

Engineers Conclusion Report – Site Investigations

48 Queens Grove London NW8 6HH

Following the occurrence of vegetated related subsidence at this property which has resulted in crack damage and distortion a site investigation was undertaken on 29 November 2018.

Within this request, QuestGates Limited are to prove that:

1. On the balance of probabilities, there is sufficient evidence to demonstrate that the nearby trees have influenced the ground conditions below the rear addition of the property;
2. You are indemnified against any claim for heave as a result of the vegetation removal.

Supporting Evidence

Nature and Extent of Damage

The damage is isolated to the single storey rear addition.

Externally, stepped diagonal cracking of up to 15 mm in width was noted to the end wall of the rear addition to the right hand side of the external door with distortion to the timber door frame.

On the right hand of the addition minor diagonal cracking was viewed above the right hand side and below the left hand side of the window adjacent to the junction with the main house.

A separation crack was also noted to the flat roof coping stone above the window up to 10 mm in width.

Internally, within the rear addition children's room diagonal cracking was viewed on the rear wall to the right hand side of the door opening and that extended onto the ceiling coving and along the right hand flank wall.

Adjacent to the junction with the main house rear wall further diagonal cracking was noted at high level on the right hand flank wall with disturbance on the ceiling coving line.

The damage would be described as Category 3/4 using the BRE 251 Classification.

Trial Hole 1

A trial hole was excavated adjacent to the flank wall of the rear addition and probes to a depth of 2000 mm below ground level could not locate the top of the footings.

A dry stiff brown slightly sandy clay fill material was identified.

Laboratory Analysis

Roots from various shrubs were found at a depth of 1000 mm below ground level.

Trial Hole 2

A trial hole was excavated adjacent to the end of the right hand flank wall at the return with the rear wall and probes to a depth of 2000 mm below ground level could not locate the top of the footings.

A dry stiff brown slightly sandy clay fill material was identified.

Laboratory Analysis

Roots from various trees and shrubs were found at a depth of 2000 mm below ground level.

Drainage Survey

No significant defects were found to the adjacent underground drainage system.

Conclusion

The Site Investigation was not conclusive as it appears that the cellar extends further along the rear addition than expected and therefore the depth/type of foundation could not be confirmed or the ground conditions under the foundation. However, the information collected suggests that tree/shrub roots have been implicated in exacerbating the clay shrinkage during the summer of 2018.

Next Steps

On the basis of the Site Investigation evidence we will instruct an Arboriculturist to inspect and provide recommendations on the extent of mitigation works required.

We trust the above and enclosed is of assistance. In the meantime, should you have any queries, please do not hesitate to contact our office.