

Absolute Arboriculture
Maple Lodge
Brighton Road
Lower Beeding
West Sussex
RH13 6PS



Arboricultural Impact Assessment

Client: Mr Lindsay Shookhye

Location: Lingworth, Oathall Road, Haywards Heath, RH16 3EG

Date of inspection: May 2024













Inspector: Max Ferretti N.Dip Arb

Our reference: AIA/Lingworth/August24

1.1 Instructions received: I am instructed by Mr Lindsay Shookhye to inspect the significant trees at Lingworth, in accordance with British Standard 5837:2012 'Trees In relation to design, demolition and construction.

1.2 Terms of reference: To give recommendations and assess trees suitability for retention in relation to the development of the site. Where appropriate, to make preliminary management recommendations and identify any constraints that those trees worthy of retention may present in relation to development.

1.3 Documents supplied: The following plans were provided

 Lingworth PL_123_00 03.pdf 43 KB	 Lingworth Coach House - Existing Plans & Elevations.pdf 40 KB
 23_23_PL_102_00.pdf 177 KB	 23_23_PL_101_00.pdf 184 KB
 23_23_PL_100_00.pdf 284 KB	 Lingworth PL_129_00 04.pdf 220 KB
 Lingworth PL_124_00 03.pdf 42 KB	 Lingworth PL_134_00 03.pdf 49 KB
 Lingworth PL_130_00 03.pdf 2 MB	 P1495 - Lingworth - Haywoods Heath - Topo-Model (sheet 1).pdf 490 KB
 P1495 - Lingworth - Haywoods Heath - Elevations-Model (sheet 7).pdf 337 KB	
 P1495 - Lingworth - Haywoods Heath - Topo.pdf 265 KB	

1.4 Limitations of Use and Copyright:

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2.0 Scope and Method of Tree Survey:

2.1 The survey was carried out on 17th May 2024 by Max Ferretti N.Nip Arb

2.2 All trees that could, potentially, be affected by the proposed development were assessed in accordance with guidance detailed in British Standard 5837:2012 'Trees in relation to design demolition and construction - Recommendations' [BS5837].

2.3 The survey is based on a ground level tree assessment and examination of external features only – described as the 'Visual Tree Assessment' method expounded by Mattheck and Breloer (The Body Language of Trees, DoE booklet Research for Amenity Trees No.4, 1994).

- 2.4 In general, trees with a stem diameter less than 75mm at 1.5m above ground level have been excluded unless they have particular merit that warrants inclusion. In general, woody shrub species are not included. Tree stem diameters were measured in millimetres as near as possible to 1.5m above ground level. Root protection areas are calculated in accordance with BS5837.
- 2.5 The height of each tree was measured using a clinometer and crown radii were measured using a laser measure. Dimensions are given in metres.
- 2.6 Dimensions of trees within groups are given as an averaged figure unless otherwise stated. Dimensions of off-site trees are estimated unless full access is available.

3.0 Existing Trees

- 3.1 The details of 12 trees, 6 groups and two hedges were recorded. Off-site trees include those along the northern boundary along with 2 trees by the southern entrance of the site, of which ownership is unknown. Trees on the site are mostly positioned to the south and east.
- 3.2 The schedule shown as appendix 1, on the Arboricultural Impact Assessment provides the dimensions of those specimens included in the survey together with an assessment of their condition and life expectancy with specific comments regarding their condition where appropriate. In addition, each tree has been categorised according to its retention value following criteria provided in Table 1 of BS5837.
- 3.3 T001, T003, are off-site trees situated on the southern boundary. T009, T010 and T012 are off-site trees and situated to the east and north of the site respectively
- 3.4 There are two substantial groups from which trees overhang the site. G013 towards the north west and rear of the site and G019 at the north eastern entrance. Both groups are very close to the boundary and also the entrance drive leading up the Coach House.
- 3.5 T014 Plum, towards the west of the site, is not in good condition, with low vitality and a dead stem. Accordingly, I have graded the tree category U.
- 3.5 Off-site trees T001 and T003 are in good condition and have been graded B. for their merit and high life expectancy.
- 3.6 The remaining trees are a mixture of both moderate and low quality and measures to avoid damage should be taken where possible.
- 3.7 It is understood that the site is within The Heath Conservation Area, Ref; PR/00021/CA4.0

4 Recommended Tree Works

- 4.1 The guidance provided within BS5837 suggests that the tree survey schedule should include preliminary recommendations for works that should be carried out in the interests of good arboricultural practice.
- 4.2 In this case, T014 Plum which is in poor condition should be removed.
- 4.3 Any tree works should be carried out in accordance with British Standard 3998: 2010 'Tree work - Recommendations' and by a suitably qualified and insured tree contactor.
- 4.4 It is normally appropriate to re-plant where trees are to be removed. There is ample scope for re-planting within the site and new trees should be carefully selected, planted and well maintained throughout their early years.
- 4.5 Species carefully chosen to suit the site conditions.
Trees to be planted in accordance with current British standards (BS 8545 from Nursery to Independence in the Landscape).

5.0 Tree Constraints

- 5.1 The data collected during the tree survey data provides the basis for identifying the above ground or below ground constraints that may imposed on the site by those trees worthy of retention.
- 5.2 Below ground constraints are indicated by the root protection area [RPA] for each tree which is calculated in accordance with guidance provided within BS5837. The RPA is the minimum recommended area in square metres that ideally should be left undisturbed around each tree to be retained to ensure that damage to its roots or rooting environment is avoided.
- 5.3 In the case of open grown trees with an even, radial root distribution it would be normal for the boundaries of the RPA to be equidistant from the trunk of the tree. The actual disposition of tree roots can however be greatly affected by a range of site-specific factors such as existing building foundations and poor growing conditions under public highways. BS537 advises that these factors are to be assessed by the arboriculturist and appropriate adjustments to the siting of the RPA made, provided that it is not reduced in area.

6.0 Proposed Development

- 6.1 The proposed development includes the conversion of the existing dwelling and detached coach house into a nursing home including an extension of the main building to the south.

7.0 Impact of Proposed Development

- 7.1 To ensure that trees are not damaged by construction vehicles it will be necessary to crown lift the canopy's of T001, G002 as well as trees within G019, to a safe height and no higher than 6 meters from ground level.
- 7.2 T017 and T018 will require removing to facilitate the development.
- 7.3 G005 will require cutting back in order for development to begin. The removal of the most northerly trees within the group along with reducing crowns from trees to the north.
- 7.4 Ground protection will not be required where the existing ground within the RPA is already hard-surfaced. Therefore, it is usually preferable where practicable to retain any existing established hard surface within the RPA throughout the construction phases and replace/remove the surface with care near completion of the project (as required).
- 7.5 Any new boundary fencing to divide the developed land should be considered first and erected to contain and limit potential damage to the site.
- 7.6 Provided that the tree protection measures detailed in the accompanying Arboricultural Method Statement and shown on Tree Protection plan are implemented and strictly maintained, all retained trees should be adequately safeguarded from the effects of construction activity.

ARBORICULTURAL METHOD STATEMENT

Lingworth, Oathall Road, Haywards Heath, RH16 3EG

Important note: It is essential that this method statement, the tree protection plan and any other documents that relate to tree protection matters are passed to the project manager prior to the commencement of any works on site. All personnel involved in this project should be made aware of the content of these documents and the importance of implementing and maintaining a robust policy towards the protection of retained trees. Failure to adhere to approved tree protection measures is likely to result in a breach of planning conditions.

8 Introduction

- 8.1 This Arboricultural Method Statement [AMS] and the accompanying Tree Protection Plan [TPP] are prepared following the principles set out within British Standard 5837:2012 'Trees in relation to design, demolition and construction Recommendations' [BS5837] and current best practice.
- 8.2 This document should be read in conjunction with our Arboricultural Impact Assessment, reference AIA/Lingworth/August24 dated August 2024.

9 Arboricultural Supervision

- 9.1 The successful integration of any development within or adjacent to existing trees relies on those trees being properly protected throughout all periods of the development process, from site clearance or demolition through to post development landscaping and completion. To ensure that this is achieved, BS5837 advocates the retention of an appropriately qualified Arboriculturist to oversee all matters relating to trees for the duration of the construction period.
- 9.2 As part of this process the Arboriculturist shall attend a PRE-COMMENCEMENT site meeting with the Project Manager and the Site Manager prior to ANY works on site, including demolition or site clearance. At this meeting, the programme of works will be reviewed and an outline schedule of visits by the Arboriculturist will be determined and agreed.
- 9.3 Site visits by the Arboriculturist should coincide with tree-related key stages of the development and in particular:
 - Any preliminary arboricultural works or site clearance.
 - The installation of tree protection measures.
 - Any works within Root Protection Areas such as the removal of hard surfaces or installation of underground services or new hard surfaces.
 - Any change in site or project manager personnel.

- 9.4 The schedule may be subject to later review and may be influenced by unforeseen events or where there has been a failure in the maintenance of approved tree protection measures. The LPA shall be informed by phone, email or in writing of any changes, variations, or amendments.
- 9.5 Particular attention must be given to any works of any nature that have to be undertaken within construction exclusion zones (CEZ). These must be carried out under the direct supervision of the Arboriculturist.
- 9.6 The Arboriculturist should be available to attend any site meetings at the request of the LPA.
- 9.7 In addition, the Arboriculturist should be available in the event that any unexpected conflicts with trees arise.
- 9.8 The Arboriculturist should keep a written log of the results of all site inspections and note any changes to the schedule of site visits. Any contraventions of tree protection measures or other incident that may prejudice the well-being of retained trees shall be brought to the attention of the site manager in the form of a written report. Copies of the inspection log and any contravention reports will be available for inspection by the Local Planning Authority at all times.

10 Facilitation Tree Works

- 10.1 Prior to the commencement of any site clearance or construction works and to ensure that trees are not damaged by construction vehicles it will be necessary to crown lift the canopy's of T001, Horse chestnut, Group, G002 as well as trees within group G019, to a height no higher than 6 meters from ground level.
- 10.2 T017, Japanese maple and T018, Amelanchier will need removing to facilitate the development.
- 10.3 Group G005 will require cutting back in order for development to begin. The removal of the most northerly trees within the group, along with reducing crowns from trees to the north will be necessary and specifications are to be set out by the project arboriculturist.
- 10.4 For area where parking space had been designated, a cellular confinement system must be installed to mitigate damage to the roots of T015 Hom Oak. The RPA of T015 is a 'no dig' area and work must be supervised by the project arboriculturist.
- 10.5 No other tree works shall be undertaken without further consultation with the local planning authority.

11 Tree Protection Barriers

- 11.1 Tree protection barriers shall be installed prior to the commencement of any site clearance or construction works.
- 11.2 Vertical tree protection barriers shall be erected in the positions indicated on the Tree Protection Plan [TPP]. Barriers shall be formed from a system of 'heras' style weldmesh panels securely fixed to scaffold poles driven firmly into the ground and braced as illustrated on the TPP. These barriers demarcate the 'Construction Exclusion Zone' (CEZ), the areas adjacent to trees that shall be safeguarded from all forms of construction activity.

12 Site Access and Storage of Materials

- 12.1 There is scope for the temporary storage of materials on the existing driveway, parking areas and tennis court. No materials shall be stored within the construction exclusion zones (CEZ) or RPA indicated on the TPP.
- 12.2 Great care shall be taken to ensure that the booms of excavators and all machinery used in the delivery or movement of materials do not damage the crowns or stems of retained trees. All activities close to trees shall be carefully planned and controlled.
- 12.3 Particular care shall be taken to prevent the spillage of toxic chemicals such as cement and oils in any part of the site so that any future planting is not compromised by substances that may prejudice their establishment. All such substances shall be stored (and mixed where necessary) on robust plastic sheeting. Contaminated water from the washing of tools and equipment shall not be permitted to leach into the soils in or adjacent to the RPA or any area designated for future planting.

13 Site Clearance and Demolition

- 13.1 Excavations are to be carried out with great care to minimise disturbance to underlying soils. Excavations shall not extend into the soil or root zone underneath.
- 13.2 Any excavators used in these works shall be fitted with a grading bucket without 'teeth'. The bucket must be used so that the cutting edge is horizontal to minimise disturbance of the underlying soil.
- 13.3 In the event that tree roots are exposed during these works they shall be cut back cleanly using handsaw or secateurs. Great care shall be taken to avoid ripping or tearing roots back to towards the tree stem.

- 13.4 No materials shall be stockpiled on any area of soft landscaping.
- 13.5 Under no circumstances shall any machinery or vehicles operate or traverse across exposed soils within RPAs.

14 Excavations for Foundations

- 14.1 All excavations adjacent to the RPA's shall be carefully controlled to ensure the minimum of disturbance. Care shall be taken to avoid excavating further towards the trees than is absolutely necessary.
- 14.2 Great care shall be taken to avoid any disturbance to soils outside the footprint of the wall and foundations.
- 14.3 In the event that roots cross the excavation they shall be cut back cleanly using a hand saw or secateurs. Care shall be taken to ensure that roots do not tear back towards the tree stem.

15 Installation of New Underground Services

- 15.1 The installation of new underground services can present a particular risk of damage to trees. Even relatively shallow excavations, if carried out without appropriate care, can cause considerable damage to roots.
- 15.2 In this case, there is ample scope for all new services to be routed outside the RPAs of all trees to be retained.
- 15.3 In the event that changes to the routing of new services is required, the arboriculturist shall be consulted to ensure that trees remain unaffected.

16 Tree Protection Barriers and Ground Protection

Note: The style of tree protection barrier here is recommended in BS5837:2012

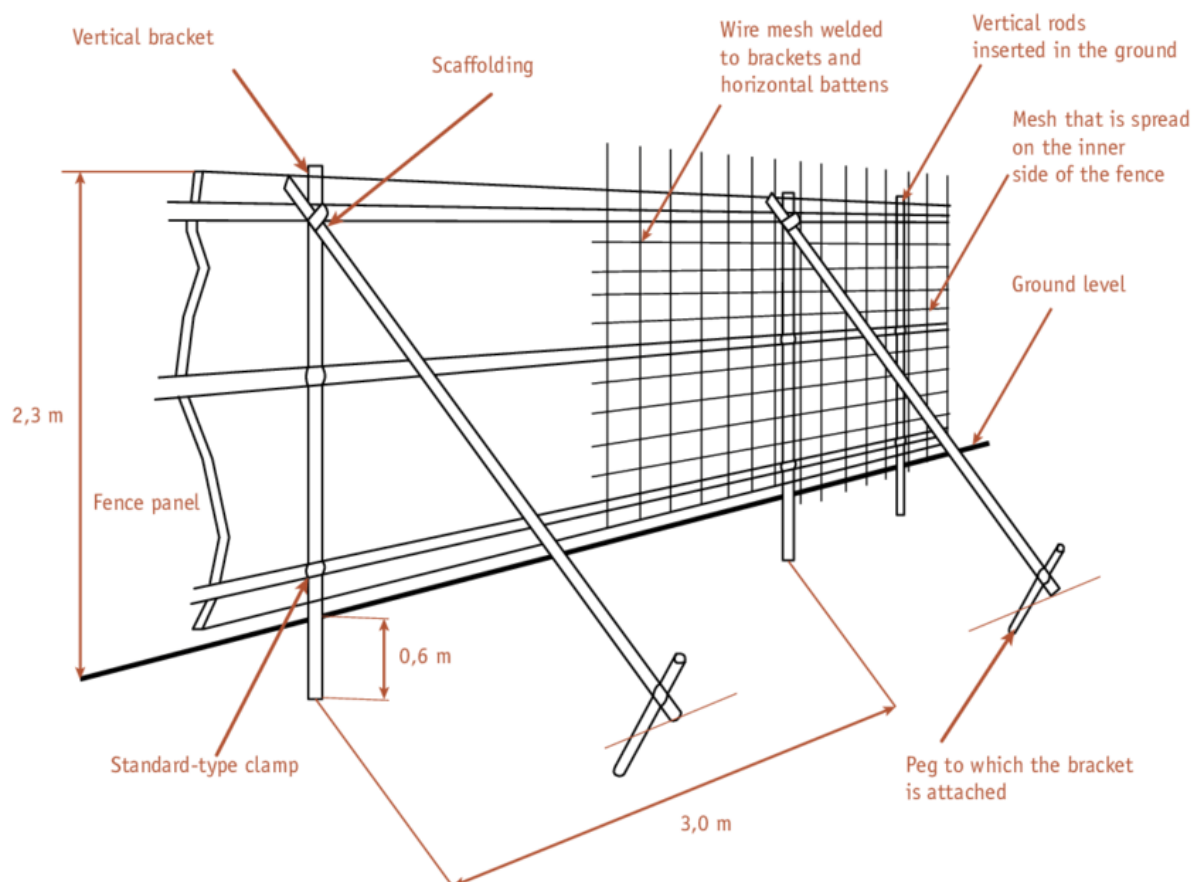
'Heras' weldmesh panels securely attached to scaffold poles driven firmly into ground and braced with supporting scaffold poles. Where fencing is in or near RPA's, base supports are to be used to prevent damaging any roots underneath.

17 Working area / Access

Ground boards such as 'EuroMat' or 'TuffTrak' (dependent upon loading), held together fixed with connection plates. Where access is for pedestrian or light machinery use only, scaffold boards or 18mm ply sheets may be used, these may need to be bolted together to add strength and to prevent movement. Existing ground for pedestrian access hollows should be filled with topsoil or woodchip. For vehicular / heavy machinery use or if prolonged access is required a 100-

150 mm bed of wood or bark chip should be laid underground boards
Geotextile membrane such as Terram 1000 as a separating layer.

Fig.1



18 Example of protective fencing signs

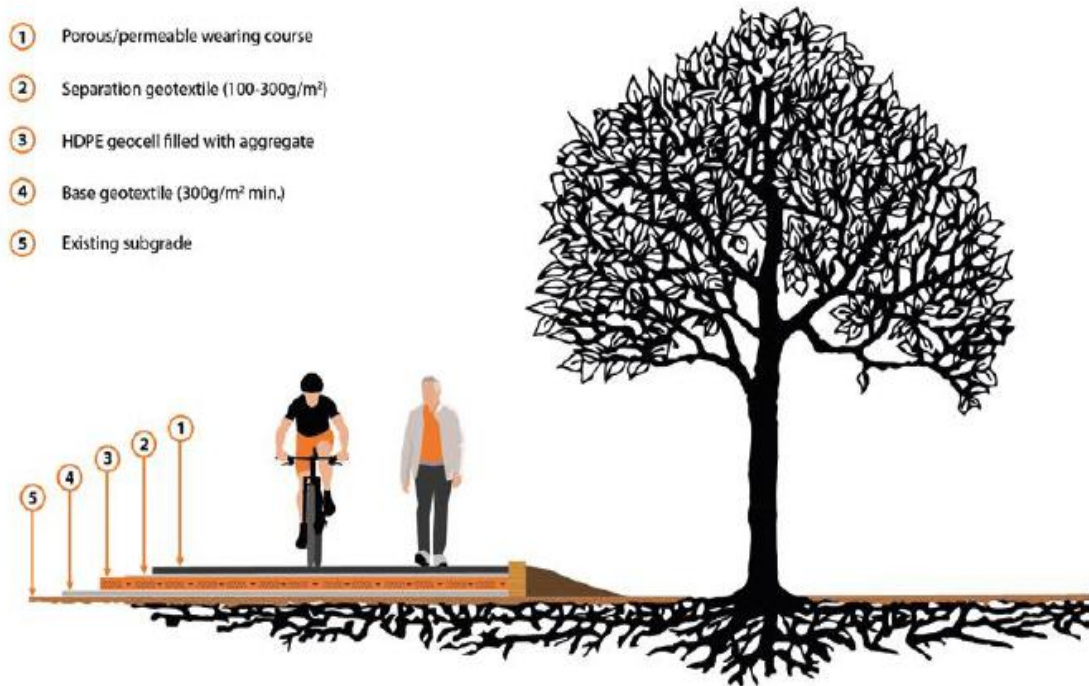
Signs such as these must be firmly secured onto each fence panel.

Fig.2



19 Example of cellular confinement system

Fig.3



Absolute Arboriculture - Shedule of trees

Site: Lingworth, Oathall Road, Haywards Heath, RH16 3EG

Date: May 2024

Ref: SOT-05-2024



Ref.	Species	Age	Measurements	Survey Notes	Retention Category	RPA	Physiological Condition	Recommendations
G002	Mixed species group	Early mature	Height (m): 7 Stem Dia (mm) 111 (ave) Spread (m): 4N, 2E, 4S, 2W Crown Clearance (m): 2.5	Group that overhangs entrance drive. Consists of Rhododendron and an off site Laburnum. Provide good screening	C	Area: 154 sq m.	Fair	
G005	Mixed species group	Early mature	Height (m): 13 Stem Diam(mm): 113 ave Spread (m): 9N, 4E, 3S, 4W	Mixed group of Birch, Willow, Laurel, Hazel and Pittosporum. Provide good screening	C	Area: 133 sq m.	Fair	
G006	Cypress group (<i>Cupressus sp.</i>)	Mature	Height (m): 10 2 stems (mm): 110,110 Spread (m): 5N, 5E, 1S, 2W Crown Clearance (m): 0	Good screening trees. Tallest tree in group has sparse upper crown. Ivy on stems	C	Area: 86 sq m.	Fair	
G007	Mixed species group	Semi mature	Height (m): 7 Stem Diam(mm): 80 Spread (m): 3N, 3E, 3S, 3W	Young group of Willow and Maple between boundary fence and tennis court	C	Area: 178 sq m.	Fair	
G013	Common beech group (<i>Fagus sylvatica</i>)	Mature	Height (m): 22 2 stems, avg.(mm): 360 Spread (m): 8N, 8E, 8S, 8W	Off site group with some trees suppressed by T12	B	Area: 229 sq m.	Fair	
G019	Mixed species group	Mature	Height (m): 15 Stem Diam(mm): 290 Spread (m): 7N, 7E, 7S, 7W Crown Clearance (m): 4 Life Stage: Mature	Off site group mainly, Maple, Robinia and Horse chestnut. Maple tree closest to property is part dead. Dead Robinia over gate entrance. crowns of remaining Robinia's look sparse	C	Area: 562 sq m.	Poor	Remove dead stems of Maple which overhang property. Remove dead Robinia over 17a entrance gate
H0020	Laurel cherry hedge (<i>Prunus laurocerasus</i>)	Semi mature	Height (m): 2 1 stems Spread (m): 1N, 1E, 1S, 1W Crown Clearance (m): 0	Hedge in raised planters	C	Area: 92 sq m.	Good	
H008	Cypress hedge (<i>Cupressus sp.</i>)	Mature	Height (m): 10 2 stems Spread (m): 1N, 1E, 1S, 1W	Good screening hedge	C	Area: 152 sq m.	Fair	

T001	Red horse chestnut (<i>Aesculus x carnea</i>)	Mature	Height (m): 13 Stem Diam(mm): 440 Spread (m): 4N, 6E, 2S, 5W	Off site tree. Overhangs entrance drive. Branches in contact with utility line to north. Ivy on stem and branches. Root loss near base to north and east	B	Radius: 5.3m. Area: 88 sq m.	Fair	Consider cutting back to ensure clearance from utility line
T003	Copper beech (<i>Fagus sylvatica purpurea</i>)	Mature	Height (m): 20 Stem Diam(mm): 660 Spread (m): 9N, 7E, 9S, 6W Crown Clearance (m): 4	Off site tree	B	Radius: 7.9m. Area: 196 sq m.	Fair	
T004	Laburnum (<i>Laburnum sp.</i>)	Mature	Height (m): 8 Stem Diam(mm): 220 Spread (m): 6N, 4E, 1S, 4W Crown Clearance (m): 3	Suppressed by T3 and leans north. Overhangs drive. Branches touching utility line to north. Ivy on stem	C	Radius: 2.6m. Area: 21 sq m.	Poor	Consider cutting back to ensure clearance from utility line
T009	Oak (<i>Quercus sp.</i>)	Mature	Height (m): 21 Stem Diam(mm): 600 Spread (m): 10N, 10E, 10S, 11W Crown Clearance (m): 3	Off site tree. Some moderate deadwood	B	Radius: 7.2m. Area: 163 sq m.	Fair	
T010	Horse chestnut (<i>Aesculus hippocastanum</i>)	Mature	Height (m): 22 Stem Diam(mm): 980 Spread (m): 8N, 8E, 8S, 8W Crown Clearance (m): 2	Off site tree. Divides into 3 stems at 3m from ground level. Some minor deadwood present	B	Radius: 11.8m. Area: 437 sq m.	Fair	
T011	Cypress (<i>Cupressus sp.</i>)	Early mature	Height (m): 12 Stem Diam(mm): 240 Spread (m): 2N, 2E, 2S, 2W	Branches in contact with property	C	Radius: 2.9m. Area: 26 sq m.	Fair	Consider cutting back to ensure clearance from property
T012	Monterey cypress (<i>Cupressus macrocarpa</i>)	Mature	Height (m): 22 Stem Diam(mm): 530 Spread (m): 4N, 3E, 5S, 3W Crown Clearance (m): 4	Off site tree	C	Radius: 6.4m. Area: 129 sq m.	Fair	
T014	Plum (<i>Prunus domestica</i>)	Mature	Height (m): 4 2 stems, avg.(mm): 130 Spread (m): 3N, 3E, 3S, 3W Crown Clearance (m): 1	Overall sparse, dead stem to west	U	No RPA due to Retention Category of U.	Poor	Consider felling
T015	Holm oak (<i>Quercus ilex</i>)	Early mature	Height (m): 6 Stem Diam(mm): 250 Spread (m): 3N, 3E, 3S, 3W	Branches in contact with tennis court fence	C	Radius: 3.0m. Area: 28 sq m.	Fair	Consider cutting back to give clearance from fence
T016	Portuguese laurel (<i>Prunus lusitanica</i>)	Early mature	Height (m): 5 Stem Diam(mm): 180 Spread (m): 1N, 1E, 1S, 1W	Sparse crown. Close to oil tank. Branches in contact with fence. Suppressed by T15	C	Radius: 2.2m. Area: 15 sq m.	Poor	Consider cutting back to give clearance from fence
T017	Japanese maple (<i>Acer palmatum</i>)	Mature	Height (m): 5 3 stems (mm): 130,130,130 Spread (m): 1N, 4E, 3S, 1W	Situated by pond. Suppressed by T18. Some cavities from branch loss near base	C	Radius: 2.7m. Area: 23 sq m.	Fair	
T018	Serviceberry (<i>Amelanchier laevis</i>)	Mature	Height (m): 8 3 stems (mm): 120,120,120 Spread (m): 5N, 5E, 2S, 4W	Bias north, branches touching property	C	Radius: 2.5m. Area: 20 sq m.	Fair	Consider cutting back to give clearance from property

Key

All dimensions in metres unless otherwise stated. Dimensions of trees growing outside the site may be estimated.

Age categories: Y=Young, SM= Semi-Mature, EM=Early Mature, M=Mature, LM=Late Mature, V=Veteran.

BS grade: A=40 year life expectancy, B=20 year life expectancy, C=10 year life expectancy, U=trees that cannot realistically be retained for longer than 10 years

Root protection areas (RPA) calculated following guidance provided in BS5837:2012. *Stem diameters of multi-stem trees are calculated in accordance with BS5837 section 4.6. Alternative calculation of 15 times stem diameter used for veteran trees ▲

This report has been prepared by Max Ferretti N.Dip Arb

Signed:

Mferretti

Max Ferretti N.Dip Arb, TechArborA
T/A Absolute Arboriculture
Date: 2nd September 2024

