

17 BRANCH HILL LONDON NW3 7NA

**JOB N° 1281
PLANNING APPLICATION N° 2015/3377/P**

STRUCTURAL POST COMPLETION REVIEW: 7TH MAY 2019

EngineersHRW have carried out post completion review confirming that the measures incorporated in the Detailed Basement Construction Plan as approved by the Council have been incorporated into the Development. The review is to satisfy paragraph 4.2.5 of The Agreement between Adam Kaye and The Mayor and Burgesses of The London Borough of Camden relating to land known as, 17 Branch Hill, London NW3 7NA. The paragraph is as follows: -

- 4.2.5 Not to Occupy or permit Occupation of the Development until a satisfactory post-completion review has been submitted to and approved by the Council in writing (such approval not to be unreasonably withheld or delayed) by way of certification by the Basement Design Engineer or Certifying Engineer confirming that the measures incorporated in the Detailed Basement Construction Plan as approved by the Council have been incorporated into the Development

Checked by: Stephen Haskins BSc CEng MIStructE

Date: 07.05.2019

1. Introduction

This review is to confirm that the development has been constructed in accordance with the terms of the Section 106 Agreement and have appropriately and correctly incorporated the provisions of sub-clauses (i)-(vi) of paragraph 2.9 sub-point 2 of the Agreement and are sufficient to achieve the objectives of the Detailed Basement Construction Plan

2. Proposed structural works

The proposed development of the site involves the demolition of the existing three storey (inclusive of lower ground floor) building and construction of a new three storey property inclusive of a lower ground (rear garden level). Generally, the proposed depth of excavation below the existing ground level to the front of the property (high level) is to be a maximum of 4.0m, however in the area of the proposed study/ games room to the rear of the property this will decrease to around 2.5m (circa 2.8m below existing garden level to the rear of the property). The existing ground level is to be raised in this area resulting in a final retained height of 5.5m against the northern boundary. The existing retained height at the boundary retaining wall is approximately 3.5m.

3. Structural review

The following structural design information has been reviewed: -

- Structural Engineer's Construction Issue Specification – eHRW ref. No 1281
- Full set of eHRW structural final construction issue drawings No: 1281/GA/000 – 009; 1281/SE/010-016; 1281/DE/020-027, 030, 035; 1281/EL/040-043; 1281/DR/050-052,55; 1281/N/070
- Temporary works calculations by Cranston Consulting
- Temporary works construction issue drawings by Cranston Consulting: 170608-TW-06 to 14 and 17 to 24

The review takes in consideration that the above structural information accords with the Detailed Basement Construction Plan sub-clauses (i)-(vi) of paragraph 2.9 sub-point 2 of the Agreement as follows:

- (i) *reasonable endeavours to access and prepare a detailed structural appraisal and conditions survey of all the Neighbouring Property to be undertaken by an independent suitably qualified and experienced chartered surveyor (and for details to be offered if this is not undertaken in full or part);*

Party Wall surveyors were appointed for the appropriate boundary structures. A post construction survey will be carried out.

- (ii) *a method statement detailing the proposed method of ensuring the safety and stability of Neighbouring Property throughout the Construction Phase including temporary works sequence drawings and assumptions with appropriate monitoring control risk assessment contingency measures and any other methodologies associated with the basement and the basement temporary works;*

The construction sequence followed was not as the original proposals. This had no impact on the stability of the surrounding structures or permanent works.

Temporary works drawings, temporary works calculations and sequence of works provided by Cranston Consulting have been reviewed and they are in accordance with assumptions assumed by eHRW. Basement Impact Assessment has been prepared by Site Analytical Services Ltd. ref: 15/23902-2 October 2015.

- (iii) *detailed design drawings incorporating conservative modelling relating to the local ground conditions and local water environment and structural condition of the Neighbouring Property prepared by the Basement Design Engineer for all elements of the groundworks and basement authorised by the Planning Permission together with specifications and supporting calculations for both the temporary and permanent basement construction works;*

The ground conditions on site were as expected. These were based on the following: -

Full, site specific Ground Investigation has been undertaken by Site Analytical Services Ltd. ref: 14/22714 November 2014. Review of the structural calculations and drawing confirms that they have been based on the existing ground and water environment conditions as per the Ground Investigation Report. The design of the substructure has been also carried out in accordance with the existing arrangement and conditions of the neighbouring properties.

- (iv) *the Basement Design Engineer to be retained at the Property throughout the relevant part of the Construction Phase relating to the basement to inspect and approve and undertaking regular monitoring of both permanent and temporary basement construction works throughout their duration and to ensure compliance with the plans and drawings as approved by the building control body;*

The Basement Design Engineer has made site structural inspections on regular basis through the duration of the structural works to ensure that the works are in generally accordance with structural drawings and specifications.

- (v) *measures to ensure the on-going maintenance and upkeep of the basement forming part of the Development and any and all associated drainage and/or ground water diversion measures order to maintain structural stability of the Property the Neighbouring Property and the local water environment (surface and groundwater);*

There no changes to the details of the agreed Basement Detailed basement Plan. These are as follows:

Internal cavity drainage system and retaining walls forming the basement can be inspected as a part of on-going maintenance. The basement is designed to resist ground water loading and does not rely on water removal for structural stability. Tension piles have been utilized to ensure that there are no buoyancy issues. Full surface and foul drainage details have been provided with sufficient access for maintenance.

- (vi) *measures to ensure ground water monitoring equipment shall be installed prior to Implementation and retained with monitoring continuing during the Construction Phase and not to terminate monitoring until the issue of the Certificate of Practical Completion (or other time agreed by the Council in writing);*

As stated in the Detailed Basement Construction Plan this was not required.

Stephen Haskins BSc CEng MIStructE