

Arboricultural Appraisal Report

Subsidence Damage Investigation at:

The Studio House 51 Upper Park Road London NW3 2UL



CLIENT: Crawford & Company

CLIENT REF: MWA REF:

MWA CONSULTANT: George Peters BSc. (Hons)

REPORT DATE: 18/11/2019

SUMMARY

Statutory Controls			Mitigation (Current claim tree works)		
TPO current claim	No		Policy Holder	Yes	
TPO future risk	Yes T1		Domestic 3 rd Party	No	
Cons. Area	Yes		Local Authority	No	
Trusts schemes	No		Other	No	
Local Authority: -	London Borough of Camden				

MWA Arboriculture Ltd



Introduction

Acting on instructions from Crawford & Company, the insured property was visited on 07/11/19 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 2-storey semi-detached house built circa 1875. It has been extended with a single-storey extension to the rear. The property was again extended with a single storey glazed extension, built 10 - 12 years ago. External areas comprise gardens to the front and rear.

The property occupies a site that slopes gently uphill from front to rear.

Damage Description & History

Damage relates to both extensions where cracking indicates downward movement. The engineer's report details internal and external cracking in this location. Damage was noticed in June 2019.

At the time of the engineer's inspection (04/07/19) 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 comprising clay, silt and sand. 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 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 considered to be most significant in relation to the current damage is T5 (willow) and TG1 (yew).

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 T5 and TG1 are 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 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	
T5	Willow	6	400	5	1.7	Younger than Property	Policy Holder	
Management history		No recent management noted.						
Recommendation		Remove (fell) to near ground level and treat stump to inhibit regrowth.						
TG1	Yew	3	100 Ms *	3.5	2	Younger than Property	Policy Holder	
Management history		No recent management noted.						
Recommendation		Remove (fell) to near ground level and treat stump 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	Lime	13	650 *	6	6	Younger than Property	Policy Holder		
Manager	Management history		Subject to past management/pruning.						
Recomm	Recommendation		Pollard every 3 years.						
T2	Lime	9	400	5	5.9	Younger than Property	Policy Holder		
Management history		Subject to past management/pruning.							
Recomm	Recommendation		Pollard every 3 years.						
ТЗ	Holly	5	100 *	2	3	Younger than Property	Third Party 53 Upper Park Road NW3 2UL		
Manager	Management history		No recent management noted.						
Recommendation		Maintain broadly at no more than current dimensions by periodic pruning.							
T4	Fig	5	100 Ms *	3	0	Younger than Property	Policy Holder		
Management history		No recent management noted.							
Recommendation		Remove (fell) to near ground level and treat stump to inhibit regrowth.							
Т6	Rowan	7.5	370 *	5	7	Younger than Property	Policy Holder		
Management history		No recent management noted.							
Recomm	Recommendation		Maintain broadly at no more than current dimensions by periodic pruning.						

VIs: multi-stemmed

* Estimated value



Table 2 Future Risk - Tree Details & Recommendations cont'd

Tree No.	Species	Ht (m)	Dia (mm)	Crown Spread (m)	Dist. to building (m)	Age Classification	Ownership		
Т7	Eucalyptus	8	280	5 *	6	Younger than Property	Third Party 53 Upper Park Road NW3 2UL		
Management history		No recent management noted.							
Recommendation		Remove (fell) to near ground level and treat stump to inhibit regrowth.							
TG2	Holly and elder	5	120 Ms	7	10	Younger than Property	Policy Holder		
Manager	Management history		No recent management noted.						
Recommendation		Maintain broadly at no more than current dimensions by periodic pruning.							
H1	Cypress	1.9	80 Ms *	6	6	Younger than Property	Policy Holder		
Management history		No recent management noted.							
Recommendation		Maintain broadly at no more than current dimensions by periodic pruning.							

As: multi-stemmed *

* Estimated value



Site Plan



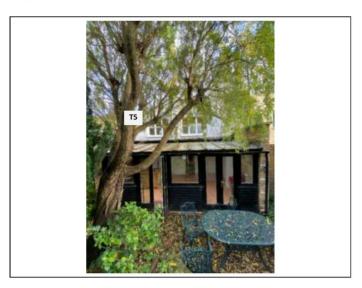
Plan not to scale – indicative only



Approximate areas of damage



Images



View of T5, current claim.



View of T5 and TG1, current claim.





View of T3, future risk.



View of TG2, future risk.