



Arboricultural Impact Assessment

The Vixen, Ingham Road, Haverhill, Suffolk

Client Name: Radford Interiors

Project Number: P2610.1.0

Date: 5 December 2016

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Site:	The Vixen, Ingham Road, Haverhill, Suffolk
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1 Report Summary

This Arboricultural Impact Assessment has been prepared to support a planning application for development at The Vixen, Ingham Road, Haverhill, Suffolk.

The site was a disused public house and compound, with car parking to the south east. Redevelopment of the site is proposed that would see refurbishment and extension of the building, an increase in parking provision and new tree planting. The site contained a few trees, with off-site trees close to the southern boundary.

The potential impacts on trees from development and proposed mitigation measures are set out in the table.

Potential Development Impact	Trees Affected	Proposed Mitigation Measures
Removal of trees of poor quality or condition due to incompatibility with the development.	T1	Compensate removals with new tree planting, to create a tree stock of increased diversity and longevity.
Damage to tree roots from compaction and contamination from construction activities. Damage to tree stems and crowns from construction activities.	All retained trees.	Erect protective fencing to encompass all sections of tree crowns and RPAs, whichever is the greater, with this erected prior to the commencement of development and maintained in place until all development is complete.

At the time of the report, it is understood that there is no statutory tree protection (Tree Preservation Orders or Conservation Areas) affecting any of the trees within this report. This must be confirmed with the Local Planning Authority before any tree work commences.

This report sets out tree removal to allow space for viable development, together with tree protection requirements. It is considered that the impact of tree removal for development will have minimal visual impact, with this being effectively compensated via new planting within the site. Any development impacts on retained trees can be effectively mitigated through the correct use of tree protective fencing.

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2 Introduction

2.1 Brief and Proposals

agb Environmental Ltd was commissioned by Radford Group to undertake an Arboricultural Survey at The Vixen, Ingham Road, Haverhill, Suffolk to accompany a planning application. The purpose of the survey was to identify:

- Tree age, condition class, general health and dimensions;
- Root Protection Area;
- Constraints and potential tree removals in respect of the proposed layout;
- The location and means of protecting retained trees;
- Preliminary methodology for implementing the proposed layout.

2.2 Documents and Information

The following documents were utilised in the preparation of this report:

- RS=1012-01A Topographical Survey;
- Vixen Site Plan;
- BS5837:2012 *Trees in relation to design, demolition & construction - Recommendations*.

2.3 Survey Details and Constraints

The survey was undertaken on the 17th March 2016 by the agb Environmental Principal Arboricultural Consultant, in adherence to the principles of BS5837:2012 *Trees in relation to design, demolition & construction - Recommendations*. Tree inspections have been undertaken from ground level using non-invasive techniques only, in accordance with the principles of the Visual Tree Assessment method developed by Mattheck and Breloer (1994).

The survey obtained data upon one individual tree and three groups. Trees with a stem diameter below 75mm, when measured at 1.5m above ground level, were not included. The terms used to explain the data recorded are provided in **Appendix 1**.

Comments on tree condition and safety relate to the condition of trees at the time of survey. It should be recognised that tree condition is subject to change in response to a range of factors. This report does not take into account potential extreme climatic events not normally expected in this locality, which could include, but aren't restricted to, severe windstorms, floods or drought. This report also doesn't take into account potential outbreaks of pests or diseases.

This report contains recommendations concerning work that should be carried out to manage the risks posed to and by the trees responsibly, and reduce them to an acceptable level. Even after the recommended work has been carried out some trees could still fail, but it is unlikely that they will cause significant harm unless the weather conditions are extreme and/or there are major hidden defects.

This report considers the potential for trees to influence soil in such a way as to cause the proposed development, or other buildings, to suffer tree related subsidence or heave damage, but does not attempt to quantify this. Operations carried out in the vicinity of the trees, either in the past or future, could affect their health and stability; such operations could include, but aren't restricted to, trenches dug for the installation or repair of utilities.

3 Site and Surrounding Area Context

3.1 Site Description

The site was located to the west of the junction between Ingham Road and Millfields Way, Haverhill. Surrounding land use was predominantly residential, in particular to the north and east. To the south and west land use was dominated by commercial and leisure use, with a school building and grounds to the immediate west.

The site was accessed by vehicles from Ingham Road, which runs along the south-east boundary. The access road led to a surfaced car park, which served local shops to the south-west. The north-west of the site was occupied by the former Vixen public house, including external space, enclosed by walls and fencing. Millfields Way ran along the north-east boundary.

Most of the site was level, with no major changes, except for the north-east boundary with Millfields Way, where the verge sloped down from the road to meet the car park. Grass verges extended round the north-east and south-east, with all other areas beneath tarmac or buildings. There were no boundary features limiting pedestrian access from the south-east and north-east. Walls and the Vixen limited access from other directions.

3.2 Soil Assessment

Information from the Geology of Britain viewer (British Geological Survey, 2015) indicates that the bedrock geology local to the property is Lewes Nodular Chalk Formation and Seaford Chalk Formation (Undifferentiated) – Chalk, and that local superficial deposits, likely present across the northern section of the site, are Lowestoft Formation – Diamicton (sands, gravels, silts and clays). Clay soils generally have a high potential for volume change in response to soil moisture change, possibly resulting from the presence of trees.

An assessment of the soil conditions within the site will be required to inform foundation construction. This assessment must be made by a qualified structural engineer or geotechnical consultant.

3.3 Existing Tree Stock Summary

Photographic plates are provided in **Appendix 2**. Details of all trees surveyed are provided in the Tree Survey Table in **Appendix 3**, with locations in relation to the site in the Tree Constraints Plan (TCP) in **Appendix 4**.

The site contained few trees. A single sycamore, T1, stands next to the car park on the verge below Millfields Way. This tree had unremarkable form and several minor defects that may limit its retention span. In addition, if retained in its current location, it would cause damage to the car park surface and kerbing. As a consequence of defects and potential for future damage, this tree was considered to be of low quality, Category C.

To the south of the vehicular access were three groups of conifers. G1 and G2 both consisted of three larch trees, which had typical form but did not appear to be thriving, with somewhat reduced extension growth. Both groups were considered of moderate quality, Category B.

G2 had partial mutual crown development with G3, which consisted of three Corsican pines. These trees appeared better suited to the local conditions and were thriving. As a consequence, G3 was considered to be of high quality, Category A.

4 Statutory Tree Protection

It has been confirmed with West Suffolk District Council that the site is not located within a Conservation Area (CA), nor are any of the trees within this report subject to Tree Preservation Orders (TPO). This should be confirmed with the Local Planning Authority (LPA) prior to any works on the trees taking place.

In the event that statutory tree protection is put in place, the LPA will contact the landowner, explaining the implications and the required process for contacting the LPA prior to commencing any work.

The presence of statutory tree protection may prevent work that may normally be carried out, such as reducing overhanging branches from a neighbour's tree back to the site boundary. In circumstances where work is required in an emergency, the work may proceed, though contact should be made with the LPA to advise them that this is the case prior to carrying out any work.

If this report is submitted to accompany a planning application, any tree work specified, relating to trees subject to statutory tree protection, will be considered as part of that application. Therefore, if planning permission is subsequently granted, this would normally provide permission for all tree work. Clarification may be sought from the LPA over this.

5 Principal Survey Findings and Arboricultural Impacts

The main findings are summarised in the following section. For ease of reference, it is recommended that this section is cross referenced with the information and plans provided within **Appendices 3, 4 & 5**.

5.1 Development Proposals

Redevelopment of the site is proposed, which would involve changes to the public house and increased parking provision, mostly the north-east. A recycling centre would be located to the east of the access road. The scheme includes the planting of four new trees to the east of the site.

5.2 Tree Removals and Reduction

Details of all tree work and tree removals are provided in **Table 6.2** and illustrated on the Tree Protection Plan (TPP) provided in **Appendix 5**.

5.2.1 Removal and Reduction for Reasons of Condition

No tree removal or reduction is recommended for reasons of condition.

5.2.2 Removal and Reduction for Reasons of Incompatibility

T1, sycamore, will require removal due to conflict with the extended parking provision.

5.2.3 Assessment of Proposed Tree Removal and Reduction

T1 is a low-quality tree exhibiting a range of structural defects, which would reduce the potential for long-term retention in the absence of development. Its removal would be readily compensated by proposed new tree planting, which offers good potential to deliver an enhanced tree stock of increased value and longevity.

5.3 Tree Interface with Proposals

Where trees are retained, both the works required to develop the site and its future use have potential to adversely affect trees, either causing damage to them or threatening their long-term retention. Damage can occur both above ground to tree crowns, limbs and trunks, and to roots below ground within the calculated Root Protection Area (RPA). The potential causes of such threats, together with proposals to avoid or minimise them, are set out in this section.

Table 5.1: Potential arboricultural impacts and proposed mitigation.

Development Activity	Potential Risk	Consequence	Mitigation
Construction activities, including materials delivery, transport and storage, contractor parking, site facilities and working areas.	Soil compaction and contamination. Accidental contact damage.	Root damage and die-back. Crown damage, die-back and loss.	Erect tree protective fencing round the entire RPA and crown spread, whichever is the greater, for the entire duration of the development, only removed temporarily when surface removal and reinstatement work commences, and replaced once completed.

6 Arboricultural Method Statement

The information in this section has been provided on the basis of the plans provided at the time the report was prepared. Should the site layout alter in the future, the advice provided may have reduced relevance and need to be revised prior to the commencement of the development.

6.1 Guidance Utilised

This section provides a site specific Arboricultural Method Statement (AMS), based on guidance provided within:

- BS5837:2012 *Trees in relation to design, demolition & construction - Recommendations.*
- BS3998:2010 *Tree work - Recommendations.*
- Volume 4 - *NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees* (Issue 2, 2007).

6.2 Contact Details

The details of all the principal points of contact are provided in the table below.

Table 6.1. Principal Contact Details

Contact	Name	Address	Contact Details
Local Planning Authority	Jaki Fisher Ecology and Landscape Officer	St Edmundsbury Borough Council West Suffolk House Western Way Bury St Edmunds Suffolk IP33 3YU	01284 763233 customer.sevice@westsuffolk.gov.uk
Client	Chris Read Architect / Design Manager	Radford Group Unit A, Homefield Road Haverhill Suffolk CB9 8QP	01440 760090 chris.read@radford-group.co.uk
Arboricultural Consultant	Richard Parmee Principal Arboricultural Consultant	agb Environmental Newmarket Business Centre 314 Exning Road Newmarket Suffolk CB8 0AT	01638 663226 richard@agbenvironmental.co.uk

6.3 Tree Works

Tree works should be the first activity on site to prevent accidental damage during clearance/demolition/construction and to enable sufficient vehicular clearance such that the proposals can be implemented.

Tree work is a potentially dangerous occupation. All tree work contractors should be required to provide evidence that they are competent to undertake the required works and are adequately insured. The contractor should also be asked to provide a site-specific risk assessment prior to commencement of any tree works. All tree works should be in accordance with BS 3998:2010 *Tree work - Recommendations*.

Some of the trees may possess features that increase their potential for use by nesting birds and roosting bats. It is recommended that all tree works take place outside of the main bird

nesting season (generally accepted as being March-August inclusive). Where work is required on trees containing cracks, cavities, splits and major (>100mm) dead wood, it is recommended that these features are inspected by a licenced ecologist or bat surveyor prior to work being carried out.

Details for all tree work are given in **Table 6.2**.

Table 6.2: Tree Works

Tree No.	Species	Work Required Irrespective of Development	Work Required to Facilitate Development
T1	Sycamore	None.	Remove due to conflict with the development.

6.4 Tree Protection

Following tree works and before any other works commence on site, tree protective fencing shall be immediately installed in accordance with the Tree Protection Plan (TPP) in **Appendix 5** and specification in **Appendix 6**, and signed accordingly with warning notices. It shall be located on the outer edge of the RPAs except where working space is required within RPAs.

Protection is also recommended for the locations of new tree planting, to prevent construction activities from adversely affecting soil condition, which in turn may impeded or prevent successful establishment.

Once all protection is in place and before any works commence on site, it is recommended that this be viewed and signed off, by the project arboriculturist or the LPA's Tree Officer. All protection shall be in place during the entire construction phase of the development.

6.5 Construction Access/Materials Storage

Access will be via the existing access road from Ingham Road. The existing carpark offers good potential for use for the site compound and all construction activities. The limitations on materials storage are those given under **General Guidance** in **6.8**.

6.6 Provision of New Planting

The ability of new tree planting to deliver the intended compensation for tree removal is dependent upon three key factors. The project's Landscape Architect will need to consider these factors when determining the landscape plan. It is recommended that British Standard BS 8545:2014 *Trees: from nursery to independence in the landscape – Recommendations* is used to inform the process.

6.6.1 Species Selection

When selecting species for planting, the following need to be considered:

- The space available – select species able to grow to mature size without requiring substantial reduction or maintenance to alleviate future problems;
- The adjacent land use – avoid species that may conflict with use of the surrounding area, giving consideration to shading, debris fall, potential use by nesting birds and insects, and potential to cause irritation;
- The local environmental conditions – the urban setting may result in higher temperatures, reflected heat, wind deflection and higher levels of pollution.

6.6.2 Planting Location

Due to the extensive and comprehensive redevelopment of the site, all new trees will require planting provision. The following needs to be considered when designing this:

- Provide a sufficient soil volume for tree roots at the anticipated mature size – if this is not feasible, then consideration must be given to a smaller growing species;
- Provide a means for water, nutrients and air to reach roots beneath new hard surfacing – this may be via a permeable paving construction or the installation of an underground irrigation and aeration system;
- Provide suitable soil conditions – consideration needs to be given to soil structure, composition and potential contaminants. The specifications for imported topsoil should conform to the latest recommendations within BS 3882:2015 *British Standard specification for topsoil and requirements for use*;
- Provide a construction capable of tolerating the tree at mature size – incremental expansion of the trunk and roots can cause damage to surfacing, potentially leading to expensive future repairs and possible tree removal.

There are a number of proprietary tree planting products designed specifically for the urban environment. Manufacturers will be able to provide advice on soil volume requirements, irrigation and aeration, and the ability to tolerate future growth.

6.6.3 Aftercare to Independence

Trees will need periodic inspection and irrigation during the first few growing seasons, to help them establish successfully to the point where they can survive independently.

A regime of post-planting aftercare should be provided, to cover the following:

- Irrigation schedule;
- Inspection schedule for damage (trees and structures), pests and disease;
- Formative pruning in accordance with BS 3998:2010 *Tree work - Recommendations*.
- Replacement provision for any failures or those that have poor establishment.

6.7 Schedule of Works and Supervision

The recommended schedule of works and points at which supervision is required are set out in **Table 6.3**. This schedule is intended to minimise the potential for development to result in damage to retained trees, providing a logical sequence of works.

Supervision is recommended for key stages where these have greatest potential to result in tree damage if carried out incorrectly. This supervision should be provided by the designated project arboricultural consultant. Following supervision, a photographic report would be presented to the LPA.

Arboricultural supervision may be made a requirement of the development by way of appropriate planning conditions. A proposed schedule detailing the scope and frequency of arboricultural supervision visits is detailed below. However, the LPA may request an alternative schedule within any planning conditions.

Table 6.3. Schedule of Works and Supervision.

Sequence	Activity	Supervision Responsibility
1	All tree works and removals.	Project Arboriculturist.
2	Installation of all tree protection in accordance with the TPP.	Site Manager & Project Arboriculturist.
3	Main development phase.	Site Manager.
4	Removal of all tree protection following completion of all development.	Site Manager.
5	Soft landscaping	Project Landscape Architect.
6	Assessment of tree condition post-development	Project Arboriculturist.

6.8 General Guidance

The following general precautions must also be taken during the construction phase.

- No materials or fuel shall be stored close to or within the RPAs of trees to be retained or where new trees are to be established.
- There shall be no bonfires within 10m of the outer edge of the crown or RPA of a tree to be retained.
- Mechanical equipment must not be refuelled within the RPAs of retained trees or areas where new trees are to be established.
- No cement shall be mixed or stored within the RPAs of retained trees or areas where new trees are to be established.
- Cement mixers must not be washed within or uphill of the RPAs of retained trees or areas where new trees are to be established.
- The soil level within the RPA of a retained tree must not be raised or lowered without the agreement of the local authority Tree Officer.
- No plant shall be operated within the RPAs of retained trees unless the soil is suitably protected against compaction.
- Excavation should not take place within the RPAs of retained trees unless an arboricultural consultant or the local authority Tree Officer is supervising the work.
- The guidance provided by NJUG (2007) should be followed when installing underground services within the RPAs of retained trees.
- Surface water runoff must not be redirected into or out of the RPA of a retained tree.
- No materials shall be dumped within the RPA of a tree, whether in a skip or on the ground.
- No vehicles shall be parked or operate within the RPA of a retained tree.

7 Conclusions

Development requires the removal of a single low-quality tree, likely to have been self-set. Development includes the planting of four new trees which, subject to correct species selection, the provision of suitable planting conditions and a regime of aftercare to full independent establishment, will deliver an enhanced tree stock of increased quality and longevity.

The installation of tree protection prior to the commencement of development, retained in situ for the entire duration of the project, will prevent harm to retained trees within or adjacent to the site.

Arboricultural supervision is specified for the installation of tree protection and following completion of development, to ensure development will not harm retained trees.

8 References

British Geological Survey. (2016) *Geology of Britain viewer* [online]. <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (Accessed 18th March 2016).

Mattheck, C. and Breloer, H. (1994) *The body language of trees*. London: TSO

National Joint Utilities Group. (2007). Volume 4 *NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees* (Issue 2) [online]. Available at: <http://www.njug.org.uk/document-download/?URL=http://www.njug.org.uk/wp-content/uploads/V4-Trees-Issue-2-16-11-2007.pdf> (Accessed 23rd July 2015).

Appendix 1 Explanatory Notes for Terms Used in Appendices 3, 4 & 5

Compass Bearing

N = north; S = south; E = east; W = west;

Tree Number

Number used to indicate the approximate position on plans inserted as **Appendices 4 & 5**.

Species

The species identification is based on visual observations.

Diameter at Breast Height (DBH)

Trunk diameter 1.5m above ground level recorded in millimetres measured with a diameter tape. If branches emerge below 1.5m, or if the trunk divides at or close to this height, the trunk diameter will be measured at a different height above the ground and this height will be mentioned. More than one figure indicates that the individual has several stems. Many stems are indicated with an 'M'. If the DBH has been estimated this will be marked with an asterisk (*) in the column.

Height

The height of the tree measured to the nearest metre, or half-metre if below ten metres.

Age Class

Sapling or newly established (Y) = a size which could be easily transplanted;

Semi-mature (SM) = prior to seed bearing age and could be transplanted with care;

Early Mature (EM) = of seed bearing age, may be close to or have achieved mature height, but with considerable apical dominance and lacking a broad, domed crown;

Mature (M) = fully grown, annual growth is much reduced, with a broad, domed crown;

Old Mature (OM) = exceptionally old for the species, possibly starting to decline;

Veteran (V) = often old for the species, the crown may be retrenching or displaying damage, containing features that provide many opportunities for wildlife, likely to offer important habitat.

Crown Clearance

The existing height of the first significant branch or section of canopy, to the nearest half-metre, to inform on ground clearance, crown/stem ratio and shading.

Condition

The physiological condition of the tree:

Good = normal growth and twig extension showing good vitality, canopy of typical density, with foliage of normal size and colour for the species - no notable indication of ill health.

Fair = reduced twig extension, minor deadwood, but other than that few signs of ill health;

Poor = small internodes and low vitality, the canopy may be thinning and contain dead twigs and/or branches in the outer canopy, discoloured, dwarfed, misshapen or wilting foliage, obvious presence of disease or infection;

Dead = Dead

Category & Remaining Contribution

The category assessed using the guidance in Table 1 of BS 5837:2012 and the potential for safe tree retention based on the current context.

(A) (light green) Trees of high quality and value: in such condition as to be able to make a substantial contribution (a minimum of 40 years is suggested);

- A1 - Exemplary arboricultural specimens
- A2 - Trees of particular visual importance as arb/landscape features
- A3 - Significant conservation/historical value.

(B) (mid blue) Trees of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested);

- B1 - Might have been A Cat, but downgraded because of impaired condition.
- B2 - Present in numbers - reduced value as individuals but higher as a collective group.
- B3 - Trees with material conservation or other cultural value.

(C) (grey) Trees of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150mm;

- C1 - Unremarkable tree, limited merit/impaired condition.
- C2 - Trees present in groups/woodlands without inferring greater collective value.
- C3 - Tree with no material or other cultural value.

(U) (dark red) Trees in such a condition that any existing value would be lost within 10 years and should, in the current context, be removed under sound arboricultural management.

Crown Radius

The distance from the tree trunk to the most relevant of the four cardinal points of the compass, measured in metres.

Radius of the RPA

The radius of a circular Root Protection Area (RPA) in metres as specified using the guidance contained in BS 5837:2012.

Appendix 2 Tree Photos

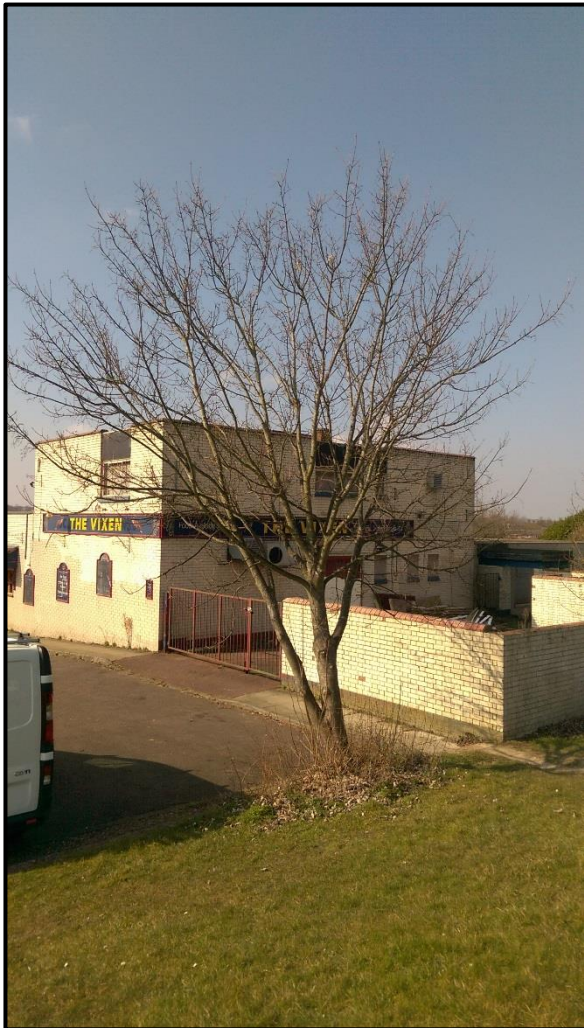


Plate 1. T1, sycamore, viewed from Millfields Road.



Plate 2. The base of T1, as viewed from within the car park, showing the area of bark loss and the V-shaped primary union.



Plate 3 (left). G1, three larch trees, forming a group by the Ingham Road car park entrance.

Plate 4 (below). G2, three larch trees (centre right) and G3, three Corsican pine trees, as viewed from Ingham Road looking west.



Appendix 3 Tree Survey Table

All work recommendations provided in this table are given on the basis of tree condition at the time of the survey and do not relate to any development proposal.

Tree No.	Species	Age	Con	Height (m)	Spread (m)				Crown Clearance (m)	DBH (mm)	Comments	Recommendations	BS 5837 Category	Remaining Contribution (est.)	RPA Radius (m)
					N	S	E	W							
T1	Sycamore	EM	G	6.5	3	3.5	3.5	3	1.5	140 200	<p>A dominant tree of good crown density and extension growth.</p> <p>The tree grows immediately next to the car park kerbing, with some distortion of the kerb evident.</p> <p>There is an area of bark loss on the east of the trunk at 0.5m (25x10cm) with good adaptive growth on either side and no current decay visible.</p> <p>There is a V-shaped union with minor bark inclusion at 0.7m on the south side of the trunk, where the primary scaffold limb emerges.</p> <p>The crown contains several small areas of partially occluded damage and pruning points, not considered to be of any significance.</p>	No work.	C1	10-20	2.93
G1	3 x larch	EM/M	F	8.0	3.5	3.5	3	3.5	2.0	280 max.	<p>A dominant group of trees with considerable mutual crown development. Crown density is good, with fair extension growth.</p> <p>The crowns contain insignificant levels of minor (<25mm) and moderate (25-100mm) dead wood.</p>	No work.	B2	20-40	3.36
G2	3 x larch	EM/M	F	9.0	3	2	3	3	2.0	290 max.	<p>A co-dominant group of trees with considerable mutual crown development. Crown density is good, with fair extension growth.</p> <p>The crowns contain insignificant levels of minor (<25mm) and moderate (25-100mm) dead wood.</p>	No work.	B2	20-40	3.48
G3	3 x Corsican pine	M	G	10	5	5	3	4.5	3.0	340 max.	<p>A co-dominant group of trees with considerable mutual crown development. Crown density, extension growth and colour are all good.</p> <p>The crowns contain insignificant levels of minor and moderate dead wood, with some moderate and major (>100mm) branch stubs, of 0.5m length in the lower crowns.</p> <p>The trunks have circular dents to 1.5m, possibly from being hit repeatedly by a hammer.</p>	No work.	A2	40+	4.08






* Indicates estimated value due to access constraints.

Appendix 4 Tree Constraints Plan

REV	DATE	DESCRIPTION



LEGEND

-  Category U
-  Category A
Trees of high quality
-  Category B
Trees of moderate quality
-  Category C
Trees of low quality
-  RPA using formula in accordance with BS5837:2012

Trees categorised in accordance with BS5837:2012 "Trees in relation to design, demolition and construction – Recommendations"

The original of this drawing was produced in colour – a monochrome copy should not be relied upon

LOCATIONS ARE APPROXIMATE.

PROJECT

THE VIXEN, HAVERHILL

TITLE

TREE CONSTRAINTS

CLIENT

RADFORD INTERIORS



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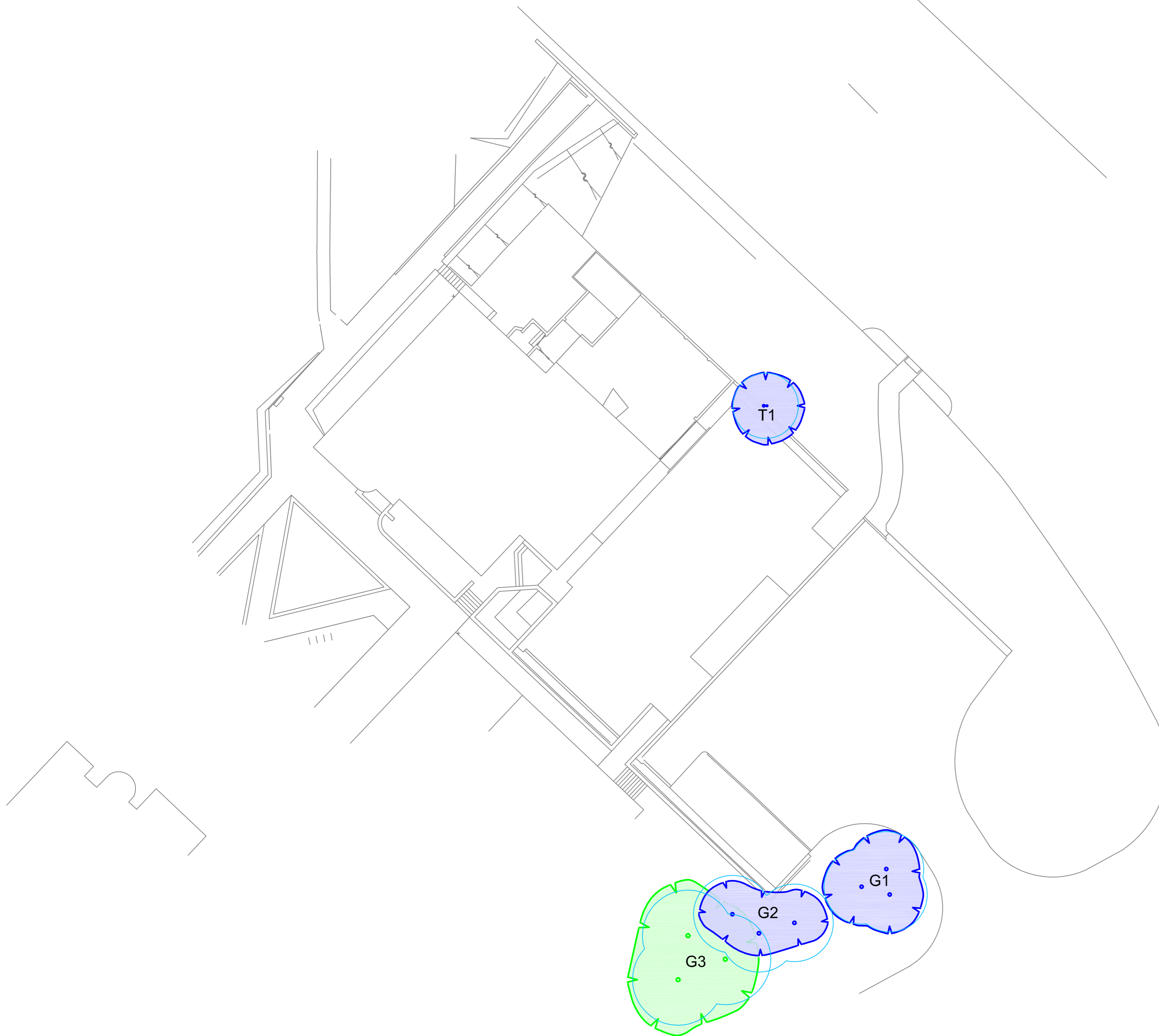
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DATE 01/04/16

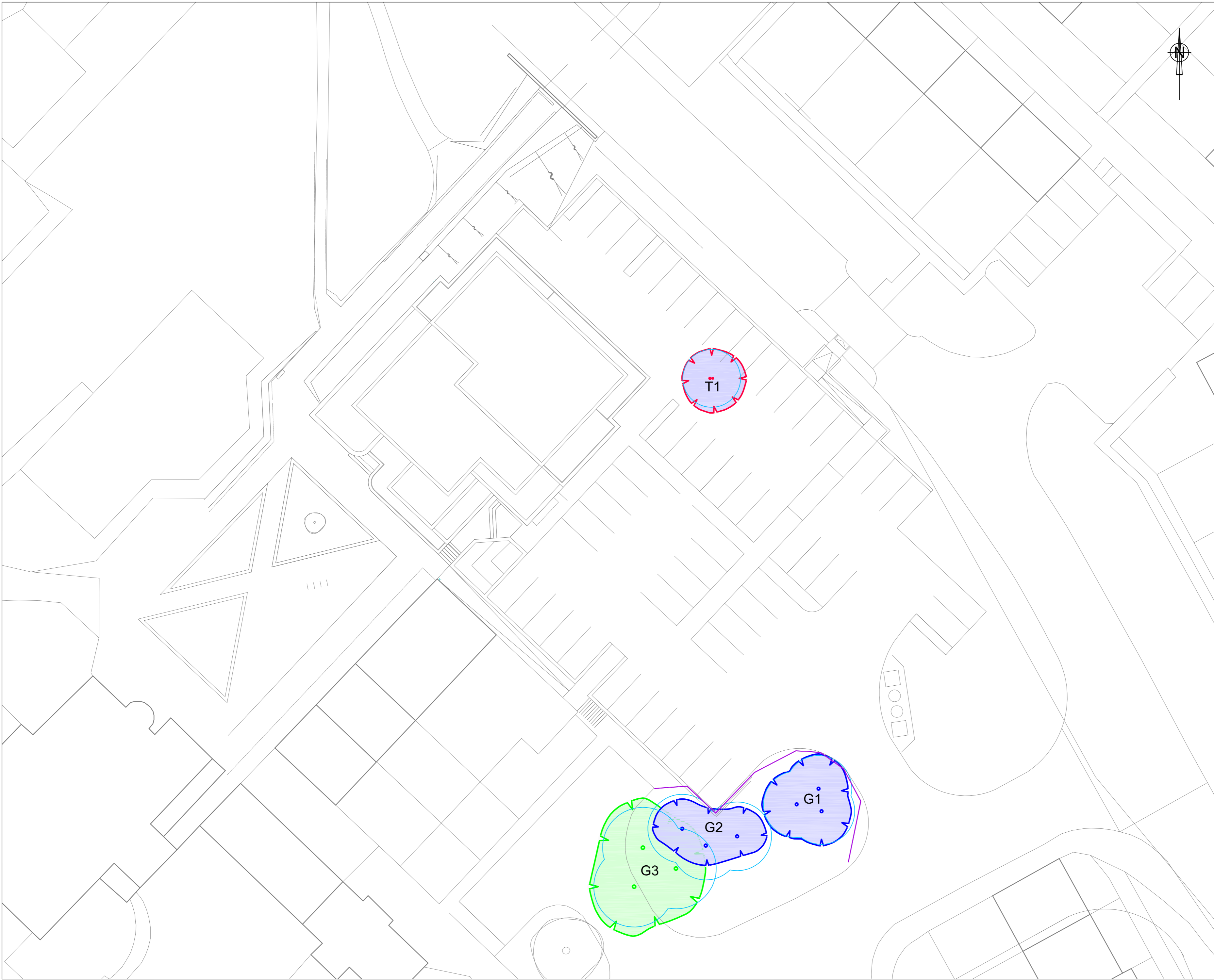
SCALE 1:250

PROJECT NUMBER . DRAWING NUMBER

P2610.1 . 001



Appendix 5 Tree Protection Plan



REV	DATE	DESCRIPTION
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LEGEND

-  Category A
Trees of high quality
-  Category B
Trees of moderate quality
-  Category C
Trees of low quality
-  RPA using formula in accordance with BS5837:2012
-  Tree incompatible with proposals
-  Location of Protective Fencing

Trees categorised in accordance with BS5837:2012 "Trees in relation to design, demolition and construction – Recommendations"

The original of this drawing was produced in colour – a monochrome copy should not be relied upon

LOCATIONS ARE APPROXIMATE.

PROJECT
THE VIXEN, HAVERHILL

TITLE
TREE PROTECTION

CLIENT
RADFORD INTERIORS



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Appendix 6 Tree Protective Fencing Specification

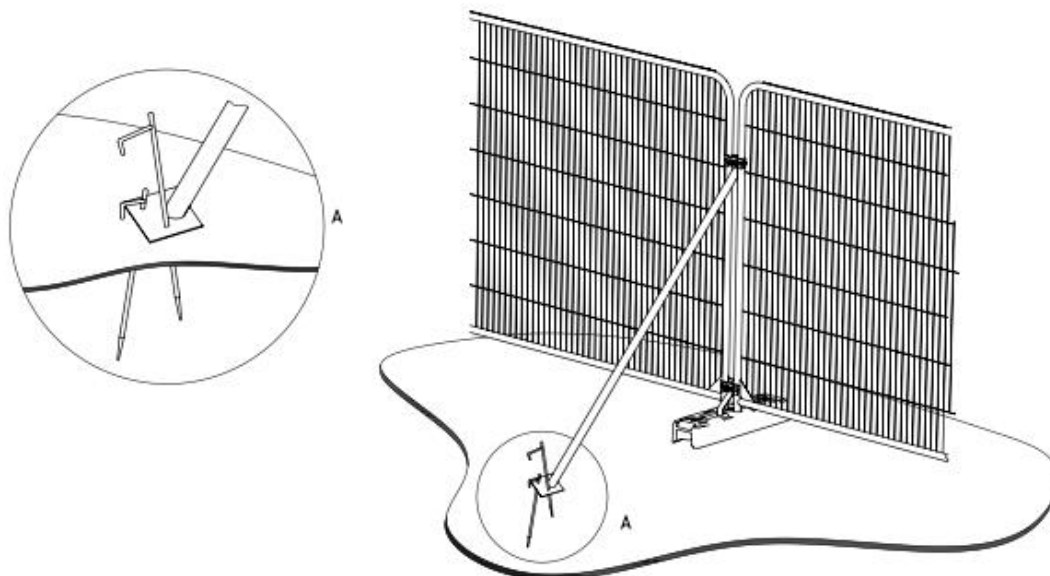
Specifications:

Tree Protective Fencing Panels shall be 2.3m high x 3m in length. (see image below).



Tree protective fencing example

Given the existing soft surface onto which the fencing will be placed in addition to the small, constrained nature of the site, it is considered that Heras fencing will be most appropriate from of tree protection. The Heras fencing will comprise of continuously joined panels, and will be secured utilising an 'above ground stabilizing system', with the fencing base stabilizer strut secured with ground pins with a base plate, as illustrated below:



a) Stabilizer strut with base plate secured with ground pins

Tree protective fencing construction

Location:

Fencing shall be positioned as far as possible on the perimeter of the Root Protection Area (RPA) to define a Construction Exclusion Zone and will be further identified by 'Tree Protection' warning signs (see image below).

