Regulation 8(1)(ba) of the Building (Administration) Regulations empowers the Building Authority to require a geotechnical assessment of the adequacy of a site for proposed building work at general building plan submission stage. This provision will assist authorized persons to identify at an early stage any fundamental geotechnical constraints that could arise on certain sites and ensure that the geotechnical feasibility of the proposed building works is adequately assessed and reflected in the general building plans.

Criteria for Submission of Geotechnical Assessment

2. A general building plan submission meeting the following criteria should be accompanied by a geotechnical assessment:

(a) New building (including alteration and addition (A&A) works resulting in a new building) proposal:

(i) where the maximum gradient across a site from boundary to boundary or, for a large site, across any 50 m long strip, is greater than 15°;

(ii) where a slope inclined at more than 30° and greater than 7.5 m high (including the height of any retaining wall at its toe or crest) exists on the site or within 7.5 m of the site;

(iii) where there is to be an excavation with a face longer than 10 m and either:

(1) the excavation is to be deeper than 7.5 m at any point at any stage; or

(2) the excavation will be below a plane projecting down at 45° from the toe of any retaining wall; or

(3) the excavation is to be made below HKPD minus 1 m on reclaimed coastal land.

(iv) where a retaining wall greater than 6 m high (retained height) exists on the site or a 6 m or longer portion of such a wall exists within 6 m of the site; or

/where.....
(v) where special geological conditions exist, such as previous landslides, debris flows, threatening boulders and potential rockfalls.

(b) A&A works not resulting in a new building where the proposed works may have significant impact on existing geotechnical features (such as slopes and retaining walls) and adjacent foundations, or involve excavation works under paragraph 2(a)(iii) above.

Contents of Geotechnical Assessment

3. The essential contents of a geotechnical assessment are:

(a) an outline of the topography, geology and presumed groundwater conditions of the site;

(b) a general description of the proposed works and discussion of how the existing geotechnical features (such as slopes and retaining walls) and adjacent foundations will affect or be affected by such works;

(c) a discussion to demonstrate the feasibility of the proposed development, including descriptions of construction methods and sequence of works;

(d) schematic plans and sections of the proposed site formation works and foundation works, taking the above discussion into account;

(e) a plan showing the scope and extent of the proposed ground investigation specifying, by reference to section 15.3 of GEOGUIDE 2: Guide to Site Investigation, the level of independent site supervision of the works to be undertaken; and

(f) descriptions of intended investigations of the stability of existing slopes and retaining walls and any preventive or remedial works that may be needed.
Refusal of Plans

4. Any general building plan submission meeting the criteria stipulated in paragraph 2 above but not accompanied by a geotechnical assessment may be rejected under section 16(1)(a) of the Buildings Ordinance.

( HUI Siu-wai )
Building Authority

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