ABOUT THE SEMINAR

The three-hour seminar will cover the design of basal reinforced embankments and the determination of the appropriate geosynthetic reinforcement design strengths in accordance with New South Wales RMS QA R67 and Queensland MRTS100 specification requirements.

The seminar begins by introducing the basic concepts of reinforced soil specifically related to basal reinforced embankments including the concepts of Ultimate Limit State (ULS) and Serviceability Limit State (SLS) conditions as set out in BS8006. A practical example is given where the reinforcement design strengths are listed for both the ULS and SLS condition and then the procedure according to BS8006:2010 is used to arrive at the required reinforcement product initial ultimate strengths.

The seminar also presents the BS8006:2010 approach to describing geosynthetic reinforcement behavior where each of the relevant properties are presented in the form of material reduction factors which, when combined, can be used to determine the required initial (ultimate) tensile properties of a suitable reinforcement type. This is done to arrive at suitable reinforcement solutions that satisfy both the design ULS and SLS conditions.

The design procedure for basal reinforced piled embankments contained in BS8006 is presented in detail, including the determination of the design tensile strengths developed in the basal reinforcement due to embankment arching and horizontal outward thrust. A detailed example is presented which covers the BS8006 design procedure in determining the appropriate reinforcement design strengths which are then stated in terms of RMS QA R67 and MRTS100 design strength requirements.

Morning tea provided. The seminar will be followed by a standing networking lunch.

ABOUT THE PRESENTER

Chris Lawson, Managing Director of TenCate Geosynthetics Asia-Pacific based in Malaysia, has worked in the field of geosynthetics for over 30 years covering Australia, Europe, North America and Asia. Mr Lawson has been involved in developing the geosynthetics Standards and Codes of Practice, and is author of over fifty technical papers on the subject of geosynthetics.