

TREE SURVEY ARBORICULTURAL CONSTRAINTS ARBORICULTURAL IMPACT ASSESSMENT

Land at Boscawen Park Malpas Road Truro TR1 1SG

Client: Meiloci

Reference: EV-4355-TS CA AIA

Site visit Date: December 2022

Report Date: January 2023

Evolve Tree Consultancy 8 Duke Street Truro TR1 2QE

01872 276 099

office@evolvetrees.co.uk

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1 INSTRUCTION

1.1 We, Evolve Tree Consultancy, have been instructed by Meiloci to provide an Arboricultural Constraints Analysis and an Arboricultural Impact Assessment with Tree Protection Plan.

2 INTRODUCTION

- 2.1 We have been asked to survey the trees to assess their condition with regards the potential for the proposed development.
- 2.2 This report analyses the final design as received and describes the implications of the development on the trees.



Image 1. Survey site location. ©Google Map Data 2022.

3 METHODOLOGY

- I have undertaken both survey and report to accord with the recommendations in British Standard 5837:2012 Trees in relation to design, demolition & construction Recommendations (BS 5837). It is not a risk assessment, nor does it assess the risks related to subsidence, heave or other forms of disturbance associated with tree root growth or removal.
- 3.2 My survey was a visual one made from ground level. I did not have access to trees outside the boundary of the site. Any observations of these trees are confined to what is visible from within the property.
- 3.3 Tree Schedule Explanatory Notes & Methodology are listed in Appendix A.
- Tree positions are indicated on the Tree Constraints Plan (TCP), which is based on the topographical survey provided.

4 SUPPORTING DOCUMENTATION

- 4.1 Relevant documents provided to me include:
 - Site location plan titled Boscawen Park Phase 1 & 2.
 - Topographic Survey prepared by Sumo .
- 4.2 This report should be read alongside Evolve drawing:
 - Tree Constraints Plan: EV-4355-TCP.

5 STATUTORY PROTECTION & OTHER CONTROLS

- 5.1 Tree Preservation Order/Conservation Area: I have used information supplied by the Cornwall Council Interactive map.
- 5.1.1 Trees on site are subject to a Tree Preservation Order/s (TPOs). Reference: Boscawen Park Malpas Road Tree Preservation Order 1992. https://map.cornwall.gov.uk/reports TPO/C1 CK104.pdf
- 5.1.2 The site is not within a designated Conservation Area.
- Felling Licences: Parts of a site associated with the domestic property will not be subject to the provisions of the Forestry Act. Felling licenses are generally required for felling living trees unless they are fruit trees, or trees growing in a garden, orchard, churchyard or designated open spaces.
- 5.3 Planning Conditions/Covenants: I did not investigate whether any planning conditions or legal covenants relevant to the trees are in place.

6 PLANNING POLICY & DESIGNATIONS

6.1 National Planning Policy Framework (NPPF): This sets out national planning policy.

Paragraph 131. Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined ⁵⁰, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.

Paragraph 174. Planning policies and decisions should contribute to and enhance the natural and local environment by:

- (a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- (b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

Paragraph 180. When determining planning applications, local planning authorities should apply the following principles:

- (a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- (c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons ⁶³ and a suitable compensation strategy exists.

Cornwall Local Plan: This sets out local planning policy. It includes the following relevant policies:

Policy 12: Design – Development must ensure Cornwall's enduring distinctiveness and maintain and enhance its distinctive natural and historic character.

Policy 22: European Protected Sites – mitigation of recreational impacts from development.

- Policy 23: Natural environment. Development proposals will need to sustain local distinctiveness and character and protect and where possible enhance Cornwall's natural environment and assets according to their international, national, and local significance.
- 6.2 Cornwall Council Planning for Biodiversity Guide: The guide sits below the Local Plan and provides additional information to guide decisions relying on policies 22 and 23.

Paragraph 10.7.3 states that "Buffering for hedges suggests that for residential developments that an absolute minimum buffer of 2-metre either side of the hedge is required. For industrial and solar farm developments a 5-metre buffer is an absolute minimum. Where woodland is present a 10-metre buffer is absolute minimum."

7 THE SITE & THE TREES

- 7.1 The Site: The survey site identified as Phase 1 comprises a strip of land used as the vehicular entrance and car parking facility for Boscawen Park. A newly constructed tennis pavilion with associated services and drainage is found adjacent to eight all weather tennis courts bounded by wire mesh fencing. Turners Hall is a Scouts facility with associated services and drainage. To the south of the tennis courts is a newly constructed wooden building which is a canoe sports facility. The main car parking area has a slipway to the south for access to the river. A pathway also runs to the southwest becoming a path along the river following the boundary of Boscawen Park.
- 7.2 Along the eastern boundary is a row of Monterey Cypress and Pine trees. At the northeast of the site is the vehicular access point with an area of other pines, pines and pines. The eastern boundary of the site is the Truro River.
- 7.3 North of the tennis courts is the beginning of the ornamental shrub beds and pathway that leads to the main park area.



Image 2. Aerial view. ©Google Map Data 2022.

- 7.4 The trees are a mix of exotic conifers and the occasional broadleaf including whitebeams (T1 and T2), poplars (T3 and T4), a beech tree (T7) with a horse chestnut T21.
- 7.5 There is currently a tree work application been submitted for the removal of T16. The tree officer has agreed in principle though the formal decision has not yet been issued.

8 CONSTRAINTS ANALYSIS & DESIGN CONSIDERATIONS

- 8.1 The key constraints posed by the trees are shown on the TCP drawing. Both the above and below ground constraints have the potential to influence the design.
- 8.2 Tree Quality Assessment: The cascade chart, presented as part of Appendix B, is a construct of the BS5837 designed to help describe the characteristics and relative value of trees. It provides guidance enabling an estimate of which trees are important and which trees are not.
- 8.2.1 It does not dictate which trees ought to be retained or removed, merely the weight that should be given to them when balancing competing interests.

 Certain trees may be of such importance and sensitivity that they justify having a major influence on design. Others may be of little significance that could be removed without adverse impacts.
- 8.2.2 The key trees are identified in the survey schedule presented as Appendix B.

- 8.3 The root protection area (RPA): This is an area (representing a volume of soil) considered necessary to maintain the trees viability. The area represented on the TCP is a minimum recommended by BS5837 and is capped at 707 m².
- 8.3.1 The shape of the RPA will vary in accordance with site conditions e.g. a road is likely to form a barrier to root growth. Whilst the notional RPA is circular the shape plotted on the TCP may be a polygon to reflect likely barriers to root growth.
- 8.3.2 Encroachment within the RPA of retained trees will require justification and be supported by a sound rationale from the project arboriculturist.
- Tree species: The species will influence a number of factors relevant to design including height (represented by the length of the shade arc), spread (indicated on the TCP), ultimate height and spread (which may be indicated where appropriate), deciduous/evergreen nature, crown density, seasonal nuisance etc.
- 8.4.1 The proximity of a tree to constructed houses and gardens can be a key factor affecting people's enjoyment of a property.
- Age: Mature and over-mature trees are more sensitive to change than young trees. Their inability to adapt to altered soil conditions within or near the RPA means that care is required when designing in these places.
- 8.6 Shade Arc: This is an average pattern of the shade as is passes through the day. It provides an indication of how trees may impede direct sunlight.
- 8.6.1 Dense shade can be addressed by the siting of dwellings and a reasonable proportion of the garden outside the shade arcs.
- 8.6.2 Siting buildings within the shade arc can adversely affect the availability of natural daylight to principal living rooms. The internal arrangement of buildings and fenestration design can make significant improvements to daylight availability.
- 8.7 Services: It is prudent to locate new service outside the RPA and crown (allowing for future growth) of retained trees. However, the impact of putting services close to trees will be determined by the sensitivity and/or quality of the trees.

9 CONCLUSIONS

9.1 The trees appear in good condition though there has been considerable disturbance of the ground in close proximity to trees T8, T9 and G10. There has been a recent trench excavated adjacent to the beech tree T7. I suspect this disturbance will result in the decline of these trees over the next few years, particularly for the beech tree T7, see photo 3 below.



Photograph 3 showing the recent excavation, presumably for services, adjacent to T7.

9.2 My report provides a description of the physical characteristics of trees and hedgerows, their benefits, and the constraints that they pose to development. It is the key (arboricultural) part of the feasibility and planning assessment.

- 9.3 There is potential (in arboricultural terms) to develop the land. The key issue will be ensuring no further damage to the roots of the retained trees.
- 9.4 I trust this provides enough information for you to develop the plans. Should you have any queries I am happy to provide further advice and opinion.

10 NEXT STEPS

- 10.1 The LPAs validation procedure may require that a planning application is supported by an arboricultural impact assessment and tree protection plan.
- 10.2 When a preliminary design is available, I can provide further advice on the potential impacts and suggest measures for avoidance, mitigation, or compensation of any harm.

Cim Scott. Elis

Tim Scott-Ellis BSc Hons (For), Dip Arb (RFS), F Arbor A, MICFor, MRICS Evolve Tree Consultancy

I am a Fellow of the Arboricultural Association, a Chartered Arboriculturist and a Chartered Surveyor. I hold an honours degree in Forestry and the Royal Forestry Society Professional Diploma in Arboriculture. I have been working as a full-time, professional arboriculturist since 1999.







The authority of this report ceases when any site conditions change or pruning or other works unspecified in the report are conducted to, or affecting, the subject tree(s). The statements made in this report do not consider the effects of extremes of climate, vandalism, or accident, whether physical, chemical or fire. Evolve Tree Consultancy cannot accept any liability about these factors, nowhere prescribed work is not carried out in a correct and professional manner in accordance with current good practice.

The recommendations within this report remain valid for the period stated for reinspection or twelve months from the date of survey.

Evolve Tree Consultancy Reference EV-4355-TS CA AIA

The limit of Evolve Tree Consultancy's indemnity over any matter arising out of this report extends only to the instructing client; Evolve Tree Consultancy cannot be held liable for any third-party claim that arises following or out of this report. This report remains the intellectual property of Evolve Tree Consultancy.

APPENDIX A Tree Schedule Explanatory Notes

Tree Number Sequential Tree, Group or Woodland Reference Number.

Name Scientific name (Common name in brackets).

Height Recorded in metres by inclinometer in each discrete area and estimated from

the measured tree.

(Lwr crn ht - Lower crown height, the height of the canopy above the ground)

Stem diameter Tree stem diameter in millimetres at 1.5 metres above adjacent ground level

rounded up to nearest 50 millimetres. For multi-stemmed trees, a cumulative

diameter is calculated (in accordance with BS 5837:2012 Annex C).

Branch spread Measured in metres & taken at four cardinal points (N E S W).

1st Sig branch 1st Sig branch: Existing height in metres above ground level (agl) of the first

significant branch with direction of growth (if available).

Life Stage Y Young Recently planted or established tree

SM Semi-mature Age less than one-third life completed. Established

tree but one that has not reached its potential ultimate height and has significant growth potential.

EM Early-mature One-third to two-thirds life completed. A tree

reaching its ultimate potential height, whose growth rate is slowing down but will still increase in stem

diameter and crown spread.

M Mature Two-thirds plus life completed. Specimen with limited

potential for any significant increase in size but with

reasonable life expectancy.

LM Late-mature Two-thirds plus life completed and declining. A tree

that has passed its optimum growth rate and may require specialist management. These trees may offer significant benefits in terms of nature conservation.

Referred to as Over-mature in the British Standard.

V Veteran A tree that shows features of biological, cultural or

aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical

age range for the species concerned.

Comments General observations e.g. collapsing, the presence of any decay and physical

defect and including further investigation of suspected defects that require

more detailed assessment and potential for wildlife habitat.

Life Expectancy Estimated remaining contribution in years in terms of amenity (<10, 10+, 20+,

40+).

Physiological

Condition G Good Tree that appears to be in good condition and

healthy without significant defects.

F Fair Tree that appears to be structurally sound but due to

minor defects is downgraded from good.

P Poor Tree which shows signs of poor health, in decline

and/or with significant defects.

D Dead Tree which is moribund or has died.

Recommendations Preliminary management recommendations based on the site as surveyed

and for any likely pruning likely to be required should any development

proceed.

Category A grade given in accordance with BS 5837:2012 - Tree Categories (see copy

of Table 1 from BS 5837:2012 below).

RPA-R (m) Root Protection Area (RPA) Radius - The radius of an indicative circle of the

RPA.

RPA (m²) RPA Area in metres squared.

Criteria (including subcategories where appropriate	2)		
	,		Identification
			on plan
rees that have a serious, irremediable, structural de	efect, that such that their early loss is e	xpected due to collapse,	on plan
ncluding those that will become unviable after rem	noval of other category U trees (e.g. wh	nere, for whatever	RED
eason, the loss of companion shelter cannot be mi	itigated by pruning).		
rees that are dead or are showing signs of significa-	ant, immediate, and irreversible overal	l decline.	
rees infected with pathogens of significance to the	e health and/or safety of other trees no	earby, or very low-quality	
rees suppressing adjacent trees of better quality.			
NOTE Category U trees can have existing or potentic	al conservation value which it might be	desirable to preserve.	
Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values,	GREEN
·	. ,	including conservation	
rees that are particularly good examples of their	Trees, groups, or woodlands of	Trees, groups, or	
species, especially if rare or unusual; or those that	particular visual importance as	woodlands of	
are essential components of groups or formal or	arboricultural and/or landscape	significant conservation,	
semi-formal arboricultural features (e.g. the	features.	historical,	
dominant and/or principal trees within an		commemorative, or other	
avenue).		value (e.g. veteran trees	
		or wood-pasture).	
Trees that might be included in category A but	Trees present in numbers, usually	Trees with material	BLUE
are downgraded because of impaired condition	growing as groups or woodlands,	conservation or other	
e.g. presence of significant though remediable	such that they attract a higher	cultural value	
defects, including unsympathetic past	collective rating than they might as		
nanagement and storm damage), such that they	individuals; or trees occurring as		
are unlikely to be suitable for retention for	collectives but situated so as to		
peyond 40 years; or trees lacking the special	make little visual contribution to		
· · · · · · · · · · · · · · · · · · ·	the wider locality		
. , , ,	,		
	Trees present in groups or	Trees with no material	GREY
		conservation or other	
	•	cultural value	
	3 ,		
	•		
	,		
	benefits.		
n e Fi Fi r V I	recluding those that will become unviable after remeason, the loss of companion shelter cannot be mirees that are dead or are showing signs of significance infected with pathogens of significance to the rees suppressing adjacent trees of better quality. IOTE Category U trees can have existing or potential Mainly arboricultural qualities rees that are particularly good examples of their pecies, especially if rare or unusual; or those that are essential components of groups or formal or emi-formal arboricultural features (e.g. the ominant and/or principal trees within an emi-formal especies that might be included in category A but are downgraded because of impaired condition e.g. presence of significant though remediable efects, including unsympathetic past management and storm damage), such that they	accluding those that will become unviable after removal of other category U trees (e.g. whereason, the loss of companion shelter cannot be mitigated by pruning). It is rees that are dead or are showing signs of significant, immediate, and irreversible overal rees infected with pathogens of significance to the health and/or safety of other trees not rees suppressing adjacent trees of better quality. If other Category U trees can have existing or potential conservation value which it might be a Mainly arboricultural qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly arboricultural qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly arboricultural qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly arboricultural qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly landscape qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly landscape qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly landscape qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly landscape qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly landscape qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly landscape qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly landscape qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly landscape qualities If other Category U trees can have existing or potential conservation value which it might be a Mainly landscape qualities If other C	rees that are dead or are showing signs of significant, immediate, and irreversible overall decline. rees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low-quality ees suppressing adjacent trees of better quality. IOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve. Mainly arboricultural qualities 2 Mainly landscape qualities 3 Mainly cultural values, including conservation rees that are particularly good examples of their pecies, especially if rare or unusual; or those that re essential components of groups or formal or pecies, especially if rare or unusual; or those that re essential components of groups or formal or pecies, especially if rare or unusual; or those that re downgraded because of impaired condition ended in category A but re downgraded because of impaired condition ended in category A but re unlikely to be suitable for retention for eveyond 40 years; or trees lacking the special uality necessary to merit the category A esignation. Intermarkable trees of very limited merit or such mpaired condition that they do not qualify in gigher categories 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 greater collective landscape value; and/or trees offering low or only temporary/transient landscape

APPENDIX B Tree Schedule

Tree No.	Name (Common & Scientific)	Ht (m) (Lwr cr	Stem dia. (mm)	Brand	ch Spre	ead (m))	1 st sig branch (m)	Life Stag e	Comments	Life Exp (yrs)	Cond	Advice	Cat	RPA R m	RPA A m ²
T1	Sorbus aria (Whitebeam)	ht) 6(2)	370	N 2	3	3	W 3	2	М	No significant visible defects. Prominent	20+	Fair		B1	4.4	62
										tree/group. Part of linear group.						
T2	Sorbus aria (Whitebeam)	6(2)	380	3	3	3	3	2	M	No significant visible defects. Prominent tree/group. Part of linear group.	20+	Fair		B1	4.6	65
Т3	Populus x canadensis (Poplar)	22(6)	910,890	6	8	10	12	0.5	LM	Reasonable vitality and structural condition. In/adjacent to hard surface area. Prominent tree/group. Decay present on stem. Fungal brackets visible on stem. Stem divides above 1.5m.	20+	Fair		A1	15.0	707
T4	Populus x canescens (Grey Poplar)	22(6)	1250	6	8	10	12	0.5	LM	In/adjacent to hard surface area. Prominent tree/group. Unable to inspect stem due to Ivy.	20+	Fair		A1	15.0	707
T5	Pinus radiata (Monterey Pine)	13(0.5)	570	5	5.5	3	4	0.5	SM	Reasonable vitality and structural condition. Restricted	40+	Fair		B2	6.8	147

Т8	Pinus radiata (Monterey Pine)	11(2)	390	2	2	2.5	2	2	SM	No significant visible defects. Reasonable vitality and structural	40+	Good	B1	4.7	69
Т7	Fagus sylvatica (Beech)	17(3)	780	2.5	4	4	4	3	EM	No significant visible defects. Reasonable vitality and structural condition. Prominent tree/group. Crown distorted due to group pressure. Crown lifted to current dimensions. Good occlusion on wounds.	40+	Fair	A1, 2	9.4	275
G6	Pinus radiata (Monterey Pine)	17.5 (10)	1100	5	5.5	3	4	10	SM	Reasonable vitality and structural condition. Restricted growth due to exposed situation. Crown lifted to current dimensions. Surface roots evident around base. Adjacent to retaining wall.	40+	Fair	B2	13.2	547
										growth due to exposed situation. Crown lifted to current dimensions. Surface roots evident around base. Adjacent to retaining wall.					

										condition. In/adjacent to hard surface area. Prominent tree/group.					
Т9	Pinus radiata (Monterey Pine)	14(2)	710	7	6	6	5	2	EM	No significant visible defects. Reasonable vitality and structural condition. In/adjacent to hard surface area. Prominent tree/group. Adjacent to recent construction activity.	40+	Good	B1	8.5	228
G10	Pinus radiata (Monterey Pine)	10(1)	710	8	5	9	7.5	1.5	EM	No significant visible defects. Reasonable vitality and structural condition. In/adjacent to hard surface area. Prominent tree/group. Crown distorted due to group pressure. Forms joint canopy. Adjacent to recent construction activity.	40+	Good	B1	8.5	228
T11	Pinus radiata (Monterey Pine)	7.5(1)	510	5	3	1	5	1.5	EM	Restricted growth due to exposed situation. In/adjacent to hard surface area. Prominent tree/group. Dieback in crown. Broken branches in crown.	10+	Fair	C 1	6.1	118

										Unbalanced crown shape. Crown lifted to current dimensions. Adjacent to recent construction activity. Branch failure in crown.					
T12	Pinus radiata (Monterey Pine)	7.5(1)	510	7	4	1	3	1.5	EM	Restricted growth due to exposed situation. In/adjacent to hard surface area. Prominent tree/group. Dieback in crown. Broken branches in crown. Unbalanced crown shape. Crown lifted to current dimensions. Adjacent to recent construction activity. Crown asymmetry due to presence of tree to south since removed.	10+	Fair	C1	6.1	118
T13	Pinus radiata (Monterey Pine)	7(2)	490	6	4	1.5	1	2	EM	No significant visible defects. Reasonable vitality and structural condition. Restricted growth due to exposed situation. In/adjacent to hard surface area. Prominent tree/group.Crown	40+	Fair	B1, 2	5.9	109

										asymmetry due to presence of tree to south since removed.						
T14	Pinus radiata (Monterey Pine)	14(2)	580	6	3	4	2	2	EM	No significant visible defects. Reasonable vitality and structural condition. Restricted growth due to exposed situation. Prominent tree/group.	40+	Fair		B1, 2	7.0	152
T15	Pinus radiata (Monterey Pine)	15(2)	620	5	3	4	3.5	2	EM	No significant visible defects. Reasonable vitality and structural condition. Restricted growth due to exposed situation. Prominent tree/group. Exposed surface roots.	40+	Fair		B1, 2	7.4	174
T16	Hesperocyparis macrocarpa (Monterey Cypress)	12.5(4)	880	5	9	6	9	4.5	M	In/adjacent to hard surface area. Prominent tree/group. Broken branches in crown. Unbalanced crown shape. Branches encroaching upon building. Crown pruned to current dimensions.	10+	Poor		C1	10.6	350
T17	Pinus radiata (Monterey Pine)	5(1.5)	500	4	4	4	4	1.5	EM	No significant visible defects. Reasonable	40+	Good	Crown lift to 5m.	B1, 2	6.0	113

										vitality and structural condition. Restricted growth due to exposed situation. Prominent tree/group. Exposed surface roots.						
T18	Pinus radiata (Monterey Pine)	11(2.5)	700	6	7	8	4	1	EM	No significant visible defects. Reasonable vitality and structural condition. Restricted growth due to exposed situation. Prominent tree/group. Multiple stems above 1.5m.Exposed surface roots. Crown divides into vase-like form.	40+	Good	Crown lift to 5m.	B1, 2	8.4	222
T19	Pinus radiata (Monterey Pine)	12(2.5)	660	3	6	3	5	2.5	EM	No significant visible defects. Reasonable vitality and structural condition. Restricted growth due to exposed situation. Prominent tree/group. Multiple stems above 1.5m.Exposed surface roots. Crown divides into vase-like form.	40+	Good	Crown lift to 5m.	B1, 2	7.9	197
T20	Pinus radiata (Monterey Pine)	12(2.5)	710	3	4	6	5	2.5	EM	No significant visible defects. Reasonable	40+	Good	Crown lift to 5m.	B1, 2	8.5	228

										vitality and structural condition. Restricted growth due to exposed situation. Prominent tree/group. Exposed surface roots. Crown divides into vase-like form.					
T21	Aesculus hippocastanum (Horse Chestnut)	6(1)	390	3	3	3	3	1.5	EM	No significant visible defects. Restricted growth due to exposed situation.	20+	Fair	B1	4.7	69

APPENDIX C Legal Constraints

Trees outside the site/property

Landowners and managers have a duty of care not to damage trees on the neighbouring land. The common causes of damage (root damage, compaction, physical damage, and inexpert pruning) must be avoided through good planning and site management.

However, branches and roots from trees on adjacent properties that extend over boundaries can be pruned back to the boundary line without the permission of the owners. However, the branch material belongs to the tree owner and should be returned where appropriate.

Statutory wildlife obligations

The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000 provides statutory protection to birds, bats and other species that inhabit trees. All wild birds are protected by law under the Wildlife & Countryside Act 1981, and it is an offence to disturb injure or kill a nesting bird intentionally or to take damage or destroy an occupied nest or egg. If nesting birds are discovered works on the trees should be deferred until the nests are abandoned. Care should be taken during any felling operation, or surgery works to trees to avoid damage or disturbance to birds during the nesting season.

Tree Preservation Orders

Advice can be found at: http://planningguidance.communities.gov.uk/blog/guidance/tree-preservation-orders/tree-preservation-orders-general/

Conservation Areas

Advice can be found at: http://planningguidance.communities.gov.uk/blog/guidance/tree- preservation-orders/protecting-trees-in-conservation-areas/

Important: Exceptions for tree work relating to planning permission and permitted development from the Planning Practice Guidance 15 April 2015 paragraph 36-083-20150415.

Under the heading "Is there an exception for tree work relating to planning permission and permitted development?", of the PPG states:

"The authority's consent is not required for carrying out work on trees subject to an Order so far as such work is necessary to implement a full planning permission. For example, the Order is overridden if a tree has to be removed to make way for a new building for which planning permission has been granted.

Conditions or information attached to the permission may clarify what work is exempt.

However, the authority's consent is required for works on trees subject to an Order if:

- development under a planning permission has not been commenced within the relevant time limit (i.e. the permission has 'expired'):
- only outline planning permission has been granted; and
- it is not necessary to carry out works on protected trees in order to implement a full planning permission."

Felling licence

In any calendar quarter*, you may fell up to 5 cubic metres on your property without a licence if no more than two cubic metres are sold. Contact your local Forestry Commission office if you are not certain whether these exemptions apply.

*1 Jan to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October 31 December

Exemptions: Certain types of felling do not need permission from the Forestry Commission. The Forestry Act 1967, as amended, and related regulations give these exceptions in full. The main categories are listed below: Lopping and topping (which usually includes tree surgery, pruning and pollarding).

Felling included in an approved dedication plan.

Felling fruit trees, or trees growing in a garden, orchard, churchyard or designated public open space (e.g. under the Commons Act 1899).

Felling trees which, when measured at the height of 1.3 metres from the ground:

- have a diameter of 8 centimetres or less; or if thinnings have a diameter of 10 centimetres or less; or
- if coppice (i.e. managed by cutting to promote multi-stemmed growth arising at or near ground level) or underwood, have a diameter of 15 centimetres or less.

Felling trees immediately required for carrying out development authorised by planning permission (granted under the Town and Country Planning Act 1990) or for work carried out by certain providers of gas, electricity and water services and which is essential for the provision of these services.

Felling necessary for the prevention of danger or the prevention or abatement of a nuisance (e.g. which may involve the threat of danger to a third party). This exemption will only apply if there is a real rather than a perceived danger. We may be able to give you advice that would minimise the danger without felling the trees. We strongly recommend that you contact us if you are considering felling a tree or trees in these circumstances. You may be prosecuted for illegal felling if it is shown that the tree did not present a real or immediate danger.

Felling necessary to prevent the spread of a quarantine pest or disease and done in accordance with a notice served by a Forestry Commission Plant Health Officer (under the Plant Health (Forestry) (Great Britain) Order 1993, as amended.

The felling is done in compliance with any obligation imposed by or under an Act of Parliament.

More advice can be found at: http://www.forestry.gov.uk/pdf/treefellingaugust.pdf/\$FILE/treefellingaugust.pdf

APPENDIX D Tree Protection Barriers

No equipment, machinery or materials shall be brought onto the site for the purposes of the development until fencing has been erected in accordance with the plans and particulars which shall have been previously approved by the local planning authority in writing.

The areas forming the Construction Exclusion Zone are to be protected by Tree Protection Barriers as per the recommendations in BS 5837:2012 (Figure 2) or as specified below at Appendix H.

This fencing is to be erected before any work commences on site and is to remain in place undamaged for the duration of all work or each phase. It will only to be removed once all work is completed and if required by planning condition, with the formal consent of the local planning authority.

If the fencing be broken or removed during the course of carrying out the development, it shall be promptly repaired or replaced to the satisfaction of the local planning authority.

Within any area fenced in accordance with this condition, nothing shall be stored, placed, or disposed of on the above or below ground, the ground level shall not be altered, no excavations shall be made, nor shall any fires be lit, without the prior written consent of the local planning authority.

Other than works detailed within this method statement or approved in writing by the local planning authority, no works at all (including storage or dumping of materials) shall take place within the exclusion zones defined by the protective fencing.

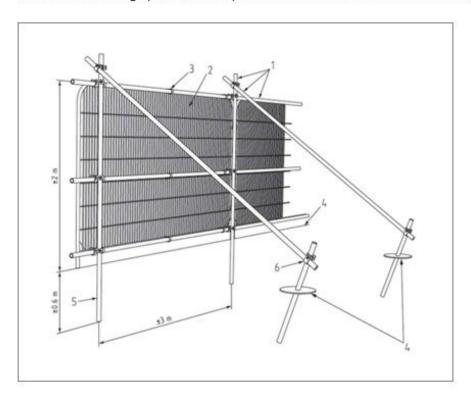
The fencing is to carry waterproof warning notices denying access within the RPA. The following signs or similar will be attached to the fence panels.





APPENDIX E Specification for Tree Protection Barriers

Below is the fencing specification reproduced from BS 5837:2012 Trees in relation to design, demolition, and construction - Recommendations.



Key

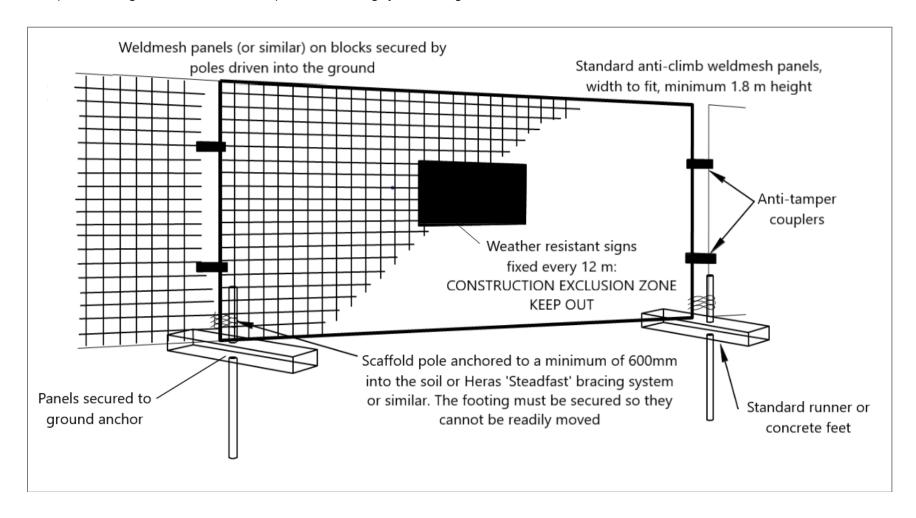
- 1 Standard scaffold poles.
- 2 Heavy gauge 2 m tall, galvanized tube and welded mesh infill panels.
- 3 Panels secured to uprights and cross-members with wire ties.
- 4 Ground level.
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m).
- 6 Standard scaffold clamps.



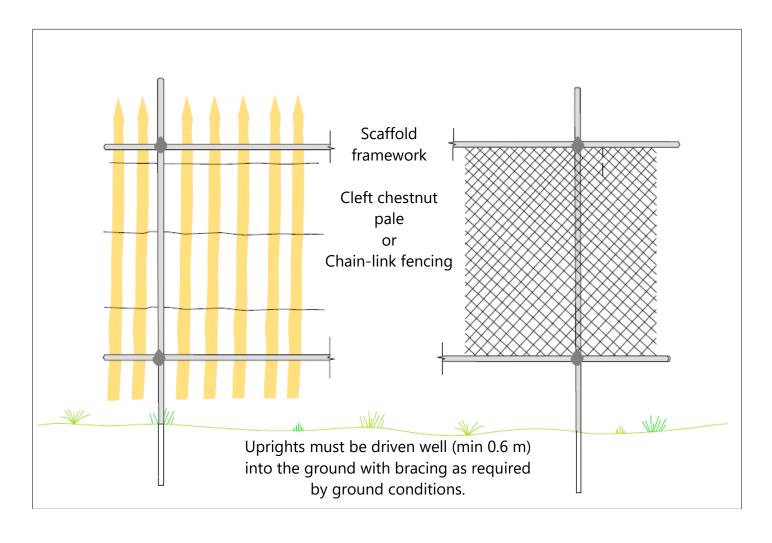


APPENDIX F Tree Protection Barriers Medium Construction Pressure

Tree Protection Barriers (derived & amended from BS5837:2012 Figure 2) where there is insufficient space to install bracing. Examples of configurations for steel mesh perimeter fencing systems are given in BS 1722-18



APPENDIX G Secondary Tree Protection Barriers Low Construction Pressure



Arboricultural Site Considerations - To be displayed in a prominent place.

Tree Protective Barriers must be regarded as sacrosanct and must not be removed or altered without prior consultation with either the Local Planning Authority (LPA) or the arboricultural consultant responsible for the site supervision.

Ground protection must not be lifted or removed without prior consultation with either the LPA or the arboricultural consultant responsible for the site supervision.

Damage caused to protective fencing or ground protection must be reported to the site supervisor immediately to ensure efficient repair.

No materials, chemicals, machinery, or vehicles must be stored within the Construction Exclusion Zone as defined on the Tree Protection Plan (TPP) and identified on site by fencing and above ground root protection.

No materials must be rested against a tree's trunk or machinery chained to it.

No pruning of trees may be undertaken by anyone other than an arborist, and all work must be approved by the supervising arboricultural consultant.

Any physical damage caused to a tree retained on site must be reported to the site manager so remedial work can be undertaken without delay.

Builder's sand, which contains salt, must not be used to back fill excavation within or in close proximity to tree roots, as this can have a toxic affect. Sharp sand can be used instead.

Material that will contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, must not be discharged within 10 metres of a tree stem.

Fires must not be lit in a position where their flames can extend to within 5 m of foliage, branches, or trunk. This will depend on the size of the fire and wind direction.

Notice boards, telephone cables or other services must not be attached to any part of a tree.



Evolve Tree Consultancy 8 Duke Street Truro Cornwall TR1 2QE

01872 276099 office@evolvetrees.co.uk