

ARBORICULTURAL REPORT

AT: 24 Weir Road. KT16 8NE



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SUMMARY

Tree Removals

- 1 x individual 'C' grade tree is to be removed. This tree has had significant and heavy reduction pruning to combat the multiple weak unions within the main structural parts of the crown. This pruning has significantly reduced the current landscape value of the tree and will result in repeat reduction works in up-coming years increasing the likelihood of decay at the pruning points potentially impacting on its long term retention.
- A replacement tree sized 18-20 that is of the same species and defect free is to be planted within the confines of the rear garden to mitigate the loss of the removed tree.
- No trees of high or moderate value are to be removed
- 1 x tree covered by a Tree Preservation Order are to be removed
- No veteran or aged trees are to be removed

Pruning

- None.

Root Protection Area (RPA) incursions

- There are no root protection area incursions by proposed structures and hard surfacing within the RPAs of retained trees.

Other considerations

- The proposals comply with tree related aspects of national and local planning policy and guidance.
- The potential impacts on trees are considered to be **low**.
- The appended scheme of Tree Protection demonstrates that the proposals can be constructed without causing significant harm to trees identified for retention.
- Demolition will take place with tree protection in place that will protect the trees during this process.
- Construction will be carried out outside of the RPAs of retained and protected trees.
- Mitigation planting: planting of a replacement tree (Ginkgo Biloba) within the confines of the rear garden with a high quality defect free replacement tree sized 18-20cm.

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Table 1: Key Terms and Abbreviations

Arboricultural Impacts Assessment (AIA)	An assessment of the arboricultural impact(s) of the specific proposal on a given area
Arboricultural Method Statement (AMS)	Methodology for the implementation of any aspect of development that is within the root protection area, or has the potential to result in loss of or damage to a tree to be retained
Arboriculturist	Person who has, through relevant education, training and experience, gained expertise in the field of trees in relation to construction.
Arboricultural consultant	Arboriculturist instructed by the Project Manager to oversee the retention and protection of trees adjacent to the development site.
British Standard 5837 (2012): <i>Trees in relation to design, demolition and construction – recommendations</i>	British Standard document outlining best practice and guidelines for the arboricultural and construction industry in relation to developments.
British Standard 3998 (2010): <i>Tree work – Recommendations</i>	British Standard document outlining best practice for Tree Works to the arboricultural industry.
British Standard 8545 (2014): <i>Trees from nursery to independence in the landscape – Recommendations</i>	British Standard document to assist people involved in planning, designing, resourcing, producing, planting and managing new trees in the landscape.
Construction	Site based operations with the potential to affect existing trees
Root Protection Area (RPA)	Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability, and where the protection of the roots and soil structure is treated as a priority.
Service(s)	Any above or below ground structure or apparatus required for utility provision e.g. drainage, gas supply, water, ground source heat pumps, soak-aways, CCTV, telecommunications, water, electric etc.
Structure	Manufactured object such as a building, carriageway, path, wall, Service run, and built or excavated earthworks.
Tree Constraints Plan (TCP)	Scale drawing, informed by descriptive text where necessary, showing the developable area and tree constraints.
Tree protection Plan (TPP)	Scale drawing, informed by descriptive text where necessary, based upon the finalized proposals, showing the trees for retention and illustrating the tree and landscape protection measures.
Veteran tree	Tree that, by recognised criteria, 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.

1 Introduction

1.1 Site details

1.2 26 Weir Road, Chertsey, Surrey. KT16 8NE

1.3 Proposal

1.3.1 *'Demolition of existing garage and construction of an extension extending beyond the back of the existing garage footprint.'*

1.4 Instruction

1.4.1 J. A. Consulting has been instructed by Mr David Phillips to survey the trees growing on or immediately adjacent to this site in accordance with British Standard BS 5837 (2012): *Trees in relation to design, demolition and construction — Recommendations*, to assess the impacts of the proposals on the surveyed trees and to provide a report in support of a planning application to the Runnymede Borough Council (RBC).

1.5 Scope of report

1.5.1 This report and the accompanying appendices reflect the scope of the instructions, as set out above.

2 Limitations of the report

2.1 Limitations

2.1.1 This report and the appended plans have been written up based on site visits, utilisation of tree data capture software, and information that has been provided by third parties (e.g. architect's plans).

2.1.2 J. A. Consulting cannot guarantee the accuracies of information provided by third parties and shall not be held liable for any issues that arise from any discrepancies within or between those items.

2.1.3 Trees are dynamic organisms which undergo structural and physiological change as they continue to grow, age, and in response to changes in their local environment; therefore the findings of the tree survey cannot be fully relied upon after any significant changes to the environments of the trees; which includes (but not limited to) construction pressures such as: soil compaction, changes to soil levels where roots are present, changes to drainage patterns, damage to tree parts or significant weather events (e.g. unusually strong winds).

2.1.4 A full hazard assessment of the trees (including assessment of decay or their defects) has not been undertaken as part of this survey as it is considered beyond the scope of this report. Any obvious hazards and defects have been identified where relevant in the tree survey schedule; which may also recommend remedial works.

2.1.5 Trees located beyond the constraints of the identified area affected by the development or trees below 75mm in diameter as measured at 1.5m from ground level, are not ordinarily included.

2.1.6 Any works to trees that are outside of the legal boundaries of the owner would be subject (where relevant by law, statute and common) to the owner's permission or legal right of entry to mitigate a legitimate health and safety concern.

2.1.7 Detailed ecological considerations are also beyond the scope of this report. UK and European wildlife legislation may affect the timing and even prohibit the enhancement of works and operations described in this report. Most of the information regarding wildlife can be found in the Wildlife and Countryside Act 1981 (as amended). This includes information of wild birds, bats, badgers, some insects and red data species. An ecological report is provided as part of this application.

3 Planning considerations

3.1 The Town and Country Planning ACT (1990)

3.1.1 Section 197 of the Town and Country Planning Act (TCPA, 1990) places an express duty on the Local Planning Authority (LPA), when granting planning permission, to ensure whenever appropriate that adequate conditions are imposed to secure the preservation or planting of trees, and that any necessary tree preservation orders (TPOs) are made under section 198 of the Act (DCLG, 2006).

3.1.2 The potential impacts of development on trees, whether statutorily protected (e.g. by a TPO or by their inclusion within a conservation area) or not, is a material consideration that is taken into account in dealing with planning applications.

3.1.3 The presence of a TPO or a conservation area does not mean that the Local Planning Authority will not agree to trees being removed or pruned as part of the proposals. However, there might be a greater preference to retain and protect those trees that are covered. Furthermore, the authority's consent is not required for carrying out work on trees subject to a TPO or within a conservation area so far as such work is necessary to implement a full planning permission.

3.2 The National Planning Policy Framework

3.2.1 Section 11 (*Conserving and enhancing the natural environment*) of The National Planning Policy Framework (NPPF, 2012) states that: *'planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.'*

3.3 Local plans and policies in relation to trees

3.3.1 **Runnymede Borough Council (RBC):** Trees, Woodlands and Hedgerows SPG July 2003

- *The retention, enhancement and management of the Borough's stock of attractive trees, woodlands and hedges will be promoted through the planning and development process. The Borough Council will make Tree Preservation Orders to protect trees, or groups of trees, with significant local amenity value that are in good health.*
- *In order to satisfy the strategic objectives set out above and comply with the Wildlife & Countryside Act 1981 and the Conservation Regulations 1994, the Borough Council will restrict the removal of protected trees unless:*
 - *There is clear justification for their removal; and*
 - *Appropriate provision is made for replacement planting.*

3.3.2 **Planning Validation Checklist:** For all applications where trees might be affected, the application has to be accompanied by the following information:

- tree survey including root protection areas (RPAs)
- tree retention/removal plan
- tree protection plan
- details of retained trees with RPA's on the proposed layout
- arboricultural impact assessment

4 The constraints of trees (general caveats)

4.1 Site layout design

4.1.1 Constraints imposed by trees both above and below ground have been used to inform the site layout design, although it is recognised that the competing needs of development mean that trees are only one factor requiring consideration.

4.2 The rooting environment

4.2.1 The Root Protection Area (RPA) is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. The RPA is initially shown as a circle, the shape (but not size of area) may be adjusted to reflect physical constraints or topographical features limiting root activity.

4.2.2 Consideration should also be given to NHBC Standards Chapter 4.2 in regards to technical requirements and recommendations (for foundations) when building near trees, hedgerows and shrubs, particularly in shrinkable clay soils.

4.3 Tree parts

4.3.1 Surface and buttress roots, the stem, stems and branches of retained trees are all direct constraints on proposed structures and services as well as on working and access space. Care will be needed to make sure that any branch pruning is not excessive and that there is enough space for future canopy growth.

4.4 Future pressure for removal

4.4.1 The relationship of buildings to large trees can cause apprehension to occupiers or users of nearby buildings or spaces, resulting in pressure for the removal of the trees. Buildings and other structures should be sited allowing adequate space for a tree's natural development, with due consideration given to its predicted height and canopy spread.

4.4.2 In this instance the relationship of the proposed footprint of the build does not cause concern in relation to retained trees. T1 is highlighted for removal.

4.5 Tree retention & removal

4.5.1 **Retention:** Trees can offer many benefits, including the provision of visual amenity, softening or complementing the effect of the built environment, and adding maturity and sales value to new residential developments (CABE, 2005). Trees make places more comfortable in tangible ways by contributing screening and shade, reducing wind speed and

turbulence, intercepting snow and rainfall, and reducing glare. With the exception of one tree, all other trees are to be retained.

4.5.2 Removal: Consideration should be given to avoid misplaced tree retention; attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction. Likewise, re-development can provide an opportunity to replace individual trees (usually those with limited potential) with species / specimens that are more suited to the existing or proposed setting; thereby providing a basis for long-term tree cover that can co-exist harmoniously within the site. Due consideration to current and future size of retained trees has been duly given.

5 Tree survey and baseline data; methodology

5.1 Survey method

5.1.1 The trees were inspected from ground level using widely accepted Visual Tree Assessment (VTA) methodology (Lonsdale. D., 1999) (Mattheck. C & Breloer. H, 1994) and in accordance with B.S 5837 (2012).

5.1.2 Their details are found in the appended tree survey schedule (TSS).

5.1.3 The positions of the trees are believed to be accurate, as they have been supplied in topographical format following a full site survey. Due to the locations of the proposed building and the distances at which the retained trees are to be found, a high degree of confidence can be assumed that damage from retained trees will be unlikely, especially when following guidance in BRE: 4.2.

5.1.4 Climbed inspections were not undertaken.

5.1.5 No samples of soil, tree tissue, suspected pests and diseases or pathogens were taken during the tree survey.

5.1.6 The heights of trees were measured with the aid of a digital clinometer and crown spreads were measured using a digital measuring device.

5.1.7 Stem diameters were measured using a diameter tape; single stemmed trees were measured at 1.5m from ground level. Diameters of other commonly encountered tree stems were measured in accordance with B.S 5837 (2012)¹.

5.1.8 Photographs taken on site were done so using a digital camera.

5.1.9 Tools used when appraising trees were a diameter tape, binoculars, digital measuring devices, and where appropriate, metal probe, trowel, and nylon mallet.

5.2 Baseline data & design development

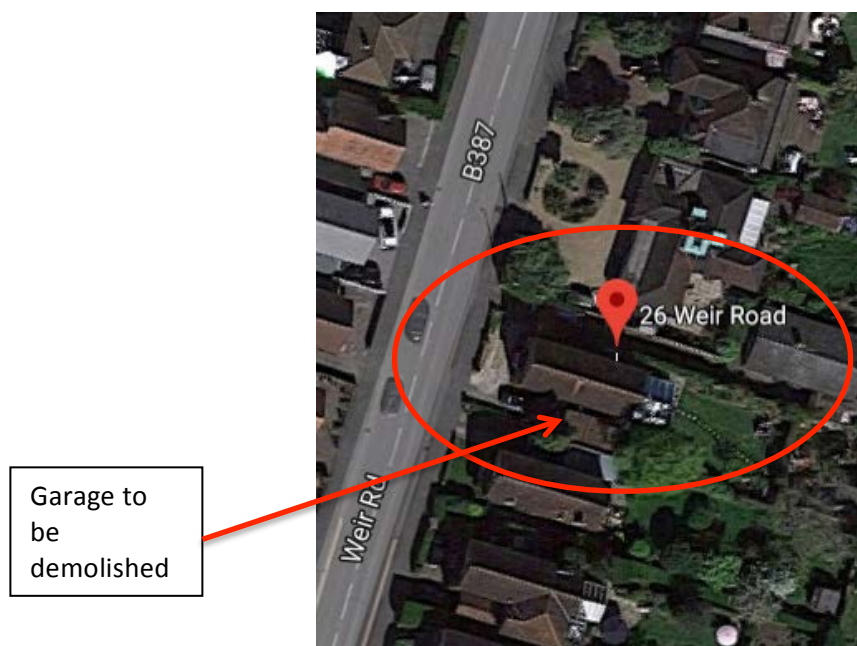
- The trees locations can be found on the appended Tree Survey Plan (TSP)
- Details of the trees can be found within the appended Tree Survey Schedule (TSS)
- Above and below ground tree constraints were provided within a Tree Constraints Plan (TCP) that is used to guide the proposed development.
- An overlay of the proposals onto the TCP allows an assessment of the arboricultural impacts; which is shown on the appended Arboricultural Impacts Assessment Plans (AIAPs) and discussed further within this report.
- Recommended tree removals / retention, replacement planting and required pruning are shown on the appended AIAPs or on the Tree Protection Plan (TPP).
- A scheme of tree protection is shown within the appended Arboricultural Method Statement (AMS) and TPP.

¹ Annex C; figures C.1b) to C.1f).

6 The site

6.1 Surrounding area and site description

6.1.1 The Property is located East of Chertsey within a residential area.



6.1.2 The proposed extension of the existing property, as shown indicatively by the blue lines on the image below.



6.1.3 The immediately surrounding area consists of:

1. Detached properties border the property on both sides of the road with trees of varying age classes. Properties are accessed by their own driveways that enter the front gardens from Weir Road. The properties are located within the front third, leaving large rear gardens.

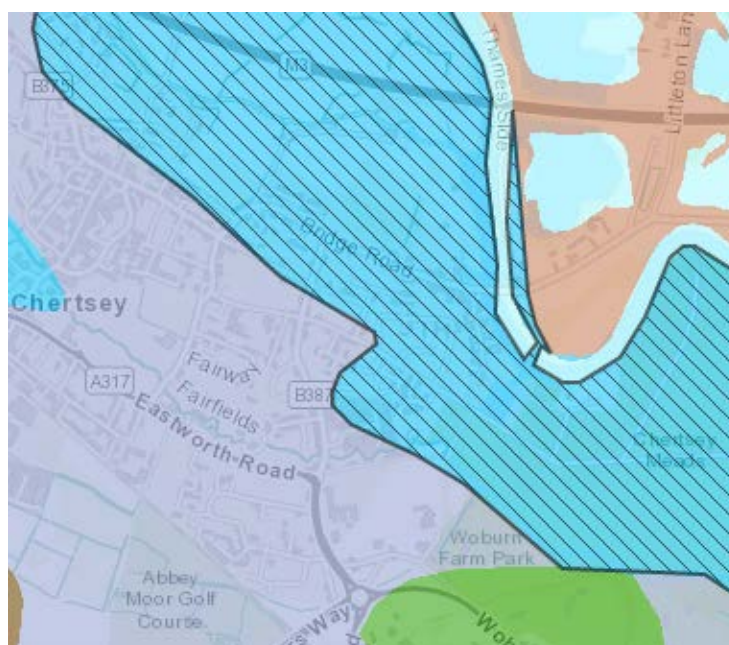
6.1.4 In general the tree cover in the local area is of predominantly early/mature trees. In

general these are in good health and well looked after. The land is generally level throughout.

6.2 Soil survey

6.2.1 Soil survey information has not been provided. However, a desktop study using the Landis online interactive map (Landis, 2015) shows that the area has:

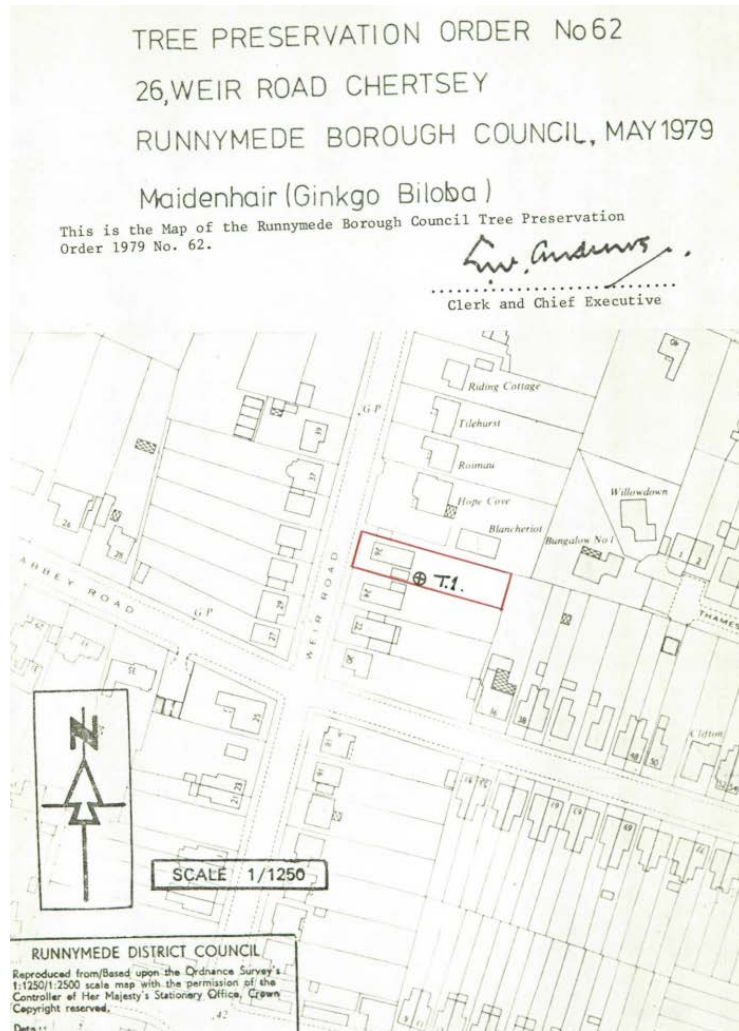
- *Soilscape 20: Loamy and clayey floodplain soils with naturally high groundwater*
- *Texture: 'Loamy & clayey'*



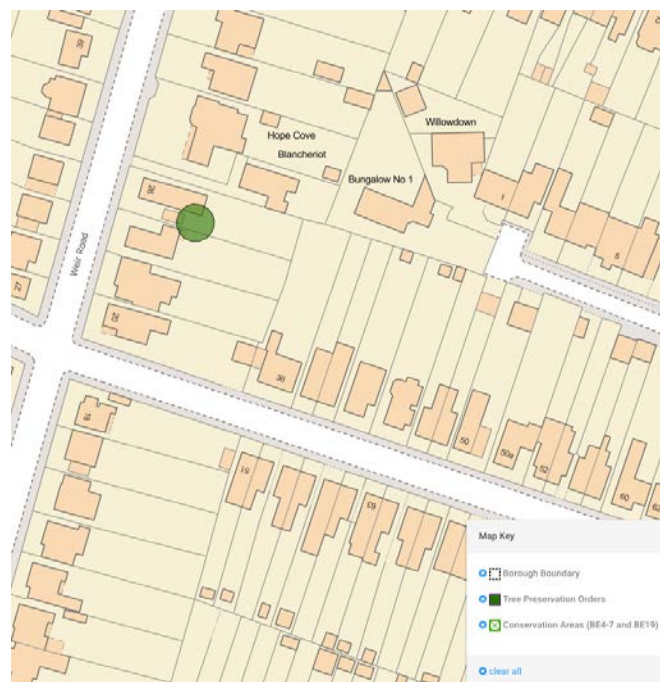
6.3 Statutory controls

6.3.1 The RBC mapping system showing TPOs and conservation areas did show that the land is the subject of a TPO No.62 placed on the trees in August 1979.

6.3.2 The property does not sit within a conservation area.



Extract from RBC online TPO list



Extract from RBC online Mapping system showing TPO'd tree

7 The trees

7.1.1 A total of 1 x individual trees and 0 x groups of trees have been included in the survey; their details are found within the appended tree survey schedule (TSS) and their locations are shown on the appended plans. The trees have been categorised as set out in BS 5837 (2012); a summary of the categorised trees can be found at **Table 2** (below).

Table 2: Summary of tree categories		
Tree categories	Individuals	Groups / hedges
A	-	-
B	1	-
C	-	-
U	-	-
Total	1	-
Category A: of high quality with an estimated remaining life expectancy of at least 40 years Category B: of moderate quality with an estimated remaining life expectancy of at least 20 years Category C: of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm Category U: in such a condition that they cannot realistically be retained for longer than 10 years		

7.2 Photographic guide to the trees and the Plots

7.2.1 Below and overleaf are photographs showing views of the tree and the faults within the structure, as well as the pruning recently conducted to compensate for the faults significantly altering the overall view and landscape quality of the tree.



Photograph looking West of T1 showing the heavy nature of pruning to counter the poor unions



Photograph looking South showing the poor union between the two main structural scaffolds

8 Arboricultural impacts

8.1 Assessment methodology

8.1.1 A Tree Constraints Plan (TCP) showing the constraints of the trees was used to give guidance to the design; the appended Arboricultural Impact Assessment Plans (AIAPs) are overlays of the proposed layouts onto the TCP, the arboricultural impacts are shown on the AIAPs and discussed further below and overleaf.

8.2 Trees to be removed

8.2.1 To facilitate the proposed buildings; 1 x individual tree is to be removed, (see **Table 3** below).

Table 3: Trees to be removed		
Tree no.	Name	Notes
T1	Ginkgo	Tree has been recently heavily pruned to try to counter the tight unions at 2.4m and 4m. Fence 1m to the south slabs to the north and garage within 1.5m of base

8.2.2 Extracts from the tree survey schedule for these trees are shown at **Table 4** (below).

Table 4: Extracts from the tree survey schedule for trees to be removed										
Tree no.	Name	Height (m)	Diameter (mm)	Age	Physiology	Structure	Value	ULE	Comments	Category
1	Ginkgo	11	640	M	Fair	Fair	Moderate	10+	Tree has been recently heavily pruned to try to counter the tight unions at 2.4m and 4m. Fence 1m to the south slabs to the north and garage within 1.5m of base	C1

8.2.3 One 'C' grade tree is to be removed. This tree has multiple tight unions within the crown and has recently been heavily reduced in order to prevent failure of the structural weaknesses present, reducing the landscape value of the tree considerably. There is a major structural weakness in the lower main structural sections of the tree and at 2m and 4m and further up the crown on the north and western sections.

8.2.4 No other trees, groups or hedges will need to be removed.

8.2.5 1 tree covered by a TPO is to be removed and a replacement tree of the same species, sized 18-20 cm to be planted within the confines of the rear garden.

8.2.6 No moderate or high value trees are to be removed.

8.2.7 No veteran or aged trees are to be removed.

8.3 Trees to be pruned

8.3.1 No trees require pruning to facilitate the proposed structures.

8.3.2 Tree removal and pruning will need to be carried out in accordance with British Standard 3998 (2010): *Tree work – Recommendations*.

8.4 Root Protection Area (RPA) incursions

8.4.1 There are no root protection area incursions.

Table 5: RPA incursions				
Tree no.	Species	Incursion by	% incursion	Mitigation
-	-	-	-	-

8.5 RPAs: other considerations

8.5.1 Plans detailing proposed services (such as gas or electric supplies) have not been provided; however, there is adequate space outside of RPAs to allow proposed services to meet with existing service routes.

8.5.2 It is understood at this time however, that services will be joined to existing services from the property.

8.6 Shading

8.6.1 Due to the nature of the site, tree locations and the nature of the build, shading is not considered issue and is considered not to be a future issue.

8.7 Spatial relationship to trees covered by the TPO

8.7.1 None as tree is proposed to be removed and replaced. The replacement tree will be planted within the confines of the rear garden in a location that will not impact on its long-term retention or have a need to be pruned as a result of this proposal.

8.8 Spatial relationship to other trees

8.8.1 The distance of the build from the trees provides sufficient space without impacting of the long-term health of the trees or a need to prune the canopies in the near future other than for the trees own health reasons.

8.9 In relation to relevant national and local planning policy and guidance

8.9.1 **The National Planning Policy Framework:** There are no aged or veteran trees that will be adversely affected by the proposals and it is understood that there are no ancient woodland designations on the site; therefore the proposed development is in accordance with section 11 of the National Planning Policy Framework.

8.9.2 **Runnymede Borough Council (RBC):** Trees, Woodlands and Hedgerows SPG July 2003

- *The retention, enhancement and management of the Borough's stock of attractive trees, woodlands and hedges will be promoted through the planning and development process. The Borough Council will make Tree Preservation Orders to protect trees, or groups of trees, with significant local amenity value that are in good health.*

- *In order to satisfy the strategic objectives set out above and comply with the Wildlife & Countryside Act 1981 and the Conservation Regulations 1994, the Borough Council will restrict the removal of protected trees unless:*
- *There is clear justification for their removal; and*
- *Appropriate provision is made for replacement planting.*

8.9.3 The proposal fits within the above as the tree has defects that have been recognised by the authority and significant pruning authorised to the tree.

8.9.4 A replacement tree has been proposed to mitigate the loss of T1 and in order to preserve the long term future of tree coverage within the area by planting a defect tree of significant size and of high quality.

8.10 Conclusions

- No trees of high value are to be removed.
- 1 tree covered by a Tree Preservation Order is to be removed. This tree has tight unions of the type known for failure, significant crown reduction has been undertaken to retain the tree. However, this has significantly reduced the landscape value of the tree and will require regular on-going maintenance from this date onwards which is likely to lead to decay within the pruning points further reducing the trees landscape value.
- A replacement tree sized 18-20 that is of the same species and defect free is to be planted within the confines of the rear garden to mitigate the loss of the removed tree.
- No veteran or aged trees are to be removed.
- No pruning.
- There is adequate spatial relationship between the proposals and the trees to be retained.
- The proposals comply with tree related aspects of national and local planning policy and guidance.

8.10.1 Given the above, the potential impacts on trees are considered to be **low**.

8.11 Recommendations

8.11.1 Paragraph 6 of B.S 5837 (2012) states that *'where planning permission or other statutory controls apply, details might need to be submitted in draft form or heads of terms to allow for changes to the design that might occur after permission has been granted. In these cases, it will be necessary for the project arboriculturist to set out a series of parameters for construction activity (e.g. where service routes and/or construction activity should not occur), based on the RPA and the physiological needs of the tree, to which the finalized specifications and statements will apply.'*

8.11.2 An AMS and TPP have been appended to this report to demonstrate that the proposals are feasible. If the LPA requires any amendments to the provided detail it is requested that this is dealt with either by negotiation or a planning condition.

8.11.3 It is also recommended that the LPA attach a pre-commencement condition requesting a landscape scheme I.E. replacement planting.

9 Works cited

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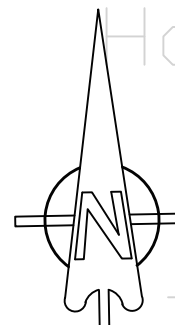
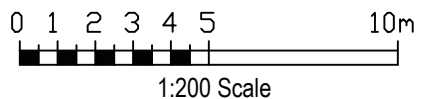
TCPA. (1990). *Town and Country Planning Act*.

Appendix 1: Tree Survey Schedule

Tree Survey Schedule Key Terms	
Tree no:	Sequential reference number of trees or groups of trees commencing at "1". Prefixed with a letter indicating type: T: Tree. G: Group. H: Hedge. Where relevant the TPO no. is included in brackets. Where newly planted trees have a TPO no. followed by an asterisk; e.g. T69 (TPO T2*), it is instead showing the TPO no. for the tree that has been removed and replaced (by this tree).
Name	Species listed by common name
Height	Estimated height of tree rounded up or down to nearest metre.
Stem	Trunk diameter measured at approx. 1.5m above ground level; or where the trunk forks into separate stems between ground level and 1.5m, measured at the narrowest point beneath the fork, given in millimeters.
Branch spread	Branch spread taken at the four cardinal points
Crn Hgt	Clearance of lowest branches above ground level (given in meters)
FSB	Height (meters) and orientation of first significant branch (where orientation is not specified the tree has an even crown break at this height).
Age	Y: Young: Age less than 1/4 life expectancy SM: Semi Mature: 1/4 to 1/2 life expectancy EM: Early Mature: 1/2 to 3/4 life expectancy M: Mature: Over 3/4 life expectancy OV: Over-mature: Mature, and in a state of decline V: Veteran: tree that, by recognized criteria, 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.
Physiology	Good: Typical for species and age Fair: Signs of physiological stress or dysfunction; but not significant enough that the tree may not recover. Poor: Signs of physiological stress or dysfunction; significant enough that the tree might not recover. Dead: Dead specimen.
Structure	Good: No significant structural defects. Fair: Significant structural defects; but these are either remediable or do not put the tree at immediate or early risk of collapse. Poor: Significant and irremediable structural defects, such that there may be a risk of early or premature collapse. Hazardous: Significant and irremediable structural defects, such that there is a risk of imminent collapse.
Value	Assessment of the landscape value of the tree. Low, Moderate or High
ULE	Useful Life Expectancy: Estimated remaining contribution, in years (<10, 10+, 20+, 40+) 0 No potential (dead trees) <10 Less than ten years 10+ more than ten years 20+ more than twenty years 40+ more than forty years
Comments:	General comments relating to vitality, structure, value and/or recommendations
Category	BS 5837 categorisation: A: Trees/Vegetation of high quality and value. B: Vegetation of moderate quality and value C: Trees/Vegetation of low quality and value. U: Those in such a condition that they cannot realistically be retained as living trees for longer than 10 years Sub categories (suffix): 1: Trees with mainly arboricultural value, 2: Trees with mainly landscape value, 3: Trees with mainly cultural / conservation value
RPA Radius	Root Protection Area (RPA) as radius (m) from the centre of the trunk
RPA m²	Root Protection Area (RPA) (m ²)

Tree no.	Name	Height	Stem	Branch Spread	Crown Hgt	FSB	Age	Physiology	Structure	Value	ULE	Comments	Category	RPA Radius	RPA
T1	Maidenhair (<i>Ginkgo biloba</i>)	11m	640mm	N2.3m E2.3m S2.3m W2.3m	4.5m	4.5m	M	Fair	Fair	Moderate	10+	Tree has been recently heavily pruned to try to counter the tight unions at 2.4m and 4m. fence1m to the south slabs to the north and garage within 1.5m of base of tree.	C (1)	7.7m	185.3m ²

Appendix 2: Tree Survey Plan



Tree categorisation:
In accordance with the cascade chart in Table 1 of British Standard 5837 (2012) *Trees in relation to design, demolition and construction — Recommendations*

Category U tree ●
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

Category A tree ●
Trees of high quality with an estimated remaining life expectancy of at least 40 years

Category B tree ●
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years

Category C tree ●
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

KEY:

TRUNK
T1-B — TREE NO. & CATEGORY
Ash — SPECIES
CANOPY EDGE

J A Consulting

Mob: 07811169756
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Client: Mr David Phillips

Site Address: 24 Weir Road, Chertsey, Surrey.
KT16 8NE

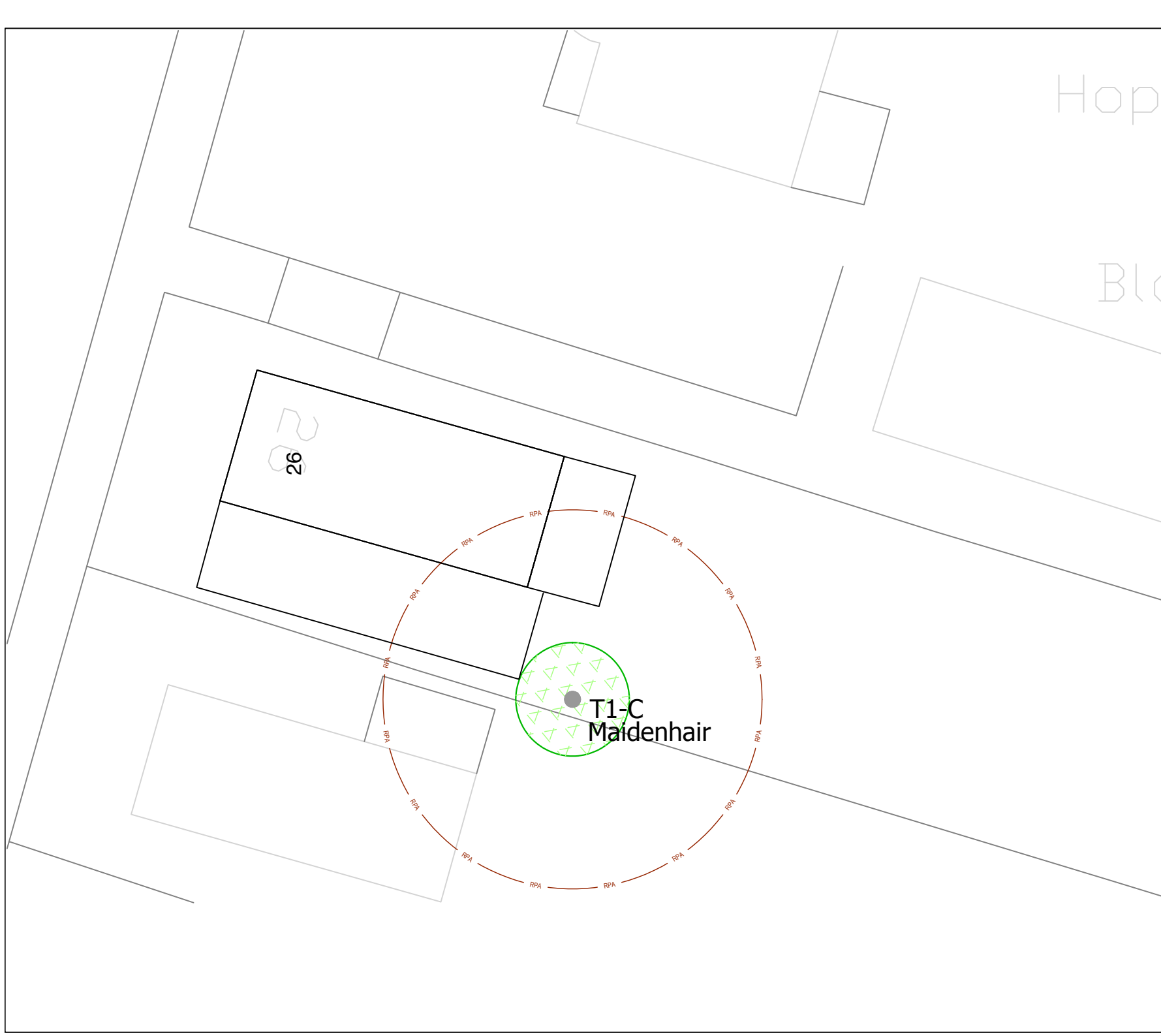
Title: Tree Survey Plan

Drawing Number: TSP 01

Based on: OS plan

Date: 18.12.17 Drawn by: JA Paper Size: A4

Appendix 3: Arboricultural Impacts Assessment Plans



Tree categorisation:
In accordance with the cascade chart in Table 1 of British Standard 5837 (2012) *Trees in relation to design, demolition and construction — Recommendations*

Category U tree ●
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

Category A tree ●
Trees of high quality with an estimated remaining life expectancy of at least 40 years

Category B tree ●
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years

Category C tree ●
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

KEY:



CANOPY EDGE
ROOT PROTECTION AREA (RPA)

T1-B — TREE NO. & CATEGORY
Ash — SPECIES
● — TRUNK

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Mob:	07811169756	
Email:	jaarbconsulting@yahoo.co.uk	
Client:	Mr David Phillips	
Site Address:	24 Weir Road, Chertsey, Surrey. KT16 8NE	
Title:	Tree Constraints Plan	
Drawing Number:	TCP 01	
Based on:	OS plan	
Date:	18.12.17	Drawn by: JA
		Paper Size: A4

Appendix 4: Arboricultural Method Statement (with Tree Protection Plan)

10 Introduction

10.1 Site details

10.2 26 Weir Road, Chertsey, Surrey. KT16 8NE

10.2.1 **Proposal** *'Demolition of existing garage and construction of an extension extending beyond the back of the existing garage footprint.'*

10.3 Instruction

10.3.1 J.A. Consulting has been instructed to provide an arboricultural method statement (AMS) in accordance with British Standard BS 5837 (2012): *Trees in relation to design, demolition and construction — Recommendations*.

10.4 Scope of report

10.4.1 This report and the accompanying appendices reflect the scope of the instruction, as set out above.

11 Legal considerations

11.1 The Town and Country Planning ACT (1990)

11.1.1 Section 197 of the Town and Country Planning Act (1990) places an express duty on the Local Planning Authorities, when granting planning permission, to ensure whenever appropriate that adequate conditions are imposed to secure the preservation or planting of trees, and that any necessary tree preservation orders are made under section 198 of the Act.

11.1.2 The potential impacts of development on trees, whether statutorily protected (e.g. by a tree preservation order or by their inclusion within a conservation area) or not, is a material consideration that is taken into account in dealing with planning applications.

11.2 Breach of planning control

11.2.1 A breach of planning control is defined (in section 171A of the Town and Country Planning Act 1990) as: the carrying out of development without the required planning permission; or failing to comply with any condition or limitation subject to which planning permission has been granted.

11.2.2 A breach of conditions notice requires its recipient to secure compliance with the terms of a planning condition or conditions, specified by the Planning Authority in the notice

11.2.3 Following the end of the period for compliance, a “person responsible” who has not ensured full compliance with the conditions and any specified steps, will be in breach of the notice and guilty of an offence Section 187A(8) and (9) of the Town and Country Planning Act 1990. Summary prosecution can be brought in the Magistrates’ Court for the offence of contravening a breach of condition notice.

11.3 Stop notices

11.3.1 Temporary stop notices are a powerful enforcement tool that allows Planning Authorities to act very quickly to address some breaches of planning control, such as unauthorised activities close to trees. A temporary stop notice may prohibit a range of activities.

11.3.2 The effect of issuing a temporary stop notice will be to halt the breach of planning control, or the specified activity immediately. This can have immediate serious consequences on a business. It is an offence to contravene a temporary stop notice, and a Planning Authority will usually consider prosecution as soon they have evidence of an offence

11.3.3 A person guilty of an offence is liable on summary conviction, to a fine not exceeding £20,000; and on conviction on indictment, to an unlimited fine. Summary prosecution can be brought in the Magistrates’ Court for the offence of contravening a breach of condition notice.

11.4 Tree Preservation Orders & Conservation Areas

11.4.1 A **Tree Preservation Order** (TPO) is an order made by a local planning authority in England to protect specific trees, groups of trees or woodlands in the interests of amenity. An Order prohibits the:

- cutting down
- topping
- lopping
- uprooting
- wilful damage
- wilful destruction

of trees without the local planning authority's written consent.

11.4.2 Owners of protected trees must not carry out, or cause or permit the carrying out of, any of the prohibited activities without the written consent of the local authority.

11.4.3 The site is not within a conservation area and the RBC on line mapping did show that the land was the subject of a TPO 62 Confirmed in 1979.

11.4.4 Anyone who, in contravention of a Tree Preservation Order cuts down, uproots or wilfully destroys a tree; or tops, lops or wilfully damages a tree in a way that is likely to destroy it; or causes or permits such activities is guilty of an offence.

11.4.1 Whilst works to trees covered by a TPO that are granted within a planning permission are exempt for the requirement to gain further approval from the local authority anyone who carries out unapproved tree work may be committing an offence.

11.4.2 Section 210(2) of the Town and Country Planning Act 1990 provides that anyone found guilty of these offences is liable, if convicted in the magistrates' court, to a fine of up to £20,000. In serious cases a person may be committed for trial in the Crown Court and, if convicted, is liable to an unlimited fine. Section 210(3) provides that, in determining the amount of fine, the court shall take into account any financial benefit that has resulted, or is likely to result, from the offence.

12 Typical tree related issues on construction sites

12.1 Threats to trees on construction sites

12.1.1 Development sites hold a multitude of dangers for trees. For the protection of trees to be assured this AMS and the appended TPP has to be strictly adhered to; even a momentary lapse in the scheme of tree protection can lead to irreversible tree damage.

12.2 Damage to the root system

12.2.1 The part of a tree most susceptible to damage is the root system, which, because it is not immediately visible, is frequently ignored.

12.2.2 Within a short distance of the stem, the roots are highly branched, so as to form a network of small-diameter woody roots, which can extend radially for a distance much greater than the height of the tree. All parts of the root system are vulnerable to damage. Once roots are damaged, water and nutrient uptake is restricted until new ones have grown. Mature trees recover slowly, if at all, from damage to their woody roots.

12.2.3 Damage to, or death of, the root system affects the health, growth, life expectancy and safety of the entire tree. The effects of such damage might only become evident several years later. Damage can be the result of a number of minor but compounding factors that accumulate over time. Materials such as uncured concrete, diesel oil and vehicle washings can all damage roots and lead to adverse impacts on the tree.

12.3 Damage to other tree parts

12.3.1 Damage to the stem and branches of a tree is not usually sufficient to kill the tree directly, but can make it unsafe by affecting the dynamics and growth of the tree, or by initiating long-term decay. Such damage can also be disfiguring. The attachment of notice boards, cables and other utility apparatus can all damage trees, as can using trees as anchors for winching.

12.4 A consistent approach

12.4.1 It is vital to the protection of the trees on this site that the site manager brings this method statement to the attention of all relevant parties and that if there is any confusion on the identification of trees, or specifications within, that contact must be made with the appointed arboricultural consultant for clarification.

12.4.2 A typical example is where a service subcontractor, who is not aware of this document or the requirements within, moves protective barriers and carries out soil excavation within RPAs without appropriate supervision; thereby damaging the roots of the tree.

13 Planning and communication

13.1 Planning (sequence of works)

13.1.1 The following actions shall be undertaken, in the order specified in the Sequence of Works at **Table 2** (below). Unless otherwise agreed with the Local Planning Authority.

Table 2: Sequence of Works		
Order	Works	Arb consultant input required?
1	Pre-start site meeting	Yes
2	Removal and pruning of trees	-
3	Erection of protective fencing	Yes
4	Supervised excavations within RPAs	-
5	Demolition and construction	-
6	Clearance of machinery/materials from site	-
7	Removal of protective fencing	Yes

13.2 Communication

13.2.1 The Project Manager will appoint an arboricultural consultant to oversee tree protection details and any sensitive works adjacent to retained trees.

13.2.2 Before any site clearance or construction works takes place the Project Manager will arrange a pre-start site meeting; to be attended by the site manager, the fencing contractor, the groundwork contractor(s) and the arboricultural consultant. The Local Planning Authority tree officer will be invited to attend.

13.2.3 At the pre-start meeting:

- Contact details shall be exchanged
- The scheme of tree protection as outlined in this document and the appended tree protection plan shall be discussed, so that all parties are clear on:
 - the specifications of the tree protection
 - the chronological order of events
 - any special requirements (such as supervised excavations within RPAs).
- It may be the case that previously unforeseen modifications to this statement arise from discussion during the meeting; in this case any modifications will have to be approved by the Local Planning Authority tree officer before being circulated to all parties in writing.

13.2.4 It is vital to the protection of the trees on this site, that the site manager brings this method statement to the attention of all relevant parties and if there is any confusion on the identification of trees or specifications within, contact must be made with the appointed arboricultural consultant for clarification.

13.2.5 The Project Manager will immediately inform the arboricultural consultant if at any time during the project the site manager, the fencing contractor or the groundwork contractor(s) are replaced, so that the arboricultural consultant can meet with the relevant person and make clear the requirements of arboricultural method statement.

14 Monitoring and supervision

14.1 Site monitoring

14.1.1 Once the protective fencing has been installed, the arboricultural consultant will inspect the tree protection measures.

14.1.2 If the tree protection measures comply with the AMS and TPP, the arboricultural consultant will 'sign off' the tree protection and will copy this to the Project Manager and either the Local Planning Authority Case Officer or Tree Officer; in this way it can be shown that the planning conditions are being adhered to and will allow the Local Planning Authority to sign off any relevant conditions.

14.1.3 No construction or demolition activity will commence on-site until tree protection measures have been signed off by the arboricultural consultant.

14.1.4 In the event that the specifications or locations of these items does not comply with this AMS and TPP, the arboricultural consultant will inform the relevant party of what adjustments are required and if necessary will undertake a further visit to check that these have been carried out; once compliance has been made this will be signed off (as per the previous paragraph).

14.1.5 Throughout the construction process the arboricultural consultant will undertake regular visits to monitor the condition of the trees, and effectiveness of the protective measures; timings to be agreed at the pre-start meeting.

14.2 Supervision of sensitive works

14.2.1 The arboricultural consultant shall be given at least two working days' notice of any activity that requires his attendance (see the sequence of works at **Table 2**).

14.2.2 If there are any revised drawings that show details of works within RPAs or beneath the crowns of trees (due to services), these are to be sent in advance to the arboricultural consultant so that he can advise on any impacts to trees and how this might relate to planning conditions (in case further approval from the Local Planning Authority will be required before being carried out).

14.2.3 The arboricultural consultant will make records of all monitoring and supervisory visits, and will forward these to the client and Local Planning Authority.

15 Trees to be removed and trees to be pruned

15.1 Trees to be removed

Table 3: Trees to be removed		
Tree no.	Name	Notes
T1	Ginko	Twin stemmed tree with basal damage to the east at 1m, decay base. Upper crown south has a large section of deadwood

15.2 Trees to be pruned

- None

15.2.1 Tree removal and pruning to be carried out in accordance with British Standard 3998 (2010): *Tree work – Recommendations*.

16 Protective barriers

16.1 Protective fencing

16.1.1 Protective fencing for this proposal is not thought necessary, however I have indicated a potential line across the rear of the garden to protect the trees well away from the proposal if required by the planning authority.

16.1.2 Protective fencing shall be installed at the locations shown on the appended TPP and to the specification within BS 5837: 2012, Section 6.2.2 (at **Figure 1** below). It is advised, that for the duration of this project the alternative specification with pinned feet and rakers is to be used. If deemed unsuitable then the specification below can be used

16.1.3 The protective fencing shall consist of a vertical and horizontal framework, well braced to resist impacts. Scaffolding equipment shall conform to current recommendations; BS EN 39 Type 4 galvanised scaffold tubes shall be used to make the framework, vertical poles shall be spaced at a maximum interval of 3m and driven securely into the ground to a minimum depth of 600mm. Welded mesh panels shall be securely fixed and secured to the uprights and cross members with wire ties. Care shall be exercised when locating the vertical poles to avoid underground services and, in the case of the bracing poles, also to avoid contact with structural roots.

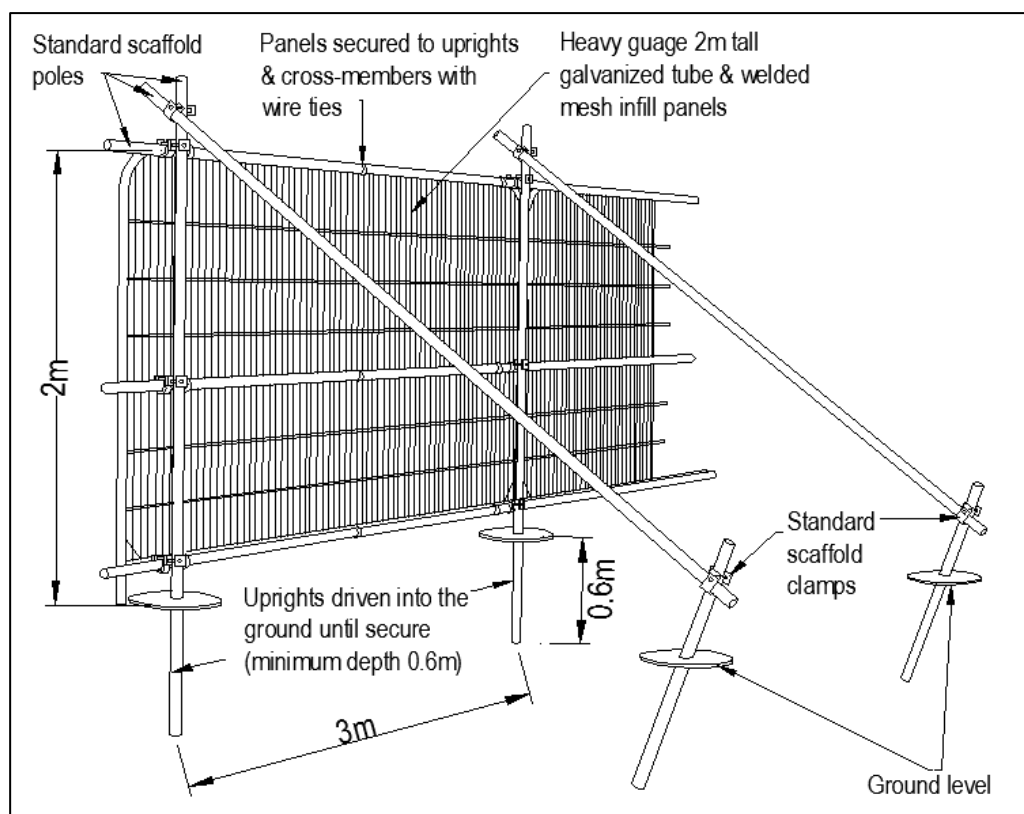


Figure 1: Protective fencing; default specification (Based on Figure 2, BS 5837: 2012)

16.1.4 Notices stating "Tree Protection Zone, Keep Out!" will be attached with cable ties to every fourth panel; examples of suitable signage are shown appended to this method statement.

16.1.5 In the event that the protective barriers are accidentally damaged or knocked out of position, those sections will be repaired or replaced as soon as practicably possible.

17 Construction Exclusion Zones

17.1.1 Once the protective fencing is in situ, the arboricultural consultant will visit the site and inspect it.

17.1.2 The protective barriers shall form the edge of Construction Exclusion Zones (CEZs) and will restrict access into these areas. **The barriers and the areas it protects must be considered as sacrosanct, it must, under no circumstances be moved without the explicit permission of the approved arboricultural consultant.**

17.1.3 No construction activities will take place within the CEZs:

- No personnel, plant or vehicles shall enter
- No storage of equipment or materials (including mixing of cement)
- No clearance of existing vegetation
- No changes to soil levels (including topsoil)

17.1.4 Areas for the storage of materials shall be outside the CEZs. Oil, bitumen, diesel, and cement shall not be stored, mixed or discharged onto the ground within 10m of the trunks of any trees.

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

17.1.6 No fires shall be lit within RPAs of trees to be retained or within 10m of the canopies of any trees to be retained (whichever is the greater).

17.1.7 The protective fencing will not be moved or re-located without the approval of the arboricultural consultant. Once all construction works are completed the arboricultural consultant will be informed of when it is intended to remove the fencing.

18 Demolition – Construction and Excavations within RPAs

18.1 Demolition

18.1.1 Care is to be exercised when demolishing the existing property to insure that no retained trees are damaged. This includes both below and above parts of the trees.

18.1.2 All ex services are to be either capped or blocked. If the service passes through the RPA the conformance with NJUG: 4 is to be observed and only hand tools under the supervision of the Arboricultural Consultant is to be used. Under no circumstances is machinery or mechanical excavators to be used.

18.2 Excavations within RPAs

Table 4: Trees that require excavations within RPAs		
Tree no.	Species	Structure
-	-	-

19 Building Plans

19.1 Supplied plans

19.1.1 None

20 Fencing, landscaping and reinstatement

20.1 Fencing, landscaping and reinstatement

20.1.1 All protective barriers must remain in place until the construction activity is finished and there is no realistic risk of damage to the protected soil surfaces.

20.1.2 Final fencing, soft landscaping and reinstatement shall only be undertaken after the protective fencing has been removed. It is important to note that great care is needed by all the contractors to avoid damage to the trees.

20.1.3 Any cultivation operations should be undertaken carefully by hand in order to minimize damage to the tree, particularly the roots. De-compaction measures include forking, spiking, soil augering and tilled radial trenching. Care should be taken during such operations to minimize the risk of further damage to tree roots. Heavy mechanical cultivation such as ploughing or rotavation should not occur within RPAs.

20.1.4 Soil compaction shall be avoided around existing vegetation, including trees, and in areas where new planting or seeding is proposed: No plant shall enter or be used within RPAs, which specifically includes rotovators.

20.1.5 There shall be no changes to soil levels within the RPAs of trees.

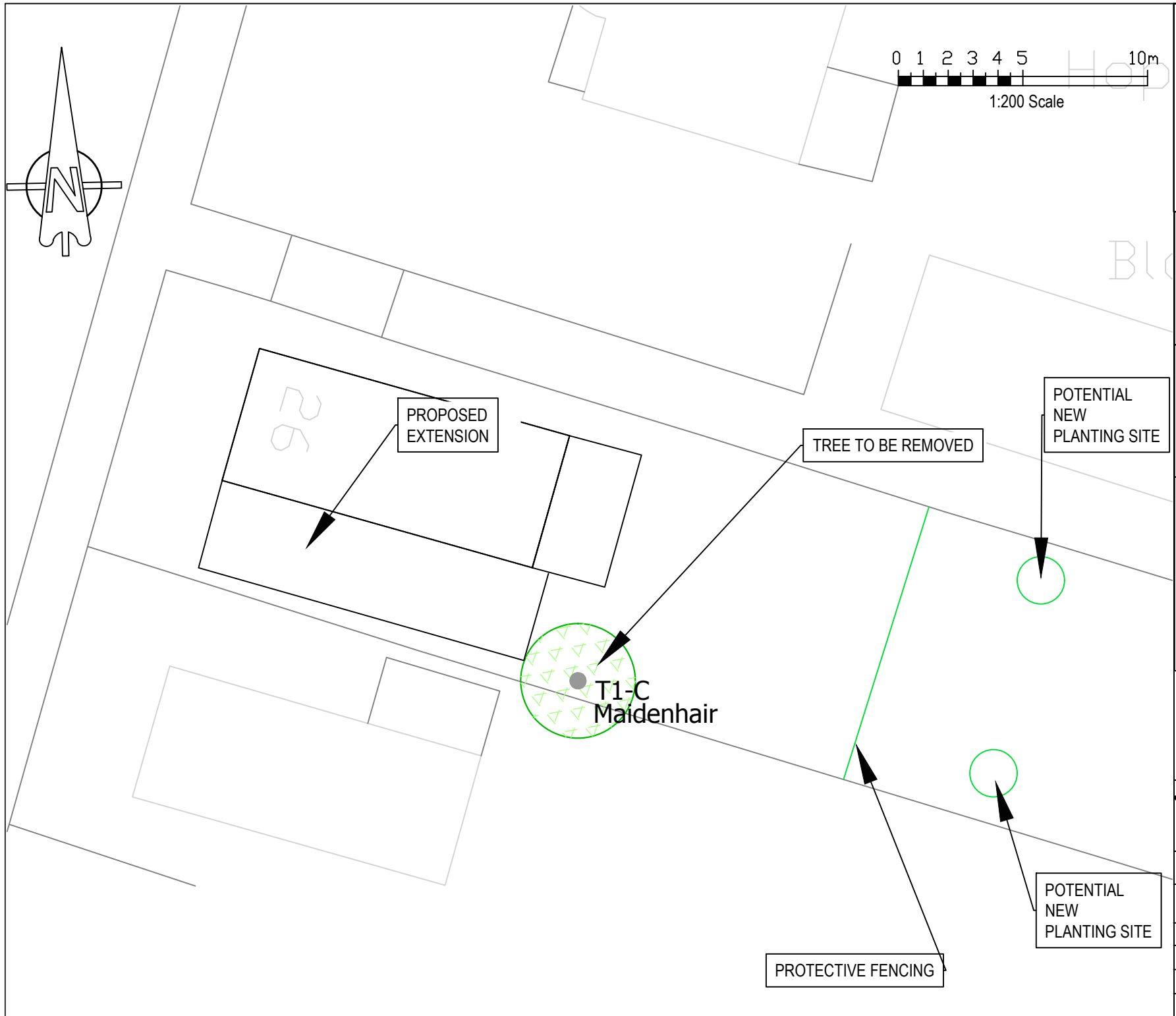
20.1.6 Digging (for fence posts etc.) shall be done by hand. If roots or clumps of 25mm diameter and above are encountered they shall be retained and protected; the position of the proposed post will be re-located. All roots exposed shall be back-filled with sharp sand.

20.1.7 After the removal of the tree protection and final landscaping works the arboricultural consultant shall make an assessment of the condition of the trees, which may lead to recommendations for remedial works.

Appendix 1: Example of tree protection signage



Appendix 2: Tree Protection Plan



Tree categorisation:
In accordance with the cascade chart in Table 1 of British Standard 5837 (2012) *Trees in relation to design, demolition and construction — Recommendations*

Category U tree ● 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

Category A tree ● Trees of high quality with an estimated remaining life expectancy of at least 40 years

Category B tree ● Trees of moderate quality with an estimated remaining life expectancy of at least 20 years

Category C tree ● Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

KEY:

● CANOPY EDGE
● ROOT PROTECTION AREA (RPA)
● T1-B — TREE NO. & CATEGORY
● Ash — SPECIES
● TRUNK

PROTECTIVE FENCING - alternative specification
Protective fencing shall consist of a scaffold framework in accordance with figure 3 of British Standard 5837 (2012); comprising 2m tall welded mesh panels on rubber or concrete feet. Onto this, weldmesh panels shall be securely fixed with wire or scaffold clamps joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The distance between the fence couplers shall be at least 1m and shall be uniform throughout the fence. The panels shall be supported on the inner side by stabiliser struts, attached to a base plate secured with ground pins.

Weldmesh panels
2m
Anti tamper coupler
Ground pins
Base plate
Stabiliser strut with base plate secured with ground pins

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Client: Mr David Phillips

Site Address: 24 Weir Road, Chertsey, Surrey. KT16 8NE

Title: Tree Protection Plan

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