ERRATA

PTI DC10.5-12 Standard Requirements for Design and Analysis of Shallow Post-Tensioned Concrete Foundations on Expansive Soils
DC-10 Slab-on-Ground Committee

The following errata items were added on 4/16/2014:

Page 6, Section 3.0 – Notation:

CR= prestress loss due to creep of concrete, \( \text{lb kips} \).

ES = prestress loss due to the elastic shortening of concrete, \( \text{lb kips} \).

Page 8, Section 3.0 – Notation:

\( M_L \) = maximum applied service load moment in long direction from either the center lift or edge lift; positive if producing tension at bottom of foundation, negative if producing tension at top of the foundation, \( \text{ft-lb/ft ft-k/ft} \).

\( M_S \) = maximum applied service load moment in short direction from either the center lift or edge lift; positive if producing tension at bottom of foundation, negative if producing tension at top of the foundation, \( \text{ft-lb/ft ft-k/ft} \).

\( P_e \) = effective prestress force in tendon after losses due to elastic shortening, creep and shrinkage of concrete, and steel relaxation, \( \text{lb kips} \).

Page 9, Section 3.0 – Notation:

\( P_i \) = prestress force in tendon immediately after stressing and anchoring tendons considering effects of tendon friction, \( \text{lb kips} \).

\( P_r \) = effective prestress force in concrete after losses due to tendon friction, elastic shortening, creep and shrinkage of concrete, steel relaxation, and subgrade friction, \( \text{lb kips} \).
\( P_s \) = prestress force at jacking end immediately before anchoring tendons, \( \text{lb kips} \).

\( RE \) = prestress loss due to steel relaxation, \( \text{lb kips} \).

**Page 10, Section 3.0 – Notation:**

\( SG \) = reduction in compressive force on concrete cross section caused by subgrade friction, \( \text{lb kips} \).

\( SH \) = prestress loss due to concrete shrinkage, \( \text{lb kips} \).

\( V_L \) = maximum service shear force in long direction under service load from either center lift or edge lift, \( \text{lb kips/ft} \).

\( V_S \) = maximum shear force in short direction under service load from either center lift or edge lift, \( \text{lb kips/ft} \).

\( W_{slab} \) = foundation weight, \( \text{lb kips} \).

**Page 22, Section 5.1.3 – Modified unsaturated diffusion coefficient \( \alpha' \):**

\[ \alpha'_{shrink} = (0.0029 - 0.000162S_S - 0.0122y_{h shrink})F_f \]

**Page 39, Section 8.3 – Edge Lift**

**Section 8.3.1 – Long and short direction:** lower case “p” in the numerator changes to capital “P” and the exponent on \( y_m \) changes from 0.57 to 0.67.

\[ V_L = V_S = \frac{L^{0.07}h^{0.4}P^{0.03}p^{0.03}e_m^{0.16}y_m^{0.52}0.67}{35^{0.015}} \]

**Page 40, Section R8.4 – Allowable stress:** capital “S” changes to lower case “s” in the denominator of the equation.

\[ \frac{A_v}{S_s} = \frac{(v - v_c)b}{0.4f_y} \]