Rev. No.: 0
Date : 5.4.2005

BEM/RD/PPC/09

Serial No. 0018

BOARD OF ENGINEERS MALAYSIA

CIRCULAR NO. 4/2005

ENGINEER'S RESPONSIBILITY
FOR SUBSURFACE INVESTIGATION
(Generally known as soil investigation)

To All Professional Engineers

It has come to the attention of the Board of Engineers Malaysia that inadequate and/or unreliable geotechnical information and laboratory test results are sometimes used in the design of geotechnical/foundation works. The main reason for this reprehensible practice is that there are still misconceptions among some engineers on their responsibility in planning and supervising subsurface investigation and field and laboratory testing.

2. Using inadequate and unreliable information from subsurface investigation have caused problems during construction and sometimes even after the completion of structures. The problem can arise from unexpected ground conditions causing foundation or slope/foundation failures. Such failures often require extensive changes and/or remedial works entailing increase construction costs, delays and sometimes even threatening the safety of the public.

3. Inadequate subsurface investigation information is often the result of consulting engineers failing to properly plan and specify the types of field and laboratory tests needed to acquire the necessary information for design. They sometimes leave it to Subsurface Investigation (S.I) Contractors to plan/specify/dictate the works for them, or permit their clients to specify the scope of such S.I. Needless to say, geotechnical information thus obtained could well leave much to be desired; the engineer must specify the scope of the subsurface investigation for the works he is to design.

4. The Board of Engineers Malaysia takes a serious view of this matter and hereby reminds all Professional Engineers of the following:

(1) that subsurface investigation should be properly planned after a desk study and site reconnaissance, including reviewing of all available information of the site and adjacent areas. The methods of subsurface investigation and sampling for laboratory tests must also be adequately specified for the type of development to be undertaken and the ground condition.

(2) Subsurface investigation should be properly carried out by qualified and experienced personnel according to approved methods.

(3) All subsurface investigation should be supervised directly by the professional who is responsible for the design or by qualified and experienced staff under his/her control. This is consistent with the professional services as described in the Board of Engineers Malaysia Scale of Fees (1998).

(4) Part IV, Code of Professional Conduct of the Registration of Engineers Regulation 1990 (Amendment 2003) requires Professional Engineers to discharge their professional duty with due care and diligence. Failure to do so contravenes the Act and calls for disciplinary action under Section 15 the Registration of Engineers Act 1967 (Amendment 2002).

[BEM-246th Meeting / 5th April 2005]

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