

Arboricultural Appraisal Report

Subsidence Damage Investigation at:

Flat 1, 94 Stapleton Hall Road
London
N4 4QA



CLIENT: Crawford & Company
CLIENT REF: 1881888 / SU2000002
MWA REF: SUB260410-18425
MWA CONSULTANT: Andy Clark
REPORT DATE: 05/06/2026

SUMMARY

Statutory Controls		Mitigation (Current claim tree works)	
TPO current claim	No	Policy Holder	No
TPO future risk	No	Domestic 3 rd Party	Yes
Cons. Area	Yes	Local Authority	No
Trusts schemes	No	Other	No
Local Authority: -	London Borough of Haringey		

Introduction

Acting on instructions from Crawford & Company, the insured property was re-visited on 26/05/2026 to assess the potential role of vegetation in relation to subsidence damage.

This report follows an updated survey, further to our initial survey on 14/09/2021 and sequent report [MWA ref: SUB210909-9436] of 29/09/2021.

We are instructed to provide updated opinion on whether vegetation is a causal factor in a repeat of damage to the property and give recommendations on what vegetation management, if any, may be carried out with a view to restoring stability to the property. The scope of our assessment includes opinion relating to mitigation of future risk. Vegetation not recorded is considered not to be significant to the current damage or pose a significant risk in the foreseeable future.

This report does not include a detailed assessment of tree condition or safety. Where indications of poor condition or health in accessible trees are observed, this will be indicated within the report. Assessment of the condition and safety of third-party trees is excluded, and third-party owners are advised to seek their own advice on tree health and stability of trees under their control.

Property Description

The property comprises a 3-storey semi-detached house of traditional construction, built c.1930 and since extended with a two-storey addition to the rear and converted into self-contained flats. Flat 1, the lower ground floor flat, is the focus of this report.

External areas comprise gardens to the front and rear.

The site is generally level with no adverse topographical features.

Damage Description & History

Damage relates to the front of the right-hand flank of the insured dwelling. Damage was initially reported to have first been observed during December 2019, and our September 2021 report refers.

We understand that tree pruning works were carried out during 2021, followed by repairs to the initial damage during 2022. However, the damage has since returned and worsened prompting the matter to be referred back to insurers.

Site Investigations

Site investigations were previously carried out by CET on 09/08/2021, when a single trial pit [TP/BH1A] was excavated to reveal the foundations, with a borehole sunk through the base of the trial pit to determine subsoil conditions. A drains survey was also undertaken.

Further investigations were carried out on 02/02/2026, when an additional trial pit and borehole were excavated [TP/BH1B] and the drain survey was repeated.

Foundations:

Ref	Foundation type	Depth at Underside (mm)
TP/BH1A	Concrete	600
TP/BH1B	Crushed brick	600

Soils:

Ref	Description	Plasticity Index (%)	Volume change potential (NHBC)
TP/BH1A	MADEGROUND: medium compact becoming medium compact to compact mid brown silty sandy clay with brick and clinker fragments to 1200mm, becoming stiff to very stiff brown-grey veined silty CLAY with claystone nodules below	39 - 51	Medium - High
TP/BH1B	Firm to very stiff, brown, silty CLAY	34 - 52	Medium - High

Roots:

Ref	Roots Observed to depth of (mm)	Identification	Starch content
TP/BH1A	1500	probably Quercus spp. but possibly Castanea spp.	Present
TP/BH1B	1800	either Quercus spp. or Castanea spp.	Present

Quercus spp. are oaks, both deciduous and evergreen.

Castanea spp. include sweet chestnut and are related to oaks.

Drains: The drains have been surveyed and defects have been identified; however leaking drains are concluded not to be a cause of the current damage.

Monitoring: Level monitoring is in progress.

Discussion

Opinion and recommendations in this report are made on the understanding that Crawford & Company has identified clay shrinkage subsidence as a cause of ongoing building movement and repeated damage.

Site investigations and soil test results have confirmed a plastic clay subsoil susceptible to undergoing volumetric change in relation to changes in soil moisture. A comparison between moisture content and the plastic and liquid limits indicates soil desiccation at the time of sampling at depths beyond normal ambient soil drying processes, such as evaporation, which is indicative of the soil drying effects of vegetation.

Roots were previously observed to a depth of 1.5m bgl in TP/BH1A, with recovered samples positively identified (using anatomical analysis) as probably *Quercus* spp. but possibly [the related] *Castanea* spp. Our 2021 survey and subsequent report determined the source of the recovered samples to be from the T3 Oak as the closest related species to the building.

Roots were also observed to 1.8m bgl in the more recent TP/BH1B, with recovered samples again being identified as either *Quercus* spp. or [the related] *Castanea* spp. Given the absence of any nearby *Castanea* spp. vegetation and as T3 Oak remains in situ, it will be the source of the retrieved samples.

Our previous survey also identified that irrespective of the identification of recovered root samples, the roots of the Limes T1 and T2 will also be present below foundation level in proximity to the area of movement/damage and contributing to the influence on soil moisture and volumes.

Level monitoring has recorded a seasonal pattern of building movement indicative of the seasonal soil drying effects of vegetation. Readings show that up to -4.0mm of downward movement occurred over the summer of 2021, followed by up to 5.0mm of recover over the subsequent winter.

Monitoring was then suspended in September 2022 and was reinstated in December 2025 following the recurrence of damage. Readings between December 2025 and February 2026 show uplift at points 7 and pints 8, but most notably show that points 5, 6 and 7 are recovering from a lower point than they reached during the summer of 2021. This would account for the increase in damage since the initial 2019 episode.

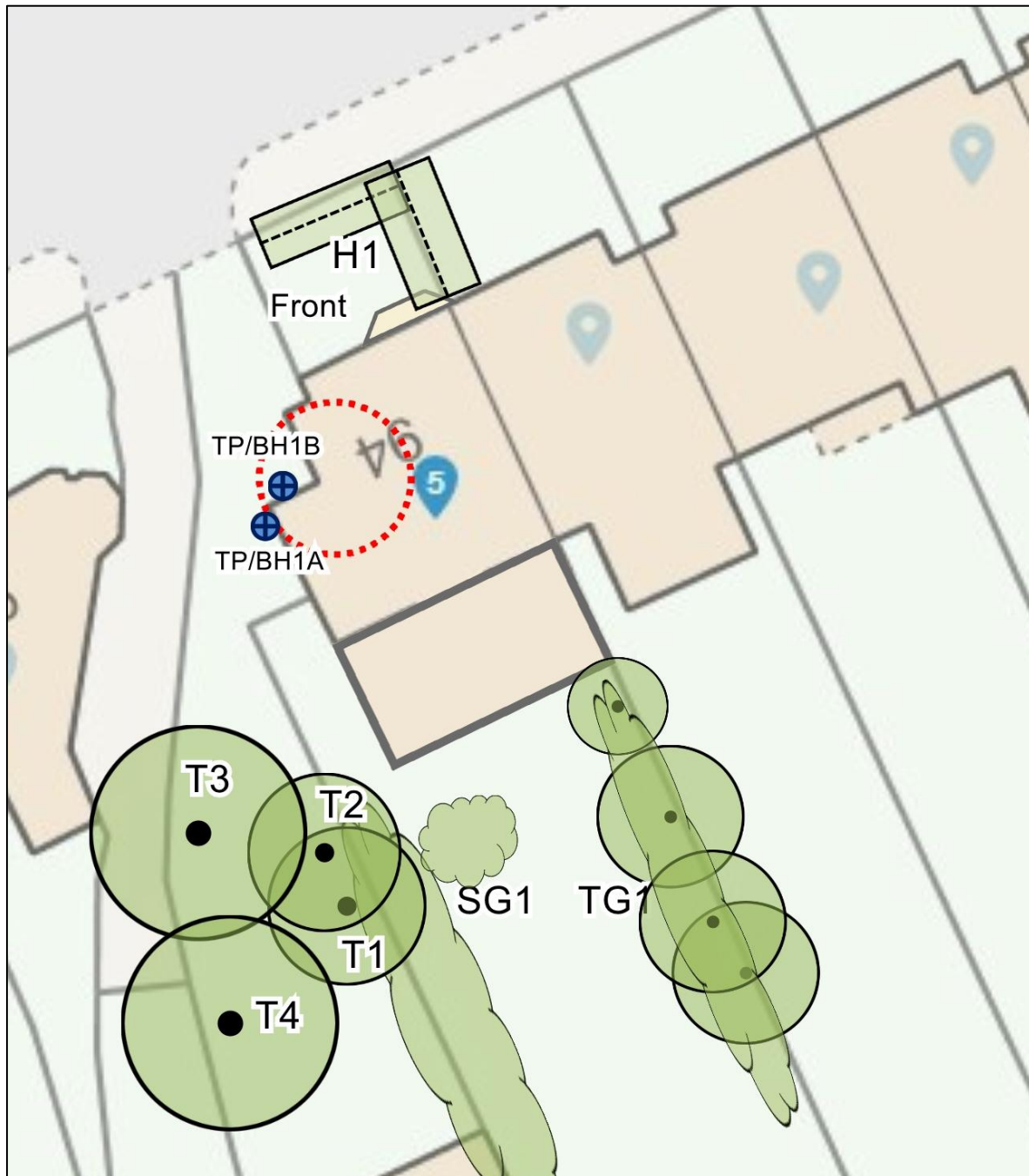
Based on the information currently available, engineering opinion and our own site assessment we conclude there is damage consistent with ongoing shrinkage of the clay subsoil exacerbated by the soil drying effects of vegetation.

If an arboricultural solution is to be implemented to mitigate the influence of the implicated trees/vegetation considered to be responsible for the damage, we repeat our previous recommendations that T1 and T2 are re-pollarded and that T3 Oak is removed. Recommendations are also escalated to include the removal of T4 Oak, which also stands within influencing distance of the building.

Consideration has been given to pruning alone as a means of mitigating the vegetative influence, however the recurrence of damage demonstrates that the previous reduction works carried out during 2021 have not been sufficient to restore long term stability to the damaged property.

Other vegetation recorded presents a potential future risk to building stability and management is therefore recommended. Recommended tree works may however be subject to change upon receipt of additional information.

Site Plan



Plan not to scale – indicative only



Approximate areas of damage

Tree/vegetation locations are based on what could be determined at the time of the survey.

It should be noted that this is not always clear due to lack of access or a restricted view of the trees/vegetation and may be disputed by property owners.

MWA can undertake land registry searches as required.

Table 1 **Current Claim - Tree Details & Recommendations**

Tree No.	Species	Height (m)	Dia (mm)	Crown Spread (m)	Dist. to building (m)	Age Classification	Ownership
T1	Lime	8.0 *	230 *	6.5	3.0	Younger than Property	Third Party 92A Stapleton Hall Road N4 4QA
Management history		Subject to past management/pruning - previously pollarded at approx. 2.0m.					
Recommendation		Re-pollard to previous points at approx. 2.0m and thereafter re-pollard on a triennial cycle to maintain at broadly reduced dimensions.					
T2	Lime	8.0 *	400 *	6.5	6.5	Younger than Property	Third Party 92A Stapleton Hall Road N4 4QA
Management history		Subject to past management/pruning - previously pollarded at approx. 2.0m.					
Recommendation		Re-pollard to previous points at approx. 2.0m and thereafter re-pollard on a triennial cycle to maintain at broadly reduced dimensions.					
T3	Oak	16.5 *	700 *	11.0 *	8.0 *	Older than extension(s)	Third Party 92A Stapleton Hall Road N4 4QA
Management history		Subject to past management/pruning - previously crown reduced.					
Recommendation		Remove (fell) to near ground level and treat stump to inhibit regrowth.					
T4	Oak	16.5 *	700 *	11.0	14.0 *	Older than extension(s)	Third Party 92A Stapleton Hall Road N4 4QA
Management history		Subject to past management/pruning - previously crown reduced.					
Recommendation		Remove (fell) to near ground level and treat stump to inhibit regrowth.					

Ms: multi-stemmed * Estimated value

T - Tree; TG - Tree group; G - Group; H - Hedge; S - Shrub; SG - Shrub group; C - Climber; W - Woodland; ST - Stump

Table 2 **Future Risk - Tree Details & Recommendations**

Tree No.	Species	Height (m)	Dia (mm)	Crown Spread (m)	Dist. to building (m)	Age Classification	Ownership
TG1	Mixed spp. group of mostly Ash [self sown], Laburnum, Mimosa and Japanese Maple with understorey of Choisya, Rose and Cordyline	Up to 6.5	Up to 120	5.0	3.4	Younger than Property	Policy Holder
Management history		No significant recent management noted.					
Recommendation		Remove (fell) self sown Ash to near ground level and treat stump to inhibit regrowth. Maintain remainder broadly at no larger than current dimensions by periodic pruning.					
SG1	Mixed spp. shrub group of mostly Rose, Snowberry, Cotoneaster and Dogwood	Up to 2.5	Up to 20	Up to 2.0	2.5	Younger than Property	Policy Holder
Management history		No significant recent management noted.					
Recommendation		Maintain broadly at no larger than current dimensions by periodic pruning.					
H1	Privet and Aucuba hedge	2.5	Up to 20	1.5	0.6	Younger than Property	Policy Holder
Management history		Subject to past management/pruning - appears regularly trimmed.					
Recommendation		Maintain broadly at no larger than current dimensions by periodic pruning.					

Ms: multi-stemmed * Estimated or approximate value

T - Tree; TG - Tree group; G – Group; H - Hedge; S - Shrub; SG - Shrub group; C - Climber; W – Woodland; ST - stump

Distance to building measurements are to the nearest point of the building unless otherwise stated.

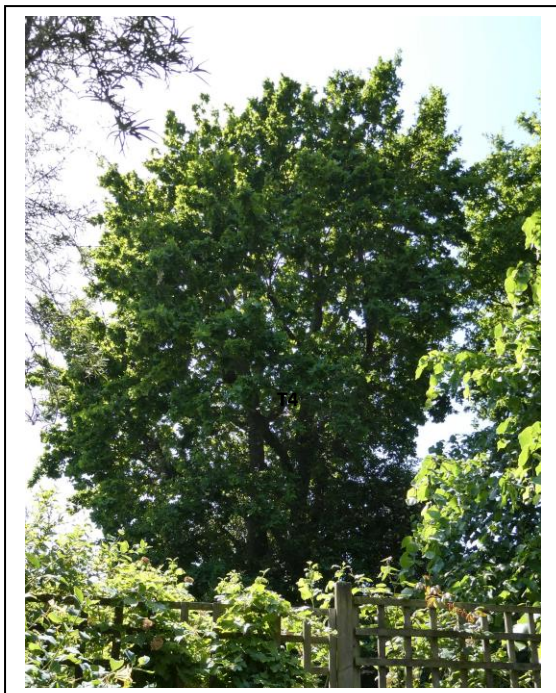
Tree dimensions may be estimated or approximate based on accessibility.

Crown spread values are normally an estimate of the maximum spread but note tree crowns may be asymmetrical.

Photographs



View of SG1 shrub group with T1 Lime and T2 Lime visible beyond and T4 Oak to left of frame



View of T4 Oak



View of T2 Lime and T3 Oak

Management of vegetation to alleviate clay shrinkage subsidence.

All vegetation requires water to survive which is accessed from the soil. Clay soils shrink when water taken up by vegetation exceeds inputs from rainfall, which is at its maximum during the summer months. When deciduous vegetation enters dormancy and loses its leaves, and rainfall increases during the winter months, soil moisture increases and the clay swells. (Evergreen trees and shrubs use minimal/negligible amounts of soil water during the winter).

Buildings founded on clay soils are susceptible to movement as the clay shrinks and swells which when exacerbated by vegetation can result in building movement and cracking to walls.

Where damage does occur, pruning (reducing leaf area) can in some circumstances be effective in restoring stability however, removal of the influencing vegetation (trees, shrubs, climbers) causing the ground movement offers the most reliable and quickest solution in reducing seasonal volumetric changes in the clay, restoring building stability, and for this reason is frequently initially recommended as the most appropriate solution.

Often this is unavoidable due to the size or number of influencing trees, shrubs etc and their proximity to the building. Very heavy pruning of some species to a level required to effectively control its water use can result in the trees decline and ultimately death and is one factor considered when making recommendations for remedial and future management of a tree. Pruning alone, whilst reducing soil moisture uptake is often an unpredictable and unreliable management option in restoring building stability, either in the short or long term.