

ARBORICULTURAL SURVEY REPORT

LOCATION: 16 Belsize Crescent, Belsize Park, London, NW3 5QU CLIENT: Tommy Flood AUTHOR: Oliver Tong ND Arb TechArborA DATE: 27th September 2022 REF: 1548

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1 Introduction and Scope

- 1.1 This report has been commissioned by the property owner Mr Tommy Flood. The property was visited by the author on the 15th of September 2022.
- 1.2 The scope of the report is limited to a visual assessment of the only tree within 7m of the building, a single Himalayan birch tree (T1), located in the front garden of the property.
- 1.3 The brief is to appraise risk with respect to potential direct/indirect damage to the building and above ground infrastructure.
- 1.4 We have not made any formal enquires with the Local Planning Authority (LPA) London Borough of Camden, regarding the legal protection status of the tree. However, the property is located within the Belsize Park Conservation Area.
- 1.5 To prepare a clear set of report recommendations with supporting a sketch plan and data to inform potential lenders, insurers, prospective purchasers, or current owners of the subject property.
- 1.6 This report is **not** a Tree Risk Management Report or a Hazard Analysis Report and its use as such is invalid.
- 1.7 The report refers to the condition of the tree and an assessment of the site on the day that the evaluation was undertaken. The tree was not climbed but was assessed from ground level only.
- 1.8 Due to the changing nature of trees and other site circumstances, this report and any recommendations made are limited to a two (2) year period. Any alteration to the subject site or any development could change the current circumstances and may invalidate this report and any recommendations made.
- 1.9 Our survey of the tree is of a preliminary nature. The assessment of tree health/condition is based on a visual tree assessment (VTA) and no invasive or destructive tests have been undertaken. We have not taken soil / root samples for, analysis and the trees have not been climbed but inspected from ground level only. The report is valid only for typical weather conditions. Healthy trees or parts of healthy trees may fail in normal weather situations, although the risk is significantly increased in storm conditions and as the consequences of such weather events are unforeseeable, Greenwood Environmental Ltd cannot be held liable for any such failures.
- 1.10 Trees are dynamic structures that can never be guaranteed to be 100% safe; even trees in good condition can suffer damage or failure under average conditions.



Regular inspections by competent and / or suitably qualified arboriculturists will help to identify potential problems before they become acute.

- 1.11 A lack of recommended work does not imply that a tree is safe and likewise it should not be implied that a tree will be made safe following the completion of any recommended work.
- 1.12 Any legal description or other information given to Greenwood Environmental Ltd is assumed to be accurate.
- 1.13 We have not been made aware of any current structural problems with the property. We are unaware of any previous insurance claims made in relation to structural movements, defects, or damage. If there is information available to suggest that the property has/is suffering from any structural defects available, we would ask that this is released to us for consideration.
- 1.14 The appearance of any building defect should always be investigated promptly. If vegetation is implicated, then often effective early removal of trees will stabilize the situation at little cost. Always contact a qualified structural engineer or arboriculturist before considering tree removal.
- 1.15 Any alteration or deletion from this report shall invalidate it as a whole.
- 1.16 The potential for trees to damage buildings and light structures (patios, retaining walls etc.) can be broadly categorized into two types of damage, direct damage and indirect damage:

Direct damage:

This includes damage caused by falling branches or whole trees, the physical displacement of built structures/hard surfacing by tree roots, branches and main stems. Direct damage also includes the blocking of drains by tree roots.

Indirect damage:

This is usually associated with the abstraction of moisture by tree roots from cohesive plastic clay soil below the foundations. This process may result in shrinkage of the soil and structural instability in buildings due to foundation movement. The presence of shrinkable clays is required for this type of damage to occur.

Clay shrinkage subsidence damage related to moisture abstraction by trees and other vegetation is not predictable. This report aims to identify risk where significant vegetation is present, however this does not mean that damage is inevitable where an enhanced risk is present.



This report should not be relied upon as a definitive assessment of current and or future subsidence risks but should be interpreted and utilised as a guide for property purchasers, mortgage lenders and buildings insurers based on the information available.

2 **Property Description**

- 2.1 The property comprises a four-storey townhouse.
- 2.2 External areas to the property consists of front and rear gardens.
- 2.3 Nearby vegetation consists of established tree, hedges, shrubs, and flowerbeds with the remainder laid to lawn.
- 2.4 The property is generally level with no adverse topographical features.

3 Supporting Documents

3.1 We have not been supplied with any supporting documents, apart from the following extract from the buildings insurers.

Material Damage - Endorsement – (ASM04) Tree Maintenance Clause It is a condition precedent to our liability in respect of subsidence, landslip and heave and accidental damage to underground pipes under this insurance that you comply with the following all trees and shrubs within 7 metres (22ft) of the home which are more than 3 metres (10ft) tall:

a. if the tree is within the boundary of the home, it must be inspected by a recognised tree surgeon at least once every two years and managed in line with their recommendations. Where an inspection has not previously been carried out in the last two years then you must arrange for one to be carried out within the first three months of this insurance and then at least once every two years thereafter.

4 Geology / Soils

- 4.1 Reference has been made to the British Geological Survey (<u>BGS</u>) maps for an indicative guide to underlying soil characteristics, which the online 1:50,000 scale map records as the following:
 - Bedrock geology: London Clay Formation Clay, silt and sand.
 - Superficial deposits: None recorded.
- 4.2 Soil characteristics and index properties (shrink/swell potential) can only be determined precisely by laboratory testing of soil samples.



5 Services

5.1 No information relating to the services has been provided. No information or reports relating to the condition of the drains have been made available. Inspection chamber covers have not been lifted or any other inspection of the drains made.

6 Appraisal

- 6.1 There are a total of three individual trees and one hedge identified, which present a potential risk to the building, its occupants, or visitors.
- 6.2 In terms of the risk from whole or part tree failure, this is currently assessed as moderate, as indications of poor tree health of tree T2 Common ash were observed, which may compromise its structural stability.
- 6.4 There is the potential for disruption/displacement to hard surfacing (footpaths and paving) from surface roots, however these issues can be addressed easily by pruning of offending surface roots if such damage were to occur.
- 6.5 We have not carried out any excavations to confirm soil characteristics. However, reference to British Geological Survey maps identifies this area as being dominated by soils with a high clay related ground movement potential. Clay related soil shrinkage is likely to be extensive in the area.
- 6.6 Without site specific information on subsoil soil characteristics (site investigations would be needed to determine this) and foundation depth and design, a definitive appraisal of tree related subsidence risk cannot be given.
- 6.7 Based on the above and the information currently available to us, the potential for root induced subsidence damage is moderate. On this basis, remedial pruning work is considered necessary to address subsidence risk issues.
- 6.8 Trees are dynamic structures and should be subject to regular inspection by a competent person to assess their physiological condition and structural stability. A further inspection of the trees should be made within 2 years of this report, or sooner should any signs of ill health, disease or damage be observed or following periods of extreme weather.



7 Table 1 Tree Details

Full Tree ID	Common Name	Botanical Name	Height (m)	Canopy Spread (m)	Stem Dia. (mm)	Life Stage	Physiological Condition	Structural Condition	Comments	Recommendations
T1	Himalayan birch	Betula utilis var jacquemontii	9	6	270	Early mature	Good	Good	5m distance to building, located in front garden flowerbed with retaining wall, low canopy over highway, dense canopy, minor historical movement to adj. garden wall	Reduce height and lateral growth by approx. 1m, selectively thin canopy to allow more sunlight to penetrate without altering the size and shape of the canopy, lift canopy to 2.5m by removing low secondary branches to suitable growth points



Key

Full Tree ID.: This number identifies the trees and corresponds with the provided plans. Trees are prefixed T, groups G and hedges H. Where stumps are identified the suffix S will be used.

Height: Measured in metres.

Canopy Spread: Measured in metres

Stem Diameter (Ø): Taken at 1.5m above ground level.

Life Stage: This refers to the age of the individual tree relating to the average life expectancy of each species in a similar environment:

Y (Young): Recently planted or establishing tree that could be transplanted without specialist equipment i.e. up to 12-14cm stem girth.

SM (Semi-mature): An established tree but one which has not reached its potential ultimate height and has significant growth potential.

EM (Early mature): A tree reaching its ultimate potential height, whose growth rate is slowing down but will increase in stem diameter and crown spread and has a safe useful life expectancy.

M (Mature): A mature specimen with limited potential for any significant increase in size but with a reasonable safe useful life expectancy.

LM (Late mature): A senescent or moribund specimen with a limited safe useful life expectancy. Possibly also containing sufficient structural

defects with attendant safety and/or duty of care implications.

V (Veteran): An over-mature specimen of high value due to its age, size and/or ecological significance.

Physiological condition: Overall physiological condition of tree: Good; Fair; Poor; Dead

Structural condition: Overall structural condition of tree: Good; Fair; Poor; Hazardous

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8 Site Plan





9 Images



Image 1. View tree T1 Himalayan birch from opposite side of street



Image 3. Close-up view tree stem from adj. footway



Image 2. View tree and garden wall from adj. footway



Image 4. Close-up view of lower stem from inside of garden



10 Disclaimers

- 10.1 The information and opinion in this report is offered in the interests of sound arboricultural management and should not be interpreted as a recommendation to proceed with the purchase of the property or for mortgage lenders to advance a mortgage charge on the property or for insurers to offer cover for the subject property.
- 10.2 Greenwood Environmental Ltd are instructed as arboricultural consultants and are not qualified to offer formal advice relating to structural or geotechnical matters. If the opinion offered within this report does not allow you to evaluate the risks for your purposes, we advise that you employ the services of a Chartered Engineer or geotechnical specialist.

11 General Points

- 11.1 Due to the risk of direct damage from secondary thickening of trunks and roots against built structures or indirect damage (subsidence) from localised soil drying, it is recommended that no woody plants, such as: trees; shrubs or climbers are allowed to grow within 1m of any built structures.
- 11.2 Property owners should have, and maintain, adequate buildings insurance that includes cover for subsidence. They should notify their building insurers as soon as possible if any movement occurs which could be subsidence. The insurer will then investigate to determine the cause (usually through the services of a structural engineer, who may arrange further investigations and monitoring of the structure over an extended period to identify the pattern of movement).

12 Tree Work

12.1 Tree work must only be carried out by suitably qualified and insured tree work contractors in accordance with BS3998: 2010 "Tree work – Recommendations", plus all current health and safety legislation, regulations, and codes of practice.



APPENDIX A

Tree Legislation and Guidance



The following advice applies to England only and is for guidance purposes only. Some trees are protected by legislation, and it is essential that you establish the legal status of trees prior to carrying out works to them. Unauthorised work to protected trees could lead to prosecution, resulting in enforcement action such as fines or a criminal record. Tree Preservation Orders, Conservation Areas, Planning Conditions, Felling Licences or Restrictive Covenants legally protect many trees in the UK.

Tree Preservation Orders (TPOs)

TPOs are administered by Local Planning Authorities (LPA) (e.g. a borough, district or unitary council or a national park authority) and are made to protect trees that bring significant amenity benefit to the local area. This protection is particularly important where trees are under threat.

All types of tree, but not hedges, bushes or shrubs, can be protected, and a TPO can protect anything from a single tree to all trees within a defined area or woodland. Any species can be protected, but no species is automatically protected by a Tree Preservation Order.

A TPO is a written order which, in general, makes it a criminal offence to cut down, top, lop, uproot, wilfully damage or wilfully destroy a tree protected by that order, or to cause or permit such actions, without the authority's permission. Anyone found guilty of such an offence is liable. In serious cases the case may be dealt with in the Crown Court where an unlimited fine can be imposed.

To make an application to carry out tree works you will need to complete an application form and submit it to the LPA. The form can either be submitted through the Planning Portal or directly to the

LPA. You can find out more about TPOs in the Department for Communities and Local Government guide titled <u>Protected trees: A guide to tree preservation procedures</u> (withdrawn 7 March 2014) and it's replacement <u>The National Planning Policy Framework and relevant</u> <u>planning practice guidance</u> document with particular reference to <u>Tree Preservation Orders</u> <u>and trees in conservation areas</u>.

Conservation Areas

Normal TPO procedures apply if a tree in a conservation area is already protected by a TPO. But if a tree in a conservation area is not covered by a TPO, you have to give written notice to the LPA (by letter, email or on the LPA's form) of any proposed work, describing what you



want to do, at least six weeks before the work starts. This is called a 'section 211 notice' and it gives the LPA an opportunity to consider protecting the tree with a TPO.

You do not need to give notice of work on a tree in a conservation area less than 7.5 centimetres in diameter, measured 1.5 metres above the ground (or 10 centimetres if thinning to help the growth of other trees).

You can find out more about trees in Conservation Areas in the Department for Communities and Local Government guide titled <u>Protected trees: A guide to tree preservation</u> <u>procedures</u> (withdrawn 7 March 2014) and it's replacement <u>The National Planning Policy</u> <u>Framework and relevant planning practice guidance</u> document with particular reference to <u>Tree Preservation Orders and trees in conservation areas</u>.

Trees and the planning system

Under the UK planning system, LPAs have a statutory duty to consider the protection and planting of trees when granting planning permission for proposed development. The potential effect of development on trees, whether statutorily protected (e.g. by a tree preservation order or by their inclusion within a conservation area) or not, is a material consideration that is taken into account when dealing with planning applications. Where trees are statutorily protected, it is important to contact the LPA and follow the appropriate procedures before undertaking any works that might affect the protected trees.

Planning conditions are frequently used by LPAs as a means of securing the retention of trees, hedgerows and other soft landscaping on sites during development and for a period following completion of the development. If it is proposed to retain trees for the long term then a TPO is often used rather than a planning condition. If valid planning conditions are in place then anyone wishing to undertake work to trees shown as part of the planning condition must ensure they liaise with the LPA and obtain any necessary consent or variation.

The nature and level of detail of information required to enable an LPA to properly consider the implications and effects of development proposals varies between stages and in relation to what is proposed. Table B.1 of British Standard *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations* provides advice to both developers and LPAs on an appropriate amount of information that will need to be provided either at the planning application stage or via conditions.

Felling Licences

Felling Licences are administered by the <u>Forestry Commission</u>. You do not need a licence to fell trees in gardens. However, for trees outside gardens, you may need to apply to the Forestry



Commission for a felling licence, whether or not they are covered by a TPO. You can find out more about felling licences at <u>Felling Licences</u> quick guide (England) or in the Forestry Commission's booklet <u>Tree Felling – getting permission</u>.

Sites of Special Scientific Interest (SSSI)

SSSIs (ASSIs in Northern Ireland) are designated by the Statutory Nature Conservation Organisation (SNCO) for each country of the United Kingdom. They include some of our most spectacular and beautiful habitats - large wetlands teeming with waders and waterfowl, winding chalk rivers, gorse and heather-clad heathlands, flower-rich meadows, windswept shingle beaches and remote uplands moorland and peat bog. Each SSSI will have a management plan and a list of operations requiring the SNCOs consent prior to carrying out works.

Any activity that recklessly or intentionally harms the SSSI (ASSIs in Northern Ireland) or its flora or fauna will be an offence liable on summary conviction to a fine not exceeding £20,000 or on conviction on indictment to an unlimited fine. If you know the name of the Site of Special Scientific Interest and want to know more about it, you can search for it by country at England, Wales, Scotland or Northern Ireland.

Restrictive Covenants

A restrictive covenant is a promise by one person to another, (such as a buyer of land and a seller) not to do certain things with the land or property. It binds the land and not an individual owner, it "runs with the land". This means that the restrictive covenant continues over the land or property even when the current owner(s) sells it to another person. Restrictive covenants continue to have effect even though they may have been made many years ago and appear to be obsolete.

Covenants or other restrictions in the title of a property or conditions in a lease may require the consent of a third party prior to carrying out some sorts of tree work, including removing trees and hedges. This may be the case even if TPO, CA and felling licence regulations do not apply. It may be advisable to consult a solicitor.

Further information

Further information about TPO legislation can be found in the latest <u>National Planning Policy</u> <u>Framework</u> with particular reference to <u>Tree Preservation Orders and trees in conservation</u> <u>areas</u>.

More detailed information on TPOs: <u>www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas#Flowchart-1-Making-and-confirming-TPO</u>



Trees in Relation to Subsidence

Subsidence in this instance is understood to be indirect damage by tree roots, where water is removed by the tree roots from a shrinkable clay soil beneath the foundations of a property. It is understood that the weight of the structure then compresses the soils, resulting in the building subsiding. Usually this does not occur uniformly and the subsequent differential movement results in the building exhibiting cracks. This situation is exacerbated in drought conditions. Cracks may or may not be due to subsidence through vegetation demand. This is best adjudicated by a structural engineer, or similarly trained professional. A period of monitoring should be carried out before and after any tree work operations. This is to establish a link with seasonal movements within the soil related to the seasonal water demands of the vegetation, and to ensure that stability has been achieved before repairs are made to the property. Any connection between structural damage to a property and the surrounding vegetation will require definite identification of shrinkable soils and an analysis of the moisture levels of those soils below the foundations of the property.

Trees in Relation to Heave

It is important to consider the effects of Heave on the property if trees are removed. Generally, where the trees are older than the property their removal could subsequently lead to problems of Heave. Heave potential can be calculated from soil samples. This can be done by a Structural Engineer. The risk of Heave maybe considered within the report, yet the responsibility to calculate and evaluate this risk will lie with a Structural Engineer before agreeing to and carrying out any tree works as maybe detailed in the recommendations.

Occupiers Liability Act 1957 and 1984 The Occupiers Liability Act (1957 and 1984)

Places a duty of care on tree owners to ensure that no reasonably foreseeable harm takes place to people or property due to their tree. 'Common sense risk management of tree (National Tree Safety Group 2012)' states that, 'The owner of the land on which a tree stands, together with any party who has control over the tree's management, owes a duty of care in Common Law to all people who might be injured by the tree. The duty of care requires that reasonable steps are taken to avoid acts or omissions that could cause a reasonably foreseeable risk of injury to persons or property'.



Common law

Enables pruning back as far as the boundary line only, providing the work is reasonable and does not negatively impact tree health or safety. Other restrictions on tree works, such as tree preservation orders still apply.

Tree Work

All tree work should be carried out in compliance with BS3998: 2010 "Tree work – Recommendations", plus all relevant health and safety legislation, regulations and codes of practice.

Biosecurity

Where there is a risk of transferring pathogens to vegetation at other sites, felling and pruning equipment must be disinfected after use. Also consider brushing mud and debris from soles of boots, and spraying boots and vehicle tyres before leaving the site (suitable disinfectants include Propellar & Cleankill Sanitising Sprays). All disinfectants should be used in accordance with the recommended safety precautions (refer to the material data safety sheet for each product).

Wildlife & Countryside Act 1981 (as amended) and Countryside and Rights of Way Act 2000

It is an offence to intentionally or recklessly damage or destroy the nest of any wild bird while it is in use or being built. Please therefore check for the presence of nesting birds before commencing work. Where nesting birds are found to be present, the contractor must stop work immediately and postpone work until further notice.

Conservation of Habitats and Species Regulations 2010 (as amended)

This applies to European protected species which refers primarily to bats.

- (a) A person is guilty of an offence if he/she:
- (i) deliberately captures, injures or kills a protected species,
- (ii) deliberately disturbs a protected species,
- (iii) damages or disturbs a breeding site or resting place.

When bats are found to be present, the contractor must stop work immediately and postpone work until further notice.



APPENDIX B

Reference Material



- NHBC Building near trees Chapter 4.2 (2022). National House Building Council, Amersham Bucks.
- G. Mercer, A. Reeves & D. O'Callaghan. 'The Relationship between Trees, Distance to Buildings and Subsidence Events on Shrinkable Clay Soil' AB Academic Publishers 2011. Arboricultural Journal, 33, 229-245.
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- Handley, P., Walker, H., Ansine, J., Baden, R., Craig, I., Dewhurst-Richman, N., Doick, K.J., Fay, L., Mackie, E., Parratt, M., Perez-Sierra, A., Sparrow, K., Wheeler, P. (2022) Individual Tree Data Standard. Forest Research, Farnham. p:52. ISBN: 978-1-83915-015-9
- The Arboricultural Association (24/11/2015 Last Modified: 01/07/2019) A brief guide to legislation for trees.





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