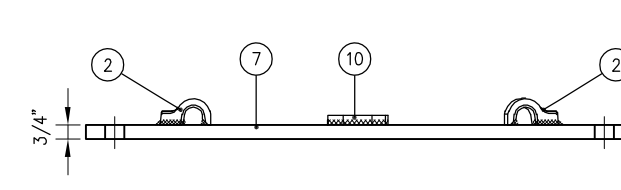
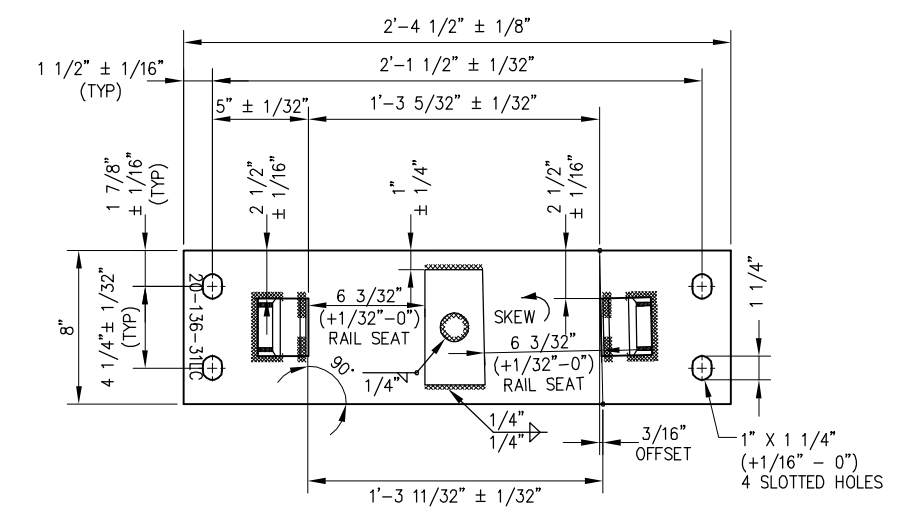
SWITCH PLATE P20-136-30LC



SWITCH PLATE P20-136-28LRC



SWITCH PLATE P20-136-29LRC



SWITCH PLATE P20-136-31LC

BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 1" x 8" x 2'-3"
2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1
3	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 5
4	FLAT BAR, ASTM A36, 1/2" x 6" x 1 7/8"
5	FLAT BAR, ASTM A36, 1" x 8" x 2'-3 1/4"

BILL OF MATERIALS	
ITEM	DESCRIPTION
6	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-3 3/4"
7	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-4 1/2"
8	FLAT BAR, ASTM A36, 1/2" x 6" x 2 3/8"
9	BURNED STOP, 1/2" THICK, TAPERED 2 5/8" TO 2 1/2", OVER 6"
10	BURNED STOP, 1/2" THICK, TAPERED 3" TO 3 1/8", OVER 6"

NOTES:

- I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
- WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
- SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING

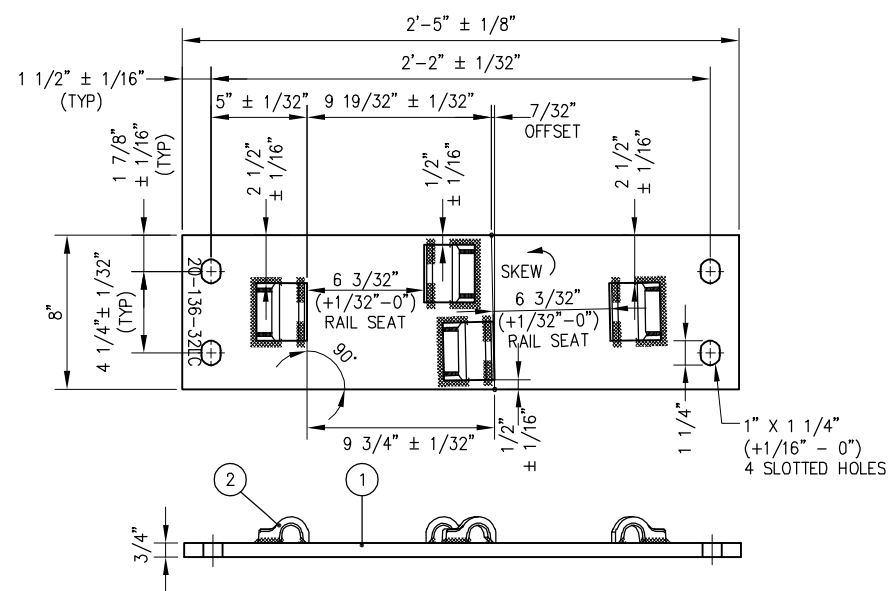
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
SWITCH PLATES FOR LH TURNOUT
20-28LLC/LRC THRU 20-29LLC/LRC
20-30LC THRU 20-31LC

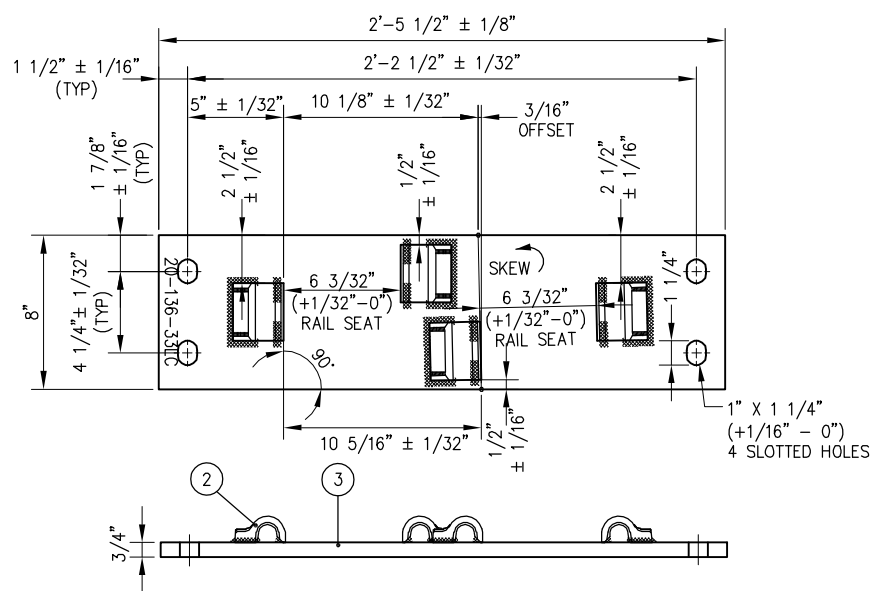
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SPECIAL TRACKWORK
STANDARD DRAWING NO.: SD-2744



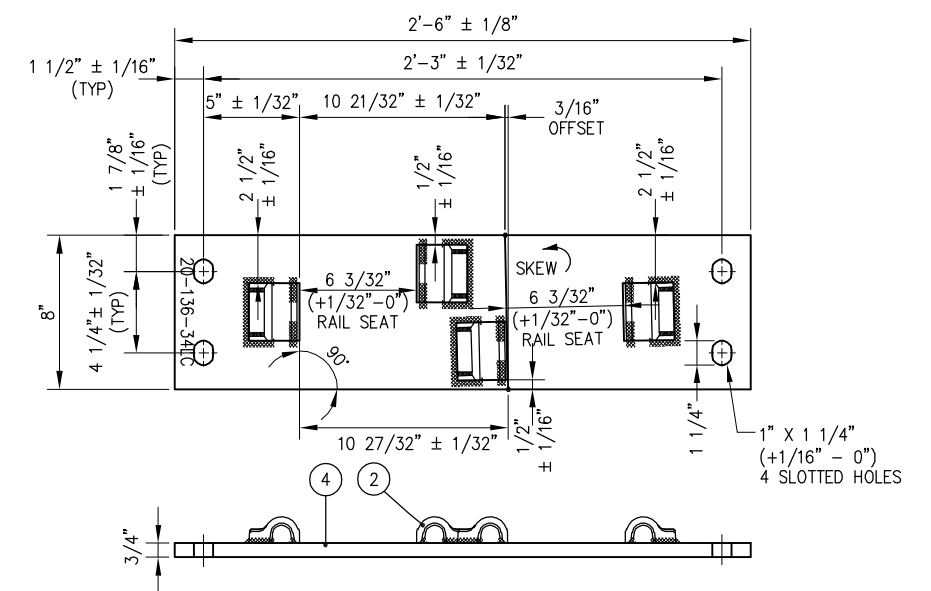
1250 San Carlos Avenue
San Carlos, CA 94070



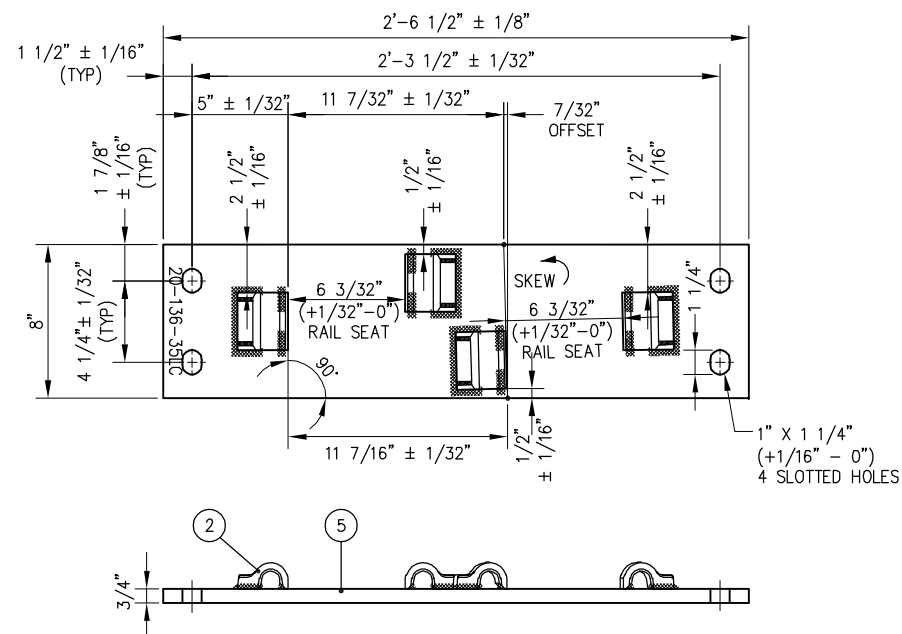
SWITCH PLATE P20-136-32LC



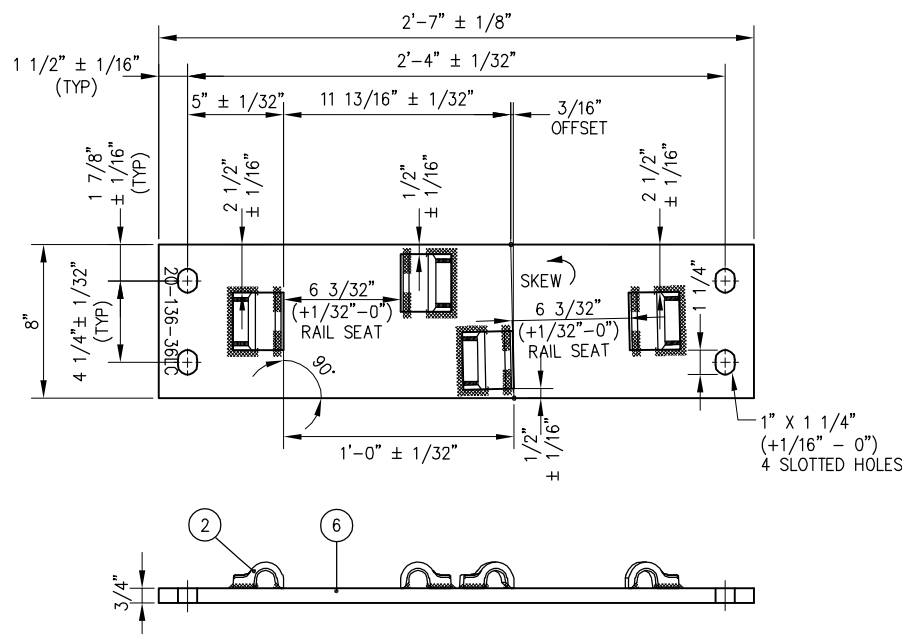
SWITCH PLATE P20-136-33LC



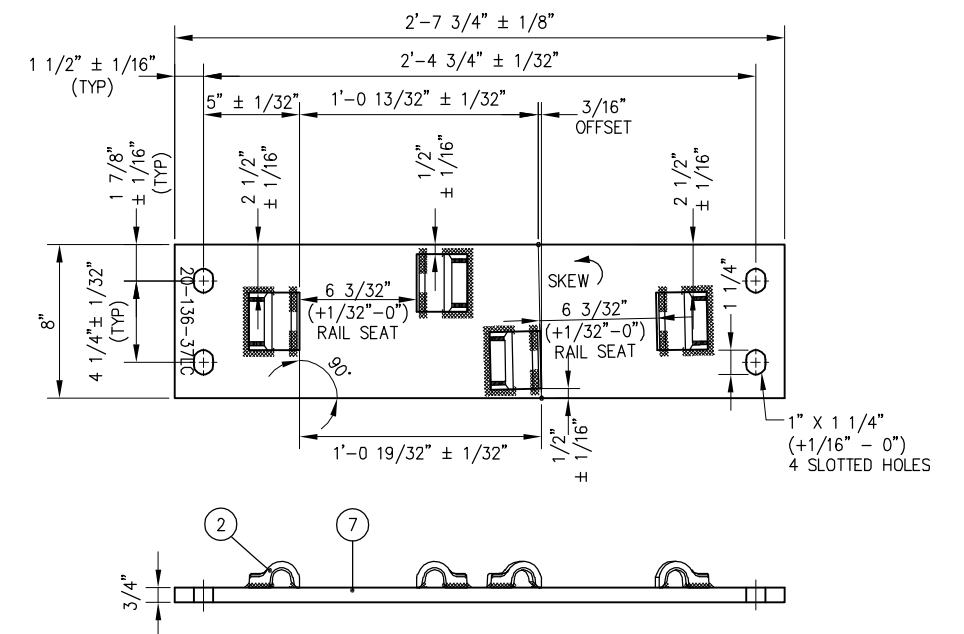
SWITCH PLATE P20-136-34LC



SWITCH PLATE P20-136-35LC



SWITCH PLATE P20-136-36LC



SWITCH PLATE P20-136-37LC

NOTES:

- I.D. CHARACTERS TO BE $1/2"$ MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
- WELDS TO BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
- SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, $3/4" \times 8" \times 2'-5"$
2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1
3	FLAT BAR, ASTM A36, $3/4" \times 8" \times 2'-5 \frac{1}{2}"$
4	FLAT BAR, ASTM A36, $3/4" \times 8" \times 2'-6"$

BILL OF MATERIALS	
ITEM	DESCRIPTION
5	FLAT BAR, ASTM A36, $3/4" \times 8" \times 2'-6 \frac{1}{2}"$
6	FLAT BAR, ASTM A36, $3/4" \times 8" \times 2'-7"$
7	FLAT BAR, ASTM A36, $3/4" \times 8" \times 2'-7 \frac{1}{4}"$

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
SWITCH PLATES FOR LH TURNOUT
20-32LC THRU 20-37LC

CADD FILE NAME:
SD-2745

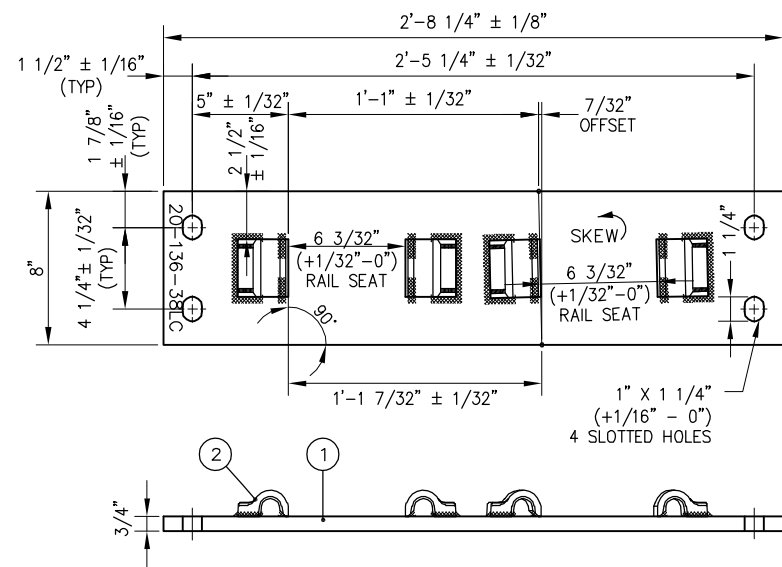
REV: EDITION:
 FOURTH

SPECIAL TRACKWORK

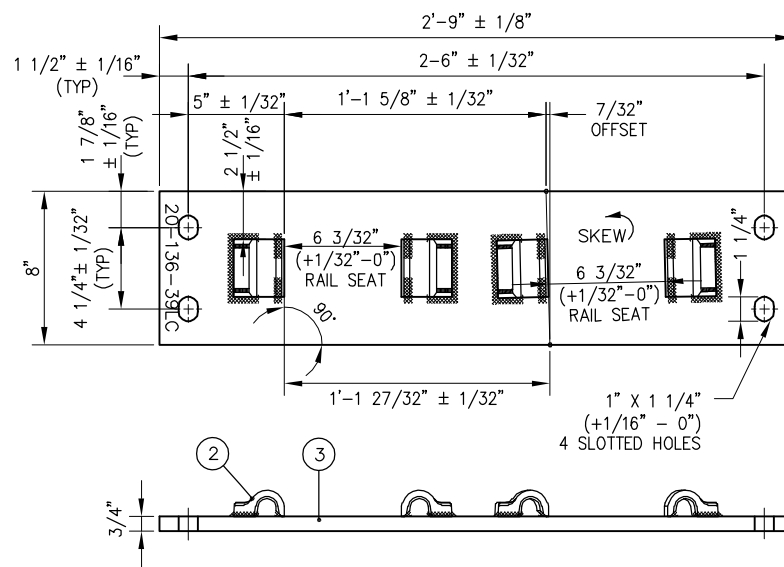
STANDARD DRAWING NO.:
SD-2745

REV	DATE	BY	CHK	APP	DESCRIPTION

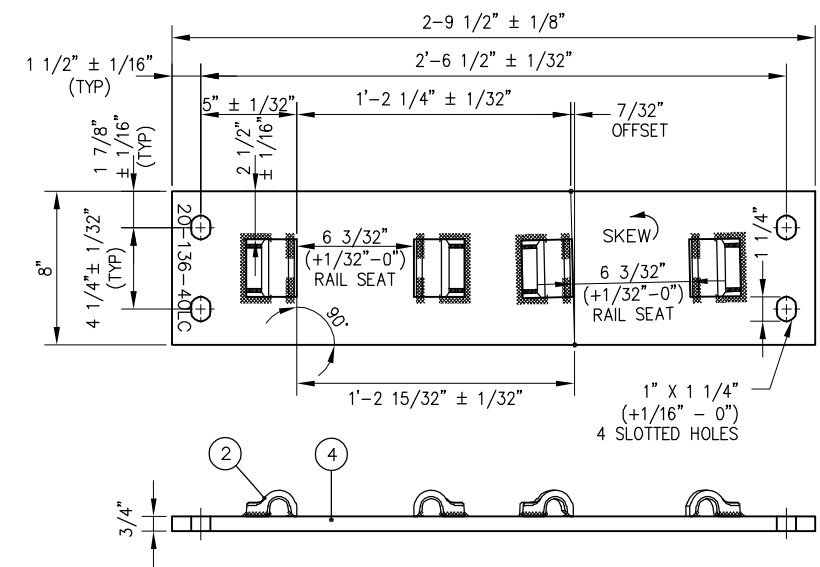
01012024 FOURTH EDITION



SWITCH PLATE P20-136-38LC



SWITCH PLATE P20-136-39LC



SWITCH PLATE P20-136-40LC

BILL OF MATERIALS		BILL OF MATERIALS	
ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, $3/4" \times 8" \times 2'-8\frac{1}{4}"$	3	FLAT BAR, ASTM A36, $3/4" \times 8" \times 2'-9"$
2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	4	FLAT BAR, ASTM A36, $3/4" \times 8" \times 2'-9\frac{1}{2}"$

NOTES:

1. I.D. CHARACTERS SHALL BE $1/2"$ MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
3. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

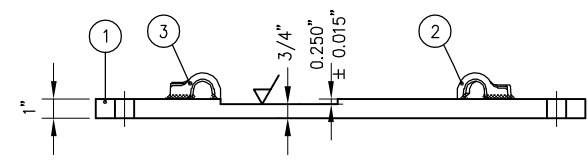
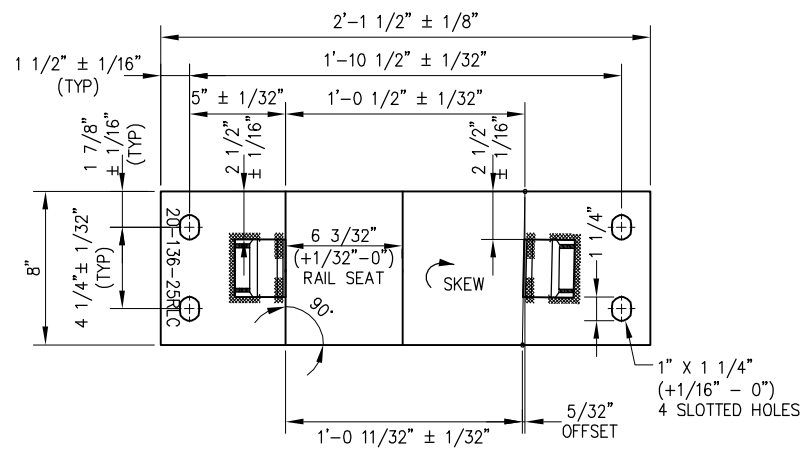
SPECIAL TRACKWORK
NO. 20 TURNOUT
SWITCH PLATES FOR LH TURNOUT
20-38LC THRU 20-40LC

CADD FILE NAME:
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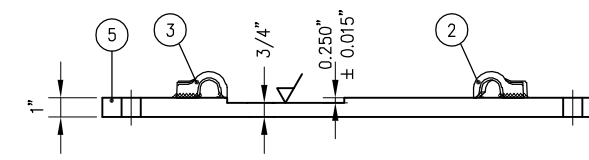
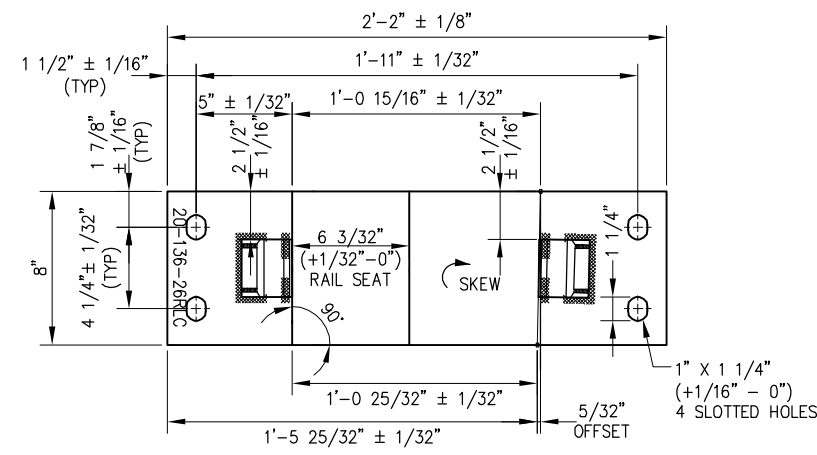
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SPECIAL TRACKWORK

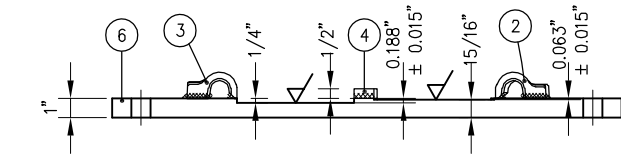
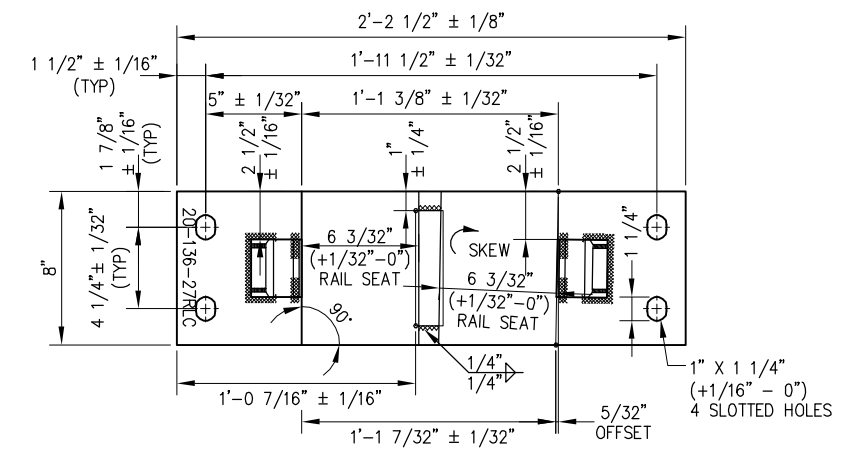
STANDARD DRAWING NO.:
SD-2746



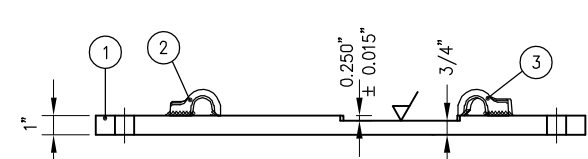
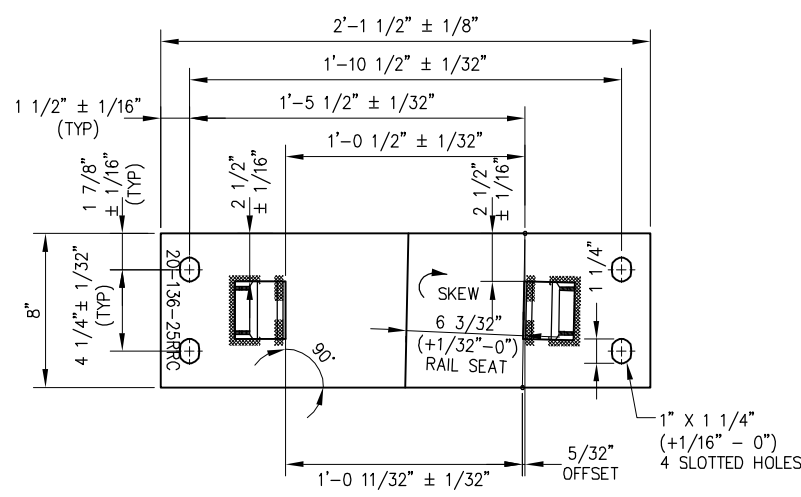
SWITCH PLATE P20-136-25RLC



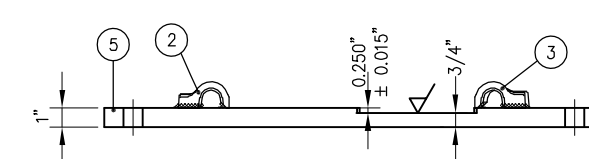
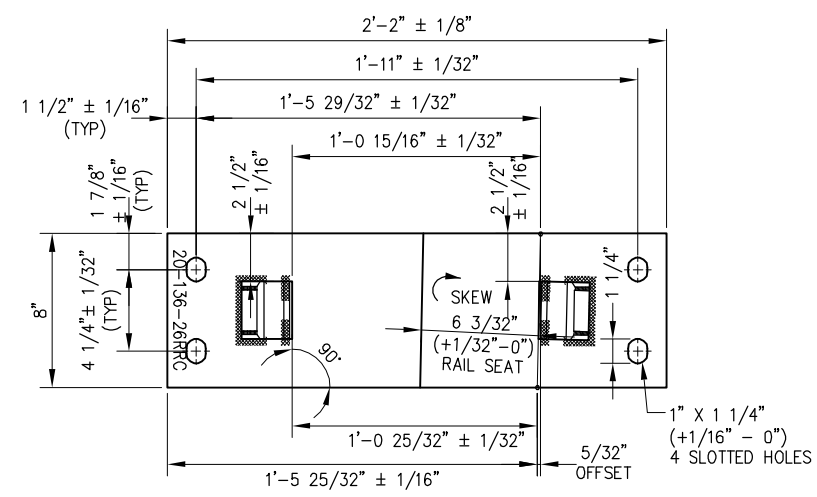
SWITCH PLATE P20-136-26RLC



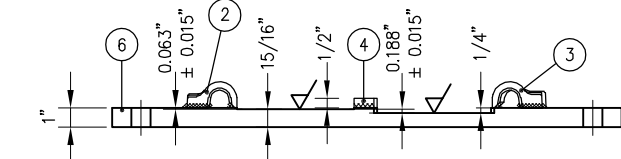
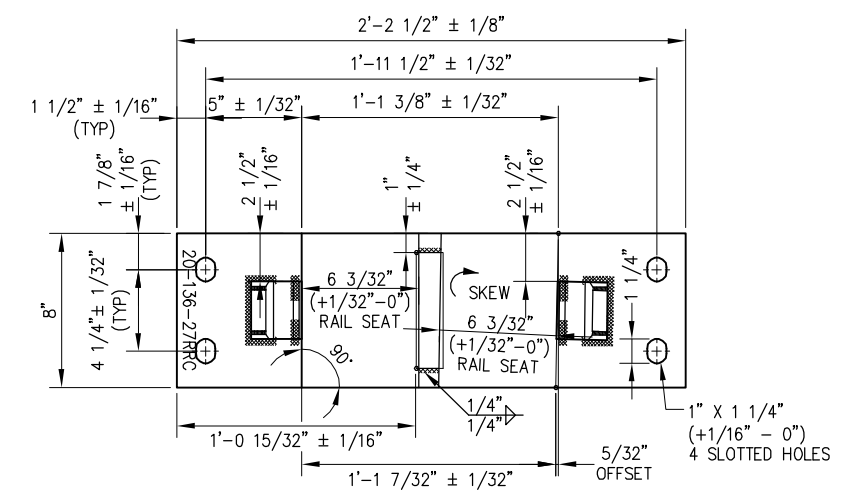
SWITCH PLATE P20-136-27RLC



SWITCH PLATE P20-136-25RRC



SWITCH PLATE P20-136-26RRC



SWITCH PLATE P20-136-27RRC

BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 1" x 8" x 2'-1 1/2"
2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1
3	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 5

BILL OF MATERIALS	
ITEM	DESCRIPTION
4	FLAT BAR, ASTM A36, 1/2" x 6" x 1 7/16"
5	FLAT BAR, ASTM A36, 1" x 8" x 2'-2"
6	FLAT BAR, ASTM A36, 1" x 8" x 2'-2 1/2"

NOTES:

1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
3. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

 DEPUTY DIRECTOR, ENGINEERING

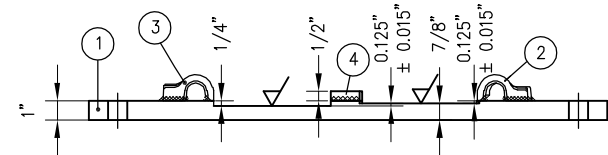
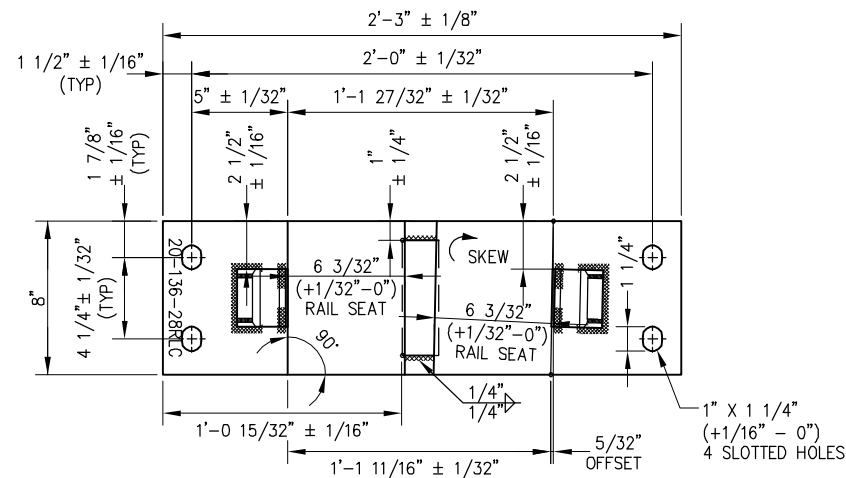
STANDARD DRAWINGS

SPECIAL TRACKWORK
 NO. 20 TURNOUT
 SWITCH PLATES FOR RH TURNOUT
 20-25RLC/RRC THRU 20-27RLC/RRC

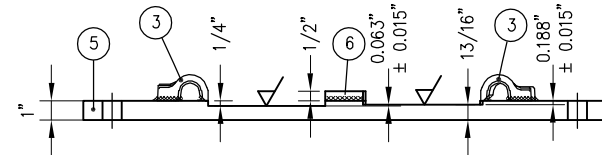
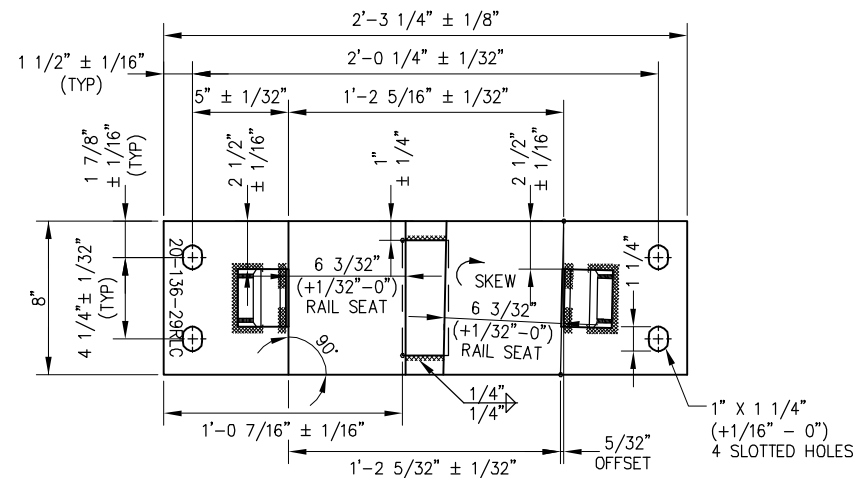
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 SPECIAL TRACKWORK
 STANDARD DRAWING NO.: SD-2747



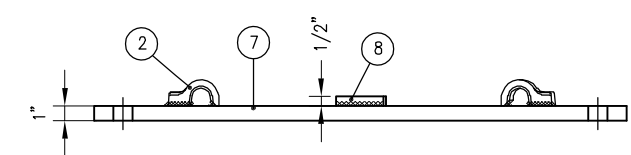
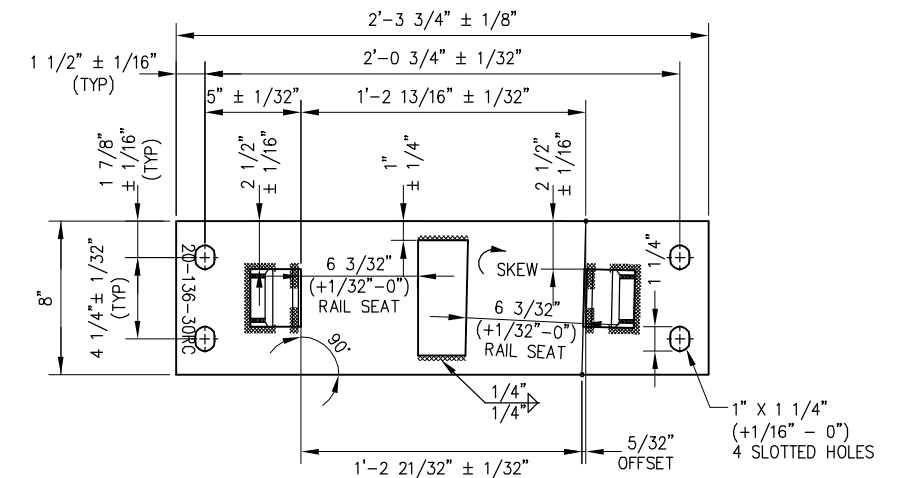
01012024 FOURTH EDITION



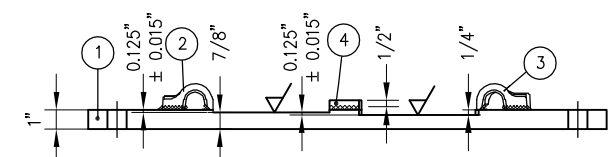
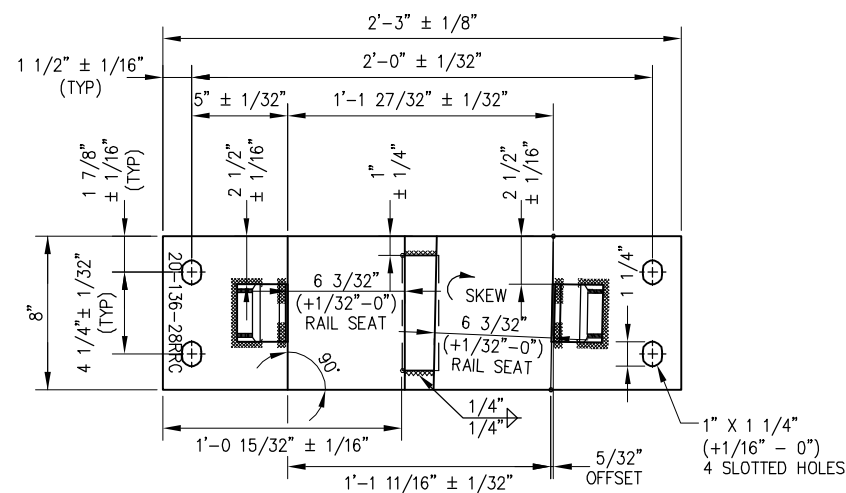
SWITCH PLATE P20-136-28RLC



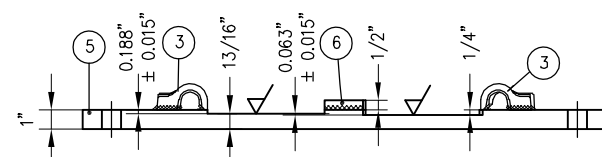
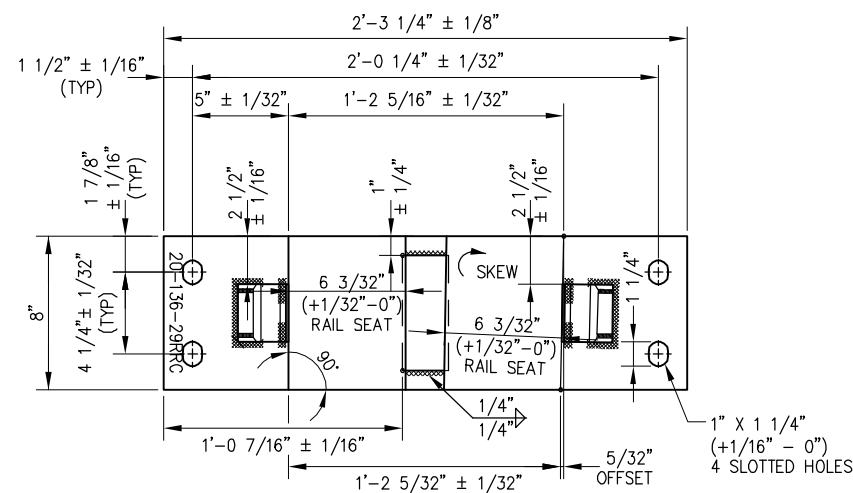
SWITCH PLATE P20-136-29RLC



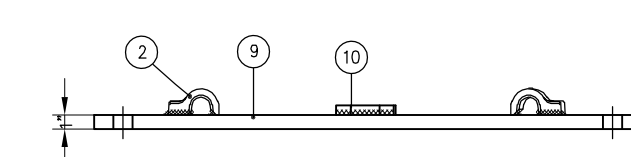
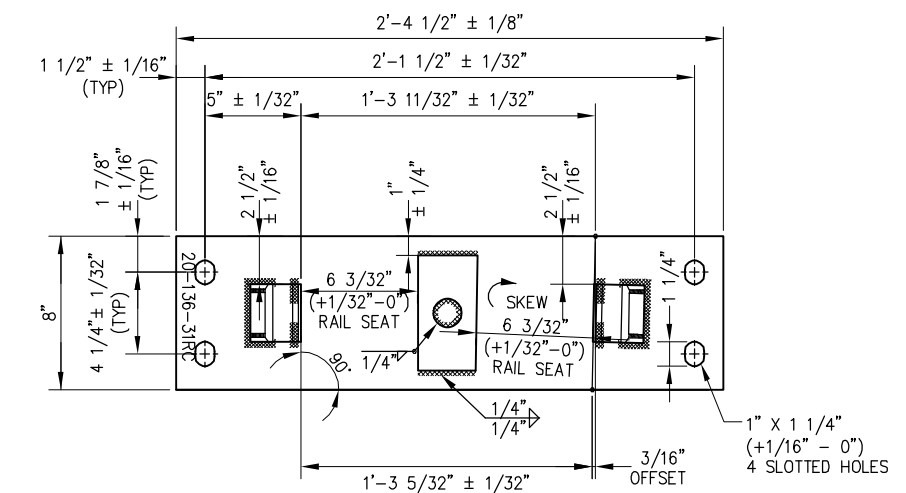
SWITCH PLATE P20-136-30RC



SWITCH PLATE P20-136-28RRC



SWITCH PLATE P20-136-29RRC



SWITCH PLATE P20-136-31RC

BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 1" x 8" x 2'-3"
2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1
3	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 5
4	FLAT BAR, ASTM A36, 1/2" x 6" x 1 7/8"
5	FLAT BAR, ASTM A36, 1" x 8" x 2'-3 1/4"

BILL OF MATERIALS	
ITEM	DESCRIPTION
6	FLAT BAR, ASTM A36, 1/2" x 6" x 2 3/8"
7	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-3 3/4"
8	BURNED STOP, 1/2" THICK, TAPERED 2 5/8" TO 2 1/2", OVER 6"
9	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-4 1/2"
10	BURNED STOP, 1/2" THICK, TAPERED 3" TO 3 1/8", OVER 6"

NOTES:

- I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
- WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
- SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
SWITCH PLATES FOR RH TURNOUT
20-28RLC/RRC THRU 20-29RLC/RRC
20-30RC THRU 20-31RC

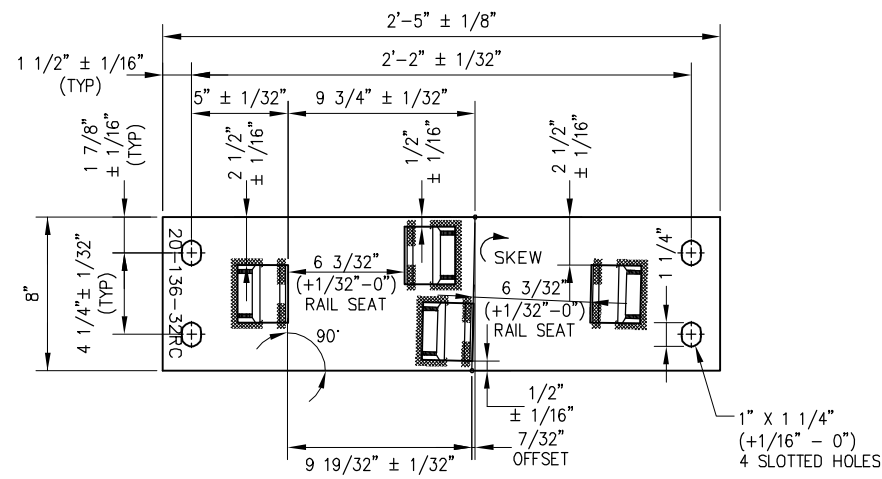
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REV: EDITION:
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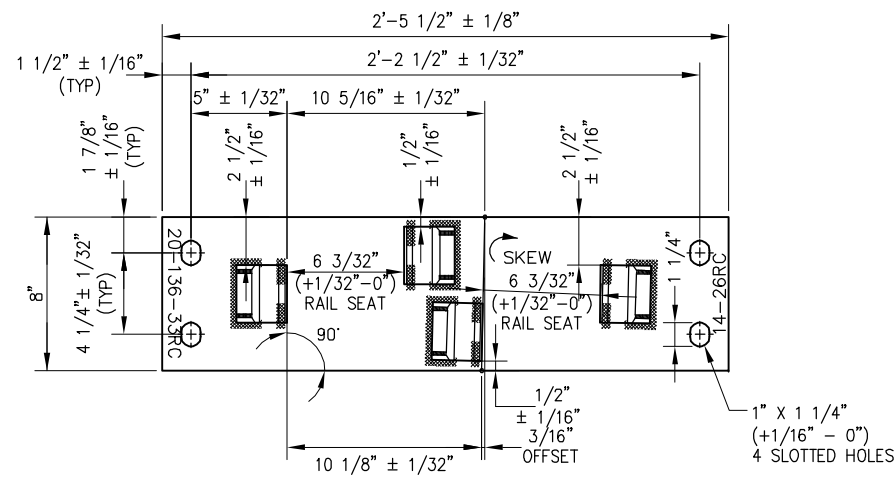
SPECIAL TRACKWORK

STANDARD DRAWING NO.:
SD-2748

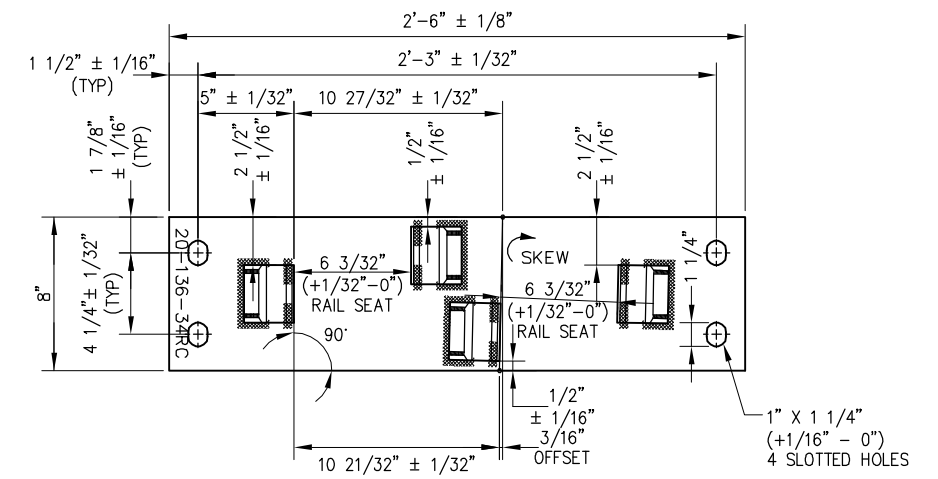
REV	DATE	BY	CHK	APP	DESCRIPTION



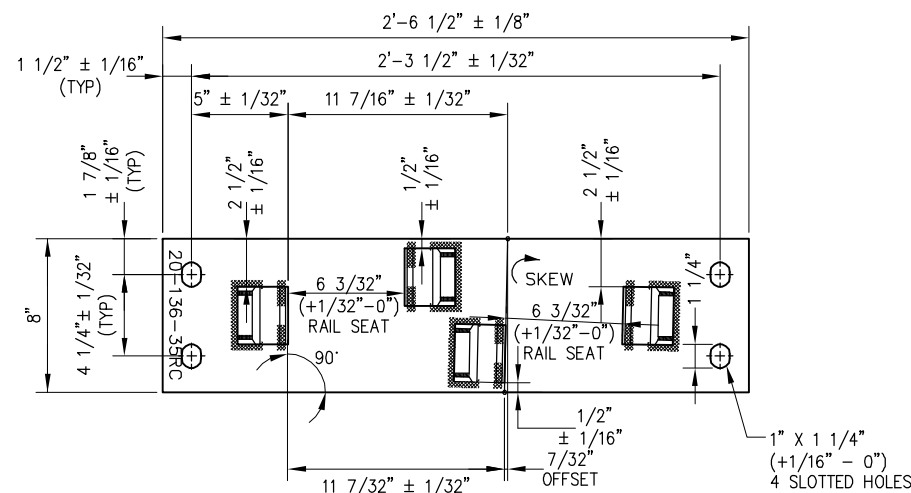
SWITCH PLATE P20-136-32RC



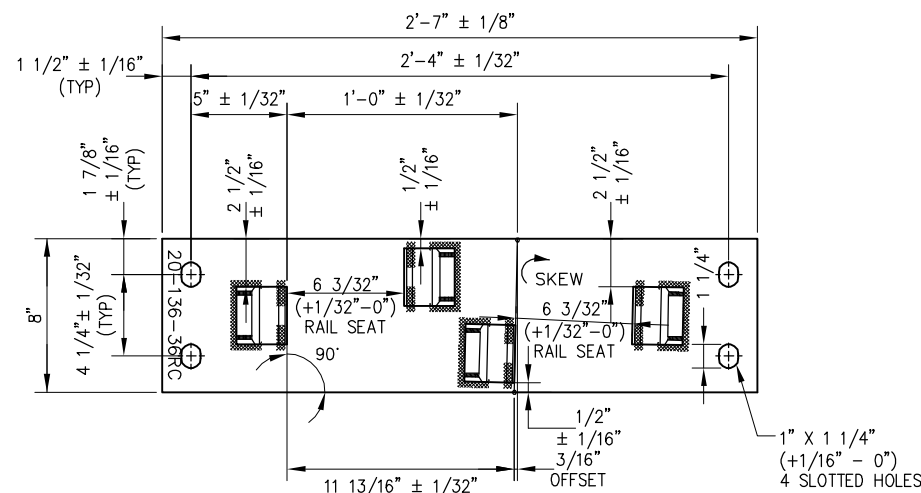
SWITCH PLATE P20-136-33RC



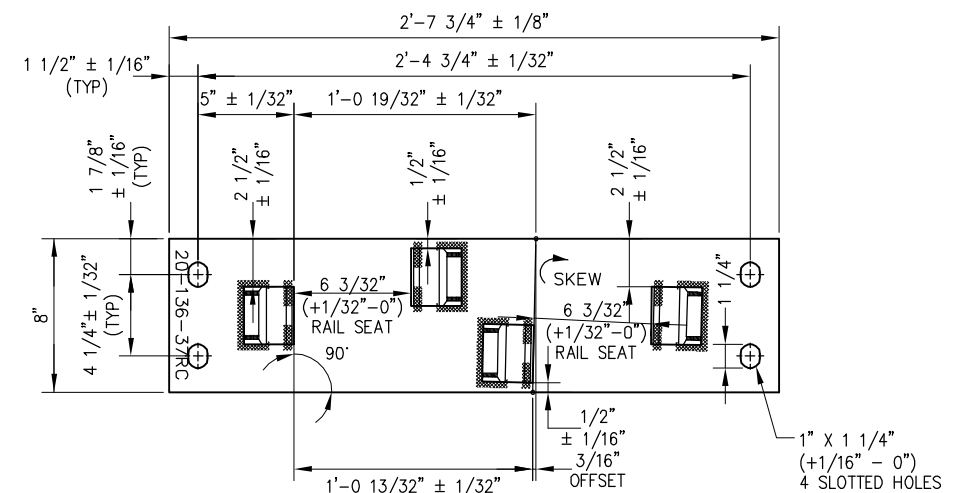
SWITCH PLATE P20-136-34RC



SWITCH PLATE P20-136-35RC



SWITCH PLATE P20-136-36RC



SWITCH PLATE P20-136-37RC

BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-5"
2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1
3	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-5 1/2"
4	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-6"

BILL OF MATERIALS	
ITEM	DESCRIPTION
5	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-6 1/2"
6	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-7"
7	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-7 3/4"

NOTES:

- I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
- WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
- SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
SWITCH PLATES FOR RH TURNOUT
20-32RC THRU 20-37RC

CADD FILE NAME:
SD-2749

REV: EDITION:
FOURTH

SPECIAL TRACKWORK

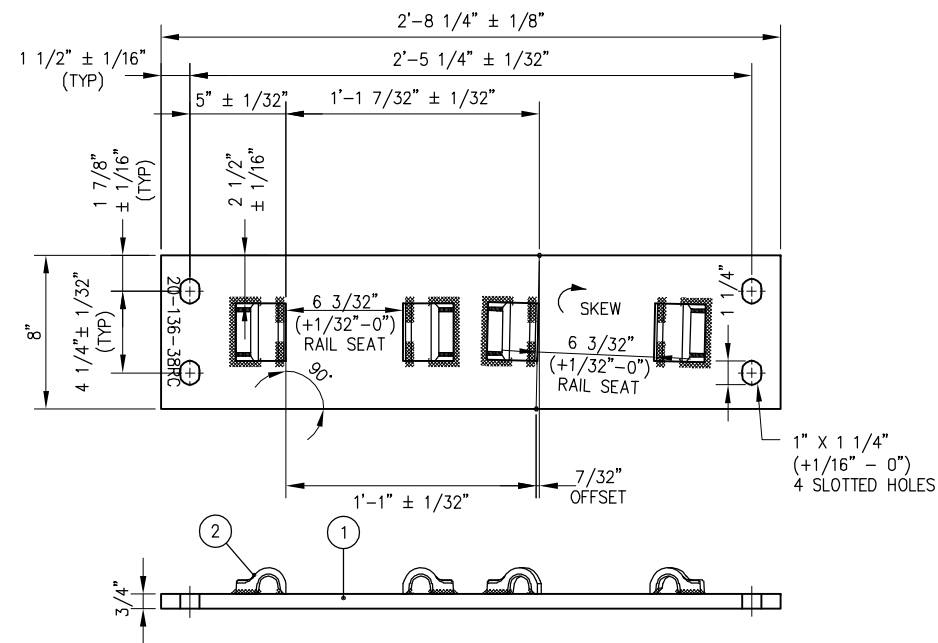
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SD-2749

REV	DATE	BY	CHK	APP	DESCRIPTION

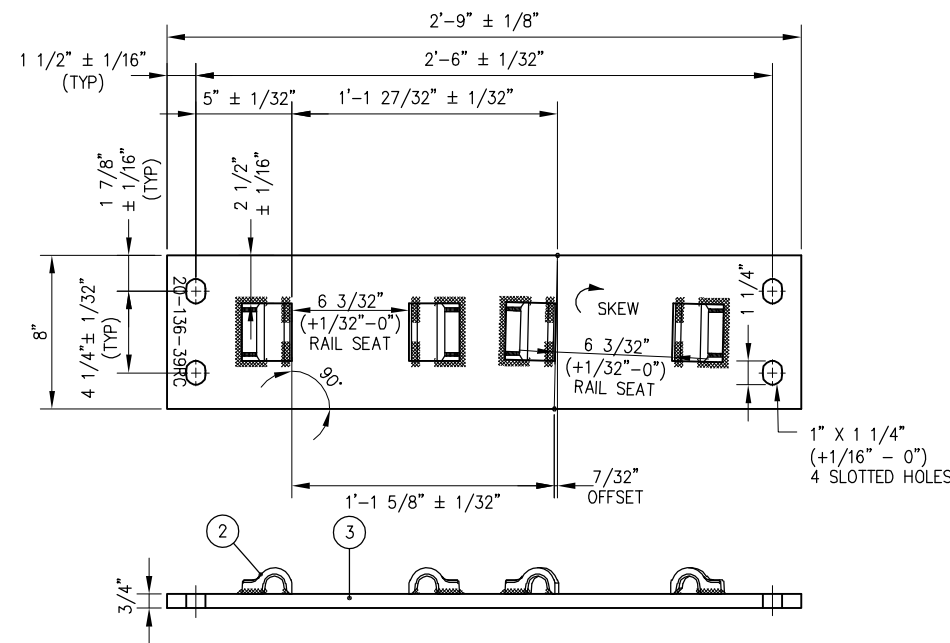
01012024 FOURTH EDITION

DESCRIPTION

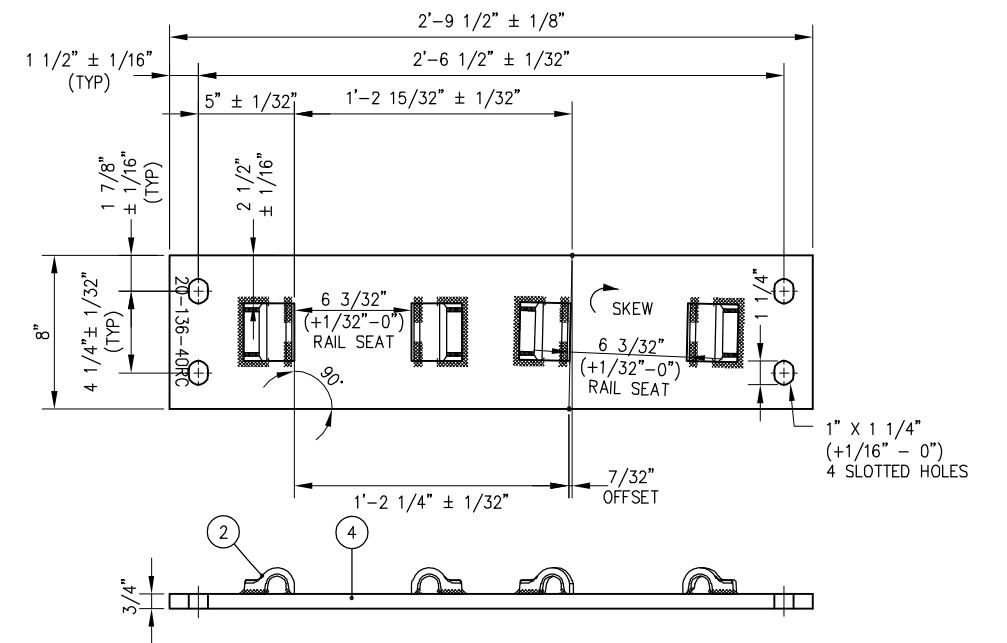
REV DATE BY CHK APP



SWITCH PLATE P20-136-38RC



SWITCH PLATE P20-136-39RC



SWITCH PLATE P20-136-40RC

NOTES:

1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
3. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

BILL OF MATERIALS		BILL OF MATERIALS	
ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-8 1/4"	3	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-9"
2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	4	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-9 1/2"

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING

1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

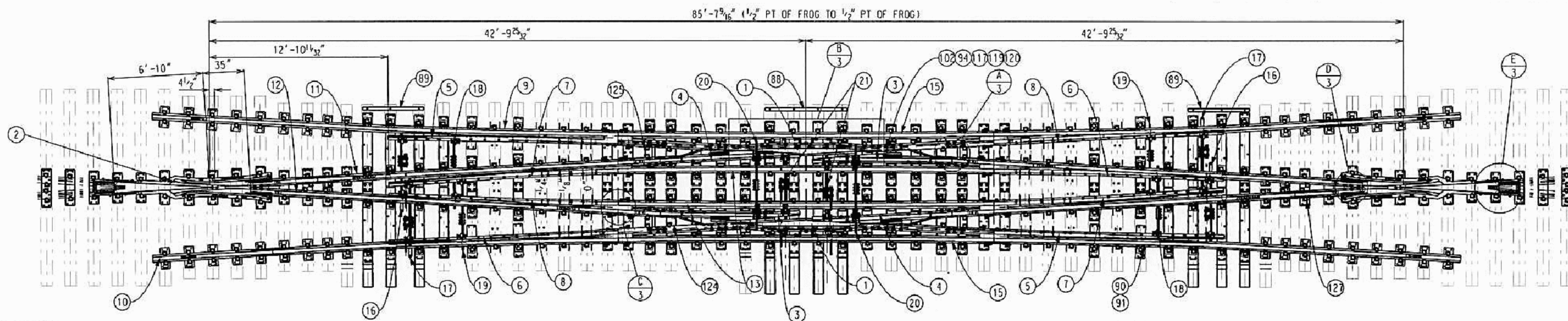
SPECIAL TRACKWORK
NO. 20 TURNOUT
SWITCH PLATES FOR RH TURNOUT
20-38RC THRU 20-40RC

CADD FILE NAME:
SD-2750

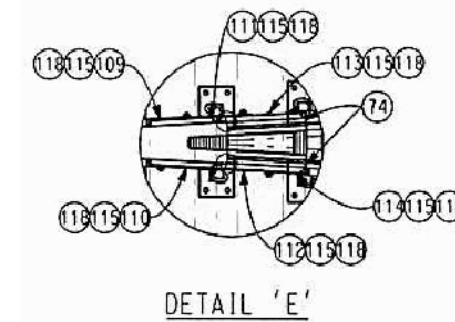
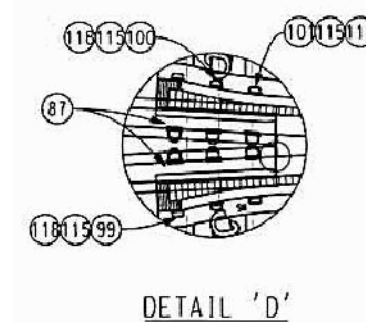
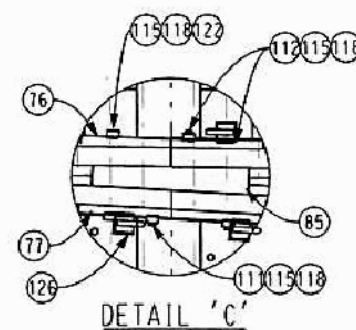
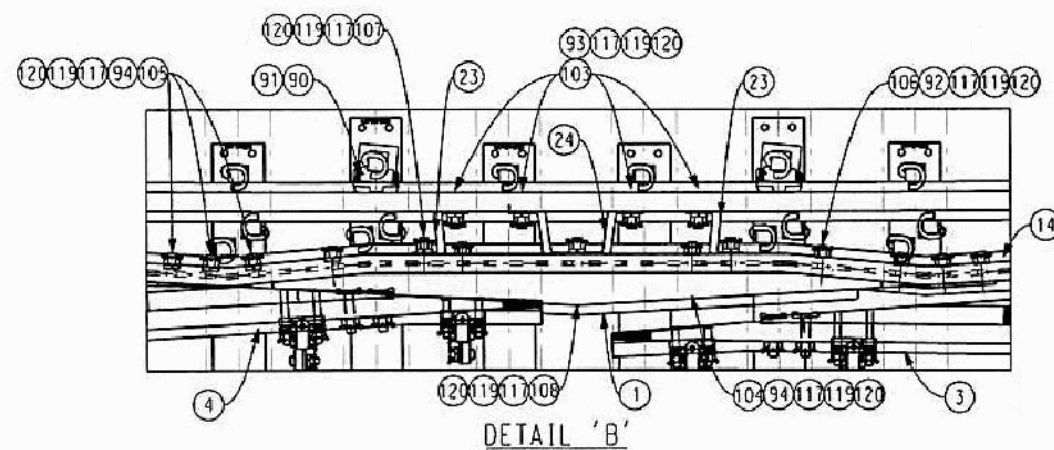
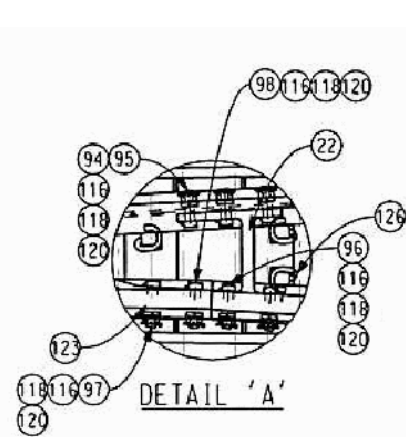
REV: EDITION:
 FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO.:
SD-2750



NO 9 DOUBLE SLIP SWITCH LAYOUT



NOTES:

1. ALL MEASUREMENTS GIVEN AT 5/8" BELOW TOP OF RAIL
2. SEE SD-2802 FOR BILL OF MATERIAL

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 9 DOUBLE SLIP
ON TIMBER TIES

CADD FILE NAME:
SD-2801

REV: EDITION:
FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO:
SD-2801

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

BILL OF MATERIAL

ITEM	PRODUCT No.	QTY	DESCRIPTION
1	C40-09900	2	FROG, CENTER KNUCKLE CASTING (K136RE-9) M/C'D, EDH'D
2	C40-09851	2	FROG, No.9-136RE SOLID MANGANESE, EDH (U99-09821)
3	D03-21280	2	CENTER POINT ASSEMBLY, LH 136RE
4	D03-21281	2	CENTER POINT ASSEMBLY, RH 136RE
5	D08-40250	2	SWITCH POINT ASSEMBLY, LH, STR, OUTSIDE END, 16'-6" SW
6	D08-40251	2	SWITCH POINT ASSEMBLY, RH, STR, OUTSIDE END, 16'-6" SW
7	D28-40250	2	SWITCH POINT ASSEMBLY, LH, CVD, INSIDE END, 16'-6" SW
8	D28-40251	2	SWITCH POINT ASSEMBLY, RH, CVD, INSIDE END, 16'-6" SW
9	L35-09000	2	STOCK RAIL, CVD, LH, OUTSIDE 136RE, SAMSON
10	B99-09001	2	INSULATED JOINT KIT ASSEMBLY, 136RE, 33'-6" LONG
11	B99-09002	2	INSULATED JOINT KIT ASSEMBLY, 136RE, 29'-5 ¹³ / ₁₆ " LONG
12	L35-09003	2	STOCK RAIL, STR, RH, INSIDE 136RE, SAMSON
13	L41-09100	2	RAIL, SLIP, INSIDE x 26'-10 ³ / ₄ " LONG
14	L41-09101	2	RAIL, EASER, OUTSIDE x 26'-11 ¹ / ₂ " LONG
15	L41-09102	2	SLIP RAIL, OUTSIDE, 136RE x 26'-10 ¹¹ / ₁₆ " LONG
16	B28-00620	2	ROD, SWITCH, VERTICAL, INSULATED No.1 c/w BASKET
17	B28-00621	2	ROD, SWITCH, VERTICAL, INSULATED No.2 c/w BASKET
18	B28-00622	2	ROD, SWITCH, VERTICAL, INSULATED No.3
19	B28-00623	2	ROD, SWITCH, VERTICAL, INSULATED No.4
20	B28-00624	2	ROD, SWITCH, VERTICAL, INSULATED No.5
21	B28-00625	2	ROD, SWITCH, VERTICAL, INSULATED No.6 c/w BASKET
22	B15-40410	4	STRAP, ANTI-CREEP
23	B15-40600	4	STRUT, SINGLE
24	B15-40601	2	STRUT, DOUBLE
25	G10-09534	8	BRACE SLIDE PLATE (BP2-136)
26	G10-09535	8	SWITCH PLATE (P4)
27	G10-94000	8	SWITCH PLATE (P4-136)
28	G10-94001	8	SWITCH PLATE (P5-136)
29	G35-94000	1	PLATE (DSS9-1L-136)
30	G35-94001	1	PLATE (DSS9-1R-136)
31	G35-94016	1	PLATE (DSS9-1LL-136)
32	G35-94017	1	PLATE (DSS9-1RR-136)
33	G35-94002	1	PLATE (DSS9-2L-136)
34	G35-94003	1	PLATE (DSS9-2R-136)
35	G35-94018	1	PLATE (DSS9-2LL-136)
36	G35-94019	1	PLATE (DSS9-2RR-136)
37	G35-94004	2	PLATE (DSS9-3L-136)
38	G35-94005	2	PLATE (DSS9-3R-136)
39	G35-94006	2	PLATE (DSS9-4L-136)
40	G35-94007	2	PLATE (DSS9-4R-136)
41	G35-94008	2	PLATE (DSS9-5L-136)
42	G35-94009	2	PLATE (DSS9-5R-136)

BILL OF MATERIAL

ITEM	PRODUCT No.	QTY	DESCRIPTION
43	G35-94010	2	PLATE (DSS9-6L-136)
44	G35-94011	2	PLATE (DSS9-6R-136)
45	G35-94012	2	PLATE (DSS9-7L-136)
46	G35-94013	2	PLATE (DSS9-7R-136)
47	G35-94014	2	PLATE (DSS9-8L-136)
48	G35-94015	2	PLATE (DSS9-8R-136)
49	G06-94000	1	GAUGE PLATE ASSEMBLY (DSS9-136-GPOL)
50	G06-94007	1	GAUGE PLATE ASSEMBLY (DSS9-136-GPOR)
51	G06-94001	2	GAUGE PLATE ASSEMBLY (DSS9-136-GP1)
52	G06-94002	2	GAUGE PLATE ASSEMBLY (DSS9-136-GP2)
53	G06-94003	2	GAUGE PLATE ASSEMBLY (DSS9-136-GP3)
54	G06-94004	2	GAUGE PLATE ASSEMBLY (DSS9-136-GP4)
55	G06-94005	1	GAUGE PLATE ASSEMBLY (DSS9-136-GP5L)
56	G06-94008	1	GAUGE PLATE ASSEMBLY (DSS9-136-GP5R)
57	G06-94006	1	GAUGE PLATE ASSEMBLY (DSS9-136-GP6L)
58	G06-94009	1	GAUGE PLATE ASSEMBLY (DSS9-136-GP6R)
59	G01-02901	36	PLATE, (SRP-136)
60	G20-09550	2	PLATE, FROG, 9-19F-136
61	G20-09564	4	PLATE, FROG, 9-20/21L-136
62	G20-09565	4	PLATE, FROG, 9-20/21R-136
63	G20-09553	2	PLATE, FROG, 9-22F-136
64	G20-09554	2	PLATE, FROG, 9-23F-136
65	G20-09555	2	PLATE, FROG, 9-24F-136
66	G20-09556	2	PLATE, FROG, 9-25F-136
67	G20-09557	2	PLATE, FROG, 9-26F-136
68	G20-09558	2	PLATE, FROG, 9-27F-136
69	G20-09559	2	PLATE, FROG, 9-28F-136
70	G20-09560	2	PLATE, FROG, 9-29F-136
71	G20-09561	2	PLATE, FROG, 9-30F-136
72	G20-09562	2	PLATE, FROG, 9-31F-136
73	G20-09563	2	PLATE, FROG, 9-32F-136
74	H10-90614	4	JOINT BAR RD/OV 6-HOLE 1 ¹ / ₈ " BOLT 132RE
75	H30-90226	6	JOINT BAR, LH, BENT AND M/C, 4-HOLE, 28" LONG, 1 ¹ / ₈ " DIA. BOLTS
76	H30-90225	6	JOINT BAR, RH, BENT AND M/C, 4-HOLE, 28" LONG, 1 ¹ / ₈ " DIA. BOLTS
77	H30-90228	4	JOINT BAR, LH, STRAIGHT, 4-HOLE, 28" LONG, 1 ¹ / ₈ " DIA. BOLTS
78	H30-90227	4	JOINT BAR, RH, STRAIGHT, 4-HOLE, 28" LONG, 1 ¹ / ₈ " DIA. BOLTS
79	J15-10352	33	TIE, TREATED HARDWOOD, 7" X 9" X 12'-0" LONG
80	J15-10353	8	TIE, TREATED HARDWOOD, 7" X 9" X 13'-0" LONG
81	J15-10354	12	TIE, TREATED HARDWOOD, 7" X 9" X 14'-0" LONG
82	J15-10380	8	TIE, WOOD, 8" X 10" X 13'-0", DAPPED
83	J15-10381	5	TIE, WOOD, 8" X 10" X 13'-6", DAPPED
84	J50-00010	1	TIE TAG SET

BILL OF MATERIAL

ITEM	PRODUCT No.	QTY	DESCRIPTION
85	L70-01300	2	BLOCK, RH, SWITCH HEEL, 136RE, 4-HOLE x 24" LONG
86	L70-01301	2	BLOCK, LH, SWITCH HEEL, 136RE, 4-HOLE x 24" LONG
87	L99-00070	4	PLATE, FISH ¹ / ₈ " THICK, 136RE, 3-HOLE
88	L99-00675	1	STRAP, TIE SPACING, No 1, ³ / ₄ " x 2 ¹ / ₂ " x 5'-10 ¹ / ₂ " LONG
89	L99-00676	2	STRAP, TIE SPACING, No 2, ³ / ₄ " x 2 ¹ / ₂ " x 4'-4 ¹ / ₂ " LONG
90	U10-00460	80	BOLTLESS BRACE, 136RE 'SUREFIT'
91	U24-01010	80	SERRATED WASHER FOR BOLTLESS BRACE
92	U24-00087	4	WASHER, BEVELLED, WEB FOR 1 ³ / ₈ " BOLTS
93	U24-00900	8	WASHER, (UHW132)
94	U24-00920	40	WASHER, (UTW132)
95	V10-73016	12	BOLT, 1 ¹ / ₈ " DIA. x 4 ¹ / ₂ " LONG, SO. HD. Gr 5, DRILLED ¹ / ₄ " DIA. @ 3 ²³ / ₃₂ "
96	V10-73029	8	BOLT, 1 ¹ / ₈ " DIA. x 6" LONG, SO. HD. Gr 5, DRILLED ¹ / ₄ " DIA. @ 5 ¹ / ₄ "
97	V10-73022	4	BOLT, 1 ¹ / ₈ " DIA. x 6" LONG, SO. HD. Gr 5, DRILLED ¹ / ₄ " DIA. @ 5 ²³ / ₃₂ "
98	V10-73028	4	BOLT, 1 ¹ / ₈ " DIA. x 6" LONG, SO. HD. Gr 5, DRILLED ¹ / ₄ " DIA. @ 5 ¹³ / ₃₂ "
99	V10-71035	4	BOLT, 1 ¹ / ₈ " DIA. x 9 ¹ / ₂ " LONG, SO. HD. Gr 5
100	V10-71030	4	BOLT, 1 ¹ / ₈ " DIA. x 9" LONG, SO. HD. Gr 5
101	V10-71020	4	BOLT, 1 ¹ / ₈ " DIA. x 8" LONG, SO. HD. Gr 5
102	V10-93022	12	BOLT, 1 ³ / ₈ " DIA., SO. Gr 8 x 5" LONG, DRILLED ¹ / ₄ " DIA. @ 4 ³ / ₁₆ "
103	V10-93029	8	BOLT, 1 ³ / ₈ " DIA. SO HD Gr 8 x 4 ¹ / ₂ " LONG, DRILLED ¹ / ₄ " DIA. @ 4 ³ / ₁₆ "
104	V10-93030	4	BOLT, 1 ³ / ₈ " DIA. SO HD Gr 8 x 7" LONG, DRILLED ¹ / ₄ " DIA. @ 6 ¹ / ₂ "
105	V10-93031	12	BOLT, 1 ³ / ₈ " DIA. SO HD Gr 8 x 5" LONG, DRILLED ¹ / ₄ " DIA. @ 4 ¹ / ₄ "
106	V10-93032	4	BOLT, 1 ³ / ₈ " DIA. SO HD Gr 8 x 5 ¹ / ₂ " LONG, DRILLED ¹ / ₄ " DIA. @ 5"
107	V10-93047	4	BOLT, 1 ³ / ₈ " DIA. SO HD Gr 8 x 7 ¹ / ₂ " LONG, DRILLED ¹ / ₄ " DIA. @ 7"
108	V10-93049	2	BOLT, 1 ³ / ₈ " DIA. SO HD Gr 8 x 9 ¹ / ₂ " LONG, DRILLED ¹ / ₄ " DIA. @ 9 ¹ / ₁₆ "
109	V20-75130	2	TRACKBOLT, 1 ¹ / ₈ " DIA. OVAL x 11" LONG, A183-Gr2
110	V20-75145	2	TRACKBOLT, 1 ¹ / ₈ " DIA. OVAL x 12" LONG, A183-Gr2
111	V20-75150	10	TRACKBOLT, 1 ¹ / ₈ " DIA. OVAL x 12 ¹ / ₂ " LONG, A183-Gr2
112	V20-75160	18	TRACKBOLT, 1 ¹ / ₈ " DIA. OVAL x 13" LONG, A183-Gr2
113	V20-75170	2	TRACKBOLT, 1 ¹ / ₈ " DIA. OVAL x 14" LONG, A183-Gr2
114	V20-75175	2	TRACKBOLT, 1 ¹ / ₈ " DIA. OVAL x 14 ¹ / ₂ " LONG, A183-Gr2
115	V30-70111	36	NUT, HVY SO. 1 ¹ / ₈ " DIA.
116	V30-70038	56	NUT, HVY HEX. SLOTTED, 1 ¹ / ₈ " DIA. Gr.8
117	V30-90038	46	NUT, HVY HEX. SLOTTED, 1 ³ / ₈ " DIA. Gr.8
118	V35-70218	92	WASHER, SPRING, 1 ¹ / ₈ " DIA.
119	V35-90222	46	WASHER, SPRING, 1 ³ / ₈ " DIA.
120	V45-00030	102	PIN, COTTER, ¹ / ₄ " x 2 ¹ / ₂ " LONG
121	V50-60013	652	SCREW SPIKE, ¹ / ₁₆ " DIA. x 6 ¹ / ₂ " LONG
122	V99-70127	8	SHOULDER BOLT, 1 ¹ / ₈ " DIA. x 14 ³ / ₈ "
123	X05-00035	4	THIMBLE, SEAMLESS (HT) 1 ¹ / ₄ " ID x 1 ⁵ / ₈ " OD x 2 ⁵ / ₁₆ " LONG
124	X25-00010	302	CLIP, PANDROL (E2055), RIGHT HAND
125	X25-00011	8	CLIP, PANDROL (E2056), LEFT HAND
126	X25-00021	24	C-CLIP c/w TYPE 'C' C-PLATE

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 9 DOUBLE SLIP

BILL OF MATERIAL

CADD FILE NAME: SD-2802

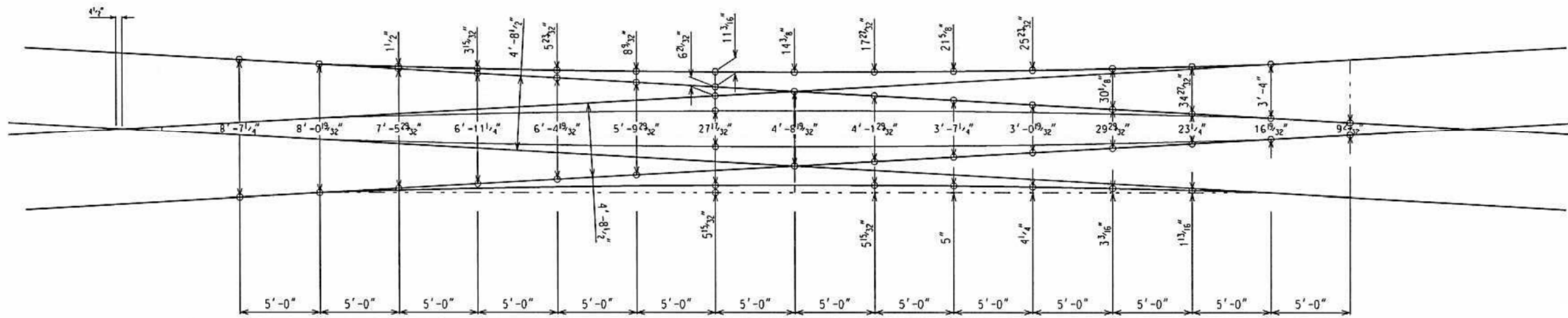
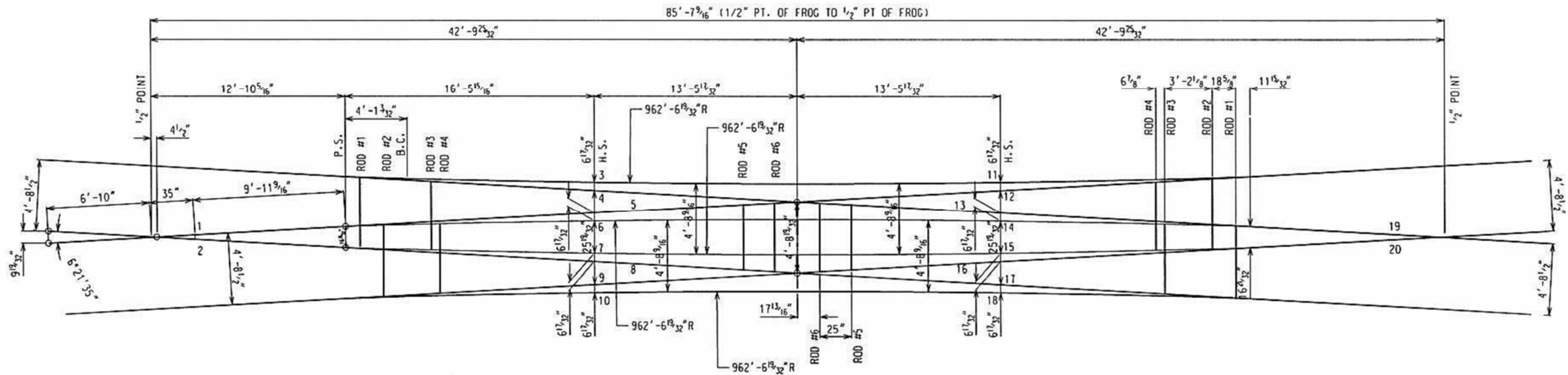
REV: EDITION: FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO: SD-2802



1250 San Carlos Avenue
San Carlos, CA 94070



SPREADS AND OFFSETS

NOTES:

1. DOUBLE SLIP SWITCH: SINGLE RAIL STYLE CROSSING WITH SLIP RAILS ON BOTH SIDES
2. CROSSING ANGLE: 6°20'25" (#9 FROG)
3. RAIL TYPE: 136 RE HEAD HARDENED
4. GAUGE: 4'-8 1/2" WIDE ON TANGENT RUNS, 4'-8 9/16" ON CURVES
5. FROG PLATING: FULLY PANDROLIZED
6. ALL RAISED ROLLING MARKS OR RAIL BRANDING IN THE AREA OF THE JOINT HOLES SHALL BE CONE-GROUND TO ELIMINATE ALL BURRS AND STRESS RISERS
7. BEVEL JOINT ARM ENDS PER AREMA PLAN 1005
8. EACH CROSSING FROG SHALL BE TAGGED WITH A METAL TAG STAMPED WITH THE MANUFACTURER'S INFORMATION
9. MATCH MARKING DETAIL:
 - a. ALL RAIL AND INSERTS ARE TO BE MATCH MARKED ON TOP OF RAIL FOR RE-ASSEMBLY
 - b. MATCH MARKING CHARACTERS ARE TO BE PAINTED IN WHITE ON A BLACK BACKGROUND
 - c. DO NOT STAMP RAIS OR INSERTS
 - d. DO NOT PAINT MARKS UNTIL AFTER INSPECTION
10. SEE SD-2801 TO 2802 FOR DETAILED LAYOUT
11. ALL DIMENSIONS SHOWN ARE AT GAUGE ELEVATION, 5/8" BELOW TOP OF HEAD


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



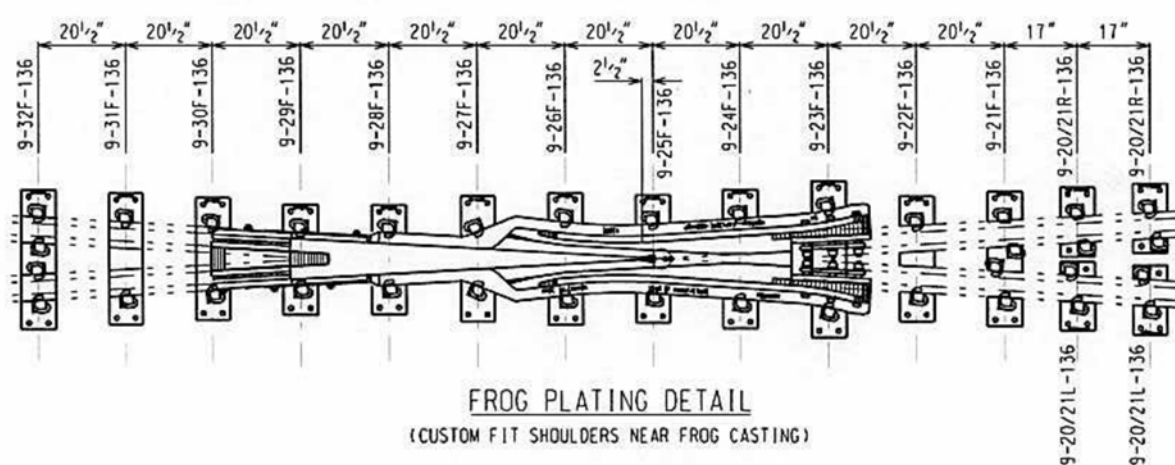
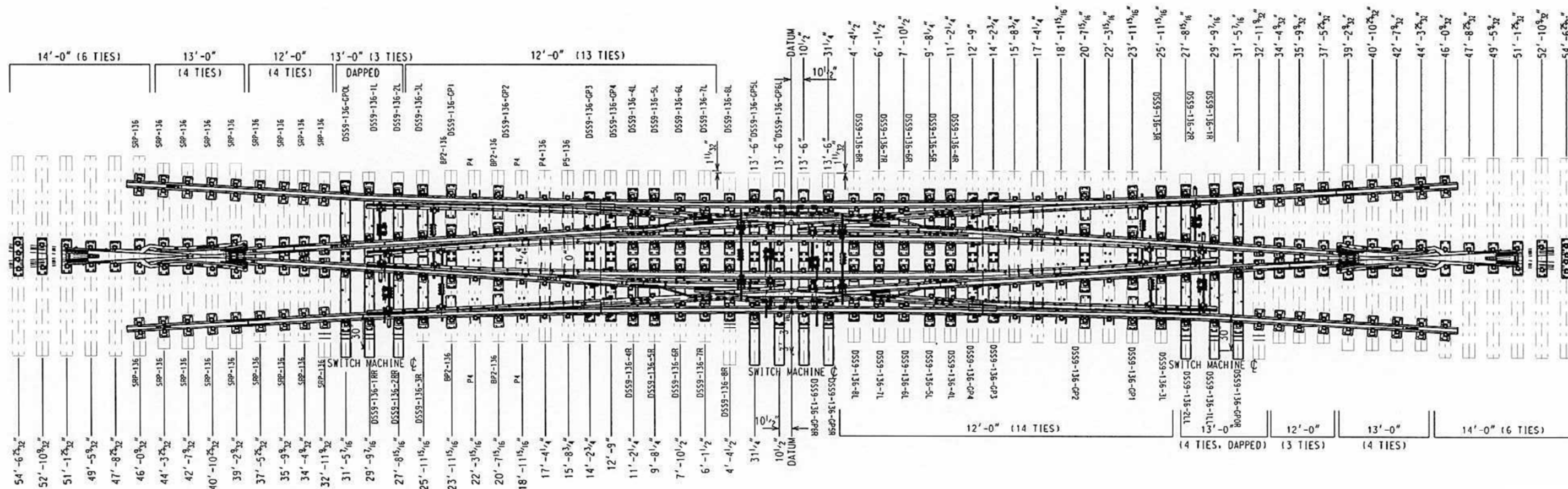
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 9 DOUBLE SLIP

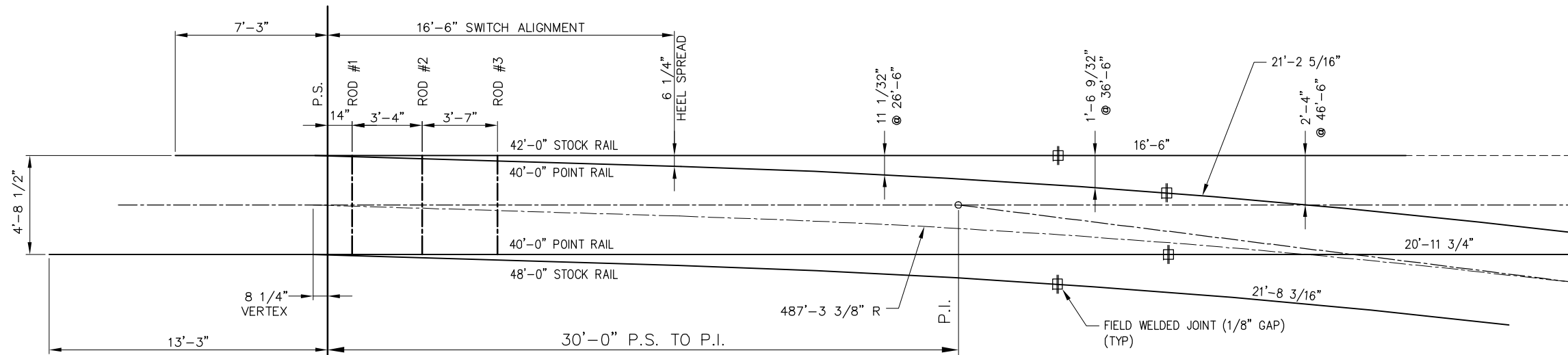
SPREADS AND OFFSETS

CADD FILE NAME: SD-2803	EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO: SD-2803	



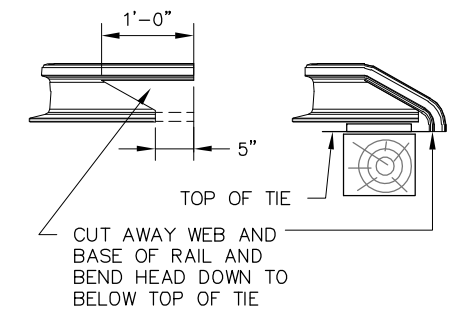
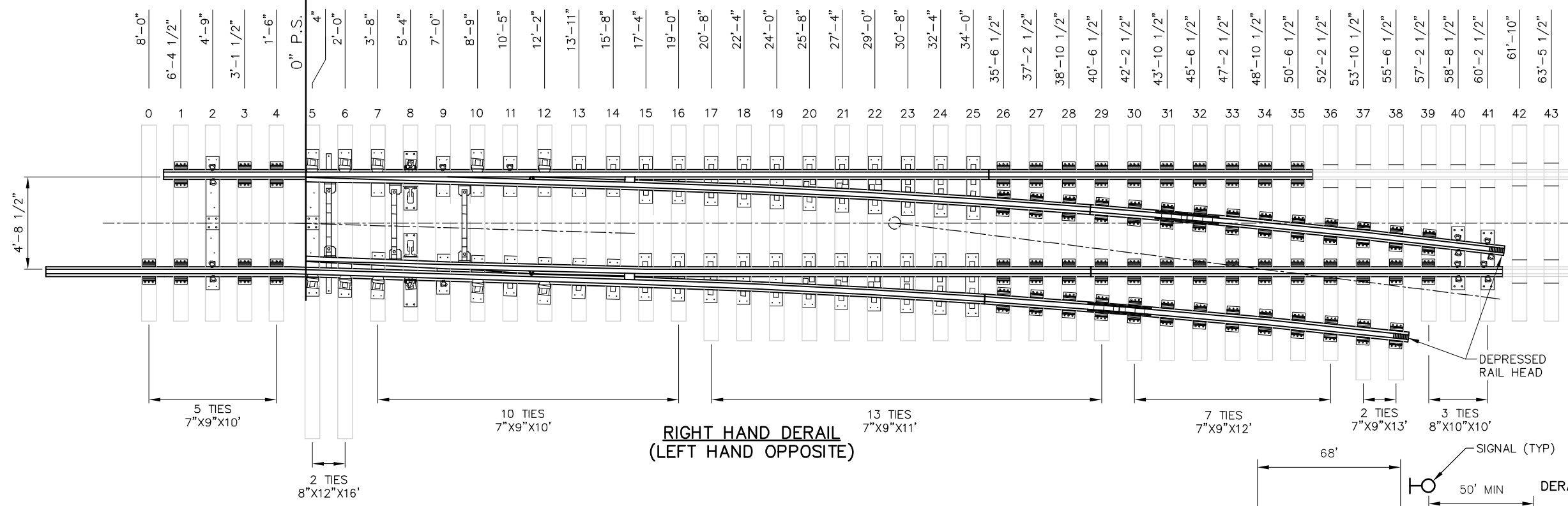
NOTE:
ANY RAISED ROLLING MARKS ON THE RAIL WEBS WITHIN JOINT BAR AREAS SHALL BE GROUND FLUSH WITH WEB FOR A DISTANCE OF 19" FROM END OF RAIL

REV					DATE					BY					CHK					APP					DESCRIPTION																																																																										
01012024					FOURTH					EDITION																																																																																									
<p style="text-align: center;">PENINSULA CORRIDOR JOINT POWERS BOARD</p> <p style="text-align: center;">APPROVED BY:</p> <p style="text-align: center;"><i>Bin Zhang</i></p> <p style="text-align: center;">DEPUTY DIRECTOR, ENGINEERING</p> <div style="float: right; text-align: right; font-size: small;"> 1250 San Carlos Avenue San Carlos, CA 94070 </div>																																																																																																			
STANDARD DRAWINGS SPECIAL TRACKWORK NO. 9 DOUBLE SLIP TIES AND PLATES										<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="10">CADD FILE NAME:</td> <td colspan="5">SD-2804</td> </tr> <tr> <td colspan="10">REV:</td> <td colspan="5">EDITION:</td> </tr> <tr> <td colspan="10"></td> <td colspan="5">FOURTH</td> </tr> <tr> <td colspan="15">SPECIAL TRACKWORK</td> </tr> <tr> <td colspan="10">STANDARD DRAWING NO.:</td> <td colspan="5">SD-2804</td> </tr> </table>															CADD FILE NAME:										SD-2804					REV:										EDITION:															FOURTH					SPECIAL TRACKWORK															STANDARD DRAWING NO.:										SD-2804				
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- NOTES:**
- POINTS AND STOCK RAILS ARE UNDERCUT. SEE DRAWING SD-2404 FOR UNDERCUT DETAILS.
 - LAYOUT BASED ON A NO. 8 TURNOUT.
 - RAIL LENGTHS ALLOW 1/8" GAP BETWEEN RAIL JOINTS FOR FIELD ASSEMBLY. ALL JOINTS SHALL BE WELDED. NO BOLTED JOINTS ARE ALLOWED WITHIN THE DERAIL LIMITS.
 - DERAIL SHOWN IS FOR TIMBER TIES, FASTENED WITH PANDROL E CLIPS.
 - FOR CONNECTING ROD AND SWITCH STAND DETAILS SEE SD-2315 AND SD-2316.
 - DOUBLE POINT SPLIT SWITCH DERAIL IS USED FOR MAIN LINE ONLY. USE HAYES MODEL DERAILS FOR NON-MAINLINE, YARD AND INDUSTRY TRACKS.
 - THIS DRAWING IS A REFERENCE FOR DESIGN AND LAYOUT. SHOP DRAWINGS FOR ALL COMPONENTS SHALL BE SUBMITTED FOR APPROVAL BY CALTRAIN ENGINEERING PRIOR TO FABRICATION.
 - DOUBLE POINT DERAIL SHALL BE PLACED ENTIRELY ON TANGENT TRACK.
 - SEE DRAWINGS SD-9108 AND SD-9109 FOR LOCATIONS OF SIGNS.

DERAIL GEOMETRY

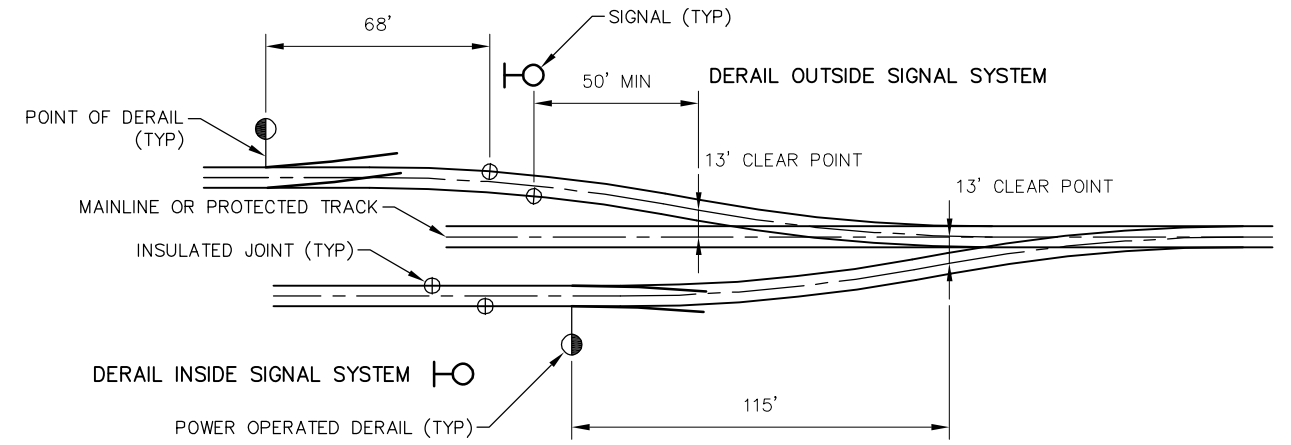


DEPRESSED RAIL HEAD DETAIL

DERAIL SPECIFICATIONS	
ANGLE	7'-09'-10"
THROW OF SWITCH AT # 1 ROD	4 3/4"
LENGTH OF SWITCH POINT	16'-6"
ENTRY ANGLE	1'-44'-11"
VERTEX DISTANCE	8 1/4" @ CENTERLINE
CENTERLINE RADIUS	487'-3 3/8"
DEGREE OF CURVE	5'-53'-22"
P.S. TO CENTER OF LAST LONG TIE	63'-5 1/2"

BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	16'-6"/40'-0" SWITCH (42'-0" STRAIGHT STOCK RAIL & 48'-0" CURVED STOCK RAIL)
2	1	DRILLED RAIL, 136RE, 16'-6" LONG
3	1	DRILLED RAIL, 136RE, 20'-11 3/4" LONG
4	1	DRILLED RAIL, 136RE, 21'-2 5/16" LONG WITH DEPRESSED RAIL HEAD
5	1	DRILLED RAIL, 136RE, 21'-8 3/16" LONG WITH DEPRESSED RAIL HEAD

* BILL OF MATERIAL SHOWN DOES NOT INCLUDE TIES, PLATES, RODS, AND OTM.



PERMANENT DERAIL INSTALLATION LOCATIONS

PENINSULA CORRIDOR JOINT POWERS BOARD

STANDARD DRAWINGS

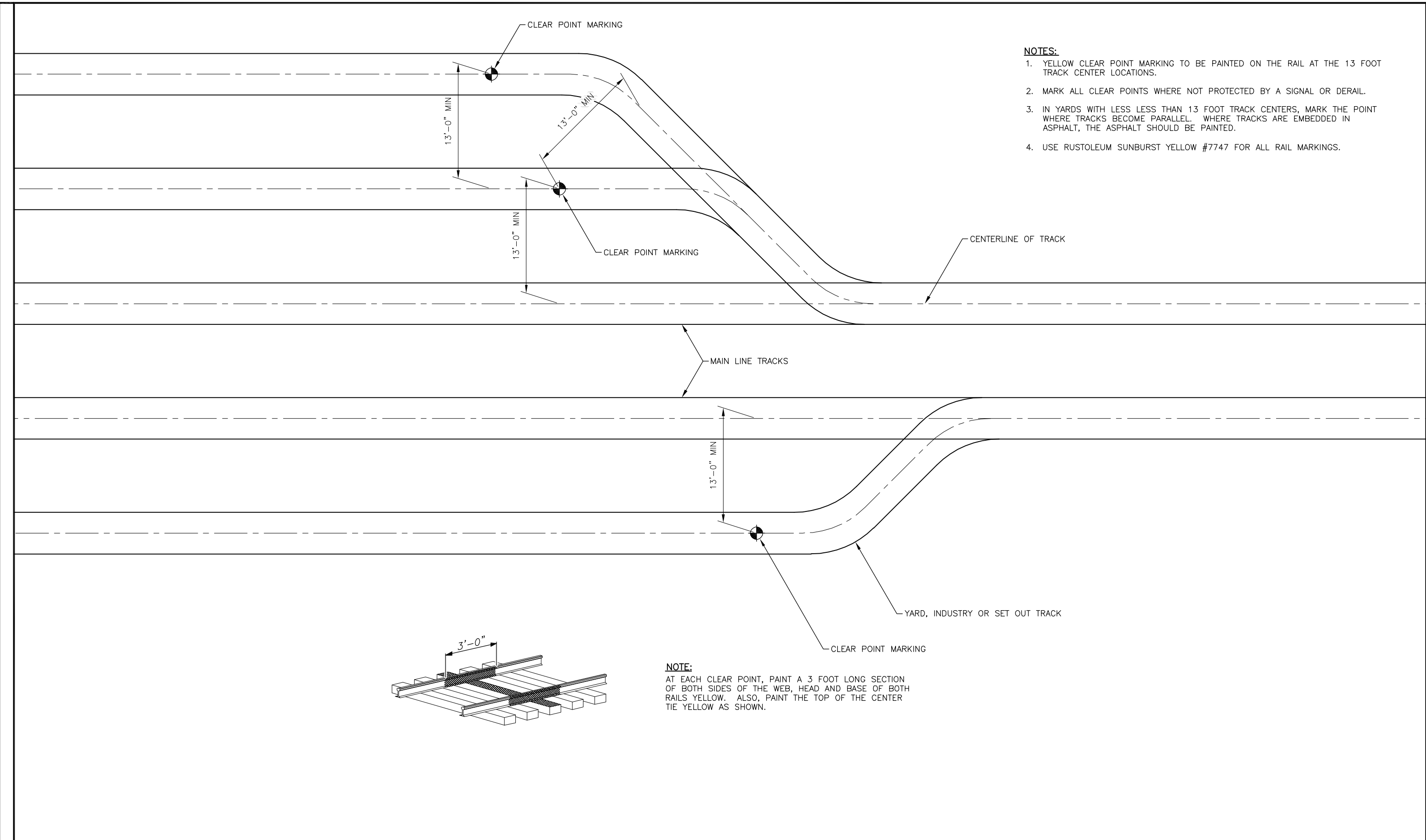
APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING



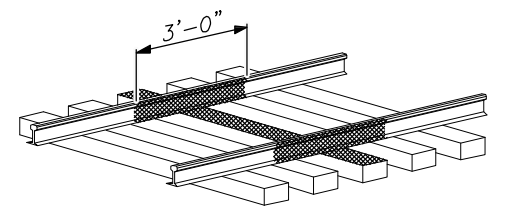
SPECIAL TRACKWORK
DERAILS
16'-6" 136 RE DOUBLE POINT
SPLIT SWITCH DERAIL

CADD FILE NAME:	SD-2901
REV:	EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.:	SD-2901

REV	DATE	BY	CHK	APP	DESCRIPTION



- NOTES:**
1. YELLOW CLEAR POINT MARKING TO BE PAINTED ON THE RAIL AT THE 13 FOOT TRACK CENTER LOCATIONS.
 2. MARK ALL CLEAR POINTS WHERE NOT PROTECTED BY A SIGNAL OR DERAIL.
 3. IN YARDS WITH LESS LESS THAN 13 FOOT TRACK CENTERS, MARK THE POINT WHERE TRACKS BECOME PARALLEL. WHERE TRACKS ARE EMBEDDED IN ASPHALT, THE ASPHALT SHOULD BE PAINTED.
 4. USE RUSTOLEUM SUNBURST YELLOW #7747 FOR ALL RAIL MARKINGS.



NOTE:
 AT EACH CLEAR POINT, PAINT A 3 FOOT LONG SECTION OF BOTH SIDES OF THE WEB, HEAD AND BASE OF BOTH RAILS YELLOW. ALSO, PAINT THE TOP OF THE CENTER TIE YELLOW AS SHOWN.


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
TURNOUTS AND DERAILS

CLEAR POINT MARKING

CADD FILE NAME: SD-2911	REV: EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO: SD-2911	