FIRST STEPS LTD
To Success

Mr G. Whittingham,
Department of Planning,
London Borough of Camden,
Judd Street,
London
WC1H 9JE

Dear Sir,

29th November 2015

Response on matters of groundwater to Campbell Reith's Basement Impact Assessment Audit for Grove Lodge.
Dated October 2015 (CR's Project No. 12066-17 Rev: D1)
London Borough Camden Applications 2015/4485/P & 2015/4555/L

The following response has been commissioned by Mr. & Mrs. Gardiner of Admiral's House, and Mr. & Mrs. Seaton of Terrace Lodge, both of Admiral's Walk and both immediate neighbours to Grove Lodge

1. Perspective as seen from Admiral's House

1.1 In 1832 John Constable recorded on canvas the southern aspect of Admiral's House, a dominant feature of the painting being a copious spring emerging from the ground in front of the house in the region of what is now ground a little below Admiral's Walk at an elevation of around 127m AOD.

1.2 Admiral's House was probably built around 1700 and with spring water close at hand it is not surprising that a well was dug (which would have been by hand) as part of the estate and close to the buildings of the time. That well survives, is now within the boundary walls of the property which has extended over it. A vigorous flow of water enters it and cascades down to a standing level which rises and falls with the seasons and has been seen by the present owner standing at around 124.5m AOD.

1.3 But water levels can be higher than that as the excavation for constructing a swimming pool a few metres from the well was inundated by groundwater with such flows that the contractor abandoned further deepening beyond 124.5m AOD this being the limit to which he could manage the water, implying that at that time the level outside the excavation was higher.

1.4 A few years ago two holes, each more than a meter by meter in general dimension, opened in Admiral's Walk and these were seen by many residents. No explanation was offered by Camden who filled them. The only explanation plausible for their formation is erosion of the ground by groundwater flowing to old pipework – possibly former drains or part of the drainage network gathering water for the spring so as to concentrate its flow for practical purposes. Similar collapse has been witnessed at Redington Rd adjacent to a manhole and sump into which drains discharge.

1.5 With these four pieces of factual evidence based on long term observations, with those of the well spanning many seasons, and of the ground seen in 3D, and by more than one person it would be natural to conclude that some form of groundwater management would form part of any proposal to excavate a large basement adjacent to Admiral's House, either to demonstrate no change is occurring during the works or to protect Admiral's House from whatever changes to the existing environment the works create.

2. Expectation from the BIA

2.1 Groundwater management for a surface excavation such as a basement requires five basic pieces of information;

- an accurate knowledge of water levels from which can be derived,
- the present direction of groundwater flow,
- and its hydraulic gradient , which with
- a representative value for insitu permeability coupled with
- a working knowledge of the relationship between water level and rainfall,

These will collectively permit a system of groundwater management to be designed.

2.2 None of these exist in the BIA and Campbell Reith is wrong to assure Camden that the works proposed satisfy DP27.

2.3 What does exist in the BIA is corrupted data on water levels, a distribution of data points that makes the present direction of flow impossible to define, so no hydraulic gradient can be obtained, thus denying any value for permeability (of which there is none given in the BIA) from being converted into an assessment of likely volumes of water to be managed. This means there is no clear definition of the groundwater environment before work starts making it impossible to quantify and interpret any change that subsequently occurs. In addition, the record of water level with time clearly shows there is a link between water level and rainfall but this link is impossible to analyse and interpret because of the nature of the observations made.

2.4 It is requested that these shortcomings are addressed as they should be under the terms of DP27 because as they stand they deny the owner of Admiral's House the opportunity to know what's happening and the reassurance that comes when it is clear that nothing is happening, or that whatever is happening is under control.

3. Particular points of objection

3.1 The Non-Technical Summary (1.4 & 1.6) deals only with the points of view of the Applicant and as explained above there are firm grounds for believing the data presented is lacking in essential detail.

3.2 Further the Non-Technical Summary fails to clearly state that although alternative views are registered as being present, their implications are not considered. In the Introduction, Section 2.8 makes clear that reports containing the alternative views of First Steps Ltd and Eldred's were included in the review yet the e-mail from [redacted] (Thursday October 01, 2015 11.48am) to Mike Briggs makes it abundantly clear that alternative views are not the concern of the review and that as far as the review is concerned the issue is whether or not certain subjects have been considered, and considered by appropriately qualified people. And that is exactly what is shown in Appendix 1 where, as far as groundwater is concerned, the only consideration given to alternative views is that the applicant has submitted an answer to them and not that the questions raised have been resolved.

3.3 The Non-Technical Summary (1.7) implies any dewatering will just be a matter of pumping but the risk of soil erosion means that the location of the dewatering becomes important and with no groundwater management plan in place that risk cannot be managed.

3.4 The Non-Technical Summary concludes (1.13 bullet point 3) with a travesty of facts. It must be restated that

- the well in Admiral's House has not been seen
- the swimming pool in Admiral's House has not been seen
- the levels for either of these have not been measured
- the evidence from the holes in the road has been dismissed
- perfectly reliable methods of defining the direction of groundwater flow are ignored in favour of some notion from topography of where water is flowing
- no means of determining hydraulic gradient exist on site and
- rainfall cannot be related to water level.

How can it be concluded that this aspect of the BIA is based on all necessary and reasonable evidence? And without that how can its conclusions be seen as reliable and transparent? The necessary data does not exist, reasonable and reliable data has not been obtained, and thus the conclusions arrived at are not transparent.

4. General Conclusions

4.1 The Particular points of objection (3.1 to 3.4 inclusive above) are reasons why the BIA fails to provide a reliable and transparent basis for concluding that the proposals for groundwater management, as required in DP27 as a prerequisite for planning, have been satisfied; they have not.

4.2 Further, the manner of the responses shows that the thinking behind the proposals forwarded in this Application undermines any assurance given by the Applicant that matters relating to groundwater can be dealt with during construction once permission is granted. A contractor encountering a problem

on the site with groundwater e.g. at the base of a hole for piling, would not know the action taken to control that problem could promote a different problem somewhere else. Further, with the data as it now stands there would be no basis for guiding the contractor.

4.3 In short, the claim that any problems arising from groundwater could be satisfied in the course of construction, post permission, cannot be an answer to the lack of data for satisfying the requirements of DP27 in the first place. It is to avoid such uncertainties that the requirements of DP27 are there and they should be satisfied.

[redacted]

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