



Arbssystem

Arboricultural Survey, Impact Assessment and Method Statement

as per BS5837:2012 Trees in relation to design demolition and construction- Recommendations
at

8 Queens Road
Waterlooville
PO7 7SB



File Ref: ASIAMS154.1

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29.11.22



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1. Summary

1.1 Instruction and overview of the report

1.1.1 Arbsystem were instructed to carry out an Arboricultural Survey and prepare an Arboricultural Impact Assessment (AIA) and Arboricultural Method Statement (AMS) by Mr Brian Wragg, 8 Queen's Road, Waterlooville PO7 7SB. Existing significant trees were recorded.

1.2 Arboricultural Survey (AS)

1.2.1 A tree survey as per the requirements for BS5837:2012 was carried out. Existing significant trees within the land of 8 Queen's Road and neighbouring land that was deemed necessary for consideration were recorded within the Arboricultural Survey (AS). The results of the survey are presented within this report.

1.3 Arboricultural Impact Assessment (AIA)

1.3.1 The Arboricultural Impact Assessment (AIA) examines the relationship between trees and adjacent features (present & proposed). It examines how the trees and features will interact, influence and impact each other.

1.3.2 The purpose of the AIA study is to determine whether the proposed development will adversely affect the established trees and whether these trees will be the cause of nuisance to the proposed development.

1.4 Arboricultural Method Statement (AMS)

1.4.1. A method statement has been created to incorporate the proposed development and prevent or minimise impact from the proposed development and the construction process upon the retained trees.

2. Introduction

2.1 Development proposals

2.1.1 It is understood the proposed development encompasses the erection of a new extension to the existing dwelling.

2.2 Site, location and details

2.2.1 The site includes a detached residential dwelling, a garage, an outbuilding and a garden.

2.2.2 The trees described in this report are located in neighbouring property and close to the site boundaries.

2.2.3 The site is in Waterlooville. Waterlooville is a Town within the borough of Havant which is in the county of Hampshire. The property is located at grid reference SU 68714 10497.

2.2.4 The area immediately surrounding the site is suburban, with detached and semi-detached properties with front and rear gardens.

2.2.5 The site is not within a Conservation Area and there are no trees protected by a tree preservation order (TPO) within or neighbouring the site.



2.2.6 This site is not a site of specific scientific interest.

2.2.8 The Geology of Britain viewer <https://geologyviewer.bgs.ac.uk/> has been used to check the prevailing soil type in the area. This indicated that the underlying bedrock comprises of London Clay Formation. No superficial deposits are listed at this location.

2.3 Planning status

2.3.1 It is understood this report is in support of a planning application to develop the existing site, as set out in **2.1.1** of this report.

2.4 Scope of this study and limitations

2.4.1 The purpose of this report is to assess the trees in and around the site and to consider the proposals in relation to those trees. This report aims to enable appropriate planning to ensure a well-considered approach to the design and implementation processes is achieved regarding the trees.

2.4.2 This report is not concerned with the health and safety risks these trees could pose, other than determining their individual categorisation and establishing acceptable levels of risk for the proposed land use, nor is it to decide whether planning permission should or should not be granted.

2.4.3 The surveying was carried out from ground level. No aerial inspections, decay detection or further arboricultural testing has taken place.

2.4.4 No ecological survey has taken place in direct connection with this report.

2.4.5 No soil survey has taken place in direct connection to this report.

2.4.6 The surveyed trees have been plotted onto the provided topographical survey plan, (file ref: 21102 415F).

2.4.7 Access was not possible to measure the trees as they were in neighbouring property, so the measurements have been generously estimated.

3. Arboricultural Survey

3.1 Methodology

3.1.1 The trees were inspected from ground level by arboricultural consultant Gillon Laidlaw on the 28th of September 2022.

3.1.2 Categorisation was made, and measurements were taken in accordance with the recommendations set out in BS5837:2012. Canopy spreads were measured and plotted to the four compass points. Direct access was not possible therefore measurements have been generously estimated.

3.1.3 The surveyed trees are colour coded on the accompanying tree survey drawing according to their relevant BS category, where categorisation was possible.

3.1.4 The tree data collected was used to show the current canopy spread and to calculate the standard Root Protection Area (RPA). These are plotted on the accompanying plans (154 - M01 and M03).



3.1.5 The standard RPA used is defined by the formula in paragraph 4.6 from the BS 5837:2012 and may be refined by considering current on-site constraints to root activity such as buildings, underground structures, earthworks and hard paving.

3.2 Survey results - summary

3.2.1 The detailed results of the tree survey are provided in the Tree Survey Data (Appendix).

3.2.2 There were 10 significant individual trees surveyed which were adjacent to the site.

3.2.3 All 10 of the individual trees were located in neighbouring land. It was not possible to fully assess these trees.

3.2.4 5 out of the 10 trees surveyed were highlighted for removal due to their condition and limited expected contribution.

3.2.5 4 out of the 10 trees surveyed were categorised as C2 and 1 of the 10 trees was categorised as B2.

3.3 The Survey Key

3.3.1 Ref – The identification number given to the tree

3.3.2 Species – Common/English and botanical name of the tree.

3.3.3. Full structure – type of structure and number of stems of a multi stemmed tree

3.3.4 Measurements:

- Height – Height of each tree in metres
- Stem diameter – Diameter of the stem at 1.5 metres above ground level
- Life stage – maturity
- Remaining Contribution – considered life expectancy in years
- Spread – Crown spread in four compass points
- Crown clearance – height in metres above ground level of the lowest part of the canopy
- Lowest branch – height and direction of the lowest branch.

3.3.5 General observations – observations recorded during the survey

3.3.6 RPA – Radius in metres and full **Root Protection Area** in square metres

3.3.7 Physiological condition – the condition in relation to the functions of the tree as an organism

3.3.8 Structural condition – the condition in relation to the structure of the tree and structural integrity

3.3.9 Category – categorisation of the tree as per BS5837:2012, with colours presented on the tree constraints plan in the appendix (ASIAM154-M01):

- **A** - Tree of high quality with an estimated life expectancy of at least 40 years
- **B** – Tree of moderate quality with an estimated life expectancy of at least 20 years
- **C** – Tree of low quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter of below 150mm.



- **U** – Tree of low quality that is in such a condition that it cannot be retained as a living tree for longer than 10 years and therefore may be unsuitable for retention.

In addition to the categorisation letter, a number is attributed to category A, B and C trees. These numbers relate to the following qualities and values:

- 1- Mainly arboricultural qualities
- 2- Mainly landscape qualities
- 3- Mainly cultural values, including conservation

4. Arboricultural impact assessment (AIA)

4.1 Objectives

4.1.1 To assess the proposals in relation to the trees in and around site. This is particularly to assess if trees or woody plants would need to be removed to facilitate the proposals, or assess any impacts where works are proposed to be carried out near retained trees.

4.1.2 To determine whether the proposed works can be carried out successfully without adversely affecting the trees, both in the short and long term.

4.1.3 To determine whether the trees will have adverse impacts on the proposed development, both in the short and long term.

4.1.4 To assess if any alterations to the design or mitigation is necessary due to conflicts between retained trees and the proposed development.

4.2 Items for consideration

4.2.1 Direct impacts from tree losses, in terms of direct visual impact, environmental impact and impact on the landscape character of the area.

4.2.2 Root disturbance caused by, excavation & construction.

4.2.3 Installation of services in close proximity to the retained trees and associated damage.

4.2.4 Grade/ground level and surface alterations that may have implications for tree root systems.

4.2.5 New planting- design of the scheme and associated landscape operations.

4.2.6 Sunlight shading of buildings or exterior amenity areas (such as gardens, patios etc.), which may lead to pressure to prune or fell.

4.2.7 Physical encroachment by roots, tree stems and branches.

4.2.8 Allowance for future tree growth.

4.2.9 Likelihood of indirect damage to the proposed development caused by retained trees.

4.2.10 Health, safety and nuisance items e.g. leaves, fruit and residues, which may lead to pressure to prune or fell.



4.2.11 Location of welfare/office buildings & material storage.

4.2.12 Likelihood of damage to retained trees caused by the likely development activities and prevention through tree protection measures.

4.2.13 Whether access pruning is required prior to enable access and prevent damage to retained trees.

4.2.14 Other tree works required to reduce risk to suitable levels given the proposed land use.

4.3 Results of Analysis - Summary

4.3.1 There are no trees that will need to be removed to enable the proposed development. Therefore, no impact is expected, and no mitigation required.

4.3.2 There is no impact upon the landscape through tree losses due to the visibility, condition and longevity of trees.

4.3.3 The neighbouring trees have not been fully inspected. Although many of the trees surveyed were categorised as U, due to poor condition and limited life expectancy, the trees are not owned by the client and the construction has been designed to incorporate the trees growing closest to the proposals, regardless of their category.

4.3.4 Under normal circumstances, trees with a U category would be removed prior to construction processes going ahead, but in this instance careful consideration has been taken to accommodate all of the trees present.

4.3.5 On site plans showing the trees present, RPA's have been plotted as if all the trees are category C. This has allowed design of the foundations to be a minimum possible impact to the adjacent trees.

4.3.6 In addition, it is anticipated that there will be limited rooting activity from neighbouring trees in the northeast section of the proposed construction, see figures 1 & 2 in the appendix. The client previously purchased a section of land from neighbouring property, when cleared the client found a large concrete slab, which had been used historically as a car park by the neighbour.

4.3.7 This type of sealed concrete slab construction would not provide favourable rooting conditions underneath the slab for trees due to limited movement of water and gaseous exchange. Therefore, it is expected there is few to no roots present from neighbouring trees beneath the northeast section of the proposed development (beneath the 'Family Room')

4.3.8 A scheme to provide the methodology of development and guidance to minimise or prevent potential impacts on all the retained trees' RPAs, or above ground structures, is set out in the Arboricultural method statement (AMS).

4.4 Results of Analysis - general

4.4.1 There were no trees to be removed or pruned to allow for construction processes to take place.

4.4.2 Special foundation construction is planned to limit the potential impact on trees adjacent to the proposals. Pad foundations are planned to be used, with steel beams on top to support the proposed structure. The positions of the pad foundations, (proposed pad positions shown in drawing 41102 415F) may be altered if there is significant rooting activity found when hand digging.



4.4.3 The proposed structure to be created on top of the pad foundations will incorporate an airgap under the construction to allow for air and water to permeate the ground where there could be rooting activity from neighbouring trees.

4.4.4 The risk of root disturbance caused by excavation and construction is considered to be low if the Arboricultural Method Statement (AMS) is followed. The AMS defines how the risk of damage will be minimised through the prohibitions within RPAs.

4.4.5 Given the location and the scope of the development, it is considered that the current services will be used. However, should any additional services be required during the project then the minimum standards required will be those as set out in the National Joint Utilities Group (NJUG) 2007 Volume 4, Issue 1: Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. If the guidance, prohibitions and precautions for the installation of new services that is provided in the AMS is followed, the impact of service installation is expected to be low.

4.4.6 There are no landscaping or surfacing changes within the RPAs of retained trees.

4.4.7 Shading by the existing trees to the proposed development will create an impact given the nature and future use of the proposals. See shade plan, ref: **154- M03**.

4.4.8 The impact of physical encroachment by parts of the retained trees upon the proposed development is considered to be low. The proposals are an adequate distance away from above and below ground parts of the retained trees.

4.4.9 In addition the tree owner keeps his trees pruned to just inside the boundary fence.

4.4.10 The design provides adequate provision for future tree growth.

4.4.11 Given the recorded soil type being London clay, the trees and the proposals, the risk of indirect impact is possible but considered to be low. It is expected that the project engineer will provide suitable engineering and foundation specifications, given the possibility of soil shrinkage or swelling, considering the proximity to trees.

4.4.12 Health, safety and nuisance items e.g. leaves, fruit and residues, which may lead to pressure to prune or fell is considered to be low, as there are no tree canopies over the proposed structure. There is a potential for leaf drop to cause a minor nuisance by a build-up of leaf litter on top of the flat roof construction to the extension. However, the client regularly has the first-floor windows cleaned and will request the contractor clears the flat roof of leaf litter each time the first-floor windows are cleaned.

4.4.13 There is some space for skips, storage of materials and welfare facilities on the driveway to 8 Queens Road.

4.4.14 The likelihood of damage cause by the development to the retained trees is considered to be low and protection measures are provided in the AMS.

4.4.15 No pruning is anticipated to enable access and prevent damage to retained trees.

4.5 Conclusions of AIA

4.5.1 There is no impact upon the landscape through tree losses.

4.5.2 If the methodology and prohibitions in the AMS are followed, the likelihood of damage to the retained trees is considered low. Therefore, it is considered the proposed development can be carried out successfully without adversely affecting the trees, in the short and long term.



4.5.3 It is considered the retained trees will not have adverse effects on the proposed development, both in the short and long term.

4.5.4 With alterations to the design having been recommended due to trees adjacent to the proposals, the Arboricultural Impact Assessment concludes this to be a low impact scheme.

4.5.5 Methodology, including prohibitions and precautions with the RPAs of retained trees, have been provided in the AMS.

5. Arboricultural Method Statement (AMS)

5.1 Overview

5.1.1 The key protection issues associated with this project, in relation to the existing trees, in the short, medium, and long term are the requirement for:

- The protection of tree habitat
- The protection of the retained trees from damage to the above and below ground structures
- The protection of the soil structure and prevention of damage to tree root systems by chemicals and other noxious substances/materials
- The protection of the proposed built structures from impacts caused by the retained trees

5.2 Introduction

5.2.1 The AMS sets out the management and protection details in support of the planning proposal and must be implemented to ensure successful tree retention.

5.2.2 The AMS provides guidance on the typical range of processes that are involved during development and attempts to ensure that suitable methods of implementation are carried out.

5.2.3 The AMS also aims to provide an overview of the development process and attempts to address any potential issues and conflicts that may arise and provide acceptable solutions, resolving them in line with current industry best practices.

5.2.4 An arboricultural sequencing of events schedule is provided in the appendix of this report and is to be used in conjunction with the AMS to ensure continued tree protection, to avoid potential breaches of planning and delays to the development. The arboricultural sequencing of events and site monitoring should be integrated into the planning of the development.

5.3 Development methodology and mitigation

5.3.1 No service drawings have been provided and no new service installation within RPAs of retained trees are anticipated, due to the proposal being an extension to the existing property. If new service installations are required these should be carried out wherever possible outside of RPAs. If this is unavoidable and installations are required within RPAs, the method and final positions of any proposed services should be verified and approved by the AC before implementation. In planning such installations, the preference order for techniques used are: a) trenchless, b) Broken trench (hand-dug) and c) Continuous trench (hand-dug) as per the NJUG guidelines- *Volume 4, NJUG Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees*. If trenchless methods



are to be used, the starting and finishing pits at both ends of the service run needs to be outside RPAs. Where a hand dug option is agreed, any roots discovered during the excavations will be dealt with as described in *5.4 Prohibitions and precautions within RPAs*. Backfilling within RPAs should be carefully carried out to avoid direct damage to roots and excessive compaction of the soil around them.

5.3.2 No landscaping or surface changes are required within RPAs therefore no methodology or mitigation is provided.

5.3.3 No pruning or other measures have been deemed necessary for encroachment reasons.

5.3.4 No pruning or other measures have been deemed necessary for allowing suitable future expansion growth.

5.3.5 The project engineer will provide suitable specifications to ensure that the foundations and engineering specifications for the extension, are adequate given the soil type and risk of indirect damage, through soil shrinkage and expansion.

5.4 Prohibitions and precautions within RPAs

5.4.1 No linear mechanical excavation without prior written agreement from the Arboricultural Consultant (AC).

5.4.2 No excavation, including soil displacement or hand digging without a written method statement from the main contractor having first been approved in writing by the AC.

5.4.3 No excavation without arboricultural site monitoring unless agreed by the AC.

5.4.4 No lowering of or raising of soil levels unless agreed in writing with the AC.

5.4.5 No construction of a sealed hard surface.

5.4.6 No storage of plant or materials, unless on ground protection. This permission excludes storage of potentially harmful substances which cannot be stored on ground protection unless with prior planning and agreement of further measures, such as bunded areas.

5.4.7 No storage or handling of any chemicals including cement washings, unless the AC approves site-specific protection and mitigation.

5.4.8 No fire lighting.

5.4.9 Investigative excavation is required within or near to RPAs of retained trees, this should be planned and agreed with the AC. Trial excavations can be carried out through careful hand digging or soil displacement with an air spade. Exposed roots should be immediately wrapped with hessian to prevent desiccation or rapid temperature changes. Roots under 25mm may be pruned using a sharp hand tool following consultation with the AC. Roots over 25mm or equivalent sized clumps of roots require consultation with the AC who will be able to advise on whether the roots can be cut.

5.5 Further precautions when working near retained trees

5.5.1 Any mixing or storage of cement and other substances injurious to tree health, must be at least 10 metres from the RPAs unless specific mitigation is agreed before works go ahead.



5.5.2 All site operations shall be carefully planned to prevent any contact with any parts of the retained trees.

5.6 Tree Protection fencing and barriers

5.6.1 The proposed scheme involves construction activities near retained trees.

5.6.2 Tree protection fencing is not required to create a construction exclusion zone as the boundary fence will remain in place throughout the project and once the project is completed. This will act as a physical barrier which is 2 metres above ground level and secure in its position.

5.7 Ground protection measures

5.7.1 Ground protection has not been specified within the RPAs of retained trees as work will be taking place within the RPAs, there will be no machinery used within the RPAs and the pad foundation excavation will be carried out by hand, therefore no ground protection is needed.

5.7.2 If ground protection is added during the development, its loading capacities and storage capabilities should be carefully observed and not exceeded throughout the development.

5.8 Access pruning and other tree works

5.8.1 No tree removals are needed before construction activities commence.

5.8.2 No access pruning is anticipated. However, if any pruning is deemed necessary, the project AC shall be contacted so this can be planned and may only be conducted following written consent from the tree owner and AC.

5.8.3 Under no circumstances may the construction contractors prune any trees. All tree pruning must be undertaken by suitably qualified and insured arboricultural contractors, in accordance with BS3998:2010 and current best arboricultural practices, following consent of the AC.

5.9 Other precautions

5.9.1 Due to construction processes planned within RPAs to retained trees, excavation for the pad foundations will be carried out by hand digging, under supervision from the project AC.

5.9.2 Hand digging will identify any significant roots present. If significant roots are found in the location of the pad foundations planned, there is scope to move the pads to locations which don't have significant roots present.

5.9.3 When pouring concrete for the pad foundations, a non-permeable membrane will be used to line the excavated holes before concrete is poured. This will prevent leaching into the surrounding soil as the concrete sets.

5.10 Contingency plans



5.10.1 A general contingency plan for this project should be prepared by the main contractor for controlling such things as chemical/fuel spillage, runoff from cement washings, sewage or water leaks, site collisions and emergency access into or adjacent to tree protection areas. The plan must be agreed by the AC before commencement of works.

6. Enquiries

Any enquiries relating to this report should be addressed, in the first instance, to Gillon Laidlaw, Kelvedon House, Guildford Road, London, SW8 2DN.

7. Appendix

1. Tree Survey data

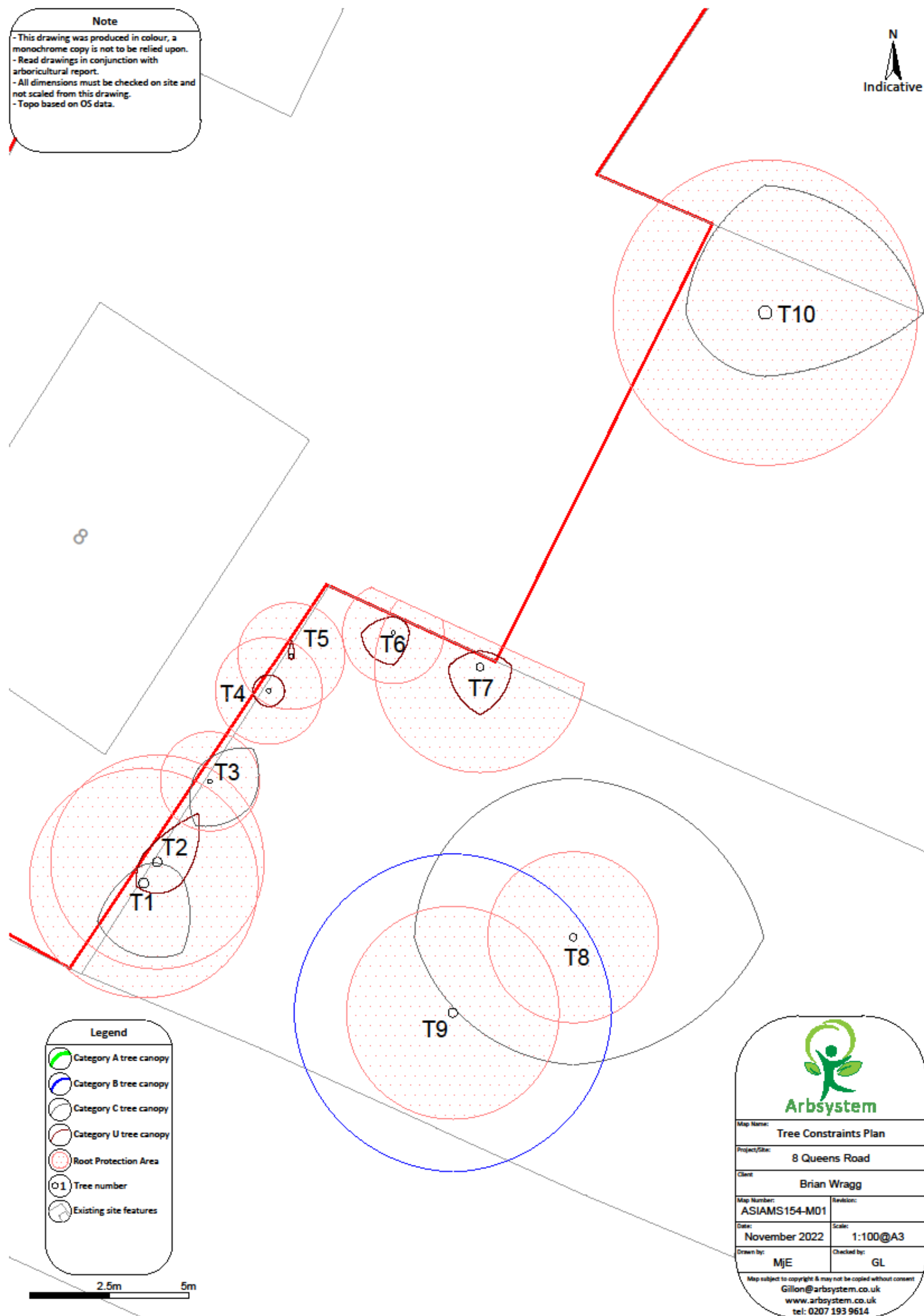
Ref.	Species	Measurements	General Observations	RPA	Physiological Cond	Structural Cond	Retention Category
T001	Western Red Cedar (<i>Thuja plicata</i>)	Height (m): 5 Stem Diam (mm): 300 Spread (m): 1N, 2E, 2S, 1W Crown Clearance (m): 2 Lowest Branch (m): 1(N) Life Stage: Mature Rem. Contrib.: 20+ Years	Asymmetrical canopy, bias east, pruned to 5m height and west side kept pruned to the boundary, low value tree due to shape and constant pruning needed to maintain along the boundary.	Radius: 3.6m. Area: 41 sq m.	Fair	Fair	C2
T002	Western Red Cedar (<i>Thuja plicata</i>)	Height (m): 5 Stem Diam (mm): 280 Spread (m): 0.5N, 2E, 1S, 1W Crown Clearance (m): 2 Lowest Branch (m): 1(N) Life Stage: Over Mature Rem. Contrib.: <10 years	Asymmetrical canopy with bias east, decay on upper stem, very little live growth in upper canopy.	Radius: 3.4m. Area: 36 sq m.	Poor	Poor	U
T003	Norway Maple (<i>Acer platanoides</i>)	Height (m): 5 Stem Diam (mm): 130 Spread (m): 1.5N, 1E, 1.5S, 1W Crown Clearance (m): 2 Lowest Branch (m): 1.5(W) Life Stage: Semi Mature Rem. Contrib.: 20+ Years	Asymmetrical canopy with bias north and south, heavily pruned in the last 2 years, been kept pruned in line with the boundary. Long term the tree will need to be removed due to proximity to the boundary.	Radius: 1.6m. Area: 8 sq m.	Fair	Fair	C2
T004	Lawson Cypress (<i>Chamaecyparis lawsoniana</i>)	Height (m): 5 Stem Diam (mm): 140 Spread (m): 0.5N, 0.5E, 0.5S, 0.5W Crown Clearance (m): 2 Lowest Branch (m): 2(W) Rem. Contrib.: <10 years	Previously pruned to 1m above ground level, 2 small stems have regrowth, but with weak attachments to the main stem, these could fail on the future.	Radius: 1.7m. Area: 9 sq m.	Poor	Poor	U
T005	Not identified (<i>Not identified</i>)	Height (m): 5 Stem Diam (mm): 140 Spread (m): 0.5N, 0.5E, 0.5S, 0.5W Crown Clearance (m): 0 Lowest Branch (m): 0 Life Stage: Dead	Dead stem covered in ivy	Radius: 1.7m. Area: 9 sq m.	Dead	Poor	U

Ref.	Species	Measurements	General Observations	RPA	Physiological Cond	Structural Cond	Retention Category
T006	Lawson Cypress (<i>Chamaecyparis lawsoniana</i>)	Height (m): 4 Stem Diam (mm): 120 Spread (m): 0.5N, 0.5E, 1S, 1W Crown Clearance (m): 2.5 Lowest Branch (m): 2(W) Life Stage: Early Mature Rem. Contrib.: <10 years	Asymmetrical canopy with bias west and east, pruned to 4m in height and north side pruned to the boundary, poor vitality and shape some dieback on the Foliage.	Radius: 1.4m. Area: 6 sq m.	Poor	Fair	U
T007	Lawson Cypress (<i>Chamaecyparis lawsoniana</i>)	Height (m): 4 Stem Diam (mm): 230 Spread (m): 0.5N, 1E, 1.5S, 1W Crown Clearance (m): 3 Lowest Branch (m): 2(W) Rem. Contrib.: <10 years	Asymmetrical canopy with bias south, close to the boundary, some dead sections present, not much live foliage in the canopy, Ivy on stem	Radius: 2.8m. Area: 25 sq m.	Poor	Fair	U
T008	Common Ash (<i>Fraxinus excelsior</i>)	Height (m): 16 2 stems, diam(mm): 200, 100 Spread (m): 5N, 6E, 4S, 5W Crown Clearance (m): 6 Lowest Branch (m): 5(N) Life Stage: Early Mature Rem. Contrib.: 10+ Years	Slightly sparse canopy could be early signs of ash dieback, tree has grown with elongated stems due to light.	Radius: 2.7m. Area: 23 sq m.	Fair	Fair	C2
T009	Purple Cherry Plum (<i>Prunus cerasifera</i> 'Pissardi')	Height (m): 6 4 stems, diam(mm): 150, 170, 120, 110 Spread (m): 5N, 5E, 5S, 5W Crown Clearance (m): 2 Lowest Branch (m): 1(N) Life Stage: Mature Rem. Contrib.: 30+ Years	Difficult to see through other foliage but seems symmetrical and fully in leaf.	Radius: 3.3m. Area: 34 sq m.	Fair	Fair	B2
T010	Prunus (<i>Prunus sp.</i>)	Height (m): 7 Stem Diam (mm): 400 Spread (m): 4N, 5E, 2S, 2.5W Crown Clearance (m): 2 Lowest Branch (m): 2(N) Life Stage: Mature Rem. Contrib.: 30+ Years	Asymmetrical canopy with bias east, possibly due to historical overshadowing, tree pruned recently to try and balance canopy.	Radius: 4.8m. Area: 72 sq m.	Fair	Fair	C2

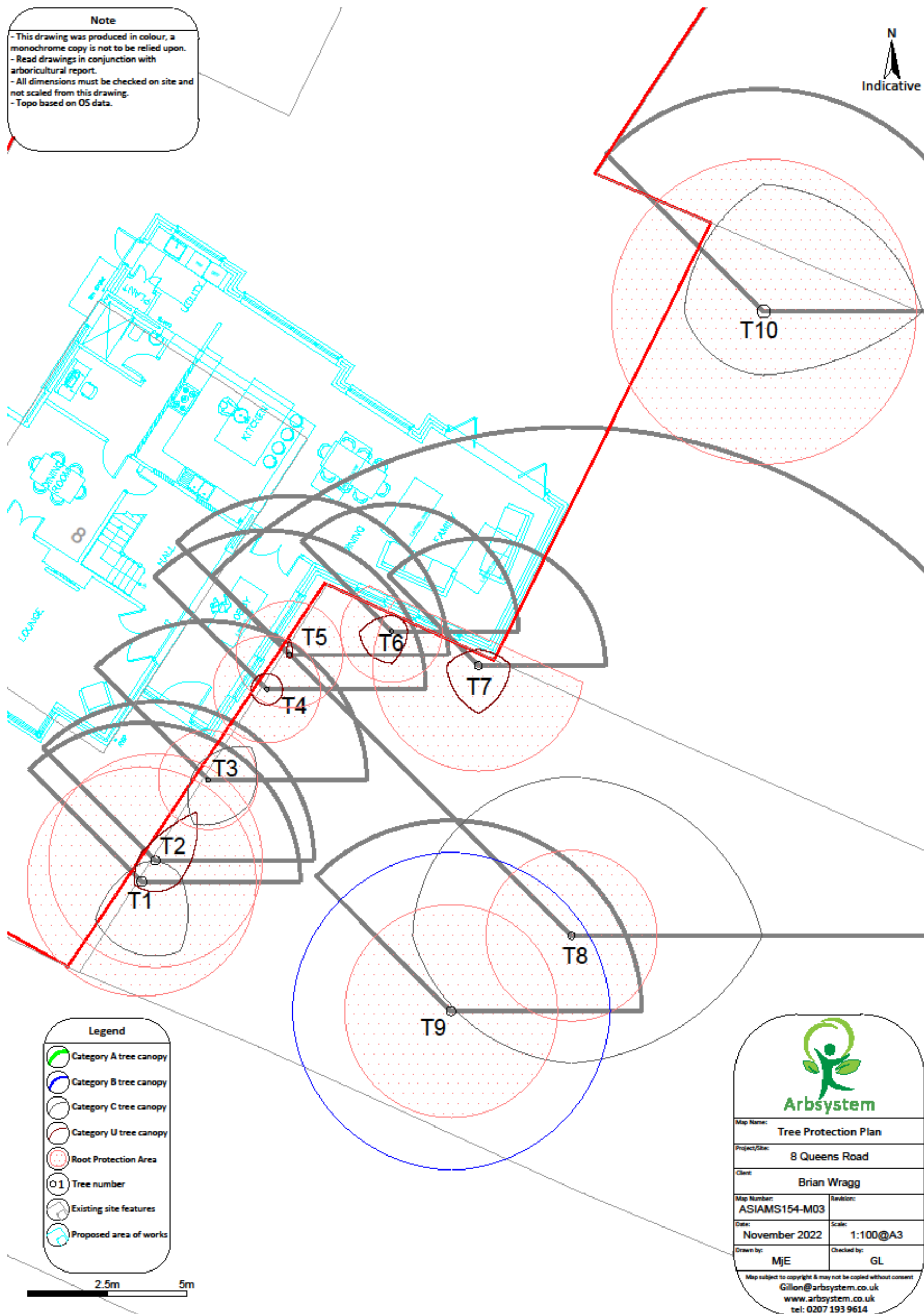
2 Tree constraints plan- 154M01

Note

- This drawing was produced in colour, a monochrome copy is not to be relied upon.
- Read drawings in conjunction with arboricultural report.
- All dimensions must be checked on site and not scaled from this drawing.
- Topo based on OS data.



3. Shade and constraints plan- 154-M03



4. Site Plan provided showing planned foundation positions A-E

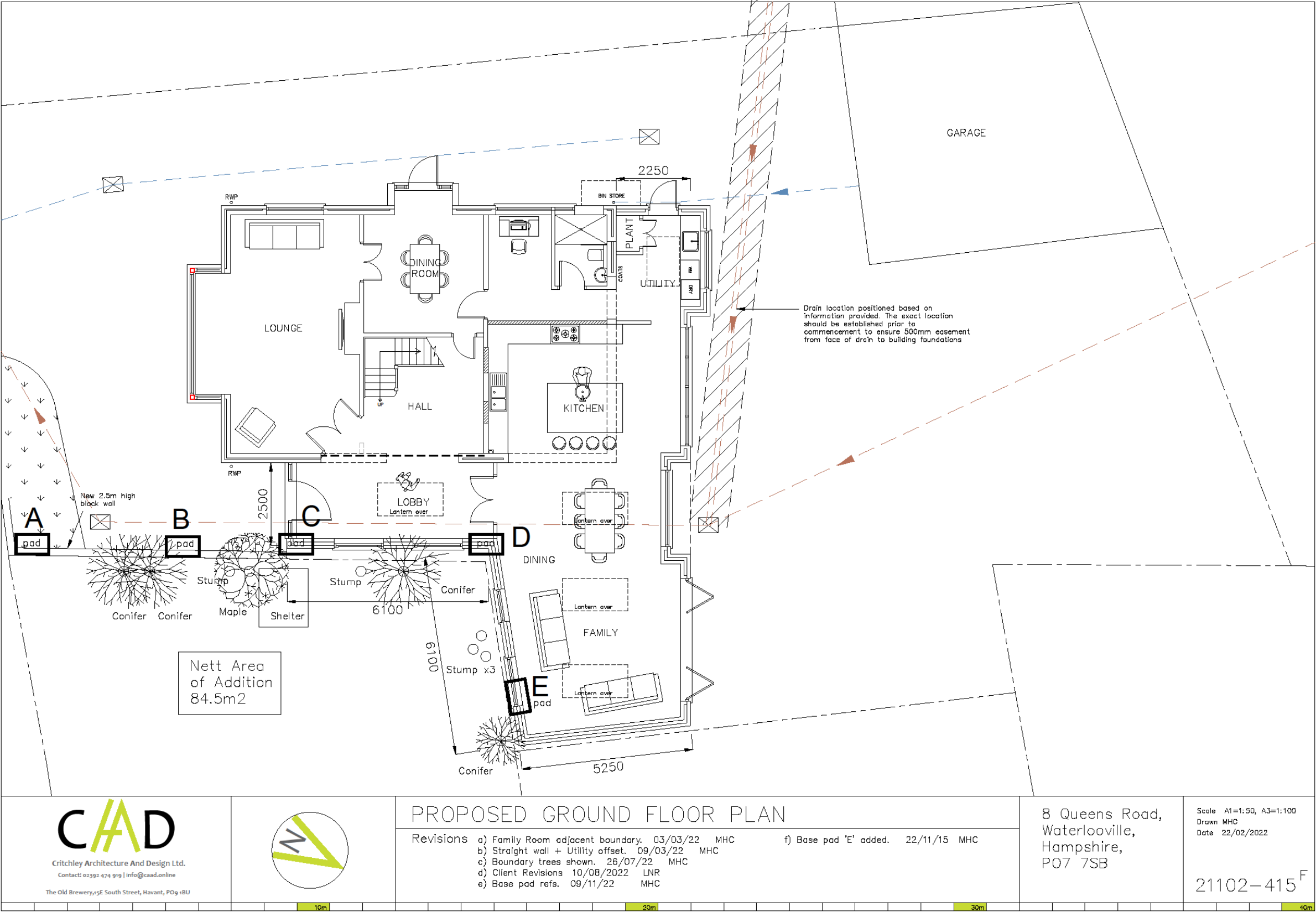




Figure 1. Showing rear garden once uncovered by Mr Wragg, found concrete slab when investigating newly bought land.



Figure 2. Showing rear garden once uncovered, Mr Wragg found concrete slab when investigating newly bought land.

5. Arboricultural sequencing of events and site monitoring

Stage	Event
Stage 1	Project arboricultural consultant (AC) appointed
Stage 2	Main contractor supplied with this arboricultural report (ASIAMS154.1). Main contractor to supply report to secondary contractors and brief as necessary. Main contractor to prepare contingency plan and provide to AC
Stage 3	A copy of the AMS should be available on site for the reference of all contractors
Stage 4	There will be need for a site visit from the Project AC to supervise the excavation for the pad foundations. The site visit should documented, using an auditable system of site monitoring for submission to the LPA or retained as required.
Stage 5	Following the site visit for supervision with excavation by the AC. The AC’s involvement will only be needed if there are issues regarding trees. The main contractor will brief all other contractors on tree protection and methodology of works.

Note: If at any point during the development any changes to the project involving the trees and woody plants is proposed, consultation must be made with the AC in writing. These changes may include, but are not limited to; tree protection measures, pruning, excavation within or near to RPAs. The AC will advise on the matter and a site visit to oversee operations may be required.

6. Reference material

BS5837:2012 Trees in Relation to Design, Demolition and Construction - Recommendations.

BS3998:2010 Tree work. Recommendations.

BS8545:2014 Trees: from nursery to independence in the landscape- Recommendations

Tree Preservation Orders: A Guide to the Law and Good Practice.

NJUG 10 - Guidelines for the planning, installation and maintenance of Utility Services in relation to trees.

BS8206: Part 2: 2008 Code of Practice for Daylighting.

Site Layout Planning for Daylight and Sunlight. A Guide to Good Practice.

CIBSE: Daylighting and window design, lighting guide LG 10: 1999.

Site Guidance Notes- Barrell tree consultancy