

Arboricultural Survey to BS5837:2012

Premier Inn Hotels

**Premier Inn,
Duffryn,
Pentrebacj,
Merthyr Tydfil,
CF48 4BB**

18 April 2024

Thomas Ramm TechArborA

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If this report has been released electronically the appendices referred to herein can be found in the annexed zip folder/s as .pdf files. If this report has been released in hard copy the appendices will be bound into the back of this report. Plans are annexed separately as A0, A1, A2 or A3 as appropriate.

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1. Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on 4 April 2024 from Matthew Mills of M2 Project Surveyors on behalf of Whitbread Group PLC to attend Premier Inn, Duffryn, Pentrebacj, Merthyr Tydfil, CF48 4BB; grid reference, SO 06177 03790 (site) to undertake an arboricultural survey to BS5837:2012 guidance to assess trees, hedges and major shrub groups growing on and within influencing distance of the site and to produce a Schedule of Trees, Tree Constraints Plan, Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan.

I am Thomas Ramm, an arboricultural surveyor at Arbtech Consulting Ltd. I undertook the tree survey on 17 April 2024 and subsequently have produced this summary of my findings.

I have 14No years of professional industry experience including an additional 4No years as an Arboricultural instructor & technician at Warwickshire College Group. I hold a LANTRA award in professional tree inspection as well as a Level 3 qualification with an extended Diploma in Arboriculture and Forestry and I am a member of the Arboricultural Association at the Technician grade.

The advice below and appended is underwritten by our Professional Indemnity insurance for the business practice of Arboricultural Consultancy in the sum of one million Pounds Sterling in each and every claim.

Table 1: Documents referred to.

Document	Reference No.
Survey base drawing	4520/10/001
LPA pre-app comments	N/A
British Standard 5837:2012	“BS5837”
Tree Survey Schedule	Arbtech TS 01
Tree Constraints Plan	Arbtech TCP 01

2. Survey

Survey: An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Thomas Ramm on 17 April 2024.

During the survey I categorised the trees using “Table 1 – Cascade chart for tree quality assessment” of the BS5837:2012 (see Appendix 1).

A total of 33No individual trees, 8No groups of trees and, 5No hedges were surveyed. Details for each of the trees surveyed are provided in the Schedule of Trees (see Appendix 2).

Multiple small trees and shrubs occupy the site, none of which meet the minimum diameter requirements to be considered for this survey.

Table 2: Documents upon which this tree survey has been based.

Document	Originator	Reference Number	Title
Survey Base Drawing	Clugston Survey Services	4520/10/001	Topographical Survey & Utilities Survey

Limitations: The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and advanced decay detection equipment were not employed, though may form part of the survey's management recommendations. Measurements were taken using specialist tapes, laser, and GPS devices. Where this was not possible, measurements are estimated.

Scope: Pre-development tree surveys make arboricultural management recommendations based exclusively upon the individual tree or group of trees condition relative to their present context (*i.e. not in relation to the proposed development*).

Legal Status: No statutory protection check has been performed. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

* For more information on the surveyed trees please see Arbtech Consulting Ltd, Tree Survey Schedule (Appendix 1), Tree Survey Report and Tree Constraints Plan.

Site description

The site is situated within the grounds of Premier Inn Hotels with the Table Table restaurant located to the north of the site. Associated parking is to the north, east, and south. To the north and west are the A4060 & A4054 with the River Taff to the west. The topography levels are relatively level with a slight decline to the south.

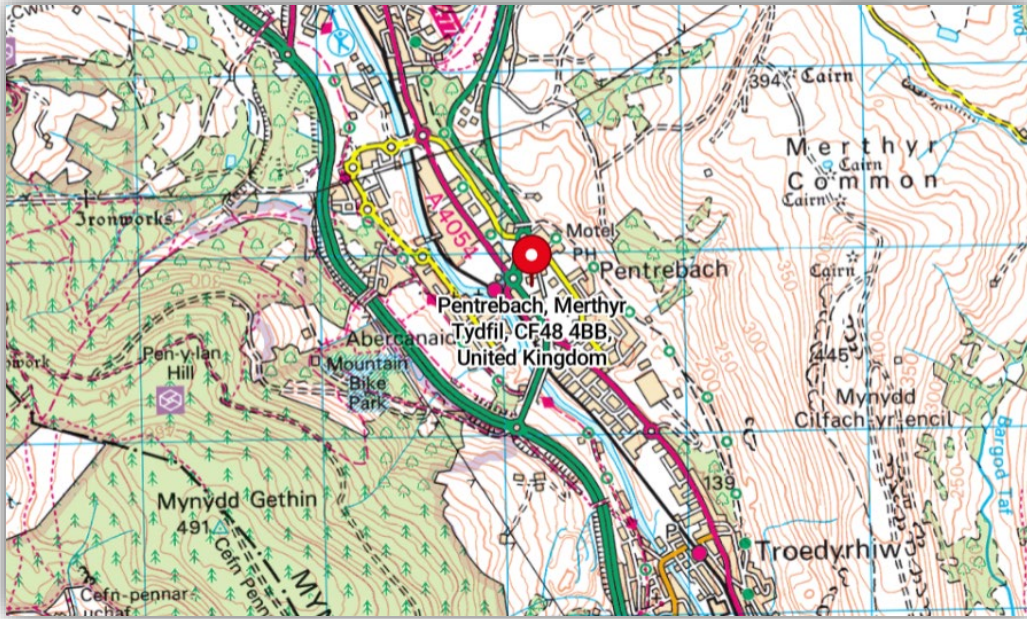


Figure 1: OS Map showing site location (Bing Maps)



Figure 2: Aerial Image of site with approximate red line boundary denoting area surveyed (Google Earth)

Proposed scheme

The proposed scheme for the site is to extend the existing hotel.

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3. BS5837:2012 Scope

This standard recognises that there can be problems for development close to existing trees which are to be retained, and of planting trees close to existing structures. This standard sets out to assist those concerned with trees, in relation to construction, to form balanced judgements. It does not set out to put arguments for or against development, or for the removal or retention of trees. Where development, including demolition, is to occur, the standard provides guidance on how to decide which trees are appropriate for retention, on the means of protecting these trees during development, including demolition and construction work, and on the means of incorporating trees into the developed landscape.

4. Methodology

The methodology used to assess the trees was the British Standard 5837:2012 'Trees in Relation to Construction' tree survey method. The aim of the survey is to establish which trees are moderate and good quality; suitable for retention and justifying protection. And which trees are low or poor quality; either undesirable or unsuitable to retain and protect.

The tree survey includes all trees included in the land survey red line boundary plan, as well as any that may have been missed, and it should categorize trees or groups of trees, including woodlands for their quality and value within the existing context, in a transparent, understandable, and systematic way. Where the arboriculturist has deemed it appropriate, the trees have been tagged with small metal or plastic tags, placed as high as is convenient on the stem of each tree.

Whilst master plan proposals for the development of the site might be available, the trees have been surveyed without taking these into consideration. All detailed design work on site layout should take into consideration the results of the tree survey (and the TCP).

Trees forming groups and areas of woodland (including orchards, wood pasture and historic parkland) are identified and considered as groups where the arboriculturist has determined that this is appropriate, particularly where they contain a variety of species and age classes that could aid long-term management. It is often expedient to assess the quality and value of such groups of trees as a whole, rather than as individuals. However, an assessment of individuals within any group has been undertaken if they are open-grown or if there is a need to differentiate between them.

The quality and value of each tree or group of trees has been recorded by allocating it to one of the four categories: **A**, **B**, **C**, or **U** (highest to lowest quality respectively). The categories are differentiated on the tree survey plan by colour, or by suffixing the category adjacent to the tree identification number on the TCP.

The survey schedule lists all the trees or groups of trees. The following information is also provided:

- a) reference number (to be recorded on the tree survey plan);
- b) species (common or scientific names);
- c) height in meters (m);
- d) stem diameter in millimetres (mm) at 1.5m above adjacent ground level or immediately above the root flare for multi-stemmed trees;
- e) branch spread in meters taken at the four cardinal compass points;
- f) height of crown clearance above adjacent ground level in meters (m);
- g) age class (newly planted, young, semi-mature, early mature, mature, over mature);
- h) physiological condition (e.g. good, fair, poor, decline and dead);
- i) structural condition (e.g. good, fair, poor or not visible);
- j) comment about the tree, its location and preliminary management recommendations, including further investigation of suspected defects that require more detailed assessment and potential for wildlife habitat;
- k) The retention category referring to the quality and useful contribution in years; **U** = <10yrs; **A** = >40yrs; **B** = >20yrs; **C** = >10yrs. The retention subcategory referring to the type of amenity; 1 = Arboricultural; 2 = Landscape; 3 = Cultural including conservation (see Appendix 1 Cascade chart for tree quality assessment).

5. Definitions

Arboriculturist

An arboriculturist (or arboricultural consultant) is a person who has, through relevant education, training, and experience, gained recognized qualifications and expertise in the field of trees in relation to construction.

Tree Survey

A tree survey should be undertaken by an arboriculturist and should record information about the trees on a site independently of and prior to any specific design for development. As a subsequent task, and with reference to a design or potential design, the results of the survey should be included in the preparation of a tree constraints plan, which should be used to assist with site layout design.

Tree Constraints Plan

A TCP is plan, typically delivered as an AutoCAD drawing (.DWG file format), prepared by an arboriculturist for the purposes of layout design showing the root protection area and representing the effect that the mature height and spread of retained trees will have on layouts through shade, dominance, etc.

Root Protection Area

An RPA is a layout design tool indicating the area surrounding a tree that contains sufficient rooting volume to ensure the survival of the tree, shown in plan form in m².

Construction Exclusion Zone (also termed Tree Protection Zone)

A construction exclusion or tree protection zone is an area based on the RPA (in m²), identified by an arboriculturist, to be protected during development, including demolition and construction work, by the use of barriers and/or ground protection fit for purpose to ensure the successful long-term retention of a tree.

Arboricultural Impact Assessment (AIA)

This is a study, undertaken by an arboriculturist, to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of any site layout proposal.

Tree Protection Plan (TPP)

A TPP is plan, typically delivered as an AutoCAD drawing (.DWG file format), prepared by an arboriculturist showing the finalized layout proposals, tree retention and tree and landscape protection measures detailed within the arboricultural method statement, which can be shown graphically.

Arboricultural Method Statement (AMS)

This is a methodology for the implementation of any aspect of development that has the potential to result in loss of or damage to a tree. The AMS is likely to include details of an on-site tree protection monitoring regime.

6. Recommendations

With the benefit of making an assessment of your planning proposals, I make the following recommendation to ensure that there are no irrevocable issues to the proposed retained trees and so that no conditions relating to arboriculture are attached to any planning consent secured; obtain an arboricultural report to include:

- a) An arboricultural impact assessment (AIA).
- b) An arboricultural method statement (AMS).
- c) A tree protection plan drawing (TPP).

7. Limitations

Trees were inspected from using visual observation from ground level only. Trees were not climbed or inspected below ground level. Inaccessible trees will have best estimates made about the location, physical dimensions, and characteristics. Trees have been grouped where BS5837 guides us that it is expedient to do so. Trees have been excluded from the survey if they are found by us to be sufficiently far away from the proposed developable area or if they are outside of the red line boundary plan showing the expectations of our client for the extent of the survey. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order (“TPO”), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

8. Appendices

The following documents were released to the Client as appendices to this report:

- Survey Schedule (.PDF)
- Tree Constraints Plan drawing (.DWG & .PDF)

If you require clarification of information contained herein, please do not hesitate to contact us via 01244 661170.

Yours Sincerely,



Thomas Ramm TechArborA
Arboricultural Surveyor

07512317883
thomasramm@arbtech.co.uk

Appendix 1: Table 1 Cascade chart for tree quality assessment

BS5837:2012 Trees in relation to design, demolition and construction – Recommendations

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories when 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.	•Trees that have 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. <i>NOTE Category U trees can have existing or potential conservation value which might be desirable to preserve; see 4.5.7.</i>			Dark red
	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 dominate 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).	Light green
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 remedial defects, including unsympathetic management and storm damage), such that they are unlikely to be suitable for retention of 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.	Mid blue
Category C Trees of low quality with an estimated remaining 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 value.	Trees with no material conservation or other cultural value.	Grey

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Ecology – Protected Species - Licensing – Arboriculture – Biodiversity Net Gain – Land/Topographical Survey

Appendix 2: Schedule of Trees

BS5837:2012 Tree Survey

Arbtech Consulting Limited

Client: Premier Inn Hotels - Merthyr Tydfil
 Project: Premier Inn, Duffryn, Pentrebacj, Marthyr Tydfil, CF484BB
 Survey Date: 17/04/2024
 Surveyor: Thomas Ramm

Unit 3, Well House Barns
 Chester Road
 Chester
 Cheshire
 CH4 0DH
 Phone: 01244661170

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			
G01												Estimated Measurements		
Various		15	1	360	N	4	2	SM	A: 58.6	Good	C: Good			B.1.2
See comments for details					E	4	2		R: 4.31		S: Good	Group is situated off site to the west following to the south; Group is comprised of circa 75+ stems with species to include pine, sycamore, alder, goat willow, hawthorn and scrub; Dimensions recorded represent maximum for group; Overall the tree population within the group are of good vigor.	20+ yrs	
					S	4	2				B: Good			
					W	4	2							
G02														
Various		18	1	520	N	4	2	SM	A: 122.3	Good	C: Good			B.1.2
See comments for details					E	4	2		R: 6.23		S: Good	Group is situated off site to the north; Group is comprised of circa 30+ stems with species to include silver birch, sycamore, cherry and hornbeam; Dimensions recorded represent maximum for group; Over all the tree population within the group are of good vigor.	20+ yrs	
					S	4	2				B: Good			
					W	4	2							
G03														
Various		5	1	150	N	2	0.5	SM	A: 10.2	Good	C: Good			C.1.2
See comments for details					E	2	0.5		R: 1.8		S: Good	Group is situated to the gardens of 'Table Table' restaurant; Group is comprised of circa 10+ stems with species to include silver birch, goat willow and pontic rhododendron; Dimensions recorded represent maximum for group.	10+ yrs	
					S	2	0.5				B: Good			
					W	2	0.5							
G04														
A Group		5	1	150	N	2	0.5	SM	A: 10.2	Good	C: Good			C.1.2
See comments for details					E	2	0.5		R: 1.8		S: Good	Group is situated to the gardens of 'Table Table' restaurant; Group is comprised of circa 7+ stems of pontic rhododendron; Dimensions recorded represent maximum for group.	10+ yrs	
					S	2	0.5				B: Good			
					W	2	0.5							
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	ERC:			Estimated Remaining Contributio

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			
G05														
Various <i>See comments for details</i>		4	1	150	N	2	0.5	SM	A: 10.2 R: 1.8	Good	C: Good S: Good B: Good	Group is situated to the gardens of 'Table Table' restaurant; Group is comprised of circa 7+ stems of pontic rhododendron and hawthorn; Dimensions recorded represent maximum for group.		C.1.2 10+ yrs
G06														
Various <i>See comments for details</i>		1	1	75	N	1	0.5	SM	A: 2.5 R: 0.89	Good	C: Good S: Good B: Good	Group is situated to the west of 'Table Table' restaurant; Group is comprised of circa 15+ stems of shrubs and herbaceous with species to include rhododendron, cherry laurel and boxleaf honeysuckle.		C.2 10+ yrs
G07														
Various <i>See comments for details</i>		1	1	75	N	1	0.5	SM	A: 2.5 R: 0.89	Good	C: Good S: Good B: Good	Group is situated to the west of 'Table Table' restaurant; Group is comprised of circa 15+ stems of shrubs and herbaceous with species to include rhododendron, cherry laurel and boxleaf honeysuckle.		C.2 10+ yrs
G08												Estimated Measurements		
Various <i>See comments for details</i>		12	1	310	N	3	2	EM	A: 43.5 R: 3.72	Good	C: Good S: Good B: Good	Group is situated to the western boundary line; Group is comprised of circa 30+ stems with species to include sycamore, hawthorn, hazel and scrub; Dimensions recorded represent maximum for group; The tree population within the group are of good vigor.		B.1.2 20+ yrs
H01														
Cherry Laurel <i>Prunus laurocerasus</i>		1	1	75	N	1	0.5	SM	A: 2.5 R: 0.89	Good	C: Good S: Good B: Good	Linear hedge-line situated to the southern boundary line; Hedge is comprised of circa 10+ stems; Hedge is regularly maintained on top and sides to current dimensions.		C.2 10+ yrs
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio

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			
H02														
Cherry Laurel <i>Prunus laurocerasus</i>		1	1	75	N	1	0.5	SM	A: 2.5 R: 0.89	Good	C: Good S: Good B: Good	Linear hedge-line situated to the southern boundary line; Hedge is comprised of circa 15+ stems; Hedge is regularly maintained on top and sides to current dimensions.	C.2 10+ yrs	
H03														
Various <i>See comments for details</i>		1	1	75	N	1	0.5	SM	A: 2.5 R: 0.89	Good	C: Good S: Good B: Good	Linear hedge-line situated to the southern boundary line; Hedge is comprised of circa 15+ stems with species to include box and cherry laurel; Hedge is regularly maintained on top and sides to current dimensions.	C.2 10+ yrs	
H04														
Various <i>See comments for details</i>		1	1	75	N	1	0.5	SM	A: 2.5 R: 0.89	Good	C: Good S: Good B: Good	Fragmented linear hedge-line situated to the southern boundary line; Hedge is comprised of circa 50+ stems with species to include box and cherry laurel; Hedge is regularly maintained on top and sides to current dimensions.	C.2 10+ yrs	
H05														
Various <i>See comments for details</i>		1	1	80	N	1	0.5	SM	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Fragmented linear hedge-line situated to the southern boundary line; Hedge is comprised of circa 50+ stems with species to include box and cherry laurel; Hedge is regularly maintained on top and sides to current dimensions.	C.2 10+ yrs	
T01														
Goat Willow <i>Salix caprea</i>		16	1	450	N	5	4	EM	A: 91.6 R: 5.39	Good	C: Good S: Ivy B: Good	Tree is situated towards the southern boundary line; Main stem leans to the east from base; Unable to gain a detailed inspection of main stem due to ivy; Main stem bifurcates to codominant stem at 4 m; Naturally occurring deadwood typical for species; Over all the tree is in good vigor.	B.1.2 20+ yrs	
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio	

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			
T02														
Common Alder <i>Alnus glutinosa</i>		17	1	480	N E S W	5 4 5 7	7 7 7 7	EM A: 104.2 R: 5.75	Good	C: Good S: Good B: Good	Tree is situated to the south; Main stem leans slightly to the south from base; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
T03														
Goat Willow <i>Salix caprea</i>		8	1	320	N E S W	4 1 4 5	3 3 3 3	SM A: 46.3 R: 3.83	Good	C: Good S: Good B: Good	Tree is situated towards the southern boundary line; Main stem leans to the west from base; Asymmetrical crown due to suppression from adjacent companion trees; Naturally occurring deadwood typical for species; Over all the tree is in good vigor.			B.1.2 20+ yrs
T04														
Common Alder <i>Alnus glutinosa</i>		14	1	340	N E S W	4 3 4 3	4 4 4 4	EM A: 52.3 R: 4.08	Good	C: Good S: Good B: Good	Tree is situated to the south; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
T05														
Common Alder <i>Alnus glutinosa</i>		11	1	110	N E S W	1 2 2 2	4 3 3 3	SM A: 5.5 R: 1.32	Good	C: Good S: Good B: Good	Tree is situated to the western boundary line; Asymmetrical crown due to suppression from adjacent companion trees; Naturally occurring deadwood typical for species.			C.1.2 10+ yrs
T06														
Common Alder <i>Alnus glutinosa</i>		11	1	210	N E S W	3 2 1 2	4 4 4 4	SM A: 20 R: 2.52	Fair	C: Good S: Fair B: Good	Tree is situated to the western boundary line; Historical mechanical damage to the main stem on the eastern aspect at 3 m where wound has not yet occluded; Sparse foliage density throughout crown; Naturally occurring deadwood typical for species.			C.1.2 10+ yrs
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio

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				
T07															
Silver Birch		14	1	340	N	4	3	SM	A: 52.3	Good	C: Good			B.1.2	
Betula pendula					E	3	3		R: 4.08		S: Good	Tree is situated towards the western boundary line; Naturally occurring deadwood typical for species.	20+ yrs		
					S	3	4				B: Good				
					W	4	4								
T08 385															
Scots Pine		9	1	390	N	6	4	SM	A: 68.8	Good	C: Good			B.1	
Pinus sylvestris					E	5	3		R: 4.67		S: Good	Tree is situated within raised planing pit towards the eastern boundary; Main stem leans to the west from base then straightens at 1 m; Main stem bifurcates to codominant stem at 3 m; Historically pruned to the eastern lateral extent to non appropriate attachment points; Naturally occurring deadwood typical for species.	20+ yrs		
					S	6	3				B: Good				
					W	5	3								
T09															
Scots Pine		10	1	370	N	4	3	SM	A: 61.9	Good	C: Good			B.1	
Pinus sylvestris					E	4	3		R: 4.43		S: Good	Tree is situated within raised planing pit towards the eastern boundary; Ring bulge from base of tree on all aspects; Historically pruned to the eastern and western lateral extent to non appropriate attachment points; Naturally occurring deadwood typical for species.	20+ yrs		
					S	5	3				B: Good				
					W	5	3								
T10 387															
Common Holly		10	1	410	N	2	4	SM	A: 76.1	Good	C: Good			B.1.2	
Ilex aquifolium					E	2	4		R: 4.92		S: Good	Tree is situated towards the eastern boundary line; Historical damage to the northern aspect of main stem at 3 m where wound has occluded; Main stem trifurcates at 3 m; Asymmetrical crown due to suppression from adjacent companion trees; Natural bracing throughout crown; Naturally occurring deadwood typical for species.	20+ yrs		
					S	3	4				B: Good				
					W	3	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	ERC:		Estimated Remaining Contributio		

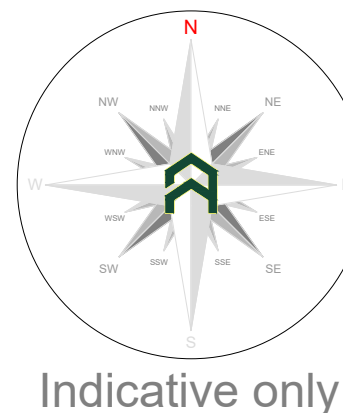
Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment			
T11												Estimated Measurements		
Common Horse Chestnut <i>Aesculus hippocastanum</i>		12	1	630	N	7	5	EM	A: 179.6 R: 7.56	Good	C: Good S: Good B: Not visible	Tree is situated off site to the eastern boundary line; Unable to gain a detailed inspection of base due to restricted access; Main stem bifurcates at 3 m to codominant stem; Historically pruned to the northern aspect of main stem at 4-5 m where wounds have occluded; Naturally occurring deadwood typical for species.		B.1.2 20+ yrs
T12														
Common Holly <i>Ilex aquifolium</i>		9	1	410	N	2	4	SM	A: 76.1 R: 4.92	Good	C: Good S: Good B: Good	Tree is situated towards the eastern boundary line; Main stem bifurcates at 2 m to codominant stem; Asymmetrical crown due to suppression from adjacent companion trees; Natural bracing throughout crown; Naturally occurring deadwood typical for species.		B.1.2 20+ yrs
T13												Estimated Measurements		
Scots Pine <i>Pinus sylvestris</i>		12	1	420	N	1	8	SM	A: 79.8 R: 5.03	Good	C: Good S: Fair B: Not visible	Tree is situated off site to the eastern boundary line; Historical limb failure at 3 m to northern aspect of main stem where wound has not yet occluded; Heavy lean to the south west at 6 m; Naturally occurring deadwood typical for species.		B.1.2 20+ yrs
T14														
Lawson Cypress <i>Chamaecyparis lawsoniana</i>		8	1	320	N	1	0.5	SM	A: 46.3 R: 3.83	Good	C: Good S: Good B: Good	Tree is situated to the northern boundary line; No notable features.		B.1.2 20+ yrs
T15														
Lawson Cypress <i>Chamaecyparis lawsoniana</i>		6	1	260	N	1	0.5	SM	A: 30.6 R: 3.12	Fair	C: Fair S: Good B: Good	Tree is situated to the northern boundary line; Visible browning to the eastern and western aspect; Low foliage density throughout crown.		C.1.2 10+ yrs
Age Classifications:		N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:		C S B	Crown Stem Basal area	Stems:		Ø (Eq)	Diameter Equivalent stem diameter using BS5837:2012 definition	ERC: Estimated Remaining Contributio

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			
T16													
Lawson Cypress <i>Chamaecyparis lawsoniana</i>	8	1	330	N	1	0.5	SM	A: 49.3 R: 3.96	Good	C: Good S: Good B: Good	Tree is situated to the northern boundary line; No notable features.	B.1.2 20+ yrs	
T17													
Norway Maple <i>Acer platanoides</i>	17	1	740	N	3	10	M	A: 247.8 R: 8.88	Good	C: Good S: Good B: Good	Tree is situated to the north of 'Table Table's restaurant; Surface roots exposed to northern and eastern aspect of base; Historically pruned to the southern lateral extent to non appropriate attachment points; Asymmetrical crown due to suppression from adjacent companion trees; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
T18													
Common Beech <i>Fagus sylvatica</i>	17	1	1020	N	9	3	M	A: 470.7 R: 12.24	Good	C: Good S: Good B: Good	Tree is situated to the north of 'Table Table' restaurant; Surface roots exposed to western aspect of base; Historically pruned to the southern and western aspect of main stem at 3-5 m where wounds have fully occluded; Asymmetrical crown due to suppression from adjacent companion tree; Naturally occurring deadwood typical for species.	A.1.2 40+ yrs	
T19													
Common Yew <i>Taxus baccata</i>	7	1	520	N	3	1	SM	A: 122.3 R: 6.23	Good	C: Good S: Good B: Good	Tree is situated towards the northern boundary; Surface roots exposed on all aspects of base; Historical pruning to southern extent of main stem at 2 m to appropriate attachment point where wound has not yet occluded; Naturally occurring deadwood typical for species.	B.1.2 20+ yrs	
T20													
Common Beech <i>Fagus sylvatica</i>	21	1	1000	N	11	5	M	A: 452.4 R: 12	Good	C: Good S: Good B: Good	Tree is situated within the gardens of 'Table Table' restaurant; Historically pruned to the northern and western aspect of main stem where wounds have fully occluded; Naturally occurring deadwood typical for species.	A.1.2 40+ yrs	
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:			C S B	Crown Stem Basal area	Stems: ERC:	Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition Estimated Remaining Contributio		

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			
T21													
Common Hornbeam <i>Carpinus betulus</i>	20	1	980	N E S W	12 10 9 9	4 4 4 4	M A: 434.5 R: 11.76	Good	C: Good S: Good B: Good	Tree is situated to the northern boundary line; Naturally occurring deadwood typical for species.			A.1.2 40+ yrs
T22													
Common Beech <i>Fagus sylvatica</i>	21	1	1250	N E S W	11 10 11 12	5 5 5 5	M A: 706.9 R: 15	Good	C: Good S: Good B: Good	Tree is situated within the gardens of 'Table Table' restaurant; Historically pruned to the northern and western aspect of main stem where wounds have fully occluded; Naturally occurring deadwood typical for species.			A.1.2 40+ yrs
T23													
Silver Birch <i>Betula pendula</i>	17	1	710	N E S W	5 10 9 9	5 3 4 2	M A: 228.1 R: 8.52	Good	C: Good S: Good B: Fair	Tree is situated in the gardens of 'Table Table' restaurant; Open cavity to base of northern aspect from group level to 150 mm in height X 130 mm in width; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
T24													
Monkey Puzzle Tree <i>Araucaria araucana</i>	17	1	760	N E S W	5 5 5 5	13 13 13 13	M A: 261.3 R: 9.11	Good	C: Good S: Good B: Good	Tree is situated to the western boundary line; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
T25													
Austrian Pine <i>Pinus nigra ssp. Nigra</i>	17	1	640	N E S W	3 2 5 5	3 10 4 4	M A: 185.3 R: 7.68	Good	C: Good S: Good B: Good	Tree is situated to the western boundary line; Asymmetrical crown due to suppression from adjacent companion trees; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:			C S B	Crown Stem Basal area	Stems:	Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition	ERC:	Estimated Remaining Contributio

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			
T26													
Common Yew <i>Taxus baccata</i>	8	2	334 (Eq)	N E S W	3 3 3 3	1 1 1 1	M A: 50.5 R: 4	Good	C: Good S: Good B: Good	Tree is situated towards the western boundary line; Subsidiary stems from base comprised of 11No stems; Dimensions recorded main stem and average for subsidiary stems; Historically pruned to the lateral extent on all aspects to appropriate attachment points; Natural bracing throughout crown; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
T27													
Monkey Puzzle Tree <i>Araucaria araucana</i>	17	1	720	N E S W	4 4 4 4	3 3 3 3	M A: 234.5 R: 8.63	Good	C: Good S: Good B: Good	Tree is situated to the western boundary line; Naturally occurring deadwood typical for species.			B.1.2 20+ yrs
T28													
Pear <i>Pyrus Spp.</i>	6	1	240	N E S W	2 2 2 2	2 2 2 2	SM A: 26.1 R: 2.88	Good	C: Good S: Good B: Good	Tree is situated to the west of 'Table Table' restaurant; No notable features.			B.1.2 20+ yrs
T29													
Pear <i>Pyrus Spp.</i>	6	1	220	N E S W	2 2 2 2	2 2 2 2	SM A: 21.9 R: 2.64	Good	C: Good S: Good B: Good	Tree is situated to the west of 'Table Table' restaurant; No notable features.			B.1.2 20+ yrs
T30													
Monkey Puzzle Tree <i>Araucaria araucana</i>	5	1	300	N E S W	2 2 2 2	1 1 1 1	SM A: 40.7 R: 3.59	Dead	C: Poor S: Poor B: Fair	Tree is dead standing.			U n/a
Age Classifications:	N Y SM	Newly planted Young Semi-mature	EM M OM	Early Mature Mature Over Mature	Condition:			C S B	Crown Stem Basal area	Stems:	Ø Diameter (Eq) Equivalent stem diameter using BS5837:2012 definition	ERC:	Estimated Remaining Contributio

Appendix 3: Tree Constraints Plan



Indicative only

Tree Categories

Trees are categorised in accordance with the cascade chart in Table 1 of the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.
Category 'U' - Trees in such condition that they cannot realistically be retained as living trees in context of the current land use for longer than 10 years.
Category 'H' - Trees of high quality with an estimated remaining life expectancy of at least 40 years.
Category 'M' - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
Category 'L' - Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Root Protection Area

In order to avoid damage to the roots or rooting environment of retained trees, the Root Protection Areas (RPAs) should be plotted around each of the category 'H' and 'M' trees. This is a minimum area in m² which should be left undisturbed around each retained tree.
The RPA is calculated using the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.
The calculated RPA is capped to 707m², which is the equivalent to a circle with a radius of 15m. Where there appears to be restrictions to root growth, the root protection area is reshaped to more accurately reflect the likely distribution of the roots.

Tree Survey Report

Please refer to Arbttech Consulting Ltd. Tree Survey Report and Tree Schedule for full details on all surveyed trees, hedgerows and major shrub groups.
All trees were surveyed and categorised in accordance with the guidance set out in the British Standard BS5837:2012 'Tree in relation to design, demolition and construction - Recommendations'.
We make the following recommendation to ensure that no conditions relating to arboriculture are attached to any planning consent secured: obtain and arboricultural report to include:
a) An arboricultural impact assessment (AIA);
b) An arboricultural method statement (AMS); and
c) A tree protection plan (TPP).



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Project: Premier Inn Hotels, Duffryn, Pentrebaci, Marthyr, Tydfil, CF48 4BB

Client: Premier Inn Hotels- Merthyr Tydfil

Drawing: Tree Constraints Plan

Based on: 420/01/001

Drawing No: Arbttech TCP 01

Date: Apr 2024

Scale: 1:250 @ A0

Drawn: TFR

Key:

Tree No: T01

RPA: Category 'U' trees

Category 'H' trees

Category 'M' trees

Category 'L' trees

Category 'U' trees

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9. Document Production Record

Document number	Editor	Signature	Position	Issue number	Date
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