### Bill of Material

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Quantity</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Switch point rail 1045 EL IUE RH swaging or. 12&quot; x 37°</td>
<td>2</td>
<td>Steel 1045</td>
</tr>
<tr>
<td>2</td>
<td>Washer for the 12&quot; x 16&quot; swaging switch point</td>
<td>16</td>
<td>Steel 1045</td>
</tr>
<tr>
<td>3</td>
<td>Separating rail cap size 1/2&quot; x 1 1/2&quot; rh point</td>
<td>12</td>
<td>Steel 1045</td>
</tr>
<tr>
<td>4</td>
<td>Separating w/pick off size 1/2&quot; x 10&quot; 1/2&quot; rh point</td>
<td>15</td>
<td>Steel 1045</td>
</tr>
<tr>
<td>5</td>
<td>Switch rail 4082 polishing 102/10 or to be 102/10 Hardened</td>
<td>14</td>
<td>Steel 1045</td>
</tr>
<tr>
<td>6</td>
<td>Point drill 1 1/4&quot; rhm</td>
<td>15</td>
<td>Steel 1045</td>
</tr>
<tr>
<td>7</td>
<td>Bolt 1/4&quot; x 3 1/2&quot; rh square head drilled &amp; 3 3/16&quot; shd</td>
<td>10</td>
<td>Steel 1045</td>
</tr>
<tr>
<td>8</td>
<td>Bolt 1/4&quot; x 3 1/4&quot; rh square head drilled &amp; 3 3/16&quot; shd</td>
<td>17</td>
<td>Steel 1045</td>
</tr>
<tr>
<td>9</td>
<td>Bolt 3/4&quot; x 4&quot; rh square head drilled &amp; 3 21/32&quot; shd</td>
<td>6</td>
<td>Steel 1045</td>
</tr>
</tbody>
</table>

### Notes:
1. Round edges of switch stops at contact areas. R = 1/2".
2. Bevel all bolt holes.

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**Side View - Vertical Bending Detail**

1. 48'-0" overall length.
2. 30'-0" to heel block.
3. 16'-0" to heel.
4. 7'-0" to stop.
5. 7'-3/4" to bend.
6. Open holes.
7. Ten to 8 straight rail line.
8. Open holes.

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**Peninsula Corridor Joint Powers Board**

**Special Trackwork**

**No 8 Turnout**

**Switch Point Assembly**

16'-0" Straight Switch Point
### Bill of Material

<table>
<thead>
<tr>
<th>NO.</th>
<th>QTY</th>
<th>DESCRIPTION</th>
<th>DAD NO.</th>
<th>REV</th>
<th>QTY</th>
<th>DESCRIPTION</th>
<th>DAD NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Switch Point Rail 136-LR-RE-130 Rnd Gndn 6.75&quot;</td>
<td>100G10 64</td>
<td>10</td>
<td>2</td>
<td>Spring Washer, 3/4&quot; DIN</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Wrasande TP 136 LR-RE-130 Rnd Gndn 6.75&quot; Switch Point</td>
<td></td>
<td></td>
<td>4</td>
<td>Spring Washer, 1&quot; DIN</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Reinforcing Bar, Grade 60, 1/2&quot; x 16'-6&quot; RH Point</td>
<td></td>
<td></td>
<td>12</td>
<td>Nut, 3/4&quot; DIN Heavy Hex, Or 5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Reinforcing Bar, Stock Size, 1/2&quot; x 16'-6&quot; RH Point</td>
<td></td>
<td></td>
<td>15</td>
<td>Nut, 1&quot; DIN Heavy Hex, Or 5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Switch Heel Assy. Partial 132/138 LR-RE 3/8&quot; CAM Hardened</td>
<td></td>
<td></td>
<td>14</td>
<td>Cotter Pin, 3/8&quot; DIN x 1 1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Point Tool 3/4&quot; Head</td>
<td></td>
<td></td>
<td>16</td>
<td>Cotter Pin, 1/4&quot; DIN x 1 1/4&quot;</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>Bolt, 1&quot; DIN x 3 1/2&quot; THD Square Head D1 @ 3 3/16&quot; Or 5</td>
<td></td>
<td></td>
<td>18</td>
<td>Washer, 1/4&quot; DIN (Copper-824-24)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>Bolt, 1&quot; DIN x 3 3/4&quot; THD Square Head D1 @ 3 1/2&quot; Or 5</td>
<td></td>
<td></td>
<td>17</td>
<td>Nuck Collar, 3/4&quot; DIN (Copper-824-24)</td>
<td></td>
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<tr>
<td>9</td>
<td>2</td>
<td>Bolt, 3/4&quot; DIN x 4, Square Head D1 @ 3 3/32&quot; Or 5</td>
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**NOTES:**
1. Round edges of switch stops at contact areas, R = 1/2"
2. Bevel all bolt holes

**Side View - Vertical Bending Detail**

**40'-6" Overall Length**

**40'-6" Overall Length**

**16'-6" to Heel Block**

**17'-6" to Color**

**7'-2 3/4" to Bend**

**Send to Straighten Gauge Line**

**17'-1 25/32"**

**Open Holes**

**Open Holes**

**Peninsula Corridor Joint Powers Board**

**Standard Drawings**

**SPECIAL TRACKWORK**

**No 5 Turnout**

**16'-6" Curved Switch Point**

**Graph No: SW-2403**

**Effective Date:** 08/30/2011

**Date Rev.: 08/30/2011**

**Special Trackwork: 16'-6" Curved Switch Point**

**Caltrain**

**[Signatures]**

**[Documents]**
No. 8 RAIRBOUND MANGANESE FROG
(RH SHOWN, LH PLATE LAYOUT OPPOSITE)
(NOT TO SCALE)

NOTES:
1. MANGANESE CASTINGS SHALL BE 1-SHOT EXPLOSIVE IN ACCORDANCE WITH CURRENT AAR
   SPECIFICATIONS. HEEL WASHERS SHALL INTEGRATE WITH A 20° DEELED CUT.
2. ALL PROD BOLTS SHALL BE 3/8" GRADE B, SQUARE HEAD WITH 1/4" HARDENED PLAIN
   WASHERS AND MECOON SECURITY LOCKNUTS. BOLTS SHALL BE LUBRICATED AND
   TORQUED TO 2000 FOOT POUNDS.
3. ALL RAIL FURNISHED SHALL BE HEAT TREATED.
4. EXCEPT WHERE SHOWN, ALL PROD PLATES FURNISHED WITH 1/4" ROUND HOLES.
5. SEE SIGNAL STANDARD DRAWINGS FOR PROD BOND DETAILS.
6. THIS DRAWING IS FOR REFERENCE ONLY. SHOP DRAWINGS SHALL BE SUBMITTED FOR
   APPROVAL BY CALTRAIN ENGINEERING PRIOR TO FABRICATION.
NOTES:
1. PLATE SPACING SHOWN FOR SHIPPING ONLY. FINAL PLATE SPACING SHALL BE DETERMINED BY THE SPACING
   AT THE TIME OF INSTALLATION.
2. PANEL SPRING CLIPS (+22955) SHALL BE INCLUDED IN ASSEMBLY.
3. LIFT POINTS AND WEIGHT OF ASSEMBLY SHALL BE MONED ON HEAD OF NAIL BAR WITH WHITE PAINT.
4. FOR PLACEMENT OF GUARD RAIL, SEE SD-2506.
5. PLATE SPACING AND ORIENTATION ON THIS DRAWING ILLUSTRATES SEVERAL POSSIBLE CONFIGURATIONS. EACH
   GUARD RAIL SHALL BE COMPACTED WITH PLATE/SPACE ASSEMBLIES ORIENTED PARALLEL TO GROOM TIES AND
   SPACED FOR WOOD OR CONCRETE TIES AS INDICATED FOR EACH TURNOUT.
6. ALL GUARD RAIL SHALL BE BOLTLESS ADJUSTABLE WITH 1" RAKE.

15'-0" BOLTLESS ADJUSTABLE GUARD RAIL (RH)
POWER OPERATION SWITCH PLAN

NOTES:
1. GAGE PLATE DRAWN IS FOR TEGAO 12 SWITCHES ONLY.
2. GAGE PLATE SHOWN IS FOR TEGAO 12 SWITCHES ONLY.
3. GAGE PLATE SHALL BE MARKED AS SHOWN WITH 3/4" CHARACTERS ENGRAVED TO A DEPTH OF 1/32" AT LOCATION INDICATED.
4. SEE SIGNAL DRAWING FOR DETAILS ON GAGE PLATE EXTENSION AND DAP TIES.
5. PLATE SHALL BE FASTENED TO FRAME WITH SCOTCH PLY INSULATION.
6. PLATE SHALL BE FASTENED TO FRAME WITH SCOTCH PLY INSULATION.

SCOTCH PLY INSULATION

DETAIL 1
COUNTERSINK DETAIL

DETAIL 2
COUNTERBORE DETAIL

TOP VIEW
GAGE PLATE NO. 1

SIDE VIEW
GAGE PLATE NO. 1

NOTE:
1. PLATE SHALL BE FASTENED TO FRAME WITH SCOTCH PLY INSULATION.
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36-EH SWITCH STAND (STANDARD)

NOTE:
1. All switch stands shown are for use on mainline switches only.