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For the attention of Elizabeth Beaumont
8 February 2012

Dear Madam,

53 Fitzroy Park- Audit of Submission Documents

In accordance with your further E-mail of instruction dated 2nd February, we have reviewed the further information provided by the applicant; namely, revised “Structural Engineering Notes” by Elliottwood dated January 12th and letter dated 3rd February 2012 from Terrain Geotechnical Consultants. We understand that these were responses to comments we made in our Letter Report of 20th December 2011.

1. The revisions to the Elliottwood report are intended to address our comment that “The proposed method of controlling groundwater during construction is risky and uncertain to succeed”. Essentially, proposal now is that the drainage sump which was formerly outside the excavation is to be replaced with one or more sumps inside the excavation. This appears to us to be a safer arrangement than the previous one from the point of view of slope stability and the neighbouring pond, as the sumps will be within the piled retaining wall, and it is also likely to be more effective at draining water from all sides of the excavation. However, it appears from drawing 209483 SK-11 P3 “Proposed Section 2-2” (dated 27/9/10, we note – presumably the date should have been changed to that of the latest update) and from the text (para. 6.9) that the intention is to construct these sumps in concrete below the level of the pool. This would increase the depth of the new works by some 2 metres (approximately scaled from the drawing); it is also unclear how or whether these sumps will be connected to the drainage layer under the structure. We also note that the outline of the original external sump has not been deleted from drawing 209483 SK-11 P2 “Temporary Works - Basement”, nor does the drawing show the proposed internal sumps.

Our opinion is that the re-siting of the sumps internally will substantially remove the risk we identified in our earlier report, but the strategy for dealing with groundwater during construction has not been thoroughly thought through and will need to be revisited prior to the start of construction.

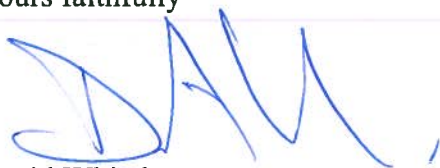
2. Turning to the Terrain letter, we have a number of comments. Firstly, on page 3 the statement is made that “it is difficult to see how the London Clay could become saturated to any extent given its low permeability”: the relevant issue here is pore pressure rather than saturation, because the London Clay is unlikely to be “unsaturated”, and permeability affects only the rate at which seepage occurs, not the ultimate degree of saturation. This is a detailed and minor point, however.
3. On the same page, the statement that the remodelled slope close to the pond will not exceed 10° is qualified by “where possible”. This seems to us to be an insufficient statement of the final condition.
4. In the paragraph on the last page which discusses the proposed design in relation to the guidance in CIRIA C580, the assessment made is generic rather than site specific; also, ground surface movements due to pile installation (CIRIA Fig.2.8) have not been considered. Our opinion, however, is that the assessment not unreasonable in view of the absence of buildings in the close vicinity of the proposed excavation, and on the basis of the information we have been provided with we would not expect there to be problems as a result of wall movement.

Overall, our view is that the applicant’s engineers have addressed the issues raised in our report although not particularly rigorously. However, the arrangements for groundwater control during construction should not create risks externally and details can be finalised at a later stage, and the engineer’s conclusions on likely ground movements are probably reasonable, given the absence of closely neighbouring structures.

We might suggest that as no statement has been made of what will be achieved, a condition is applied to the planning consent, requiring the quoted (or implied) maximum 2mm vertical ground movement at 11 metres to be achieved.

I hope that this will assist you in reaching your decision.

Yours faithfully



David Whitaker