



BY E-MAIL ONLY

10 January 2023

**ACTION: INSTRUCTIONS REQUIRED**

**138 Haverstock Hill RTM Company Limited, 138 Haverstock Hill, London, NW3 2AY**

I write to confirm that I undertook an inspection of the above property on 3<sup>rd</sup> January 2023.

With respect to my observation and recommendations I would utilise the following headings for clarity:-

**1. Executive Summary**

- 1.1 Cracking in the order of 2 to 3mm has occurred at the junction of the front entrance steps with the portico construction.
- 1.2 During my visit access was only available to the following:-
  - i) Externally to the front.
  - ii) Internally to the lower ground floor flat.
  - iii) Internally to the communal areas to the flats above.
- 1.3 Historically, notable downward vertical foundation movement has occurred to the front façade between the front bay and the portico (Photographs 1 to 4).

During my visit I noted no evidence that there has been further downward movement at such location in recent times.
- 1.4 Bearing in mind the timing of the recent cracking at the junction of the front entrance steps with the portico construction, the cause of the foundation movement is most likely to be the influence of the trees/vegetation to the front right-hand boundary exacerbated by the exceptionally hot and dry climatic conditions experienced during summer 2022.
- 1.5 As a consequence of the property being located in a Conservation Area and the majority of the trees to the right-hand boundary being located in a neighbour's garden, a formal approach to this matter will be required regarding trial pit/borehole investigations, monitoring and the appointment of an arboricultural expert.

The following confirms my specific recommendations in this respect.

## **2. Observations**

- 2.1 Notable historic downward vertical movement has occurred to the front façade between the bay and the portico construction (Photographs 1 to 4).

No evidence was noted within the lower ground floor flat (Photograph 22) or within the communal area that there had been further movement of the front façade in recent times.

Bearing in mind the historic foundation movement of the front façade is very localised and the presence of underground drainage (a rainwater downpipe/gulley) at the junction of such foundation movement, it is probable that the cause of the historic foundation movement of the front façade was an issue with respect to the underground drainage.

As movements have not happened in recent times it is reasonable to conclude that any issues with the underground drainage adjacent to the front façade were resolved many years ago and that no issues within the ground under the foundations to the front façade currently exist.

Accordingly this aspect will not be considered further in this matter.

- 2.2 The foundation movement of the front entrance steps relative to the portico has caused cracking as follows:-

- i) External cracking at the junction of the steps with the front portico in the order of 2 to 3m in width (Photographs 6 to 14).
- ii) Internal cracking again at the junction of the entrance steps with the portico construction in the order of 2mm (Photographs 16 to 21).

## **3. Discussion**

- 3.1 The timing of the foundation movement of the front entrance steps relative to the front portico indicates that the foundation movement has been caused by the influence of trees/vegetation to the right-hand boundary exacerbated by the exceptionally hot and dry climatic conditions that happened during summer 2022.

- 3.2 To the right-hand boundary the following trees/vegetation exists:-

- i) At a distance of approximately 7m from the entrance steps there are two trees of heights in the order of 10 to 12m. These trees are located in the neighbour's garden.
- ii) Between the above trees and the entrance steps there are a number of trees and bushes up to 5m in height. These trees appear to be on the boundary (i.e. they are spread over both gardens).

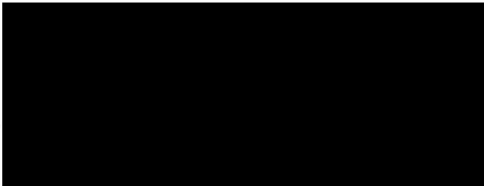
- 3.3 Bearing in mind the property is located in conservation area and that, as per the above, the majority of the trees most likely to have caused the foundation movement are situated within a neighbour's front garden, a formal approach will be required to gain appropriate evidence and agreement to remove the influence of the trees/vegetation.

Our specific recommendations with respect to such evidence are as follows:-

- i) A trial pit should be progressed to confirm the depth of the foundations to the entrance steps.
- ii) 2 No. boreholes should be progressed to a depth of at least 3.0m to the front of the entrance steps to confirm the nature of the supporting soil beneath the foundations, tree root encroachment and whether or not there is an issue of desiccation of the supporting soil despite the heavy rainfall of recent weeks.
- iii) Typically, to obtain the agreement of the Local Authority to notable tree works, it is required for there to be evidence of seasonal movement.  
  
It would therefore be prudent to establish a scheme of monitoring including both crack width and accurate level monitoring.
- iv) On receipt of the above investigations and during the course of monitoring, a professional arboriculturalist should be appointed to provide advice regarding the appropriate tree/vegetation works required to ensure long term stability.

- 3.4 Following removal of the offending trees and vegetation localised crack repairs can be undertaken in the knowledge that long term stability will have been returned.

I trust that the above is clear and to your satisfaction.



Enclosures