



Maesteg Road

BS5837:2012 Tree Survey



Membership No: TE03654

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1. Introduction

1.1 Instructions

1.1.1 RTAC has been instructed to produce a tree survey to BS5837:2012 for a development of one property at Maesteg Road, Bryn. The instruction was given by Mr. Gavin Reed, the site owner.

1.2 Documents Provided

1.2.1

Document Description	Reference Number	Produced By	Date
Site Location & Block Plan	0100-PL01	G Reed	April 2024

1.2.2 No independent verification or assessment of these documents has been made by RTAC.

1.3 Scope of Report

1.3.1 This report is concerned with the arboricultural features of the site only and including any physical features which directly affect or are affected by the trees.

1.3.2 No vegetation has been removed to inspect trees and where trees are not visible or accessible because of vegetation, fences, ditches or other obstructions a limited assessment has been carried out.

1.3.3 This survey is a record of the condition of the trees at the time of the survey being carried out, notwithstanding this, the purpose of this survey is to assess the trees in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations and with respect to the proposed development and the survey is not intended to be a full tree condition or hazard survey.

1.4 Survey Methodology and Limitations

1.4.1 The survey was carried out on Friday 12th April 2024, the weather was heavy rain, but visibility was sufficient for the purpose of this survey.

1.4.2 Tree heights were measured using a Suunto PM5/360 clinometer. Stem diameters were measured at 1.5 metres above ground level with a diameter tape.

1.4.3 Crown spreads were measured with a twenty-metre measuring tape. Only crown spreads over the site have been accurately measured; crown spreads over adjacent land have been estimated.

1.4.4 Tree locations were plotted using a twenty-metre measuring tape.

1.4.5 Observations were made using Visual Tree Assessment (VTA) methodology (Mattheck 1994). The data was recorded using Pear Technology Pocket GIS on a Panasonic Toughbook CF19.

1.4.6 Only trees with stem diameters greater than 75 millimetres when measured at 1.5 metres above ground level have been recorded.

1.4.7 The trees recorded were tagged with two-inch diameter aluminium tree tags numbered from 0372 to 0375 inclusive.

1.4.8 This survey was undertaken in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations.

1.4.9 The trees have been categorised in accordance with the British Standard 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations as listed below:

Category A – trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B – trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category C – trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

These categories are subdivided into 1. Arboricultural qualities, 2. Landscape qualities and 3. Cultural values, including conservation.

Trees not suitable for retention have been categorised as U. See Appendix I for table of categories.

1.4.10 All observations were made from the ground. No climbing surveys were carried out.

1.4.11 No soil samples were taken.

1.4.12 No invasive decay detection techniques have been used.

1.4.13 This report is valid for one year from the date of inspection. Trees are living organisms and no responsibility can be accepted by the surveyor for the failure of a tree or part of a tree due to adverse weather conditions, *force majeure* or other unpredictable occurrences. It is the responsibility of the tree owner to inspect and maintain his or her trees on a regular basis.

1.4.14 The tree survey was carried out by Liz Phillips TechArborA of RTAC. Liz has worked in the arboricultural industry for 19 years as a tree surgeon, surveyor, local authority tree officer and consultant.

1.5 Protected Wildlife

1.5.1 Before any treeworks are carried out, the trees should be inspected for any evidence of bats or nesting birds.

1.5.2 It is an offence under the Wildlife and Countryside Act 1981 to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of a wild bird included in Schedule ZA1;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird,

1.5.3 It is also an offence to:

- deliberately capture, injure or kill a bat;
- damage or destroy any structure or place which any bat uses for shelter or protection;
- disturb any bat while it is occupying a structure or place which it uses for shelter or protection; or
- obstruct access to any structure or place which any bat uses for shelter or protection.

2. Site Analysis

2.1 Site Location

2.1.1 Site Address: Plot adjacent to Dan Y Bryn, Maesteg Road, Bryn, Port Talbot, SA13 2RW.

2.1.2 Ordnance Survey grid reference: SS820919.

2.2 Site Description

2.2.1 The site is an empty plot at the end of a row of three bungalows off Maesteg Road in the village of Bryn, Port Talbot. The plot measures approximately 0.13 hectares and is triangular.

2.2.2 The south boundary of the site is a disused railway embankment with a sparse cover of predominantly hazel (*Corylus avellana*) coppice with some semi-mature sessile oak (*Quercus petraea*) and goat willow (*Salix caprea*).

2.2.3 To the north, the ground drops by approximately 3 metres to a small area of woodland, predominantly goat willow. The ground falls steeply away within the woodland to a small stream.

2.3 Proposed Works

2.3.1 A residential dwelling will be built on the western half of the site with an access drive running from the existing access parallel to the northern boundary. The remainder of the site will be a garden.

3. The Trees

3.1 Four trees; two goat willow, one sessile oak and one silver birch (*Betula pendula*). All are C category trees except for T373, goat willow, which is U category (see Appendix I).

4. Treeworks Recommendations

4.1

Tree Number	Species	Works Required
T372	Goat willow	Pollard stems to 2m in height
T373	Goat willow	Remove split limb

4.2 All treeworks must be carried out in accordance with BS3998:2010 Recommendations for Treeworks.

5. Arboricultural Impact Assessment

5.1 Tree Constraints Plan

5.1.1 All site plans are in Appendix II.

5.1.2 Above Ground Constraints - current crown spread is marked on the Tree Constraints Plan (TCP). This does not indicate the ultimate crown spread of the individual trees. The trees around the site are unlikely to have any adverse effect on overhead services to the site.

5.1.3 Below Ground Constraints – the root protection area (rpa) is a circle of radius 12 x the diameter of the stem of the tree measured at 1.5 metres above ground level. For a multi-stemmed tree, the rpa is calculated using the following formula:

$$\sqrt{(\text{mean stem diameter})^2 \times \text{number of stems}}$$

5.1.4 The rpa is usually depicted as a complete circle; however, this area can be altered in shape to reflect compromised growing conditions such as the presence of buildings, watercourses, etc. In this case, the rpas have been unaffected by any above ground conditions.

5.2 Arboricultural Impact Assessment

5.2.1 A Leyland cypress (*X Cupressocyparis leylandii*) hedge and a semi-mature Norway spruce (*Picea abies*) are growing in the garden of the property to the south; these trees are protected from any potential works by the existing fence and ditch. The ditch will have prevented root incursion into the site.

5.2.2 T372 will be pollarded to prevent conflict with the building. The tree will be retained as a pollard to provide a screen from the footpath behind the property. The rpa of this tree measures 173m²; the house will encroach on 21m² of this area which is a loss of 12% of the rooting area. This is unlikely to have a detrimental effect on the tree as it has an uninterrupted rooting area in every other direction and the embankment will be undisturbed by the development. T373 is in poor condition, the

limb overhanging the site has split and needs to be removed. The remaining stem is leaning away from the site; this stem has split and will fail but will not impact on the site. This stem can be removed or retained as required. The hazel coppice on the embankment will not be affected by the development. The embankment is outside the curtilage of the site.

5.2.3 T375 is below the level of the development site; no roots from this tree will encroach into the site. The crown of the tree has a slight overhang into the site, but this will not be affected by the development.

5.2.4 The woodland to the north of the site is at a lower level than the proposed development and will be protected from any works by the change in ground level.

5.3 Tree Protection Plan

5.3.1 All treeworks must be carried out prior to the commencement of construction works.

5.3.2 Heras fencing as shown in Appendix III will be placed as marked on the Tree Protection Plan in Appendix II. This will protect the roots of T372 and the crown of T375. Plastic mesh fencing as shown in Appendix III will be placed along the base of the embankment to mark the site boundary.

5.3.3 The fenced off areas will be designated as the construction exclusion zone (CEZ). All fencing must be in place before construction works begin and must not be moved or removed until all construction works have finished.

5.3.4 Works within the CEZ are restricted as follows:

- No excavations to be carried out unless agreed as part of the planning permission.
- No vehicle access.
- No fires to be lit within the CEZ or within 10 metres of the crown of a tree to be retained.
- No storage of construction materials or spoil within the CEZ.
- No mixing of cement or discharge of contaminants such as fuels within the CEZ.
- Soil levels within the CEZ must not be altered unless agreed as part of the planning permission.



15th April 2024

Maesteg Road

APPENDICES

I. Survey Data

Terms used in data tables

BS5837 Survey

Tag No – corresponds to numbered metal tag attached to tree.

Species – common and Latin names are given.

Height - measured with a Suunto PM5/360 clinometer to the nearest metre unless otherwise stated.

Stem diameter - measured at 1.5 metres above ground level with a dbh (diameter at breast height) tape.

Crown spread - measured at the cardinal points to 0.5 metres.

Clear - the lowest height of the crown above ground measured in metres.

Age - NP – newly planted; Y – young, a tree in the first third of life expectancy; SM – semi-mature, a tree in the second half of life expectancy; M – mature, tree in final third of life expectancy; OM – over-mature, tree in decline; V – veteran, tree with major physiological decline, surviving beyond the typical age range for the species.

RP – root protection area; radius and area of circle.

Phys. Condition - physiological condition; poor, fair, good, dead or dangerous.

Structural condition - crown, stem and basal area.

Preliminary recommendations - recommendations for remedial works. Cat

- retention category as defined in BS5837:2012 A, B, C and U.

BS5837:2012 Tree Survey												RTAC	
Client: Gavin Reed												6 Courtyard Flats	
Project: Maesteg Road												Stable Yard	
Survey Date: 12/04/2024												Stackpole	
Surveyor: Liz Phillips												Pembroke	
												SA71 5DE	
												Mobile: 07823332279	
Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations		Cat ERC	
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T372 0372													
Goat Willow	12	1	620	N	7	2	SM	A: 173.9	Good	C: Fair	Pollard :: Pollard to 2 metres	C.2	
Salix caprea				E	4	4		R: 7.44		S: Fair		>40 yrs	
				S	5	0.5				B: Good	Some branches removed. One stem leaning away from site has small area of decay. Crossing and grafted branches. Stem divides into 4 at 1m.		
				W	6	2							
T373 0373													
Goat Willow	8	2	631 (Eq)	N	5	1.5	SM	A: 180.3	Fair	C: Poor	Remove :: Faulted branch/limbs	U	
Salix caprea				E	6	3		R: 7.57		S: Poor		<10 yrs	
				S	7	1				B: Poor	Large split in limb overhanging site - remove this limb. Stem leaning away from site has split at base - retain.		
				W	4	3							
T374 0374													
Silver Birch	10	1	230	N	3	3	SM	A: 23.9	Good	C: Good	No action :: Unspecified	C.1	
Betula pendula				E	5	2		R: 2.75		S: Fair		20 to 40 yrs	
				S	2	3				B: Good	Growing through fence, bifurcated at 1m.		
				W	3	2							
T375 0375													
Sessile Oak	7	1	710	N	5	1	SM	A: 228.1	Good	C: Good	No action :: Unspecified	C.1	
Quercus petraea				E	6	1		R: 8.52		S: Ivy		10 to 20 yrs	
				S	8	4				B: Good			
				W	8	4							
Age Classifications:	N	Newly planted	EM	Early Mature	Condition:			C	Crown	Stems:	Ø	Diameter	
	Y	Young	M	Mature				S	Stem		(Eq)	Equivalent stem diameter using BS5837:2012 definition	
	SM	Semi-mature	OM	Over Mature				B	Basal area				

Report selection criteria.

Projects.

Maesteg Road

Date Range.

Any Date

Work types.

----> Fell :: Unspecified

----> No action :: Unspecified

----> Pollard :: Pollard to 2 metres

----> Remove :: Faulted branch/limbs

Latest Survey.

All surveys for the selected trees.

---> Last survey for each selected tree.

Work Completed.

---> Work Completed

---> Work Not Completed

Number of trees in selected Project(s)	5
Number of trees in Report selection	5

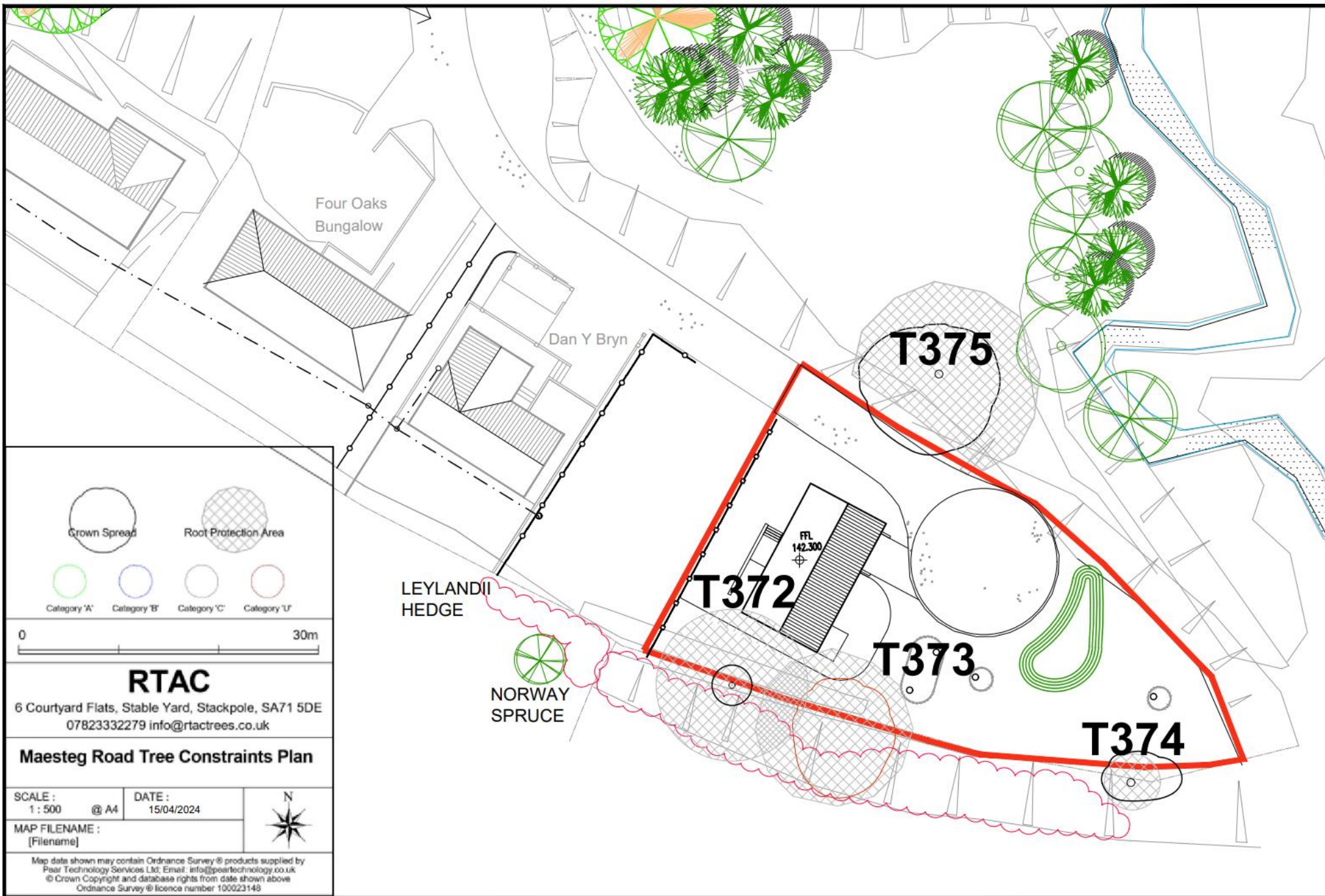
Age Classifications:	N	Newly planted	EM	Early Mature	Condition:	C	Crown	Stems:	Ø	Diameter
	Y	Young	M	Mature		S	Stem		(Eq)	Equivalent stem diameter using BS5837:2012 definition
	SM	Semi-mature	OM	Over Mature		B	Basal area			

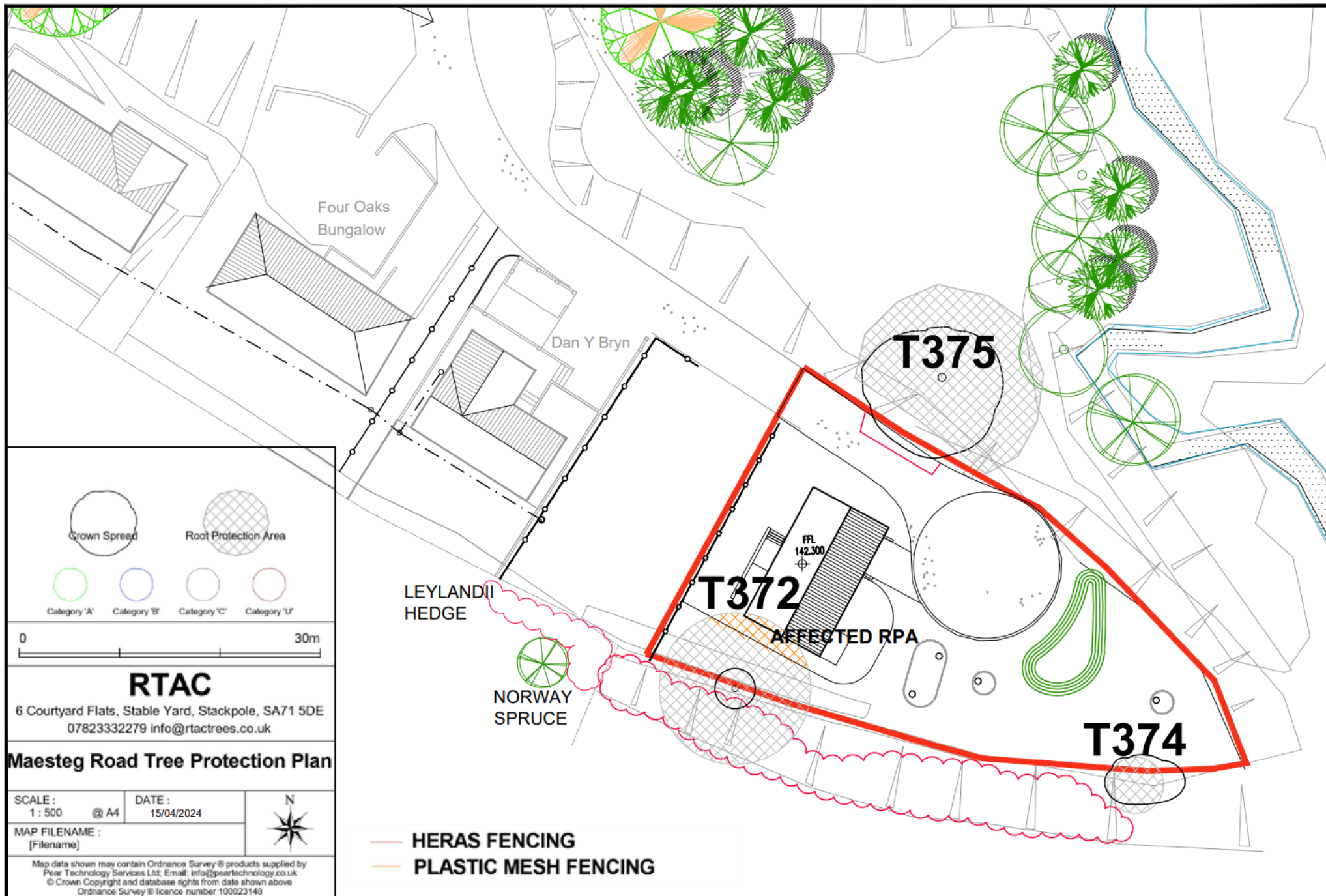


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Maesteg Road

II. Site Plans





IV. Photographs



Site from entrance North Boundary



South boundary





T373 showing split limb



T375

V. Qualifications

Qualifications:

AA Technicians Certificate 2009
BSc. Heritage Conservation 2ii
Electrical Arboriculture Units 1 and 2a
NVQ Level 2 Environmental Conservation
NPTC CS 30, 31, 39, climb trees and perform aerial rescue

CPD:

Bats and Arboriculture: a Practitioner's guide
BS 5837:2012. Tree Surveying and Categorisation
Subsidence 1 day workshop
Assessment of Tree Forks: Assessment of Junctions for Risk Management
The Hollow Tree - Arboriculture

VI. Bibliography

British Standard 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations; British Standards Institution.

Manual of Wood Decays in Trees (2003) Weber & Mattheck; The Arboricultural Association.

The Law of Trees, Forests and Hedgerows (2002) Mynors; Sweet and Maxwell, London.

Diagnosis of Ill-health in Trees (1994) Strouts and Winter; TSO.

British Standard 3998:2010 Recommendations for Tree Work UK; British Standards Institution.

The body language of trees (1994) Mattheck & Breloer; TSO.

Principles of tree hazard assessment and management (1999) Lonsdale; Forestry Commission.

Complete field guide to the Trees of Britain & Europe (2004) Johnson & More; Collins.

Assessment of Tree Forks: Assessment of Junctions for Risk Management (2016) Slater in association with Myerscough College; The Arboricultural Association.

Arboricultural Practice Note 12: Through the Trees to Development (2007) Patch and Holding; Arboricultural Advisory and Information Service.

Guide to producing a Tree Protection Fencing Plan for straightforward Householder Applications SPG; City and County of Swansea Council.

NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (16th November 2007); The National Joint Utilities Group.

Modern Arboriculture (2003) Shigo; Sherwin Dodge Printers, Littleton, New Hampshire.

Planning Policy Wales Technical Advice Note 5: Nature Conservation and Planning (September 2009) Welsh Government.