

# Tree Report

## BS:5837 Tree Survey, Arboricultural Impact Assessment

122 Kidmore Road  
Caversham  
READING  
RG4 7NB

Client: Mr. [REDACTED]

Date: 20<sup>th</sup> March 2023



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| <b>Title</b>                  | Tree Report:<br>BS:5837 Tree Survey, Arboricultural Impact<br>Assessment & Method Statement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |               |                 |
| <b>Client</b>                 | Mr. [REDACTED]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |             |               |                 |
| <b>GC Document Reference</b>  | J230306 – 122 Kidmore Road, Reading                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |               |                 |
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| <b>Issue Status</b>           | <b>Issue</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Date</b> | <b>Status</b> | <b>Revision</b> |
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| <b>Disclaimer</b>             | <p>The recommendations contained in this Report represent Ground Control's professional opinions, in exercising the duty of care required of an experienced Arboricultural Consultant. The information contained has been prepared and given in accordance with the author's professional institution's Code of Professional Conduct and the opinions expressed within are true professional opinions.</p> <p>The report has been prepared by Ground Control for the sole and exclusive use of the Client and for the specific purpose for which Ground Control were commissioned.</p> <p>Ground Control accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.<br/>Use of the Report by any other person is unauthorised and such use is at the sole risk of the user.</p> <p>The tree survey and this report has been undertaken in accordance with BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations, which are intended to assist decision making with regard to the existing and proposed trees in the context of design, demolition and construction. This report will also assess the potential impact that the scheme may have on the surveyed trees.</p> <p>This survey is not, nor should be taken to be, a full or thorough assessment of the health and safety of trees on or adjacent to the site, and therefore it is recommended that detailed tree inspections are undertaken on a regular basis with the express purpose of complying with the landowner's duty of care and satisfying health and safety requirements.</p> |             |               |                 |

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## 1.0 Instruction & Introduction

- 1.1 Ground Control Ltd has been instructed by Mr [REDACTED] to undertake an Arboricultural Survey and Impact Assessment for the proposed extension work at 122 Kidmore Road, Caversham, Reading, RG4 7NB, hereafter referred to as 'the site'.
- 1.2 The survey and assessment have been produced to support the forthcoming planning submission and has been assessed in accordance with British Standard 5837:2012, Trees in Relation to Design, Demolition and Construction.
- 1.3 The purpose of this report is to assess the likely direct and indirect impacts of development proposal and produce an Arboricultural Impact Assessment (AIA) detailing the impact of the development on trees and to provide details upon suitable mitigation or protection measures that will be required. This will include:
- *Arboricultural Impact Assessment (AIA)*
  - *Tree Constraints & Protection Plan (TCPP)*
- 1.4 The tree survey and impact assessment reporting for the site is concerned with the tree survey extents as outlined by the red line boundary on Figure 1 below.



*Figure 1: Tree Survey & Reporting Extents*

- 1.5 **Site Description:** The site is located within a residential area surrounded by residential properties and public highway (Kidmore Road).
- 1.6 The property has one access point off Kidmore Road.
- ## 2.0 Tree Survey
- 2.0.1 The tree survey has been undertaken in accordance with the BS 5837:2012, Trees in Relation to Design, Demolition and Construction, and was undertaken on the 14<sup>th</sup> March 2023 by Morgan Davies.

## 2.1 Inspection Methodology

- 2.1.1 A visual assessment was undertaken, from ground level only in accordance with the BS 5837:2012 Trees in Relation to Design, Demolition and Construction.
- 2.1.2 This report should not be a substitute for a full Safety Survey or Management Plan which are specifically designed to minimise risk and liability associated with responsibility for trees.
- 2.1.3 A climbing Inspection has not been undertaken as part of this instruction.
- 2.1.4 Tree survey data and stems were plotted as per BS 5837:2012 guidance, enclosed within in Appendix A of this report.
- 2.1.5 A copy of the Tree Survey Schedule Key can be found in Appendix B of this report.

|                                                                               |                                                                                                             |               |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------|
| <b>Survey Standards</b>                                                       | In accordance with BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations |               |
|                                                                               | • Part 4.4 – Tree Survey                                                                                    |               |
|                                                                               | • Part 4.5 – Tree Categorization Method                                                                     |               |
|                                                                               | • Part 4.6 – Root Protection Area                                                                           |               |
|                                                                               | Refer to Appendix A for Tree Survey Key & Cascade Chart for tree quality Assessment                         |               |
| <b>Survey Area</b>                                                            | As outlined within Figure 1 in section 1.5                                                                  |               |
| <b>Survey Methodology</b>                                                     | Visual Assessment from Ground level                                                                         |               |
| <b>Specialist Surveying Equipment</b><br><br>(Other than tape/ camera/ plans) |                                                                                                             | <b>Yes/No</b> |
|                                                                               | Tablet Computer                                                                                             | Yes           |
|                                                                               | Leica Disto Laser measuring device                                                                          | Yes           |
|                                                                               | Inclinometer                                                                                                | No            |
|                                                                               | Trimble Catalyst GPS Hardware                                                                               | No            |
|                                                                               | Picus arborescens (Tree Decay Investigation)                                                                | No            |
|                                                                               | Endoscope (Bat Survey)                                                                                      | No            |
| <b>Have Ground Control been commissioned to Plot the tree locations</b>       | No                                                                                                          |               |

## 2.2 Survey Limitations

- 2.2.1 Plans provided by HAC Designs Ltd referenced: 22048.PP-01, 22048.PP-02, 22048.PP-03, 22048.PP-04 REV A, 22048.PP-05 REV A, 22048.PP-06 REV A, 22048.PP-07 & 22048.PP-08 REV A.
- 2.2.2 Where trees could not be accessed, estimated dimensions are marked with # on the tree survey schedule.

## 2.3 Surveyed Trees

- 2.3.1 In total 14 individual trees were surveyed and 4 Groups. These comprise of mainly broadleaf trees and some evergreen species.

- 2.3.2 The site is made up several early mature to mature trees ranging from B - C category with younger individual trees graded C. The trees have been graded in terms of their arboricultural, amenity and cultural value.
- 2.3.3 The trees, Groups and hedges have been surveyed in accordance with BS 5837:2012 and categorised in accordance with the 'Tree Survey Key & Cascade Chart for tree quality Assessment' (See Appendix C). Table 1 below provides an overview summary of the quality assessment breakdown across the site.

| Quantities |             |                                | Category | Quality & Value                                                                                                                                                                      |                                       |
|------------|-------------|--------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Trees      | Tree Groups | Hedges (or Landscape Features) |          |                                                                                                                                                                                      |                                       |
| 0          | 0           | 0                              | A        | High                                                                                                                                                                                 | Trees to be considered for retention  |
| 8          | 2           | 0                              | B        | Moderate                                                                                                                                                                             |                                       |
| 6          | 2           | 0                              | C        | Low                                                                                                                                                                                  |                                       |
| 0          | 0           | 0                              | U        | Those in such a condition that any existing value would be lost within 10 years, and which should, in the current context be removed for reasons of sound arboricultural management. | Trees <u>unsuitable</u> for retention |
| 14         | 4           | 0                              | Totals   |                                                                                                                                                                                      |                                       |

Table 1: Surveyed Trees Quality Assessment Summary

- 2.3.4 A full copy of the tree survey schedule outlining the recorded data, condition and category of all trees is enclosed in Appendix D.
- 2.3.5 A Tree Survey Plan has been prepared plotting the tree canopies in accordance with the branch spread details within the tree survey schedule. A copy of the Tree Survey Plan can be found in Appendix E.

## 2.4 Statutory Tree Protection/ Designations

We have received the TPO document from Reading Borough Council, identifying Tree Preservation Order within the neighbouring property (see Fig 1).

A search on Reading Borough councils my reading page on the 20<sup>th</sup> of March 2023 revealed the property not to be located within a Conservation area (<http://my.reading.gov.uk/myreading.aspx>).

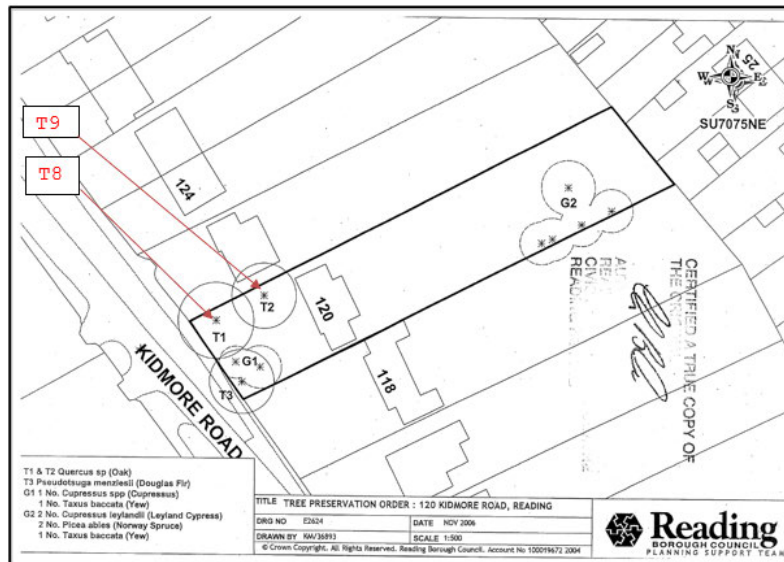


Fig 1 - Council TPO document (annotated to show survey tree numbers (in red) next to RBC TPO numbers).

### 3.0 Development Proposals & Root Protection Areas

#### 3.1 Development Proposal

- 3.1.1 The development proposal is to extend the current property mainly within existing footprint.
- 3.1.2 No detailed proposal has been given with regards to access/ storage for machinery/ plant and site facilities to facilitate the construction of the development, as this is currently unknown until a main contractor is appointed for the site. However, the site has plenty of existing hard surfacing that falls outside of the RPAs of any retained trees which can be utilised.

#### 3.2 Design Advice & Guidance

- 3.2.1 Ground Control has not offered guidance and advice to the client and design team as part of the development in order to inform design decisions on the scheme based on tree condition, future contribution and landscape design aspects.

#### 3.3 Root Protection Areas

- 3.3.1 The root protection areas (RPA's) have been calculated in accordance Table D1 in BS 5837:2012 guidelines, a copy of which can be found in Appendix F.
- 3.3.2 The RPAs of the surveyed trees and hedge are contained within the tree survey schedule and diagrammatically on the Tree Constraints & Protection Plan for the site which can be found in Appendix G.
- 3.3.3 Due to the nature and constraints of the existing site, the RPA might have been offset/ adapted to suit envisaged root growth area.
- 3.3.4 The RPA of T9 has been adjusted due to pre-existing site conditions. The presence of the current building foundations will act as a barrier to root growth and deform the RPA with a likely bias of the remaining root distribution favouring the loose aggregate and soft landscaping within 120 Kidmore Road.

## **4.0 Arboricultural Impact Assessment**

4.0.1 The impact of the proposed development on the existing trees is outlined under the following headings.

- *Impact of Proposal to Tree Cover*
- *Trees Unsuitable for Retention*
- *Incursions within the RPA and/or canopy of retained trees*
- *Direct Loss*

4.0.2 The proposed development: Extend the property at 122 Kidmore Road, creating an additional 2<sup>nd</sup> floor above existing garage and extending out on the rear right hand corner (southern edge) to create a 2-storey rear extension.

4.0.3 The AIA is to be read in conjunction with the attached Tree Retention & Protection Plan and BS Survey Site Plan.

### **4.1 Impact of Proposal to Tree Cover**

4.1.1 The proposal will see the foundations/footprint of the proposed extension extend into the RPA of 2 individual trees and 1 group (2 X B category 1 x C category) (T8, T9 & G1).

4.1.2 This impact effects trees (GC surveyed Trees T8 and T9) covered by Tree Preservation Order (393/06) see Fig 1.

4.1.3 The impact to the group (G1) is less significant in that the group is deemed low quality (cat C) and is a heavily managed hedge.

### **4.2 Trees Unsuitable for Retention**

4.2.1 No tree(s) have been noted as being unsuitable for retention due to the proposal.

### **4.3 Incursions within the RPA and/or canopy of retained trees**

#### **Foundation of extension (footprint)**

4.3.1 As highlighted, the proposal will see the foundations/footprint of the proposed extension extend into the RPA of 2 individual trees and 1 group, with the 2 protected oak trees (T8 & T9) (graded category B) to the front of the property being of most significant.

4.3.2 In constructing the foundation for the rear and front extension, root severance will likely occur. It is recommended that the area is "hand dug" (under arboricultural supervision) and root pruning undertaken in-line with current best practice. The rooting area impacted is at the extremity of the RPA and will likely reveal thinner roots that would be suitable for pruning, which as a species, the Oak would tolerate with little impact. The impact equates to 4.4% of the RPA for T9 and 1.6% of the RPA of T8. The remaining RPA of both trees including the group (T8, T9 & G1) will be protected by existing hard surfacing.

4.3.3 The canopy of these trees (T8 & T9) is currently clear of the property. However, due to the future growth potential of these trees, there is still some future growth (with varying impact), which will require cyclical maintenance. Incorporating the new proposal will bring the building closer to the tips of the trees but would not create greater maintenance than is not already required.

4.3.4 The Oak (T9) has a stem diameter of 350mm with future growth potential. In the current location without the extension, it is expected that maintenance of clearance to the property will need to occur as a matter of routine (evidence of pruning already noted). As pruning will be required as

the tree gets older, sustainable formative pruning methods can be undertaken to help manage the clearance at an earlier stage and therefore ensure pruning is kept to a minimum branch diameter (reducing wound size).

- 4.3.5 The structure of the branches extending over to 122 Kidmore Road are not substantial and would not give concern for these types of formative pruning works.
- 4.3.6 With regards to the Oak (T8) it is considered that suitable clearance will be maintained with extension in place, with options of sympathetic pruning in the future that can be undertaken in line with current best practices.
- 4.3.7 The installation of scaffolding around the build will need to be undertaken to accommodate tree canopies by incorporating scaffolds of suitable dimensions when placed around retained trees where canopies are becoming close (i.e. T8 & T9).
- 4.3.8 The council trees (T1-T3) are located outside the curtilage of the site and not suitable for storage or required to access over soft ground (access drive already present over area). Greater protection can be recommended if requested and supported by the local authority. Protective fencing would impact highway visibility splays.
- 4.3.9 The Low-grade category C trees are located within the front of the property are protected by nature of their position within the landscaped area. Utilisation of hard standing acts as ground protection.
- 4.3.10 The remaining trees T10–T14 & G2-G4 are not directly impacted by the footprint of the proposal and will need to be protected by use of protective fencing and ground protection (including utilising existing hard surfacing and scaffolding) to protect from the construction process itself. The rear garden will be cordoned off to contain the working area and trees closest to the property (within 15-20 metres of proposal) protected via protective fencing.

#### 4.4 **Direct Loss**

- 4.4.1 No trees have been identified for removal due to proposal.

#### 4.5 **Infrastructure Requirements i.e., highway visibility, lighting, CCTV, services etc**

- 4.5.1 No requirements have been identified to Ground Control Professional Services.
- 4.5.2 No works are to be undertaken within the RPA of any retained tree without prior approval.

#### 4.6 **Tree Protection measures (Fencing and Ground Protection)**

- 4.5.1 All protection measures will be shown within the Tree Constraints and Protection Plan (TCPP). These protective measures will be put in place prior to any works (including demolition) and will remain for the duration of the development.
- 4.5.2 The areas identified within the TCPP are to be protected by fencing and deemed as “exclusion zone” to construction. Should any of the protected areas require access, written approval must be sought prior to entering or removing any protective measures.
- 4.5.3 Suitable protective fencing will be used to protect all retained trees. All weather notices will be attached to the fencing to further highlight its purpose (**See appendix H, relevant sign used**). Locations of the protective measures is identified within the Tree Protection Plan (appendix G).

#### **4.6 Site management, storage and use of materials (non-toxic & Toxic), plant and machinery**

- 4.6.1 Construction site facilities including site huts, staff and contractor parking and areas for storage will be located outside of the RPA or crown spread of retained trees, including those not specifically covered in this report, where possible. The areas protected by protective fencing are considered Construction Exclusion Zones and are identified on the Tree Protection Plan. These areas must be fully respected, and their location and significance are to be highlighted to all site staff and contractors during the formal site briefing.
- 4.6.2 The use, mixing and washing of materials can lead to run off or inadvertent spillage into tree root zones. Many substances often used on construction sites can be toxic to tree roots (such as concrete, fuels, salts, builders' sand and herbicides) and can result in the death of tree roots and beneficial soil organisms and can have a significant impact on the future health and appearance of the tree.
- 4.6.3 The storage of materials and arisings can result in an effective raised soil level. This buries tree roots at depths where air and water are less available and can lead to the decline or death of the tree.
- 4.6.4 For these reasons the storage of materials and any washing, mixing or refueling will take place in agreed allocated areas at (at least 5m from the edge of the RPA of retained trees).
- 4.6.5 Any slope effect must be considered and where there is a potential for run-off heavy duty polythene sheeting and sandbags must be in place as barrier to prevent toxic materials reaching RPAs.

#### **4.7 Construction process of the proposed development**

- 4.7.1 Based on the above assessment we recommend the following construction sequencing and measures are adopted.
  - 4.7.1.1 *Pre-construction phase*
  - 4.7.1.2 *Undertake tree removals if required.*
  - 4.7.1.3 *Undertake tree works as recommended in section 4.9 of this report.*
  - 4.7.1.4 *Erection of tree protection fencing to in accordance with BS 5837:2012 and establishment of as Construction Exclusion Zone (CEZ) as indicated on TCPP to protect RPAs of the retained trees. This is to take place before main construction phase.*
  - 4.7.1.5 *Main construction phase.*
  - 4.7.1.6 *Landscaping/ external works.*
  - 4.7.1.7 *Project snagging.*
  - 4.7.1.8 *Dismantle and removal of tree protection fencing.*
  - 4.7.1.9 *Ongoing site monitoring of retained trees.*

#### **4.8 Proximity of trees to structures**

- 4.8.1 The impact of trees on buildings and vice versa alongside the allowance for future growth has all been considered in the positioning of the development. Tree size, future growth, light/shading, leaf and fruit nuisance have received due attention and are not considered an issue in the context of this scheme. Potential future pressure on retained trees for excessive maintenance has also been considered and factored into the assessment of the trees as part of this report.
- 4.8.2 The proposed development adjacent to the retained trees does not, in our opinion, significantly increase the existing safety risk due to the current size and fair condition of the trees, although, it is advised that the tree works recommended in this report (see section 4.9) are undertaken as part of the project. It would be prudent to re-inspect the trees on an annual basis. Firstly, in the form of a post development inspection to monitor the health of the trees

and check for signs of decline and offer any recommendations for tree works and then as a general visual tree assessment to cover duty of care.

#### **4.9 Recommended Tree Works**

4.9.1 In combination with those trees requiring pruning as part of these development works and additional tree works have been recommended below:

- **T9 (T2 of TPO 393/06) – Oak** – *Potential tip-reduction works may be needed to provide clearance for scaffolding (dimensions to be confirmed). It is recommended that consideration for pruning is given once scaffold has been erected to ensure that only optimal pruning is undertaken.*
- **T7 Yew** – *Prune lateral branches that extend towards the property by no more than 300mm to provide suitable clearance.*

4.9.2 Any tree works are to be carried out outside of the bird nesting season (March to September inclusive) unless works are overseen with the presence of a suitably trained Ecologist if within this period. Refer to Appendix J for detail.

4.9.3 All pruning, including facilitation pruning should be carried out in accordance with BS 3998:2010 “Tree work – Recommendations” and be undertaken by suitably qualified tree professional.

#### **4.10 Mitigating tree loss/new planting**

4.10.1 None proposed.

### **5.0 Summary**

5.1.1 The current layout proposals will see the retention of all trees.

5.1.2 Suitable protective fencing will be installed and retained for the duration of construction.

5.1.3 The site contains a high percentage of existing hard surfacing that can be utilised as working area for the proposal and will act as ground protection for retained trees/groups.

5.1.4 The site has existing hard standing and garage space suitable for the storage of equipment and materials.

5.1.5 There is recognised methodology recommended for working within RPAs of retained trees, under Arboricultural supervision.

5.1.6 The proposed development will only have a limited impact on the long-term health of the retained trees and amenity value of the site providing the mitigation measures outlined in this report are adhered to. It is considered that the proposal will not have any significant impact on retained trees or wider landscape.

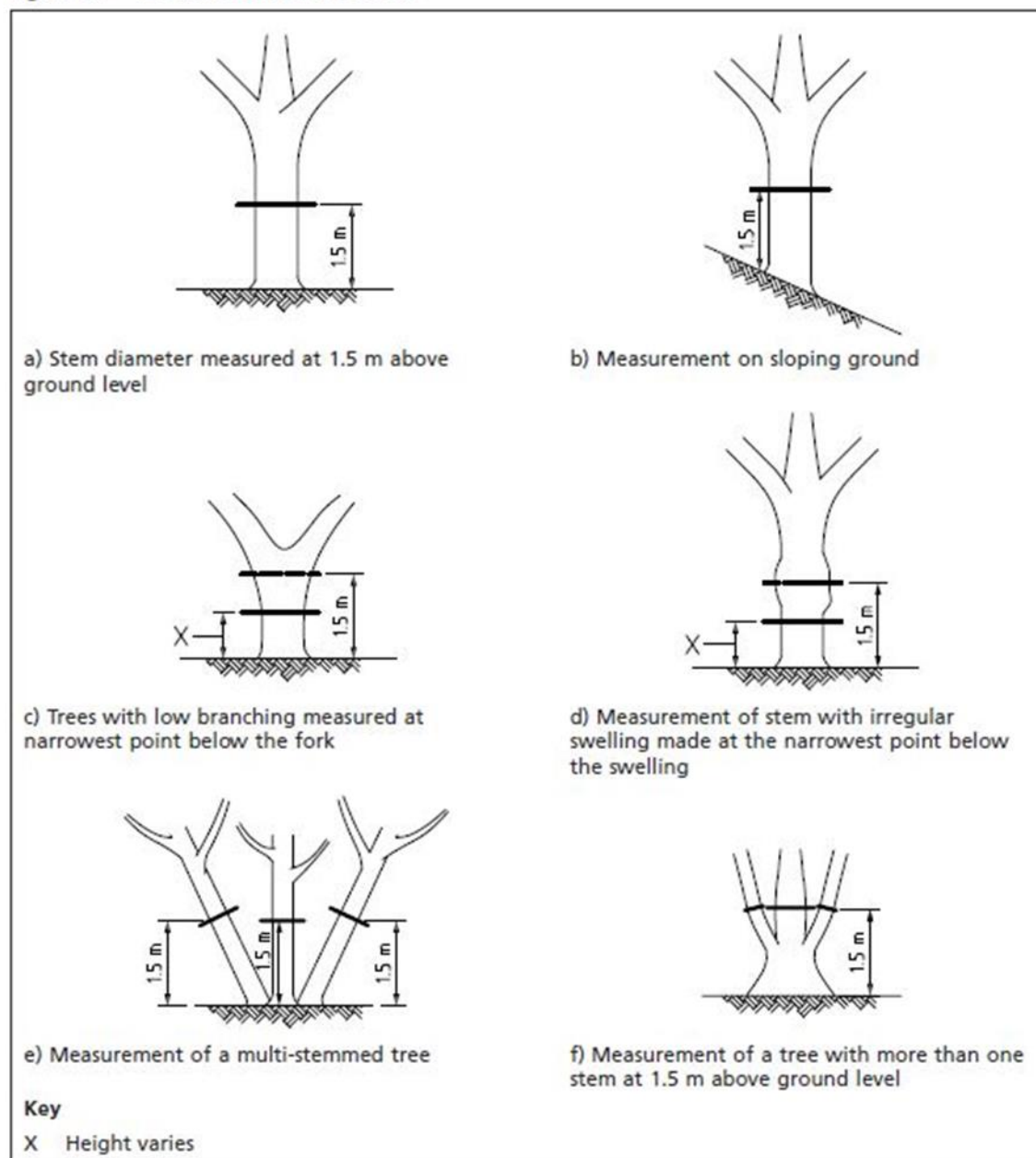
## Annex C (normative)

### Measurement of tree stems

Diameters of single stem trees on level ground should be measured in accordance with Figure C.1a). Diameters of other commonly encountered tree stems should be measured in accordance with Figures C.1b) to C.1f).

**NOTE** The thick black line indicates where the measurement is taken.

Figure C.1 Measurement of tree stems



## Appendix B: Tree Survey Key

### Tree Survey Key

|                                                          |                                                                                                                                                                                                                                                              |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tree Reference Number:</b>                            | As recorded on tree survey plan.                                                                                                                                                                                                                             |
| <b>Species:</b>                                          | Species listed by common name; key provided to scientific names.                                                                                                                                                                                             |
| <b>Height:</b>                                           | overall height of the tree from ground level (in meters).                                                                                                                                                                                                    |
| <b>Stem Diameter:</b>                                    | In millimeters at 1.5m above adjacent ground level or immediately above the root flare for multi-stemmed trees.                                                                                                                                              |
| <b>Branch Spread:</b>                                    | In meters taken at four cardinal points (North, East, South, and West) to derive an accurate representation of the crown as recorded in the Tree Survey Plan.                                                                                                |
| <b>Existing height (in meters) above ground level of</b> | <div>1) first significant branch and direction of growth</div> <div>2) canopy (crown clearance)</div> <div>to inform on ground clearance, crown/stem ratio and shading.</div>                                                                                |
| <b>Life Stage:</b>                                       | Young(Y), Middle Aged (MA), Mature(M), Over Mature (OM), Veteran(V)                                                                                                                                                                                          |
| <b>General observations:</b>                             | particularly of structural and/or physiological condition (e.g., the presence of any decay and physical defect), and/or preliminary management recommendations.                                                                                              |
| <b>Estimated remaining contribution:</b>                 | in years (<10, 10+, 20+, 40+)                                                                                                                                                                                                                                |
| <b>Category Grading:</b>                                 | Categories U or A to C grading, to be recorded on the tree survey plan in accordance with Cascade Chart for tree quality assessment on following page.                                                                                                       |
| <b>RPA:</b>                                              | Root Protection Area calculated from BS5837:2012 "Trees in Relation to Design, Demolition and Construction – Recommendations" in sqm. Where indicated, dimensions of radius of RPA circle based around center point of trunk calculated for design purposes. |

## Appendix C: Cascade Chart for Tree Quality Assessment

**BS 5837:2012 Table 1 – Cascade chart for tree quality assessment**

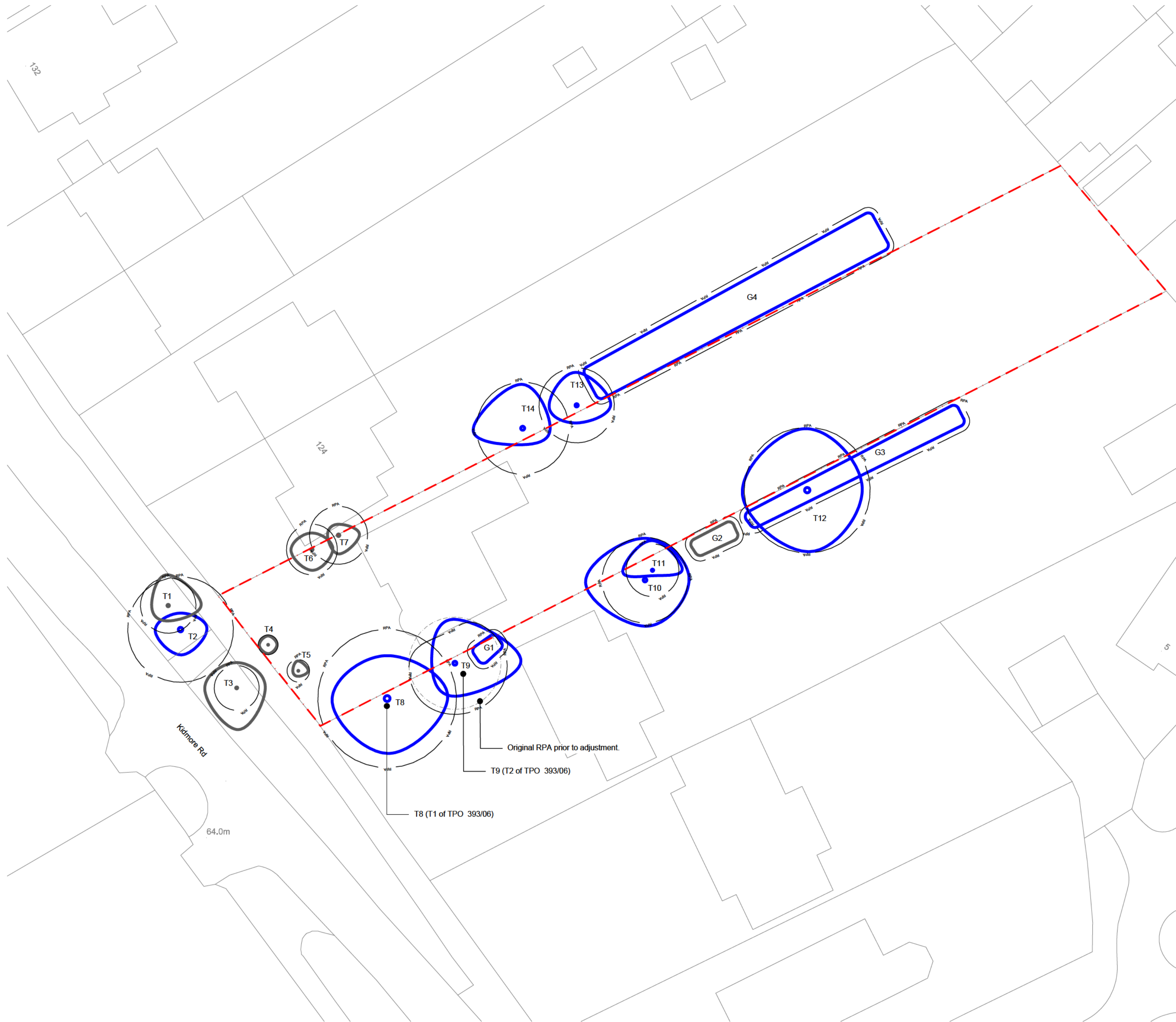
| Category and Definition                                                                                                                                                    | Criteria (including subcategories where appropriate)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                   |                                                                                                                                       | Identification on plan |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Trees unsuitable for retention                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                   |                                                                                                                                       |                        |
| <b>Category U</b><br>Trees 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. | <ul style="list-style-type: none"><li>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)</li><li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li><li>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</li></ul> <p>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve.</p> |                                                                                                                                                                                                                                                                   |                                                                                                                                       | DARK RED               |
|                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                   |                                                                                                                                       |                        |
|                                                                                                                                                                            | 1. Mainly arboricultural values                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2. Mainly landscape values                                                                                                                                                                                                                                        | 3. Mainly cultural values, including conservation                                                                                     |                        |
| Trees to be considered for retention                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                   |                                                                                                                                       |                        |
| <b>Category A</b><br>Trees of high quality with an estimated remaining life expectancy of at least 40 years                                                                | Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features                                                                                                                                                            | Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture) | LIGHT GREEN            |
| <b>Category B</b><br>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years                                                            | Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation                                                                                                                                                                                                                                                                                                                                                                                           | Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality | Trees with material conservation or other cultural value                                                                              | MID BLUE               |
| <b>Category C</b><br>Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm                | Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value; and/or trees offering low or only temporary/transient landscape benefits                                                                         | Trees with no material conservation or other cultural value                                                                           | GREY                   |

**Appendix D: Tree Survey Schedule**

| Tree ID | Common Name     | Scientific Name    | Life Stage  | Stem Diameter [mm] | Tree Height [m] | Height of Canopy Above Ground Level [m] | Height of First Significant Branch [m] | (N) Branch Spread [m] | (E) Branch Spread [m] | (S) Branch Spread [m] | (W) Branch Spread [m] | Physiological Condition | Structural Condition | Comments                                                                                                                                                                                                                                         | Recommendations | Estimated Remaining Contribution | Quality Category | RPA Radius [m] |
|---------|-----------------|--------------------|-------------|--------------------|-----------------|-----------------------------------------|----------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------|------------------|----------------|
| 1       | Common holly    | Ilex aquifolium    | Semi-mature | 210                | 6               | 1.8                                     | 2.5                                    | 2.8                   | 3                     | 1.4                   | 1.5                   | Good                    | Good                 | Council owned tree situated on verge between footpath and property boundary. Tree is growing beneath canopy of neighbouring tree.                                                                                                                |                 | Medium (20 to 40 years)          | C                | 2.52           |
| 2       | Norway spruce   | Picea abies        | Semi-mature | 400                | 18              | 1.9                                     | 5.2                                    | 1.5                   | 2.4                   | 2.3                   | 2.3                   | Fair                    | Good                 | Council owned tree situated on verge between footpath and property boundary                                                                                                                                                                      |                 | Long (>40 years)                 | B                | 4.8            |
| 3       | Cherry species  | Prunus sp.         | Semi-mature | 170                | 6               | 1.9                                     | 2.5                                    | 2.3                   | 2.6                   | 3.8                   | 2.9                   | Fair                    | Good                 | Council owned tree situated on verge between footpath and property boundary.                                                                                                                                                                     |                 | Short (10 to 20 years)           | C                | 2.04           |
| 4       | Norway spruce   | Picea abies        | Young       | 75                 | 2               | 0                                       | 0                                      | 0.8                   | 0.8                   | 0.8                   | 0.8                   | Good                    | Good                 |                                                                                                                                                                                                                                                  |                 | Long (>40 years)                 | C                | 0.9            |
| 5       | Norway spruce   | Picea abies        | Young       | 85                 | 2               | 0                                       | 0                                      | 0.9                   | 0.9                   | 0.5                   | 0.5                   | Good                    | Good                 |                                                                                                                                                                                                                                                  |                 | Long (>40 years)                 | C                | 1.02           |
| 6       | Common yew      | Taxus baccata      | Young       | 192                | 6               | 1                                       | 1                                      | 1.5                   | 1.9                   | 1.9                   | 1.9                   | Fair                    | Good                 | Neighbouring garage was built within the last ten years, due to the proximity of the structure to the trees RPA, the trees physiological state has been affected as is evident in the slight chlorotic tinge to the leaves throughout the crown. |                 | Long (>40 years)                 | C                | 2.31           |
| 7       | Common yew      | Taxus baccata      | Semi-mature | 220                | 4               | 1                                       | 1                                      | 1                     | 1.9                   | 1.7                   | 1                     | Good                    | Good                 | Crown has been heavily pruned back on the neighbours side.                                                                                                                                                                                       |                 | Medium (20 to 40 years)          | C                | 2.64           |
| 8       | Pedunculate oak | Quercus robur      | Mature      | 525                | 20              | 6                                       | 6                                      | 3.9                   | 5.5                   | 5                     | 5                     | Fair                    | Good                 | Large limbs growing over parking spaces of 122 have historically been removed (above 1/3rd Parent stem).                                                                                                                                         |                 | Long (>40 years)                 | B                | 6.3            |
| 9       | Pedunculate oak | Quercus robur      | Semi-mature | 350                | 20              | 4                                       | 4                                      | 4                     | 6                     | 3                     | 2.1                   | Good                    | Good                 | No access to the base of the stem.                                                                                                                                                                                                               |                 | Long (>40 years)                 | B                | 4.2            |
| 10      | Silver birch    | Betula pendula     | Mature      | 325                | 16              | 3.8                                     | 4                                      | 3.8                   | 4                     | 4.2                   | 5.4                   | Good                    | Good                 | Stem 1.7m from boundary fence.                                                                                                                                                                                                                   |                 | Long (>40 years)                 | B                | 3.9            |
| 11      | Common ash      | Fraxinus excelsior | Semi-mature | 200                | 10              | 3                                       | 3                                      | 2.7                   | 2.7                   | 0.5                   | 2.7                   | Fair                    | Good                 | Stem 1.3m from boundary fence.                                                                                                                                                                                                                   |                 | Medium (20 to 40 years)          | B                | 2.4            |
| 12      | Cherry species  | Prunus sp.         | Mature      | 476                | 10              | 4.5                                     | 3.9                                    | 5.6                   | 5                     | 5.6                   | 5.9                   | Good                    | Fair                 |                                                                                                                                                                                                                                                  |                 | Medium (20 to 40 years)          | B                | 5.72           |
| 13      | Apple species   | Malus sp.          | Mature      | 285                | 6               | 1.7                                     | 1.6                                    | 3                     | 3.1                   | 1.6                   | 2.5                   | Good                    | Good                 |                                                                                                                                                                                                                                                  |                 | Long (>40 years)                 | B                | 3.42           |
| 14      | Apple species   | Malus sp.          | Mature      | 350                | 7               | 1.6                                     | 1.4                                    | 4                     | 2.5                   | 1.5                   | 4.5                   | Good                    | Good                 | Stem .80cm from boundary fence.                                                                                                                                                                                                                  |                 | Long (>40 years)                 | B                | 4.2            |

| Group ID | Common Name   | Scientific Name  | Life Stage  | Lower Height Range [m] | Upper Height Range [m] | Lower Stem Diameter [mm] | Upper Stem Diameter [mm] | Height of Canopy Above Ground [m] | Physiological Condition | Structural Condition | Estimated Remaining Contribution | Quality Category | Quality Sub-Category | Comments                                                                                                                 | Recommendations |
|----------|---------------|------------------|-------------|------------------------|------------------------|--------------------------|--------------------------|-----------------------------------|-------------------------|----------------------|----------------------------------|------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------|
| 1        | Common holly  | Ilex aquifolium  | Semi-mature | 0.3                    | 3                      | 180                      | 185                      | 0.3                               | Fair                    | Good                 | Medium (20 to 40 years)          | C                | 2                    | Trees have been topped into a hedge.                                                                                     | N/A             |
| 2        | Common hazel  | Corylus avellana | Semi-mature | 1.8                    | 5                      | 50                       | 100                      | 1.8                               | Good                    | Good                 | Short (10 to 20 years)           | C                | 2                    | Multi-stem Hazel group situated in neighbours property along boundary.                                                   | N/A             |
| 3        | Mixed species | Mixed species    | Semi-mature | 1.5                    | 10                     | 50                       | 185                      | 1.8                               | Mixed                   | Fair                 | Short (10 to 20 years)           | B                | 2                    | Mixed species growing in proximity to each other along boundary fence. Species include Leyland cypress, Hawthorn, Hazel. | N/A             |
| 4        | Mixed species | Mixed species    | Semi-mature | 2                      | 8                      | 50                       | 200                      | 1                                 | Mixed                   | Fair                 | Short (10 to 20 years)           | B                | 2                    | Mixed species growing in proximity to each other along boundary fence. Species include Forsythia, Apple and Ash.         | N/A             |

## **Appendix E: Tree Survey Plan (see constraints plan)**



LEGEND:



CATEGORY 'B' TREES & TREE GROUP'S: Those of moderate quality and value; in such a condition as to make significant contribution (a minimum of 20 years is suggested)



CATEGORY 'C' TREES & TREE GROUPS: Those of low quality and value; currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150 mm



Root Protection Area (RPA)



Site Boundary

NOTES:

1. Tree survey carried out on behalf of HAC Designs LTD for the proposed extension.
2. Tree survey was carried out on 14<sup>th</sup> of March 2023 by Mr Morgan Davies Ground Control's Arboricultural Surveyor.
3. Tree survey based on HAC DESIGNS LTD existing Location Plan 22048.S.PP-07.
4. Tree survey has been carried out in accordance with BS:5837:2012 'Trees in relation to design, demolition and construction - Recommendations' part 4.4. Please refer to these sections for further details.
5. Tree canopies outlines as shown on the plan are in accordance with the branch spread details within the tree schedule.
6. The location of trees and tree groups are based on visual inspection & estimation of location only due to not being supplied with Topographical drawing.

Rev. Changes Date Dr.by Ap.by



**Ground Control**  
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Client  
**HAC DESIGNS LTD**

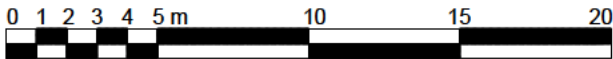
Project (Address)  
**122 Kidmore Road  
Caversham, Reading  
RG4 7NB**

Drawing title  
**Tree Constraints Plan**

| Date                  | Drawn by | Checked by   | Scale(s) |
|-----------------------|----------|--------------|----------|
| 15 March 2023         | IH       | LG           | 1:250@A2 |
| Drawing No.           | Rev      | Issue Status |          |
| J230306-GC-A-DR-3-001 | —        | Planning     |          |

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3. All discrepancies, errors or omissions are to be reported for clarification before proceeding.

Tree Constraints Plan SCALE:1:250 @ A2



## Appendix F: Root Protection Area Schedule

### Root protection Area - Measurements taken from BS5837: 2012 Table D1

In respect of all trees surveyed the RPA has been calculated and is given in the Tree Survey Schedule. The figures given represents both the radial distance and in sqm from the tree's trunk, at which the barriers should be erected and the entire area which should be encompassed by the barriers.

**BS 5837:2012**

**BRITISH STANDARD**

**Annex D**  
**(normative)**

### Root protection area

The RPAs given in Table D.1 should be used for single stem trees and the equivalent resultant combined stem diameter for multi-stemmed trees.

Table D.1 Root protection areas

| Single stem diameter<br>mm | Radius of nominal circle<br>m | RPA<br>m <sup>2</sup> | Single stem diameter<br>mm | Radius of nominal circle<br>m | RPA<br>m <sup>2</sup> |
|----------------------------|-------------------------------|-----------------------|----------------------------|-------------------------------|-----------------------|
| 75                         | 0.90                          | 3                     | 675                        | 8.10                          | 206                   |
| 100                        | 1.20                          | 5                     | 700                        | 8.40                          | 222                   |
| 125                        | 1.50                          | 7                     | 725                        | 8.70                          | 238                   |
| 150                        | 1.80                          | 10                    | 750                        | 9.00                          | 255                   |
| 175                        | 2.10                          | 14                    | 775                        | 9.30                          | 272                   |
| 200                        | 2.40                          | 18                    | 800                        | 9.60                          | 290                   |
| 225                        | 2.70                          | 23                    | 825                        | 9.90                          | 308                   |
| 250                        | 3.00                          | 28                    | 850                        | 10.20                         | 327                   |
| 275                        | 3.30                          | 34                    | 875                        | 10.50                         | 346                   |
| 300                        | 3.60                          | 41                    | 900                        | 10.80                         | 366                   |
| 325                        | 3.90                          | 48                    | 925                        | 11.10                         | 387                   |
| 350                        | 4.20                          | 55                    | 950                        | 11.40                         | 408                   |
| 375                        | 4.50                          | 64                    | 975                        | 11.70                         | 430                   |
| 400                        | 4.80                          | 72                    | 1 000                      | 12.00                         | 452                   |
| 425                        | 5.10                          | 81                    | 1 025                      | 12.30                         | 475                   |
| 450                        | 5.40                          | 92                    | 1 050                      | 12.60                         | 499                   |
| 475                        | 5.70                          | 102                   | 1 075                      | 12.90                         | 519                   |
| 500                        | 6.00                          | 113                   | 1 100                      | 13.20                         | 547                   |
| 525                        | 6.30                          | 124                   | 1 125                      | 13.50                         | 573                   |
| 550                        | 6.60                          | 137                   | 1 150                      | 13.80                         | 598                   |
| 575                        | 6.90                          | 150                   | 1 175                      | 14.10                         | 625                   |
| 600                        | 7.20                          | 163                   | 1 200                      | 14.40                         | 652                   |
| 625                        | 7.50                          | 177                   | 1 225                      | 14.70                         | 679                   |
| 650                        | 7.80                          | 191                   | 1 250+                     | 15.00                         | 707                   |

NOTE These figures are derived from the calculations described in 4.6.

## **Appendix G: Tree Constraints and Protection Plan**

NOTES

1.0 DRAWING INFORMATION

1.1 Drawing based on:  
HAC DESIGNS LTD Proposed Block Plan 22048.S.PP-08 REV A.

1.2 Drawing to be read in conjunction with following Ground Control documents:  
GC Tree Constraints Plan J230306-GC-A-DR-3-001  
GC Arboricultural Report.

2.0 TREE PROTECTION FENCING.

2.1 All trees requiring protection (as highlighted) to be protected for the duration of the contract in accordance with British Standard BS5837:2012, entitled 'Trees in relation to design, demolition and construction - Recommendations'. Refer to Arboricultural Report for details.

3.0 MANUAL EXCAVATION

3.1 Within root protection areas the depths of any excavations, whether for proposed foundations, hard surfacing, planting or underground services shall be undertaken by hand under arboricultural supervision. The soil will be loosened with a pick or fork, and then will be cleared from roots with a compressed air soil pick. All roots will be cut cleanly with a saw or secateurs. The edge of the excavation closest to the trees will be covered with Hessian sacking to prevent drying out, if necessary be shuttered with an appropriate material to prevent soil collapse. Where appropriate, the soil beneath this depth may be sheet piled and deeper excavation may be undertaken by a machine provided it works from outside the root protection areas.

4.0 ARBORICULTURAL SUPERVISION

4.1 The arboricultural consultant will be directly supervising all construction works that have to be undertaken within root protection areas. These include:  
4.1.1 Location of protective fencing.  
4.1.2 Lifting/excavation of existing hard surfaces.  
4.1.3 Construction of proposed hard surfaces.  
4.1.4 All other excavations, whether for proposed foundations, or underground services

5.0 GENERAL SITE OPERATIONS

5.1 The following should be avoided. (BS5837:2012 sec 7 and 8)

- 5.1.1 Material which will contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, should not be discharged within 10m of the tree stem.
- 5.2.2 Fires should not be lit in a position where their flames can extend to within 5 m of foliage, branches of trunk. This will depend on the size of the fire and the wind direction.
- 5.3.3 Notice boards, telephone cables or other services should not be attached to any part of the tree.

6.0 GROUND PROTECTION

6.1 The default position should remain as any existing hard surfacing within the RPA should remain in place and act as ground protection throughout duration of works.

6.2 Where the retention of existing surfacing is not possible and ground is left exposed temporary ground protection should be installed in accordance with BS5837:2012 and the specification below and illustrative details on drawing:

6.2.1 For Pedestrian Movements;

Single thickness of scaffold boards placed on top of a driven scaffold frame to form a suspended walkway or on top of a compression resistant layer such as 100mm depth wood chip laid onto a geo-textile membrane.

6.2.2 Pedestrian Operated Plant up to 2 ton;

Proprietary interlinked ground protection board placed on top of compression resistant layer such as 150mm depth of wood chip laid onto a geo-textile membrane.

6.2.3 Wheeled or Tracked Construction Traffic exceeding 2 ton gross weight;

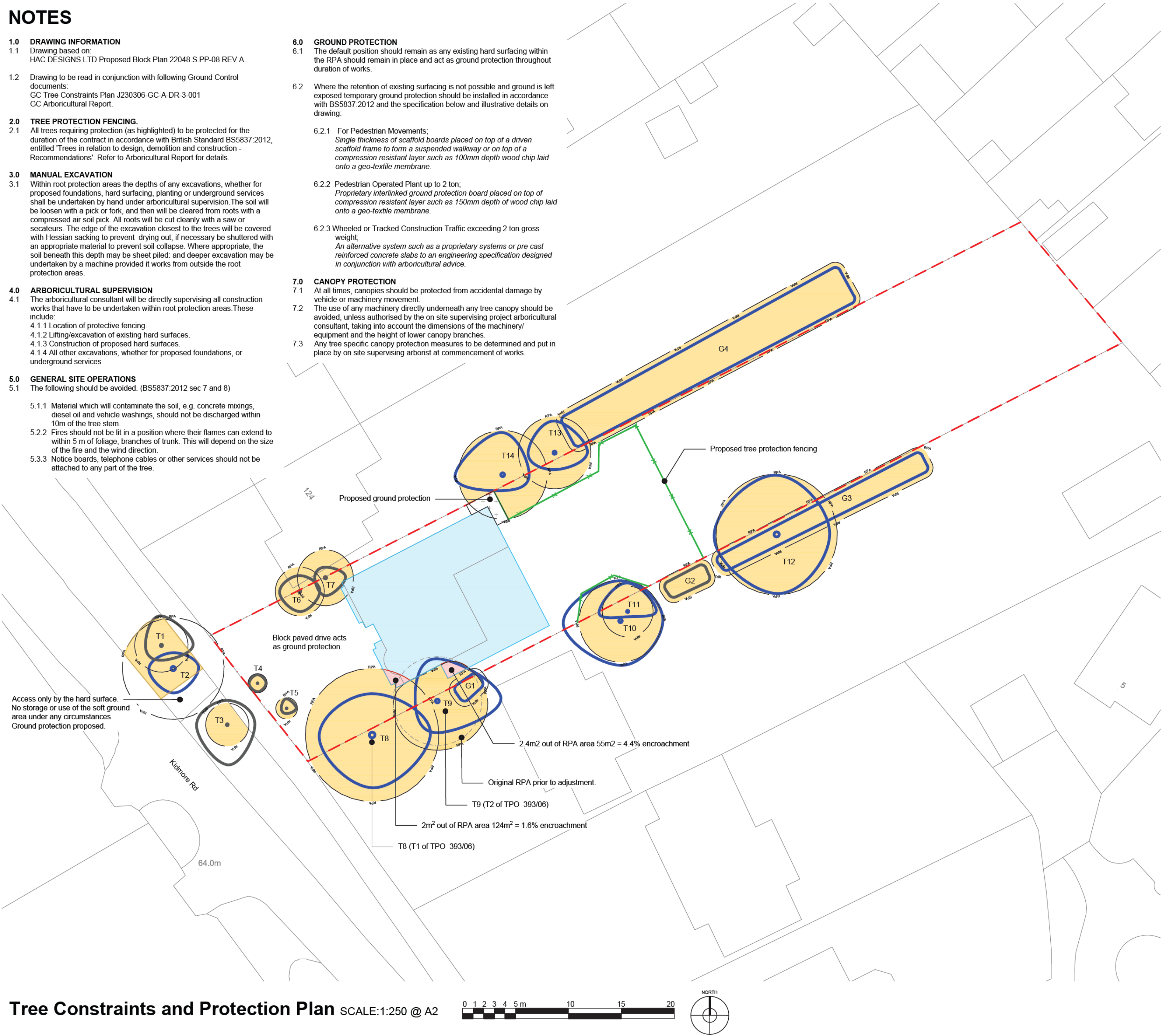
An alternative system such as a proprietary systems or pre cast reinforced concrete slabs to an engineering specification designed in conjunction with arboricultural advice.

7.0 CANOPY PROTECTION

7.1 At all times, canopies should be protected from accidental damage by vehicle or machinery movement.

7.2 The use of any machinery directly underneath any tree canopy should be avoided, unless authorised by the on site supervising project arboricultural consultant, taking into account the dimensions of the machinery/equipment and the height of lower canopy branches.

7.3 Any tree specific canopy protection measures to be determined and put in place by on site supervising arborist at commencement of works.



LEGEND:

- Existing category 'B' trees & Tree Groups to be retained
- Existing category 'C' trees & Tree Groups to be retained
- Construction Exclusion Zone (CEZ) within Root Protection Area (RPA)
- Proposed ground protection in accordance with BS 5837:2012 Section.6.2.3
- Proposed tree protection in accordance with BS 5837:2012
- Encroachment area

Tree Constraints and Protection Plan SCALE:1:250 @ A2

Rev. Changes

Date

Dr.by

Ap.by



Arboriculture  
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Client

HAC DESIGNS LTD

Project (Address)

122 Kidmore Road  
Caversham, Reading  
RG4 7NB

Drawing title

Tree Constraints and Protection Plan

|             |                       |          |    |              |          |          |          |
|-------------|-----------------------|----------|----|--------------|----------|----------|----------|
| Date        | 15 March 2023         | Drawn by | IH | Checked by   | LG       | Scale(s) | 1:250@A2 |
| Drawing No. | J230306-GC-A-DR-3-002 | Rev      | —  | Issue status | Planning |          |          |

Notes:

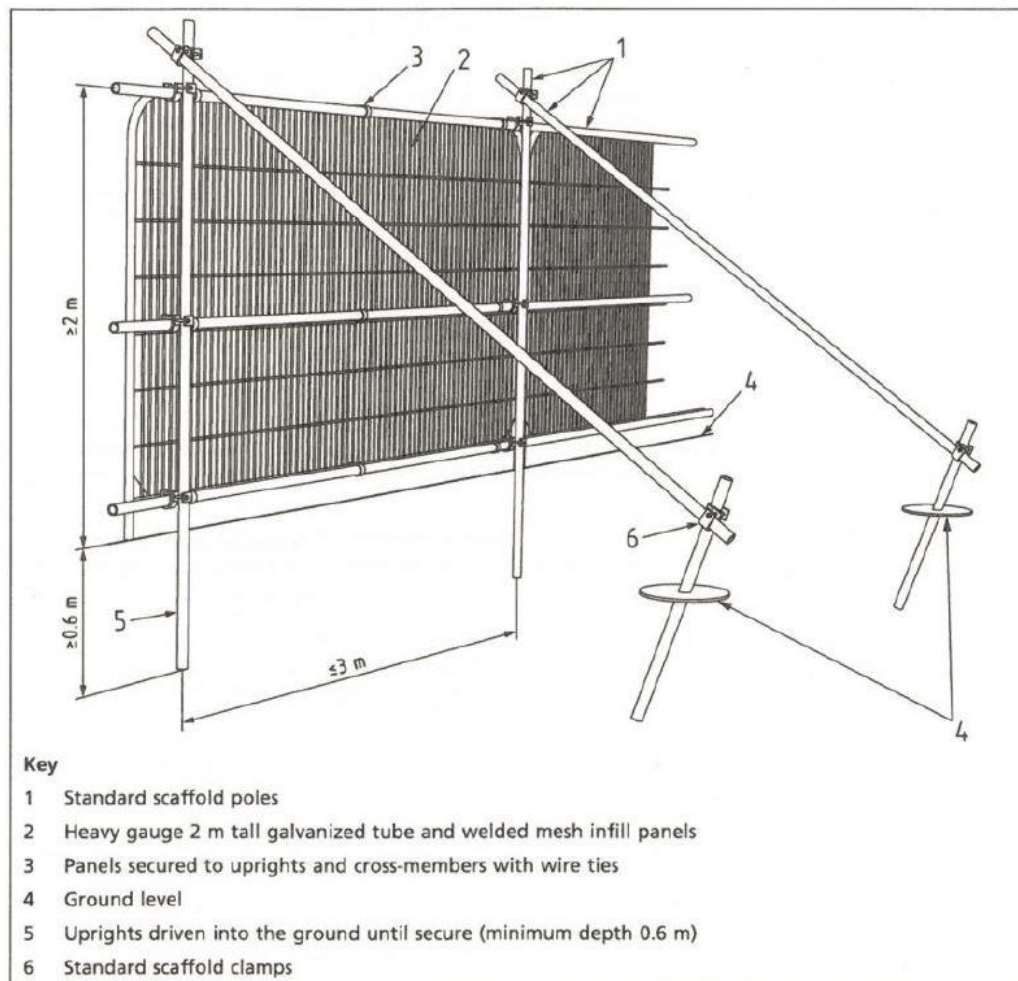
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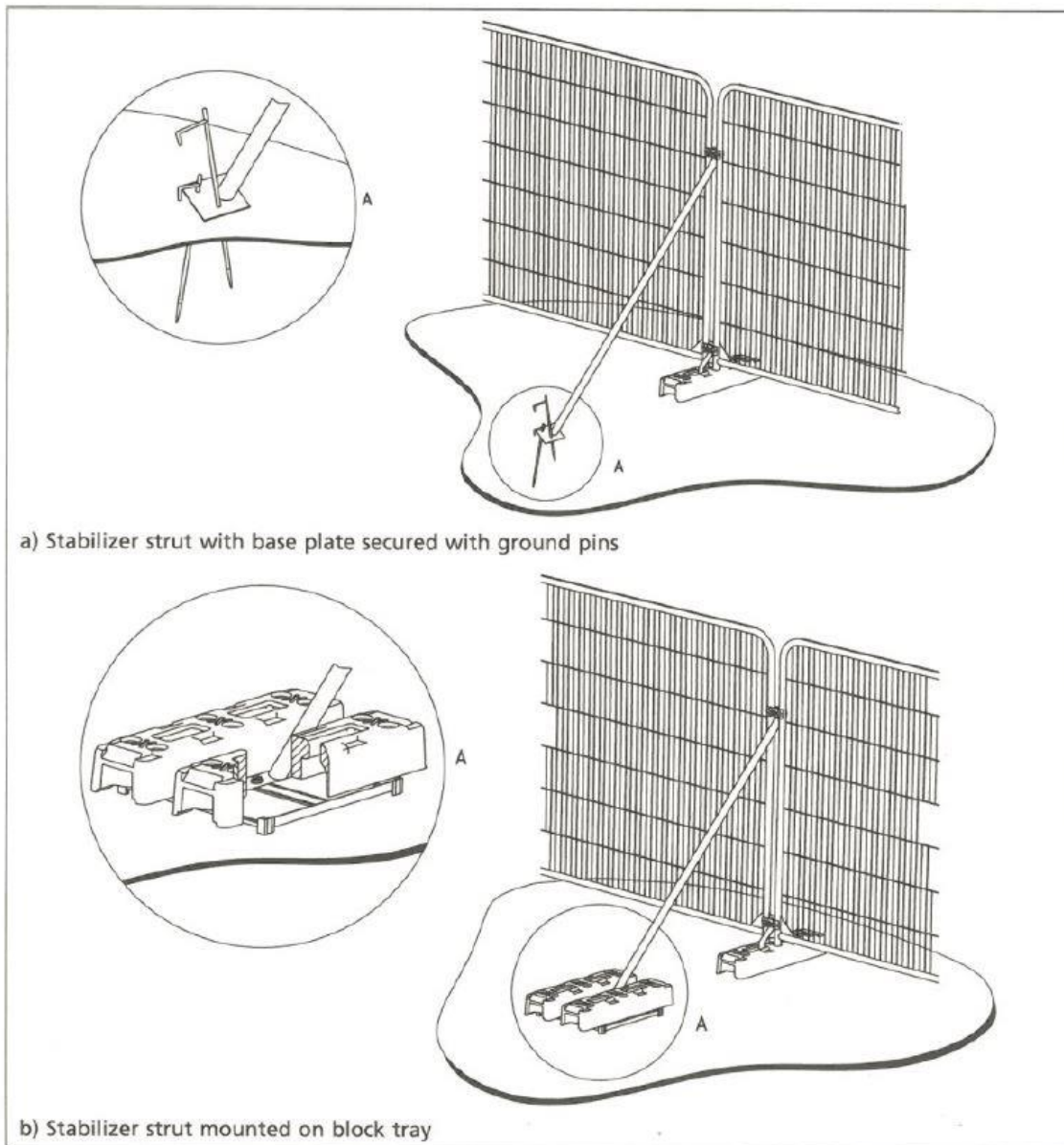
3. All discrepancies, errors or omissions are to be reported for clarification before proceeding.

## Appendix H: Tree Protection Fencing & Signs

Default specification for protective barrier



## Examples of above ground stabilizing systems



## Appendix I: Tree Survey Photos

### Common holly Tree ID #1

79 Kidmore Road

#### Tree Details

|                          |                 |
|--------------------------|-----------------|
| Scientific Name:         | Ilex aquifolium |
| Physiological Condition: | Good            |
| Stem Diameter [mm]:      | 210             |
| Stem Diameter [cm]:      | 21              |
| User:                    | MorganD         |
| Primary ID:              | 35474           |

#### Photos



### Norway spruce Tree ID #2

79 Kidmore Road

#### Tree Details

|                          |             |
|--------------------------|-------------|
| Scientific Name:         | Picea abies |
| Physiological Condition: | Fair        |
| Stem Diameter [mm]:      | 400         |
| Stem Diameter [cm]:      | 40          |
| User:                    | MorganD     |
| Primary ID:              | 35475       |

#### Photos



### Cherry species Tree ID #3

120 Kidmore Road

#### Tree Details

|                          |            |
|--------------------------|------------|
| Scientific Name:         | Prunus sp. |
| Physiological Condition: | Fair       |
| Stem Diameter [mm]:      | 170        |
| Stem Diameter [cm]:      | 17         |
| User:                    | MorganD    |
| Primary ID:              | 35476      |

#### Photos



### Norway spruce Tree ID #4

120 Kidmore Road

#### Tree Details

Scientific Name: Picea abies

Physiological Condition: Good

Stem Diameter [mm]: 75

Stem Diameter [cm]: 7.5

User: MorganD

Primary ID: 35477

#### Photos



### Norway spruce Tree ID #5

120 Kidmore Road

#### Tree Details

Scientific Name: Picea abies

Physiological Condition: Good

Stem Diameter [mm]: 85

Stem Diameter [cm]: 8.5

User: MorganD

Primary ID: 35478

#### Photos



### Common yew Tree ID #6

124 Kidmore Road

#### Tree Details

Scientific Name: Taxus baccata

Physiological Condition: Fair

Stem Diameter [mm]: 192.09

Stem Diameter [cm]: 19.209

User: MorganD

Primary ID: 35479

#### Photos



### Common yew Tree ID #7

124 Kidmore Road

#### Tree Details

|                          |               |
|--------------------------|---------------|
| Scientific Name:         | Taxus baccata |
| Physiological Condition: | Good          |
| Stem Diameter [mm]:      | 220           |
| Stem Diameter [cm]:      | 22            |
| User:                    | MorganD       |
| Primary ID:              | 35480         |

#### Photos



### Pedunculate oak Tree ID #8

120 Kidmore Road

#### Tree Details

|                          |               |
|--------------------------|---------------|
| Scientific Name:         | Quercus robur |
| Physiological Condition: | Fair          |
| Stem Diameter [mm]:      | 525           |
| Stem Diameter [cm]:      | 52.5          |
| User:                    | MorganD       |
| Primary ID:              | 35481         |

#### Photos



### Pedunculate oak Tree ID #9

122 Kidmore Road

#### Tree Details

|                          |               |
|--------------------------|---------------|
| Scientific Name:         | Quercus robur |
| Physiological Condition: | Good          |
| Stem Diameter [mm]:      | 350           |
| Stem Diameter [cm]:      | 35            |
| User:                    | MorganD       |
| Primary ID:              | 35482         |

#### Photos



### Silver birch Tree ID #10

122 Kidmore Road

#### Tree Details

|                          |                |
|--------------------------|----------------|
| Scientific Name:         | Betula pendula |
| Physiological Condition: | Good           |
| Stem Diameter [mm]:      | 325            |
| Stem Diameter [cm]:      | 32.5           |
| User:                    | MorganD        |
| Primary ID:              | 35484          |

#### Photos



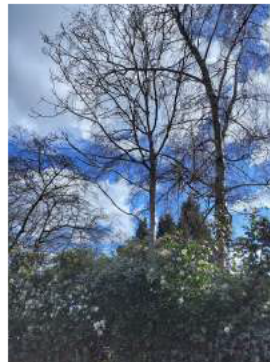
### Common ash Tree ID #11

122 Kidmore Road

#### Tree Details

|                          |                    |
|--------------------------|--------------------|
| Scientific Name:         | Fraxinus excelsior |
| Physiological Condition: | Fair               |
| Stem Diameter [mm]:      | 200                |
| Stem Diameter [cm]:      | 20                 |
| User:                    | MorganD            |
| Primary ID:              | 35485              |

#### Photos



### Cherry species Tree ID #12

140 Kidmore Road

#### Tree Details

|                          |            |
|--------------------------|------------|
| Scientific Name:         | Prunus sp. |
| Physiological Condition: | Good       |
| Stem Diameter [mm]:      | 476.34     |
| Stem Diameter [cm]:      | 47.634     |
| User:                    | MorganD    |
| Primary ID:              | 35486      |

#### Photos



### Apple species Tree ID #13

122 Kidmore Road

#### Tree Details

Scientific Name: Malus sp.

Physiological Condition: Good

Stem Diameter [mm]: 285

Stem Diameter [cm]: 28.5

User: MorganD

Primary ID: 35487

#### Photos



### Apple species Tree ID #14

122 Kidmore Road

#### Tree Details

Scientific Name: Malus sp.

Physiological Condition: Good

Stem Diameter [mm]: 350

Stem Diameter [cm]: 35

User: MorganD

Primary ID: 35488

#### Photos



### Group ID #1

#### Group Details

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Common Name:                      | Common holly                         |
| Life Stage:                       | Semi-mature                          |
| Physiological Condition:          | Fair                                 |
| Estimated Remaining Contribution: | Medium (20 to 40 years)              |
| Quality Category:                 | C                                    |
| Recommendations:                  |                                      |
| Comments:                         | Trees have been topped into a hedge. |

#### Photos Street View Map View



### Group ID #2

#### Group Details

|                                   |                                                                        |
|-----------------------------------|------------------------------------------------------------------------|
| Common Name:                      | Common hazel                                                           |
| Life Stage:                       | Semi-mature                                                            |
| Physiological Condition:          | Good                                                                   |
| Estimated Remaining Contribution: | Short (10 to 20 years)                                                 |
| Quality Category:                 | C                                                                      |
| Recommendations:                  |                                                                        |
| Comments:                         | Multi-stem Hazel group situated in neighbours property along boundary. |

#### Photos Street View Map View



### Group ID #3

#### Group Details

|                                   |                                                        |
|-----------------------------------|--------------------------------------------------------|
| Common Name:                      | Mixed species                                          |
| Life Stage:                       | Semi-mature                                            |
| Physiological Condition:          | Mixed                                                  |
| Estimated Remaining Contribution: | Short (10 to 20 years)                                 |
| Quality Category:                 | B                                                      |
| Recommendations:                  |                                                        |
| Comments:                         | Mixed species growing in proximity to each other along |

#### Photos Street View Map View



boundary fence.  
Species include  
Leyland cypress, Haw  
Thorn, Hazel.

## Group ID #4

### Group Details

|                                   |                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------|
| Common Name:                      | Mixed species                                                                                                    |
| Life Stage:                       | Semi-mature                                                                                                      |
| Physiological Condition:          | Mixed                                                                                                            |
| Estimated Remaining Contribution: | Short (10 to 20 years)                                                                                           |
| Quality Category:                 | B                                                                                                                |
| Recommendations:                  |                                                                                                                  |
| Comments:                         | Mixed species growing in proximity to each other along boundary fence. Species include Forsythia, Apple and Ash. |

### Photos Street View Map View



## Appendix J: Tree work during Bird Nesting Season

During the bird nesting season, the procedure leading up to tree works should involve.

- Work within dense vegetation should be avoided.
- Generally, trees and shrubs being worked upon should be single individuals that can be observed in full, or completion of coppice work where clear views through and into beds to be coppiced can be obtained.
- Those undertaking the work need to look for presence of nests and for birds flying in and out of the tree returning with food or bedding material. Slowly circle the tree/shrub, again inspecting the tree/shrub for indications of nesting.
- Move closer (or underneath) the tree/shrub, again slowly circle the tree/shrub looking for nesting and nesting opportunities such as holes.
- If at any time, an active nest or a nest that is being built is observed, the tree/shrub must not be worked upon.
- If a nest is observed that it is quite clearly an old or abandoned nest (not maintained/falling apart or clearly not being used – time of year will be a consideration), the tree/shrub may be felled.
- If the selected tree/shrub is part of a group or immediately adjacent to tree/shrubs, these too should also be inspected for nests. For example, felling one tree could expose a nest to a change in micro-climates or predators.
- Regarding larger mature trees it should be our aim to work on these trees out of the regular nesting season. However, if for health and safety reasons or perhaps responding to wind damage, work should continue with caution. The tree should be continually observed for nests and bird activities.
- Holes in the trunk/branches should be viewed with suspicion and use of endoscopes (by a trained ecologist) should be employed to investigate such features further. If a tree is found in a dangerous condition that contains a nest, where possible the work should continue without disturbance to the nest and within the shortest possible time. Where there is possibility that the nest may be physically disturbed, advice should be taken from an ecologist.
- When working in areas that might be deemed sensitive (working in mature trees) or larger scale jobs (i.e., removing groups of singular trees) using photographs or written documentation is recommended.

## References

*Building Research Establishment, (2011), BR 209, Site layout planning for daylight and sunlight: a guide to good practice.*

*DCLG (2000) 'Tree Preservation Orders – A Guide to the Law and Good Practice'.*

*International Society of Arboriculture's Best Management Practices for Tree Risk Assessment*

*Lonsdale D., (1999), Principles of Tree Hazard Assessment and Management, DETR*

*Mattheck, C. Breloer H., (1994) The Body Language of Trees, Forestry Commission.*

*Mattheck, C. (2007), Updated Field Guide for Visual Tree Assessment*

*National Joint Utilities Group publication VOLUME 4 Issue 2 November 2007*

*Strouts R. G., Winter T. G. (1994), Diagnosis of Ill Health in Trees, 2nd Ed., DETR*

*Tree Roots in the Built Environment (2006) J Roberts, N Jackson, M Smith*

## British Standards

- *BS 5837: 2012 - Trees in Relation to Design, Demolition and Construction-Recommendations.*
- *BS 3998: 2010 - Recommendations for Tree Work.*
- *BS 3882: 2015 – Specification for Topsoil.*
- *BS 8545: 2014 – Trees from Nursery to Independence in the Landscape.*
- *BS 3936: 1992 - Nursery Stock. Part 1: Specification for Trees and Shrubs.*
- *BS 3936: 1992 - Nursery Stock. Part 10: Specification for Groundcover Plants.*
- *BS 4428: 1989 – Code of Practice for General Landscaping Operations (excluding hard surfaces).*



*Vegetation Management*

*Arboricultural Services*

*Ecological Services*

*Grounds Maintenance*

*Landscape Construction*

*Landscape Architecture*

*Winter Maintenance*

*Asset Management*

*Pest Control & Auditing*

*Fencing & Roofing*