

# Cooper Associates

Consulting Structural Engineers

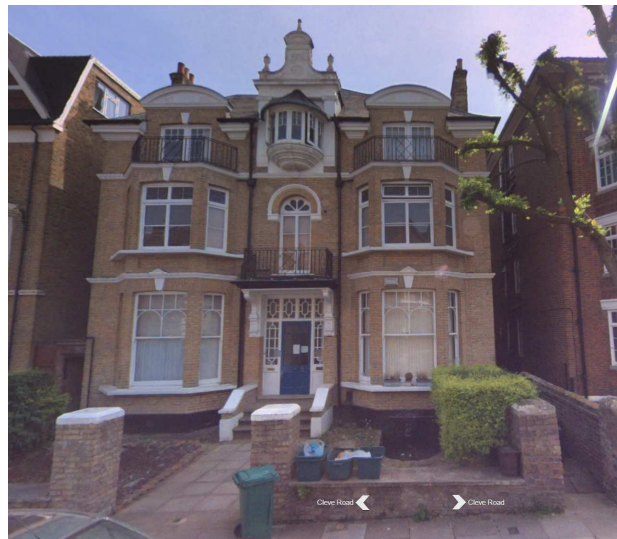


CA5084.05

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## 5 Cleve Road, London NW6 3RN



### Executive Summary

Proposed construction to the rear  
of an existing five story house.

This basement impact report has been prepared in accordance with Camden Planning Guidance note 4.

This describes the proposed construction of a rear extension to the lower ground floor of an existing substantial detached property. This rear extension includes a small basement area (a single bedroom on each side of the central party wall). A reduced level garden area will extend beyond the new full width extension all as shown on the attached Architects plans. Existing poor quality light wells to the front of the property will be upgraded to make them structurally sound.

The existing building already has a lower ground floor. This will be refurbished. The flank walls of the property are not being underpinned and the internal slab level will be maintained at approximately its current level.

An initial scoping exercise has been carried out - as our documents CA5085.02 and CA5085.03.

CA5085.02 considers the risk of flooding, underground water courses and slope stability. It concludes that the relatively minor excavation works proposed do not impact on these issues.

CA5085.03 comprises the stage 1 screening report.

Although it does raise three areas of concern, at the end of this report, we respond to the concerns.

Although the areas of hard surfaces will increase, we are retaining a large garden, beyond the extension.

London Clay is the shallowest strata in the area however our building is physically separate from the neighbour's buildings; hence no risk of hard spots or differential movement exists in relation to the neighbours buildings.

A further report - a construction strategy - has been prepared as document CA5085.04. This describes the existing building, and considers ground movement in more detail. As we are away from the neighbours buildings the risk to them is negligible.

We have described the construction proposals for the lower ground floor extension and partial basement area at the rear of the property and have confirmed that the slabs will be suspended due to an adjacent retained tree, where appropriate. The reduced level gardens at the very rear will allow water flow into the ground, to avoid them reducing water flow and dissipation.

The works will be carried out by a contractor with significant experience of basement works and a member of the Considerate Contractor Scheme.

The report has been prepared by an Engineer with BSc, CEng, MICE, MStructE qualifications and over a decade's experience of designing retrofit basements, below existing properties plus over 35 years' experience as a Chartered Engineer.

He will be instructed to monitor the works in progress when the project is on site.

In support of the above, Stage 3, a detailed soil investigation has been carried out, by Southern Testing, Environmental and Geotechnical Consultants. Their report is included as part of this submission.

This included 2 bore holes and 4 trial pits, as described fully in the report. They confirmed that the ground in the area is London Clay, below top soil.

Water was encountered in the trial holes, but not initially in the boreholes. It is likely that rain water is sitting on top of the clay layer, in the top soil. This can be controlled by local pumping during the works and our experience of works in the area suggests that the amount of water will be limited.

**Cooper Associates**