

Thomas Telford House, Sun Valley Business Park Winnall Close Winchester S023 OLB

Drawing And Planning

Via email only: jeremy@drawingandplanning.com

17th February 2022

Our Ref.: 18511/AL

Dear Jeremy,

Re: 163 Sumatra Road, London NW6 IPN

We are writing this accompanying letter to provide information regarding Basement Impact Assessment Rev1.02, report ref. 18511/BIA/Rev1.02 dated February 2020, prepared at the above site by Soils Limited following to the audit carried out by Campbell Reith and presented in their document named Basement Impact Assessment Audit, project no. 13398-77 Rev. D1 dated January 2021.

Introduction

The Basement Impact Assessment Audit from Campbell Reith pointed out a series of 6No. queries still to be clarified to proceed with the planning permission for the proposed basement development at the site. In particular, the queries were summarised in the Audit Query Tracker in Appendix 2 of the Audit and referred in greater detail to explanations and discussions in Section 4 of the Audit. The open queries required the updating the BIA Rev1.02 with information from specific documents to be provided by the Client and their Consultants and modified calculations based upon the mentioned documents.

The Basement Impact Assessment Rev1.02 dealt with the queries, but due to the large amount of information required it was decided to produce this accompanying letter to inform and provide references on where the answers to the queries can be found in the BIA Rev1.02. This was better detailed in the following paragraphs.

Query No. 1

The query referred mainly to the contents of points 1.6, 4.5 and 5.2 of the Audit. It was confirmed in paragraph 1.1 of BIA Rev1.02 that the information thereby presented was prepared in accordance with Appendix G1 of the Arup Guidance for Subterranean Developments and comprised:

- A desk study compliant to Appendix G1 of the GSD prepared by Arup for the LB of Camden
- A screening and scoping exercise
- A site specific ground investigation



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- A ground movement assessment for the evaluation of the expected damage on the neighbouring structures
- Conclusions and recommendations
- A Non-Technical Summary.

It was also clarified in the Commission paragraph that the investigation did not include a Phase I Desk Study with reference to eventual ground contamination issues.

Query No. 2

The query referred to the contents of points 1.10, 4.10 and 5.6 of the Audit. Mitigation measures previously presented just in the site-specific Flood Risk Assessment prepared by Soils Limited, report ref. 18224/FRA dated February 2020, were presented also in paragraph 8.2 of the BIA Rev1.02

Query No. 3

The contents of the query were presented in detail at points 1.11, 4.1, 4.12, 4.13 and 5.1 of the Audit. The Client provided Soils Limited with reports produced by the appointed Structural Engineer, which were presented in Appendix D.1 and the contents of which were summarised in paragraph 2.4 of BIA Rev1.02. Section 9 of the BIA Rev1.02 was then revised based on information from the reports produced by the Structural Engineer. Soils Limited did not take part to the preparation of the Structural Engineering Report or the Structural Survey, which were just received and full reliance was placed on them.

The Underpinning Report produced by Drawing And Planning was used and considered as an as-built report, while information from Glen Haddon Consulting was only used for defining the existing and proposed loadings. No reference was made in the calculations to the previous scheme proposed by Martin Redston Associates.

The previous version of the BIA erroneously reported references to the building at 159 Sumatra Road. Where 159 Sumatra Road was mentioned throughout the report this must be replaced with the adjoining building at 161 Sumatra Road, except in Figure 1 of Appendix A.2.

Query No. 4

The Ground Movement Assessment presented in Section 9 and the assessment of the expected damage category according to the Burland Scale presented in Section 10 of BIA Rev1.02 were revised taking into account the contents of points 1.13, 4.14 to 4.17 and 5.9 of the Audit.

The ground movements at Stage 1 were calculated including the unloading at formation level caused by demolitions and building collapse, as clarified in paragraphs 9.2 and 9.2.2 (ref. point 4.15 of the Audit).

The ground movements developed as a consequence of the long interruption of site works were calculated as Stage 1 and represented heave movements in the long-term. The ground movements which will develop because of the completion of the construction were considered as Stage 2 of the GMA and did not include the movements (heave) calculated at Stage 1, as explained in paragraphs 9.2 and 9.2.4 (ref. point 4.16 of the Audit).

The horizontal movements presented in BIA Rev1.02 were conservatively calculated in correspondence of the excavation and no dissipation with distance was considered within the report so that no detail on how the movements propagate is needed. This represents a conservative approach. In addition, simplified calculations for the evaluation of ground movements referring to the procedures presented in CIRIA C760 were produced in paragraph 9.4. The simplified approach showed that the expected damage did not exceed category 0 (negligible damage) at SC1 and category 1 (very slight damage) at SC2 at the end of construction (Stage 2), confirming that the expected damage would not exceed the required category 1 in the worst case scenario (ref. points 4.17 and 4.18 of the Audit).

Query No. 5

The query referred to the contents of points 1.14, 4.18 and 5.10 of the Audit. A structural survey of the conditions at the site was prepared by the Client's Structural Engineer and presented in paragraph 8.6 and in Appendix D1 of the BIA Rev1.02. No structural survey of the neighbouring structures was undertaken as part of party wall agreements and it was recommended to undertake it before the commencement of site works.

Query No. 6

Reference must be made to the contents of points 1.10, 4.11 and 5.10 of the Audit. Information regarding the proposed drainage scheme was considered in the screening-scoping exercise presented in Section 3 and Section 4 and mentioned in paragraph 8.2 of BIA Rev1.02. Consultation with Thames Water led to the issuing of a Clean Water Capacity Report, which was presented in Appendix D.2 alongside with the email received from Thames Water.

If you have any questions regarding the above reports, please contact the undersigned.

Yours sincerely

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Dr DV Tedesco MEng, PhD, ChITA, CEng MICE, RoGEP **Principal Geotechnical Engineer** dt@soilslimited.co.uk

For and on behalf of Soils Limited