Geotechnical Engineering Principles and Practices, 2nd Edition

Errata for printings 1-3

Revision 08: 5/17/2014

1. P.2, line 2: "excavate" should be "excavated"
2. P. 119 Figure 3.41: at bottom left replace "Scale: 1in. = 5ft" with "Scale: 1in. = 50ft"
3. P.158-159: Replace problems 4.1 and 4.5 with the following problems

   4.1 A cube of soil measures 1.5 ft on each side and weighs 375 lb. Its moisture content is 26.0% and the specific gravity of solids is 2.72. Compute the void ratio, porosity, degree of saturation, unit weight and dry unit weight of this soil.

   4.5 The moisture content of a saturate soil is 36.0%. Assuming the specific gravity of soils is 2.68, compute the void ratio, porosity and unit weight (lb/ft^3 and kN/m^3) of this soil.

4. P.223: Table 6.3, change recommendation relative compaction for earth dams to 95%.
   First paragraph, delete sentence "This is especially likely on earth dams, where high levels of compaction are required."
5. P. 26-262: Example 7.1: at Point B, h_p should equal 1.60 m and h should then be 6.38 m. In solution then, Δh should be -0.75 m and i should be 0.0038.
6. P.285: Last line of page replace "k_x" with "k_z"
7. P.294 Table in problem 7.33: Heading of third column should read "Sand" and heading of fourth column should read "Silty Sand"
8. P.296 Figure 8.1: equation on right hand side of figure should read

$$v_x + \frac{\partial v_x}{\partial x} dx$$

9. P.299 first line: Replace "Equation 8.12" with "Equation 8.13"
10. P.300 fist line: Replace "Equation 8.16" with "Equation 8.17"
11. P.318, last paragraph: first sentence should read "It is possible to create a physical model that illustrates the flow lines in a flow net by injecting dye into the model, as shown in Figure 8.13."
12. P.329 fourth paragraph, second line: replace "Power (1992)" with "Powers (1992)".
13. P.345 third paragraph last line: change "4 times D_{15}" to "4 times d_{15}"
14. P.346 fourth sub-paragraph, first line: change "$D \leqq 0.50$ mm" to "$D_{15} \leqq 0.50$ mm"
15. P.347: line 2: change "parallel to the draing material" to " parallel to that for the drain material"
16. P.355 Problem 8.15: in first line change "original from" to "original depth from" at end of problem after question mark add "Assume $r_w = 0.06$ m."

17. P.381 Equation 9.27 should read

$$\Delta\tau_{yx} = -\Delta\tau_{xy} = \frac{P}{2\pi}\left[\frac{3x_f y_f z_f}{R^5} - (1-2\nu)\left(\frac{(2R+2)x_f y_f}{(R+z_f)^2 R^3}\right)\right]$$

18. P.389 Figure 9.16: change "m = xx" to "m = ∞" in two locations on figure.
19. P. 393 Example 9.6: in solution for Footing 1: (Z_f/B)= 0.40 should be dimensionless i.e. delete the m from solution.
20. P.396, one line above equation 9.43, should read

$$F_B = (0.100\ \text{m}^3)(9.8\ \text{kN/m}^3)$$

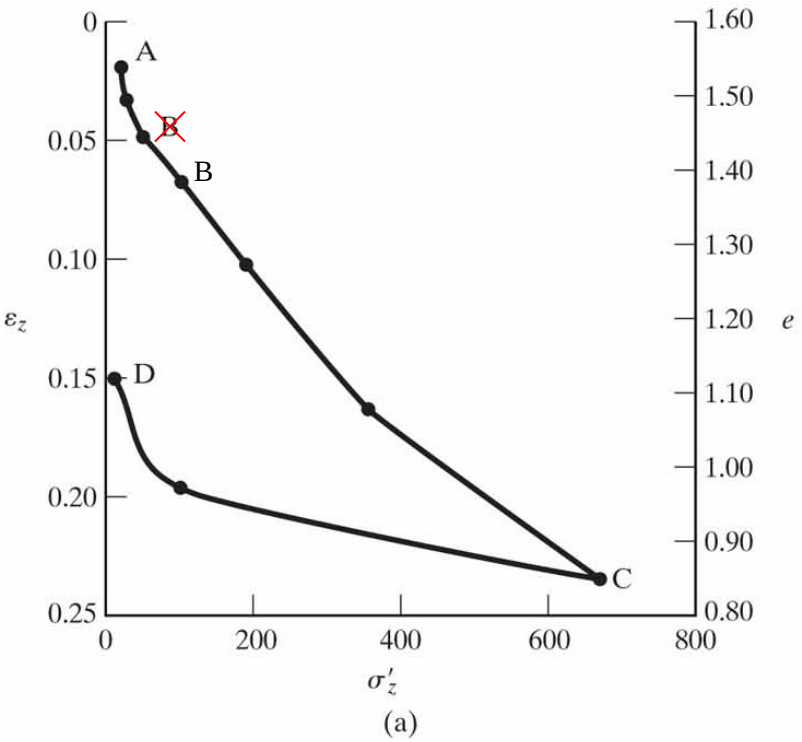
21. P.403 equation 9.52 should read

$$\sigma_z' = z\gamma_b$$

22. P.418, first line: change "modulii of elasticity in the soil and the culvert" to "the modulus of elasticity of the soil to that of the culvert"
23. P.424, Example 10.1 last line should read

$$\sigma_{zf}' = 932\ \text{lb/ft}^3$$

24. P.435 Figure 10.10 (a): move point B to location shown below



25. P.449, Equation 10.21 should read

$$\varepsilon_z = -\frac{\Delta e}{1+e_0}$$

$$\varepsilon_z = \frac{C_c}{1+e_0}\log\left(\frac{\sigma'_{zf}}{\sigma'_{z0}}\right)$$

26. P.450, Equation 10.25: Equation should read

$$\delta_{c,ult} = \sum\left[\frac{C_r}{1+e_0}H\log\left(\frac{\sigma'_c}{\sigma'_{z0}}\right)+\frac{C_c}{1+e_0}H\log\left(\frac{\sigma'_{zf}}{\sigma'_c}\right)\right]$$

27. P. 454, 456, 459, &460, in solution tables for Examples 10.5, 10.6, 10.8 & 10.9, σ'_{z0} in third column of each table should be computed using Equation 9.47 and not 9.48
28. Page 541 - Example 12.2, Planes at B & C are incorrect as written. Change solution to read.

    Point B— horizontal plane s = 54.4 kPa

    Point B— vertical plane s = 68.1 kPa

    Point C— horizontal plane s = 35.5 kPa

    Point C— vertical plane s = 57.2 kPa

29. Page 565 - Table 12.2, "Stability" misspelled in table heading
30. P.590, problem 12.35: “22 lb/ft^2” should be “22 lb/in^2”
31. P.632, last paragraph: “magnitude 6.2” should be “magnitude 6.6”
32. P. 660, Figure 14.6, text in left most box in top row should read “Driven Piles”
33. P.687, Example 15.5, the third equation in the solution should read

$$q' = 4000 + 450 - 360 = 4090 \text{ lb/ft}^2$$