

**LAND AT SANDFIELD, WEST LAVINGTON,  
WILTSHIRE**

**TREE SURVEY AND ARBORICULTURAL IMPACT ASSESSMENT  
FOR  
PROPOSED RESIDENTIAL DEVELOPMENT**

On behalf of  
**GAIGER BROS LTD.**

**April 2017**

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**REF: 17.531**

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# APPOINTMENT

**WHLandscape Consultancy Ltd** has been appointed by Gaiger Bros Ltd to undertake a Tree Survey and Arboricultural Impact Assessment in respect of a proposed development on land off Sandfield, West Lavington, Wiltshire.

**WHLandscape Consultancy Ltd** has an established track record of carrying out tree surveys for development proposals using BS 5837:2012 *Trees in Relation to Design, Demolition and Construction – Recommendations*.

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## 1. INTRODUCTION

**1.1** This tree survey has been commissioned by Gaiger Bros Ltd to assess the condition of onsite trees and hedges, and to address tree protection matters including an Arboricultural Impact Assessment to support proposed planning on land off Sandfield, West Lavington, Wiltshire. The trees affected by the proposed development are either located within, or bordering, the site.

**1.2** The site lies between the villages of West Lavington and Market Lavington, and is bordered by existing residential development to the west, a bridleway and widely spaced development to the east, Dauntsey's Primary School to the immediate south and the Lavington Lane to the north.

**1.3** The trees comprise a mixture of young and mature native and non-native species located within, and bordering, the site, which have largely received limited proactive management in recent years. The bulk of the trees are sited on the periphery of the northern and eastern boundaries, with larger offsite trees to the south-east and south, the canopies of which marginally overhanging the site boundaries in parts. Established native hedging also runs along parts of the southern and western boundaries.

**1.4** An unaccompanied site visit was undertaken on the 22<sup>nd</sup> March 2017 by Simon Turner.

## 2. TREE SURVEY SCOPE AND DETAILS

**2.1** The tree survey was undertaken in accordance with the British Standard (BS) 5837:2012 *Trees in Relation to Design, Demolition and Construction – Recommendations*. The purpose of the survey was to assess existing trees in relation to potential development in order to:

- Record their principle attributes (species, height, stem diameter, crown spread etc.).
- Determine their quality and value.
- Identify their retention value.
- Determine their root protection areas as detailed within BS 5837:2012.

**2.2** The findings of the survey highlight which trees are of particular merit and should be marked as a material constraint in the planning process.

**2.3** The suitability of trees for inclusion in the future development was considered, in particular considering their safe useful life expectancy and suitability on the site after development is completed.

## **2.4 DESIGNATIONS**

**2.4.1** The trees identified within this report are not located within a designated conservation area and are not known to have Tree Preservation Order protection. The site is not located within a designated landscape.

## **2.5 SURVEY LIMITATIONS**

**2.5.1** Whilst every effort has been made to detect defects within the trees, no guarantee can be given as to their absolute safety, as trees are dynamic living organisms whose health and condition can be subject to rapid change depending on external and internal factors. All recommendations contained within this report relate to the trees at the time of inspection and are principally given in the context of the planning process with emphasis placed on their current condition, site suitability, corrective works and the Root Protection Areas (RPAs) required to ensure the trees' health and longevity should planning permission be granted. A full Tree Hazard Assessment has not been carried out.

**2.5.2** The report was produced following a ground level survey only, with the use of binoculars, sounding hammer and metal probe, based on the Visual Tree Assessment Method (Mattheck & Breloer 1994). No soil samples were taken and this report does not consider the potential influence that the tree may have on adjacent structures. The validity, accuracy and findings of this report will be directly related to the accuracy of the information made available. The author of this report will not be held responsible for any recommendations made where essential data has not been made available or is inaccurate.

**2.5.3** All dimensions are measured as far as reasonably practicable with the plotting of trees dependent on the available satellite coverage at the time of inspection. The survey methodology follows that prescribed in BS 5837:2012.

**2.5.4** The report is valid for a period of 1 year from the date of inspection, but will become invalid if any works on, or close to, the trees, including the changing of soil levels, is undertaken.

**2.5.5** Under the terms of the Wildlife and Countryside Act 1981 (as amended), the Countryside Rights of Way Act 2000 and the Conservation of Habitats and Species Regulations 2010, it is an offence to disturb any protected species, including their habitat or resting place. It may, therefore, be necessary to obtain expert advice in this area prior to the commencement of any works. This is particularly relevant to nesting birds, bats and their roosts. Contractors must be reminded of their responsibilities and should contact the relevant authorities if any signs of bats are found. The nesting season for most birds runs from 1<sup>st</sup> March to 31<sup>st</sup> July. However, this can vary depending on the species and location. During these months, careful inspection must be made before any work commences and works must be postponed if active nests are found.

## **2.6 ROOT PROTECTION AREA CONSTRAINTS**

**2.6.1** Retained trees will result in a potential constraint on the land. The rooting system/rooting zone of a tree is essential to a tree's health and vitality. The area of the rooting zone sufficient to sustain a tree's long-term health is referred to as the Root Protection Area (RPA). RPAs are plotted for all trees which are potentially affected by the development.

**2.6.2** The RPAs are calculated as per Section 4.6 of BS 5837:2012 and, where applicable, are recorded as an area of a nominal circle or a radius of that circle. The British Standard states the following:

- For a single stem tree, the RPA is calculated as an area equivalent to a circle with a radius 12 times the stem diameter.
- For trees with more than one stem, one of two calculation methods is to be used:

*For Trees with Two to Five Stems*

$$\sqrt{(stem\ diameter\ 1)^2 + (stem\ diameter\ 2)^2 \dots + (stem\ diameter\ 5)^2}$$

*For Trees with More than Five Stems*

$$\sqrt{(mean\ stem\ diameter\ 1)^2 \times number\ of\ stems}$$

**2.6.3** In all cases the stem diameters are measured in accordance with Annex C, and the RPA determined from Annex D of BS 5837:2012. The calculated RPA is capped at 707m<sup>2</sup> or a 15 metre (m) radius.

## **2.7 OTHER CONSTRAINTS**

**2.7.1** The above-ground area occupied by the crown of a tree, allowances for working space during development, the area of potential shade and debris cast by the tree and, if applicable, allowances for future growth of the trees, all pose potential constraints on the site. The extent of these constraints is determined by considering the suitability of the species and its characteristics, and the existing and future crown spread of the tree. A further consideration is that the crown could be modified by appropriate tree surgery, which should be undertaken in accordance with BS 3998:2010 *Tree Work – Recommendations*. Site planning and development design should therefore give consideration to these issues in order to prevent future problems arising.

## **2.8 SERVICES**

**2.8.1** All services should be directed outside the retained trees' RPAs. However, where it is agreed that services can be located within an RPA, they must be hand-dug in accordance with the principles contained within National Joint Utilities Group Guidelines Vol. 4 in a position no closer than 4 times the stem circumference of the tree down to the required level. Small diameter roots should be neatly cut with clean secateurs, whilst roots over 25 millimetres (mm) in diameter and/or large root masses should be retained undamaged.

## **2.9 GENERAL MEASURES**

**2.9.1** No unplanned construction activity whatsoever must be allowed within the RPAs. This includes no storage of materials, unplanned routing of underground services or on-site parking.

**2.9.2** Mixing of cement, concrete or the storage of fuels must not take place within 10.0m of the retained trees, nor in any location where a slope in the ground could lead to contamination of the RPA.

**2.9.3** Fires must not be lit in a position where flames could extend within 10.0m of the foliage, branch framework or trunk.

**2.9.4** Landscape works undertaken within the RPAs must be done with great care so as not to damage shallow roots. Heavy mechanical cultivation of the soil must not be undertaken within the RPAs.

**2.9.5** Changes in soil level should not be undertaken within the RPAs in order to ensure that soil is not compacted with the delicate rooting system, including the non-woody roots.

**2.9.6** All soil storage must be outside the RPAs of all retained trees to ensure that any run-off of water or residue does not seep into the RPAs.

### **3. TREE PROTECTION MEASURES**

**3.1** In order to ensure the protection of the retained trees and their rooting systems, they will be fenced during the construction period in accordance with the requirements of BS 5837:2012 *Trees in Relation to Design, Demolition and Construction – Recommendations*. The location of Tree Protection Fencing will be determined when the final site layout is agreed and will provide the minimum protection of the trees RPAs. The location of which is detailed in Fig 4.

**3.2** Where the new permanent hard surfacing is proposed within the RPA of a retained tree, a no-dig construction solution is required in accordance with the requirements of paragraph 7.4 of BS 5837:2012 to prevent damage to the rooting system. This should not exceed 20% of any existing unsurfaced ground within the RPA. An example of this design is shown as Appendix 4.

**3.3** Edge supports/kerbing must also be of a non-dig design such as boards/sleepers with pegs/pins. As detailed in Appendix 4

**3.4** Where pedestrian access for construction operations is necessary in areas which are not already hard surfaced, temporary ground protection is required. Temporary ground protection should be constructed to support the load required and be in accordance with the requirements of paragraph 6.2.3.3 of BS 5837:2012.

**3.5** The use of Heras type braced weld mesh fencing is recommended where demolition and construction operations may affect retained trees. The protective fencing shall be constructed as detailed above and as shown in Appendix 2 and 3.

**3.6** After the erection of the Tree Protection Fencing, a minimum of 2-days' notice must be given to the Local Planning Authority (LPA) before any construction, including any ground work, starts on site. Tree Protection Fencing must be maintained and retained for the duration of the works, or until such time as agreed in writing with the LPA.



**3.7** Clear notices are to be fixed to the outside of the Tree Protection Fencing with words such as 'PROTECTED AREA – NO ACCESS AND NO STORAGE OR WORKING WITHIN THIS AREA'. Examples of these are attached as Appendix 5.

**3.8** The following shall apply within all fenced RPAs or under the canopies of retained trees:

- No mechanical excavation.
- No excavation by other means without arboricultural supervision.
- No hand digging without an approved written method statement.
- No lowering of levels for any purpose.
- No storage of plant or materials.
- No storage or handling of chemicals or cement within or adjacent to the fenced RPAs.
- No vehicular access.
- No fire lighting within 10.0m of the outer edge of the tree canopies.

**3.9** Services and drain runs must be kept outside the fenced RPAs of the retained trees unless agreed in advance of construction.

## 4. TREE SURVEY CRITERIA

4.1 The Tree Survey was undertaken in accordance with Section 4 of BS 5837:2012, which grades trees into the following categories:

- A – Trees of high quality with an estimated remaining life expectancy of at least 40 years.
- B – Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
- C – Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
- U – Trees in such a condition that they cannot be realistically retained. Irreparable structural defects, diseased, dead or severely suppressed trees.

4.2 Further subcategories are given as follows:

- Mainly arboricultural qualities (1).
- Mainly landscape qualities (2).
- Mainly cultural values, including conservation (3).

## 5. TREE SURVEY FINDINGS

**5.1** The surveyed trees comprise a mixture of native and non-native specimens, which are visible from the permissive footpaths crossing the site, parts of the bridleway to the east, the school and adjacent roads, and nearby properties to the west and east. The findings of the survey are as follows:

### 5.2 Offsite trees

**5.3** Trees T6, T7 and G2 comprise a linear group of mature common beech (*Fagus sylvatica*) and hornbeam (*Carpinus betulus*) located on the eastern edge of the bridleway. The trees are tightly grouped and of varying quality. Trees T6 and T7 overhang the edge of the site by several metres, with the canopies of G2 stretching to the edge of the site. The trees provide a strong sylvan backdrop to the site and have been awarded a B1,2 grade category due to their arboricultural and landscape qualities.

**5.4** Trees T31 and T32 are 2 mature common oaks (*Quercus robur*) located within the grounds of the adjacent school. The trees form a conjoined canopy and are a significant sylvan feature within the immediate area which have been awarded a B1,2 category for their arboricultural and landscape qualities. The canopies overhanging the site boundary by approximately 5.0m.

### 5.5 On-site trees

**5.6** The trees within the site are of various quality with the higher-grade trees sited along the northern boundary, with the remaining trees of mixed quality being sited largely to the east of the site.

**5.7** Trees T1 to T5 are four misshapen Leyland cypress (*X Cupressocyparis leylandii*) and one grey poplar (*Populus x canescens*) located within the south-eastern corner of the site. The trees are largely suppressed by the larger offsite trees and lean to the southwest in search for light. The poplar also has significant squirrel damage on the upper main stem, which is an entry point for future decay. The trees are of limited quality and the conifers have been awarded a C1 category with the poplar awarded a U-grade category. The removal of these trees would allow more suitable planting to be undertaken.

**5.8** Tree T8 is a semi-mature sycamore (*Acer pseudo-platanus*), located on the edge of the site, which is shrouded in ivy and in a poor condition. The tree has been awarded a U-grade category. The removal of this tree is recommended.

**5.9** Tree T9 is a semi-mature common ash (*Fraxinus excelsior*) located close to T8. The tree is suppressed with a heavy lean to the south. The tree is of limited quality and has been awarded a U-grade category. The removal of this tree is recommended.

**5.10.** Trees T10 to T12, T18 and T39 to T44 are semi-mature English elm (*Ulmus procera*) located on the northern and eastern boundaries. The trees are of limited overall quality and likely to succumb to Dutch Elm Disease as they increase in size and stature. The trees have been awarded U-grade categories and are not expected to last longer than 10 years. Their removal is recommended.

**5.11** Trees T13 to 15 are three poorly-shaped, ivy-clad veteran whitebeam (*Sorbus aria*) located on the top of the bank adjacent to the sunken bridleway. Although the trees are of a significant size for the species, they have been awarded a U-grade category due to their age and poor quality. Their removal is recommended.

**5.12** Tree T16 and T17 comprise a mature and a veteran sycamore (*Acer pseudoplatanus*), located on the edge of the steep bank bordering the sunken bridleway. Both trees have been topped in the past with T17 covered in thick ivy and sounding hollow in the lower stem. The trees have been awarded a U-grade category due to their location and condition. It is recommended that the trees be felled or coppiced.

**5.13** Trees T19, T20, T21 comprise two maturing sycamore (*Acer pseudoplatanus*) and one mature elder (*Sambucus nigra*) located on the steep bank bordering the bridleway, all of which appear to have been lopped in the past. The sycamore T19 has a badger sett 5.0m to the south-west and has notable squirrel damage on the upper stems. Both sycamores have been allocated C1,2 categories whilst the elder has been awarded a U-grade category. It is recommended that the trees be felled or coppiced.

**5.14** Trees T22, T23, T23.1, T24 and T25 consist of four coppiced Hazel (*Corylus avellana*) stools and one coppiced sycamore (*Acer pseudoplatanus*) stool, which are located near the foot of the bank. The trees have been historically coppiced and have been awarded C1,2 categories. It is recommended that the trees be regularly coppiced to maintain their size and shape.

**5.15** Tree T26 is a mature spreading cherry laurel (*Prunus laurocerasus*) located at the edge of the bank. The tree is visible from the adjacent bridleway and road, but is of limited overall quality and as such has been awarded a C1,2 category. No action is recommended.

**5.16** Tree T27 is mature weeping willow (*Salix chrysocoma*) standing around 13.0m tall. The tree has a poor union and has been historically topped in the past at around 6.0m. Although visible from the bridleway and road, it is of mediocre quality and has been awarded a C1,2 category. No action is recommended at this time, although further reduction work is likely to be required to control its overall size and shape.

**5.17** Tree T28 is a mature wild Cherry (*Prunus avium*) standing 14.0m tall and located on the edge of the grassed slope close to the permissive footpath leading into the site. The tree has an electricity cable running through the crown and has been topped at around 5.0m to 6.0m in the past. The tree has been awarded a C1,2 category due to its location and quality. It is recommended that the tree be felled to ground level to enable the required access visibility splay to be achieved.

**5.18** Trees T29 and T30 are semi-mature wild Cherry (*Prunus avium*) located in close proximity to T28. Both trees are likely to have developed from the rooting system of the larger parent tree and are poorly-sited insignificant specimens, which have been awarded a C1 category. Their removal is recommended

**5.19** Trees T33, to T35, T37 and T38 are all small-scale trees of mixed species located within the site and on the western edge. T35 is a mature hawthorn (*Crataegus monogyna*) species located on the boundary with a large portion of the canopy overhanging the edge of the site. All these trees have been awarded a C1 category due to their overall size and limited quality.

**5.20** Tree T36 is a mature hawthorn (*Crataegus monogyna*) standing 4.0m tall on the western boundary adjacent to an existing property. The tree has a low canopy, but is considered to be a reasonable tree of moderate amenity value. It has been awarded a C1 category to its overall size and quality. No action is recommended.

**5.21** Trees T45, T48, T53 to T55 comprise 4 mature common ash (*Fraxinus excelsior*) and one common oak (*Quercus robur*) standing around 15.0m to 22.0m tall on the northern boundary. Trees T45, T53, T54 and T55 are shrouded in ivy with an electricity cable running to the south of the trees, with T48, T53 and T55 containing moderate dead wood. The trees are notable sylvan features which have been awarded a B1,2 category. It is recommended that the ivy clad trees be re-inspected following the severance and decline of the ivy, with deadwood over 75mm in diameter removed over the road, and

low whole, or part, branches crown lifted over the site to a height of 3.0m, and 5.2m over the adjacent road (where needed).

**5.22** Trees T47, T49 to T52 are mature sycamore (*Acer pseudoplatanus*), located on the northern edge of the site close to the electricity wires. Tree T47 forks close to ground level and is weighted towards the road, with the remaining sycamore having been pollarded at a low level in the past due to its location directly under the electricity wire. These trees have been awarded a C1 categories due to their location and overall condition. It is recommended that these trees be felled.

**5.23** Trees T58 to T62 comprise 3 common ash (*Fraxinus excelsior*) and 2 sycamore (*Acer pseudoplatanus*), standing around 16.0m to 18.0m tall. The trees are sited close to the electricity cable and are shrouded in ivy, with low spreading limbs to the south. The trees have been awarded a B1,2 category due to their size and location adjacent to the road. However, level changes and the creation of the visibility spays for the new access will necessitate the removal of trees T61 and T62. It is recommended that trees T58 to T60 be re-inspected following the severance and decline of the ivy, with branches reduced back to clear the electricity gable, with deadwood greater than 75mm in diameter removed from over the road. Any construction works within the RPAs of these trees will need to be undertaken by hand in-line with an approved detailed method statement.

**5.24** Trees T46, T56, T57 comprise 2 common hawthorn (*Crataegus monogyna*) and 1 wild cherry (*Prunus avium*) which are located amongst the taller, more prominent trees. Although the trees are small in stature they contribute to the roadside tree belt. The trees have been awarded a C1,2 category. No action is recommended on trees T46 and T56, with tree T57 to be re-inspected following the severance and decline of the ivy.

**5.25** T63 is a mature hazel (*Corylus avellana*) stool located on the northern edge of the roadside verge close to overhead electric wires. The tree is considered to be a poorly sited specimen, which has been awarded a C1,2, category due to its size and location. It is recommended that the tree be removed in favour of more appropriate replacement planting within the site, which would also enable the required new access visibility splay to be achieved.

**5.26** G1 and T64 denote a wide spreading group of fallen and regenerating crack willow (*Salix fragilis*). The trees are poor-quality specimens, which have been awarded U-grade categories. It is recommended that the trees be felled to allow suitable replacement planting.

**5.27** H1 and H2 are high quality native hedges running along part of the southern and western boundaries which have been awarded a B2 category. It is recommended that the hedges be maintained to the desired size and shape.

## 6. TREE SURVEY CONCLUSION

**6.1** The trees which are the subject of this report have largely received limited management in recent years, with a number showing signs of extensive decay. Offsite trees to the east and south are visually significant B-grade trees when viewed from the site, with these trees posing a potential constraint on the site where low crowns marginally overhang the site boundary.

**6.2** The onsite trees of note are the B-grade trees, all of which are sited along the northern boundary, some of which are shrouded in ivy and contain moderate amounts of dead wood with low crowns to the south. However, the creation of the new site access will necessitate the loss of T61 and T62 from this group, with minimal ground level changes within the RPAs of trees T58 to T60, which should be undertaken by hand in line with an approved method statement. The majority of the C and U-grade trees are also sited along the northern and eastern boundaries, with many being poorly sited and of poor overall quality. The remaining C-grade trees and those which fall beneath the survey criteria for inclusion in this report due to size are located within the middle of the site, some of which could be transplanted and used in the proposed landscaping scheme if desired.

**6.3** The two notable hedges bordering parts of the southern and western boundaries are significant sylvan features of the site and pose a minor constraint on their respective sections.

**6.4** It is recommended a further tree inspection be undertaken on the ivy clad trees in the autumn following the severance of the ivy.



## **7. ARBORICULTURAL SUPERVISION**

**7.1** A suitably qualified arboriculturist should be retained during the development period to carry out the following:

- To prepare a detailed Arboricultural Method Statement, where needed, with input and agreement from the contractor, and including the detailed layout design. This is to be approved by the LPA before work commences on site. The Arboricultural Method Statement must include details of services, drainage and facilities.
- To inspect tree protection fencing once erected prior to construction or ground works starting on site.
- To advise of any issues at the request of the LPA, the developer or contractor as necessary.

**7.2** The details of each visit are to be recorded in a site visit pro-forma, with copies circulated to the contractor, developer and the LPA Tree Officer

## **8. ARBORICULTURAL IMPACT ASSESSMENT**

**8.1** The Tree Survey Plan (Fig.2) demonstrates that a large section of the site could be constructed incorporating site compounds, soil heaps, services routes etc. outside the RPAs of the retained trees and hedging, with the removal of trees T28, T30, T63, T61 and T62 required to create the access and visibility splays to the highway standard. Further minimal ground work within the RPAs of T58 to T60 will also be required as part of the new access works, which will need to be undertaken by hand in line with an approved method statement.

**8.2.** The proposed strategic tree planting would help offset the loss of amenity value afforded by the removed trees and would further enhance the northern, eastern and south-eastern boundaries, as well as help screen the proposed development and provide a strong landscape buffer between the villages of West Lavington and Market Lavington. The landscape buffer would remain an undeveloped green corridor around much of the site, which would also enhance the verdant tree-lined character of the bridleway.

**8.3** Where trees T6 and T7 and T31 and T32 overhang the site, consideration will need to be given to the site layout and active site management during the construction process to ensure these trees are not inadvertently damaged.

**8.4** The Tree Shadow Plan (Fig3.) also demonstrates that shading patterns for the retained trees will not result in excessive shading over the proposed site.

**8.5** Protection measures have been specified to protect all retained trees, with arboricultural supervision included to help ensure compliance.

**8.6** The retained trees should be protected by suitable protective fencing, as detailed in the Tree Root Protection Areas and Tree Protection Fencing Plan (Fig.4). The protective fencing should be positioned at the outer edge of the RPAs of the retained trees prior to any works taking place. Once erected, this protective fencing should remain intact, with no incursion during the development process

**8.7** All tree surgery should be undertaken by a suitably qualified arborist in accordance with the BS 3998:2010 *Tree Work – Recommendations* and should be undertaken prior to commencement of works on site.

**8.8** The Arboricultural Impact Assessment considers the generic developable area of the site at this stage. It is likely that a planning condition on any planning permission granted will require that an Arboricultural Method Statement be submitted for works close to retained trees, prior to commencement of development.

**8.9** Provided the recommendations in this report are followed, the arboricultural impact of the development of this site is considered to be acceptable.

## FIGURES

**FIGURE 1 – TREE SURVEY RESULTS TABLES**

Tree/Group No	Tag Number	Species Common and Latin name	Height (m)	Stem Diam. at 1.5m	Branch Spread				Canopy Clearance (m)	Age Class	Physiological condition	Observations	Management Recommendations	Estimated Remaining Contribution (years)	BS5837 Category Grading	Protection Distance (m)	Tree Protection (m2)
					N	E	S	W									
T1	243	Leyland cypress <i>X Cupressocyparis leylandii</i>	10.9	280	1	2	6	4	0.5	Mature	Fair	Suppressed. Leans to south-west.	Fell.	10 to 20	C1	3.4	35.5
T2	244	Leyland cypress <i>X Cupressocyparis leylandii</i>	5.9	170	2	1	4	3	0.5	Mature	Fair	Suppressed.	Fell.	10 to 20	C1	2	13.1
T3	245	Leyland cypress <i>X Cupressocyparis leylandii</i>	5.8	230	1	2	6	4	0.5	Mature	Fair	Suppressed. Leans to south-west	Fell.	10 to 20	C1	2.8	23.9
T4	246	Leyland cypress <i>X Cupressocyparis leylandii</i>	4.5	200	1	1	6	4	0.5	Mature	Fair	Suppressed.	Fell.	10 to 20	C1	2.4	18.1

T5	247	Grey poplar <i>Populus x canescens</i>	8.5	140	0	1	6	3	3	Young	Poor	Suppressed. Significant squirrel damage at 2m and above on main stem.	Fell.	<10	U	1.7	8.9
T6	No tag	Common beech <i>Fagus sylvatica</i>	22.6	520	3	3	5	4	10	Mature	Good	Suppressed by adjacent trees.	No action.	20 to 40	B1,2	6.2	122.3
T7	No tag	Hornbeam <i>Carpinus betulus</i>	14.8	420	8	0	12	4	6	Mature	Fair	Offsite. Significant lean to south.	No action.	20 to 40	B1,2	5	79.8
T8	248	Sycamore <i>Acer pseudoplatanus</i>	6.7	290	0	3	5	4	2	Semi mature	Fair	Ivy in to crown.	Fell.	<10	U	3.5	38.1
T9	249	Common ash <i>Fraxinus excelsior</i>	8.4	180	0	2	6	2	2	Semi mature	Fair	Suppressed. Heavy lean to south.	Fell.	10 to 20	C1	2.2	14.7
T10	250	English elm <i>Ulmus procera</i>	10.3	240	1	2	4	2	1	Semi mature	Good	Suppressed. Weighted to south.	Fell.	<10	U	2.9	26.1
T11	251	English elm <i>Ulmus procera</i>	5	170	2	3	4	3	1	Young	Good	Significant basal wound north side 300mm x 50mm.	Fell.	<10	U	2	13.1
T12	252	English elm <i>Ulmus procera</i>	15.5	240	1	5	4	3	3	Semi mature	Good	Suppressed. Poor shape	Fell.	<10	U	2.9	26.1
T13	253	Whitebeam <i>Sorbus aria</i>	13.1	580	5	3	1	7	1	Veteran	Fair	Ivy clad stem with lean to north. Poor stem / limb formation at crown break.	Fell.	<10	U	7	152.2

T14	254	Whitebeam <i>Sorbus aria</i>	10	570	5	0	0	4	3	Veteran	Poor	Ivy clad. Significant lean to north.	Fell.	<10	U	6.8	147
T15	255	Whitebeam <i>Sorbus aria</i>	12	590	6	2	5	4	1	Veteran	Fair	Ivy clad suppressed.	Fell.	<10	U	7.1	157.5
T16	256	Sycamore <i>Acer pseudoplatanus</i>	4	310	3	3	5	5	0.5	Mature	Poor	On edge of steep bank. Topped at 3m in past.	Fell/ Coppice.	<10	U	3.7	43.5
T17	257	Sycamore <i>Acer pseudoplatanus</i>	4	800	1	2	3	5	0.5	Veteran	Decline	Collapsing pollard. Hollow stem when sounded with hammer.	Fell.	<10	U	9.6	289.6
T18	258	English elm <i>Ulmus procera</i>	5	170	2	2	2	2	2	Young	Good	Partly suppressed by adjacent Sycamore.	Fell.	<10	U	2	13.1
T19	259	Sycamore <i>Acer pseudoplatanus</i>	10	180 160 230 250 340	6	5	6	6	2	Mature	Good	Located on steep bank. Animal sett 5 m to south. Ivy clad with squirrel damage on upper stems.	Fell/ Coppice.	10 to 20	C1,2	5.4	90.8
T20	260	Elder <i>Sambucus nigra</i>	4	130 140	2	2	3	3	3	Mature	Fair	Located on steep bank.	Fell/ Coppice.	<10	U	1.9	11.5
T21	261	Sycamore <i>Acer pseudoplatanus</i>	12	330 160	5	6	6	6	2	Mature	Fair	Located on edge of steep bank.	Coppice to 0.5m stumps.	10 to 20	C1,2	3.6	40.4
T22	No tag	Common hazel <i>Corylus avellana</i>	5	450	2	2	2	2		Mature	Fair	Coppice stool on steep bank.	Coppice to 0.5m stumps.	10 to 20	C1,2	3.6	40.4

T23	No tag	Sycamore <i>Acer pseudoplatanus</i>	4	100 90 100 100	4	4	4	4	4	1	Semi mature	Good	Coppice stool on steep bank.	Coppice to 0.5m stumps.	10 to 20	C1,2	2.2	15.1
T23.1a	No tag	Common hazel <i>Corylus avellana</i>	4	500	2	2	2	2	0.5		Semi mature	Good	Coppice stool on steep bank.	Coppice to 0.5m stumps.	10 to 20	C1,2	6	113.1
T24	No tag	Common hazel <i>Corylus avellana</i>	4	450	2	2	2	2	0.5		Semi mature	Fair	Coppice stool on steep bank.	Coppice to 0.5m stumps.	10 to 20	C1,2	5.4	91.6
T25	No tag	Common hazel <i>Corylus avellana</i>	4	450	2	2	2	2	0.5		Semi mature	Fair	Coppice stool on steep bank.	Coppice to 0.5m stumps.	10 to 20	C1,2	5.4	91.6
T26	262	Cherry laurel <i>Prunus laurocerasus</i>	6.8	140 140 120 110 150	2	5	4	3	1		Mature	Fair	Spreading.	No action.	10 to 20	C1,2	3	27.1
T27	263	Weeping willow <i>Salix chrysocoma</i>	13.4	540	3	6	9	7	1.8		Mature	Good	Topped at 6 metres with poor union. Messy south side.	No action.	10 to 20	C1,2	6.5	131.9
T27a	No tag	Common hazel <i>Corylus avellana</i>	4	500	2	2	2	2	0.5		Semi mature	Good	On steep bank.	Coppice to 0.5m stumps.	10 to 20	C1	6	113.1



T28	264	Wild cherry <i>Prunus avium</i>	14.5	380	6	5	6	5	1	Mature	Fair	Electric cable through west side of crown. Old fully and partly occluded wounds on stem north side up to 3.5 m. Possibly topped at 5/6 m in past.	Prune to clear cable. Raise low canopy to 2.5m.	<10	C1,2	4.6	65.3
T29	265	Wild cherry <i>Prunus avium</i>	9	170	2	1	6	3	1	Semi mature	Good	Suppressed.	No action.	20 to 40	C1	2	13.1
T30	266	Wild cherry <i>Prunus avium</i>	5	130	1	1	4	4	1.8	Young	Good	Suppressed on edge of path.	No action.	20 to 40	C1	1.6	7.6
T31	No tag	Common oak <i>Quercus robur</i>	21	800	11	10	1	9	4	Mature	Good	Offsite. Leans to north. Overhanging canopy.	No action.	>40	B1,2	9.6	286.9
T32	No tag	Common oak <i>Quercus robur</i>	11.5	600	6	4	8	6	2	Mature	Good	Offsite tree.	No action.	20 to 40	B1,2	7.2	162.9
T33	267	Paper birch <i>Betula papyrifera</i>	6.2	80	2	2	2	2	0.5	Young	Good	Sweep on stem to north.	Transplant	>40	C1	1	2.9
T34	288	Goat willow <i>Salix caprea</i>	5.4	140	2	2	2	2	0.5	Young	Good	Forks at 1 m in to 3 stems. 120mm long split in west stem at 1.2	Fell.	20 to 40	C1	1.7	8.9
T35	No tag	Thorn <i>Crataegus</i> species	4	110	3	1	2	2	2.5	Mature	Decline	Overhanging stem.	No action.	<10	C1	1.3	5.5

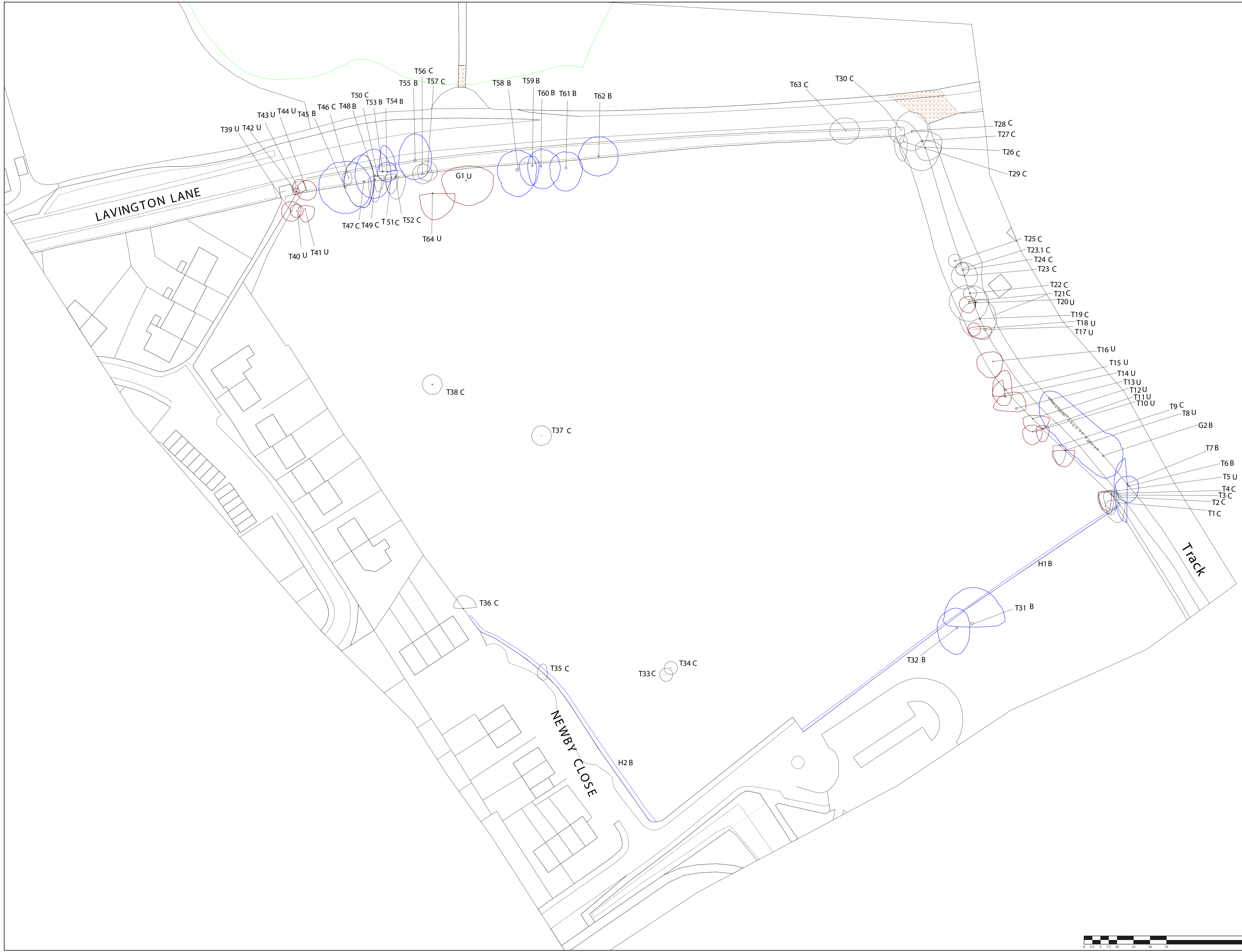
T36	269	Hawthorn <i>Crataegus monogyna</i>	6.3	250	4	4	0	3	0	Mature	Good	Sig lean to north.	No action.	10 to 20	C1	3	28.3
T37	270	Hawthorn <i>Crataegus monogyna</i>	3	140	3	3	3	3	0.5	Semi mature	Good	Low forking stem.	Transplant	20 to 40	C1	1.7	8.9
T38	271	Goat willow <i>Salix caprea</i>	5	160 100 180 180 110	3	3	3	3	0.5	Mature	Good	Multi stemmed close to ground level.	Fell.	<10	C1	3.4	35.3
T39	272	English elm <i>Ulmus procera</i>	7.1	190	3	3	3	3	2	Semi mature	Fair	Ivy clad.	Fell.	<10	U	2.3	16.3
T40	273	English elm <i>Ulmus procera</i>	8	190	2	2	2	2	1	Semi mature	Poor	Ivy clad.	Fell.	<10	U	2.3	16.3
T41	274	English elm <i>Ulmus procera</i>	10	230	1	3	4	2	1	Semi mature	Decline	Signs of Dutch Elm Disease DED.	Fell.	<10	U	2.8	23.9
T42	275	English elm <i>Ulmus procera</i>	4	160	1	1	1	1	0.5	Semi mature	Fair	Ivy clad. Edge of stairwell.	Fell.	<10	U	1.9	11.6
T43	276	English elm <i>Ulmus procera</i>	7	140	3	2	1	2	2	Semi mature	Fair	Ivy clad. Suppressed.	Fell.	<10	U	1.7	8.9
T44	277	English elm <i>Ulmus procera</i>	10	130 190	3	3	3	3	1	Semi mature	Fair	Ivy clad on roadside bank. Adjacent to electric wires	Fell.	<10	U	2.3	16.7

T45	278	Common ash <i>Fraxinus excelsior</i>	20	650	8	8	8	8	1	Mature	Good	Ivy clad large tree. Electric cable south side.	Re-inspect once ivy removed.	20 to 40	B1,2	7.8	191.2
T46	279	Hawthorn <i>Crataegus monogyna</i>	6	170	2	1	2	2	1	Semi mature	Good	Ivy clad.	No action.	>40	C1,2	2	13.1
T47	280	Sycamore <i>Acer pseudoplatanus</i>	20	280 360	8	3	8	6	2	Mature	Good	Forks at 300mm. Suppressed and weighted to north (road).	Fell.	20 to 40	C1,2	4.6	65.4
T48	281	Common ash <i>Fraxinus excelsior</i>	21	380 150	8	5	7	6	3	Mature	Good	Contains moderate dead wood	Remove major deadwood	20 to 40	B1,2	4.1	52.4
T49	282	Sycamore <i>Acer pseudoplatanus</i>	7	330	1	2	7	2	2	Mature	Fair	Pollarded under electric cable at 1m.	Fell	10 to 20	C1	4	49.3
T50	283	Sycamore <i>Acer pseudoplatanus</i>	18	350	0	2	5	1	1	Mature	Good	Sited under electric cables at pollarded in past at 1.5 m.	Fell	10 to 20	C1	4.2	55.4
51	284	Sycamore <i>Acer pseudoplatanus</i>	12	140 120 120	1	2	5	2	0.5	Mature	Good	Pollared under cable.	Fell	<10	C1	2.2	15.2
T52	285	Sycamore <i>Acer pseudoplatanus</i>	15	450 210 210	2	3	7	3	1	Mature	Good	Pollarded under electric wires.	Fell	<10	C1	5.4	91.3
T53	286	Common oak <i>Quercus robur</i>	22.1	490	8	4	0	1	5	Mature	Good	Leans over road. Ivy clad with moderate deadwood	Remove deadwood over road. Re-inspect once ivy removed.	20 to 40	B1,2	5.9	108.6

T54	287	Common ash <i>Fraxinus excelsior</i>	18	270	3	3	3	3	1	Mature	Fair	Suppressed. High crown.	Re-inspect once ivy removed.	20 to 40	B1,2	3.2	33
T55	288	Common ash <i>Fraxinus excelsior</i>	16	690	8	5	6	5	2	Mature	Fair	Ivy clad. Remove major deadwood over road.	Re-inspect once ivy removed.	20 to 40	B1,2	8.3	215.4
T56	291	Hawthorn <i>Crataegus monogyna</i>	12	280	3	3	3	3	2	Mature	Fair	Coppiced under electric wires.	No action.	10 to 20	C1,2	3.4	35.5
T57	292	Wild cherry <i>Prunus avium</i>	12	220	3	3	3	3	5	Semi mature	Good	High crown. Suppressed by adjacent tree.	Re-inspect once ivy removed.	20 to 40	C1,2	2.6	21.9
T58	294	Common ash <i>Fraxinus excelsior</i>	16	890	6	6	8	6	1	Mature	Good	Large ivy clad tree with low limb to south. Electric wires through crown north side.	Re-inspect once ivy removed.	10 to 20	B1,2	10.7	358.4
T59	295	Sycamore <i>Acer pseudoplatanus</i>	16	450	3	2	6	4	2	Mature	Good	Suppressed and ivy clad. Electric wires to north.	Re-inspect once ivy removed.	20 to 40	B1,2	5.4	91.6
T60	296	Sycamore <i>Acer pseudoplatanus</i>	15	410 420	5	6	7	4	1	Mature	Good	Forks at 400mm. Ivy clad stem suppressing adjacent tree.	Remove.	20 to 40	B1,2	5.9	108.2
T61	297	Common ash <i>Fraxinus excelsior</i>	18.7	618	5	5	7	5	2	Mature	Good	Large ivy clad tree. Wires to north. High lift north side	Remove.	20 to 40	B1,2	7.4	172.8

T62	298	Common ash <i>Fraxinus excelsior</i>	19	540	6	6	6	6	1	Mature	Poor	Forks at 3.0 m into three main limbs. Significant die-back in crown. Electric wires through crown south side. Monitor and clear from wires	Clear wires. Remove dead wood. Monitor annually	10 to 20	B1,2	6.5	131.9
T63	299	Common hazel <i>Corylus avellana</i>	9	680	4	4	4	5	1.8	Mature	Fair	Phased coppice to maintain size.	No action.	10 to 20	C1,2	8.2	209.2
T64	290	Crack willow <i>Salix fragilis</i>	5	220 180 160 180	0	7	8	4	2	Veteran	Fair	Collapsed and spreading stems.	Fell.	<10	U	3.7	43.6
G1	293	Crack willow <i>Salix fragilis</i>	1	180 180 180 180	4	8	8	8	0	Veteran	Fair	Collapsed area of willow.	Fell.	<10	U	3.6	40.7
G2	No tag	Common beech <i>Fagus sylvatica</i> , Hornbeam <i>Carpinus betulus</i>	17.6	550	7	6	7	2	1	Mature	Fair to poor	Hornbeam x 22 Beech x 1 at end. Old wound in north-east side of beech at ground level up to 1 m. Poorly occluded. western end of group. Possibly former hedge which leans to east. Mixed condition.	No action.	20 to 40	B1,2	6.6	136.9
H1	No tag	Mixed native species	4		2	2	2	2				mixed native hedge	maintain at current size.	>40	B2		

H2	No tag	Hawthorn <i>Crataegus monogyna</i>	2		1	1	1	1				Hawthorn- established hedge	maintain at current size.	>40	B2		
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**Key:**

**Tree Retention Categories**

- 'A' Category
- 'B' Category
- 'C' Category
- 'U' Category

**Other Plan Features**

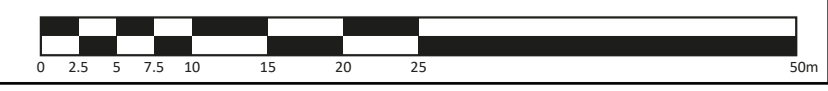
- Unsurveyed Hedge
- Recently Undertaken Planting
- Shading Arc
- Root Protection Area
- Tree Protection Fencing
- Ground Protection
- No-dig Construction Area

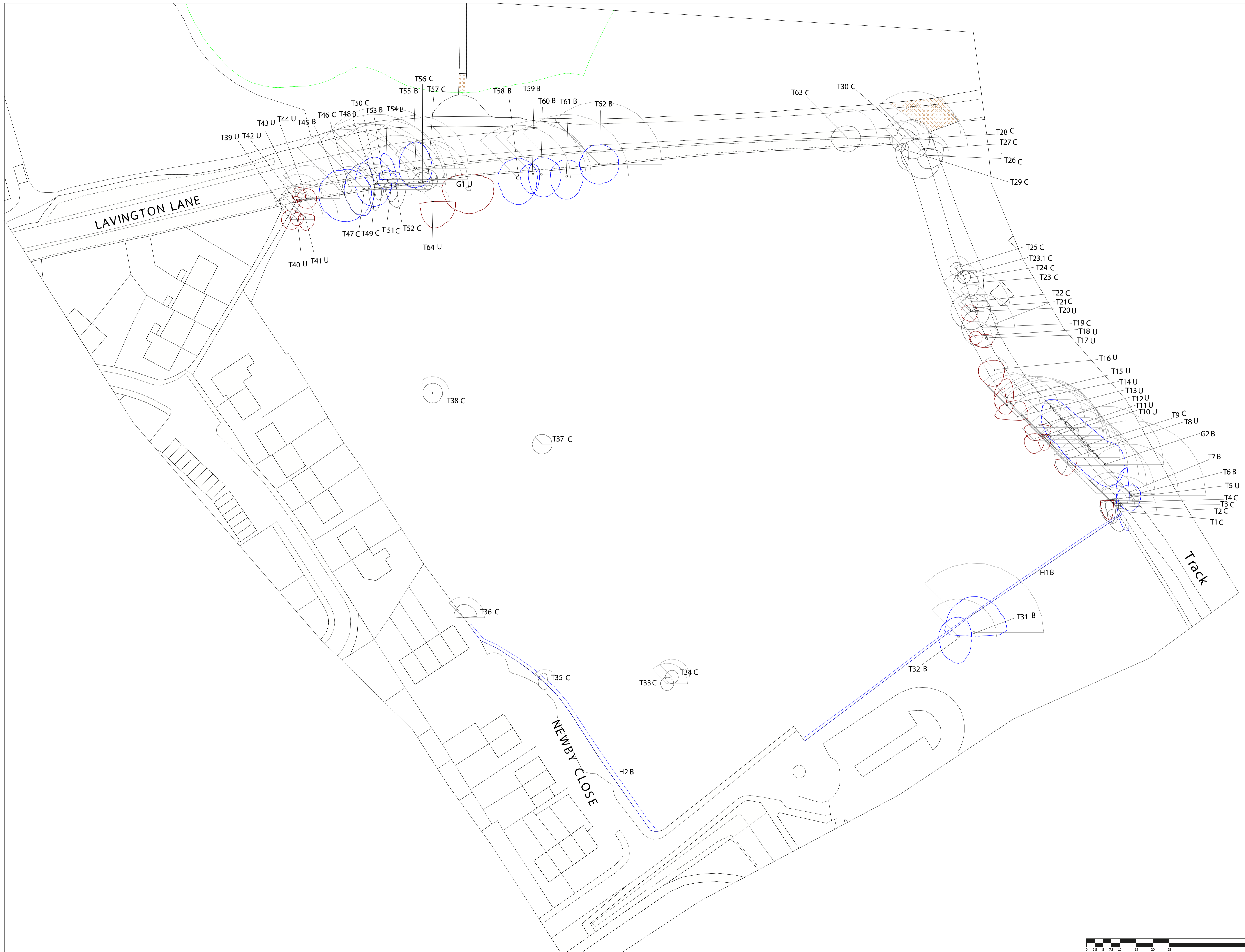
**Notes:**  
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Project:		Land at Sandfield, West Lavington	
Drawn By:		Tree Survey Plan	
Figure number:	Scale:		
Fig. 2	1:500 @ A1		
Dr:	Ch:	Date:	Rev:
TA	WH	Apr 27	





**Key:**

**Tree Retention Categories**

- 'A' Category
- 'B' Category
- 'C' Category
- 'U' Category

**Other Plan Features**

- Unsurveyed Hedge
- Recently Undertaken Planting
- Shading Arc
- Root Protection Area
- Tree Protection Fencing
- Ground Protection
- No-dig Construction Area

**Notes:**  
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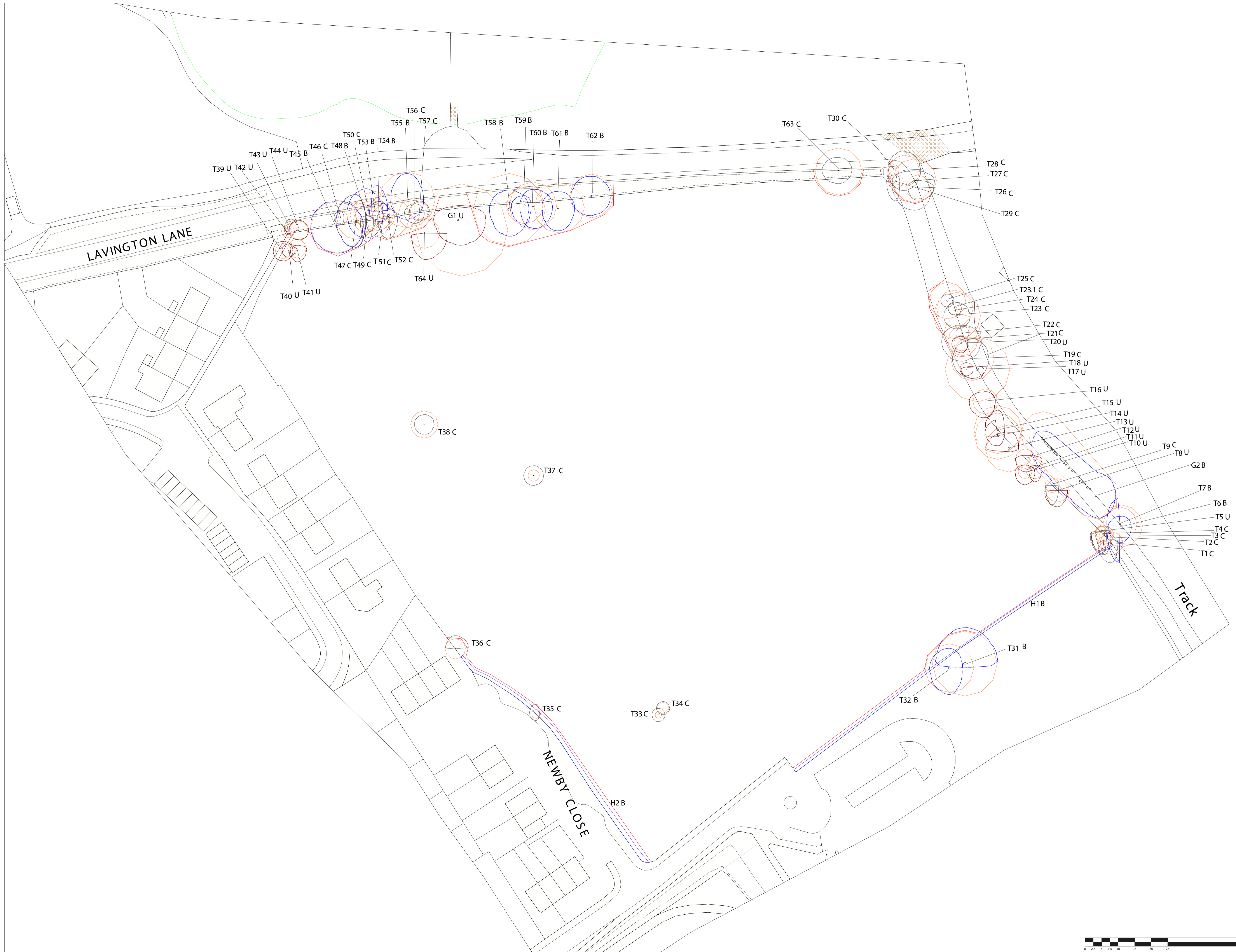
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Project:		Land at Sandfield, West Lavington	
Drawn By:		Tree Shadow Plan	
Figure number:	Scale:		
Fig. 3	1:500 @ A1		
Dr:	Cr:	App:	Rev:
TA	WH	Apr 27	







**Key:**

**Tree Retention Categories**

- 'A' Category
- 'B' Category
- 'C' Category
- 'U' Category

**Other Plan Features**

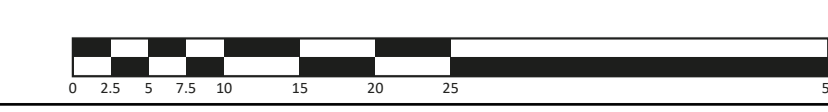
- Unsurveyed Hedge
- Recently Undertaken Planting
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Client: Ganger Bros Ltd	
From: Land at Sandfield, West Lavington	
Name: Root Protection Areas and Tree Protection Fencing	
Figure number: Fig. 4	Scale: 1:500 @ A1
Drawn by: WML	Checked by: WML
Date: Apr 27	Rev: 1



## APPENDICES

## APPENDIX 1 - TREE SURVEY KEY

**Tree No.**- each tree has been allocated a number which refers to the plan.

**Species** - referred to by Common and Latin name.

**Height** - height is measured in metres using a clinometer unless denoted otherwise by\*.

**Number of stems** - identified as S for single or MS for multi-stemmed.

**Stem diameter** - measurement of stem diameter measured at 1.5 metres above ground level, unless denoted otherwise by \*.

**Age Class** - Y - a young tree up to 1/3 of its usual lifespan.

EM - a tree up to 66% of its usual lifespan.

M - a tree up to 100% of its usual lifespan.

OM - a tree passed its usual lifespan.

**Crown Spread** - measured in metres using a standard tape, unless denoted otherwise by \*

**Vigour** - a measure of the trees vigour expressed as: N = Normal, or L = Low.

**Physiological condition** - an assessment of the trees physiological condition defined as:

Good – (G) fully functioning biological system showing average vitality;

Fair – (F) fully functioning biological condition showing below average vitality;

Poor – (P) a biological system with limited functionality showing significant below average vitality;

Dead – (D) a non-functioning tree.

**Structural condition** - an assessment of the trees structural condition is defined as:

Good – (G) no significant structural defects.

Fair – (F) structural defects which could be alleviated through remedial tree surgery or management practices;

Poor – (P) structural defects which cannot be alleviated through tree surgery management or practices;

Dead – (D) a non-functioning tree.

**Comments and management recommendations** - observations and recommendations which may address problems raised in the assessment of the tree's structural condition.

### **BS 5837:2012 Retention Category:**

A - Trees of high quality with an estimated life expectancy of a least 40 years.

B - Trees of moderate quality with an estimated life expectancy of at least 20 years.

C - Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with stems of less than 150mm in diameter.

U - Trees in such as condition that they cannot be realistically retained. Irreparable structural defects, diseased, dead or severely suppressed.

### **Further sub-categories are given as follows:**

(1) - mainly arboricultural qualities

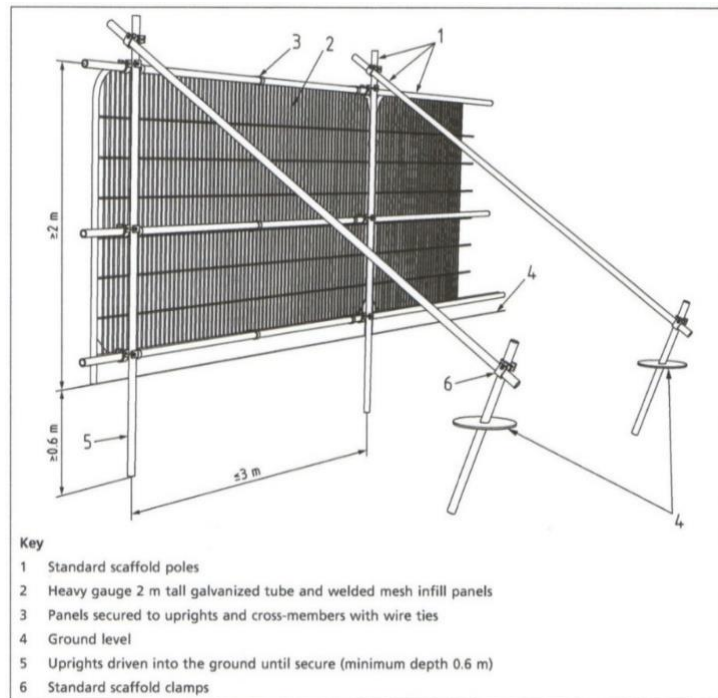
(2) - mainly landscape qualities

(3) - mainly cultural values, including conservation

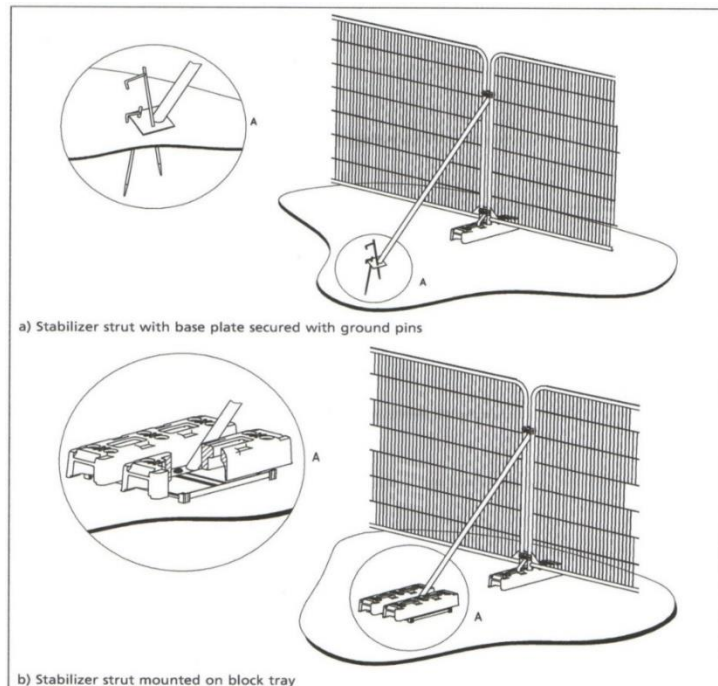
**Remaining contribution** - based on retention category

**Root Protection Area** - measured as a nominal circle and in a radius of the circle as per BS5837:2012.

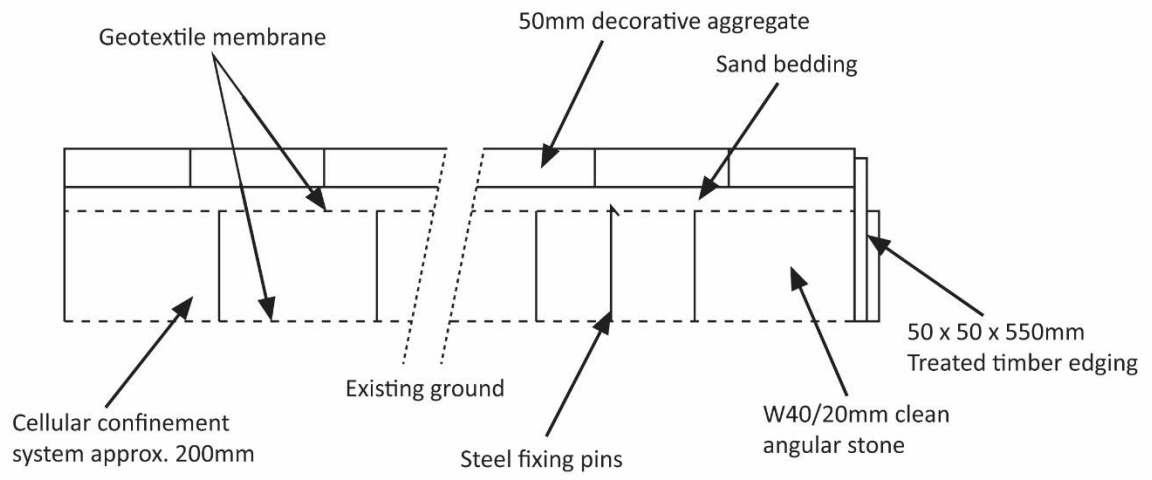
## APPENDIX 2 - BS5837 (2012) DEFAULT SPECIFICATION FOR PROTECTIVE BARRIER



## APPENDIX 3 - BS5837 (2012) ABOVE GROUND STABILISING SYSTEMS



**APPENDIX 4 - EXAMPLE OF A NO-DIG ACCESS CONSTRUCTION METHODOLOGY.**



**APPENDIX 5 - EXAMPLES OF TREE PROTECTION NOTICES**



**PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.**



**TREE PROTECTION AREA  
KEEP OUT !**  
(TOWN & COUNTRY PLANNING ACT 1990)  
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.  
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

**ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY**