



Arboricultural Impact Assessment with Arboricultural Method Statement

- Caldershaw Centre, Ings Lane, Rochdale, OL12 7LQ -

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A report for

**I.Q.7 Ltd.
Unit 5D Caldershaw Centre
Ings Lane
Rochdale
OL12 7LQ**

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SUMMARY

Three groups of self-seeded specimens were recorded. In accordance with *BS5837:2012 Trees in relation to design, demolition and construction* all of the trees were classified as retention category 'U' (unsuitable for retention).

In this instance, all the trees within the site are considered unsuitable for retention and have been proposed for removal prior to development.

Any arboricultural work undertaken should be done so by a competent arborist in line with British Standard *BS3998:2010 Tree Work*, and after permission has been granted to do so by the local planning authority.

CONTENTS

1. Introduction	1
1.1. Project outline	1
1.2. Scope of this report	1
1.3. Data collection.....	1
2. Arboricultural Constraints	2
2.1. Tree retention categories.....	2
2.2. Tree age class and condition	2
2.3. Root Protection Areas	2
2.4. Tree protection status	3
3. Arboricultural Impact Assessment	4
3.1. The proposed development.....	4
3.2. Proposed tree works	4
3.3. Site construction traffic.....	4
3.4. Post development impacts	4
4. Arboricultural Method Statement	5
4.1. Tree works prior to development.....	5
4.2. Tree protection barriers	5
 Drawing 1. Tree Constraints Plan	 6
Drawing 2. Tree Protection Plan.....	7
 Appendix 1. Tree Schedule.....	 8
Appendix 2. Explanatory Notes	9
Appendix 3. Report Limitations & General Guidelines	12
Appendix 4. Protective Barrier Construction.....	14

1. Introduction

1.1. Project outline

- 1.1.1. This report has been produced in accordance with *British Standard BS5837: 2012 Trees in relation to design, demolition and construction* to achieve a harmonious and sustainable relationship where tree retention or planting is proposed in conjunction with nearby construction (site-based operations with the potential to affect existing trees).

1.2. Scope of this report

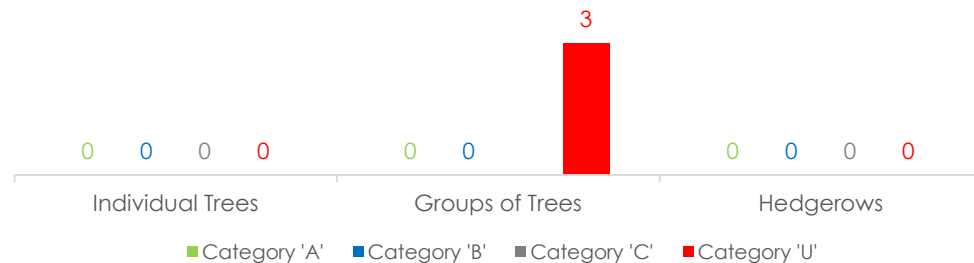
- 1.2.1. This report has been produced to comply with planning requirements where trees are to be considered as part of a proposed development. To achieve this, arboricultural constraints have been identified and a detailed plan (*Tree Constraints Plan*) has been produced showing the location, root protection areas and retention category of trees within the site.
- 1.2.2. In addition, this report provides an *Arboricultural Impact Assessment* that evaluates the direct and indirect effects of the proposed development, and where necessary makes recommendations for mitigation measures. This report also includes *Tree Protection Measures* and a *Tree Protection Plan* as part of an outline *Arboricultural Method Statement*, which demonstrate how the retained trees will be protected during construction, and where tree protection measures are to be implemented.
- 1.2.3. Recommendations for tree works within this report are specific to the construction of the proposed development. This report does not form part of a tree safety inspection or tree management strategy, and general arboricultural management works may be required post development. To manage the safety and risk from trees it is advised that trees are inspected in detail for this purpose by an arboriculturist using a suitable risk management strategy.

1.3. Data collection

- 1.3.1. A ground level inspection was undertaken by Robert Godwin on 8th March 2024. As recommended by *BS5837*, the position of all trees within the site with a stem diameter of 75 mm or more, measured at 1.5 m above highest adjacent ground level are recorded. The position of trees with an estimated stem diameter of 75 mm or more that overhang the site or are located beyond the site boundaries within a distance of up to 12 times their estimated stem diameter were also recorded. For individual trees the crown spread taken at four cardinal points; for tree groups the overall extent of the canopy was recorded.
- 1.3.2. Tree positions were plotted using a site location plan, aerial photography and on-site measurements, which is the basis for which the *Tree Constraints Plan* has been prepared.

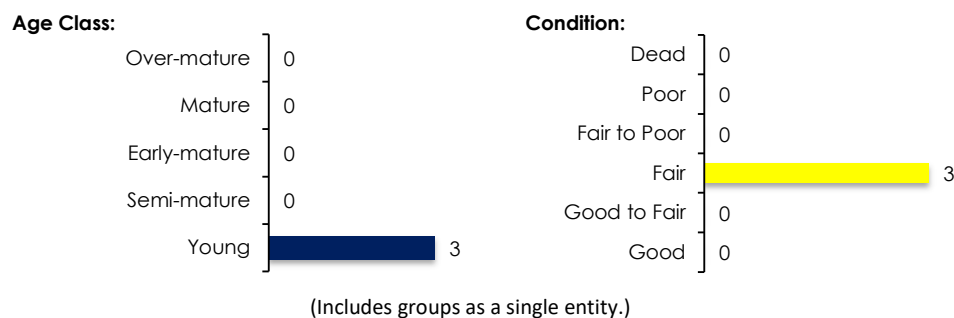
2. Arboricultural Constraints

2.1. Tree retention categories



- 2.1.1. Three groups of self-seeded specimens were recorded. In accordance with *BS5837:2012 Trees in relation to design, demolition and construction* all of the trees were classified as retention category 'U' (unsuitable for retention).

2.2. Tree age class and condition



- 2.2.1. Please see *Appendix 1* for the detailed list on existing species, age class, dimensions and condition of trees within the site, and *Appendix 2* for an explanation of retention category criteria. Tree locations can be seen on the *Tree Constraints Plan* at the rear of this report (*Drawing 1*).
- 2.2.2. The inspection of several groups was restricted as detailed at *Appendix 1*. The inspection of these trees was limited to a cursory observation of the parts of the trees that could be clearly observed, without obstruction, from the available vantage point. However, sufficient tree related data was collected to fulfil the requirements detailed within the scope of this report.

2.3. Root Protection Areas

- 2.3.1. The tree Root Protection Area (RPA) is a layout design tool indicating the area around a tree that, along with the tree stem and branches, must be considered during development. The protection of the roots and soil structure within the RPA should be treated as a priority. The RPA of each tree or group is marked on the *Tree Constraints Plan* at the rear of this report.

2.4. Tree protection status

- 2.4.1. A statutory tree protection enquiry was made with Rochdale Borough Council on 11th March 2024. We are still awaiting the results of the enquiry and will forward them once they are available.
- 2.4.2. **In the meantime, it is essential that no tree works (including works to category 'U' trees), and no construction works that may affect retained trees, are undertaken within the site prior to consideration and consent of the proposed works under FULL planning approval only by the local planning authority, regardless of whether the trees are currently protected or not.**

3. Arboricultural Impact Assessment

3.1. The proposed development

- 3.1.1. A new industrial building consisting of several units and a service area with associated car parking is proposed. The proposed layout drawing can be seen within the *Tree Protection Plan* to the rear of this report. This drawing has been used to assess the potential direct and indirect arboricultural impacts.

3.2. Proposed tree works

- 3.2.1. No trees shall require removal to enable the construction of the proposed development.
- 3.2.2. No pruning works shall be required to enable the construction of the proposed development.

3.3. Site construction traffic

- 3.3.1. Generally, to protect the trees from construction site traffic (including demolition works) the retained trees should be protected by a temporary protective barrier, put in place before any construction activity. However, in this instance, all the trees within the site are considered unsuitable for retention and have been proposed for removal prior to development.
- 3.3.2. To protect the trees on adjacent land from construction site traffic a temporary protective barrier (see *Section 4.2*), should be put in place before any construction activity. The barrier will ensure that the trees remain in a healthy condition during and after development.

3.4. Post development impacts

- 3.4.1. No soil samples were taken during the site visit. It is recommended that soil assessment is undertaken by a competent person to determine whether the soil is shrinkable, and that foundation design is undertaken to consider the soil type. It is essential that consideration is also given by a suitably qualified professional to how the proposed tree removal may affect soil conditions and the stability of any future foundations.

4. Arboricultural Method Statement

4.1. Tree works prior to development

- 4.1.1. Care should be taken to ensure during tree removal or remedial work that damage to the retained trees and disturbance to the RPA is avoided. All tree works, as described in *Appendix 1*, should be carried out in accordance with *BS 3998: 2010 Recommendations for tree work*, and after permission has been granted to do so by the local planning authority. It is essential that those appointed to undertake any tree works carry out adequate checks to ensure that no statutory laws are contravened during tree work operations.

4.2. Tree protection barriers

- 4.2.1. Once the tree works have been completed, all trees that may be affected by construction activity and are being retained should be protected by barriers before any materials or machinery are brought onto the site, and before any demolition, development or stripping of soil commences. No hardcore, rubble or soil from groundworks should be located within the protective barriers. It should be confirmed by an arboriculturist or the local authority that the barriers have been correctly set out on site, before the commencement of any other operations.
- 4.2.2. The protected area should be regarded as off limits, and once installed barriers should not be removed or altered without prior recommendation by an arboriculturist and, where necessary, approval from the local planning authority.
- 4.2.3. Please see *Appendix 4* for suggested barrier construction detail. It is recommended that in this instance the protective barrier shown in *Figure 2* would be appropriate. The suggested location for protective fencing is shown on the *Tree Protection Plan (Drawing 2)*.
- 4.2.4. Only when the development phase is complete and the site machinery has been removed, the local planning authority should be invited to inspect the site to approve the removal of the tree protection measures.

Drawing 1. Tree Constraints Plan



T	G	H	W	S
INDIVIDUAL TREE	GROUP OF TREES	HEDGEROW	WOODLAND GROUP	SHRUB

	EXISTING LAYOUT
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TREE QUALITY ASSESSMENT CATEGORY	
	CATEGORY 'A' HIGH QUALITY
	CATEGORY 'B' MODERATE QUALITY
	CATEGORY 'C' LOW QUALITY
	CATEGORY 'U' UNSUITABLE FOR RETENTION

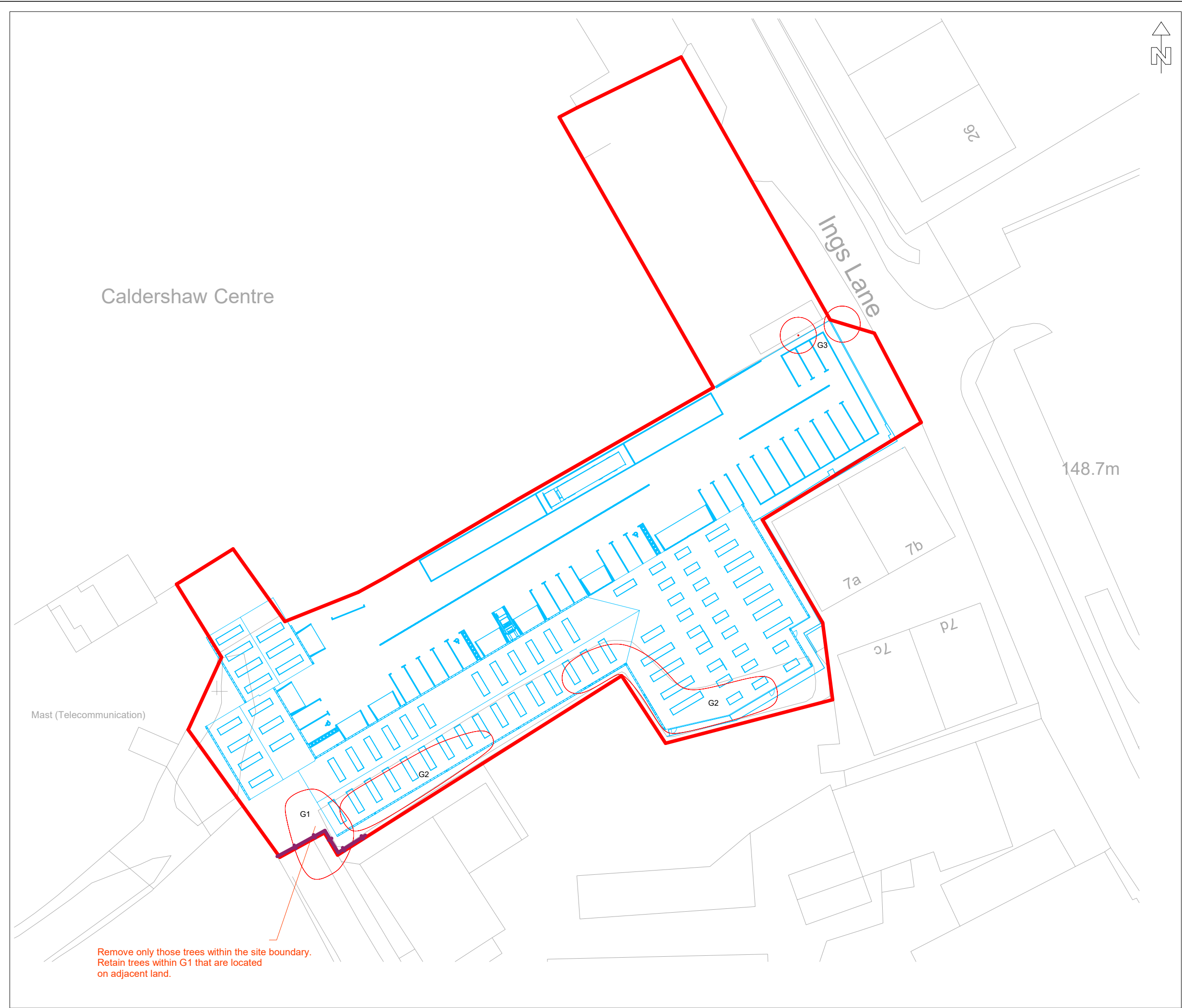
Based on British Standard 5837:2012 Table 1.
Please refer to Appendix 2 of the arboricultural report for more detailed category definitions.

	ROOT PROTECTION AREA (RPA)
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The Root Protection Area (RPA) is a layout design tool highlighting the underground tree constraints.
Along with the tree stem and branches the RPA must be considered prior to and during development.

PROJECT TITLE: Caldershaw Centre, Ings Lane, Rochdale, OL12 7LQ		
DRAWING TITLE: TREE CONSTRAINTS PLAN	SCALE: 1:500 @ A3	ISSUE DATE: 11.03.24
DRAWING NUMBER: TCP.13770	REVISION: .01	DRAWN BY: RG

Drawing 2. Tree Protection Plan



T	G	H	W	S
INDIVIDUAL TREE	GROUP OF TREES	HEDGEROW	WOODLAND GROUP	SHRUB

	EXISTING LAYOUT
	PROPOSED LAYOUT

PROPOSED TREE WORKS	
	TREE PROPOSED FOR RETENTION
	TREE PROPOSED FOR PRUNING
	None
	UNSUITABLE FOR RETENTION (ARBORICULTURAL REASONS)
	G1, G2 & G3
	TREE PROPOSED FOR REMOVAL (TO ENABLE DEVELOPMENT)
	None

Please refer to Appendix 1 of the Arboricultural Impact Assessment for details on tree condition and proposed works.

	ROOT PROTECTION AREA (RPA)
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The Root Protection Area (RPA) is a layout design tool highlighting the underground tree constraints. Along with the tree stem and branches the RPA must be considered prior to and during development.

TREE PROTECTION MEASURES	
	TEMPORARY PROTECTIVE BARRIER Refer to Appendix 4 of the Arboricultural Impact Assessment for specification details.

PROJECT TITLE: Caldershaw Centre, Ings Lane, Rochdale, OL12 7LQ		
DRAWING TITLE: TREE PROTECTION PLAN	SCALE: 1:500 @ A3	ISSUE DATE: 11.03.24
DRAWING NUMBER: TPP.13770	REVISION: .01	DRAWN BY: RG

Appendix 1. Tree Schedule

Tree No.	Species	Age	Stems at 1.5m	Stem Dia (mm)	Height (Crown Hgt) (m)	FSB (D) (m)	Branch Spread (m)				Observations	Cond	Life Exp	Tree Works Required to Enable Development	Root Protection Area (RPA)		Retention Category
							N	E	S	W					Radius (m)	Area (m ²)	
G 1	Acer pseudoplatanus (Sycamore), Salix caprea (Goat Willow)	Young	5	50	5(0)	0(N)	2	2	2	2	Multi-stemmed from ground level. Limited inspection - restricted access. Individuals crowns restricted by group. Self-seeded specimens.	Fair	40+	Unsuitable for retention. Remove those trees within the site boundary prior to development.	1.3	5.6	U
G 2	Salix caprea (Goat Willow), Betula pubescens (Downy Birch)	Young	5	50	3(1)	1(N)	1.5	1.5	1.5	1.5	Multi-stemmed from ground level. Limited inspection - restricted access. Individuals crowns restricted by group. Self-seeded specimens.	Fair	40+	Unsuitable for retention. Remove prior to development.	1.3	5.6	U
G 3	Salix caprea (Goat Willow)	Young	5	75	5(1)	1(N)	2.5	2.5	2.5	2.5	Multi-stemmed from ground level. Limited inspection - restricted access. Individuals crowns restricted by group. Self-seeded specimens.	Fair	40+	Unsuitable for retention. Remove prior to development.	2.0	12.8	U

Appendix 2. Explanatory Notes

A2.1. Tree statistics and measurements

Survey record	Description
<i>Tree No.</i>	Unique tree reference number. (T) = Individual tree, (G) = Group of trees or woodland that form cohesive arboricultural features, (H) = Hedgerows and substantial internal or boundary hedges.
<i>Species</i>	Species listed by scientific name, with (common name).
<i>Age</i>	Life stage – Young, Semi-mature, Early-mature, Mature, Over-mature and Veteran.
<i>Stem Count</i>	Number of stems recorded at 1.5m above ground level.
<i>Stem Diameter</i>	Stem diameter recorded in millimetres at 1.5 meters above ground. Where the tree is multiple stemmed, each stem has been recorded.
<i>Height (Crown Height)</i>	Height of the tree in metres – to the closest 0.5m. Average canopy height in brackets, e.g. 10(3).
<i>First Significant Branch</i>	Existing height above ground level of first significant branch and direction of growth, e.g. 3(N)
<i>Branch Spread</i>	Branch spread, taken as a minimum at the four cardinal points – North, East, South and West.
<i>Observations</i>	General observations, particularly of structural and/or physiological condition (e.g. the presence of any decay, physical defect or historic pruning).
<i>Cond</i>	Condition of the tree recorded as Good, Good to Fair, Fair, Fair to Poor, Poor or Dead.
<i>Life Exp</i>	Life Expectancy - classed as less than 10 years, 10 plus years, 20 plus years, or more than 40 years.
<i>Tree Works Required to Enable Development</i>	Tree works specifically required to enable the proposed development, or to reduce significant risk of harm. The term 'No action required' does not mean that general post development arboricultural management works are not required.
<i>RPA Radius</i>	Radius of the root protection area, when plotted as a circle centred on the base of the stem.
<i>RPA Area</i>	Total area of RPA in metres squared, e.g. 100m ² .
<i>Retention Category</i>	See below – A2.2.

A2.2. Tree retention categories

Retention category and definition	Criteria
<i>U (marked in red on the Tree Constraints Plan) = trees for removal.</i>	Trees 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.
<i>A (marked green on the Tree Constraints Plan) = Trees of high quality</i>	Trees of high quality with an estimated remaining life expectancy of at least 40 years.
<i>B (marked in blue on the Tree Constraints Plan) = Trees of moderate quality</i>	Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
<i>C (marked in grey on the Tree Constraints Plan) = Trees of low quality</i>	Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Appendix 3. Report Limitations & General Guidelines

- A3.1 Where the inspection of trees was limited (*see Appendix 1*), the 'Tree statistics and measurements' (*Appendix 2.1*) are estimated, and observations, condition and life expectancy are based on an inspection from the available vantage point.
- A3.2 It is recommended that qualified and experienced companies are sought when appointing tree work contractors and they should be approved under the Arboricultural Association Approved Contractors scheme. It is essential that all appointed tree work contractors have adequate Public Liability, Products Liability and Employers Liability Insurance. All tree works must conform to the current BS 3998 "*Recommendations for Tree Work*".
- A3.3 PENNINE *Ecological* will not accept liability for works undertaken by third party companies. All necessary checks must be made by the appointed tree work contractor prior to undertaking any works to ensure that no statutory tree protection measures or relevant laws are contravened.
- A3.4 The validity, accuracy and findings of this report are directly related to the accuracy of the information made available prior to and during the inspection process. No checking of independent third-party data will be undertaken. PENNINE *Ecological* will not be responsible for the recommendations within this report where essential data are not made available, or are inaccurate.
- A3.5 The assessment and works recommendations relate to conditions found at the time of our inspection. Any significant alteration to the site post our site inspection but pre submission for planning that may affect the trees present, or have a bearing on the planning implications (including level changes, hydrological changes, storms, extreme climatic events or site works) will necessitate a re-assessment of the trees and the site.
- A3.6 This report has been carried out in order to inform the planning process, and not to assess the potential hazards and risks posed by trees. Where clear and obvious hazards have been observed to accessible trees, these have been addressed in the works recommendations. Where inspections were limited by restrictions such as stem ivy, understory vegetation, limited access, epicormic growth or being located on adjacent land, any form of tree condition assessment was restricted. A full assessment of the levels of risk posed by trees can only be informed by considering site use together with assessing any hazards present within a tree.
- A3.7 Trees are dynamic structures that continue to develop and decline; in addition, changes in site use are likely to occur during and as a result from the proposed development. On this basis, regular tree risk assessments are advised.
- A3.8 PENNINE *Ecological* plans are to scale whenever possible but care should be taken when measuring from a plan without first checking the original data.

Appendix 4. Protective Barrier Construction

- A4.1 The default specification for protective barriers should consist of a vertical and horizontal scaffold framework, well braced to resist impacts, as illustrated below. The vertical tubes should be spaced at a *maximum* interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels should be securely fixed. Care should be exercised when locating the vertical poles to avoid underground services and, in the case of the bracing poles, also to avoid contact with structural roots.

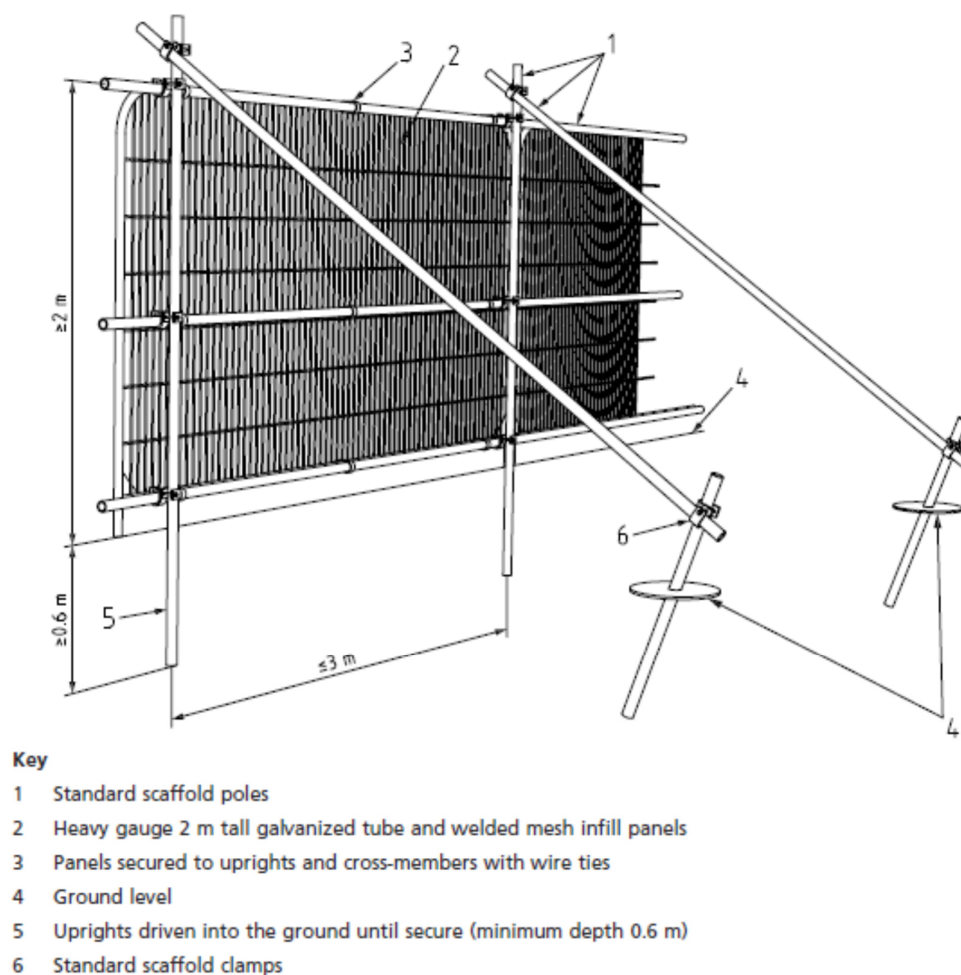


Figure 1. Default protective fencing barrier as detailed in *BS 5837: 2012*.

- A4.2 Where the site circumstances and associated risk of damaging incursion into the RPA do not necessitate the default level of protection, an alternative specification may be adopted. This system includes 2 m tall welded mesh panels on rubber or concrete feet, secure enough to provide an adequate level of protection from cars, vans, pedestrians and manually operated plant. In such cases, the fence panels should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The distance between the fence couplers should be at least 1 m and should be uniform throughout the fence. The panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins (Figure 2a). Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabilizer struts should be mounted on a block tray (Figure 2b).

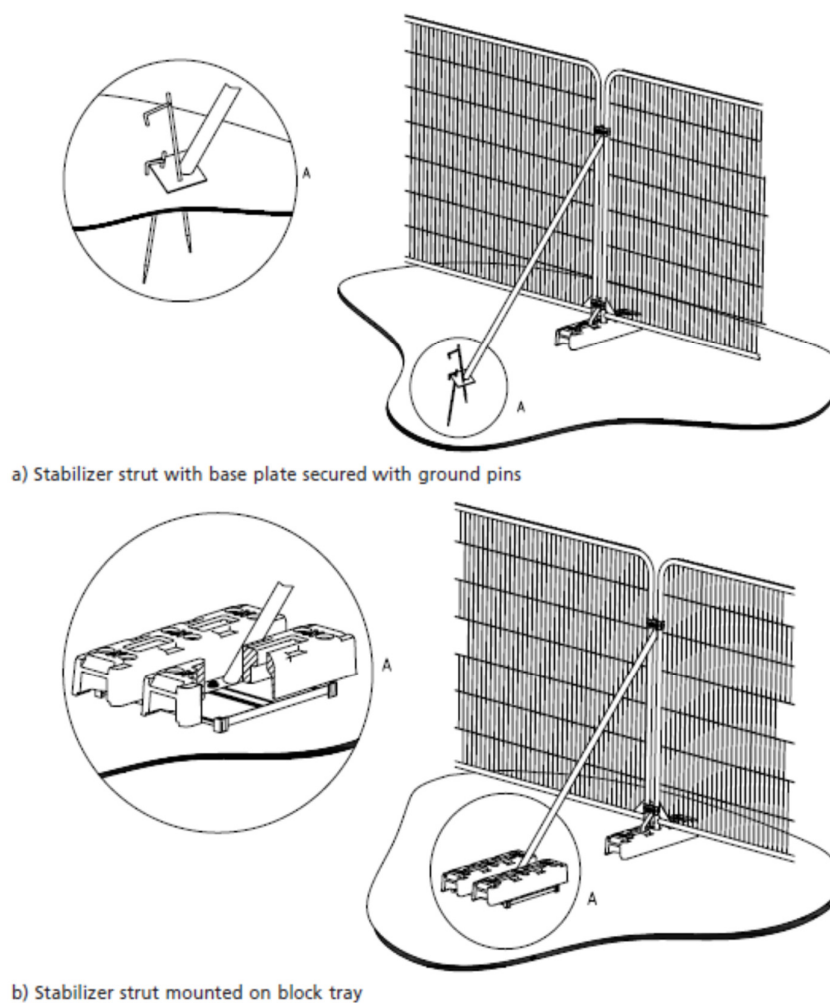


Figure 2. Examples of above-ground stabilizing systems