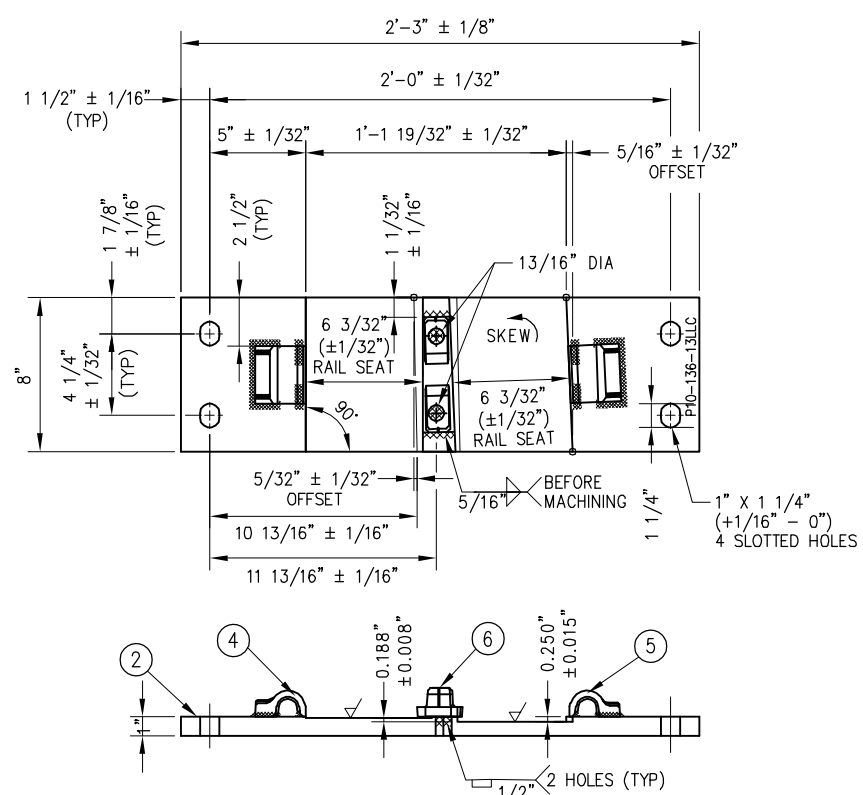
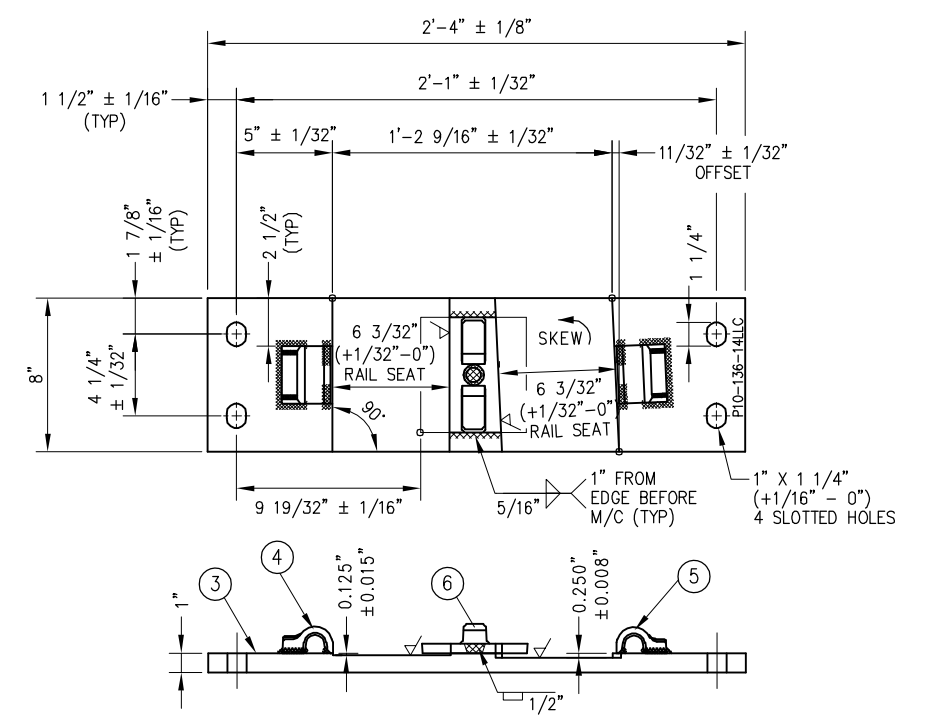


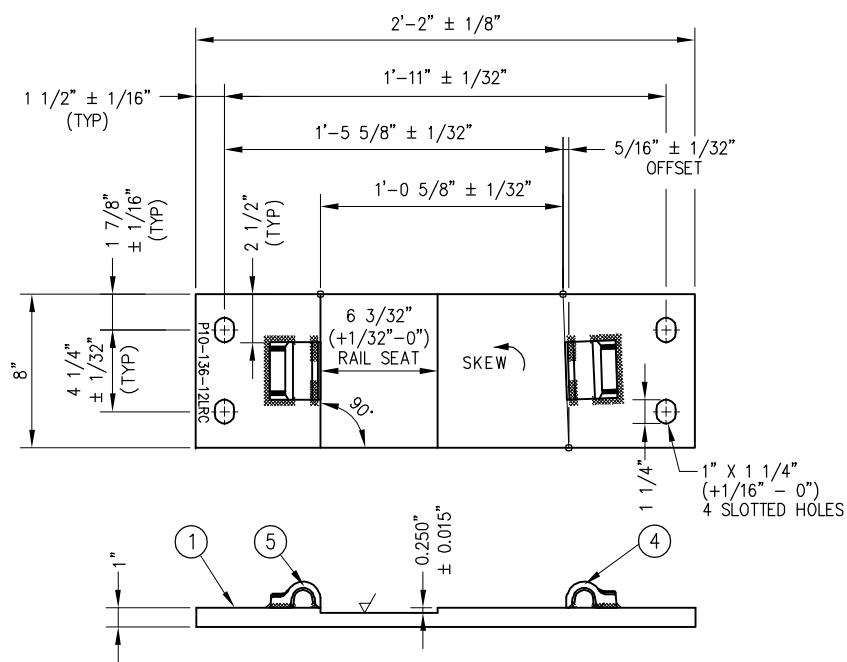
SWITCH PLATE P10-136-12LLC



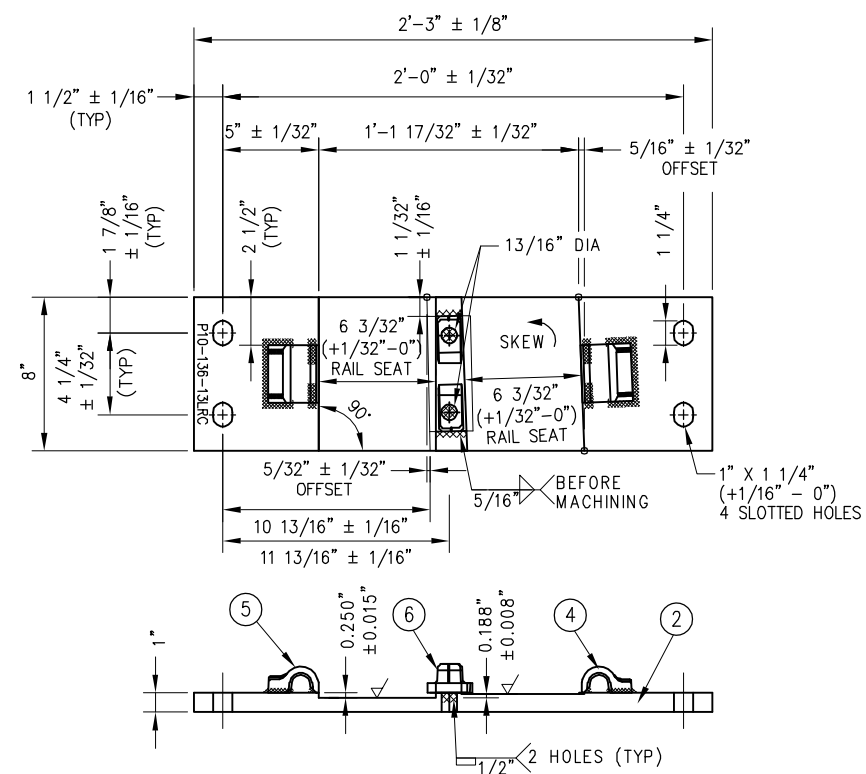
SWITCH PLATE P10-136-13LLC



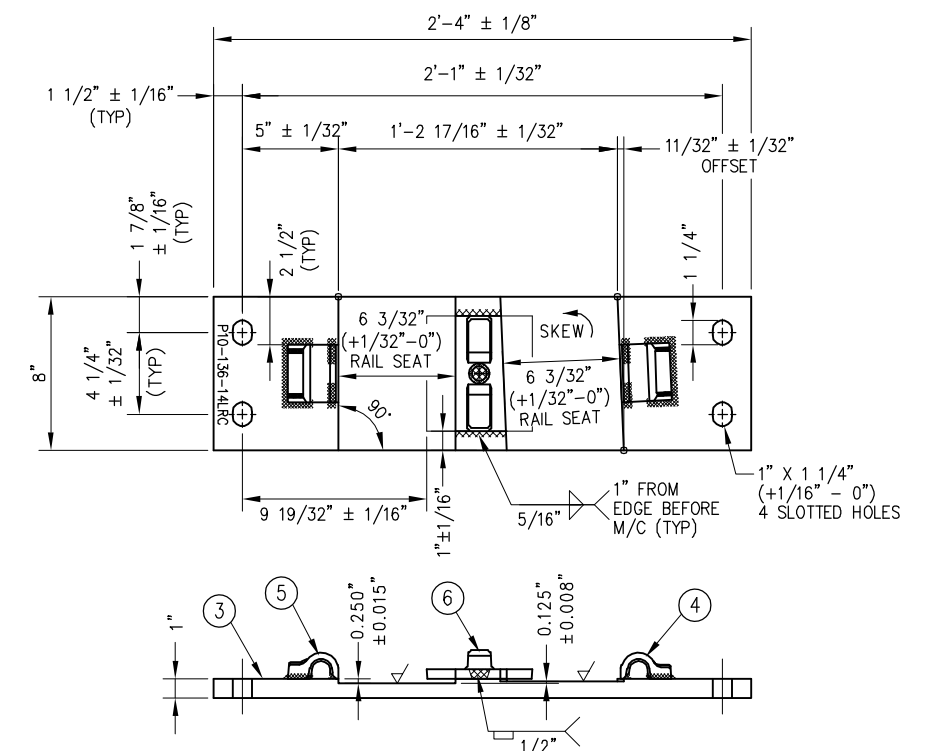
SWITCH PLATE P10-136-14LLC



SWITCH PLATE P10-136-12LRC



SWITCH PLATE P10-136-13LRC



SWITCH PLATE P10-136-14LRC

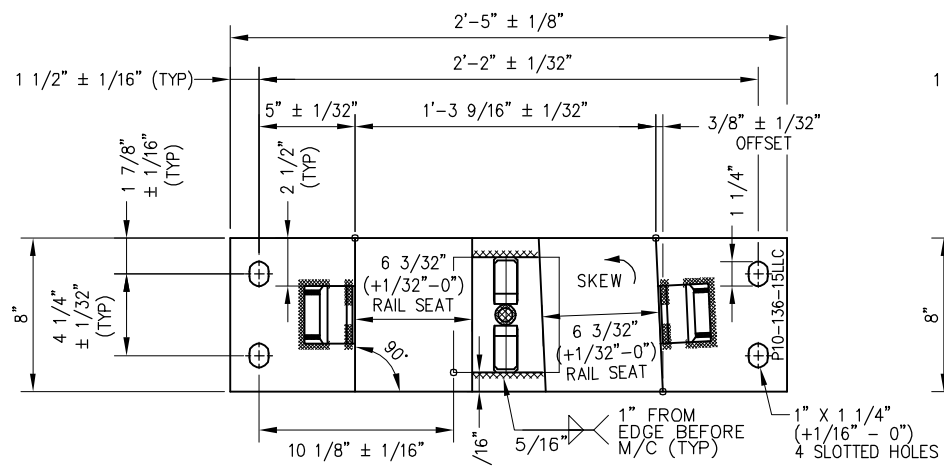
BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 1" x 8" x 2'-2" LONG
2	FLAT BAR, ASTM A36, 1" x 8" x 2'-3" LONG
3	FLAT BAR, ASTM A36, 1" x 8" x 2'-4" LONG
4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1
5	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 5
6	STOP WITH INTEGRAL T-BOLT HOLD DOWN

NOTES

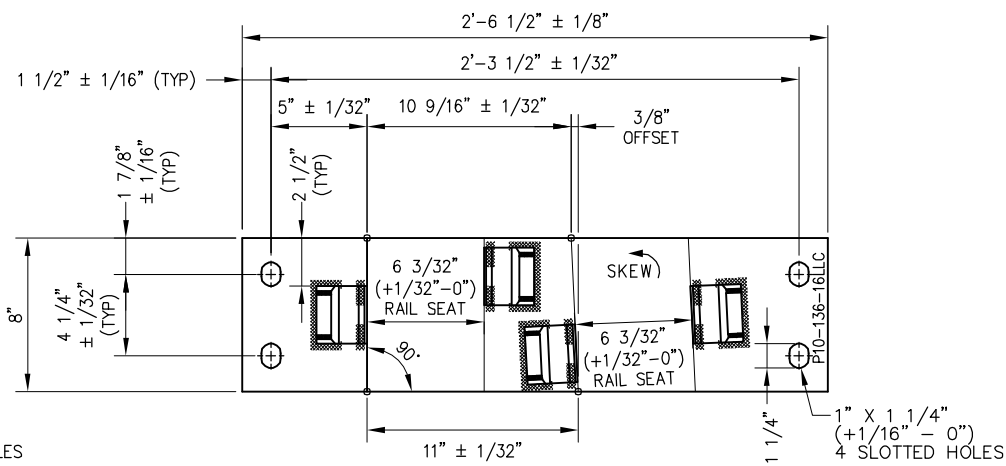
1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
3. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

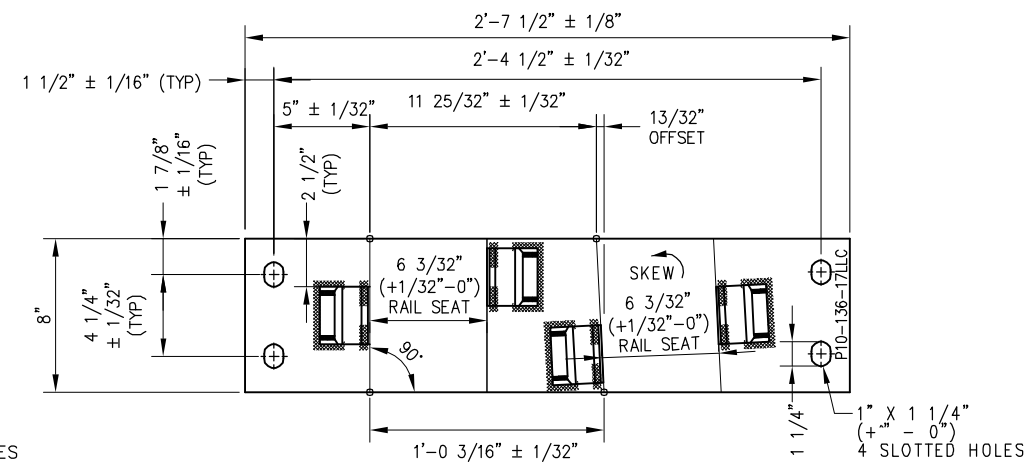
PENINSULA CORRIDOR JOINT POWERS BOARD		STANDARD DRAWINGS		CADD FILE NAME: SD-2540
APPROVED BY: <i>Bin Zhang</i> DEPUTY DIRECTOR, ENGINEERING		Caltrain 1250 San Carlos Avenue San Carlos, CA 94070		REV: SD-2540 EDITION: FOURTH
		SPECIAL TRACKWORK NO. 10 TURNOUT SWITCH PLATES FOR LH TURNOUT 10-12LLC/LRC THRU 10-14LLC/LRC		STANDARD DRAWING NO.: SD-2540



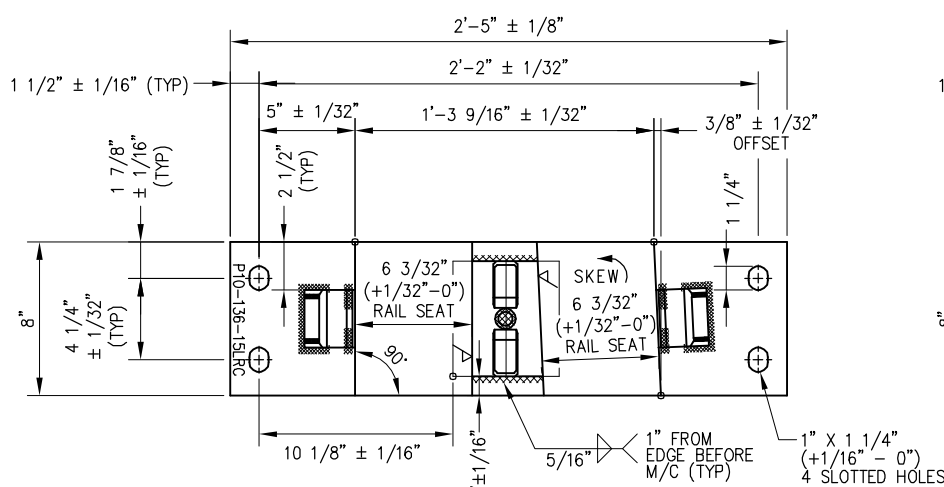
SWITCH PLATE P10-136-15LLC



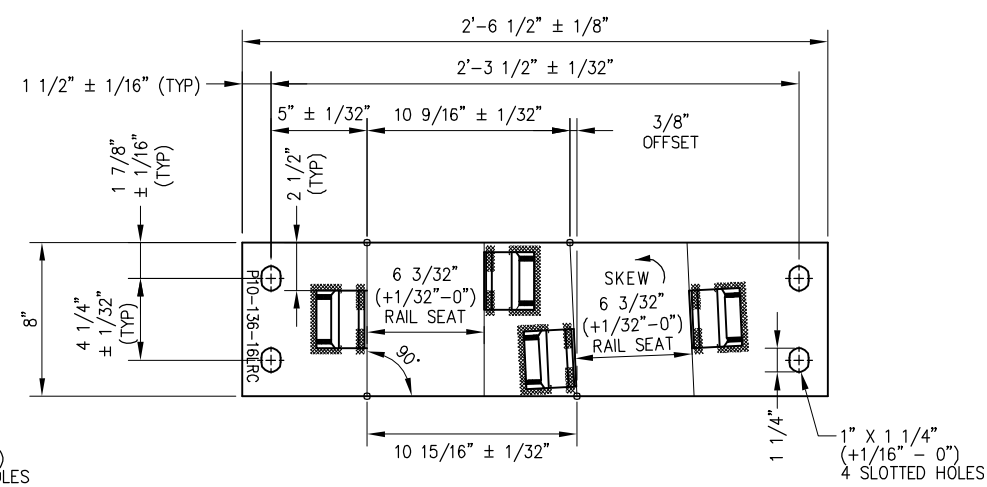
SWITCH PLATE P10-136-16LLC



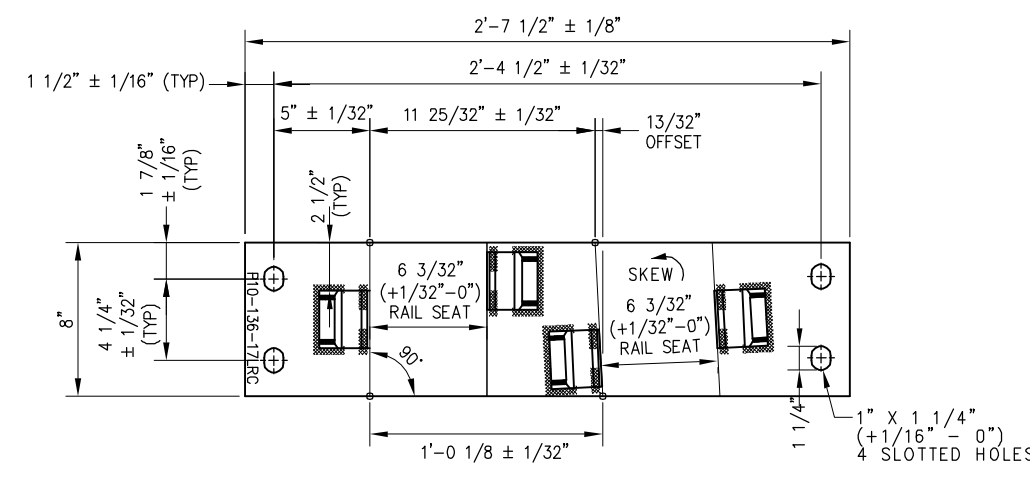
SWITCH PLATE P10-136-17LLC



SWITCH PLATE P10-136-15LRC



SWITCH PLATE P10-136-16LRC



SWITCH PLATE P10-136-17LRC

BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 1" x 8" x 2'-5" LONG
2	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-6 1/2" LONG
3	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-7 1/2" LONG
4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1
5	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 5
6	STOP WITH INTEGRAL T-BOLT HOLD DOWN

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

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. 10 TURNOUT
SWITCH PLATES FOR
LH TURNOUT
10-15LLC/LRC THRU 10-17LLC/LRC

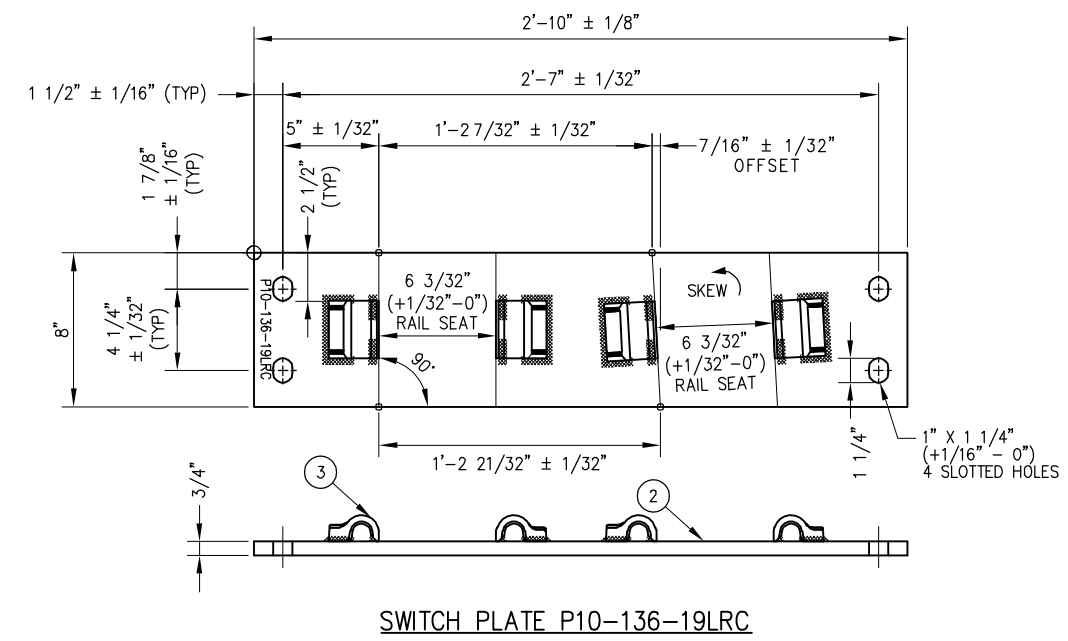
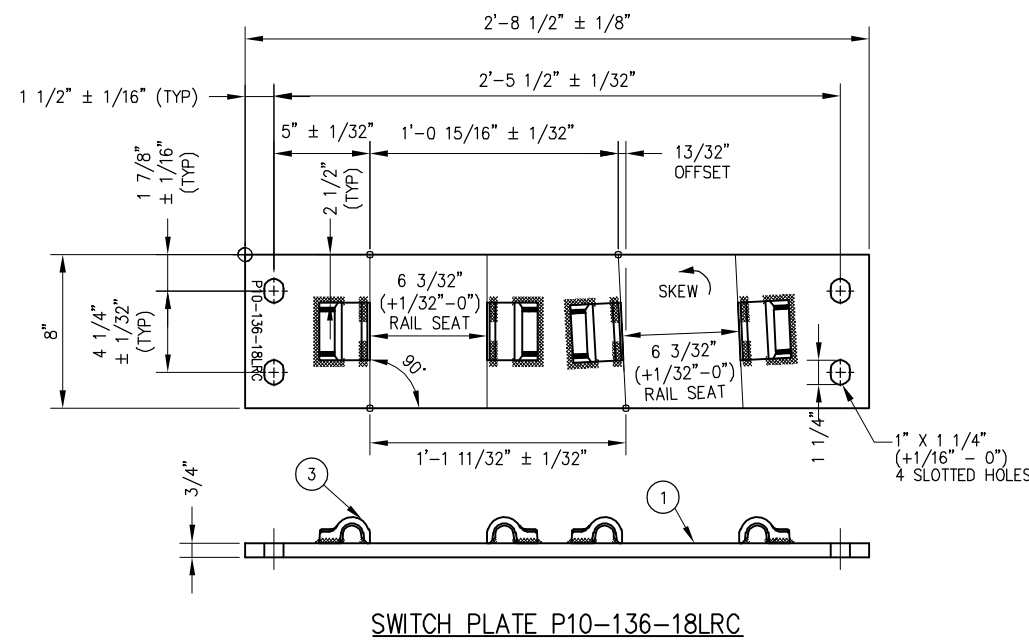
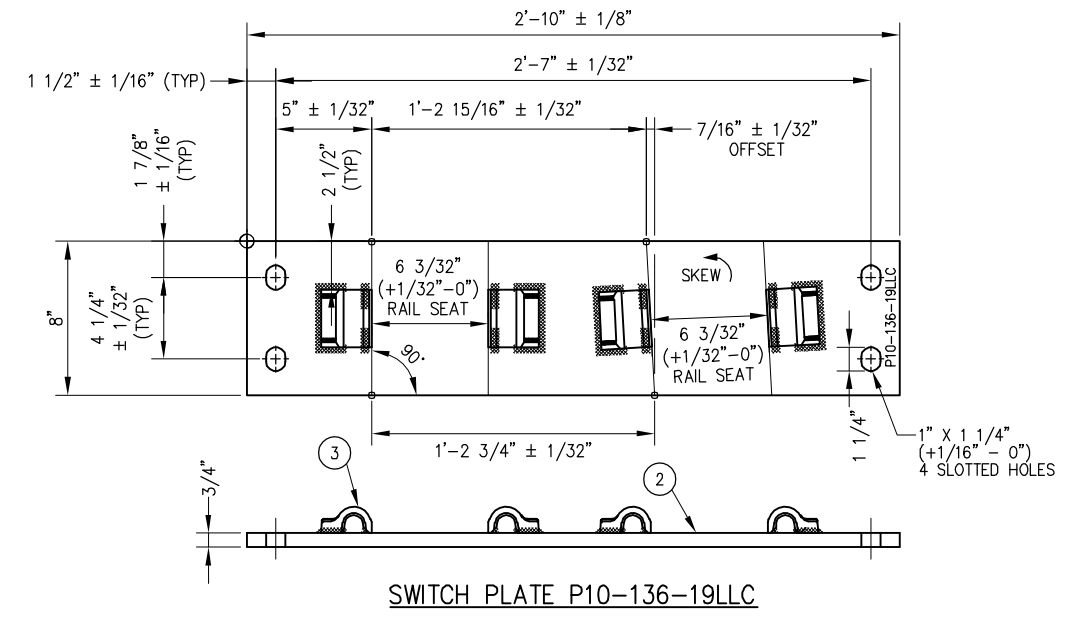
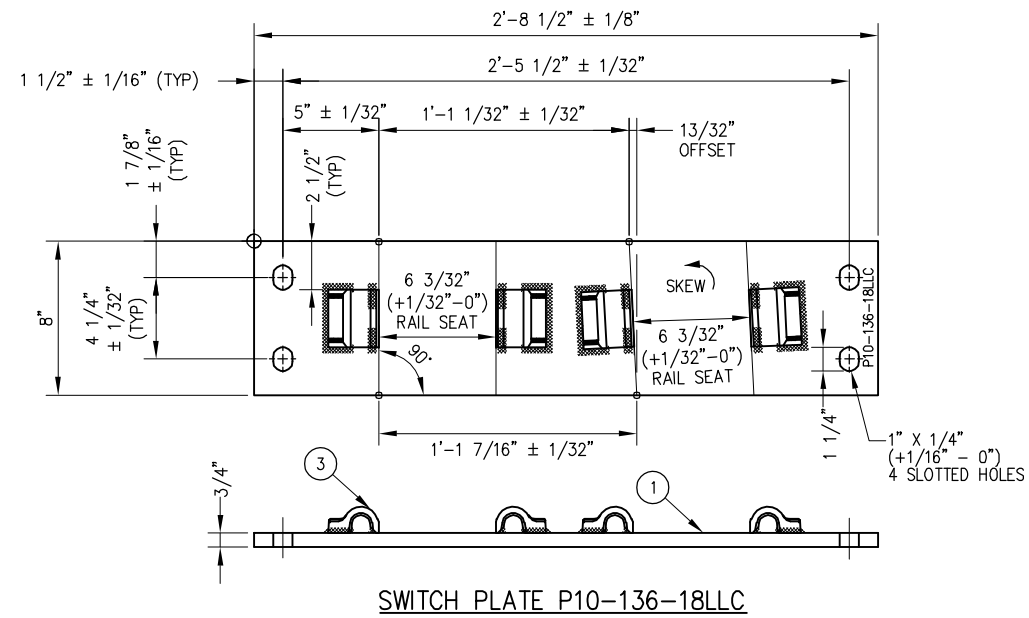
CADD FILE NAME:
SD-2541

REV: EDITION:
FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO.:
SD-2541

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



BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 3/4\" x 8\" x 2'-8 1/2\" LONG
2	FLAT BAR, ASTM A36, 3/4\" x 8\" x 2'-10\" LONG
3	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

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



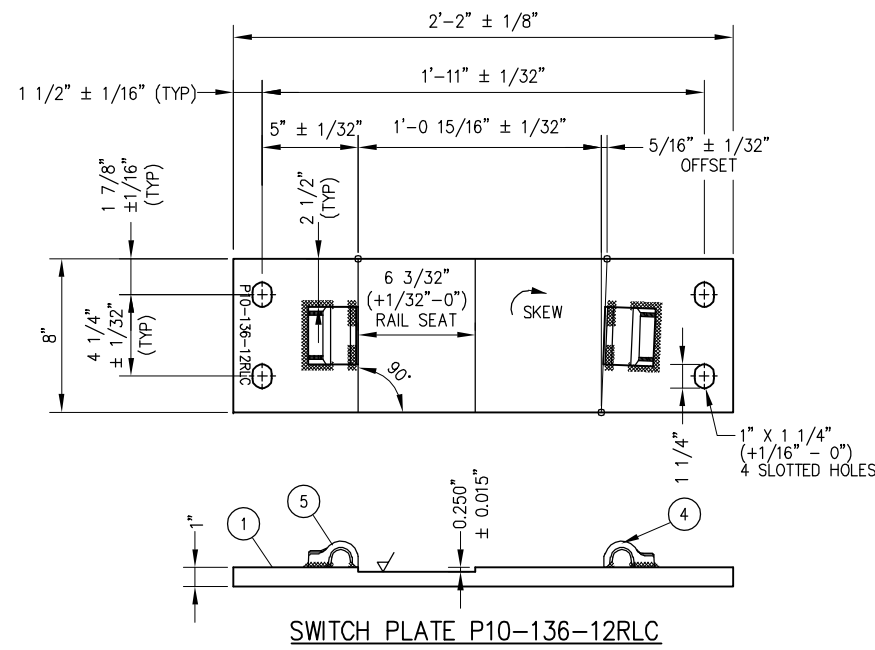
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

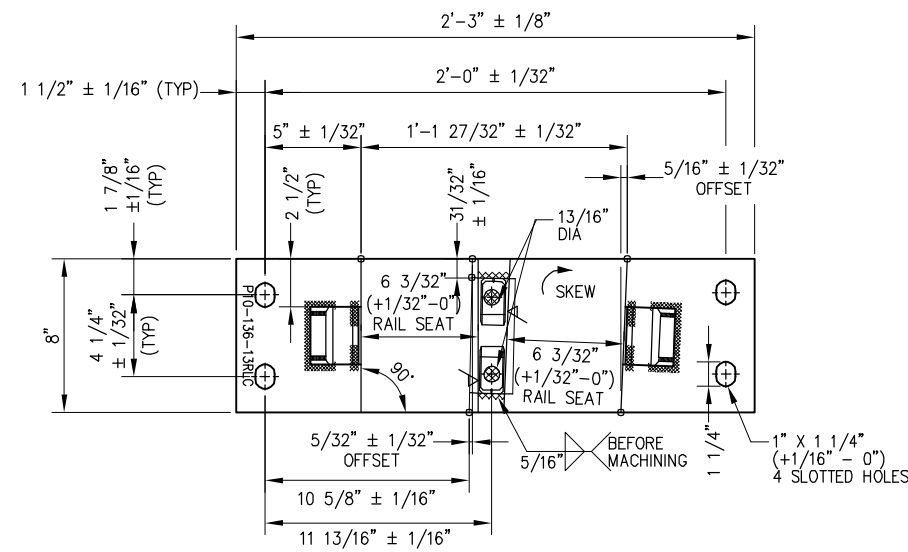
SPECIAL TRACKWORK
NO. 10 TURNOUT
SWITCH PLATES FOR
LH TURNOUT

10-18LLC/LRC THRU 10-19LLC/LRC

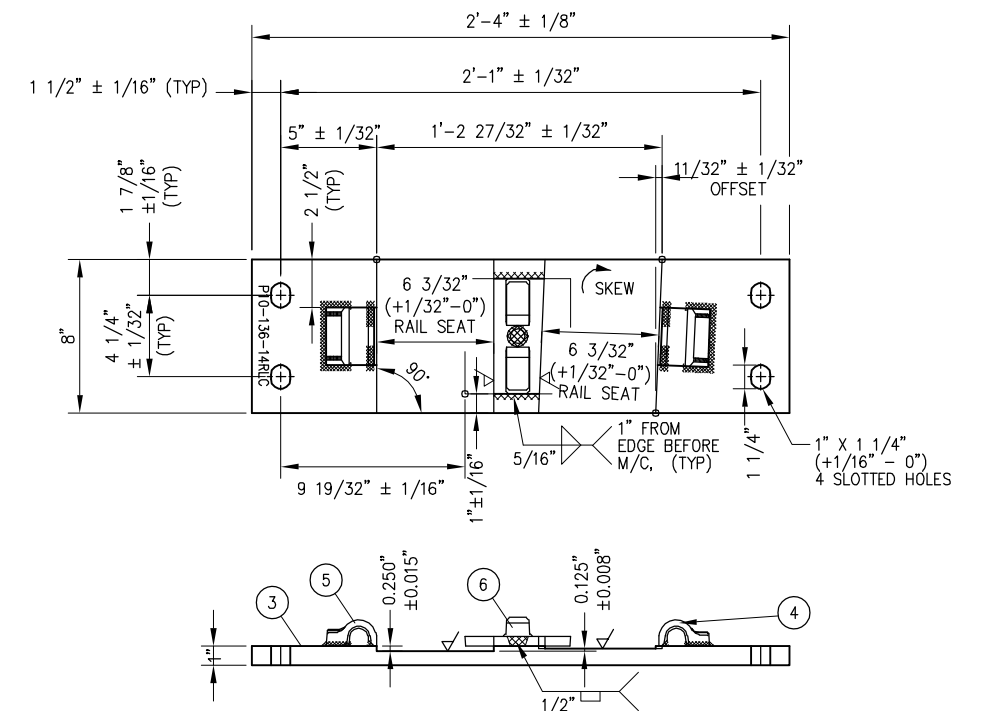
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SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2542	



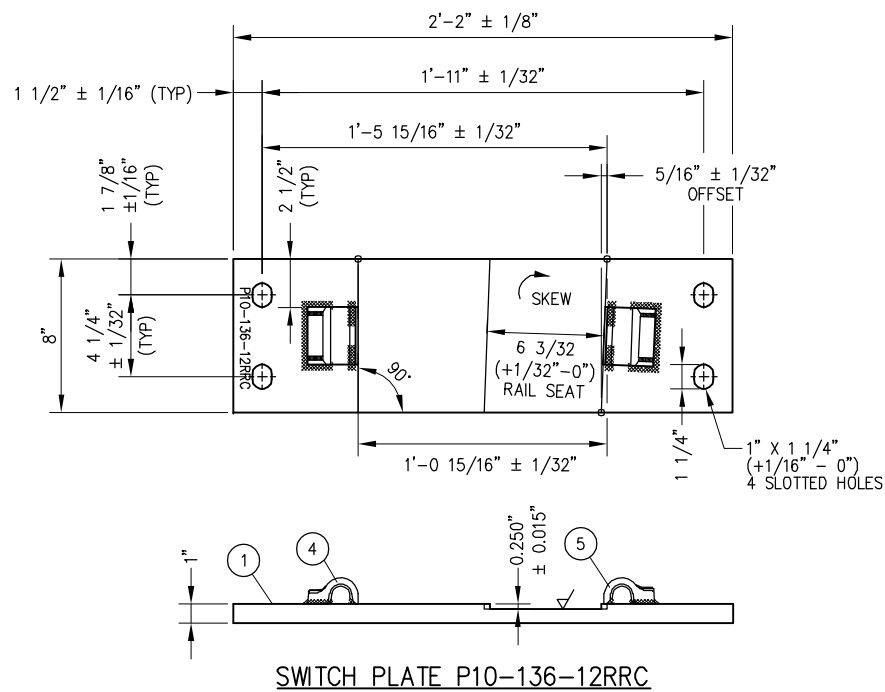
SWITCH PLATE P10-136-12RLC



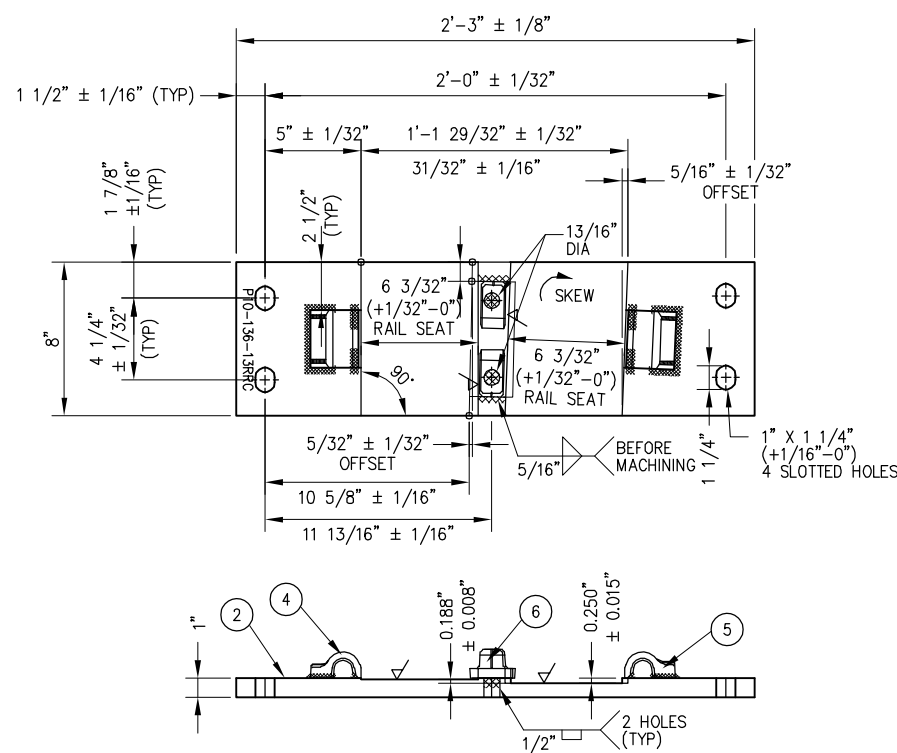
SWITCH PLATE P10-136-13RLC



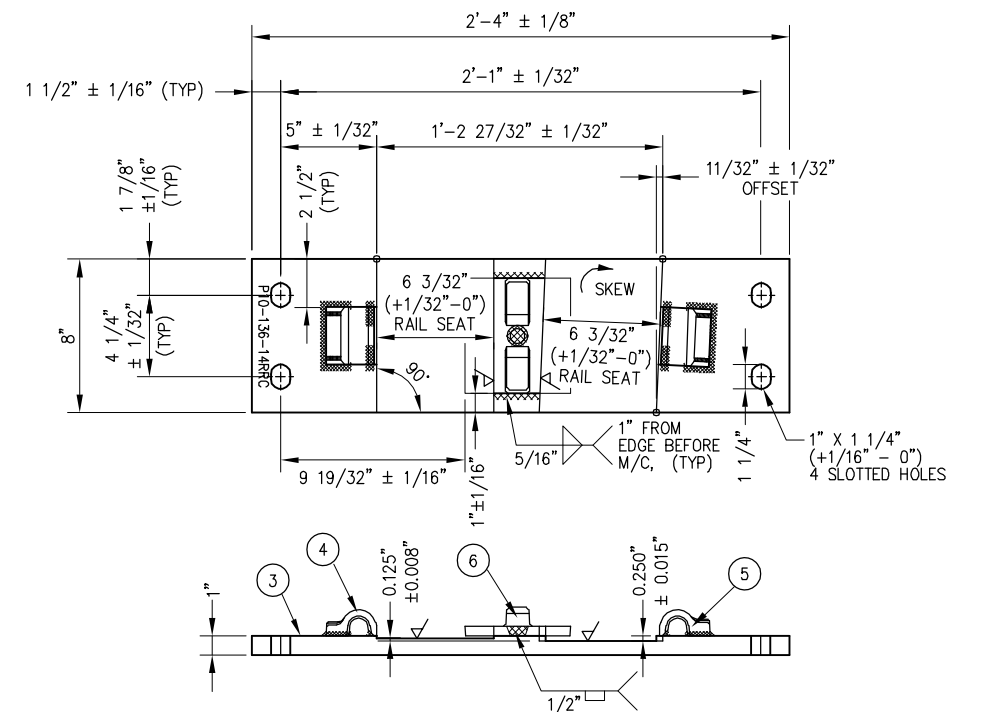
SWITCH PLATE P10-136-14RLC



SWITCH PLATE P10-136-12RRC



SWITCH PLATE P10-136-13RRC



SWITCH PLATE P10-136-14RRC

BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 1" x 8" x 2'-2" LONG
2	FLAT BAR, ASTM A36, 1" x 8" x 2'-3" LONG
3	FLAT BAR, ASTM A36, 1" x 8" x 2'-4" LONG
4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1
5	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 5
6	STOP WITH INTEGRAL T-BOLT HOLD DOWN

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. 10 TURNOUT
SWITCH PLATES FOR
RH TURNOUT
10-12RLC/RRC THRU 10-14RLC/RRC

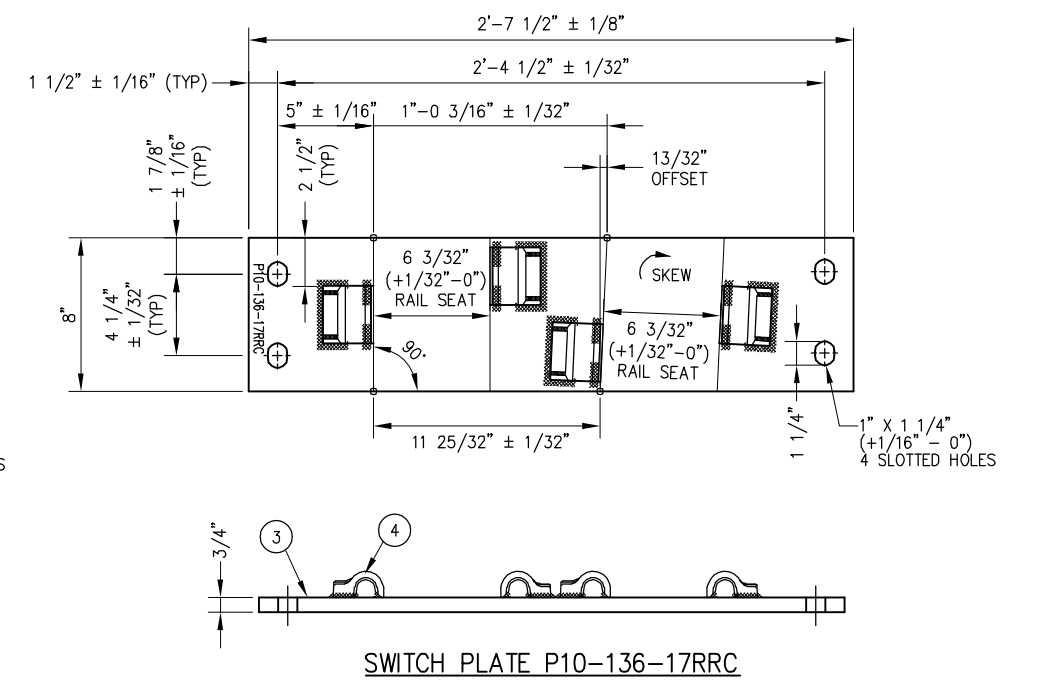
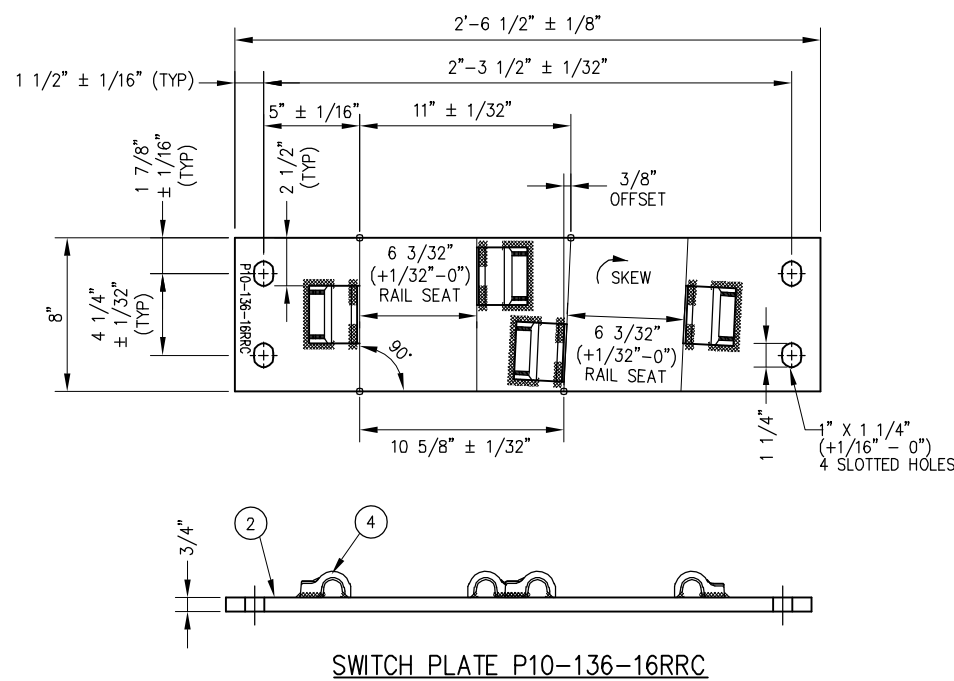
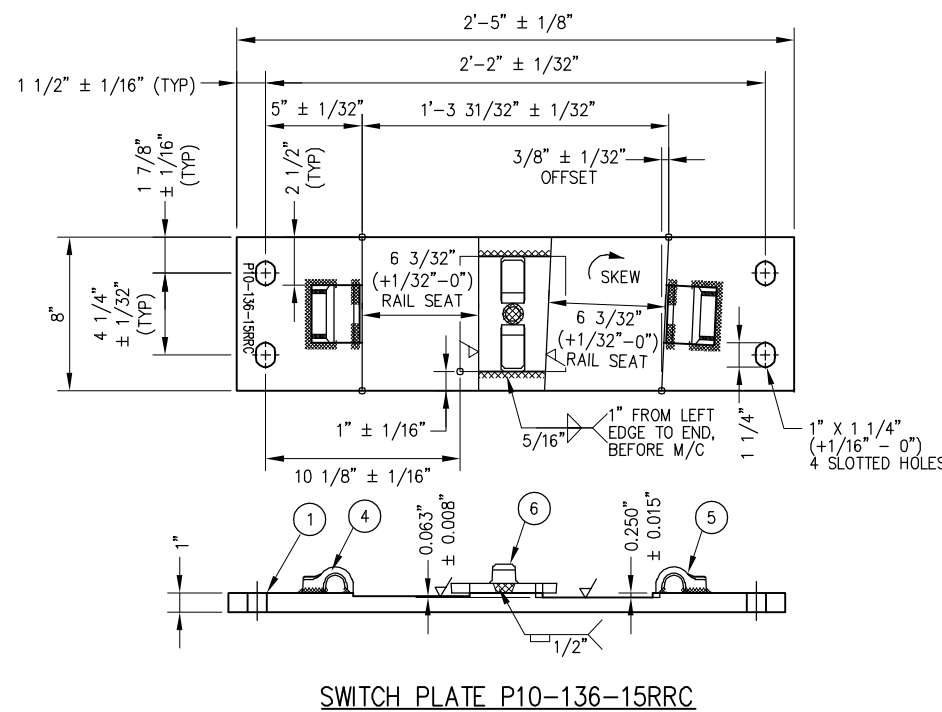
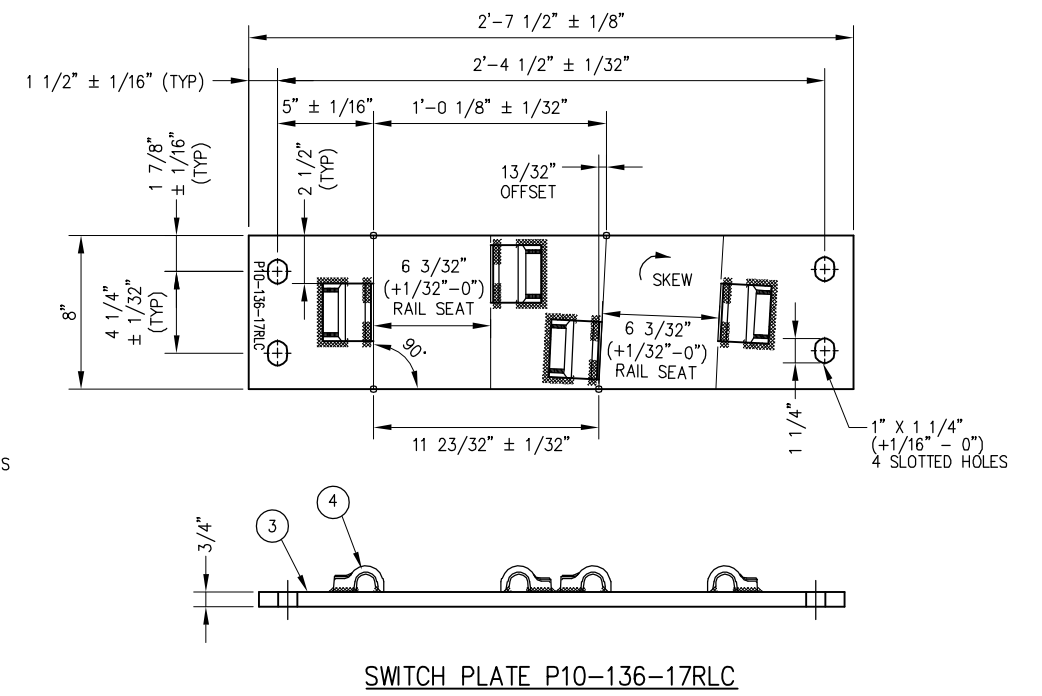
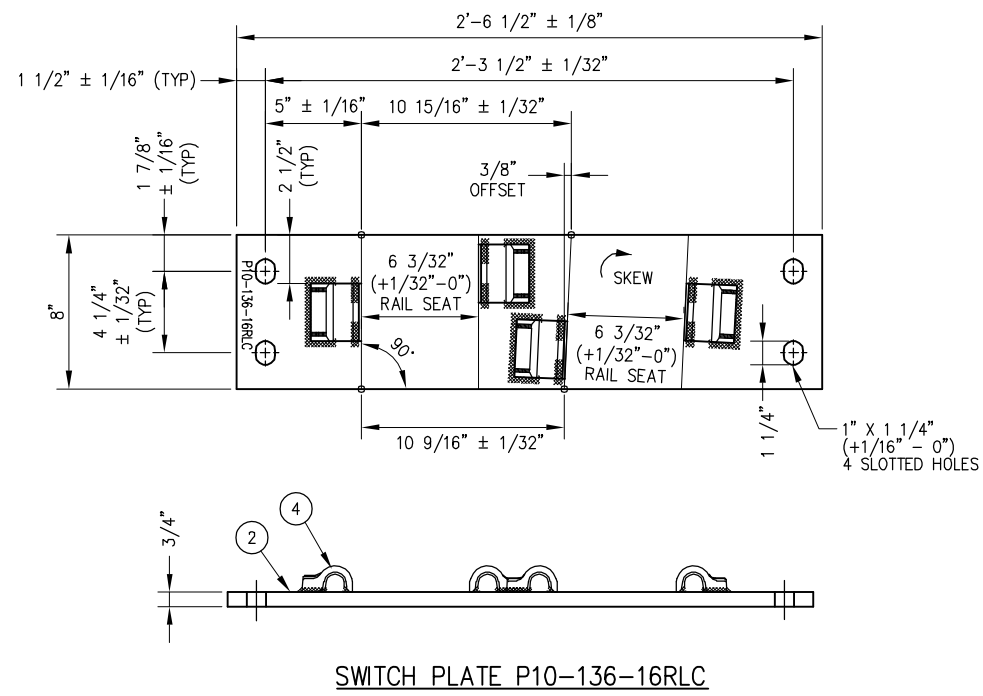
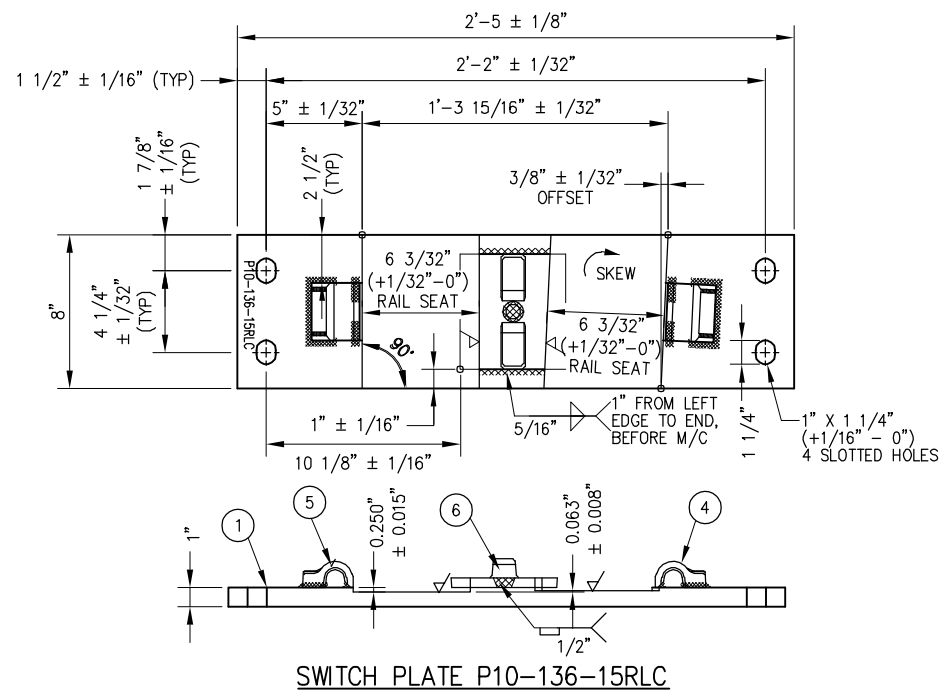
CADD FILE NAME:
SD-2543

REV: EDITION:
FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO.:
SD-2543

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



BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 1" x 8" x 2'-5" LONG
2	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-6 1/2" LONG
3	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-7 1/2" LONG
4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1
5	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 5
6	STOP WITH INTEGRAL T-BOLT HOLD DOWN

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



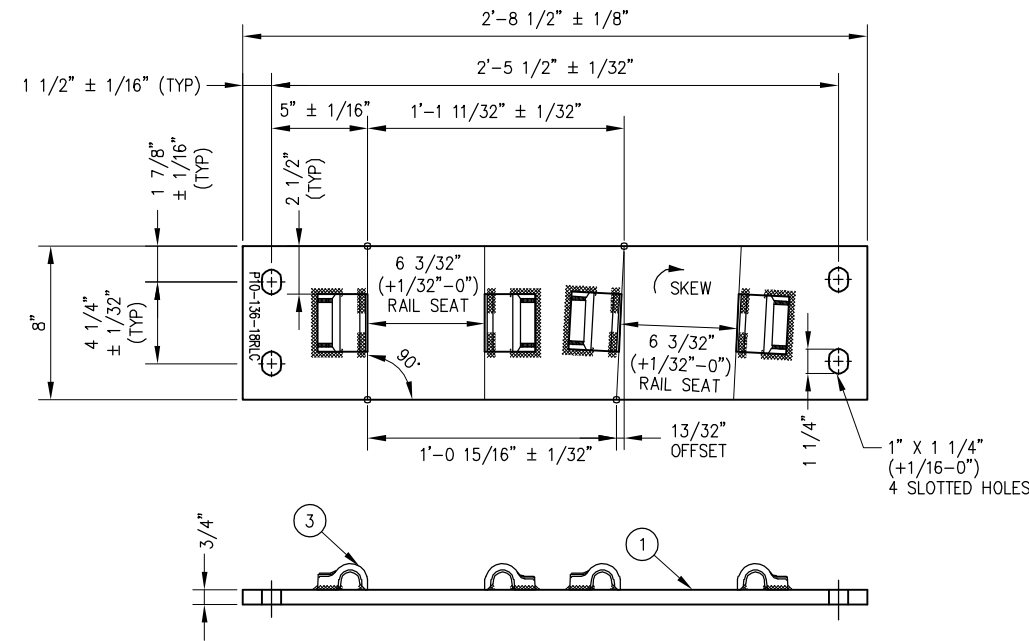
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

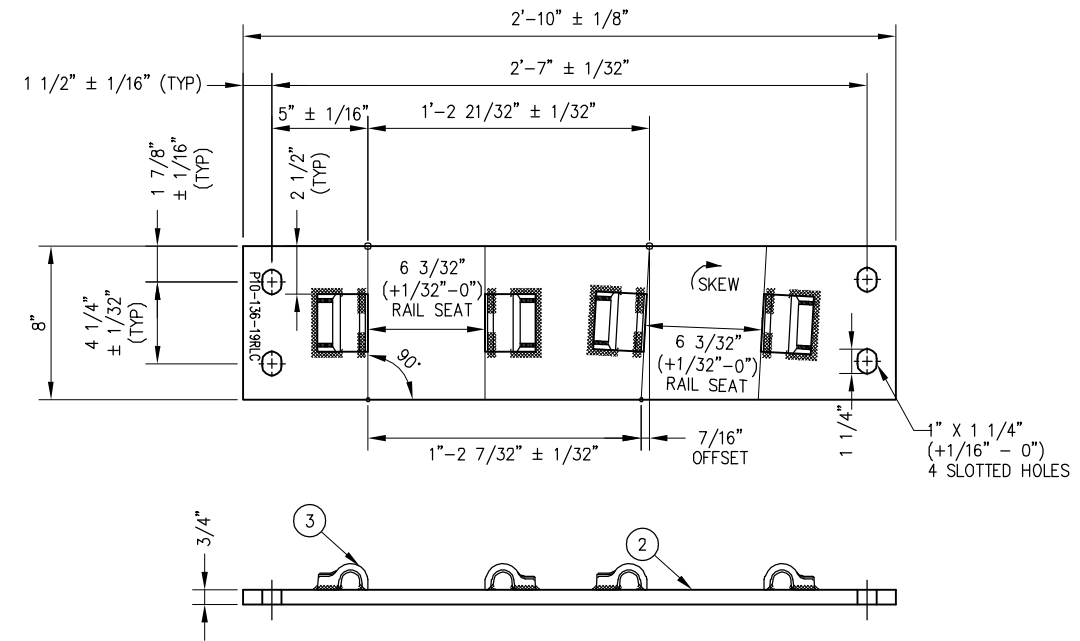
SPECIAL TRACKWORK
NO. 10 TURNOUT
SWITCH PLATES FOR
RH TURNOUT
10-15RLC/RRC THRU 10-17RLC/RRC

CADD FILE NAME:
SD-2544
REV: EDITION:
FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO.:
SD-2544

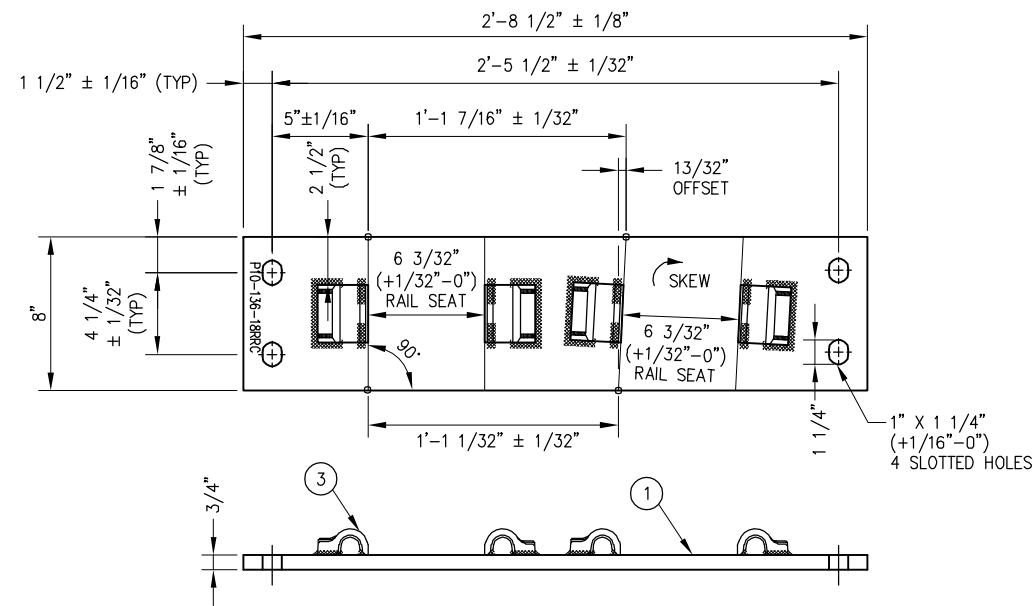
REV	DATE	BY	CHK	APP	DESCRIPTION	REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION						



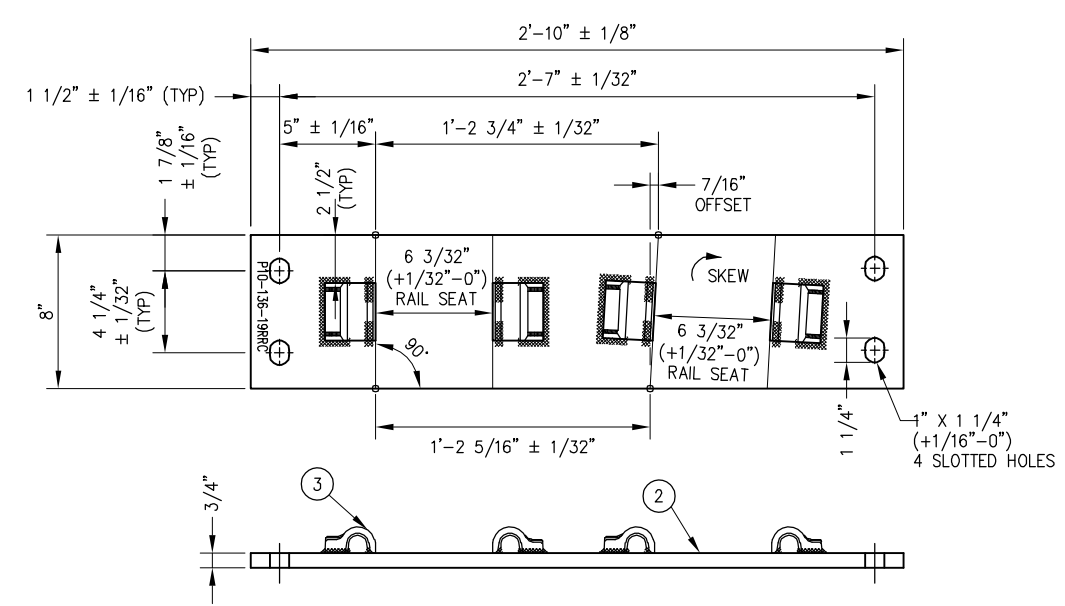
SWITCH PLATE P10-136-18RLC



SWITCH PLATE P10-136-19RLC



SWITCH PLATE P10-136-18RRC



SWITCH PLATE P10-136-19RRC

BILL OF MATERIALS	
ITEM	DESCRIPTION
1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-8 1/2" LONG
2	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-10" LONG
3	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1

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. 10 TURNOUT
SWITCH PLATES FOR
RH TURNOUT
10-18RLC/RRC THRU 10-19RLC/RRC

CADD FILE NAME:
SD-2545

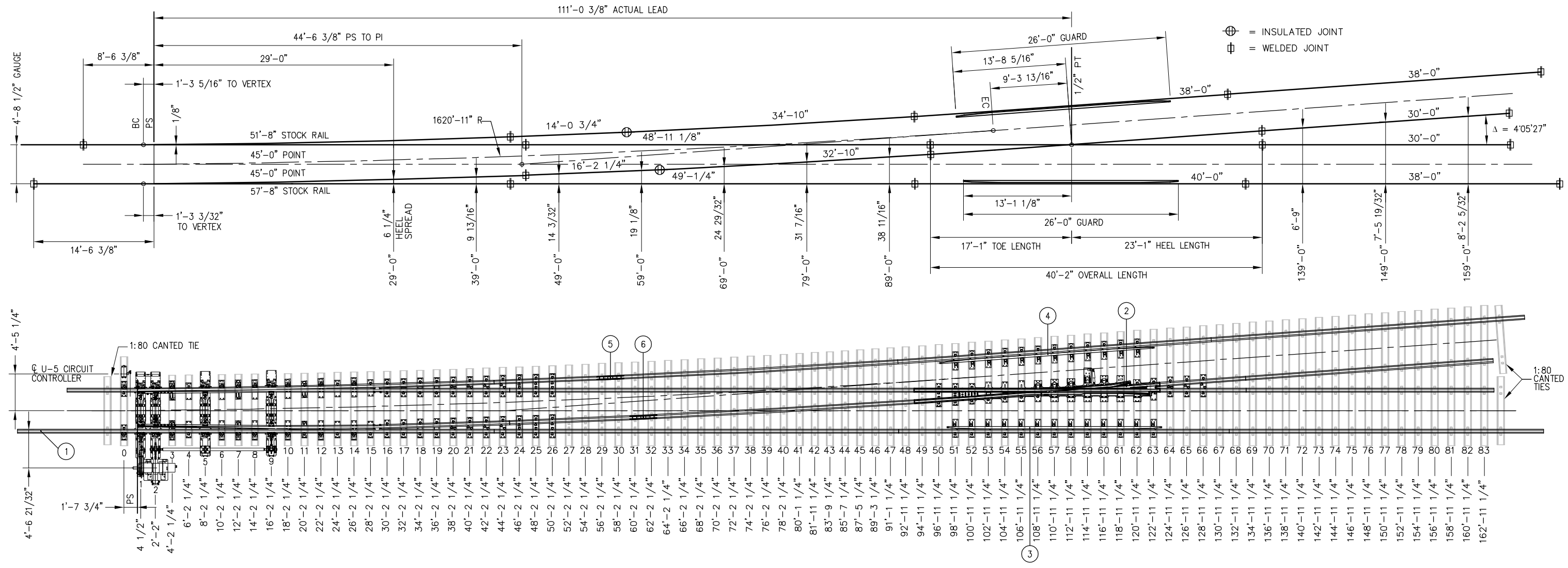
REV: EDITION:
FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO.:
SD-2545

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH PACK, NO 14-136 LB RE MODIFIED TANGENTIAL, LH, HST	SD-2605	11	352	TIE SCREW, CONCRETE 7/8" DIA X 6" HEX HEAD	-
2	1	FROG PACK, NO 14-136 LB RE WSM, LH	SD-2623	12	352	WASHER FLAT 7/8" TYPE A NARROW 15/16" X 1 3/4" X 0.134"	-
3	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LONG, 136 LB RE RAISED 1", STRAIGHT	SD-2301	13	352	SPRING WASHER, DOUBLE COIL (Fe6)	-
4	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LONG, 136 LB RE RAISED 1", LH	SD-2635	14	1	CONCRETE TIE SET, 0-83 + (3) 1:80 TIES, PLATE PADS, PIM INSERTS, LH	SD-2618
5	1	INSULATED RAIL ASSEMBLY, 48'-10 3/4" C/W BONDED INSULATED JOINT	-	15	342	CLIP PANDROL E2055	-
6	1	INSULATED RAIL ASSEMBLY, 49'-0 1/4" C/W BONDED INSULATED JOINT	-	16	342	INSULATOR PANDROL FEATURES BASE HOLDOWN NYLON HD-10	-
7	2	DRILLED RAIL, 136 LB RE, 30'-0" LONG	-	17	8	CLIP PANDROL E2063	-
8	3	DRILLED RAIL, 136 LB RE, 38'-0" LONG	-	18	8	INSULATION, PANDROL NYLON 6790	-
9	1	DRILLED RAIL, 136 LB RE, 40'-0" LONG	-	19	175	TIE PAD PANDROL 6993SR	-
10	2	DRILLED RAIL, 136 LB RE, 48'-11 1/8" LONG	-	20	176	SHIM, TO REDUCE PLATE FLEXURE	-



NOTES:

1. ALL RAILS SHALL HAVE IDENTIFICATION COLOR CODE PAINTED ON WEB, CLEAR OF JOINT AREA
2. RAIL LENGTHS ALLOW 1/8" GAP BETWEEN RAIL JOINTS FOR WELDING
3. GUARD RAILS ARE RAISED 1" AND FORM A 1 7/8" FLANGWAY
4. COORDINATE SWITCH MACHINE AND MACHINE PLATE (NIC) WITH CALTRAIN
5. ALL TIE LENGTHS SHALL INCLUDE 1'-9" FROM TIE ENDS TO RAIL CENTERLINE, EXCEPT AS NOTED AND 1:80 CANTED TIES
6. TIGHTEN TIE SCREW WITH DOUBLE COIL SPRING WASHER IN PLACE
7. SCHWIHAG ROLLERS SHALL BE INSTALLED AND ADJUSTED IN THE FIELD

TURNOUT DATA

FROG	ANGLE: 4'05'27"	ACTUAL LEAD: 111'-3/8"
	TOE LENGTH: 17'-1"	CLOSURE AREA: 1620'-11"
	HEEL LENGTH: 23'-1"	CENTERLINE RADIUS: 3'32'07"
	TOTAL LENGTH: 40'-2"	DEGREE OF CURVE: 3'32'07"
SWITCH	LENGTH OF POINTS: 45'-0"	DESIGN SPEEDS
	VERTEX DISTANCE: 1'-3 7/32"	35 MPH PASSENGER @ 3" UNBALANCE
	ENTRY ANGLE: 0'29'50"	25 MPH FREIGHT @ 2" UNBALANCE
	THICKNESS AT POINT: 1/8"	
	THROW AT ROD #1: 4 3/4"	


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



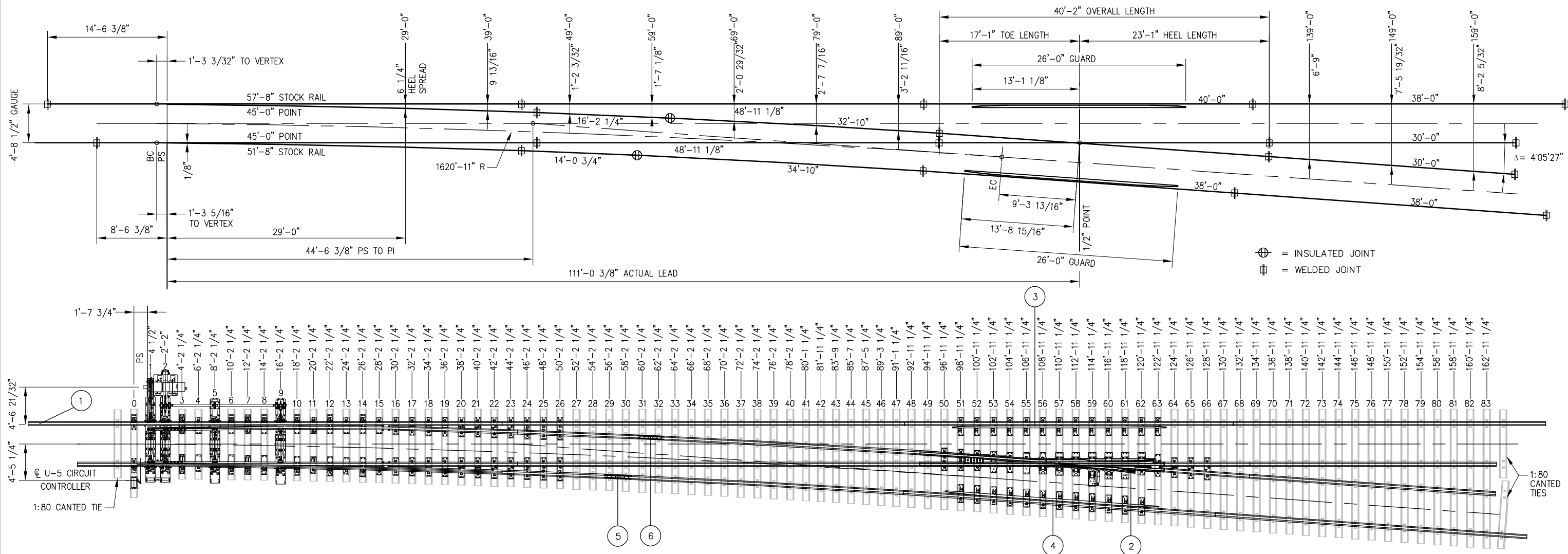
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
NO. 14 LH TURNOUT WITH
WSM FROG AND HST SWITCH MACHINE
ON MAINLINE SIDE

CADD FILE NAME: SD-2601
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO.: SD-2601

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH PACK, NO 14-136 LB RE MODIFIED TANGENTIAL, RH, HST	SD-2606	11	352	TIE SCREW, CONCRETE 7/8" DIA x 6" HEX HEAD	-
2	1	FROG PACK, NO 14-136 LB RE WSM, RH	SD-2624	12	352	WASHER FLAT 7/8" TYPE A NARROW 15/16" x 1 3/4" x 0.134"	-
3	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LONG, 136 LB RE RAISED 1", STRAIGHT	SD-2301	13	352	SPRING WASHER, DOUBLE COIL (Fe6)	-
4	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LONG, 136 LB RE RAISED 1", RH	SD-2636	14	1	CONCRETE TIE SET, 0-83 + (3) 1:80 TIES, PLATE PADS, PIM INSERTS, RH	SD-2617
5	1	INSULATED RAIL ASSEMBLY, 48'-10 3/4" C/W BONDED INSULATED JOINT	-	15	342	CLIP PANDROL E2055	-
6	1	INSULATED RAIL ASSEMBLY, 49'-0 1/4" C/W BONDED INSULATED JOINT	-	16	342	INSULATOR PANDROL FEATURES BASE HOLDOWN NYLON HD-10	-
7	2	DRILLED RAIL, 136 LB RE, 30'-0" LONG	-	17	8	CLIP PANDROL E2063	-
8	3	DRILLED RAIL, 136 LB RE, 38'-0" LONG	-	18	8	INSULATION, PANDROL NYLON 6790	-
9	1	DRILLED RAIL, 136 LB RE, 40'-0" LONG	-	19	175	TIE PAD PANDROL 6993SR	-
10	2	DRILLED RAIL, 136 LB RE, 48'-11 1/8" LONG	-	20	176	SHIM, TO REDUCE PLATE FLEXURE	-



NOTES:

- ALL RAILS SHALL HAVE IDENTIFICATION COLOR CODE PAINTED ON WEB, CLEAR OF JOINT AREA
- RAIL LENGTHS ALLOW 1/8" GAP BETWEEN RAIL JOINTS FOR WELDING
- GUARD RAILS ARE RAISED 1" AND FORM A 1 7/8" FLANGWAY
- COORDINATE SWITCH MACHINE AND MACHINE PLATE (NIC) WITH CALTRAIN
- ALL TIE LENGTHS SHALL INCLUDE 1'-9" FROM TIE ENDS TO RAIL CENTERLINE, EXCEPT AS NOTED AND 1:80 CANTED TIES
- TIGHTEN TIE SCREW WITH DOUBLE COIL SPRING WASHER IN PLACE
- SCHWIHAG ROLLERS SHALL BE INSTALLED AND ADJUSTED IN THE FIELD

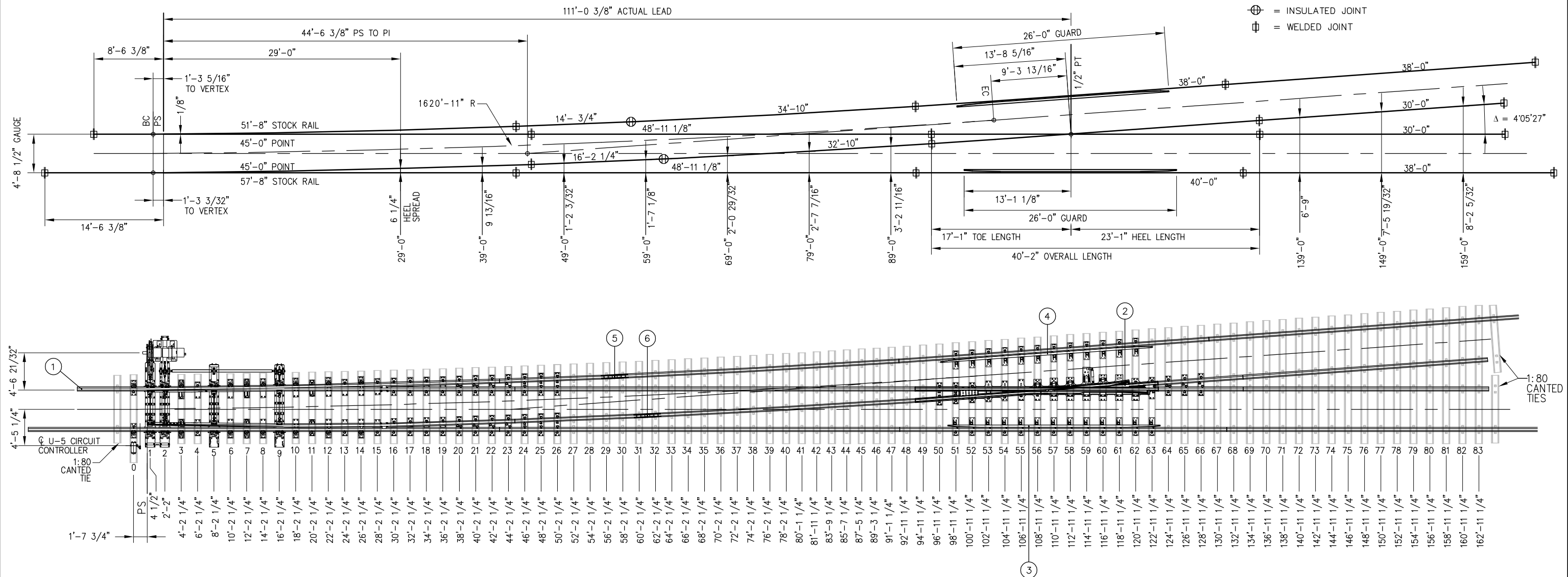
TURNOUT DATA

FROG		ANGLE	4'05'27"	ACTUAL LEAD:	111'-3/8"
		TOE LENGTH:	17'-1"	CLOSURE AREA	
		HEEL LENGTH:	23'-1"	CENTERLINE RADIUS:	1620'-11"
		TOTAL LENGTH:	40'-2"	DEGREE OF CURVE:	3'32'07"
SWITCH		LENGTH OF POINTS:	45'-0"	DESIGN SPEEDS	
		VERTEX DISTANCE:	1'-3 7/32"	35 MPH PASSENGER @ 3" UNBALANCE	
		ENTRY ANGLE:	0'29'50"	25 MPH FREIGHT @ 2" UNBALANCE	
		THICKNESS AT POINT:	1/8"		
		THROW AT ROD #1:	4 3/4"		

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD		STANDARD DRAWINGS		CADD FILE NAME: SD-2602
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. 14 TURNOUT NO. 14 RH TURNOUT WITH WSM FROG AND HST SWITCH MACHINE ON MAINLINE SIDE		SPECIAL TRACKWORK
REV DATE BY CHK APP		REV DATE BY CHK APP		STANDARD DRAWING NO: SD-2602

BILL OF MATERIAL					BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO		
1	1	SWITCH PACK, NO 14-136 LB RE MODIFIED TANGENTIAL, LH, HST	SD-2607	11	352	TIE SCREW, CONCRETE 7/8" DIA X 6" HEX HEAD	-		
2	1	FROG PACK, NO 14-136 LB RE WSM, LH	SD-2623	12	352	WASHER FLAT 7/8" TYPE A NARROW 15/16" X 1 3/4" X 0.134"	-		
3	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LONG, 136 LB RE RAISED 1", STRAIGHT	SD-2301	13	352	SPRING WASHER, DOUBLE COIL (Fe6)	-		
4	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LONG, 136 LB RE RAISED 1", LH	SD-2635	14	1	CONCRETE TIE SET, 0-83 + (3) 1:80 TIES, PLATE PADS, PIM INSERTS, LH	SD-2618		
5	1	INSULATED RAIL ASSEMBLY, 48'-10 3/4" C/W BONDED INSULATED JOINT	-	15	342	CLIP PANDROL E2055	-		
6	1	INSULATED RAIL ASSEMBLY, 49'-0 1/4" C/W BONDED INSULATED JOINT	-	16	342	INSULATOR PANDROL FEATURES BASE HOLDOWN NYLON HD-10	-		
7	2	DRILLED RAIL, 136 LB RE, 30'-0" LONG	-	17	8	CLIP PANDROL E2063	-		
8	3	DRILLED RAIL, 136 LB RE, 38'-0" LONG	-	18	8	INSULATION, PANDROL NYLON 6790	-		
9	1	DRILLED RAIL, 136 LB RE, 40'-0" LONG	-	19	175	TIE PAD PANDROL 6993SR	-		
10	2	DRILLED RAIL, 136 LB RE, 48'-11 1/8" LONG	-	20	176	SHIM, TO REDUCE PLATE FLEXURE	-		



NOTES:

1. ALL RAILS SHALL HAVE IDENTIFICATION COLOR CODE PAINTED ON WEB, CLEAR OF JOINT AREA
2. RAIL LENGTHS ALLOW 1/8" GAP BETWEEN RAIL JOINTS FOR WELDING
3. GUARD RAILS ARE RAISED 1" AND FORM A 1 7/8" FLANGEWAY
4. COORDINATE SWITCH MACHINE AND MACHINE PLATE (NIC) WITH CALTRAIN
5. ALL TIE LENGTHS SHALL INCLUDE 1'-9" FROM TIE ENDS TO RAIL CENTERLINE, EXCEPT AS NOTED AND 1:80 CANTED TIES
6. TIGHTEN TIE SCREW WITH DOUBLE COIL SPRING WASHER IN PLACE
7. SCHWIHAG ROLLERS SHALL BE INSTALLED AND ADJUSTED IN THE FIELD


TURNOUT DATA

FROG	ANGLE: 4°05'27"	ACTUAL LEAD: 111'-3 8/8"
	TOE LENGTH: 17'-1"	CLOSURE AREA
	HEEL LENGTH: 23'-1"	CENTERLINE RADIUS: 1620'-11"
	TOTAL LENGTH: 40'-2"	DEGREE OF CURVE: 3'32'07"
SWITCH	LENGTH OF POINTS: 45'-0"	DESIGN SPEEDS
	VERTEX DISTANCE: 1'-3 7/32"	35 MPH PASSENGER @ 3" UNBALANCE
	ENTRY ANGLE: 0°29'50"	25 MPH FREIGHT @ 2" UNBALANCE
	THICKNESS AT POINT: 1/8"	
	THROW AT ROD #1: 4 3/4"	

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING



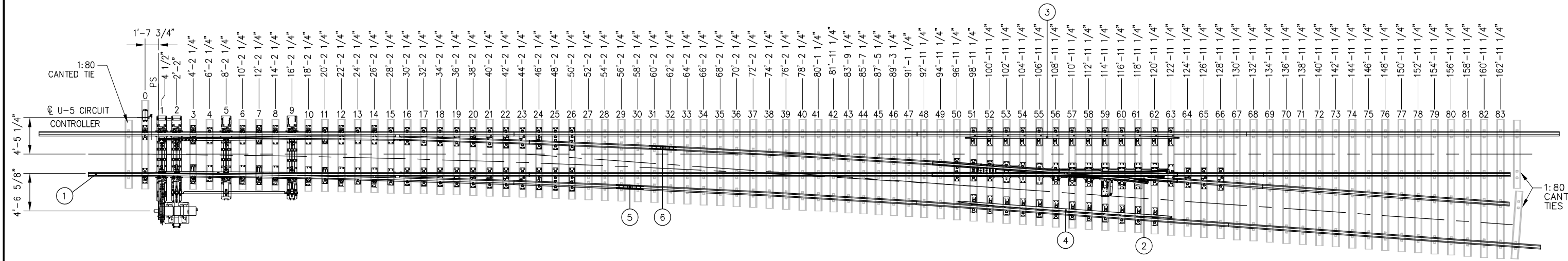
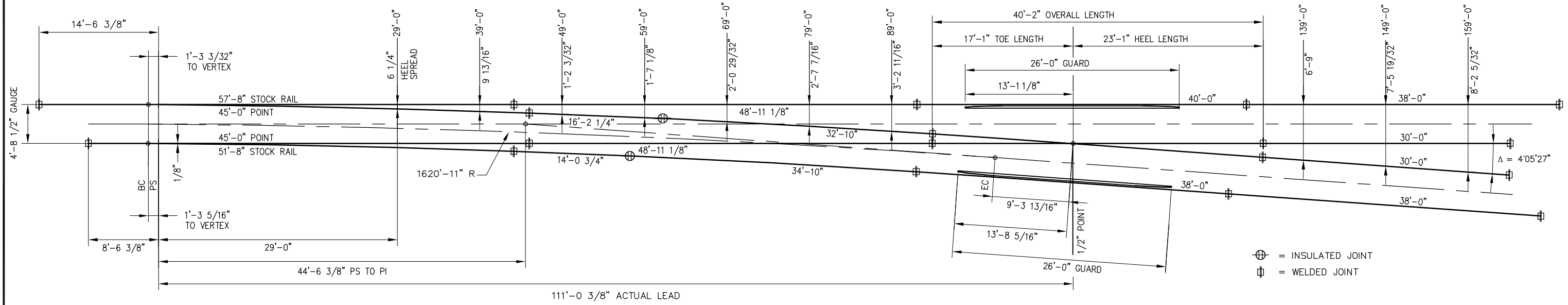
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
NO. 14 LH TURNOUT WITH
WSM FROG AND HST SWITCH MACHINE
ON TURNOUT SIDE

CADD FILE NAME: SD-2603
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO.: SD-2603

BILL OF MATERIAL					BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO		
1	1	SWITCH PACK, NO 14-136 LB RE MODIFIED TANGENTIAL, RH, HST	SD-2608	11	352	TIE SCREW, CONCRETE 7/8" DIA x 6" HEX HEAD	-		
2	1	FROG PACK, NO 14-136 LB RE WSM, RH	SD-2624	12	352	WASHER FLAT 7/8" TYPE A NARROW 15/16" x 1 3/4" x 0.134"	-		
3	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LONG, 136 LB RE RAISED 1", STRAIGHT	SD-2301	13	352	SPRING WASHER, DOUBLE COIL (Fe6)	-		
4	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LONG, 136 LB RE RAISED 1", RH	SD-2636	14	1	CONCRETE TIE SET, 0-83 + (3) 1:80 TIES, PLATE PADS, PIM INSERTS, RH	SD-2617		
5	1	INSULATED RAIL ASSEMBLY, 48'-10 3/4" C/W BONDED INSULATED JOINT	-	15	342	CLIP PANDROL E2055	-		
6	1	INSULATED RAIL ASSEMBLY, 49'-1 1/4" C/W BONDED INSULATED JOINT	-	16	342	INSULATOR PANDROL FEATURES BASE HOLDOWN NYLON HD-10	-		
7	2	DRILLED RAIL, 136 LB RE, 30'-0" LONG	-	17	8	CLIP PANDROL E2063	-		
8	3	DRILLED RAIL, 136 LB RE, 38'-0" LONG	-	18	8	INSULATION, PANDROL NYLON 6790	-		
9	1	DRILLED RAIL, 136 LB RE, 40'-0" LONG	-	19	175	TIE PAD PANDROL 6993SR	-		
10	2	DRILLED RAIL, 136 LB RE, 48'-11 1/8" LONG	-	20	176	SHIM, TO REDUCE PLATE FLEXURE	-		



NOTES:

- ALL RAILS SHALL HAVE IDENTIFICATION COLOR CODE PAINTED ON WEB, CLEAR OF JOINT AREA
- RAIL LENGTHS ALLOW 1/8" GAP BETWEEN RAIL JOINTS FOR WELDING
- GUARD RAILS ARE RAISED 1" AND FORM A 1 7/8" FLANGEWAY
- COORDINATE SWITCH MACHINE AND MACHINE PLATE (NIC) WITH CALTRAIN
- ALL TIE LENGTHS SHALL INCLUDE 1'-9" FROM TIE ENDS TO RAIL CENTERLINE, EXCEPT AS NOTED AND 1:80 CANTED TIES
- TIGHTEN TIE SCREW WITH DOUBLE COIL SPRING WASHER IN PLACE
- SCHWIBAG ROLLERS TO BE INSTALLED AND ADJUSTED IN THE FIELD

TURNOUT DATA

FROG	ANGLE: 4°05'27"	ACTUAL LEAD: 111'-3 3/8"
	TOE LENGTH: 17'-1"	CLOSURE AREA
	HEEL LENGTH: 23'-1"	CENTERLINE RADIUS: 1620'-11"
	TOTAL LENGTH: 40'-2"	DEGREE OF CURVE: 3°32'07"
SWITCH	LENGTH OF POINTS: 45'-0"	DESIGN SPEEDS
	VERTEX DISTANCE: 1'-3 7/32"	35 MPH PASSENGER @ 3" UNBALANCE
	ENTRY ANGLE: 0°29'50"	25 MPH FREIGHT @ 2" UNBALANCE
	THICKNESS AT POINT: 1/8"	
	THROW AT ROD #1: 4 3/4"	


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. 14 TURNOUT
NO. 14 RH TURNOUT WITH
WSM FROG AND HST SWITCH MACHINE
ON TURNOUT SIDE

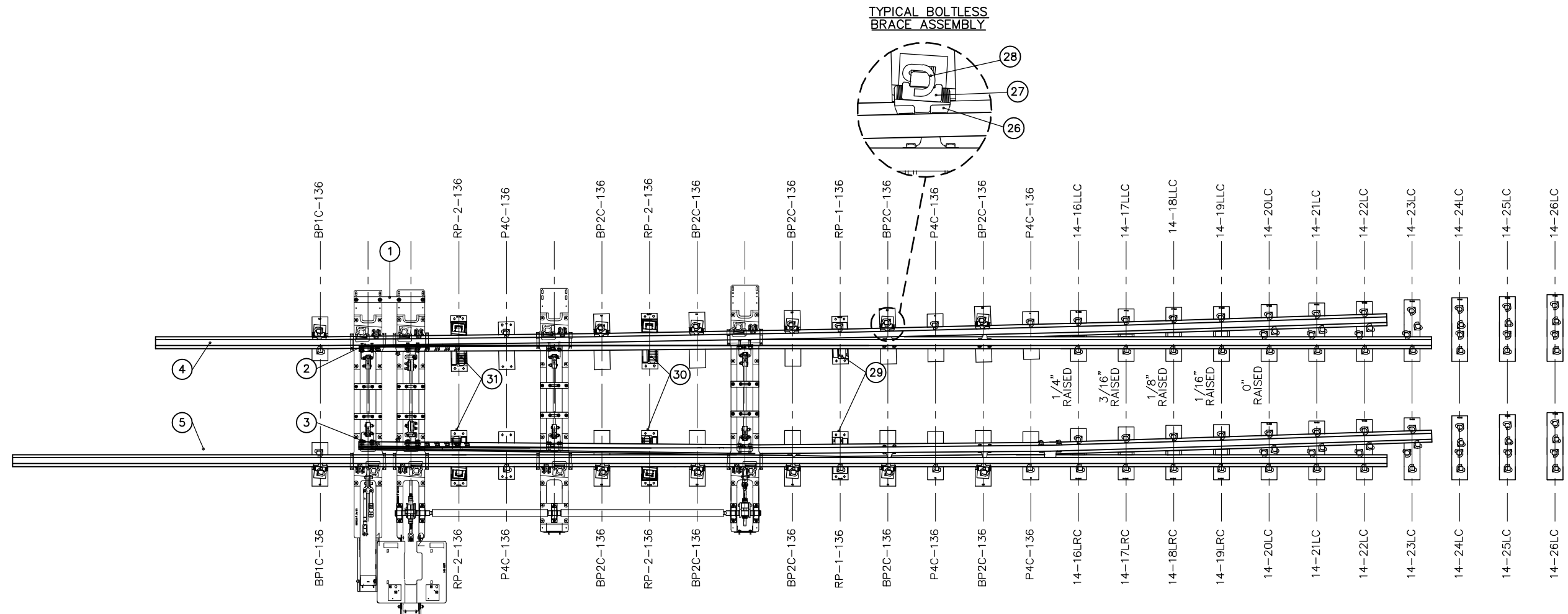
CADD FILE NAME: SD-2604

REV: EDITION: FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO: SD-2604

BILL OF MATERIAL					BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO		
1	1	HOLLOW SWITCH TIE & RODDING ASSEMBLY	SD-2620	16	1	PLATE, SWITCH (14-18LRC)	SD-2640		
2	1	SAMSON POINT, 45'-0" LONG, UR MANG TIP, STRAIGHT, LH	SD-2609	17	1	PLATE, SWITCH (14-19LLC)	SD-2641		
3	1	SAMSON POINT, 45'-0" LONG, UR MANG TIP, CURVED, RH	SD-2610	18	1	PLATE, SWITCH (14-19LRC)	SD-2641		
4	1	SAMSON STOCK RAIL, 51'-8" LONG, CURVED, LH	SD-2613	19	2	PLATE, SWITCH (14-20LC)	SD-2641		
5	1	SAMSON STOCK RAIL, 57'-8" LONG, STRAIGHT, RH	SD-2614	20	2	PLATE, SWITCH (14-21LC)	SD-2641		
6	2	PLATE, SWITCH (BP1C-136)	SD-2302	21	2	PLATE, SWITCH (14-22LC)	SD-2641		
7	10	PLATE, SWITCH (BP2C-136)	SD-2302	22	2	PLATE, SWITCH (14-23LC)	SD-2641		
8	6	PLATE, SWITCH (P4C-136)	SD-2302	23	2	PLATE, SWITCH (14-24LC)	SD-2642		
9	2	PLATE, SWITCH ROLLER SCHWIHAG RP-1-136	SD-2311	24	2	PLATE, SWITCH (14-25LC)	SD-2642		
10	4	PLATE, SWITCH ROLLER SCHWIHAG RP-2-136	SD-2312	25	2	PLATE, SWITCH (14-26LC)	SD-2642		
11	1	PLATE, SWITCH (14-16LLC)	SD-2640	26	16	BRACE, BOLTLESS, 136 LB RE 'SUREFIT'	-		
12	1	PLATE, SWITCH (14-16LRC)	SD-2640	27	16	WASHER, SERRATED FOR BOLTLESS BRACE	-		
13	1	PLATE, SWITCH (14-17LLC)	SD-2640	28	98	CLIP, PANDROL, E2055	-		
14	1	PLATE, SWITCH (14-17LRC)	SD-2640	29	2	ROLLER SCHWIHAG, SINGLE	-		
15	1	PLATE, SWITCH (14-18LLC)	SD-2640	30	2	ROLLER SCHWIHAG, DOUBLE	-		
				31	2	ROLLER SCHWIHAG, TRIPLE	-		



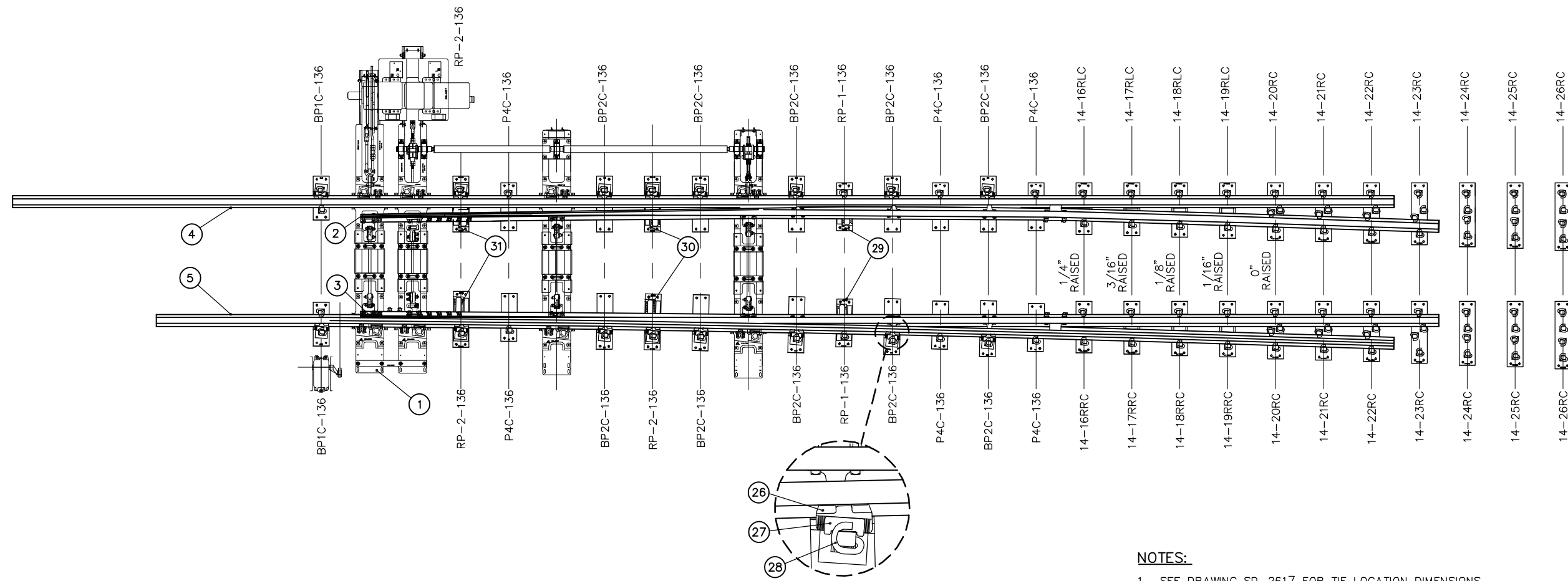
NOTES:

1. SEE DRAWING SD-2618 FOR TIE LOCATION DIMENSIONS
2. SWITCH RODS SHALL BE PREADJUSTED TO DIMENSIONS SHOWN IN DETAIL FOR EACH ROD LOCATION. MODIFY SPREADS AS NECESSARY WHEN INSTALLING INTO LAYOUT

REV					DATE					BY					CHK					APP					DESCRIPTION				
																									01012024 FOURTH EDITION				

PENINSULA CORRIDOR JOINT POWERS BOARD				STANDARD DRAWINGS		CADD FILE NAME: SD-2605					
APPROVED BY: <i>Bin Zhang</i> DEPUTY DIRECTOR, ENGINEERING			Caltrain 1250 San Carlos Avenue San Carlos, CA 94070			SPECIAL TRACKWORK NO. 14 TURNOUT LH SWITCH PACK WITH HOLLOW STEEL TIES SWITCH MACHINE ON MAINLINE SIDE		REV: EDITION: FOURTH		SPECIAL TRACKWORK	
						STANDARD DRAWING NO.: SD-2605					

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	HOLLOW SWITCH TIE & RODDING ASSEMBLY	SD-2619	16	1	PLATE, SWITCH (14-18RRC)	SD-2643
2	1	SAMSON POINT, 45'-0" LONG, UR MANG TIP, CURVED, LH	SD-2611	17	1	PLATE, SWITCH (14-19RLC)	SD-2644
3	1	SAMSON POINT, 45'-0" LONG, UR MANG TIP, STRAIGHT, RH	SD-2612	18	1	PLATE, SWITCH (14-19RRC)	SD-2644
4	1	SAMSON STOCK RAIL, 57'-8" LONG, STRAIGHT, LH	SD-2615	19	2	PLATE, SWITCH (14-20RC)	SD-2644
5	1	SAMSON STOCK RAIL, 51'-0" LONG, CURVED, RH	SD-2616	20	2	PLATE, SWITCH (14-21RC)	SD-2644
6	2	PLATE, SWITCH (BP1C-136)	SD-2302	21	2	PLATE, SWITCH (14-22RC)	SD-2644
7	10	PLATE, SWITCH (BP2C-136)	SD-2302	22	2	PLATE, SWITCH (14-23RC)	SD-2644
8	6	PLATE, SWITCH (P4C-136)	SD-2302	23	2	PLATE, SWITCH (14-24RC)	SD-2645
9	2	PLATE, SWITCH ROLLER SCHWIHAG RP-1-136	SD-2311	24	2	PLATE, SWITCH (14-25RC)	SD-2645
10	4	PLATE, SWITCH ROLLER SCHWIHAG RP-2-136	SD-2312	25	2	PLATE, SWITCH (14-26RC)	SD-2645
11	1	PLATE, SWITCH (14-16RLC)	SD-2643	26	16	BRACE, BOLTLESS, 136 LB RE 'SUREFIT'	-
12	1	PLATE, SWITCH (14-16RRC)	SD-2643	27	16	WASHER, SERRATED FOR BOLTLESS BRACE	-
13	1	PLATE, SWITCH (14-17RLC)	SD-2643	28	98	CLIP, PANDROL, E2055	-
14	1	PLATE, SWITCH (14-17RRC)	SD-2643	29	2	ROLLER SCHWIHAG, SINGLE	-
15	1	PLATE, SWITCH (14-18RLC)	SD-2643	30	2	ROLLER SCHWIHAG, DOUBLE	-
				31	2	ROLLER SCHWIHAG, TRIPLE	-



TYPICAL BOLTLESS BRACE ASSEMBLY

- NOTES:**
- SEE DRAWING SD-2617 FOR TIE LOCATION DIMENSIONS
 - SWITCH RODS SHALL BE PREADJUSTED TO DIMENSIONS SHOWN IN DETAIL FOR EACH ROD LOCATION. MODIFY SPREADS AS NECESSARY WHEN INSTALLING INTO LAYOUT


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



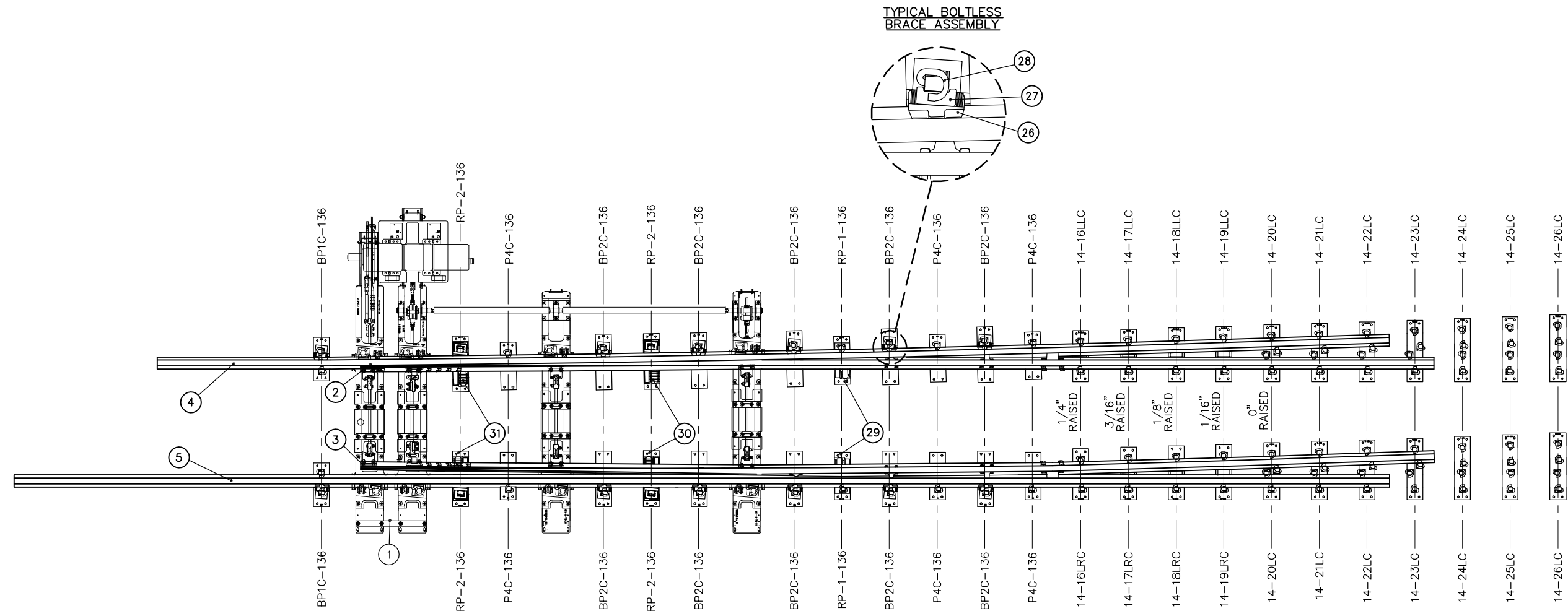
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
RH SWITCH PACK WITH
HOLLOW STEEL TIES
SWITCH MACHINE ON MAINLINE SIDE

CADD FILE NAME: SD-2606	EDITION: FOURTH
REV:	
STANDARD DRAWING NO: SD-2606	

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	HOLLOW SWITCH TIE & RODDING ASSEMBLY	SD-2622	16	1	PLATE, SWITCH (14-18LRC)	SD-2640
2	1	SAMSON POINT, 45'-0" LONG, UR MANG TIP, STRAIGHT, LH	SD-2609	17	1	PLATE, SWITCH (14-19LLC)	SD-2641
3	1	SAMSON POINT, 45'-0" LONG, UR MANG TIP, CURVED, RH	SD-2610	18	1	PLATE, SWITCH (14-19LRC)	SD-2641
4	1	SAMSON STOCK RAIL, 51'-8" LONG, CURVED, LH	SD-2613	19	2	PLATE, SWITCH (14-20LC)	SD-2641
5	1	SAMSON STOCK RAIL, 57'-8" LONG, STRAIGHT, RH	SD-2614	20	2	PLATE, SWITCH (14-21LC)	SD-2641
6	2	PLATE, SWITCH (BP1C-136)	SD-2302	21	2	PLATE, SWITCH (14-22LC)	SD-2641
7	10	PLATE, SWITCH (BP2C-136)	SD-2302	22	2	PLATE, SWITCH (14-23LC)	SD-2641
8	6	PLATE, SWITCH (P4C-136)	SD-2302	23	2	PLATE, SWITCH (14-24LC)	SD-2642
9	2	PLATE, SWITCH ROLLER SCHWIHAG RP-1-136	SD-2311	24	2	PLATE, SWITCH (14-25LC)	SD-2642
10	4	PLATE, SWITCH ROLLER SCHWIHAG RP-2-136	SD-2312	25	2	PLATE, SWITCH (14-26LC)	SD-2642
11	1	PLATE, SWITCH (14-16LLC)	SD-2640	26	16	BRACE, BOLTLESS, 136 LB RE 'SUREFIT'	-
12	1	PLATE, SWITCH (14-16LRC)	SD-2640	27	16	WASHER, SERRATED FOR BOLTLESS BRACE	-
13	1	PLATE, SWITCH (14-17LLC)	SD-2640	28	98	CLIP, PANDROL, E2055	-
14	1	PLATE, SWITCH (14-17LRC)	SD-2640	29	2	ROLLER SCHWIHAG, SINGLE	-
15	1	PLATE, SWITCH (14-18LLC)	SD-2640	30	2	ROLLER SCHWIHAG, DOUBLE	-
				31	2	ROLLER SCHWIHAG, TRIPLE	-



NOTES:

1. SEE DRAWING SD-2618 FOR TIE LOCATION DIMENSIONS
2. SWITCH RODS SHALL BE PREADJUSTED TO DIMENSIONS SHOWN IN DETAIL FOR EACH ROD LOCATION. MODIFY SPREADS AS NECESSARY WHEN INSTALLING INTO LAYOUT

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING



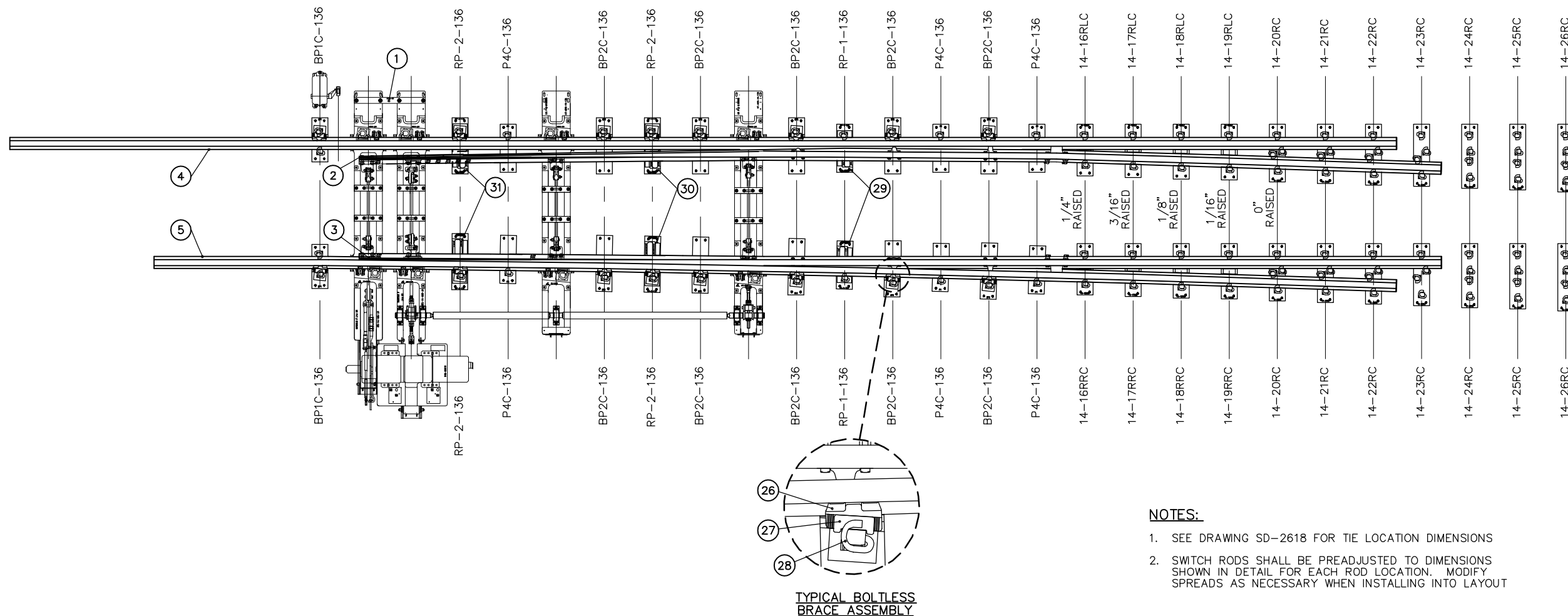
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
LH SWITCH PACK WITH
HOLLOW STEEL TIES
SWITCH MACHINE ON TURNOUT SIDE

CADD FILE NAME: SD-2607	EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO: SD-2607	

BILL OF MATERIAL					BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO		
1	1	HOLLOW SWITCH TIE & RODDING ASSEMBLY	SD-2621	16	1	PLATE, SWITCH (14-18RRC)	SD-2643		
2	1	SAMSON POINT, 45'-0" LONG, UR MANG TIP, CURVED, LH	SD-2611	17	1	PLATE, SWITCH (14-19RLC)	SD-2644		
3	1	SAMSON POINT, 45'-0" LONG, UR MANG TIP, STRAIGHT, RH	SD-2612	18	1	PLATE, SWITCH (14-19RRC)	SD-2644		
4	1	SAMSON STOCK RAIL, 57'-8" LONG, STRAIGHT, LH	SD-2615	19	2	PLATE, SWITCH (14-20RC)	SD-2644		
5	1	SAMSON STOCK RAIL, 51'-8" LONG, CURVED, RH	SD-2616	20	2	PLATE, SWITCH (14-21RC)	SD-2644		
6	2	PLATE, SWITCH (BP1C-136)	SD-2302	21	2	PLATE, SWITCH (14-22RC)	SD-2644		
7	10	PLATE, SWITCH (BP2C-136)	SD-2302	22	2	PLATE, SWITCH (14-23RC)	SD-2644		
8	6	PLATE, SWITCH (P4C-136)	SD-2302	23	2	PLATE, SWITCH (14-24RC)	SD-2645		
9	2	PLATE, SWITCH ROLLER SCHWIHAG RP-1-136	SD-2311	24	2	PLATE, SWITCH (14-25RC)	SD-2645		
10	4	PLATE, SWITCH ROLLER SCHWIHAG RP-2-136	SD-2312	25	2	PLATE, SWITCH (14-26RC)	SD-2645		
11	1	PLATE, SWITCH (14-16RLC)	SD-2643	26	16	BRACE, BOLTLESS, 136 LB RE 'SUREFIT'	-		
12	1	PLATE, SWITCH (14-16RRC)	SD-2643	27	16	WASHER, SERRATED FOR BOLTLESS BRACE	-		
13	1	PLATE, SWITCH (14-17RLC)	SD-2643	28	98	CLIP, PANDROL, E2055	-		
14	1	PLATE, SWITCH (14-17RRC)	SD-2643	29	2	ROLLER SCHWIHAG, SINGLE	-		
15	1	PLATE, SWITCH (14-18RLC)	SD-2643	30	2	ROLLER SCHWIHAG, DOUBLE	-		
				31	2	ROLLER SCHWIHAG, TRIPLE	-		



- NOTES:**
- SEE DRAWING SD-2618 FOR TIE LOCATION DIMENSIONS
 - SWITCH RODS SHALL BE PREADJUSTED TO DIMENSIONS SHOWN IN DETAIL FOR EACH ROD LOCATION. MODIFY SPREADS AS NECESSARY WHEN INSTALLING INTO LAYOUT

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. 14 TURNOUT
RH SWITCH PACK WITH
HOLLOW STEEL TIES
SWITCH MACHINE ON TURNOUT SIDE

CADD FILE NAME: SD-2608

REV: EDITION: FOURTH

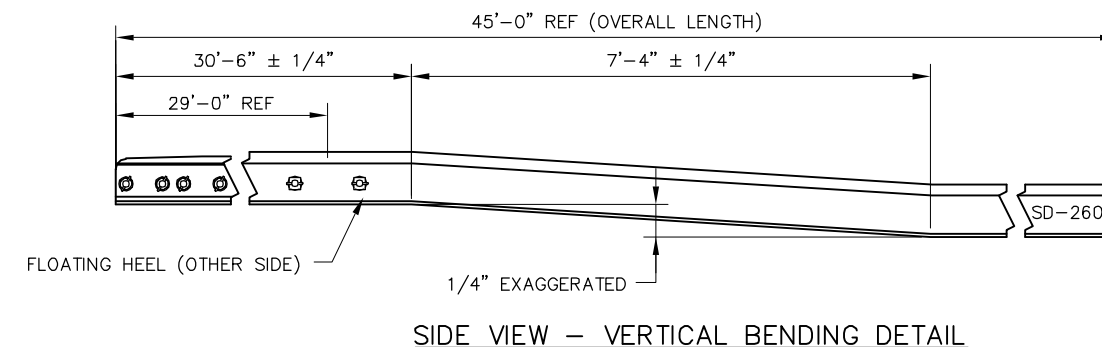
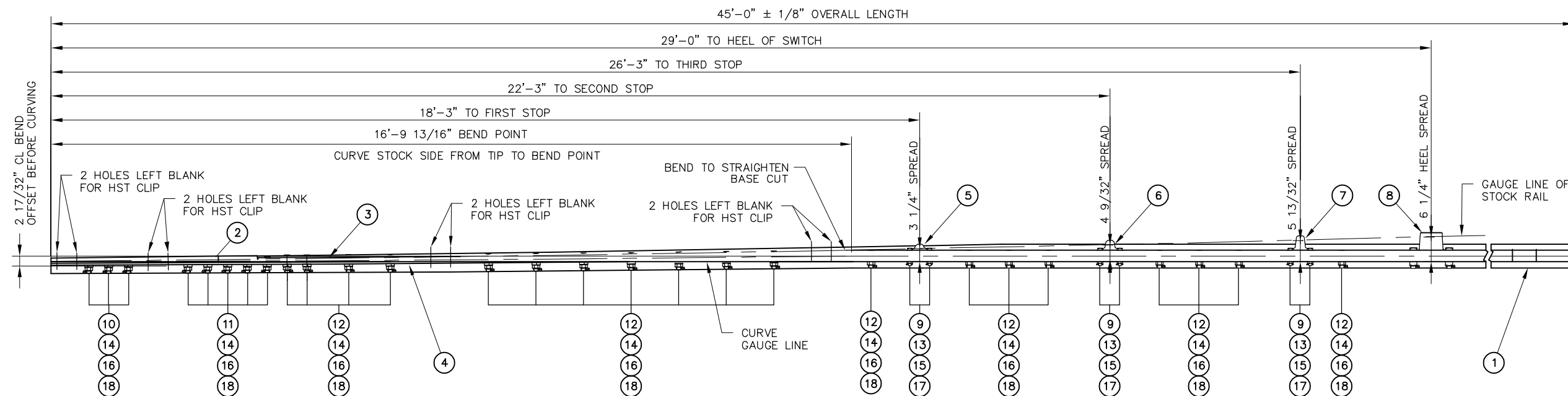
SPECIAL TRACKWORK

STANDARD DRAWING NO: SD-2608



1250 San Carlos Avenue
San Carlos, CA 94070

BILL OF MATERIAL			BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION	ITEM	QTY	DESCRIPTION
1	1	SAMSON POINT RAIL, 45'-0" LONG, UR MANG TIP, STRAIGHT, LH	10	3	BOLT, 1" DIA X 3 3/4" LONG, THIN SQ HEAD DRILLED @ 3 1/4", GR 5
2	1	MANGANESE TIP, LH, FOR 29'-0", 136 LB RE SAMSON SWITCH POINT	11	5	BOLT, 1" DIA X 4" LONG, THIN SQ HEAD DRILLED @ 3 1/2", GR 5
3	1	REINFORCING BAR, STOCK SIDE, 1/2" X 22'-11 7/8" LONG, SAMSON, LH POINT	12	19	BOLT, 1" DIA X 3 3/4" LONG, SQ HEAD DRILLED @ 3 3/8", GR 5
4	1	REINFORCING BAR, GAUGE SIDE, 1/2" X 27'-4" LONG, SAMSON, LH POINT	13	6	NUT, 3/4" DIA HEAVY HEX, GR 5
5	1	POINT STOP 2 1/16" HIGH	14	27	NUT, 1" DIA HEAVY HEX, GR 5
6	1	POINT STOP 3 1/16" HIGH	15	6	SPRING WASHER, 3/4" DIA
7	1	POINT STOP 4 3/16" HIGH	16	27	SPRING WASHER, 1" DIA
8	1	HEEL BLOCK ASSEMBLY, FLOATING C/W HARDWARE	17	6	COTTER PIN, 3/16" DIA X 1 3/4" LONG
9	6	BOLT, 3/4" DIA X 4" LONG, SQ HEAD DRILLED @ 3 21/32", GR 5	18	27	COTTER PIN, 1/4" DIA X 2" LONG



NOTES:

1. ROUND EDGES OF SWITCH STOPS AT CONTACT AREAS, 1/2" R
2. BEVEL ALL BOLT HOLES
3. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



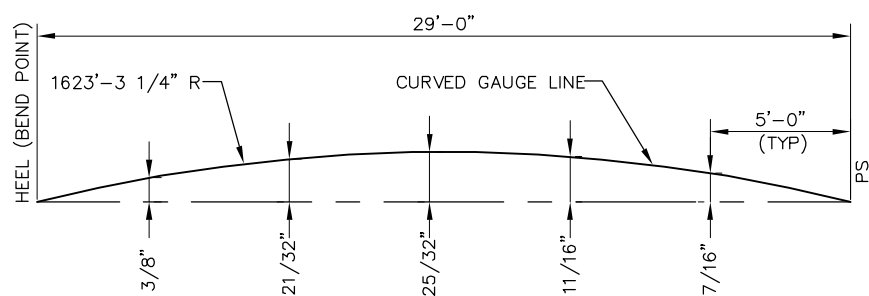
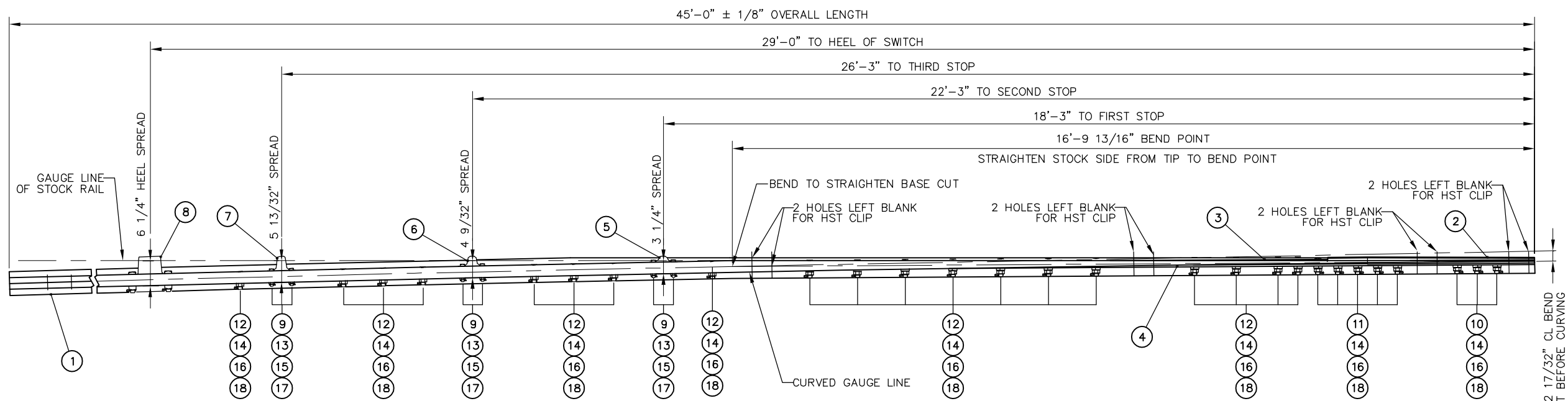
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

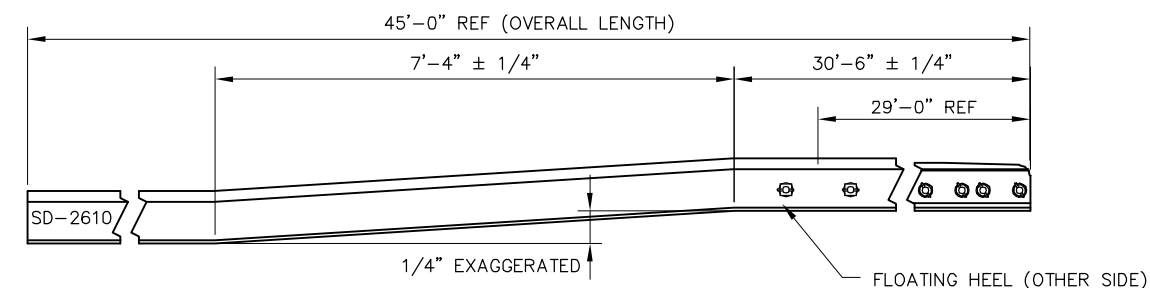
SPECIAL TRACKWORK
NO. 14 TURNOUT
SWITCH POINT ASSEMBLY
FOR LH TURNOUT
LH STRAIGHT 29'-0" SAMSON

CADD FILE NAME: SD-2609	
REV:	EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2609	

BILL OF MATERIAL			BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION	ITEM	QTY	DESCRIPTION
1	1	SAMSON POINT RAIL, 45'-0" LONG, UR MANG TIP, CURVED, RH	10	3	BOLT, 1" DIA X 3 3/4" LONG, THIN SQ HEAD DRILLED @ 3 1/4", GR 5
2	1	MANGANESE TIP, RH, FOR 29'-0", 136 LB RE SAMSON SWITCH POINT	11	5	BOLT, 1" DIA X 4" LONG, THIN SQ HEAD DRILLED @ 3 1/2", GR 5
3	1	REINFORCING BAR, STOCK SIDE, 1/2" X 22'-11 7/8" LONG, SAMSON, RH POINT	12	19	BOLT, 1" DIA X 3 3/4" LONG, SQ HEAD DRILLED @ 3 3/8", GR 5
4	1	REINFORCING BAR, GAUGE SIDE, 1/2" X 27'-4" LONG, SAMSON, RH POINT	13	6	NUT, 3/4" DIA HEAVY HEX, GR 5
5	1	POINT STOP 2 1/16" HIGH	14	27	NUT, 1" DIA HEAVY HEX, GR 5
6	1	POINT STOP 3 1/16" HIGH	15	6	SPRING WASHER, 3/4" DIA
7	1	POINT STOP 4 3/16" HIGH	16	27	SPRING WASHER, 1" DIA
8	1	HEEL BLOCK ASSEMBLY, FLOATING C/W HARDWARE	17	6	COTTER PIN, 3/16" DIA X 1 3/4" LONG
9	6	BOLT, 3/4" DIA X 4" LONG, SQ HEAD DRILLED @ 3 21/32", GR 5	18	27	COTTER PIN, 1/4" DIA X 2" LONG



LATERAL CURVING DETAIL
GAUGE SIDE



SIDE VIEW - VERTICAL BENDING DETAIL

NOTES:

1. ROUND EDGES OF SWITCH STOPS AT CONTACT AREAS, 1/2" R
2. BEVEL ALL BOLT HOLES
3. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT


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. 14 TURNOUT
SWITCH POINT ASSEMBLY
FOR LH TURNOUT
RH CURVED 29'-0" SAMSON

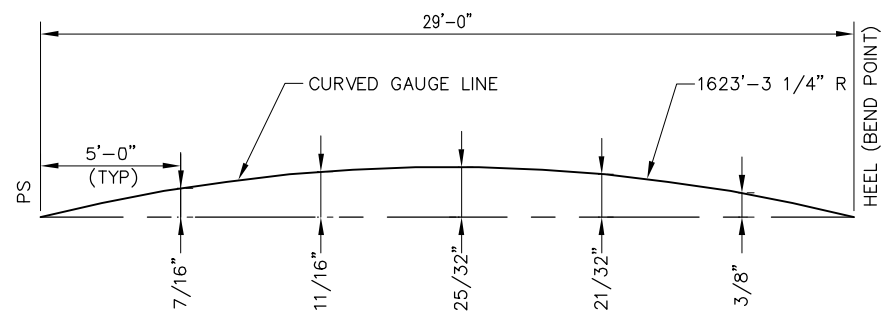
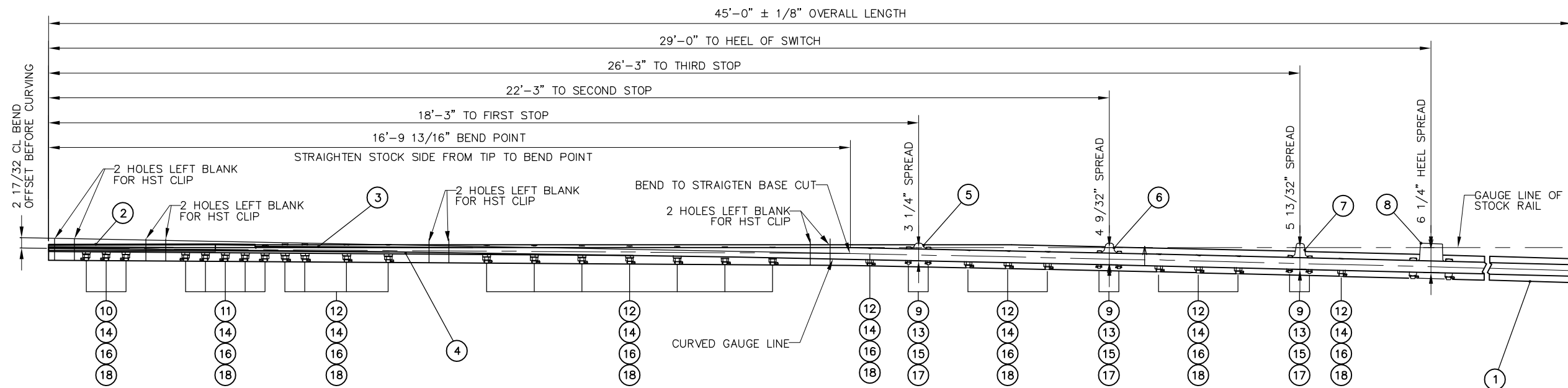
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REV: EDITION: FOURTH

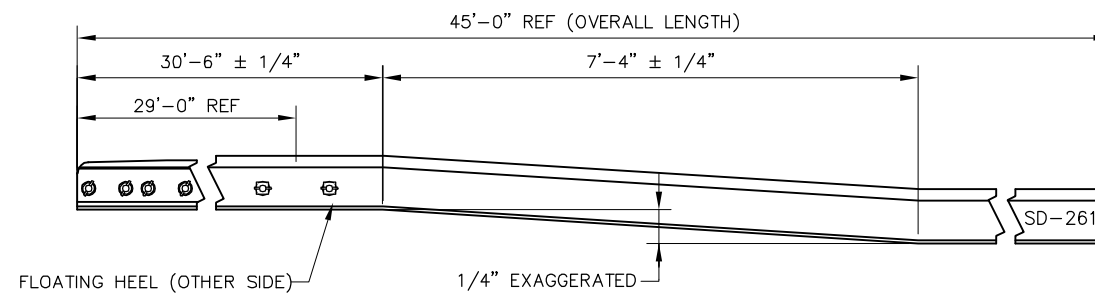
SPECIAL TRACKWORK

STANDARD DRAWING NO.: SD-2610

BILL OF MATERIAL			BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION	ITEM	QTY	DESCRIPTION
1	1	SAMSON POINT RAIL, 45'-0" LONG, UR MANG TIP, CURVED, LH	10	3	BOLT, 1" DIA X 3 3/4" LONG, THIN SQ HEAD DRILLED @ 3 1/4", GR 5
2	1	MANGANESE TIP, LH, FOR 29'-0", 136 LB RE SAMSON SWITCH POINT	11	5	BOLT, 1" DIA X 4" LONG, THIN SQ HEAD DRILLED @ 3 1/2", GR 5
3	1	REINFORCING BAR, STOCK SIDE, 1/2" X 22'-11 7/8" LONG, SAMSON, LH POINT	12	19	BOLT, 1" DIA X 3 3/4" LONG, SQ HEAD DRILLED @ 3 3/8", GR 5
4	1	REINFORCING BAR, GAUGE SIDE, 1/2" X 27'-4" LONG, SAMSON, LH POINT	13	6	NUT, 3/4" DIA HEAVY HEX, GR 5
5	1	POINT STOP 2 1/16" HIGH	14	27	NUT, 1" DIA HEAVY HEX, GR 5
6	1	POINT STOP 3 1/16" HIGH	15	6	SPRING WASHER, 3/4" DIA
7	1	POINT STOP 4 3/16" HIGH	16	27	SPRING WASHER, 1" DIA
8	1	HEEL BLOCK ASSEMBLY, FLOATING C/W HARDWARE	17	6	COTTER PIN, 3/16" DIA X 1 3/4" LONG
9	6	BOLT, 3/4" DIA X 4" LONG, SQ HEAD DRILLED @ 3 21/32", GR 5	18	27	COTTER PIN, 1/4" DIA X 2" LONG



LATERAL CURVING DETAIL
GAUGE SIDE



SIDE VIEW - VERTICAL BENDING DETAIL

NOTES:

1. ROUND EDGES OF SWITCH STOPS AT CONTACT AREAS, 1/2" R
2. BEVEL ALL BOLT HOLES
3. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

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. 14 TURNOUT
SWITCH POINT ASSEMBLY
FOR RH TURNOUT
LH CURVED 29'-0" SAMSON

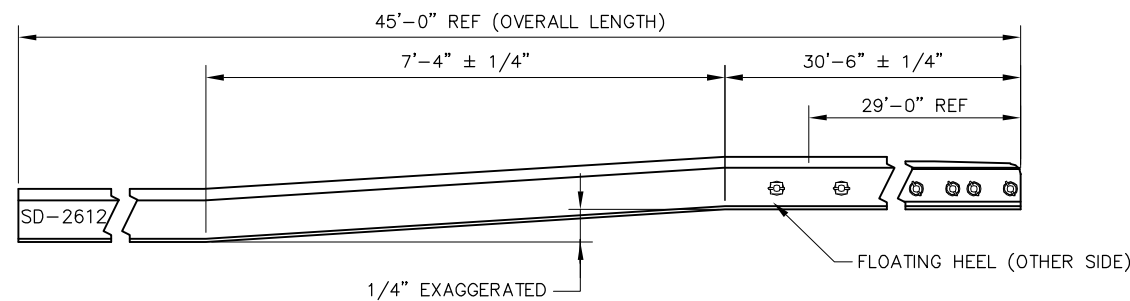
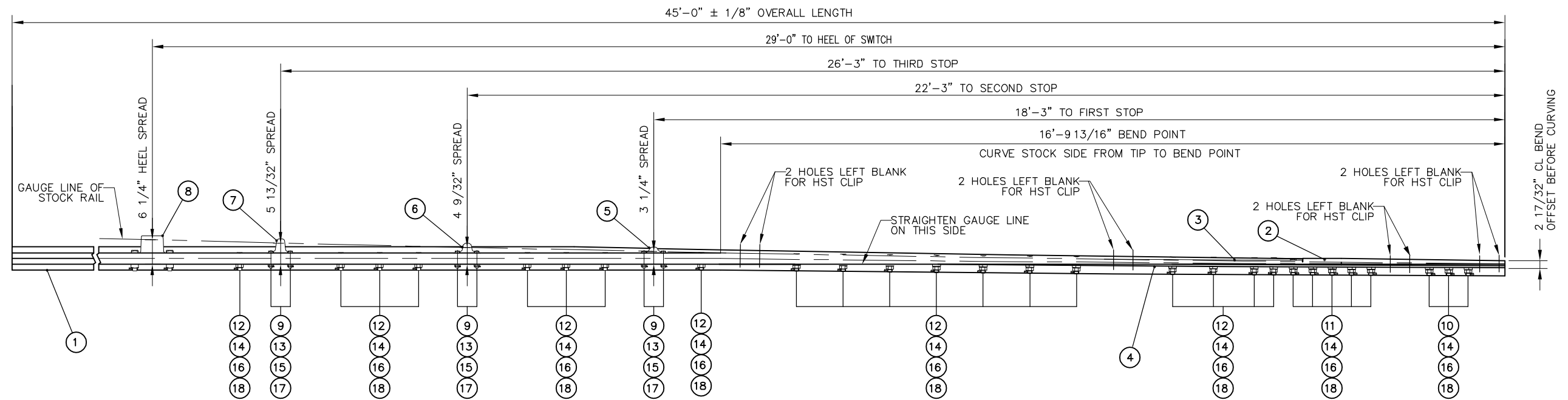
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REV: EDITION: FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO.: SD-2611

BILL OF MATERIAL			BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION	ITEM	QTY	DESCRIPTION
1	1	SAMSON POINT RAIL, 45'-0" LONG, UR MANG TIP, STRAIGHT, RH	10	3	BOLT, 1" DIA X 3 3/4" LONG, THIN SQ HEAD DRILLED @ 3 1/4", GR 5
2	1	MANGANESE TIP, RH, FOR 29'-0", 136 LB RE SAMSON SWITCH POINT	11	5	BOLT, 1" DIA X 4" LONG, THIN SQ HEAD DRILLED @ 3 1/2", GR 5
3	1	REINFORCING BAR, STOCK SIDE, 1/2" X 22'-11 7/8" LONG, SAMSON, RH POINT	12	19	BOLT, 1" DIA X 3 3/4" LONG, SQ HEAD DRILLED @ 3 3/8", GR 5
4	1	REINFORCING BAR, GAUGE SIDE, 1/2" X 27'-4" LONG, SAMSON, RH POINT	13	6	NUT, 3/4" DIA HEAVY HEX, GR 5
5	1	POINT STOP 2 1/16" HIGH	14	27	NUT, 1" DIA HEAVY HEX, GR 5
6	1	POINT STOP 3 1/16" HIGH	15	6	SPRING WASHER, 3/4" DIA
7	1	POINT STOP 4 3/16" HIGH	16	27	SPRING WASHER, 1" DIA
8	1	HEEL BLOCK ASSEMBLY, FLOATING C/W HARDWARE	17	6	COTTER PIN, 3/16" DIA X 1 3/4" LONG
9	6	BOLT, 3/4" DIA X 4" LONG, SQ HEAD DRILLED @ 3 21/32, GR 5	18	27	COTTER PIN, 1/4" DIA X 2" LONG



SIDE VIEW - VERTICAL BENDING DETAIL

NOTES:

1. ROUND EDGES OF SWITCH STOPS AT CONTACT AREAS, 1/2" R
2. BEVEL ALL BOLT HOLES
3. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

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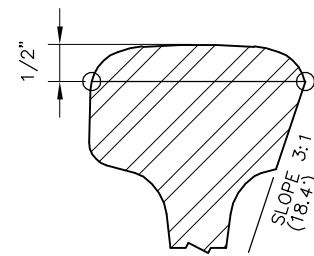


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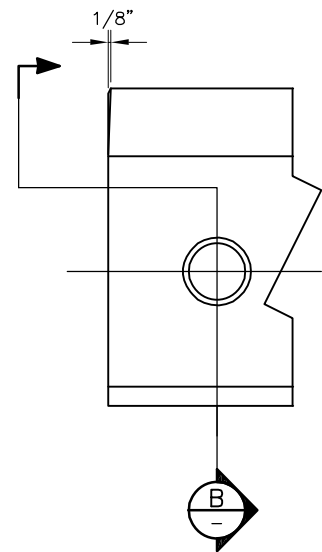
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
SWITCH POINT ASSEMBLY
FOR RH TURNOUT
RH STRAIGHT 29'-0" SAMSON

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REV:	EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2612	

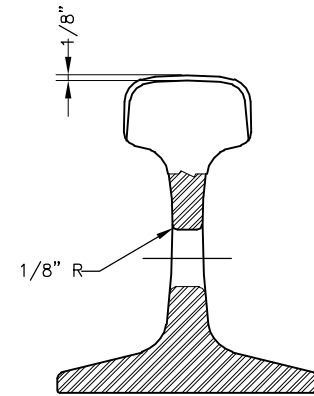


A PARTIAL SECTION
SCALE: NTS



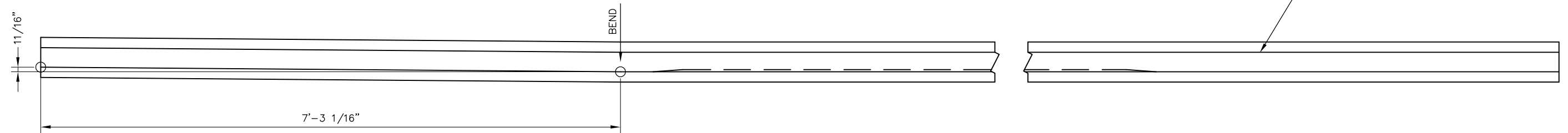
B

RAIL END/HOLE BEVELING DETAIL
RAIL HEAD ONLY - NOT BASE

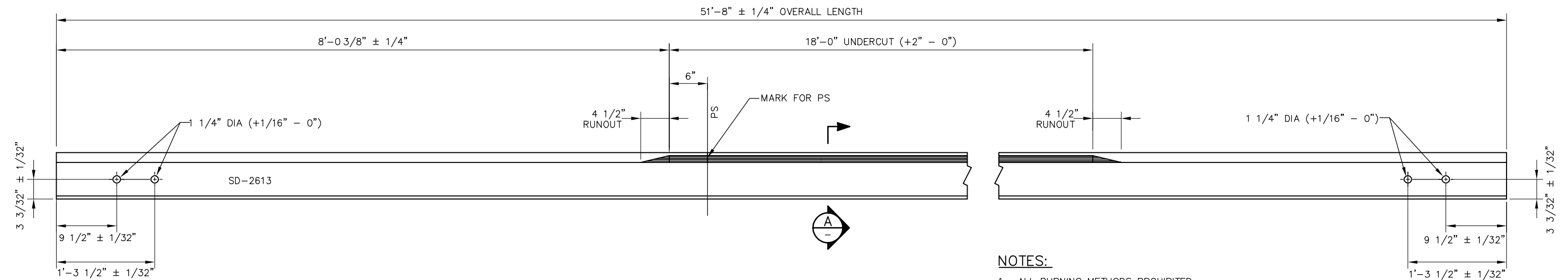


B SECTION
SCALE: NTS

BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	RAIL, 136 LB RE 51'-8" LONG



BENDING DETAILS



MACHINING DETAILS

NOTES:

1. ALL BURNING METHODS PROHIBITED
2. ALL BOLT HOLES SHALL BE BEVELED PER DETAIL
3. POINT OF SWITCH SHALL BE MARKED ON GAUGE SIDE OF WEB WITH A WHITE LINE USING WATERPROOF MARKER OR PAINT
4. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

PENINSULA CORRIDOR JOINT POWERS BOARD

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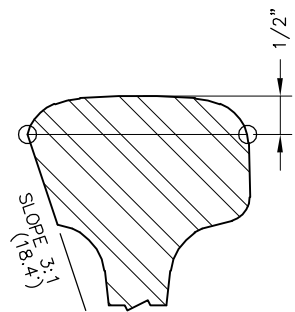


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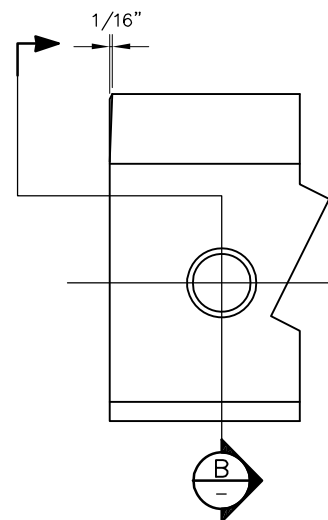
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
SAMSON STOCK RAIL
FOR LH TURNOUT
LH CURVED 51'-8" LONG

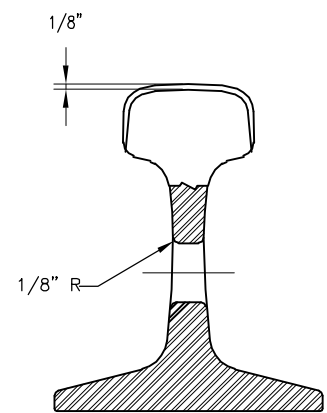
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A PARTIAL SECTION
SCALE: NTS



B SECTION
SCALE: NTS



B SECTION
SCALE: NTS

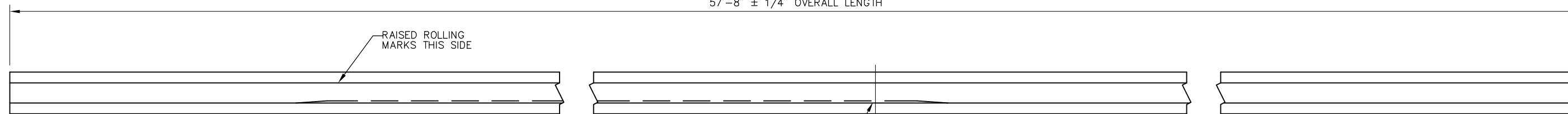
BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	RAIL, 136 LB RE 57'-8" LONG

NOTES:

1. ALL BURNING METHODS PROHIBITED
2. ALL BOLT HOLES SHALL BE BEVELED PER DETAIL
3. POINT OF SWITCH SHALL BE MARKED ON GAUGE SIDE OF WEB WITH A WHITE LINE USING WATERPROOF MARKER OR PAINT
4. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT

RAIL END/HOLE BEVELING DETAIL
RAIL HEAD ONLY - NOT BASE

57'-8" ± 1/4" OVERALL LENGTH

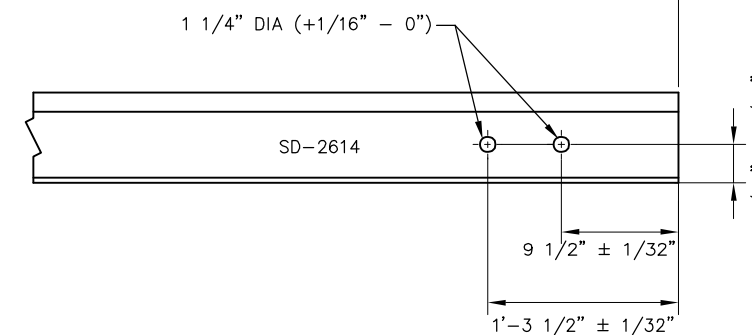
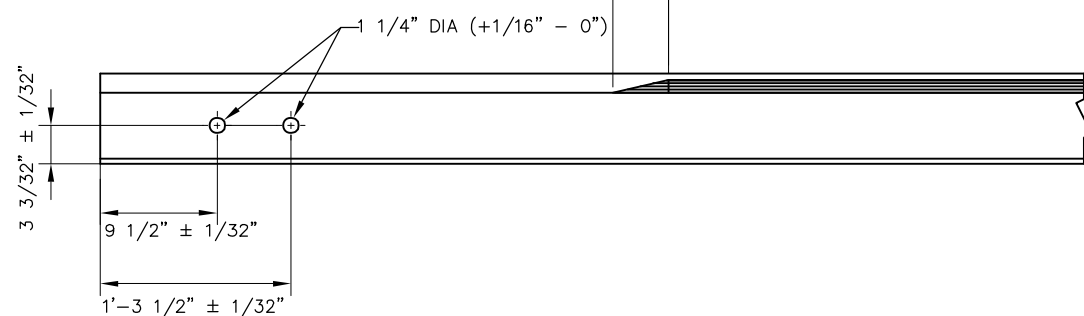


18'-0" UNDERCUT (+2" - 0")

14'-0 3/8" ± 1/4"

4 1/2" RUNOUT

4 1/2" RUNOUT



MACHINING DETAILS

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



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San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
SAMSON STOCK RAIL
FOR LH TURNOUT
RH STRAIGHT 57'-8" LONG

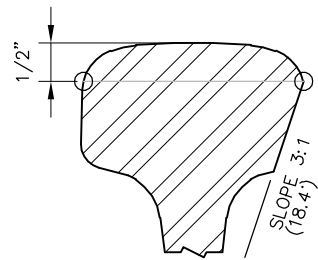
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REV: EDITION:
FOURTH

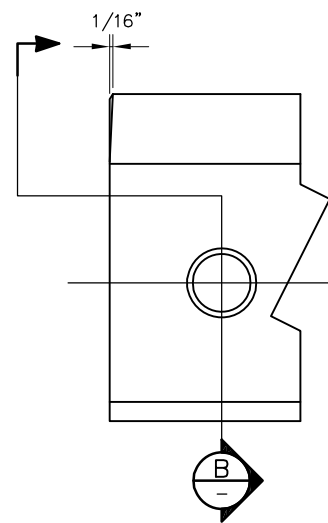
SPECIAL TRACKWORK

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SD-2614

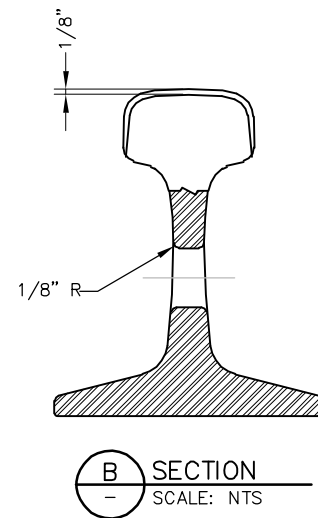
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					01012024 FOURTH EDITION						



A PARTIAL SECTION
SCALE: NTS



B RAIL END/HOLE BEVELING DETAIL
RAIL HEAD ONLY - NOT BASE



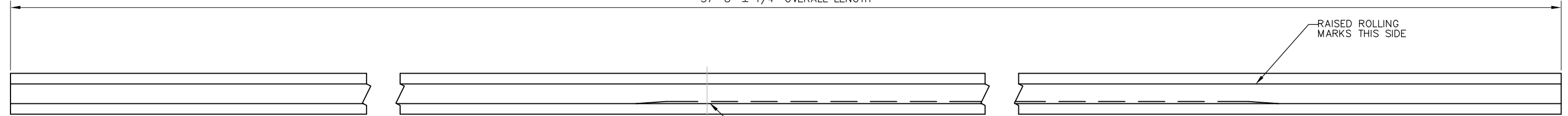
B SECTION
SCALE: NTS

BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	RAIL, 136 LB RE 57'-8" LONG

NOTES:

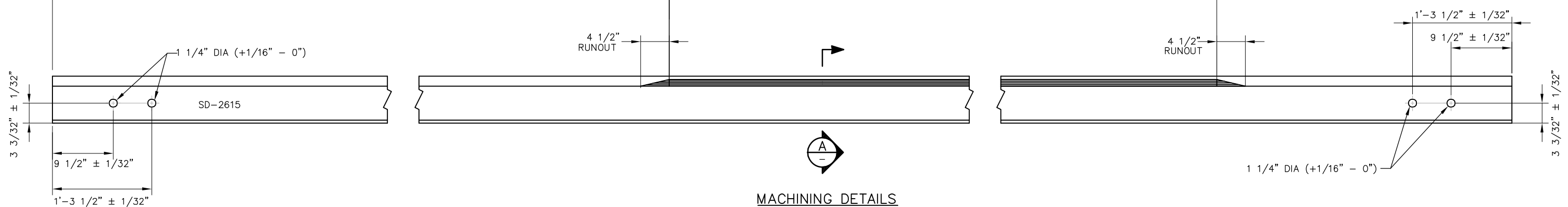
1. ALL BURNING METHODS PROHIBITED
2. ALL BOLT HOLES SHALL BE BEVELED PER DETAIL
3. POINT OF SWITCH SHALL BE MARKED ON GAUGE SIDE OF WEB WITH A WHITE LINE USING WATERPROOF MARKER OR PAINT
4. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT

57'-8" ± 1/4" OVERALL LENGTH



14'-0 3/8" ± 1/4"

18'-0" UNDERCUT (+2" - 0")



A MACHINING DETAILS


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

PENINSULA CORRIDOR JOINT POWERS BOARD

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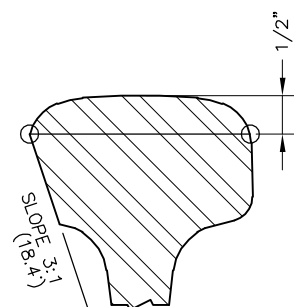


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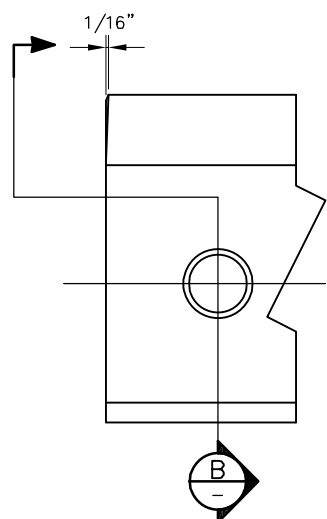
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
SAMSON STOCK RAIL
FOR RH TURNOUT
LH STRAIGHT 57'-8" LONG

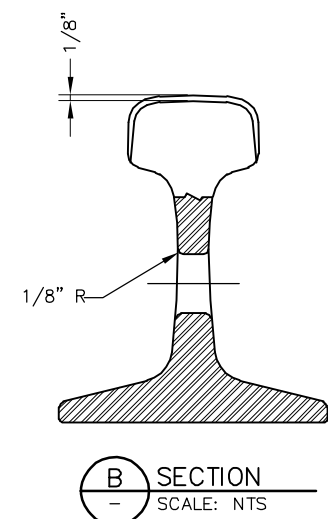
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SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2615	



A PARTIAL SECTION
SCALE: NTS



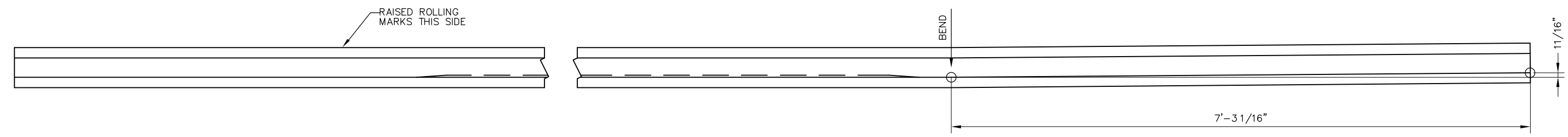
RAIL END/HOLE BEVELING DETAIL
RAIL HEAD ONLY - NOT BASE



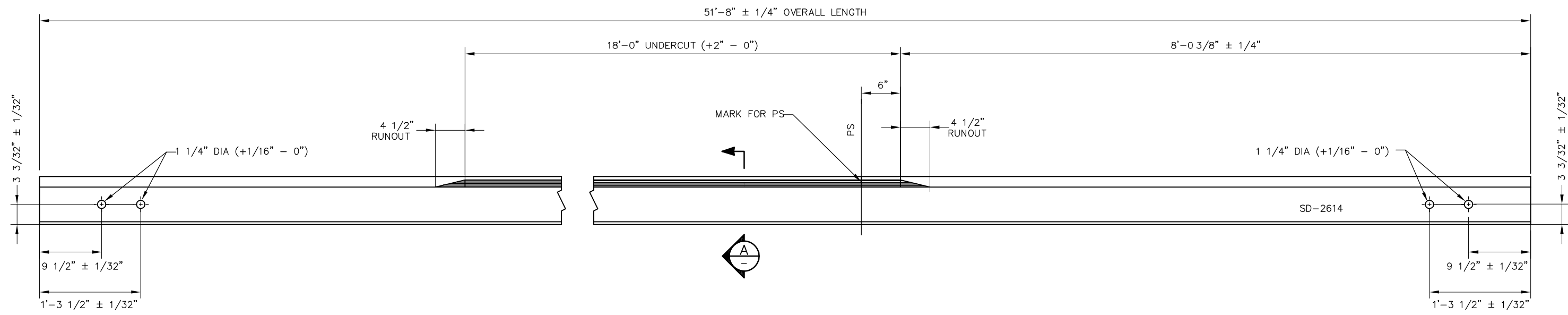
B SECTION
SCALE: NTS

BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	RAIL, 136 LB RE 51'-8" LONG

- NOTES:**
1. ALL BURNING METHODS PROHIBITED
 2. ALL BOLT HOLES SHALL BE BEVELED PER DETAIL
 3. POINT OF SWITCH SHALL BE MARKED ON GAUGE SIDE OF WEB WITH A WHITE LINE USING WATERPROOF MARKER OR PAINT
 4. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT



BENDING DETAILS




MACHINING DETAILS

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

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Bin Zhang
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STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
SAMSON STOCK RAIL
FOR RH TURNOUT
RH CURVED 51'-8" LONG

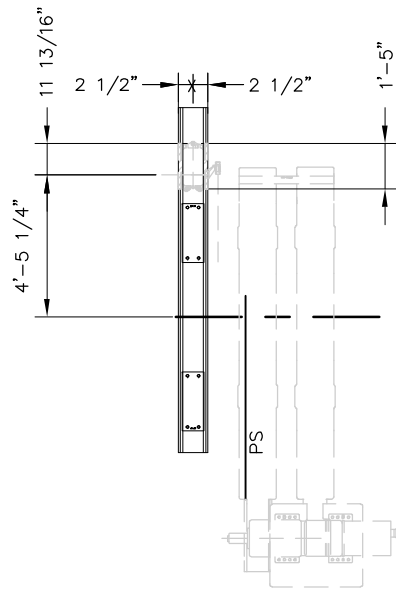
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REV: EDITION:
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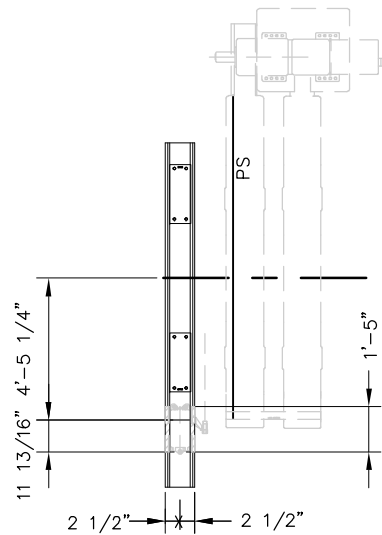
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SD-2616

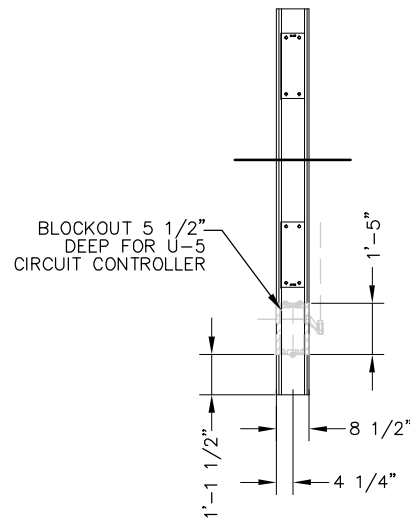
01012024 FOURTH EDITION



TIE "O" PLACEMENT
SWITCH MACHINE
ON TURNOUT (RH) SIDE

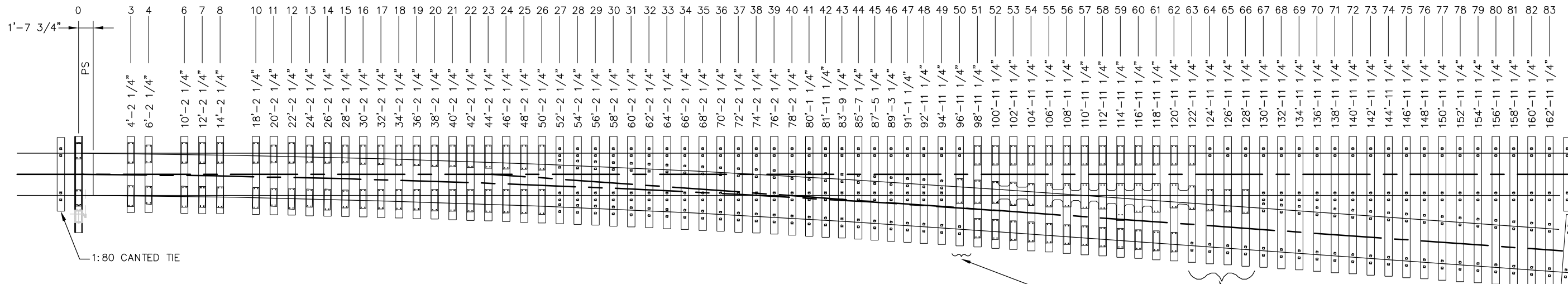


TIE "O" PLACEMENT
SWITCH MACHINE
ON MAINLINE (LH) SIDE



TIE "O" BLOCKOUT DETAIL

BILL OF MATERIALS			
ITEM	QTY	DESCRIPTION	DWG NO
1	4	TIES 1,2,5 AND 9, POWER SWITCH MACHINE ON MAINLINE SIDE FOR LH TURNOUT (HOLLOW STEEL)	SD-2619
2	4	TIES 1,2,5 AND 9, POWER SWITCH MACHINE ON TURNOUT SIDE FOR LH TURNOUT (HOLLOW STEEL)	SD-2621



NOTES:

- SET SHALL INCLUDE TIES 0, 3 & 4, 6 THROUGH 8 AND 10 THROUGH 83, THREE 1:80 CANTED TIES, TIE PADS FOR ALL PLATES AND PIM INSERTS
- TIE LENGTHS ARE DETERMINED BY ADDING 1'-10 7/16" FROM RAIL GAUGE LINE (OR 1'-9" FROM RAIL CENTERLINE) PER SIDE AT THE CENTERLINE OF EACH TIE LOCATION
- ALL TIES ARE FLAT (NON-CANTED) EXCEPT 1:80 CANTED TRANSITION TIES
- TRANSITION TIES (QUANTITY 3) SHALL INCORPORATE 1:80 CANTED RAIL SEATS AND USE 4'-8 1/2" BETWEEN STRAIGHT RAIL SEAT GAUGES. LENGTH SHALL BE 8'-3"
- THIS DRAWING SHOWS TIE "O" PLACEMENT FOR SWITCH MACHINE ON LH/MAINLINE SIDE. USE OPPOSITE HAND FOR SWITCH MACHINE ON RH/TURNOUT SIDE
- SEE BILL OF MATERIALS ABOVE FOR TIES 1, 2, 5 AND 9

PLATING IS 3/4" THICK. RAISE OUTSIDE RAIL SEATS ACCORDINGLY. ALL RAIL SEATS ARE FLAT.


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

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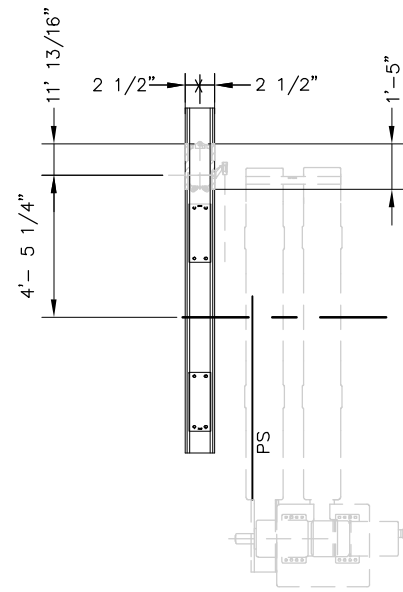
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
HOLLOW STEEL TIE AND CONCRETE TIE
LAYOUT FOR RH TURNOUT

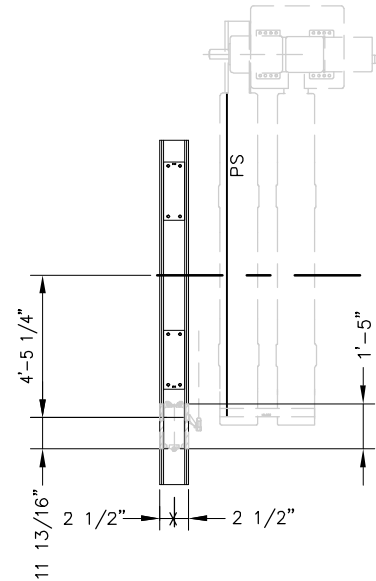
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REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO: SD-2617

BILL OF MATERIALS

ITEM	QTY	DESCRIPTION	DWG NO
1	4	TIES 1,2,5 AND 9, POWER SWITCH MACHINE ON MAINLINE SIDE FOR LH TURNOUT (HOLLOW STEEL)	SD-2620
2	4	TIES 1,2,5 AND 9, POWER SWITCH MACHINE ON TURNOUT SIDE FOR LH TURNOUT (HOLLOW STEEL)	SD-2622



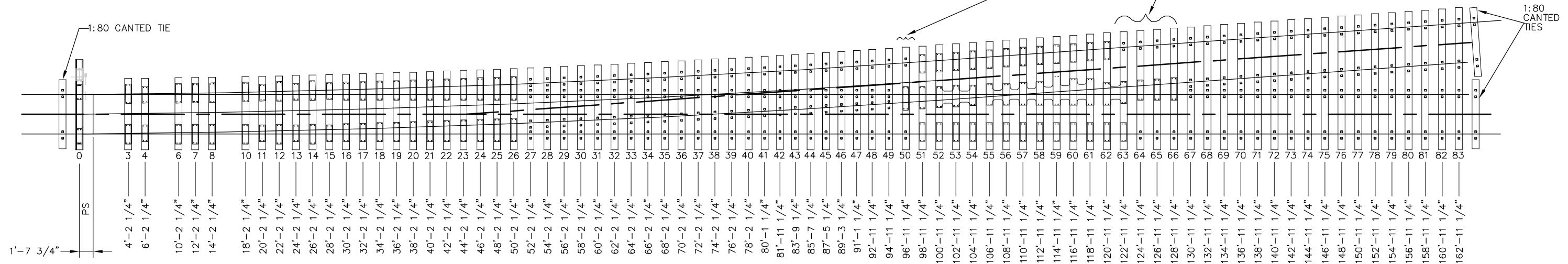
TIE "O" PLACEMENT
SWITCH MACHINE
ON MAINLINE (RH) SIDE



TIE "O" PLACEMENT
SWITCH MACHINE
ON TURNOUT (LH) SIDE



TIE "O" BLOCKOUT DETAIL




NOTES:

- SET SHALL INCLUDE TIES 0, 3 & 4, 6 THROUGH 8 AND 10 THROUGH 83, THREE 1:80 CANTED TIES, TIE PADS FOR ALL PLATES AND PIM INSERTS
- TIE LENGTHS ARE DETERMINED BY ADDING 1'-10 7/16" FROM RAIL GAUGE LINE (OR 1'-9" FROM RAIL CENTERLINE) PER SIDE AT THE CENTERLINE OF EACH TIE LOCATION
- ALL TIES ARE FLAT (NON-CANTED) EXCEPT 1:80 CANTED TRANSITION TIES
- TRANSITION TIES (QUANTITY 3) SHALL INCORPORATE 1:80 CANTED RAIL SEATS AND USE 4'-8 1/2" BETWEEN STRAIGHT RAIL SEAT GAUGES. LENGTH SHALL BE 8'-3"
- THIS DRAWING SHOWS TIE "O" PLACEMENT FOR SWITCH MACHINE ON RH/MAINLINE SIDE. USE OPPOSITE HAND FOR SWITCH MACHINE ON LH/TURNOUT SIDE
- SEE BILL OF MATERIALS ABOVE FOR TIES 1, 2, 5 AND 9

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING

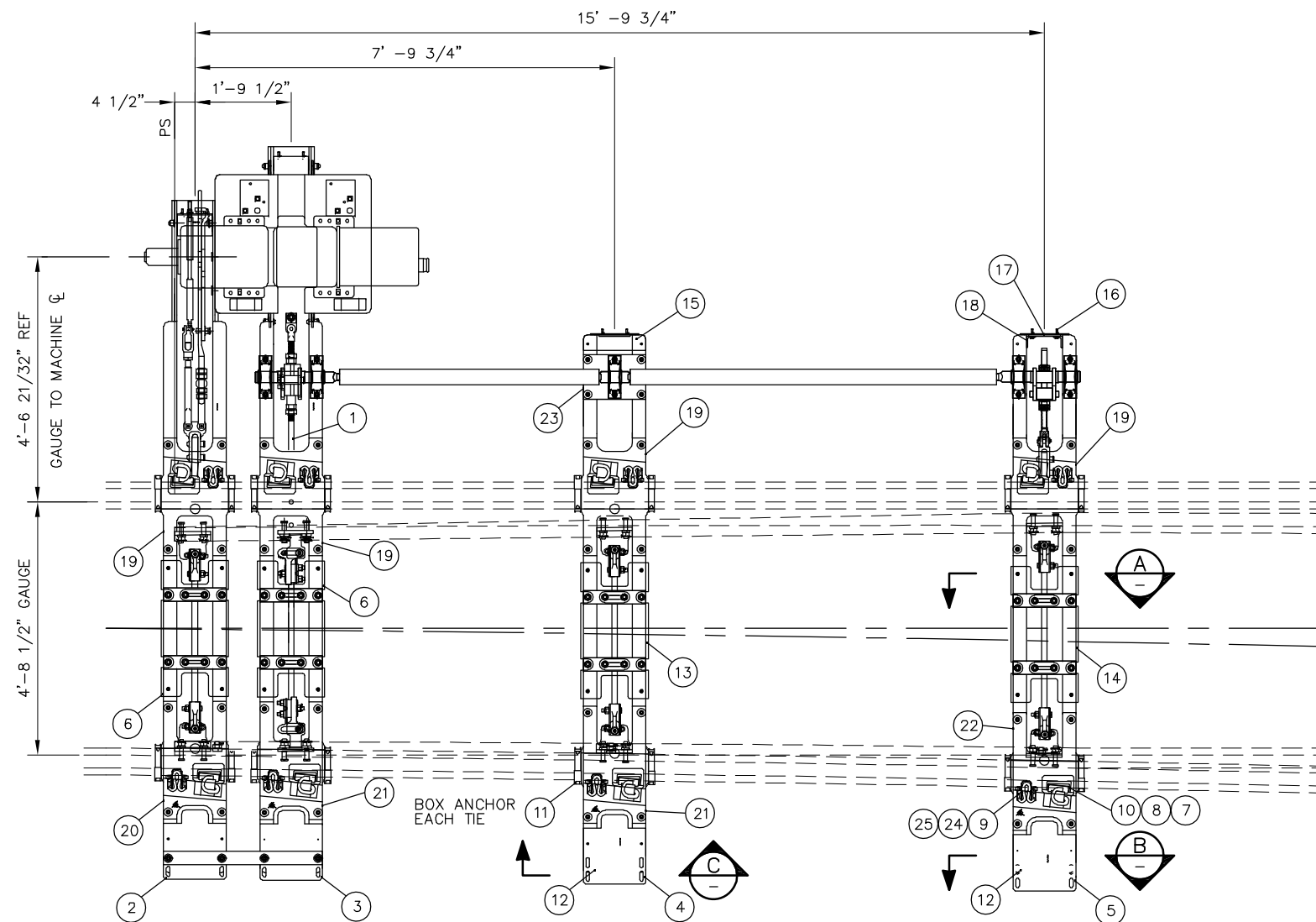


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STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
HOLLOW STEEL TIE AND CONCRETE TIE
LAYOUT FOR LH TURNOUT

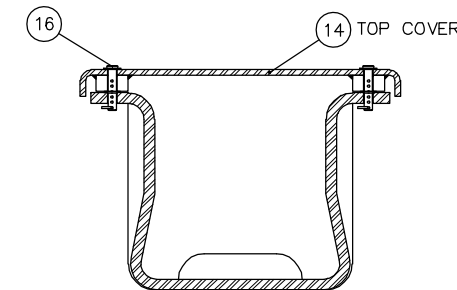
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SPECIAL TRACKWORK	
STANDARD DRAWING NO: SD-2618	



NOTE:
1. COORDINATE SWITCH MACHINE AND MACHINE PLATES (NIC) WITH CALTRAIN

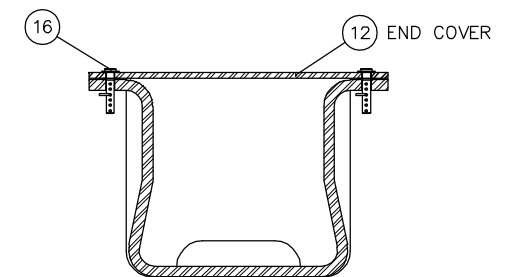
BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	RODDING ASSEMBLY FOR NO 14-136 LB RE, SWITCH MACHINE ON LEFT SIDE	SD-2637
2	1	HOLLOW TIE ASSEMBLY (HT-1RL-14-136)	-
3	1	HOLLOW TIE ASSEMBLY (HT-2RL-14-136)	-
4	1	HOLLOW TIE ASSEMBLY (HT-5RL-14-136)	-
5	1	HOLLOW TIE ASSEMBLY (HT-9RL-14-136)	-
6*	2	COVER PLATE NO 1, HOLLOW SWITCH TIE	-
7	8	LV BRACE FOR 136 LB RE	-
8	8	SERRATED WASHER FOR LV BRACE	-
9	8	CLIP, PANDROL, FC1601	-
10	8	CLIP, PANDROL, E2055	-
11	16	RAIL ANCHOR UNIT DRIVE-ON TYPE 5	-
12	2	STEEL COVER PLATE FOR HST TIE, TOP END	-
13*	1	COVER PLATE NO 2, HOLLOW SWITCH TIE	-
14*	1	COVER PLATE NO 3, HOLLOW SWITCH TIE	-
15	1	END COVER PLATE FOR HST TIE, SHORT TOP VERSION	-
16	30	PUSH PIN ASSEMBLY FOR HST COVERS	-
17	4	STEEL SIDE END COVER PLATE ASSEMBLY FOR HST TIE	-
18	8	COVER SUPPORT BRACKET	-
19	4	HST SWITCH PLATE HTP-206-STR	SD-2305
20	1	HST SWITCH PLATE HTP-209-R	SD-2307
21	2	HST SWITCH PLATE HTP-201-R	SD-2308
22	1	HST SWITCH PLATE HTP-203-R	SD-2309
23	1	PILLOW BLOCK MOUNTING PLATE	-
24	8	SIDE POST INSULATOR FOR FC1600 SERIES PANDROL FASTCLIP	SD-2313
25	8	TOE INSULATOR FOR FC1600 SERIES PANDROL FASTCLIP	SD-2314

* NOT SHOWN ON ASSEMBLY FOR CLARITY



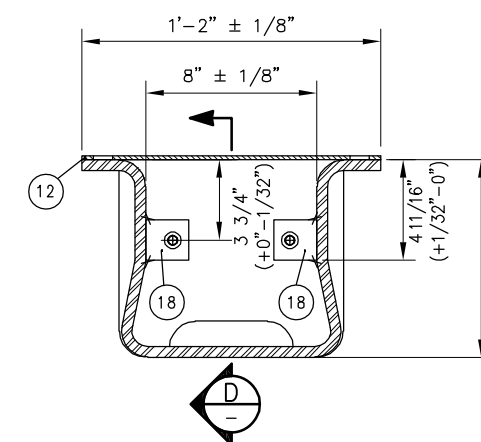
HOLLOW TIE TOP COVER DETAIL

A SECTION
SCALE: NTS



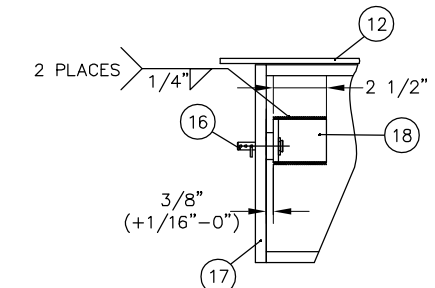
END COVER PLATE

B SECTION
SCALE: NTS



HOLLOW TIE SIDE END COVER DETAIL

C SECTION
SCALE: NTS



WELDING DETAIL

D SECTION
SCALE: NTS

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

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

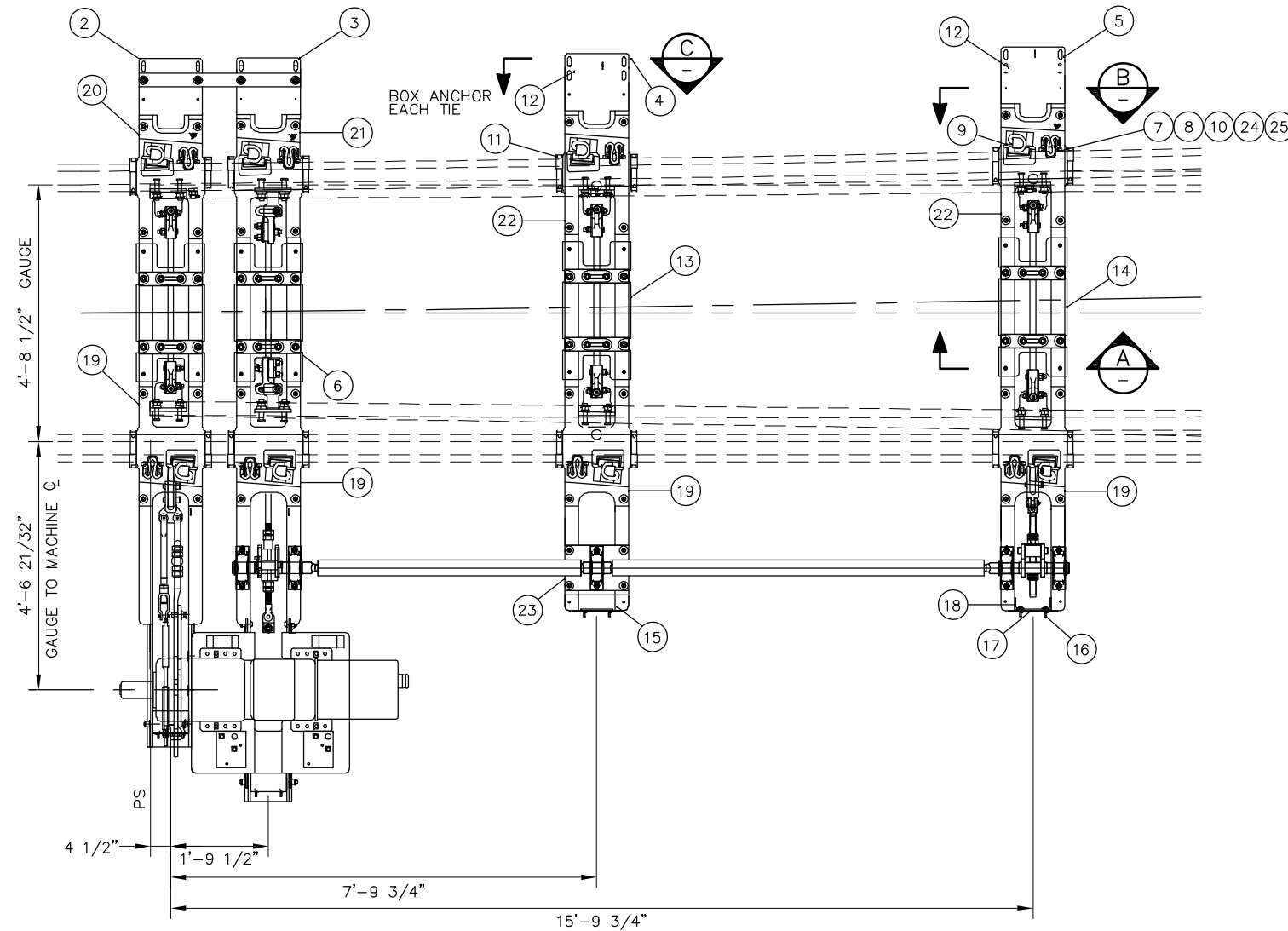
SPECIAL TRACKWORK
NO. 14 TURNOUT
HOLLOW STEEL TIES FOR RH TURNOUT
SWITCH MACHINE ON MAINLINE SIDE

CADD FILE NAME: SD-2619
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO.: SD-2619

BILL OF MATERIAL

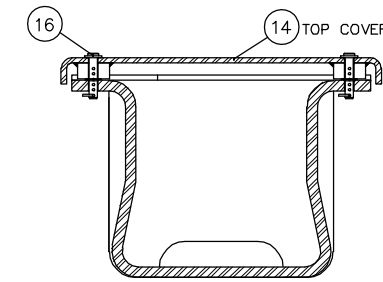
ITEM	QTY	DESCRIPTION	DWG NO
1	1	RODDING ASSEMBLY FOR NO 14-136 LB RE, SWITCH MACHINE ON RIGHT SIDE	SD-2638
2	1	HOLLOW TIE ASSEMBLY (HT-1LR-14-136)	-
3	1	HOLLOW TIE ASSEMBLY (HT-2LR-14-136)	-
4	1	HOLLOW TIE ASSEMBLY (HT-5LR-14-136)	-
5	1	HOLLOW TIE ASSEMBLY (HT-9LR-14-136)	-
6*	2	COVER PLATE NO 1, HOLLOW SWITCH TIE	-
7	8	LV BRACE FOR 136 LB RE	-
8	8	SERRATED WASHER FOR LV BRACE	-
9	8	CLIP, PANDROL, FC1601	-
10	8	CLIP, PANDROL, E2055	-
11	16	RAIL ANCHOR UNIT DRIVE-ON TYPE 5	-
12	2	STEEL COVER PLATE FOR HST TIE, TOP END	-
13*	1	COVER PLATE NO 2, HOLLOW SWITCH TIE	-
14*	1	COVER PLATE NO 3, HOLLOW SWITCH TIE	-
15	1	END COVER PLATE FOR HST TIE, SHORT TOP VERSION	-
16	30	PUSH PIN ASSEMBLY FOR HST COVERS	-
17	4	STEEL SIDE END COVER PLATE ASSEMBLY FOR HST TIE	-
18	8	COVER SUPPORT BRACKET	-
19	4	HST SWITCH PLATE HTP-206-STR	SD-2305
20	1	HST SWITCH PLATE HTP-208-L	SD-2307
21	1	HST SWITCH PLATE HTP-200-L	SD-2308
22	2	HST SWITCH PLATE HTP-202-L	SD-2309
23	1	PILLOW BLOCK MOUNTING PLATE	-
24	8	SIDE POST INSULATOR FOR FC1600 SERIES PANDROL FASTCLIP	SD-2313
25	8	TOE INSULATOR FOR FC1600 SERIES PANDROL FASTCLIP	SD-2314

* NOT SHOWN ON ASSEMBLY FOR CLARITY



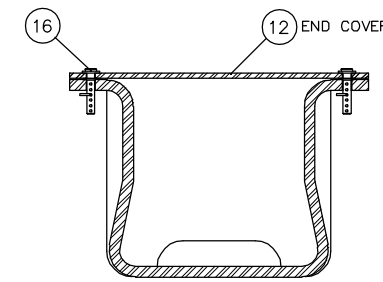
NOTES:

1. COORDINATE SWITCH MACHINE AND MACHINE PLATES (NIC) WITH CALTRAIN



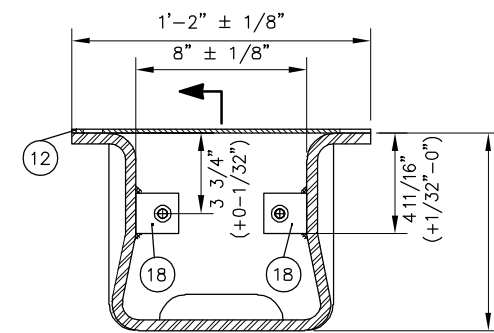
HOLLOW TIE TOP COVER DETAIL

A SECTION
SCALE: NTS



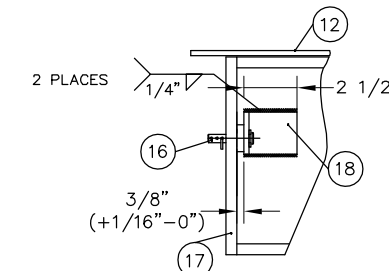
END COVER PLATE

B SECTION
SCALE: NTS



HOLLOW TIE SIDE END COVER DETAIL

C SECTION
SCALE: NTS



WELDING DETAIL

D SECTION
SCALE: NTS

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

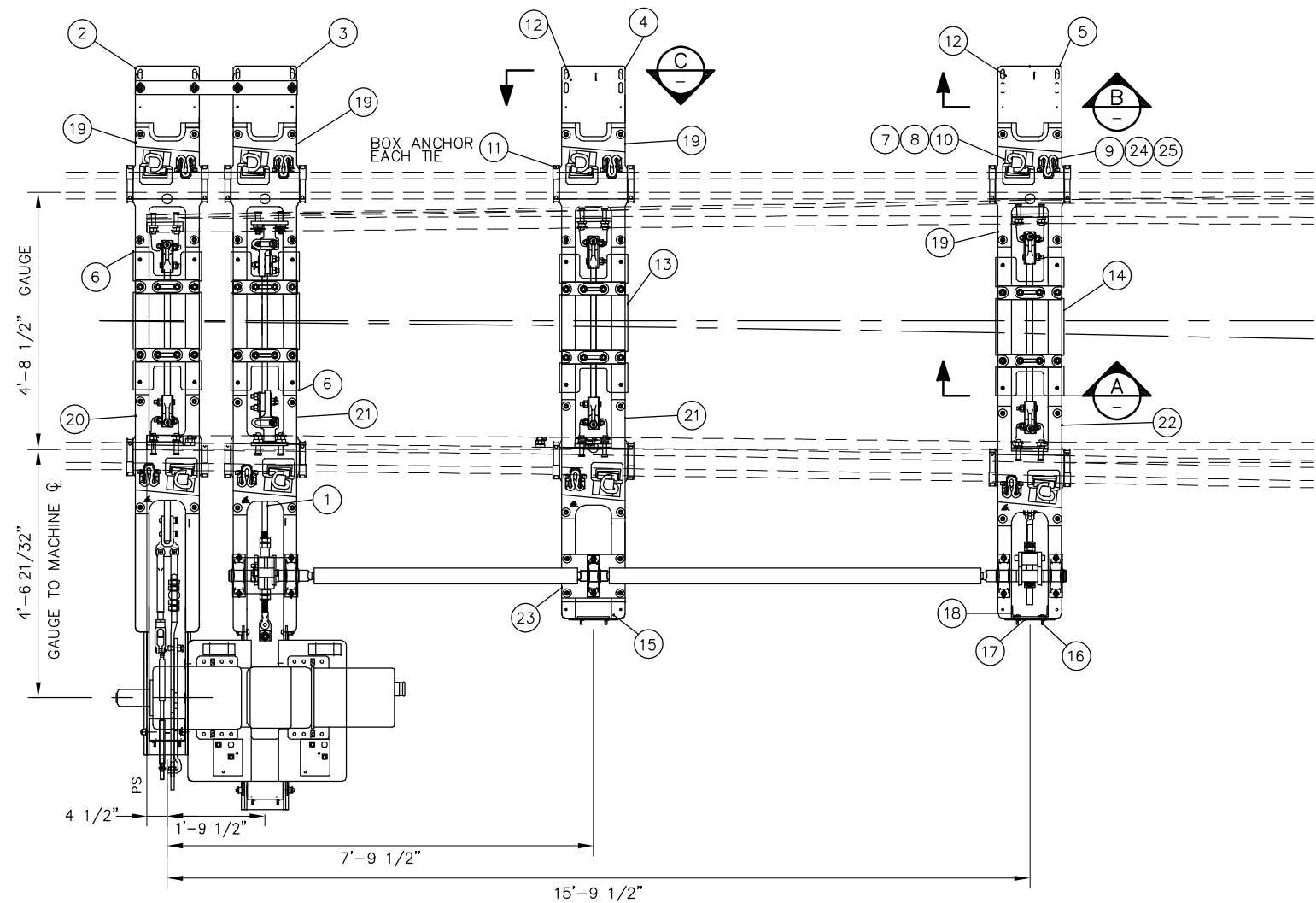
DEPUTY DIRECTOR, ENGINEERING

1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

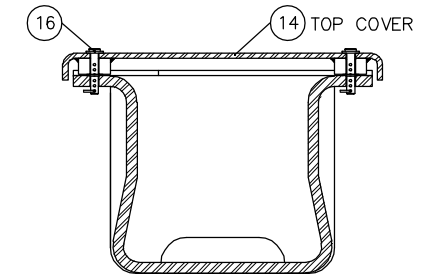
SPECIAL TRACKWORK
NO. 14 TURNOUT
HOLLOW STEEL TIES FOR LH TURNOUT
SWITCH MACHINE ON MAINLINE SIDE

CADD FILE NAME: SD-2620	EDITION: FOURTH
REV:	SPECIAL TRACKWORK
STANDARD DRAWING NO: SD-2620	



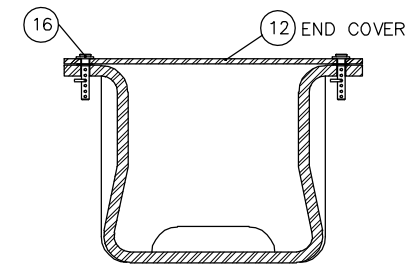
BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	RODDING ASSEMBLY, FOR NO 14-136 LB RE, SWITCH MACHINE ON RIGHT SIDE	SD-2638
2	1	HOLLOW TIE ASSEMBLY (HT-1RR-14-136)	-
3	1	HOLLOW TIE ASSEMBLY (HT-2RR-14-136)	-
4	1	HOLLOW TIE ASSEMBLY (HT-5RR-14-136)	-
5	1	HOLLOW TIE ASSEMBLY (HT-9RR-14-136)	-
6*	2	COVER PLATE NO 1, HOLLOW SWITCH TIE	-
7	8	LV BRACE FOR 136 LB RE	-
8	8	SERRATED WASHER FOR LV BRACE	-
9	8	CLIP, PANDROL, FC1601	-
10	8	CLIP, PANDROL, E2055	-
11	16	RAIL ANCHOR UNIT DRIVE-ON TYPE 5	-
12	2	STEEL COVER PLATE FOR HST TIE, TOP END	-
13*	1	COVER PLATE NO 2, HOLLOW SWITCH TIE	-
14*	1	COVER PLATE NO 3, HOLLOW SWITCH TIE	-
15	1	END COVER PLATE FOR HST TIE, SHORT TOP VERSION	-
16	30	PUSH PIN ASSEMBLY FOR HST COVERS	-
17	4	STEEL SIDE END COVER PLATE ASSEMBLY FOR HST TIE	-
18	8	COVER SUPPORT BRACKET	-
19	4	HST SWITCH PLATE HTP-206-STR	SD-2305
20	1	HST SWITCH PLATE HTP-209-R	SD-2307
21	2	HST SWITCH PLATE HTP-201-R	SD-2308
22	1	HST SWITCH PLATE HTP-203-R	SD-2309
23	1	PILLOW BLOCK MOUNTING PLATE	-
24	8	SIDE POST INSULATOR FOR FC1600 SERIES PANDROL FASCLIP	SD-2313
25	8	TOE INSULATOR FOR FC1600 SERIES PANDROL FASTCLIP	SD-2314

* NOT SHOWN ON ASSEMBLY FOR CLARITY



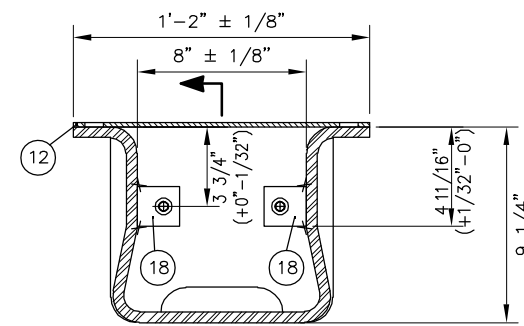
HOLLOW TIE TOP COVER DETAIL

A SECTION
SCALE: NTS



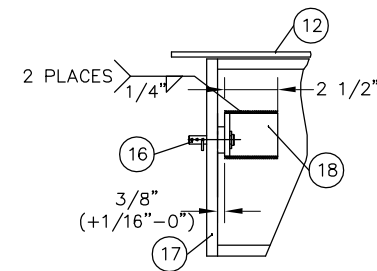
END COVER PLATE

B SECTION
SCALE: NTS



HOLLOW TIE SIDE END COVER DETAIL


C SECTION
SCALE: NTS

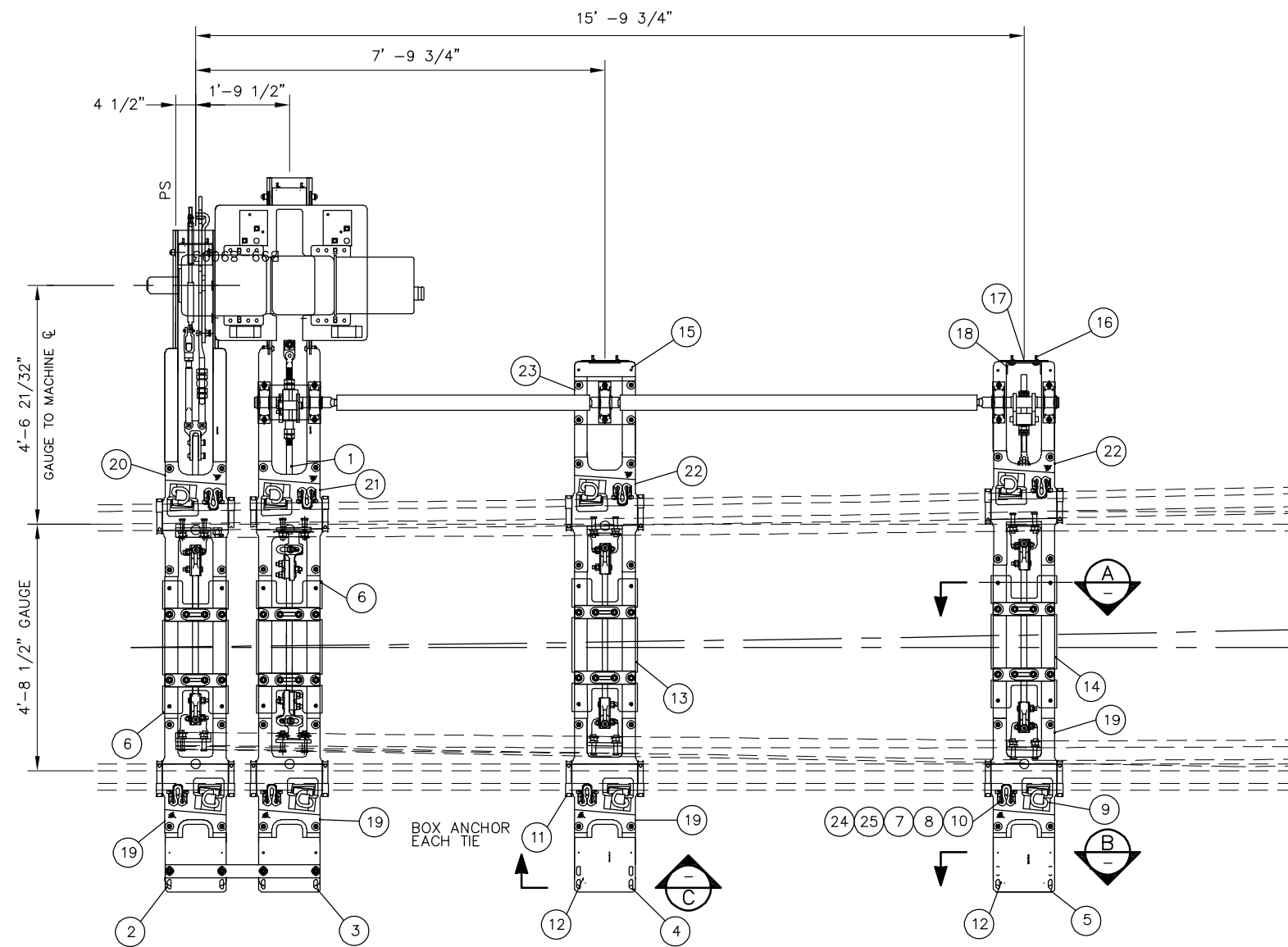


WELDING DETAIL

D SECTION
SCALE: NTS

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD		STANDARD DRAWINGS		CADD FILE NAME: SD-2621
APPROVED BY: <i>Bin Zhang</i> DEPUTY DIRECTOR, ENGINEERING		 1250 San Carlos Avenue San Carlos, CA 94070		REV: EDITION: FOURTH
01012024 FOURTH EDITION		SPECIAL TRACKWORK NO. 14 TURNOUT HOLLOW STEEL TIES FOR RH TURNOUT SWITCH MACHINE ON TURNOUT SIDE		SPECIAL TRACKWORK
REV DATE BY CHK APP		REV DATE BY CHK APP		STANDARD DRAWING NO: SD-2621

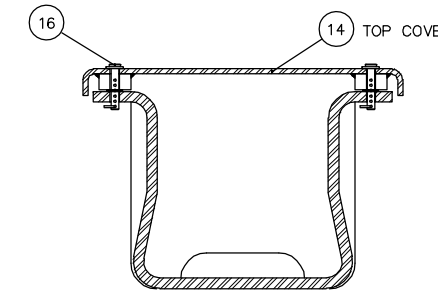


NOTE:

1. COORDINATE SWITCH MACHINE AND MACHINE PLATES (NIC) WITH CALTRAIN

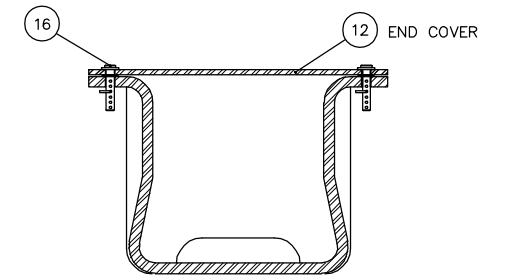
BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	RODDING ASSEMBLY FOR NO 14-136 LB RE, SWITCH MACHINE ON LEFT SIDE	SD-2637
2	1	HOLLOW TIE ASSEMBLY (HT-1LL-14-136)	-
3	1	HOLLOW TIE ASSEMBLY (HT-2LL-14-136)	-
4	1	HOLLOW TIE ASSEMBLY (HT-5LL-14-136)	-
5	1	HOLLOW TIE ASSEMBLY (HT-9LL-14-136)	-
6*	2	COVER PLATE NO 1, HOLLOW SWITCH TIE	-
7	8	LV BRACE FOR 136 LB RE	-
8	8	SERRATED WASHER FOR LV BRACE	-
9	8	CLIP, PANDROL, FC1601	-
10	8	CLIP, PANDROL, E2055	-
11	16	RAIL ANCHOR UNIT DRIVE-ON TYPE 5	-
12	2	STEEL COVER PLATE FOR HST TIE, TOP END	-
13*	1	COVER PLATE NO 2, HOLLOW SWITCH TIE	-
14*	1	COVER PLATE NO 3, HOLLOW SWITCH TIE	-
15	1	END COVER PLATE FOR HST TIE, SHORT TOP VERSION	-
16	30	PUSH PIN ASSEMBLY FOR HST COVERS	-
17	4	STEEL SIDE END COVER PLATE ASSEMBLY FOR HST TIE	-
18	8	COVER SUPPORT BRACKET	-
19	4	HST SWITCH PLATE HTP-206-STR	SD-2305
20	1	HST SWITCH PLATE HTP-208-L	SD-2307
21	1	HST SWITCH PLATE HTP-200-L	SD-2308
22	2	HST SWITCH PLATE HTP-202-L	SD-2309
23	1	PILLOW BLOCK MOUNTING PLATE	-
24	8	SIDE POST INSULATOR FOR FC1600 SERIES PANDROL FASTCLIP	SD-2313
25	8	TOE INSULATOR FOR FC1600 SERIES PANDROL FAST CLIP	SD-2314

* NOT SHOWN ON ASSEMBLY FOR CLARITY



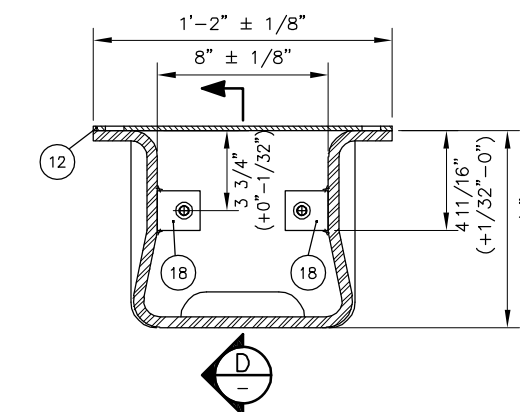
HOLLOW TIE TOP COVER DETAIL

A SECTION
SCALE: NTS



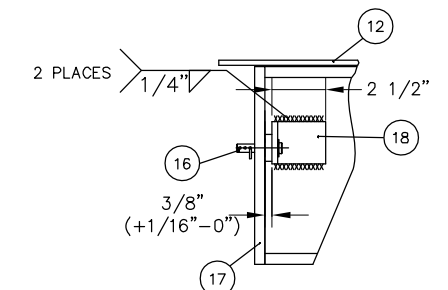
END COVER PLATE

B SECTION
SCALE: NTS



HOLLOW TIE SIDE END COVER DETAIL


C SECTION
SCALE: NTS



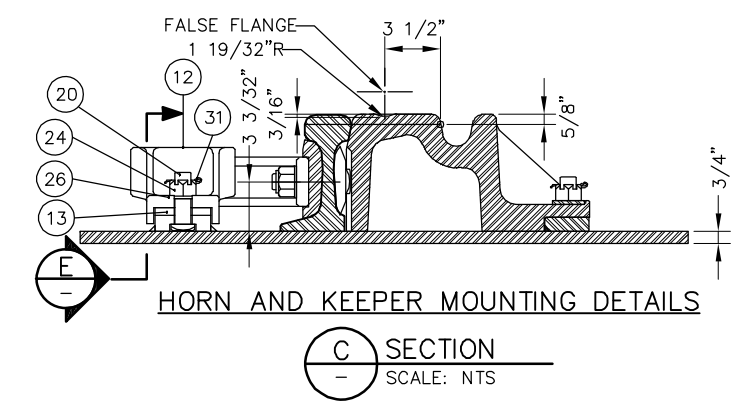
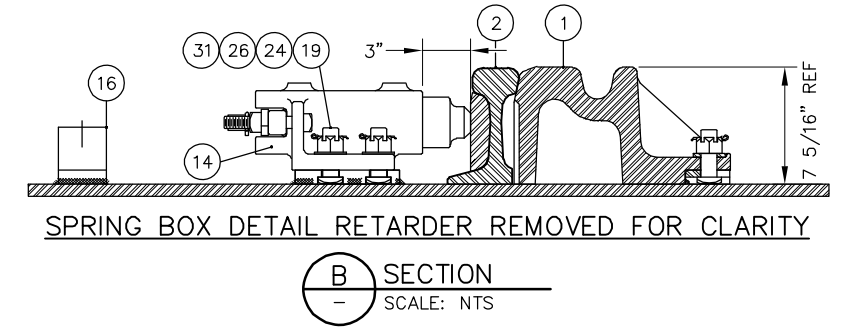
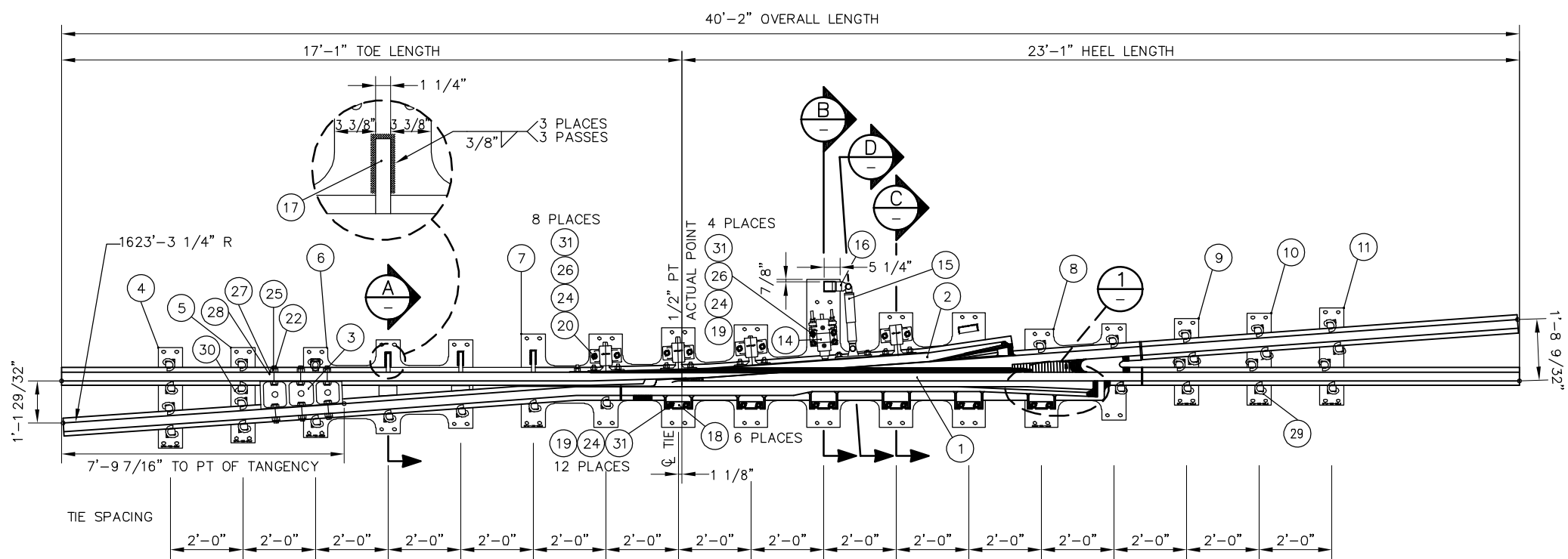
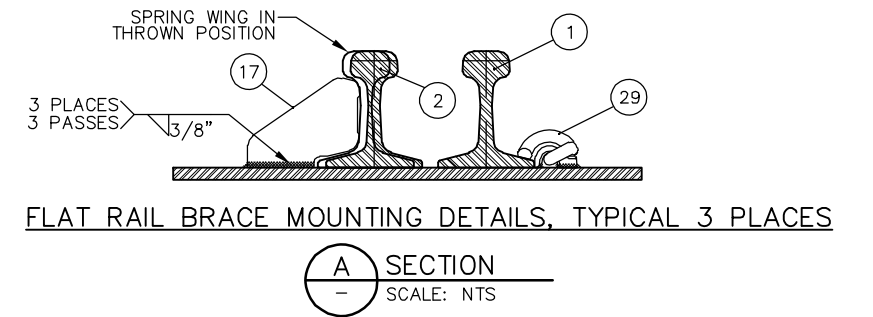
WELDING DETAIL

D SECTION
SCALE: NTS

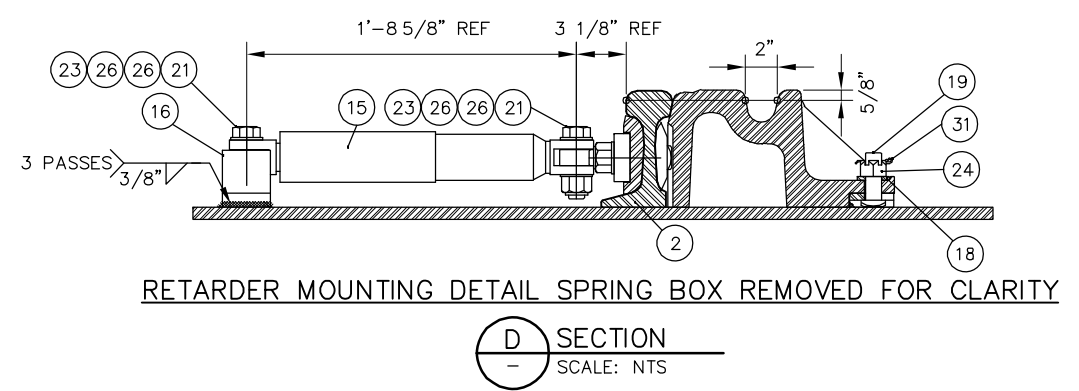
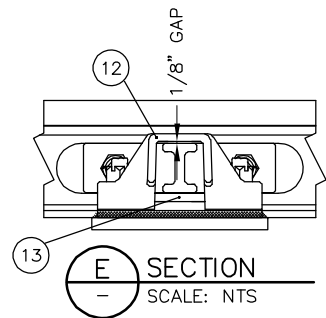
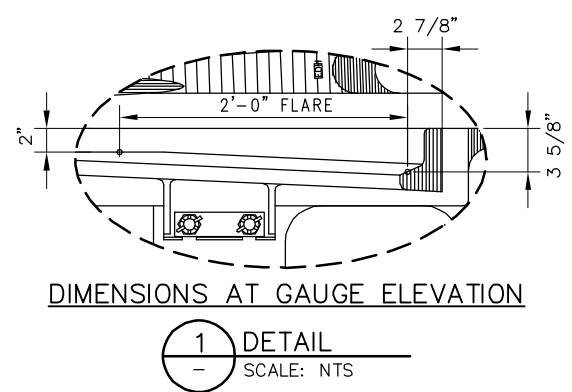
REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD		STANDARD DRAWINGS		CADD FILE NAME: SD-2622
APPROVED BY: <i>Bin Zhang</i> DEPUTY DIRECTOR, ENGINEERING		 1250 San Carlos Avenue San Carlos, CA 94070		REV: EDITION: FOURTH
01012024 FOURTH EDITION		SPECIAL TRACKWORK NO. 14 TURNOUT HOLLOW STEEL TIES FOR LH TURNOUT SWITCH MACHINE ON TURNOUT SIDE		SPECIAL TRACKWORK
REV DATE BY CHK APP		REV DATE BY CHK APP		STANDARD DRAWING NO: SD-2622

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	NO 14-136 LB RE SPRING FROG, LH POINT ASSEMBLY	-	16	1	RETARDER PLATE BRACKET FOR FROG C/W HYDRAULIC RETARDER	-
2	1	SPRING WING RAIL, NO 14-136LB RE, LH C/W HARDWARE	-	17	3	FLAT RAIL BRACE FOR NON D-BAR APPLICATIONS	-
3	1	TOE BLOCK, NO 14-136 LB RE WSM	-	18	6	WASHER, BOLT CAPTURE STYLE, 1/4" THICK	-
4	1	FROG PLATE (14-136-50LC)	SD-2625	19	16	BOLT, 1" DIA X 3", THIN SQ HEAD, DRILLED @ 2 1/2", GR 5	-
5	1	FROG PLATE (14-136-51LC)	SD-2625	20	8	BOLT, 1" DIA X 3 1/2", THIN SQ HEAD, DRILLED @ 2 11/16", GR 5	-
6	1	FROG PLATE (14-136-52LC)	SD-2627	21	2	BOLT, 1" DIA X 4 1/8", HEAVY HEX HEAD, GR 8	-
7	1	FROG PLATE (14-136-55LC)	SD-2629	22	6	BOLT, 1 3/8" DIA X 5 1/2", SQUARE HEAD, GR 8	-
8	1	FROG PLATE (14-136-62LC)	SD-2631	23	2	SECURITY LOCK NUT, 1" DIA, HEX (SH521), GR 5	-
9	1	FROG PLATE (14-136-64LC)	SD-2631	24	24	NUT, 1" DIA HEAVY HEX, SLOTTED, GR 5	-
10	1	FROG PLATE (14-136-65LC)	SD-2633	25	6	SECURITY LOCK NUT, 1 3/8" DIA HEX (SH530), GR 8	-
11	1	FROG PLATE (14-136-66LC)	SD-2633	26	16	FLAT WASHER, FOR 1" DIA x 5/32" THICK, HARDENED	-
12	4	HORN KEEPER, REVERSIBLE	-	27	6	FLAT WASHER, FOR 1 3/8" DIA x 1/4" THICK, HARDENED	-
13	4	WEAR PLATE FOR REVERSIBLE HORN KEEPER	-	28	6	TAIL WASHER, FLAT (837K)	-
14	1	SPRING BOX ASSEMBLY, WITH 3" MAXIMUM PLUNGER TRAVEL	-	29	28	PANDROL SPRING CLIP E2055	-
15	1	RETARDER, ENIDINE P/N: SP22917, CLEVIS ENDS WITH HARDWARE	-	30	1	PANDROL SPRING CLIP E2056	-
				31	24	COTTER PIN, 1/4" DIA x 2" LONG	-




- NOTES:**
- RETARDER CLOSING TIME RANGES FROM 1 TO 3 MINUTES
 - SPRING BOX LOAD IS 300 LBS/IN
 - SPRING WING SHALL BE THROWN TO A 17/8" FLANGEWAY AT THE 3/4" POINT TO DETERMINE THE SPRING WING THROWN POSITION
 - FLAT RAIL BRACES (ITEM NO 17) SHALL BE WELDED WHERE SHOWN, UP AGAINST SPRING WING WHEN FULLY THROWN
 - RAIL END DRILLING SHALL BE @ 9" AND 15 1/2", 3 3/32" ABOVE RAIL BASE, 1 5/16" DIA AT ALL 4 RAIL ENDS. ALL RAIL HOLE EDGES SHALL BE ROUNDED WITH A 1/8" R
 - RETARDER BRACKET (ITEM NO 16) SHALL BE WELDED AS SHOWN
 - FROG SHALL BE CONSTRUCTED TO TOLERANCES GIVEN ON LATEST AREMA PLAN 1010, PERMISSIBLE VARIATIONS IN COMPLETED FROGS
 - INSERT SHALL BE EXPLOSIVE DEPTH HARDENED TO 352 BRINELL PER AREMA
 - NAME TAG SHALL BE AFFIXED TO RIGID WING RAIL NEAR 1/2" PT WITH INFORMATION SHOWN
 - CALTRAIN WILL CONSIDER A TAPERED HEEL SPRING OF SAME ALIGNMENT AND DIMENSIONS TO REPLACE WSM



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

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

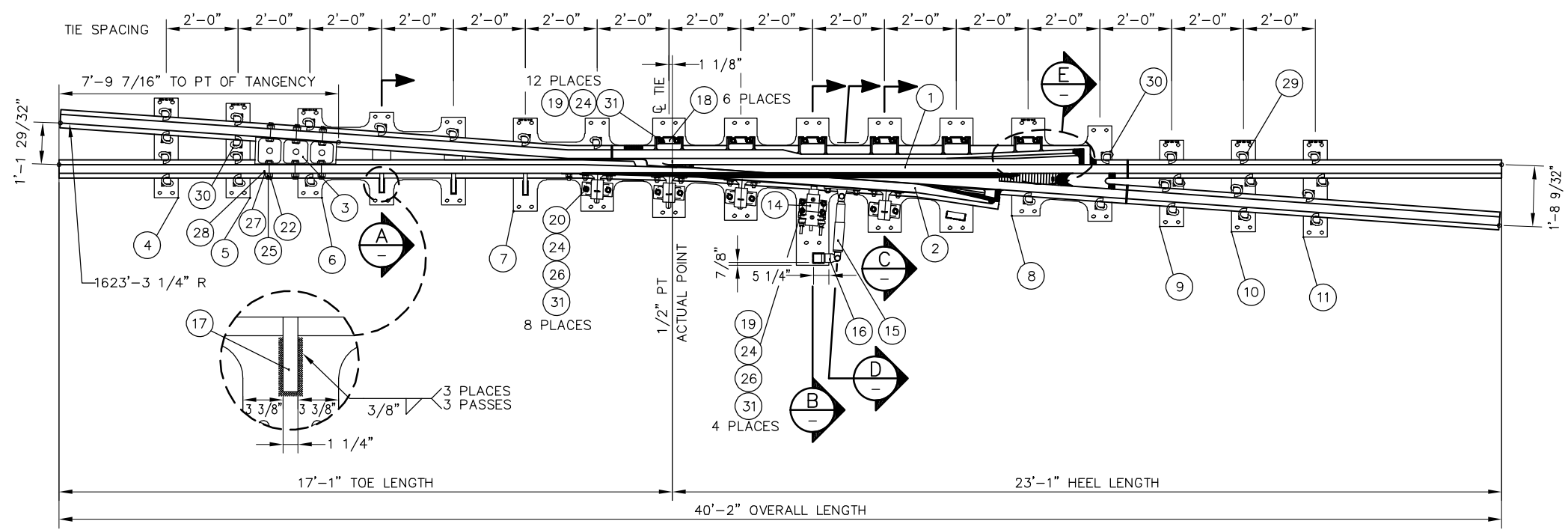
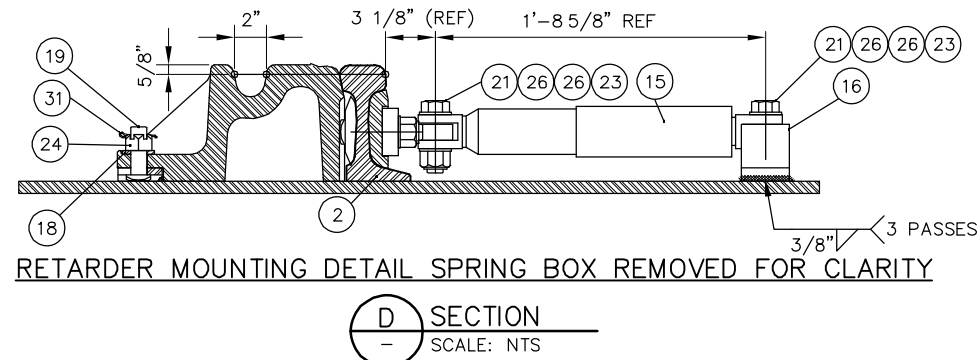
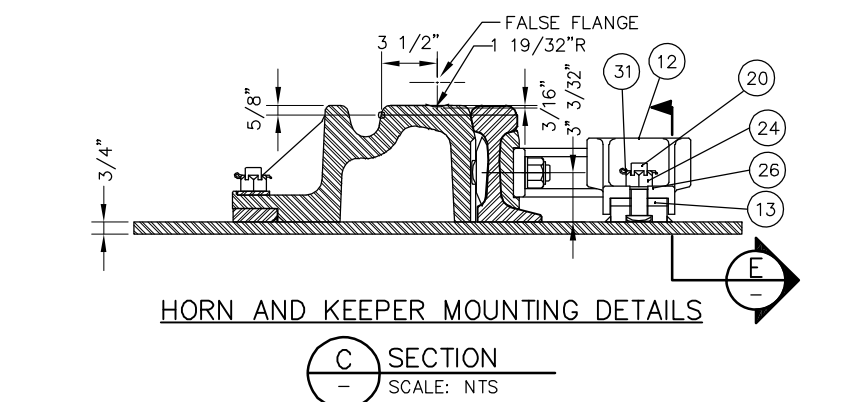
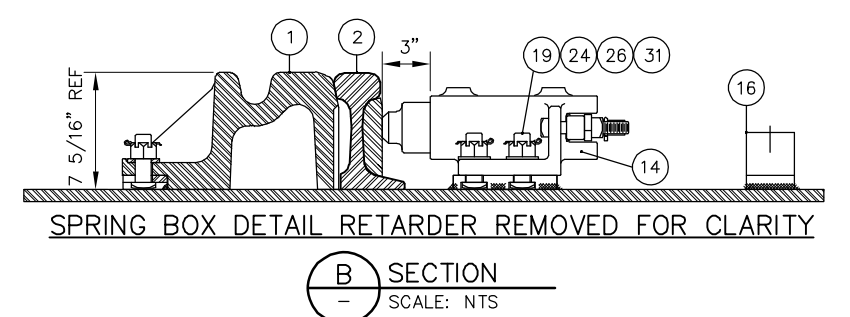
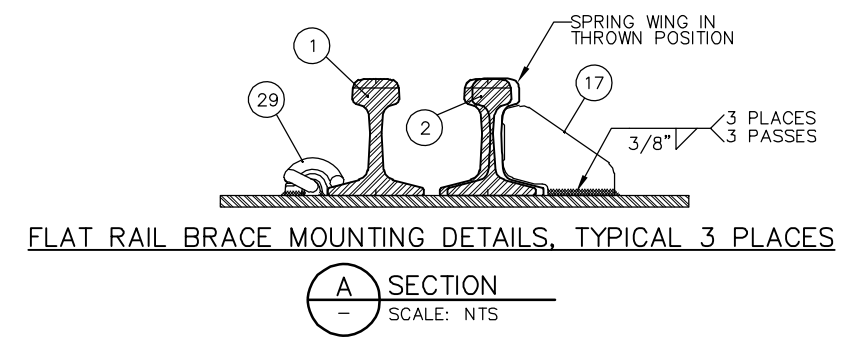
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT

WSM FROG LH AND FROG PACK

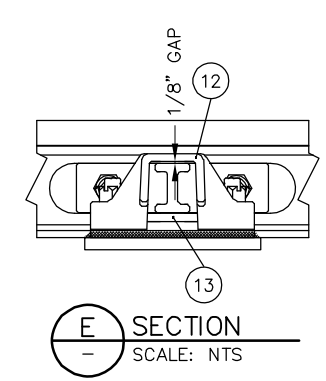
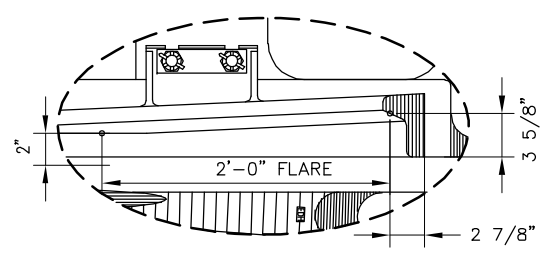
CADD FILE NAME: SD-2623
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO.: SD-2623

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	NO 14-136 LB RE SPRING FROG, RH POINT ASSEMBLY	-	16	1	RETARDER PLATE BRACKET FOR FROG C/W HYDRAULIC RETARDER	-
2	1	SPRING WING RAIL, NO 14-136 LB RE, RH, C/W HARDWARE	-	17	3	FLAT RAIL BRACE FOR NON D-BAR APPLICATIONS	-
3	1	TOE BLOCK, NO 14-136 LB RE WSM	-	18	6	WASHER, BOLT CAPTURE STYLE, 1/4" THICK	-
4	1	FROG PLATE (14-136-50RC)	SD-2626	19	16	BOLT, 1" DIA x 3", THIN SQ HEAD, DRILLED @ 2 1/2", GR 5	-
5	1	FROG PLATE (14-136-51RC)	SD-2626	20	8	BOLT, 1" DIA x 3 1/2", THIN SQ HEAD, DRILLED @ 2 11/16", GR 5	-
6	1	FROG PLATE (14-136-52RC)	SD-2628	21	2	BOLT, 1" DIA x 4 1/8" HEAVY HEX HEAD, GR 8	-
7	1	FROG PLATE (14-136-55RC)	SD-2630	22	6	BOLT, 1 3/8" DIA x 5 1/2", SQUARE HEAD, GR 8	-
8	1	FROG PLATE (14-136-62RC)	SD-2632	23	2	SECURITY LOCK NUT, 1" DIA, HEX (SH521), GR 5	-
9	1	FROG PLATE (14-136-64RC)	SD-2632	24	24	NUT, 1" DIA HEAVY HEX, SLOTTED, GR 5	-
10	1	FROG PLATE (14-136-65RC)	SD-2634	25	6	SECURITY LOCK NUT, 1 3/8" DIA HEX (SH530), GR 8	-
11	1	FROG PLATE (14-136-66RC)	SD-2634	26	16	FLAT WASHER, FOR 1" DIA x 5/32" THICK, HARDENED	-
12	4	HORN KEEPER, REVERSIBLE	-	27	6	FLAT WASHER, FOR 1 3/8" DIA x 1/4" THICK, HARDENED	-
13	4	WEAR PLATE FOR REVERSIBLE HORN KEEPER	-	28	6	TAIL WASHER, FLAT (837K)	-
14	1	SPRING BOX ASSEMBLY, WITH 3" MAXIMUM PLUNGER TRAVEL	-	29	27	PANDROL SPRING CLIP E2055	-
15	1	RETARDER, ENDINE P/N: SP22917, CLEVIS ENDS WITH HARDWARE	-	30	2	PANDROL SPRING CLIP E2056	-
				31	24	COTTER PIN, 1/4" DIA x 2" LONG	-



NOTES:

- RETARDER CLOSING TIME RANGES FROM 1 TO 3 MINUTES
- SPRING BOX LOAD IS 300 LBS/IN
- SPRING WING SHALL BE THROWN TO A 1 7/8" FLANGEWAY AT THE 3/4" POINT TO DETERMINE THE SPRING WING THROWN POSITION
- FLAT RAIL BRACES (ITEM NO 17) SHALL BE WELDED WHERE SHOWN, UP AGAINST SPRING WING WHEN FULLY THROWN
- RAIL END DRILLING SHALL BE @ 9" AND 15 1/2", 3 3/32" ABOVE RAIL BASE, 1 5/16" DIA AT ALL 4 RAIL ENDS. ALL RAIL HOLE EDGES SHALL BE ROUNDED WITH A 1/8" R
- RETARDER BRACKET (ITEM NO 16) SHALL BE WELDED AS SHOWN
- FROG SHALL BE CONSTRUCTED TO TOLERANCES GIVEN ON LATEST AREMA PLAN 1010, PERMISSIBLE VARIATIONS IN COMPLETED FROGS
- INSERT SHALL BE EXPLOSIVE DEPTH HARDENED TO 352 BRINELL PER AREMA
- NAME TAG SHALL BE AFFIXED TO RIGID WING RAIL NEAR 1/2" PT WITH INFORMATION SHOWN
- CALTRAIN WILL CONSIDER A TAPERED HEEL SPRING OF SAME ALIGNMENT AND DIMENSIONS TO REPLACE WSM



PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING



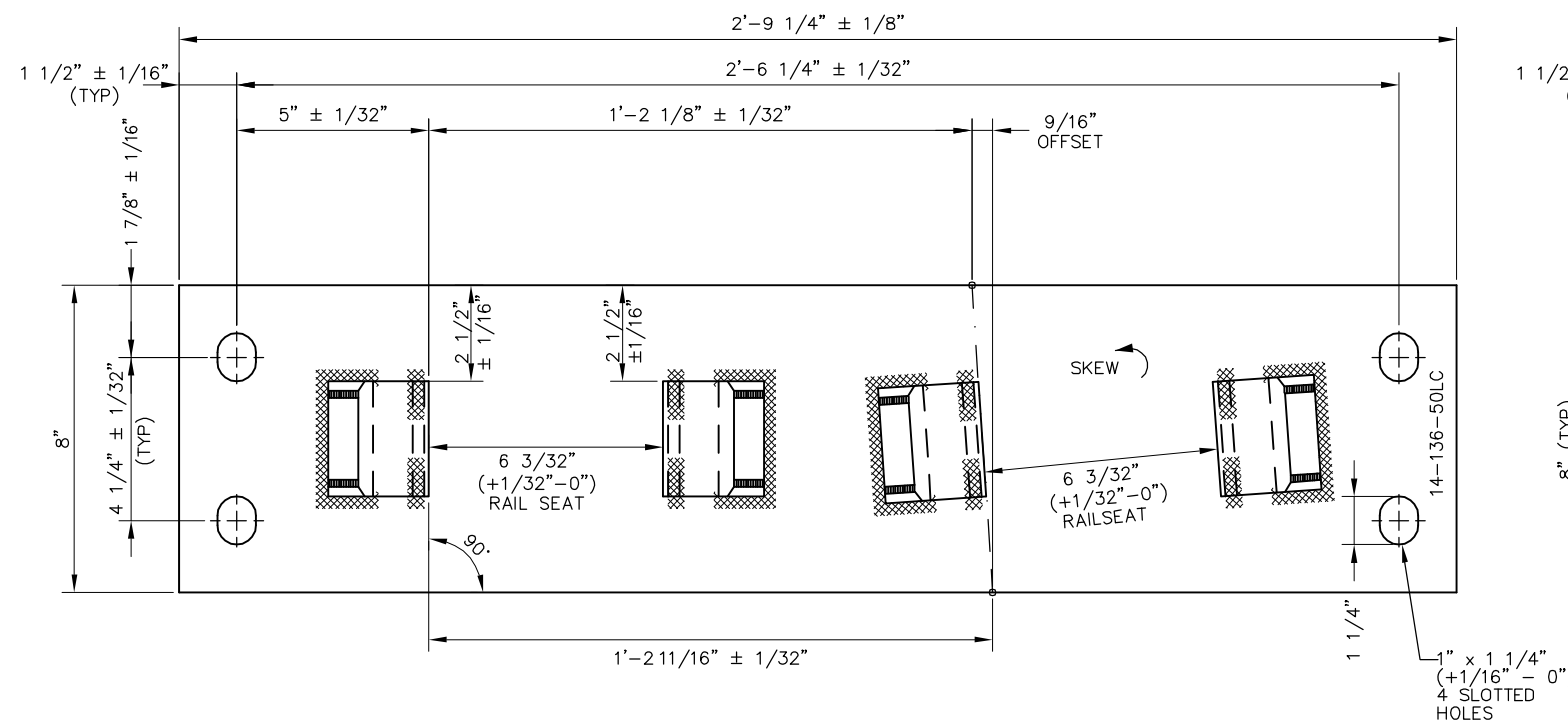
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SPECIAL TRACKWORK
NO. 14 TURNOUT
WSM FROG RH AND FROG PACK

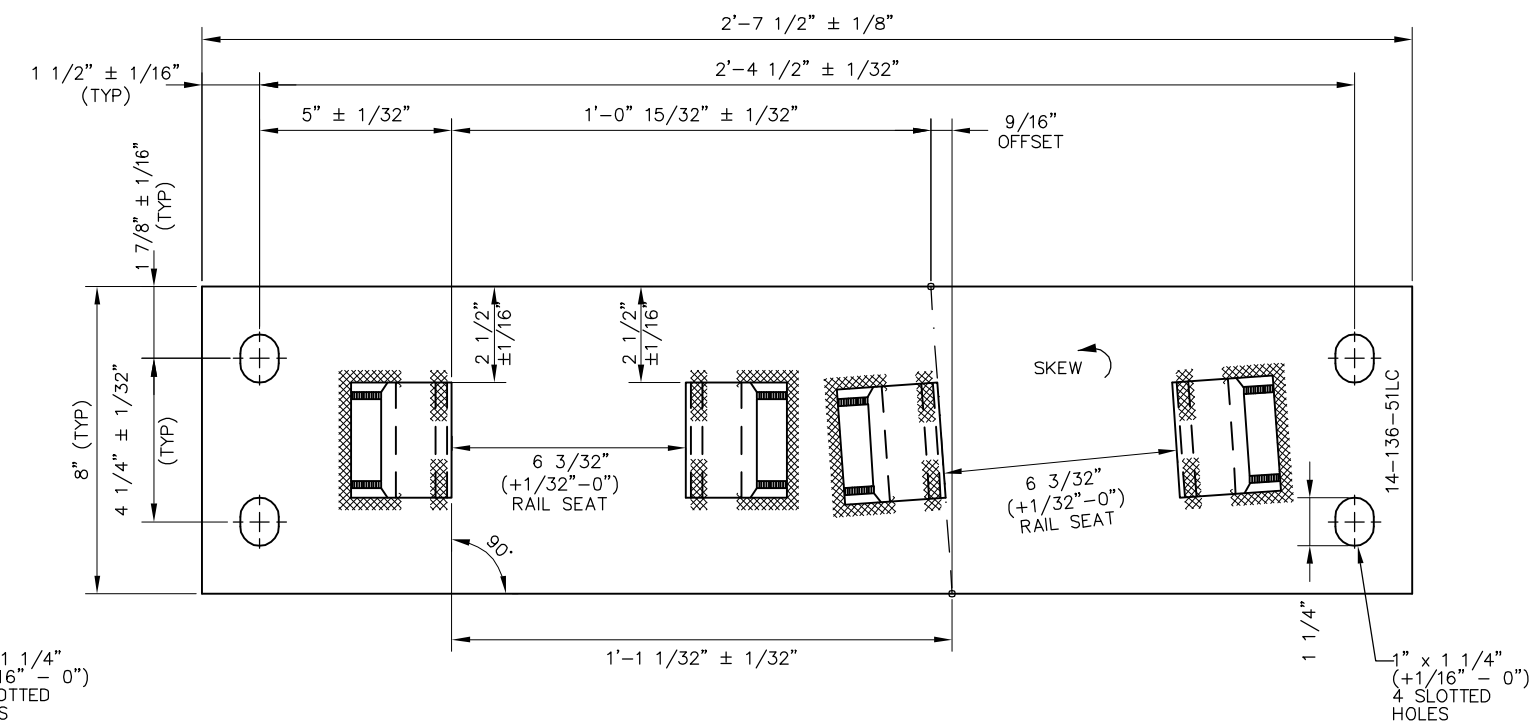
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SPECIAL TRACKWORK	
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REV	DATE	BY	CHK	APP	DESCRIPTION
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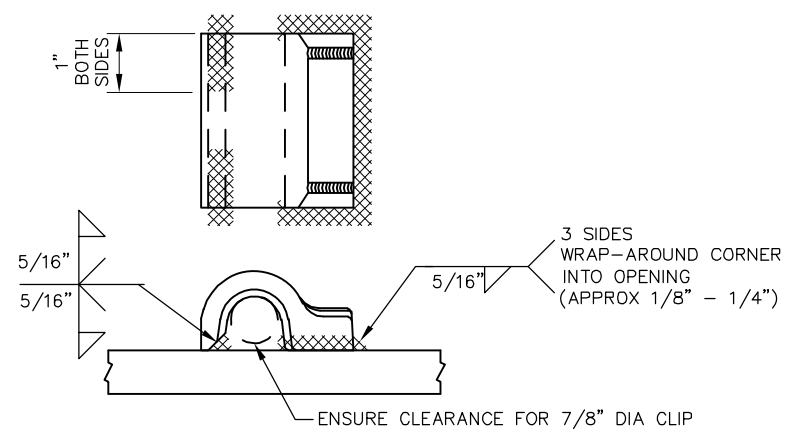
BILL OF MATERIAL				
ITEM	QTY FOR 14-136-50LC	QTY FOR 14-136-51LC	DESCRIPTION	DWG NO
1	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-9 1/4" LONG	-
2	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-7 1/2" LONG	-
3	4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



FROG BASE PLATE 14-136-50LC



FROG BASE PLATE 14-136-51LC



FORGED SHOULDER WELDING DETAIL

- 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

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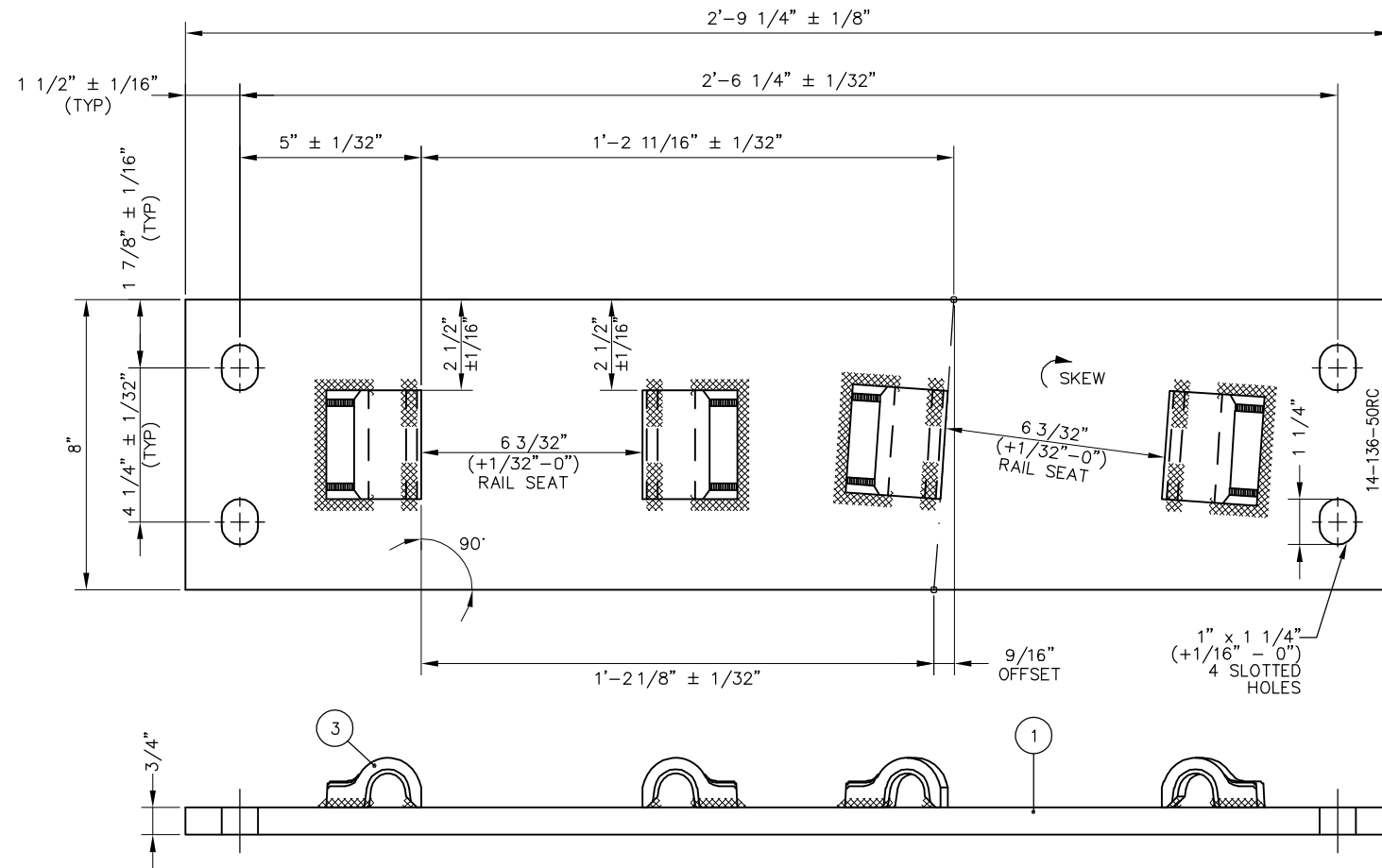
DEPUTY DIRECTOR, ENGINEERING

STANDARD DRAWINGS

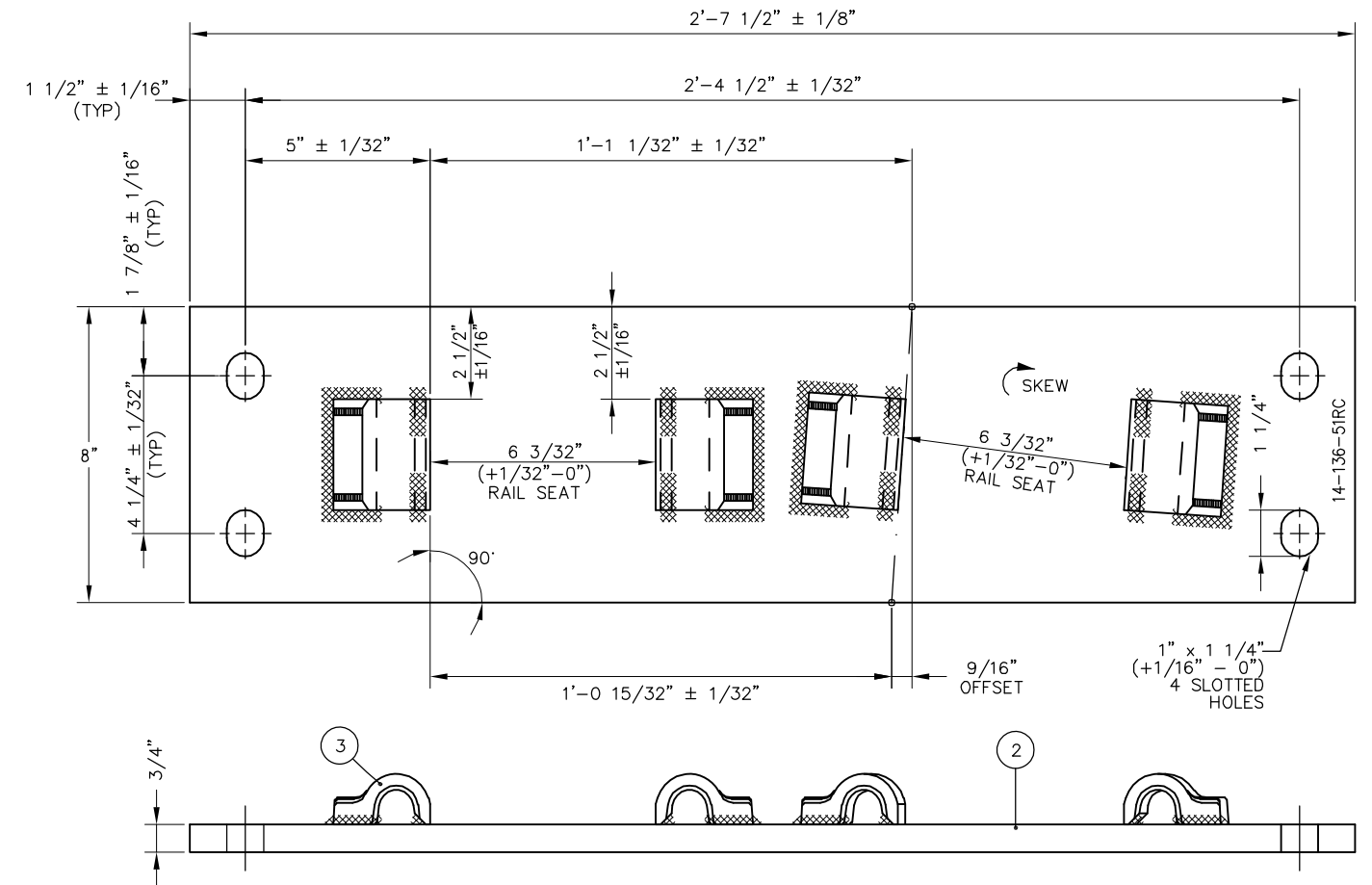
SPECIAL TRACKWORK
NO. 14 TRACKWORK
WSM FROG LH
FROG BASE PLATES
14-50LC AND 14-51LC

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	FOURTH
	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2625

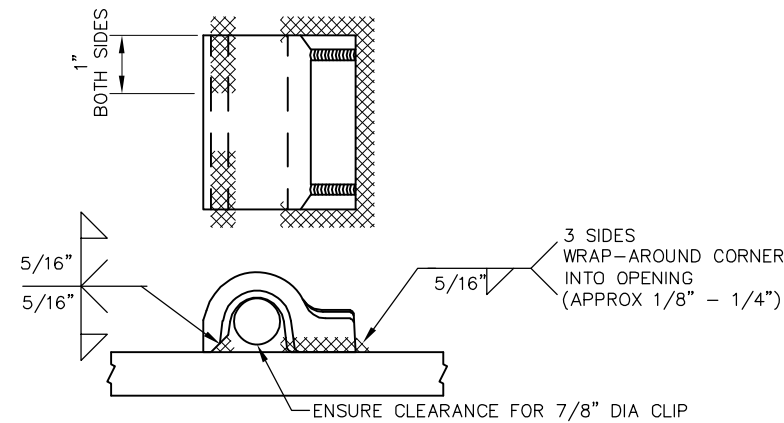
BILL OF MATERIAL				
ITEM	QTY FOR 24-136-50RC	QTY FOR 24-136-51RC	DESCRIPTION	DWG NO
1	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-9 1/4" LONG	-
2	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-7 1/2" LONG	-
3	4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



FROG BASE PLATE 14-136-50RC



FROG BASE PLATE 14-136-51RC



FORGED SHOULDER WELDING DETAIL

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

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STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
WSM FROG RH
FROG BASE PLATES
14-50RC AND 14-51RC

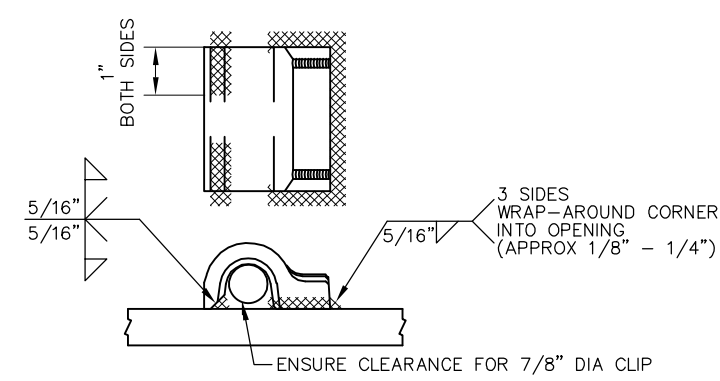
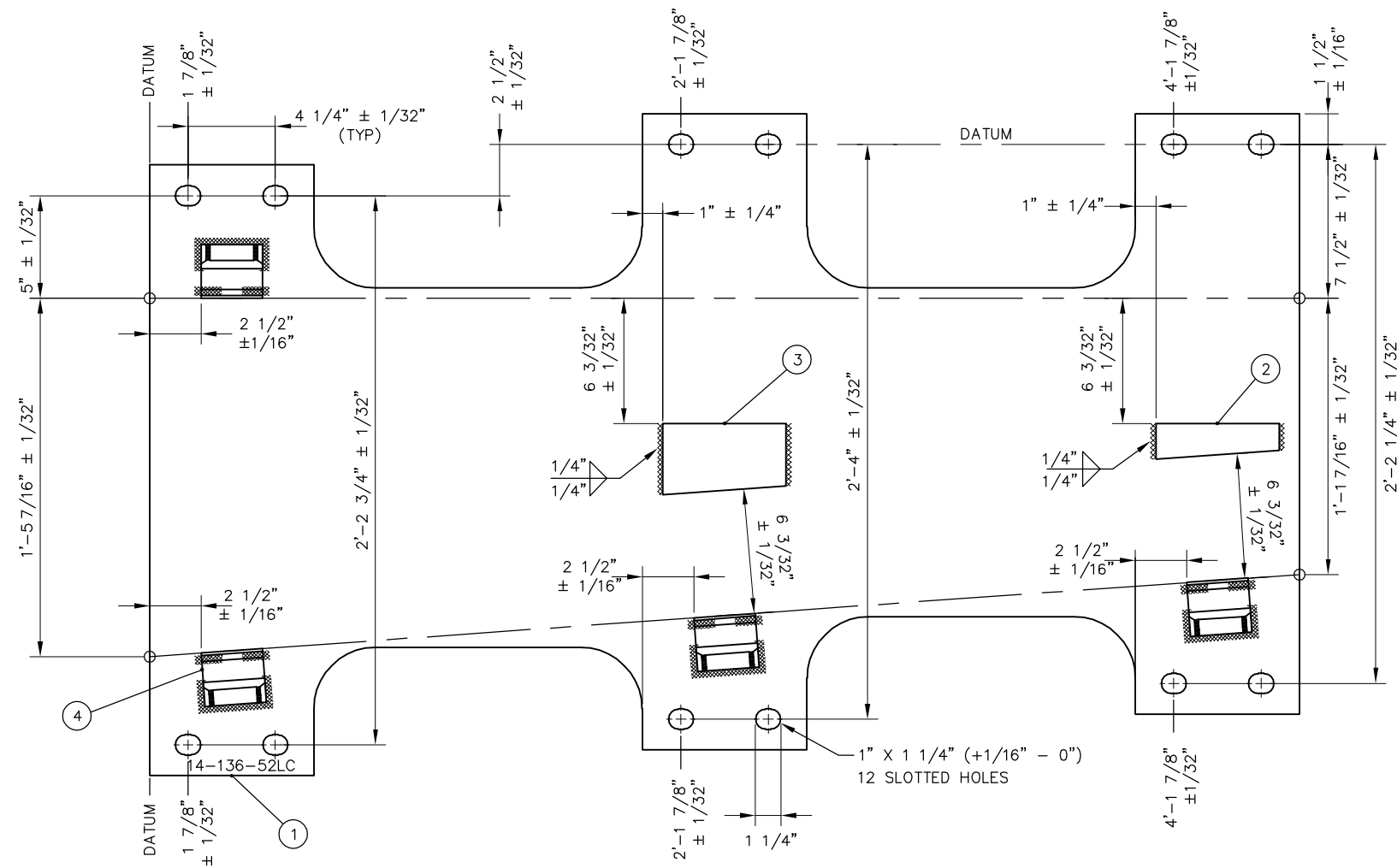
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REV: EDITION: FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO.: SD-2626

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BURNED PLATE, 3/4" THICK	-
2	1	BURNED STOP, 1/2" THICK, TAPERED 1 5/16" TO 1 3/4", 6" LONG	-
3	1	BURNED STOP, 1/2" THICK, TAPERED 3 1/32", TO 3 15/32", 6" LONG	-
4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



FORGED SHOULDER WELDING DETAIL

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

FROG BASE PLATE 14-136-52LC


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

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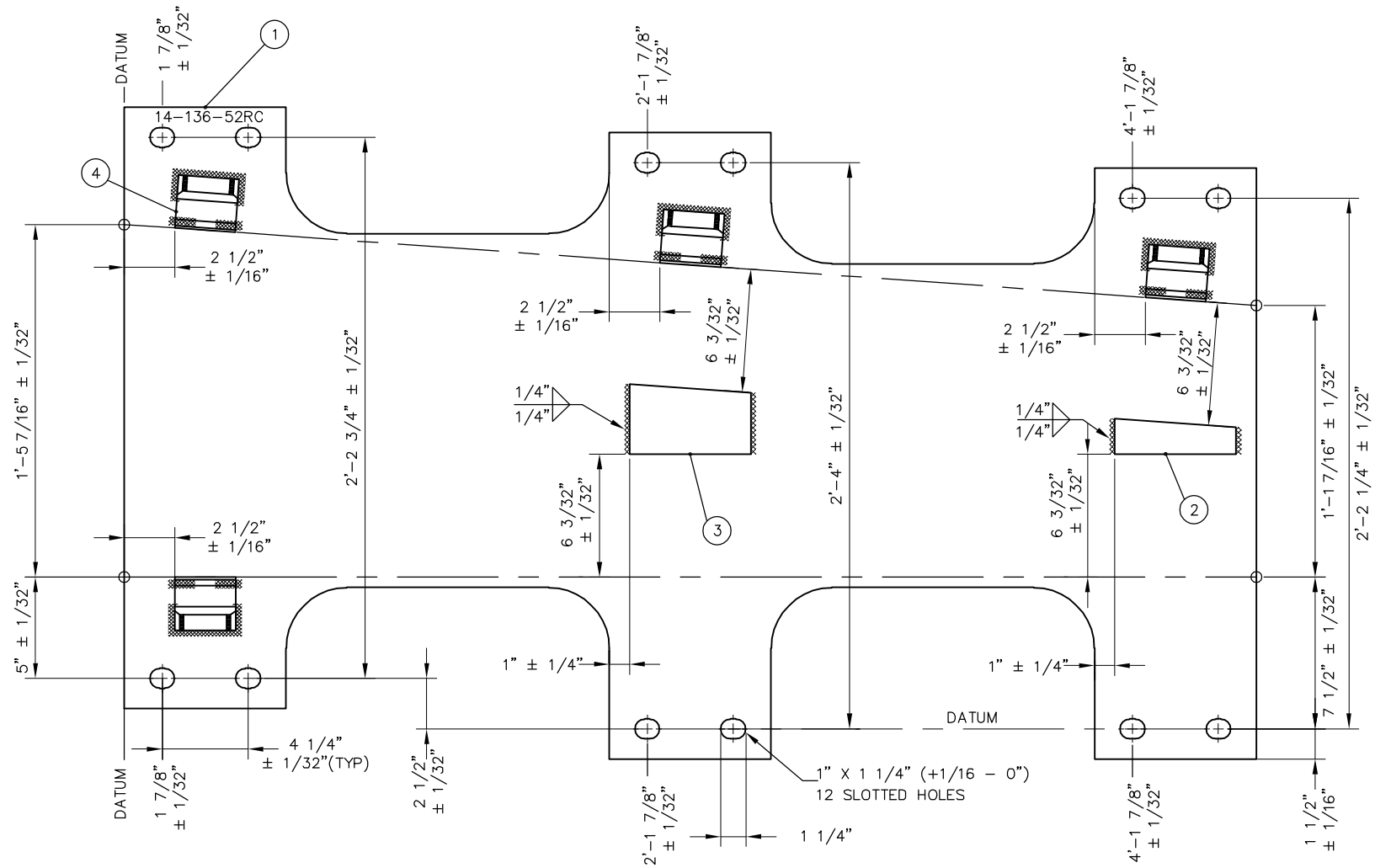
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

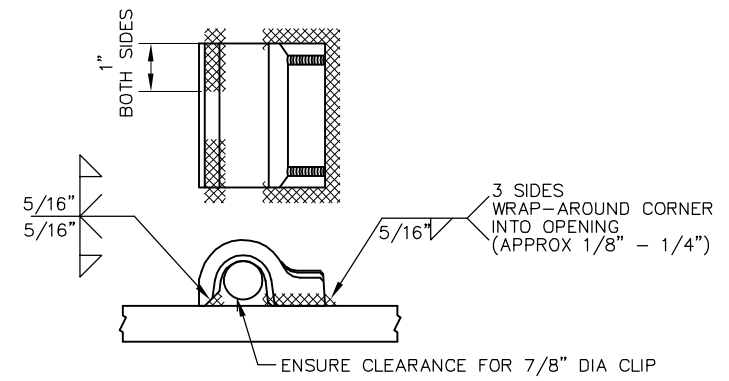
SPECIAL TRACKWORK
NO. 14 TURNOUT
WSM FROG LH
FROG BASE PLATE 14-52LC

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REV:	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2627

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BURNED PLATE, 3/4" THICK	-
2	1	BURNED STOP, 1/2" THICK, TAPERED 1 5/16" TO 1 3/4", 6" LONG	-
3	1	BURNED STOP, 1/2" THICK, TAPERED 3 1/32" TO 3 15/32", 6" LONG	-
4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



FROG BASE PLATE 14-136-52RC



FORGED SHOULDER WELDING DETAIL

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


REV	DATE	BY	CHK	APP	DESCRIPTION

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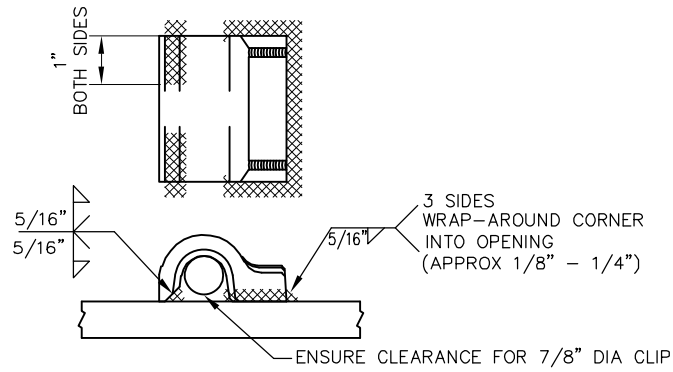
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
WSM FROG RH
FROG BASE PLATE 14-52RC

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SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2628	

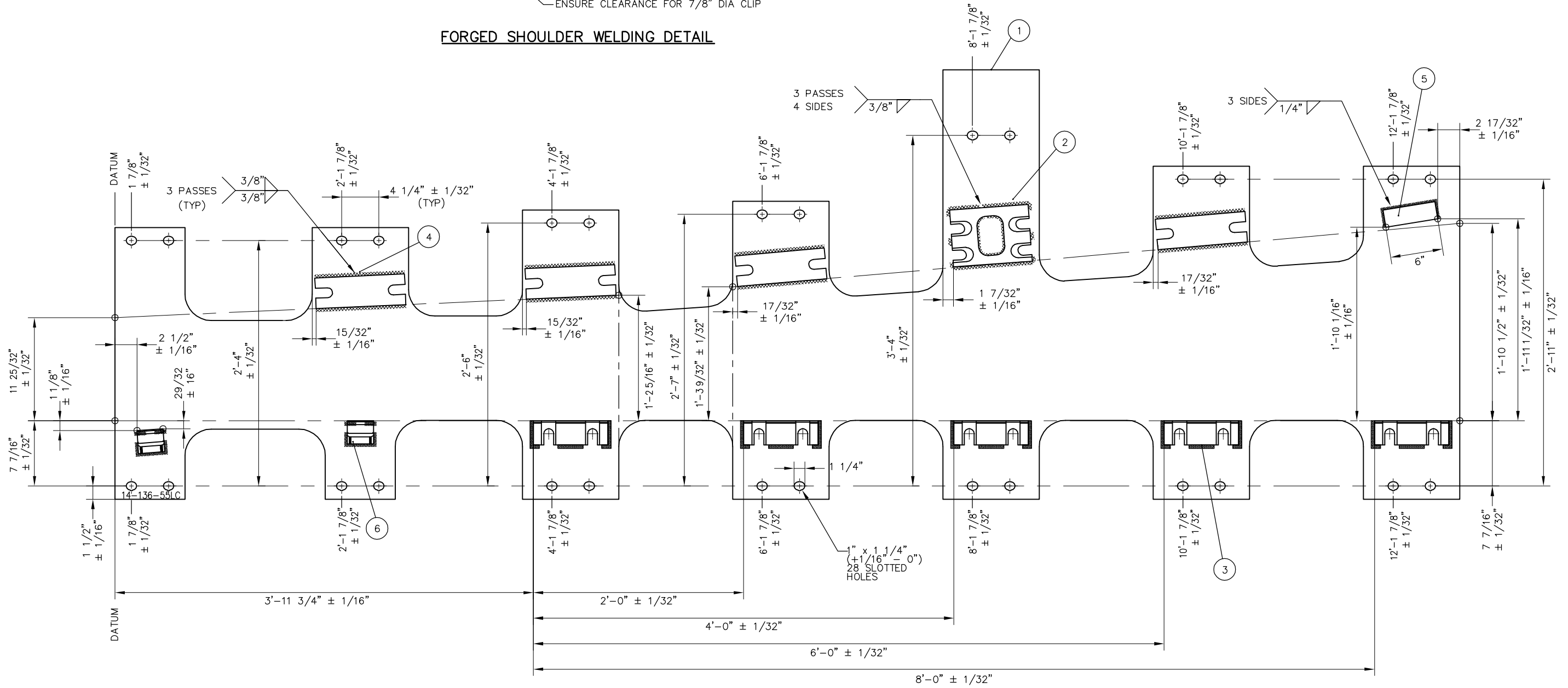
NOTES:

1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDERS AND STOPS AND NOT TO PROTRUDE INTO RAIL SEAT
3. OPENINGS IN BOLT CAPTURE BLOCKS SHALL BE FREE OF WELD AND SPATTER
4. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING



FORGED SHOULDER WELDING DETAIL

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BURNED PLATE, 3/4" THICK	-
2	1	CAPTURE BLOCK FOR SPRING BOX	-
3	5	CAPTURE BLOCK FOR PLATE CLIP	-
4	4	CAPTURE BLOCK FOR HORN KEEPER	-
5	1	FLAT BAR, ASTM A36, 1/2" THICK x 2" x 6" LONG	-
6	2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-




FROG BASE PLATE 14-136-55LC

REV	DATE	BY	CHK	APP	DESCRIPTION

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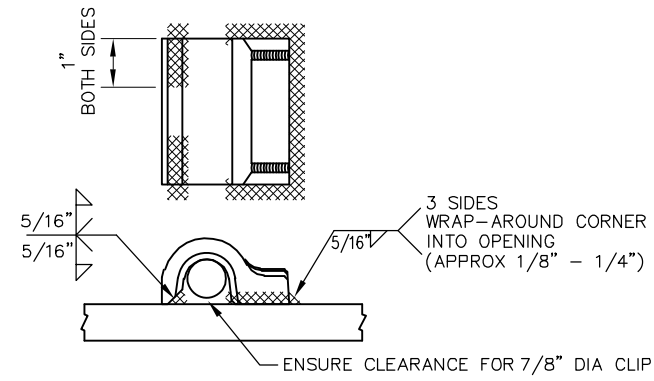


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STANDARD DRAWINGS

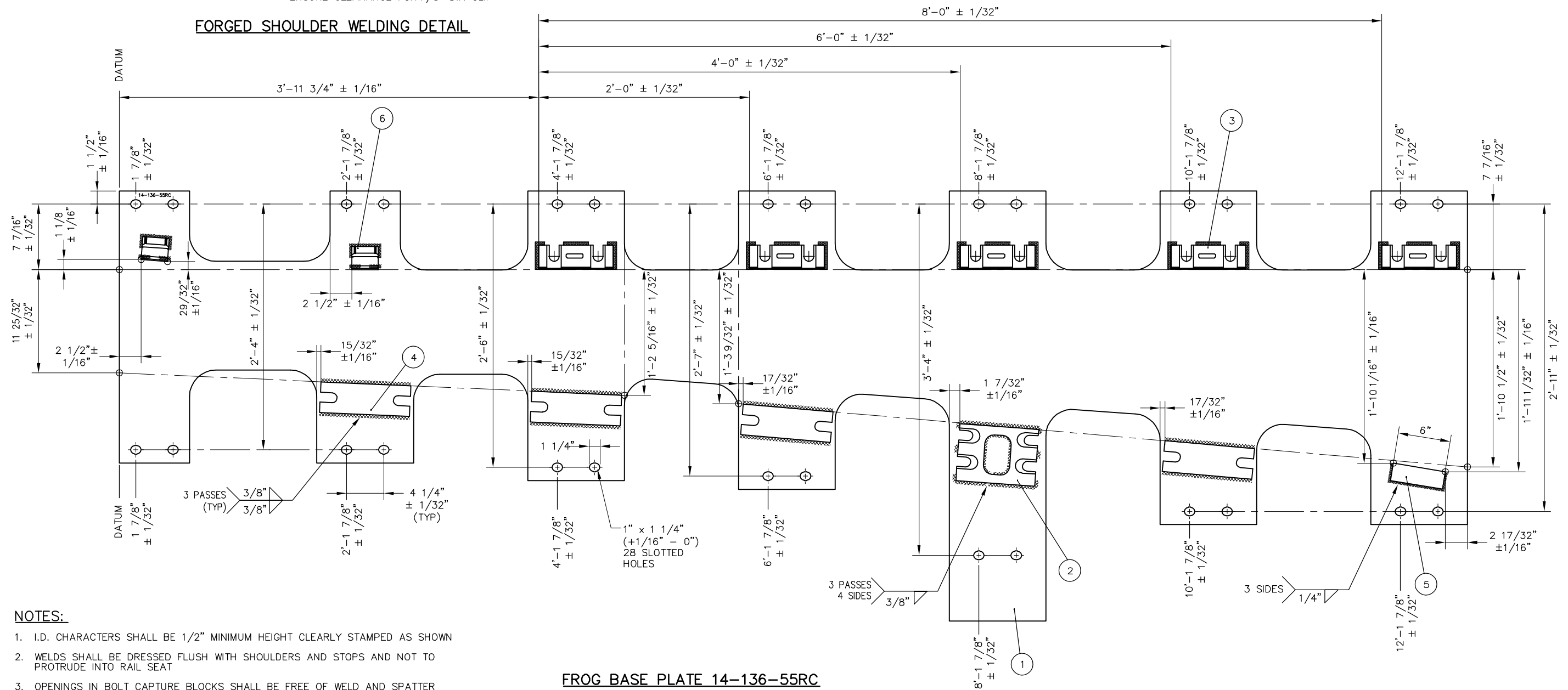
SPECIAL TRACKWORK
NO. 14 TURNOUT
WSM FROG LH
FROG BASE PLATE 14-55LC

CADD FILE NAME: SD-2629
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO.: SD-2629



FORGED SHOULDER WELDING DETAIL

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BURNED PLATE, 3/4" THICK	-
2	1	CAPTURE BLOCK FOR SPRING BOX	-
3	5	CAPTURE BLOCK FOR PLATE CLIP	-
4	4	CAPTURE BLOCK FOR HORN KEEPER	-
5	1	FLAT BAR, ASTM A36, 1/2" THICK x 2" x 6" LONG	-
6	2	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 SHOULDERS AND STOPS AND NOT TO PROTRUDE INTO RAIL SEAT
3. OPENINGS IN BOLT CAPTURE BLOCKS SHALL BE FREE OF WELD AND SPATTER
4. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

FROG BASE PLATE 14-136-55RC


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

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STANDARD DRAWINGS

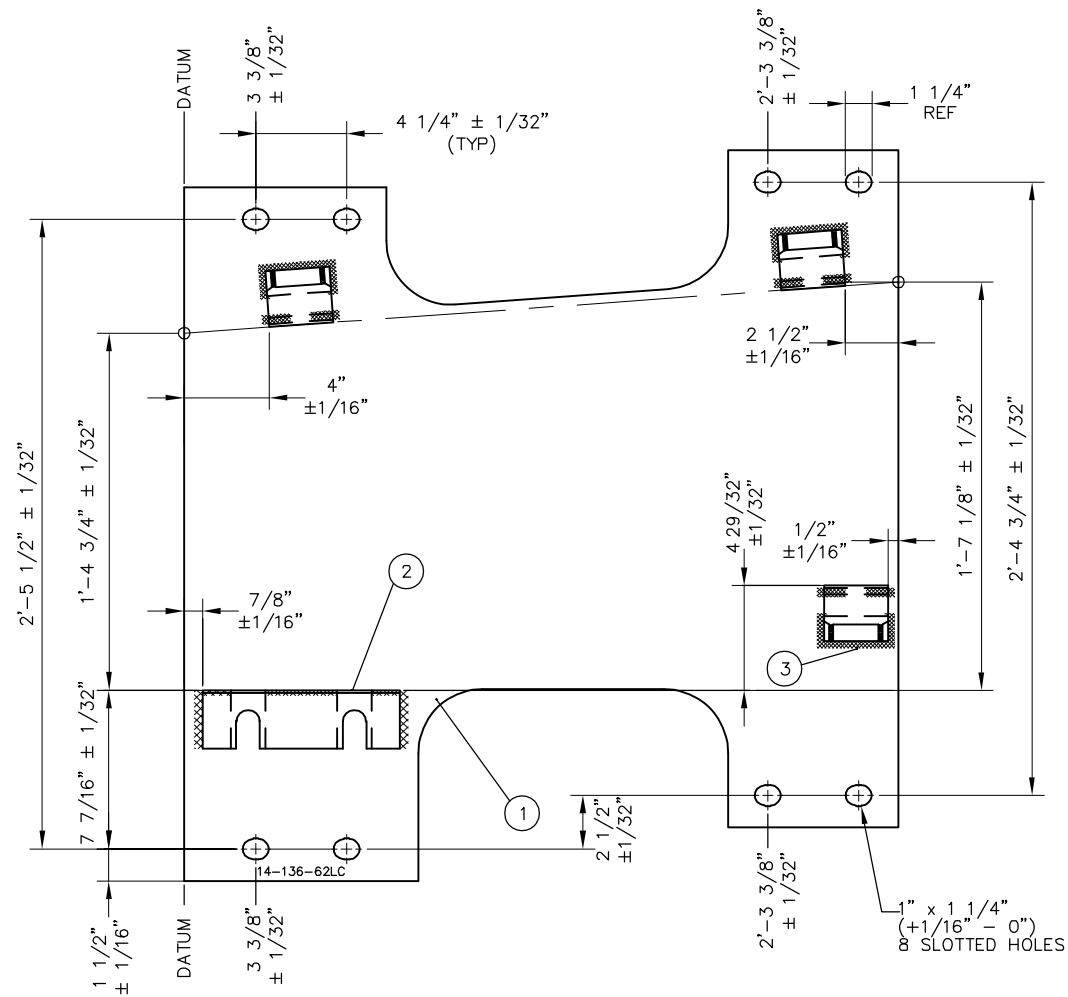
SPECIAL TRACKWORK
NO. 14 TURNOUT
WSM FROG RH
FROG BASE PLATE 14-55RC

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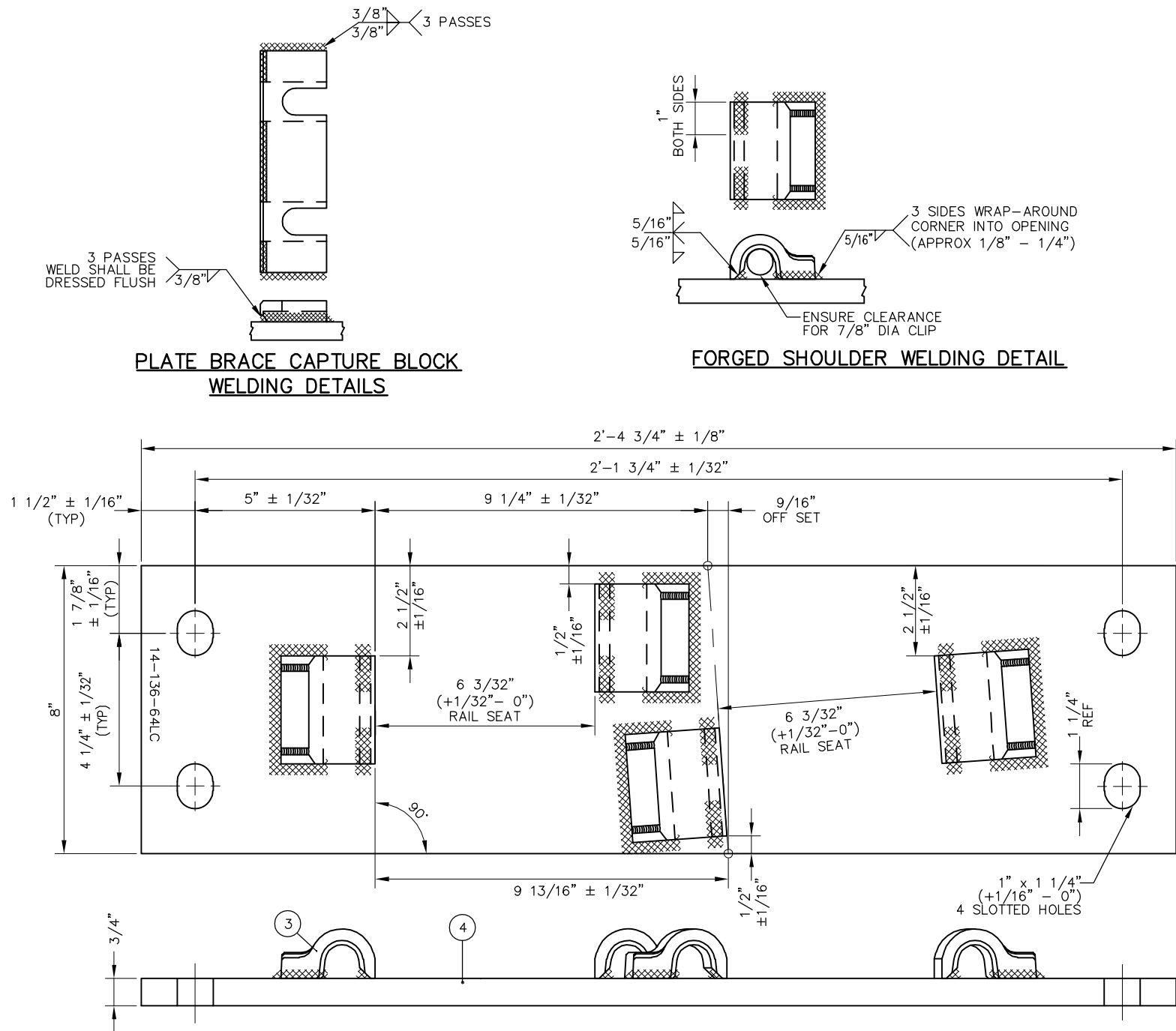
NOTES:

1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDERS AND STOPS AND NOT PROTRUDE INTO RAIL SEAT
3. OPENINGS IN BOLT CAPTURE BLOCKS SHALL BE FREE OF WELD AND SPATTER
4. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

BILL OF MATERIAL				
ITEM	QTY FOR 14-136-62LC	QTY FOR 14-136-64LC	DESCRIPTION	DWG NO
1	1	0	BURNED PLATE, 3/4" THICK	-
2	1	0	CAPTURE BLOCK FOR HORN KEEPER	-
3	3	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-
4	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-4 3/4" LONG	-



FROG BASE PLATE 14-136-62LC



FROG BASE PLATE 14-136-64LC


REV	DATE	BY	CHK	APP	DESCRIPTION

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STANDARD DRAWINGS

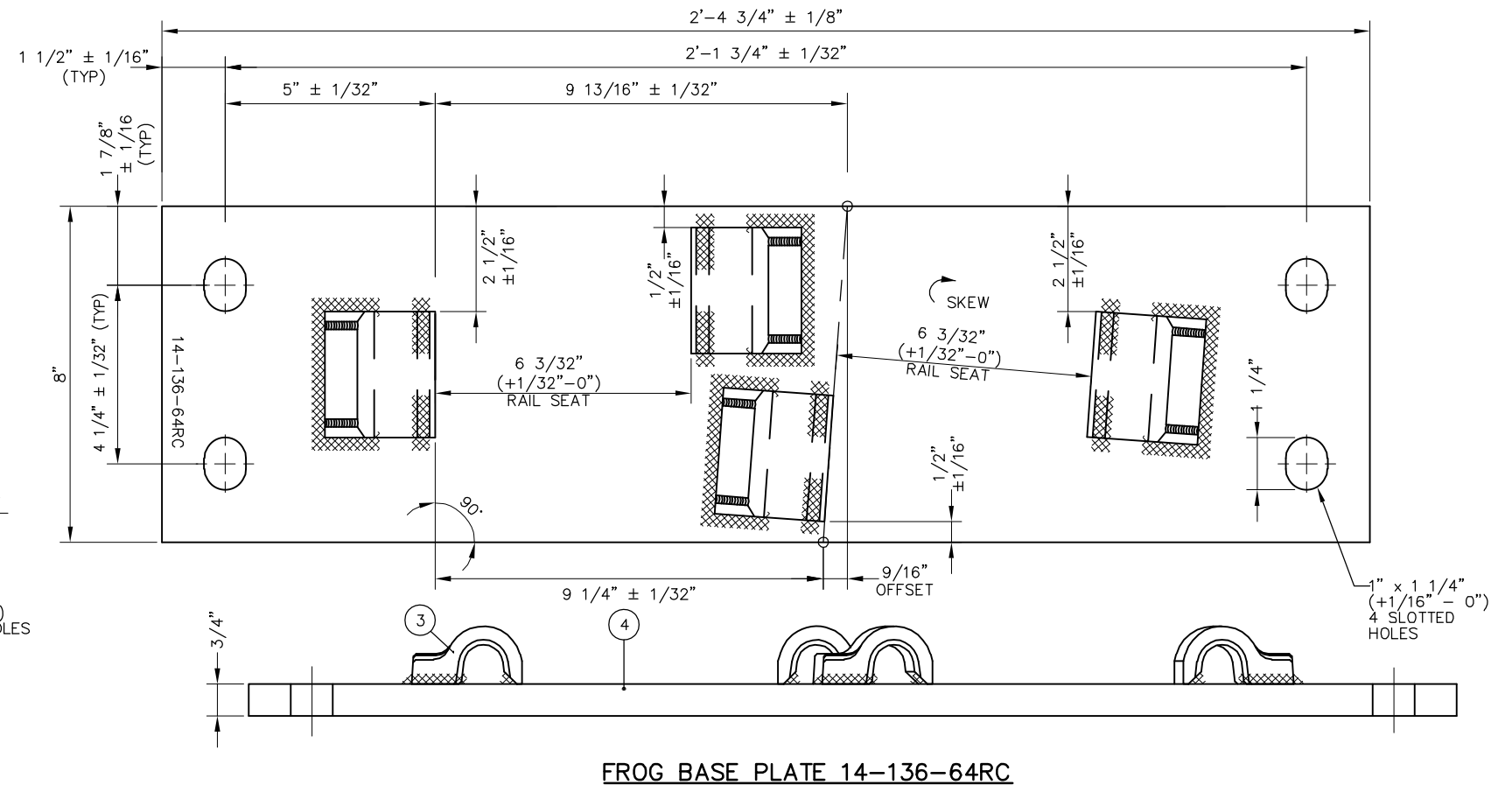
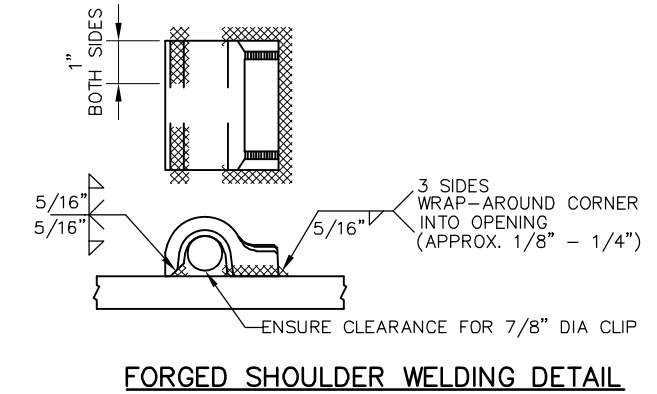
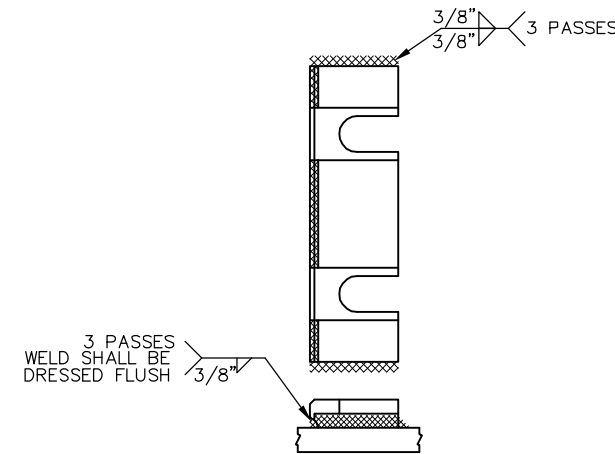
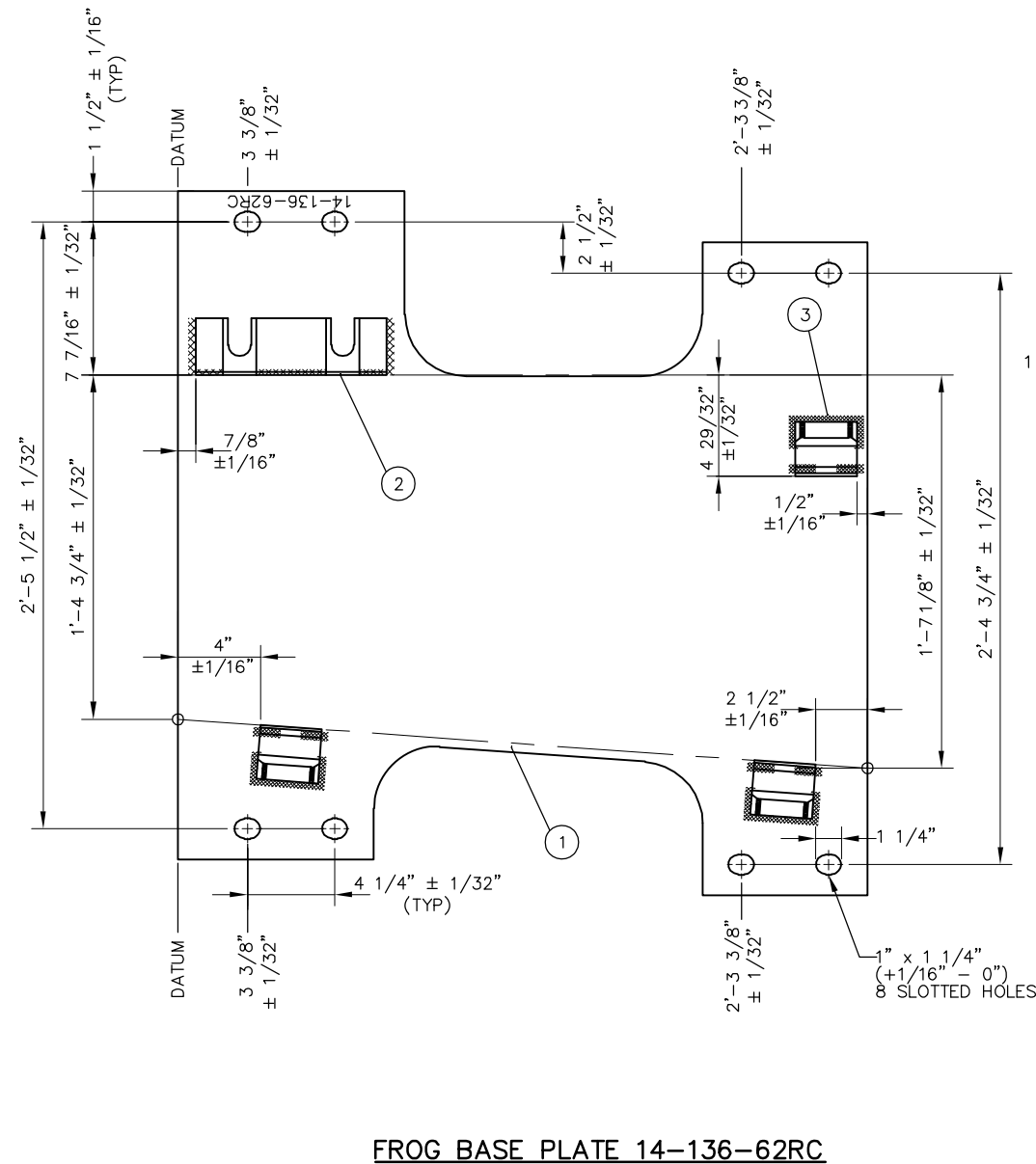
SPECIAL TRACKWORK
NO. 14 TURNOUT
WSM FROG LH
FROG BASE PLATES
14-62LC AND 14-64LC

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REV:	EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.:	SD-2631

BILL OF MATERIAL				
ITEM	QTY FOR 14-136-62RC	QTY FOR 14-136-64RC	DESCRIPTION	DWG NO
1	1	0	BURNED PLATE, 3/4" THICK	-
2	1	0	CAPTURE BLOCK FOR HORN KEEPER	-
3	3	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-
4	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-4 3/4" LONG	-

NOTES:

- I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
- WELDS SHALL BE DRESSED FLUSH WITH SHOULDERS AND STOPS AND NOT PROTRUDE INTO RAIL SEAT
- OPENINGS IN BOLT CAPTURE BLOCKS SHALL BE FREE OF WELD AND SPATTER
- SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING



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. 14 TURNOUT
WSM FROG RH
FROG BASE PLATES
14-62RC AND 14-64RC

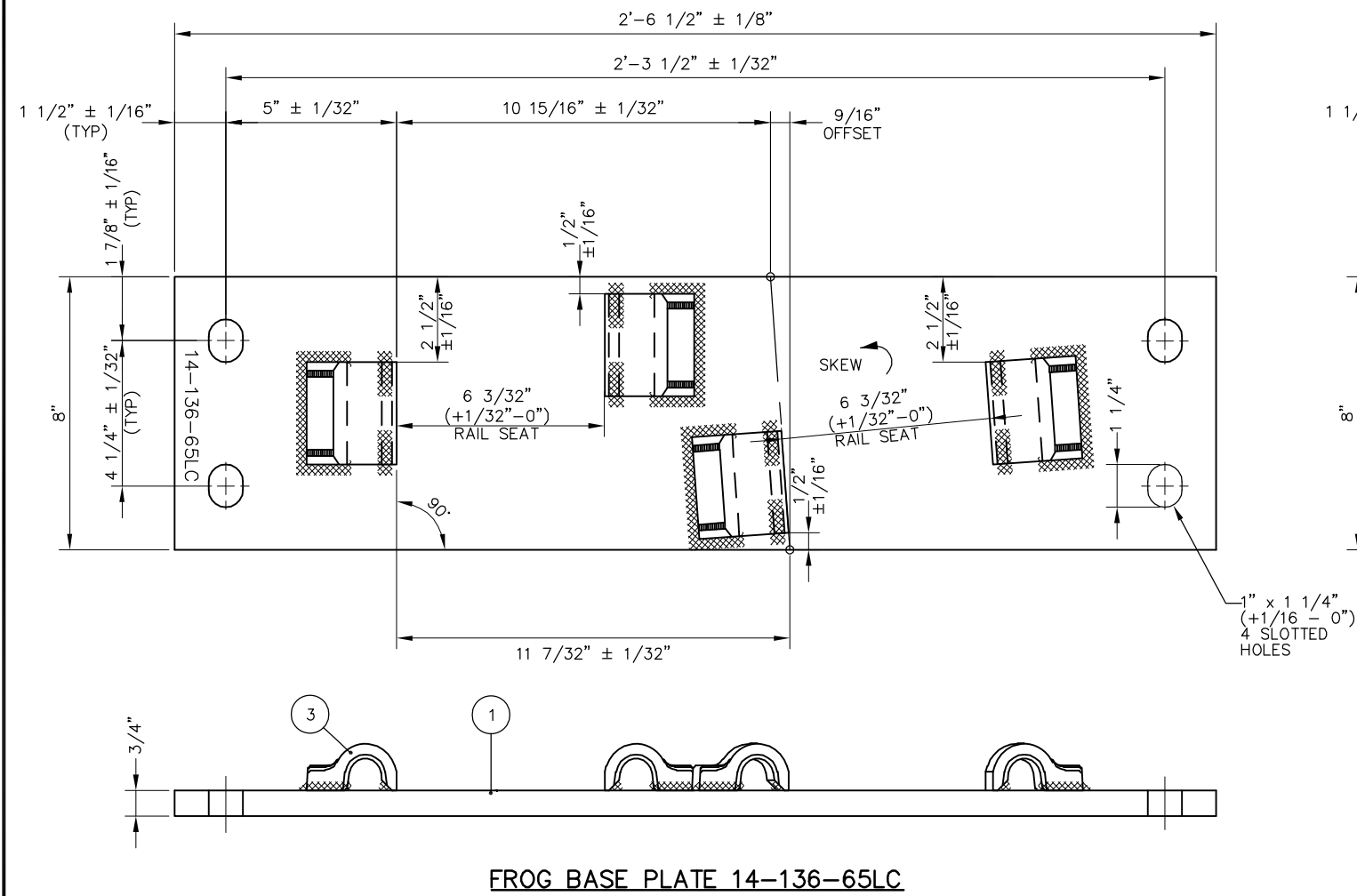
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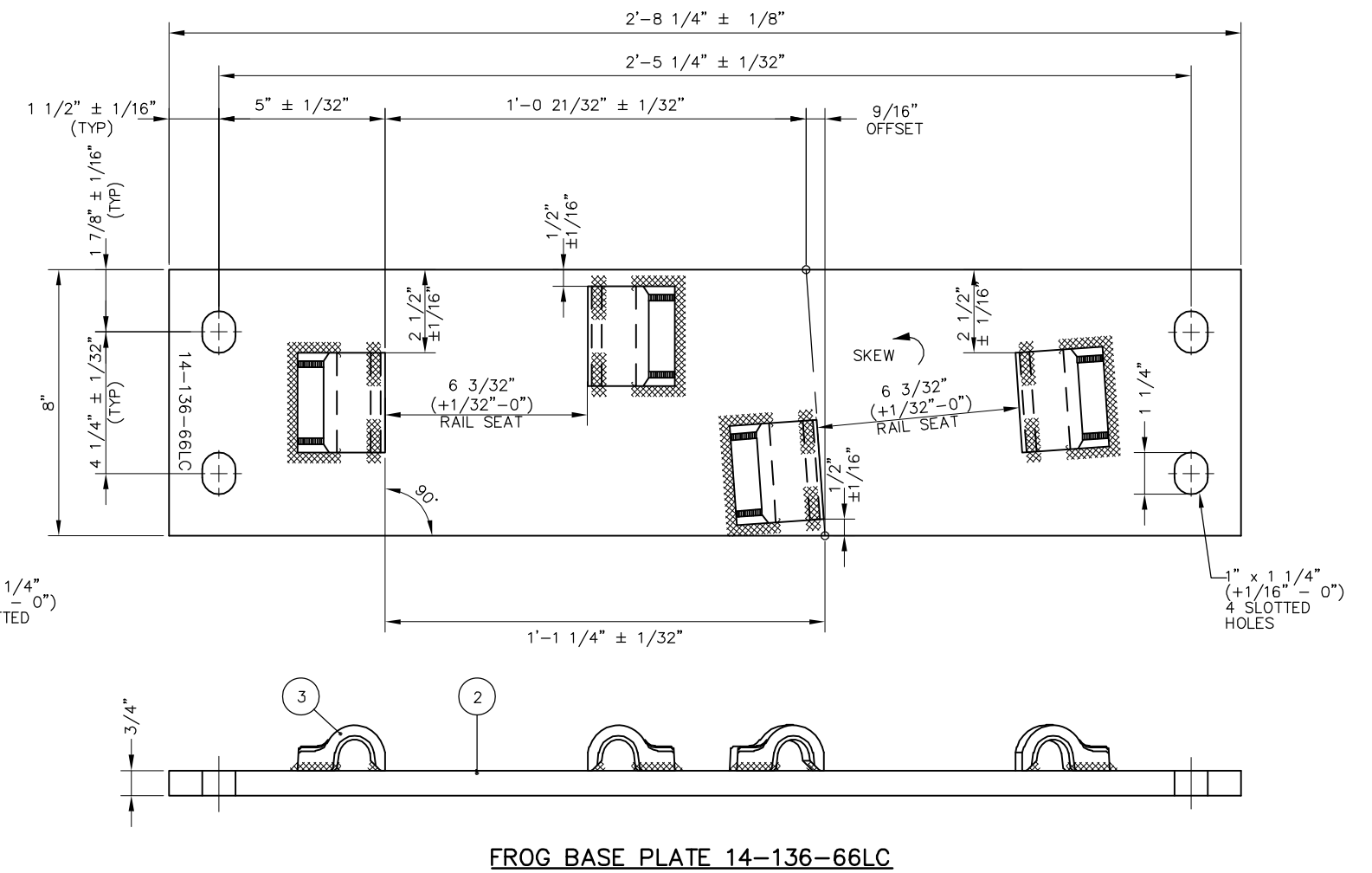
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STANDARD DRAWING NO.: SD-2632

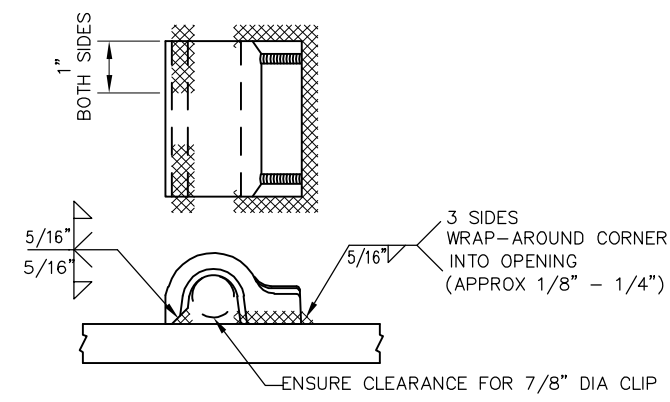
BILL OF MATERIAL				
ITEM	QTY FOR 14-136-65LC	QTY FOR 14-136-66LC	DESCRIPTION	DWG NO
1	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-6 1/2" LONG	-
2	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-8 1/4" LONG	-
3	4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



FROG BASE PLATE 14-136-65LC



FROG BASE PLATE 14-136-66LC



FORGED SHOULDER WELDING DETAIL

- 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

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STANDARD DRAWINGS

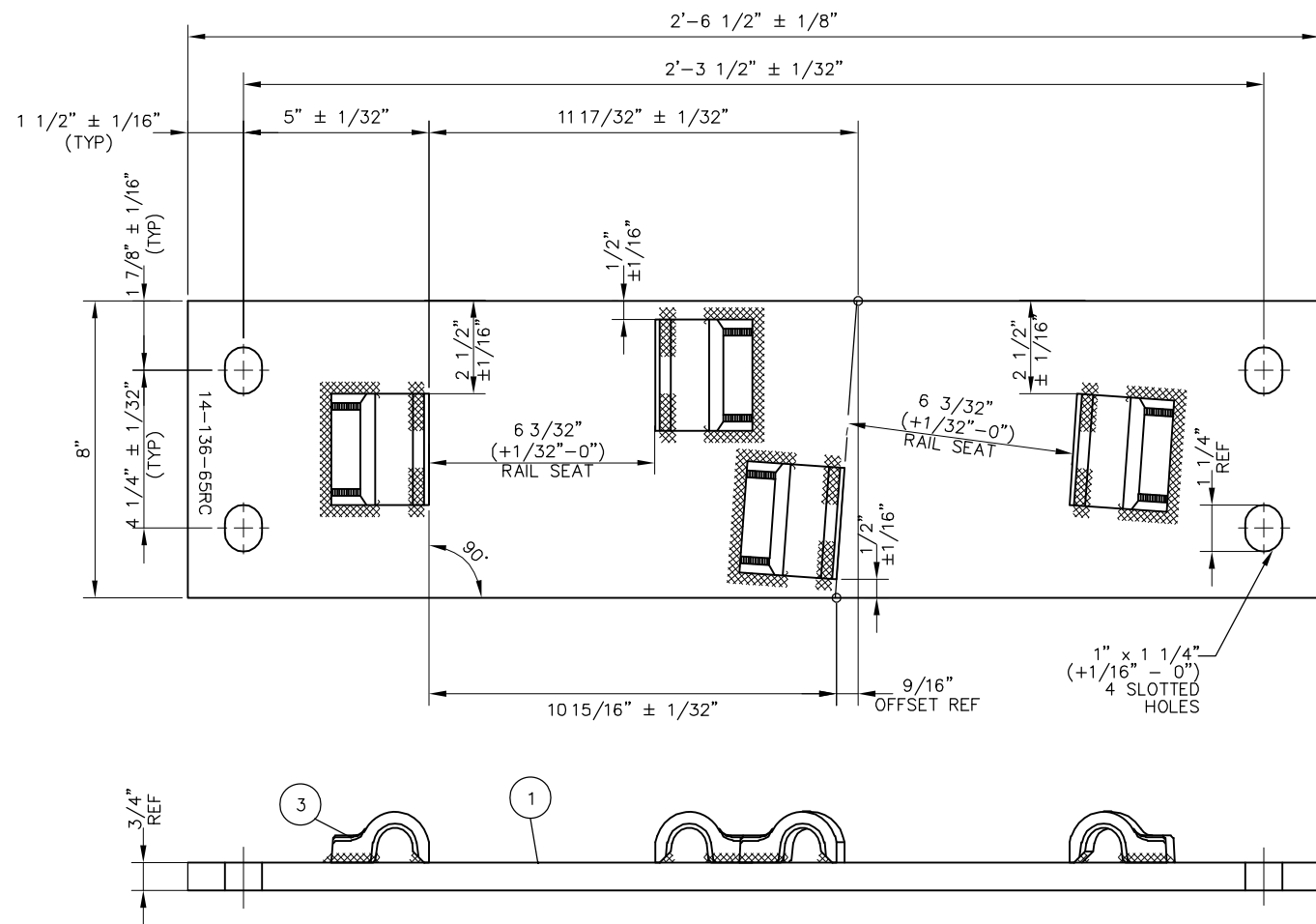
SPECIAL TRACKWORK
NO. 14 TURNOUT
WSM FROG LH
FROG BASE PLATES
14-65LC AND 14-66LC

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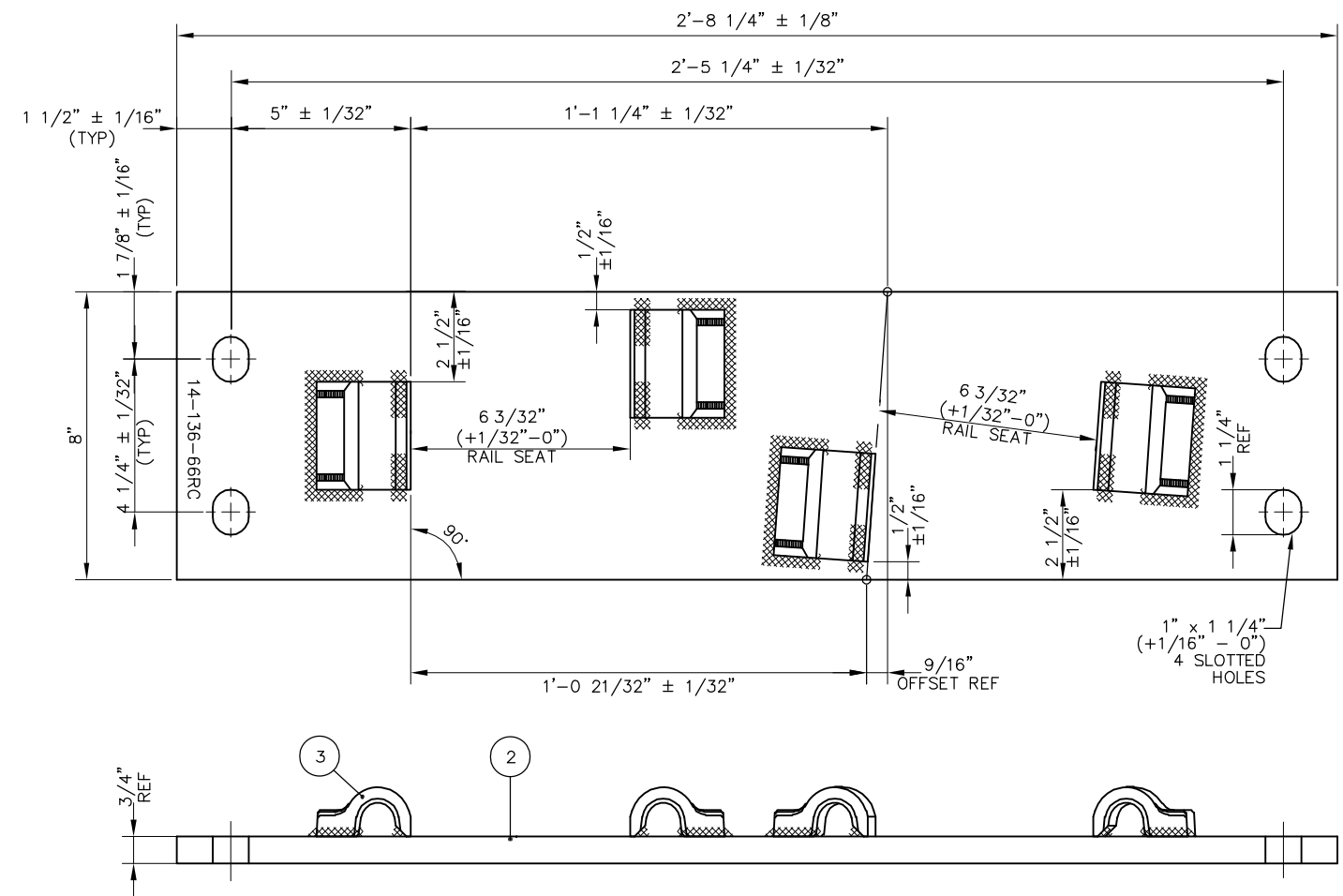
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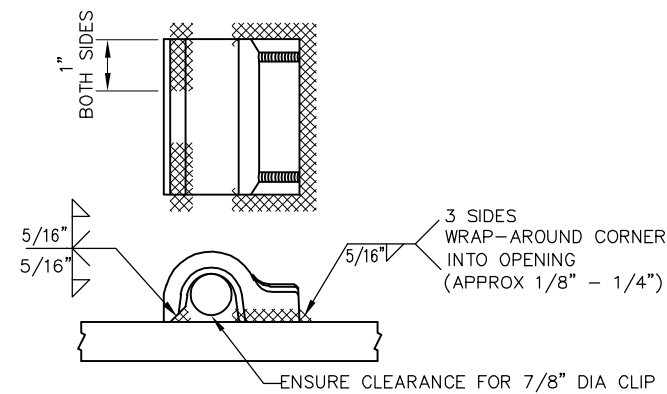
BILL OF MATERIAL				
ITEM	QTY FOR 14-136-65RC	QTY FOR 14-136-66RC	DESCRIPTION	DWG NO
1	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-6 1/2" LONG	-
2	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-8 1/4" LONG	-
3	4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



FROG BASE PLATE 14-136-65RC



FROG BASE PLATE 14-136-66RC



FORGED SHOULDER WELDING DETAIL

NOTES:

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

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

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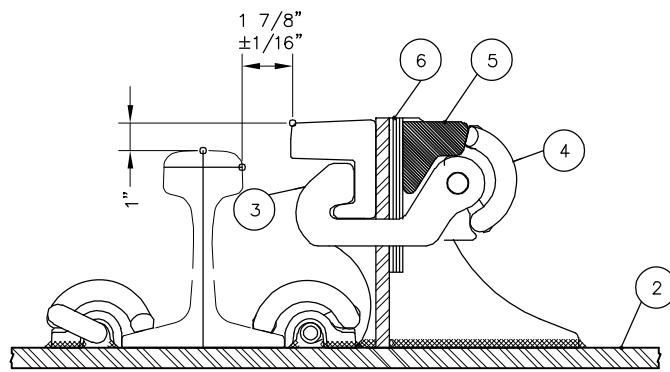
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STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
WSM FROG RH
FROG BASE PLATES
14-65RC AND 14-66RC

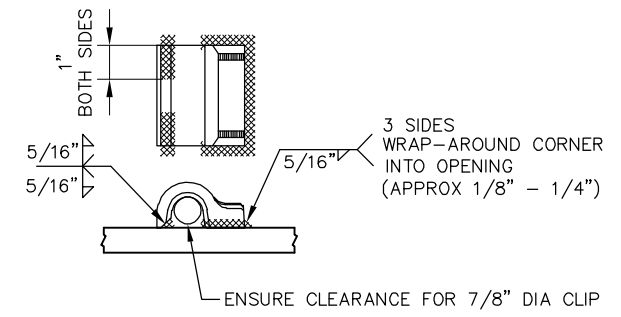
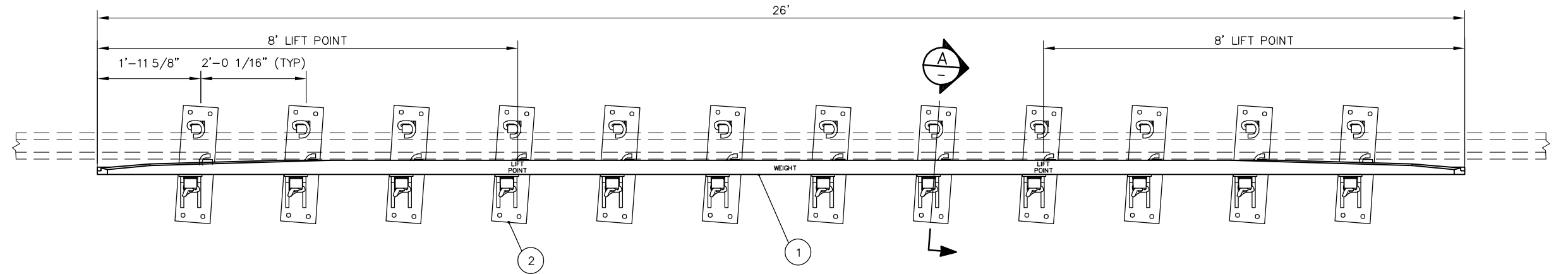
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	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2634



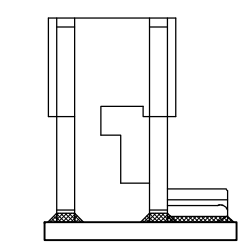
GUARD RAIL HARDWARE ASSEMBLY

A PARTIAL SECTION
SCALE: NTS

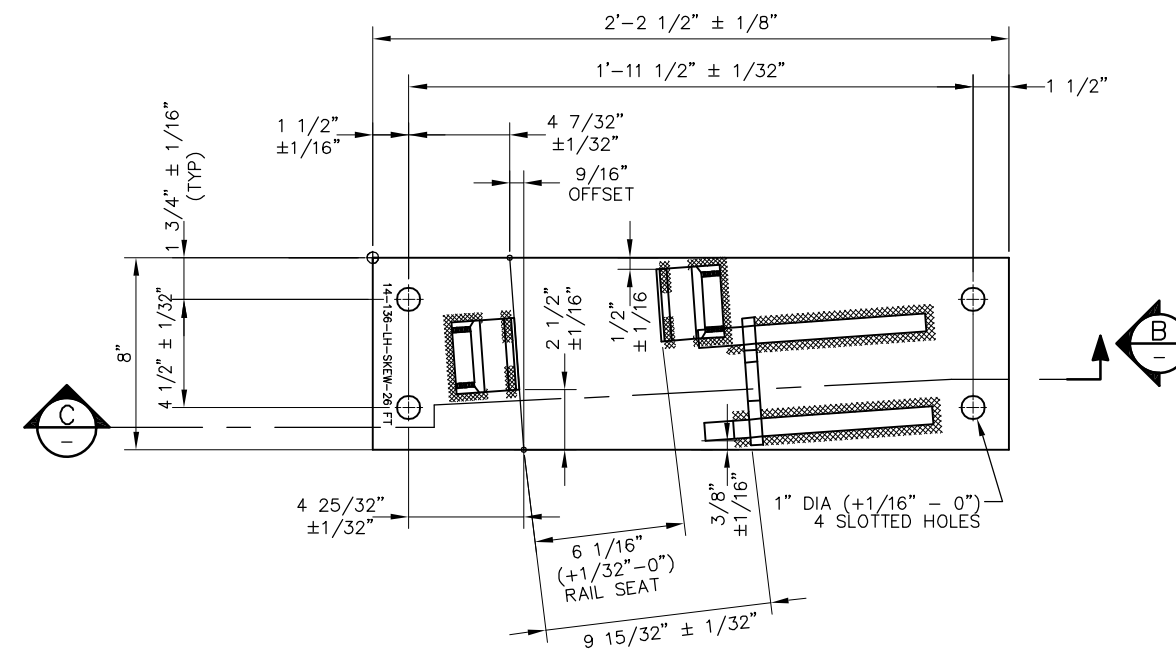
BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	GUARD BAR, UIC33 1200 SERIES X 26'-0" LONG	-
2	12	GUARD RAIL PLATE ASSEMBLY, RAISED 1", LH SKEWED	-
3	12	H-CLAMP	-
4	36	CLIP, PANDROL, E2055	-
5	12	LOCKING BLOCK	-
6	48	SHIM, 1/8" THICK X 3" X 6" LONG	-



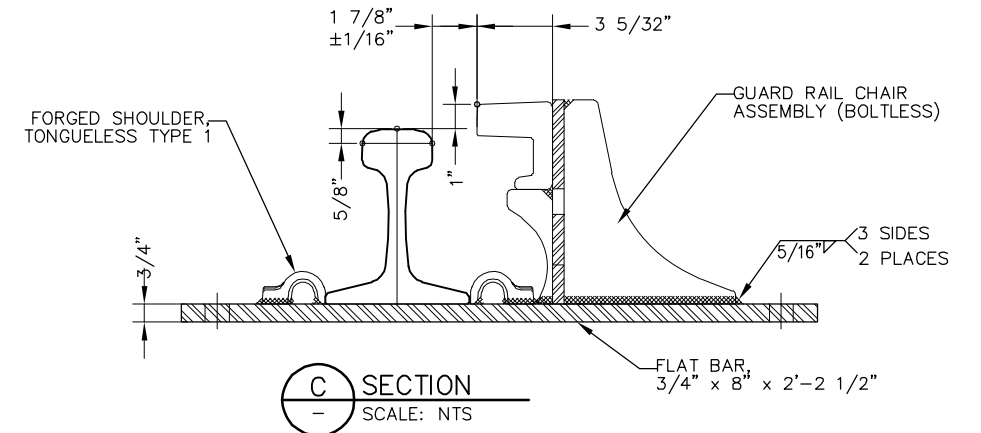
FORGED SHOULDER WELDING DETAIL



B VIEW
SCALE: NTS



GUARD RAIL PLATE ASSEMBLY



C SECTION
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

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING

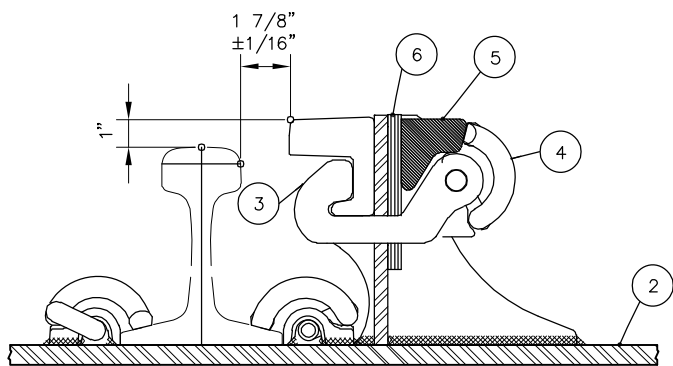


1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
GUARD RAIL ASSEMBLY
LH SKEWED WITH PLATES 26'-0" LONG

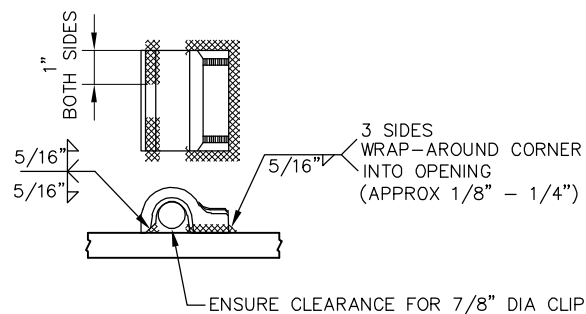
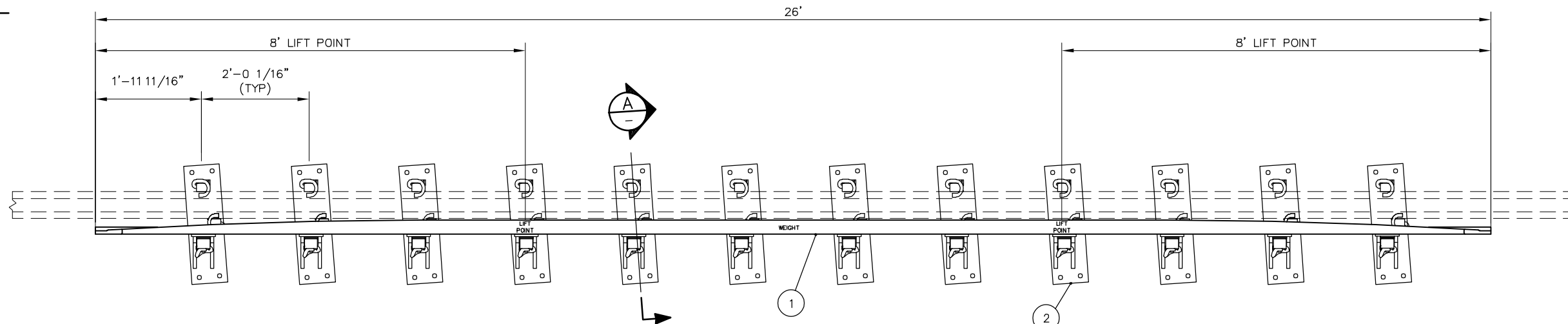
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SPECIAL TRACKWORK	
STANDARD DRAWING NO: SD-2635	



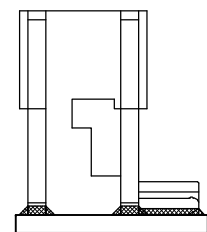
GUARD RAIL HARDWARE ASSEMBLY

A PARTIAL SECTION
SCALE: NTS

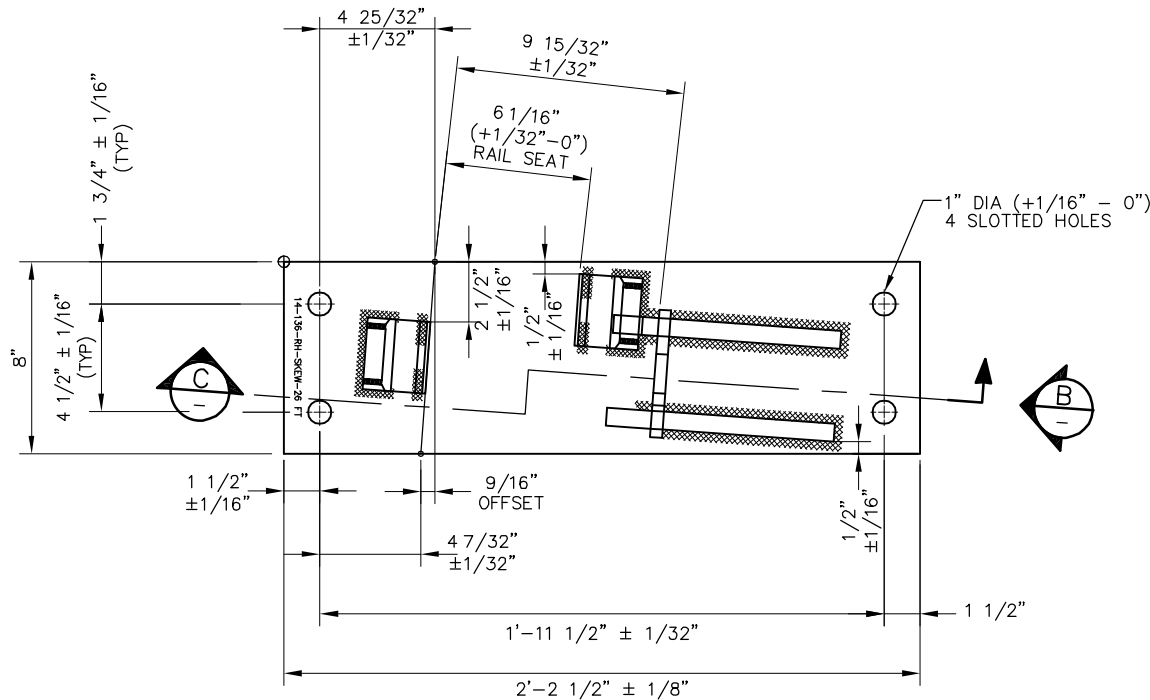
BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	GUARD BAR, UIC33 1200 SERIES X 26'-0" LONG	-
2	12	GUARD RAIL PLATE ASSEMBLY, RAISED 1", RH SKEWED	-
3	12	H-CLAMP	-
4	36	CLIP, PANDROL, E2055	-
5	12	LOCKING BLOCK	-
6	48	SHIM, 1/8" THICK X 3" X 6" LONG	-



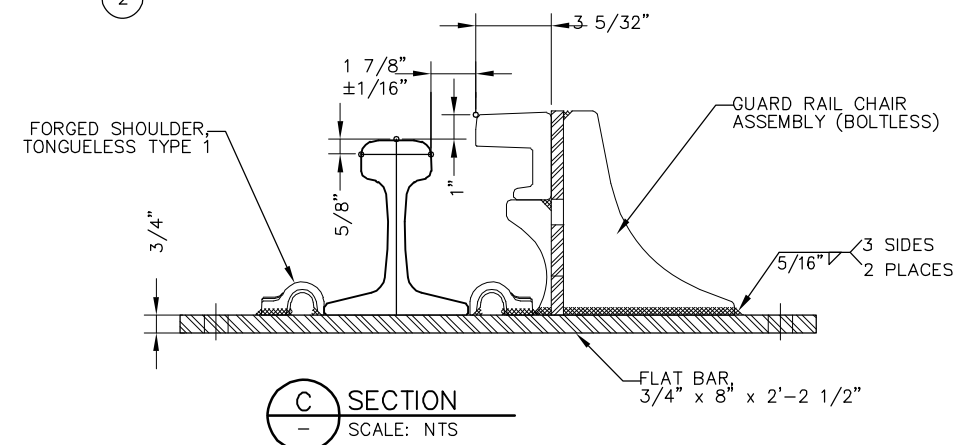
FORGED SHOULDER WELDING DETAIL



B VIEW
SCALE: NTS



GUARD RAIL PLATE ASSEMBLY



C SECTION
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

PENINSULA CORRIDOR JOINT POWERS BOARD

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DEPUTY DIRECTOR, ENGINEERING

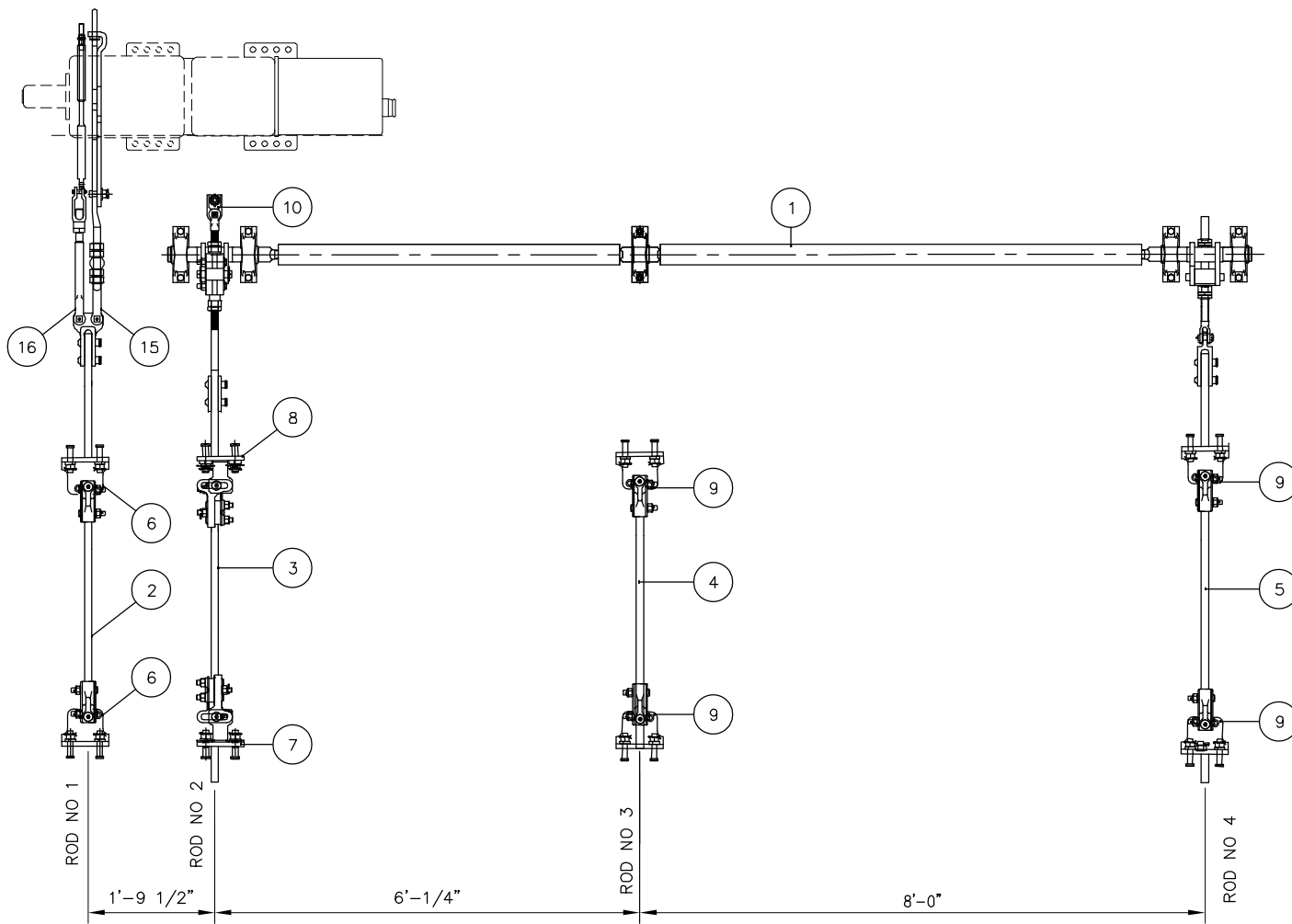


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San Carlos, CA 94070

STANDARD DRAWINGS

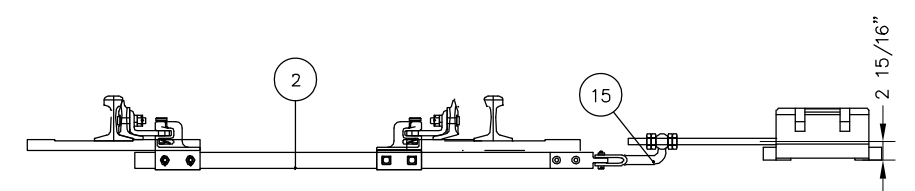
SPECIAL TRACKWORK
NO. 14 TURNOUT
GUARD RAIL ASSEMBLY
RH SKEWED WITH PLATES 26'-0" LONG

CADD FILE NAME: SD-2636
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO.: SD-2636

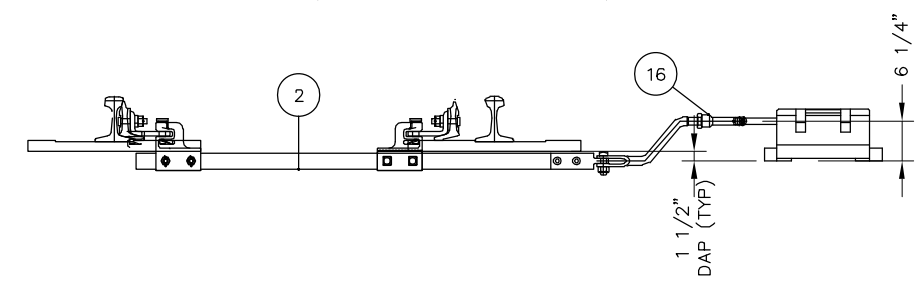


BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	ROTARY ASSIST ASSEMBLY FOR NO 14-136 LB RE TURNOUT	-
2	1	SWITCH ROD NO 1, FOR POINT DETECTOR/LOCK ROD, (14-136-1)	SD-2639
3	1	SWITCH ROD NO 2, DRIVE, C/W BASKET (14-136-2)	SD-2639
4	1	SWITCH ROD NO 3, THROW, (14-136-3)	SD-2639
5	1	SWITCH ROD NO 4, THROW, (14-136-4)	SD-2639
6	2	ROD POINT BRACKET, DETECTOR/LOCK ROD, HOLES AT 2 7/8" ARB*	-
7	1	ROD POINT BRACKET, THROW ROD, ANTI-ROLL, HOLES AT 2 7/8" ARB* LH	-
8	1	ROD POINT BRACKET, THROW ROD, ANTI-ROLL, HOLES AT 2 7/8" ARB* RH	-
9	4	ROD POINT BRACKET, HOLES AT 2 3/8" ARB*, C/W SQ BOLTS	-
10	1	DROP LUG FOR US&S M23 SWITCH MACHINE DRIVE BAR	-
11	1	BOLT, 7/8" DIA x 3" LONG, DRILLED 2 9/16" BELOW HEAD, HEAVY HEX, GR 5	-
12	1	NUT, 7/8" DIA SLOTTED HEAVY HEX, GR 8	-
13	1	SPRING WASHER, 7/8" DIA	-
14	1	COTTER PIN, 3/16" DIA x 1 3/4" LONG	-
15	1	LOCK ROD, FOR M23 SWITCH MACHINE, HST	-
16	1	DETECTOR ROD, FOR M23 SWITCH MACHINE, HST	-

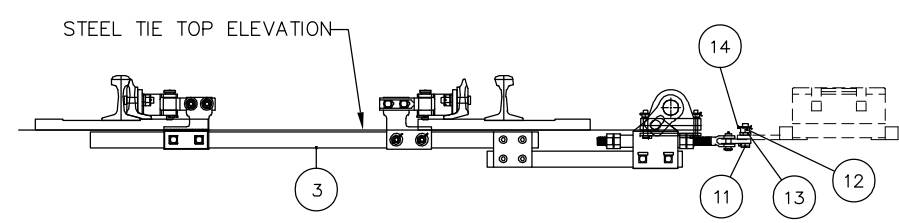
ARB* - ABOVE RAIL BASE



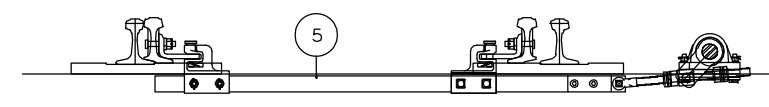
SWITCH ROD (ROD NO 1) ASSEMBLY
LOCK ROD CONNECTION SHOWN
(VIEW FROM HEEL TOWARDS PS)



SWITCH ROD (ROD NO 1) ASSEMBLY
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

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

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
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DEPUTY DIRECTOR, ENGINEERING

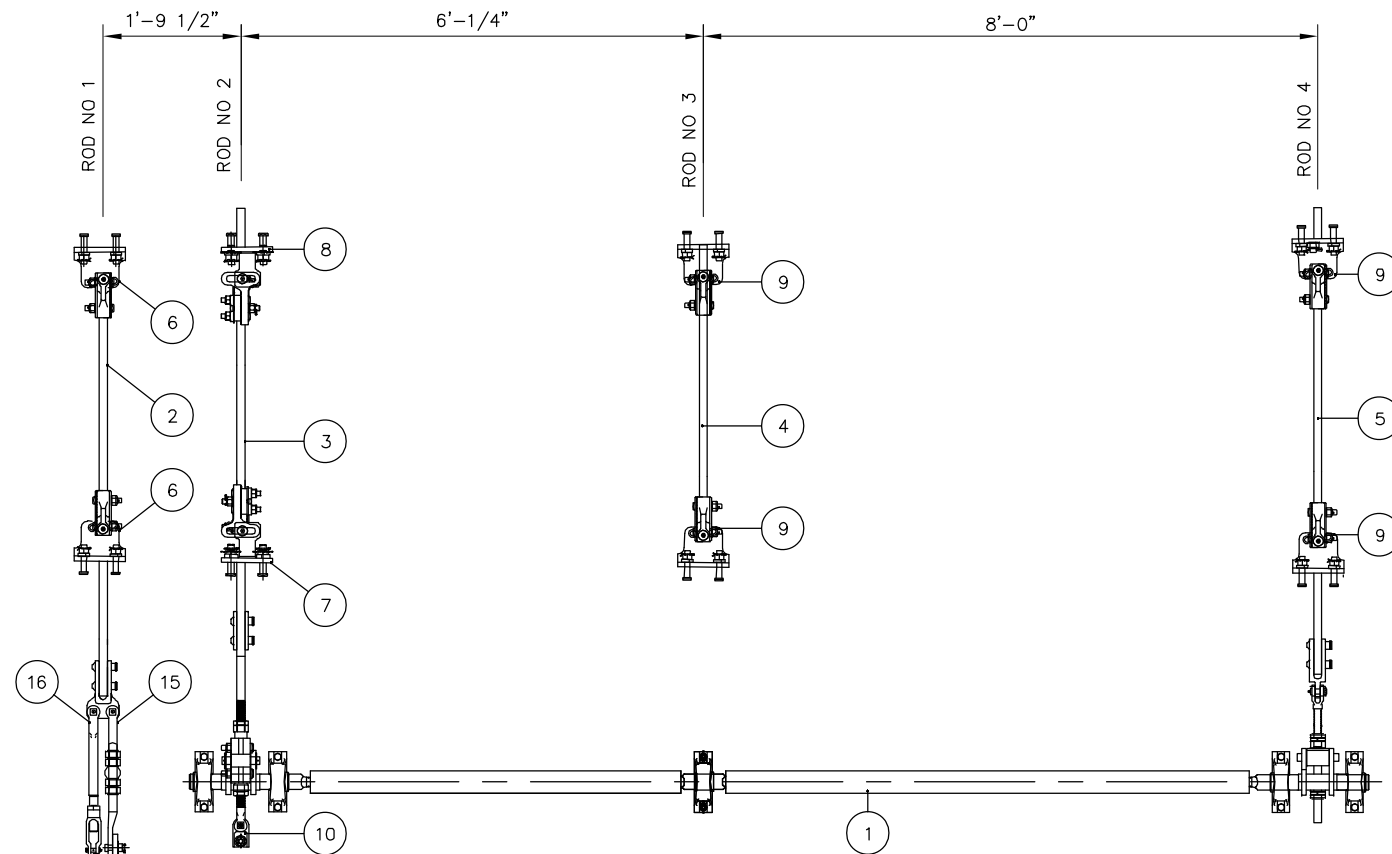


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STANDARD DRAWINGS

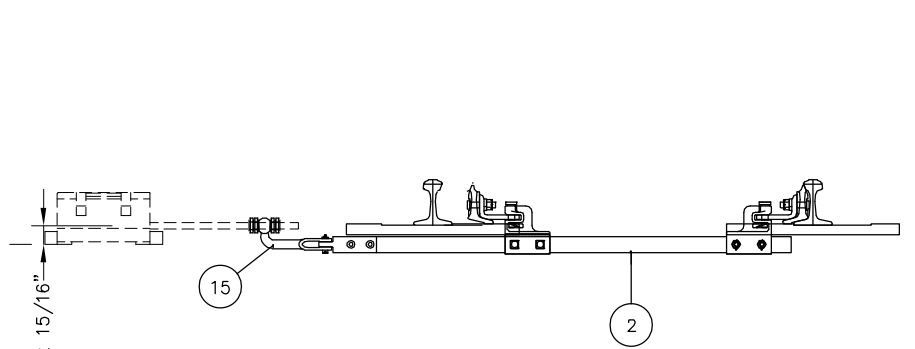
SPECIAL TRACKWORK
NO. 14 TURNOUT
HOLLOW STEEL TIE ROD ASSEMBLY
SWITCH MACHINE ON LH SIDE

CADD FILE NAME: SD-2637	
REV:	EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2637	

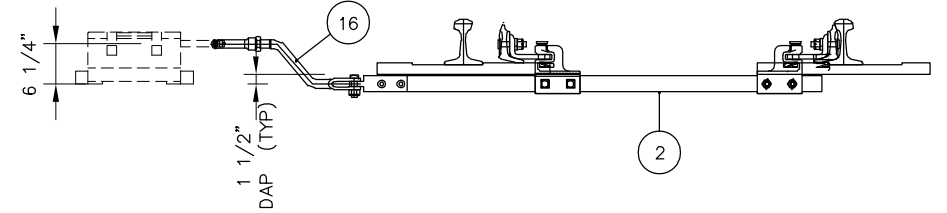


BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	ROTARY ASSIST ASSEMBLY FOR NO 14-136 LB RE TURNOUT	-
2	1	SWITCH ROD NO 1, FOR POINT DETECTOR/LOCK ROD, (14-136-1)	SD-2639
3	1	SWITCH ROD NO 2, DRIVE, C/W BASKET (14-136-2)	SD-2639
4	1	SWITCH ROD NO 3, THROW, (14-136-3)	SD-2639
5	1	SWITCH ROD NO 4, THROW, (14-136-4)	SD-2639
6	2	ROD POINT BRACKET, DETECTOR/LOCK ROD, HOLES AT 2 7/8" ARB*	-
7	1	ROD POINT BRACKET, THROW ROD, ANTI-ROLL, HOLES AT 2 7/8" ARB* LH	-
8	1	ROD POINT BRACKET, THROW ROD, ANTI-ROLL, HOLES AT 2 7/8" ARB* RH	-
9	4	ROD POINT BRACKET, HOLES AT 2 3/8" ARB* C/W SQ BOLTS	-
10	1	DROP LUG FOR US&S M23 SWITCH MACHINE DRIVE BAR	-
11	1	BOLT, 7/8" DIA x 3" LONG, DRILLED 2 9/16" BELOW HEAD, HEAVY HEX, GR 5	-
12	1	NUT, 7/8" DIA SLOTTED HEAVY HEX, GR 8	-
13	1	SPRING WASHER, 7/8" DIA	-
14	1	COTTER PIN, 3/16" DIA x 1 3/4" LONG	-
15	1	LOCK ROD, FOR M23 SWITCH MACHINE, HST	-
16	1	DETECTOR ROD, FOR M23 SWITCH MACHINE, HST	-

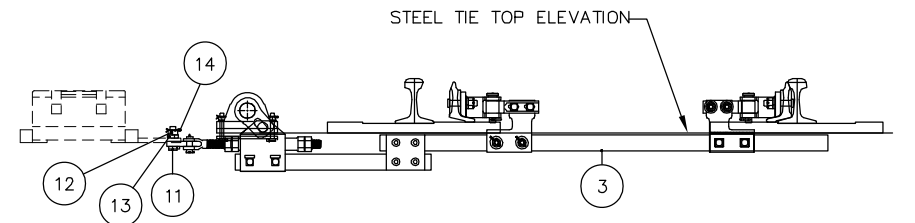
ARB* - ABOVE RAIL BASE



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



SWITCH ROD (ROD NO 1) ASSEMBLY
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


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

PENINSULA CORRIDOR JOINT POWERS BOARD

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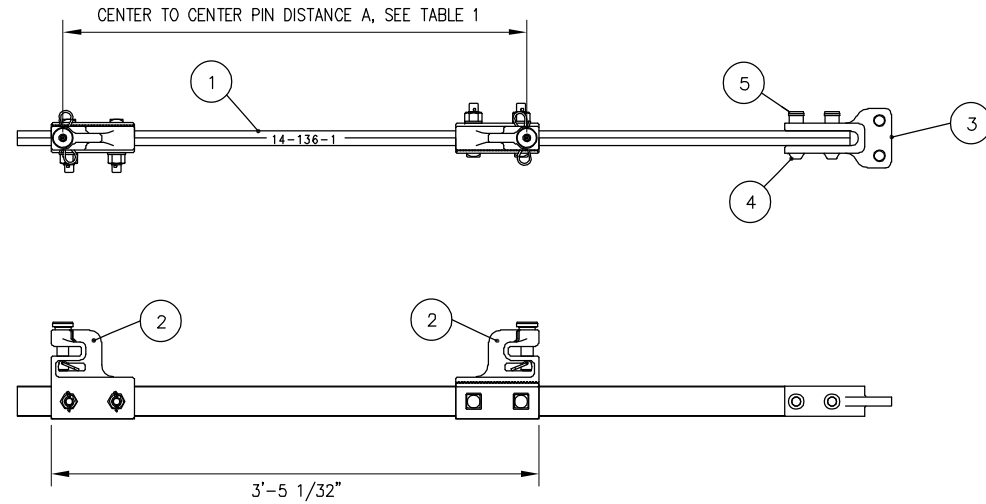
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
HOLLOW STEEL TIE ROD ASSEMBLY
SWITCH MACHINE ON RH SIDE

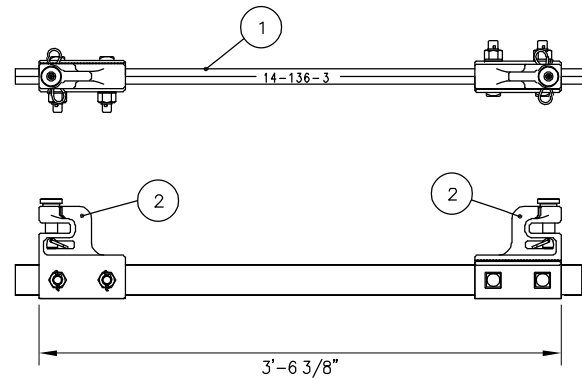
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SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2638	

BILL OF MATERIAL FOR SWITCH ROD 14-136-1			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH ROD 14-136-1	-
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 14-136-1

BILL OF MATERIAL FOR SWITCH ROD 14-136-3			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH ROD 14-136-3	-
2	2	SWITCH CLIP ASSEMBLY, ADJUSTABLE, FOR HOLLOW TIE	-

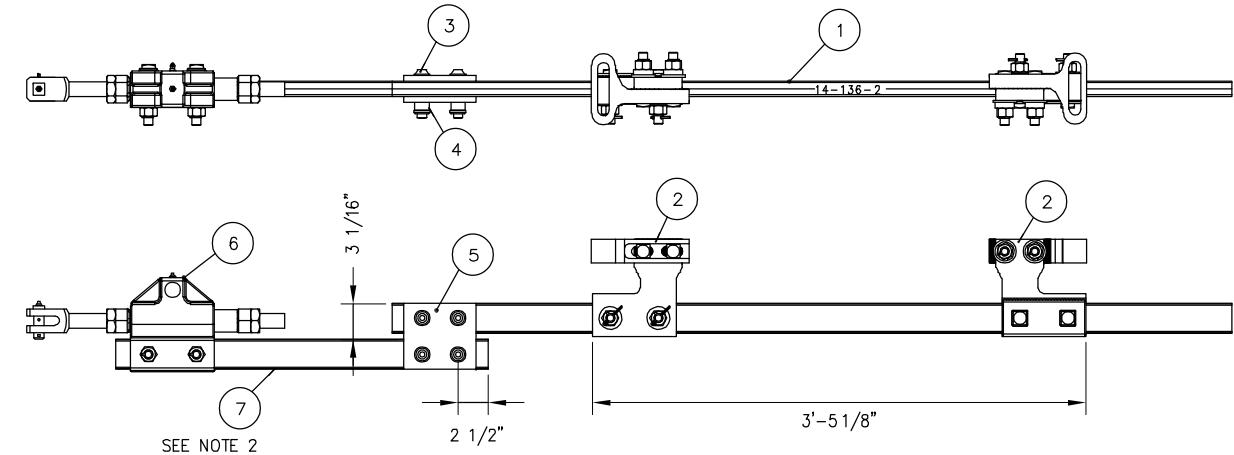


SWITCH ROD ASSEMBLY 14-136-3

TABLE 1

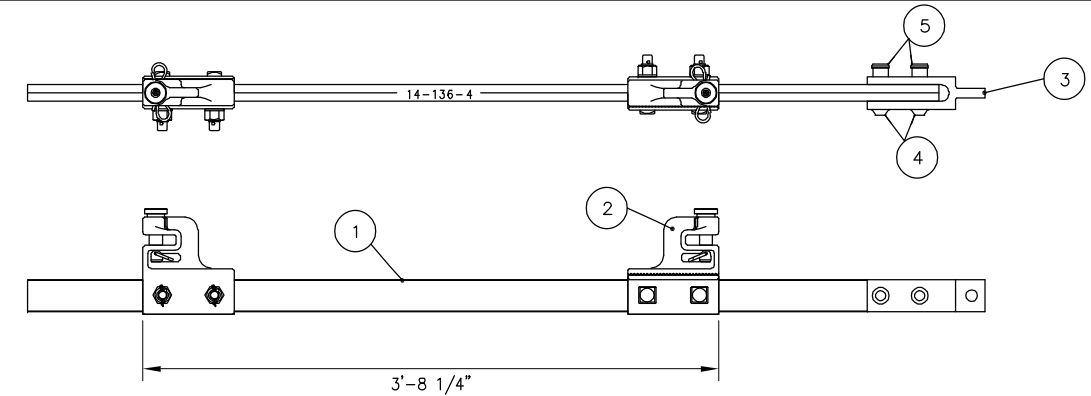
ROD #	A
SWITCH ROD ASSEMBLY 14-136-1	3'- 3 15/16"
SWITCH ROD ASSEMBLY 14-136-2	3'- 4 1/8"
SWITCH ROD ASSEMBLY 14-136-3	3'- 5"
SWITCH ROD ASSEMBLY 14-136-4	3'- 6 5/8"

BILL OF MATERIAL FOR SWITCH ROD 14-136-2			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BLUE ROD, PULTRUDED COMPOSITE, 1 1/4" x 2 1/2" x 5'-10" LONG, 14-136-2A	-
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 1/2" x 2'-7" LONG, 2-B ROD	-



SWITCH ROD ASSEMBLY 14-136-2

BILL OF MATERIAL FOR SWITCH ROD 14-136-4			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH ROD 14-136-4	-
2	2	SWITCH CLIP ASSEMBLY, ADJUSTABLE	-
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)	-



SWITCH ROD ASSEMBLY 14-136-4

NOTES:

- ROD IDENTIFICATION SHALL BE ENGRAVED ON ROD CLEARLY AS SHOWN, 3/8" MIN HEIGHT
- SWITCH RODS MUST BE PARALLEL WITHIN 1/16" OVER LENGTH OF 2-B ROD

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

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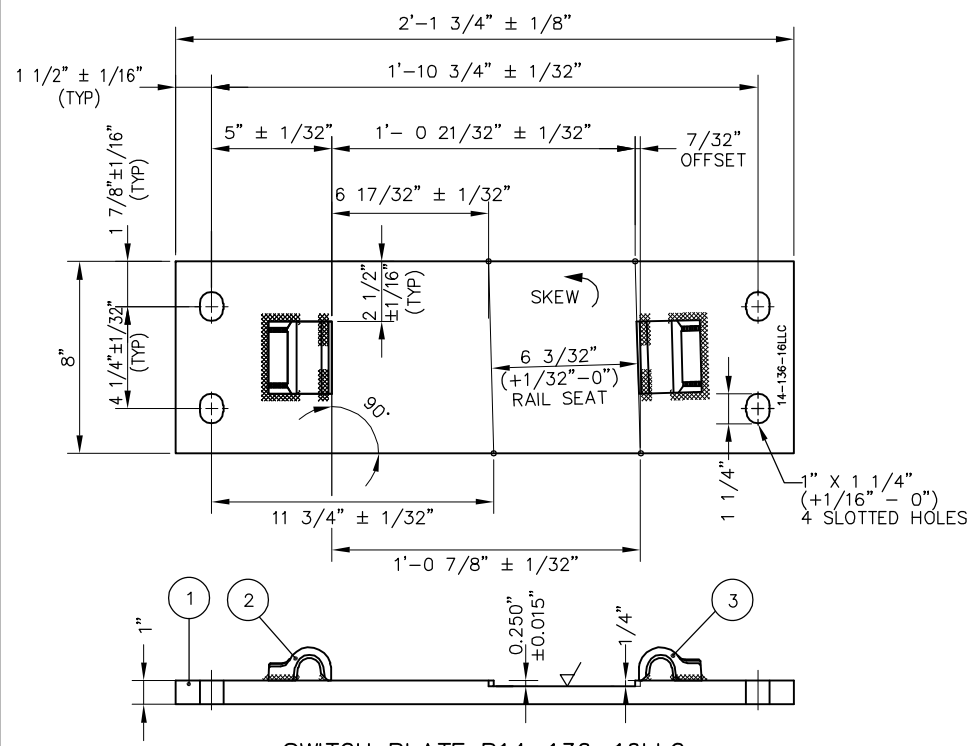


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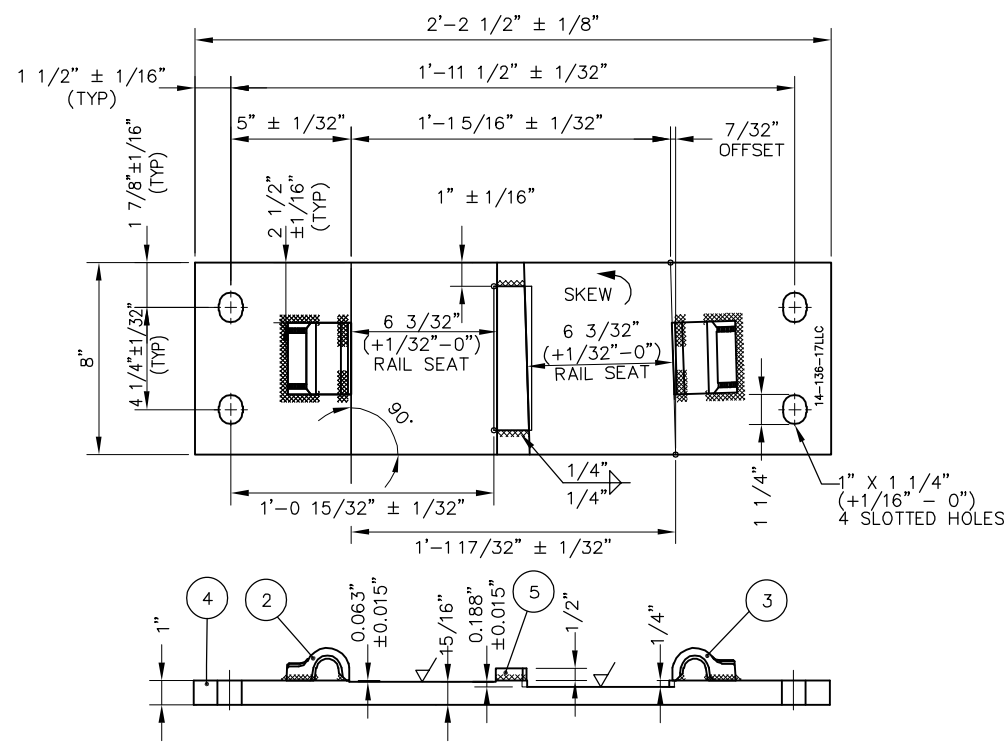
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
HOLLOW STEEL TIE SWITCH
RODS 14-1, 14-2, 14-3 AND 14-4

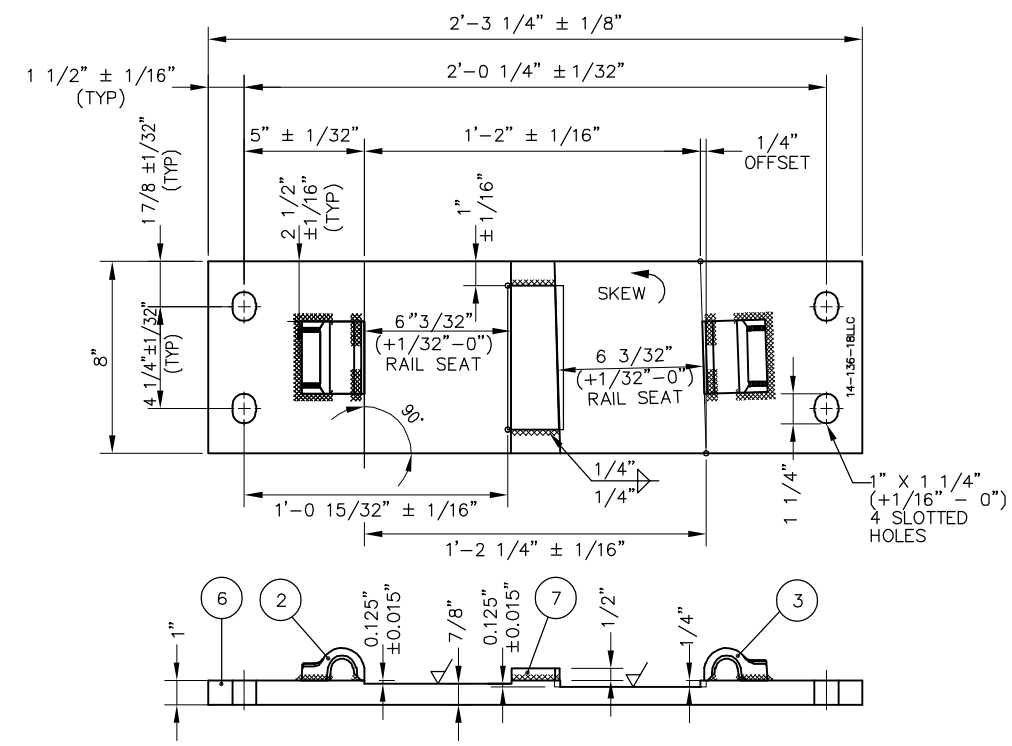
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STANDARD DRAWING NO.: SD-2639



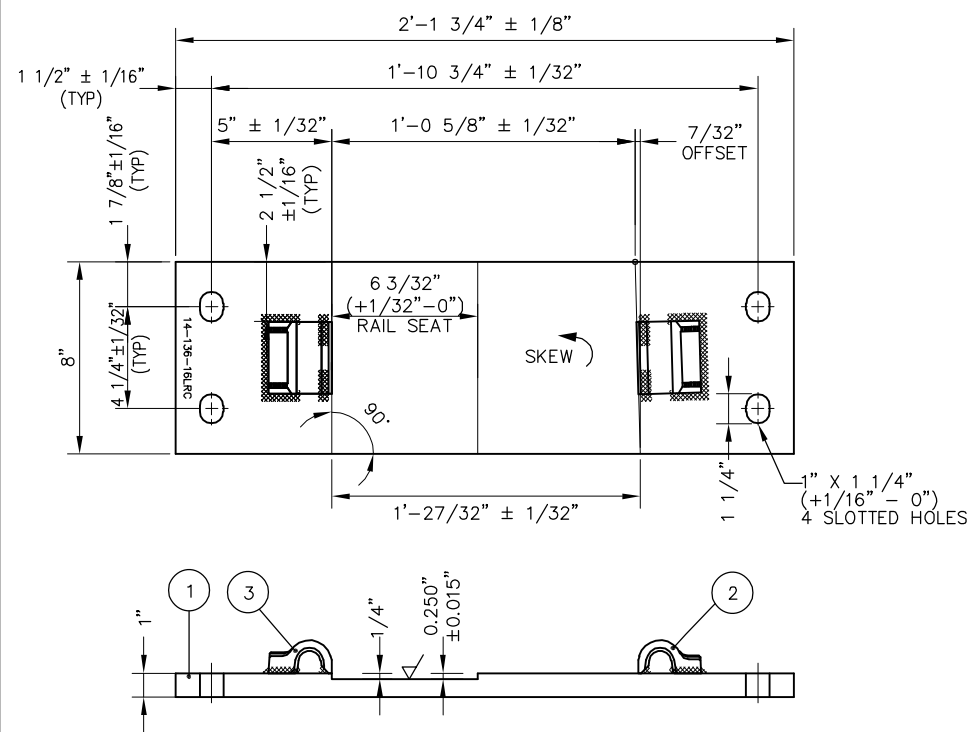
SWITCH PLATE P14-136-16LLC



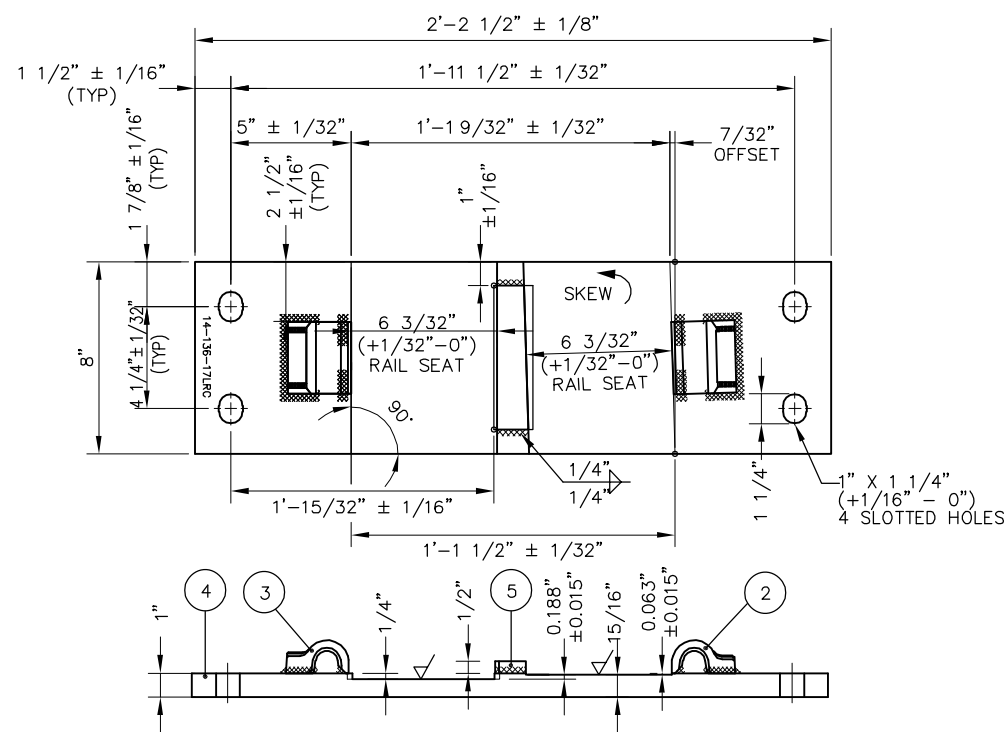
SWITCH PLATE P14-136-17LLC



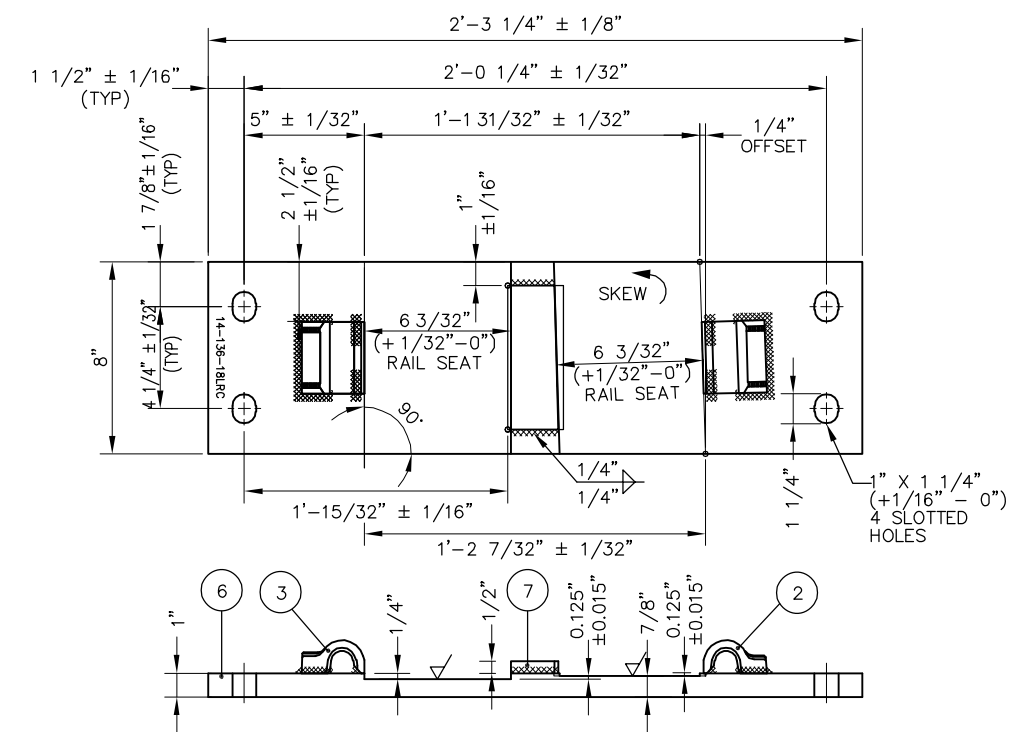
SWITCH PLATE P14-136-18LLC



SWITCH PLATE P14-136-16LRC



SWITCH PLATE P14-136-17LRC



SWITCH PLATE P14-136-18LRC

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

BILL OF MATERIALS	
ITEM	DESCRIPTION
5	FLAT BAR, ASTM A36, 1/2" X 6" X 1 5/8"
6	FLAT BAR, ASTM A36, 1" X 8" X 2'-3 1/4"
7	FLAT BAR, ASTM A36, 1/2" X 6" X 2 5/16"

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

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

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DEPUTY DIRECTOR, ENGINEERING

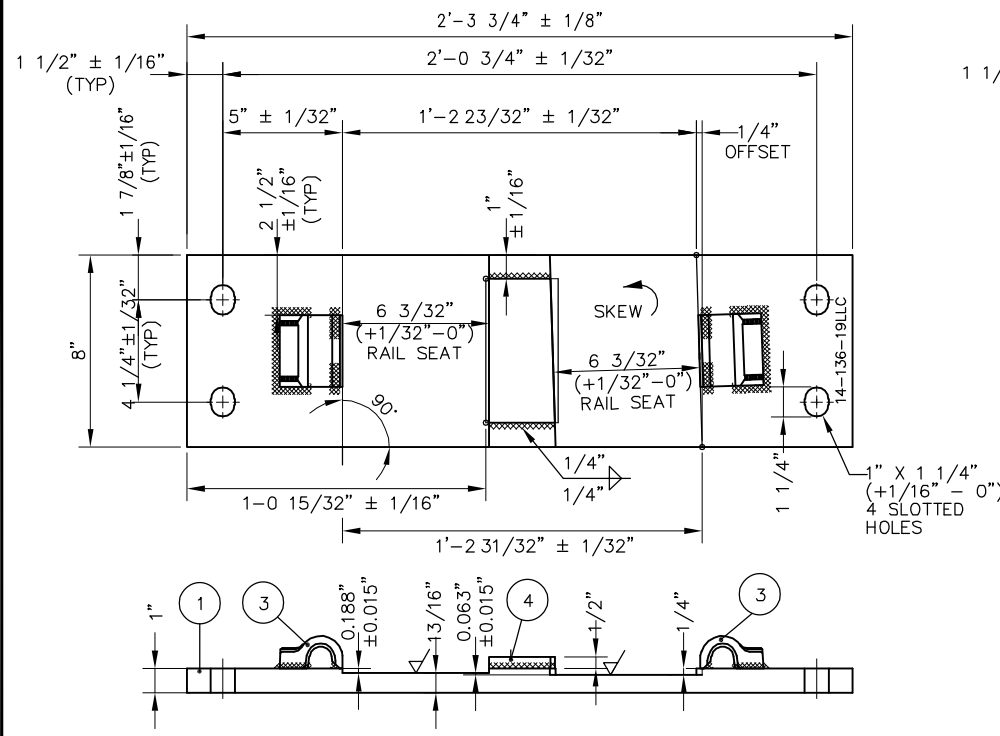


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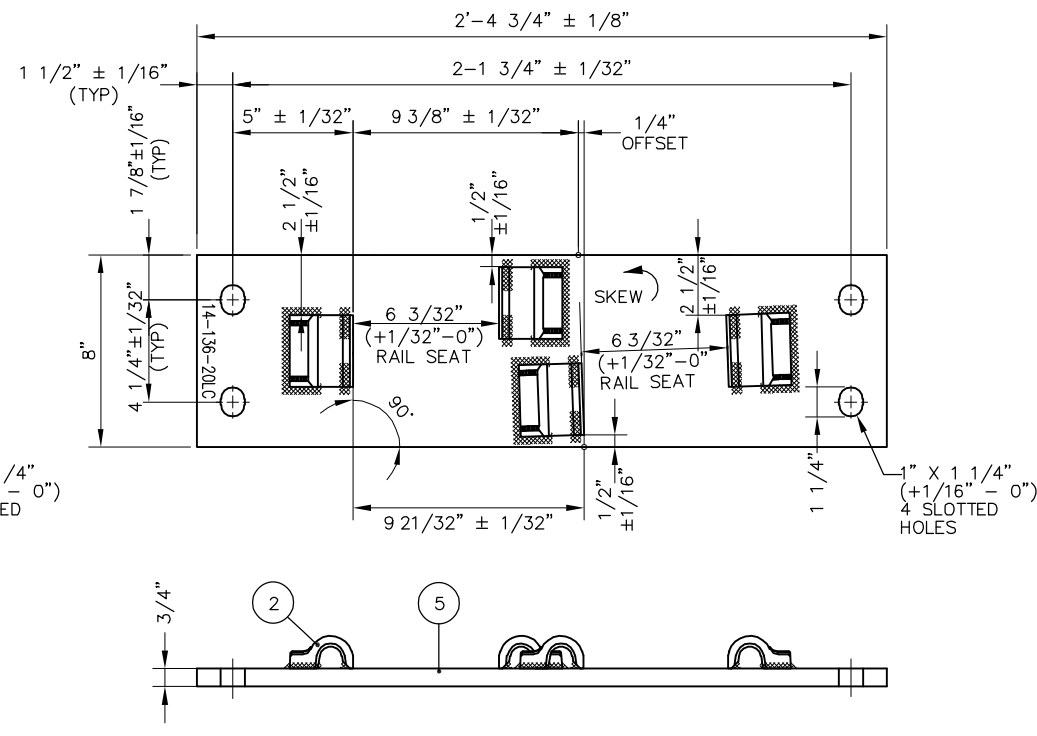
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
SWITCH PLATES
FOR LH TURNOUT
14-16LLC/LRC THRU 14-18LLC/LRC

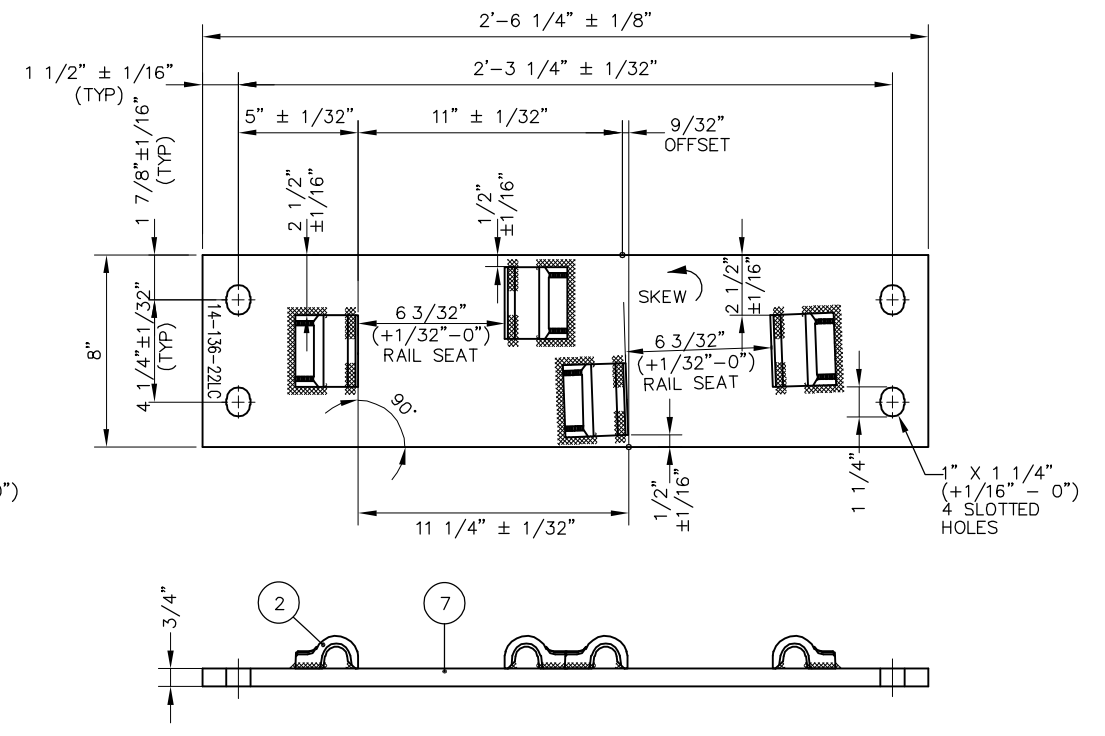
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SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2640	



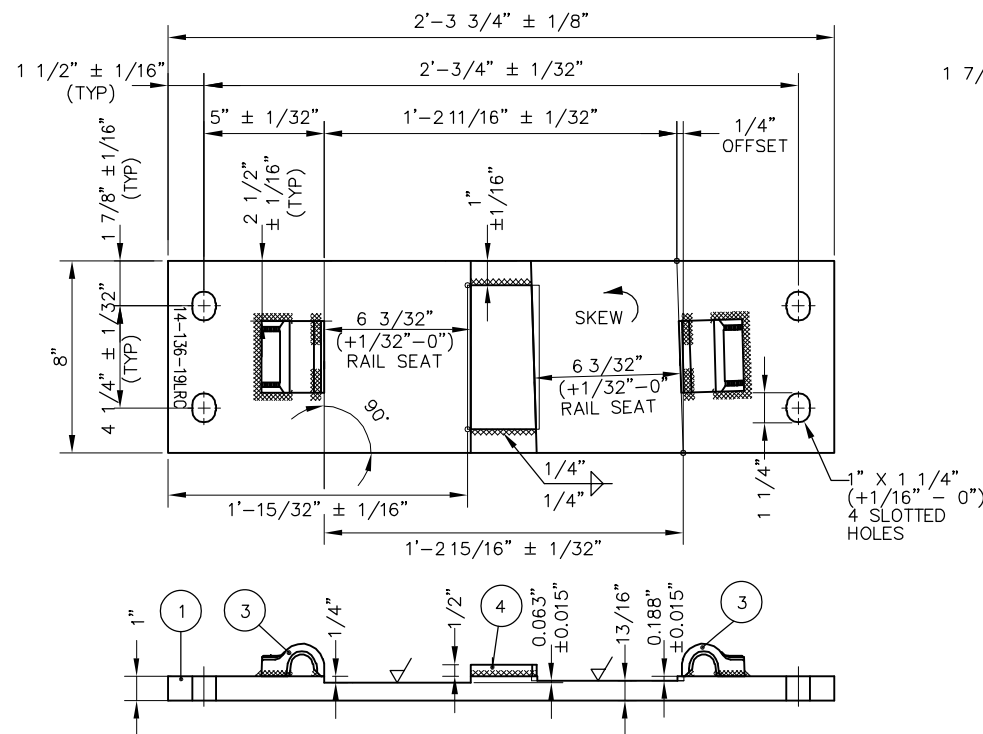
SWITCH PLATE P14-136-19LLC



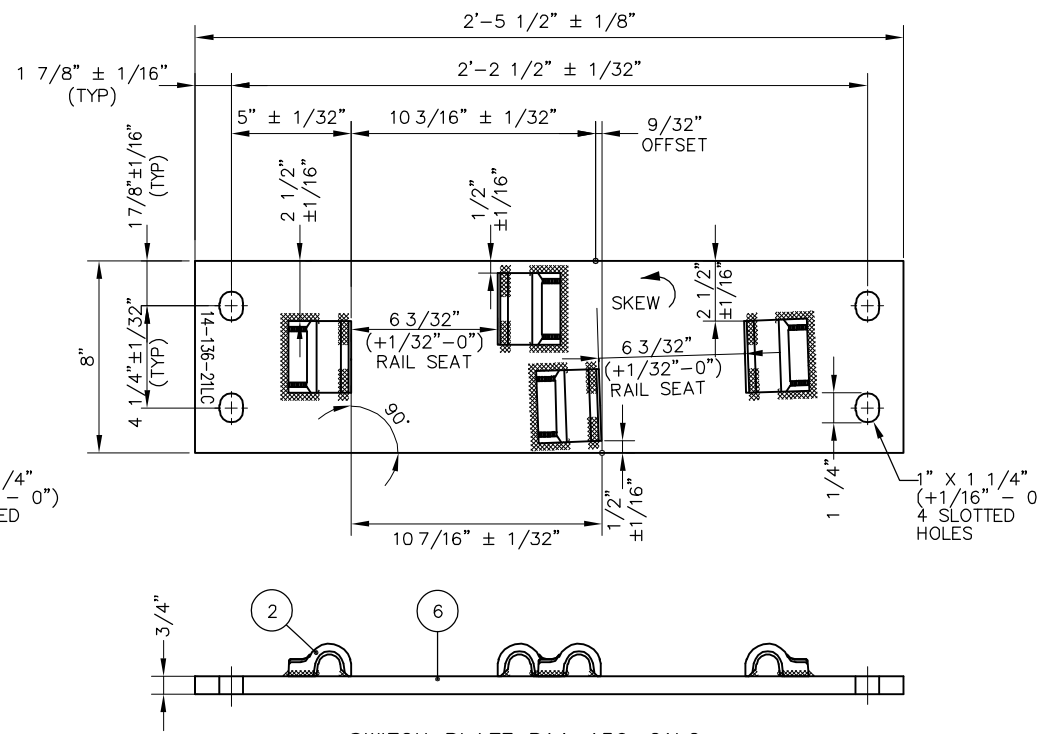
SWITCH PLATE P14-136-20LC



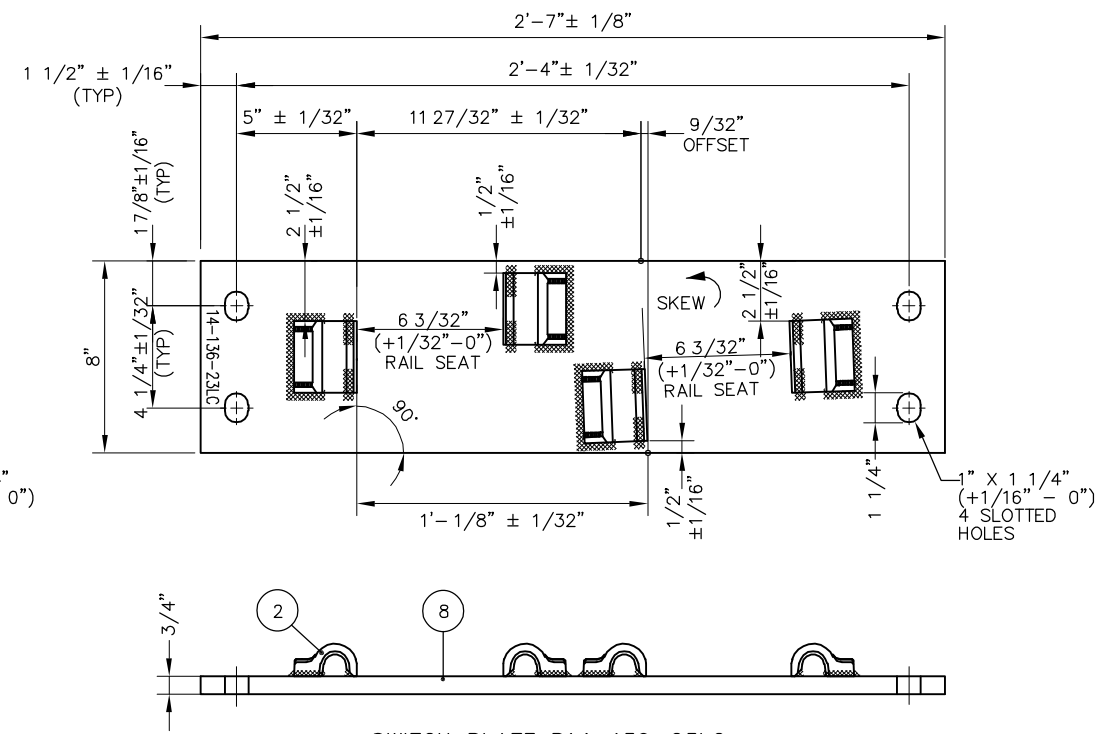
SWITCH PLATE P14-136-22LC



SWITCH PLATE P14-136-19LRC



SWITCH PLATE P14-136-21LC



SWITCH PLATE P14-136-23LC

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

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

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



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San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
SWITCH PLATES
FOR LH TURNOUT

14-19LLC/LRC, 14-20LC THRU 14-23LC

CADD FILE NAME:
SD-2641

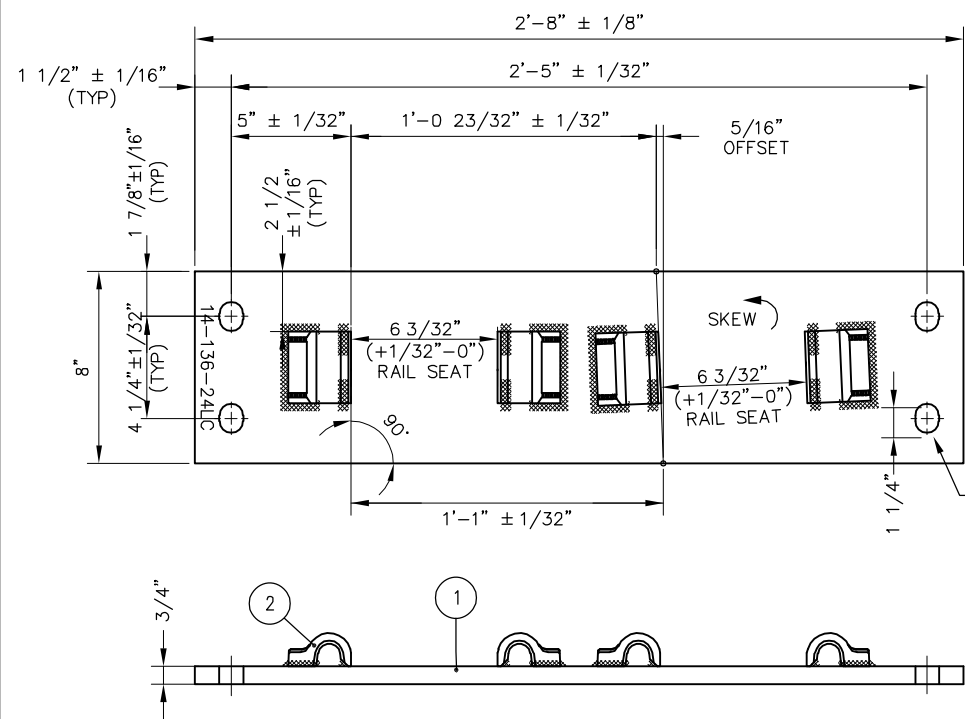
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SPECIAL TRACKWORK

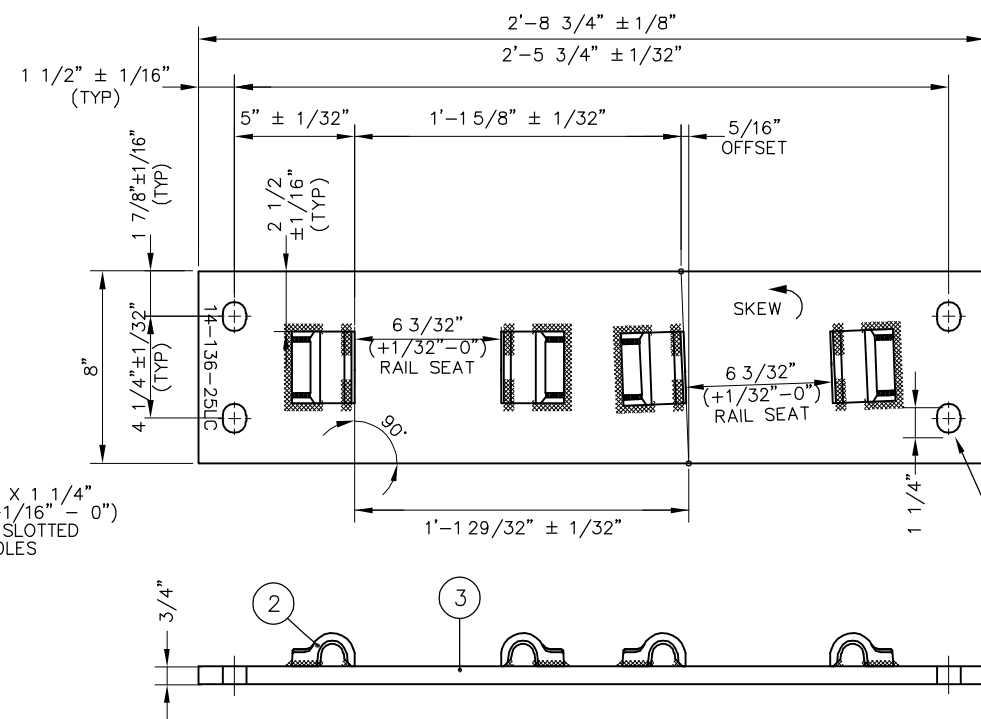
STANDARD DRAWING NO.:
SD-2641

REV	DATE	BY	CHK	APP	DESCRIPTION
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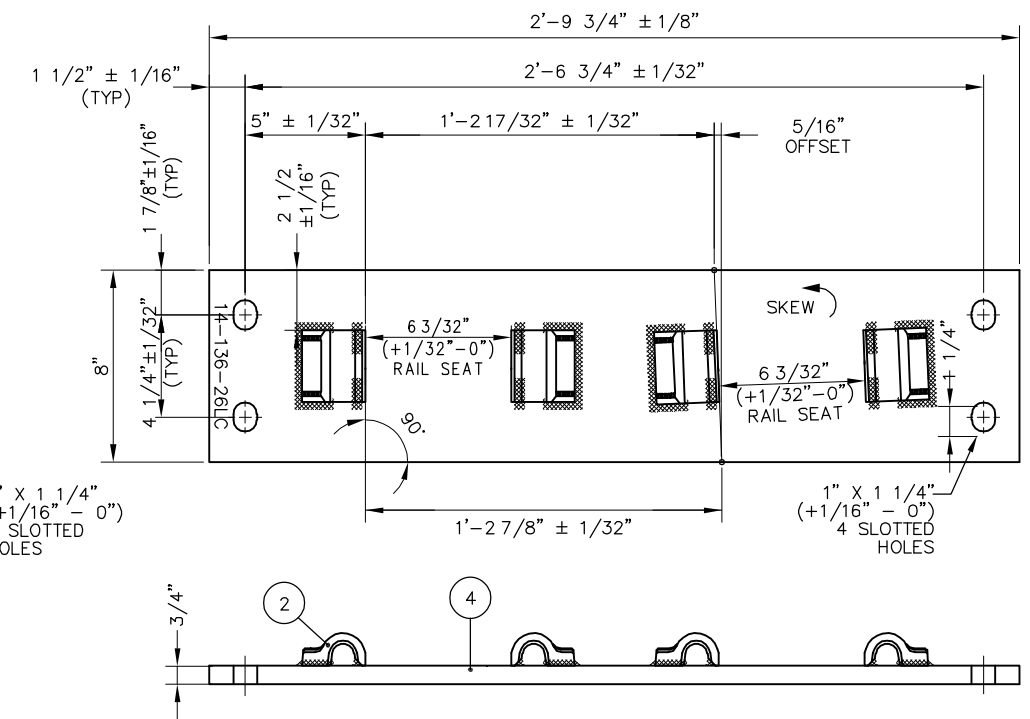
REV	DATE	BY	CHK	APP	DESCRIPTION



SWITCH PLATE P14-136-24LC



SWITCH PLATE P14-136-25LC



SWITCH PLATE P14-136-26LC

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

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:

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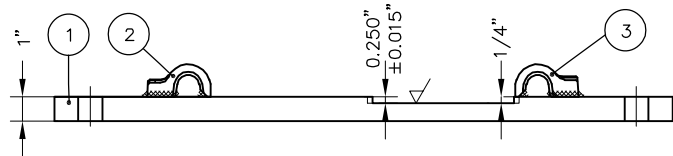
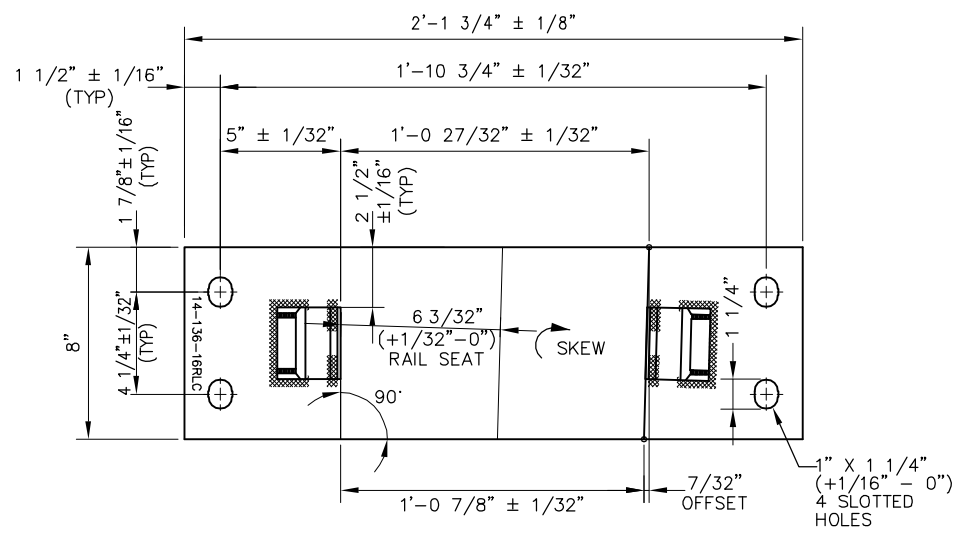


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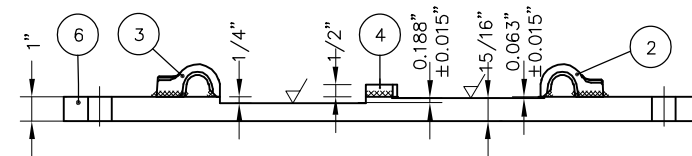
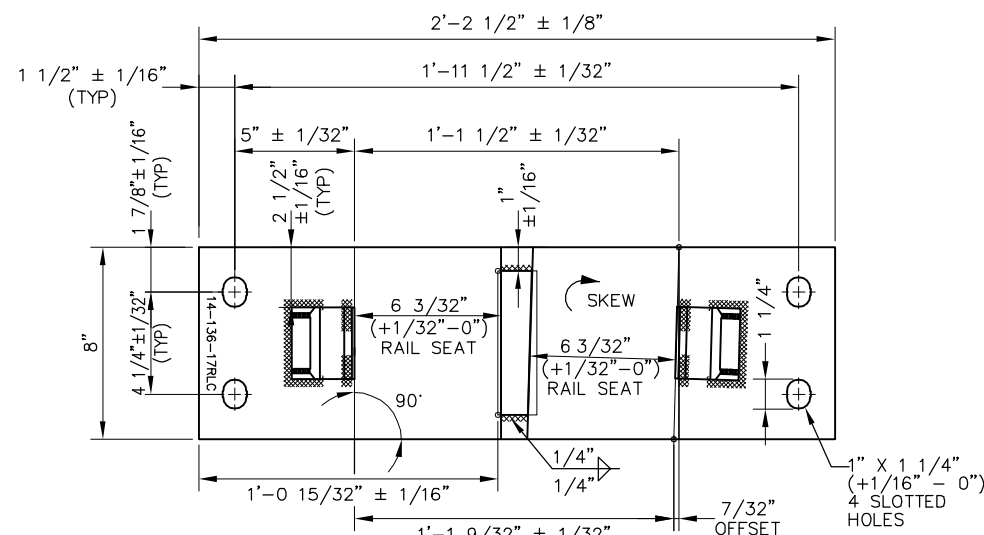
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
SWITCH PLATES FOR LH TURNOUT
14-24LC THRU 14-26LC

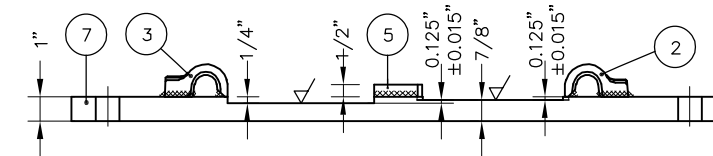
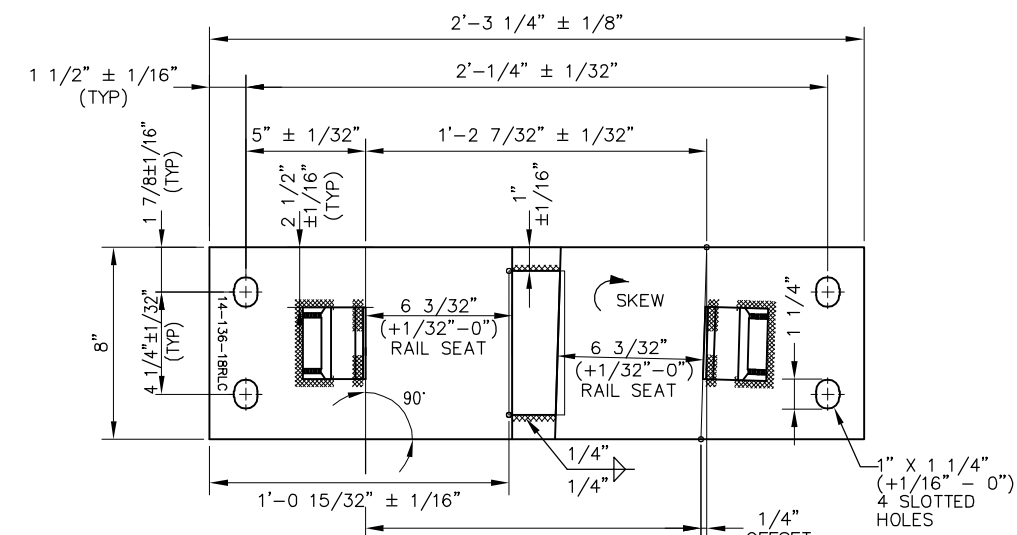
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REV:	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2642



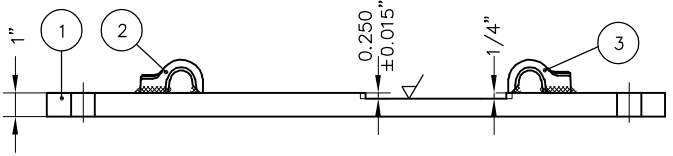
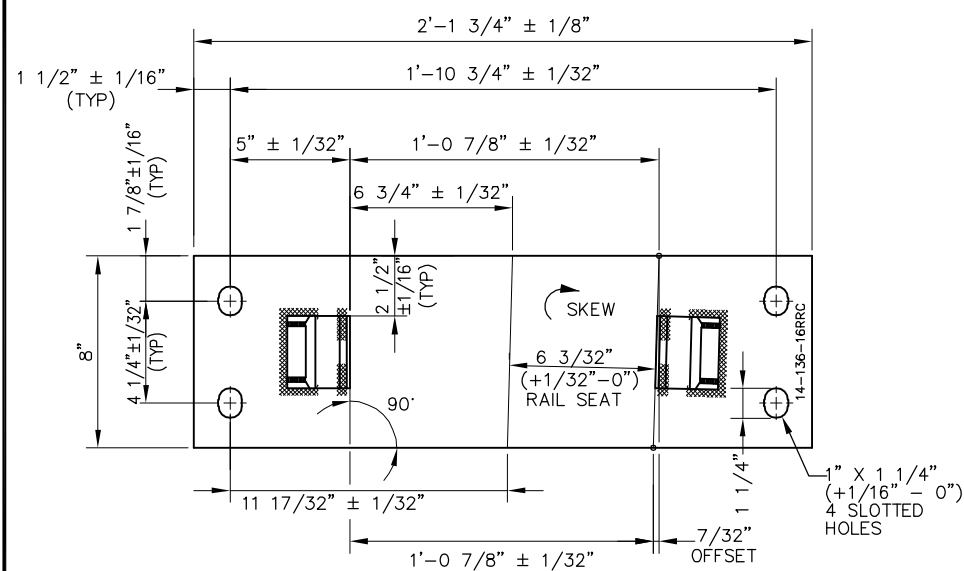
SWITCH PLATE P14-136-16RLC



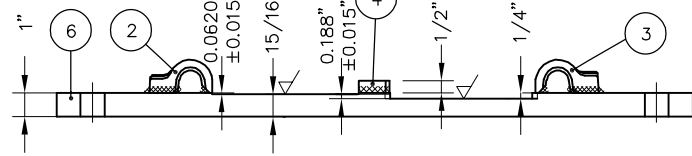
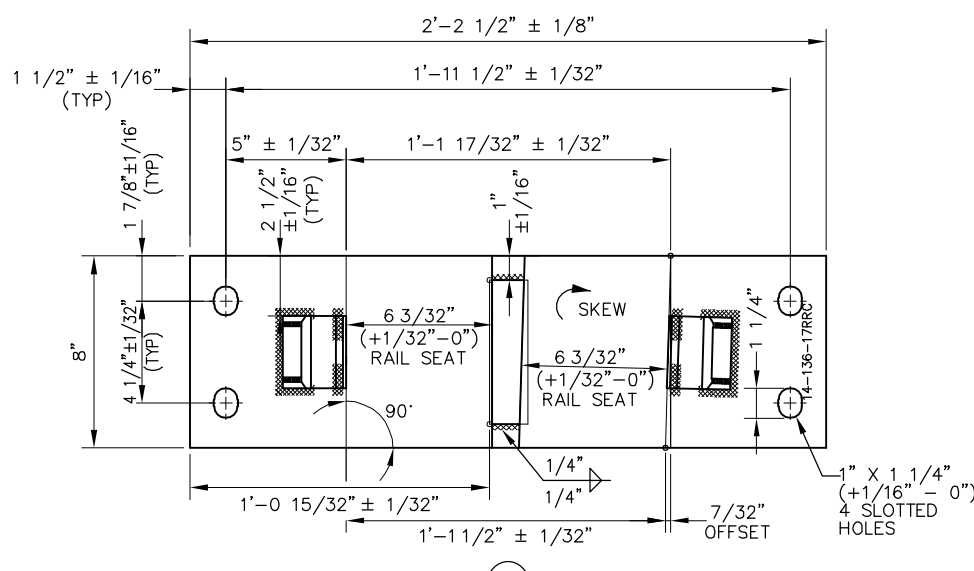
SWITCH PLATE P14-136-17RLC



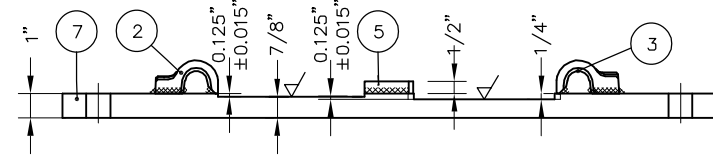
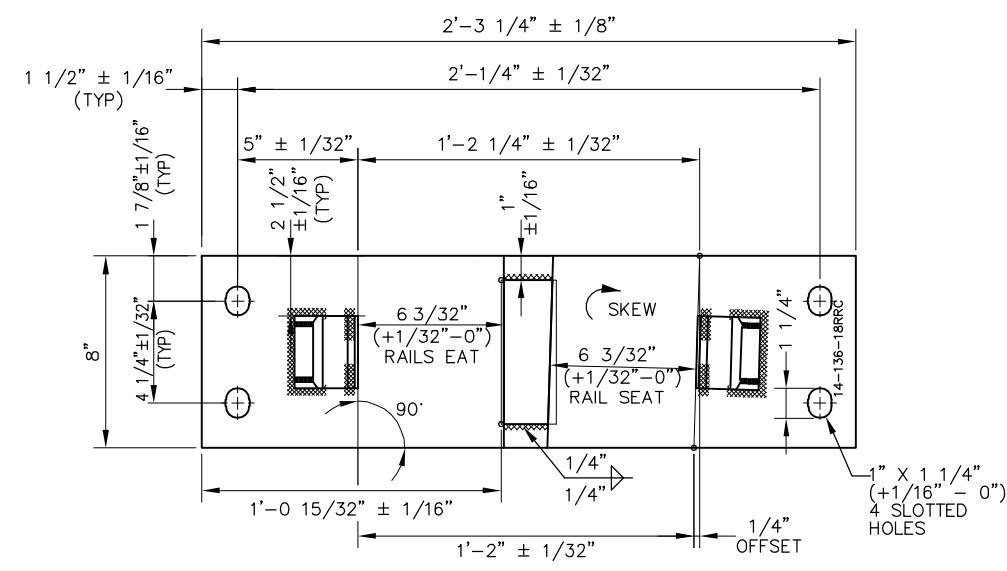
SWITCH PLATE P14-136-18RLC



SWITCH PLATE P14-136-16RRC



SWITCH PLATE P14-136-17RRC



SWITCH PLATE P14-136-18RRC

BILL OF MATERIALS				
ITEM	DESCRIPTION	ITEM	DESCRIPTION	
1	FLAT BAR, ASTM A36, 1" x 8" x 2'-1 3/4"	5	FLAT BAR, ASTM A36, 1/2" x 6" x 2 5/16"	
2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	6	FLAT BAR, ASTM A36, 1" x 8" x 2'-2 1/2"	
3	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 5	7	FLAT BAR, ASTM A36, 1" x 8" x 2'-3 1/4"	
4	FLAT BAR, ASTM A36, 1/2" x 6" x 1 5/8"			

BILL OF MATERIALS				
ITEM	DESCRIPTION	ITEM	DESCRIPTION	
5	FLAT BAR, ASTM A36, 1/2" x 6" x 2 5/16"	5	FLAT BAR, ASTM A36, 1/2" x 6" x 2 5/16"	
6	FLAT BAR, ASTM A36, 1" x 8" x 2'-2 1/2"	6	FLAT BAR, ASTM A36, 1" x 8" x 2'-2 1/2"	
7	FLAT BAR, ASTM A36, 1" x 8" x 2'-3 1/4"	7	FLAT BAR, ASTM A36, 1" x 8" x 2'-3 1/4"	

NOTES:

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

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



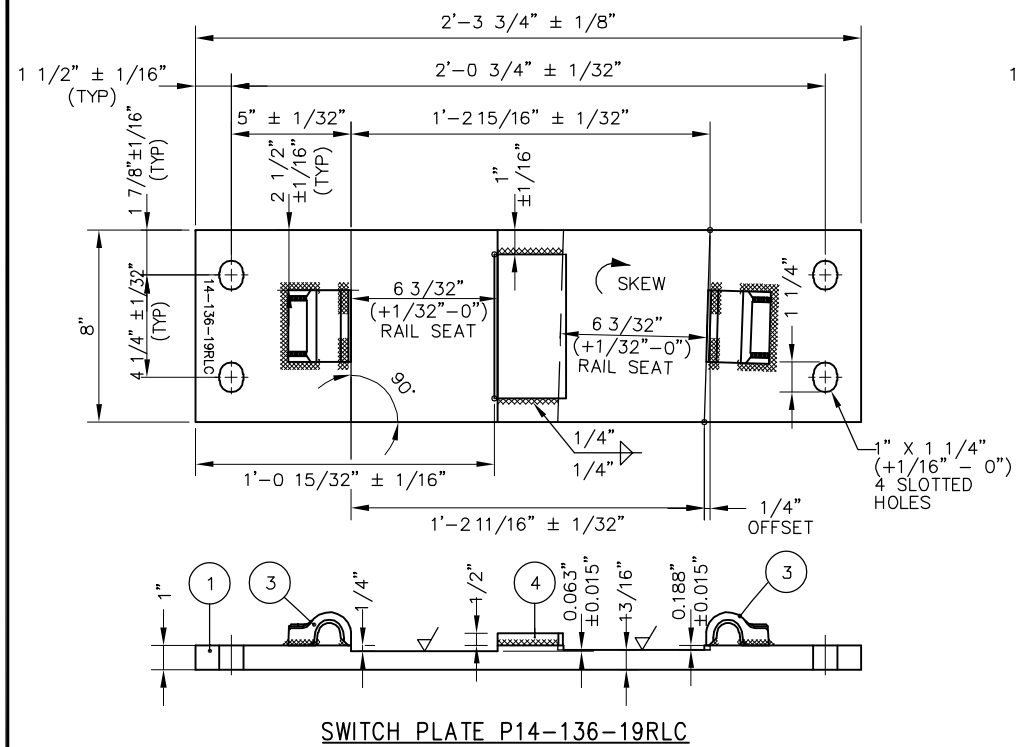
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

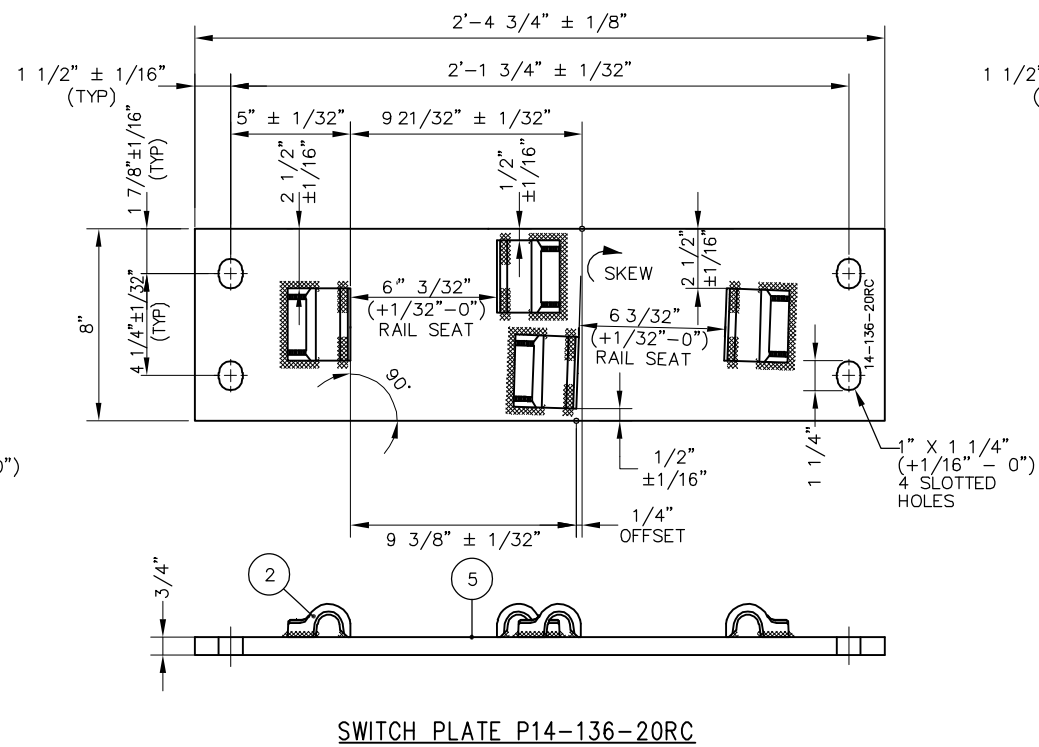
SPECIAL TRACKWORK
NO. 14 TURNOUT
SWITCH PLATES
FOR RH TURNOUT
14-16RLC/RRC THRU 14-18RLC/RRC

CADD FILE NAME:	SD-2643
REV:	EDITION: FOURTH
	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2643

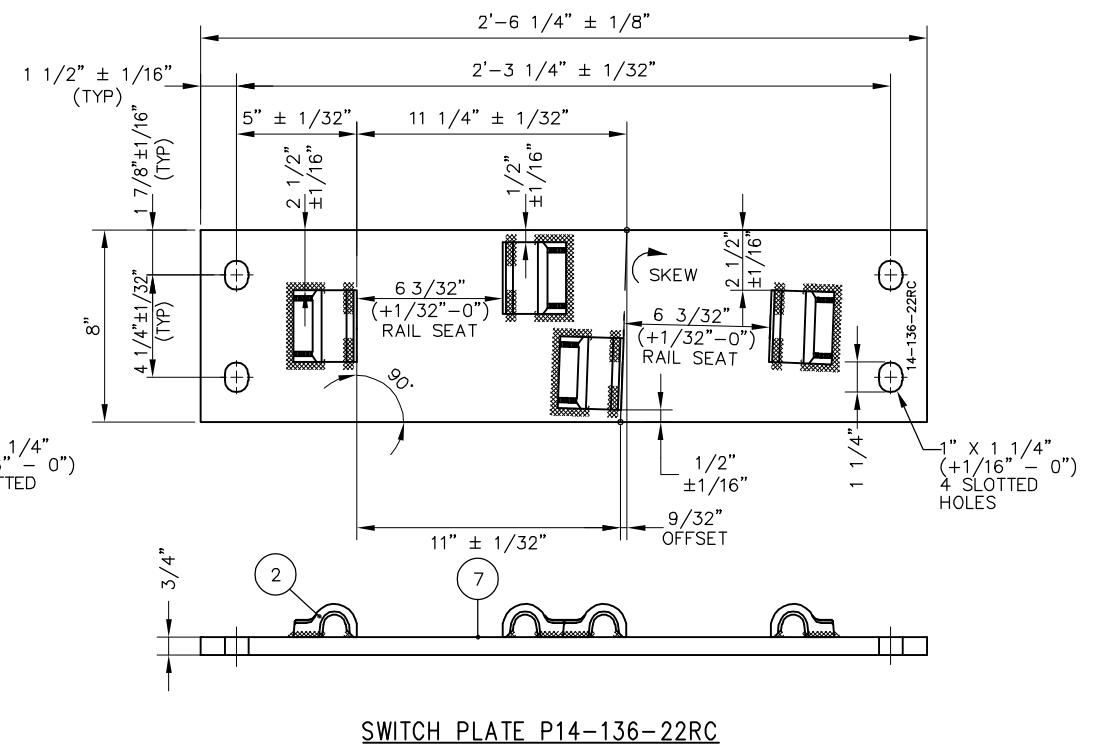
REV	DATE	BY	CHK	APP	DESCRIPTION	REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION						



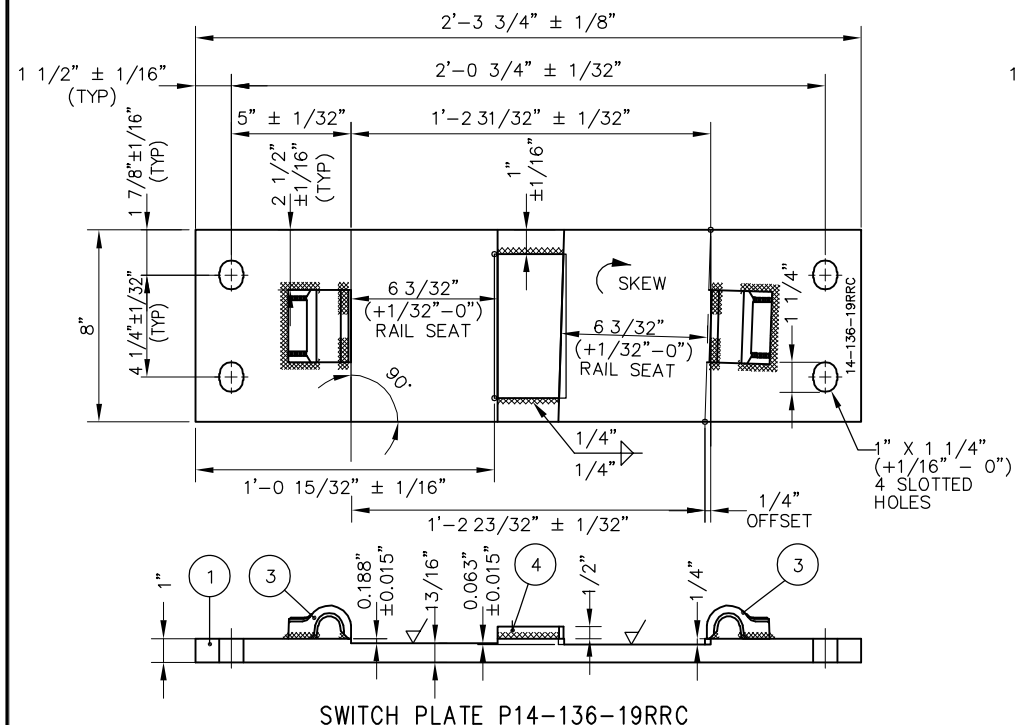
SWITCH PLATE P14-136-19RLC



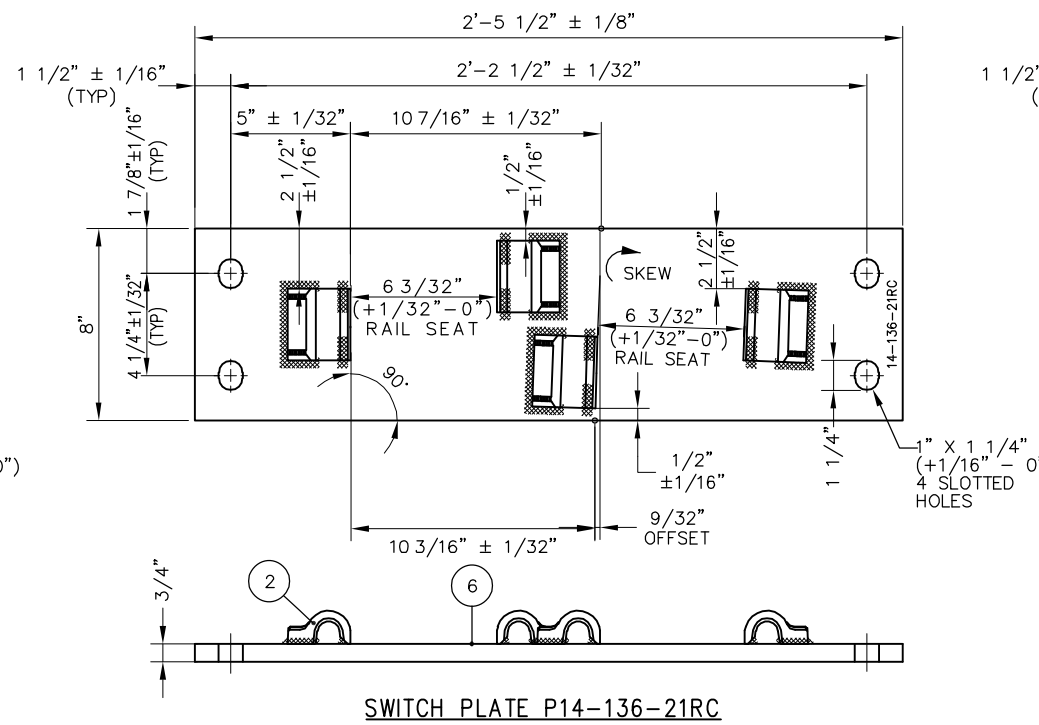
SWITCH PLATE P14-136-20RC



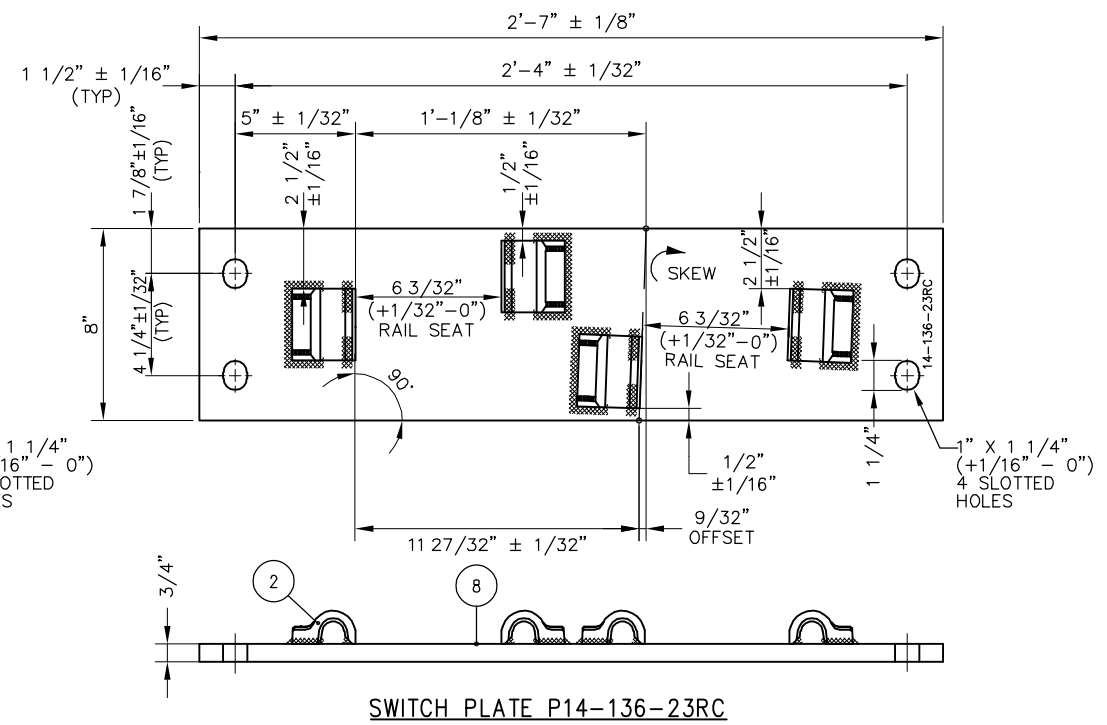
SWITCH PLATE P14-136-22RC



SWITCH PLATE P14-136-19RRC



SWITCH PLATE P14-136-21RC



SWITCH PLATE P14-136-23RC

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

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

NOTES:

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

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING

STANDARD DRAWINGS

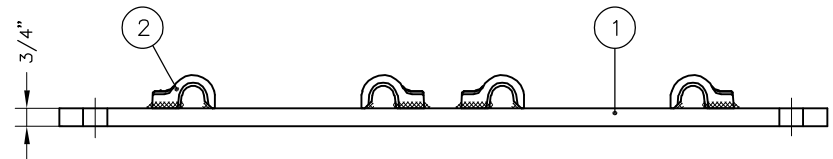
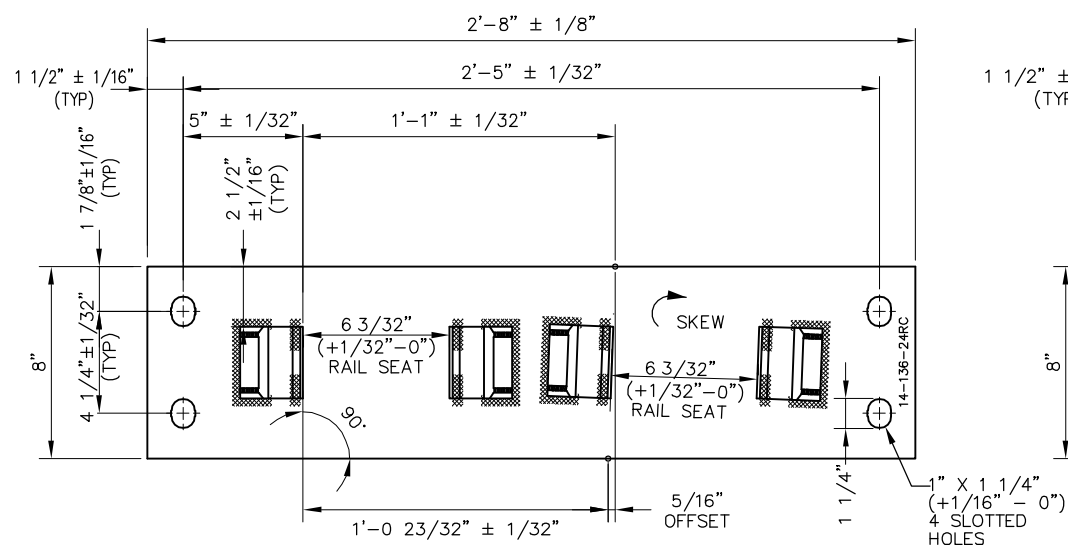
SPECIAL TRACKWORK
NO. 14 TURNOUT
SWITCH PLATES
FOR RH TURNOUT

14-19RLC/RRC, 14-20RC THRU 14-23RC

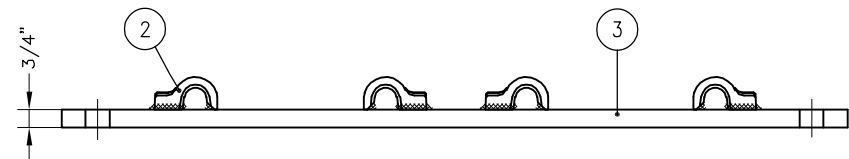
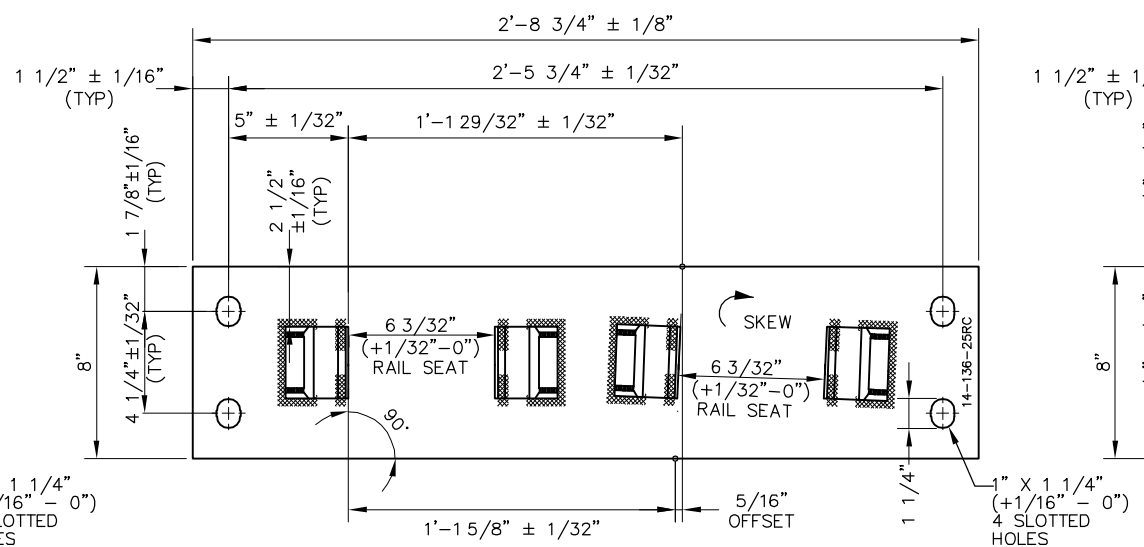
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REV:	EDITION: FOURTH
	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2644



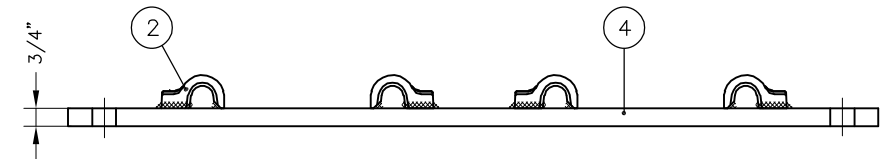
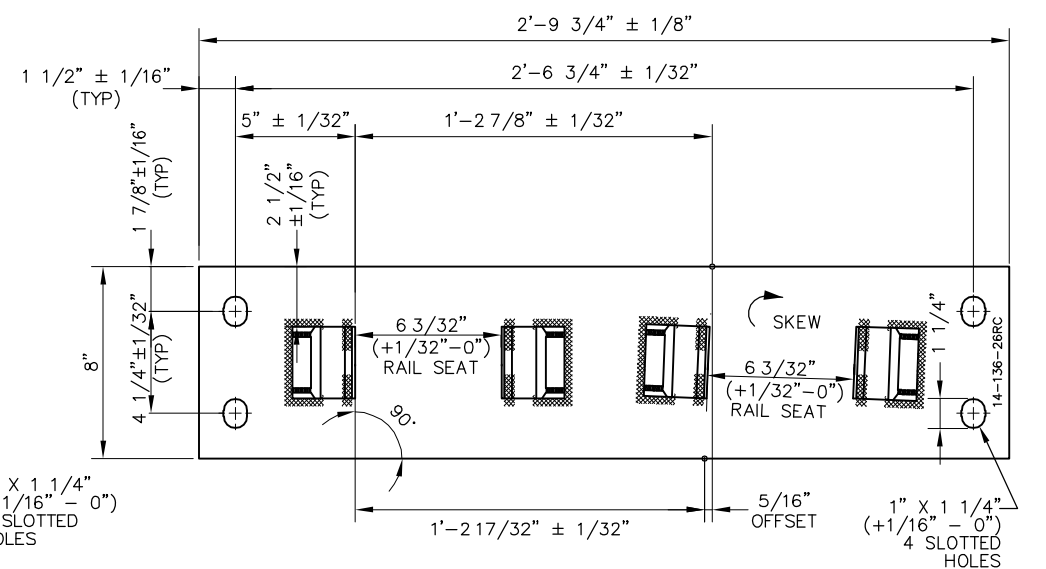
1250 San Carlos Avenue
San Carlos, CA 94070



SWITCH PLATE P14-136-24RC



SWITCH PLATE P14-136-25RC



SWITCH PLATE P14-136-26RC

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

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

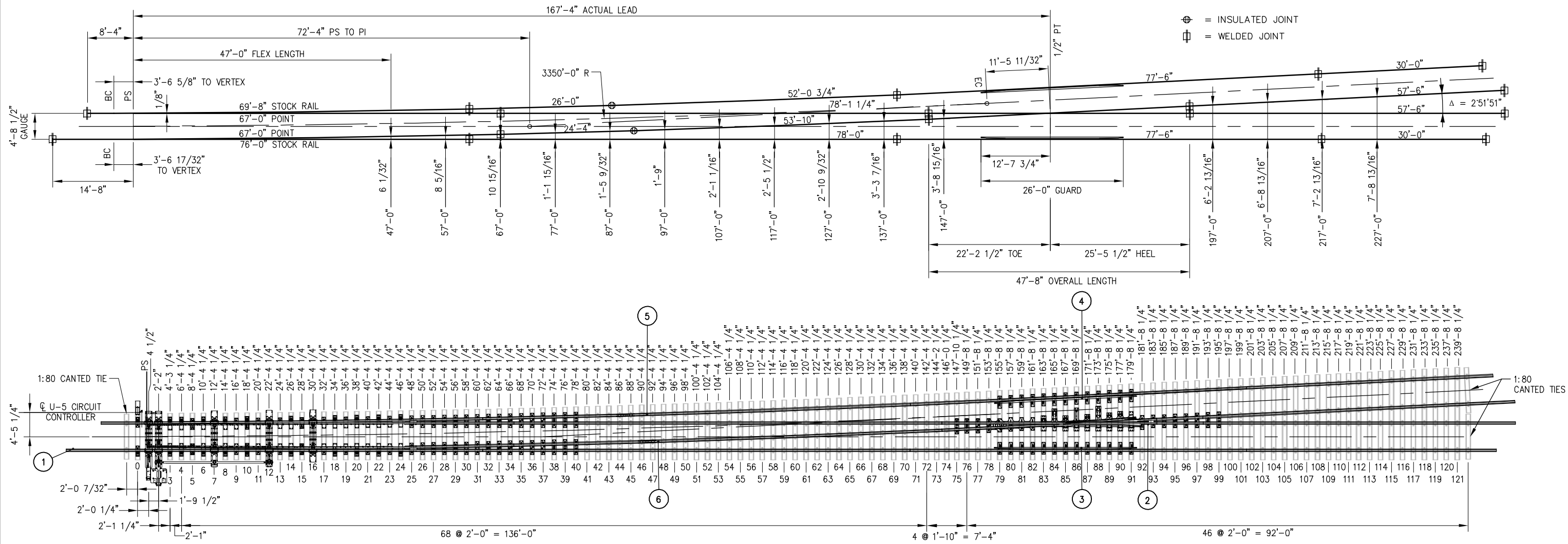
DEPUTY DIRECTOR, ENGINEERING

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 14 TURNOUT
SWITCH PLATES FOR RH TURNOUT
14-24RC THRU 14-26RC

CADD FILE NAME:	SD-2645
REV:	EDITION:
	FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.:	SD-2645

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH PACK, NO 20-136 LB RE MODIFIED TANGENTIAL, LH, HST	SD-2705	12	492	TIE SCREW, CONCRETE 7/8" DIA X 6" HEX HEAD	-
2	1	FROG PACK, NO 20-136 LB RE WSM, LH	SD-2721	13	492	WASHER FLAT 7/8" TYPE A NARROW 15/16" X 1 3/4" X 0.134"	-
3	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LG, 136 LB RE RAISED 1", STRAIGHT	SD-2738	14	492	SPRING WASHER, DOUBLE COIL (FE6)	-
4	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LG, 136 LB RE RAISED 1", LH	SD-2737	15	1	CONCRETE TIE SET, 0-121 + (3) 1:80 TIES, PLATE PADS, PIM INSERTS, LH	-
5	1	INSULATED RAIL ASSEMBLY, 78'-0 3/4" C/W BONDED INSULATED JOINT	-	16	500	CLIP PANDROL E2055	-
6	1	INSULATED RAIL ASSEMBLY, 78'-2" C/W BONDED INSULATED JOINT	-	17	500	INSULATOR PANDROL FEATURES BASE HOLDOWN NYLON HD-10	-
7	2	DRILLED RAIL, 136 LB RE, 30'-0" LONG	-	18	8	CLIP PANDROL E2063	-
8	2	DRILLED RAIL, 136 LB RE, 57'-6" LONG	-	19	8	INSULATION, PANDROL NYLON 6790	-
9	2	DRILLED RAIL, 136 LB RE, 77'-6" LONG	-	20	254	TIE PAD PANDROL 6993SR	-
10	1	DRILLED RAIL, 136 LB RE, 78'-0" LONG	-	21	246	SHIM, TO REDUCE PLATE FLEXURE	-
11	1	DRILLED RAIL, 136 LB RE, 78'-1 1/4" LONG	-				



NOTES:

- ALL RAILS SHALL HAVE IDENTIFICATION COLOR CODE PAINTED ON WEB, CLEAR OF JOINT AREA
- RAIL LENGTHS ALLOW 1/8" GAP BETWEEN RAIL JOINTS FOR WELDING
- GUARD RAILS ARE RAISED 1" AND FORM A 1 7/8" FLANGWAY
- COORDINATE SWITCH MACHINE AND MACHINE PLATE (NIC) WITH CALTRAIN
- ALL TIE LENGTHS SHALL INCLUDE 1'-9" FROM TIE ENDS TO RAIL CENTERLINE, EXCEPT AS NOTED AND 1:80 CANTED TIES
- TIGHTEN TIE SCREW WITH DOUBLE COIL SPRING WASHER IN PLACE
- SCHWIHAG ROLLERS SHALL BE INSTALLED AND ADJUSTED IN THE FIELD

TURNOUT DATA:

FROG	NO 20	Δ = 2'51"51"	SWITCH	LENGTH OF POINT:	47'-0" / 67'-0"	ACTUAL LEAD:	167'-4"
	TOE LENGTH:	22'-2 1/2"		VERTEX DISTANCE:	VARIABLE PER SIDE	CLOSURE AREA	
	HEEL LENGTH:	25'-5 1/2"		ENTRY ANGLE:	0'11"55"	CENTERLINE RADIUS:	3350'-0"
	TOTAL LENGTH:	47'-8"		THICKNESS AT POINT:	1/8"	DEGREE OF CURVE:	1'42"37"
				THROW AT ROD # 1:	4 3/4"	DESIGN SPEEDS	
						50 MPH PASSENGER @ 3" UNBALANCE	
						40 MPH FREIGHT @ 2" UNBALANCE	


REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



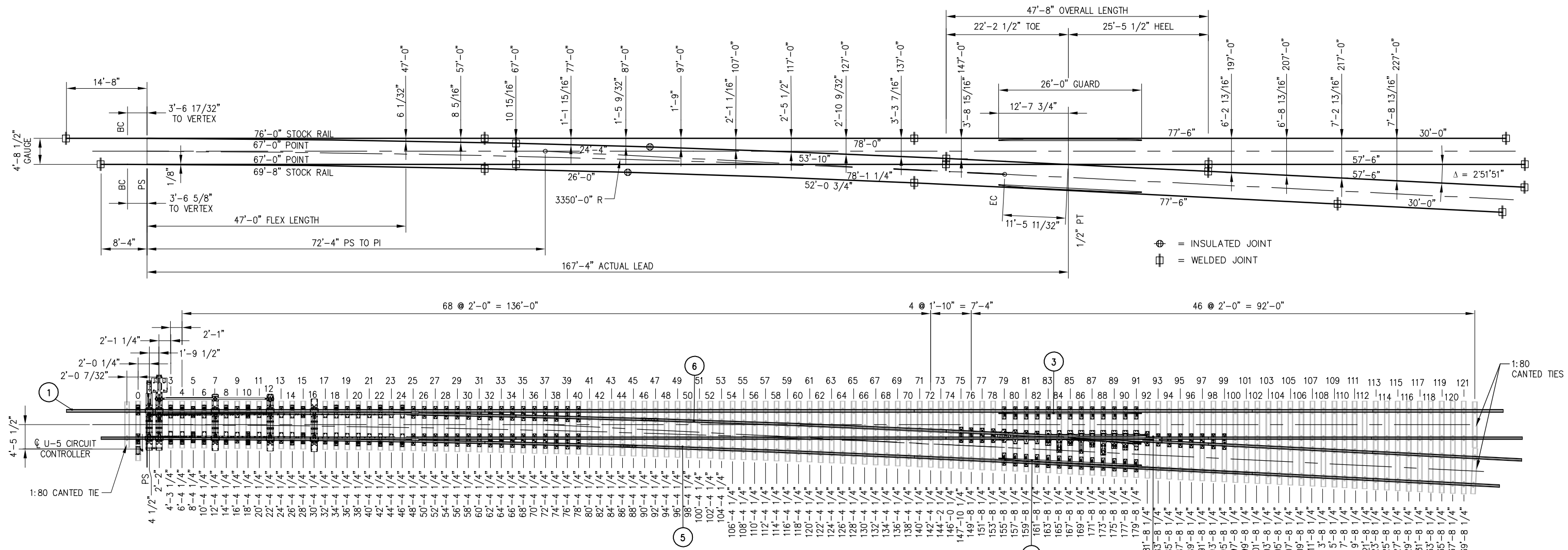
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
NO. 20 LH TURNOUT WITH
WSM FROG AND HST SWITCH MACHINE
ON MAINLINE SIDE

CADD FILE NAME: SD-2701
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO: SD-2701

BILL OF MATERIAL					BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO		
1	1	SWITCH PACK, NO 20-136 LB RE MODIFIED TANGENTIAL, RH, HST	SD-2706	12	492	TIE SCREW, CONCRETE 7/8" DIA X 6" HEX HEAD	-		
2	1	FROG PACK, NO 20-136 LB RE WSM, RH	SD-2722	13	492	WASHER FLAT 7/8" TYPE A NARROW 15/16" X 1 3/4" X 0.134"	-		
3	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LG, 136 LB RE RAISED 1", STRAIGHT	SD-2737	14	492	SPRING WASHER, DOUBLE COIL (FE6)	-		
4	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LG, 136 LB RE RAISED 1", RH	SD-2738	15	1	CONCRETE TIE SET, 0-121 + (3) 1:80 TIES, PLATE PADS, PIM INSERTS, RH	-		
5	1	INSULATED RAIL ASSEMBLY, 78'-0 3/4" C/W BONDED INSULATED JOINT	-	16	500	CLIP PANDROL E2055	-		
6	1	INSULATED RAIL ASSEMBLY, 78'-2" C/W BONDED INSULATED JOINT	-	17	500	INSULATOR PANDROL FEATURES BASE HOLDOWN NYLON HD-10	-		
7	2	DRILLED RAIL, 136 LB RE, 30'-0" LONG	-	18	8	CLIP PANDROL E2063	-		
8	2	DRILLED RAIL, 136 LB RE, 57'-6" LONG	-	19	8	INSULATION, PANDROL NYLON 6790	-		
9	2	DRILLED RAIL, 136 LB RE, 77'-6" LONG	-	20	254	TIE PAD PANDROL 6993SR	-		
10	1	DRILLED RAIL, 136 LB RE, 78'-0" LONG	-	21	246	SHIM, TO REDUCE PLATE FLEXURE	-		
11	1	DRILLED RAIL, 136 LB RE, 78'-1 1/4" LONG	-						



NOTES:

- ALL RAILS SHALL HAVE IDENTIFICATION COLOR CODE PAINTED ON WEB, CLEAR OF JOINT AREA
- RAIL LENGTHS ALLOW 1/8" GAP BETWEEN RAIL JOINTS FOR WELDING
- GUARD RAILS ARE RAISED 1" AND FORM A 1 7/8" FLANGEWAY
- COORDINATE SWITCH MACHINE AND MACHINE PLATE (NIC) WITH CALTRAIN
- ALL TIE LENGTHS SHALL INCLUDE 1'-9" FROM TIE ENDS TO RAIL CENTERLINE, EXCEPT AS NOTED AND 1:80 CANTED TIES
- TIGHTEN TIE SCREW WITH DOUBLE COIL SPRING WASHER IN PLACE
- SCHWIHAG ROLLERS SHALL BE INSTALLED AND ADJUSTED IN THE FIELD

TURNOUT DATA:

FROG
 NO 20: Δ = 2'51"51"
 TOE LENGTH: 22'-2 1/2"
 HEEL LENGTH: 25'-5 1/2"
 TOTAL LENGTH: 47'-8"

SWITCH
 LENGTH OF POINT: 47'-0" / 67'-0"
 VERTEX DISTANCE: VARIES PER SIDE
 ENTRY ANGLE: 0'11"55"
 THICKNESS AT POINT: 1/8"
 THROW AT ROD # 1: 4 3/4"

ACTUAL LEAD: 167'-4"
CLOSURE AREA
 CENTERLINE RADIUS: 3350'-0"
 DEGREE OF CURVE: 1'42"37"
DESIGN SPEEDS
 50 MPH PASSENGER @ 3" UNBALANCE
 40 MPH FREIGHT @ 2" UNBALANCE

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
 NO. 20 RH TURNOUT WITH
 WSM FROG AND HST SWITCH MACHINE
 ON MAINLINE SIDE

CADD FILE NAME:
 SD-2702

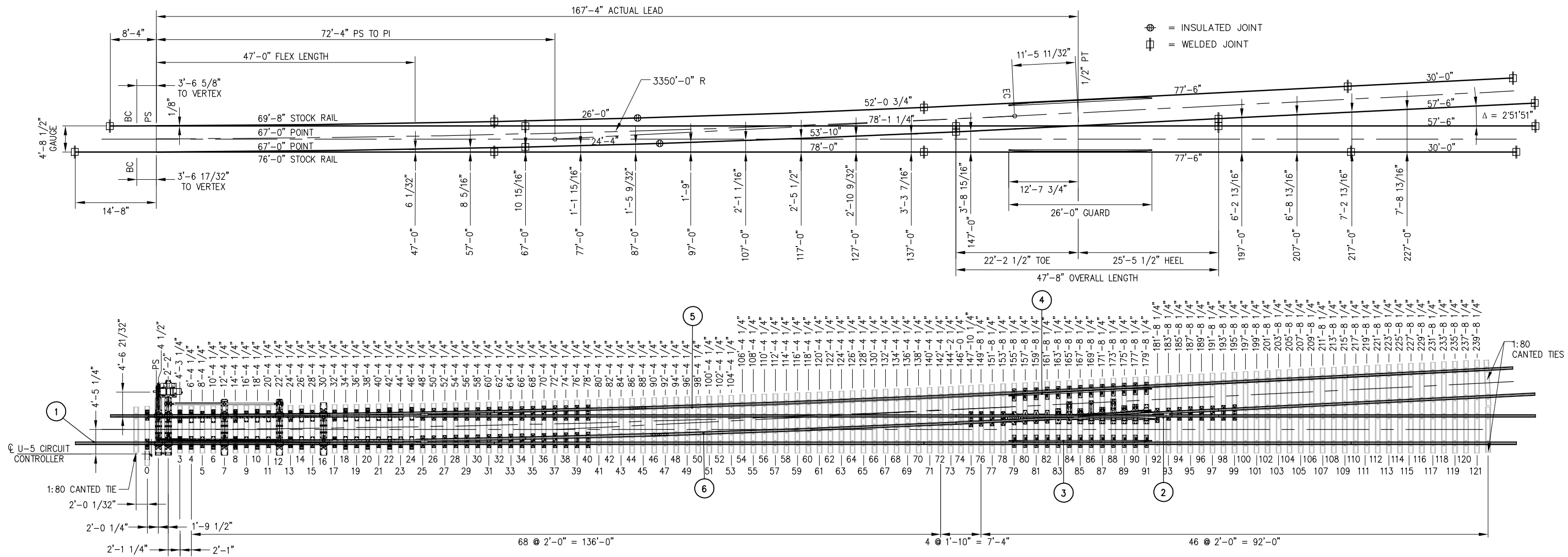
REV: EDITION:
 FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO:
 SD-2702

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH PACK, NO 20-136 LB RE MODIFIED TANGENTIAL, LH, HST	SD-2707	12	492	TIE SCREW, CONCRETE 7/8" DIA X 6" HEX HEAD	-
2	1	FROG PACK, NO 20-136 LB RE WSM, LH	SD-2721	13	492	WASHER FLAT ? TYPE A NARROW 15/16" X 1 3/4" X 0.134"	-
3	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LG, 136 LB RE RAISED 1", STRAIGHT	SD-2738	14	492	SPRING WASHER, DOUBLE COIL (FE6)	-
4	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LG, 136 LB RE RAISED 1", LH	SD-2737	15	1	CONCRETE TIE SET, 0-121 + (3) 1:80 TIES, PLATE PADS, LH	-
5	1	INSULATED RAIL ASSEMBLY, 78'-0 3/4" C/W BONDED INSULATED JOINT	-	16	500	CLIP PANDROL E2055	-
6	1	INSULATED RAIL ASSEMBLY, 78'-2" C/W BONDED INSULATED JOINT	-	17	500	INSULATOR PANDROL FEATRUES BASE HOLDOWN NYLON HD-10	-
7	2	DRILLED RAIL, 136 LB RE, 30'-0" LONG	-	18	8	CLIP PANDROL E2063	-
8	2	DRILLED RAIL, 136 LB RE, 57'-6" LONG	-	19	8	INSULATION, PANDROL NYLON 6790	-
9	2	DRILLED RAIL, 136 LB RE, 77'-6" LONG	-	20	254	TIE PAD PANDROL 6993SR	-
10	1	DRILLED RAIL, 136 LB RE, 78'-0" LONG	-	21	246	SHIM, TO REDUCE PLATE FLEXURE	-
11	1	DRILLED RAIL, 136 LB RE, 78'-1 1/4" LONG	-				



NOTES:

- ALL RAILS SHALL HAVE IDENTIFICATION COLOR CODE PAINTED ON WEB, CLEAR OF JOINT AREA
- RAIL LENGTHS ALLOW 1/8" GAP BETWEEN RAIL JOINTS FOR WELDING
- GUARD RAILS ARE RAISED 1" AND FORM A 1 7/8" FLANGWAY
- COORDINATE SWITCH MACHINE AND MACHINE PLATE (NIC) WITH CALTRAIN
- ALL TIE LENGTHS SHALL INCLUDE 1'-9" FROM TIE ENDS TO RAIL CENTERLINE, EXCEPT AS NOTED AND 1:80 CANTED TIES
- TIGHTEN TIE SCREW WITH DOUBLE COIL SPRING WASHER IN PLACE
- SCHWIHAG ROLLERS SHALL BE INSTALLED AND ADJUSTED IN THE FIELD

TURNOUT DATA:

FROG
 NO 20 Δ = 2'51"51"
 TOE LENGTH: 22'-2 1/2"
 HEEL LENGTH: 25'-5 1/2"
 TOTAL LENGTH: 47'-8"

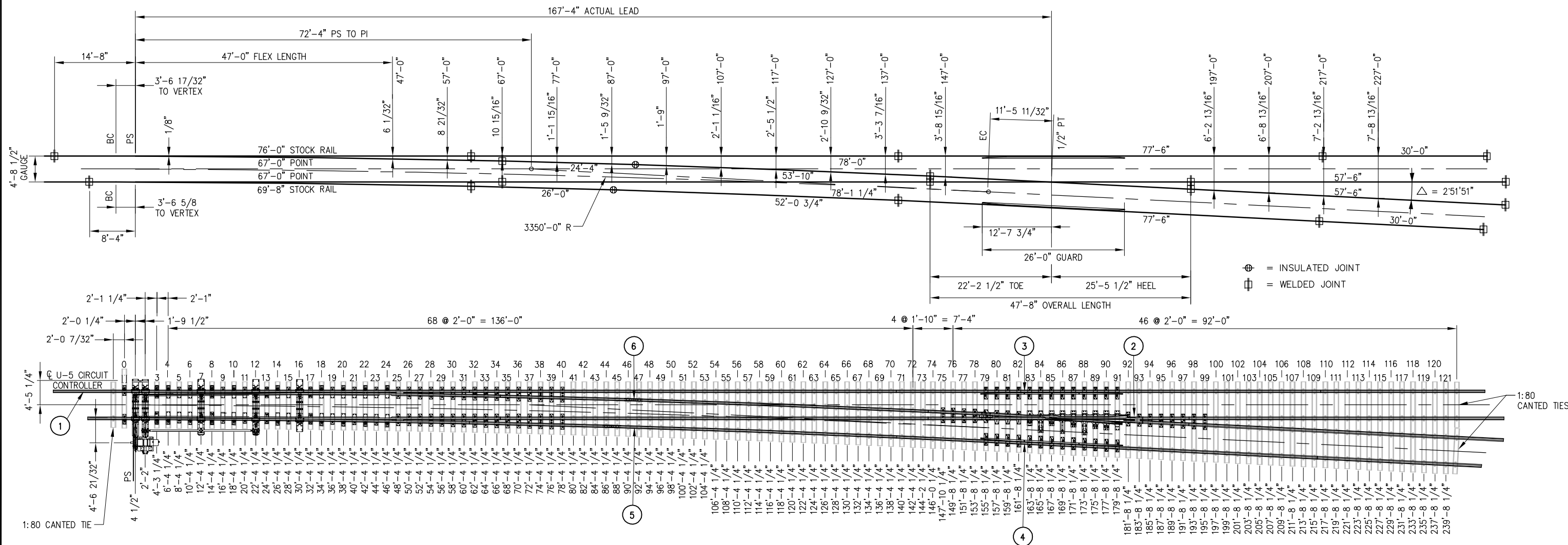
SWITCH
 LENGTH OF POINT: 47'-0" / 67'-0"
 VERTEX DISTANCE: VARIES PER SIDE
 ENTRY ANGLE: 0'11"55"
 THICKNESS AT POINT: 1/8"
 THROW AT ROD # 1 : 4 3/4"

ACTUAL LEAD: 167'-4"
CLOSURE AREA
 CENTERLINE RADIUS: 3350'-0"
 DEGREE OF CURVE: 1'42"37"

DESIGN SPEEDS
 50 MPH PASSENGER @ 3" UNBALANCE
 40 MPH FREIGHT @ 2" UNBALANCE

					PENINSULA CORRIDOR JOINT POWERS BOARD					STANDARD DRAWINGS					CADD FILE NAME: SD-2703				
					APPROVED BY: <i>Bin Zhang</i> DEPUTY DIRECTOR, ENGINEERING										REV: EDITION: FOURTH				
01012024 FOURTH EDITION										SPECIAL TRACKWORK NO. 20 TURNOUT WSM FROG AND HST SWITCH MACHINE ON TURNOUT SIDE					STANDARD DRAWING NO.: SD-2703				
REV	DATE	BY	CHK	APP	REV	DATE	BY	CHK	APP	REV	DATE	BY	CHK	APP	REV	DATE	BY	CHK	APP

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH PACK, NO 20-136 LB RE MODIFIED TANGENTIAL, RH, HST	SD-2708	12	492	TIE SCREW, CONCRETE 7/8" DIA X 6" HEX HEAD	-
2	1	FROG PACK, NO 20-136 LB RE WSM, RH	SD-2722	13	492	WASHER FLAT 7/8" TYPE A NARROW 15/16" X 1 3/4" X 0.134"	-
3	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LG, 136 LB RE RAISED 1", STRAIGHT	SD-2737	14	492	SPRING WASHER, DOUBLE COIL (FE6)	-
4	1	GUARD RAIL ASSEMBLY BOLTLESS, 26'-0" LG, 136 LB RE RAISED 1", RH	SD-2738	15	1	CONCRETE TIE SET, 0-121 + (3) 1:80 TIES, PLATE PADS, RH	-
5	1	INSULATED RAIL ASSEMBLY, 78'-0 3/4" C/W BONDED INSULATED JOINT	-	16	500	CLIP PANDROL E2055	-
6	1	INSULATED RAIL ASSEMBLY, 78'-2" C/W BONDED INSULATED JOINT	-	17	500	INSULATOR PANDROL FEATURES BASE HOLDOWN NYLON HD-10	-
7	2	DRILLED RAIL, 136 LB RE, 30'-0" LONG	-	18	8	CLIP PANDROL E2063	-
8	2	DRILLED RAIL, 136 LB RE, 57'-6" LONG	-	19	8	INSULATION, PANDROL NYLON 6790	-
9	2	DRILLED RAIL, 136 LB RE, 77'-6" LONG	-	20	254	TIE PAD PANDROL 6993SR	-
10	1	DRILLED RAIL, 136 LB RE, 78'-0" LONG	-	21	246	SHIM, TO REDUCE PLATE FLEXURE	-
11	1	DRILLED RAIL, 136 LB RE, 78'-1 1/4" LONG	-				



NOTES:

- ALL RAILS SHALL HAVE IDENTIFICATION COLOR CODE PAINTED ON WEB, CLEAR OF JOINT AREA
- RAIL LENGTHS ALLOW 1/8" GAP BETWEEN RAIL JOINTS FOR WELDING
- GUARD RAILS ARE RAISED 1" AND FORM A 1 7/8" FLANGWAY
- COORDINATE SWITCH MACHINE AND MACHINE PLATE (NIC) WITH CALTRAIN
- ALL TIE LENGTHS SHALL INCLUDE 1'-9" FROM TIE ENDS TO RAIL CENTERLINE, EXCEPT AS NOTED AND 1:80 CANTED TIES
- TIGHTEN TIE SCREW WITH DOUBLE COIL SPRING WASHER IN PLACE
- SCHWIBAG ROLLERS SHALL BE INSTALLED AND ADJUSTED IN THE FIELD

TURNOUT DATA:

FROG
 NO 20 Δ = 2'51"51"
 TOE LENGTH: 22'-2 1/2"
 HEEL LENGTH: 25'-5 1/2"
 TOTAL LENGTH: 47'-8"

SWITCH
 LENGTH OF POINT: 47'-0" / 67'-0"
 VERTEX DISTANCE: VARIES PER SIDE
 ENTRY ANGLE: 0'11"55"
 THICKNESS AT POINT: 1/8"
 THROW AT ROD # 1: 4 3/4"

ACTUAL LEAD: 167'-4"
 CLOSURE AREA
 CENTERLINE RADIUS: 3350'-0"
 DEGREE OF CURVE: 1'42"37"
 DESIGN SPEEDS
 50 MPH PASSENGER @ 3" UNBALANCE
 40 MPH FREIGHT @ 2" UNBALANCE

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

 DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
 San Carlos, CA 94070

STANDARD DRAWINGS

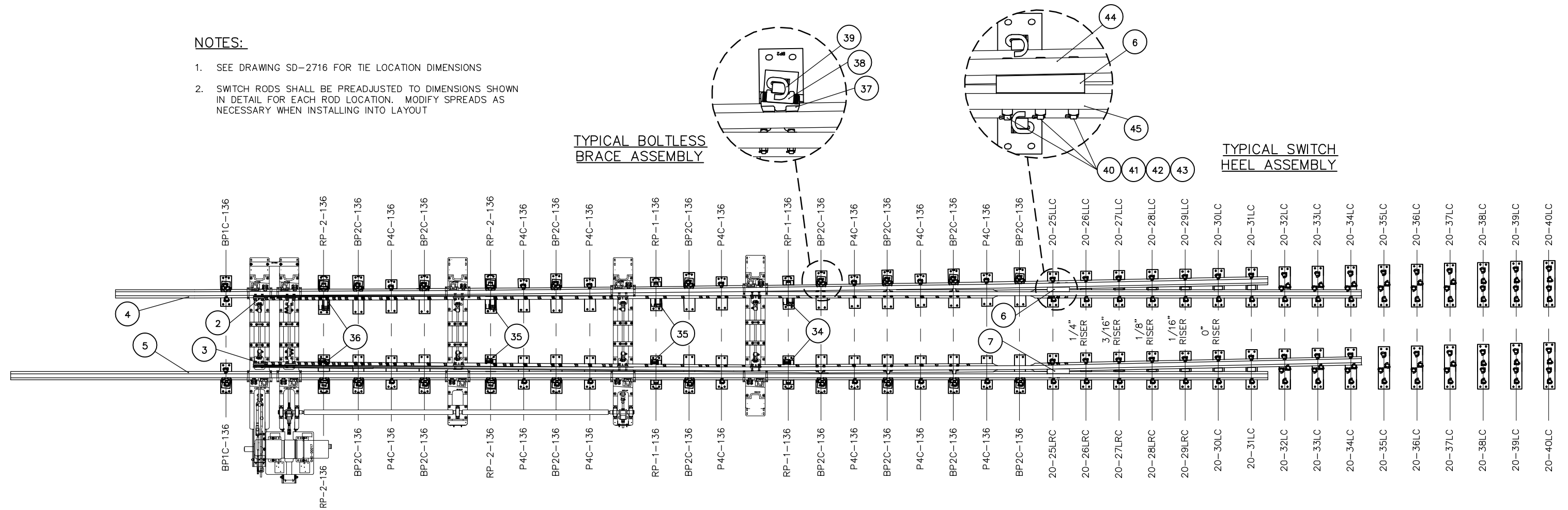
SPECIAL TRACKWORK
 NO. 20 TURNOUT
 NO. 20 RH TURNOUT WITH
 WSM FROG AND HST SWITCH MACHINE
 ON TURNOUT SIDE

CADD FILE NAME: SD-2704
 REV: EDITION: FOURTH
 SPECIAL TRACKWORK
 STANDARD DRAWING NO.: SD-2704

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	HOLLOW SWITCH TIE & RODDING ASSEMBLY	SD-2718	23	2	SWITCH PLATE (20-30LC)	SD-2744
2	1	SAMSON POINT, 67'-0" LONG, DOUBLE REINFORCED, UR MANG TIP, LH	SD-2709	24	2	SWITCH PLATE (20-31LC)	SD-2744
3	1	SAMSON POINT, 67'-0" LONG, DOUBLE REINFORCED, UR MANG TIP, RH	SD-2710	25	2	SWITCH PLATE (20-32LC)	SD-2745
4	1	SAMSON STOCK RAIL, 69'-8" LONG, CURVED, LH	SD-2711	26	2	SWITCH PLATE (20-33LC)	SD-2745
5	1	SAMSON STOCK RAIL, 76'-0" LONG, STRAIGHT, RH	SD-2712	27	2	SWITCH PLATE (20-34LC)	SD-2745
6	1	SWITCH HEEL BLOCK, 136 LB RE, UNIFORM RISER, LH	-	28	2	SWITCH PLATE (20-35LC)	SD-2745
7	1	SWITCH HEEL BLOCK, 136 LB RE, UNIFORM RISER, RH	-	29	2	SWITCH PLATE (20-36LC)	SD-2745
8	2	SWITCH PLATE (BP1C-136)	SD-2302	30	2	SWITCH PLATE (20-37LC)	SD-2745
9	16	SWITCH PLATE (BP2C-136)	SD-2302	31	2	SWITCH PLATE (20-38LC)	SD-2746
10	14	SWITCH PLATE (P4C-136)	SD-2302	32	2	SWITCH PLATE (20-39LC)	SD-2746
11	4	SWITCH ROLLER PLATE (RP-1-136) SCHWIHAG	SD-2311	33	2	SWITCH PLATE (20-40LC)	SD-2746
12	4	SWITCH ROLLER PLATE (RP-2-136) SCHWIHAG	SD-2312	34	2	ROLLER SCHWIHAG, SINGLE	-
13	1	SWITCH PLATE (20-25LLC)	SD-2743	35	4	ROLLER SCHWIHAG, DOUBLE	-
14	1	SWITCH PLATE (20-25LRC)	SD-2743	36	2	ROLLER SCHWIHAG, TRIPLE	-
15	1	SWITCH PLATE (20-26LLC)	SD-2743	37	22	BRACE, BOLTLESS, 136 LB RE 'SUREFIT'	-
16	1	SWITCH PLATE (20-26LRC)	SD-2743	38	22	SERRATED WASHER FOR BOLTLESS BRACE	-
17	1	SWITCH PLATE (20-27LLC)	SD-2743	39	142	CLIP, PANDROL, E2055	-
18	1	SWITCH PLATE (20-27LRC)	SD-2743	40	6	BOLT, 1 1/8" DIA X 10 1/2" LONG, SQUARE HEAD, DRILLED @ 10 1/16", GR 5	-
19	1	SWITCH PLATE (20-28LLC)	SD-2744	41	6	SPRING WASHER FOR 1 1/8" DIA BOLT	-
20	1	SWITCH PLATE (20-28LRC)	SD-2744	42	6	NUT, 1 1/8" DIA HEAVY SQUARE, GR 5	-
21	1	SWITCH PLATE (20-29LLC)	SD-2744	43	6	COTTER PIN, 1/4" DIA X 2 1/4" LONG	-
22	1	SWITCH PLATE (20-29LRC)	SD-2744	44	2	FISH PLATE, 3-HOLE, 1/2" D-BAR X 16" LONG, HEADLOCKED	-
				45	2	FISH PLATE, 3-HOLE, 1/2" D-BAR X 16" LONG	-

NOTES:

- SEE DRAWING SD-2716 FOR TIE LOCATION DIMENSIONS
- SWITCH RODS SHALL BE PREADJUSTED TO DIMENSIONS SHOWN IN DETAIL FOR EACH ROD LOCATION. MODIFY SPREADS AS NECESSARY WHEN INSTALLING INTO LAYOUT




REV	DATE	BY	CHK	APP	DESCRIPTION
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PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

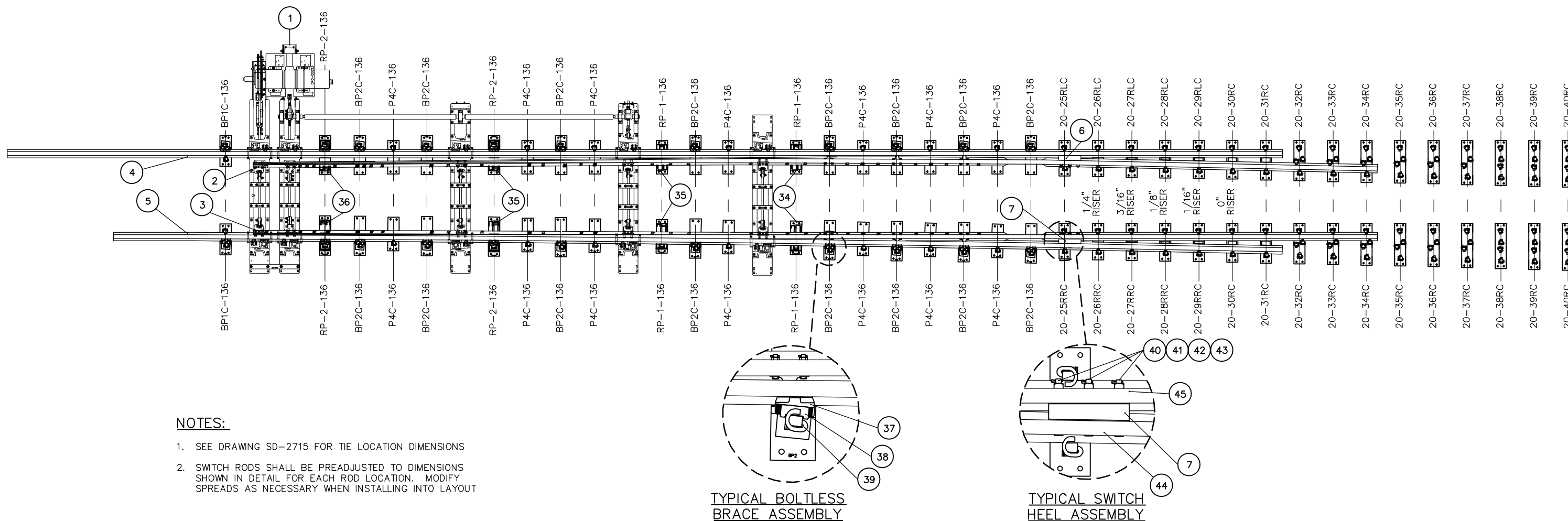
SPECIAL TRACKWORK
NO. 20 TURNOUT
LH SWITCH PACK WITH HST
SWITCH MACHINE ON MAINLINE SIDE

CADD FILE NAME: SD-2705

REV: EDITION: FOURTH

STANDARD DRAWING NO.: SD-2705

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	HOLLOW SWITCH TIE & RODDING ASSEMBLY	SD-2717	23	2	SWITCH PLATE (20-30RC)	SD-2748
2	1	SAMSON POINT, 67'-0" LONG, DOUBLE REINFORCED, UR MANG TIP, LH	SD-2709	24	2	SWITCH PLATE (20-31RC)	SD-2748
3	1	SAMSON POINT, 67'-0" LONG, DOUBLE REINFORCED, UR MANG TIP, RH	SD-2710	25	2	SWITCH PLATE (20-32RC)	SD-2749
4	1	SAMSON STOCK RAIL, 76'-0" LONG, STRAIGHT, LH	SD-2713	26	2	SWITCH PLATE (20-33RC)	SD-2749
5	1	SAMSON STOCK RAIL, 69'-8" LONG, CURVED, RH	SD-2714	27	2	SWITCH PLATE (20-34RC)	SD-2749
6	1	SWITCH HEEL BLOCK, 136 LB RE, UNIFORM RISER, LH	-	28	2	SWITCH PLATE (20-35RC)	SD-2749
7	1	SWITCH HEEL BLOCK, 136 LB RE, UNIFORM RISER, RH	-	29	2	SWITCH PLATE (20-36RC)	SD-2749
8	2	SWITCH PLATE (BP1C-136)	SD-2301	30	2	SWITCH PLATE (20-37RC)	SD-2749
9	16	SWITCH PLATE (BP2C-136)	SD-2301	31	2	SWITCH PLATE (20-38RC)	SD-2750
10	14	SWITCH PLATE (P4C-136)	SD-2301	32	2	SWITCH PLATE (20-39RC)	SD-2750
11	4	SWITCH ROLLER PLATE (RP-1-136) SCHWIHAG	SD-2311	33	2	SWITCH PLATE (20-40RC)	SD-2750
12	4	SWITCH ROLLER PLATE (RP-2-136) SCHWIHAG	SD-2312	34	2	ROLLER SCHWIHAG, SINGLE	-
13	1	SWITCH PLATE (20-25RLC)	SD-2747	35	4	ROLLER SCHWIHAG, DOUBLE	-
14	1	SWITCH PLATE (20-25RRC)	SD-2747	36	2	ROLLER SCHWIHAG, TRIPLE	-
15	1	SWITCH PLATE (20-26RLC)	SD-2747	37	22	BRACE, BOLTLESS, 136 LB RE 'SUREFIT'	-
16	1	SWITCH PLATE (20-26RRC)	SD-2747	38	22	SERRATED WASHER FOR BOLTLESS BRACE	-
17	1	SWITCH PLATE (20-27RLC)	SD-2747	39	142	CLIP, PANDROL, E2055	-
18	1	SWITCH PLATE (20-27RRC)	SD-2747	40	6	BOLT, 1 1/8" DIA X 10 1/2" LONG, SQUARE HEAD, DRILLED @ 10 1/16", GR 5	-
19	1	SWITCH PLATE (20-28RLC)	SD-2748	41	6	SPRING WASHER FOR 1 1/8" DIA BOLT	-
20	1	SWITCH PLATE (20-28RRC)	SD-2748	42	6	NUT, 1 1/8" DIA HEAVY SQUARE, GR 5	-
21	1	SWITCH PLATE (20-29RLC)	SD-2748	43	6	COTTER PIN, 1/4" DIA X 2 1/4" LONG	-
22	1	SWITCH PLATE (20-29RRC)	SD-2748	44	2	FISH PLATE, 3-HOLE, 1/2" D-BAR X 16" LONG, HEADLOCKED	-
				45	2	FISH PLATE, 3-HOLE, 1/2" D-BAR X 16" LONG	-



NOTES:

1. SEE DRAWING SD-2715 FOR TIE LOCATION DIMENSIONS
2. SWITCH RODS SHALL BE PREADJUSTED TO DIMENSIONS SHOWN IN DETAIL FOR EACH ROD LOCATION. MODIFY SPREADS AS NECESSARY WHEN INSTALLING INTO LAYOUT

TYPICAL BOLTLESS BRACE ASSEMBLY

TYPICAL SWITCH HEEL ASSEMBLY


REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

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
RH SWITCH PACK WITH HST
SWITCH MACHINE ON MAINLINE SIDE

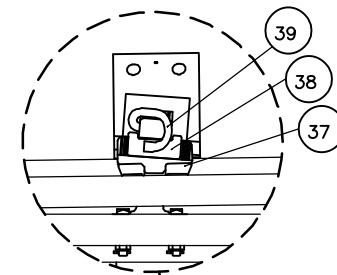
CADD FILE NAME: SD-2706	EDITION: FOURTH
REV:	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2706

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	HOLLOW SWITCH TIE & RODDING ASSEMBLY	SD-2720	23	2	SWITCH PLATE (20-30LC)	SD-2744
2	1	SAMSON POINT, 67'-0" LONG, DOUBLE REINFORCED, UR MANG TIP, LH	SD-2709	24	2	SWITCH PLATE (20-31LC)	SD-2744
3	1	SAMSON POINT, 67'-0" LONG, DOUBLE REINFORCED, UR MANG TIP, RH	SD-2710	25	2	SWITCH PLATE (20-32LC)	SD-2745
4	1	SAMSON STOCK RAIL, 69'-8" LONG, CURVED, LH	SD-2711	26	2	SWITCH PLATE (20-33LC)	SD-2745
5	1	SAMSON STOCK RAIL, 76'-0" LONG, STRAIGHT, RH	SD-2712	27	2	SWITCH PLATE (20-34LC)	SD-2745
6	1	SWITCH HEEL BLOCK, 136 LB RE, UNIFORM RISER, LH	-	28	2	SWITCH PLATE (20-35LC)	SD-2745
7	1	SWITCH HEEL BLOCK, 136 LB RE, UNIFORM RISER, RH	-	29	2	SWITCH PLATE (20-36LC)	SD-2745
8	2	SWITCH PLATE (BP1C-136)	SD-2301	30	2	SWITCH PLATE (20-37LC)	SD-2745
9	16	SWITCH PLATE (BP2C-136)	SD-2301	31	2	SWITCH PLATE (20-38LC)	SD-2746
10	14	SWITCH PLATE (P4C-136)	SD-2301	32	2	SWITCH PLATE (20-39LC)	SD-2746
11	4	SWITCH ROLLER PLATE (RP-1-136) SCHWIHAG	SD-2311	33	2	SWITCH PLATE (20-40LC)	SD-2746
12	4	SWITCH ROLLER PLATE (RP-2-136) SCHWIHAG	SD-2312	34	2	ROLLER SCHWIHAG, SINGLE	-
13	1	SWITCH PLATE (20-25LLC)	SD-2743	35	4	ROLLER SCHWIHAG, DOUBLE	-
14	1	SWITCH PLATE (20-25LRC)	SD-2743	36	2	ROLLER SCHWIHAG, TRIPLE	-
15	1	SWITCH PLATE (20-26LLC)	SD-2743	37	22	BRACE, BOLTLESS, 136 LB RE 'SUREFIT'	-
16	1	SWITCH PLATE (20-26LRC)	SD-2743	38	22	SERRATED WASHER FOR BOLTLESS BRACE	-
17	1	SWITCH PLATE (20-27LLC)	SD-2743	39	142	CLIP, PANDROL, E2055	-
18	1	SWITCH PLATE (20-27LRC)	SD-2743	40	6	BOLT, 1 1/8" DIA X 10 1/2" LONG, SQUARE HEAD, DRILLED @ 10 1/16", GR 5	-
19	1	SWITCH PLATE (20-28LLC)	SD-2744	41	6	SPRING WASHER FOR 1 1/8" DIA BOLT	-
20	1	SWITCH PLATE (20-28LRC)	SD-2744	42	6	NUT, 1 1/8" DIA HEAVY SQUARE, GR 5	-
21	1	SWITCH PLATE (20-29LLC)	SD-2744	43	6	COTTER PIN, 1/4" DIA X 2 1/4" LONG	-
22	1	SWITCH PLATE (20-29LRC)	SD-2744	44	2	FISH PLATE, 3-HOLE, 1/2" D-BAR X 16" LONG, HEADLOCKED	-
				45	2	FISH PLATE, 3-HOLE, 1/2" D-BAR X 16" LONG	-

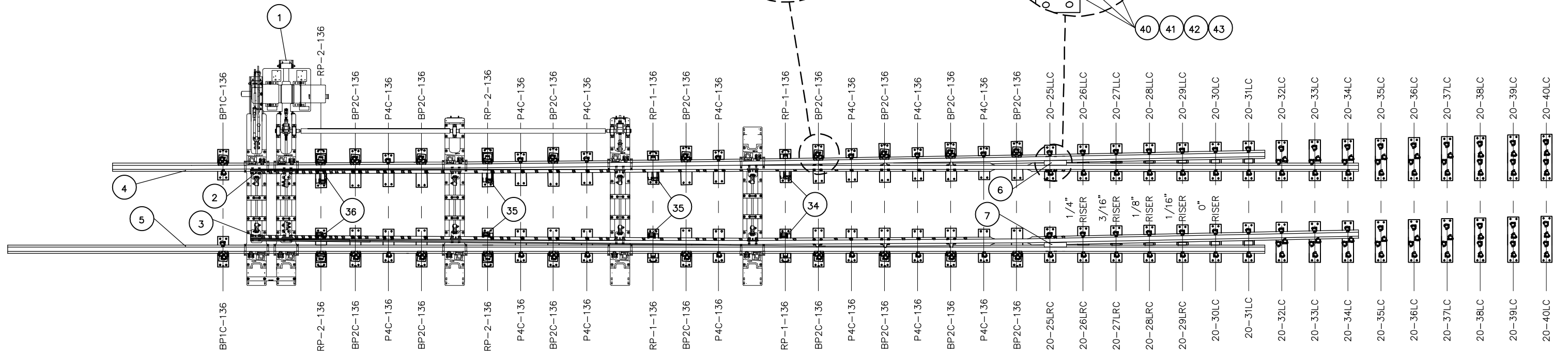
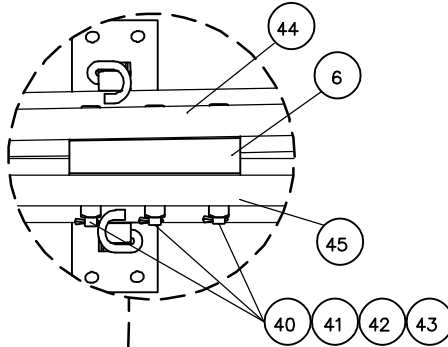
NOTES:

- SEE DRAWING SD-2716 FOR TIE LOCATION DIMENSIONS
- SWITCH RODS SHALL BE PREADJUSTED TO DIMENSIONS SHOWN IN DETAIL FOR EACH ROD LOCATION. MODIFY SPREADS AS NECESSARY WHEN INSTALLING INTO LAYOUT

TYPICAL BOLTLESS BRACE ASSEMBLY



TYPICAL SWITCH HEEL ASSEMBLY




REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

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
LH SWITCH PACK WITH HST
SWITCH MACHINE ON TURNOUT SIDE

CADD FILE NAME: SD-2707

REV: EDITION: FOURTH

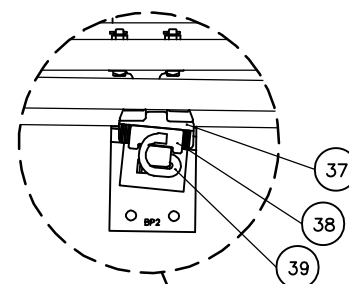
STANDARD DRAWING NO.: SD-2707

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	HOLLOW SWITCH TIE & RODDING ASSEMBLY	SD-2719	23	2	SWITCH PLATE (20-30RC)	SD-2748
2	1	SAMSON POINT, 67'-0" LONG, DOUBLE REINFORCED, UR MANG TIP, LH	SD-2709	24	2	SWITCH PLATE (20-31RC)	SD-2748
3	1	SAMSON POINT, 67'-0" LONG DOUBLE REINFORCED, UR MANG TIP, RH	SD-2710	25	2	SWITCH PLATE (20-32RC)	SD-2749
4	1	SAMSON STOCK RAIL, 76'-0" LONG, STRAIGHT, LH	SD-2713	26	2	SWITCH PLATE (20-33RC)	SD-2749
5	1	SAMSON STOCK RAIL, 69'-8" LONG, CURVED, RH	SD-2714	27	2	SWITCH PLATE (20-34RC)	SD-2749
6	1	SWITCH HEEL BLOCK, 136 LB RE, UNIFORM RISER, LH	-	28	2	SWITCH PLATE (20-35RC)	SD-2749
7	1	SWITCH HEEL BLOCK, 136 LB RE, UNIFORM RISER, RH	-	29	2	SWITCH PLATE (20-36RC)	SD-2749
8	2	SWITCH PLATE (BP1C-136)	SD-2301	30	2	SWITCH PLATE (20-37RC)	SD-2749
9	16	SWITCH PLATE (BP2C-136)	SD-2301	31	2	SWITCH PLATE (20-38RC)	SD-2750
10	14	SWITCH PLATE (P4C-136)	SD-2301	32	2	SWITCH PLATE (20-39RC)	SD-2750
11	4	SWITCH ROLLER PLATE (RP-1-136) SCHWIHAG	SD-2311	33	2	SWITCH PLATE (20-40RC)	SD-2750
12	4	SWITCH ROLLER PLATE (RP-2-136) SCHWIHAG	SD-2312	34	2	ROLLER SCHWIHAG, SINGLE	-
13	1	SWITCH PLATE (20-25RLC)	SD-2747	35	4	ROLLER SCHWIHAG, DOUBLE	-
14	1	SWITCH PLATE (20-25RRC)	SD-2747	36	2	ROLLER SCHWIHAG, TRIPLE	-
15	1	SWITCH PLATE (20-26RLC)	SD-2747	37	22	BRACE, BOLTLESS, 136 LB RE 'SUREFIT'	-
16	1	SWITCH PLATE (20-26RRC)	SD-2747	38	22	SERRATED WASHER FOR BOLTLESS BRACE	-
17	1	SWITCH PLATE (20-27RLC)	SD-2747	39	142	CLIP, PANDROL, E2055	-
18	1	SWITCH PLATE (20-27RRC)	SD-2747	40	6	BOLT, 1 1/8" DIA X 10 1/2" LONG, SQUARE HEAD, DRILLED @ 10 1/16", GR 5	-
19	1	SWITCH PLATE (20-28RLC)	SD-2748	41	6	SPRING WASHER FOR 1 1/8" DIA BOLT	-
20	1	SWITCH PLATE (20-28RRC)	SD-2748	42	6	NUT, 1 1/8" DIA HEAVY SQUARE, GR 5	-
21	1	SWITCH PLATE (20-29RLC)	SD-2748	43	6	COTTER PIN, 1/4" DIA X 2 1/4" LONG	-
22	1	SWITCH PLATE (20-29RRC)	SD-2748	44	2	FISH PLATE, 3-HOLE, 1/2" D-BAR X 16" LONG, HEADLOCKED	-
				45	2	FISH PLATE, 3-HOLE, 1/2" D-BAR X 16" LONG	-

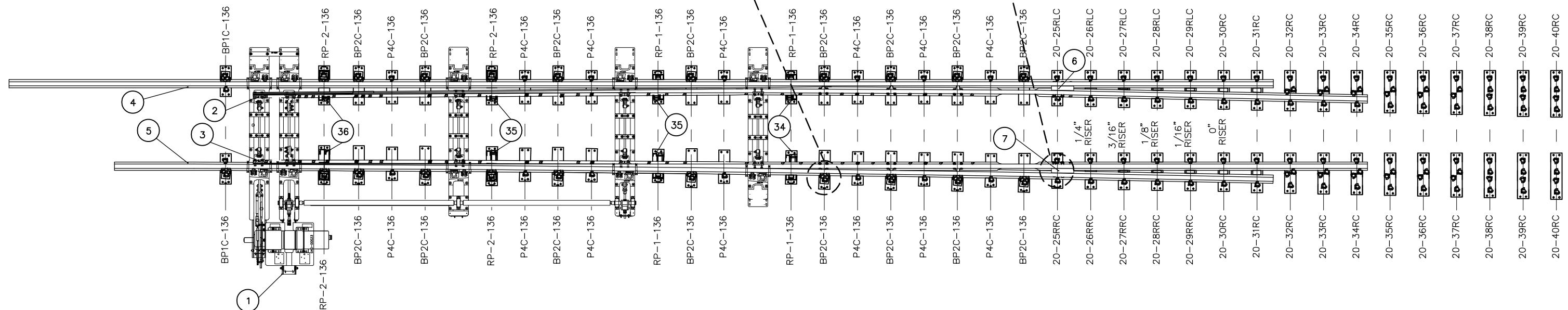
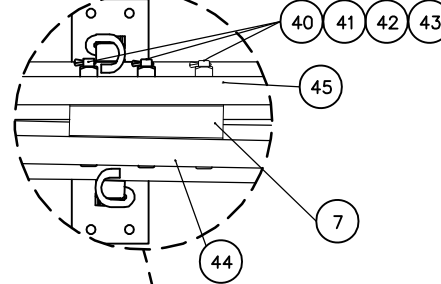
NOTES:

- SEE DRAWING SD-2715 FOR TIE LOCATION DIMENSIONS
- SWITCH RODS SHALL BE PREADJUSTED TO DIMENSIONS SHOWN IN DETAIL FOR EACH ROD LOCATION. MODIFY SPREADS AS NECESSARY WHEN INSTALLING INTO LAYOUT

TYPICAL BOLTLESS BRACE ASSEMBLY



TYPICAL SWITCH HEEL ASSEMBLY




REV	DATE	BY	CHK	APP	DESCRIPTION
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PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

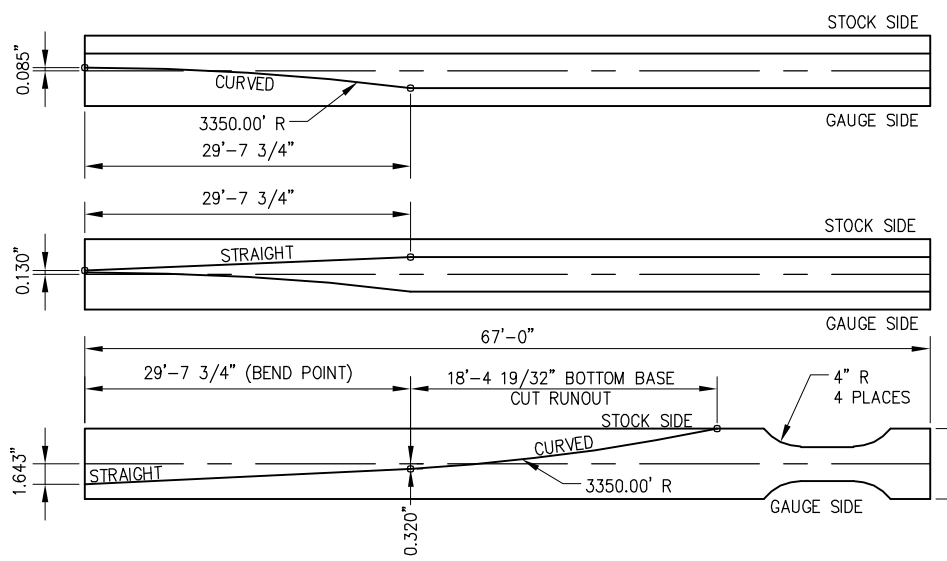
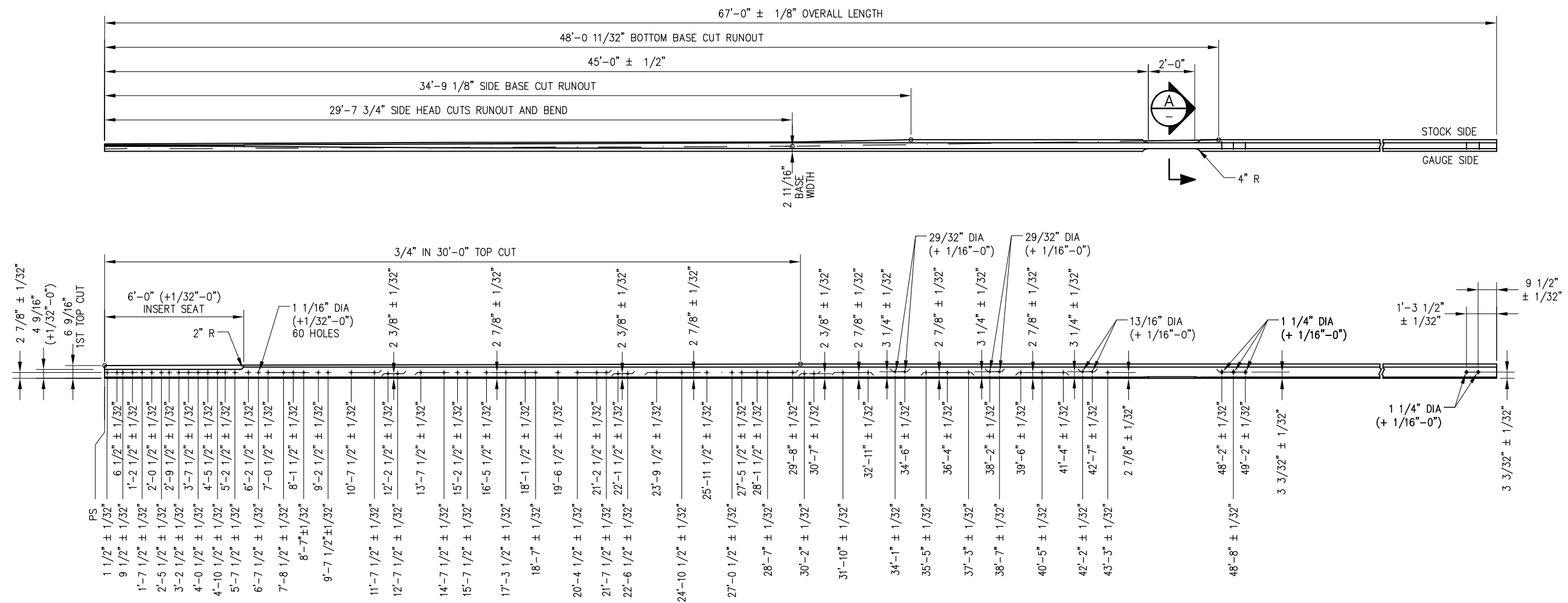
SPECIAL TRACKWORK
NO. 20 TURNOUT
RH SWITCH PACK WITH HST
SWITCH MACHINE ON TURNOUT SIDE

CADD FILE NAME: SD-2708

REV: EDITION: FOURTH

STANDARD DRAWING NO.: SD-2708

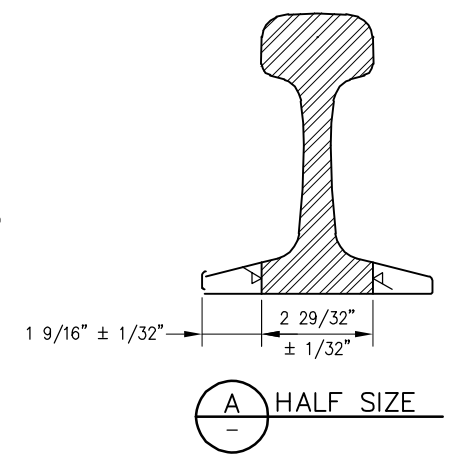
BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	RAIL, 136 LB RE x 67'-0" LONG



GAUGE SIDE HEAD CUT:
DIMENSIONS @ 6 11/16" AT RAIL
BEND STRAIGHT WEB, TOP VIEW

STOCK SIDE HEAD CUT:
DIMENSIONS @ 6 11/16" AT RAIL BEND
STRAIGHT WEB, TOP VIEW

UNDERSIDE BASE CUT:
DIMENSIONS @ BASE.
STRAIGHT WEB, TOP VIEW




- NOTES:**
- MACHINE SIDE HEAD CUTS BEFORE REMOVING HEAD AND WEB AREA SHOWN FOR MANGANESE TIP
 - POINT SHALL BE MACHINED STRAIGHT
 - ALL HOLES SHALL BE CHAMFERED WITH 1/8" R EDGES

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING



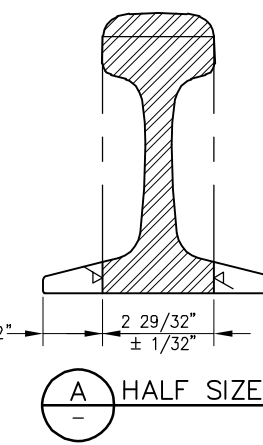
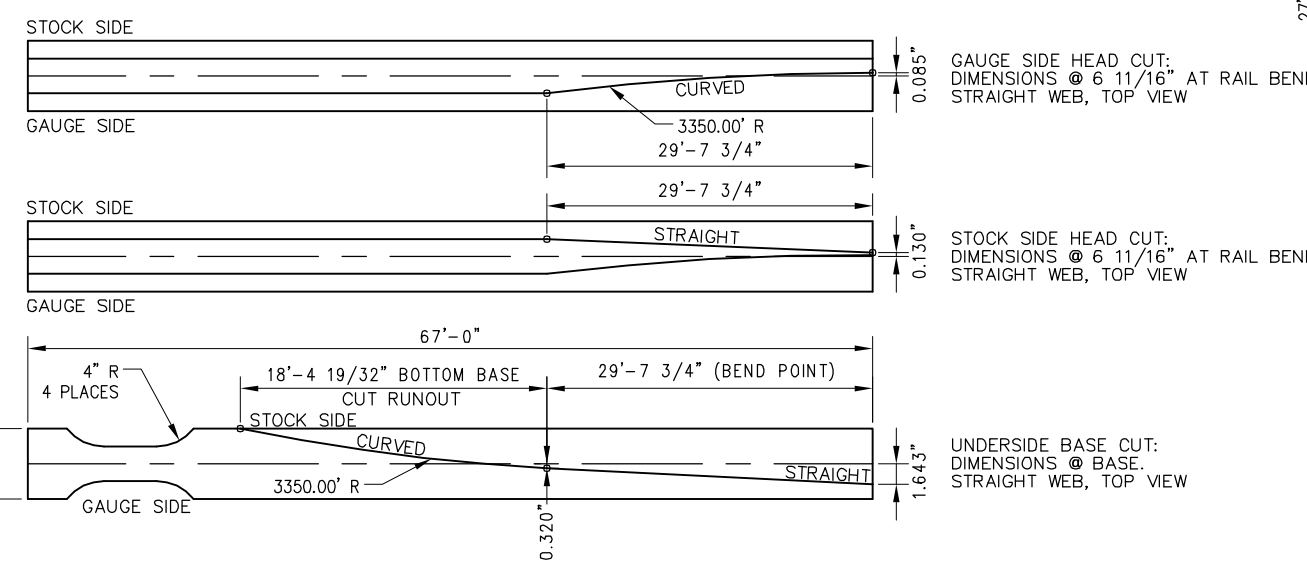
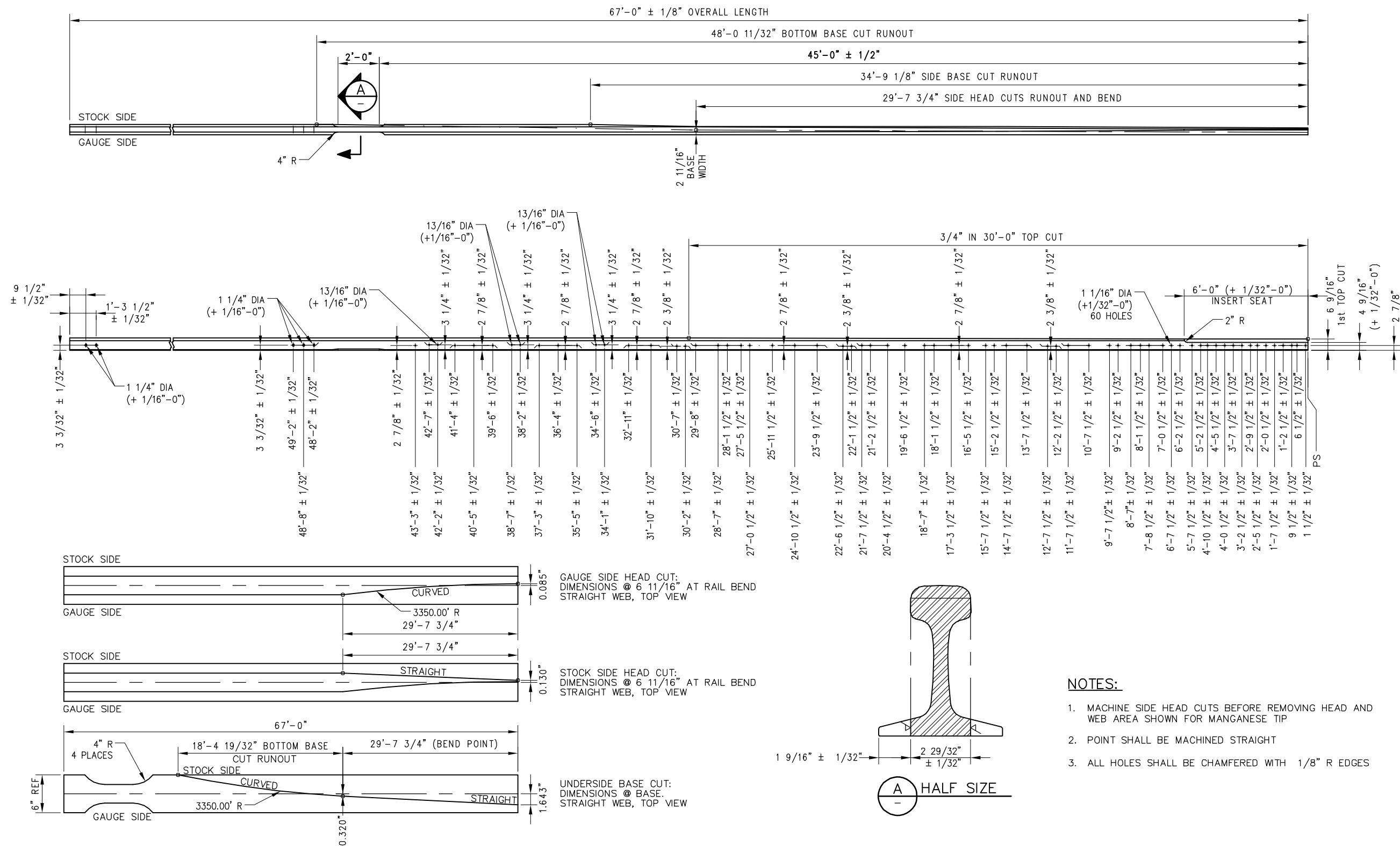
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
LH SWITCH POINT ASSEMBLY
67'-0" LONG WITH UNIFORM RISER

CADD FILE NAME: SD-2709
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO: SD-2709

BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	RAIL, 136 LB RE x 67'-0" LONG

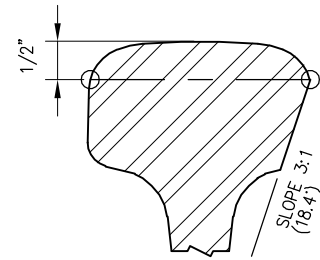


- NOTES:**
1. MACHINE SIDE HEAD CUTS BEFORE REMOVING HEAD AND WEB AREA SHOWN FOR MANGANESE TIP
 2. POINT SHALL BE MACHINED STRAIGHT
 3. ALL HOLES SHALL BE CHAMFERED WITH 1/8" R EDGES

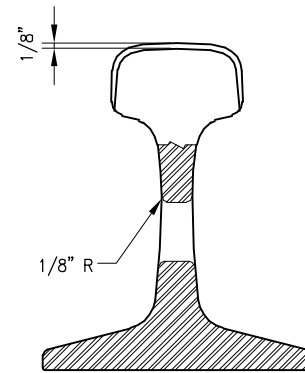
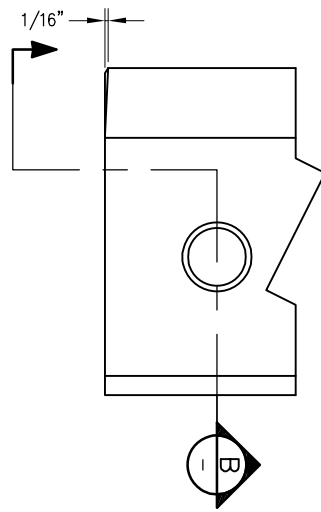
REV					DATE					BY					CHK					APP					DESCRIPTION																								

01012024 FOURTH EDITION								

PENINSULA CORRIDOR JOINT POWERS BOARD		STANDARD DRAWINGS		CADD FILE NAME: SD-2710	
APPROVED BY: <i>Bin Zhang</i> DEPUTY DIRECTOR, ENGINEERING				REV: EDITION: FOURTH	
1250 San Carlos Avenue San Carlos, CA 94070		SPECIAL TRACKWORK NO. 20 TURNOUT RH SWITCH POINT ASSEMBLY 67'-0" LONG WITH UNIFORM RISER		STANDARD DRAWING NO: SD-2710	



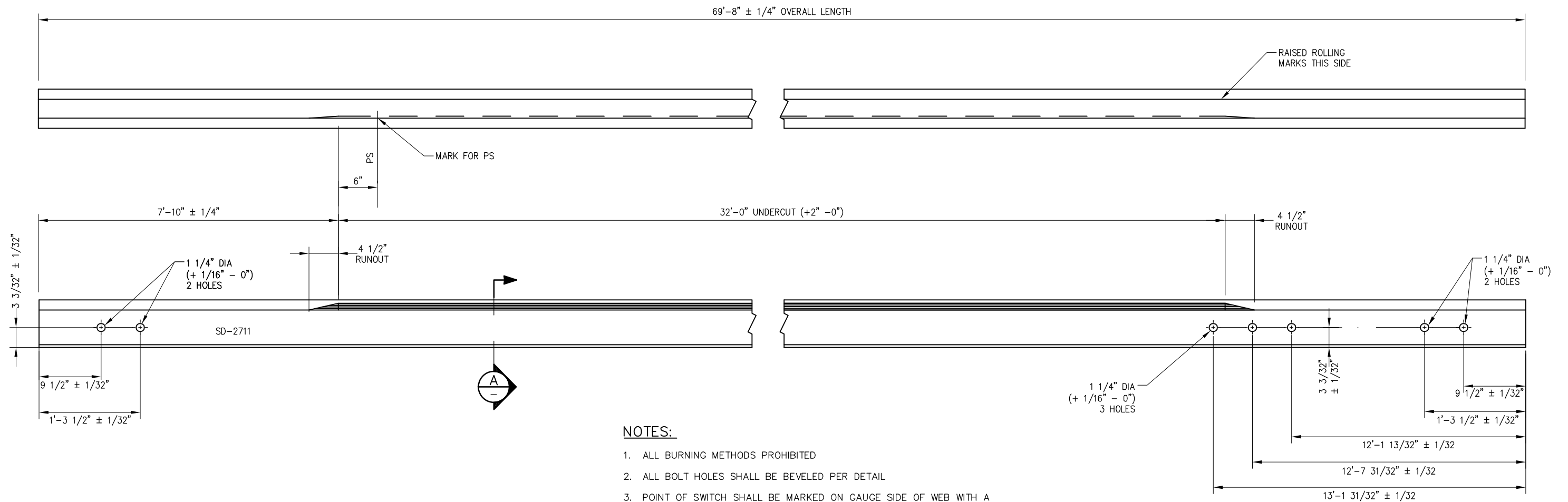
A PARTIAL SECTION
SCALE: NTS



B SECTION
SCALE: NTS

RAIL END / HOLE BEVELING DETAILS
RAIL HEAD ONLY - NOT BASE

BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	RAIL, 136 LB RE 69'-8" LONG



NOTES:

1. ALL BURNING METHODS PROHIBITED
2. ALL BOLT HOLES SHALL BE BEVELED PER DETAIL
3. POINT OF SWITCH SHALL BE MARKED ON GAUGE SIDE OF WEB WITH A WHITE LINE USING WATERPROOF MARKER OR PAINT
4. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING

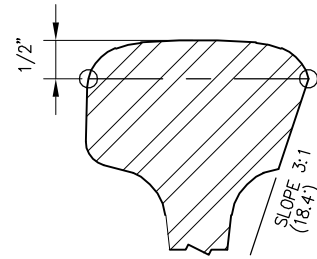


1250 San Carlos Avenue
San Carlos, CA 94070

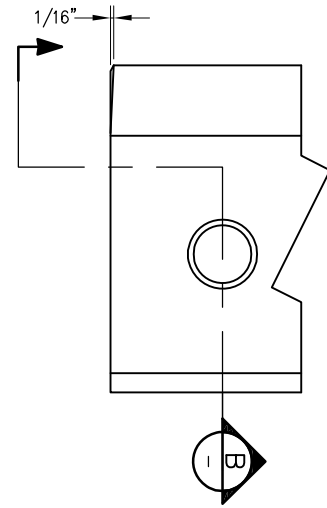
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
SAMSON STOCK RAIL FOR LH TURNOUT
LH 69'-8" LONG

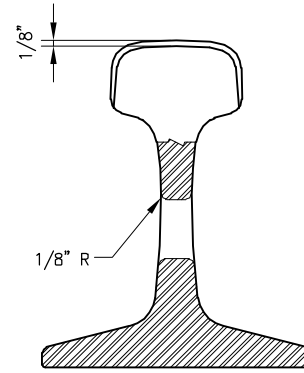
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STANDARD DRAWING NO.:	SD-2711



A PARTIAL SECTION
SCALE: NTS



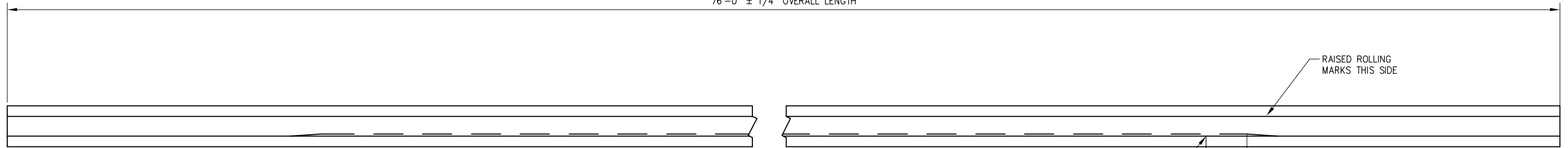
RAIL END / HOLE BEVELING DETAILS
RAIL HEAD ONLY - NOT BASE



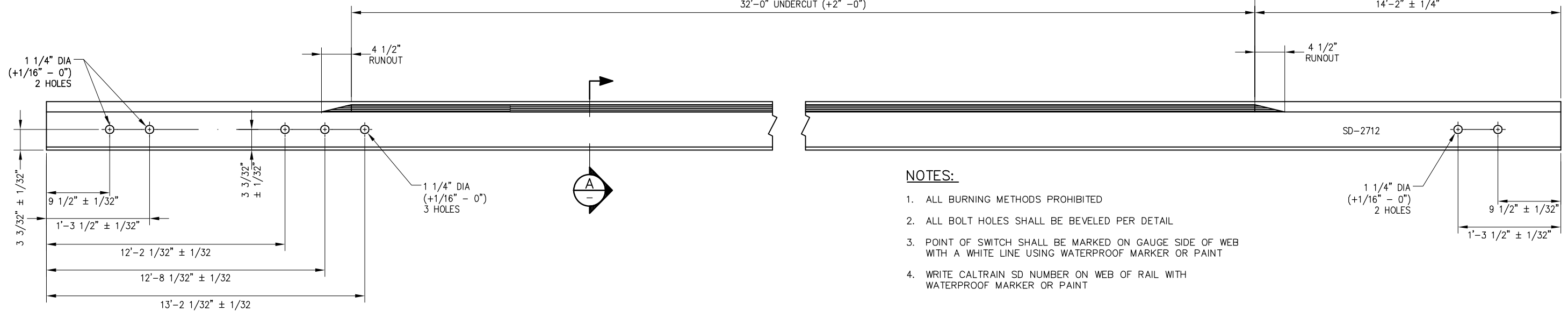
B SECTION
SCALE: NTS

BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	RAIL, 136 LB RE 76'-0" LONG

76'-0" ± 1/4" OVERALL LENGTH



32'-0" UNDERCUT (+2" -0")



NOTES:

1. ALL BURNING METHODS PROHIBITED
2. ALL BOLT HOLES SHALL BE BEVELED PER DETAIL
3. POINT OF SWITCH SHALL BE MARKED ON GAUGE SIDE OF WEB WITH A WHITE LINE USING WATERPROOF MARKER OR PAINT
4. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT

REV	DATE	BY	CHK	APP	DESCRIPTION

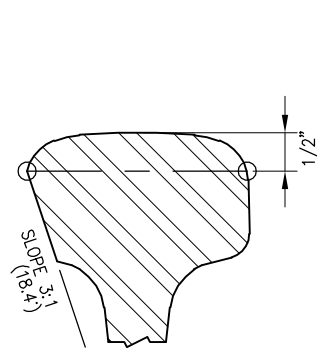
PENINSULA CORRIDOR JOINT POWERS BOARD

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Bin Zhang
DEPUTY DIRECTOR, ENGINEERING

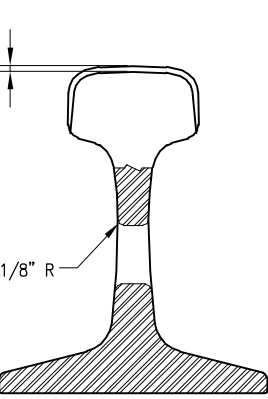
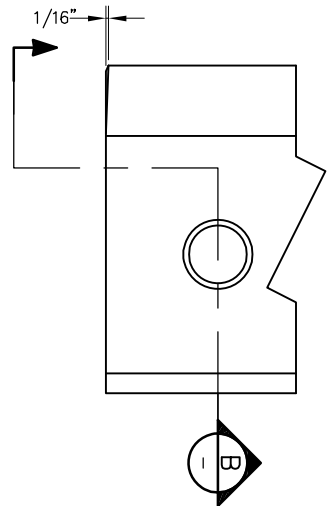
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
SAMSON STOCK RAIL FOR LH TURNOUT
RH 76'-0" LONG

CADD FILE NAME: SD-2712
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO.: SD-2712



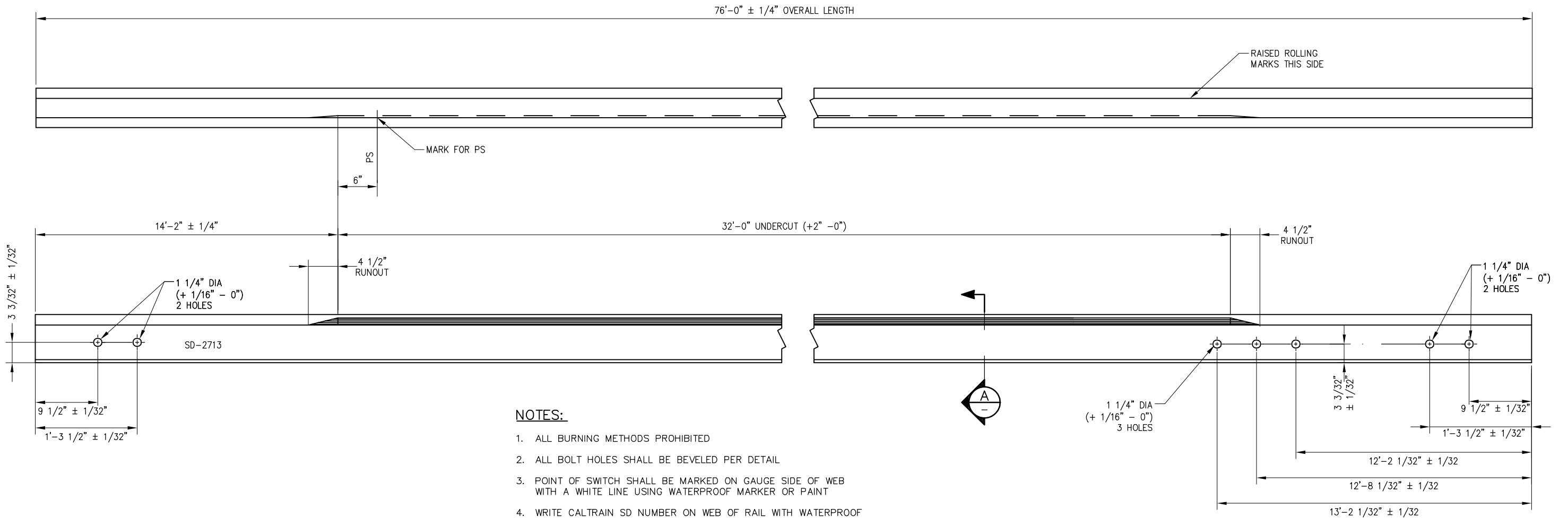
A PARTIAL SECTION
SCALE: NTS



B SECTION
SCALE: NTS

RAIL END / HOLE BEVELING DETAILS
RAIL HEAD ONLY - NOT BASE

BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	RAIL, 136 LB RE 76'-0" LONG



NOTES:

1. ALL BURNING METHODS PROHIBITED
2. ALL BOLT HOLES SHALL BE BEVELED PER DETAIL
3. POINT OF SWITCH SHALL BE MARKED ON GAUGE SIDE OF WEB WITH A WHITE LINE USING WATERPROOF MARKER OR PAINT
4. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

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STANDARD DRAWINGS

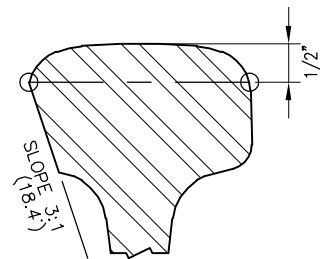
SPECIAL TRACKWORK
NO. 20 TURNOUT
SAMSON STOCK RAIL FOR RH TURNOUT
LH 76'-0" LONG

CADD FILE NAME: SD-2713

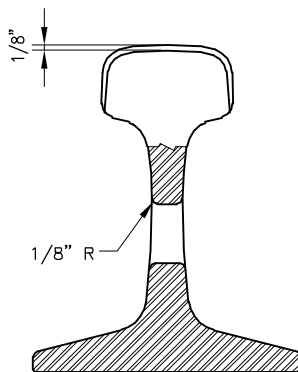
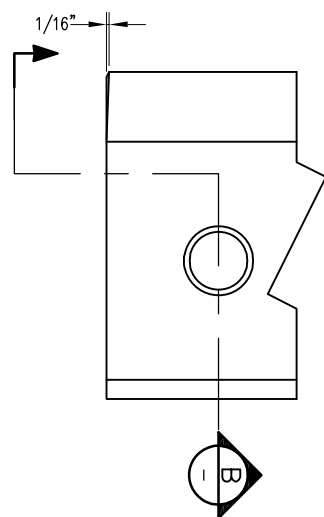
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SPECIAL TRACKWORK

STANDARD DRAWING NO.: SD-2713



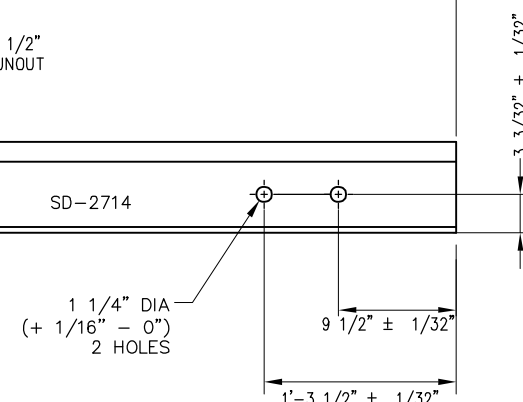
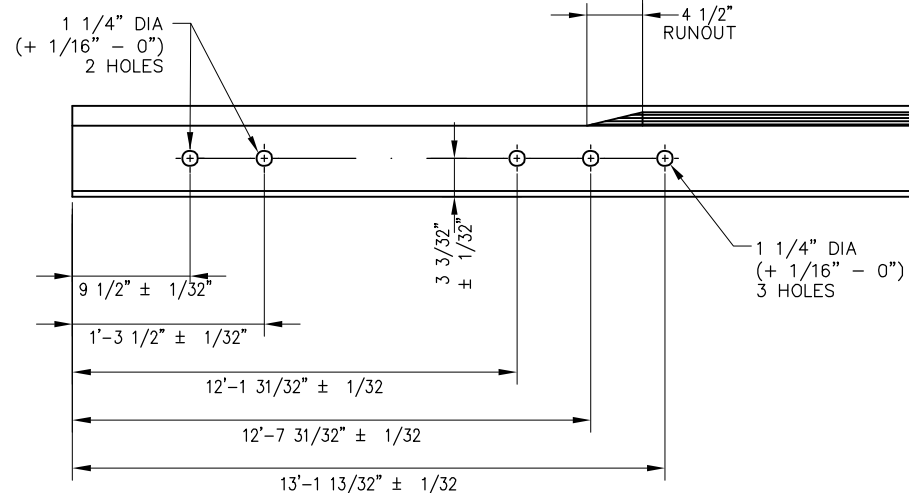
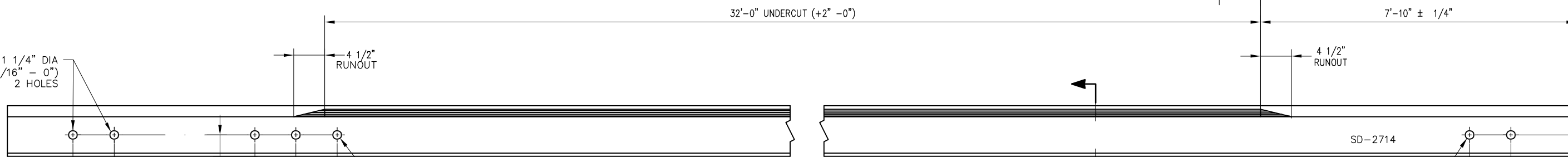
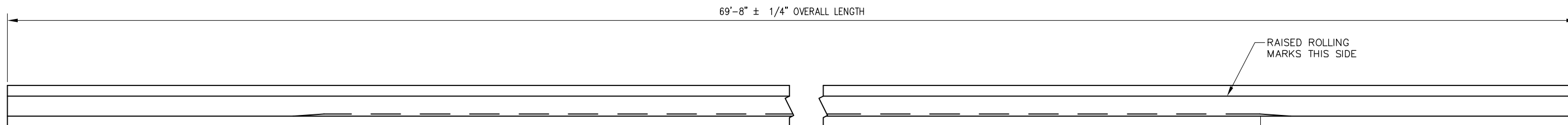
A PARTIAL SECTION
SCALE: NTS



B SECTION
SCALE: NTS

RAIL END / HOLE BEVELING DETAILS
RAIL HEAD ONLY - NOT BASE

BILL OF MATERIAL		
ITEM	QTY	DESCRIPTION
1	1	RAIL, 136 LB RE 69'-8" LONG



NOTES:

1. ALL BURNING METHODS PROHIBITED
2. ALL BOLT HOLES SHALL BE BEVELED PER DETAIL
3. POINT OF SWITCH SHALL BE MARKED ON GAUGE SIDE OF WEB WITH A WHITE LINE USING WATERPROOF MARKER OR PAINT
4. WRITE CALTRAIN SD NUMBER ON WEB OF RAIL WITH WATERPROOF MARKER OR PAINT

PENINSULA CORRIDOR JOINT POWERS BOARD

STANDARD DRAWINGS

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



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SPECIAL TRACKWORK
NO. 20 TURNOUT
SAMSON STOCK RAIL FOR RH TURNOUT
RH 69'-0" LONG

CADD FILE NAME:
SD-2714

REV: EDITION:
FOURTH

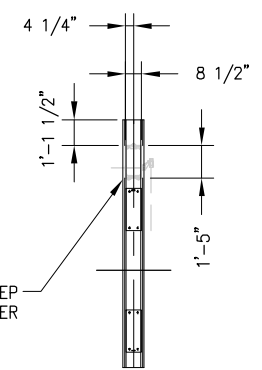
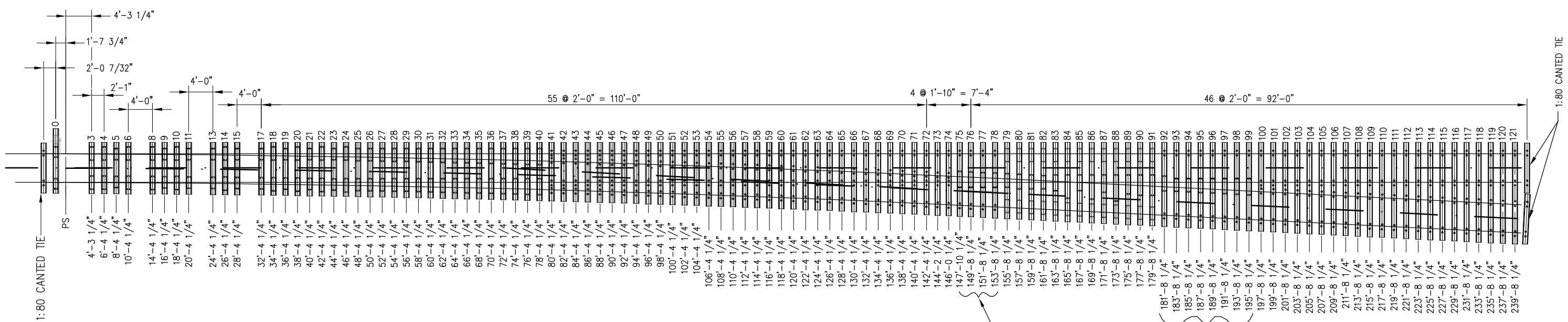
SPECIAL TRACKWORK

STANDARD DRAWING NO.:
SD-2714

REV	DATE	BY	CHK	APP	DESCRIPTION

01012024 FOURTH EDITION

BILL OF MATERIALS			
ITEM	QTY	DESCRIPTION	DWG NO
1	5	TIES 1,2,7,12 AND 16, POWER SWITCH MACHINE ON MAINLINE SIDE FOR RH TURNOUT (HOLLOW STEEL)	SD-2717
2	5	TIES 1,2,7,12 AND 16, POWER SWITCH MACHINE ON TURNOUT SIDE FOR RH TURNOUT (HOLLOW STEEL)	SD-2719



TIE #0 BLOCKOUT DETAIL

NOTES:


- SET SHALL INCLUDE TIES 03 THROUGH 6, 8 THROUGH 11, 13 THROUGH 15 AND 17 THROUGH 121, THREE 1:80 CANTED TIES, PLATE TIE PADS AND RIM INSERTS
- TIE LENGTHS ARE DETERMINED BY ADDING 1'-10 7/16" FROM RAIL GAUGE LINE (OR 1'-9" FROM RAIL CENTERLINE) PER SIDE AT THE CENTERLINE OF EACH TIE LOCATION
- ALL TIES ARE FLAT (NON-CANTED) EXCEPT 1:80 CANTED TIES
- TRANSITION TIES (QUANTITY 3) SHALL INCORPORATE 1:80 CANTED RAIL SEATS AND USE 4'-8 1/2" BETWEEN STRAIGHT RAIL SEAT GAUGES. LENGTH SHALL BE 8'-3"
- THIS DRAWING SHOWS TIE "0" PLACEMENT FOR SWITCH MACHINE ON RH/TURNOUT SIDE. USE OPPOSITE HAND FOR SWITCH MACHINE ON LH/MAINLINE SIDE
- SEE BILL OF MATERIALS ABOVE FOR TIES 1, 2, 7, 12 AND 16

PLATING IS 3/4" THICK. RAISE OUTSIDE RAIL SEATS ACCORDINGLY. ALL RAIL SEATS ARE FLAT

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



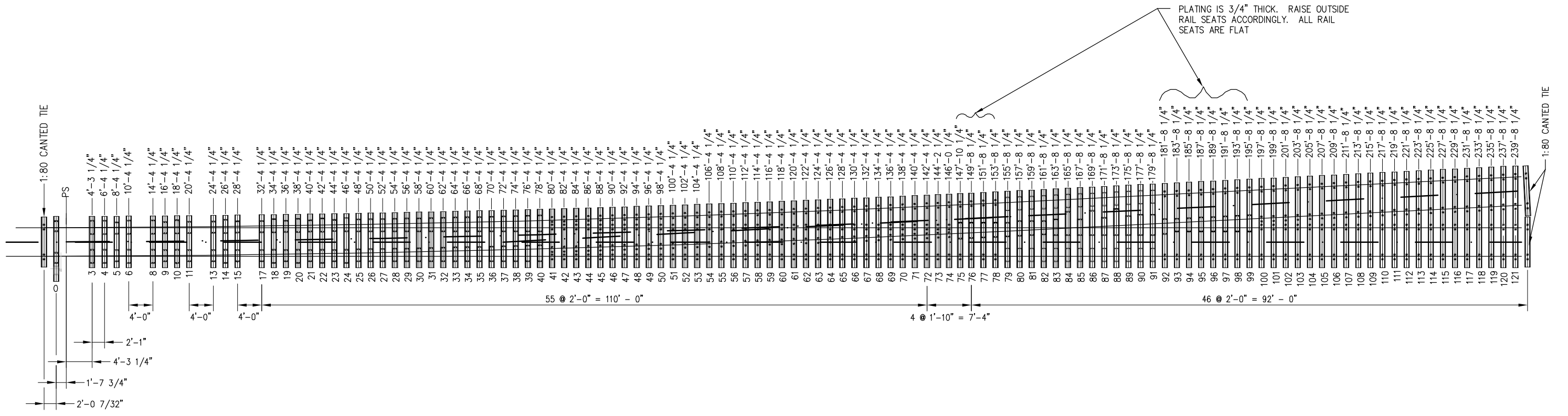
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

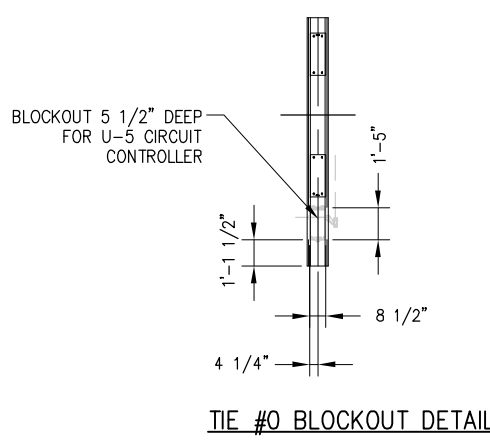
SPECIAL TRACKWORK
NO. 20 TURNOUT
HOLLOW STEEL TIE AND CONCRETE TIE
LAYOUT FOR RH TURNOUT

CADD FILE NAME: SD-2715
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO: SD-2715

BILL OF MATERIALS			
ITEM	QTY	DESCRIPTION	DWG NO
1	5	TIES 1,2,7,12 AND 16, POWER SWITCH MACHINE ON MAINLINE SIDE FOR LH TURNOUT (HOLLOW STEEL)	SD-2718
2	5	TIES 1,2,7,12 AND 16, POWER SWITCH MACHINE ON TURNOUT SIDE FOR LH TURNOUT (HOLLOW STEEL)	SD-2720



PLATING IS 3/4" THICK. RAISE OUTSIDE RAIL SEATS ACCORDINGLY. ALL RAIL SEATS ARE FLAT




NOTES:

1. SET SHALL INCLUDE TIES 0, 3 THROUGH 6, 8 THROUGH 11, 13 THROUGH 15 AND 17 THROUGH 121, THREE 1:80 CANTED TIES, PLATE TIE PADS AND RIM INSERTS
2. TIE LENGTHS ARE DETERMINED BY ADDING 1'-10 7/16" FROM RAIL GAUGE LINE (OR 1'-9" FROM RAIL CENTERLINE) PER SIDE AT THE CENTERLINE OF EACH TIE LOCATION
3. ALL TIES ARE FLAT (NON-CANTED) EXCEPT 1:80 CANTED TIES
4. TRANSITION TIES (QUANTITY 3) SHALL INCORPORATE 1:80 CANTED RAIL SEATS AND USE 4'-8 1/2" BETWEEN STRAIGHT RAIL SEAT GAUGES. LENGTH SHALL BE 8'-3"
5. THIS DRAWING SHOWS TIE "0" PLACEMENT FOR SWITCH MACHINE ON LH/TURNOUT SIDE. USE OPPOSITE HAND FOR SWITCH MACHINE ON RH/MAINLINE SIDE
6. SEE BILL OF MATERIALS ABOVE FOR TIES 1, 2, 7, 12 AND 16

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 AND CONCRETE TIE
LAYOUT FOR LH TURNOUT

CADD FILE NAME: SD-2716	REV: SD-2716
EDITION: FOURTH	
SPECIAL TRACKWORK	
STANDARD DRAWING NO: SD-2716	

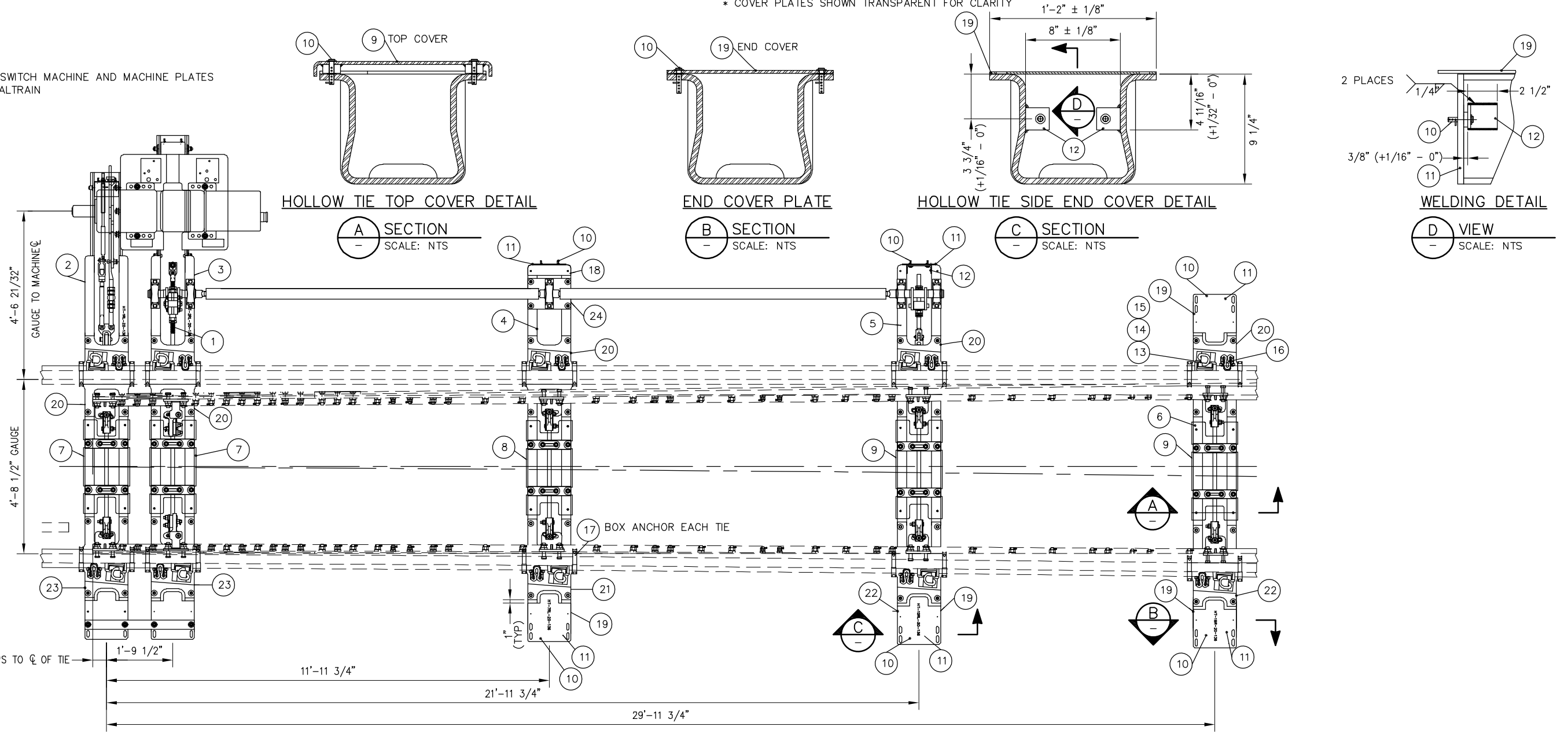
BILL OF MATERIAL				DWG NO
ITEM	QTY	DESCRIPTION		
1	1	ASSEMBLY FOR NO 20-136 LB RE, SWITCH MACHINE ON LH SIDE	SD-2739	
2	1	HOLLOW TIE ASSEMBLY (HT-1RL-20-136)	-	
3	1	HOLLOW TIE ASSEMBLY (HT-2RL-20-136)	-	
4	1	HOLLOW TIE ASSEMBLY (HT-7RL-20-136)	-	
5	1	HOLLOW TIE ASSEMBLY (HT-12RL-20-136)	-	
6	1	HOLLOW TIE ASSEMBLY (HT-16L-20-136)	-	
7*	2	COVER PLATE NO 1, HOLLOW SWITCH TIE	-	
8*	1	COVER PLATE NO 2, HOLLOW SWITCH TIE	-	
9*	2	COVER PLATE NO 3, HOLLOW SWITCH TIE	-	
10	42	PUSH PIN ASSEMBLY FOR HST COVERS	-	
11	6	STEEL SIDE END COVER PLATE ASSEMBLY FOR HST TIE	-	
12	12	COVER SUPPORT BRACKET	-	

BILL OF MATERIAL				DWG NO
ITEM	QTY	DESCRIPTION		
13	10	LV BRACE FOR 136 LB RE	-	
14	10	SERRATED WASHER FOR LV BRACE	-	
15	10	CLIP, PANDROL, E2055	-	
16	10	CLIP, PANDROL, FC1601	-	
17	20	RAIL ANCHOR, UNIT DRIVE-ON TYPE 5	-	
18	1	STEEL COVER PLATE FOR HST TIE, SHORT TOP VERSION	-	
19	4	STEEL COVER PLATE FOR HST TIE, TOP END	-	
20	5	HST SWITCH PLATE HTP-206-STR	SD-2305	
21	1	HST SWITCH PLATE HTP-209-R	SD-2307	
22	2	HST SWITCH PLATE HTP-201-R	SD-2308	
23	2	HST SWITCH PLATE HTP-301-R	SD-2306	
24	1	PILLOW BLOCK MOUNTING PLATE	-	

* COVER PLATES SHOWN TRANSPARENT FOR CLARITY

NOTES:

- COORDINATE SWITCH MACHINE AND MACHINE PLATES (NIC) WITH CALTRAIN




REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

PENINSULA CORRIDOR JOINT POWERS BOARD

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Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



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San Carlos, CA 94070

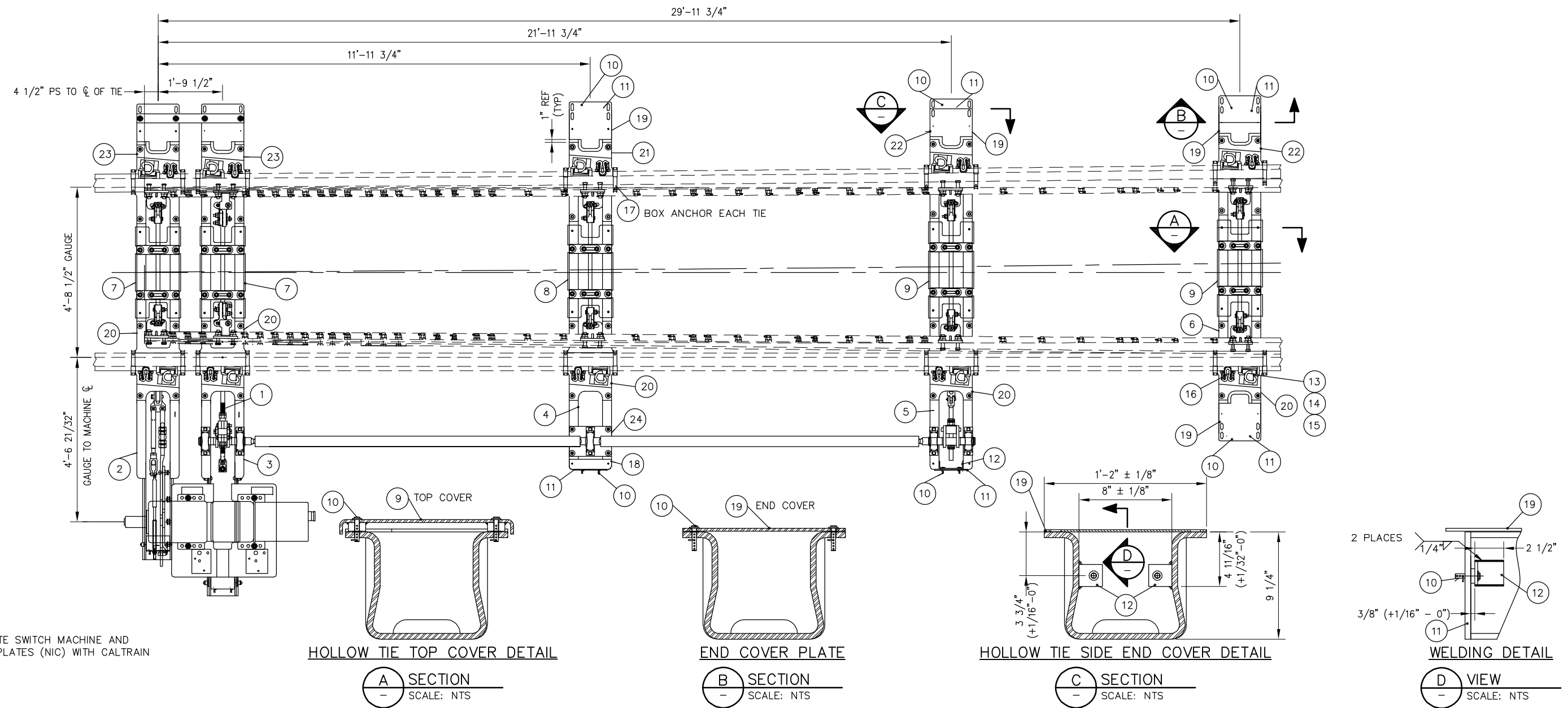
STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
HOLLOW STEEL TIES
FOR RH TURNOUT WITH
SWITCH MACHINE ON MAINLINE SIDE

CADD FILE NAME:	SD-2717
REV:	EDITION:
	FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.:	SD-2717

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	RODDING ASSEMBLY FOR NO 20-136 LB RE, SWITCH MACHINE ON RH SIDE	SD-2740	13	10	LV BRACE FOR 136 LB RE	-
2	1	HOLLOW TIE ASSEMBLY (HT-1LR-20-136)	-	14	10	SERRATED WASHER FOR LV BRACE	-
3	1	HOLLOW TIE ASSEMBLY (HT-2LR-20-136)	-	15	10	CLIP, PANDROL, E2055	-
4	1	HOLLOW TIE ASSEMBLY (HT-7LR-20-136)	-	16	10	CLIP, PANDROL, FC1601	-
5	1	HOLLOW TIE ASSEMBLY (HT-12LR-20-136)	-	17	20	RAIL ANCHOR, UNIT DRIVE-ON TYPE 5	-
6	1	HOLLOW TIE ASSEMBLY (HT-16L-20-136)	-	18	1	STEEL COVER PLATE FOR HST TIE, SHORT TOP VERSION	-
7*	2	COVER PLATE NO 1, HOLLOW SWITCH TIE	-	19	4	STEEL COVER PLATE FOR HST TIE, TOP END	-
8*	1	COVER PLATE NO 2, HOLLOW SWITCH TIE	-	20	5	HST SWITCH PLATE HTP-206-STR	SD-2305
9*	2	COVER PLATE NO 3, HOLLOW SWITCH TIE	-	21	1	HST SWITCH PLATE HTP-208-L	SD-2307
10	42	PUSH PIN ASSEMBLY FOR HST COVERS	-	22	2	HST SWITCH PLATE HTP-200-L	SD-2308
11	6	STEEL SIDE END COVER PLATE ASSEMBLY FOR HST TIE	-	23	2	HST SWITCH PLATE HTP-300-L	SD-2306
12	12	COVER SUPPORT BRACKET	-	24	1	PILLOW BLOCK MOUNTING PLATE	-

* COVER PLATES SHOWN TRANSPARENT FOR CLARITY



PENINSULA CORRIDOR JOINT POWERS BOARD

STANDARD DRAWINGS

CADD FILE NAME:
SD-2718

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



1250 San Carlos Avenue
San Carlos, CA 94070

SPECIAL TRACKWORK
NO. 20 TURNOUT
HOLLOW STEEL TIES
FOR LH TURNOUT WITH
SWITCH MACHINE ON MAINLINE SIDE

REV: EDITION:
FOURTH

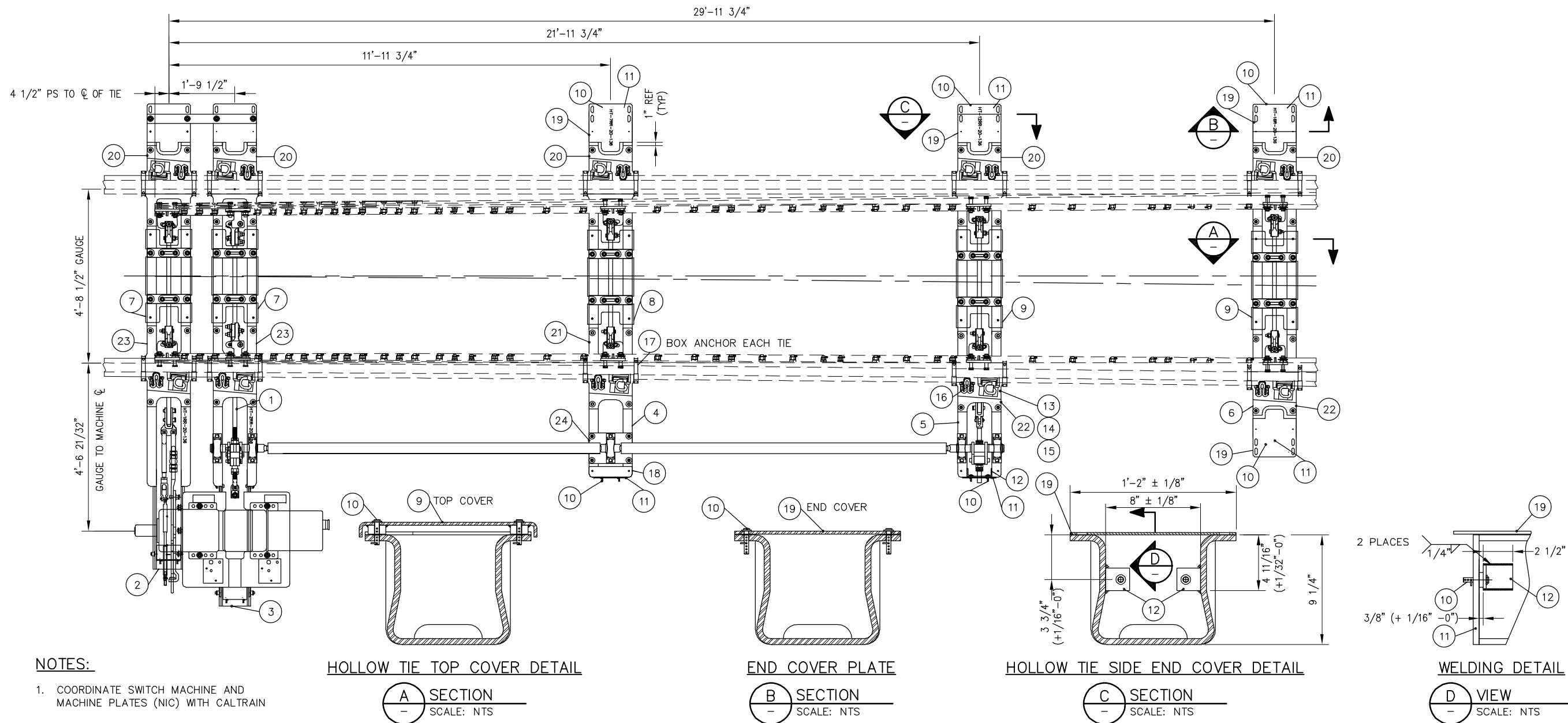
SPECIAL TRACKWORK

STANDARD DRAWING NO:
SD-2718

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

BILL OF MATERIAL					BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO		
1	1	RODDING ASSEMBLY FOR NO 20-136 LB RE, SWITCH MACHINE ON RH SIDE	SD-2740	13	10	LV BRACE FOR 136 LB RE	-		
2	1	HOLLOW TIE ASSEMBLY (HT-1RR-20-136)	-	14	10	SERRATED WASHER FOR LV BRACE	-		
3	1	HOLLOW TIE ASSEMBLY (HT-2RR-20-136)	-	15	10	CLIP, PANDROL, E2055	-		
4	1	HOLLOW TIE ASSEMBLY (HT-7RR-20-136)	-	16	10	CLIP, PANDROL, FC1601	-		
5	1	HOLLOW TIE ASSEMBLY (HT-12RR-20-136)	-	17	20	RAIL ANCHOR, UNIT DRIVE-ON TYPE 5	-		
6	1	HOLLOW TIE ASSEMBLY (HT-16R-20-136)	-	18	1	STEEL COVER PLATE FOR HST TIE, SHORT TOP VERSION	-		
7*	2	COVER PLATE NO 1, HOLLOW SWITCH TIE	-	19	4	STEEL COVER PLATE FOR HST TIE, TOP END	-		
8*	1	COVER PLATE NO 2, HOLLOW SWITCH TIE	-	20	5	HST SWITCH PLATE HTP-206-STR	SD-2305		
9*	2	COVER PLATE NO 3, HOLLOW SWITCH TIE	-	21	1	HST SWITCH PLATE HTP-209-R	SD-2307		
10	42	PUSH PIN ASSEMBLY FOR HST COVERS	-	22	2	HST SWITCH PLATE HTP-201-R	SD-2308		
11	6	STEEL SIDE END COVER PLATE ASSEMBLY FOR HST TIE	-	23	2	HST SWITCH PLATE HTP-301-R	SD-2306		
12	12	COVER SUPPORT BRACKET	-	24	1	PILLOW BLOCK MOUNTING PLATE	-		

* COVER PLATES SHOWN TRANSPARENT FOR CLARITY



NOTES:

- COORDINATE SWITCH MACHINE AND MACHINE PLATES (NIC) WITH CALTRAIN


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



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San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
HOLLOW STEEL TIES
FOR RH TURNOUT WITH
SWITCH MACHINE ON TURNOUT SIDE

CADD FILE NAME: SD-2719

REV: EDITION: FOURTH

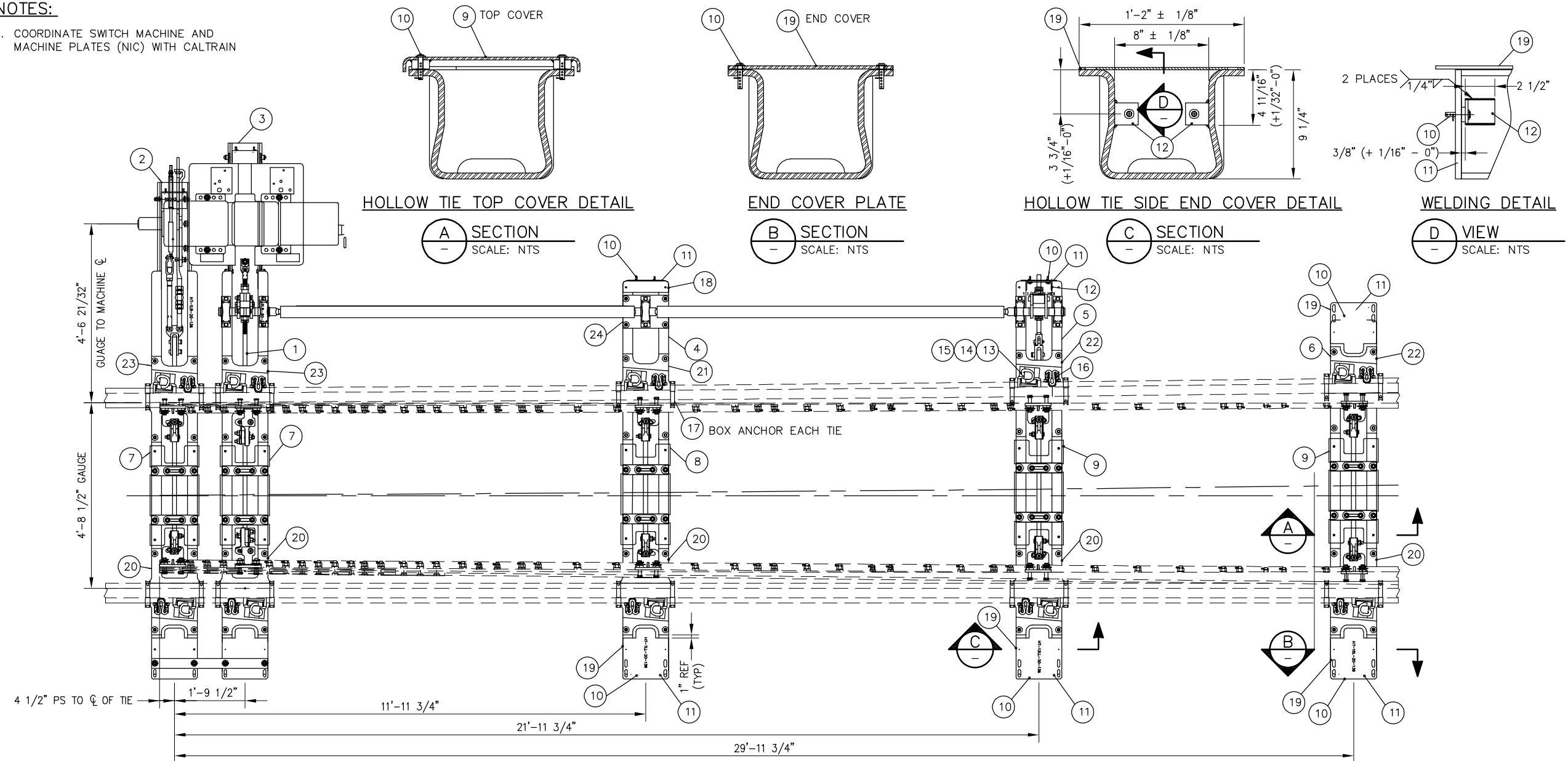
STANDARD DRAWING NO.: SD-2719

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	RODDING ASSEMBLY FOR NO 20-136 LB RE, SWITCH MACHINE ON LH SIDE	SD-2739	13	10	LV BRACE FOR 136 LB RE	-
2	1	HOLLOW TIE ASSEMBLY (HT-1LL-20-136)	-	14	10	SERRATED WASHER FOR LV BRACE	-
3	1	HOLLOW TIE ASSEMBLY (HT-2LL-20-136)	-	15	10	CLIP, PANDROL, E2055	-
4	1	HOLLOW TIE ASSEMBLY (HT-7LL-20-136)	-	16	10	CLIP, PANDROL, FC1601	-
5	1	HOLLOW TIE ASSEMBLY (HT-12LL-20-136)	-	17	20	RAIL ANCHOR, UNIT DRIVE-ON TYPE 5	-
6	1	HOLLOW TIE ASSEMBLY (HT-16L-20-136)	-	18	1	STEEL COVER PLATE FOR HST TIE, SHORT TOP VERSION	-
7*	2	COVER PLATE NO 1, HOLLOW SWITCH TIE	-	19	4	STEEL COVER PLATE FOR HST TIE, TOP END	-
8*	1	COVER PLATE NO 2, HOLLOW SWITCH TIE	-	20	5	HST SWITCH PLATE HTP-206-STR	SD-2305
9*	2	COVER PLATE NO 3, HOLLOW SWITCH TIE	-	21	1	HST SWITCH PLATE HTP-208-L	SD-2307
10	42	PUSH PIN ASSEMBLY FOR HST COVERS	-	22	2	HST SWITCH PLATE HTP-200-L	SD-2308
11	6	STEEL SIDE END COVER PLATE ASSEMBLY FOR HST TIE	-	23	2	HST SWITCH PLATE HTP-300-L	SD-2306
12	12	COVER SUPPORT BRACKET	-	24	1	PILLOW BLOCK MOUNTING PLATE	-

* COVER PLATES SHOWN TRANSPARENT FOR CLARITY

NOTES:

- COORDINATE SWITCH MACHINE AND MACHINE PLATES (NIC) WITH CALTRAIN




REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

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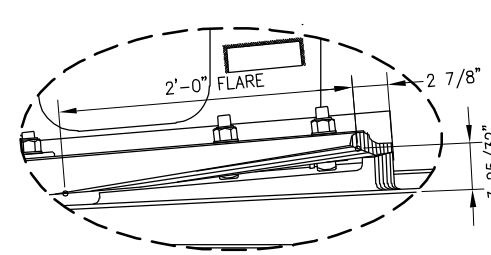
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
HOLLOW STEEL TIES
FOR LH TURNOUT WITH
SWITCH MACHINE ON TURNOUT SIDE

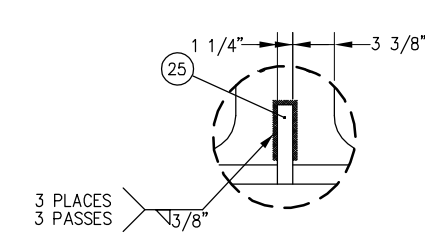
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REV:	EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.:	SD-2720

BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	NO 20-136 LB RE SPRING FROG, LH POINT ASSEMBLY	-	21	1	SPRING BOX ASSEMBLY, WITH 5 1/2" MAXIMUM PLUNGER TRAVEL	-
2	1	SPRING WING RAIL, NO 20-136 LB RE, LH, C/W D-BAR	-	22	1	RETARDER TIMING DEVICE (ENIDINE P/N SP22917)	-
3	1	TOE BLOCK, NO 20-136 LB RE WSM	-	23	1	RETARDER BRACKET FOR SPRING FROGS	-
4	1	FROG PLATE (SF20-136-75LC)	SD-2723	24	1	RETARDER PLATE BRACKET FOR FROG	-
5	1	FROG PLATE (SF20-136-76LC)	SD-2723	25	3	FLAT RAIL BRACE FOR NON D-BAR APPLICATIONS	-
6	1	FROG PLATE (SF20-136-77LC)	SD-2723	26	7	WASHER, BOLT CAPTURE STYLE, 1/4" THICK	-
7	1	FROG PLATE (SF20-136-78LC)	SD-2725	27	18	BOLT, 1" DIA x 3" LONG, THIN SQUARE HEAD, DRILLED @ 2 1/2", GR 5	-
8	1	FROG PLATE (SF20-136-83LC)	SD-2727	28	10	BOLT, 1" DIA x 3 1/2" LONG, THIN SQUARE HEAD, DRILLED @ 2 11/16", GR 5	-
9	1	FROG PLATE (SF20-136-88LC)	SD-2729	29	2	BOLT, 1" DIA x 4 1/8" LONG, HEAVY HEX HEAD, GR 8	-
10	1	FROG PLATE (SF20-136-93LC)	SD-2731	30	14	BOLT, 1" DIA x 4 1/2" LONG, SQUARE HEAD, GR 5	-
11	1	FROG PLATE (SF20-136-94LC)	SD-2731	31	6	BOLT, 1 3/8" DIA x 5 1/2" LONG, SQUARE HEAD, GR 8	-
12	1	FROG PLATE (SF20-136-95LC)	SD-2731	32	16	SECURITY LOCK NUT, 1" DIA, HEX (SH521), GR 5	-
13	1	FROG PLATE (SF20-136-96LC)	SD-2733	33	28	NUT, 1" DIA HEAVY HEX, SLOTTED, GR 5	-
14	1	FROG PLATE (SF20-136-97LC)	SD-2733	34	6	SECURITY LOCK NUT, 1 3/8" DIA HEX (SH530), GR 8	-
15	1	FROG PLATE (SF20-136-98LC)	SD-2735	35	32	FLAT WASHER, FOR 1" DIA x 5/32" THICK, HARDENED	-
16	1	FROG PLATE (SF20-136-99LC)	SD-2735	36	6	FLAT WASHER, FOR 1 3/8" DIA x 1/4" THICK, HARDENED	-
17	5	HORN KEEPER, REVERSIBLE	-	37	6	TAIL WASHER, FLAT (837K)	-
18	5	HOLD-DOWN HORN	-	38	14	HEADLOCK WASHER, FLAT (837P)	-
19	5	WEAR PLATE FOR REVERSIBLE HORN KEEPER	-	39	48	CLIP, PANDROL, E2055	-
20	1	SPRING BOX ASSEMBLY, WITH 3" MAXIMUM PLUNGER TRAVEL	-	40	28	COTTER PIN, 1/4" DIA x 2" LONG	-

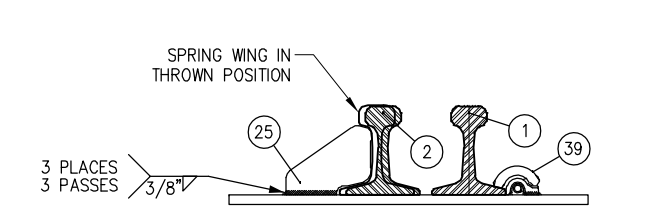
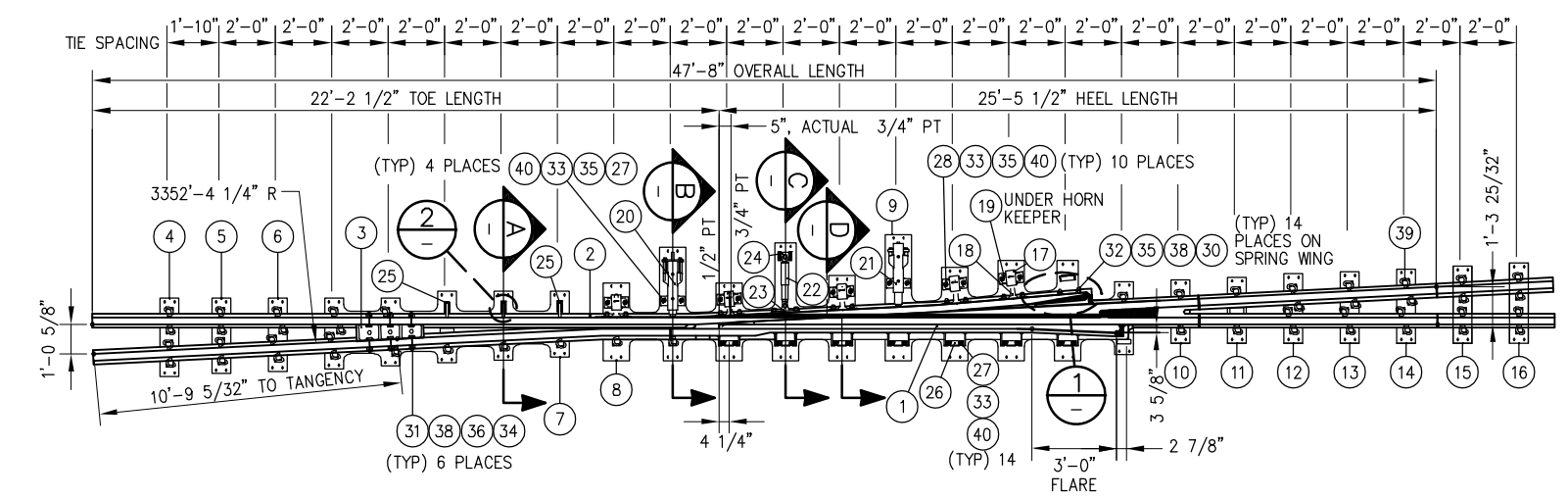


DIMENSIONS AT GAUGE ELEVATION

1 DETAIL
SCALE: NTS

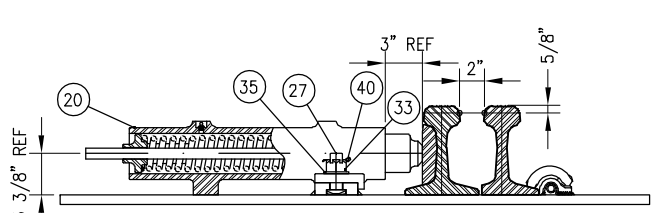


2 DETAIL
SCALE: NTS



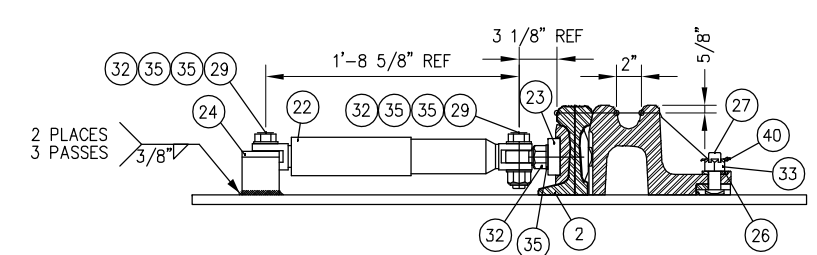
FLAT RAIL BRACE MOUNTING DETAILS
TYPICAL 3 PLACES

A SECTION
SCALE: NTS



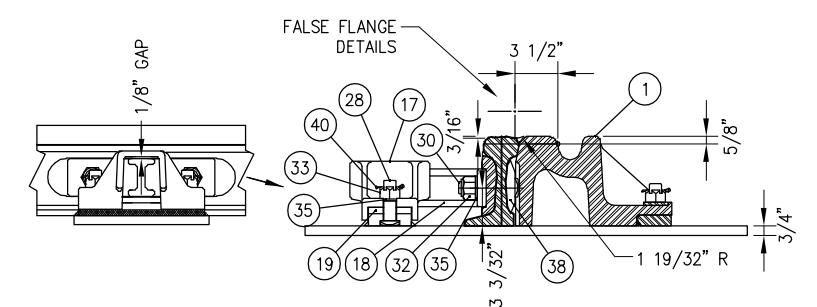
SPRING BOX MOUNTING DETAILS

B SECTION
SCALE: NTS



RETARDER MOUNTING DETAILS
(RETARDER NOT SHOWN SECTIONAL)

C SECTION
SCALE: NTS



HORN AND KEEPER MOUNTING DETAILS

D SECTION
SCALE: NTS

NOTES:

- RETARDER CLOSING TIME RANGES FROM 1 TO 3 MINUTES
- SPRING BOX LOAD IS 300 LB/IN
- SPRING WING SHALL BE THROWN TO A 1 7/8" FLANGEWAY AT THE 3/4" POINT TO DETERMINE THE SPRING WING THROWN POSITION
- FLAT RAIL BRACES (ITEM NO 25) SHALL BE WELDED WHERE SHOWN, UP AGAINST SPRING WING WHEN FULLY THROWN
- RAIL END DRILLING SHALL BE @ 9" AND 15 1/2", 3 3/32" ABOVE RAIL BASE, 1 5/16" DIA AT ALL 4 RAIL ENDS. ALL RAIL HOLE EDGES SHALL BE ROUNDED WITH A 1/8" R
- RETARDER BRACKET (ITEM NO 23) SHALL BE WELDED AS SHOWN
- FROG SHALL BE CONSTRUCTED TO TOLERANCES GIVEN ON LATEST AREMA PLAN 1010, PERMISSIBLE VARIATIONS IN COMPLETED FROGS
- INSERT SHALL BE EXPLOSIVE DEPTH HARDENED TO 352 BRINELL PER AREMA
- NAME TAG SHALL BE AFFIXED TO RIGID WING RAIL NEAR 1/2" PT WITH INFORMATION SHOWN
- CALTRAIN WILL CONSIDER A TAPERED HEEL SPRING OF SAME ALIGNMENT AND DIMENSIONS TO REPLACE WSM


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



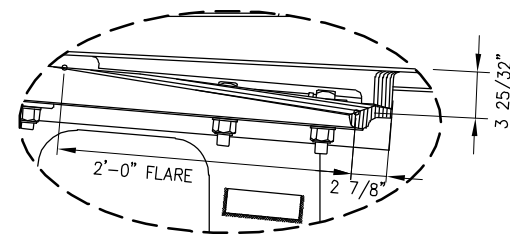
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

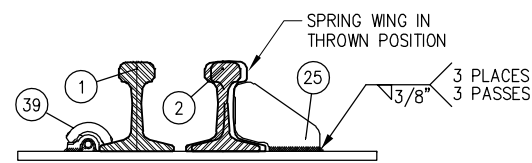
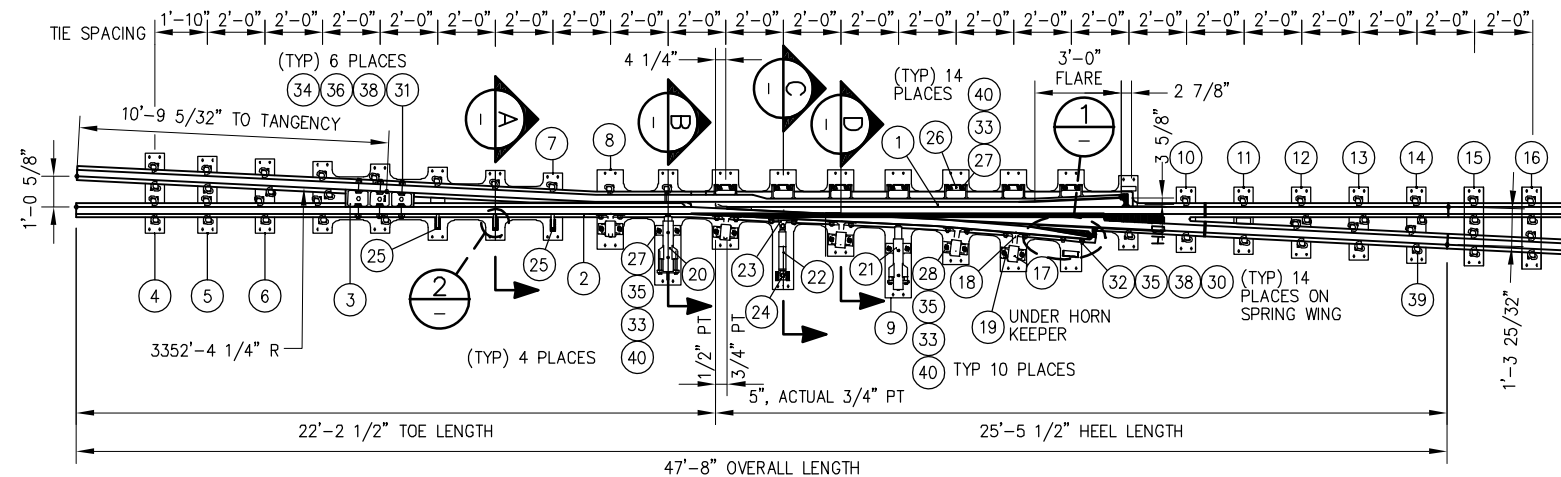
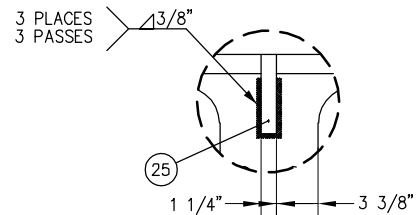
SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG LH
AND FROG PACK

CADD FILE NAME: SD-2721
REV: EDITION: FOURTH
STANDARD DRAWING NO.: SD-2721

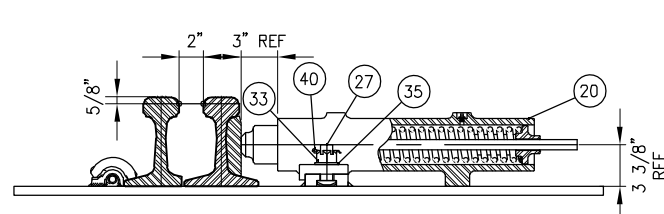
BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	NO 20-136 LB RE SPRING FROG, RH POINT ASSEMBLY	-	21	1	SPRING BOX ASSEMBLY, WITH 5 1/2" MAXIMUM PLUNGER TRAVEL	-
2	1	SPRING WING RAIL, NO 20-136 LB RE, RH, C/W D-BAR	-	22	1	RETARDER TIMING DEVICE (ENIDINE P/N SP22917)	-
3	1	TOE BLOCK, NO 20-136 LB RE WSM	-	23	1	RETARDER BRACKET FOR SPRING FROGS	-
4	1	FROG PLATE (SF20-136-75RC)	SD-2724	24	1	RETARDER PLATE BRACKET FOR FROG	-
5	1	FROG PLATE (SF20-136-76RC)	SD-2724	25	3	FLAT RAIL BRACE FOR NON D-BAR APPLICATIONS	-
6	1	FROG PLATE (SF20-136-77RC)	SD-2724	26	7	WASHER, BOLT CAPTURE STYLE, 1/4" THICK	-
7	1	FROG PLATE (SF20-136-78RC)	SD-2726	27	18	BOLT, 1" DIA x 3" LONG, THIN SQUARE HEAD, DRILLED @ 2 1/2", GR 5	-
8	1	FROG PLATE (SF20-136-83RC)	SD-2728	28	10	BOLT, 1" DIA x 3 1/2" LONG, THIN SQUARE HEAD, DRILLED @ 2 11/16", GR 5	-
9	1	FROG PLATE (SF20-136-88RC)	SD-2730	29	2	BOLT, 1" DIA x 4 1/8" LONG, HEAVY HEX HEAD, GR 8	-
10	1	FROG PLATE (SF20-136-93RC)	SD-2732	30	14	BOLT, 1" DIA x 4 1/2" LONG, SQUARE HEAD, GR 5	-
11	1	FROG PLATE (SF20-136-94RC)	SD-2732	31	6	BOLT, 1 3/8" DIA x 5 1/2" LONG, SQUARE HEAD, GR 8	-
12	1	FROG PLATE (SF20-136-95RC)	SD-2732	32	16	SECURITY LOCK NUT, 1" DIA, HEX (SH521), GR 5	-
13	1	FROG PLATE (SF20-136-96RC)	SD-2734	33	28	NUT, 1" DIA HEAVY HEX, SLOTTED, GR 5	-
14	1	FROG PLATE (SF20-136-97RC)	SD-2734	34	6	SECURITY LOCK NUT, 1 3/8" DIA HEX (SH530), GR 8	-
15	1	FROG PLATE (SF20-136-98RC)	SD-2736	35	32	FLAT WASHER, FOR 1" DIA x 5/32" THICK, HARDENED	-
16	1	FROG PLATE (SF20-136-99RC)	SD-2736	36	6	FLAT WASHER, FOR 1 3/8" DIA x 1/4" THICK, HARDENED	-
17	5	HORN KEEPER, REVERSIBLE	-	37	6	TAIL WASHER, FLAT (837K)	-
18	5	HOLD-DOWN HORN	-	38	14	HEADLOCK WASHER, FLAT (837P)	-
19	5	WEAR PLATE FOR REVERSIBLE HORN KEEPER	-	39	48	CLIP, PANDROL, E2055	-
20	1	SPRING BOX ASSEMBLY, WITH 3" MAXIMUM PLUNGER TRAVEL	-	40	28	COTTER PIN, 1/4" DIA x 2" LONG	-



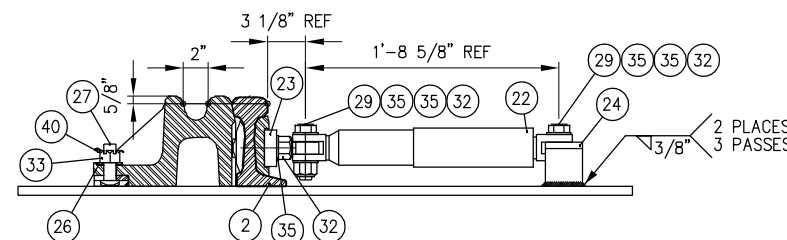
DIMENSIONS AT GAUGE ELEVATION



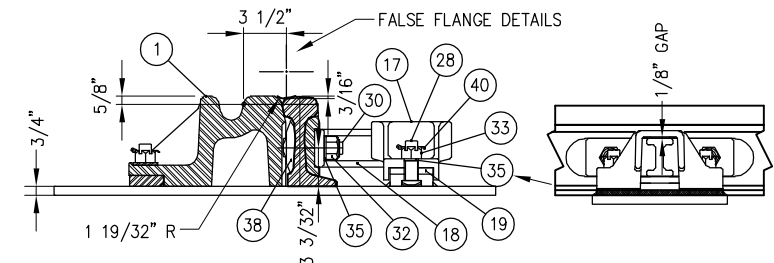
FLAT RAIL BRACE MOUNTING DETAILS
TYPICAL 3 PLACES



SPRING BOX MOUNTING DETAILS



RETARDER MOUNTING DETAILS
(RETARDER NOT SHOWN SECTIONAL)



HORN AND KEEPER MOUNTING DETAILS



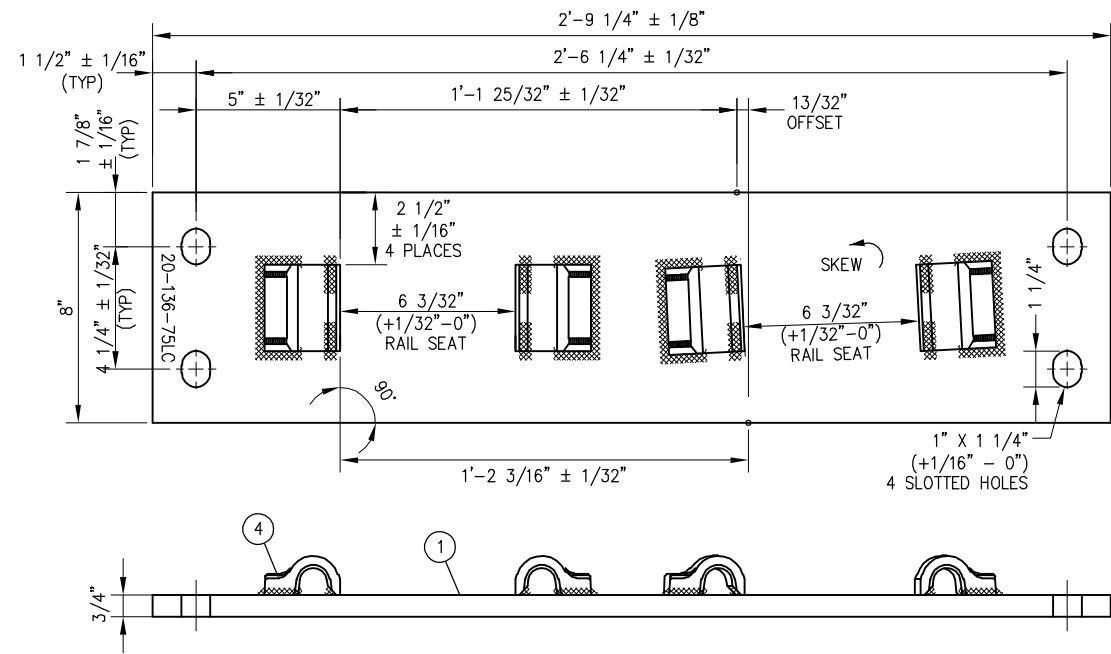
NOTES:

- RETARDER CLOSING TIME RANGES FROM 1 TO 3 MINUTES
- SPRING BOX LOAD IS 300 LB/IN
- SPRING WING SHALL BE THROWN TO A 1 7/8" FLANGWAY AT THE 3/4" POINT TO DETERMINE THE SPRING WING THROWN POSITION
- FLAT RAIL BRACES (ITEM NO 25) SHALL BE WELDED WHERE SHOWN, UP AGAINST SPRING WING WHEN FULLY THROWN
- RAIL END DRILLING SHALL BE @ 9" AND 15 1/2", 3 3/32" ABOVE RAIL BASE, 1 5/16" DIA AT ALL 4 RAIL ENDS. ALL RAIL HOLE EDGES SHALL BE ROUNDED WITH A 1/8" R
- RETARDER BRACKET (ITEM NO 23) SHALL BE WELDED AS SHOWN
- FROG SHALL BE CONSTRUCTED TO TOLERANCES GIVEN ON LATEST AREMA PLAN 1010, PERMISSIBLE VARIATIONS IN COMPLETED FROGS
- INSERT SHALL BE EXPLOSIVE DEPTH HARDENED TO 352 BRINELL PER AREMA
- NAME TAG SHALL BE AFFIXED TO RIGID WING RAIL NEAR 1/2" PT WITH INFORMATION SHOWN
- CALTRAIN WILL CONSIDER A TAPERED HEEL SPRING OF SAME ALIGNMENT AND DIMENSIONS TO REPLACE WSM

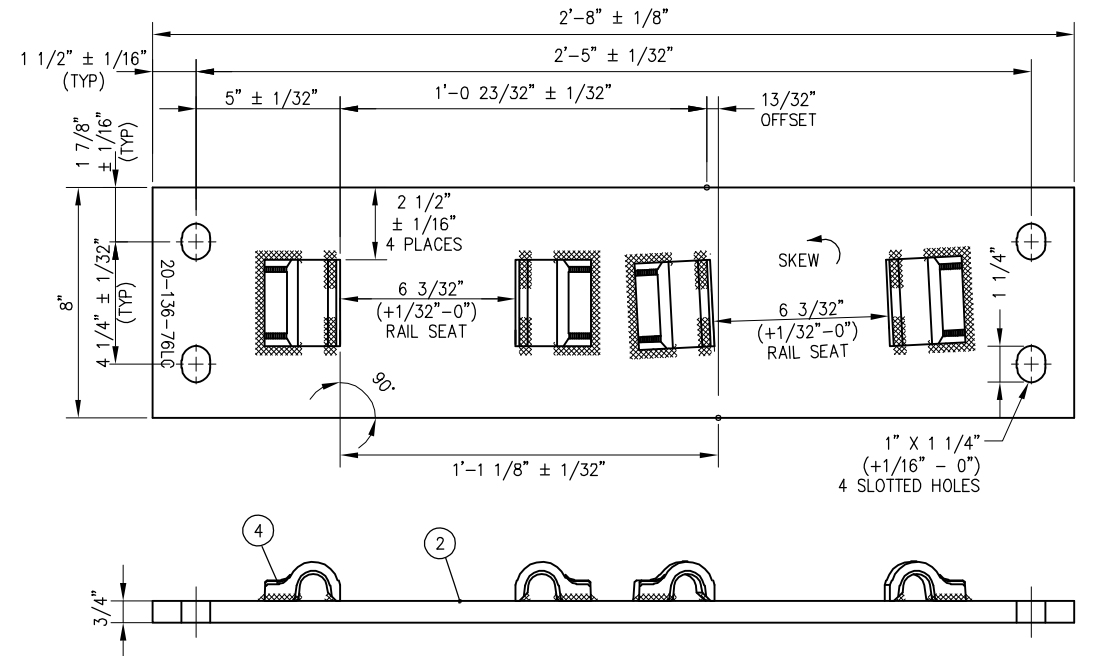
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					01012024 FOURTH EDITION						

PENINSULA CORRIDOR JOINT POWERS BOARD		STANDARD DRAWINGS		CADD FILE NAME: SD-2722
APPROVED BY: <i>Bin Zhang</i> DEPUTY DIRECTOR, ENGINEERING				REV: EDITION: FOURTH
		SPECIAL TRACKWORK NO. 20 TURNOUT WSM FROG RH AND FROG PACK		SPECIAL TRACKWORK
				STANDARD DRAWING NO.: SD-2722

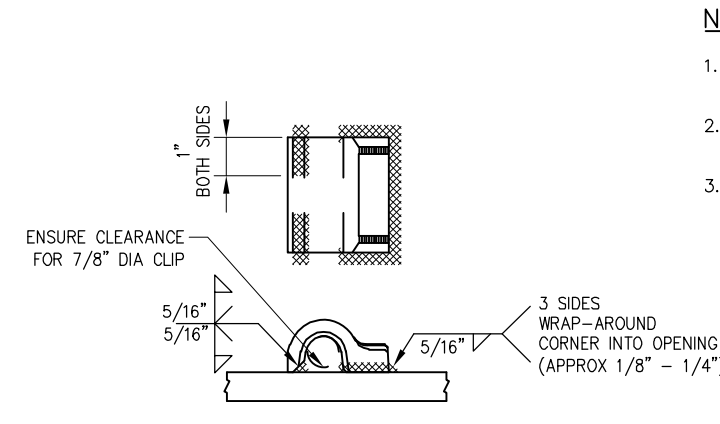
BILL OF MATERIAL					
ITEM	QTY FOR 20-75LC	QTY FOR 20-76LC	QTY FOR 20-77LC	DESCRIPTION	DWG NO
1	1	0	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-9 1/4" LONG	-
2	0	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-8" LONG	-
3	0	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-7" LONG	-
4	4	4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



FROG BASE PLATE 20-136-75LC



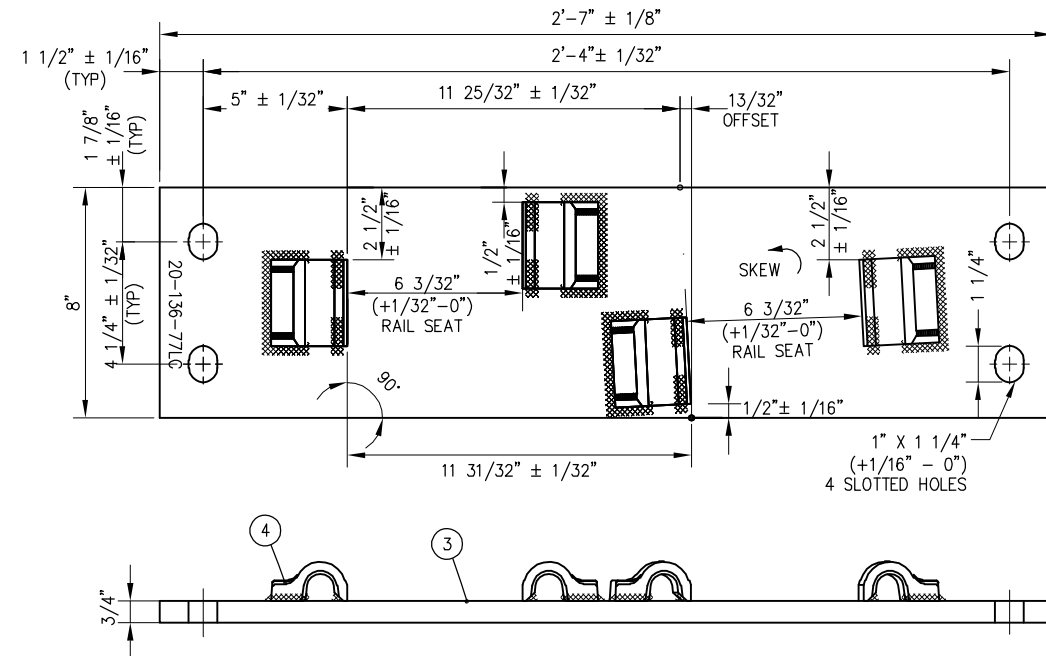
FROG BASE PLATE 20-136-76LC



FORGED SHOULDER WELDING DETAIL

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



FROG BASE PLATE 20-136-77LC

REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:
Bin Zhang
DEPUTY DIRECTOR, ENGINEERING

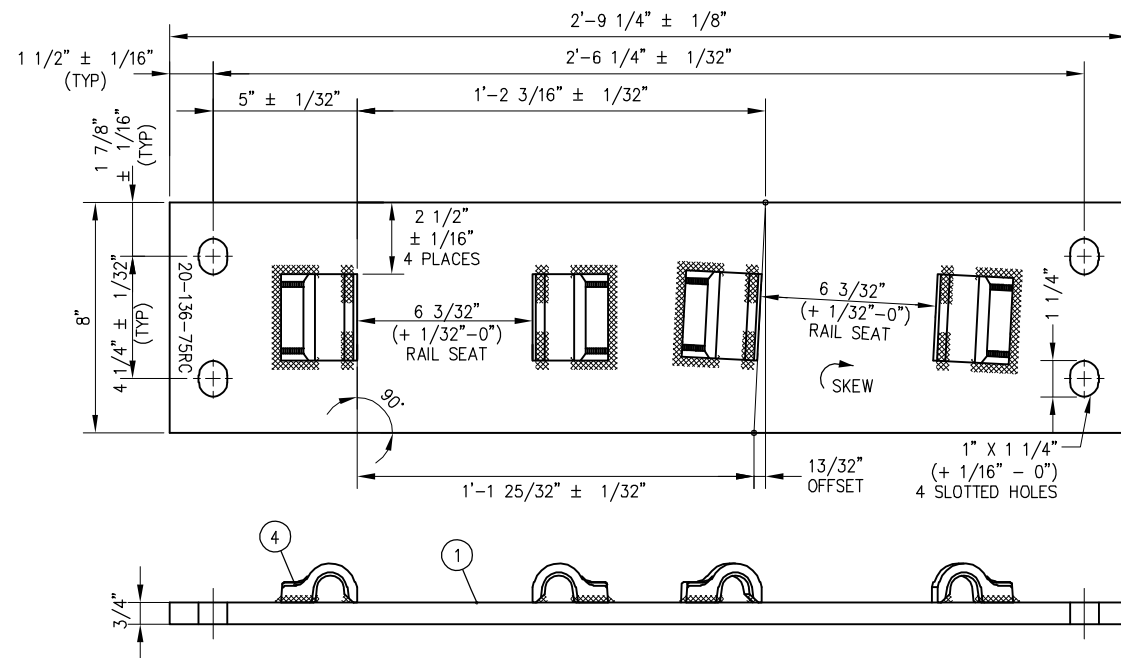
Caltrain
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

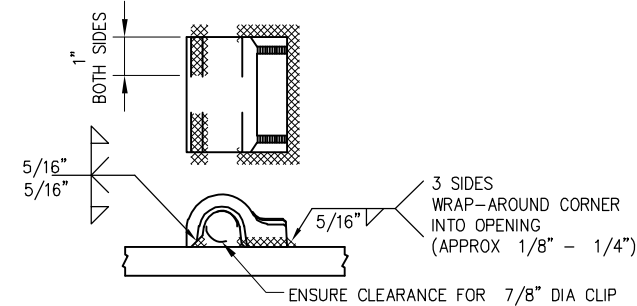
SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG LH
FROG BASE PLATES
20-75LC, 20-76LC AND 20-77LC

CADD FILE NAME: SD-2723
REV: EDITION: FOURTH
SPECIAL TRACKWORK
STANDARD DRAWING NO: SD-2723

BILL OF MATERIAL					
ITEM	QTY FOR 20-75RC	QTY FOR 20-76RC	QTY FOR 20-77RC	DESCRIPTION	DWG NO
1	1	0	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-9 1/4" LONG	-
2	0	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-8" LONG	-
3	0	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-7" LONG	-
4	4	4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



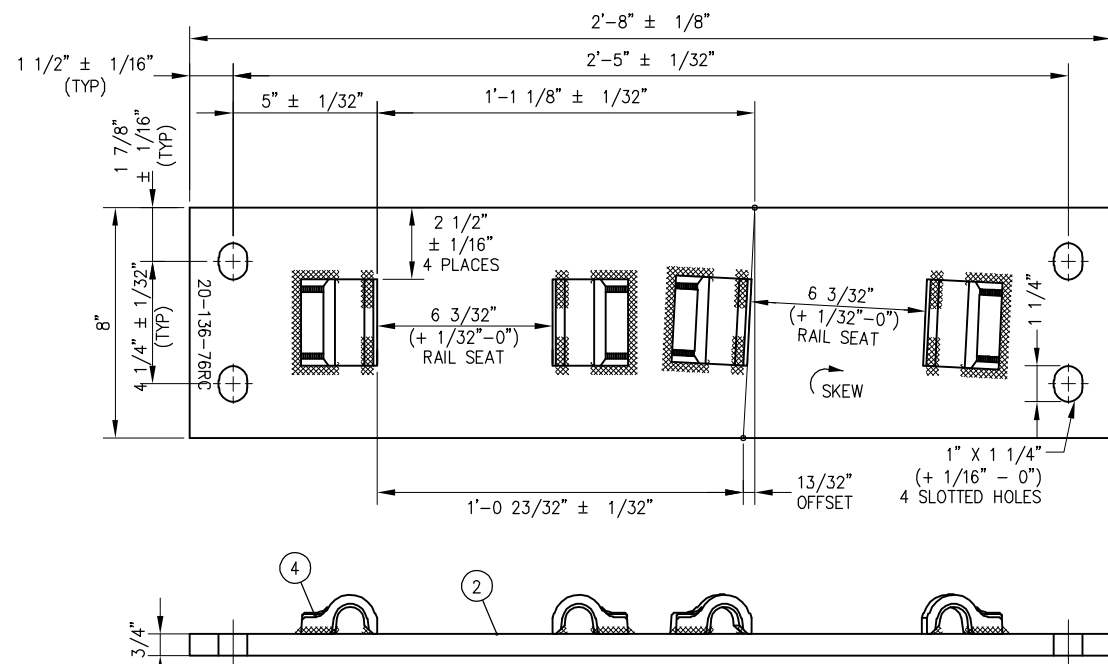
FROG BASE PLATE 20-136-75RC



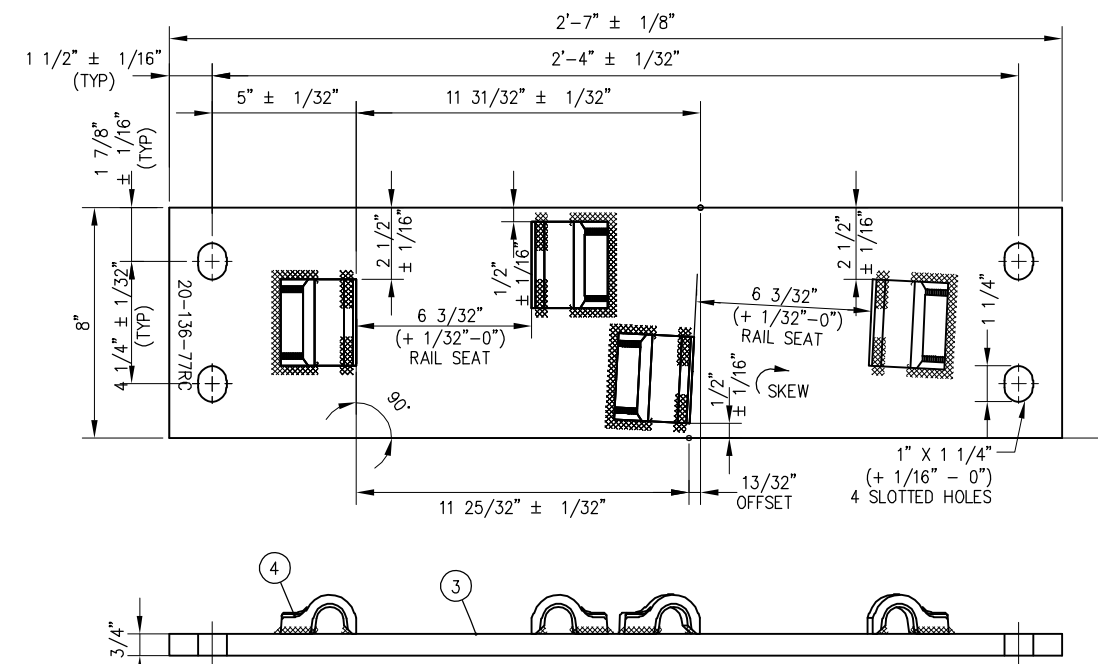
FORGED SHOULDER WELDING DETAIL

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



FROG BASE PLATE 20-136-76RC



FROG BASE PLATE 20-136-77RC

PENINSULA CORRIDOR JOINT POWERS BOARD

STANDARD DRAWINGS

CADD FILE NAME: SD-2724

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



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San Carlos, CA 94070

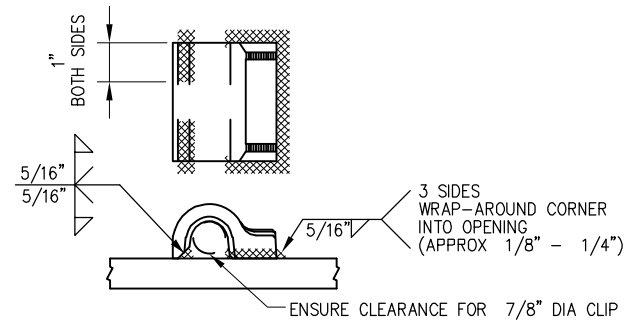
SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG RH
FROG BASE PLATES
20-75RC, 20-76RC AND 20-77RC

REV: EDITION: FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO: SD-2724

REV	DATE	BY	CHK	APP	DESCRIPTION	REV	DATE	BY	CHK	APP	DESCRIPTION
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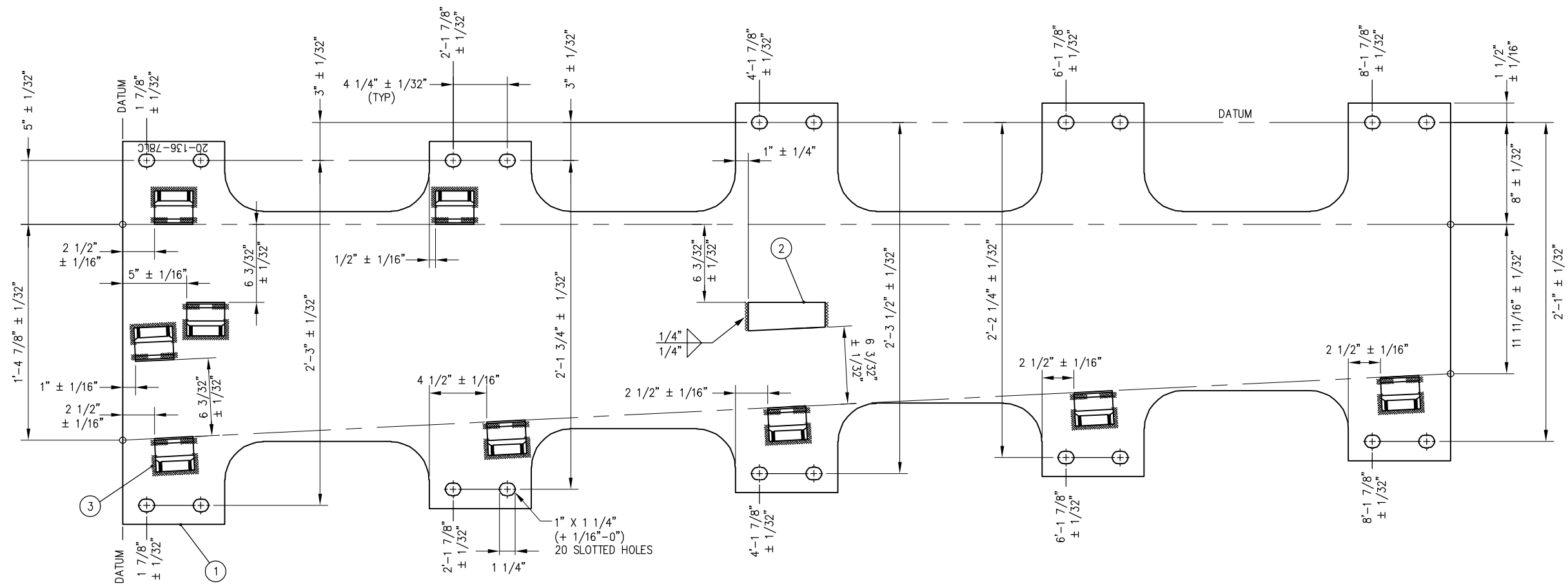


FORGED SHOULDER WELDING DETAIL

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BURNED PLATE, ASTM A36, 3/4" THICK	-
2	1	BURNED STOP, 1/2" THICK, TAPERED 1 15/16" TO 2 1/4", 6" LONG	-
3	9	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



FROG BASE PLATE 20-136-78LC

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING

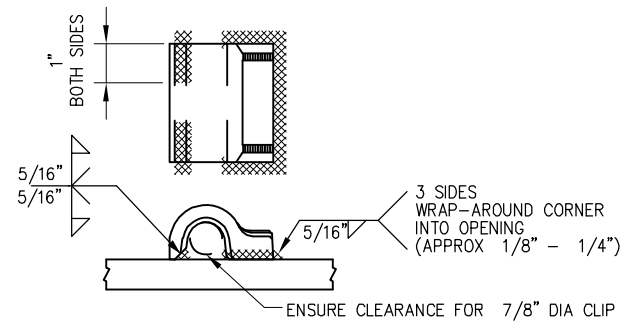


1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG LH
FROG BASE PLATE 20-78LC

CADD FILE NAME: SD-2725	REV: EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO: SD-2725	

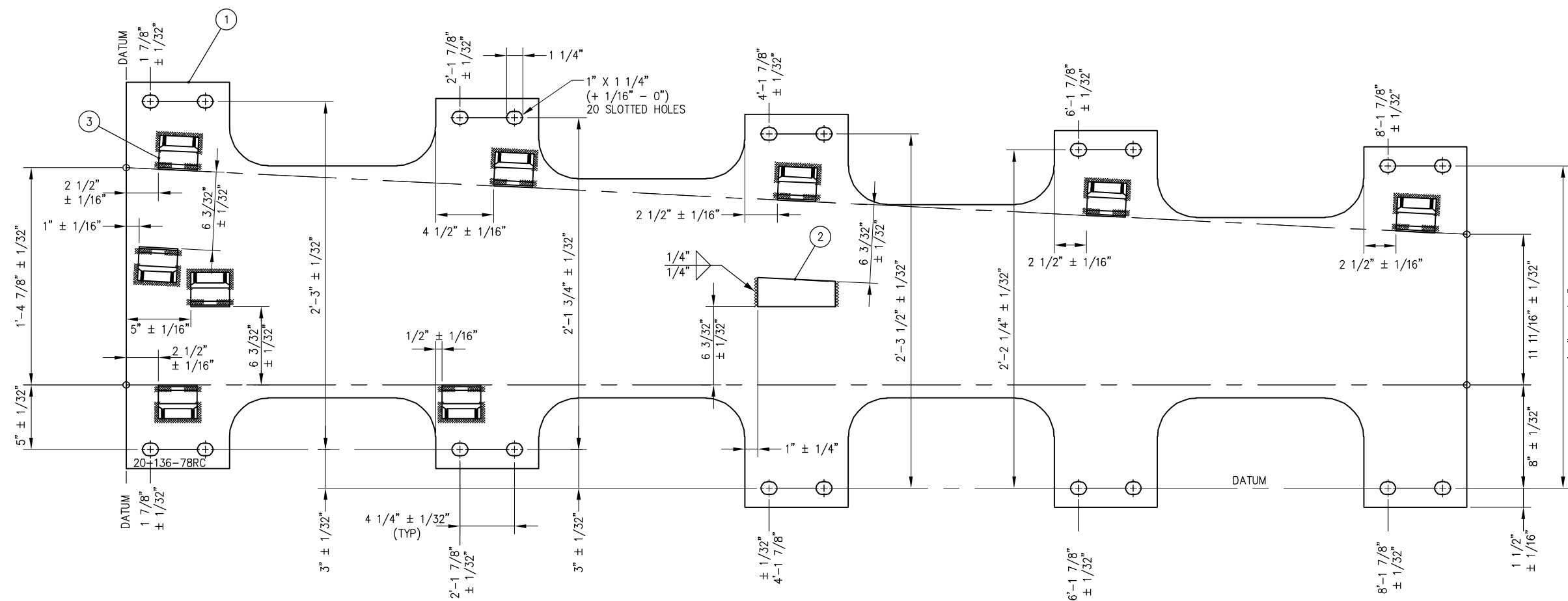


FORGED SHOULDER WELDING DETAIL

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BURNED PLATE, ASTM A36, 3/4" THICK	-
2	1	BURNED STOP, 1/2" THICK, TAPERED 1 15/16" TO 2 1/4", 6" LONG	-
3	9	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



FROG BASE PLATE 20-136-78RC

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

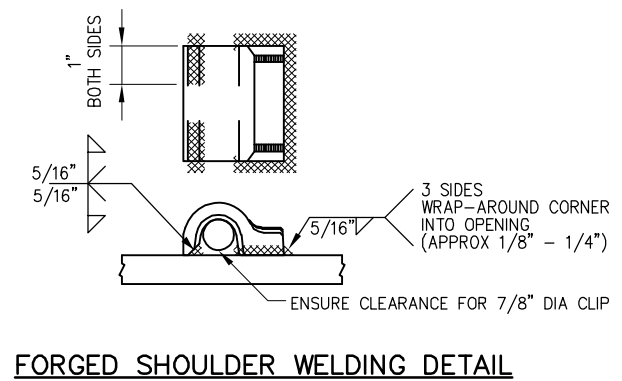
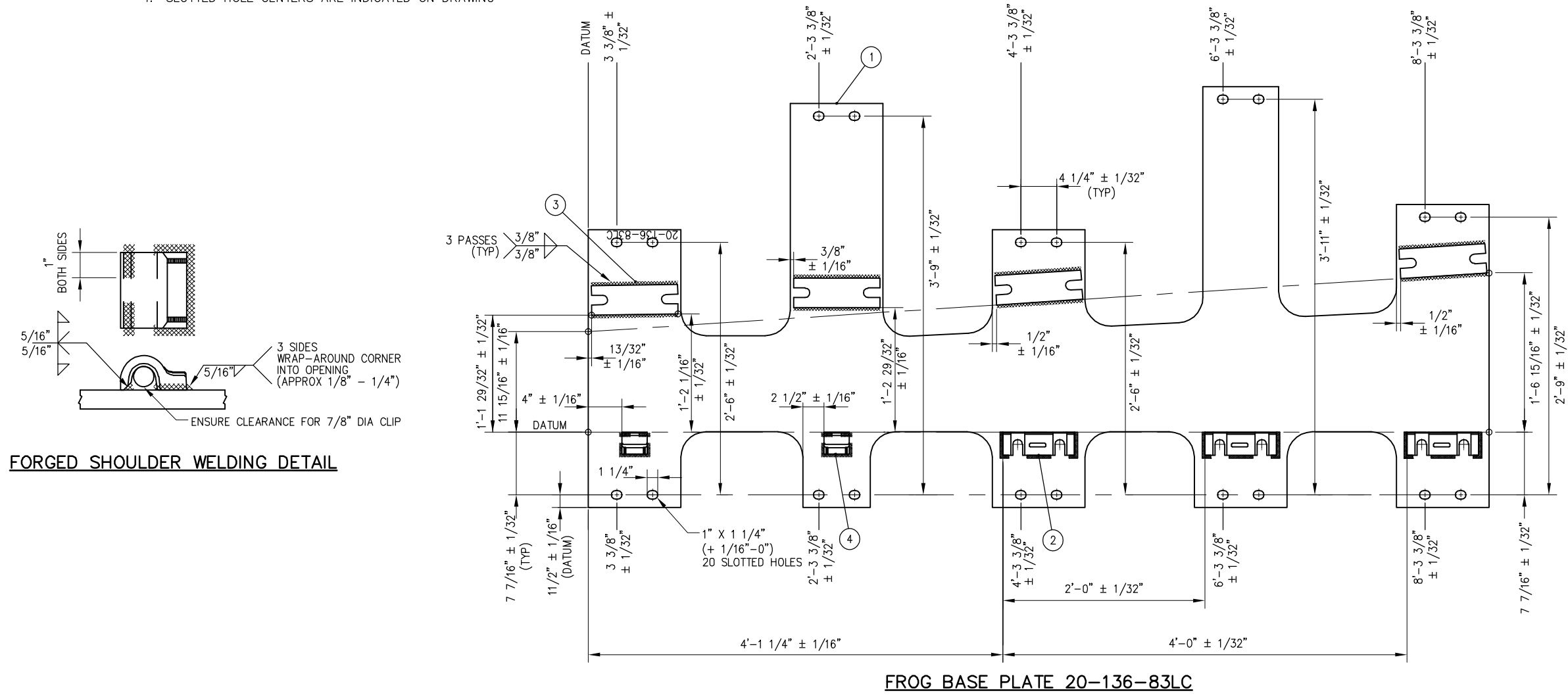
SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG RH
FROG BASE PLATE 20-78RC

CADD FILE NAME: SD-2726	REV: EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2726	

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. OPENINGS IN BOLT CAPTURE BLOCKS SHALL BE FREE OF WELD AND SPATTER
4. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING


BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BURNED PLATE, ASTM A36, 3/4" THICK	-
2	3	CAPTURE BLOCK FOR PLATE CLIP	-
3	4	CAPTURE BLOCK FOR HORN KEEPER	-
4	2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



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

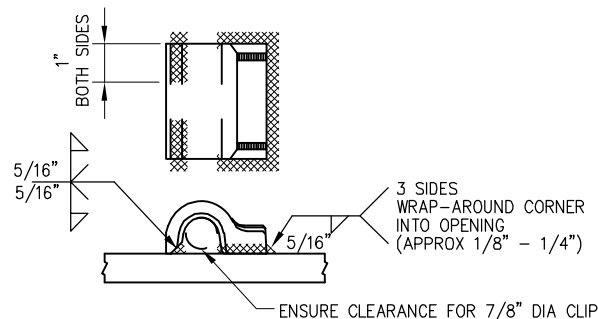
SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG LH
FROG BASE PLATE 20-83LC

CADD FILE NAME: SD-2727	REV: EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2727	

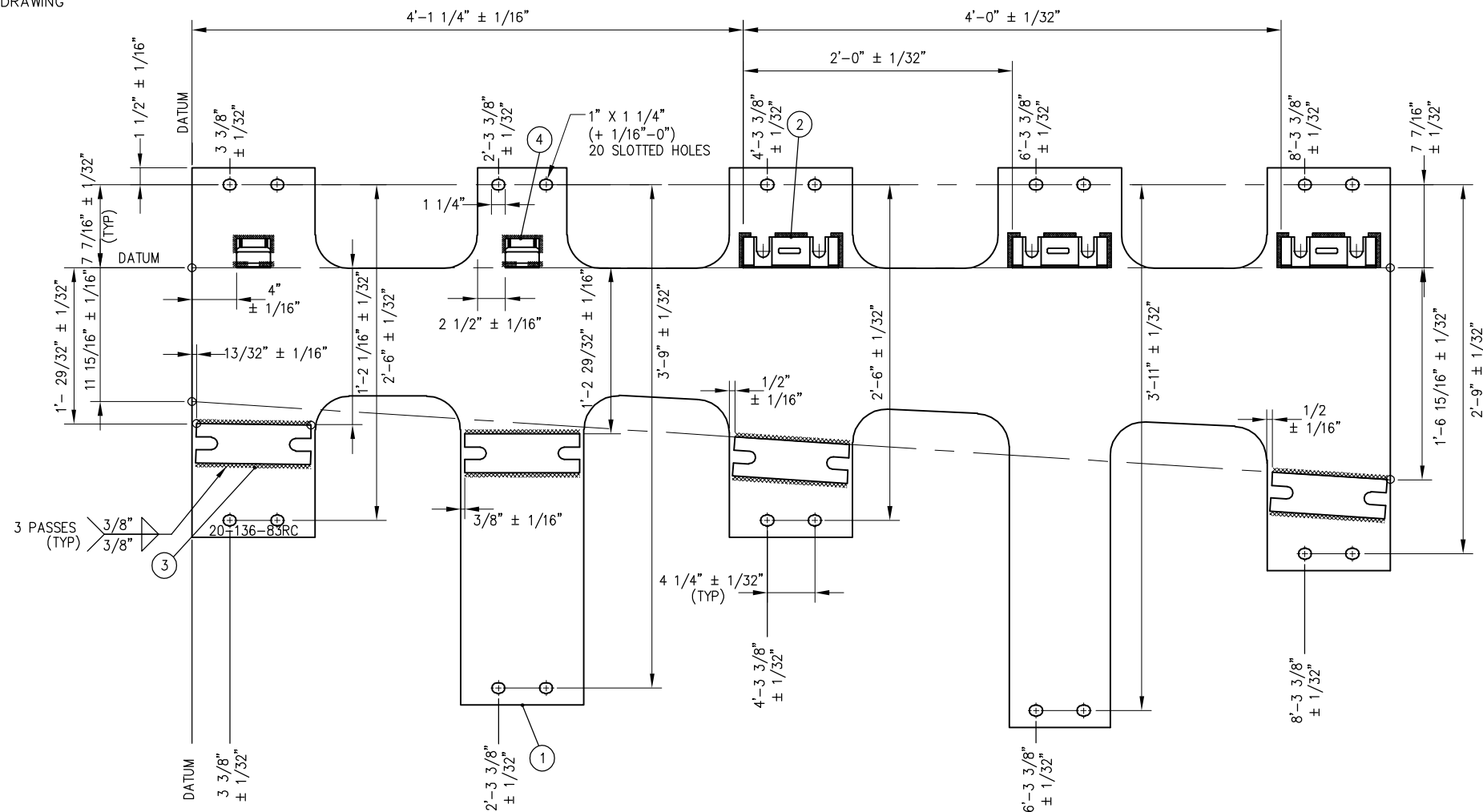
NOTES:

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. OPENINGS IN BOLT CAPTURE BLOCKS SHALL BE FREE OF WELD AND SPATTER
4. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BURNED PLATE, ASTM A36, 3/4" THICK	-
2	3	CAPTURE BLOCK FOR PLATE CLIP	-
3	4	CAPTURE BLOCK FOR HORN KEEPER	-
4	2	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



FORGED SHOULDER WELDING DETAIL



FROG BASE PLATE 20-136-83RC


REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

DEPUTY DIRECTOR, ENGINEERING



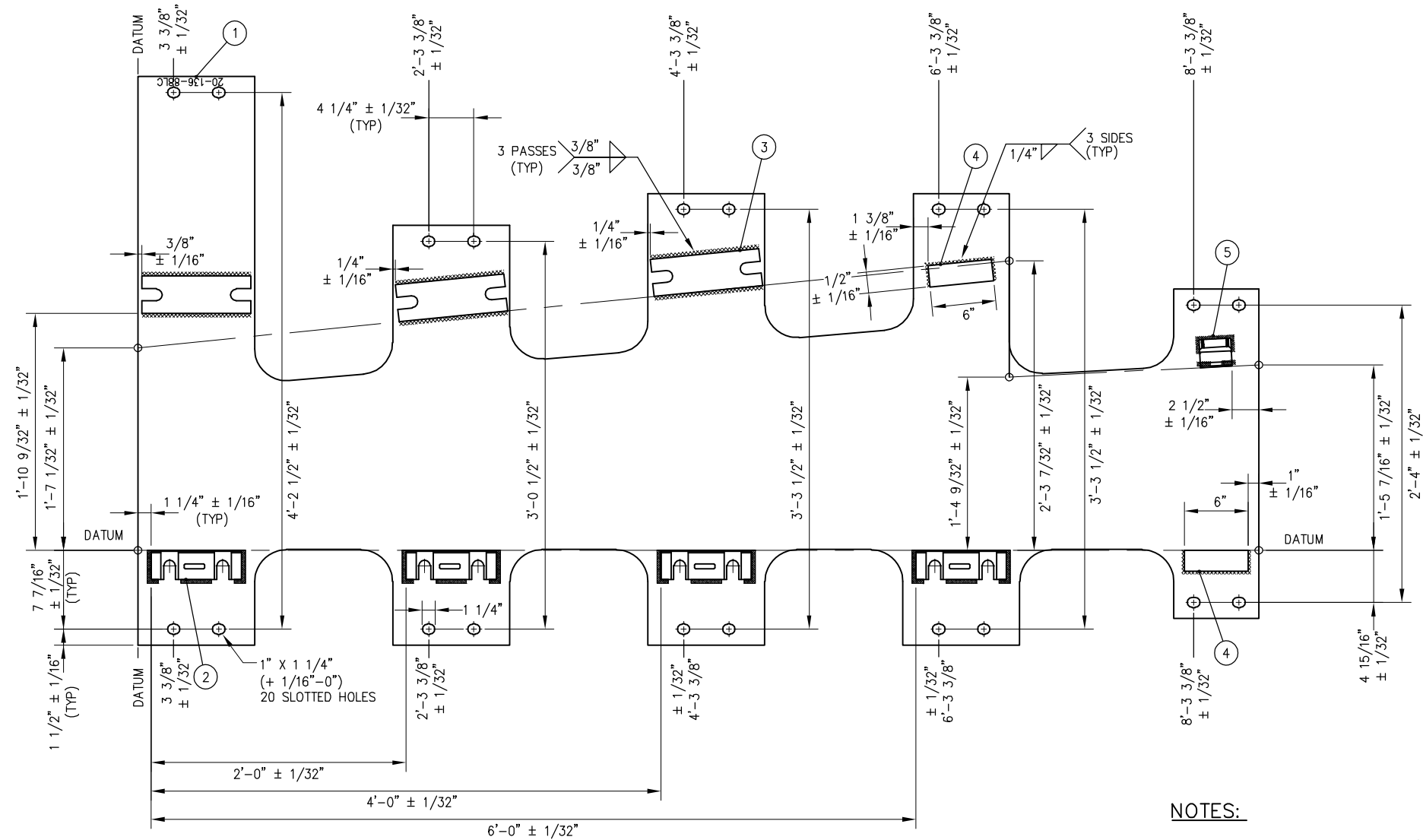
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

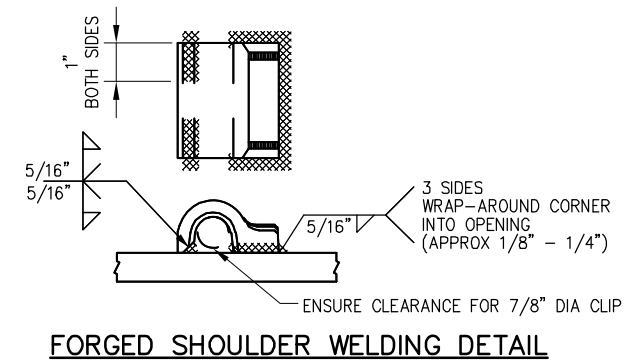
SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG RH
FROG BASE PLATE 20-83RC

CADD FILE NAME: SD-2728	REV: EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2728	

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO
1	1	BURNED PLATE, ASTM A36, 3/4" THICK	-
2	4	CAPTURE BLOCK FOR PLATE CLIP	-
3	3	CAPTURE BLOCK FOR HORN KEEPER	-
4	2	FLAT BAR, ASTM A36, 1/2" THICK X 2" X 6" LONG	-
5	1	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



FROG BASE PLATE 20-136-88LC



NOTES:

1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDER AND NOT TO PROTRUDE INTO RAIL SEAT
3. OPENINGS IN BOLT CAPTURE BLOCKS SHALL BE FREE OF WELD AND SPATTER
4. 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



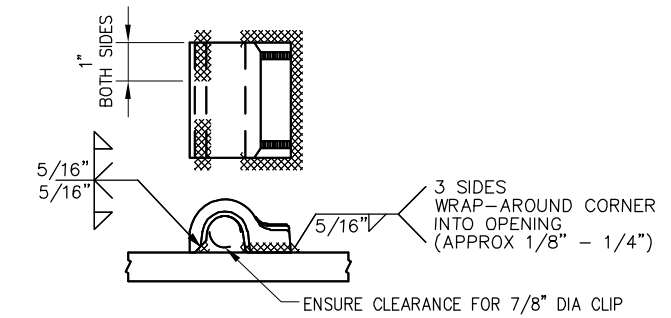
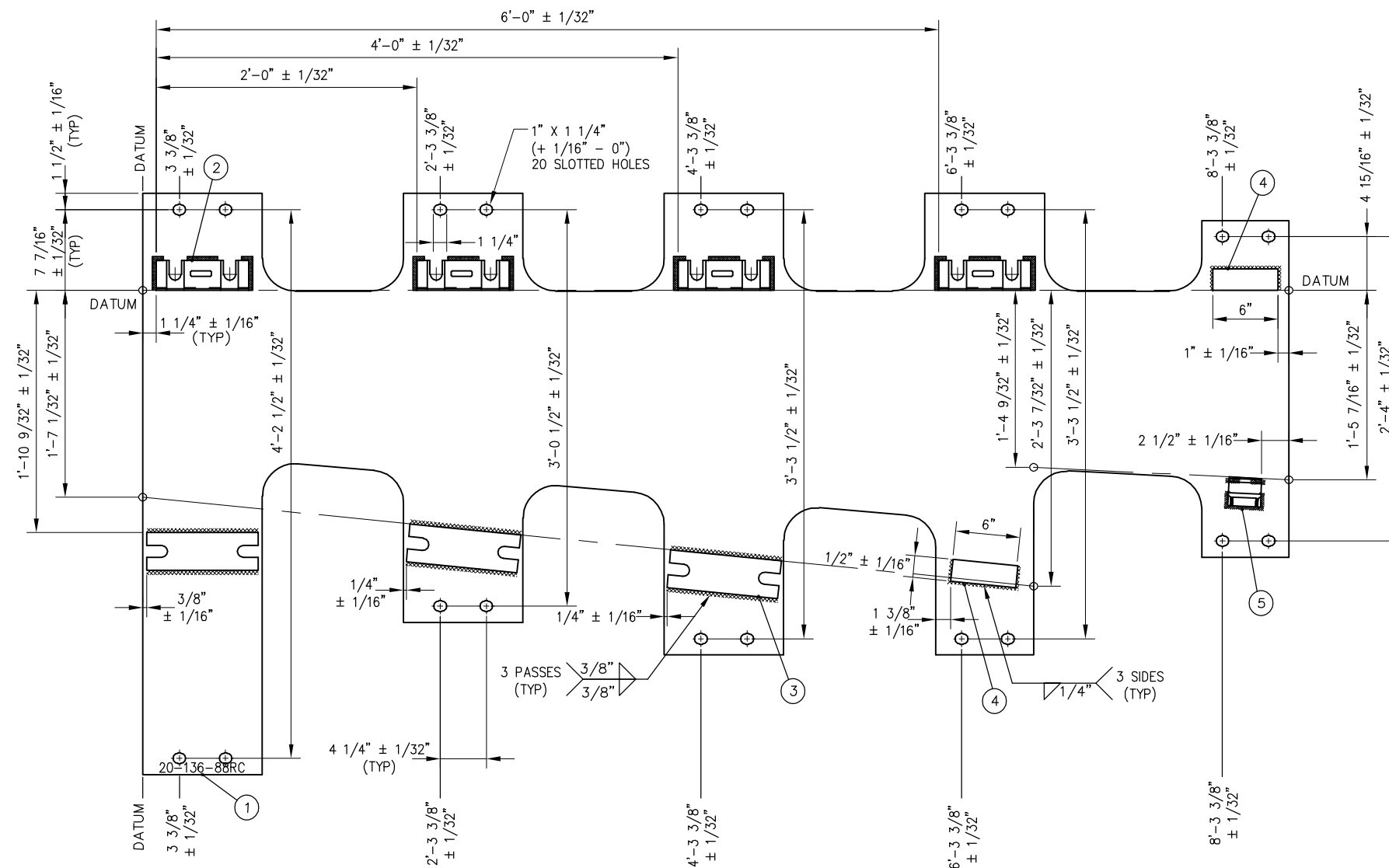
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG LH
FROG BASE PLATE 20-88LC

CADD FILE NAME: SD-2729	REV: EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO.: SD-2729	

BILL OF MATERIAL				
ITEM	QTY	DESCRIPTION	DWG NO	
1	1	BURNED PLATE, 3/4" THICK	-	
2	4	CAPTURE BLOCK FOR PLATE CLIP	-	
3	3	CAPTURE BLOCK FOR HORN KEEPER	-	
4	2	FLAT BAR, ASTM A36, 1/2" THICK X 2" X 6" LONG	-	
5	1	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-	



FORGED SHOULDER WELDING DETAIL

FROG BASE PLATE 20-136-88RC

NOTES:

1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDER AND NOT TO PROTRUDE INTO RAIL SEAT
3. OPENINGS IN BOLT CAPTURE BLOCKS SHALL BE FREE OF WELD AND SPATTER
4. 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



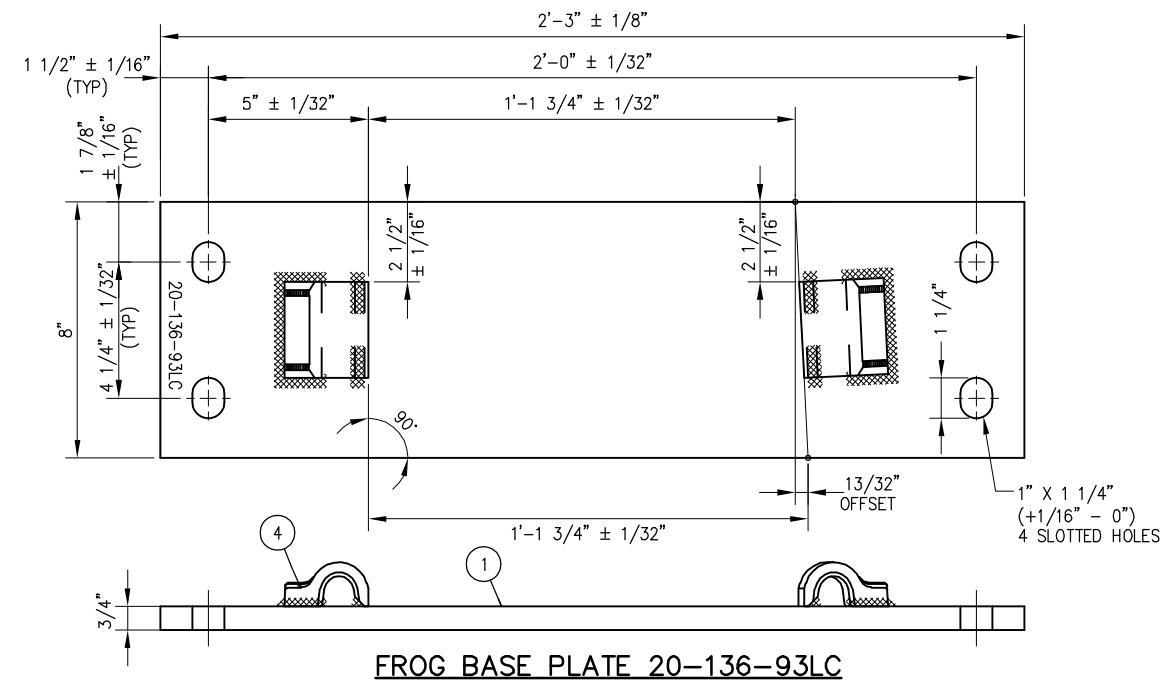
1250 San Carlos Avenue
San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG RH
FROG BASE PLATE 20-88RC

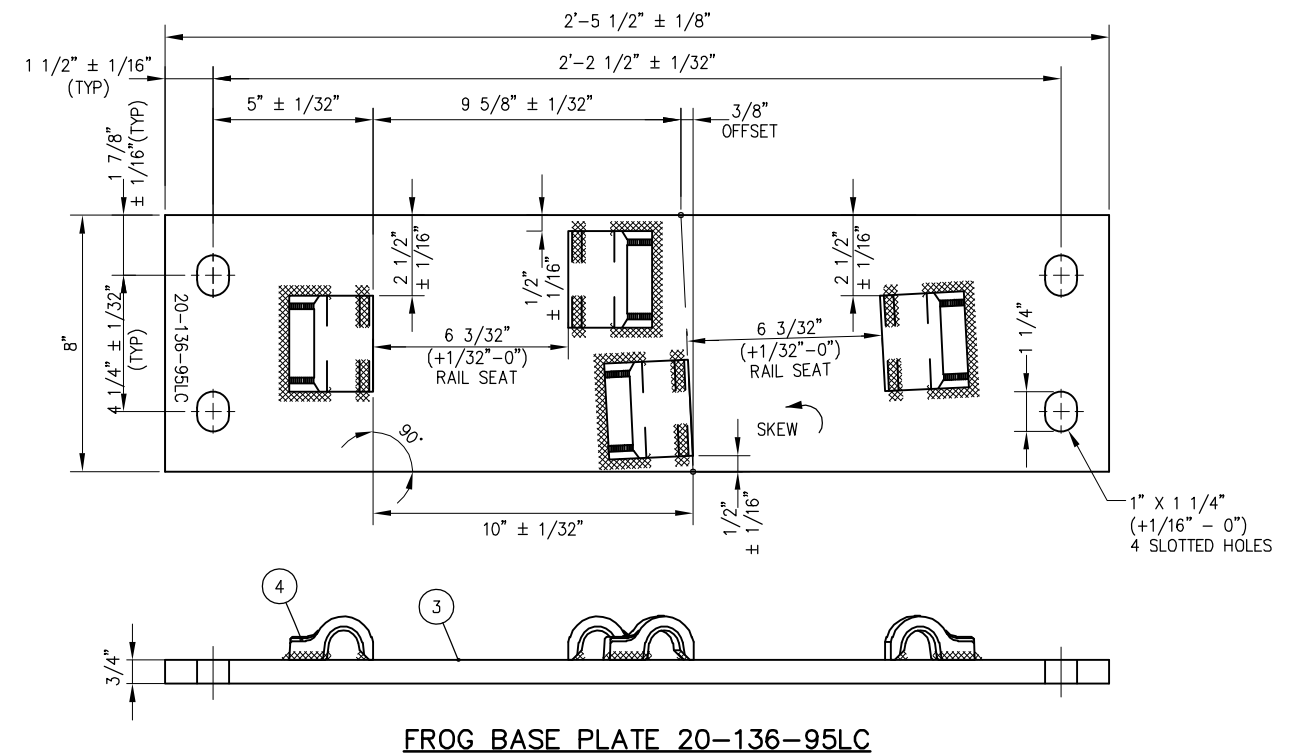
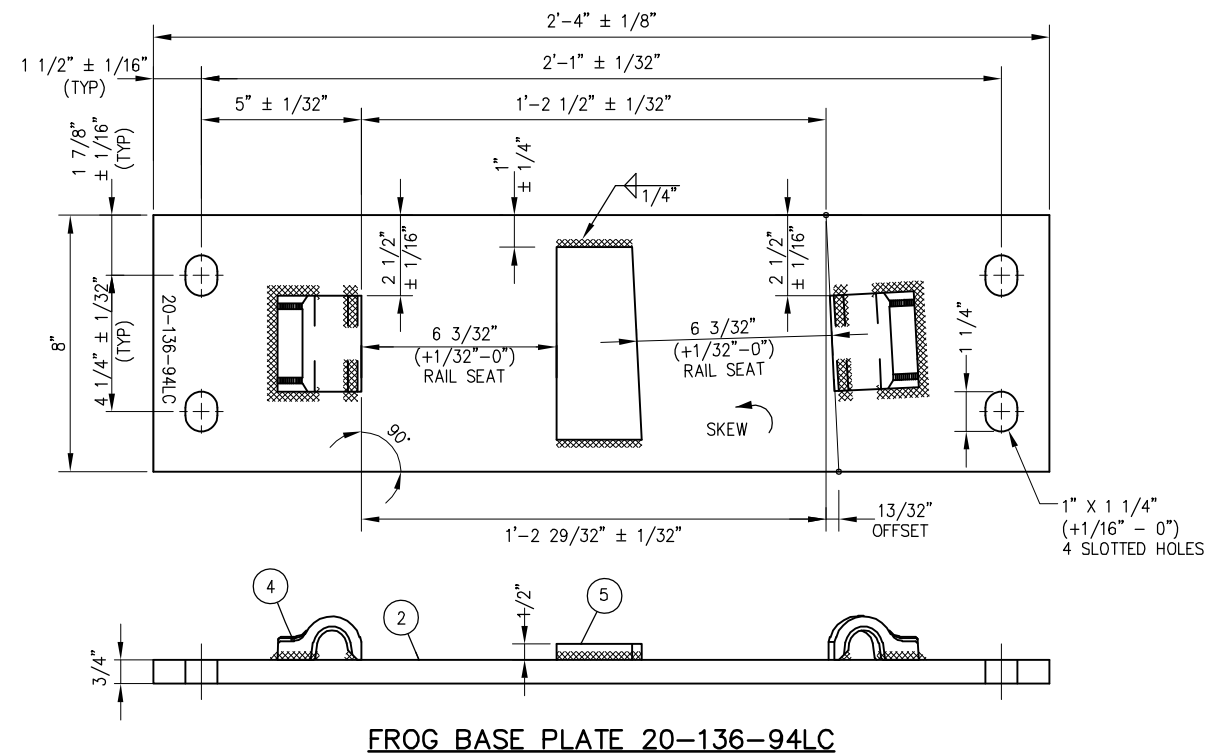
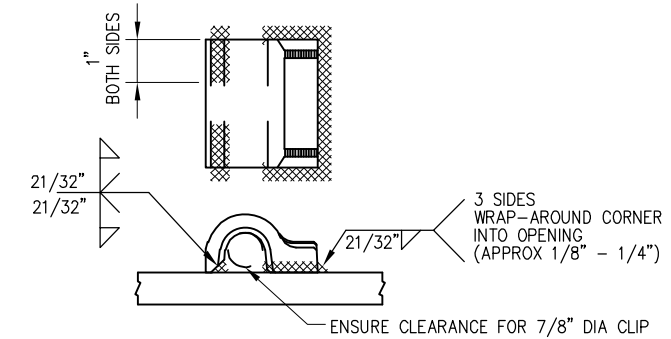
CADD FILE NAME: SD-2730	REV: EDITION: FOURTH
SPECIAL TRACKWORK	
STANDARD DRAWING NO: SD-2730	

BILL OF MATERIAL					DWG NO
ITEM	QTY FOR 20-93LC	QTY FOR 20-94LC	QTY FOR 20-95LC	DESCRIPTION	
1	1	0	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-3" LONG	-
2	0	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-4" LONG	-
3	0	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-5 1/2" LONG	-
4	2	2	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-
5	0	1	0	BURNED STOP, 1/2" THICK, TAPERED 2 3/8" TO 2 21/32", 6" LONG	-



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	REV	DATE	BY	CHK	APP	DESCRIPTION
					01012024 FOURTH EDITION						

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

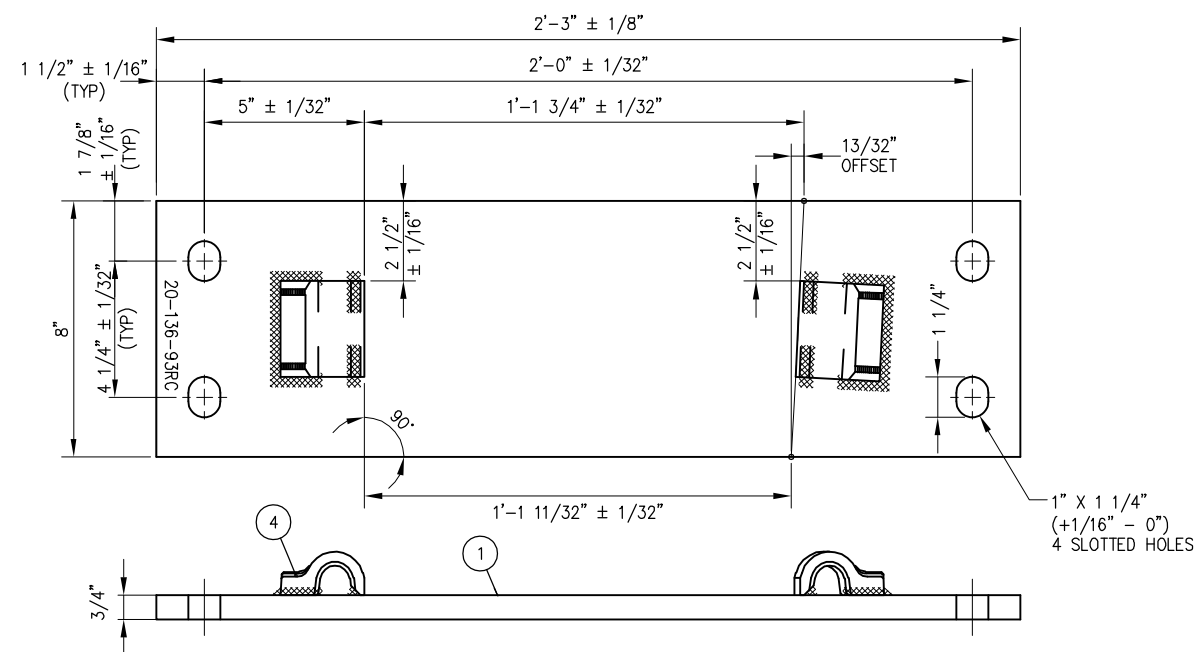
DEPUTY DIRECTOR, ENGINEERING

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG LH
FROG BASE PLATES
20-93LC, 20-94LC AND 20-95LC

CADD FILE NAME:	SD-2731
REV:	EDITION: FOURTH
	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2731

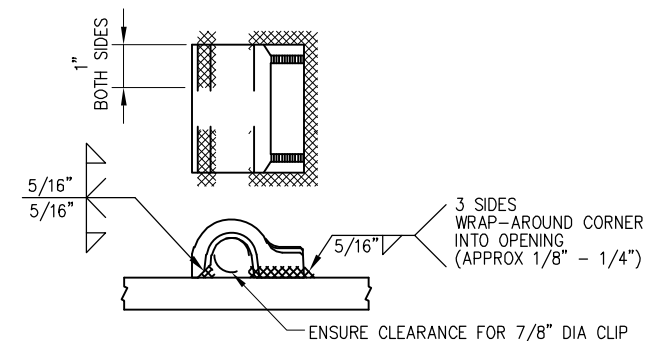
BILL OF MATERIAL					DWG NO
ITEM	QTY FOR 20-93RC	QTY FOR 20-94RC	QTY FOR 20-95RC	DESCRIPTION	
1	1	0	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-3" LONG	-
2	0	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-4" LONG	-
3	0	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-5 1/2" LONG	-
4	2	2	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-
5	0	1	0	BURNED STOP, 1/2" THICK, TAPERED 2 3/8" TO 2 5/16", 6" LONG	-



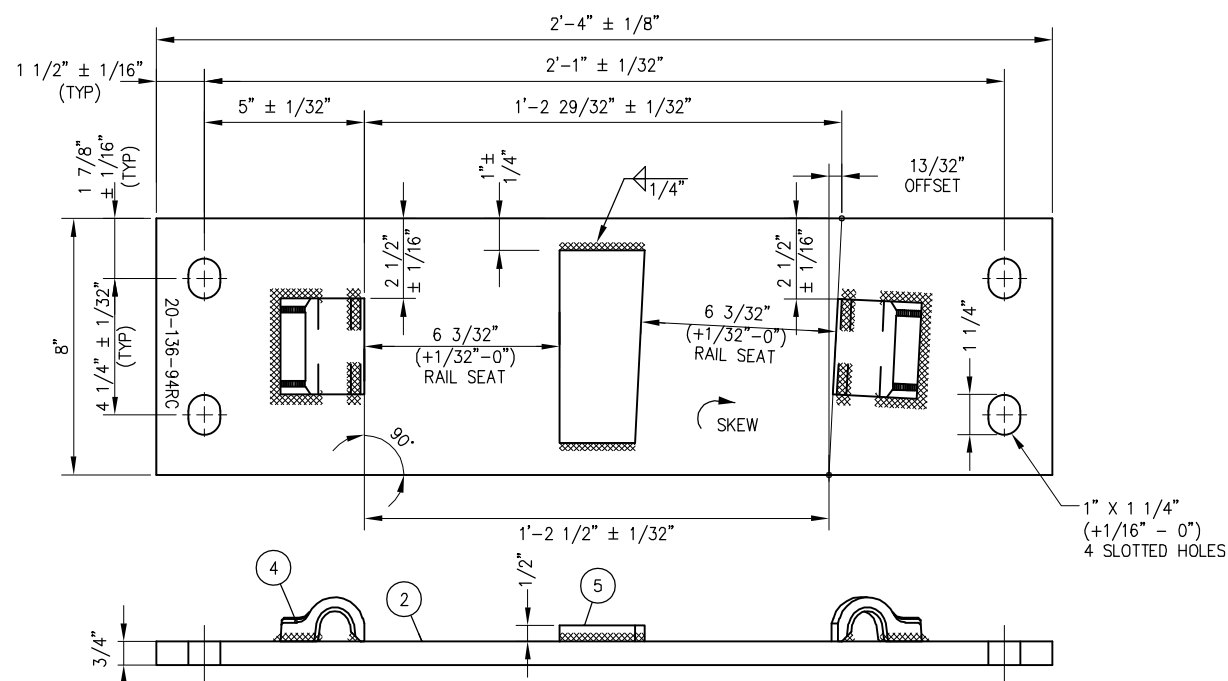
FROG BASE PLATE 20-136-93RC

NOTES:

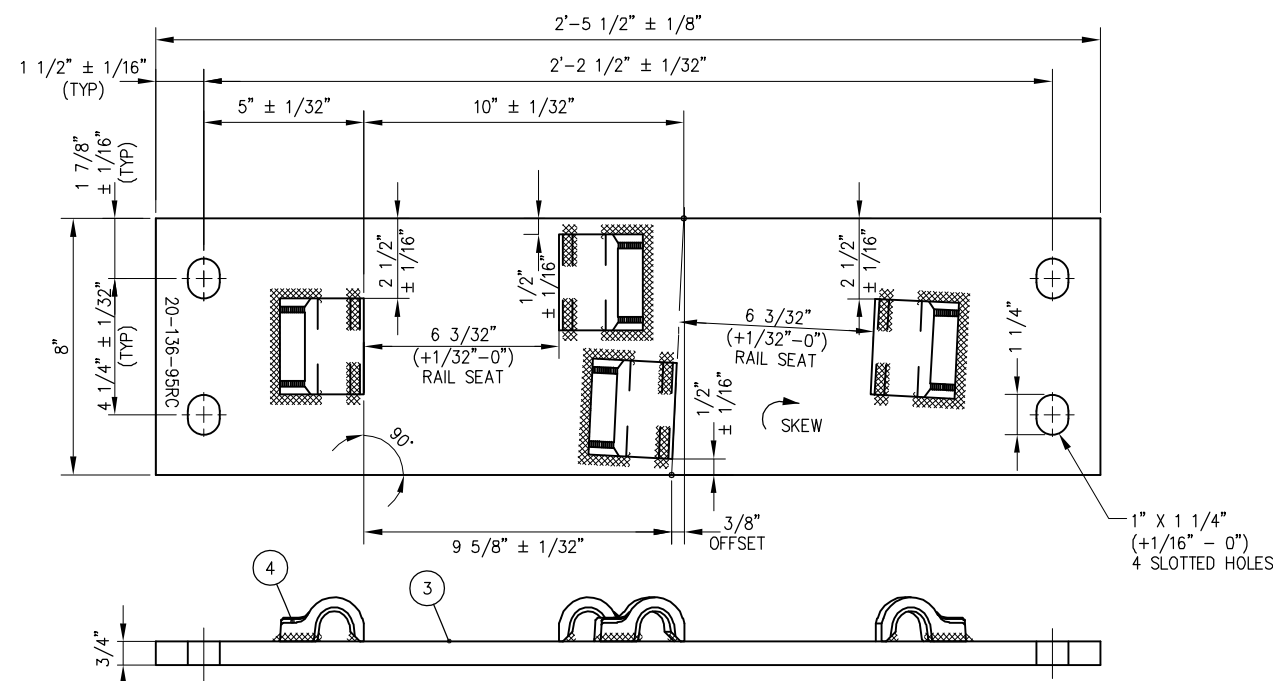
1. I.D. CHARACTERS SHALL BE 1/2" MINIMUM HEIGHT CLEARLY STAMPED AS SHOWN
2. WELDS SHALL BE DRESSED FLUSH WITH SHOULDER & NOT TO PROTRUDE INTO RAIL SEAT
3. SLOTTED HOLE CENTERS ARE INDICATED ON DRAWING



FORGED SHOULDER WELDING DETAIL



FROG BASE PLATE 20-136-94RC



FROG BASE PLATE 20-136-95RC

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

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

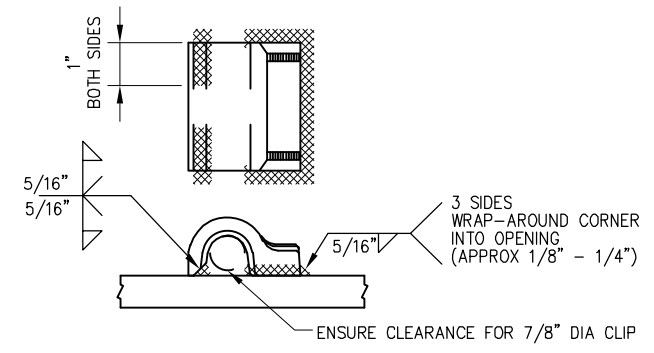
DEPUTY DIRECTOR, ENGINEERING

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG RH
FROG BASE PLATES
20-93RC, 20-94RC AND 20-95RC

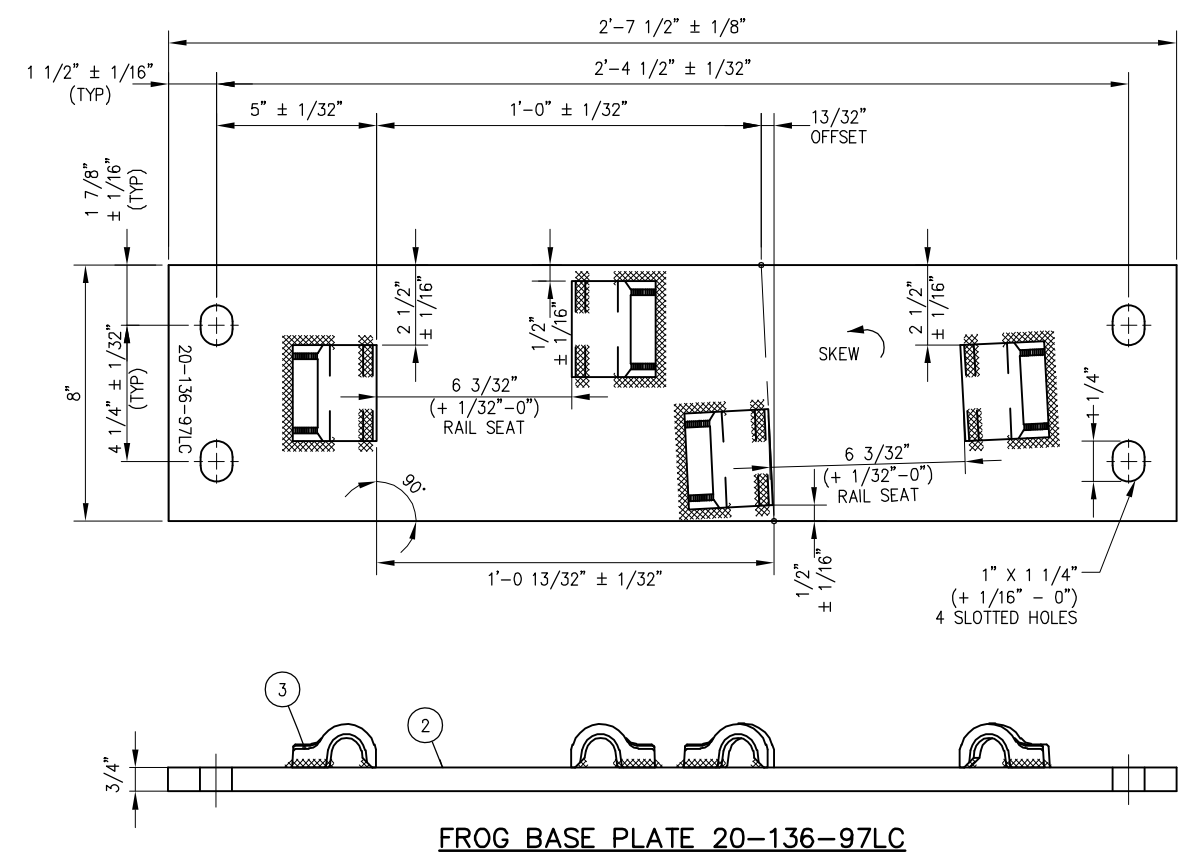
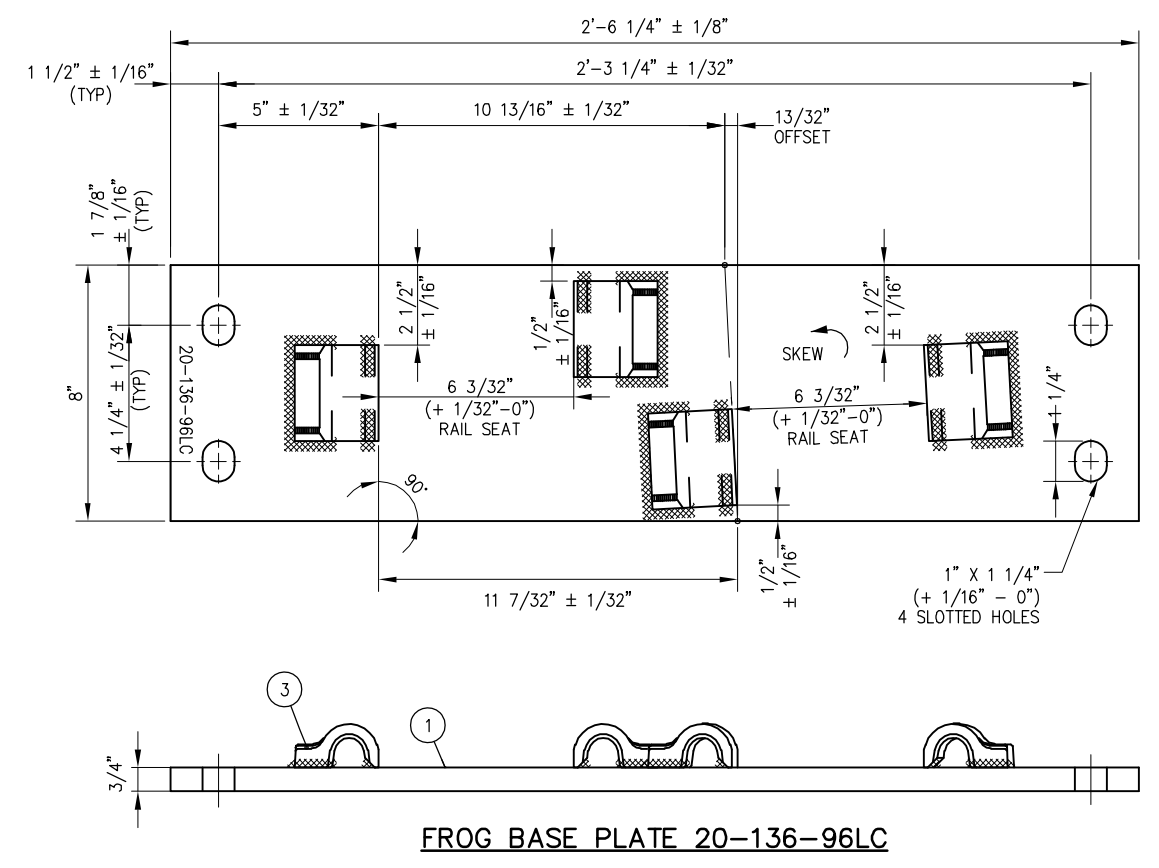
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REV:	EDITION: FOURTH
	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2732

BILL OF MATERIAL				
ITEM	QTY FOR 20-96LC	QTY FOR 20-97LC	DESCRIPTION	DWG NO
1	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-6 1/4" LONG	-
2	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-7 1/2" LONG	-
3	4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



- 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

FORGED SHOULDER WELDING DETAIL




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
WSM FROG LH
FROG BASE PLATES
20-96LC AND 20-97LC

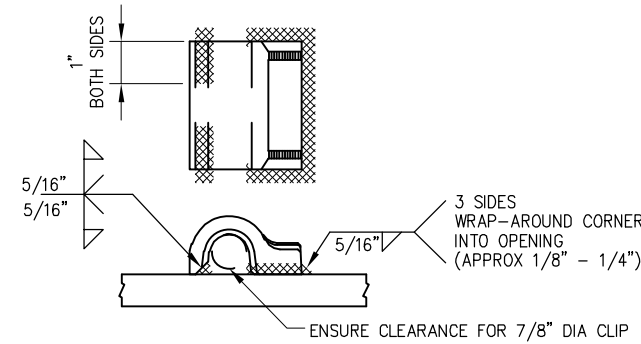
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SD-2733

REV: EDITION:
 FOURTH

SPECIAL TRACKWORK

STANDARD DRAWING NO.:
SD-2733

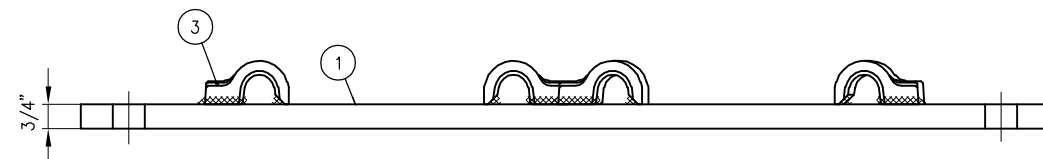
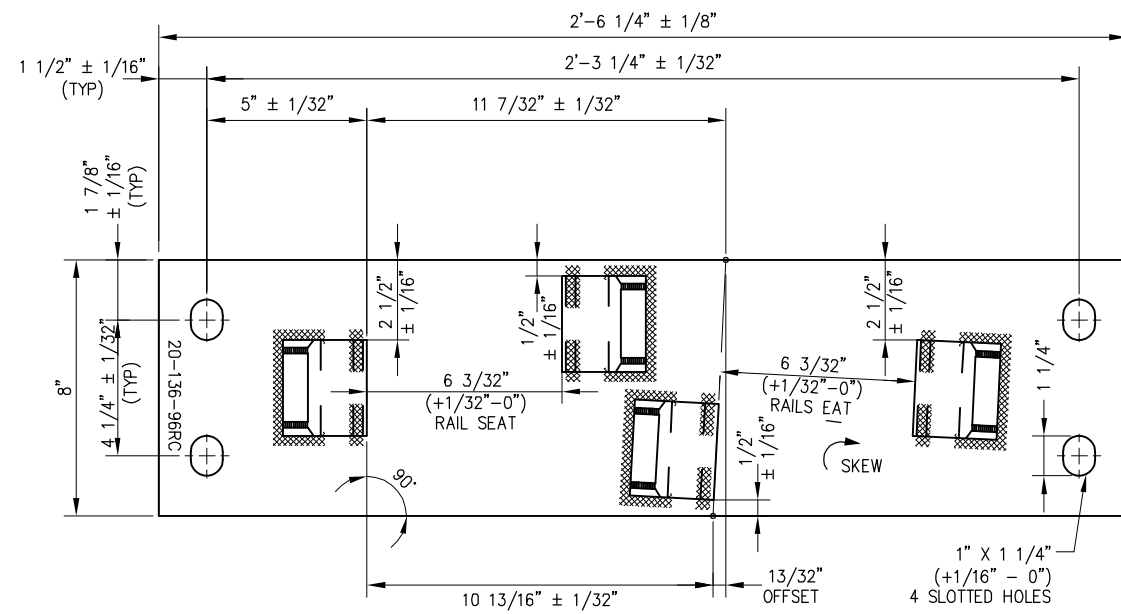
BILL OF MATERIAL				
ITEM	QTY FOR 20-96RC	QTY FOR 20-97RC	DESCRIPTION	DWG NO
1	1	0	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-6 1/4" LONG	-
2	0	1	FLAT BAR, ASTM A36, 3/4" x 8" x 2'-7 1/2" LONG	-
3	4	4	SHOULDER, PANDROL, FORGED TONGUELESS, TYPE 1	-



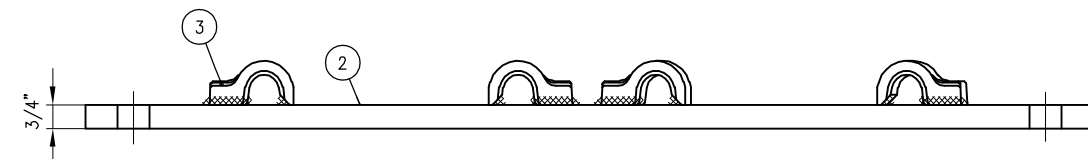
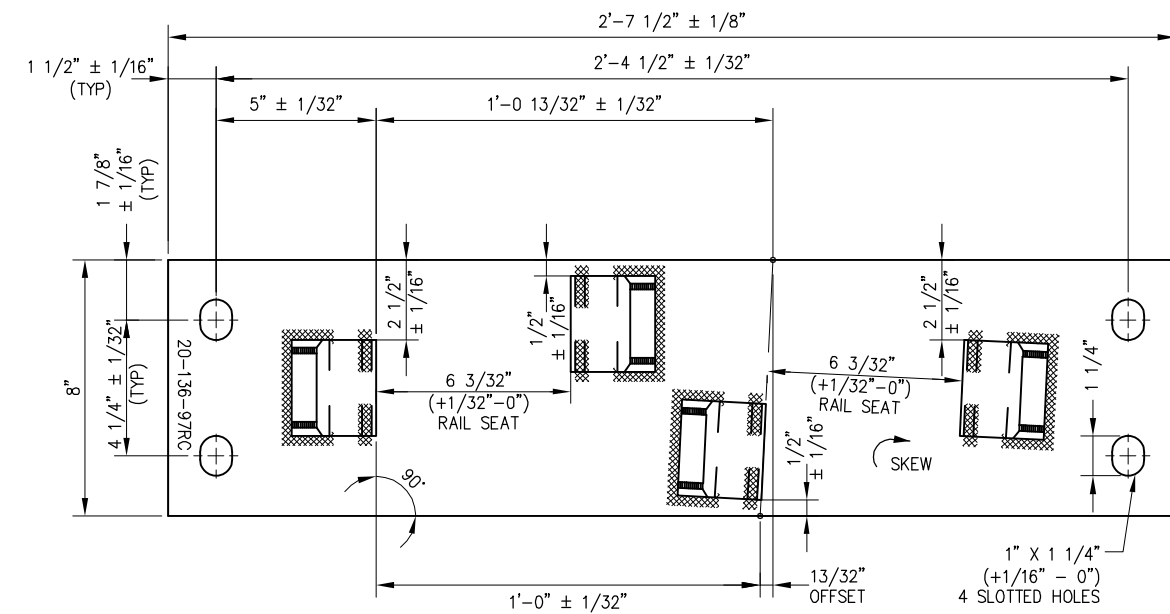
FORGED SHOULDER WELDING DETAIL

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



FROG BASE PLATE 20-136-96RC



FROG BASE PLATE 20-136-97RC

REV	DATE	BY	CHK	APP	DESCRIPTION

PENINSULA CORRIDOR JOINT POWERS BOARD

APPROVED BY:

Bin Zhang

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San Carlos, CA 94070

STANDARD DRAWINGS

SPECIAL TRACKWORK
NO. 20 TURNOUT
WSM FROG RH
FROG BASE PLATES
20-96RC AND 20-97RC

CADD FILE NAME: SD-2734	EDITION: FOURTH
REV:	SPECIAL TRACKWORK
STANDARD DRAWING NO.:	SD-2734