

Arboricultural Appraisal Report

Subsidence Damage Investigation at:

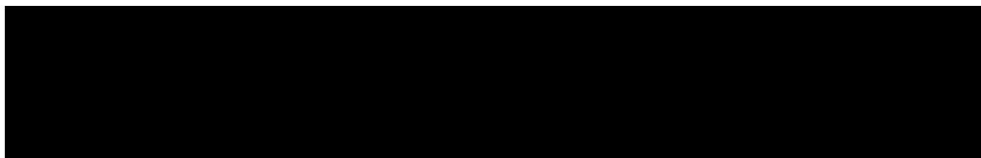
114 Highgate Road
London
NW5 1PB



CLIENT:	Crawford & Company
CLIENT REF:	[REDACTED]
MWA REF:	[REDACTED]
MWA CONSULTANT:	Andy Clark
REPORT DATE:	23/01/2020

SUMMARY

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



Introduction

Acting on instructions from Crawford & Company, the insured property was visited on 22/01/2020 to assess the potential role of vegetation in respect of subsidence damage.

We are instructed to provide opinion on whether moisture abstraction by vegetation is a causal factor in the 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 is an initial appraisal report and recommendations are made with reference to the technical reports and information currently available and may be subject to review upon receipt of additional site investigation data, monitoring, engineering opinion or other information.

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 4 storey mid-terrace house of traditional construction, built c.1890 and since converted into self-contained flats. 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 bay and front elevation of the insured dwelling, with cracking observed across all 4 storeys indicative of downward movement. Damage is reported to have first been observed during October 2019.

At the time of the engineers' inspection (04/12/2019) the structural significance of the damage was found to fall within Category 3 (Moderate) of Table 1 of BRE Digest 251. For a more detailed synopsis of the damage please refer to the surveyor's technical report.

We have not been made aware of any previous claims.

Geology / Soils

The online 1:50 000 scale British Geological Survey map records the bedrock geology as London Clay Formation - Clay, silt and sand. No superficial deposits for the area are recorded.



Discussion

Opinion and recommendations are made on the understanding that Crawford & Company are satisfied that the current building movement and the associated damage is the result of clay shrinkage subsidence and that other possible causal factors have been discounted.

Published soil maps indicate the underlying soils include or are likely to include a clay component susceptible to undergoing volumetric change with changes in soil moisture. Moisture abstraction by vegetation has the potential to cause soil shrinkage and consequent subsidence of the building.

Our survey has identified vegetation within influencing distance of the building with a current potential to influence soil volumes below foundation level; the most significant of which in relation to the current damage is the TG1 group of Cypress, Birch and Ceanothus.

Based on the information currently available, engineering opinion and our own site assessment we conclude the damage appears consistent with shrinkage of the clay fraction due to the soil drying effects of vegetation.

If an arboricultural solution is to be implemented to mitigate the influence of the trees/shrubs considered to be responsible for the damage we recommend that TG1 group is removed. Other vegetation recorded presents a potential future risk to building stability and management is therefore recommended.

Consideration has been given to pruning alone as a means of mitigating the vegetative influence, however in this case, this is not considered to offer a viable long-term solution due to the proximity of the responsible vegetation. Recommended tree works may however be subject to change upon receipt of additional information.

Conclusions

- Conditions necessary for clay shrinkage subsidence to occur related to moisture abstraction by vegetation have been confirmed by reference to published soil maps.
- Engineering opinion is that the damage is related to clay shrinkage subsidence.
- There is significant vegetation present with the potential to influence soil moisture and volumes below foundation level.

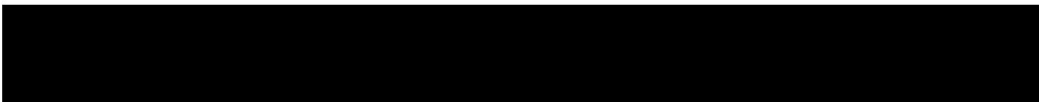


Table 1 **Current Claim - Tree Details & Recommendations**

Tree No.	Species	Ht (m)	Dia (mm)	Crown Spread (m)	Dist. to building (m)	Age Classification	Ownership
TG1	Mixed spp. group of Cypress, Birch and Ceanothus	10.5	400 Ms *	7.5	1.5	Younger than Property	Policy Holder
Management history		No past management noted.					
Recommendation		Remove (fell) to all near ground level and treat stumps to inhibit regrowth.					

Ms: multi-stemmed * Estimated value

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


Tree No.	Species	Ht (m)	Dia (mm)	Crown Spread (m)	Dist. to building (m)	Age Classification	Ownership
T1	Cherry	8.5	300 *	7.0	6.1	Younger than Property	Third Party: 110 Highgate Road, NW5 1PB
Management history		Subject to past management/pruning - previously crown reduced.					
Recommendation		Prune back to previous pruning points and repeat on a biennial cycle.					
TG2	Mixed spp. group of Juniper, Laburnum, Pyracantha and Viburnum	8.0 *	180 Ms *	5.5	4.2 *	Younger than Property	Third Party: 118 Highgate Road, NW5 1PB
Management history		No past management noted.					
Recommendation		Remove (fell) Viburnum to near ground level and treat stump to inhibit regrowth. Maintain remainder at broadly no more than current dimensions by periodic pruning.					
H1	Privet hedge	1.0	50 Ms *	1.0	0.4	Younger than Property	Third Party: 112 Highgate Road, NW5 1PB
Management history		Recently reduced to current height.					
Recommendation		Maintain broadly at no more than current dimensions by periodic [annual] trimming.					

Ms: multi-stemmed * Estimated value

Site Plan



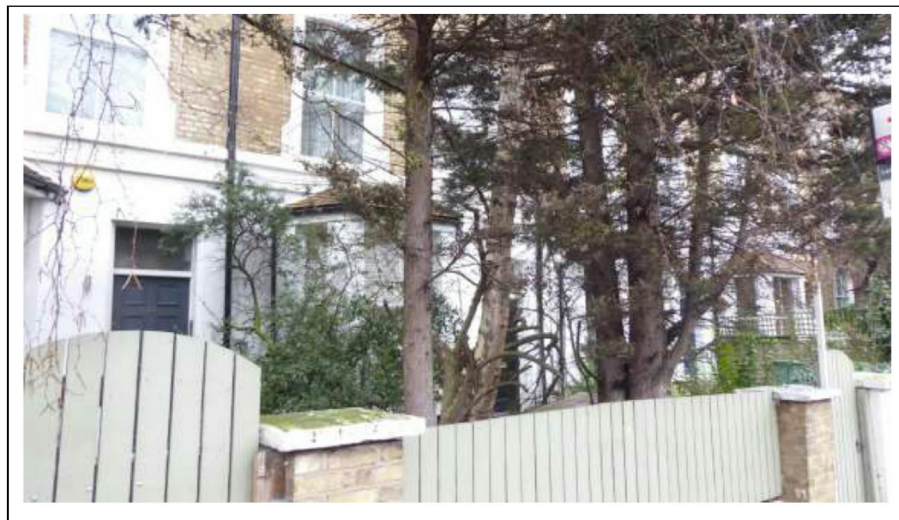
Plan not to scale – indicative only

 Approximate areas of damage

Images



Overview of TG1 group, TG2 group and T1 Cherry



View of TG1 group



View of H1 Privet hedge



View of T1 Cherry

