



**Tree Check**  
Arboriculture Ltd.

# Tree Survey and Categorisation Former Gowerton Primary School Ffordd Beck SA4 3GE



**Conducted By: Josh Clark**

**07913733309**

**09/05/25**

[josh@treecheck.co.uk](mailto:josh@treecheck.co.uk)

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## Introduction

This survey was overseen by Ben Clark, Arboricultural Consultant, and Director at Tree Check Arboriculture Ltd. with over 9 years' experience in the arboriculture industry and holding the following qualifications:

- Level 4 Diploma in Arboriculture
- BSc. Geology (University of Southampton)
- LANTRA Professional Tree Inspection Certificate (PTI)
- Various NPTC qualifications in tree surgery.

Ben is a technician member of the arboricultural association and attends regular training and seminars to remain up to date with current arboricultural practices.

This survey was carried out by Josh Clark, Arboricultural Consultant, and Director at Tree Check Arboriculture Ltd. with over 9 years' experience in the arboriculture industry and holding the following qualifications:

- LANTRA Professional Tree Inspection Certificate (PTI)
- Various NPTC qualifications in tree surgery.

The methodology of this report is based on the recommendations provided by the British Standards Institute document BS5837: Trees in Relation to Design, Demolition and Construction – Recommendations, as well as other recommendations provided by institutions such as the Arboral Association.

## Brief

Tree Check has been instructed by Neal Hunter of Squirrel Wood Properties to carry out a tree survey and categorisation at Former Gowerton Primary School, Ffordd Beck with the aim of identifying tree related constraints present on site in order to inform the design process and enable tree protection measures to be devised and carried out as appropriate throughout the development.

The following information was available:

- 001 Gowerton Primary School Topographic Survey (Vinci Surveys 2020)

It should be noted that not all of the trees recorded in this report were shown on the topographical plan, and their locations in the Tree Constraints Plan are based on GPS and should be taken as indicative only. All locations and distances should be checked on site.

The site was visited on the 24-Apr-2025 during dry and bright weather conditions considered ideal for this type of survey.

## Scope

- The purpose of this survey was to assess the location, size and general condition of the trees on and around site as well as determine their retention value and categorise them in accordance with the British standard: BS5837- Trees in Relation to Design, Demolition and Construction – Recommendations
- Trees have only received a cursory inspection and this report does not constitute a full tree condition/safety survey. Ongoing inspection should proceed as per the landowner's tree management plan. A suitably qualified arboricultural specialist should be consulted if a tree management plan is not already in place.
- A [Tree Constraints Plan](#) has been produced to indicate the locations of trees and the BS5837 calculated rooting areas. in relation to the site.
- Where trees have been noted to be hazardous in terms of unacceptable third-party risk this has been noted and recommendations given.
- General management recommendations have been given where appropriate.

- The inspection was carried out at ground level from inside the site and along adjacent public roads where appropriate. Trees were not climbed and no internal decay detection was used. It is our policy to recommend further investigation with decay detection equipment where features observed during visual inspection warrant such action.
- All heights of trees were estimated from ground level.
- Branch spread was measured from the base of the trees in four cardinal directions using a laser tape measure.
- Stem Diameter was measured at 1.5m above ground level using a diameter tape measure.
- Data on the observed structural condition of the tree has been entered, e.g., collapsing, leaning and the presence of any observed decay or physical defect has been noted.

## Site Description

**What3Words:** ///appraised.defrost.movement

**Nearest Postcode:** SA4 3GE



The site, a former primary school is set at an elevation of 10 meters above sea level, relatively sheltered from prevailing southwesterly winds despite its coastal location. As is characteristic of this type of site, hard surfacing and stone boundary walls are dominant features, influencing the distribution of root networks throughout site. The tree cover on site is relatively sparse, with most trees being situated within neighbouring properties or at the periphery of site, with the exception of a woodland school area to the west of site.

No soil analysis was carried out on site, however, data obtained from Cranefield Soil and Agrifood Institute <sup>[1]</sup> suggests the area is dominated by Loamy and clayey floodplain soils with naturally high groundwater

Data obtained from Swansea City Councils online mapping service <sup>[2]</sup> suggests that while the site does not fall within the boundaries of a Conservation Area, a number of trees within W2 (as referenced in this report) are subject to a Tree Preservation Order (TPO 655) where they are recorded as T5, T6, G1 and G2 and include Horse chestnut (*Aesculus hippocastanum*) and Sycamore (*Acer pseudoplatanus*) at the south boundary of site.

## Section I: Interpretation

### BS Categories

Trees have been assigned retention categories in accordance with BS5837. These are as follows:

**Category A-** Trees with a high retention value which are either arboriculturally important, important within the landscape, or culturally/ecologically important.

**Category B-** Trees with a moderate retention value i.e. they are good examples of their species, provide some notable amenity value to the area, or provide significant ecological or cultural value.

**Category C-** Trees with a low retention value. Including trees with defects which reduce their amenity value or expected lifespan but not to the extent that they cannot be realistically retained within the development.

**Category U-** Trees of which retention is considered unrealistic within the context of the development due to poor condition and low life expectancy.

See [Table I](#) in the appendix section of this report for more information on the allocation of categories and subcategories.

### Tree Age Ratings

Y- Young trees in their early stage of growth, have undergone minimal secondary thickening and are still primarily composed of active tissue.

EM- Early mature trees that have started to show characteristics of maturity such more developed crowns and increased stem thickness.

M- Mature fully developed trees.

OM- Over mature trees that are starting to show signs of decline.

A- Ancient trees that have reached a notably old age for their species and are therefore considered to be important.

V- Veteran trees with notable features such as wounds, cavities, cracks, etc. that provide significant habitat value. These are usually older trees.

### Root Protection Areas (RPA's)

Root Protection areas have been calculated according to BS5837 and represent the estimated minimum rooting area required by the tree to carry out its functions.

Excavation in this area can cause physiological or structural harm to a tree and the movement of machinery or personnel over this area can cause soil compaction and in turn, physiological harm to the tree.

These areas may need to be segregated from the rest of this site using tree protective fencing and if excavations in these areas are unavoidable in the context of the design, then they should be carried out in accordance with an arboricultural method statement produced by a suitably trained and qualified arboriculturalist.

### Remaining Contribution

Remaining contribution has been estimated based on the trees overall condition, approximate age, and the life expectancy of the species in question. This is based on the assumption that new factors are not introduced that will affect the trees life expectancy, such as pathogens, climate factors or other biotic or abiotic influences.

## Terminology

See appendix v for a glossary of the terms commonly used in tree reports.

Trees and groups are numbered with the following prefixes:

- **T**- individual trees.
- **G**- groups of trees with similar characteristics and rooting areas.
- **H**- Hedgerows.
- **W**- woodland groups, designated as such due to the presence of woodland features such as natural regeneration,

## Target Occupancies

**Very High target occupancy**- Areas likely to be occupied by people at any time during the day or night, such as residential dwellings, A roads or Motorways where tree failures can have severe consequences or areas occupied by vital or high value infrastructure such as powerlines.

**High target occupancy**- Areas likely to be occupied by people for a large part of the day, such as gardens, places of work, as well as lower value infrastructure such as fences etc. or residential streets or busy B roads.

**Moderate target occupancy**- Areas likely to be transiently occupied by people at certain times of the day, such as official footpaths, parks etc. Also includes quiet B roads or access roads and very low value infrastructure such as stock fencing.

**Low target occupancy**- Areas unlikely to be occupied by people at any time of the day, such as agricultural fields or overgrown areas with limited access, with no infrastructure that could be damaged by tree failure and minimal potential consequences arising from tree failure.

## Section 2: Findings

### Species Recorded

The following tree species were recorded on site (in alphabetical order):

- Common alder - *Alnus glutinosa*
- Common hawthorn - *Crataegus monogyna*
- Common holly - *Ilex aquifolium*
- Corsican pine - *Pinus nigra laricio*
- Crack willow - *Salix fragilis*
- Field maple - *Acer campestre*
- Flowering cherry - *Prunus Serrulata*
- Goat willow - *Salix caprea*
- Hazel - *Corylus avellana*
- Horse chestnut (*Aesculus hippocastanum*)
- Laurel cherry - *Prunus laurocerasus*
- Pedunculate oak - *Quercus robur*
- Silver birch - *Betula pendula*
- Sycamore - *Acer pseudoplatanus*

### Retention Categories

No Category A trees were identified on site.

The following Category B trees were identified on site:

- W1
- W2
- T2
- T3

No Category U trees were identified on site.

All remaining trees are category C and pose no major constraints on the site.

## Findings Table

Ref	Tag	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)				Crown Clearance (m)	Lowest Branch (m)	Survey Notes	Recommendations	Life Stage	Life Expectancy (years)	Retention Category	RPA Area (m <sup>2</sup> )	RPA Radius (m)	Photo
					N	E	S	W										
G2	N/A	Common alder ( <i>Alnus glutinosa</i> ) Goat willow ( <i>Salix caprea</i> )	4	100	2	2	2	2	0	0	Unremarkable self-seeded trees of average form growing from the edges of the hard surfacing. Providing minimal amenity value.	No action required.	Y	10-20	C2	4	1.2	<a href="#">1</a>
W1	N/A	Flowering cherry ( <i>Prunus Serrulata</i> ), Silver birch ( <i>Betula pendula</i> ), Corsican pine ( <i>Pinus nigra laricio</i> ) Crack willow ( <i>Salix fragilis</i> ), Field maple ( <i>Acer campestre</i> ) Common alder, ( <i>Alnus glutinosa</i> ) Common hawthorn ( <i>Crataegus monogyna</i> ) Pedunculate oak ( <i>Quercus robur</i> ) Goat willow ( <i>Salix caprea</i> ) Hazel ( <i>Corylus avellana</i> )	14	550	5	5	5	5	4	4	Mixed woodland with a variety of large mature trees with an understorey of smaller shrubby trees. Approximately 80 trees spaced between 1m and 5m apart. Providing habitat. The rooting area to the east is restricted by hard surfacing. The RPA as illustrated in the attached <a href="#">Tree Constraints Plan</a> has been adjusted to reflect this.	No action required.	M	20-40	B2	136	6.6	<a href="#">2</a>

Ref	Tag	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m)				Crown Clearance (m)	Lowest Branch (m)	Survey Notes	Recommendations	Life Stage	Life Expectancy (years)	Retention Category	RPA Area (m <sup>2</sup> )	RPA Radius (m)	Photo
					N	E	S	W										
W2	N/A	Laurel cherry ( <i>Prunus laurocerasus</i> ) Common holly ( <i>Ilex aquifolium</i> ) Horse chestnut ( <i>Aesculus hippocastanum</i> ) Sycamore ( <i>Acer pseudoplatanus</i> ) Goat willow ( <i>Salix caprea</i> )	14	600	2	2	2	2	5	5	Large trees good form. Rooting area to the north is restricted by hard surfacing and approximately 1.5m level change. The RPA as illustrated in the attached <a href="#">Tree Constraints Plan</a> has been adjusted to reflect this.	No action required.	M	20-40	B2	162	7.2	
T1	2918	Common alder ( <i>Alnus glutinosa</i> )	6	100	2	2	2	2	0	0	Unremarkable self-seeded tree of average form growing at the edge of the hard surfacing.	No action required.	Y	10-20	C2	4	1.2	/
T2	2704	Sycamore ( <i>Acer pseudoplatanus</i> )	13	700	7	7	7	7	3	4	Large tree of good form, providing amenity value within the site. Rooting area to the south and east is restricted by hard surfacing. The RPA as illustrated in the attached <a href="#">Tree Constraints Plan</a> has been adjusted to reflect this.	No action required.	M	20-40	B2	221	8.4	/
T3	2701	Sycamore ( <i>Acer pseudoplatanus</i> )	12	450	5	5	5	5	3	4	Large tree of good form, providing amenity value within the site. Rooting area to the south and east is restricted by hard surfacing. The RPA as illustrated in the attached <a href="#">Tree Constraints Plan</a> has been adjusted to reflect this.	No action required at this time.	M	20-40	B2	91	5.4	/

## Section 3: Preliminary Management Recommendations

- Use the findings of this report to inform the site design and minimize tree losses and damage to retained trees. Considering the following points:
  - Any excavation works within the Root Protection Areas (RPAs) of retained trees, including drainage and service installation, as well as foundation laying should be avoided wherever possible.
  - No Strip foundations should be used in the RPA's of trees to be retained trees. Alternative Pile foundations can be used where construction within RPAs is unavoidable but the footprint of structures should not cover more than 20% of the RPA of trees that are to be retained.
  - Installation of hard surfaces over the RPAs of trees should be avoided wherever possible.
  - Avoid creating level changes within the RPAs of trees.
  - If works within the RPAs of retained trees cannot be avoided, specialist engineering techniques should be provided in an arboricultural method statement.
  - If an incursion into the Root Protection Area (RPA) is significant enough that an Arboricultural Method Statement cannot adequately minimize the risk of damage or loss, the tree should be considered lost to development. This should be clearly stated in the Arboricultural Impact Assessment, and the affected tree should be removed before commencing construction works, following planning approval.
  - Category C trees do not necessarily constrain the site design but can be retained if desired, as long as their presence does not conflict with the desired layout.
  - Make efforts to retain category A and B trees.
  - Consult the project arboriculturalist on the future stem thickening of trees near light structures, services and surfacing, such as footpaths, walls, and fencing, and use the guidance provided in Table A of BS5837 and outlined in [the appendix section](#) of this report to avoid the positioning of structures too close to trees causing future damage.
  - Consider the shading impact of retained trees on buildings. Position spaces requiring natural light away from trees or facing away from trees to minimise future pressure for tree removal.
- Commission an Arboricultural Impact Assessment upon completion of the design to determine if retained trees are at risk of damage from the proposed development.
- Commission an Arboricultural Method Statement, where necessary, to minimize the risk of damage or loss of retained trees.
- Obtain relevant approval from the Local Planning Authority (LPA) before proceeding with tree clearance works. **Removal of category U trees can proceed immediately where they pose a current safety concern.**
- Reinspect retained trees upon completion of the development.
- Install barrier fencing around all RPAs and tree crowns, where possible, to protect all trees before commencing any works on the site. This should establish a construction exclusion zone.
- Follow the steps outlined in the Arboricultural Method Statement when construction activities within the RPAs of retained trees are unavoidable.
- It is strongly recommended all recommended works are completed within the specified time frame. Failure to do so may increase the risk of damage or injury.
- Unless specified in this report, the assessment of trees does not consider any habitat constraints that may be present. Ensure that tree surgeons commissioned for tree work are aware of their responsibilities under the Wildlife and Countryside Act (1981) regarding protected species.
- Conduct relevant soil analysis by geophysical engineering specialists to determine constraints related to shrinkable clay soils.
- Ensure that all tree work is carried out by suitably qualified operatives in accordance of the relevant industry best practices and British Standard (BS3998: Tree Work: Recommendations).
- Trees require regular inspection and maintenance particularly in situations where they are close to high usage areas such as residential properties and roads. The recommended date for next inspection is: 24/10/2026

## **Appendices**

Appendix i: Photographs taken on site.

Appendix ii: Tree constraints plan showing the location of trees and their root protection areas

Appendix iii: A cascade chart from BS5837: 2012- Trees in relation to design, demolition, and construction– Recommendations explaining the categorisation of trees.

Appendix iv: A diagram showing the recommended configuration for tree protective fencing, from BS5837: 2012- Trees in relation to design, demolition, and construction– Recommendations.

Appendix v- Minimum distance between young trees or new planting and structure to avoid direct damage to a structure from future tree growth

Appendix vi: A Glossary of terms and phrases commonly used in tree reports.

Appendix vii: references.

## Appendix i: Photos

**Photo I:** [G2](#)- Unremarkable, self-seeded trees growing from the edges of the hard surfacing.

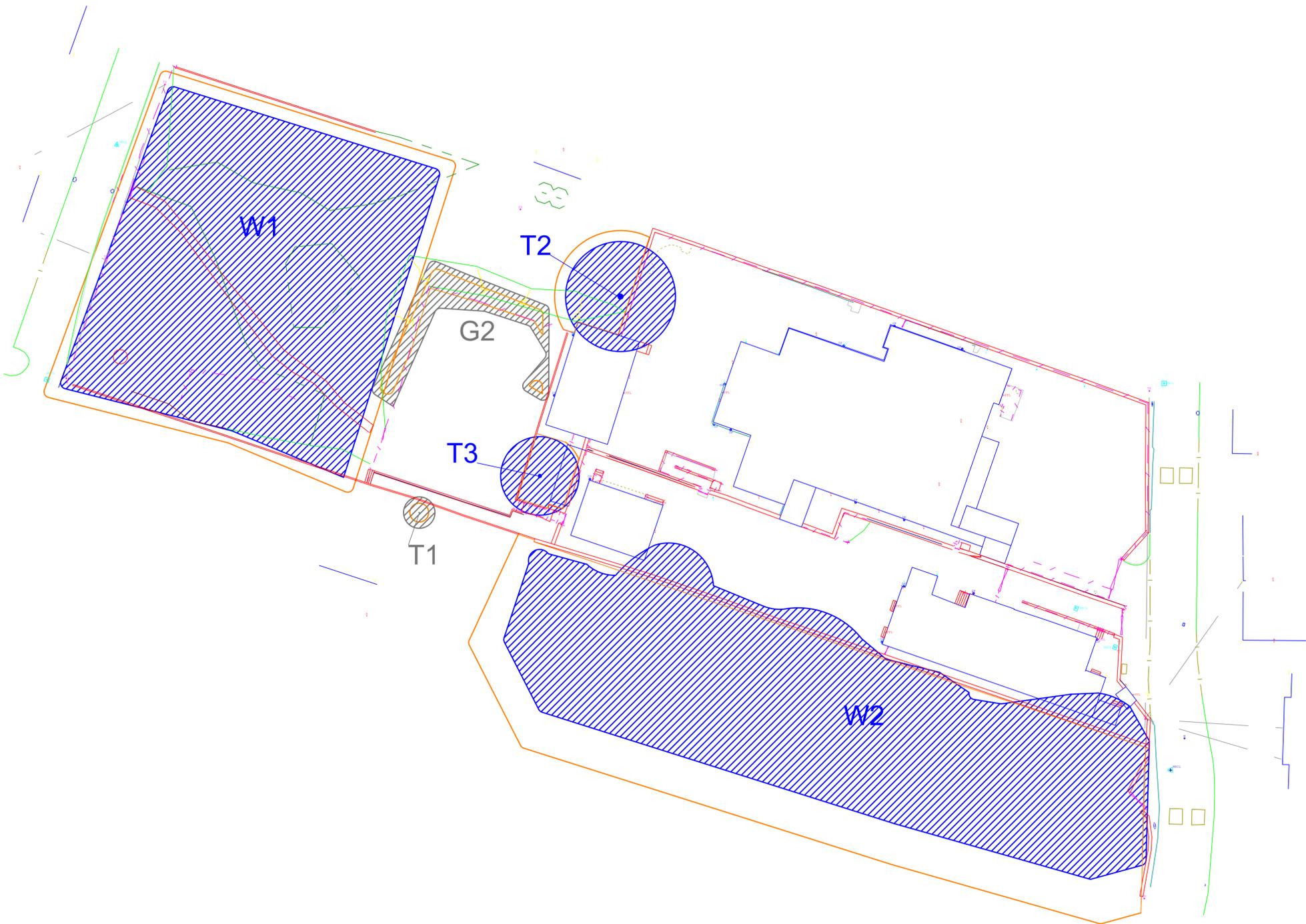


**Photo 2:** [WI](#) - Rooting area to the east is restricted by hard surfacing.



**Photo 3:** [W2](#)- The rooting area is cut off to the north due to hard surfacing and approximately 1.5m higher elevation than the site.





Ref Tag	Species	Height	Stem Diam (mm)	Life Stage	Life Expectancy	Retention Category	RPA Area (m <sup>2</sup> )	RPA Radius (m)
G2	Common alder ( <i>Alnus glutinosa</i> ), Goat willow ( <i>Salix caprea</i> )	4	100	Y	10-20	C2	4.52	1.2
W1	Flowering cherry ( <i>Prunus serrulata</i> ), Silver birch ( <i>Betula pendula</i> ), Corsican pine ( <i>Pinus nigra lancea</i> ), Crack willow ( <i>Salix fragilis</i> ), Field maple ( <i>Acer campestre</i> ), Common alder ( <i>Alnus glutinosa</i> ), Common hawthorn ( <i>Crataegus monogyna</i> ), Mixed woodland (Mixed woodland), Pedunculate oak ( <i>Quercus robur</i> ), Goat willow ( <i>Salix caprea</i> ), Hazel ( <i>Corylus avellana</i> ), Horse chestnut ( <i>Aesculus hippocastanum</i> )	14	550	M	20-40	B2	137	6.6
W2	Laurel cherry ( <i>Prunus laurocerasus</i> ), Common holly ( <i>Ilex aquifolium</i> ), Sycamore ( <i>Acer pseudoplatanus</i> ), Goat willow ( <i>Salix caprea</i> )	14	600	M	20-40	B2	163	7.2
T1	2918 Common alder ( <i>Alnus glutinosa</i> )	6	100	Y	10-20	C2	4.52	1.2
T2	2704 Sycamore ( <i>Acer pseudoplatanus</i> )	13	700	M	20-40	B2	222	8.4
T3	2701 Sycamore ( <i>Acer pseudoplatanus</i> )	12	450	M	20-40	B2	91.6	5.4

- Key**
- Category A. Trees with high retention value.
  - Category B. Trees with moderate retention value.
  - Category C. Trees with low retention value.
  - Category U. Trees unsuitable for retention due to condition
  - Root Protection Area (RPA)

- Tree Key**
- Canopy extents, hatched area represents area within the canopy.
  - Location of tree base, taken from position on TOPO or GPS.
- Reference number (T for trees, G for groups, W for woodlands, H for hedges).

RPA- an indication of the estimated minimum rooting area required by the tree. Calculated in accordance with BS5837.

<b>Tree Constraint Plan</b>	
<b>Gowerton Primary School</b>	
<b>1:300 at A1</b>	
Client	Squirrel Wood Properties
Survey Code	25004
Drawn by	LM
Surveyed by	JC
Date	24/04/2025

**Tree Check**  
Arboriculture Ltd.

Ben Clark  
TechArborA, Dip Arb L4 (ABC)

Tree Check Arboriculture Ltd.  
Tel. 07736236152  
Email: ben@treecheck.co.uk  
www.Treecheck.co.uk

Drawing designed to be viewed in colour. Indicative only, check all RPA's on site in accordance with table.

## Appendix iii: Cascade Table for the Categorisation of Trees (BS5837)

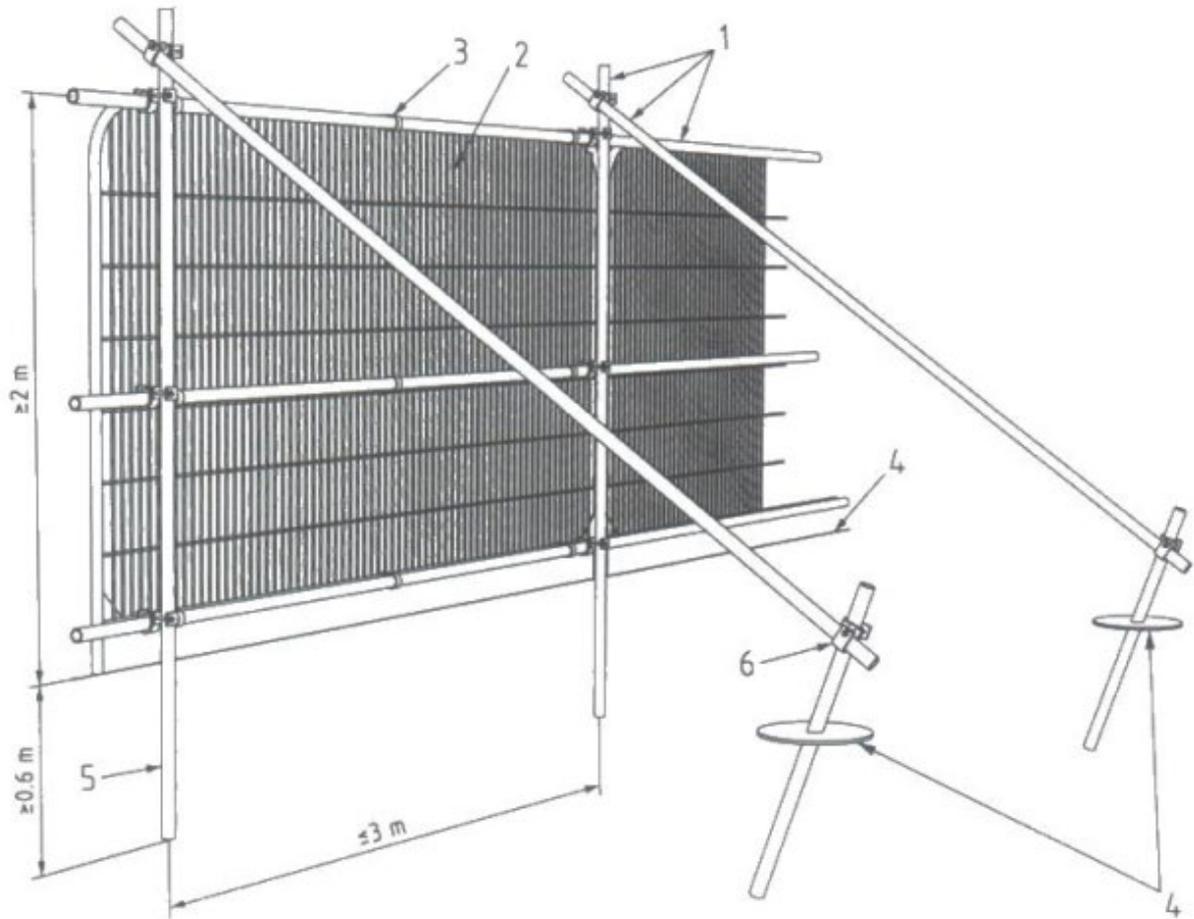
Table 1 – Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)		
<p><b>Category U</b> 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 U category trees (i.e. 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</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>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7</p>		
	1 Mainly Arboricultural values	2 Mainly landscape values	3 Mainly cultural values, including conservation
<p><b>Category A</b> Those 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 essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	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><b>Category B</b> Those 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 storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	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 collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural benefits
<p><b>Category C</b> Those of low quality with an estimated remaining life expectancy of at least 10 years, 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

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## Appendix iv: Recommended Configuration for Tree Protective Fencing (BS5837)

Figure 2 Default specification for protective barrier



**Key**

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps

## Appendix v- Minimum distance between young trees or new planting and structure to avoid direct damage to a structure from future tree growth

Type of Structure		Minimum distance between young trees or new planting and structure, in metres (m)		
		Stem Ø <300mm*	Stem Ø 300mm-600mm*	Stem Ø >600mm*
Buildings and heavily loaded structures		-	0.5	1.2
Lightly loaded structures such as garages, porches etc.		-	0.7	1.5
Services	<1 m deep	0.5	1.5	3
	>1 m deep	-	1	2
Masonry boundary walls		-	1	2
In situ concrete paths and drives		0.5	1	2.5
Paths and drives with flexible surfaces or paving slabs		0.7	1.5	3

\*diameter of stem at 1.5m above ground level at maturity.

## Appendix vi: Glossary

**Aerial Inspection:** A close inspection of the aerial part of a tree, either by mobile elevated work platform (MEWP) or by a tree surgeon (climbing inspection). **Adaptive Growth;** The growth of new wood in response to a stress concentration in the structure of a tree

**Adventitious;** A shoot which arises from tissue other than a growing shoot apex or bud, for instance in callus associated with a wound.

**Anchorage;** The holding of the structural root system of a tree with in the soil,.

**Architecture;** the formation and distribution of a trees branch system.

**Arboricultural Impact Assessment:** That part of the BS 5837 (2012) procedure that evaluates the tree-related constraints to a development (loss of trees, encroachment into root protection areas etc.).

**Arboricultural Method Statement:** That part of the BS 5837 (2012) procedure that sets out how site works should be carried out near trees to avoid accidental damage.

**Arboriculturalist:** A person skilled or knowledgeable in the field of arboriculture. The alternative term 'arboriculturalist' is sometimes used. A Person trained and experienced in the management of trees, and trees in relation to construction,.

**Assessment;** The process of examining the variables involving a trees condition and location in order to assess the risk posed by an individual tree.

**Bole (trunk):** The main , vertical stem or trunk of a tree.

**Branch:** a limb extending from the main stem or parent branch of a tree

**Canopy:** the combined foliage of a group of trees or a woodland, i.e. the combined area of numerous crowns.

**Construction Exclusion Zone;** The part of a development site from which all pedestrian and vehicular movements are excluded by protective fencing, typically to ensure the wellbeing of trees, during site works. Usually determined by the RPA of a tree.

**Crown:** in arboriculture the main foliage-bearing portion of a tree containing the leaves and branches

**Defect:** Any feature of a tree that is likely to make it less safe (in the case of a structural defect) or otherwise to reduce its health, longevity, landscape prominence or conservation value for any other reason.

**Dysfunction:** The cessation of physiological function in woody material, especially vascular functions such as water and sap transportation.

**Failure:** Fracture or deformation in any load bearing part of the tree, compromising stability or causing loss of support for part of, or all of the tree structure,

**Group:** More than one tree in close proximity that possess sufficient similarity or cohesiveness that they can be treated as a single entity for the purpose of this report.

**Heave:** deformation of shrinkable clay soil related to the expansion caused by rehydration.

**Leader:** the dominant, vertical shoot or stem of a tree.

**Pruning:** The cutting off or cutting back of tree branches or foliage to direct growth, remove an obstructing part, mitigate a nuisance, make safe, remove a diseased part, increase longevity, simulate natural damage, enhance habitat for wildlife etc.

**Retained Tree:** a tree that has been considered suitable for retention and therefore selected to remain as part of the final site layout.

**Risk:** the likelihood of a hazard to cause actual harm to people or property,

**Root Protection Area (RPA);** The area around the base of a tree that contains sufficient root volume to ensure the future well-being of the tree in the event of nearby soil disturbance (as on a development site). It is calculated according to guidelines in BS 5837 (2012).

**Subsidence (branch):** Branches, especially if spreading, tend gradually to subside under their own weight, and may eventually reach ground level in large open-grown trees. Rapid subsidence may result in crown separation or congested bark and can lead to branch failure where there is no support within the elastic limit of a given branch.

**Subsidence (soil):** Broadly, the downward movement of ground and an affected foundation influenced by soil properties, weather, foundation depth and nearby vegetation.

**Targets:** An element of tree risk: the subject of injury or damage within range of a hazard.

**Tree:** The definition of 'tree' is a composite of tree species, tree form and tree size. The blue book offers the following: A perennial plant with a self-supporting woody main stem, usually developing woody branches at some distance from the ground and growing to a considerable height and size. This definition has the three main elements in general form. **For the purposes of 5837 surveys, only plants with a stem diameter of 75mm or above are considered trees.**

**Tree Constraint Plan (TCP):** Site plan showing the tree-related constraints to development as envisaged in BS 5837 (2012). Common constraints are the loss of trees, encroachment into a tree's root protection area.

**Tree Condition Inspection/Survey:** A procedure to inspect a tree or trees. Variables used to describe a tree include position (if not already plotted on a topographical survey), species identity, maturity, various dimensions (main stem diameter, height, crown radius etc.), aspects of form, vigour, condition, incidence of pests, diseases, damage and defects, evidence of past management etc. Site factors, position in the landscape and site usage may also be relevant. , usually including its position, species identity, dimensions, age class, condition, conservation value etc. as appropriate, and to identify and evaluate defects. It is also common to make management recommendations (see schedule of works). Tree inspection is a fundamental of tree management and advisory practice in arboriculture.

**Tree Preservation Order:** (UK) an order made by a local authority or other planning authority to protect a tree, group of trees, area of (scattered) trees or woodland under Part VIII of the Town and Country Planning Act 1990. There have been several amendments, the latest being the Town and Country Planning (Tree Preservation) (England) Regulations 2012. An order is generally made on the grounds of amenity and expediency. Anyone proposing works to a TPO tree must seek prior consent from the authority using the form IAPP. With the advent of the 2012 regulations, some of the detail in existing TPOs in England has been revoked.

**Tree Protection Plan:** scale drawing prepared by an arboriculturalist showing the final layout proposals, tree retention and tree and landscape protection measures detailed within the arboricultural method statement (AMS), which can be shown graphically.

**Trunk:** see bole.

**Vigour:** The health and resilience of a tree (from the Latin 'to be strong'), reflected in the capacity of the whole tree to grow (see growth rate). The term is often used as a description of overall condition on a qualitative scale from 'high' to 'low'.

**Visual Tree Assessment (VTA):** The standard approach to tree risk assessment consisting of the diagnosis of structural defects and the evaluation of their significance from visible signs and the application of biomechanical criteria. Simple equipment such as a sounding mallet, probe and binoculars are commonly used.

**Wind exposure:** the degree to which a tree or other object is exposed to wind, with regard both to duration and velocity, often taking into account prevailing wind directions.

**Windthrow:** the blowing over of a tree at its roots.

## Appendix vii: References

1. Cranfield Soil and Agrifood Institute (2023). Soilsclapes soil types viewer - National Soil Resources Institute. Cranfield University. [online] [www.landis.org.uk](http://www.landis.org.uk). Available at: <https://www.landis.org.uk/soilsclapes/>.
2. Swansea. (2025). Tree preservation order (TPO) map - Swansea. [online] Available at: <https://www.swansea.gov.uk/tpomap>.
3. Claus Mattheck, Klaus Bethge and Karlheinz Weber (2015). The body language of trees encyclopedia of visual tree assessment. Karlsruhe Karlsruhe Inst. Of Technology - Campus North.
4. Hiron, A.D. and Thomas, P.A. (2018b). Applied tree biology. Chichester, West Sussex Wiley Blackwell.
5. British Standards Institution (2012). Trees in relation to design, demolition and construction : recommendations. London, Eng.: B.S.I.
6. British Standards Institution (2010). Tree work : recommendations. London: British Standards Institution.
7. Rose, B. (2020). THE USE OF CELLULAR CONFINEMENT SYSTEMS NEAR TREES: A GUIDE TO GOOD PRACTICE. [online] Stonehouse, Gloucestershire: Arboricultural Association. Available at: <https://www.trees.org.uk/News-Blog/Latest-News/New-guide-to-use-of-cellular-confinement-systems-n> [Accessed 25 Mar. 2023].

## Terms and conditions

The Client is the party commissioning and funding the survey. The Consultant is any person(s) employed by Tree Check Arboriculture LTD to carry out any related works, as well as Tree Check Arboriculture LTD as an entity.

### Limitations

1. This survey reflects the condition of the trees as they were observed on 24-Apr-2025. The condition of trees can change quickly and if any significant change is observed then a qualified arboriculturist should be consulted regardless of the recommended reinspection period.
2. While every attempt has been made to provide accurate recommendations based on the condition of the observed trees, Tree Check Arboriculture Ltd. can accept no liability for damage, injury, or loss of property caused by faults that were not apparent at the time of inspection. These include but are not limited to faults that may only be visible seasonally such as fungal fruiting bodies, or faults that were obscured or inaccessible to the surveyor such as those high up in the crown or obscured by ivy.
3. During adverse weather conditions such as storms, otherwise healthy trees can fail. Trees should be visually inspected after any high winds.
4. This report cannot predict the reaction of inspected trees to external factors such as extreme climate events, accidents, or vandalism.
5. The author(s) can accept no liability for damages if the recommended works are not carried out as per this report in line with BS:3998.
6. Operational recommendations (e.g. climb and dismantle, are for loose guidance only. It remains the responsibility of the assigned contractor to decide on the safest work method. Tree Check Arboriculture LTD. accepts no responsibility for damages occurring during the carrying out of recommended works.
7. This report does not cover any underground part of trees, nor does it consider any affect inspected trees may have on shrinkable clay soils since these issues are almost entirely restricted to areas of shrinkable clay soils and soil analysis was not specified in the brief.
8. **Recommendations made in this report do not override any legislation covering the affected trees. Trees in a conservation area, trees subject to preservation orders and groups of trees requiring felling licenses still require relevant permissions before work can be carried out. Unless otherwise agreed the Tree Check Arboriculture LTD will not be checking for the presence of this legislation or be applying for these permissions. The Client must contact the consultant if they are unsure on this matter.**
9. Certain areas of the site were inaccessible in the time scale of this survey due to dense vegetation cover. Areas and trees where this has been an issue are described in certain trees and groups in the survey table.
10. **The findings of this report cannot be relied upon after 12 months from the time of inspection or the recommended reinspection date (if sooner).**

### Legal Constraints

1. The report is for use by the client and any reasonably involved third party advisors only. Rights to reproduce, publish, or broadcast the contents of this reports are reserved.
2. It is prohibited to make any amendments or omissions to this report under any circumstances. This report should be provided unaltered and in full to any third-party advisors, contractors or other involved parties to ensure that the hazards highlighted are understood and the necessary remedial works are commissioned. Failure to comply will invalidate the report and Tree Check Arboriculture Ltd. will accept no liability for damages occurring.
3. Tree Check Arboriculture LTD retains full title on this, and all subsequent reports until the relevant invoices are settled. Tree Check Arboriculture LTD accepts no liability relating to the contents of reports that have not been fully paid for.
4. This report only covers the scope described in the introduction of this report, as discussed with the client, Trees, and methods of inspection not described in the scope were not included, and it is the client's responsibility to bring it to the attention of Tree Check Arboriculture LTD if they feel the scope doesn't fully meet their requirements.
5. The consultant is under no obligation to inspect trees in areas that are not freely accessible. It is the client's responsibility to ensure that all relevant areas of site are legally and practically accessible to the consultant.
6. In some instances, the consultant may recommend that further professional opinions are sought. For example, structural engineers, geotechnical engineers, drain engineers etc. Tree Check Arboriculture LTD accepts no responsibility for losses occurring from the advice sought from these third parties, nor from damages caused from acting without the consultation of the recommended professionals.
7. Tree Check Arboriculture LTD. accepts no responsibility for losses occurring between the time of commissioning and the delivery of a written report. No responsibility is accepted for losses occurring where delays or failure to deliver a report on the agreed date where delays or failures occurred due to circumstances out of the control of Tree Check Arboriculture LTD.
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