

Errata for “Offshore Geotechnical Engineering” First Edition, by Randolph & Gourvenec (ISBN: 978-0-415-47744-4)

This document contains a list of corrections of errors from the first edition of *Offshore Geotechnical Engineering* by Mark Randolph and Susan Gourvenec.

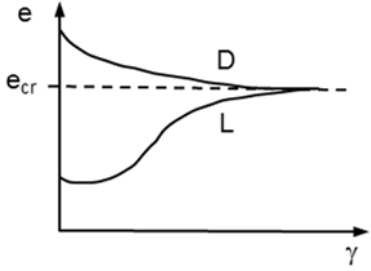
While all reasonable effort was made to check the manuscript, some errors exist and we apologize for any confusion that these may have caused.

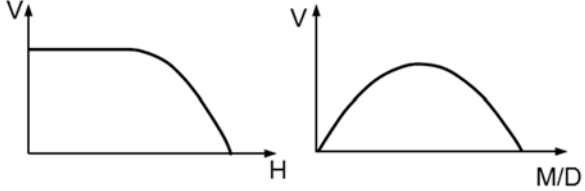
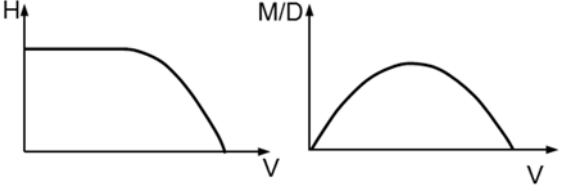
This is an active document and is updated each time an error is identified. Please contact me (susan.gourvenec@uwa.edu.au) if you identify any errors that are not included here. We are grateful to those individuals who have already passed on corrections and suggestions for the next edition.

Kind regards,

Susan and Mark

List last updated 20/05/2015

Location reference	Existing entry	Correction
Figure 4.9c		Dense, D and loose, L labels should be swapped (Figures 4.9a and b are correct)
Equation 6.7	$V_{ult} = A' \left(s_{u0} \left(N_c + \frac{kB'}{4} \right) \frac{FK_c}{\gamma_m} + p'_o \right)$	$V_{ult} = A' \left(\left(N_c s_{u0} + \frac{kB'}{4} \right) \frac{FK_c}{\gamma_m} + p'_o \right)$
Equation 6.13	Clarification that the final γ_m term is part of the exponent. This is ambiguous in the typesetting of the original equation.	$N_q = \tan^2 \left(\frac{\pi}{4} + 0.5 \tan^{-1} \left(\frac{\tan \phi}{\gamma_m} \right) \right) e^{\pi \tan \phi / \gamma_m}$
Equation 6.14	$N_\gamma = 1.5(N_q - 1) \tan \left(\frac{\tan \phi}{\gamma_m} \right)$	$N_\gamma = 1.5(N_q - 1) \left(\frac{\tan \phi}{\gamma_m} \right)$

Equation 6.35	$f = \left(\frac{V}{V_{ult}}\right)^2 + \left[\left(\frac{M^*}{M_{ult}}\right)\left(1 - 0.3\frac{HM}{H_{ult} M }\right)\right]^2 + \left \left(\frac{H}{H_{ult}}\right)^3\right - 1$	$f = \left(\frac{V}{V_{ult}}\right)^2 + \left[\left(\frac{M}{M_{ult}}\right)\left(1 - 0.3\frac{HM}{H_{ult} M }\right)\right]^2 + \left \left(\frac{H}{H_{ult}}\right)^3\right $
Figure 6.22	<p>The labels on the VH and VM envelopes are on the incorrect axes</p> 	
Equation 7.34	$b = (L/3D) + 4.5$	$b = 4.5 - (L/3D)$
Equation 10.7	$\frac{2s_u}{\gamma' \cdot z \cdot \sin\alpha \cdot \cos\alpha} = \frac{2s_u}{\gamma' \cdot z \cdot \sin 2\alpha}$	$\frac{s_u}{\gamma' \cdot z \cdot \sin\alpha \cdot \cos\alpha} = \frac{2s_u}{\gamma' \cdot z \cdot \sin 2\alpha}$
Equation 10.21 - 10.23	$F = \frac{S_1^{\max} + S_2^{\max} \sin(\beta - \alpha) + S_3^{\max} \cos(\beta - \alpha) + P \cos \alpha}{W_1' \sin \alpha + W_2' \sin \beta \cos(\beta - \alpha)}$ $s_1 = a$ $s_3 = \frac{z}{\sin(\beta - \alpha)}$ $A_1 = \frac{s_2^2}{2 \tan(\beta - \alpha)}$ $A_2 = az - A_1$	<p>The subscripts of slip planes 1 & 3 are interchanged in equations 10.21 - 10.23 relative to the labelling in Figure 10.10, thus:</p> $F = \frac{S_1^{\max} \cos(\beta - \alpha) + S_2^{\max} \sin(\beta - \alpha) + S_3^{\max} + P \cos \alpha}{W_1' \sin \beta \cos(\beta - \alpha) + W_2' \sin \alpha}$ $s_1 = \frac{z}{\sin(\beta - \alpha)}$ $s_3 = a$ $A_1 = az - A_2$ $A_2 = \frac{s_2^2}{2 \tan(\beta - \alpha)}$ <p>Insert in Figure 10.12 should read $a_{\max} = \frac{s_1}{\cos(\beta - \alpha)}$</p>