



**ArbTS - Arboricultural Technician Services Ltd**

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## Arboricultural Report

Including:

Tree Survey Data &

Tree Constraints Plan,

Arboricultural Impact Assessment,

Tree Protection Plan and Arboricultural Method Statement

To the British Standard 5837:2012  
*(Trees in relation to design, demolition*  
*and construction. Recommendations)*

Date – 22nd September 2023

Site – Abernant

Project Reference – ArbTS\_866.3\_Abernant

# Table of Contents

1.0	Introduction	3
2.0	The Tree Survey	3
3.0	The Trees	4
4.0	Tree Constraints Plan Information	4
5.0	Arboricultural Impact Assessment	5
6.0	Arboricultural Method Statement	7
7.0	Conclusion	9
8.0	Qualifications & Further Information	10
9.0	Bibliography & Web Information	11
10.0	Appendix	
	1A	Tree Survey Data + 1B - Detailed Tree Survey Data Summary
	2	Tree Constraints Plan
	3	Tree Survey Key
	4	Tree Protection Plan
	5	Tree Photographs

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## 1.0 Introduction

- 1.1 The purpose of this report is to assess the quality of the trees at a site at Abernant, assess the arboricultural impact of the proposed development design and provide details regarding the protection of retained trees during construction work.
- 1.2 This report identifies the quality of the trees on this site as categorised by the *British Standard 5837:2012, Trees in relation to design, demolition and construction - Recommendations*. The survey and findings, as reported here, represent an unbiased third-party opinion offering professional advice on the value of the trees on or adjacent to this site. To illustrate the constraints identified trees pose to the design of future development, a Tree Constraints Plan (TCP) has been drawn, as found in Appendix 2.
- 1.3 Arboricultural constraints within the surveyed site relate primarily to the preservation of trees recommended for retention. Identified trees must be protected during the construction phase by employing a combination of tree protection methods as illustrated in Appendix 4, Tree Protection Plan and detailed within Section 6 - Arboricultural Method Statement.
- 1.4 The trees' root system and the associated soil structure is often overlooked during the construction process and can be damaged or altered by compaction, causing significant damage to the health of the tree. Generally, the tree's entire root system is within the top 600mm of soil, where it can be easily damaged. A calculated ground area around the tree should be protected during the onsite construction phase. In this report, it is referred to as the Root Protection Area (RPA).

## 2.0 The Tree Survey

- 2.1 The tree survey was conducted by *Stephen Lucoq BSc (Hons), Tech Cert (ArborA), M.Arbor.A* on 12th June 2023.
- 2.2 Trees over 75mm were tagged where appropriate with numbered metal identification tags at around 2.0 metres above ground level.
- 2.3 All observations were made from the ground with an acoustic-sounding hammer. No invasive decay detective instruments were used.
- 2.4 The survey was carried out per *British Standard 5837:2012, Trees in relation to design, demolition and construction - Recommendations*. This standard gives a systematic, consistent, transparent evaluation method for tree surveying.
- 2.5 The tree survey was conducted with the aid of a topographical survey.
- 2.6 **Preliminary management recommendations:** The survey has identified preliminary management recommendations for the trees on or adjacent to this site. Details regarding these specified operations are given in this report (See Appendix 1 - Tree Survey Data). Where work priority is stated to be H – High due to safety reasons, these operations should be carried out as soon as possible. Where work priority is

said to be M/H – medium/high or higher, these operations should be undertaken before the commencement of any works on site.

- 2.7 **Limitations of the tree survey:** Whilst every effort is made to ensure an accurate assessment of the tree's condition during the survey, no responsibility can be taken for resultant damage or injury that occurred by a failing tree. The survey only gives a snapshot of what is visible and is not obscured on the day of the survey. The survey identifies trees of varying quality and their above-ground/below-ground constraints. This survey does not constitute a full tree condition survey/tree risk assessment of the site, and this report is only valid for 24 months from the date of the tree survey.

### 3.0 The Trees

- 3.1 The complete tree survey data can be found in Appendix 1A Tree Survey Data

- 3.2 Tree Survey Summary Table (See Appendix 3 for BS5837 category definitions).  
(A more detailed Tree Survey Data Summary can be found in Appendix 1B)

BS5837:2012 Quality Category	Total Number of Individual Trees Surveyed	Total Number of Tree Groups Surveyed	Total Number of Tree Areas Surveyed	Total Number of Woodland Areas Surveyed	Total Number of Hedgerows Surveyed	Total
<b>A</b> (High - Most desirable for retention)	4	1	0	3	0	8
<b>B</b> (Moderate - Desirable for retention)	1	8	0	1	0	10
<b>C</b> (Low - Optional for retention)	3	12	1	0	2	18
<b>U</b> (Poor - Unsuitable for retention)	11	0	0	0	0	11
<b>Total A,B,C,U</b>	19	21	1	4	2	47

### 4.0 Tree Constraints Plan (TCP) Information

- 4.1 A Tree Constraints Plan (TCP) can be found in Appendix 2 of this report. An introduction to TCP can also be found at the start of this Appendix Section. For further information and details regarding TCP, please see the *British Standard 5837:2012, Trees in relation to design, demolition and construction – Recommendations*.



## 5.0 Arboricultural Impact Assessment (AIA)

5.1 The following Arboricultural Impact Assessment has been made for the proposed development design.

5.2.1 Tree Loss - AIA - MODERATE - The following trees and hedgerows are required to be removed to facilitate the construction of the proposed development design.

5.2.2 Individual Tree Loss –

AIA - Individual trees removed to facilitate development						
BS5837 Quality Category	Tree ID# Removed	Tree Number Removed	Total Trees Surveyed	% Trees Removed From Total Surveyed	Mitigation Required	Arboricultural Adverse Impact (0-No Impact, 10-High Impact)
A (High)	T15	1	4	25.0	Y	3
B (Medium)		0	1	0.0		0
C (Low)	T28	1	3	33.3	N	1
U (Poor)	T16, T32, T30, T31, T29, T18, T40, T39	8	11	72.7	N	0
Total A,B,C,U Removed		10	19	52.6		

5.2.3 Grouped, Area, Woodland Tree Loss –

AIA - Tree Group, Tree Area and Woodland Area removed to facilitate development						
BS5837 Category	Group, Area or Wood ID# Removed	Number Removed	% Number of Group, Area & Wood Removed From Total	Total Area of Group, Area & Wood Removed (Metres Squared)	Mitigation Required	Arboricultural Adverse Impact (0-No Impact, 10-High Impact)
A	Small part of W1, Outer edge of W12 mainly sprawling edge scrub, G5	3	75.0	2,337.0	Y	3
B	G14, G27, Part of G11, G2	4	44.4	6,480.0	Y	6
C	G21, G17, G20, G39, G38, G33, Part of A24, G23	8	61.5	13,035.0	Y	3
U		0	0.0	0.0		0
Total A,B,C,U Removed		15	57.7	21,852.0		

#### 5.2.4 Hedgerow Loss –

- Hedgerow H41, H42 – Length 65 metres - Low-quality cypress hedgerow

#### 5.2.5 Overall Tree Loss –

Several trees are identified to be removed to facilitate the construction of the proposed development design (10 individual trees, 11 tree groups, part of 1 tree group, part of 1 tree area, the outer edge of 2 woodland areas and 65 metres of hedgerow). Many of these trees identified for removal are low or poor-quality trees (C / U Category ). These trees should not present a constraint on developing the site. The removal of the moderate to high-quality trees (A/B Category) will require mitigation by suitable compensatory tree planting and surrounding practical woodland management (i.e. invasive species removal etc.). The site offers much space outside the developed area to allow for a substantial scheme of tree planting mitigation.

5.3 Root Protection Area (RPA) – AIA - LOW - RPA potential damage can all be managed through the installation of tree protective fencing, as designed by an Arboriculturist will ensure no significant long-term adverse impact will occur to any of the retained trees.

5.4 Tree surgery work – AIA - LOW / MODERATE - Some branch reduction/branch lifting pruning work will be required to facilitate this proposed scheme, as detailed in the tree protection plan (Appendix 4). This work will be carried out to the *British Standard 3998:2010 tree work recommendations*. Adhering to this standard will ensure no adverse impact on these trees' long-term health or visual amenity.

5.5 Future Tree Pressures – AIA - LOW / MODERATE - The development design has considered many of the tree constraints of the larger higher-value trees on this site to ensure they are suitably included in the design. This can be demonstrated by the central amenity area formed around the two high-value oak tree T8 + T26. The northern area of the design results in many rear gardens backing onto the adjacent woodland. This tree over dominance can be managed by periodic pruning. Overall, the design has considered the size and value of many of the trees on this site to minimise any future pressures to heavily prune or fell the higher-value trees .

5.6.1 AIA – Conclusion - AIA - (Including landscape mitigation) - LOW / MODERATE - The site has several Arboricultural constraints that must be considered in the development design phase. Several trees are identified to be removed to facilitate the construction of the proposed development design (10 individual trees, 11 tree groups, part of 1 tree group, part of 1 tree area, the outer edge of 2 woodland areas and 65 metres of hedgerow). Many of these trees identified for removal are low or poor quality trees (C / U Category ). These trees should not present a constraint on developing the site. The removal of the moderate to high-quality trees (A/B Category) will require mitigation by suitable compensatory tree planting and surrounding practical woodland management (i.e. invasive species removal etc.). The site offers much space outside the developed area to allow for a substantial scheme of tree planting mitigation.

- 5.6.2 This proposed development design has aimed to retain a high proportion of the higher-value trees (A + B Category) that form part of the site whilst sustainably using it for residential development. Of note is the amenity area in the northern region of the site around the two high-value Oak Trees (T8 + T26). This amenity area will provide the required space around these trees to protect their future health whilst providing a high-value public amenity/landscape area to the development.
- 5.6.3 The proposal will not cause a long-term adverse impact on the local amenity of the area through tree loss. Mitigative tree, hedgerow and shrub planting will be required for the loss of the trees on this site through a combination of different diverse tree/shrub species and varied nursery-aged stock.
- 5.6.4 The construction of the proposed development, whilst complying with the tree protection scheme as detailed in section 6, will ensure that no significant long-term adverse Arboricultural impact occurs on the health of any retained trees on or adjacent to this site or the long-term amenity of the area.

## 6.0 Arboricultural Method Statement

- 6.1 The Tree Protection Plan to facilitate the construction of the development design can be found in Appendix 4 of this report. The Tree Protection Plan must comply with all of the following:
- Be regarded as sacrosanct and follow the sequence of events as detailed in the table below
  - Be installed before commencement of any demolishing or construction works on site
  - Must not be removed or altered without prior approval of the local planning authority
- 6.2 The following table overleaf provides a detailed sequence of events that must occur to protect the retained trees during all stages of the construction process. These methods must be communicated to the entire construction team before any work on site.

Stage	Arboricultural Method Statement (In the sequence of events)
<b>1.) Preconstruction</b> <i>(Prior to any on-site construction work, including demolition work, site material storage etc.)</i>	<b>1.1 – Design</b> areas for <b>construction site storage</b> by the site supervisor and the appointed Arboriculturist.
	<b>1.2 – Design</b> position, form and construction methods of <b>all utility services</b> with Arboricultural consideration. All underground service designs <b>MUST</b> conform to the NJUG Volume 4 Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees. The full document is available at <a href="http://www.njug.org.uk/">http://www.njug.org.uk/</a> and <a href="#">BS5837:2012</a> . Local Planning Authority to be consulted on utility service design details and, if satisfied, to be approved in writing before installation during the construction phase.

	<p><b>1.3– Tree surgery work</b> to be carried out is detailed in the Tree Protection Plan (Appendix 4) of this report and to the <i>British Standard:3998:2010: Recommendation for tree works</i>. Where required, all trees close to the development (Dwellings/Parking Areas, Foot Paths etc.) will be aerial inspected by an arborist, and any large deadwood over 25mm diameter is to be removed/reduced as required. Any major significant defects are to be documented and photographed, appointed Arboriculturist and Local Planning Authority Tree Officer are to be consulted for recommended management options and subsequent agreed work carried out.</p> <p><b>1.4 – Tree protective fencing installed</b> in the position and form as detailed in the Tree Protection Plan (Appendix - 4). Installation is to be supervised by the appointed Arboriculturist. All weather tree construction exclusion zone posters are to be secured to fencing at regular intervals.</p> <p><b>1.5 – Site storage area containers</b> installed as designed and supervised by the site supervisor and the appointed Arboriculturist.</p> <p><b>1.6– Onsite meeting</b> with all parties, client, Local Planning Authority tree officer, agent, developer, site supervisor and the appointed Arboriculturist to ensure all tree protection methods are in place as detailed on the Tree Protection Plan (Appendix - 4). Any issues that arise from the site meeting are addressed if required.</p> <p><b>1.7 – Appointed Arboriculturist to document</b> all tree protection methods in situ and photographs taken for reference purposes. Copy of document report sent to all parties.</p>
<b>2.) Construction</b>	<p><b>2.1 – The site supervisor is to be briefed</b> by the appointed Arboriculturist regarding the Tree Protection Plan/Methods, and a laminated copy of the plan/methods is to be secured onto the wall in the site supervisor's office. Contact details of the appointed Arboriculturist, Council's Tree Officer, to be included. Emphasis is to be made to the site supervisor on the importance of the Tree Protection Plan/Methods and possible planning enforcement action (Stop Notice), problems with discharging tree protection conditions and/or legal action for noncompliance with these tree protection methods.</p> <p><b>2.2 – All contractors are to be briefed</b> by the site supervisor and/or the appointed Arboriculturist regarding the tree protection plan and methods before starting work on site. Emphasis made to contractors on the importance of the Tree Protection Plan/Methods and possible planning enforcement action (Stop Notice), problems with discharging tree protection conditions and/or legal action for noncompliance with these tree protection methods.</p> <p><b>2.3 – The construction phase begins</b> with regular <b>site inspection visits</b> from the appointed Arboriculturist (Once every yearly quarter for the entire duration) to ensure all tree protection methods are being adhered to. Arboriculturist to document findings from the site visits, including any issues identified, how to resolve and photographic evidence. Document report to be sent to all parties within 1 week after the site visit.</p> <p><b>2.4- Tree Safe Construction</b> (Throughout site) – areas outside of the construction exclusion zones, as shown on the tree protection plan, must adhere to the following:</p> <ul style="list-style-type: none"> <li>•Building materials and fuels such as oil, bitumen or cement should not be stacked or discharged within 20 metres of the tree's stem.</li> <li>•Fires will not be lit beneath any tree or in a place where flames could extend to within 10 metres of the tree.</li> <li>•Trees to be retained and protected should not be used as anchorage for services or equipment.</li> <li>•The use of cranes and large machinery on site should be planned and care taken not to damage the trees during the process.</li> </ul> <p><b>2.5 – Unforeseen issues</b> which require the alteration of the Tree Protection Plan/Methods, required tree surgery work or immediate remedial work will be submitted to the Local Planning Authority for approval in writing.</p>

<b>3.) Post Construction</b> ( <i>Once all construction work has been completed, this includes all utility services</i> )	<b>3.1 – Tree Protection fencing Removed.</b>
	<b>3.2 – Hard and soft landscaping commence</b> - All landscape team members are to be briefed regarding tree protections by an Arboriculturist.
	<b>3.3 – Any required remedial tree action is taken</b> , such as Leaf Mulch Application, soil de-compaction methods, contamination clean up etc., to be carried out.

## 7.0 Conclusion

- 7.1 Adhering to the tree protection details in this report, the proposed development can be constructed without any significant long-term adverse impact on the retained trees or the area's amenity.

## 8.0 Further Information & Qualifications

Stephen Lucocq has been involved in Arboriculture within South Wales for over twenty years. He has worked as an Arborist for many of these years and has an excellent working knowledge of the practical side of the profession. He has always taken an active interest in all areas of Arboriculture and kept up to date with current research and developments.

### Qualifications

- First Class BSc (Hons) Degree – Combined Studies - Biology and IT
- Arboricultural Association Technicians Certificate – Level 4 - (Merit)
- PTI - Professional Tree Inspection (Lantra Awards)
- 2D Computer-Aided Design (City and Guilds - Level 3)
- Quantified Tree Risk Assessment (QTRA) – Mike Ellison
- Visual Tree Assessment (VTA) – Mike Ellison
- Arboriculture and Bats (Lantra)
- Industrial Rope Access Trade Association (IRATA)
- Practical Arboriculture Qualifications (NPTC)

### Membership

- Arboricultural Association Professional Member (M.Arbor.A)

## 9.0 Web Information & Bibliography

### Web Information

- Arboricultural Association  
<http://www.trees.org.uk/>
- Cellular Confinement System  
**GeoWeb** - [GreenFix](#)  
**CellWeb** - [Geosynthetics](#) [Cellweb](#)
- Underground Utilises Installation  
<http://www.njug.org.uk/>

### Bibliography

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- British Standard 5837:2012, Trees in relation to design, demolition and construction - Recommendations UK; British Standards Intuition
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- Weber, K & Mattheck, C (2003) Manual of wood decay UK; Arboricultural Association

## **10.0 Appendix 1A -Tree Survey Data**



Tree ID #	Tree Species	Age	Stems	Stem Diam (mm)	Cat	Height + (Lower Branch Height)	Nrth	Est	Sth	Wst	Phys Cond	Struc Cond	Est. Remain Contrib	Comments	Preliminary Management Recommendations	Work Priority	RPR (m)	RPA (m2)	
A7	Fraxinus excelsior (Ash),Acer pseudoplatanus (Sycamore),Alnus glutinosa (Common Alder),Betula pendula (Silver Birch),Corylus avellana (Hazel),Crataegus monogyna (Hawthorn)	Y	1	150	C3	6(0)	2	2	2	2	F	F	10+	high C category. Surrounding terrain prevented close inspection of the tree therefore all observations and measurements are estimated.	approximate area of mainly small sprawling regeneration, high proportion of small young ash with signs of Ash dieback disease, some larger sprawling goat willow, sycamore and small amounts of oak regeneration additionally noted		1.8	10.18	
A24	Salix caprea (Goat Willow),Crataegus monogyna (Hawthorn),Betula pendula (Silver Birch)	SM	1	100	C3	8(0)	3	3	3	3	F	F	10+		area of sprawling scrub and small tree regeneration		1.2	4.52	
G2	Acer pseudoplatanus (Sycamore),Salix caprea (Goat Willow),Betula pendula (Silver Birch),Fraxinus excelsior (Ash),Crataegus monogyna (Hawthorn),Corylus avellana (Hazel),Acer campestre (Field Maple),Sorbus aucuparia (Rowan),Populus alba (White Poplar)	M	1	400	B2	13(3)	5	5	5	5	G/F	F	40+	high B category.	roadside small group of trees, tree group slightly separated from main woodland area by tarmac/stone tracks, mainly tightly grown upright in form trees, thick area of tree/scrub growth in places, some Ash showing signs of Ash dieback disease, good species variety and of fair to Good form		4.8	72.39	
G3	Acer pseudoplatanus (Sycamore),Alnus glutinosa (Common Alder),Aesculus hippocastanum (Horse Chestnut),Ulmus glabra (Wych Elm),Carpinus betulus (Hornbeam),Salix caprea (Goat Willow),Betula pubescens (Downy Birch),Ilex aquifolium (Holly)	M	1	550	B2	16(4)	6	6	6	6	G/F	G/F	40+	high B category.	group of trees, trees of note individually included in the survey, a mixture of trees of size and form, mainly larger road side prominent sycamore trees along the southern area of the site along abernant road, Ash most showing signs of Ash dieback disease, this tree group then turns into small scrubber tree form to the north, from this smaller regeneration noted at Northern end included as separate tree area, some small open areas in tree group	fell Road side Ash with significant signs of Ash dieback disease	H/M	6.6	136.9
G5	Quercus petraea (Sessile Oak),Acer pseudoplatanus (Sycamore),Crataegus monogyna (Hawthorn),Fraxinus excelsior (Ash)	M	1	650	A3	17(5)	7	7	7	7	G/F	G/F	40+	low A category. Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated.	group of larger trees growing from bank, mainly oak and sycamore, one large Ash tree with significant signs of Ash dieback disease		7.8	191.2	
G6	Fraxinus excelsior (Ash),Acer pseudoplatanus (Sycamore),Crataegus monogyna (Hawthorn)	EM	1	300	C2	13(4)	4	4	4	4	F	F	10+		roadside strip of trees, ash at lower southern end showing significant signs of Ash dieback disease	fell Ash with clear signs of Ash dieback disease	H/M	3.6	40.72

Tree ID #	Tree Species	Age	Stems	Stem Diam (mm)	Cat	Height + (Lower Branch Height)	Nrth	Est	Sth	Wst	Phys Cond	Struc Cond	Est. Remain Contrib	Comments	Preliminary Management Recommendations	Work Priority	RPR (m)	RPA (m2)
G10	Fraxinus excelsior (Ash),Betula pendula (Silver Birch)	M	1	350	B2	12(0)	7	7	7	7	G/F	N/A	20+	Located on private land preventing a close inspection of the tree therefore all observations and measurements are estimated.	scattered group of early mature trees		4.2	55.42
G11	Quercus robur (Common Oak),Salix caprea (Goat Willow),Corylus avellana (Hazel),Betula pendula (Silver Birch),Acer campestre (Field Maple)	M	1	400	B2	9(0)	6	6	6	6	G/F	F	20+	Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated.	group of thick medium sized trees and scrub		4.8	72.39
G14	Quercus robur (Common Oak),Crataegus monogyna (Hawthorn),Betula pendula (Silver Birch)	M	1	400	B2	14(0)	5	5	5	5	G/F	F	20+	low B category.	group of mainly oak, mostly slender and upright in form		4.8	72.39
G17	Quercus robur (Common Oak)	M	1	450	C2	13(5)	6	6	6	6	F	F	10+	low B category.	group of two upright oak forming a whole, some trunk damage and stem decline noted		5.4	91.62
G20	Betula pendula (Silver Birch)	M	1	200	C2	8(2)	3	3	3	3	F	F	10+		isolated group of small upright birch		2.4	18.1
G21	Salix caprea (Goat Willow),Quercus robur (Common Oak)	M	1	350	C2	8(2)	4	4	4	4	F	F	10+				4.2	55.42
G22	Fraxinus excelsior (Ash),Acer pseudoplatanus (Sycamore)	EM	1	350	C2	11(3)	5	5	5	5	F	F	10+		row of trees, untidy in form ash showing early signs of ash dieback		4.2	55.42
G23	Alnus glutinosa (Common Alder),Betula pendula (Silver Birch)	EM	1	200	C2	8(0)	3	3	3	3	F	F	10+		scattered group of mainly small alder		2.4	18.1
G25	Unknown (Unknown)	M	1	450	B2	12(0)	5	5	5	5	G/F	N/A	20+	Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated.			5.4	91.62
G27	Quercus robur (Common Oak)	M	1	900	B2	16(5)	10	10	10	10	F	N/A	20+	Sparse foliage cover.	large multistemmed tree, bees nest in tree so inspected from a distance		10.8	366.5
G33	Salix caprea (Goat Willow),Alnus glutinosa (Common Alder),Acer pseudoplatanus (Sycamore)	M	1	300	C2	8(0)	4	4	4	4	F	F	10+		group of sprawling scrub		3.6	40.72
G35	Acer pseudoplatanus (Sycamore),Pinus sylvestris (Scots Pine)	M	1	600	B2	14(2)	6	6	6	6	G/F	F	20+	Surrounding terrain prevented close inspection of the tree therefore all observations and measurements are estimated.	small group of two trees growing through each other		7.2	162.9

Tree ID #	Tree Species	Age	Stems	Stem Diam (mm)	Cat	Height + (Lower Branch Height)	Nrth	Est	Sth	Wst	Phys Cond	Struc Cond	Est. Remain Contrib	Comments	Preliminary Management Recommendations	Work Priority	RPR (m)	RPA (m2)
G38	Alnus glutinosa (Common Alder),Acer pseudoplatanus (Sycamore),Salix fragilis (Crack Willow)	M	1	350	C2	12(0)	4	4	4	4	F	F	10+	group of trees, mainly alder, some decline noted			4.2	55.42
G39	Alnus glutinosa (Common Alder)	M	1	200	C2	7(0)	4	4	4	4	F	F	10+	group of trees, mainly alder, some decline noted			2.4	18.1
G47	Acer pseudoplatanus (Sycamore)	EM	1	400	C2	9(0)	4	4	4	4	F	N/A	10+	group of two small sycamore, scrub like in form			4.8	72.39
G48	Fraxinus excelsior (Ash),Acer pseudoplatanus (Sycamore)	M	1	350	C2	12(0)	4	4	4	4	F/P	N/A	<10	Dieback in crown. small group of ash and sycamore			4.2	55.42
G49	Acer pseudoplatanus (Sycamore),Fraxinus excelsior (Ash)	EM	1	400	C2	12(3)	4	4	4	4	F	F	10+	road side group of mainly upright ash, many showing early signs of ash dieback			4.8	72.39
H41	X Cupressocyparis leylandii (Leyland Cyp)	EM	1	250	C2	6(0)	3	3	3	3	F	F	10+	over grown hedgerow			3	28.28
H42	X Cupressocyparis leylandii (Leyland Cyp)	EM	1	250	C2	6(0)	3	3	3	3	F	F	10+	over grown hedgerow			3	28.28
T8	Quercus robur (Common Oak)	M	1	950	A3	13(1)	9	8	12	11	G/F	G/F	40+	old native oak tree of interest, twin stem with lower stem growing at an angle, forms a pair with adjacent oak			11.4	408.3
T15	Quercus robur (Common Oak)	M	1	900	A2	16(4)	9	9	6	8	G/F	G/F	40+	multistemmed oak of fair to good form			10.8	366.5
T16	Quercus robur (Common Oak)	EM	1	800	U	14(4)	5	8	9	6	F/P	F	<10	Dieback in crown.			9.6	289.6
T18	Quercus robur (Common Oak)	M	1	800	U	13(4)	5	7	7	5	F/P	F/P	<10	Sparse foliage cover. Dieback in crown.			9.6	289.6
T26	Quercus robur (Common Oak)	M	1	1100	A3	13(1)	10	10	10	7	F	G/F	40+	old native oak tree of interest, multistem, area of bark loss noted on northern trunk, forms pair with adjacent tree some tip dieback noted possibly retrenching crown			13.2	547.5
T28	Quercus robur (Common Oak)	M	1	800	C2	16(4)	8	8	8	8	F/P	F	10+	Dieback in crown. large oak with decline noted and no inner crown developing			9.6	289.6
T29	Fraxinus excelsior (Ash)	M	1	450	U	13(4)	5	5	5	5	F/P	F/P	<10	Dieback in crown.			5.4	91.62
T30	Fraxinus excelsior (Ash)	M	1	400	U	13(4)	5	5	5	3	F/P	N/A	<10	Dieback in crown. Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated.			4.8	72.39

Tree ID #	Tree Species	Age	Stems	Stem Diam (mm)	Cat	Height + (Lower Branch Height)	Nrth	Est	Sth	Wst	Phys Cond	Struc Cond	Est. Remain Contrib	Comments	Preliminary Management Recommendations	Work Priority	RPR (m)	RPA (m2)	
T31	Fraxinus excelsior (Ash)	M	1	400	U	13(4)	6	6	6	6	F/P	N/A	<10	Dieback in crown. Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated.			4.8	72.39	
T32	Quercus robur (Common Oak)	M	1	400	U	13(4)	5	5	5	3	F/P	N/A	<10	Dieback in crown. Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated.			4.8	72.39	
T34	Quercus robur (Common Oak)	M	1	900	A2	16(4)	8	8	8	8	G/F	G/F	40+	low A category. Slightly sparse foliage cover.			10.8	366.5	
T37	Quercus robur (Common Oak)	M	1	450	B3	12(2)	4	4	4	4	G/F	N/A	20+	high B category. Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated.	old oak that appears to have been pollard, est. 900mm diameter reduced by half due to pollard form to calculate RPA			5.4	91.62
T39	Acer pseudoplatanus (Sycamore)	M	1	1000	U	14(3)	8	8	8	8	P	P	<10	Dieback in crown. Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated.			12	452.5	
T40	Alnus glutinosa (Common Alder)	M	1	450	U	14(6)	4	4	4	4	P	P	<10	Dieback in crown.			5.4	91.62	
T43	Acer pseudoplatanus (Sycamore)	M	1	700	U	12(6)	6	6	6	6	F/P	N/A	10+	Dieback in crown. Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated.			8.4	221.7	
T44	Acer pseudoplatanus (Sycamore)	M	1	400	C2	12(4)	2	3	4	5	F	F	10+				4.8	72.39	
T45	Fraxinus excelsior (Ash)	M	1	450	U	12(4)	4	4	4	4	F/P	N/A	<10	Dieback in crown.			5.4	91.62	
T46	Salix caprea (Goat Willow)	M	1	350	C2	8(2)	5	5	5	5	F	F	10+	Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated.	multistemmed			4.2	55.42
T706	Salix caprea (Goat Willow)	M	1	500	U	12(4)	5	5	5	5	F	P	<10		twin stem goat willow next to railway line, reactive growth noted on trunk, species prone to stem failure	Fell	H/M	6	113.1

Tree ID #	Tree Species	Age	Stems	Stem Diam (mm)	Cat	Height + (Lower Branch Height)	Nrth	Est	Sth	Wst	Phys Cond	Struc Cond	Est. Remain Contrib	Comments	Preliminary Management Recommendations	Work Priority	RPR (m)	RPA (m2)	
W1	Alnus glutinosa (Common Alder),Acer pseudoplatanus (Sycamore),Salix caprea (Goat Willow),Aesculus hippocastanum (Horse Chestnut),Crataegus monogyna (Hawthorn),Fraxinus excelsior (Ash),Ulmus glabra (Wych Elm),Corylus avellana (Hazel),Quercus cerris (Turkey Oak),Betula pendula (Silver Birch),Fagus sylvatica (Beech),Ilex aquifolium (Holly),Quercus petraea (Sessile Oak),Betula pubescens (Downy Birch)	M	1	550	A3	19(4)	6	6	6	6	G/F	G/F	40+	Surrounding vegetation prevented close inspection of the tree therefore all observations and measurements are estimated. Surrounding terrain prevented close inspection of the tree therefore all observations and measurements are estimated.	thick boundary group of woodland trees, good mixture of species, form and structure, many upright and slender in form with some larger older broader trees noted, good understorey, some Ash showing signs of Ash dieback disease, sprawling boundary edge in places			6.6	136.9
W4	Acer pseudoplatanus (Sycamore),Alnus glutinosa (Common Alder),Aesculus hippocastanum (Horse Chestnut),Fraxinus excelsior (Ash),Sorbus aucuparia (Rowan),Crataegus monogyna (Hawthorn),Salix caprea (Goat Willow),Ulmus glabra (Wych Elm),Corylus avellana (Hazel)	M	1	450	B2	15(0)	5	5	5	5	G/F	G/F	40+	high B category.	woodland area on northern side of track, small amount of ash with signs of Ash dieback disease noted, good mixture of species and fair to Good structure, one dead alder tree noted, sprawling boundary edge			5.4	91.62
W9	mixed species	M	1	750	A1	15(0)	8	8	8	8	G/F	G/F	40+		woodland area, thick growth mixture of species, not inspected in great detail, typical, ash dieback disease noted			9	254.5
W12	Quercus robur (Common Oak),Crataegus monogyna (Hawthorn),Salix caprea (Goat Willow),Acer pseudoplatanus (Sycamore),Betula pendula (Silver Birch),Alnus glutinosa (Common Alder)	M	1	800	A2	12(0)	8	8	8	8	G/F	N/A	40+	Located on private land preventing a close inspection of the tree therefore all observations and measurements are estimated.	boundary woodland area, thick growth mixture of species, sprawling edge scrub including gorse in areas, not inspected in great detail			9.6	289.6

## 10.0 Appendix 1B – Detailed Tree Survey Data Summary

(Please see Appendix 3 - Tree Survey Key)

Field Usage Results.		
Total Records: 48		
Type	Count	% of Total
T	19	39.6
G	20	41.7
A	2	4.2
W	5	10.4
H	2	4.2
Tree Species	Count	% of Total
Quercus robur (Common Oak)	11	22.9
mixed species	1	2.1
Betula pendula (Silver Birch)	1	2.1
Unknown (Unknown)	1	2.1
Fraxinus excelsior (Ash)	4	8.3
Salix caprea (Goat Willow)	2	4.2
Alnus glutinosa (Common Alder)	2	4.2
Acer pseudoplatanus (Sycamore)	4	8.3
X Cupressocyparis leylandii (Leyland Cyp)	2	4.2
Average Stem Diameter	Count	% of Total
<150	1	2.1
<250	4	8.3
<500	26	54.2
<750	6	12.5
<1000	9	18.8
<2000	2	4.2
Cat	Count	% of Total
A1	1	2.1
A2	3	6.2
A3	4	8.3
B2	9	18.8
B3	1	2.1
C2	17	35.4
C3	2	4.2
U	11	22.9

Age	Count	% of Total
Y	1	2.1
SM	1	2.1
EM	8	16.7
M	38	79.2
Height	Count	% of Total
<10	12	25
<15	27	56.2
<20	9	18.8
Phy Cond	Count	% of Total
G/F	16	33.3
F	20	41.7
F/P	10	20.8
P	2	4.2
Stuc Cond	Count	% of Total
G/F	9	18.8

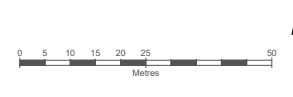
## 10.0 Appendix 2 - Tree Constraints Plan

### An introduction to the Tree Constraints Plan (TCP)

Trees identified to be retained should be treated as constraints to the design of future development. A Tree Constraints Plan has been drawn and can be found over leaf.

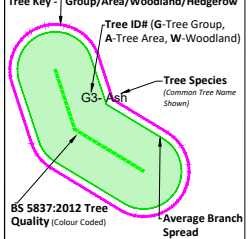
- **Tree Quality** - The TCP highlights the above and below-ground constraints each tree poses to design future development schemes. Further, the BS5837 tree quality category (A - High, B - Moderate, C - Low and U- Unsuitable for retention) are coloured coded as solid circles at the centre of the tree's position.
- **Root Protection Area** – The magenta circle on the TCP sets out the root protection area (RPA). No construction work in this area, ground-level alteration or site traffic (machinery or persons) should occur. This prevents damage to tree roots and soil compaction. (Where possible, an Arboriculturist can design suitable tree protection methods to facilitate construction work/site traffic within these areas).
- **Tree Canopy** - The green circle/oval on the TCP sets out the above-ground constraints of tree canopy spread. Within this area, no construction work or site traffic (machinery or persons) should occur if the tree is to be retained. This prevents damage to the tree branches and trunk. (Where possible, an Arboriculturist can design suitable tree protection methods to facilitate construction work/site traffic within these areas).
- **Tree Shading** – Shade from the retained trees should be considered in the development design. Depending on the tree's height and width, the shade cast will be from a North West to East pattern through the central part of the day.
- **Tree Future growth** - Within future development design, consideration should also be given to the ultimate height and extent of the canopy spread of all trees within site identified to be retained.





- KEY BS5837:2012 Tree Quality (Colour Code)**  
 (For Woodland, Tree Group and Tree Area)
- █ **Category A (High)**  
(\*Highly desirable for retention\*)
  - █ **Category B (Moderate)**  
(\*Desirable for retention\*)
  - █ **Category C (Low)**  
(\*Optional for retention\*)
  - █ **Category U (Poor)**  
(\*Unsuitable for retention\*)

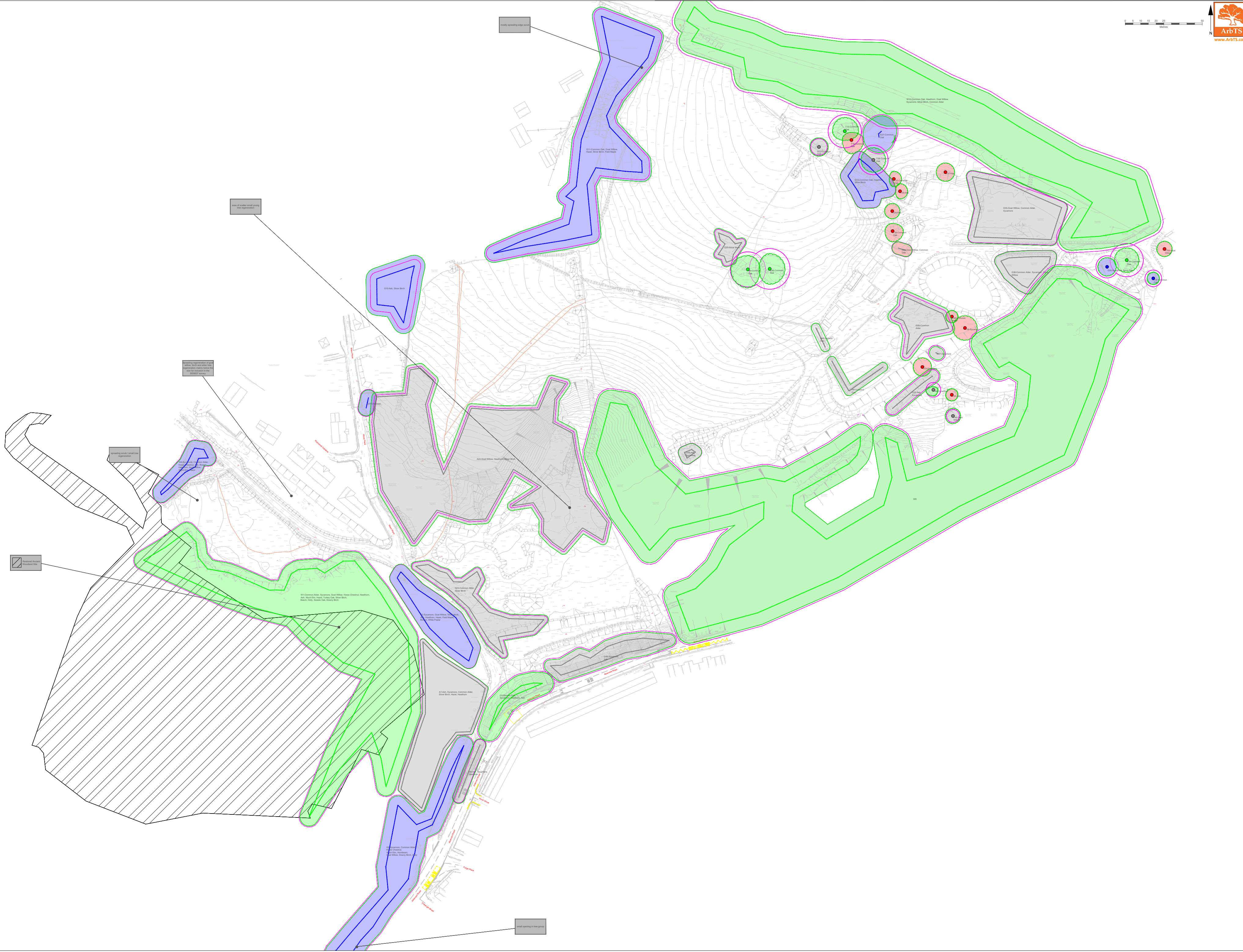
**Root Protection Area (RPA)** (A layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority)



**Definitions of BS5837:2012 Categories for Trees, Woodlands (Colour Codes):**

- A** - Those of high quality with an estimated remaining life expectancy of at least 40 years. (\*Highly desirable for retention\*)
- B** - Those of moderate quality with an estimated remaining life expectancy of at least 20 years. (\*Desirable for retention\*)
- C** - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. (\*Optional for retention\*)
- U** - 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. (\*Unsuitable for retention unless provides high conservation value\*)

**Please Note:**  
 Barriers and Ground Protection must be designed by an arboriculturist, installed before materials or machinery is brought onto site and before any demolition, development or stripping of soil commences. Once erected, barriers and ground protection should be regarded as sacrosanct, and should not be removed or altered without prior recommendation by an Arboriculturist and approval of the Local Planning Authority (LPA).

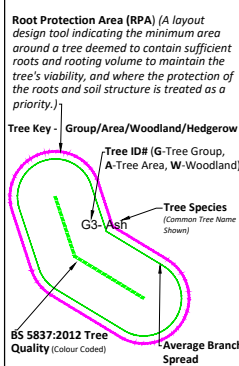


**Notes:**

- 1. All trees shown on this plan are to be retained unless otherwise stated.
- 2. Root Protection Areas (RPA) are shown as shaded areas around individual trees.
- 3. The minimum RPA for trees with a stem diameter of 75mm or more is 12m.
- 4. The minimum RPA for trees with a stem diameter of 50mm or more is 8m.
- 5. The minimum RPA for trees with a stem diameter of 25mm or more is 4m.
- 6. The minimum RPA for trees with a stem diameter of 150mm or more is 15m.
- 7. The minimum RPA for trees with a stem diameter of 100mm or more is 10m.
- 8. The minimum RPA for trees with a stem diameter of 75mm or more is 7m.
- 9. The minimum RPA for trees with a stem diameter of 50mm or more is 5m.
- 10. The minimum RPA for trees with a stem diameter of 25mm or more is 3m.
- 11. The minimum RPA for trees with a stem diameter of 150mm or more is 15m.
- 12. The minimum RPA for trees with a stem diameter of 100mm or more is 10m.
- 13. The minimum RPA for trees with a stem diameter of 75mm or more is 7m.
- 14. The minimum RPA for trees with a stem diameter of 50mm or more is 5m.
- 15. The minimum RPA for trees with a stem diameter of 25mm or more is 3m.



- KEY BS5837:2012 Tree Quality (Colour Code)**  
 (For Woodland, Tree Group and Tree Area)
- **Category A (High)**  
 (\*Highly desirable for retention\*)
  - **Category B (Moderate)**  
 (\*Desirable for retention\*)
  - **Category C (Low)**  
 (\*Optional for retention\*)
  - **Category U (Poor)**  
 (\*Unsuitable for retention\*)



**Definitions of BS5837:2012 Categories for Trees, Woodlands, (Colour Code):**

- A** - Those of high quality with an estimated remaining life expectancy of at least 40 years. (\*Highly desirable for retention\*)
- B** - Those of moderate quality with an estimated remaining life expectancy of at least 20 years. (\*Desirable for retention\*)
- C** - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. (\*Optional for retention\*)
- U** - 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. (\*Unsuitable for retention unless provides high conservation value\*)

**Please Note:**  
 Barriers and Ground Protection must be designed by an arboriculturist, installed before materials or machinery is brought onto site and before any demolition, development or stripping of soil commences. Once erected, barriers and ground protection should be regarded as sacrosanct, and should not be removed or altered without prior recommendation by an Arboriculturist and approval of the Local Planning Authority (LPA).





## 10.0 Appendix 3 - Tree Survey Data Key

- **Tree ID #** - Identifies the location of individual trees (T-ID Number), Groups of trees (G-ID Number), Area of trees (A-ID Number), Hedgerow (H-ID Number), Woodland (W-ID Number), Row of trees (R-ID Number) and tree Stumps (S-ID Number) on the accompanying plan. *(Please note: A group of trees here refers to two or more standing trees that form a visual whole, whereas an area of trees refers to dispersed individual trees standing within the site)*
- **Tree Species** - Scientific names and common tree name in brackets are generally shown.
- **Age**
  - o (Y) Young – Less than 1/3 of life completed
  - o (SM) Middle Aged - 1/3 - 2/3 of life completed
  - o (EM) Early Mature – Just entering Maturity
  - o (M) Mature – more than 2/3 of life completed
  - o (OM) Over Mature - more than 3/3 of life completed and declining
  - o (V) Veteran - (v) Veteran – Veteran trees have no precise definition but are trees considered to be of biological aesthetic or ecological value because of their age
- **Stems** – Number of tree stems used to calculate the RPR/RPA
- **Stem Diam** (mm) - Diameter of tree stem measured in millimetres for single stem trees or average stem diameter calculated for multi-stemmed trees as detailed in section 4.6 & Annex C of the British Standard 5837:2012, Trees in relation to design, demolition and construction - Recommendations. The height above ground level where the stem measurement was taken will be shown if not measured at 1.5 metres above ground level. *(Please note: that the stem diameter of certain trees will have to be estimated due to difficulties in taking measurements or for trees with a large number of stems)*
- **Cat** – Tree Quality Category - British Standard 5837:2012 A, B, C, U + 1, 2, 3

Based on BS5837:2012, categories A, B, C, and U provide the basis for prioritising trees for retention:

- o A – Those of high quality with an estimated remaining life expectancy of at least 40 years. (\*Most desirable for retention\*)
- o B - Those of moderate quality with an estimated remaining life expectancy of at least 20 years. (\*Desirable for retention\*)
- o C – Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. (\*Optional for retention\*)
- o U – 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. (\*Unsuitable for retention unless provides high conservation value\*)

Retention Criteria Subcategories: Used for identifying subcategories

E.g. A2 = A high-quality tree with high landscape qualities (further details can be found in British Standard 5837:2012, Trees in relation to design, demolition and construction - Recommendations UK; British Standards Intuition)

- o 1 – Mainly Arboricultural qualities
- o 2 – Mainly landscape qualities
- o 3 – Mainly cultural values, including conservation
  
- **Height + (Lower Branch Height)** - Tree height in metres and in brackets height in metres of the crown (tree branches) clearance at its lowest point above adjacent ground levels.
  
- **Nrth, Est, Sth, Wst** - Crown Spread (Metres) -Tree branch spread in metres measured in four directions (North, East, South, West) from the trunk.
  
- **Phys Cond** - Physiological Condition Indicating the health of the tree -
  - o (G) Good
  - o (F) Fair
  - o (P) Poor
  - o (D) Dead
  
- **Struc Cond** – Structural Condition indicating the structural integrity of the tree -
  - o (G) Good – No, or remediable physical defects or decay
  - o (F) Fair - Physical non-remediable defects or decay present, not presenting imminent danger but should be monitored
  - o (P) Poor - physical non-remediable defects or decay present, tree liable to imminent collapse or loss of major limbs.
  - o (D) Dead
  
- **Est. Remain Contrib - (<10, 10+, 20+, 40+)**

The trees estimated remaining contribution in years, recorded as:

  - o <10 – less than 10 years
  - o 10+ – at least 10 years
  - o 20+ – at least 20 years
  - o 40+ – at least 40 years
  
- **Comments** – Additional Comments, if required
  
- **Preliminary Management Recommendations** – Work Recommendations, including further investigation of suspected defects that require more detailed assessment and pose potential for wildlife habitat.

- **Work Priority** - Work Priority -This gives a work priority rating of preliminary management for each tree.
  - o H - High – Urgent work to be carried out as soon as practicable due to safety reasons (Within 14 days).
  - o H/M – High - Medium – Work to be carried out within 6 months/or before the construction phase begins
  - o M - Medium – Work to be carried out in 12 months
  - o L - Low – After consideration/Re-inspect in 18-24 months
  - o Blank – No work required.
  
- **RPR – Root protection radius / RPA - Root Protection Area** - Is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability and where the protection of the roots and soil structure is treated as a priority. RPR is a circular area measured as a radius in metres from the tree's centre, or RPA is an area in metres squared. This area may be changed in shape but not reduced in size, providing adequate protection for the tree's rooting system.

## **10.0 Appendix 4 – Tree Protection Plan**



**Tree Protective Fencing (High Risk)**

- Trees to be removed to be identified from the drawing and marked by an 'X'.
- No vehicles to enter the grass verge or root protection zone during tree removal or heavy maintenance.
- Fencing to be installed prior to any construction works (including excavation, material delivery, waste removal, etc.).
- The location of the tree protective fencing is indicated only and should not be directly measured from the plan. The tree location must be checked on site and where applicable be measured from the tree centre by the stated dimension value.
- Fencing to remain in place until all construction works have ceased.

**BS5837:2012 Recommendations (extract)**

6.2.2 - Barriers should be in place for the purpose of excluding construction activities from the site and to prevent the ingress of vehicles and plant into the site. Barriers should be installed to ensure that the site is secure and that the site is not used for any other purpose until all construction works have ceased.

**Fencing Specification**

The fencing will comprise of standard CD70mm steel sheet piling supported by concrete piles. The fence must be securely clamped together. They must be secured to the ground with robust steel stakes to a depth of 600mm. There are various types of piles available and the contractor must specify the type of pile to be used. The fence must be self-supporting and must be able to withstand a wind speed of 10m/s. The fence must be able to withstand a wind speed of 10m/s. The fence must be able to withstand a wind speed of 10m/s.

**Tree Protective Fencing (Low Risk)**

- Trees to be removed to be identified from the drawing and marked by an 'X'.
- No vehicles to enter the grass verge or root protection zone during tree removal or heavy maintenance.
- Fencing to be installed prior to any construction works (including excavation, material delivery, waste removal, etc.).
- The location of the tree protective fencing is indicated only and should not be directly measured from the plan. The tree location must be checked on site and where applicable be measured from the tree centre by the stated dimension value.
- Fencing to remain in place until all construction works have ceased.

**BS5837:2012 Recommendations (extract)**

6.2.3 - Where the site circumstances and associated risk of damage to trees is high, the contractor should be required to provide an alternative specification for the fencing. An alternative specification should be prepared by the contractor and approved by the Local Planning Authority.

**Fencing Specification**

For example: 200mm x 200mm mesh panels or tubular or concrete beam might provide an adequate level of protection from cars, vans, pedestrians and mobile equipment. In such cases, the fence panels should be installed on the site only and should be removed from the site as soon as the construction works have ceased. The fence must be self-supporting and must be able to withstand a wind speed of 10m/s. The fence must be able to withstand a wind speed of 10m/s.

**Why is Fencing Erected Around Trees?**

- The major cause of damage to trees on construction sites is due to soil compaction.
- Root damage to the spaces between soil particles in urban Orogen soils.
- Heavy plant and machinery compresses (compacts) the soil, reducing the air spaces and preventing air function.
- A compacted soil structure will stop water from infiltrating the soil.
- Compacted soil structure will stop water from infiltrating the soil.
- Compacted soil structure will stop water from infiltrating the soil.

**Key: Tree Protection Methods**

- Temporary Tree Protective Fencing (High Risk) (Blue dashed line)
- Temporary Tree Protective Fencing (Low Risk) (Orange dashed line)
- Construction Exclusion Zone (Red hatched area)
- Individual Trees to be removed to facilitate construction work (Red circle)
- Tree groups/Part of tree groups to be removed to facilitate construction work (Red hatched area)
- Trees surgery operations required to BS5837:2012 (Green hatched area)
- Tree works Recommendations (Green hatched area)

**Root Protection Area (RPA) (A layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and root volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority)**

**Tree Key - Group/Area/Woodland/Hedge/row**

- Tree ID# (G: Tree Group, A: Tree Area, W: Woodland)
- Tree Species (Colour Code)
- Tree Age
- Tree Diameter
- Average Branch Spread

**BS 5837:2012 Tree Quality (Colour Code)**

**Definitions of BS5837:2012 Categories for Trees, Woodlands (Colour Code)**

- A - Those of high quality with an estimated remaining life expectancy of at least 40 years, or young trees with a stem diameter below 150mm. (\*Optional for retention\*)
- B - Those of moderate quality with an estimated remaining life expectancy of at least 20 years. (\*Optional for retention\*)
- C - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. (\*Optional for retention\*)
- U - 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. (\*Unsuitable for retention unless provides high conservation value\*)



1. Temporary Tree Protective Fencing (High Risk)

2. Temporary Tree Protective Fencing (Low Risk)

3. Construction Exclusion Zone

4. Individual Trees to be removed to facilitate construction work

5. Tree groups/Part of tree groups to be removed to facilitate construction work

6. Trees surgery operations required to BS5837:2012

7. Tree works Recommendations

8. Root Protection Area (RPA)

9. Tree ID#

10. Tree Species

11. Tree Age

12. Tree Diameter

13. Average Branch Spread



## 10.0 Appendix 5 – Tree Photographs

Tree ID#G5



Tree ID#G2



Tree ID#W1



Tree ID#W1





Tree ID#W4 with sprawling scrub in front



Tree ID#A24



Tree ID#G10



Tree ID#G11



Tree ID#G11



Tree ID#W12



Tree ID#W12



Tree ID#T6





Tree ID#T26



Tree ID#T26, T8, G20



Tree ID#G17



Tree ID#T15





Tree ID#G27



Tree ID#T16 + G14



Tree ID#T16



Tree ID#T30





Tree ID#T18



Tree ID#T30



Tree ID#T31



Tree ID#W12 along north eastern access track



Tree ID#T34 + W12 to right



Tree ID#T40 + T39 + G39



Tree ID#H41



Tree ID#G5





