M3801R2

****Standard M3801 Supercedes ComElectric UDS & CUDS, Drgs. NE-12, NE-13 and NE-13A****

Precast Concrete Transformer Foundations
Up to 2500 kVA

1.0 **Scope** – This specification details the dimensions, strength, reinforcement, and appurtenances required for fabrication of precast transformer foundations.

2.0 **General** – Vendor design and fabrication drawing shall conform to the minimum requirements of this specification and shall be signed and stamped by a Massachusetts registered professional engineer.

3.0 **Design Notes**

3.1 Concrete minimum strength, 5000 psi @ 28 days.

3.2 Steel reinforcement - ASTM A615, Grade 60.

3.3 Minimum steel cover, 1-1/2 inches.

3.4 Design Loading – AASHTO HS20-44.

3.5 Design Specifications – ACI 318 & AASHTO Load Factor Design Method.

3.6 Reinforced to support H-20 wheel load.

3.7 Manufacturers name to be stenciled on vertical wall of cutout opening.

4.0 **Bill of Materials**

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Figure No.</th>
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<tr>
<td>Precast Top Pad Foundations</td>
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<tr>
<td>Plan Top #1 (Transformers up to 300kVA)</td>
<td>1</td>
<td>14706</td>
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<tr>
<td>Plan Top #2 (Transformers 500 to 2500kVA)</td>
<td>2</td>
<td>14715</td>
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</table>
3/8" DIAMETER X 1-1/2" LG FULL THREAD S.S. PENTA HEAD BOLT W/INSERT (4) PLACES

1" CHAMFER (TYP)

1/6" DIAMETER X 1-1/2" LG FULL THREAD S.S. PENTA HEAD BOLT W/INSERT (4) PLACES

1" CHAMFER (TYP)

#4@12" EACH WAY (TOP & BOTTOM)

SECTION A-A

Figure 1 - Transformers up to 300kVA
**MATERIAL STANDARD**

**ELECTRIC OPERATIONS ORGANIZATION**

**M3801**

**Revision 2**

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**PLAN TOP NO. 2**

*(FOR TRANSFORMERS 500 TO 2500KVA)*

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**SECTION A-A**

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**Figure 2 - Transformers up to 2500kVA**

Approved by: Amin Jessa

Director, Distribution Engineering