



Arboricultural Impact Assessment

Beach View
Trenance
Mawgan Porth
Newquay
Cornwall
TR8 4DB

Reference: 3234 AIA - Rev B

Site Visit Date: 19.11.2018, 29.09.2021

Report Date: 21.11.2018

(Rev Date 05.10.2021)

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1 INSTRUCTIONS

- 1.1 Chris and Fiona Heritage instructed us to update the previously supplied Arboricultural Impact Assessment and Tree Protection Plan.

2 INTRODUCTION

- 2.1 It is proposed to demolish and replace the existing house. Planning permission was previously granted at appeal (Ref: APP/D0840/W/19/3224149 (PA18/04468)). The same scheme is to be resubmitted for planning approval requiring an update of this impact assessment report.
- 2.2 I revisited the site to find that the trees are broadly similar in condition and size to when they were surveyed in 2018. Some crown pruning has occurred to the west and north by the neighbour, and Seiridium canker has spread to all the trees within G1. They have not grown significantly in height and spread. Stem diameters have increased slightly, but not enough to have an influence on the arboricultural impacts.
- 2.3 The clients have expressed their desire to retain and protect the existing trees as far as is reasonably practicable and want to create a legacy of enhancement to the local landscape by providing new trees.

3 METHODOLOGY

- 3.1 The positions of the subject trees are plotted on the Tree Protection Plan (TPP), which is based on the topographical survey supplied.
- 3.2 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).
- 3.3 Though safety is a consideration for each survey, this report does not provide an assessment of the risk presented by trees. Neither does this assessment relate to risks associated with subsidence, heave or other forms of disturbance associated with tree root growth or removal.
- 3.4 I did not have access to trees outside the boundaries or on other private properties and my observations of them were confined to what was visible from within the site.
- 3.5 I surveyed all the trees from ground level. My inspection was a visual one aided with binoculars if necessary. I assess the tree's maturity, biological, physiological and mechanical factors as described in the Visual Tree Assessment (VTA) methodology.

3.6 Tree Schedule Explanatory Notes & Methodology are listed in Appendix A.

4 SUPPORTING DOCUMENTATION

4.1 This report and associated plans and findings are based on the documents provided, as listed below:

- A3 PL-001 Rev C.
- EX-101 Existing Site Plan.
- PCD/150/PL02 Landscape Proposals.

4.2 This report is to be read alongside Evolve plans:

- Tree Protection Plan: Ref 3234 TPP Rev B.

5 STATUTORY DESIGNATIONS & STATUTORY REGULATIONS

5.1 I have used the information provided by the Cornwall Council Interactive Map on the assumption this is a true and accurate record. Should any tree be identified for removal confirmation must be obtained from the local planning authority in writing as to the protected status of the trees.

5.2 There are no Tree Preservation Order/s (TPOs) that affect the property or its neighbours. The site is not within a conservation area.

5.3 Planning Conditions/Covenants: I did not investigate whether any planning conditions or legal covenants relevant to the trees are in place.

5.4 Other designations:

- A Public Right of Way (PROW). The south-west coast path is situated approximately 70m to the west.

5.5 **Felling Licences:** The site is not subject to the provisions of the Forestry Act because it is a domestic curtilage.

5.6 **Hedgerow Regulations:** The hedgerow regulations do not apply to the boundary of a domestic curtilage.

6 PLANNING POLICY

6.1 National Planning Policy is described in the National Planning Policy Framework (NPPF) which states that planning decisions must take regard of ancient woodlands and veteran and aged trees outside ancient woodlands.

6.2 Local Planning Policy is described by the Cornwall Local Plan and includes:

- Policy 12: Design
- Policy 23: Natural environment.

7 THE SITE & THE TREES

- 7.1 Beach View is located at the western edge of Trenance. It has an elevated position above the Beach at Mawgan Porth. There are mid-range views of the property from the coast path on the southern side of the bay and the Atlantic Highway (B3276) to the south. There are nearby views from the coast path as it passes the site to the west.
- 7.2 The key arboricultural features are two groups (G1, G2) of Golden Monterey Cypress (*Cupressus macrocarpa* 'Goldcrest'). Their approximate position is indicated on the TCP plan extract below as image 1.

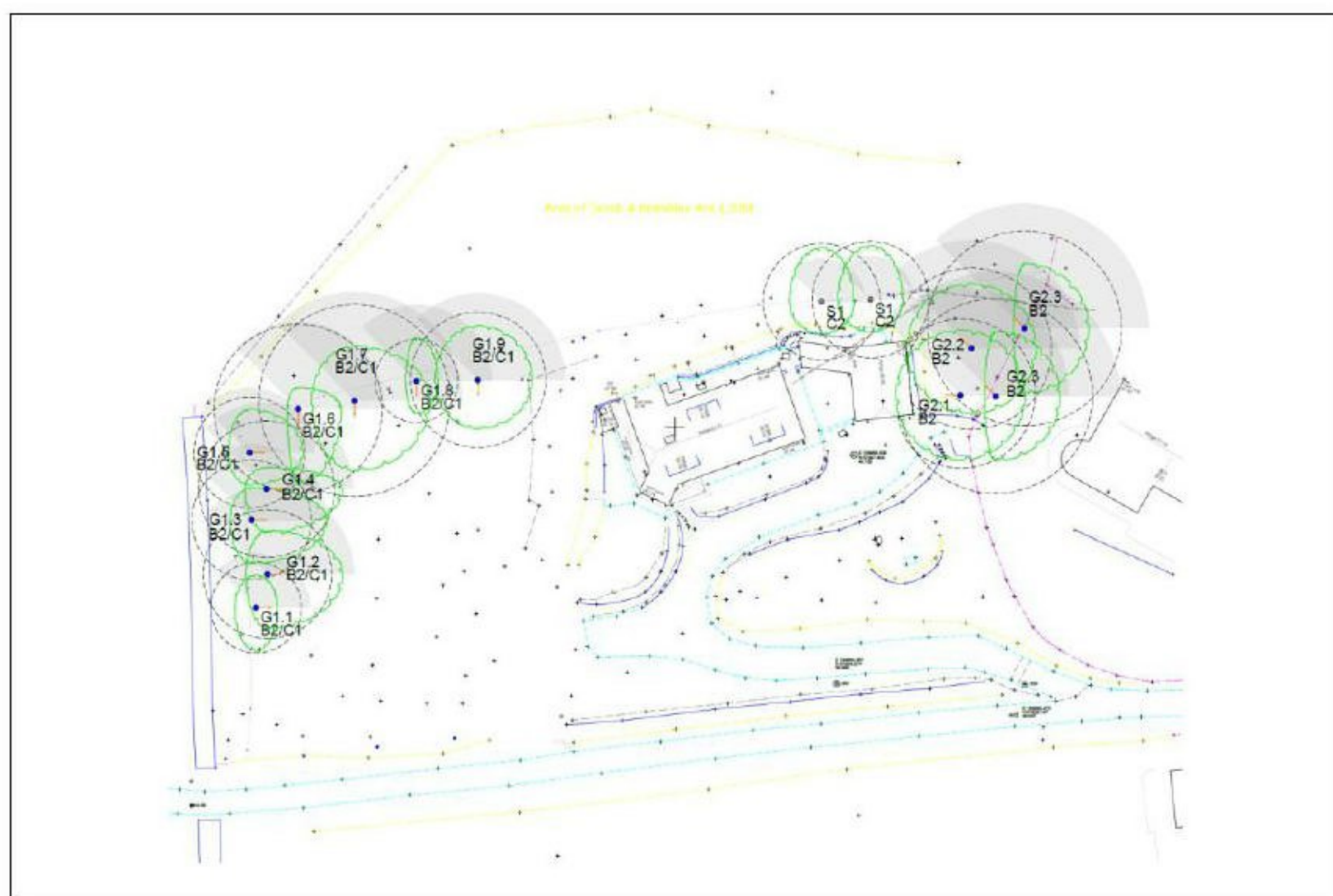


Image 1

- 7.3 Group G1 range in height from approximately 5 m to 10 m. All are multi-stemmed, and several have poor quality stem unions. This poor form, along with their position adjacent to the boundary imply that they were once a hedgerow, the management of which has lapsed in recent decades.
- 7.3.1 The multi-stemmed habit of trees in G1 does not currently result in significant structural defects. However there is potential for these unions to become more compressed and structurally defective over time. Because the ultimate size of the trees is likely to be severely restricted due to the influence of coastal exposure, the risk to people or property from stem or branch failures is likely

to remain low. However, the poor habit does adversely affect the arboricultural quality of the trees (see image 2 below).



Image 2

- 7.3.2 The western trees (G1.- G1.5) have been heavily suppressed by the wind and lateral branches to the west have been pruned off to facilitate access just beyond the western boundary. As a result, they have a poor appearance when viewed from the west. G1.6 - G1.9 have benefited from a small amount of shelter and are slightly less suppressed.
- 7.3.3 All the trees in G1 are showing signs of infection by the disease Cypress Canker (*Seiridium cardinale*). This is evident from scattered small patches of yellow or brown foliage and entirely dead shoots. It appears to be spreading slowly but is ultimately very disfiguring and often fatal.
- 7.4 I previously reported on some alteration to the ground to the north of the trees where a series of terraces were created. I commented that this work had the potential to cause damage to roots but was unable to confirm this at the time. The changes to the ground have now weathered and settled.
- 7.5 The presence of Cypress Canker, coastal exposure and multi-stemmed habit are all factors that have the potential to limit the viability of these trees. I am confident that they have at least 10 years safe useful life expectancy (SULE), but only low—moderate confidence that their SULE might exceed 20 years.
- 7.5.1 If the Cypress Canker were a little more advanced, I would be very confident in limiting their SULE to less than 20 years; which would preclude them from being B category trees.
- 7.6 Group G2 stand approximately 11 m tall and appear to be maiden trees of reasonable form. They form one cohesive group and do not appear to have any significant disease, disorder or defect.

- 7.7 Both groups of trees are visible from public vantage points to the south and west. The key views are in the middle distance from the south which offer a wide view of the valley side. From here the trees are a clearly visible component of the landscape. Their small stature limits the overall contribution that they make to visual amenity. It is unlikely that G1 will grow very much larger because of the coastal exposure.
- 7.8 The poor form of G1 and presence of Cypress Canker impacts on their arboricultural quality, hence the low C1¹ categorisation. Although the longevity of G1 is likely to be restricted, I think it is important to recognise the modest contribution that they make to visual amenity, hence the additional B2² category.
- 7.9 G2 have been categorised B2 because of the modest contribution that they make to the landscape and visual amenity.
- 7.10 The data collected during the site survey including comments regarding health, condition and amenity value, is presented in the Appendix B Tree Schedule with explanatory notes given in Appendix A.

8 THE PROPOSAL

- 8.1 The proposal is to demolish the existing dwelling and construct a replacement dwelling.

9 CONSTRAINTS ANALYSIS

- 9.1 The preliminary constraints posed by the trees are presented on the Tree Constraints Plan (3234 TPP). These include the areas we consider most likely to be occupied by the tree's roots (the root protection areas (RPAs)) and the shade arcs.
- 9.2 The RPA is derived from the stem diameter of a tree. It assumes a proportional relationship between the diameter of the tree and the volume of its crown. Because of the past hedgerow management and crown suppression there is an unusual and disproportionate relationship between the basal stem diameter of the trees and the volume of their crowns. Typically, Monterey Cypress trees with a stem diameter of those recorded

¹ The sub-category 1 denotes arboricultural quality (see BS5837 – Table 1 cascade chart).

² The sub-category 2 denotes a landscape quality (see BS6837 – Table 1 cascade chart).

would be much taller and have a much wider spread (therefore a much greater volume of canopy).

- 9.2.1 The RPA of the trees in G1 have therefore been adjusted by reducing the overall RPA by 1/2 (m²).

10 POTENTIAL IMPACT OF DEVELOPMENT ON TREES

- 10.1 Arboricultural impacts are a relationship between the magnitude of a change (positive or negative) and the quality or sensitivity of the feature being affected.
- 10.2 My assessment focuses on the impacts relevant to planning merits and is guided by the British Standard BS5837 'Trees in relation to design, demolition and construction – recommendations'.
- 10.3 Factors considered in my impact assessment are listed below, however where the impacts are clearly insignificant, the topic is not addressed specifically.
- 10.4 Typical AIA issues:
- Tree loss.
 - Construction access.
 - Shading.
 - Build practicability.
 - Statutory Protection.
 - Design conflicts.
 - Mitigation planting.
 - Canopy protection.
 - Necessary pruning.
 - Future conflicts.
 - Proximity to structures.
 - Infrastructure.
 - Removal of structures.
 - Effect on amenity value.
 - Use of land near trees.

11 THE IMPACT OF THE PROPOSED SCHEME

Loss of Trees:

- 11.1 G1.9 must be lost to facilitate the construction of the dwelling.
- 11.2 Two mature Tamarisk shrubs (S1) will be removed to facilitate new tree planting. There will be no impact on visual amenity in the short-term.
- 11.2.1 Careful consideration has been given to whether trees G1.7 and G1.8 are retained. G1.8 is small and very suppressed element of the group; G1.7 is a more dominant tree.

- 11.2.2 The design causes an incursion of approximately 30% into the RPA of G1.6 and 40% of the total RPA of G1.8. It is feasible that the impacts could be managed through careful excavation, root pruning and subsequent irrigation. However, the existing disease and disorders (see 5.3.3-5.3.4) mean that the medium-term prognosis for the trees is poor. They are unlikely to respond well to additional impacts within the RPA.
- 11.2.3 The design team have considered moving the footprint of the building to accommodate more of the RPA. Considering the compromised quality of the trees, my conclusion is that they do not warrant posing such a significant constraint to development.
- 11.2.4 G1.8 is heavily suppressed. Its removal will have a very minor impact on the landscape. The loss of all three trees (G1.7—G1.9) will have a visible effect on the landscape, but their low arboricultural qualities does mitigate the harm somewhat because they are unlikely to be long lived.
- 11.3 There will be a short-term moderately negative impact as a result of felling. New tree planting will provide sustainable long-term benefits that significantly outweigh this. The medium and long-term impact is therefore positive.

Sunlight/Daylight Availability (Shading):

- 11.4 The impact that the retained trees have on the enjoyment of the house and garden will be insignificant. The house will receive adequate levels of natural daylight. The garden will be naturally well lit with only a very small proportion of it being shaded at any particular time of day.

Build Practicability – Impact on RPA:

- 11.5 The retained trees can be adequately protected throughout development.

New Tree Planting

- 11.6 Eleven new trees are indicated on the TPP. These will more than compensate for the loss of trees G1.7—G1.9.
- 11.6.1 The key reason for planting trees is to provides a long-term and sustainable enhancement to the local landscape. In this (coastal) environment, slow growth can mean that it takes up to 20 years for new trees to make a notable visual impact. If G1.7—G1.9 were retained, it is highly likely that over this time frame they would decline to a state that they would be removed.
- 11.7 Resilience to diseases and disorders will be improved by increasing the range of species. I recommend three species including Monterey Cypress

(*Cupressus macrocarpa*), Monterey Pine (*Pinus radiata*) and Evergreen Oak (*Quercus ilex*).

- 11.8 A detailed planting specification can be provided in compliance with a planning condition. The most effective way of achieving this is by an amendment to the existing landscape proposals (drawing PCD/150/PL02) prepared by Patrick Collins Design.
- 11.9 The proposed new tree planting will have a significant positive impact over the medium and long-term.

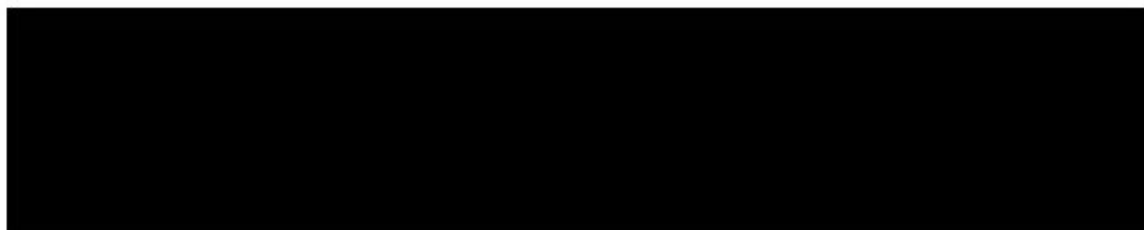
12 TREE PROTECTION PROPOSALS

- 12.1 The RPA and canopy of the key retained trees can be protected during development by establishing a Construction Exclusion Zone (CEZ), protected by way of tree protection fencing (TPF) as indicated on the TPP.
- 12.2 Based on the information provided to date, this report and TPP provide defined tree protection proposals (related to this design) which can be implemented without further specification.
- 12.3 The TPP defines the position of tree protection fencing which will be erected prior to the commencement of development and thereafter retained until completion. Please refer to Appendix D and E.

13 CONCLUSIONS

- 13.1 The removal of tree G1.7- G1.9 will have a short-term moderately negative impact. Whilst they are small trees, they do make a positive contribution to the landscape. The overall benefits that trees provide is measured over time and therefore the effect of their removal is somewhat mitigated by their poor arboricultural qualities.
- 13.2 The proposals provide eleven new trees which include a diversity of species. These new trees will have a significant positive impact on the landscape over the medium and long-term. This long-term benefit outweighs the short-term negative impact of losing the three trees proposed.
- 13.3 The retained trees can be adequately protected during development by standard tree protection measures indicated on the TPP.
- 13.4 Considering the effects of development over time, it is clear that the overall arboricultural impacts of the proposed are positive. Consequently, the proposal does not conflict with either local or national planning policies.

- 13.5 I recommend that the proposed tree planting and tree protection measures indicated on the tree protection plan are implemented. It would be reasonable for the LPA to enforce compliance by way of a planning condition.



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Evolve Tree Consultancy

I am a Chartered Arboriculturist and a professional member of the Arboricultural Association. I hold the Royal Forestry Society's Professional Diploma in Arboriculture. I have been working as a full-time, professional arboriculturist since 1998 and have experience in both the public and private sector.



The authority of this report ceases when any site conditions change or pruning or other works unspecified in the report are carried out 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 re-inspection or twelve months from the date of survey.

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

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.

Trunk 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).

Crown Spread: Measured in metres & taken at four cardinal points (N E S W).

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 establishing 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 a reasonable life expectancy.
	LM	Late-mature (Over-mature in the BS)	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
	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.

Category: A grade given in accordance with BS 5837:2012 - Tree Categories (see copy of Table 1 from BS 5837:2012 below).

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.

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

RPA (m²) - RPA Area in metres squared.

APPENDIX B
TREE SCHEDULE

Tag	Name	Ht	Trunk dia.	1 st Sig branch	N	E	S	W	Life Stage	Cat	Comments	Life Exp	Cond	Recommen dations	RPA R m	RPA A m ²
G1.1	Cupressus macrocarpa (Monterey Cypress)	5.5 (1.5)	500	0.5(E)	3	2	4	2	SM	B2	<p>Poor shape, form and condition.</p> <p>Very suppressed due to coastal exposure.</p> <p>Crown distorted due to group pressure.</p>	10+	Fair		6.0	112
										C1	<p>Stem divides below 1.5m.</p> <p>Multi-stemmed. Likely to be a former hedgerow with lapsed management.</p> <p>Landscape quality elevated due to collective visual benefits (reflected by B2 category).</p> <p>Poor quality tree compromises overall (hence additional C1 category).</p> <p>Diameter measured at base. Due to past management and suppression the stem diameter (basal or combined multiple stems) exaggerates the RPA required by the crown size.</p> <p>RPA's have been adjusted by (x 1/2) to reflect the moderate crown volume.</p> <p>Signs of early stage colonisation by Cypress Canker (<i>Seiridium cardinale</i>).</p>					





Tag	Name	Ht	Trunk dia.	1 st Sig branch	N	E	S	W	Life Stage	Cat	Comments	Life Exp	Cond	Recommendations	RPA R m	RPA A m ²
G1.2	Cupressus macrocarpa (Monterey Cypress)	8.5 (2)	680	0.5(E)	4	7	5	2	SM	B2	Comments as per 1.1 Included bark present in fork.	10+	Fair		8.1	209
										C1	Signs of early-stage colonisation by Cypress Canker (<i>Seiridium cardinale</i>).					
G1.3	Cupressus macrocarpa (Monterey Cypress)	7 (3)	670	0.5(E)	3	7	4	2	SM	B2	Comments as per 1.1 Included bark present in fork.	10+	Fair		8	203
											Signs of early-stage colonisation by Cypress Canker (<i>Seiridium cardinale</i>).					
G1.4	Cupressus macrocarpa (Monterey Cypress)	8.5 (4)	750	0.5(E)	2	7	4	2	SM	B2	Comments as per 1.1 Signs of early-stage colonisation by Cypress Canker (<i>Seiridium cardinale</i>).	10+	Fair		9.0	255
G1.5	Cupressus macrocarpa (Monterey Cypress)	6 (4)	630	0.5(E)	4	5	3	2	SM	B2	Comments as per 1.1 Signs of early-stage colonisation by Cypress Canker (<i>Seiridium cardinale</i>).	10+	Fair		7.5	179
G1.6	Cupressus macrocarpa (Monterey Cypress)	8.5 (3)	680	0.5(S)	2	4	7	1	SM	B2	Poor shape & form. Suppressed due to coastal exposure.	10+	Fair		8.1	209
										C1	Crown distorted due to group pressure. Stem divides below 1.5m.					

Tag	Name	Ht	Trunk dia.	1 st Sig branch	N	E	S	W	Life Stage	Cat	Comments	Life Exp	Cond	Recommendations	RPA R m	RPA A m ²
											Multi-stemmed. Likely to be a former hedgerow with lapsed management. Landscape quality elevated due to collective visual benefits (reflected by B2 category). Poor quality tree compromises overall quality (hence additional C1 category). Signs of early-stage colonisation by Cypress Canker (<i>Seiridium cardinale</i>).					
G1.7	Cupressus macrocarpa (Monterey Cypress)	10 (2)	1100	0.5(S)	5	7	6.5	4	SM	B2	Comments as per 1.6	10+	Fair		13.2	547
										C1	Signs of early stage colonisation by Cypress Canker (<i>Seiridium cardinale</i>).					
G1.8	Cupressus macrocarpa (Monterey Cypress)	7 (1.5)	450	0.5(S)	4	2	3	1	SM	B2	Heavily suppressed tree. Comments as per 1.6	10+	Poor		5.4	92
										C1	Signs of early stage colonisation by Cypress Canker (<i>Seiridium cardinale</i>).					
G1.9	Cupressus macrocarpa (Monterey Cypress)	8.5 (1)	800	0.5(S)	5	5	4.5	4	SM	B2	Comments as per 1.6	10+	Fair		9.6	289
										C1	Signs of early stage colonisation by Cypress Canker (<i>Seiridium cardinale</i>).					

Tag	Name	Ht	Trunk dia.	1 st Sig branch	N	E	S	W	Life Stage	Cat	Comments	Life Exp	Cond	Recommendations	RPA R m	RPA A m ²
G2.1	Cupressus macrocarpa (Monterey Cypress)	10 (3)	580	2(W)	6	6	6	6	SM	B2	Good specimen.	20+	Good		7.0	152
G2.2	Cupressus macrocarpa (Monterey Cypress)	10 (2)	620	2(NW)	6	6	6	6	SM	B2	Suppressed in lower south-west crown.	20+	Good		7.4	174
G2.3	Cupressus macrocarpa (Monterey Cypress)	11.5 (2)	750	2(NW)	6	6	6	1	SM	B2	2 x trees. Off-site.	20+	Good		9.0	255
S1	Tamarisk	4(1)	450		5	3	3	3	M	C2		10+	Fair		5.4	92

Table 1 from BS 5837:2012

Trees in relation to design, demolition & construction – Recommendations. Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
<p>Trees unsuitable for retention (see Note)</p> <p>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</p>	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low-quality trees suppressing adjacent trees of better quality <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve.</i></p>			<p>RED</p> 
	<p>1 Mainly arboricultural qualities</p>	<p>2 Mainly landscape qualities</p>	<p>3 Mainly cultural values, including conservation</p>	
<p>Trees to be considered for retention</p> <p>Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	<p>Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)</p>	<p>Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features</p>	<p>Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)</p>	<p>GREEN</p> 
<p>Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years</p>	<p>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</p>	<p>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</p>	<p>Trees with material conservation or other cultural value</p>	<p>BLUE</p> 
<p>Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm</p>	<p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories</p>	<p>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</p>	<p>Trees with no material conservation or other cultural value</p>	<p>GREY</p> 

Trees outside the site/property

Every landowner and manager has 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.

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.

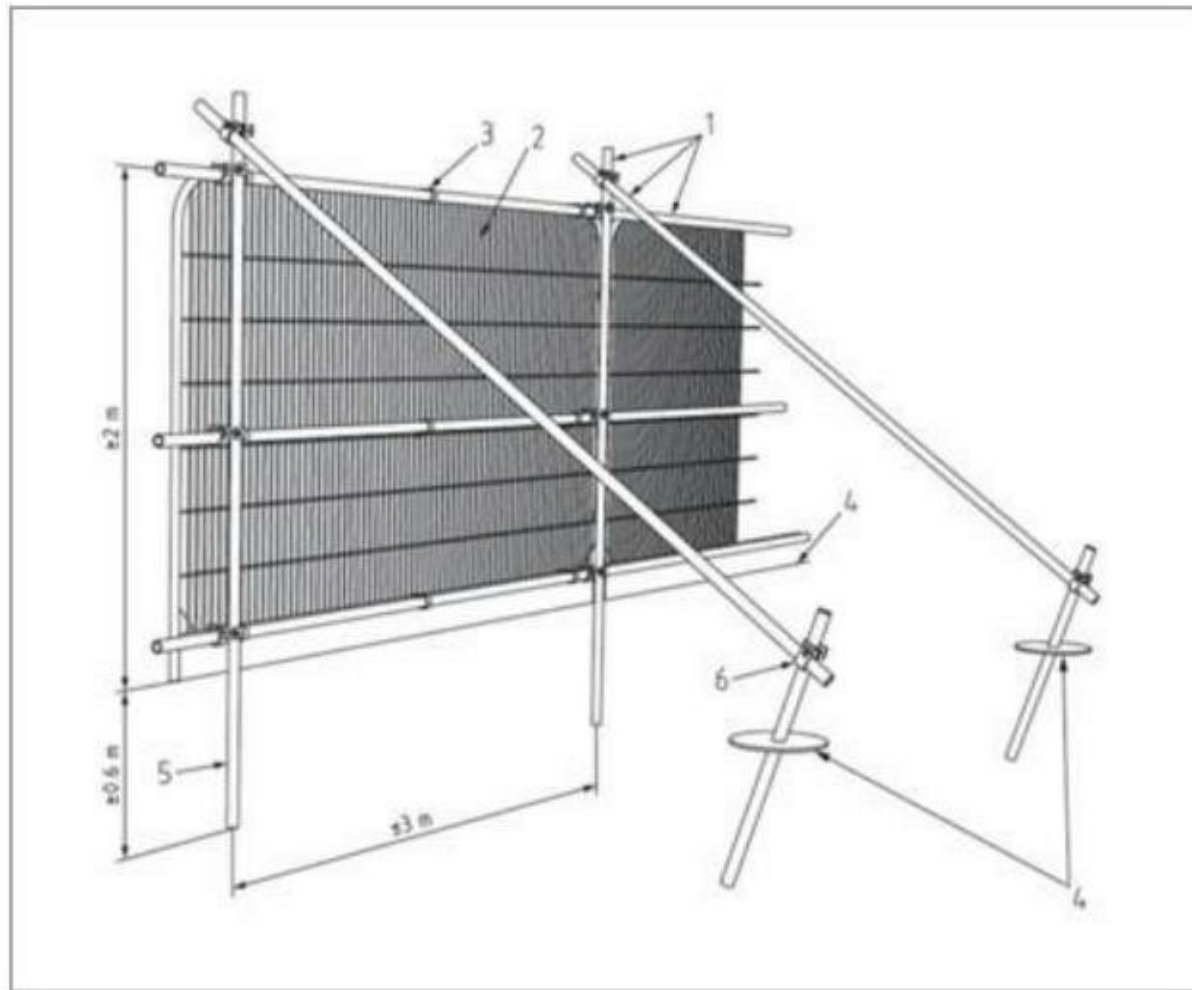
Other than works detailed within this method statement or approved in writing by the local planning authority, no works at all (including storage or dumping of materials) shall take place within the exclusion zones defined by the protective fencing.

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.



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
ARBORICULTURAL METHOD STATEMENT

No work may commence onsite and especially soil movement, stripping or stock piling may occur until the Construction Exclusion Zones have been established and protection measures implemented. This will remain in place and undisturbed until all construction activity has been finished.

Pre-commencement: A pre-commencement meeting shall be held on site prior to any construction works being undertaken. The methods of tree protection outlined in this statement shall be fully discussed at this meeting, so that all aspects of their implementation and sequencing are made clear to all parties. Any clarifications or modifications to this statement shall be recorded and circulated to all parties in writing. If appropriate, the tree surgery contractor will also attend this meeting.

The following Arboricultural Method Statement will provide the required protection for trees onsite and therefore meet the requirements or conditions imposed by the (LPA). The following sequence will be followed:

- Pre-commencement meeting.
- Tree removal.
- Erection of Tree Protection / Installation of Ground Protection Measures.
- Commencement of ground works / demolition.
- Repositioning of tree protection.
- Construction.
- Hard & soft landscaping (authorised access to Construction Exclusion Zones (CEZ)).
- Authorised removal of tree protection.
- Remedial tree surgery.

A copy of this Method Statement shall be supplied to all relevant site personnel who are working in proximity to retained trees and a register maintained in the site office to verify receipt.

Any variation to the method statement will need to be agreed with the local planning authority before commencing work.

This document is to be read in conjunction with the survey report. Any queries are to be referred to the arboriculturist.

The contractor will provide adequate training on the above for all relevant staff. This training will be carried out by or to the approval of a qualified arboricultural consultant. Any operatives undertaking work in the RPA/CEZ must be briefed using the method statement and supervised at all time by an arborist or supervisor experienced in working within the RPA.

All reasonable steps must be taken to ensure that no damage is done to the trunks or lower branches when using mechanical equipment such as excavators, cranes or aerial access platforms in the proximity of trees.

Tree Protection: The Construction Exclusion Zones shall be marked out by an Arboricultural Consultant and enforced by the erection of protective fencing. This protective fencing will be in compliance with the specification recommended in the British Standard 5837:2012 Figure 2 attached.

Once erected the Construction Exclusion Zone must be considered sacrosanct and off limits for any access or construction activity without the written consent of the designated arboricultural consultant. Affixed to every other panel or at 6 m centres will be all weather signs stating 'CONSTRUCTION EXCLUSION ZONE' --- KEEP OUT.

Timing of Fencing Operations: The TPF will need to be varied for the demolition and construction phases of the indicative plan.

The RPA will be fenced at its extremity until the day that the driveway is constructed and then specify that vehicles will not pass over the RPA until after the fill has been spread.

or;

The driveway construction will be complete prior to any other development upon the site and that the unprotected RPA should not be used for any activity associated with the development.

Tree surgery: Work in accordance with the recommendations for individual trees (as recorded in the Tree Survey Schedule) shall be undertaken either prior to all demolition/construction operations being started or at the post development stage. Prior to this surgery an updated Visual Tree Assessment will be made on the condition of the retained trees. Any amendments to the original recommendations to be recorded in a report and agreed with the manager or agent and the LPA tree officer.

Implementation of works: All tree works will be carried out to BS 3998 *Recommendations for Tree Work* and current best practice as modified by research.

Tree Removal: All Category 'U' trees and other trees agreed for removal will be felled. Shrubs and other plants will be cut back or removed as desired. Removal of trees shall be done with care to prevent damage to other specimens to be retained. Where necessary, trees will be removed in sections rather than felled from the ground to prevent them falling into and damaging the crowns of other trees.

Stumps: Stumps of any felled trees shall be removed/retained. Those that lie within the RPAs of trees to be retained shall be removed by grinding out; the remainder may be either ground or dug out.

Location of Site Office, Compound and Parking: The exact location of the office, compound and parking will be agreed in writing with the Local Planning Authority prior to commencement of any permitted development works.

Any proposed re-location of these items through the various phases of development will be agreed prior to re-siting with the Local Planning Authority.

On Site Storage of Spoil and Building Materials: Prior to and during all construction works on site, no spoil or construction materials will be stored within the RPA of any tree on, or adjacent to the site, even if the proposed development is to be within the RPA.

Levels: Other than for any specific exception as detailed at paragraph XX in Evolve TPP DATE & Reference, no alterations to soil levels within the RPA of retained trees will take place. However, if it is necessary for these to occur the consultant arborist must be contacted to assess and provide further advice as to how this may be achieved.

Storage: Areas for the storage of materials shall be outside the fenced Construction Exclusion Zones and be clearly marked. Oil, bitumen, diesel, and cement shall not be stored, mixed or discharged within 10 m of any trees. Areas for the storage or mixing of such materials shall be agreed at the pre-contract meeting and be clearly marked.

There will be no harmful works e.g. machinery movement, storage, cement mixing, cement washings etc within the RPA other than those specified in the method statement.

No notice boards or power or telephone cables shall be attached to any of the trees.

Fires will not be lit in a position where flames can extend WITHIN 5 m of foliage or branches and must take account of the size of the fire and the wind direction including changes in that direction.

As a matter of course all arboricultural matters will be resolved in consultation with and subject to the approval of the planning authority through their Arboricultural Officer.

Only once all construction works are completed can the protective fencing can be removed.

Method statement for removal of hard surfacing and buildings near to trees

An arboricultural consultant shall directly supervise all demolition and construction of building foundations and hard surfaces within Root Protection Areas.

Weather conditions will be assessed to ensure soil smearing or compaction does not occur. Wet weather conditions must be avoided when carrying out this work.

Under no circumstances is any machinery to drive into the RPA or the area identified as the CEZ.

The uptake of the existing surfacing and buildings should be carried out from outside the RPA and from within the footprint of the existing surfacing or building where within the RPA of a tree.

Hard surfacing areas near trees that require removal must be removed manually using appropriate tools and the debris removed from the excavated area. This must be planned so that the debris is not transported back over the recently excavated area. No vehicular equipment is to encroach within the recently excavated area.

OR

The bitumen surface will be broken up by a 360° Excavator no larger than 5 tons or a tractor mounted backhoe. A toothed bucket can be used to break up and lift the wearing course. Care must be taken not to disturb the underlying soils.

All vehicles will remain on the existing hard surface that is to be retained. The vehicle may need to be repositioned regularly in order to avoid damage to the existing soil structure.

The excavation of the material must not extend into the soil underneath. In practical terms the bucket of the excavator must be used so that the teeth are horizontal so that any disturbance of the underlying soil is kept to an absolute minimum. Where the surfacing is very thin and/or roots are very near the surface, the digging should be done manually.

The rubble must not be stockpiled within the RPA of the tree and must be exported without crossing the RPA.

Due care and planning must be taken to ensure that the operational arcs of excavators do not damage the retained trees.

Where new surfacing is to be installed, if the depth of the old surface is insufficient, the wearing surface may need to be higher than existing in order to accommodate the appropriate thickness. There may be a requirement for a geo-textile membrane to be laid on the soil surface, but this is an engineering matter dependent upon soil type. The separation is beneficial for root development.

Where the old surface is taken up and not replaced, the infill should be of good quality topsoil laid without compaction.

Once the hard surfacing is removed, suitable protective fencing is to be erected at the boundary of the Construction Exclusion Zone (CEZ).

After removal of the hard-surfacing Digging will proceed with hand tools only. Great care must be taken not to damage any roots that are encountered.

Any cuts to roots must be made perpendicular to the root leaving the smallest wound. Cuts are to be made with a sharp tool such as a pruning saw or secateurs to leave a clean surface with no ragged edges. The wounds are not to be treated with anti-wound product.

All roots greater than 25 millimetre in diameter are to be retained and worked around. Where clumps of smaller roots are encountered, they are to be retained. No roots greater than 25 millimetres in diameter are to be severed without the consent of the supervising arboriculturist.

Where excavations containing retained roots are to be left open clean hessian sacking is to be wrapped around the roots and kept moist.

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.



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