

Arboricultural Appraisal Report

Subsidence Damage Investigation at:

Flat 18, Holmefield Court
 Belsize Grove
 London
 NW3 4TT



CLIENT:	Crawford & Company
CLIENT REF:	[REDACTED]
MWA REF:	
MWA CONSULTANT:	George Peters BSc. (Hons)
REPORT DATE:	14/05/2019

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 10/05/19 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 purpose built block of flats, built c. 1936. External areas comprise gardens to the front and hard standing access to the rear.

The site is generally level with no adverse topographical features.

Damage Description & History

Damage relates to the left hand flank and rear elevation at the ground floor flat (Flat 18). Cracking is present at the exterior brickwork and within the kitchen. Damage was first noticed in December 2018.

At the time of the engineer's inspection (14/01/19) the structural significance of the damage was found to fall within Category 2 (slight) of Table 1 of BRE Digest 251.

We have been advised that there was a previous subsidence problem affecting flat 18 around 6/7 years ago but had no further details regarding this previous problem.

Geology / Soils

Reference has been made to the British Geological Survey maps for an indicative guide to underlying soil characteristics. The online 1:50 000 scale map records the bedrock geology as London Clay Formation. No superficial deposits 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 therefore 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 vegetation likely to be most significant in relation to the current damage is T1 (Elder), T2 (Blackthorn), TG1 (Blackthorn and Laurel) and TG2 (mixed species, inc. Blackthorn). Other vegetation recorded represents a future risk.

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 T1, T2, TG1 and TG2 are removed.

Consideration has also been given to the presence of T3 (unidentified) and its potential role in the current claim damage. At this time the influence of T3 is considered equivocal. Should movement persist following the recommended tree removals, the future if T3 should be considered further.

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 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.
- Replacement planting may be considered subject to species choice and planting location.

Table 1 Current Claim - Tree Details & Recommendations

Tree No.	Species	Ht (m)	Dia (mm)	Crown Spread (m)	Dist. to building (m)	Age Classification	Ownership
T1	Elder	3.8 *	60 Ms *	3	3	Younger than Property	Policy Holder
Management history		No recent management noted.					
Recommendation		Remove (fell) to near ground level and treat stumps to inhibit regrowth.					
T2	Blackthorn	4	130 *	3	3	Younger than Property	Policy Holder
Management history		No recent management noted.					
Recommendation		Remove (fell) to near ground level and treat stumps to inhibit regrowth.					
TG1	Mixed species group	2.4	40 Ms *	4	2	Younger than Property	Policy Holder
Management history		Species include Blackthorn, and Laurel. No recent management noted.					
Recommendation		Remove (fell) to near ground level and treat stumps to inhibit regrowth.					
TG2	Mixed species group	4.5 *	100 Ms *	5	1	Younger than Property	Policy Holder
Management history		Species include blackthorn. No recent management noted.					
Recommendation		Remove (fell) to near ground level and treat stumps to inhibit regrowth.					

Ms: multi-stemmed * Estimated value

Table 2 Future Risk - Tree Details & Recommendations

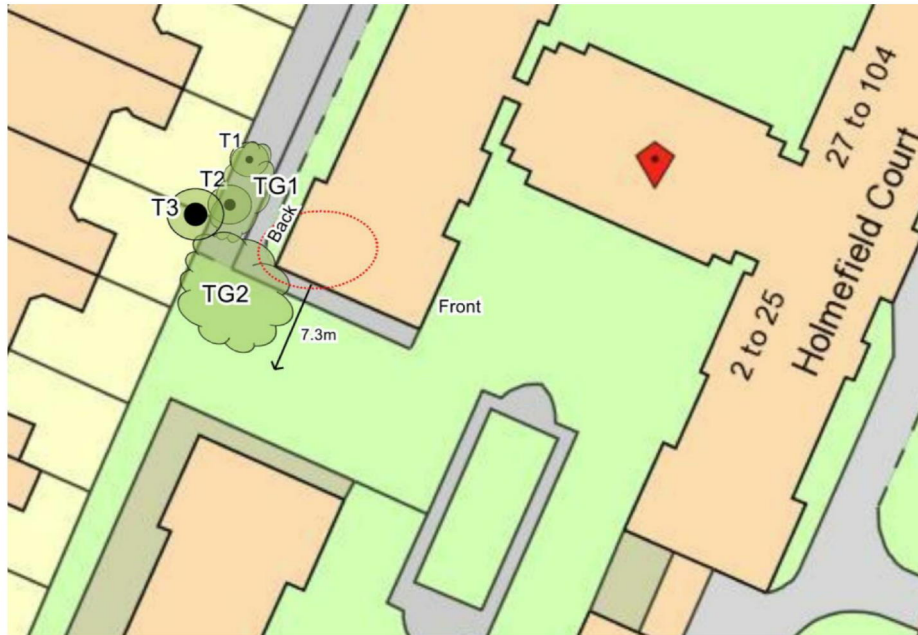
Tree No.	Species	Ht (m)	Dia (mm)	Crown Spread (m)	Dist. to building (m)	Age Classification	Ownership
T3	Unknown	4 *	500 *	3 *	4 *	Younger than Property	Third Party: 17 Howitt Road NW3 4LT
Management history		Unable to identify due to lack of access. Subject to past management.					
Recommendation		Do not allow to exceed current dimensions.					

Ms: multi-stemmed * Estimated value


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Site Plan



Plan not to scale – indicative only

 Approximate areas of damage

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Images



View of T1 Elder, current claim.



View of T2 Blackthorn, current claim.





View of TG1 mixed species, current claim.



View of TG2 mixed species, current claim.

