

**BASEMENT IMPACT ASSESSMENT (BIA)
AUDIT SERVICE**

**Terms of Reference
& Audit Process**

**LONDON BOROUGH OF
CAMDEN**

1. Introduction

- 1.1 Camden's approach to dealing with basement applications has evolved since the adoption of policy DP27. Changes have been proposed to the basement planning guidance particularly in relation to the process of 'independent verification'. This process is referred to throughout this document as the Audit.
- 1.2 This document provides the working Terms of Reference (TOR) for the engagement of Campbell Reith as independent, professionally qualified auditors of Basement Impact Assessments, acting on behalf of the Council.
- 1.3 Campbell Reith are engaged to audit Basement Impact Assessments for potential impact on land stability and local ground and surface water conditions arising from basement development.

Definitions used in this document

The following definitions are taken from CPG4 and are repeated here for information.

A 'typical' **single storey basement** would have an internal ceiling to floor height of approximately 3 metres .

Cumulative Impact in this document refers to impact on land stability and local ground and surface water conditions arising from basement development. It does not extend to consideration of the impact on local amenity or the highways, drainage or other infrastructure arising from the concurrent or cumulative construction of basements.

"Listed buildings" means buildings that are either statutorily listed by English Heritage and appear on the 'The National Heritage List for England (NHLE)'.

"Neighbouring Structures/Directly Affected Neighbours" means buildings and their occupiers which are within 6m of the basement boundary. This may be extended by the Council to four times the projected depth of the basement.

Basement Audit Categorisation

Category A

Residential or commercial development with single storey basement where the Screening Stage of the Basement Impact Assessment indicates no matters of concern which need further investigation.

Submitted BIA anticipates no significant impact relating to:

- land stability or impacts, buildings or infrastructure;
- groundwater flow or surface water flooding and underground tunnels

Category B

Residential single basement or commercial development with single or double basement where the Screening Stage of the Basement Impact Assessment identifies matters of concern which need further investigation

Submitted BIA anticipates potential impact:

- to a listed building;
- on land stability;
- on groundwater flow;
- on potential for surface water flooding ;
- on underground tunnels or infrastructure; and
- cumulative impact on ground stability and the water environment

Category C

Exceptional development (in terms of geometry, area, depth or complexity) which may be a single or double basement with potential complications.

Submitted BIA anticipates potential for significant impact :

- to a listed building;
- on other buildings and or with land stability issues;
- to groundwater flow and potential for surface water flooding ;
- underground tunnels or infrastructure; cumulative basement impacts;
- relating to significant technical issues raised by third parties.

2. Trigger for Audit

- 2.1 An audit will be sought in accordance with the terms of CPG4, currently summarised as:
- a) Where a scheme requires applicants to proceed beyond the Screening stage of the Basement Impact Assessment (i.e. where a matter of concern has been identified which requires the preparation of a full Basement Impact Assessment). For the avoidance of doubt this includes all BIAs within Audit categories B and C.
 - b) Where the proposed basement development is located within an area of concern regarding slope stability, surface water or groundwater flow; or
 - c) For any other basement applications where the Council feels that independent verification would be appropriate (e.g. where conflicting evidence is provided in response to a proposal).
- 2.2 It is also envisaged that Campbell Reith's auditing role may be applied in preparation for an appeal where basement matters remain to be resolved and a BIA requires auditing.
- 2.3 There may be instances where the planning officer considers that it would be appropriate for the audit to be carried out by an alternative to Campbell Reith, for example if a potential conflict of interest is identified or if the planning history for the site determines that the audit should be carried out by a previously involved auditor, or other situations where deemed appropriate.

3. Instructions

- 3.1 The Audit will commence when a planning officer sends a complete set of Audit Instructions to Campbell Reith. The four sections of the Audit Instruction are:
- A : Audit background (to be completed by case officer)
 - B: Checklist of Audit material (to be completed by applicant)
 - C: Fee proposal (to be completed by Campbell Reith)
 - D: Agreement to cover costs (to be completed by applicant)
- 3.2 Upon receipt of completed Sections A and B Campbell Reith will complete section C (Fee proposal) within one working day. The Audit fee proposal will be assigned in accordance with the Fee Categorisation set out above and which will include the costs of auditing the BIA. Additional costs arising from unforeseen matters, such as assessment of technical issues raised by third parties and assessment of revised BIA material, will be charged in addition at the relevant published hourly rate.
- 3.3 The case officer will send sections A-C to the applicant for written confirmation that the costs will be met (Section D). Once confirmation is received from the applicant the planning officer will advise Campbell Reith that the audit should proceed and will publish the Audit Instruction on the planning website. The site address and planning reference (eg 2015/xxxx/P) should be used as the key references for the work.

4. Inputs to the audit and associated fees

- 4.1 The cost of Campbell Reith's auditing must be met by the applicant in order to avoid burdening the public purse with costs arising from development. The following information is considered to be auditable material which is covered within the scale of fixed fees based on the audit categorisation in section 1:

BIA submission – Fixed Fee

- a) A **Basement Impact Assessment** commensurate with the scale, location and complexity of the development, formally submitted by the applicant. Such details to include drawings and supporting information as necessary. .
- 4.2 At the initial Categorisation process it is not possible to anticipate the scale, nature and complexity of local consultation responses and revisions to the supplied BIA. Therefore the following information is auditable material which falls outside of the fixed fee scale and is audited at the relevant hourly rate (see Appendix A):

Additional information – hourly rate

- b) **Revisions** to the BIA submitted by the applicant in response to concerns raised by Campbell Reith or other parties.
- c) **Technical information** submitted by suitably qualified third parties which raise reasonable concerns about the impact on neighbouring structures and/or local water environment. Neighbouring structures are defined as being within 6m of the basement boundary.
- d) **Comments** in relation to land stability, ground and surface water considerations by non-technical third parties (eg neighbours) may form part of the audit material but the weight to apply to their concerns will be a matter for Campbell Reith's professional discretion. Once the statutory consultation period has finished the planning officer will alert Campbell Reith to consultation responses which may be of potential relevance to the audit.
- 4.3 All auditable material will be made available to Campbell Reith via the publically accessible planning website. Basement-specific audit material will be clearly identified as such on the public website. Other material identified as 'Drawings' etc may also be relevant.
- 4.4 Relevant Camden planning guidance on basements and associated matters including the Council's Flood Risk Strategy and supporting document 'Strategic Flood Risk Assessment' by URS (2014) will inform the audit process. All audit comments and reports prepared by Campbell Reith will be reviewed by a Chartered Engineer and/or Chartered Geologist.
- 4.5 The fee categorisation may change during the audit, for instance if concerns arise that were not foreseen in the BIA submission and which will require significant additional time being spent on the audit. This should be agreed with all parties by way of a revised Audit Instruction form. In addition if further input is required by Campbell Reith, for example site visits or by attending Development Control Committee (DCC) to support their Audit recommendations, the cost of Auditor attendance at DCC will be charged to the applicant, at the hourly rate.

4.6 Campbell Reith will undertake these 'additional services', using an appropriate grade of staff to meet the project specification and agreed timescales in a cost effective manner. See section 12 below for more details on fees and cost recovery.

5. Lines of communication

5.1 The planning officer will be the contact point for the applicant and third parties and will provide instruction/policy advice to Campbell Reith.

5.2 Once the Audit has commenced Campbell Reith may liaise directly with the BIA authors regarding technical aspects of the BIA under consideration.

5.3 During the Audit Campbell Reith will keep the planning officer aware of any significant changes to the timescales for audit completion (for instance arising from the need for more information).

5.4 All new or amended audit material submitted by the applicant or their consultants to Campbell Reith must be copied to the planning officer. The planning officer will make the material publically available on the planning website once it is received.

5.5 Initial representations from third party consultants shall be sent to the planning officer. The officer will forward the concerns to Campbell Reith for consideration in the Audit. Thereafter Campbell Reith will liaise directly with agreed third party consultants regarding technical aspects of their representations, copying the planning officer where appropriate/relevant.

5.6 All new or amended technical representations submitted by third party consultants must be copied to the planning officer. The planning officer will make the material publically available on the planning website as soon as it is received.

5.7 Campbell Reith will not be required to discuss the Audit directly with anyone other than the planning officer and agreed technical representatives of the applicant/third parties.

5.8 Queries from the public regarding the audit (for example : timeframes for completion, update on status) shall be directed to the planning officer.

6. Principles for Audit

6.1 The audit should provide conclusions on the following principles :

Whether:

- a. The person(s) undertaking the BIA hold qualifications relevant to the matters being considered, in accordance with the requirements set out in CPG4.
- b. The Basement Impact Assessment has been prepared in accordance with the processes and procedures set out in Camden Planning Guidance 4.
- c. The methodologies and assumptions are clearly stated and are appropriate to the scale of the proposals and the nature of the site.
- d. The conclusions have been arrived at based on all necessary and reasonable evidence and considerations, in a reliable, transparent manner, by suitably qualified professionals, with sufficient attention paid to risk assessment and use of cautious or moderately conservative engineering values/estimates.

- e. The conclusions of the various documents/details comprising the BIA are consistent with each other. The conclusions are sufficiently robust and accurate and are accompanied by sufficiently detailed amelioration/mitigation measures to ensure that the grant of planning permission would accord with policy DP27 (Basements and Lightwells) and DP23 (Water), in respect of:
- maintaining the structural stability of the building and any neighbouring properties to within limits set out in the policy/guidance
 - avoiding adversely affecting drainage and run-off or causing other damage to the water environment and
 - avoiding cumulative impacts on structural stability or the water environment in the local area.

7. Details for audit

7.1 The audit shall comment in detail on the following matters, where relevant to the proposals:

The soundness of :

- a) the conceptual model with regards to ground and groundwater conditions
- b) the consideration given to structural condition of neighbouring properties
- c) identification of the likely impact on land stability and the structural integrity of the neighbouring properties
- d) identification of the likely impact on hydrogeology
- e) identification of the likely impact on hydrology
- f) the scope of completed ground investigations with the presumption that invasive ground investigation should take place in all instances
- g) appropriately conservative modelling used in reaching the BIA assumptions including anticipated structural damage categorised according to the Burland Scale, and conclusions (mindful that Campbell Reith shall use professional judgement in respect of calculations in the audit material and are not required to carry out any detailed calculations or checking of specific figures)
- h) proposals for ongoing monitoring of groundwater levels
- i) measures to ensure the on-going maintenance and upkeep of the basement and ground water management measures
- j) temporary works methodologies, requirements and recommendations for construction contractors
- k) the inter-compatibility of the assessments, findings and conclusions of all BIA components;
- l) an outline methodology for monitoring and responding to ground water levels and structural movement
- m) Identification of relevant cumulative impacts on land stability and local ground and surface water conditions arising from the basement development

7.2 If Campbell Reith have concerns about the technical content or considerations of the audit material which should be addressed *prior* to planning permission being granted, then they will advise the case officer and the applicant's consultants of their concerns and any suggested remedy. The applicant will be required to submit details to address the concerns to Campbell Reith's satisfaction prior to completion of the Initial Audit Report.

7.3 If Campbell Reith have concerns which cannot be/are not being remedied/addressed by the BIA then Campbell Reith should proceed with their Initial Audit Report setting out a recommendation for refusal.

8. Timescales

8.1 Audits should be carried out as expeditiously as reasonably practical following instruction. At the end of the statutory consultation period Campbell Reith will consider relevant consultation responses, with input and guidance from the case officer where necessary. As part of the audit Campbell Reith may request additional information from the applicant's consultants in order to complete the audit. Such requests should be accompanied by clear timescales for a response. Campbell Reith shall make the planning officer aware of the agreed timescales for receipt of further information so that the officer is aware of the likely date for conclusion of the audit.

8.3 Campbell Reith will not complete their Initial Audit Report until after the statutory consultation period has ended. A period of at least 10 working days would be provided from the date of posting the Initial Audit Report on the Camden website to the release of Campbell Reith's Final Audit Report. This would allow third parties an opportunity to comment on the Initial report. Any comments from third parties during this time must be communicated directly to the planning officer.

8.4 A period of at least 5 working days would be provided from the date of posting the Final Audit Report on the Camden website to the date of final decision. Any comments from third parties during this time must be communicated directly to the planning officer who will publish them on the website and request their review by Campbell Reith. Where appropriate Campbell Reith may liaise with the comment's authors and will provide an additional commentary for inclusion with the Final Audit Report.

8.5 The planning officer shall have final responsibility for overseeing and managing the timescales for amendments, audit completion etc.

8.6 Some BIA audits may require more than one cycle of revision and review.

9. Audit outcomes

9.1 Once instructed Campbell Reith will commence with the audit. Initial assessment may require exchange of further information/communication with the applicant. Further technical information shall be copied to the planning officer for inclusion on the planning website. Once this has progressed to a suitable point, Campbell Reith will provide an Initial Audit Report to the planning officer setting out the findings and recommendations of the audit. Campbell Reith will use their template for Audit Report. Where concerns are raised by Campbell Reith or third party consultants about aspects of the BIA they shall be tracked in a spreadsheet format providing the following information:

- issue
- concern raised

- response to concern (with date and reference)
- final Campbell Reith conclusion/recommendation with supporting reasons

9.2 The Initial Audit Report shall be published on the website under the planning reference. It shall include any recommendations in respect of conditions or s106 heads of terms, mindful of the need to ensure that the BIA is sufficiently robust and accurate and accompanied by sufficiently detailed amelioration/mitigation measures to ensure that the grant of planning permission would accord with DP27. The presumption shall be that an acceptable BIA is sufficiently robust and comprehensive that the use of conditions can be limited to securing compliance with agreed methodologies/audit material. In the event that Campbell Reith recommend that further technical information is required post-decision, but prior to the start of works, it is likely that this would be secured by Basement Construction Plan (BCP), which would be subject to further independent audit.

9.3 Following the review and feedback Campbell Reith will issue a Final Audit Report. This will be published on the website alongside all submitted BIA material and an updated (as necessary) spreadsheet of issues.

10. Site visits and meetings

10.1 Site visits by Campbell Reith will not normally be required.

10.2 Where Campbell Reith consider it necessary to visit the site in order to complete their audit then this should be arranged with the agreement of the planning case officer. The applicant will need to be advised of a likely increase in fees at the agreed hourly rate.

10.3 Where a site visit is specifically requested by the applicant then Campbell Reith may attend, with their agreement and the agreement of the instructing planning officer.

10.4 The planning officer may request a site visit or meeting with Campbell Reith and other parties represented by agreed technical consultants in order to resolve significant disagreements. The planning officer shall attend any such meeting. The applicant will need to be advised of a likely increase in fees at the agreed hourly rate.

11. Attendance at a Development Control Committee (DCC) meeting

11.1 Campbell Reith are likely to be required to attend meetings of the Development Control Committee in order to answer questions from elected representatives. Generally these will relate to:

- the information submitted by the applicant
- how the audited material meets the audit principles and detailed considerations (see sections 5 and 6) and
- how the audited material responds to concerns raised by third parties

12. Invoicing applicants for audit costs

12.1 Campbell Reith's auditing fees must be met by the applicant in order to avoid burdening the tax payer with costs arising from development. The applicant is required to agree in writing,

prior to the audit starting, that that they will cover the full costs, including expenses arising from attendance at DCC etc. This agreement will be set out in the Audit Instruction.

12.2 Changes to the fee categorisation may arise from unforeseen complexities or technical matters. Additional fees, which would be charged at the hourly rate, will also arise, for instance in the following circumstances:

- To assess detailed technical consultation responses from Third Party consultants
- To assess detailed revisions to the originally submitted audit material
- To attend DCC

Every effort will be made to minimise the occurrence of additional unforeseen expenses arising from the audit process. However at any point during the process, if the applicant refuses to meet audit costs the planning officer may recommend that the application be refused.

12.3 An Invoice will be issued to the applicant upon completion of the Final Audit Report. Where necessary a further invoice will be issued following the final decision, in respect of expenses incurred from DCC attendance etc.

12.3 At periodic intervals Campbell Reith will issue a report to the planning service setting out the audit activity during the relevant period :

- a. Audits commenced but not completed
- b. Audits completed (Final Report issued)
- c. Additional expenses incurred itemised to each Audit

Each entry will be accompanied by the case reference, planning officer, fee categorisation and relevant dates.

Appendix A – Fees

Fixed Fee

- Audit of a category A Basement Impact Assessment would be charged at £997.50
- Audit of a category B Basement Impact Assessment would be charged at £3045.
- Audit of a category C Basement Impact Assessment would be charged at an agreed rate on a case by case basis taking consideration of the complexity.

The fixed fee applies to review of all documents required to be submitted for a BIA defined as :

- Factual SI report
- Geotechnical Desk Study
- Geotechnical Interpretative Report
- GMA (if required)
- Basement Impact Assessment Report as defined by the Arup Guide for Subterranean Development.
- Submission of report to planning officers as to whether BIA complies with requirements and provides sufficient reliable and robust information to confirm that the impacts of basement construction comply with DP27 and CPG4.

Hourly fees

Hourly rates would be charged for auditing material which falls outside of the fixed scale fee, (see section 4 of the Terms of Reference) summarised as follows:

- Review of information submitted by 3rd parties and their consultants
- Review of Revised BIA information resubmitted by applicants after receipt of CampbellReith's comments
- Site visits
- DCC and other meetings

The hourly rates to be charged are as follows:

Partner/Associate	£135/hr (C Eng or C Geol)
Senior Engineer	£85/hr
Project Engineer	£65/hr
Graduate Engineer	£50/hr

In undertaking these 'Additional Services', Campbell Reith will utilise an appropriate grade of staff to meet the project specification and agreed timescales most cost effectively. All comments and reports will be reviewed by a Chartered Engineer and/or Chartered Geologist.

All amounts payable by the Customer are exclusive of amounts in respect of value added tax chargeable for the time being (**VAT**). Where any taxable supply for VAT purposes is made under the Service Contract by the Supplier to the Customer, the Customer shall, on receipt of a valid VAT invoice from the Supplier, pay to the Supplier such additional amounts in respect of VAT as are chargeable on the supply of the Services at the same time as payment is due for the supply of the Services.