Grounded Trees and Ecology

BS 5837: 2012 Survey

Site Address:	Skewen, Neath (Various sites)	Client:	Neath Port Talbot CBC The Quays Brunel Way Neath SA11 2GG
Report Ref:	GT&E/NPTCBC	Report Date:	October 2025
Author:	Darren Woolfall BSc (Hons) Dip Arb Level 4 (ABC)	Signed:	

Summary

This document has been produced to aid landowners and site managers in making decisions on the management of trees on their property prior to any development taking place, in accordance with the British Standard (BS5837: 2012). It can be used to help inform them and specialist contractors of what outline management work needs to be carried out after a general tree survey has been undertaken on a given site/area. The purpose of the survey is to identify trees or their features that may be impacted by any proposed development and those that pose a potential threat at the time of the on-site visit.

Any tree work to be carried out as a recommendation of this report should be undertaken by qualified professionals with appropriate training and experience for the tasks they will perform. It will be the responsibility of these contractors to satisfy themselves that they are compliant with legislation regarding tree preservation orders (TPO's), conservation areas and wildlife concerns prior to work commencing. All tree work should be undertaken following the recommendations of BS: 3998 2010 and industry best practice.

Contents

Introduction

This survey was conducted by Darren Woolfall of Silures LBT, (contracting to Grounded Trees and Ecology) with 40 years of working in land-based industry, with the past 12 years specifically in the arboricultural sector, holding the following qualifications:

- BSc (Hons) Ecology and Conservation Management
- Level 4 Diploma in Arboriculture
- LANTRA Professional Tree Inspection Certificate (PTI)
- City & Guilds Level I, II, III, in Forestry

Brief

Grounded Trees and Ecology have commissioned me to undertake a tree survey in accordance with the British Standard BS5837: 2012 *'Trees in Relation to Design, Demolition and Construction – Recommendations'* at various sites in Skewen.

This report is an Arboricultural Impact Assessment (AIA), focusing on the trees within and adjacent to the extents of the site. It reports on the impacts on the recorded trees from the proposals and is supplemented by the production of an Arboricultural Impacts Plan (AIP), which is included within Appendix D of this report.

The report is based upon data collected on site visits made by Darren Woolfall and Lee Gwyther of Grounded Trees and Ecology who inspected the trees on 22nd Sept and 2nd Oct 2025. Weather conditions were dry and bright, with good visibility for the purpose of this survey.

Scope

The purpose of this survey was to assess the location, size and general condition of the trees on and around the sites 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. However, where specific hazards have been identified, these have been recorded and recommendations provided.

The inspection was carried out at ground level, trees were not climbed, and no internal decay detection was used.

All heights of trees were estimated from ground level using a clinometer.

Branch spread was measured from the base of the trees in four cardinal directions using a laser measure.

Stem diameter was measured at 1.5m above ground level using a diameter tape measure.

Data Gathering

Data was collected in accordance with BS5837: 2012, as outlined in appendix of this report. The purpose of the tree categorisation method applied by the arboriculturist was to identify the quality and value (in a non-fiscal sense) of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained if development is to occur. The tree surveyor is not aware of the volume of development, or if any of the areas surveyed will retain any of the current tree stock.

For a tree to qualify under any given category, it should fall within the scope of that category definition as defined in Appendix (A) (categories U, A, B, C) and, for trees in categories A to C, it should qualify under one or more of the three sub-categories (1, 2, 3). Sub-categories 1, 2 and 3 are intended to reflect arboricultural, landscape and cultural values, respectively.

Trees were recorded as individual specimens and groups. Where trees were recorded as groups, measurements were typically taken from the largest tree within the group.

Not all trees were tagged during the survey and some may have been photographed to aid identification and location and may be presented in this report.

This level of survey meets the requirements of BS5837: 2012, which states that 'Trees growing as groups or woodland should be identified and assessed as such'. The British Standard defines the term group as 'trees that form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally including for biodiversity (e.g. parkland or wood pasture)'.

Site Descriptions and Findings

For ease of presentation of the report the individual location will be identified and findings presented for each location. A map of locations is located at the end of this section.

Location A

What3Words: //online.lousy.soulful

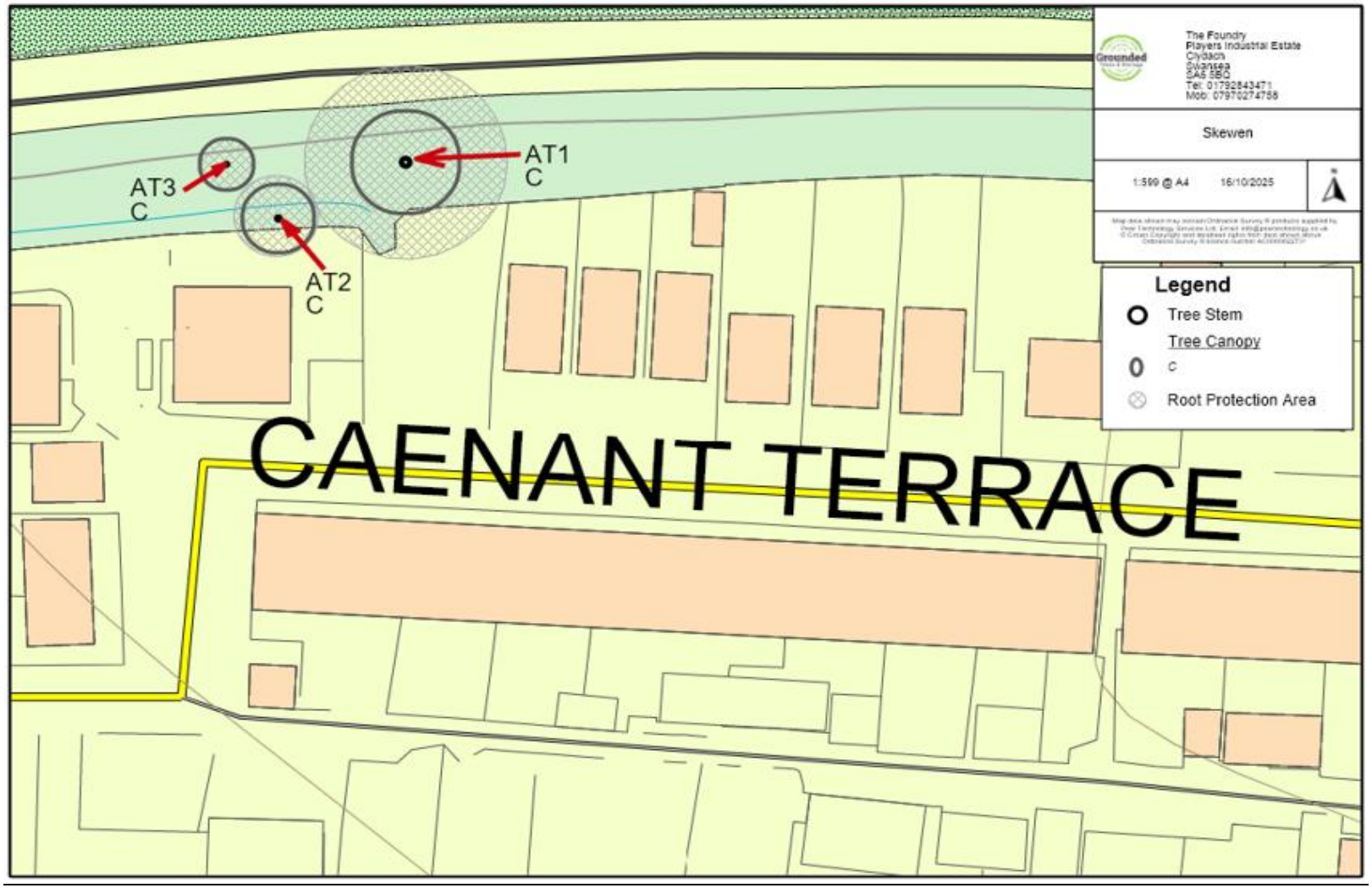
Postcode: SA10 6UX

Ordnance Survey Grid Reference: SS726975

The survey area is a south facing shallow embankment of a railway, adjacent to a parking area between domestic dwellings. There is

There are 3 sycamore trees in this area, AT1 is a lapsed coppice stool with several stems, AT2 is growing out of the banking on the south side of the watercourse at the end of a garden, AT3 is higher up the banking and will potentially be in conflict with railway transport in the near future.

Ref	Life Stage	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m) N	E	S	W	Lowest Branch, direction	Vitality	General Observations	Preliminary Recommendations	Estimated Remaining Contribution	Category Grading	RPA Area (m^2)	RPA Radius (m)
AT1	M	Sycamore (*Acer pseudoplatanus*)	12	300	6	6	6	6	2W	F	Lapsed coppice stool with several Stems. Ivy covering stems	Re-coppice and repeat on a cyclical basis (e.g. 10years)	10 -20	C1	40.72	3.6
AT2	M	Sycamore (*Acer pseudoplatanus*)	9	280	4	4	4	4	3S	F	Stem growing out of south bank of watercourse at the north end of garden	Fell to prevent tree failing And blocking watercourse	10-20	C1	71	4.75
AT3	SM	Sycamore (*Acer pseudoplatanus*)	8	250	3	3	3	3	1.5N	F	Tree close to railway	Fell to ensure safety of railway	20-40	C1	28.27	3


AT3
C
AT1
C
AT2
C
CAENANT TERRACE
Grounded
The Foundry
Players Industrial Estate
Clydach
Swansea
SA6 5BQ
Tel: 01792843471
Mob: 07970274758
Skewen
1:599 @ A4
16/10/2025
Legend
Tree Stem
Tree Canopy
C
Root Protection Area

Location A

Location B

What3Words: ///fruits.wicket.march

Postcode: SA10 6UR

Ordnance Survey Grid Reference: SS728974

Linear feature of hazel, hawthorn and privet approximately 4-5 metres in height, adjacent to Caenant Terrace. Stems were not measured as there was poor access, and many stems were below the threshold for measuring. The growth here is of little arboricultural significance. If the area is not to be excavated the growth can be coppiced and allowed to regrow.

Location C

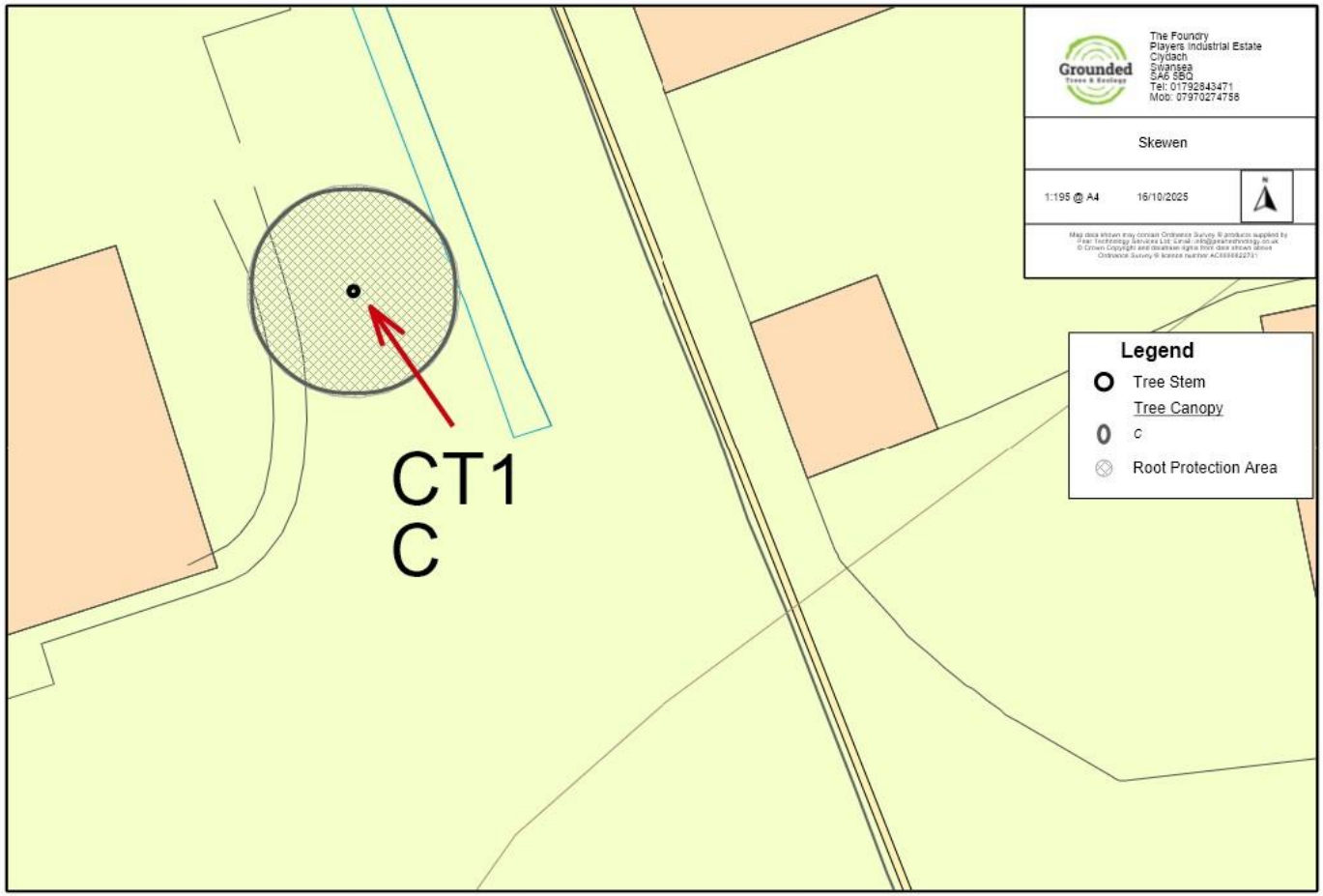
What3Words: ///taxed.enclosing.refusals

Postcode: SA10 6NY

Ordnance Survey Grid Reference: SS731974

A silver birch situated on a grass area approximately 7 metres from Drummau Road to the south-east corner of Cwrt-Clwydi-Gwyn Care Home. There has been some recent culvert work in this area.

Ref	Life Stage	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m) N	E	S	W	Lowest Branch, direction	Vitality	General Observations	Preliminary Recommendations	Estimated Remaining Contribution	Category Grading	RPA Area (m^2)	RPA Radius (m)
CT1	M	Silver birch (*Betula pendula*)	9	350	4	4	4	4	1N	G	The root system will not penetrate Beyond the boundary of the new wall Installed on the watercourse	None	10 -20	C1	55.42	4.2


Grounded
The Foundry
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Tel: 01792843471
Mob: 07970274758
Skewen
1:195 @ A4
16/10/2025
Legend
Tree Stem
Tree Canopy
C
Root Protection Area
CT1
C

Location C

Location D

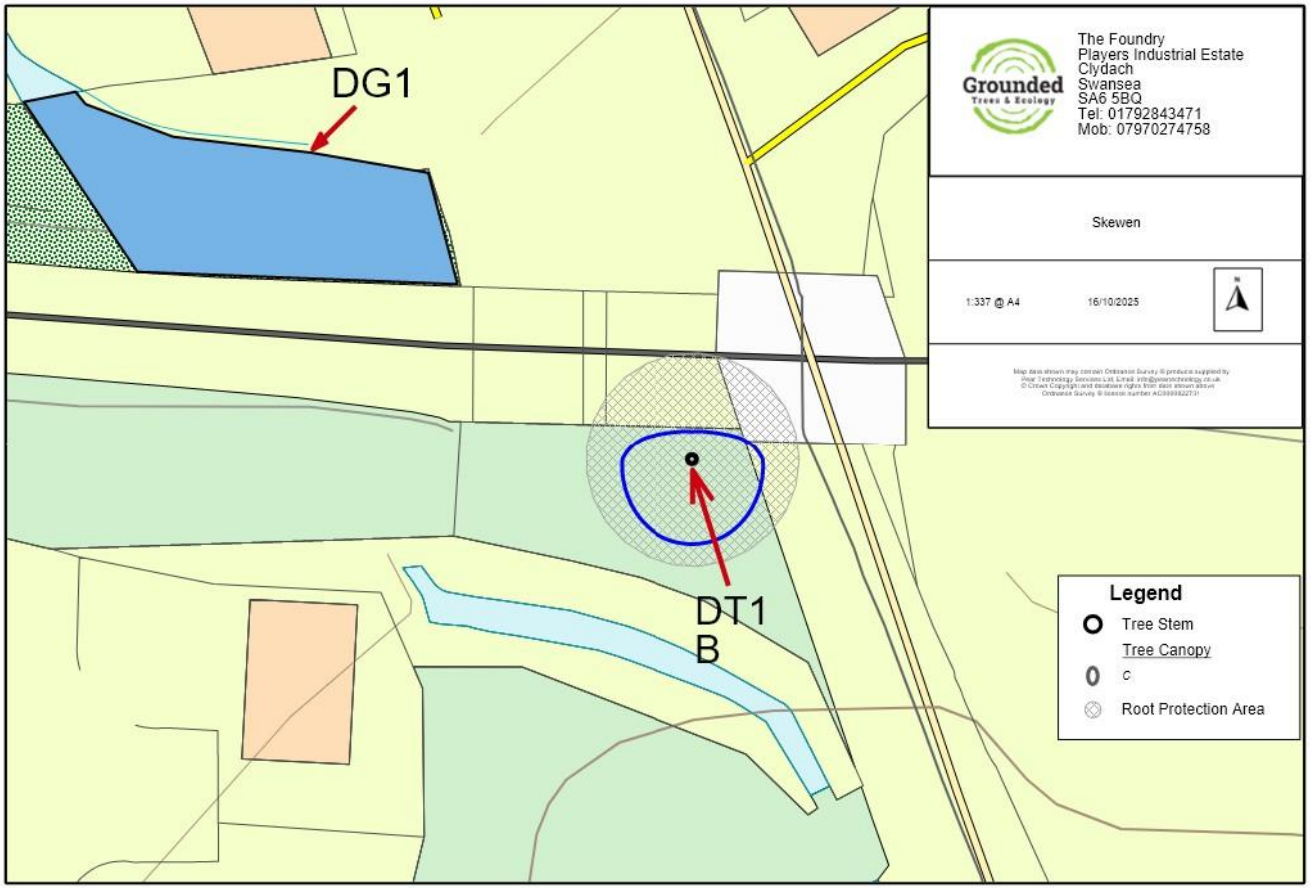
What3Words: ///tune.hurtles.similar & ///narrates.serious.types

Postcode: SA10 6NY

Ordnance Survey Grid Reference: SS730975

This location has two sites in close proximity; they are north and south of the railway. A multiple stemmed sycamore is to the south of the railway adjacent to a viaduct on a grassed area. This tree has historic evidence of reduction on the north side to prevent conflict with the structure. The north location is on the embankment of the railway and is accessed through a locked gate, this will be identified as DG1 on the map below. There are approximately 12 sycamore stems on this banking, 2 of which are coppice stools with a number of stems, their average height is estimated between 10-12 metres. There are only one single stem and one coppice stool adjacent to the watercourse. If excavation is required in this area, it is recommended to fell the trees and allow any undisturbed stumps coppice. The embankment trees have not been plotted on the maps.

Ref	Life Stage	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m) N	E	S	W	Lowest Branch, direction	Vitality	General Observations	Preliminary Recommendations	Estimated Remaining Contribution	Category Grading	RPA Area (m^2)	RPA Radius (m)
DT1	M	Sycamore (*Acer pseudoplatanus*)	17	320 330 330 280	2	5	6	5	2S	F	Multi stemmed tree on greenspace Adjacent to footpath and railway viaduct	Sever Ivy, to aid future inspection	10 -20	B1	180.32	7.58
DG1	M	Sycamore (*Acer pseudoplatanus*)	10-12							F	Approx 12 stems including coppice Stools, only 1 stem and 1 coppice Stool adjacent to watercourse	Fell and allow remaining Stumps to coppice				


DG1
DT1
B
Grounded
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The Foundry
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Swansea
SA6 5BQ
Tel: 01792843471
Mob: 07970274758
Skewen
1:337 @ A4
16/10/2025
Legend
Tree Stem
Tree Canopy
C
Root Protection Area

Location D

Location E

What3Words: ///stew.paint.wonderful & ///regulate.lighters.reviewed

Postcode: SA10 7GA

Ordnance Survey Grid Reference: SS731973 & SS732973

This location is in two parts, to the west and east of a linear watercourse located between St. Johns Terrace and Old Road. The location to the west has low growing scrub and has no arboricultural significance but will be identified as EG1 on the map below. The location to the east contains a pollard ash stem with growth reaching an estimated 7 metres in height, the stem is ivy covered so it was unable to ascertain its condition. No signs of ash dieback.

Ref	Life Stage	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m) N	E	S	W	Lowest Branch, direction	Vitality	General Observations	Preliminary Recommendations	Estimated Remaining Contribution	Category Grading	RPA Area (m^2)	RPA Radius (m)
EG1		Low vegetation									Low vegetation, including bramble & buddleia	Clear/remove				
ET1	M	Ash (*Fraxinus excelsior*)	7	600	1	1	1	1		F	Pollard ivy covered stem with Multiple small stem growth	Fell	<10y	U		


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Skewen
1:428 @ A4
17/10/2025
EG1
ET1
U
OL / OLD ROAD
Legend
Tree Stem
Tree Canopy
U
Root Protection Area

Location E

Location F

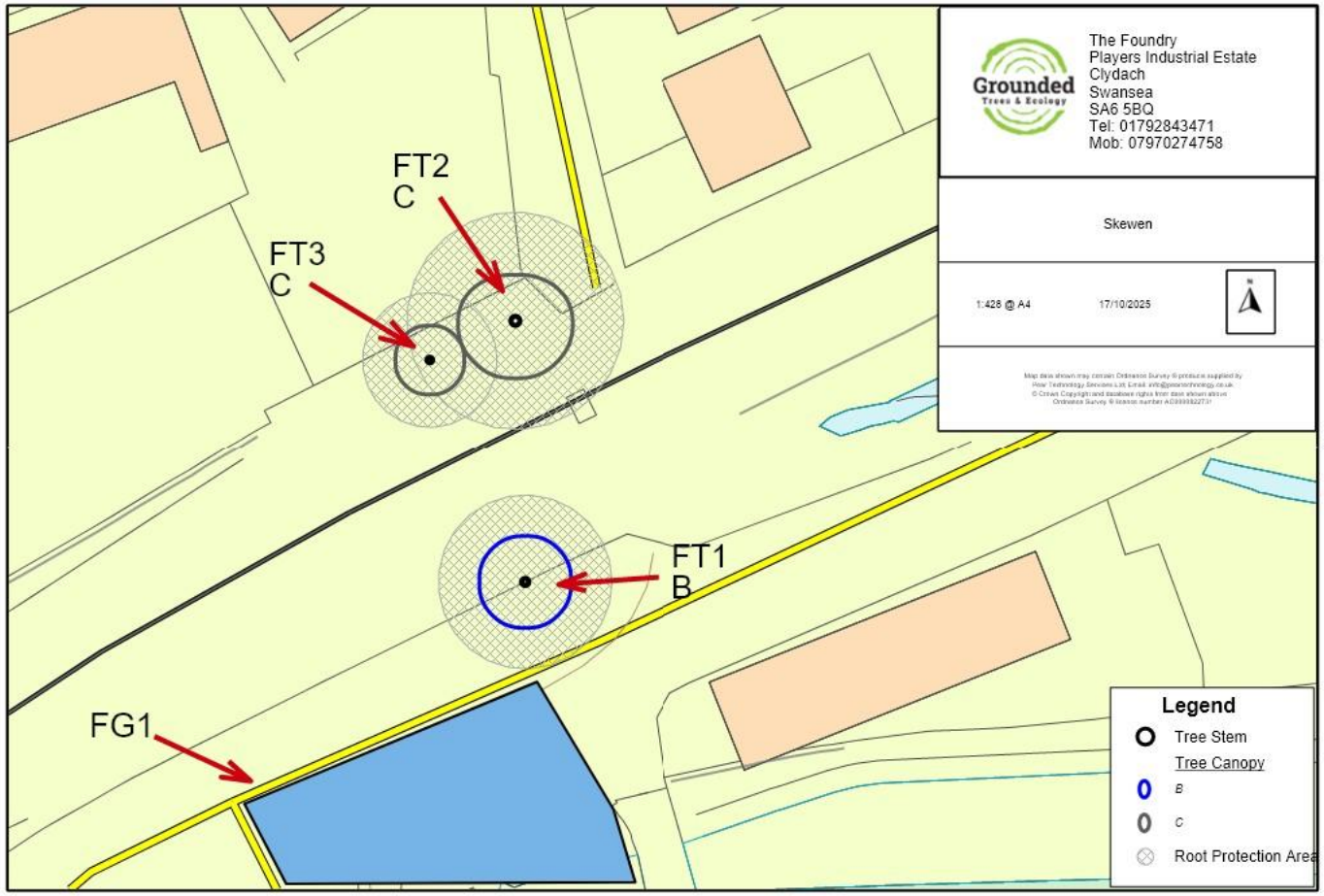
What3Words: ///public.crops.equal

Postcode: SA10 7LR

Ordnance Survey Grid Reference: SS733972

This location includes three areas of survey, both sides of the railway and an area adjacent to the canal. The canal area consists of low vegetation with some small diameter trees to the western edge adjacent to the overhead road bridge. This area has little concern for aboricultural purposes. The area to the south of the railway has a sycamore coppice stool with 10 stems growing from it and some small hawthorn growing further along the verge. The area to the north of the rail line also contains sycamore coppice stools again with a number of stems growing from each stool.

Ref	Life Stage	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m) N	E	S	W	Lowest Branch, direction	Vitality	General Observations	Preliminary Recommendations	Estimated Remaining Contribution	Category Grading	RPA Area (m^2)	RPA Radius (m)
FG1		Low vegetation									Low vegetation, including bramble & Buddleia and small diameter trees	Clear/remove				
FT1	M	Sycamore (*Acer pseudoplatanus*)	12	200	4	4	4	4	3W	G	Coppice stool with 10 stems, Average stem diameter 200mm	Fell/coppice to reduce conflict with railway	10-20	B1		
FT2	M	Sycamore (*Acer pseudoplatanus*)	12	250	4	5	5	5	3N	F	Coppice stool with multiple stems Ivy covered	Fell/coppice to reduce conflict with railway	10-20	C1		
FT3	M	Sycamore (*Acer pseudoplatanus*)	10	200	3	3	3	3		F	Coppice stool	Fell/coppice to reduce conflict with railway	10-20	C1		


FT2
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FG1
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Skewen
1:428 @ A4
17/10/2025
Legend
Tree Stem
Tree Canopy
B
C
Root Protection Area

Location F

Location G

What3Words: ///sheet.tuck.props

Postcode: SA10 7DW

Ordnance Survey Grid Reference: SS737972

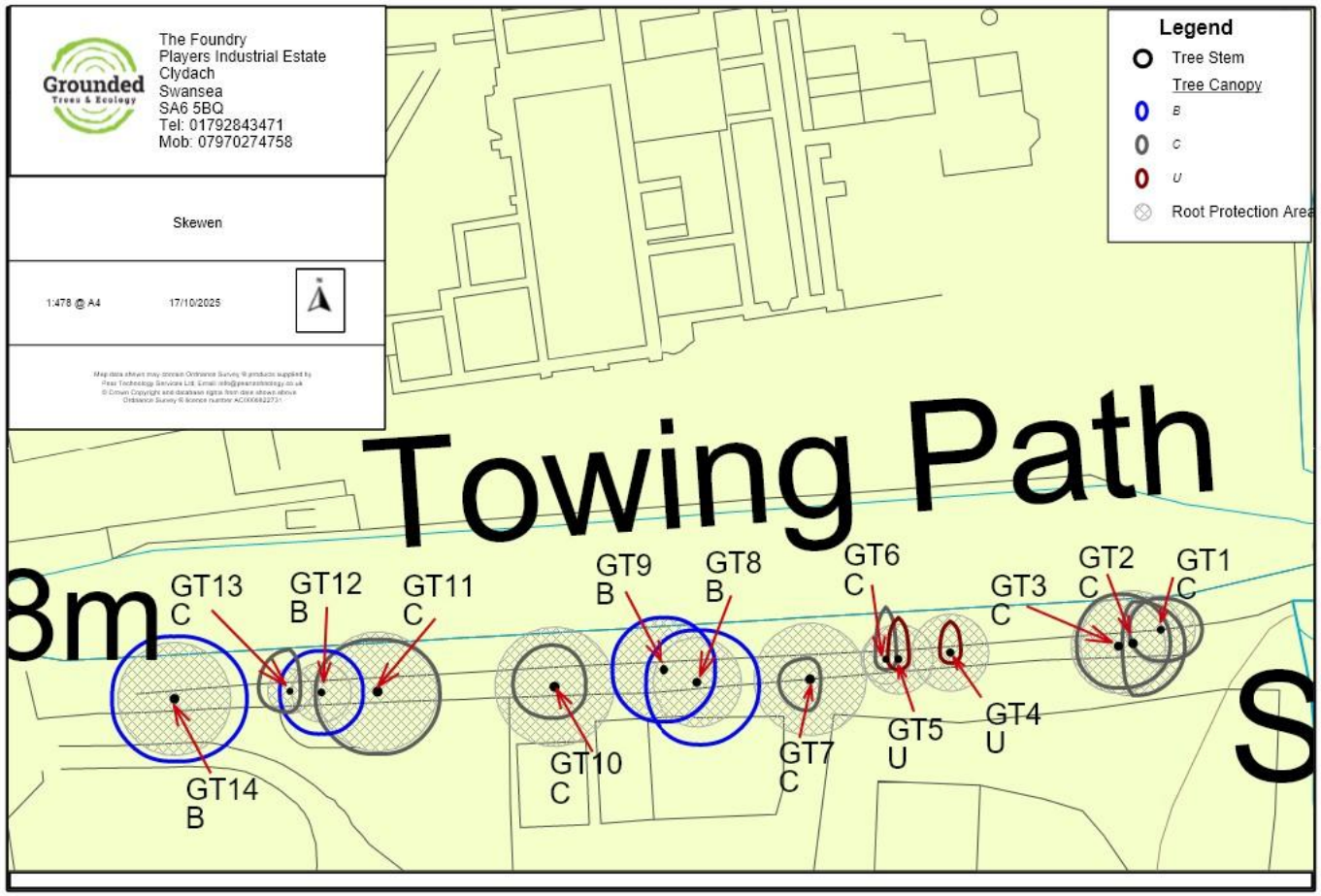
This location is along the towpath of the Tennant canal opposite Neath Abbey. The tree species here are predominantly sycamore with alder (which are in poor health) and willow. The trees have heavy covering of ivy which limits inspection of the stems, therefore, if any of these trees are to remain it would be advisable to sever the ivy at the base to aid future inspection which will benefit the trees by removing the sail area which could cause failure in high winds. The alder are generally in poor health and it is recommended to remove these.

Ref	Life Stage	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m) N	E	S	W	Lowest Branch, direction	Vitality	General Observations	Preliminary Recommendations	Estimated Remaining Contribution	Category Grading	RPA Area (m^2)	RPA Radius (m)
GT1 (23)	SM	Goat willow (*Salix caprea*)	8	180 150 150	3	4	3	3	3N	F	Three stemmed tree. Typical for species	None	10-20	C1	35	3.34
GT2 (24)	M	Alder (*Alnus glutinosa*)	11	300 300	4	5	5	1	4E	F	Suppressed to the east by neighbouring tree. Ivy covered stem	Sever ivy at base to aid future inspection	10-20	C1	81	5
GT3 (25)	M	Sycamore (*Acer pseudoplatanus*)	12	380	5	5	4	4	3W	F	Ivy covered stem	Sever ivy at base to aid future inspection	10-20	C1	65.33	4.56
GT4	M	Alder (*Alnus glutinosa*)	10	310	3	1	1	1	4N	P	Ivy covered stem, crown in decline	Fell	<10	U		
GT5 (26)	M	Alder (*Alnus glutinosa*)	10	280	4	1	1	1	5N	P	Ivy covered stem, crown in decline	Fell	<10	U		
GT6 (27)	M	Alder (*Alnus glutinosa*)	10	200	5	1	1	1	3N	P	Ivy covered stem, crown in decline	Fell	<10	C1		
GT7	M	Alder (*Alnus glutinosa*)	11	320 320	2	1	3	3	6S	P	Ivy covered stem, crown in decline Double stemmed tree	Fell	<10	C1		
GT8 (28)	M	Sycamore (*Acer pseudoplatanus*)	14	360	5	6	6	5		F	Ivy covered stem, leaning to south	Sever ivy at base to aid future inspection	10-20	B1	58.63	4.32

N.B. numbers in brackets refer to tree tag number

Ref	Life Stage	Species	Height (m)	Stem Diameter (mm)	Crown Spread (m) N	E	S	W	Lowest Branch, direction	Vitality	General Observations	Preliminary Recommendations	Estimated Remaining Contribution	Category Grading	RPA Area (m^2)	RPA Radius (m)
GT9 (29)	M	Sycamore (*Acer pseudoplatanus*)	12	420	5	5	5	5	4N	F	Ivy covered stem	Sever ivy at base to aid future inspection	10-20	B1	79.8	5
GT10 (30)	M	Alder (*Alnus glutinosa*)	8	480	4	3	3	4	4W	P	Pollard stem, ivy covered stem, willow stem adjacent (ownership uncertain)	Sever Ivy to aid future inspection, consider early removal. Fell willow if possible	<10	C1	104.2	5.76
GT11 (31)	M	Sycamore (*Acer pseudoplatanus*)	12	480	5	6	6	6	4N	F	Ivy covered stem. Damage to bark at the base on south side. Building debris around the base which can interfere with root function.	Sever ivy to aid future inspection, monitor for decline due to basal damage consider early removal	<10	C1	104.2	5.76
GT12 (32)	SM	Sycamore (*Acer pseudoplatanus*)	11	240	4	4	4	4	4N	F	Ivy covered stem	Sever ivy to aid future inspection.	20-40	B1	26	2.88
GT13 (33)	SM	Sycamore (*Acer pseudoplatanus*)	9	180	4	1	2	3	4W	G	Ivy covered stem	Sever ivy to aid future inspection.	10-20	C1	14.66	2.16
GT14 (34)	M	Sycamore (*Acer pseudoplatanus*)	10	290 350	6	7	6	6	3E	F		None		B1	93.46	5.45

N.B. number in brackets refer to tree tag numbers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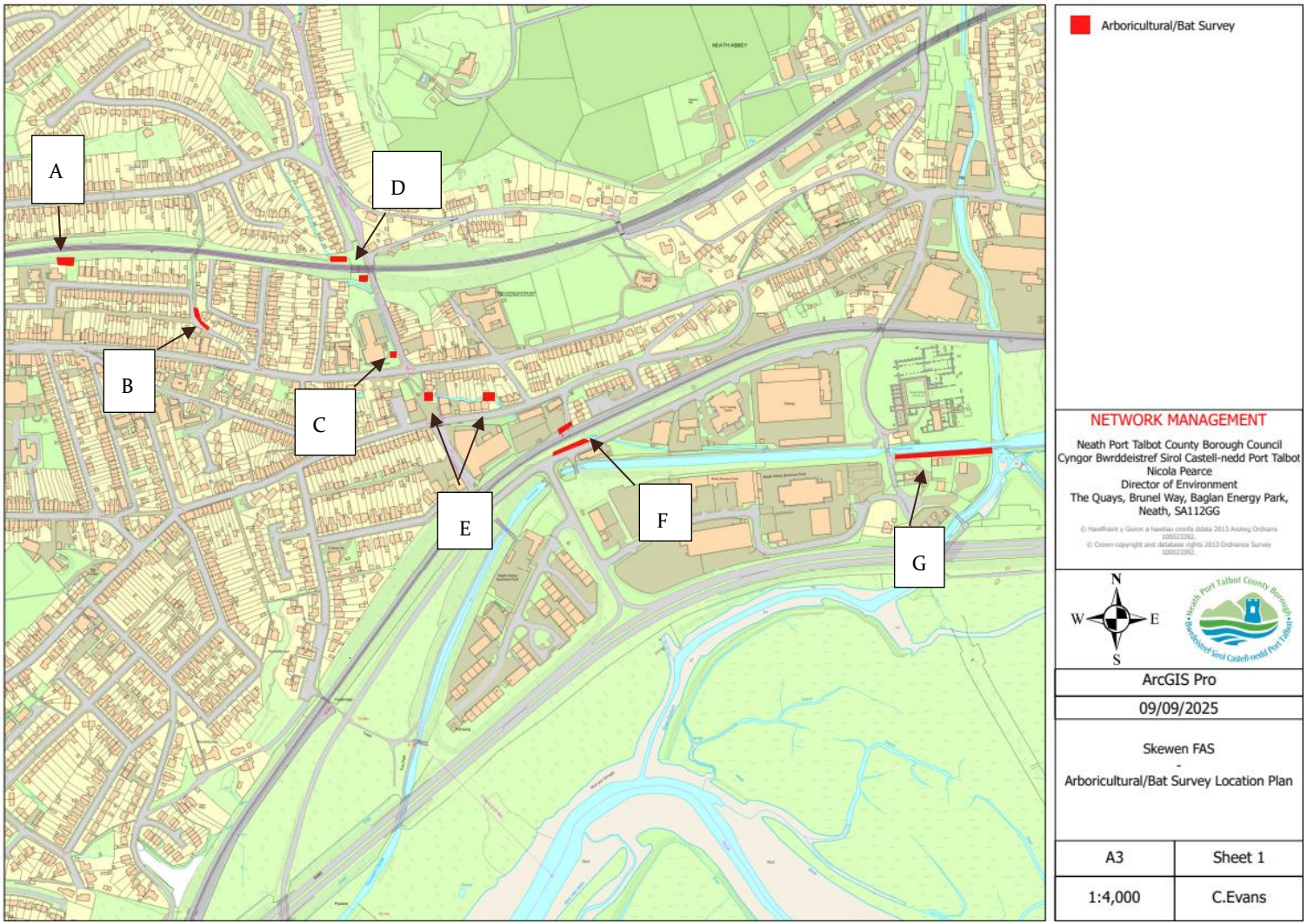
Tel: 01792843471
Mob: 07970274758
Skewen
1:478 @ A4
17/10/2025
Legend
Tree Stem
Tree Canopy
B
C
U
Root Protection Area
Towing Path
8m
GT13 C
GT12 B
GT11 C
GT9 B
GT8 B
GT6 C
GT3 C
GT2 C
GT1 C
GT14 B
GT10 C
GT7 C
GT5 U
GT4 U
S

Location G



Location Map

Statutory Protection

Trees may be protected through a Tree Preservation Order (TPO). The law on TPO's is in part VIII of the Town and Country Planning Act 1990 as amended and in the Town and Country Planning (Tree Preservation) Regulations 2012.

A TPO is made by a local planning authority in respect of a tree(s), As the tree is considered to bring amenity value to the surrounding area. A TPO makes it an offence to cut down, uproot, reduce, wilfully damage or wilfully destroy a protected tree without authorization.

Trees in a conservation area that are not protected by a TPO are protected under the provisions in section 211 of the Town and Country Planning Act 1990. There is a requirement to notify the local planning authority six weeks before carrying out certain work on such trees, unless an exemption applies.

Trees should be checked for protected species before works are undertaken. While it is outside of the scope of this tree survey to comment on the confirmed or likely presence of protected species, it is against the law to disturb bats or their roosts under the Conservation of Habitats and Species Regulations 2010. Likewise, nesting birds are protected by the Wildlife and Countryside Act 1981 (as amended). If protected species are discovered, then works should cease immediately and Natural Resources Wales should be contacted for advice.

Arboricultural Impacts

General

This report considers the trees adjacent to the proposed works and assesses their condition and suitability for retention. The report is supplemented by the AIP (Appendix D) of this report, which presents in graphic form the trees recorded as part of the survey, their specific reference numbers and the impact of the works.

Root Protection Areas

The root protection area (RPA), as defined in the BS 5837: 2012, is 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. This area should be protected from disturbance 'in order to avoid unacceptable damage to the tree as a result of severance or asphyxiation of the root system'.

The recommended minimum area(m^2) to avoid potentially harmful disturbance has been calculated and entered into the tree schedule for all trees. The RPA for each individual tree has been illustrated as a cross-hatched circle centred on the tree's stem.

The representation of the RPA does not consider pre-existing site conditions or other factors that can influence or modify the shape and disposition of tree roots. Accordingly, the Arboriculturist may make modifications or judgments on the likely extent of RPA's where through professional judgement it is deemed likely that the root zones have been restricted in a certain direction because of limiting factors such as topography, drainage or the presence of existing built infrastructure.

Preliminary Management Recommendations

The arboricultural survey data (Appendix C) shows management recommendations for those trees which at the time of the survey were identified as requiring management intervention.

- Category U trees should be removed prior to site work commencing.
- Use the findings of this report to inform the site design and minimise tree losses and damage to retained trees. Considering the following points:
    - Any excavation works within the RPA of retained trees, including drainage and service installation, as well as foundation laying should be avoided.
    - Installation of hard surfaces over the RPA of retained trees should be avoided.
    - Avoid creating level changes within the RPA of trees.
    - If works within the RPA of retained trees cannot be avoided, specialist engineering techniques should be provided in an arboricultural method statement.
- Reinspect retained trees upon completion of the development.

- Install barrier fencing around all RPA's, to protect all trees prior to commencing work on site. This should establish a construction exclusion zone.
- Unless specified in this report, the assessment of trees does not consider any habitat constraints that may be present. Ensure that any commissioned tree surgeons are aware of their responsibilities under the Wildlife and Countryside Act (1981) regarding protected species.

Mitigation Measures

If the construction work impacts over the RPAs of the trees, then any necessary excavation for construction should be achieved by hand and under arboricultural supervision so that any potential roots encountered can be immediately assessed and guidance given where necessary. Exposed roots at the edge of any excavation should be kept moist with damp hessian.

Based on the tree survey data, root protection areas (RPAs) have been determined for every retained tree. The RPAs are designed to protect at least a functional minimum of tree root mass to ensure that the trees survive the construction process.

Tree protection fencing is detailed in Appendix (B). Fencing should be erected, and ground protection installed before any materials or machinery are brought onto site and before any demolition, development or stripping of soil commences. Once erected, barriers and ground protection will not be removed or altered without prior agreement of an arboriculturist and approval of the local planning authority.

It is the responsibility of everyone engaged in the construction process to respect the tree protection measures and observe the necessary precautions within and adjacent to them.

Inside the exclusion area of the protective fencing, the following shall apply:

- No mechanical excavation
- No excavation by any other means without arboricultural site supervision
- No hand digging without a written method statement having first been approved by the developers arboriculturist.
- No ground level changes whatsoever.
- No storage of plant or materials
- No storage or handling of any chemicals
- No vehicle access

Any ground protection installed must be strong enough to support any predicted load and resist compaction and soil damage. A single thickness of boarding laid on the soil will provide sufficient protection for pedestrian loads. However, for wheeled or tracked construction traffic movements within the RPA, ground protection should be designed by the project engineer to accommodate the likely loading. The ground beneath any protection boarding will be left undisturbed and will be protected with a porous geotextile fabric.

Appendix A: Key and British Standard BS5837: 2012 Survey Table

A1. Survey Key

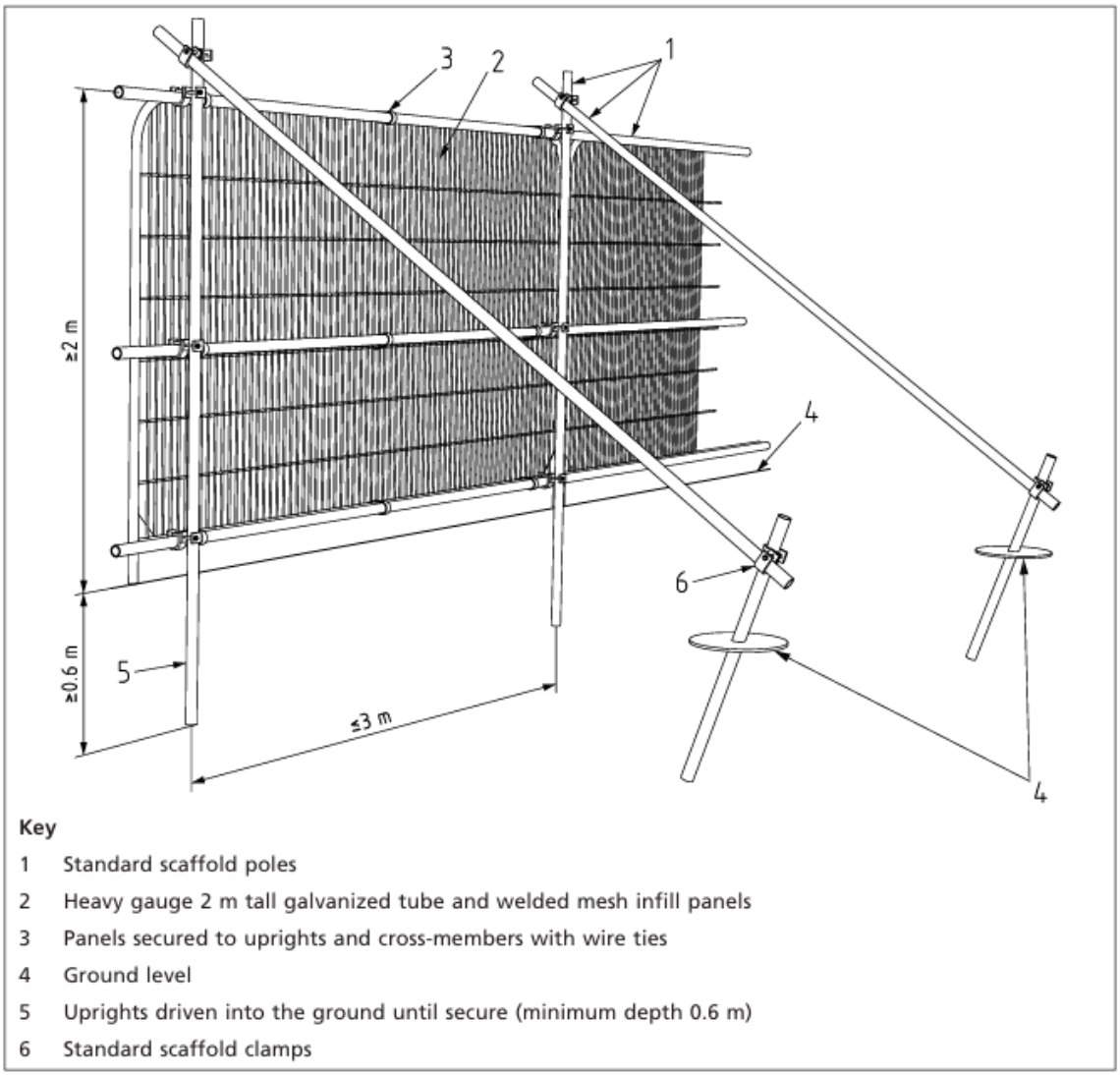
Column Heading	Description
ID	Each surveyed element has been given a unique reference number as show on the survey drawings. Each number is prefixed with a letter to represent the element type (T) Tree, (G) Group, (H) Hedge, (W) Woodland.
Age Class	The tree is described as Young, Semi-Mature, Mature, Over-Mature, Veteran or Dead
Species	The common English name has been used. In some instances, the botanical name is also given in *italics*
Height (m)	An indication of the tree's height measured in metres
Stem Diameter (mm)	The diameter of the tree stem when measured at 1.5 metres above ground level
Branch Spread (m) N, E, S, W	The distance the live crown extends in each of the four cardinal directions
First Main Branch Height (m)/ Direction	Height given in metres that the first significant branch extends from the stem and the direction in which it points towards
Vitality	A quick reference guide to the tree's overall health and condition, given as Good, Fair, Poor or Dead **Good** – a tree with little or no obvious physiological defects: leaf density and colour are typical of the species, bud, flower and fruit production are good and there are no signs of dieback at any point throughout the crown **Fair** – a tree with moderate physiological defects may have some or all of the following factors: leaf density is less than typical for the species, leaf cover is chlorotic, bud, flower, or fruit production are deficient; there are signs of minor dieback within the crown, there is a moderate degree of deadwood within the crown **Poor** – a tree with major or multiple physiological defects; evidence of extensive crown thinning, bud, flower, or fruit production is poor or missing, there are signs of advanced dieback throughout the crown, there is extensive or major deadwood throughout the crown **Dead** – a tree that has died due to either old age, drought, disease, pest infestation, physical damage to the main stem or rooting system, or a combination of these factors
General Observations	Narrative comment on the general condition including significant defects and overall appearance
Preliminary Management Recommendations	Any work recommended to minimize risk, improve form or maintain a high value
Estimated Remaining Contribution	An estimation of how long the feature will contribute to its surroundings in the current landscape context. Recorded in bands of either <10 years, 10-20 years, 20-40 years, >40 years
Category Grading	The trees are graded to the categories prescribed within BS5837; 2012 (U, A, B, C, D)
Root Protection Area (m)	The minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's vitality
Root Protection radius (m)	This is the minimum distance from the tree that roots should be protected, calculated by 12 times the stem diameter at 1.5m above ground level

A2. BS5837: 2012 Cascade Chart

Cascade chart for tree quality assessment from BS5837: 2012

Category and definition	Criteria (including subcategories where appropriate)		
Category U Those in such condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• 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). • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. • 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. Note: Category U trees can have existing or potential conservation value which it might be desirable to preserve		
	1. Mainly arboricultural values	2. Mainly landscape values	3. Mainly cultural values, including conservation
Category A Those of high quality with an estimated remaining life expectancy of at least 40 years	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)
Category B Those of moderate quality with an estimated remaining life expectancy of at least 20 years	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
Category 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	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 merit	Trees with no material conservation or other cultural value

Appendix B: Recommended Configuration for Tree Protection Fencing (BS5837: 2012)



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 D: Findings Table

Please see individual locations for this information

Appendix E: Arboricultural Impact Plan

Please see individual locations for this information

Appendix G: Recommendations/Legal Constraints

Recommendations

- All tree works should be in accordance with BS: 3998: 2010 and industry best practice.
- Ash Dieback Disease (*Hymenoscyphus fraxineus*): Act now and monitor regularly, as delaying will result in increased reactionary operational costs as trees decline and become unsafe for aerial work.
- **Any landowner/land manager should be aware that:** trees require regular tree inspections by people with adequate specialist arboricultural qualifications. The landowner has a duty of care imposed by statute and common law to do so and keep records.

Legal Constraints

- **TPO's:** Prior to work commencing the client should check with the Local Planning Authority that trees are not covered by a Tree Preservation Order, within a Conservation area or covered by a Planning Condition.

- **Felling Licence:** Even when no specific legal protection exists, it may be necessary to obtain a felling licence. This will apply if the volume of timber created from felling operations exceeds five cubic metres in one quarter. Contact Natural Resources Wales for these.

- **Birds:** Disturbing nesting birds is a Criminal offence under the Wildlife and Countryside Act 1981, unless such works are necessary to preserve public Health and Safety. In practice contractors must check for the presence of nests prior to commencing work.

- **Bats:** contractors must thoroughly inspect trees for the presence of bats prior to commencing work. Bats are a protected species under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010, making it an offence to kill or injure a bat, or destroy or significantly disturb a roost. If evidence of bat activity is found, all work must cease, and advice sought immediately from Natural Resources Wales before recommencing work.

Appendix H: Glossary of Terms

Bark	all tissue on the outside of the trunk, roots, stems, branches and twigs.
Bracket	in wood-decaying fungi, the type of fruit body produced by many species.
Branch	a limb of a tree.
Broadleaf	a tree belonging to one of the families of angiosperms i.e. not a conifer or other gymnosperm.
BS 3998: 2010	British standard for tree work.
Canopy	the part of the tree composed of leaves and twigs.
Cavity	an open wound characterized by the presence of decay and causing a hollow.
Crack	longitudinal or transverse in the stem or scaffold limbs. A split in wood tissues
Crown	The main foliage carrying part of the tree.
Crown lifting	the removal of the lower branches up to a specified height to provide clearance under the crown.
Crown/ limb reduction	a shortening of lateral and vertical branches that makes the entire Chrome or specified smaller part.
Deadwood	major in excess of 50 mm, minor less than 50 mm diameter. Stable and unstable dead woods
Decay	rot. The process of degradation of woody tissues by fungi and bacteria through decomposition.
Die back	foliage crown tip dieback, often from physiological decline.
Failure	a partial or total fracture of woody tissues or loss of cohesion between soil and roots.
Fungal fruit body (FFB)	flower of a fungus. Often the fungus species is given where ID is possible.
Hazard	anything with the potential to cause harm.
Natural target pruning	pruning as defined by Dr. Alex Shigo - minimal cut diameter made at the branch collar.
Risk	the likelihood of a potential harm from a hazard becoming actual harm.
Root	part of the tree that contains woody and non-woody tissues to absorb water and minerals from the soil, gases from the atmosphere, and support the trunk and crown.
Stem	the principal portion of the woody structure (the trunk) or one of a number of such portions with similar size and status.
Suppressed	trees that have been overshadowed and whose crown development is restricted by neighbouring trees.

Targets	in a tree hazard assessment, persons or property or other things of value, which may be harmed by mechanical failure of the tree or by objects falling from it.
Tree	a woody plant that typically has a single self-supporting woody stem, attaining a height in excess of four metres in maturity with a stem diameter of at least 75 mm.
Tree Preservation Order	an order made by a local authority, where the authority's consent is generally required for the cutting down or reduction of specified trees.
Trunk	a single main self-supporting stem of a tree.
Wound	an injury that induces the tree to compartmentalise internally.

Appendix I: References

Soilscapes soil types viewer – National Soil Resources Institute. Cranfield University. www.landis.org.uk/soilscapes/

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The body language of trees. C. Mattheck, K. Bethge, K. Weber

Modern arboriculture. Alex Shigo

Principles of tree hazard assessment and management. David Lonsdale

Applied tree biology. Andrew Hirons, Peter Thomas

British Standards Trees in Relation to design, demolition and construction – Recommendations BS5837: 2012, British Standards Institute (BSI)

Magic Maps. https://magic.defra.gov.uk/MagicMap.html

Ancient Woodland Inventory. https://datamap.gov.wales/layers/geonode:GWC21_Ancient_Woodland_Inventory_2021

Appendix J: Terms and Conditions

1. The Client is the party commissioning and funding the survey. The Consultant is any person(s) employed by Grounded Trees and Ecology to carry out any related works.
2. The report is for use by the client and any reasonably involved third party advisors only. Right to reproduce, publish, or broadcast the contents of this report are reserved.
3. It is prohibited to make amendments or omissions to this report under any circumstances. This report should be provided an altered 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 Grounded Trees and Ecology will accept no liability for damages occurring.
4. Grounded Trees and Ecology retains full title on this, and all subsequent reports until the relevant invoices are settled. Grounded Trees and Ecology accepts no liability relating to the contents of reports that have not been fully paid for.
5. This report only covers the scope described in the introduction of this report, the 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 Grounded Trees and Ecology if they feel the scope doesn't fully meet their requirements.
6. 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.
7. In some circumstances, the consultant may recommend that further professional opinions are sought. Grounded Trees and Ecology 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.
8. The findings of this report cannot be relied upon after 12 months from the time of inspection or the recommended re-inspection date if sooner.
9. Each provision of these conditions limiting or excluding liability operates and survives independently of the others.

Grounded Trees and Ecology