<table>
<thead>
<tr>
<th>CELL / MODEL NAME</th>
<th>DESCRIPTION</th>
<th>DATE</th>
</tr>
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<tbody>
<tr>
<td>PI-2E-1</td>
<td>Type I elastomeric bearing</td>
<td>12/2/2015</td>
</tr>
<tr>
<td>PI-2E-2</td>
<td>Type II elastomeric bearing</td>
<td>12/2/2015</td>
</tr>
<tr>
<td>PI-2E-3</td>
<td>Type III elastomeric bearing</td>
<td>12/2/2015</td>
</tr>
<tr>
<td>PI-2FB</td>
<td>Fixed bearing</td>
<td>7/15/2016</td>
</tr>
</tbody>
</table>
**PI-2E-1**

**Assembly, Type I Elastomeric Bearing**

**SECTION AT ABUT.**

**SECTION A-A**

---

**TYPE I ELASTOMERIC EXP. BRG.**

**BEARING ASSEMBLY**

**SIDE RETAINER**

Equipped with angle stiffeners will be allowed in lieu of welded stiffeners.

---

**BILL OF MATERIAL**

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bearing Assembly</td>
<td>Each</td>
<td>1</td>
</tr>
<tr>
<td>Anchor Bolts</td>
<td>Each</td>
<td>1</td>
</tr>
</tbody>
</table>

---

Notes:
- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
- See sheet for additional details of plate cost with bolts.
- Beams shall be braced for stability during erection until deck is poured and cured.
- Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary restraint is used.

---

**STATE OF ILLINOIS**

**DEPARTMENT OF TRANSPORTATION**

**COUNTY**

**CONTRACT NO.**

**F.A. RTE. SECTION**

**TOTAL SHEETS**

**SHEET NO.**

**FILE NAME**

**USER NAME**

**PLOT DATE**

**CHECKED**

**DRAWN**

**DESIGNED**

**REVISED**

**REVISED**

**REVISED**

**REVISED**
Dimpled on centers BELOW 50°F.

**PI-2E-2**

**Cast with beam**

<table>
<thead>
<tr>
<th>Section</th>
<th>TOP BEARING ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PI-2E-2</strong></td>
<td><strong>Elastomeric Bearing Assembly, Type II.</strong></td>
</tr>
<tr>
<td><strong>BELOW 50°F.</strong></td>
<td><strong>Elastomeric neoprene leveling</strong></td>
</tr>
<tr>
<td><strong>PLAN-PTFE SURFACE</strong></td>
<td><strong>BEARINGS DETAILS</strong></td>
</tr>
<tr>
<td><strong>SECTION AT ABUT.</strong></td>
<td><strong>SECTION A-A</strong></td>
</tr>
<tr>
<td><strong>SIDE RETAINER</strong></td>
<td><strong>EXPANSION ORIENTATION</strong></td>
</tr>
<tr>
<td><strong>BTM BEARING ASSEMBLY</strong></td>
<td><strong>SECTION THRU PTFE</strong></td>
</tr>
<tr>
<td><strong>BELOW 50°F.</strong></td>
<td><strong>ABOVE 50°F.</strong></td>
</tr>
</tbody>
</table>

**Notes:**
- Anchor bolts shall be ASTM F564 all-thread (or an Engineer-approved alternate material) of the graded and dimension(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F564.
- Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
- The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
- Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
- See sheet _ for additional details of plate cast in lieu of welded plates.
- Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
- Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

**BILL OF MATERIAL**

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonded ~       } Holes</td>
<td>Each</td>
<td></td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>~ Bott. Brg.</td>
<td></td>
</tr>
<tr>
<td>Elastomer</td>
<td>~ Top Brg.</td>
<td></td>
</tr>
<tr>
<td>Steel Plates</td>
<td>~ Bott. Brg.</td>
<td></td>
</tr>
<tr>
<td>Elastomer</td>
<td>®Holes in bottom `</td>
<td></td>
</tr>
<tr>
<td>PTFE with dimpled, unlubricated</td>
<td>2-1&quot; } Pintles—Thread or press</td>
<td></td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>1&quot; } x</td>
<td></td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>1&quot; } x</td>
<td></td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>2&quot; } x</td>
<td></td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>2&quot; } x</td>
<td></td>
</tr>
</tbody>
</table>

**PI-2E-2** 12-2-15

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**FILE NAME** =

**USER NAME** =

**PLOT SCALE** =

**PLOT DATE** =

**CHECKED** =

**DRAWN** =

**CHECKED** =

**REVISED** =

**REVISED** =

**REVISED** =

**DESIGNED** =

**REVISED** =

**REVISED** =
### Assembly, Type III

**Elastomeric Bearing**

**BELOW 50°F.**  
**ABOVE 50°F.**

**SECTION AT ABUT.**

**TYPE III ELASTOMERIC EXP. BRG.**

**SECTION A-A**

**TOP BEARING ASSEMBLY**

- 1" x 1" Pintles-Thread or press
- 1/2" Stainless Steel

**BOTTOM BEARING ASSEMBLY**

- 1/2" PTFE sheet with dimpled, unlubricated surface
- Layers of elastomer-Layers of steel plates
- Washers-
- Shear Restrictor Pin &

**SIDE RETAINER**

Equilateral rolled stop with stiffeners will be allowed in lieu of welded plates.

**PLAN-PTFE ELASTOMERIC BRG.**

**SECTION THRU PTFE**

**EXPANSION BEARING ORIENTATION**

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

---

**BILL OF MATERIAL**

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

Anchor bolts shall be ASTM F1554 all-thread for an Engineer-approved alternate material of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type III.

The 1/2" PTFE sheet shall be bonded directly to the top steel plate with a non-conductive, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MIL-A-154, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/2" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

**SHEET** of for additional details of plate cast adjusting assembly height is approved by the Engineer.

**Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.**

**BEAMS** shall be braced for stability during erection and remain braced until deck is poured and cured.
**PI-2FB**

**TOP & BOTTOM PLATES**

**SECTION AT ABUT.**

**FIXED BEARING**

**SECTION A-A**

**BILL OF MATERIAL**

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchor Bolts</td>
<td>each</td>
<td>washer under nut</td>
</tr>
</tbody>
</table>

**NOTES:**
- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Anchor bolts shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
- Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
- See sheet for additional details of design and cost with beam.