



Tree Survey

At

St. Tydfil's Hospital
Merthyr Tydfil

Inspected by:-
Julian Wilkes BSc.For, MSc.Land Man, MIC.For, TechArborA
Treescene Ltd
The Walled Garden
Old Coedarhydyglyn
St Nicholas
Cardiff
CF5 6SG
Tel No. 029 20599300

26th March, 2020

Registered Office: Treescene Limited
The Walled Garden, Old Coedarhydyglyn, St. Nicholas, Cardiff CF5 6SG
Tel. 029 205 99300 Email. treescene@treescene.co.uk

Brief

I have been instructed by St. Tydfil's Developments LLP to carry out a survey on trees at St. Tydfil's Hospital, Merthyr Tydfil.

Scope of Report

This Tree Survey has been undertaken within the recommendations of British Standards 5837:2012 and current good arboricultural practice.

The survey entailed a visual inspection from ground level of all trees.

Each tree has been numbered and, where instructed, have been tagged using small durable metal or plastic tags.

Due to variations of existing ground levels through the site, height dimensions are estimated and are given in metres.

Trunk/stem diameters are measured at 1.5 metres above ground level, or immediately above the root flare for multi-stemmed trees.

Estimated branch spread is taken in metres from the centre of the trunk, at the four cardinal points of a compass, to achieve an accurate representation of crown shape.

An assessment of a tree's age classification is made in terms of its maturity within the site's landscape.

An assessment of a tree's physiological condition is made as good, fair, poor, dead.

Data on the structural condition of the tree has been entered, e.g., collapsing, leaning and the presence of any decay or physical defect has been noted.

Preliminary management recommendations include further investigation of suspected defects that require more detailed assessment or potential for wildlife habitat.

An assessment of a tree's future life expectancy is made as <10, 10-20, 20-40 or >40 etc.

Table 1 – Cascade chart for tree quality assessment

BRITISH STANDARD BS 5837:2012

Category and definition	Criteria (including subcategories where appropriate)		
<u>Category U</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 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; see 4.5.7		
	1 Mainly Arboricultural values	2 Mainly landscape values	3 Mainly cultural values, including conservation
<u>Category A</u> 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)
<u>Category B</u> 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
<u>Category C</u> 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 benefits	Trees with no material conservation or other cultural value

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
T1	Cherry (Prunus spp)	10	Single	0.38	5	7	5	3	2	Mature	Fair	Ornamental specimen of variable form. Main stem and mid crown heavily colonised by ivy thus preventing full inspection.	No action required at this time	10-20	C
T2	Cherry (Prunus spp)	9	Single	0.35	4	3	4	4	2	Mature	Fair	Ornamental specimen of reasonable form with some evidence of internal decay within major limbs	Monitor for safety	10-20	C
T3	Cherry (Prunus spp)	5	Single	0.44	3	2	2	2	2	Mature	Poor	Ornamental specimen of poor form with evidence of significant die-back throughout crown	Remove	<10	U
G4	Group of Privet (Ligustrum)	2	Multi	0.1	0.5	0.5	0.5	0.5	0	Middle aged	Fair	Ornamental boundary hedge	No action required at this time	10-20	C
T5	Beech (Fagus sylvatica)	17	Single	0.75 (est)	9	9	9	9	5	Mature	Fair	Off-site tree thus preventing full inspection and accurate measurement. Main stem heavily colonised by ivy thus preventing visual inspection. Notable specimen of good form with evidence of slight die-back in upper crown.	Monitor for health	20-40	B

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
T6	Sycamore (Acer pseudo-platanus)	8	Multi	0.2	2	2	2	2	1	Young	Poor	Self-sown specimen of poor form and weak basal fork that is likely to fail as this specimen matures	Remove	<10	U
G7	Group of 2 Goat Willow (Salix caprea)	10	Single	0.33	4	5	5	4	2	Middle aged	Poor	Self-sown specimens of poor form with weak forks in lower crown that are liable to failure	Remove	<10	U
G8	Group of 2 Hebe	2	Multi	0.2	2	2	2	2	0	Mature	Poor	Ornamental shrubs of poor form with extensive die-back throughout crowns	Remove	<10	U
T9	Lawson Cypress (Chamaecyparis lawsoniana)	15	Multi	0.7	3	3	3	3	2	Middle aged	Poor	Twin stemmed specimen of variable form that has suffered significant fire damage that will lead to death in the foreseeable future	Remove	<10	U
T10	Weeping Birch (Betula pendula 'Youngii')	6	Single	0.28	4	3	2	3	1	Mature	Fair	Ornamental specimen of form typical for this variety	No action required at this time	10-20	C

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
T11	Ash (Fraxinus excelsior)	22	Single	0.56	6	6	9	9	2	Mature	Fair	Notable specimen of good form and well-balanced crown. No obvious indications of significant defects or disease at present but this specimen is at risk of developing Ash Die-back disease.	Monitor for health	10-20	C
T12	Ash (Fraxinus excelsior)	18	Single	0.46	5	4	5	3	3	Mature	Poor	Tree of variable form that exhibits severe symptoms of Ash Die-back disease	Remove	<10	U
T13	Ash (Fraxinus excelsior)	18	Multi	0.65	8	5	7	4	4	Mature	Poor	Twin stemmed specimen exhibiting severe symptoms of Ash Die-back disease	Remove	<10	U
T14	Ash (Fraxinus excelsior)	18	Multi	0.55	6	3	6	6	4	Mature	Poor	Twin stemmed specimen with evidence of severe symptoms of Ash Die-back disease	Remove	<10	U
T15	Ash (Fraxinus excelsior)	18	Single	0.39	8	7	3	3	4	Mature	Poor	Tree of variable form exhibiting severe symptoms of Ash Die-back disease	Remove	<10	U

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
T16	Ash (Fraxinus excelsior)	16	Multi	0.45	9	3	4	3	3	Mature	Poor	Triple stemmed specimen which has suffered severe die-back as a result of Ash Die-back disease. This specimen represents a significant and severe immediate hazard.	Remove	<10	U
T17	Ash (Fraxinus excelsior)	20	Multi	0.6	9	3	4	6	4	Mature	Poor	Multi stemmed specimen exhibiting signs of severe Ash Die-back disease	Remove	<10	U
T18	Goat Willow (Salix caprea)	21	Single	0.53	10	3	8	4	2	Mature	Poor	Tree of variable form with evidence of weak forks in lower crown. Extensive die-back and accumulation of deadwood within crown. This specimen is at risk of failure in the foreseeable future and unsuitable for long-term retention.	Remove	<10	U
T19	Cherry (Prunus spp)	14	Single	0.36	3	5	7	3	2	Mature	Fair	Ornamental specimen with crown more heavily developed on southern side	No action required at this time	10-20	C

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
T20	Goat Willow (Salix caprea)	19	Multi	0.7	9	7	8	3	3	Mature	Poor	Multi stemmed specimen of variable form with potentially weak basal forks. This species is inherently structurally unsound and is likely to become at risk of significant failure in the foreseeable future. This specimen is unsuitable for long-term retention in relation to residential development.	Remove	<10	U
T21	Ash (Fraxinus excelsior)	20	Single	0.68	6	8	9	8	6	Mature	Poor	Tree of variable form with evidence of Ash Canker throughout crown. Thinning and die-back throughout crown indicates that this specimen is infected with Ash Die-back disease.	Remove	<10	U
G22	Group of 2 Sycamore (Acer pseudo-platanus)	11	Multi	0.3	5	3	1	3	1	Middle aged	Poor	Trees of poor form that has suffered severe squirrel damage. These specimens are unsafe for retention.	Remove	<10	U

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
G23	Group of 1 Ash (Fraxinus excelsior) and 1 Sycamore (Acer pseudo-platanus)	11	Single and multi	0.2	2	3	3	1	1	Middle aged	Poor	Self-sown specimens that have established at base of metal palisade fencing leading to significant physical damage resulting from conflict between main stems and fence. These specimens are unsafe for retention as a result.	Remove	<10	U
G24	Group of Ash (Fraxinus excelsior), Sycamore (Acer pseudo-platanus) and Hazel (Corylus avellana)	9	Multi	0.15	1	3	1	1	1	Young	Poor	Self-sown specimens established immediately at base of boundary wall which has led to physical damage as a result of conflict between the structure and stems.	Remove	<10	U
G25	Group of Ash (Fraxinus excelsior)	10	Single	0.1	1	1	1	1	1	Young	Poor	Self-sown specimens of variable form which exhibit severe symptoms of Ash Die-back disease	Remove	<10	U

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
G26	Group of Ash (Fraxinus excelsior)	11	Single	0.2	2	2	2	2	2	Young	Poor	Self-sown specimens of poor form that exhibit severe symptoms of Ash Die-back disease	Remove	<10	U
G27	Group of Ash (Fraxinus excelsior) and Goat Willow (Salix caprea)	Up to 18	Single	0.25 (avg)	6	3	4	6	2	Middle aged	Poor	Woodland edge trees of generally variable form. Most specimens of Ash exhibit symptoms of Ash Die-back disease and remaining trees are liable to become infected. Goat Willow are partially collapsed.	Remove	<10	U
T28	Ash (Fraxinus excelsior)	19	Multi	0.4	4	4	4	4	6	Middle aged	Poor	Woodland edge multi stemmed specimen exhibiting severe symptoms of Ash Die-back disease	Remove	<10	U
G29	Group of Goat Willow (Salix caprea) and Ash (Fraxinus excelsior)	Up to 17	Single and multi	0.2 (avg)	5	2	5	5	1	Middle aged	Poor	Scrubby woodland edge specimens of poor form unsuitable for retention	Remove	<10	U

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
G30	Group of Sycamore (Acer pseudo-platanus), Goat Willow (Salix caprea) and Ash (Fraxinus excelsior)	Up to 18	Single and multi	0.35 (avg)	5	4	7	5	3	Middle aged	Fair to poor	Woodland edge trees of generally variable form. Some trees are in conflict with boundary fence and will require removal on safety grounds. Some Ash exhibit symptoms of Ash Die-back disease.	Remove dead, dying and dangerous specimens. Monitor remaining trees of safety.	10-20	C
G31	Group of Ash (Fraxinus excelsior) and Goat Willow (Salix caprea)	Up to 18	Single and multi	0.25	3	3	3	3	2	Middle aged	Poor	Woodland edge specimens of poor form. Goat Willow are at risk of collapsing. Ash are dead or dying as a result of Ash Die-back disease.	Remove	<10	U
G32	Group of Hornbeam (Carpinus betula)	13	Single	0.15	4	4	4	4	1	Young	Fair	Self-sown specimens of reasonable form	No action required at this time	20-40	C

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
G33	Group of Hornbeam (Carpinus betula), Hazel (Corylus avellana) and Goat Willow (Salix caprea)	8	Multi	0.1	3	3	1	2	0	Young	Fair	Woodland edge scrubby specimens of variable form	No action required at this time	10-20	C
T34	Goat Willow (Salix caprea)	3	Single	0.4	2	1	0	1	1	Mature	Poor	This specimen is partially collapsed to the north-west	Remove	<10	U
T35	Ash (Fraxinus excelsior)	21	Single	0.65 (est)	9	10	7	9	4	Mature	Fair	Woodland edge specimen of reasonable form with no obvious indications of disease at this time	Monitor for health	10-20	C
G36	Group of Hazel (Corylus avellana) and Holly (Ilex aquifolium)	4	Single and multi	0.15 (avg)	3	1	1	1	0	Young	Fair	Scrubby specimens forming boundary of woodland	No action required at this time	10-20	C

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
T37	Goat Willow (Salix caprea)	19	Single	0.55 (est)	8	8	7	7	4	Mature	Poor	Woodland edge tree that is in direct mechanical conflict with palisade fence leading to serious structural defects on main stem. This specimen is unsafe for retention.	Remove	<10	U
T38	Sycamore (Acer pseudo-platanus)	17	Multi	0.8	6	5	6	7	2	Middle aged	Fair to poor	Multi stemmed specimen of variable form and relatively low vigour	Monitor for health	10-20	C
T39	Sycamore (Acer pseudo-platanus)	11	Single	0.36	1	5	4	0	4	Middle aged	Fair to poor	Tree of variable form leaning extensively to the east	Monitor for stability	10-20	C
T40	Sycamore (Acer pseudo-platanus)	21	Single	0.69	7	5	5	8	3	Middle aged	Fair to poor	Tree of reasonable form with evidence of thinning and die-back within crown. This specimen may be in a deteriorating condition.	Monitor for health	10-20	C
T41	Sycamore (Acer pseudo-platanus)	15	Single	0.48	3	1	2	3	4	Middle aged	Poor	Tree of variable form that has suffered severe squirrel damage in mid crown which is likely to lead to significant structural failure	Remove	<10	U

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
T42	Corsican Pine (Pinus nigra maritima)	20	Single	0.55	1	4	5	2	3	Mature	Fair	Tree of variable form which leans significantly to the east. Evidence of slight thinning of foliage within crown.	Monitor for health	10-20	C
T43	Horse Chestnut (Aesculus hippocastanum)	19	Single	1.13	8	12	8	8	2	Mature	Fair	Notable specimen of reasonable form. This species is liable to developing bacterial canker disease. Presence of retaining wall on western side will limit rooting in this direction.	Monitor for health	20-40	B
G44	Group of Hawthorn (Crataegus monogyna), Hazel (Corylus avellana), Ash (Fraxinus excelsior), Sycamore (Acer pseudo-platanus) and Goat Willow (Salix caprea)	Up to 12m	Multi	0.3 (avg)	2	1	2	4	0	Middle aged	Poor	Multi stemmed specimens established at top of retaining wall and base of metal palisade fence. Most specimens are in direct conflict with the fencing which has led to development of structural defects and an increased likelihood of failure. All root systems are potentially unstable due to location at top of retaining wall.	Remove	<10	U

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
T45	Sycamore (Acer pseudo-platanus)	11	Multi	0.4	4	4	4	4	0	Middle aged	Poor	Self-sown multi stemmed specimen established at base of palisade fence which has led to direct conflict between stems and fencing. Most stems are therefore at risk of failure in the future.	Remove	<10	U
T46	Ash (Fraxinus excelsior)	11	Multi	0.3	3	2	2	3	3	Middle aged	Poor	Multi stemmed specimen of variable form which exhibits severe symptoms of Ash Die-back disease	Remove	<10	U
G47	Group of Hazel (Corylus avellana), Holly (Ilex aquifolium), Elder (Sambucus nigra) and Crab Apple (Malus spp)	Up to 9	Single and multi	0.2 (avg)	3	2	3	2	0	Middle aged	Fair to poor	Scrubby specimens sited near to top of retaining wall	Monitor for stability	10-20	C

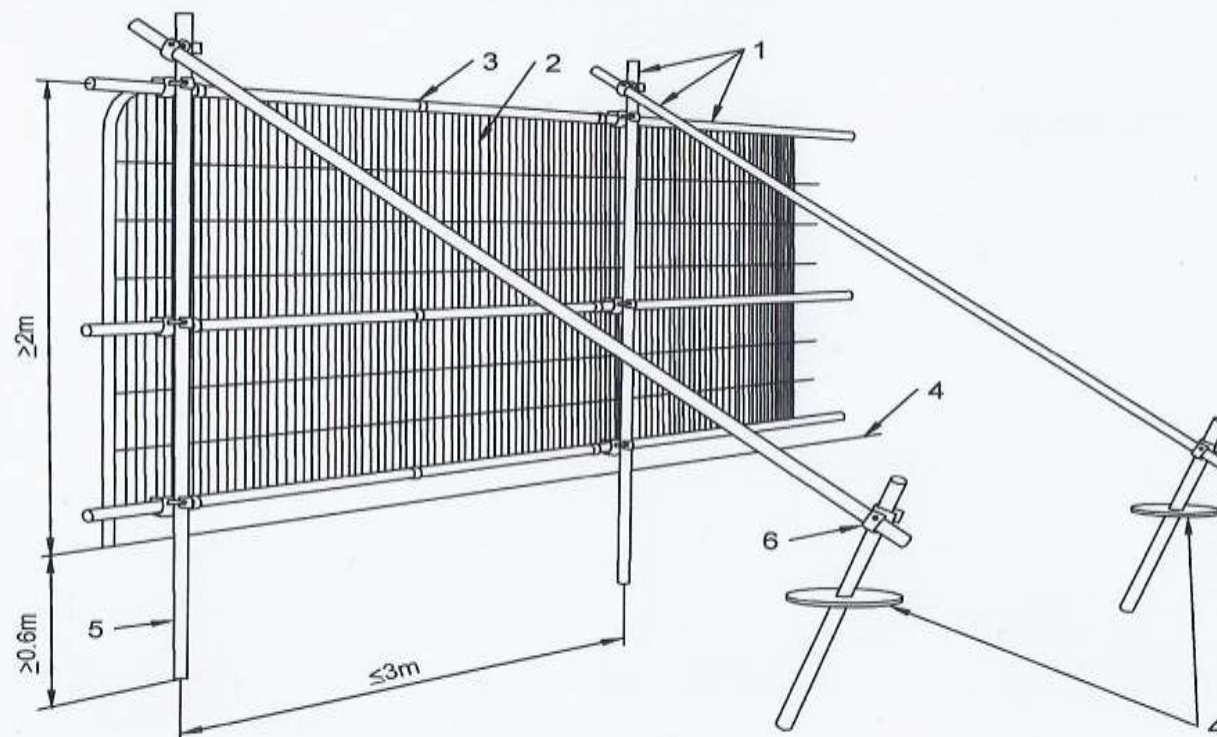
Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
G48	Group of Sycamore (Acer pseudo-platanus)	2	Multi	0.2	1	1	1	1	0	Middle aged	Poor	Self-sown specimens that have previously been significantly reduced. These specimens are unsuitable for retention.	Remove	<10	U
T49	Lawson Cypress (Chamaecyparis lawsoniana)	18	Single	0.47	2	2	2	2	1	Middle aged	Fair to poor	Tree of reasonable form. Main stem divides at 3.5m producing co-dominant stems in mid crown. Evidence of slight bulging at the base of lower fork indicates that this is a potential point of weakness.	Monitor strength of lower fork	10-20	C
T50	Birch (Betula pendula)	19	Single	0.36	5	5	3	5	3	Middle aged	Fair	Tree of reasonable form and vigour with well-balanced crown. Evidence of mechanical damage to roots on southern side of main stem which may lead to commencement of internal decay.	Monitor base of main stem for development of decay	10-20	C
T51	Weeping Willow (Salix crysocoma)	17	Single	0.59	6	6	7	6	2	Mature	Fair	Notable specimen of form typical for this species. Some deadwood in lower crown. Evidence of slight thinning of foliage throughout crown.	Prune to remove major deadwood with diameter >50mm. Monitor for health.	20-40	B

Tree No.	Species	Height(m)	Single/Multi Stemmed	Stem Diameter(m)	Branch Spread(m)				Height of Crown(m)	Age	Physiological Condition	Structural Condition	Prel. Man. Recommendations	Est. Remaining Contribution	Category
					N	E	S	W							
G52	Group of Box (Buxus) and Forsythia	2	Multi	0.1	1	1	1	1	0	Middle aged	Fair	Scrubby ornamental specimens	No action required at this time	10-20	C
G53	Group of Sycamore (Acer pseudo-platanus)	11	Multi	0.25	2	2	2	2	2	Young	Poor	Self-sown multi stemmed specimens established at base of boundary wall. These trees are unsustainable in this location.	Remove	<10	U
T54	Sycamore (Acer pseudo-platanus)	19	Single	0.67	7	7	7	6	4	Mature	Good	Tree of good form and well-balanced crown. No obvious indications of significant structural defects. Evidence that rooting area has recently been compacted due to site traffic.	Fence off root protection area to prevent further compaction of the roots	>40	A

Recommendations for Tree Protection during Development

Due to the high risk to established trees we would recommend the installation of protective fencing prior to commencement of **any** works on site in accordance with BS 5837:2012 “Trees in relation to Construction”. Trees should be protected using scaffold frame supporting weld mesh panel fencing sited on the edge of the Root Protection Area as defined in BS5837:2012. These fenced areas should not be used for the storage of any plant machinery or materials and personnel should be excluded at all times; these fences should remain in situ until after final landscaping has been carried out, removed by hand with great care to prevent compaction or root damage to established trees. The services of a suitably qualified arborist should be sought **prior** to the commencement of each stage.

Figure 2 Default specification for protective barrier



Key

- 1 Standard scaffold poles
- 2 Heavy gauge 2m 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 0.6m)
- 6 Standard scaffold clamps