

ARBORICULTURAL ASSESSMENT REPORT

For:	Client:	Cunningham Lindsey (Maidstone)
	Insurer:	[REDACTED]
Site:	Policyholder:	[REDACTED]
	Risk Address:	54 Compayne Gardens, London, NW6 3RY
Refs:	OCA Ref:	63797
	Client Ref:	[REDACTED]
	Insurer Ref:	[REDACTED]

Arborist Name:	Thomas Peppiatt	Date:	25/07/2017
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1.0 INTRODUCTION & BRIEF

- 1.1** OCA Insurance Services has been instructed by Cunningham Lindsey (Maidstone) on behalf of the building insurers of 54 Compayne Gardens, London, NW6 3RY. We have been advised that the insured property has suffered differential movement and damage that is considered to have been caused by trees growing adjacent to the property influencing soils beneath its foundations.
- 1.2** We have been instructed to undertake a survey of the vegetation growing adjacent to the insured property in order to provide our opinion as to whether, based on the available information, any of this vegetation is likely to be influencing soil moisture levels beneath the foundations of the property, and if so, to provide recommendations as to what tree management could be implemented to effectively prevent damage continuing.
- 1.3** The vegetation growing adjacent to the risk address has been surveyed from the ground. All distances are measured to the nearest point of the risk address unless otherwise stated.

2.0 LIMITATIONS

- 2.1** Recommendations with respect to tree management are associated with the risk address as stated on the front cover of this report and following consultation with investigating engineers. The survey of trees and any other vegetation is associated with impacts on the risk address subject of this report. Matters of tree health, structural condition, and/or the safety of vegetation under third party control are specifically excluded. Third party land owners are strongly advised to seek their own professional advice as it relates to the health and stability of trees under their control.
- 2.2** Recommendations do not take account of any necessary permission (statutory or otherwise) that must be obtained before proceeding with any tree works.
- 2.3** Recommendations do not take account of any requirements for survey or mitigation relating to European or other protected species, e.g. bird nesting or bats. Land owners must obtain their own professional advice in respect of any protected species.

3.0 DISCUSSION AND ANALYSIS

3.1 Soils, soil water and vegetation

All vegetation requires water to live, and this water is substantially accessed from the soil within which the plants' roots grow.

If the soil is classified as a clay soil, then it will hold very much more water than sands, gravels and loam soils. As plants abstract water from the clay soil, the soil volume will "shrink" and "swell" during the summer as water is first removed and then added by summer rainfall.

In years in which rainfall during the summer is less than the total amount of water taken from the soil by plants, shrinkage will occur. This shrinkage may remove support from building foundations, leading to cracking in the fabric of the building.

3.2 Vegetation management

The control of trees, shrubs, and climbers, by removal or pruning as appropriate, are proven techniques that can control total soil water loss thereby minimising soil shrinkage and allowing repairs to proceed.

If vegetation management works are carried out promptly, then repairs can usually proceed very quickly and the duration and distress associated with the disruption that tree related subsidence brings can be minimised.

3.3 Third party liaison and statutory controls

Tree roots do not respect physical or property boundaries and can travel for many metres beyond the above ground "dripline" of the canopy of the vegetation.

The purpose of this report is to ascertain which vegetation is the most likely substantial and/or effective contributory cause of the damage witnessed to allow for liaison with third parties or with local administrative Councils as necessary.

You can learn more about tree related subsidence of low rise buildings by visiting:

www.oca-arb.co.uk/whatissubsidence.htm

4.0 EVIDENTIAL REVIEW AND MATERIAL CONSIDERATIONS

4.1 Engineering Summary

Engineers Appraisal Report dated 16th November 2015:

The engineer has described the damage to the property, its location and the likely mechanism of movement, and has concluded that the building failure is related to differential subsidence damage caused as a result of the action of vegetation.

This is a recurrence of subsidence damage at the property.

4.2 Foundations, geotechnical, and root identification

Site Investigation Report dated 20th October 2015:

A factual geotechnical report has described the below ground foundation design, soil and geotechnical conditions, and any root identification where available.

Foundations are described as being 1400mm below ground level in trial pit 1.

Foundations are described as being 825mm below ground level in trial pit 2.

Trial pit / borehole 1 samples have been subject to laboratory analysis and the results of these tests indicate soils have a plasticity index ranging from 43% to 47%.

Trial pit / borehole 2 samples have been subject to laboratory analysis and the results of these tests indicate soils have a plasticity index ranging from 45% to 47%.

Roots have been recovered from the trial pit(s) and subjected to laboratory analysis and the results confirm:

TP/BH1:	Tilia, 5 roots. 1.5mm diameter
TP/BH1:	Tilia, 4 roots. 1mm diameter
TP/BH2:	Fraxinus, 3 roots. 2mm diameter
TP/BH2:	Fraxinus, 3 roots. 2mm diameter
TP/BH2:	Clematis, 1mm diameter

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Recommendations

On the basis of our findings, we have considered a practical vegetation management specification.

This specification will assist in reducing the impact of the adjacent vegetation on soil moisture levels, thereby potentially stabilising foundations of the affected area of the building.

Where felling has been proposed, this will be on the basis that the vegetation in question would not respond well to a severe reduction in leaf area that would inevitably lead to decay, the development of potential hazards, and an annual or other on-going management commitment and cost.

If pruning is recommended, the specification will be designed to allow continual ease of re-pruning with a reasonable prospect of a reduction in soil water use.

5.2 Recommended vegetation management to address the current subsidence:

Tree No:	Species	Works Required
C2	Clematis	Fell close to ground level (approx 50mm)
T1	Lime	Fell and treat stump
T2	Lime	Fell and treat stump
T3	Lime	Fell and treat stump
T4	Lime	Fell and treat stump
T6	Ash	Fell and treat stump

5.3 Recommended vegetation management to address health and safety risk:

Tree No:	Species	Works Required
T5	Apple	Fell and treat stump

6.0 STATUTORY CONTROLS

London Borough of Camden has confirmed that the implicated Limes trees T1 to T4 are subject to a Tree Preservation Order. T5 & T6 are covered by Conservation Area Controls.

7.0 APPENDIX 1: TREE TABLES

Tree No	Common Name	Age Class	Condition	Height (m)	Crown Spread (m)	Stem diam. (mm)	Dist to bldg. (m)	Pruning history	Recommendation	Tree work constraints	Notes	Owner address	Owner
H1	Privet	Mature	Fair	1.8	0.6	50	0.5	Trimmed regularly	No work required			54 Compayne Gardens, London, NW6 3RY	PH
C1	Rose (Climbing)	Mature	Fair	8	6	50	0.1	Pruned regularly	No work required			54 Compayne Gardens, London, NW6 3RY	PH
C2	Clematis	Mature	Fair	2.2	8	5	0.5	No significant past tree works	Fell close to ground level (approx 50mm)		On fence. Could be policy holders.	54 Compayne Gardens, London, NW6 3RY	PH
G1	Mixed Species Rose, Ivy, Holly	Mature	Fair	2	1.0	5	3.5	Pruned regularly	No work required			54 Compayne Gardens, London, NW6 3RY	PH
G2	Mixed Species	Mature	Fair	18	10	500	20	No significant past tree works	No work required		Woodland area, with Ash, London Plane, Lime,	Local Authority	LA
H2	Privet	Mature	Fair	1.8	0.50	50	0.5	Managed Hedge.	No work required			54 Compayne Gardens, London, NW6 3RY	PH

Tree No	Common Name	Age Class	Condition	Height (m)	Crown Spread (m)	Stem diam. (mm)	Dist to bldg. (m)	Pruning history	Recommendation	Tree work constraints	Notes	Owner address	Owner
T1	Lime	Mature	Fair	11.5	5.0	550	6	Subject to past management.	Fell and treat stump			54 Compayne Gardens, London, NW6 3RY	PH
T2	Lime	Mature	Fair	11	5.0	450	6.3	Subject to past management.	Fell and treat stump			54 Compayne Gardens, London, NW6 3RY	PH
T3	Lime	Mature	Fair	11.6	5.0	300	7.3	Subject to past management.	Fell and treat stump		Difficult access in hedge behind storage bin and behind wall. Estimated as no access to stem.	54 Compayne Gardens, London, NW6 3RY	PH
T4	Lime	Mature	Fair	12.3	8	500	6.9	Subject to past management.	Fell and treat stump		DBH estimated as no access.	54 Compayne Gardens, London, NW6 3RY	PH
T5	Apple	Semi-Mature	DDDD	6	4	180	2.9	Pruned regularly	Fell and treat stump – Health & safety reasons			54 Compayne Gardens, London, NW6 3RY	PH
T6	Ash	Mature	Fair	17	10	600	7	No significant recent management.	Fell and treat stump			54 Compayne Gardens, London, NW6 3RY	PH
SG1	Rose	Semi-Mature	Fair	3	1.50	30	0.3	Subject to past management.	No work required		X2 Rose.	54 Compayne Gardens, London, NW6 3RY	PH
SG2	Mixed Species shrubs	Mature	Fair	4	1.0	20	0.3	Managed Shrub group.	No work required		Including Rose and Wisteria.	54 Compayne Gardens, London, NW6 3RY	PH

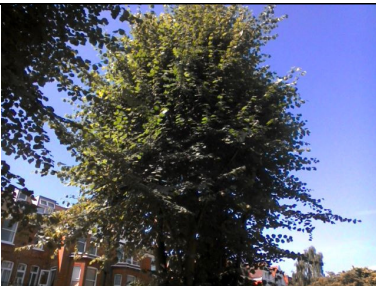






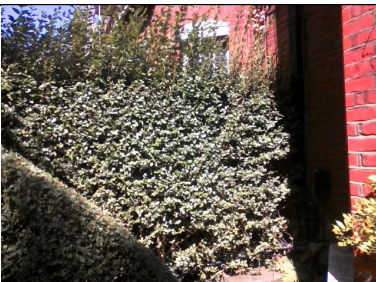
Tree No	Common Name	Age Class	Condition	Height (m)	Crown Spread (m)	Stem diam. (mm)	Dist to bldg. (m)	Pruning history	Recommendation	Tree work constraints	Notes	Owner address	Owner
H3	Privet	Mature	Fair	2.5	0.50	30	0.5	Managed Hedge.	No work required			56 Compayne Gardens, London, NW6 3RY	P3P
SG3	Hydrangea	Mature	Fair	2	2	50	0.5	Managed Shrub group.	No work required		X2 Hydrangea.	54 Compayne Gardens, London, NW6 3RY	PH

8.0 APPENDIX 2: SITE PLAN



Location:	54 Compayne Gardens, London, NW6 3RY
Job Ref:	63797
Survey Date:	5 th July 2017 - NTS
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9.0 APPENDIX 3: SITE PHOTOGRAPHS

	
<p>T1 - Lime</p>	<p>T2 - Lime</p>
	
<p>T3 - Lime</p>	<p>T4 - Lime</p>
	
<p>H1 - Privet</p>	<p>H2 - Privet</p>
	
<p>C1 - Rose (Climbing)</p>	<p>SG1 - Rose</p>
	
<p>SG2 - Mixed species shrubs</p>	<p>H3 - Privet</p>



T6 - Ash



T5 - Apple



C2 - Clematis



G1 - Mixed Species



SG3 - Hydrangea



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