



***Proposed Centre for Vulnerable
Learners at the Former
Pontllanfraith Comprehensive School
Coed Cae Ddu Road
NP12 2YB***

***Pre – Development BS5837
TREE SURVEY***

November 2021

CONTENTS		Page
1.0	TREE SURVEY RESULTS TABLE	2
2.0	TREE DETAILS – EXPLANATION OF TERMS	12
	TREE CONSTRAINTS PLAN WITH RPA’S + PROPOSALS	ACCOMPANYING
	TREE RETENTION AND PROTECTION PLAN	ACCOMPANYING
3.0	PHOTOGRAPHS	ACCOMPANYING
4.0	RECOMMENDATIONS	13
5.0	CAVEATS AND RESTRICTIONS	14
6.0	SURVEY DETAILS	15
6.1	SITE LOCATION PLAN AND APPROX. BOUNDARIES	16
7.0	LEGAL CONSTRAINTS	17
8.0	GLOSSARY OF TERMS	18
9.0	BIBLIOGRAPHY & BIOGRAPHY	19
10.0	PROTECTIVE FENCING DETAIL	20
11.0	BS 5837 TREE CATEGORISATION	21
	COPYRIGHT STATEMENT	22

TREE SURVEY DETAILS TABLE

Tree Tag No.	Species	Height (m)	Calculated Stem diameter (mm)	Height crown clearance/ (m)	Age Class	Branch spread (m)				Vitality	Structural condition notes	Recommended Works	Est remain years	Category grading	RPA radius (m)
						N	S	E	W						
Gp 1	Rhodo-dendron	6	220	0.0	OM	5.0	5.0	5.0	5.0	FAIR	Very old individuals across area with other trees throughout Most are multi-stemmed Lowest branches lying on the ground and some have rooted at the ends Some scattered dead stems No other visible defects	No works required	20	C2	2.6
4128	Yew	6	360	0.0	Y	3.0	5.0	1.0	3.0	GOOD	Suppressed to NE by Group 1 Lower branches resting on ground Tarmac drive at base W at 2.5m No other visible defects	No works required	40	B1	4.3
4129	Yew	6	420	1.0	Y	3.0	3.0	3.0	3.0	FAIR	Suppressed to East, West and South Upright crown shape Triple stemmed from 1.5m then multi stemmed x 8 above that Located on side of slope with surface roots visible No other visible defects	No works required	40	B1	5.0
4130	Yew	5	300	0.5	Y	2.0	2.0	3.0	3.0	FAIR	Twin stemmed overshadowed and suppressed by T791 West stem dominant from fork at 0.2m Sparse foliage cover Large surface roots visible No other visible defects	No works required	20 to 40	C1	3.6
791	Ash	15	600	6.0	M	4.0	7.0	8.0	10.0	GOOD	Dominant tree in this area Co-dominant stems from 5m Large surface roots across slope Lateral end weight loaded limbs mid and upper crown West No other visible defects	Reduce length of end weight loaded limbs by maximum one third current length	40	B1	7.2

Tree Tag No.	Species	Height (m)	Calculated Stem diameter (mm)	Height crown clearance / (m)	Age Class	Branch spread (m)				Vitality	Structural condition notes	Recommended Works	Est remain years	Category grading	RPA radius (m)
						N	S	E	W						
792	Lime	18	540	4.0	M	5.0	9.0	9.0	7.0	GOOD	Dense epicormic shoots around base Base of tree against boundary stone retaining wall to South No other visible defects	Cut back epicormic shoots around base	40	B1	6.5
4131	Yew	6	200	E-0	Y	3.0	2.0	2.0	2.0	POOR	Twin stemmed from base East stem has died back with cavity and associated decay at base Severely suppresses and overshadowed by T791 Dead wood through lower crown No other visible defects	No works required	20	C1	2.4
4127	Yew	5	120	0.0	Y	4.0	3.0	1.5	4.0	POOR	Multi-stemmed from base Located on top edge of slope Lowest branches at ground level Suppressed by T4126 to West Dead wood throughout lower crown No other visible defects	No works required	20	C1	1.4
4126	Yew	9	390	0.5	Y	4.0	2.5	3.0	3.0	FAIR	Large surface roots across slope M/S from branch / trunk union at 1m Medium dead wood in lower crown No other visible defects	No works required	40	C1	4.7
4125	Yew	5	320	0.0	Y	5.0	6.0	3.0	5.0	GOOD	Multi-stemmed x 6 from base Located on top edge of slope Slightly suppressed by T788 to East Dense Ivy growth to upper crown No other visible defects	No works required	40	B1	3.8
788	Ash	18	560	5.0	M	7.0	5.0	8.0	7.0	GOOD	Very large surface roots visible across side of slope to East, West and South Slightly suppressed to South by T789 Ivy growth on trunk Lateral end weight loaded limbs in lower crown East and West No other visible defects	Reduce length of end weight loaded limbs by maximum one third current length	20 to 40	B1	6.7

Tree Tag No.	Species	Height (m)	Calculated Stem diameter (mm)	Height crown clearance/ (m)	Age Class	Branch spread (m)				Vitality	Structural condition notes	Recommended Works	Est remain years	Category grading	RPA radius (m)
						N	S	E	W						
789	Lime	18	500	4.0	Mi	6.0	8.0	8.0	6.0	GOOD	Dense epicormic shoots around base Base of tree against boundary stone retaining wall to South Ivy growth into upper mid crown No other visible defects	Cut back epicormic shoots around base	40	B1	6.0
4124	Yew	6	260	0.2	Y Mi	2.0	3.0	3.0	2.0	FAIR	Slightly suppressed to SW by T788 Located on top edge of slope Branches from 0.2m No other visible defects	No works required	20	C1	3.1
4123	Yew	10	410	0	Y Mi	3.0	2.0	3.0	2.0	GOOD	Slightly suppressed to North by T4123 Multi-stemmed from base Crown to NW at ground level Minor dead wood in lower crown Located on top edge of slope No other visible defects	No works required	40	B1	4.9
4122	Yew	10	420	W-0	Mi	3.0	2.0	4.0	3.0	GOOD	Located on top edge of slope Multi-stemmed from 0.2m Minor dead wood in lower crown No other visible defects	No works required	40	B1	5.0
4121	Yew	5	400	W-0	Mi	1.0	3.0	5.0	4.0	FAIR	Multi-stemmed x 6 from 0.5m Suppressed and overshadowed by adjacent Oaks and Laurels No other visible defects	No works required	20	C1	4.8
787	Oak	10	490	2	Y	6.0	5.0	6.0	7.0	GOOD	Suppressed to North by T786 Dense Ivy growth to mid crown Low broad crown shape No other visible defects	No works required	40	B1	5.9

Tree Tag No.	Species	Height (m)	Calculated Stem diameter (mm)	Height crown clearance/ (m)	Age Class	Branch spread (m)				Vitality	Structural condition notes	Recommended Works	Est remain years	Category grading	RPA radius (m)
						N	S	E	W						
786	Oak	15	530	5	Mi	5.0	7.0	7.0	5.0	GOOD	Co-dominant stems from fork at 2m South stem forks again at 4m Dense Ivy growth to mid crown No other visible defects	No works required	40	B1	6.4
4120A	Yew	10	210	0	Mi	4.0	5.0	5.0	4.0	GOOD	Multi-stemmed from base Overshadowed to South by T786 No other visible defects	No works required	40	B1	2.5
4120	Yew	7	310	0	Y	3.0	5.0	2.0	6.0	GOOD	Twin stemmed Low branches touching ground to W Suppressed to NE by T784 No other visible defects	No works required	40	B1	3.7
784	Lime	18	500	5	Mi	4.0	8.0	8.0	7.0	GOOD	Dense epicormic shoots around base Pruned back from lamp column to East in past No other visible defects	Cut back epicormic shoots around base	40	B1	6.0
780	Oak	18	500	5	Mi	8.0	12.0	10.0	8.0	FAIR	Dense epicormic shoots on main limbs Ivy growth into mid crown North side of crown has been crown lifted to 10m in past Cavity at base South and possible ground level increase around base Dense Bramble thicket around base No other visible defects	No works required	10 to 20	C1	6.0
4119	Yew	10	580	1	Y	4.0	5.0	5.0	3.0	GOOD	Located on top edge of slope Branch / trunk union at 2m with co-dominant multi-stems No other visible defects	No works required	40	B1	7.0
4116	Yew	10	400	1	Y	3.0	4.0	4.0	3.0	GOOD	Co-dominant triple stemmed from 1m Very large surface roots to S visible No other visible defects	No works required	40	B1	4.8

Tree Tag No.	Species	Height (m)	Calculated Stem diameter (mm)	Height crown clearance/ (m)	Age Class	Branch spread (m)				Vitality	Structural condition notes	Recommended Works	Est remain years	Category grading	RPA radius (m)
						N	S	E	W						
779	Oak	15	1200	2	M	5.0	7.0	8.0	6.0	FAIR/POOR	Very large old cavity at base North with associated decay visible Looks as if the ground level has been raised around the base in the past Epicormic shoots main limbs and trunk Die back throughout crown No other visible defects	No works required	20	C1	14.4
4117	Yew	10	400	0.5	Mi	3.0	4.0	4.0	3.0	GOOD	Overshadowed by T779 to N and E Located on top edge of slope No other visible defects	No works required	40	B1	4.8
4132	Yew	10	250	N-0 S-0.5	M	6.0	4.0	4.0	4.0	GOOD	Multi-stemmed x 10 from 0.2m Branches to North at ground level Slightly suppressed to East by Rhododendrons and West by T4133 No other visible defects	No works required	40	A1	3.0
4133	Yew	10	800	S-0	M	5.0	7.0	7.0	5.0	GOOD	Multi-stemmed x 8 from 0.5m Branches to South at ground level No other visible defects	No works required	40	A1	9.6
4134	Yew	8	500	0	Mi	7.0	5.0	4.0	4.0	GOOD	Lower crown starts at ground level Dense Bramble growth around base of tree preventing closer inspection No other visible defects	No works required	40	A1	6.0
Gp 2	Willow x 20	10 (av)	180	2	Y Mi	3.0	3.0	3.0	3.0	FAIR	Closely spaced dense thicket of trees, some multi-stemmed Dense Bramble growth beneath Some stems leaning at a 45° angle or more towards fence line to North No other visible defects	No works required	10 to 20	C2	2.2

Tree Tag No.	Species	Height (m)	Calculated Stem diameter (mm)	Height crown clearance/ (m)	Age Class	Branch spread (m)				Vitality	Structural condition notes	Recommended Works	Est remain years	Category grading	RPA radius (m)
						N	S	E	W						
1	Goat Willow	6	100 (av)	0	Mi	0.0	5.0	5.0	0.0	FAIR	Multi-stemmed x 6, crown out to S Located at base of wall No long term viable future	FELL	10	C1	2.4
2	Silver Birch	8	90 (av)	0	Y	0.0	2.0	2.0	2.0	FAIR	Multi-stemmed x 6 Located at base of wall No long term viable future	FELL	10	C1	1.1
698	Cherry sp	10	300	10.0	Mi	4.0	4.0	1.0	4.0	GOOD	No visible external defects	No works required	20 to 40	C1	3.6
699	Silver Birch	12	340	12.0	M	2.0	4.0	5.0	4.0	POOR	Growing between the fence and telegraph pole No long term viable future	FELL	10 to 20	C1	4.1
700	Silver Birch	10	100	10.0	Mi	2.0	2.0	4.0	4.0	FAIR	Part of hedge line No other visible external defects	No works required	20	C1	1.2
701	Silver Birch	10	220	10.0	Mi	2.0	2.0	4.0	4.0	FAIR	Part of hedge line No other visible external defects	No works required	20	C1	2.6
742	Rowan	5	130	1.5	Y	2.0	3.0	2.0	2.0	FAIR	Overshadowed by other trees No other visible external defects	No works required	10	C1	1.6
743	Silver Birch	18	200	1.5	Mi	2.0	3.0	3.0	2.0	GOOD	Narrow upright crown No other visible external defects	No works required	40	A1	2.4
744	Rowan	5	156	1.5	Y	1.0	2.0	2.0	1.0	FAIR	Triple stemmed from 0.5m Suppressed to North Large old wound at base North No long term viable future	No works required	10	C1	1.9
746	Crimson King Norway Maple	12	300	1.0	Mi	5.0	5.0	2.0	5.0	FAIR	Co-dominant stems from fork at 2m Slight suppressed to NE by T747 Brick retaining wall and steps at base to South East at 2.5m No other visible external defects	No works required	20 to	B1	3.6

Tree Tag No.	Species	Height (m)	Calculated Stem diameter (mm)	Height crown clearance/ (m)	Age Class	Branch spread (m)				Vitality	Structural condition notes	Recommended Works	Est remain years	Category grading	RPA radius (m)
						N	S	E	W						
747	Norway Maple	15	500	0.5	Mi	6.0	6.0	6.0	6.0	FAIR	Dominant tree in area Dense multi-branched x 8 from branch / trunk union Squirrel damage to lower crown centre – dead stems present Brick retaining wall and steps at base to South East at 1.2m No other visible external defects	No works required	40	B1	6.0
748	Crimson King N. Maple	12	220	1.2	Mi	5.0	5.0	4.0	2.0	FAIR	3 x Co-dominant stems from 1m Suppressed by T747 Brick retaining wall and steps at base to South East at 2m No other visible external defects	No works required	20 to	B1	2.6
749	Norway Maple	10	280	1.5	Mi	4.0	4.0	4.0	3.0	GOOD	Co-dominant stems from fork at 4m Dense epicormic shoots around base No other visible external defects	No works required	20 to	B1	3.4
750	Cherry sp	10	370	0.5	M	4.0	5.0	5.0	4.0	FAIR	Located at base of retaining wall to North West 0.5m Neighbours hardcore drive at base to North East at 1m Low hanging crown edge No other visible external defects	No works required	10	C1	4.4
752	Purple leaved Plum	8	420	2.0	M	2.0	2.0	2.0	2.0	POOR	Tarmac at base South at 0.5m Multiple unidentified fungal fruiting bodies on trunk West between 1m – 2m and on lower branches to South No long term viable future	No works required	<5	C1	5.0
753	Lawson Cypress	12	283	1.0	M	2.0	2.0	2.0	2.0	FAIR	Co-dominant twin stemmed with narrow upright crown shape Tarmac at base to South 1m No other visible external defects	No works required	10	C1	3.4

Tree Tag No.	Species	Height (m)	Calculated Stem diameter (mm)	Height crown clearance/ (m)	Age Class	Branch spread (m)				Vitality	Structural condition notes	Recommended Works	Est remain years	Category grading	RPA radius (m)
						N	S	E	W						
754	Lawson Cypress	12	335	2.0	M	2.0	2.0	2.0	2.0	FAIR	Multi-stemmed x 5 – two South-most stems much smaller than others No other visible external defects	No works required	10	C1	4.0
756	Horse Chestnut	14	416	3.0	Mi	3.0	3.0	3.0	3.0	FAIR	3 co-dominant stems from 1m Paving slab path at base SW No other visible external defects	No works required	10	C1	5.0
757	Weeping Willow	12	540	0.5	M	3.0	4.0	4.0	3.0	GOOD	Broad spreading crown SE crown on and around building Overhead wire through lower crown N No other visible external defects	No works required	20	B1	6.5
758	Apple sp	6	156	0.5	M	10.0	10.0	6.0	6.0	FAIR	Multi-stemmed x 3 Die back around edge of crown No other visible external defects	No works required	10	C1	1.9
759	Silver Birch	12	200	5.0	Mi	3.0	2.0	3.0	3.0	FAIR	Sparse foliage cover Many epicormics on main branches No other visible external defects	No works required	<10	C1	2.4
760	Oak	12	280	2.0	Y	2.0	3.0	3.0	2.0	FAIR	Overhangs roof to South Good upright shape No other visible external defects	No works required	20	B1	3.4
761	Oak	12	300	S-2	Mi	4.0	4.0	4.0	4.0	FAIR	3 co-dominant stems from 1m Sparse crown cover with dense lvy growth to mid crown Stream at base to North and tarmac path at base to South 1m No other visible external defects	No works required	20	C1	3.6
762	Beech	10	570	2.0	Mi	4.0	4.0	3.0	4.0	FAIR	Stream at base North and path to East at 4m – large surface roots visible Fine semi-mature specimen tree No other visible external defects	No works required	20	B1	6.8

Tree Tag No.	Species	Height (m)	Calculated Stem diameter (mm)	Height crown clearance/ (m)	Age Class	Branch spread (m)				Vitality	Structural condition notes	Recommended Works	Est remain years	Category grading	RPA radius (m)
						N	S	E	W						
774	Lime	20	900	1.5	M	4.0	5.0	5.0	4.0	GOOD	Retaining boundary wall at base S Telegraph pole in crown SW Fine mature specimen tree No other visible external defects	No works required	40	B1	10.8
771	Cherry sp	4	110	1.0	Mi	2.0	2.0	2.0	2.0	FAIR	Located in raised bed in dense shrubs No other visible external defects	No works required	<10	C1	1.3
772	Cherry sp	4	110	1.0	Mi	2.0	2.0	2.0	2.0	FAIR	Located in raised bed in dense shrubs Dense lvy growth throughout crown No other visible external defects	No works required	<10	C1	1.3
773	Cherry sp	4	110	1.0	Mi	2.0	2.0	2.0	2.0	FAIR	Located in raised bed in dense shrubs No other visible external defects	No works required	<10	C1	1.3
755	Pink Hawthorn	6	120	1.4	OM	4.0	5.0	5.0	4.0	POOR	Smothered in lvy Severe die back throughout crown Tarmac at base South No long term viable future	FELL	<10	U	1.4
778	Lawson Cypress	12	200	0.5	M	3.0	3.0	3.0	3.0	FAIR	Linear group in fenced off area – area overgrown and no access to base No other visible external defects	No works required	10	C2	2.4
767	Oak	10	530	3.0	Mi	5.0	5.0	5.0	7.0	FAIR	Stream at base South 0.5m Tarmac path to South at 2m No other visible external defects	No works required	40+	B1	6.4
768	Oak	10	430	3.0	Mi	3.0	6.0	4.0	6.0	FAIR	Stream at base North 0.5m Tarmac path to South at 2m No other visible external defects	No works required	40+	B1	5.2
4143	Ash	10	346	1.0	Mi	2.0	3.0	3.0	2.0	FAIR	Multi-stemmed x 5 Palisade fence at base to West Die back in crown with Ash Dieback symptoms throughout crown Dense lvy growth to mid crown No long term viable future	FELL	<10	U	4.2

Tree Tag No.	Species	Height (m)	Calculated Stem diameter (mm)	Height crown clearance/ (m)	Age Class	Branch spread (m)				Vitality	Structural condition notes	Recommended Works	Est remain years	Category grading	RPA radius (m)
						N	S	E	W						
4146	Beech	3	100	0.5	Y	1.0	1.0	1.0	1.0	FAIR	Located on edge of stream No other visible external defects	No works required	10	C1	1.2
4149	Beech Silver Birch	10	140	1.5	Mi	4.0	4.0	4.0	4.0	FAIR	Linear group of 16 stems from old outgrown hedgerow No visible external defects	No works required	20	B2	1.7
4150	English Oak	10	160	2.0	Mi	4.0	5.0	1.0	5.0	FAIR	No visible external defects	No works required	40	B1	1.9
4151	Goat Willow	8	191	1.0	M	2.0	3.0	3.0	2.0	FAIR	Multi-stemmed x 3 NW crown touching building Suppressed to East No other visible external defects	No works required	10	C1	2.3
4152	Sycamore	6	122 (av)	0.5	Y	2.0	2.0	2.0	2.0	FAIR	Located in corner of brick planter Re-grown stump – multi-stemmed x 6 No long term viable future	No works required	<5	C1	1.5
4128 - 4134 / 779 - 792 / 775, 776	Yew Lime Oak Ash Box Laurel Cherry	4 to 15	1250	0.5	Y/Mi/ M	4.0	4.0	4.0	4.0	GOOD	Entire North West end of site fenced off – no access to trees Extensive dense Bramble and Hawthorn undergrowth Around 3 sides of large tarmac sports area – provides screening between school and main road	No works required	20 to 40	B2	15.0
3	Goat Willow	8	90	1.0	MI	0.0	4.0	5.0	5.0	FAIR	Located at base of building wall Multi-stemmed x 16 Bramble growth around base No other visible external defects	No works required	10	C1	1.1

2.0 TREE DETAILS - Explanation of terms

<i>Tree number:</i>	Relates to tree number on attached plan/s	
<i>Species:</i>	Common name of tree	
<i>Height:</i>	Estimated and taken to nearest metre	
<i>Diameter:</i>	Measured at 1.5m above ground level for single or multi-stemmed trees, or at the narrowest point for trees that fork below 1.5m (mm)	
<i>Branch spread:</i>	Measured from the stem to the North, East, South and West (m)	
<i>Crown clearance</i>	Height of canopy clearance above adjacent ground level (m)	
<i>Age class:</i>	Young trees (Y)	age less than $\frac{1}{3}$ life expectancy
	Middle age trees (Mi)	$\frac{1}{3}$ to $\frac{2}{3}$ life expectancy
	Mature trees (M)	over $\frac{2}{3}$ life expectancy
	Over Mature (OM)	over $\frac{2}{3}$ life expectancy and in decline
	Veteran (V)	
<i>Vitality:</i>	Categorised to Good, Fair, Poor or Dead	
<i>Structural Condition:</i>	Description of the tree's condition and whether any decay or physical defects are present	
<i>Estimated remaining Contribution in years:</i>	Categorised to less than 10, 10-20, 20-40, 40+	
<i>Category:</i>	U, or A to C category grading, also recorded on the tree survey plan (See the BS5837 category explanation table at the end of the report).	
<i>RPA radius m:</i>	Root Protection Area given as the radius in metres around as the minimum area required by the tree roots	

(* - It is generally accepted that the majority of a tree's rooting system is within the top 600mm of soil, and as such can be easily damaged or altered by compaction during the construction process. An area known as the Root Protection Area (RPA) is shown around each tree and should be protected for the duration of the on-site construction phase).

2.1 Tree labeling

The majority of the trees have been tagged on site and are labeled set out in the tree details table set out above and on the plans accompanying this report.

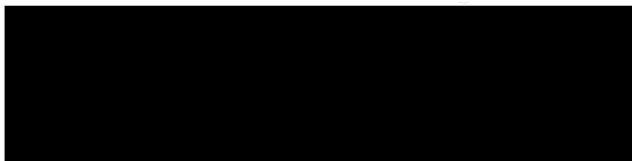
3.0 PHOTOGRAPHS – see accompanying document

4.0 RECOMMENDATIONS

- 4.1 Any tree defects found are listed in the tree details table (pages 2 – 11). Of the 67 individual trees and two group of trees inspected, four are listed as category **A**, 28 as category **B**, and the remainder as category **C**. Based upon **their condition** at the time of the survey three trees are listed as category **U** for removal.
- 4.2 An existing site topographical plan and proposed site layout were provided as pdf files and autoCAD drawings and form the basis for the accompanying plans. The Root Protection Areas (RPA) shown on the Tree Constraints Plan are the theoretical **minimum** areas required by trees of that size. But given that tree roots may not spread out consistently, the root protection areas do not necessarily reflect the likely spread of tree roots on this site.
- 4.3 The majority of the trees are in overall good health, although those trees listed as a category ‘U’ are in very poor structural condition and should be felled regardless of whether any development proceeds on the site or not.
- 4.4 Any works arising from the recommendations in this report should be undertaken by a contractor working in accordance with ‘B. S. 3998 British Standard Recommendations for Tree Work 2010’.
- 4.5 Once a final proposed site layout is agreed, all trees that are being retained on or adjacent to the site should be protected by barriers as described in BS5837: 2012 section 6.2.2 (see section 10). Vertical barriers should be erected and ground protection installed **BEFORE** any materials or machinery is brought onto the site and before any demolition, development or stripping of soil commences. Areas of new or retained planting should be similarly protected. Once erected, all barriers and ground protection **must not** be removed or altered without prior recommendation by an arboriculturalist and approval of the local planning authority.

5.0 CAVEATS AND RESTRICTIONS

- 5.1 This report was commissioned by Joanne Williams, Lead Designer at Caerphilly County Borough Council who are also the site owners. It provides a pre-development BS5837 tree survey report for two group of trees and 69 individual trees at or adjacent to the site.
- 5.2 The report is based upon data collected on a site visit made on the 25th November 2021 by Bettina Broadway-Mann. The weather condition was sunny, calm and dry, and visibility was more than adequate for the visual inspection carried out.
- 5.3 The tree assessment comprised a visual inspection carried out from ground level only. It was intended to identify distinct defects and other failure-prone characteristics of the trees, where these features might give rise to hazard within the coming twelve months. It must nevertheless be recognized that no tree is entirely safe, given the possibility that an exceptionally strong wind could damage or uproot even a mechanically ‘perfect’ specimen.
- 5.4 Please note the inspector’s Terms & Conditions for Arboricultural Consultancy Work, as supplied. While every attempt has been made to provide a realistic and accurate assessment of the trees’ condition at the time of inspection, no responsibility can be accepted for damage or injury sustained as a result of the failure of any tree due to faults not apparent upon a visual, ground level inspection carried out at this season, or to faults developing subsequent to the survey. Similarly, no liability can be accepted for the condition of trees that are obscured in part or in whole (e.g. by dense Ivy or other foliage), nor for any that proved inaccessible to the inspector. Certain features that might provide evidence of ongoing decay or decline (such as fungal fruiting bodies, damage to foliage, insect emergence holes etc.) may not have been in evidence: Only those features that are apparent at the time of inspection could be assessed.
- 5.5 The tabular format of the report records each tree individually with appropriate measurements. Distinct defects or other noteworthy characteristics where apparent have also been recorded, along with recommendations for immediate remedial works where necessary.



Bettina Broadway-Mann
ARBORICULTURAL CONSULTANT

8th April 2022

B.Sc. (Hons), M.Sc. Dip. Arb. (RFS), Tech. Cert (Arbor. A), M.Arbor.A.

6.0 SURVEY DETAILS

Contact Name:	Joanne Williams Lead Designer Caerphilly County Borough Council
Site:	Land at Former Pontllanfraith Comprehensive School Coed Cae Ddu Road Pontllanfraith NP12 2YB (Site central grid ref. ST 17610 95873)
Date of Inspections:	25 th November 2021.
Surveyor:	Bettina Broadway-Mann.
Purpose of survey:	To carry out a pre-development tree survey as per 'BS 5837 Trees in Relation to Design, Demolition and Construction – Recommendations 2012' (with appropriate measurements) to trees within or adjacent to the site, and to make recommendations for immediate remedial works where necessary.
Survey method:	Visual inspection from ground level only, including measurements for height, stem diameter, and physiological and structural condition, and: To look for visible defects of the trees To comment on the condition of the trees and make recommendations for removal or retention, and remedial works where necessary.
Weather:	Calm, dry and sunny, 10°C.
Site Plan:	This report is accompanied by site survey plans: 1) Tree Constraints Plan with RPA's + Proposals 2) Site Location and Boundary Plan

6.1 Site Location and approximate boundaries: The red outline indicates the approximate boundaries of the site and is for illustration purposes only.



7.0 LEGAL CONSIDERATIONS

- 7.1 **TPO'S** – Prior to any works commencing the client should check with the Local Planning Authority that the trees are not covered by a Tree Preservation Order, within a Conservation Area, or covered by a Planning Condition.
- 7.2 **FELLING LICENCE** – Even when no specific legal protection exists, it may be necessary to obtain a felling licence. These apply if the volume of timber created from felling works exceeds five cubic metres in any one quarter. Therefore site clearance of trees, even of small areas could exceed this quota. The Forestry Commission administers felling licences.
- 7.3 **BIRDS** - Works to trees should commence outside the bird-nesting season, generally taken to be between March and July, as 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, the tree surgeon must check for the presence of nests prior to commencing works.
- 7.4 **BATS** - The contractor must also thoroughly inspect the trees prior to carrying out works for evidence of bat activity. Bats are a protected species under Wildlife and Countryside Act 1981 (as amended) 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 works must cease and advice sought immediately from Natural Resources Wales before continuing.

- 7.5 **DUTY OF CARE** - Attention is drawn to the provisions of the Occupiers Liability Acts, which place a duty of care upon landowners / occupiers to ensure the safety of neighbours and others entering their land. There is a special responsibility to ensure the safety of children, who may be unaware of danger. Annual inspections of trees by a competent person, together with implementation of any recommendations, should ensure compliance with the legislation regarding tree safety.

8.0 GLOSSARY OF TERMS

Bark	all tissue on the outside of the trunk, roots, stems, branches and twigs.
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
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 crown or specified part smaller.
Crown Thin	the balanced removal of secondary, minor, live branch growth to reduce the leaf density evenly throughout the canopy or specified part without altering the tree's overall size and shape.
Decay	rot. The process of degradation of woody tissues by fungi and bacteria through decomposition.
Failure	a partial or total fracture of woody tissues or loss of cohesion between soil and roots.
Hazard	any thing with the potential to cause harm.
Included Bark	bark of neighbouring parts of the tree that are in face to face contact causing a weakness due to the lack of wood union.
Mature	a plant that will respond to flower inducing conditions.
Pruning	the removal or cutting of twigs, branches or roots, often used to describe all kinds of work involving cutting.
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.
Significant	relates to health and safety – describing a condition, state, hazard or risk that is deemed to exceed accepted standards, thereby requiring remedial or preventative action.
Stem	the principle 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 over shadowed and whose crown development is restricted by neighbouring trees.
Tree	a woody plant that typically has a single self-supporting woody stem, attaining a height in excess of 4 metres in maturity with a stem diameter of at least 75mm.
Trunk	a single main self supporting stem of a tree.
Wound	an injury that induces the tree to compartmentalize internally.

8.1 BIBLIOGRAPHY

Principles of Tree Hazard Assessment – D. Longsdale

Collins Tree Guide 2004 – O. Johnson & D. More

Manual of Wood Decay in Trees. 2003. K. Weber, C. Mattheck. Arboricultural Association.

BS 5837:2012 – Trees in Relation to Design, Demolition and Construction – Recommendations

9.0 BIOGRAPHY

9.1 Qualifications

Royal Forestry Society Professional Diploma in Arboriculture	September 2003
Arboricultural Association Technicians Certificate in Arboriculture	September 2001
MSc Landscape Ecology, Design and Management	September 1997
BSc (Hons) Applied Biology, Forestry and Ecology	July 1995

9.2 Experience

I have worked in the arboricultural industry since 1998 and had a variety of roles in the public sector, before setting up Broadway Tree Consultancy full time in September 2006.

My role at Caerphilly County Borough Council was that of Assistant Tree Officer and responsible for the countywide tree survey of all council owned trees.

I have taught as an arboricultural lecturer at Merrist Wood College, Guildford, and focused mainly on tree law, trees on development sites and tree pests, diseases and disorders.

With Cardiff County Council I was a Tree Preservation Officer and dealt exclusively with Tree Preservation Order applications and planning applications (trees on development sites).

At Newport City Council I was an Arboricultural Officer and oversaw all aspects of surveying and caring for the Council's tree stock.

In addition to my consultancy work I have been a lecturer in arboriculture at Bridgwater College Cannington Campus, and Coleg Gwent, Usk Campus.

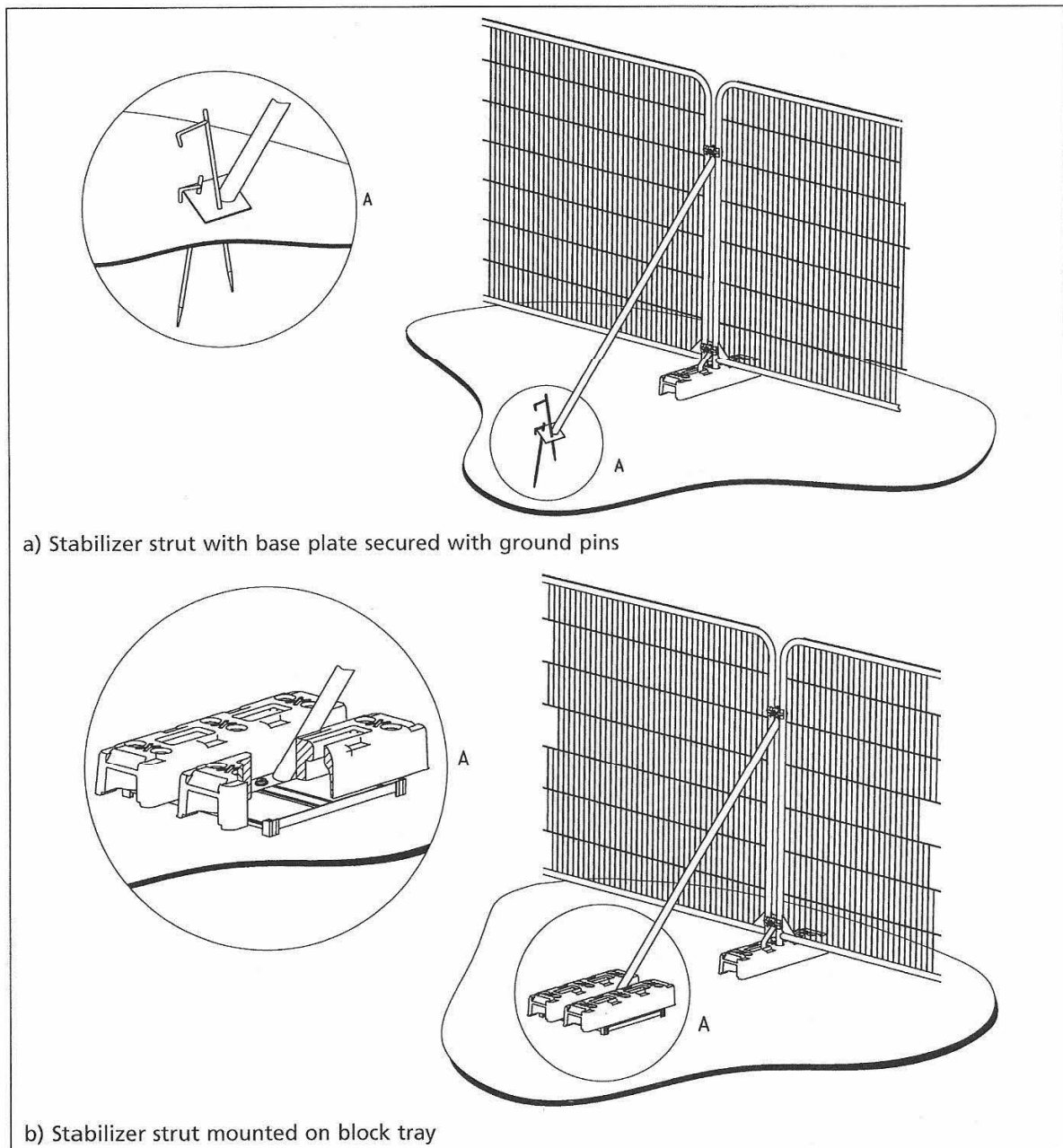
9.3 Membership

Professional member of the Arboricultural Association	March 2005 – to date
Member of the Royal Forestry Society	January 2002 – to date
Associate Member of the Institute of Chartered Foresters	January 2018 – to date

10.0 PROTECTIVE FENCING DETAIL

BS 5837:2012 Figure 3: Examples of above ground stabilising systems

Examples of above-ground stabilizing systems







a) Stabilizer strut with base plate secured with ground pins

b) Stabilizer strut mounted on block tray

11.0 BS 5837 TREE CATEGORISATION TABLE

BS5837:2012 Table 1 – Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> 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 category U trees (e.g. 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 <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see [BS5837:2012] 4.5.7.</i></p>			
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees 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 those that are essential components of groups or 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 Trees 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 value	
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 150 mm	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	

Copyright Statement

Copyright © 2022 Broadway Tree Consultancy. All Rights reserved.

No part of this report may be copied or reproduced by any means without prior written permission from Broadway Tree Consultancy.

If you have received this report in error, please destroy all copies in your possession or control.

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing by Broadway Tree Consultancy, no other party may use, make use of or rely on the contents of this report.

No liability is accepted by Broadway Tree Consultancy for any use of this report, other than for the purposes for which it was originally prepared and provided.

Opinions and information provided in the report are on the basis of Broadway Tree Consultancy using due skill, care and diligence in the preparation of the same and no warranty is provided as to their accuracy.

Surveys are undertaken on the understanding that nothing in the final report will be omitted, amended or misrepresented by the client or any other interested party.

This report and its contents remain the property of Broadway Tree Consultancy until payment has been made in full.

It should be noted and it is expressly stated that no independent verification of any of the documents or information supplied to Broadway Tree Consultancy has been made.

