[redacted]

From: "David Nash" [redacted]
Subject: FW: 106KHR - Campbell Reith Questions - 2017/5122/P & 2017/6307/P
Date: 23 March 2018 at 14:55:13 GMT
To: "'Patrick Brice'" [redacted]

Dear Patrick,

Please find below in blue a further response from Soiltechnics on Point no. 4 on the Audit Query Tracker. Please forward on to the planners/Campbell Reith.

Best regards

David

In response to Campbell Reith's comment, we have revised the strength/depth plot, reducing the initial shear strength to 75kN/m^2. We consider it appropriate to adopt stiff category parameters in the London Clay for the following reasons:

- *In-situ shear strength measurements indicate stiff conditions (>75kN/m^2) through the large majority of the soil profile.*
- *Due to the investigation method adopted, undisturbed samples for triaxial testing were not obtained. We have converted SPT N-values to undrained shear strength, using the conversion given in Stroud and Butler. In our experience, larger conversion factors are usually achieved when N-values are converted to undrained shear strength using triaxial data.*
- *The shear strength gradient adopted is based on the typical value given in Burland et al 'Building Response to Tunnelling' and is considered a good fit for the in-situ data plot.*
- *The consistency index of all London Clay samples tested for Atterberg limits is in the stiff category.*

The basement excavation will be propped in the temporary case, with movements monitored and limited to 2mm.

We trust this provides the information required.

Kind regards,

Seb Crolla
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Associate Director