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GENERAL CRITERIA:

1. THIS DESIGN MAY BE USED AS A STAND ALONE PACKAGE OR AS PART OF A LARGER DRAWING PACKAGE. ENGINEERING REVIEW AND APPROVAL SHALL BE OBTAINED FOR SITE-SPECIFIC CONDITIONS.
2. PLAN AND SECTIONS ARE SHOWN ON SHEETS 1 AND 2 OF DRAWING ST-G4010-40.
3. ANY DISCREPANCIES SHALL BE REPORTED TO THE RESPONSIBLE ENGINEER PRIOR TO CONSTRUCTION.
4. DO NOT SCALE DRAWINGS TO DETERMINE DIMENSIONS.
5. NEW CONSTRUCTION SHALL BE COORDINATED WITH EXISTING SITE CONDITIONS.
6. THE PROJECT SHALL TAKE ALL NECESSARY PRECAUTIONS TO LOCATE AND PROTECT CONCEALED CONDUITS, PLUMBING, OR OTHER UTILITIES.
7. WHERE DIMENSIONS SHOWN ON SHEETS 1 AND 2 OF ST-G4010-40 ARE SPECIFIED AS MIN OR MAX, SUBCONTRACTOR SHALL MAKE NECESSARY FIELD MEASUREMENTS AND PROVIDE REQUIRED DIMENSIONS.
8. SHEET NUMBERING AND CALL-OUT REFERENCING WILL NEED TO BE UPDATED TO FOLLOW LANL STANDARDS AND INTEGRATE INTO DRAWING PACKAGES.

DESIGN CRITERIA:

1. APPLICABLE CODES AND STANDARDS:
 - A. INTERNATIONAL BUILDING CODE (IBC) 2009
 - B. AMERICAN SOCIETY OF CIVIL ENGINEERS – MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES 2005 (ASCE 7-05).
 - C. AMERICAN CONCRETE INSTITUTE – BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-08).
 - D. LANL ENGINEERING STANDARDS MANUAL STD-342-100.
 - E. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS – NATIONAL ELECTRICAL SAFETY CODE 2007 (NEC 2007)
2. THIS DESIGN IS FOR ML-4. FOR ML-1, ML-2, AND ML-3, ADDITIONAL REQUIREMENTS MAY BE REQUIRED.
3. STRUCTURE PERFORMANCE CATEGORY: PC-1 OR PC-2
4. CALCULATIONS:

CAL-12-00-0000-0017-S-R-0
5. DESIGN LOADS:
 - A. DEAD LOADS: SELF WEIGHT OF TRANSFORMER (FROM 0 LBS – 3700 LBS.)
 - B. SEISMIC DESIGN BASED ON LANL ESM CHAPTER 5 SECTION II REV 6. SEISMIC DESIGN PARAMETERS:


SDS = 0.75g
I = 1.5
R = 1.5

FOUNDATION NOTES:

1. ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF
2. SITE PREPARATION PER LANL MASTER SPEC FOR EARTH MOVING.

MATERIAL CRITERIA:

1. CONCRETE:
 - A. CONCRETE WORK PER LANL MASTER SPEC FOR REINFORCED CONCRETE.
 - B. CONCRETE COMPRESSIVE STRENGTH (28 DAY): $f'c = 4000$ PSI
 - C. 4% TO 6% ENTRAINED AIR
 - D. 3/4" AGGREGATE TOPSIZE
 - E. ALL CONCRETE SHALL BE REINFORCED AS INDICATED ON SHEETS 1 AND 2.
 - F. REINFORCING STEEL SHALL BE ASTM A615 GRADE 60.
 - G. REINFORCING STEEL SHALL BE CONTINUOUS U.N.O.
 - H. PROVIDE WOOD FLOAT FINISH FREE OF DEPRESSIONS
2. POST-INSTALLED ANCHORS:
 - A. POST-INSTALLED ANCHORS PER LANL MASTER SPEC(S) FOR NORMAL CONFIDENCE POST-INSTALLED ANCHORS.
 - B. POST-INSTALLED ANCHORS SHALL BE INSTALLED IN COMPLIANCE THE MANUFACTURER'S INSTALLATION GUIDELINES AND ICC REPORT.
 - C. EMBEDMENTS SHOWN ON THE DRAWINGS ARE MINIMUM EMBEDMENT DEPTHS.
 - D. POST-INSTALLED ANCHORS SHALL NOT CONFLICT OR DAMAGE CONCRETE REBAR.

NO	DATE	CLASS REV	ADC	DESCRIPTION	DWN	DSGN	CHKD	SUB	APP
ENGINEERING STANDARDS PROGRAM									
ENGINEERING STANDARDS MANUAL								DRAWN	J. CARDON
LOW VOLTAGE DRY TYPE THREE PHASE TRANSFORMER PAD GENERAL NOTES								DESIGN	J. CARDON
BLDG : XXXX								CHECKED	S. KOTHARI
SUBMITTED								DATE	11/1/2012
DISCIPLINE POC: DUANE NIZIO				APPROVED FOR RELEASE STANDARDS MANAGER: TOBIN ORUCH					
 PO Box 1663 Los Alamos, New Mexico 87545								SHEET	S-XXXX
CLASSIFICATION: UNCLASSIFIED								3	OF 3
PROJECT ID				REVIEWER: DONALD YARDMAN		DATE: 1/1/2012			
CHAPTER 7				DRAWING NO		REV			
G-4010-40				0					