

RBKC Basements

Response to Consultation Comments

Prepared for

RBKC

April 2014 (Revision A)

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1. Comments on Arup's Report

"Basements development should not exceed a maximum of 50% of each garden"

Arup point out that there is no technical basis for this limitation. They refer to ABA's rules of thumb and note that this limitation may be overly conservative in some areas and, in other areas, not conservative enough. Can the statement be made milder i.e. – along the lines – our report sets out a 'rule of thumb' depending on geology and it is our understanding that the policy being proposed by RBKC is based on a range of factors and not just hydrology. Section 4.2 (second para) of Arup's report concurs that *"It is understood that the '50% rule' has been proposed by RBKC based on a wide range of factors including advice given by ABA."* Clearly the Arup report is purely based on *"a review of this policy focussing only on the potential hydrological and hydrogeological impacts of the proposed policy."* (Section 5, first para Arup Report)

They also argue that each application should be considered on a site by site basis. This will be for RBKC to consider.

In general the Arup report appears helpful to RBKC. It suggests that in areas where the surface geology is London Clay, the 50% rule may not be conservative enough and at sites in areas of London Clay, engineering designs should be provided to satisfy storage of rainwater and discharge rates for any basement proposal. They also state *"Generally the Publication Planning draft of the policy provides a reasonable policy to be implemented with respect to potential hydrological and hydrogeological impacts both locally and across the Borough"* (section 5, fourth para, Arup Report). The main issue they have is with the 50% rule which purely on a hydrological perspective is recommended to be removed and each case should be considered on a site by site basis.

2. Comments on Executive Summary by MMP Design

We agree that properly designed and constructed basements can be built successfully. Unfortunately there are too many examples where this does not happen. The Party Wall Act does not always provide a suitable method for controlling poor quality work and often does not fully compensate for the damage and disruption caused. There are many examples where the party wall process has failed to provide adequate protection to adjoining owners.

MMP do not make any comments which query any of the points made in the ABA report.

They also suggest that building a second level basement beneath a single storey basement is normally more straightforward than constructing the initial single storey because all the temporary works will be in place. This ignores potential ground movements issue logistics, programme, volume of material removed etc. which are all more complex with a two level basement.

3. Comments on Executive Summary by Taylor Williams Daley Partnership

Whilst it may not be practical for Party Wall negotiations to start in advance of planning, we do consider that it is good practice to discuss the proposals with immediate neighbours and, where feasible, take account of their reasonable comments. Evidence of this consultation process should be provided with the Planning Application.

It appears that the Party Wall Act does not always deal adequately with the issues which arise from basement construction based on the concerns of a great many adjoining owners. Also it does not deal with owners with properties adjacent to adjoining owners as they are outside of the jurisdiction of the Party Wall Act.

4. Comments on Executive Summary Report by Barrell Tree Consultancy

Alan Baxter & Associates is an engineering firm with a wide range of experience in the design of basements, both residential and commercial. ABA work with a wide range of arboriculturalists and regularly receive reports from them on the impact of constructing basements on nearby trees as part of the design process for basements. The ABA report sets out some initial advice and considerations when designing basements close to trees. It also sets out some of our views on various aspects of basement construction but we do not claim to be arboriculturalists.

It is not the intention of our report to provide specialist advice from all the different professional bodies who could be involved in the design of basements.

The ABA report notes that it may be acceptable for a basement to be partially under the tree canopy. It also notes that it may be technically feasible to build basements under trees – but it is our view that this is not good practice from an engineering and practical view point.

The section on landscaping and trees is a relatively small section in the whole report and is only one of many factors which need to be considered in the design of a basement.

The main purpose of the ABA report is to assist RBKC to review and develop their planning policies in relation to subterranean developments. It is also intended to set out issues and factors which need to be understood and considered by all interested parties. It is intended to encourage clients who wish to undertake such developments to select an appropriate team – where trees are impacted on by the proposals, this will include an arboriculturalist.

5. Savill's Submission on behalf of The Trustees of the Phillimore Estate

There are various references to the ABA report but this document does not refute any of the points we have made. The key point which they seek to make is that there are areas where our report does not provide justification for the policies proposed by RBKC.

6. Comments on Waterman Transport

Traffic generated by construction may have a negligible impact on the local highway network but it can have a significant impact on individual roads during the construction process particularly if construction vehicles prevent local residents from accessing their properties.

Residential basements generate more vehicle movements than would be required for an equivalent size above ground development particularly during the excavation and construction of the structure of the basement.

Large numbers of lorries carrying excavated material would not be needed for above ground construction. There is also more concrete, reinforcement and formwork vehicle movements for basement construction than for above ground construction of a similar size.

The requirement to produce a Construction Traffic Management Plan does not enable RBKC to manage construction throughout the Borough. Once Planning Consent is granted, RBKC have no control over the construction programme.

Traffic and Highways Policy Review
By Waterman Transport and Development Limited
Dated 20th March 2014

Paragraph 4.1

The construction traffic will use similar types of vehicles, but basement construction requires greater volumes of material to be removed from site than an above ground building extension of similar volume. They also require proportionally more ready mix concrete, formwork and reinforcement quantities than a similarly sized above ground building extension. These types of vehicles are generally larger and heavier than other types of construction traffic such as that required for the fitting out of the extensions, whether above or below ground.

A definitive study of the type suggested by Watermans would require a study of hundreds of construction projects where records of detailed vehicle movements for all the different aspects of the whole construction project were made available. This was outside the scope of the case studies and would take many months to assemble.

Watermans refer to different sizes of skips – ABA simply referred to a volume removed per load, not necessarily in skips. Where there is good access to a site it is likely that lorries will be loaded directly by excavators – the size of the lorries used will depend on access constraints, rate of loading etc.

Smaller basement projects may have a permanent skip which will be filled slowly by conveyors. In this situation the skip will be emptied by a grab lorry. Therefore the size and capacity of 6, 8 and 12 yard skips is not relevant.

Point 7.22

The CDM regulations in themselves do not “ensure the safe passage of construction related vehicles”. If the requirements for the CDM regulations were properly followed then these will help to provide safe passage. As an aside, while all projects must comply with the CDM Regulations, domestic projects which include a basement do not have to be notified under the current regulations.

Point 8.0

The issue does not relate to traffic impact on the major routes through RBKC. It relates to the smaller residential roads, squares and mews where construction related HGV's represent the vast majority of large vehicular movements other than weekly refuse collection. It is not uncommon for construction related traffic (both for basements and above ground construction) to stop in the middle of the road to load/unload blocking all traffic movement by local residents.

Point 8.8

This is irrelevant and does not relate to local traffic within a few hundred metres of the site where construction traffic could be between 50-100% of HGV movements.

7. **Comments on Environmental Protection Group Document**

Section 2 of the Environmental Protection Group report – “Ground conditions in RBKC” basically paraphrases what is in our report with additional information on infiltration rates for the various superficial deposits found in the Borough.

They argue that the assessment of the impact of basement construction on drainage and infiltration should be made on a site-by-site basis rather than any rule of thumb or generalised percentage.

They also argue that 1m of soil over the garden will reduce the surface run-off significantly.

In general this appears to be a well-researched and presented paper which seeks to justify that 1m of soil over a garden is sufficient to address surface water run-off regardless of the percentage of the garden covered by the basement regardless of the nature of the underlying soil.

As previously discussed, the limit on the basement size is not based purely on engineering or drainage issues. It is also worth noting that, to some extent this report conflicts with the comments made in the Arup report which suggests that the 50% limit may not be conservative enough in areas where the soil is London Clay.

The crossed out text below relates to clarification for our purposes and is not linked to a response

(we now have a separate paper on this issue)

8. **Critical Analysis by Cranbrook Basements**

Alan Baxter – Basements in Gardens of Listed Buildings

RBKC’s planning policy does not allow excavation underneath listed buildings and we were asked to show “how the basement can be linked to the main building without affecting its structural and historic integrity”.

Paragraphs 2-3

The reason for the separation is to reduce or minimise the requirement to underpin the walls of the listed building in line with RBKC’s requirements to protect the fabric of the listed building.

Paragraph 5

Our advice has not changed.

Park House, Onslow Square relates to a two storey basement to an unlisted building in a conservation area, and so does not appear to be relevant to the comments in Cranbrook Basement’s letter. The proposals adopted in our report are generally in accordance with the principles set out in our March 2013 report.

The structural engineering designs for 40 Egerton Crescent, SW3 were carried out by the Alan Baxter Partnership – this is a totally separate company based in Maidstone, Kent.

I assume 22 Devonshire Place relates to the project adjacent to No. 23 Devonshire Place. No. 23 is a listed building in Westminster where there is a different planning policy on basements.

The new basement was kept approximately 1.5m away from the listed building but some of the external walls of the listed building were underpinned. There was not a basement under No. 23 Devonshire Place. The adjacent basement was approximately 15m deep for a new cancer

hospital building. No. 23 Devonshire Place was not a residential building, so does not appear to be applicable.

9. **Opinion Prepared by Jeffrey W. George & Associates for Cranbrook Basement Dated March 2014**

Para 7.0

This states that the Baxter report makes three statements of “intent” – 34.3.63, 34.3.61, 34.3.65. These statements of intent are by RBKC Planning and do not come from the Baxter report.

We have no other comments on this submission.

10. **Cranbrook Basements – Executive Summary**

Para 6

We have previously commented that we do not claim to have professional qualifications in each speciality, but have used our experience of working with other specialists from a wide variety of companies in the preparation of our report.

Cranbrook Basements have appointed specialists to comment on aspects of our report, but there are very few comments on the technical aspects covered within the ABA report.

Point 47

The type of traffic required for basement construction tends to use larger vehicles, and heavier loads and in greater numbers than that required for above ground construction, if for no other reason than the volumes of materials which have to be removed from site.