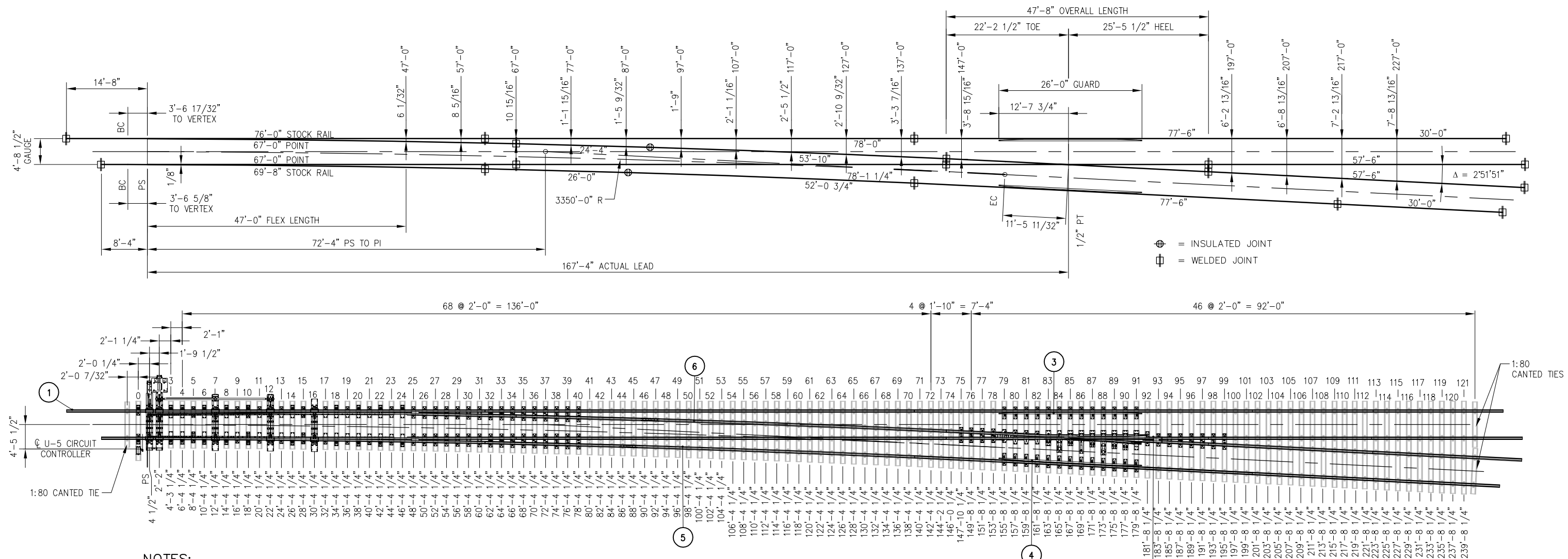


BILL OF MATERIAL				BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	DWG NO	ITEM	QTY	DESCRIPTION	DWG NO
1	1	SWITCH PACK, NO 20-136 LB RE MODIFIED TANGENTIAL, RH, HST	SD-2706	12	492	TIE SCREW, CONCRETE 7/8" DIA X 6" HEX HEAD	-
2	1	FROG PACK, NO 20-136 LB RE WSM, RH	SD-2722	13	492	WASHER FLAT 7/8" TYPE A NARROW 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:

*Bernard Anzures* *Steph Chen*  
 ENGINEERING MANAGER DEPUTY DIRECTOR OF ENGINEERING



**STANDARD DRAWINGS**

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

CADD FILE NO.: SD-2702

REV 0 DATE 093011

SPECIAL TRACKWORK

STANDARD NO.: SD-2702

REV	DATE	BY	CHK	APP	DESCRIPTION