Corrigendum #2 for 'Decoding Eurocode 7' by Andrew Bond and Andrew Harris

The following corrections are necessary to both the original print run of 'Decoding Eurocode 7' (published September 2008) and to the first re-reprint (published April 2009). See Corrigendum #1 for corrections that apply to the original print run only.

p42, table at top of page
    In the row headed 'Impact (A)', replace '260' with '50'.

p100, §3
    Replace the equation for small tunnels and caverns with:
    $b < z_a < 2b$

p111, table
    Replace 'PMP' with 'PBP'.

p114, table
    For compaction testing, replace section '5.1' with '5.10'.

p179, §3
    Replace 'correlation factor' with 'combination factor'.

p205, table
    Change the values of the partial factor for destabilizing variable rail, wind, and thermal actions in limit state EQU to the following:

Factor	EQU
$\gamma_{Q,dst}$	Rail 1.4-1.7 Wind 1.7 Thermal 1.55

    Also, insert '(A1)' after 'UK National Annex to BS EN 1990'.

p237, note 7
    Replace '... factor of safety is 0.83' with '... factor of safety is 0.87'.

p237, note 10
    Replace '... factor of safety is 1.29' with '... factor of safety is 1.34'.

p241, Example 7.4
    Insert after '218.8 kN/m' the following: 'and of the walls $W_{Gk,w}$ = 2 x t_w
    x D x γ_{ck} = 150 kN/m'.
    Replace '528 kN/m' with '588 kN/m'.
    Replace '1068 kN/m' with '1128 kN/m'.
    Replace '960.8 kN/m' with '1014.8 kN/m'.

p242
    Replace '148 %' with '141 %'.
    Replace '0.83' with '0.87'.

p243
    Replace '99 %' with '95 %'.
    Replace '1.29' with '1.34'.

p357, §3
    Replace '... must be taken ...' with '... should normally† be taken ...'. Also
    delete 'P' from reference to clause '9.6(3)P'.

p357, §4
    Delete the dagger '†' at the end of the paragraph.

p357, footnote †
    Replace the footnote text with "Eurocode 7's requirements have been
    changed from a Principle ('shall') to an Application Rule ('should') in
    Corrigendum AC:2009'.

p365, §2
    Replace "... horizontal component σ'_{ah} ..." with "... normal component
    σ'_{an} ..." and change the equation to:

$$\sigma'_{an} = K_{a\gamma}\left(\int_0^z \gamma dz - u\right) + K_{aq}q - K_{ac}c'$$

p366, §1

Replace '... horizontal component σ_{ah} ...' with '... normal component σ_{an} ...' and change the equation to:

$$\sigma_{an} = \sigma'_{an} + u$$

p366, §3

Change the equations to:

$$P'_{ah} = \int_0^H \sigma'_a \cos(\theta + \delta)\,dz = \int_0^H \sigma'_{an} \cos\theta\,dz \text{ and } U_{ah} = \int_0^H u\cos\theta\,dz$$

p366, §4

Change the second equation to: $U_{av} = U_{ah} \times \tan\theta$

p367, §8

Replace "(P'$_{a,h}$ and P'$_{a,v}$)" with "(P'$_{ah}$ and P'$_{av}$)", removing commas.

p368, §2

Replace "(U'$_{a,h}$ and U'$_{a,v}$)" with "(U$_{ah}$ and U$_{av}$)", removing commas and apostrophes.

p393, Example 11.4

Change line 14 to: $P_{ahd_1} = \left(\gamma_G \times K_{ay} \cos\theta \times \dfrac{\gamma_k H^2}{2}\right) = \left(\dfrac{61.9}{58.1}\right)\dfrac{kN}{m}$

Change line 15 to: $P_{avd_1} = ... = \left(\dfrac{46.9}{44.1}\right)\dfrac{kN}{m}$

Change line 16 to: $M_{d_1} = ... = \left(\dfrac{82.5}{77.5}\right)\dfrac{kNm}{m}$

p394, Example 11.4

Change line 1 to: $P_{ahd_2} = \left(\gamma_Q \times K_{aq} \cos\theta \times q_{Qk}H\right) = \left(\dfrac{17.7}{19.4}\right)\dfrac{kN}{m}$

Change line 2 to: $P_{avd_2} = ... = \left(\dfrac{13.4}{14.7}\right)\dfrac{kN}{m}$

Change line 3 to: $M_{d_2} = ... = \left(\dfrac{35.3}{38.9}\right)\dfrac{kNm}{m}$

Change line 4 to: $H_{Ed} = ... = \left(\dfrac{79.5}{77.6}\right)\dfrac{kN}{m}$

Change line 5 to: $P_{avd} = ... = \left(\dfrac{60.3}{58.8}\right)\dfrac{kN}{m}$

Change line 6 to: $M_{Ed,dst} = \ldots = \begin{pmatrix} 117.8 \\ 116.4 \end{pmatrix} \dfrac{kNm}{m}$

Change line 7 to: $V_d = \ldots = \begin{pmatrix} 254.7 \\ 202.8 \end{pmatrix} \dfrac{kN}{m}$

Change line 8 to: $V_{d,fav} = \ldots = \begin{pmatrix} 204.3 \\ 202.8 \end{pmatrix} \dfrac{kN}{m}$

Change line 10 to: $H'_{Rd} = \ldots = \begin{pmatrix} 171.4 \\ 136.1 \end{pmatrix} \dfrac{kN}{m}$

p395, Example 11.4

Change line 1 to: $M_{d_1} = \ldots = \begin{pmatrix} 86.0 \\ 80.8 \end{pmatrix} \dfrac{kNm}{m}$

Change line 2 to: $M_{d_2} = \ldots = \begin{pmatrix} 23.4 \\ 25.8 \end{pmatrix} \dfrac{kNm}{m}$

Change line 4 to: $M_{Ed,stb} = \ldots = \begin{pmatrix} 253.4 \\ 250.6 \end{pmatrix} \dfrac{kNm}{m}$

Change line 5 to: $e_B = \ldots = \begin{pmatrix} 0.47 \\ 0.34 \end{pmatrix} m$

Change line 7 to: $H_{Ed} = \begin{pmatrix} 79.5 \\ 77.6 \end{pmatrix} \dfrac{kN}{m}$ and $H'_{Rd} = \begin{pmatrix} 171.4 \\ 136.1 \end{pmatrix} \dfrac{kN}{m}$

Change line 8 to: $\Lambda_{GEO,1} = \ldots = \begin{pmatrix} 45 \\ 57 \end{pmatrix} \%$

Change line 9 to: $M_{Ed,dst} = \begin{pmatrix} 117.8 \\ 116.4 \end{pmatrix} \dfrac{kNm}{m}$ and $M_{Ed,stb} = \begin{pmatrix} 253.4 \\ 250.6 \end{pmatrix} \dfrac{kNm}{m}$

Change line 10 to: $\Lambda_{GEO,1} = \ldots = \begin{pmatrix} 46 \\ 46 \end{pmatrix} \%$

p396, Example 11.4

Change line 1 to: $H_{Ed} = 79.5 \dfrac{kN}{m}$ and $H'_{Rd} = 155.8 \dfrac{kN}{m}$

Change line 2 to: $\Lambda_{GEO,2} = \ldots = 51\%$

Change line 3 to: $M_{Ed,dst} = 117.8 \dfrac{kNm}{m}$ and $M_{Ed,stb} = 253.4 \dfrac{kNm}{m}$

Change line 4 to: $\Lambda_{GEO,2} = \ldots = 46\%$

Change line 5 to: $H_{Ed} = 77.6 \dfrac{kN}{m}$ and $H'_{Rd} = 136.1 \dfrac{kN}{m}$

Change line 6 to: $\Lambda_{GEO,3} = \ldots = 57\%$

Change line 7 to: $M_{Ed,dst} = 116.4 \dfrac{kNm}{m}$ and $M_{Ed,stb} = 250.6 \dfrac{kNm}{m}$

Change line 8 to: $\Lambda_{GEO,3} = ... = 46\%$

p456, table

Remove the dagger '‡' from 'Resistance factors‡' and delete the corresponding note '‡Partial factors ... are 1.0'.

p471, table

Delete '... and for accidental design situations ...' from the note ♭.

p471, §3

Insert 'to' between 'is' and 'ensure'.

p490, Example 13.3

Delete the sentence 'Also ignore the results of the fourth load test since it was conducted on a significantly shorter pile than the others' (the fourth test is not ignored in the worked example).

p561, §4

Replace 'The Ground Investigation Report [should normally consist of]/[shall consist of, if appropriate,]† a presentation of all available geotechnical information ...' with 'The Ground Investigation Report [should normally]/[shall]† consist of a presentation of all [available]/[appropriate]† geotechnical information ...' .

p581, §2

Replace '... normal to the all surface ...' with '... normal to the wall surface ...' .

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