

**61-65 Charlotte Street**  
**London**  
**W1T 4PF**

**Basement Impact Assessment**  
**Audit**

For  
London Borough of Camden

Project Number: 12066-11

June 2015

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## 1.0 NON-TECHNICAL SUMMARY

- 1.1. CampbellReith was instructed by London Borough of Camden (LBC) to carry out an audit on the Basement Impact Assessment submitted as part of the Planning Submission documentation for 61-65 Charlotte Street, London W1T 4PF (planning reference 2015/1746/P). The basement is considered to fall within Category B as defined by the Terms of Reference.
- 1.2. The Audit reviewed the Basement Impact Assessment for potential impact on land stability and local ground and surface water conditions arising from basement development in accordance with LBC's policies and technical procedures.
- 1.3. CampbellReith was able to access LBC's Planning Portal and gain access to the latest revision of submitted documentation and review it against an agreed audit check list.
- 1.4. The development site does not involve a listed building nor is it in the neighbourhood of listed buildings.
- 1.5. It is understood that because the basement is relatively shallow, and no deeper than neighbouring basements, a reduced scope BIA was agreed with the planning officer.
- 1.6. The BIA has confirmed that the proposed basement will be located within stable Made Ground and that the surrounding slopes are stable. The adequacy of the founding stratum for the proposed underpinning must be verified during construction.
- 1.7. It is accepted that groundwater will not be affected by the excavation and simple mitigation measures should effectively control potential variations to the groundwater regime.
- 1.8. The proposed basement will be excavated and constructed utilising established techniques.
- 1.9. It is accepted that the risk of surface water flooding the buildings is unchanged from the current state.
- 1.10. It is accepted that because the basement will not undermine the existing party / neighbouring wall foundations, it is not necessary to undertake a Ground Movement Assessment nor instigate a movement monitoring regime on adjacent properties during construction. However, it should be confirmed by the applicant that any damage to adjacent properties will not exceed Burland Category 2. The impact of the basement on the highway will need to be agreed with the asset owner.

## 2.0 INTRODUCTION

- 2.1. CampbellReith was instructed by London Borough of Camden (LBC) on 12 June 2015 to carry out a Category B Audit on the Basement Impact Assessment (BIA) submitted as part of the Planning Submission documentation for 61-65 Charlotte Street, Camden Reference 2015/1747/P.
- 2.2. The Audit was carried out in accordance with the Terms of Reference set by LBC. It reviewed the Basement Impact Assessment for potential impact on land stability and local ground and surface water conditions arising from basement development.
- 2.3. A BIA is required for all planning applications with basements in Camden in general accordance with policies and technical procedures contained within
- Guidance for Subterranean Development (GSD). Issue 01. November 2010. Ove Arup & Partners.
  - Camden Planning Guidance (CPG) 4: Basements and Lightwells.
  - Camden Development Policy (DP) 27: Basements and Lightwells.
  - Camden Development Policy (DP) 23: Water
- 2.4. The BIA should demonstrate that schemes:
- a) maintain the structural stability of the building and neighbouring properties;
  - b) avoid adversely affecting drainage and run off or causing other damage to the water environment; and,
  - c) avoid cumulative impacts upon structural stability or the water environment in the local area.
- and evaluate the impacts of the proposed basement considering the issues of hydrology, hydrogeology and land stability via the process described by the GSD and to make recommendations for the detailed design.
- 2.5. LBC's Audit Instruction confirmed that neither the basement proposals involved a listed building nor the site neighboured listed buildings.
- 2.6. CampbellReith accessed LBC's Planning Portal on 22 June 2015 and gained access to the following relevant documents for audit purposes:
- Basement Impact Assessment
  - Construction Management Plan

- Phase 1 land contamination risk assessment
- Drawings;
  - Lower ground floor existing
  - Proposed ground floor option A
  - Proposed ground floor option B
  - Proposed section A-A
  - Proposed section B-B
  - Proposed section D-D
  - Site location plan
  - Site plan

### 3.0 BASEMENT IMPACT ASSESSMENT AUDIT CHECK LIST

Item	Yes/No/NA	Comment
Are BIA Author(s) credentials satisfactory?	Yes	The author is a chartered civil engineer and a chartered structural engineer. He is not a chartered geologist or CIWEM but as the hydrogeology impact of this shallow basement is very limited this is accepted in this case.
Is data required by Cl.233 of the GSD presented?	Yes	BIA noting its limited scope due to the limited basement depth.
Does the description of the proposed development include all aspects of temporary and permanent works which might impact upon geology, hydrogeology and hydrology?	Yes	BIA noting its limited scope due to the limited basement depth.
Are suitable plan/maps included?	Yes	BIA and supplementary drawings.
Do the plans/maps show the whole of the relevant area of study and do they show it in sufficient detail?	Yes	
Land Stability Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	BIA Section 6.0
Hydrogeology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	BIA Section 6.0
Hydrology Screening: Have appropriate data sources been consulted? Is justification provided for 'No' answers?	Yes	BIA Section 6.0
Is a conceptual model presented?	No	But noting the excavation will be into Made Ground above the groundwater table
Land Stability Scoping Provided? Is scoping consistent with screening outcome?	Yes	BIA Section 7.0

Item	Yes/No/NA	Comment
Hydrogeology Scoping Provided? Is scoping consistent with screening outcome?	Yes	BIA Section 7.0 and Phase 1 land contamination risk assessment report Section 6.1
Hydrology Scoping Provided? Is scoping consistent with screening outcome?	Yes	BIA Section 7.0
Is factual ground investigation data provided?	Yes	BIA Appendix C – trial pits only
Is monitoring data presented?	No	
Is the ground investigation informed by a desk study?	Yes	Phase 1 land contamination risk assessment
Has a site walkover been undertaken?	Yes	BIA Section 4.0
Is the presence/absence of adjacent or nearby basements confirmed?	Yes	BIA Appendix B
Is a geotechnical interpretation presented?	No	But noting the excavation will be into Made Ground above the groundwater table
Does the geotechnical interpretation include information on retaining wall design?	No	Not relevant
Are reports on other investigations required by screening and scoping presented?	Yes No No	Phase 1 land contamination risk assessment Formal ground investigation report Utilities statement
Are baseline conditions described, based on the GSD?	Yes	BIA Section 5.0
Do the base line conditions consider adjacent or nearby basements?	Yes	BIA Section 5.0
Is an Impact Assessment provided?	No	
Are estimates of ground movement and structural impact presented?	No	



Item	Yes/No/NA	Comment
Is the Impact Assessment appropriate to the matters identified by screen and scoping?	Yes	
Has the need for mitigation been considered and are appropriate mitigation methods incorporated in the scheme?	No	Noting BIA limited scope due to the limited basement depth.
Has the need for monitoring during construction been considered?	No	Noting BIA limited scope due to the limited basement depth.
Have the residual (after mitigation) impacts been clearly identified?	No	Noting BIA limited scope due to the limited basement depth.
Has the scheme demonstrated that the structural stability of the building and neighbouring properties and infrastructure been maintained?	No	Noting BIA limited scope due to the limited basement depth.
Has the scheme avoided adversely affecting drainage and run-off or causing other damage to the water environment?	Yes	
Has the scheme avoided cumulative impacts upon structural stability or the water environment in the local area?	Yes	
Does report state that damage to surrounding buildings will be no worse than Burland Category 2?	No	This should be confirmed by applicant.
Are non-technical summaries provided?	No	Noting BIA limited scope due to the limited basement depth.

## 4.0 DISCUSSION

- 4.1. The BIA has been carried out by an established firm of consulting engineers, bwm. The lead author has suitable qualifications but not for the hydrogeology section. As the hydrogeological impact will be very limited then this is accepted in this case.
- 4.2. The proposed new basement is 1.57m deep maximum, and even less where there is an existing basement present. It is accepted that because the basement is relatively shallow, and no deeper than any neighbouring basements, then the appropriately scaled BIA provided is generally acceptable at this stage of the planning process.
- 4.3. The proposed basement will generally be excavated within the existing basement walls combined with underpinning techniques. The proposed basement will be excavated and constructed utilising established techniques.
- 4.4. It is acknowledged that the basement is founded within the Made Ground, which extends to depths greater than were investigated by the trial pitting investigation described in the BIA. No groundwater was encountered during the trial pitting. The BIA has confirmed that the proposed basement will be located within stable Made Ground and that the surrounding slopes are stable.
- 4.5. It is noted that no Ground Investigation Report has been provided and it is recommended that the adequacy of the bearing stratum is confirmed during construction.
- 4.6. It is accepted that groundwater will not be affected by the excavation and simple mitigation measures should effectively control potential variations to the groundwater regime.
- 4.7. It is accepted that the risk of surface water flooding is unchanged from the current state. The BIA includes an assessment of whether the development is likely to be affected by surface water flooding, and the risk is accepted as being very low.
- 4.8. Although the BIA does not contain a Ground Movement Assessment, it is accepted that it is not necessary to supply one since the basement will not undermine any existing buildings. However, underpinning can cause settlement and it should be confirmed that any damage to neighbouring properties will be within acceptable limits. It is not considered necessary to instigate a movement monitoring regime on adjacent properties during construction.
- 4.9. It is noted that no utilities reports have been provided for assessment.

## 5.0 CONCLUSIONS

- 5.1. The proposed new basement is 1.57m deep maximum, and even less where there is an existing basement present. It is accepted that because the basement is relatively shallow, and no deeper than any neighbouring basements, then a reduced scope BIA provided is acceptable at this stage of the planning process.
- 5.2. The proposed basement will generally be excavated within the existing basement walls combined with underpinning techniques. The proposed basement will be excavated and constructed utilising established techniques.
- 5.3. It is acknowledged that the basement is founded within the Made Ground, which extends to depths greater than were investigated by the trial pitting investigation described in the BIA. No groundwater was encountered during the trial pitting. The BIA has confirmed that the proposed basement will be located within stable Made Ground and that the surrounding slopes are stable. The adequacy of the bearing stratum must be verified during construction.
- 5.4. It is accepted that groundwater will not be affected by the excavation and simple mitigation measures should effectively control potential variations to the groundwater regime.
- 5.5. It is accepted that the risk of surface water flooding the buildings is unchanged from the current state.
- 5.6. The BIA does not contain a Ground Movement Assessment. Although it is accepted that it is not necessary to supply one since the basement will not undermine any existing buildings, the applicant should confirm that any damage to neighbouring structures will not exceed Burland category 2. It is suggested that a Ground Movement Assessment may be required by the asset and utilities owners for the nearby highway. It is not considered necessary to instigate a movement monitoring regime on adjacent properties during construction.
- 5.7. It is noted that no utilities reports have been provided for assessment.

## **Appendix 1: Residents' Consultation Comments**

Residents' Consultation Comments

Surname	Address	Date	Issue raised	Response
Brierley and Hubble	59 Charlotte Street, W1T 4PF	Not provided	Party wall impact Pile driving	See 5.1 and 5.6  No information provided whether piles will be required or not

## Appendix 2: Audit Query Tracker

Audit Query Tracker

Query No	Subject	Query	Status	Date closed out
1	BIA format	Non technical summaries not provided	BIA appropriately scaled to size and nature of development.	N/A
2	BIA author qualifications	Suitably qualified person to author hydrogeological section	To be provided in any updated document	N/A
3	Stability	No confirmation that damage to adjacent properties will not exceed Burland Category 2.	To be provided.	
4	Stability	The foundations may be constructed in Made Ground	The adequacy of the bearing stratum must be confirmed during construction.	N/A
5	Stability	No supporting evidence for damage to the highway	Ground movement assessment to be provided and agreed with asset owner.	N/A
6	Utilities, in particular Thames Water assets	No utilities investigation or assessment provided	As above	N/A

## Appendix 3: Supplementary Supporting Documents

None