

# Hestur Limited

**Title: Statement in Support of Proposed Works  
to the Brickwork Masonry wall at The  
Garden House, 24 Well Road, Hampstead,  
London, NW3 1LH**

**For: Mr & Mrs A Goldstein**

**Ref: AG01/12/16**

**Date: September 2018**



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The Garden House, 24 Well Road, Hampstead, London NW3 1LH**

## **1. Introduction**

It is proposed to undertake works to the brickwork masonry wall that forms the southern boundary of The Garden House (24 Well Road, Hampstead) with the adjacent public highway, Well Road. The wall having a Grade II listing under the Planning (Listed Buildings and Conservation Areas) Act 1990.

The proposed works consist of the stabilisation of the wall to ensure its stability is maintained and to preserve the asset.

This statement provides;

- Description / Background Information in respect of the wall
- Information relating to its condition (stability) in the form of setting out the findings of a Structural Survey carried out.
- Details of the proposed Works.

Photographs and drawings are also included / appended / referred to as appropriate.

This statement is produced to support the carrying out of the proposed works and for the purposes of providing the necessary information to allow Listed Building Consent to be granted.

## **2. Location**

As noted above the wall under consideration is located to the south of a property known as The Garden House, 24 Well Road, Hampstead NW3 1LH. A location plan is appended on which the wall is identified.

The wall in question forms part of a longer wall, with the wall in total extending from the south western corner of the land belonging to The Garden House with Well Road, to the south eastern corner of Cannon Lane with Well Road, extending in a northerly direction up Cannon Lane and Squires Mount, to the corner of Squires Mount with Cannon Place.

The grid reference for the commencement of the wall at its south western end, where it forms the boundary between The Garden House and Well Road is TQ 2662 8607 (approximately) and at the point it forms the north eastern end of the same boundary is TQ 2664 8609 (approximately). As noted above the wall extends to the north east, beyond where it forms the boundary to The Garden House.

<sup>1</sup> London Borough of Camden web site; [http://gis.camden.gov.uk/geoserver/Listed\\_Building.html](http://gis.camden.gov.uk/geoserver/Listed_Building.html)



### 3. Description and Background

The wall is a brickwork masonry wall that is Grade II listed, as identified by the London Borough of Camden <sup>1</sup>. The full length of the wall from the south west of The Garden House to the north of Cannon Place, as described above, being shown as having this listed status.

The Listing Entry, as available from Historic England's web site <sup>2</sup>, provides the following details in relation to the listing;

*Garden walls, gates and bollards. Garden walls: C18, partly rebuilt 1990 following storm damage. Brown brick with shallow buttresses and brick coping. Main (north) entrance: rebuilt late C20. Brown brick piers with red brick dressings and stone cornice surmounted by C20 stone figures which replace former urns. C20 wrought-iron gates and early C19 overthrow with lamp-holder and reproduction lamp. Main entrance flanked by brick walls with moulded brick coping and carriage entrance gates. Bollards: outside gates on pavement, 2 cast-iron later C18 cannons used as bollards. East (garden) entrance: segmental-arched gateway with wooden door flanked by brick piers set into the wall and surmounted by stone balls. To the right of entrance steps, a small cast-iron cannon used as a bollard.*

The wall over the length in question, the boundary to The Garden House, consists of the "brown brick with shallow buttress and brick coping" as described in the listing entry. The length requiring the stabilising works, however, not extending for the full frontage of the wall over the length of The Garden House boundary but approximately 23m, commencing approximately 14.4m from its current south western end. A photograph showing the length of wall in question is provided below;

<sup>2</sup> <https://historicengland.org.uk/listing/the-list/list-entry/1244095>





The Garden House wall, looking north east towards Cannon Lane

To the rear of the wall, on the side of The Garden House ground levels vary from being at the same as the footway to the front of the wall, where the vehicular access gate exists through the wall towards its south western end, to being some 2.3m at its north eastern extent, where a pedestrian access gate exists. The area immediately behind the wall being an area of planting containing various shrubs and mature trees. The trees being the subject of Tree Preservation Orders. Beyond the planting area exists a block paved drive providing access to the property itself. A topographical survey has been undertaken, and is included in the Appendices, which shows the relationship between the footway to the front of the wall and the ground level behind.

The conditions, topographical form, that currently exists in terms of the wall and adjacent area is as existed from before the time of the construction of The Garden House in 1995 / 1996. The construction of The Garden House having not changed the topography in the immediate vicinity of the wall.

As noted in the Listing Entry the wall is considered to have been constructed in the 18<sup>th</sup> century. Historical maps viewed appear to suggest the wall was constructed some time between 1850 and 1871, at the same time as Cannon Hall, and the boundary to whose grounds the wall enclosed in part. (The Garden House having been built within the area formerly occupied by those grounds). The wall extending



with Well Road, at that time of its construction, to the point which is now considered to represent the south eastern extent of the length requiring stabilisation.

The length of wall under consideration has been noted to be displaced in the vertical plane such that the face with Well Road leans away from the property towards Well Road i.e. in a south easterly direction. The displacement having existed for many years, with there being no discernible change in the walls condition over this time.

The owners of The Garden House commissioned a Structural Assessment of the wall to establish its structural condition, including the effects of the displacement. The investigation carried out as part of the assessment, and its findings, are discussed below.

Besides the displacement referred to above, the lower courses of brickwork have suffered from erosion and degradation as a result of de-icing salts being “splashed” against the base of the wall by vehicles using the adjacent public highway, Well Road. A footway exists between the carriageway and the wall, the footway width, distance from carriageway to wall, being approximately 1.1m at some locations. A photograph showing the typical damage that has occurred is provided below;



Typical damage caused by de-icing salts



It is proposed the damage as a result of the de-icing salts also be repaired at the same time as works to stabilise the wall are carried out.

#### **4. Structural Assessment**

As noted above a Structural Investigation was commissioned by the owners of The Garden House and which included an assessment of the stability of the wall. The investigation itself included a measured survey to determine the profile of the wall in the vertical plane, along with information being obtained into the walls construction. The information that could be obtained regarding the walls construction was limited to that which could be gained from its above ground part. This being due to the presence of the trees as referred to above. To overcome this a further investigation was undertaken using ground penetrating radar (GPR) with the scans being undertaken in the horizontal plane to provide information on the walls construction below the ground level of the planting area in which the trees are located.

The GPR survey identified that the wall has no appreciable change in section, thickness, below the ground level of the area of planting when compared to that above, the section remaining relatively constant to below the level of the footway to Well Road at least.

The outcome of the structural assessment based on the findings of the investigation is that the stability of the wall, in its current form, is considered as being questionable, with there being a risk of collapse should conditions change from those which currently exist. The recommendation was therefore made that works be undertaken to stabilise the wall and reduce the risk of collapse to an appropriate level.

#### **5. Proposed Works**

Taking into account the various constraints associated with the walls location, and the walls importance as a heritage asset, it has been determined that to provide the wall with an appropriately reduced risk against future collapse that it is necessary to install an anchorage system which will provide adequate resistance to the loading imposed.

The installation of the anchor system being a method that allows the wall to remain and that keeps the disturbance of its fabric to a minimum.

The works will consist of small diameter anchors being driven into the soil to the rear of the wall, with pattress plates being installed on the anchor ends, heads, to transfer the loads imposed on the wall into the ground behind. The pattress plates being located on the external, Well Road, face of the wall. To install the anchors, which is undertaken from the Well Road side, a 100mm hole is carefully cored through the brickwork at each anchor location and the anchor driven into the ground using hand held equipment. The load on the wall is also influenced by the potential build up of

water pressure within the retained soil. It is therefore also proposed to install 75mm diameter weep holes within the brickwork at low level to relieve such pressure. The alleviation of the potential accumulation of water behind the wall influences the anchor loads and potentially reduces the number of anchors to be installed. As noted above without implementing such measures the stability of the wall, which has already experienced displacement, cannot be relied upon in the future, and the asset in terms of its heritage value, will be lost. Drawings showing the existing arrangement and giving details of the proposed works are included within the Appendix. All the works are to be carried out using hand tools, including the installation of the anchors as noted.

The pattress plates will be circular and of a bronze alloy, therefore replicating those which have already been introduced elsewhere in the walls length, and in other walls nearby. A copy of a photograph showing pattress plates of the type proposed, and as used on the same listed wall immediately adjacent to the area to be stabilised, the length of wall that forms the neighbours boundary with Well Road immediately to the north east of The Garden House, is shown below.

The works require the installation of weep holes as noted above, and shown on the drawings, these will be installed by coring through the brickwork, in the same way as the holes through which the anchors will be installed.

The works also require the installation of helical bar in three locations between the two lines of anchors, again as shown on the drawings. The purpose being to reinforce the brickwork such that the loads can be distributed between the anchor locations. The bed joints will be raked out to the depth shown to allow installation of the small diameter stainless steel helical bar, which will be set in a specialist grout. The bed joint will then be reinstated using lime mortar as generally exists within the walls construction. All raking out of mortar to be undertaken with hand tools.





Pattress plates as used in the wall to be stabilised, and as used on the neighbouring property. (The personnel door is at the north eastern end of the proposed works).

The repointing of the brickwork, both where the helical bar reinforcement is installed , and where the brickwork damaged by de-icing salts is repaired will generally follow the recommendations of the Technical Note produced by the Hampstead Garden Trust, Pointing of Brickwork (A copy of which is appended). All replacement bricks to be used in the areas damaged by de-icing salts will be sourced such that they match the existing.

## **6. Summary**

Without the undertaking of remedial measures the Grade II Listed wall will exist in an environment where any change in condition has the potential to result in a risk of collapse leading to, amongst other matters, a loss of heritage asset.

The works that may be undertaken have to consider the presence of trees subject to Tree Preservation Orders, and the effects the works may have on their existence.

The proposed works therefore involve the installation of anchors installed into the ground behind the wall. Their installation being undertaken using hand held equipment. This is the most effective way to maintain the asset without causing significant disturbance to the wall and also having significant impact on other protected features and the surrounding environment.



The loads from the wall are transferred to the anchors by the use of pattress plates, the proposed plates being as those currently utilised elsewhere within the length of the same Grade II Listed wall.

The wall is also suffering from damage as a result of de-icing salts “splashing” against the wall from the adjacent public highway, Well Road, with it being intended that this be addressed at the same time as stabilising the wall. Any repair to the damage caused by de-icing salts along with repointing as a result of the works to install the anchors, is to be carried out taking into account the guidelines given in the Technical Guide produced by the Hampstead Garden Trust, “Pointing of Brickwork”.

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