Wave Assessment on Loch Ericht

DEBBIE HAY-SMITH, JBA Consulting, previously FaberMaunsell RICHARD DOAKE, FaberMaunsell WILLIAM ALLSOP, H R Wallingford KIRSTY McCONNELL, H R Wallingford

SYNOPSIS. This paper uses the example of two dams to illustrate generic problems and solutions to the analysis of waves and wave forces on wave walls.

Dalwhinnie Dam and Ericht Dam impound Loch Ericht, which straddles Perthshire and Highland Regions in Scotland. Inadequate freeboard at both dams means that remedial works are required to increase the wave overtopping protection. In both cases, standard design methodologies had to be extended to achieve a credible design basis for the works.