

# ORIGIN ENVIRONMENTAL

ARBORICULTURE

## ARBORICULTURAL IMPACT ASSESSMENT

### **SITE LOCATION**

Severn House, Upper Oddington  
Moreton-in-Marsh

### **CLIENT**

Steve Turner

### **REFERENCE**

240117 22008 AIA V1

### **ISSUE DATE**

19<sup>th</sup> January 20 24



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### Document Quality Assurance

Revision	Date	Author	Signature	Reviewed
V1	19 <sup>th</sup> January 2024	Jack Barnard <i>BSc (Hons)</i> <i>M ArborA MICFor (Chartered Arboriculturist)</i>		LW

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Any alteration to the application site or development proposals could change the current circumstances and may invalidate this report and any recommendations made.

The tree survey was a preliminary assessment from ground level and observations were made solely from visual inspection for the purposes of an assessment relevant to planning and development. This report is not a tree risk assessment and should not be construed as such. While every attempt has been made to provide a realistic and accurate assessment of the trees' condition at the time of inspection, it may have not been appropriate, or possible, to view all parts or all sides of every tree to fulfil the assessment criteria of a tree risk assessment.

This is not an ecological report. Where protected species may be present, prior to any works commencing ecological advice must be sought. The Wildlife and Countryside Act 1981 (as amended) and the Conservation of Species and Habitat Regulations 2017 provide statutory protection for birds, bats and other species that can inhabit trees. Great care is required to avoid disturbance to those species and consideration should be given to the timing of tree works to avoid an offence under the above legislation. Where the presence of such species is suspected, the project ecologist or Natural England should be contacted for advice.



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## 1. Introduction

### 1.1 Principal Author

1.1.1 The Principal Author of this report is Jack Barnard BSc (Hons), MArborA, MICFor (Chartered Arboriculturist), Director at Origin Environmental Arboriculture Ltd. known here-in as Origin. Jack has over eight years of professional experience in arboricultural consultancy and has worked on projects ranging from large master planning proposals to commercial and residential sites throughout the UK. Jack is a Professional Member of the Arboricultural Association (AA) and Institute of Chartered Foresters (ICF) and is therefore required to uphold the professional and ethical standards within their codes of conduct. Jack is also LANTRA-certified to undertake Professional Tree Inspections.

1.1.2 The information stated within this report is a true and accurate reflection of both the Site conditions at the time of the survey, as well as the professional opinion of the Principal Author.

### 1.2 Purpose

1.2.1 This Arboricultural Impact Assessment (AIA) has been commissioned by Brodie Planning Associates on behalf of their client Steve Turner (the Client). This AIA is prepared in relation to the Proposed Development at Severn House, Upper Oddington, Moreton-In-Marsh, Gloucestershire, GL56 0XF (the Site) (see the site location plan and red line boundary at Appendix 1).

1.2.2 Origin is instructed to fulfil the initial requirements of BS5837:2012 and Cotswold District Council (the Council). The Council require an AIA to make an informed decision on the Client's full planning application.

1.2.3 This AIA is also a reference point for all site operatives and a copy will remain with the Site Manager for the duration of the Proposed Development. This may be required if there were to be a dispute over compliance with related planning decisions. However, should the Council grant planning permission, an Arboricultural Method Statement (AMS) should be conditioned to ensure sufficient protection of retained trees through the construction process.

### 1.3 Origin's Instruction

1.3.1 The extent of instruction for this project is threefold:

- i. A BS5837:2012 tree survey - this is an assessment of all trees on or within influencing distance of the Site, capturing data relating to each tree's size and condition, as well as quantifying each tree or group's amenity value and life expectancy.
- ii. A Tree Constraints Plan and Tree Schedule - delineating the findings of the BS5837:2012 tree survey. Trees are superimposed onto a topographical survey or OS Map to show their reference number (e.g. T1), canopy spread, retention categorisation and Root Protection Area (RPA).
- iii. An Arboricultural Impact Assessment (AIA) – this is a report that assesses the trees and the potential impacts associated with the Proposed Development and its construction requirements.

### 1.4 Site Description

1.4.1 The Site is located to the east of the village of Upper Oddington, Moreton-In-Marsh, Gloucestershire, GL56 0XF. The Site is approximately centred at OS Grid Reference SP 22842 25893. See the site location plan and red line boundary at Appendix 1.

1.4.2 The Site comprises the residential property of Severn House, with its associated gardens and



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outbuildings. Access to the Site can be gained off the northern boundary towards the northeast corner of the Site.

- 1.4.3 The Site is bordered to the north, east and west by further residential properties, with open fields to the south.

## 2. Proposed Development

### 2.1 Description

- 2.1.1 The Proposed Development is for a single-storey extension to the west of the existing property at Severn House, Upper Oddington, Moreton-In-Marsh, Gloucestershire, GL56 0XF.

### 2.2 Reference Documents

- 2.2.1 The following documentation has been referenced as part of this impact assessment:

*Table 1* Documents and Plans Provided.

Document Description	Reference No.	Prepared By	Date
Tree Preservation Order	Tree Preservation Order No 13/00023	Cotswold District Council	October 2013
OS Map	3018	Unknown	February 2022
Proposed Site Layout	3018	Brodie Planning	February 2022

## 3. Statutory and Non-statutory Legislation

### 3.1 National Planning Policy Framework (NPPF) (July 2023)

#### Tree Policies

- 3.1.1 When determining planning applications, the Local Planning Authority (LPA) should apply the following principles from the NPPF:

#### Paragraph 131

<Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible.=

#### Paragraph 174 (B & D)

<Planning policies and decisions should contribute to and enhance the natural and local environment by:



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b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.=

### Paragraph 186 (A, C & D)

<When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.=

### 3.2 Cotswold District Council Local Plan (2011 – 2031)

3.2.1 Cotswold District Council Local Plan (2011 – 2031) provides the strategic context for development decisions up to the year 2031.

3.2.2 Section 10.4.4 states that <Trees, hedgerows and woodlands play a major part in establishing the character of the Cotswold landscape and make a valuable contribution to the ecological balance of the area, particularly veteran trees, ancient woodland and hedgerows.=

### Policy EN4 The Wider Natural and Historic Landscape

1. <Development will be permitted where it does not have a significant detrimental impact on the natural and historic landscape (including the tranquillity of the countryside) of Cotswold District or neighbouring areas.
2. Proposals will take account of landscape and historic landscape character, visual quality and local distinctiveness. They will be expected to enhance, restore and better manage the natural and historic landscape, and any significant landscape features and elements, including key views, the setting of settlements, settlement patterns and heritage assets.=

### Policy EN7 Trees, Hedgerows and Woodlands

1. <Where such natural assets are likely to be affected, development will not be permitted that fails to conserve and enhance:
  - a. trees of high landscape, amenity, ecological or historical value;
  - b. veteran trees;
  - c. hedgerows of high landscape, amenity, ecological or historical value; and/or
  - d. woodland of high landscape, amenity, ecological or historical value.
2. Where trees, woodland or hedgerows are proposed to be removed as part of development, compensatory planting will be required.



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3. Development proposals affected by (2) above should, where appropriate, have regard to the potential for new or extended woodland to assist in carbon storage and to be a potential local source of biomass or biofuel.=

### 3.3 Tree Preservation Orders and Conservation Areas

- 3.3.1 The Council has been contacted to establish whether any trees contained within the survey are protected by either a Tree Preservation Order (TPO) or are within a Conservation Area.
- 3.3.2 It has been confirmed by the Council's online TPO register on the 7<sup>th</sup> of March 2022 that the majority of trees on site are protected by Cotswold District Council Tree Preservation Order No. 13/00023, dated 8<sup>th</sup> October 2013.

### 3.4 Felling Licence

- 3.4.1 Tree felling is restricted under the Forestry Act 1967. Under this act, there is an exemption from the need for a felling licence for <Felling trees immediately required for the purpose of carrying out development authorised by planning permission (granted under the Town and Country Planning Act 1990) ...=
- 3.4.2 If full planning permission is granted, any trees which have been identified for removal as part of the planning application (in this instance, included within this AIA), are exempt from this statutory protection. However, outline planning permission does not provide an exemption to the regulations that control tree felling in the Forestry Act 1967.

## 3.5 Baseline Tree Survey

### 3.6 Site Visit

- 3.6.1 The Principal Author completed the tree survey on the 2<sup>nd</sup> of March 2022. All tree inspections were undertaken from ground level, and no climbing or further assessments were undertaken. Weather conditions during the survey were clear with light rain and did not form a constraint to the assessment.

### 3.7 Method of Data Collection

- 3.7.1 The tree survey was conducted without reference to the site layout, as detailed in Clause 4.4.1.1 of BS5837:2012. However, the design proposal for the Site has been considered as part of this AIA.
- 3.7.2 The survey recorded trees either as individual specimens or as groups, where these trees were aerodynamically, culturally, or visually important as groups. The tree numbers associated with each tree are cross-referenced within the Tree Schedule and with the associated plans at Appendix 3 and 4 respectively. The complete method of data collection was carried out as specified by BS5837:2012 and is provided at Appendix 2.
- 3.7.3 It should be noted that Table 1 of BS5837:2012 only gives recommendations in relation to remaining years. A tree has a longer remaining life, however, still be of a lower category given its maturity, condition, or overall impact on the Site.
- 3.7.4 The location of each tree and their associated constraints including canopy spread and Root Protection Areas (RPAs), with and without the Proposed Development, are illustrated on plan numbers OE-001 and OE-002, both at Appendix 4.
- 3.7.5 Category A and B trees are considered to provide a substantial contribution to a site and should be retained and incorporated into the Proposed Development where possible and feasible. Category C and U trees are of low quality or are young specimens, which can be readily replaced. These trees should not be considered a constraint to the Proposed Development. However, it is considered desirable that trees be retained wherever possible, as this ensures continuity of



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canopy cover and helps contribute to a mature landscape.

### 3.8 Summary of Data

3.8.1 All trees at the Site and within influencing distance have been surveyed.

3.8.2 A total of 15no. individual trees, 2no. groups of trees and 1no. hedgerow have been surveyed. These include 4no. category A, 5no. category B and 9no. category C. None of the surveyed trees or groups were of retention category U.

3.8.3 T2 (Aspen) is a mature category A specimen located on the northern boundary of the site. T2 forms a single stem with light ivy. The structural canopy divides from c.3m with a good radial canopy. T2 is likely visible east/west along the adjacent highway and is of good future potential.

3.8.4 T3 (Weeping Willow) is a mature category A specimen located on the eastern side of the house, centrally within the Site. T3 forms a single stem with a relatively radial canopy. The canopy extends over the adjacent single-story portion of the house. T3 forms a significant feature tree within the garden setting.

3.8.5 T5 & T6 (Giant Redwood) are a pair of mature category A specimens located towards the eastern boundary of the Site. Both specimens form single stems that are maintained for the majority of their height. Both trees form good radial canopies with a slight suppression west. Both trees are considered to be significant features within the garden setting.

3.8.6 G1 & G2 (mixed species) frame the eastern and western boundary respectively. Both groups form significant boundary screens and are considered to be of moderate future potential.

## 4. Impact Assessment

### 4.1 Relationship between Site Layout and Trees

4.1.1 To implement the Proposed Development there will be no requirement for tree removal and therefore the Proposed Development will have no impact on public amenity or the street scene. The Proposed Development is considered to be in line with both the NPPF (2023) and the Local Plan (2011).

## 5. Below Ground Constraints

### 5.1 Root Protection Area (RPA)

5.1.1 The RPA of trees has been calculated as prescribed by BS5837:2012 and these are illustrated on the Tree Constraints Plan at Appendix 4. In addition to this, each tree's numerical RPA value is provided within the Tree Schedule at Appendix 3. The Tree Schedule provides both the RPA radius in metres from the centre of the stem and the total area for the RPA in square metres.

5.1.2 In general, the RPA is a circular area with a radius 12 times the diameter of a tree, measured at 1.5 metres for single-stemmed trees. For trees with more than one stem, one of two calculation methods should be used. In all cases, the stem diameter(s) should be measured in accordance with Annex C, and the RPA should be guided by Annex D of BS5837:2012.

5.1.3 The shape of the RPA and its exact location will depend upon arboricultural considerations and ground conditions. The RPA may be altered and/or offset from a centred circle if there are existing RPA incursions. The total area of the RPA will not be altered from that prescribed by BS5837:2012.

5.1.4 The RPA is an area in which no groundwork should be undertaken without due care taken in relation to the retained tree(s). This is to avoid soil compaction, changes in levels or soil contamination, which could alter the tree's condition and/or stability.





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### 5.2 Existing RPA Incursions

5.2.1 Several trees onsite have existing RPA incursions and the RPAs have been amended accordingly. The RPAs of T5 & T6 (Giant Redwood) have been altered to the east, to reflect the incursion posed by the existing property and the footpath surrounding it, These are minor amendments at the far extent of the RPA. The RPA of T3 (weeping willow) has been altered to the west to reflect the incursion posed by the existing property foundation and wall.

### 5.3 Proposed Permanent RPA Incursions

5.3.1 The proposed extension will result in a new incursion within the RPAs of T5 & T6 (Giant Redwood) to be retained. The new incursions are detailed below:

T5 – 28.75m<sup>2</sup> of the total 707m<sup>2</sup> RPA, therefore a 4% new incursion.

T6 – 2.5m<sup>2</sup> of the total 707m<sup>2</sup> RPA, therefore a 0.25% new incursion.

5.3.2 **To ensure the successful retention of T5 & T6, the proposed extension will be constructed using engineered pad and beam foundations.**

5.3.3 The new building will be supported on pad foundations when within the RPA of retained trees. Pads must be installed from the existing ground level, with their locations to be agreed upon with the project Arboriculturist. Should the Council grant planning permission, an Arboricultural Method Statement (AMS) should be conditioned to specify such information.

5.3.4 This is supported within NOTE 1 of clause 7.4.2 of BS5837:2012, in that: piles, pads or elevated beams can be used to support surfaces to bridge over the RPA or, following exploratory investigations to determine location, to provide support within the RPA while allowing the retention of roots greater than 25mm in diameter.

5.3.5 The foundation and substructure solution are of individual pads supporting a flat concrete slab above ground level. No pile cap or ground beam construction is below ground level. The diameter and number of pads in this area will be minimised in accordance with structural requirements; for this further engineering advice must be sought.

5.3.6 The pile and beam foundation will span over the RPA, creating a void beneath. The levels will not be disturbed within this area and will allow for future root extension and good infiltration of groundwater run-off to the underlying root system.

### 5.4 Proposed Temporary RPA Incursions for Construction

5.4.1 To construct the proposed extension there will be a temporary incursion within the RPA of T5 & T6 (Giant Redwood) to be retained. The new incursions are detailed below:

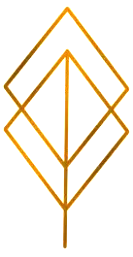
T5 (Giant Redwood) – 42.75m<sup>2</sup> of the total 707m<sup>2</sup> RPA, therefore a 6% new incursion.

T6 (Giant Redwood) – 41.75m<sup>2</sup> of the total 707m<sup>2</sup> RPA, therefore a 6% new incursion.

5.4.2 The figure stated above does not include the area associated with the proposed extension as stated in Section 7.3.

5.4.3 **To reduce the likelihood of ground compaction through development there will be a requirement to install temporary Ground-Guards. Ground-Guards to be installed as illustrated with a yellow honeycomb hatch on the Tree Protection Plan (OE-003) at Appendix 4.**

5.4.4 The Ground Guards will comprise either a suspended wooden walkway beneath the scaffolding or 100mm of woodchip laid onto a geotextile base overlaid with wooden boards. This will significantly reduce the likelihood of ground compaction as detailed within BS5837:2012, Clause 6.2.3.3, Note a.



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5.4.5 Woodchip and ground boarding should not be piled up around the base of trees and clearance should be given to ensure that no damage is caused.

### 5.5 Infrastructure

5.5.1 There is no requirement for new infrastructure that will impact the RPA of retained trees. Any new services will be extended from the existing house above ground level.

## 6. Above Ground Constraints

### 6.1 Tree Canopies

6.1.1 The distribution of tree canopy cover on and within influencing distance of the Site is illustrated on the Tree Constraints Plan (OE-001) at Appendix 4.

6.1.2 The Tree Schedule lists the vertical clearance from ground level to the first significant branching of individual trees. This measurement informs the level of accessibility and potential for development beneath tree canopies.

6.1.3 Factors such as the mature height, size, form, shading and species-specific nuisances must be considered. The proximity of retained trees to structures must also take into consideration amenity factors. This AIA has considered the area surrounding each tree to enable a satisfactory relationship between the Proposed Development and the tree.

6.1.4 Additional factors for consideration include how comfortable future inhabitants of the property will feel about trees in close proximity to their homes. This serves to protect retained trees from pressure to be felled or undergo surgery once the extension is in use.

6.1.5 To ensure the successful retention of trees, a Construction Exclusion Zone (CEZ) must be established. The CEZ must take into consideration the factors outlined above and ensure that retained trees are not harmed during the construction process.

6.1.6 It is critical that all protective fencing is installed and erected, and the CEZ enforced prior to the commencement of any works on-site. Following the installation of tree protection, a site meeting will be undertaken with the Tree Officer to ensure the satisfaction of all parties prior to any on-site works commencing.

### 6.2 Proposed Pruning Work

6.2.1 To implement the Proposed Development, there will be a requirement to raise the lower canopy of T5 & T6 (Giant Redwood) to c.5m to the east. The lower canopy will be raised to provide sufficient clearance over the Proposed Development. The proposed pruning works will only require the removal of secondary branches and tip pruning, which will not impact the amenity value or structure of the trees. As such, the proposed pruning works are not a constraint to the Proposed Development.

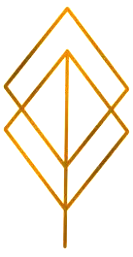
### 6.3 Future Growth

6.3.1 The future growth of trees at the Site is not considered to be an issue for the Proposed Development. Boundary trees may require minor future pruning; however, this is not considered to be any change from the existing context. These works can be addressed with minor pruning of the lateral branches, which encroach towards the built structures.

### 6.4 Leaves, Fruit, and Honeydew

6.4.1 Given the proximity of so many trees on and off-site, leaf fall may be a problem across the whole Site in autumn. Where leaf fall will cause gutter blockages, this can be managed through regular clearance of leaf litter and the incorporation of gutter grates.

6.4.2 Honeydew is not likely to be a significant problem at the Site. Although there are lime and maple



trees at the Site, the Proposed Development should not suffer any more from the nuisance of honeydew than the existing building.

## 7. Recommendations & Conclusions

- 7.1.1 A total of 15no. individual trees, 2no. groups of trees and 1no. hedgerow have been surveyed. These include 4no. category A, 5no. category B and 9no. category C. None of the surveyed trees or groups were of retention category U. All trees at the Site and within influencing distance have been surveyed.
- 7.1.2 To implement the Proposed Development there will be no requirement for tree removal and therefore the Proposed Development will have no impact on public amenity or the street scene. The Proposed Development is considered to be in line with both the NPPF (2023) and the Local Plan (2011).
- 7.1.3 The successful retention of those trees that will remain on the Site will be dependent upon the quality and maintenance of any protection system that is put in place. An indicative draft Tree Protection Plan (OE-003 at Appendix 4) has been provided; however, this is subject to alteration following a final decision notice. A detailed Arboricultural Method Statement should be provided as part of a planning condition to detail how the necessary tree protection will be implemented.
- 7.1.4 For tree and root protection measures to work effectively, all personnel associated with the construction process must be familiar with the Tree Protection Plan.
- 7.1.5 It is critical that all protective fencing is installed and erected, and the Construction Exclusion Zone (CEZ) is enforced prior to the commencement of any works on-site. Following the installation of tree protection, a site meeting will be undertaken with the Tree Officer to ensure the satisfaction of all parties prior to any on-site works commencing.
- 7.1.6 It is recommended that a suitably competent Arboricultural Consultant undertakes the site observation and monitoring works throughout the project.
- 7.1.7 To ensure the successful retention of T5 & T6, the proposed extension will be constructed using engineered pad and beam foundations. The new building will be supported on pad foundations when within the RPA of retained trees. Pads must be installed from the existing ground level, with their locations to be agreed upon with the project Arboriculturist. Should the Council grant planning permission, an Arboricultural Method Statement (AMS) should be conditioned to specify such information.
- 7.1.8 To reduce the likelihood of ground compaction through development there will be a requirement to install temporary Ground-Guards. Ground-Guards to be installed as illustrated with a yellow honeycomb hatch on the Tree Protection Plan (OE-003) at Appendix 4.



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### 8. References

British Standard 3998:2010 Tree work – Recommendations

British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendations'

British Standard 8545:2014 Trees: from nursery to independence in the landscape – Recommendations

Cotswold District Council Local Plan (2011 – 2031)

National Planning Policy Framework (NPPF) 2023

The Forestry Act 1967

The Town and Country Planning (Tree Preservation) (England) Regulations 2012

The Town and Country Planning Act 1990



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## Appendix 1: Aerial Photographs

Severn House, Upper Oddington, Moreton-In-Marsh, Gloucestershire, GL56 0XF

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## Appendix 2: Survey Methodology

The tree survey was completed without reference to the Proposed Development, as detailed in paragraph 4.4.1.1 of BS5837:2012. However, the Proposed Development has been assessed as part of this report.

Whenever possible tree locations will be plotted with the use of a Topographical Survey. When a Topographical survey is not provided, tree locations will be plotted using a combination of an ordinance survey plan, aerial imagery and measurements taken onsite.

In accordance with BS5837:2012, small trees with a stem diameter of less than 75mm were not surveyed as they are considered to be readily replaceable or could be relocated with relative ease.

Each tree has been given an identification number as either an individual tree, group of trees, woodland, or hedgerow. The tree numbers associated with each tree are cross-referenced within the Tree Schedule and the associated plans at Appendix 3 and 4, respectively.

Tree species have been recorded with both common and scientific names.

All tree heights have been assessed using a clinometer. For groups of trees, woodlands, and hedgerows the lowest and highest height associated with the group has been recorded. Tree heights are given in metres.

Stem diameters were measured at 1.5 metres above ground level (unless otherwise stated) and are given in millimetres. For groups of trees, woodlands, and hedgerows the lowest and highest diameter associated has been recorded.

The canopy spread is measured at four cardinal points or is given as an average for the canopy. Average canopy spreads are typically used for groups of trees or where the crown is evenly weighted at the four cardinal points. The canopy spreads are measured in metres.

The height of the ground clearance is given in metres and is an estimate of the height of the first branch above ground level.

Age class is indicative and will vary between species. In the absence of detailed information on tree age the following classification has been used:

Age Category	Description
Young	Trees aged less than one-third of life expectancy.
Semi-mature	Established specimen approaching one-third of life expectancy.
Early-mature	Trees have reached one-third to two-thirds of life expectancy.
Mature	Trees have reached over two-thirds of life expectancy.
Over-mature	Trees that are declining or moribund trees of low vigour.
Veteran	Specimens exhibiting features of biological, cultural, or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

The structural condition of each tree has been assessed and is summarised as:

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Structural Condition	Description
Good	Few minor defects of little overall significance.
Fair	A significant defect or several small defects.
Poor	Major defects present or many small defects.

The physiological condition has been recorded to indicate each tree's general health and vitality. The trees have been described thus:

Physiological Condition	Description
Good	In good health typical of the species.
Fair	Reasonable health with few defects.
Poor	Trees that exhibit significant defects are irremediable or moribund trees
Dead	The tree has died.

The estimated remaining contribution has been categorised as:

- Less than 10 years
- 10-20 years
- 20-40 years
- Over 40 years

The estimated remaining contribution has been based upon an assessment of the tree's potential safe useful life expectancy. The remaining contribution in years does not always directly correlate with the retention category of a tree, as an individual specimen may have a long remaining life but be of little significance in terms of development.



# Arboricultural Impact Assessment

REF NO: 240117 22008 AIA V1

DATE: January 2024



## Appendix 3: Schedules

BS5837:2012 Cascade Chart

Complete Tree Schedule

## BS5837:2012 Cascade Chart for Tree Quality Assessment

Category and Definition	Criteria (including subcategories where appropriate)			ID Colour on Plan
Trees to be considered for retention (see note)				
	1 - Mainly arboricultural qualities	2 - Mainly landscape qualities	3 - Mainly cultural values, including conservation	
<p><b>Category A</b></p> <p>Trees of high quality with an estimated remaining life expectancy of at least 40 years.</p>	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).	<p>Light Green (000-255-000)</p>
<p><b>Category B</b></p> <p>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.</p>	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as	Trees with material conservation or other cultural value.	<p>Mid Blue (000-000-255)</p>
<p><b>Category C</b></p> <p>Trees of low quality currently in adequate condition with at least 10 years life expectancy, or young trees with a stem diameter below 150mm.</p>	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/ transient landscape benefits.	Trees with no material conservation or other cultural value.	<p>Grey (0911-091-091)</p>
Trees unsuitable for retention (see note)				
<p><b>Category U</b></p> <p>Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.</p>	<ul style="list-style-type: none"> <li>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning);</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline; and/or</li> <li>Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low-quality trees suppressing adjacent trees of better quality.</li> </ul> <p><i>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>			<p>Dark Red (127-000-000)</p>



# BS5837:2012 TREE SCHEDULE

**SITE**  
 Severn House, Upper Oddington,  
 Moreton-In-Marsh

**CLIENT**  
 Steve Turner

**DATE**  
 2nd March 2022

**REFERENCE**  
 240117 22008 TS V1

Tree No.	Common Name	Scientific Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m <sup>2</sup> )	RPA Radius (m)
					N	E	S	W									
T1	Cedar of Lebanon	Cedrus libani	17	695	5	3	6	5	6	Early-mature	Good	Good	Early mature specimen located towards the northeast corner of the site, adjacent to the site access. Single stem. RPA west inhibited by existing driveway. Good radial canopy, minor bias south. Good future potential.	No works required at the time of assessment	B1, 2	222	8.40
T2	Common aspen	Populus tremula	17	705	8	8	9	7	5	Mature	Good	Good	Mature specimen located on the northern boundary of the site. single stem. Light ivy at base. Structural canopy divides from c.3m. Good radial canopy. Likely visible east/west along the adjacent highway.	No works required at the time of assessment	A1, 2	222	8.40
T3	Weeping willow	Salix x sepulcralis 'Chrysocoma'	14	910	8	8	9	8	2	Mature	Good	Good	Mature specimen located on the eastern side of the house, centrally within the site. Single stem. Good radial canopy. Canopy extending over the single story portion of the house. Prominent feature tree.	No works required at the time of assessment	A1, 2	366	10.80
T4	Common ash	Fraxinus excelsior	17	600	6	6	5	6	2.25	Mature	Fair	Fair	Mature specimen located on the northern boundary of the site. Single stem located within hedgerow. DBH estimated due to fencing limiting access. Minor epicormic growth at base. Cavity in stem at c.3.5m south. Canopy heavily reduced in the past now with significant regrowth. Adds significant height to the boundary screen. Likely visible east/west along the adjacent highway.	No works required at the time of assessment	B2	163	7.20



# BS5837:2012 TREE SCHEDULE

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**REFERENCE**  
240117 22008 TS V1

Tree No.	Common Name	Scientific Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m <sup>2</sup> )	RPA Radius (m)
					N	E	S	W									
T5	Giant redwood	Sequoiadendron giganteum	26	1695	7	7	7	5	2	Mature	Good	Good	Mature specimen located towards the northwest corner of the site. Single stem maintained for majority of height. Good radial canopy, slight suppression west. Significant feature within the garden setting. Good future potential. Likely visible east/west along the adjacent highway.	No works required at the time of assessment	A1, 2	1307	20.40
T6	Giant redwood	Sequoiadendron giganteum	26	1640	8	8	5	5	2	Mature	Good	Good	Mature specimen located towards the western boundary of the site. single stem maintained for the majority of its height. Good radial canopy, slight suppression west. Good future potential. Likely to be c only fragmented views from the public realm.	No works required at the time of assessment	A1, 2	1232	19.80
T7	Weeping willow	Salix x sepulcralis 'Chrysocoma'	11	650	1	4	8	4	0	Early-mature	Good	Fair	Early mature specimen located towards the western boundary of the site. Single stem. Canopy and scaffolding heavily biased to the south. Previously heavily pollarded, now with significant regrowth	No works required at the time of assessment	C1, 2	191	7.80
T8	Common ash	Fraxinus excelsior	14	665	7	10	7	10	2	Early-mature	Fair	Fair	Early mature specimen located towards the western boundary of the site. Single stem bifurcates at c.3m. common cohesive canopy with the adjacent linear row of lime.	No works required at the time of assessment	C1, 2	206	8.10
T9	Small-leaved lime	Tilia cordata	14	345	4	4	4	4	15	Sem i-mature	Good	Fair	Semi mature specimen growing as part of a linear arboricultural feature towards the western boundary. Single stem. Common cohesive canopy.	No works required at the time of assessment	C1, 2	55	4.20



# BS5837:2012 TREE SCHEDULE

**SITE**  
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**CLIENT**  
Steve Turner

**DATE**  
2nd March 2022

**REFERENCE**  
240117 22008 TS V1

Tree No.	Common Name	Scientific Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m <sup>2</sup> )	RPA Radius (m)
					N	E	S	W									
T10	Small-leaved lime	Tilia cordata	14	360	4	4	4	4	15	Sem i-mature	Good	Fair	Semi mature specimen growing as part of a linear arboricultural feature towards the western boundary. Single stem. Common cohesive canopy.	No works required at the time of assessment	C1, 2	55	4.20
T11	Small-leaved lime	Tilia cordata	14	335	4	4	4	4	15	Sem i-mature	Good	Fair	Semi mature specimen growing as part of a linear arboricultural feature towards the western boundary. Single stem. Common cohesive canopy.	No works required at the time of assessment	C1, 2	48	3.90
T12	Small-leaved lime	Tilia cordata	14	335	4	4	4	4	15	Sem i-mature	Good	Fair	Semi mature specimen growing as part of a linear arboricultural feature towards the western boundary. Single stem. Epicormic growth at base. Common cohesive canopy.	Remove epicormic growth.	C1, 2	7	1.50
T13	Small-leaved lime	Tilia cordata	14	310	4	4	4	4	15	Sem i-mature	Good	Fair	Semi mature specimen growing as part of a linear arboricultural feature towards the western boundary. Single stem. Common cohesive canopy.	No works required at the time of assessment	C1, 2	48	3.90
T14	Small-leaved lime	Tilia cordata	14	350	4	4	4	4	15	Sem i-mature	Good	Fair	Semi mature specimen growing as part of a linear arboricultural feature towards the western boundary. Single stem. Dense ivy on the stem and scaffold obscuring assessment. Common cohesive canopy. Adds height to the site boundary screen.	Sever ivy at base and allow to dieback.	C1, 2	290	9.60



# BS5837:2012 TREE SCHEDULE

**SITE**  
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 Moreton-In-Marsh

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 Steve Turner

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 2nd March 2022

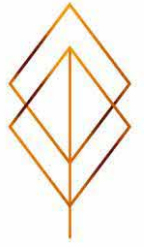
**REFERENCE**  
 240117 22008 TS V1

Tree No.	Common Name	Scientific Name	Height (m)	Stem Dia (mm)	Crown Spread (m)				Height of Crown Clearance (m)	Age Class	Phys Con	Struc Con	Additional notes	Preliminary recommendations	BS5837 Retention Category	RPA (m <sup>2</sup> )	RPA Radius (m)
					N	E	S	W									
T15	Sycamore	Acer pseudoplatanus	15	680	8	7	6	7	4	Early-mature	Good	Fair	Early mature specimen located within wooded area towards the western boundary of the site. Single stem. Ivy on base and stem partially obscuring assessment. Canopy biased northwest. Adds height to the boundary screen.	Sever ivy at base and allow to dieback.	B1, 2	55	4.20
G1	Sycamore, Lawson cypress, Common yew, Westerr red cedar	Acer pseudoplatanus, Chamaecyparis lawsoniana, Taxus baccata, Thuja plicata	8 - 17	280 - 415	6	6	6	6	1	Early-mature	Good	Good	Early mature group framing the eastern boundary of the site. Single stems. Dense ivy throughout. Common cohesive canopy. Forms a significant boundary screen.	No works required at the time of assessmen	B1, 2	10	1.80
G2	Common alder, Silver birch, Common ash, Larch, Common yew	Alnus glutinosa, Betula pendula, Fraxinus excelsior, Larix decidua, Taxus baccata	8 - 15	165 - 345	3	3	3	3	1	Semi-mature	Good	Fair	Semi mature group located on the western boundary of the site. Single stems. Common cohesive canopy. Individually of limited arboricultural meri but forms a significant boundary screen.	No works required at the time of assessmen	B2	5	1.20
H1	Portuguese laurel	Prunus lusitanica	2 - 2.5	40 - 80	1	1	1	1	0	Semi-mature	Good	Good	Semi mature hedgerow framing the northern boundary of the site. Forms a dense low level boundary screen.	No works required at the time of assessmen	C1,2	5	1.20

# Arboricultural Impact Assessment

REF NO: 240117 22008 AIA V1

DATE: January 2024



## Appendix 4: Plans

Tree Constraints Plan (OE-001)

Arboricultural Impact Plan (OE-002)

Tree Protection Plan (OE-003)

Gardeners Cottage

Hall

TCB



hello@origin-arb.com  
+44 (0)7826 062623  
www.Origin-Environmental.com

PROJECT INFORMATION

PROJECT  
Severn House, Upper Oddington, Moreton-In-Marsh

PLAN TITLE  
Tree Constraints Plan

PLAN REFERENCE  
240117 22008 TCP V1

PLAN SCALE  
1/200 @ A1

PLAN NUMBER  
OE-001

DATE  
March 2022

KEY

- Canopy Spread
- Tree Stem
- Root Protection Area
- Category A - High Retention Value
- Category B - Moderate Retention Value
- Category C - Low Retention Value
- Category U - No Retention Value

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Severn House



Tree locations are based on aerial imagery and measurements taken onsite. No topographical survey has been provided, as such tree locations must not be taken as exact.

This TCP is created as a design tool and does not make an assessment of the impacts or subsequent effects of the Proposed Development to trees. Therefore, the TCP must not be submitted solely to inform the planning application. An Arboricultural Impact Assessment or similar report will be required to inform the planning application which this TCP may form part of.



Gardeners Cottage

Hall

TCB



hello@origin-arb.com  
+44 (0)7826 062623

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PROJECT INFORMATION

PROJECT  
Severn House, Upper Oddington, Moreton-in-Marsh

PLAN TITLE  
Arboricultural Impact Plan

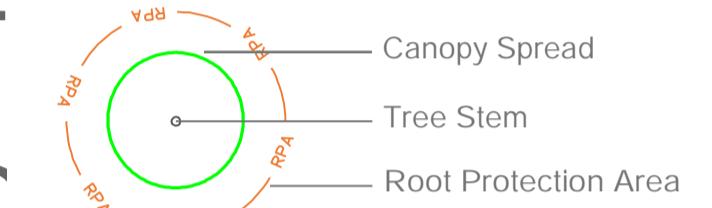
PLAN REFERENCE  
240117 22008 AIP V1

PLAN NUMBER  
OE-002

PLAN SCALE  
1/200 @ A1

DATE  
January 2024

KEY



Category A - High Retention Value

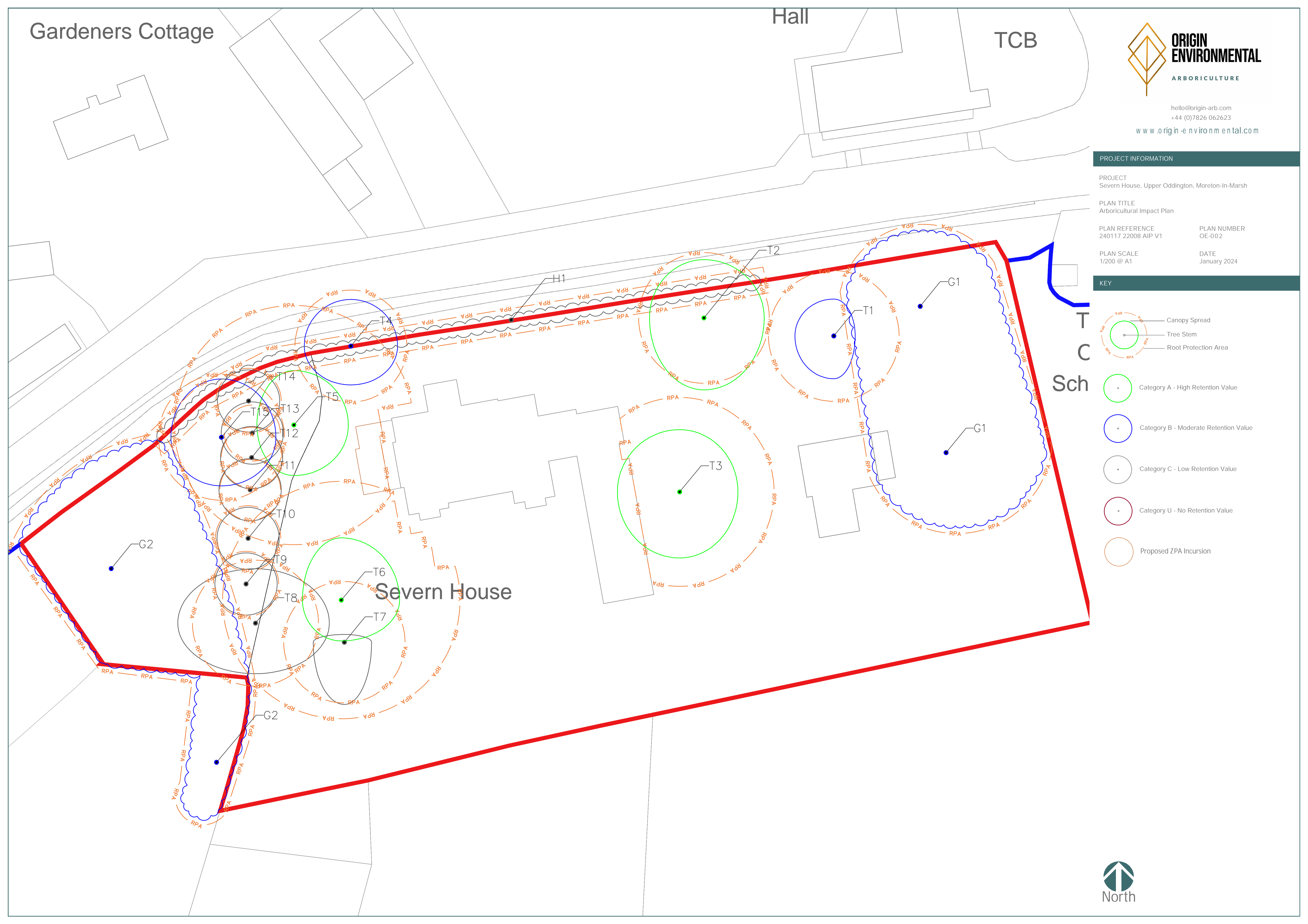
Category B - Moderate Retention Value

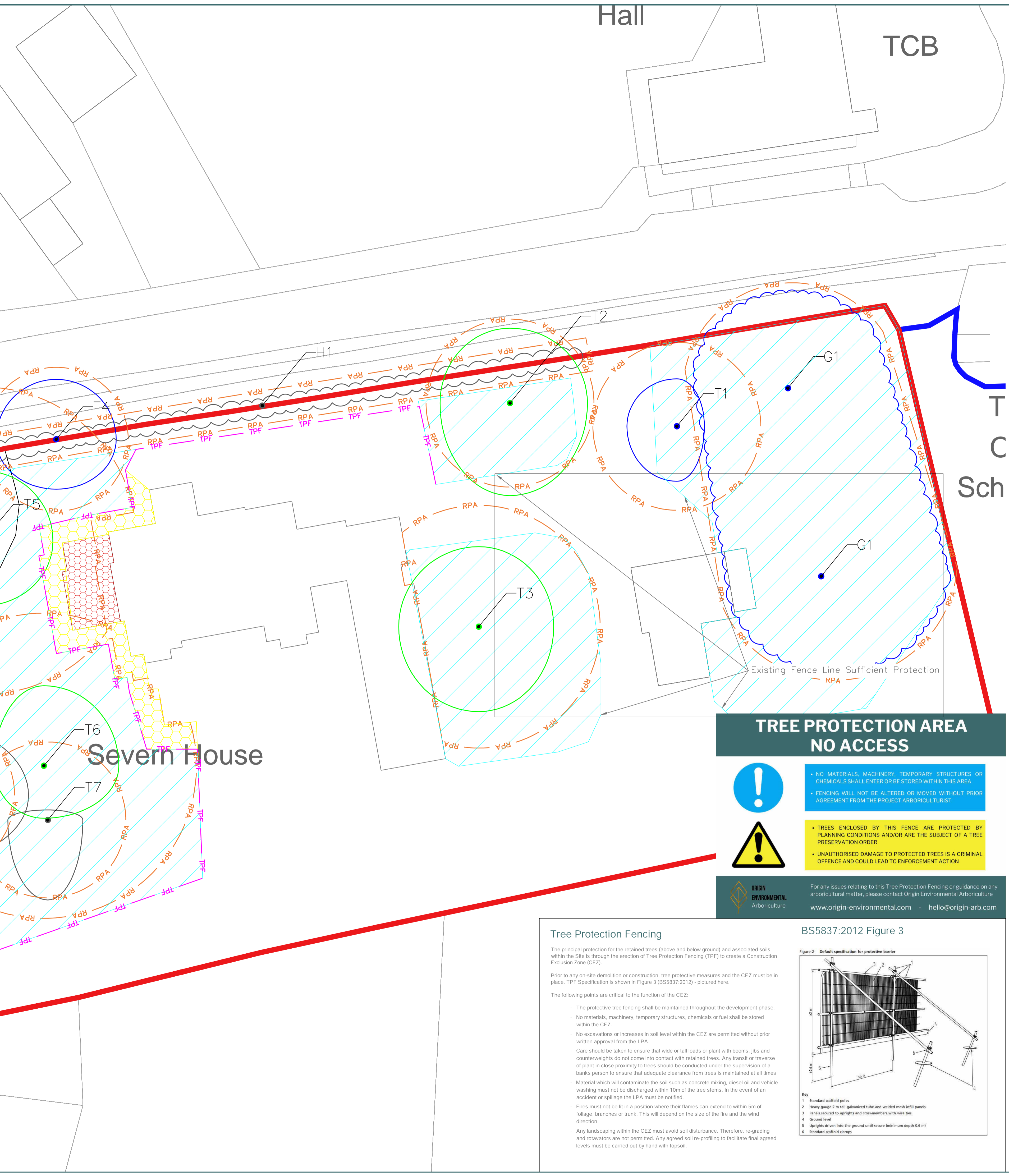
Category C - Low Retention Value

Category U - No Retention Value

Proposed ZPA Incursion

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**PROJECT INFORMATION**

PROJECT  
Severn House, Upper Oddington, Moreton-in-Marsh

PLAN TITLE  
Tree Protection Plan

PLAN REFERENCE  
240117 22008 TPP V1

PLAN NUMBER  
OE-003

PLAN SCALE  
1/200 @ A1

DATE  
January 2024

**KEY**

- Canopy Spread
- Tree Stem
- Root Protection Area
- Category A - High Retention Value
- Category B - Moderate Retention Value
- Category C - Low Retention Value
- Category U - No Retention Value
- Construction Exclusion Zone (CEZ)
- Tree Protection Fencing
- Ground Guards
- Pad and eam foundation Construction Methodology

**TREE PROTECTION AREA NO ACCESS**



• NO MATERIALS, MACHINERY, TEMPORARY STRUCTURES OR CHEMICALS SHALL ENTER OR BE STORED WITHIN THIS AREA

• FENCING WILL NOT BE ALTERED OR MOVED WITHOUT PRIOR AGREEMENT FROM THE PROJECT ARBORICULTURIST



• TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER

• UNAUTHORISED DAMAGE TO PROTECTED TREES IS A CRIMINAL OFFENCE AND COULD LEAD TO ENFORCEMENT ACTION



For any issues relating to this Tree Protection Fencing or guidance on any arboricultural matter, please contact Origin Environmental Arboriculture  
www.origin-environmental.com - hello@origin-arb.com

**Tree Protection Fencing**

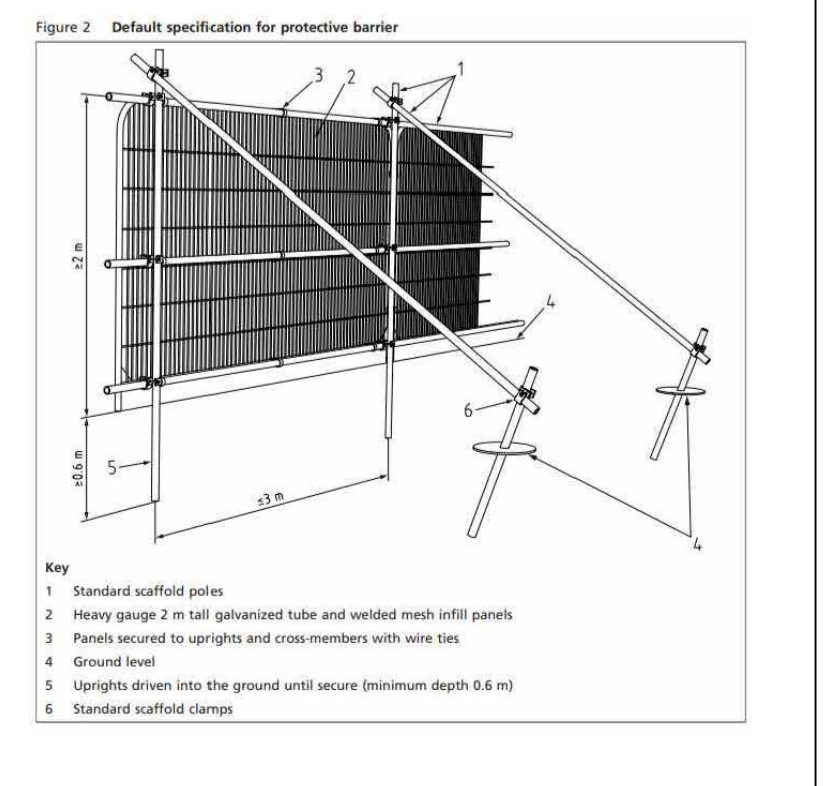
The principal protection for the retained trees (above and below ground) and associated soils within the Site is through the erection of Tree Protection Fencing (TPF) to create a Construction Exclusion Zone (CEZ).

Prior to any on-site demolition or construction, tree protective measures and the CEZ must be in place. TPF Specification is shown in Figure 3 (BS5837:2012) - pictured here.

The following points are critical to the function of the CEZ:

- The protective tree fencing shall be maintained throughout the development phase.
- No materials, machinery, temporary structures, chemicals or fuel shall be stored within the CEZ.
- No excavations or increases in soil level within the CEZ are permitted without prior written approval from the LPA.
- Care should be taken to ensure that wide or tall loads or plant with booms, jibs and counterweights do not come into contact with retained trees. Any transit or traverse of plant in close proximity to trees should be conducted under the supervision of a banks person to ensure that adequate clearance from trees is maintained at all times.
- Material which will contaminate the soil such as concrete mixing, diesel oil and vehicle washing must not be discharged within 10m of the tree stems. In the event of an accident or spillage the LPA must be notified.
- Fires must not be lit in a position where their flames can extend to within 5m of foliage, branches or trunk. This will depend on the size of the fire and the wind direction.
- Any landscaping within the CEZ must avoid soil disturbance. Therefore, re-grading and rotavators are not permitted. Any agreed soil re-profiling to facilitate final agreed levels must be carried out by hand with topsoil.

**BS5837:2012 Figure 3**

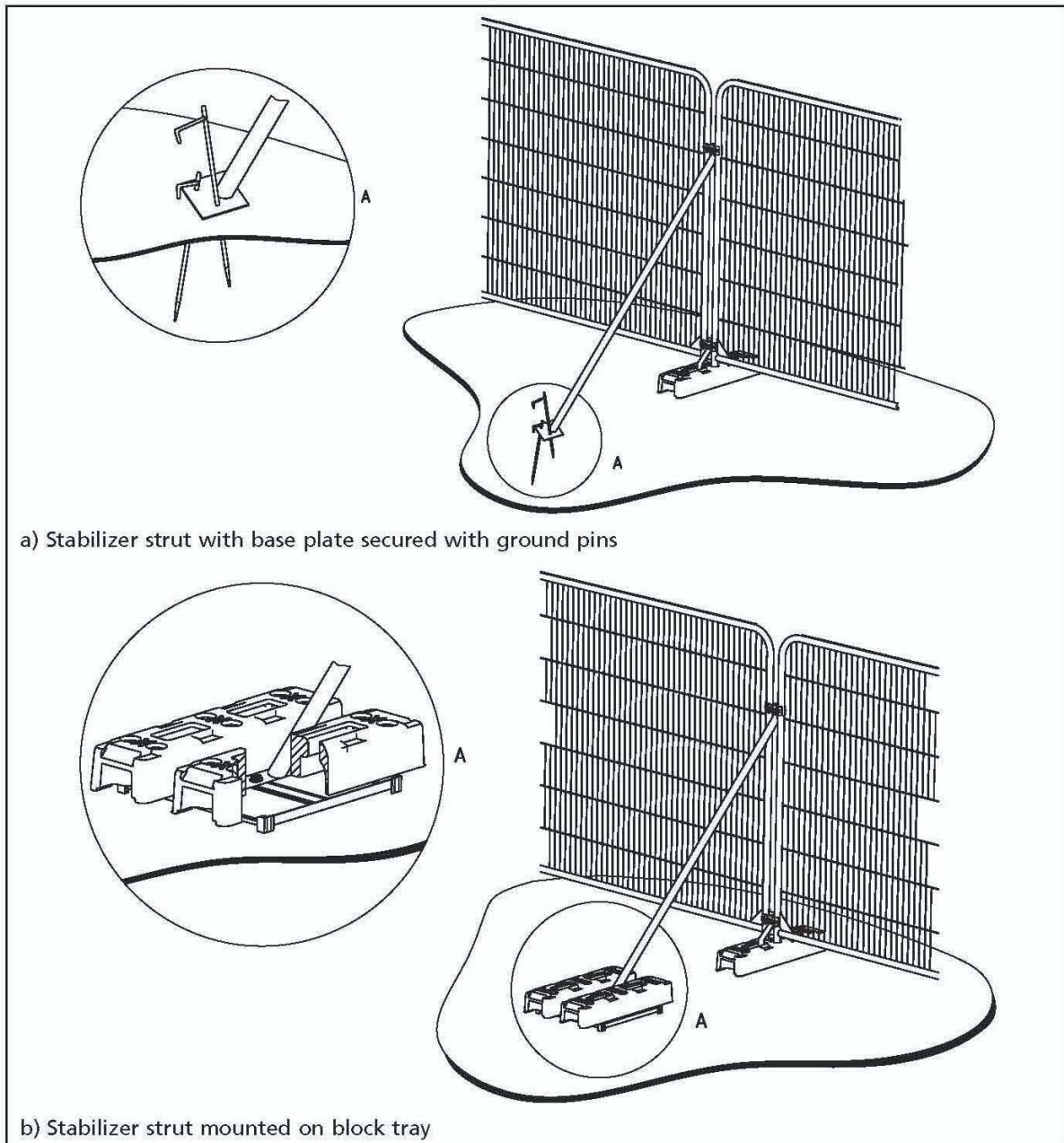


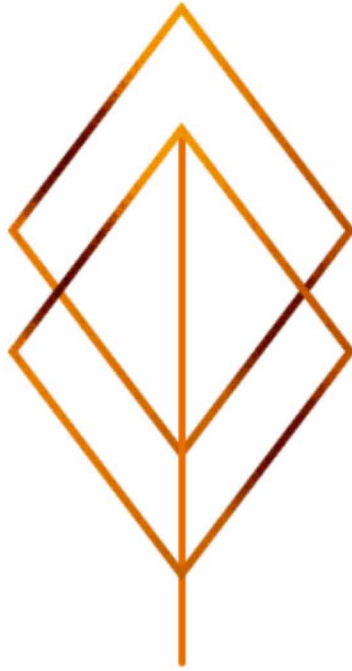


## Appendix 5: Tree Protection

### Fencing Specification

Figure 3 Examples of above-ground stabilizing systems





**ORIGIN**

**ENVIRONMENTAL**

Arboriculture

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Tel. 07826 062623

Email. [hello@origin-arb.com](mailto:hello@origin-arb.com)

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GET IN TOUCH TO DISCUSS YOUR PROJECT