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16 February 2017

Mr D Fowler
Principal Planning Officer
Regeneration and Planning
London Borough of Camden
2nd Floor
5 Pancras Square
London N1C 4AG

Dear Sirs,

APPLICATION TO REMOVE BUTTRESSES AT 29 NEW END (2016/6205/P)

Thank you for your instruction to carry out an independent assessment of the information provided as technical support to an application to replace buttresses supporting a boundary wall on the development site at 29 New End, London NW3 1JD.

CampbellReith accessed the LBC Planning Portal on 15 December 2016 and downloaded the following information:

- Existing, approved and proposed plans
- Structural Statement
- Heritage Statement

Having carried out an initial inspection of the documents, CampbellReith sent an email dated 16 December 2016 to Fluid Structures, Consulting Engineers acting for the applicant, which requested the following additional information:

- Trial pit details referred to as "simple shallow brick corbels" for the buttresses and boundary wall foundations.
- Details of the relationship of the 750mm square openings, to be formed through the buttresses to allow construction of the ground beam, with the corbelled brick footings.
- Details of the "relevant length of restrained wall" that will generate the 5% lateral force to be resisted by temporary and permanent works.
- Detailed calculations for the temporary and permanent works that justify the current proposals

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- v. Detailed justification for your statement that “differences in soil movements between the locations of the new mini-piles and the existing corbelled footing are minimal”.
- vi. Details of movement monitoring proposals for the boundary wall and Lawn House to be installed prior to any works being carried out.
- vii. Photographic evidence to show that the boundary wall is separate from Lawn House and the two walls were not originally constructed as a single construction “toothed” into one another.
- viii. Any anecdotal evidence to indicate when the rendered finish was applied to the boundary wall and flank wall of Lawn House.
- ix. Detailed condition survey of the flank wall of Lawn House and boundary wall.

In response to this request, CampbellReith received a response from Fluid Structures dated 01 February 2017 by electronic file transfer comprising detailed information relating to queries (i) to (iv) and query (vi), together with a revised Ground Movement Assessment dated December 2016 by A-Squared Studio in response to query (v), a letter report dated 26 January 2017 by Linton relating to queries (vii) and (viii) which attached the Party Wall Condition Survey for Lawn House in response to query (ix).

The original submission and additional requested information has shown that it is intended to install four no. 300mm diameter piles in a tee-form configuration between and around the existing buttress foundations, which are 300mm thick concrete footings founded 800mm below ground level. These piles will be connected by an insitu reinforced concrete ground beam which will require the careful forming of two no. 750mm square openings by hand tools through the brick buttresses immediately above the existing concrete footings, shown on an amended drawing no. 24397/SKBT01 rev P2, which was agreed with Fluid Structures by an email dated 08 February 2017. Two further additional drawings nos. SKBT03 rev P1 and SKBT04 rev P1 show how 3 no. temporary steel posts, each being a 254x254x89 UC section, are bolted to the ground beam to provide temporary support to the boundary wall and allow removal of the existing buttresses. Once this process is completed, each buttress will be replaced by a 400mm thick insitu reinforced concrete buttress projecting 750mm from the face of the existing wall and connected to the concrete ground beam. Each buttress has a sloping top to match the existing profile and has a rendered finished.

I am satisfied that these proposals indicate an acceptable solution to minimise the projection of the two buttresses onto the development site and will actually improve the foundations to this section of the boundary wall restraints. The detailed design of the individual elements is based upon a conservative assessment of the support the buttresses provide to the wall. It is unlikely that the buttresses provide support to the flank wall of Lawn House but 2 no. tilt meters have been installed to the Lawn House flank wall and monitored during the Autumn of 2016. These presumably will be further monitored during the buttress reconstruction process.

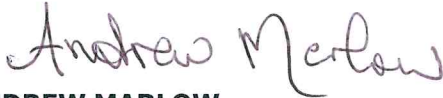
A Condition Survey of the boundary wall and the flank wall of Lawn House has been carried out and photographs of its condition have been received. Further surveys of these walls should be carried out upon completion of the buttress replacement works and again on completion of the main development.

Although a revised Ground Movement Analysis has been provided with specific references in Fluid Structures' letter to justify the statement concerning differences in soil movements between the locations of the new mini-piles and the existing corbelled footing, it is not considered to be relevant to the replacement buttress works. The GMA has not been generally reviewed as part of this assessment.

Our assessment of this proposal has assumed that the details of retaining wall construction for the main redevelopment works are unchanged from the most recent Basement Impact Assessment audited by ourselves but confirmation of this has not been received.

If you require any additional information or explanation do not hesitate to contact me.

Yours sincerely

A handwritten signature in purple ink that reads "Andrew Marlow". The signature is written in a cursive, flowing style.

ANDREW MARLOW

For and on behalf of **CAMPBELL REITH HILL LLP**