1.0 SCOPE

This specification covers precast concrete foundations for three-phase pad-mounted transformers rated from 75 kVA to 500 kVA.

2.0 APPLICABLE PUBLICATIONS AND STANDARDS

2.1. All materials and workmanship shall conform to ACI-318.


3.0 PRODUCT REQUIREMENTS

3.1. Concrete to have a minimum strength of 5,000 p.s.i. after 28 days. Air entrainment to be 6% ±1%. All exposed edges to have a ¾” chamfer.

3.2. Reinforcing to be #5 - Grade 60 bars.

3.3. Reinforcing to be placed a minimum of 2" clear from face of concrete.

3.4. All openings shall have additional rebar reinforcement of 1- #5 each corner, mid-depth.

3.5. Lifting anchor shall be installed 6" off each corner with appropriate Dayton Lifting Anchor or equivalent.

3.6. Installation shall be performed in accordance with TDMIS-3800 – Underground Developments.

3.7. Refer to Figure 3-1 for construction and dimensional details.
Figure 3-1: Concrete Foundation for Three Phase Transformer

- LIFTING ANCHOR (TYP)
- #4 WWM (5" SQUARE) CENTERED IN CONCRETE
- 12" #5 REBAR REINFORCEMENT, MID DEPTH
- MAXIMUM 6 SETS OF SECONDARY CABLES.

PRIMARY DUCT, 2 OR 4 - 5" SCH 40 REQUIRED, MAY GO IN ANY DIRECTION AS NEEDED TO PRIMARY SOURCE. CONCRETE ENCASED

SEE TDMIS 3856 FOR GROUNDING

PAD TO BE 6"(MIN) ABOVE GRADE

CONCRETE ENCASMENT WITH 3" ENVELOPE MIN 30" FROM FINISH GRADE

12" THICKNESS CONCRETE PAD; CLASS C 5,000 PSI W/C 3/4" CHAMFERED EDGES

10"(MIN) US COTG SPEC 304 COMPACTED TO 95% MAXIMUM

PRECAST CONCRETE FOUNDATION
Three-Phase Pad-Mounted Transformer, 15-kV
75 to 500 kVA

Specification