

# ARBORICULTURAL IMPACT ASSESSMENT

# LAND SOUTH OF CHISWELL GREEN LANE, ST ALBANS





#### ARBORICULTURAL IMPACT ASSESSMENT

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# **Approval for issue**

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# 1 EXECUTIVE SUMMARY

# Scope

- 1.1 An arboricultural survey and Arboricultural Impact Assessment (AIA) has been undertaken in support of a residential development on land south of Chiswell Green Lane, St Albans, within the administrative authority of St Albans City and District Council (SACDC).
- 1.2 This application seeks outline planning, with all matters reserved except access, for the demolition of existing structures and construction of up to 391 dwellings (Use Class C3), the provision of land for a new 2FE Primary School, open space provision and associated landscaping and new access arrangements.
- 1.3 Trees were recorded, and information was gathered, to allow them to be considered using guidance contained within BS5837:2012 Trees in Relation to Design, Demolition and Construction Recommendations.
- 1.4 This assessment provides identification of any vegetation requiring removal, pruning and how retained trees are to be protected during the implementation of the proposals (based on the Masterplan).

# **Findings & Recommendations**

- 1.5 The principles in BS5837:2012 were used to assess the impacts of the proposed Masterplan on the trees and other vegetation.
- 1.6 A total of 101 individual trees and 21 groups of trees were surveyed during the visit. Of the 101 trees, a total of 20 were considered to be Category A (high quality), 25 Category B (moderate quality), 42 Category C (low quality) and the remaining 14 were Category U (poor quality/dead). The 21 groups were distributed as one Category A, nine Category B, nine Category C and two Category U.
- 1.7 Of the trees, T4-11, T39, T40, T47-49, T55, T59, T77-80, T86, T87, T94-96, G8 and G12 are covered by Tree Preservation Orders (TPO).
- 1.8 It will be necessary to remove 1 Category B individual (T71), partial removal of 2 Category B groups (G8 and G11) and full removal a further group (G20). Further to this, the removal of 8 Category C individuals (T52, T53, T57, T69, T70, T72, T100 and T101), full removal of 1 Category C group (G10) and partial removal of a further (G13).
- 1.9 One tree has been assessed as potentially requiring pruning at this stage and this relates to Category A T9 (no greater than 1.5m lateral reduction of tertiary growth on south side).
- 1.10 The Masterplan indicates no-dig footpaths will be required through the RPA of Category A individual tree T17, Category B individual trees T13, T14 and T23, and groups G2 and G8.



- 1.11 The trees to be retained will be afforded protection by implementing a Construction Exclusion Zone (CEZ) using tree protection fencing (Heras style). This must be erected in the position shown on the Tree Protection Plan attached to this report.
- 1.12 By following guidance set out within this report, the retained tree should be protected during the works.



# 2 INTRODUCTION

- 2.1 RPS were instructed in October 2021 by CALA Homes (Chilterns) Ltd. and Redington Capital Ltd. to undertake a Tree Survey and Arboricultural Impact Assessment (AIA) in support of an outline planning application for a new residential development on land south of Chiswell Green Lane ('the Site'). The Site lies within the administrative boundaries of St Albans City and District Council (SACDC).
- 2.2 The survey was undertaken in accordance with BS5837:2012 as described within the survey methodology attached to this report at Appendix A.
- 2.3 The purpose of the survey was to gather data on the trees and to prepare a Tree Constraints Plan (see drawings 700 & 701) that has been used to assess any potential impacts of the development. The Tree Constraints Plan guidance at Appendix B explains the process of interpreting the plan and how it is used during the design and impact assessment process.
- 2.4 This report has been prepared to support and expand upon the data presented on the Tree Constraints Plan, in addition to summarising the quality and condition of the tree stock present on the Site.
- This report should be read in conjunction with the supplied Tree Constraints Plan (see drawings 700 & 701) and the Tree Protection Plan (see drawings 710 & 711) and all other relevant Tables and Appendices as detailed within the table of contents.
- 2.6 The tree positions were plotted using a Topographical Survey and a sub metre GPS survey device (Trimble Geo 7x).
- 2.7 The survey and this assessment were carried out by RPS Principal Arboriculturist Thomas Flood who is a Chartered Arboriculturist with the Institute of Chartered Foresters and a Professional Member of the Arboricultural Association.



# 3 SITE INFORMATION

- 3.1 The Site comprises of agricultural land, a farmyard with stables and equine facilities, and a derelict farmhouse and outbuildings. The agricultural land is divided into four distinct fields separated by mature trees. The fields in the northern part are intensively grazed by horses whilst the fields in the south are currently unmanaged grassland.
- 3.2 The Site is located adjacent to the village of Chiswell Green and is approximately 1.1km southeast of the cathedral city of St. Albans. The northern boundary is formed by Chiswell Green Lane. The eastern and south-eastern boundaries are directly adjacent to the residential area of Chiswell Green with the Site bordered by the gardens of the residential properties.
- 3.3 There is a small woodland (TPO) area to the east of the Site which is not included in the Site boundary and sits between the Site and residential area. Beyond the western boundary of the Site, a car park separates Miriam Lane from the western Site boundary. Lying adjacent to Miriam Lane approximately 25m to the east is the Site of the former 'Butterfly World'.
- 3.4 St. Albans Polo Club is approximately 80m northeast of the Site with Chiswell Green Lane lying between the two areas. The M1 is 1.4km to the east and meets the M25 1.5km southeast of the Site. The wider surrounding area comprises residential areas to the east and agricultural land to the west.
- 3.5 The Site does not benefit from any planning history of relevance to the current proposals.
- 3.6 It was confirmed using the SACDC online *District Mapping Service* (<a href="https://gis.stalbans.gov.uk/WebMap9/Map.aspx?MapName=StAlbans">https://gis.stalbans.gov.uk/WebMap9/Map.aspx?MapName=StAlbans</a> accessed October 2021) that three Tree Preservation Orders (TPO) exist within the Site as a whole. These are listed below with the relevant TPO tree references cross referenced with the RPS survey.

TPO01348 (May 1998)

• T1 (T59 RPS), T2 (T48 RPS), T3 (T47 RPS), T4 (T49 RPS), T5 (T55 RPS), G1 (G8 RPS).

TPO01441 (March 2005)

• W1 (G12, T4-11, T77-80, T86, T87 **RPS**)

TPO01908 (March 2018)

• T1-3 (T94-96 **RPS**)

TPO01552 (Unknown)

• G1 (T39, T40 **RPS**)



# 4 TREE QUALITY ASSESSMENT

#### **Retention Values**

- 4.1 All trees inspected were categorised using BS5837:2012 and the attached Tree Constraints Plan (see drawings 700 & 701) shows tree positions, numbers and retention categories. Trees were recorded as individuals and as groups.
- 4.2 Trees have been surveyed as groups where they can be considered as forming a group as they form cohesive features either aerodynamically (i.e. they form a discrete group feature providing companion), culturally (i.e. they are composed of trees of a similar size, age and species subject to the same management) or visually (i.e. where the value of the trees within the group is as a whole rather than individually).
- 4.3 Where trees have been surveyed as groups the details recorded with respect to condition and retention value intend to represent an average tree within the group; however, on occasion, it must be noted that there will be exceptions within any group that do not conform to the typical character of that group.
- 4.4 The initial stage of a tree survey in accordance with BS5837:2012 looks at the trees on the Site in terms of life expectancy and condition. Trees are then categorised according to their retention value.
- 4.5 **Category A** trees are those that have been assessed as being of a high quality and value; significant amendments to the proposed scheme should be considered in preference to their removal. These trees are shown in Green on the Tree Constraints Plan.
- 4.6 Category B trees are those that have been assessed as being of a moderate quality and value; amendments to the proposed scheme should be considered in preference to their removal. These trees are shown in Blue on the Tree Constraints Plan.
- 4.7 Category C trees are those that have been assessed as being of a low quality and value; the loss of these specimens should not be considered as a constraint to development. These trees are shown in Grey on the Tree Constraints Plan
- 4.8 Category U trees are those that have been assessed as being in poor condition and having no retention value; these trees should not be a material consideration in the planning process. These trees are shown in Red on the Tree Constraints Plan.
- 4.9 A total of 101 individual trees and 21 groups of trees were surveyed during the visit. Of the 101 trees, a total of 20 were considered to be Category A (high quality), 25 Category B (moderate quality), 42 Category C (low quality) and the remaining 14 were Category U (poor quality/dead). The 21 groups were distributed as one Category A, nine Category B, nine Category C and two Category U.



# **Physiological Condition**

- 4.10 Trees considered to be in a good physiological condition are those with crown density and shoot extension growth levels within the expected ranges for their age and species. Generally, these trees, subject to being of a suitable structural condition, can be expected to make a lasting contribution to the Site. Additionally, trees within the good condition class are likely to tolerate changes within their growing environment that occur as a result of development; as such their successful retention will be easier to achieve.
- 4.11 Trees considered to be in a fair physiological condition are those specimens exhibiting lower shoot extension growth and reduced crown density than would typically be expected. These specimens have a lower life expectancy than those within the good condition class and will not tolerate significant changes as a result of development as well as those in the good condition class.
- 4.12 Trees considered to be in a poor physiological condition are those exhibiting crown and shoot dieback and significantly reduced crown density. Trees of a poor physiological condition are not likely to make a lasting contribution to the Site and whilst their retention in the short term may be beneficial such retention will only be achievable if the trees are fully protected throughout development as they will not tolerate changes in their growing environment.
- 4.13 The distribution of tree physiological condition recorded across the 101 individual specimens were 45 good, 45 fair, six poor and five dead. While variations will exist within the 21 groups, they were distributed as nine good, ten fair, one poor and one dead.

#### **Structural Condition**

- 4.14 There are variations in the structural condition of the trees surveyed; however, tree condition is largely consistent with expectations for the age, management and species of the tree.
- 4.15 The majority of structural defects that were noted across most of the tree stock on the Site, such as minor deadwood in tree crowns, were not considered significant and are unlikely to result in the premature failure of the tree.
- 4.16 The group G18 contained a number of dead / dying elm due to Dutch elms disease and these should be removed. The tree T77 is a dead ash tree which should be either felled or reduced to leave a 4m standing deadwood habitat.

### Age Distribution

- 4.17 Trees assessed as being young (Y) in age are those considered to be less than 10 years old. These trees can generally be considered to have the potential for rapid and significant future growth. Whilst these specimens are not likely to make a substantial contribution to the landscape character of the Site at present they will, if retained, provide succession for the eventual removal of mature or over-mature trees as a result of declining physiological or structural condition.
- 4.18 Trees assessed as being semi-mature (SM) are those of more than 10 years old but having attained less than 40% of the maximum lifespan expected for the species. These trees will generally make some contribution to the current landscape character and appearance of the Site and their retention



- will provide a more immediate succession of mature trees. As with young trees these specimens will have the potential for rapid and significant future growth.
- 4.19 Early mature trees (EM) are those considered to have reached between 40% and 70% of their ultimate life expectancy. These trees are generally not considered to have a significant potential for future growth though they will increase in size at a slower rate than young and semi-mature trees.
- 4.20 Mature trees (M) are those considered to have reached between 70% and 100% of their species life expectancy. These trees will have little future growth potential and they have generally reached their maximum expected size for the location. These trees will generally make the highest contribution to the landscape character of the Site at this time; however, a tree stock over dominated by mature trees will require careful management to ensure that a continuation of canopy cover can be achieved.
- 4.21 Over-mature trees (OM) are those considered to have existed for longer than typical of their species. They do not have the potential to increase in size and may in fact reduce in size as their crowns begin to break up. These trees will often make a significant contribution to the landscape character of the Site and are likely to have ecological value. However, the retention of these trees within new development must be carefully planned as they are approaching the end of their useful life expectancy and they will often have structural defects. Where over-mature trees are to be retained in new development it is essential that access is available for their eventual removal.
- 4.22 Veteran trees (V) are those that show features of biological, cultural or aesthetic value that are characteristic of an individual surviving beyond the typical age range for the species. These trees have negligible potential to increase in size. Veteran trees are usually of a high ecological value and they will require sensitive management where they are to be retained in new development. As such it is again essential that they are located in areas where access is available to undertake management operations and where there is a reduced risk of harm occurring from failure of the trees.
- 4.23 The distribution of age classes recorded across the 101 individual trees present were 16 young, 17 semi-mature, 28 early-mature and 40 mature. The 21 groups ranged between young and mature.

# **Species Distribution**

4.24 The species recorded during the survey are listed below:

### **BOTANICAL NAME**

Acer campestre
Aesculus hippocastanum
Betula pendula

Carpinus betulus Cedrus atlantica Cedrus libani

Chamaecyparis lawsoniana

Corylus avellana

### **COMMON NAME**

Field maple Horse chestnut Silver birch Hornbeam Atlas cedar Cedar of Lebanon Lawson cypress

Hazel



### **BOTANICAL NAME**

### **COMMON NAME**

Hawthorn

Crataegus monogyna

Cupressus macrocarpa Monterey cypress

Fraxinus excelsior Ash
Ilex aquifolium Holly

Malus sp.Apple speciesPopulus x canadensisHybrid black poplar

Prunus avium Wild cherry Prunus domestica Plum

Prunus serrulataJapanese cherryPrunus spinosaBlackthornPyrus sp.Pear speciesQuercus roburEnglish oakSalix capreaGoat willow

Sambucus nigraElderUlmus sp.Elm speciesx Cupressocyparis leylandiiLeyland cypress

x Cupressocyparis leylandii 'Haggerston grey' Leyland cypress 'Haggerston grey'



# 5 CONSTRUCTION REQUIREMENTS

- 5.1 The proposed development consists of the demolition of existing structures and construction of up to 391 dwellings and associated hard surfaces, the provision of land for a new Primary School, open space provision and associated landscaping and new access arrangements.
- 5.2 The construction phase will consist of the following principal operations:
  - Remove trees where required.
  - · Prune tree canopies where required.
  - Install tree protection fencing.
  - Carry out demolition of existing structures and areas of superfluous hardstanding.
  - · Build new primary access routes.
  - Install services, lighting, and drainage.
  - Construct new structures and areas of associated new hardstanding.
  - Carry out landscaping.
- 5.3 The construction process will need to be monitored during its progress and this Arboricultural Impact Assessment should be used as the document to guide the construction process in relation to trees at the Site.
- 5.4 Reference to this document should form part of any method statement regarding the proposed construction works. This will show an understanding of the issues and actions required to protect the trees. Areas of machinery exclusion have been shown on the Tree Protection Plan (see drawings 710 & 711) to help in the production of these statements.



# 6 GENERAL ARBORICULTURAL GUIDANCE

#### Tree Retention / Removal

- The prioritisation for tree retention should be based upon the guidance contained within BS5837: 2012 Trees in Relation to Design, Demolition and Construction- Recommendations. Category A trees should be seen as the highest priority for retention and Category C the lowest.
- 6.2 Category U trees have no retention value and in most circumstances such specimens will not be considered for retention within new development.
- 6.3 When considering the extent of tree retention on Site with respect to Category C trees priority should be given to the trees that have been included within this category due to their having stem diameters of less than 150mm at 1.5m above ground level, as these specimens are relatively young trees with future potential.

# **Working Within or Near the RPA of Retained Trees**

- 6.4 Where possible all construction shall be situated outside of retained trees designated RPA as the installation has the potential to cause soil compaction, root damage and to reduce nutrient and moisture availability to tree roots to the detriment of tree health and vitality.
- However, where there is an overriding justification for working within the RPA of a retained tree, technical solutions might be available that prevent damage to the tree.
- In this respect it can be noted that the use of traditional trenching methods within the RPA could result in extensive root loss and should be avoided.
- 6.7 In order to arrive at a suitable solution Site specific advice should be sought from the project arboriculturist and an engineer.
- Generally speaking, should new buildings be proposed within the RPA of an existing tree it will be necessary to take steps to minimise the potential impact to the tree to allow construction.
- 6.9 In this respect where it is intended to undertake construction operations within the RPA, precautions should be taken to maintain the condition and health of the root system and in particular to:
  - Prevent physical damage to the roots during demolition or construction (such as by soil compaction or severing);
  - · Make provision for water and oxygen to reach the roots;
  - · Allow for the future growth of the root system; and
  - Preserve the soil structure at a suitable bulk density for root growth and function (in particular for soils of a high fines content).



### **Service Installation**

6.10 All service runs, utilities and similar infrastructure should take note of trees and allow for working methods that will minimise damage to trees by referring to documents such as NJUG Volume 4 - Guidelines for the planning, installation and maintenance of utility services in proximity to trees. (National Joint Utilities Group 2007). Existing service/utility routes should be considered as the default for the proposed building.

# **New Tree Planting**

- 6.11 New tree planting should be measured and provide greater species diversity where possible so as to promote resilience and sustainability going forward. Consideration for initial maintenance through establishment should form part of the mitigation specification.
- 6.12 The new guidance provided in BS8545:2014 *Trees: from nursery to independence in the landscape* should also be considered and its recommendations followed.



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# 7 ARBORICULTURAL IMPACT ASSESSMENT

#### Introduction

- 7.1 The construction process will need to be monitored during its progress and this Arboricultural Impact Assessment should be used as the document provided to guide the construction process.
- 7.2 Trees have finite energy reserves, developed each year throughout the growing season, which are utilised for biological processes such as growth and defence against pests or diseases throughout the following year.
- 7.3 Any development in proximity to trees has the potential to cause harm to those trees unless control measures are identified and acted upon; as such it is essential to consider the relationship between the proposed development and the retained trees to identify what precautions are necessary, proportionate and appropriate.
- 7.4 Development has the potential to impact upon the above ground and below ground parts of trees.
- 7.5 Whilst some damage that can occur, such as physical damage to the trees stems and branches from machinery movements, is clearly visible the impact from other aspects of work common on development Sites which can have a significant effect upon the continued health of trees are not always immediately evident.
- 7.6 Damage that is not immediately evident, but which can cause long term harm to retained trees includes things such as damage to the soil structure by compaction causing root damage and levels changes altering the water table and affecting moisture availability.
- 7.7 To minimise the potential for harm to occur to retained trees all works should be carried out with regard to the Tree Protection Measures detailed within this report.
- 7.8 In general, it can be seen that, by adopting appropriate methods of working, precautionary and protective measures, significant harm to retained trees can be avoided.
- 7.9 In particular the establishment of a Construction Exclusion Zone (CEZ) by erection of tree protection fencing will minimise the potential for harm to occur to retained trees.

### **Brief Description of Proposed Development**

7.10 The proposed development consists of the demolition of existing structures and construction of up to 391 dwellings and associated hard surfaces, the provision of land for a new Primary School, open space provision and associated landscaping and new access arrangements.

# **Tree Removal**

7.11 It will be necessary to remove certain trees and areas of vegetation in order to facilitate the development proposals as they are shown within the current Masterplan for the Site. This primarily relates to new access arrangements requiring clearance.



7.12 In terms of trees to be removed, the following items have been identified:

#### Category B

- T71
- Partial removal of G11 and full removal of G20
- One tree from G8 (TPO)

### Category C

- T52, T53, T57, T69, T70, T72, T100 and T101
- Full removal of G10 and partial removal G13
- 7.13 It will also be necessary to fully remove S31-39 and S52-57, and partially remove S10, S42 and S49.
- 7.14 No Category A trees will be required to be removed. While the loss of any Category B tree is unfortunate in a development, considerably more trees will be planted as part of the landscape proposals for the Site and this should therefore compensate the losses. Category C trees are generally not regarded as a significant constraint to development in accordance with BS5837:2012.
- 7.15 Category U trees should be removed regardless of any impact that they might incur from development and are therefore not included in the listing above.
- 7.16 The above removals can be seen in **red** on the Tree Protection Plan whereas the trees to be retained is shown in **green** (see drawings 710 & 711).

### **Root Protection Areas (RPA)**

- 7.17 Root Protection Areas (RPA) for each tree surveyed have been determined in accordance with BS5837:2012 Section 4.6 Root Protection Area in the Standard and a schedule of RPA is attached to this report as Table 2.
- 7.18 Initial RPA for the trees were plotted onto the Tree Constraints Plan (see drawings 700 & 701) and has been used to produce all relevant tree plans in this statement.
- 7.19 Areas where trees are located on Site have been identified and the RPA information of these trees has been used in the design of the tree protection.

# 'No-Dig' Construction

7.20 There are currently some instances where RPA encroachment is assessed as likely occurring and these will require either low impact construction methodologies or alteration of the scheme in order to address them. These are covered in the following paragraphs.



- 7.21 The Masterplan indicates footpath which will pass through the RPA of particular trees to be retained. These encroachments relate to Category A individual tree T17, Category B individual trees T13, T14 and T23, and groups G2 and G8.
- 7.22 The footpath encroachments are through the peripheral areas of RPA and provided the use of 'no-dig' construction is feasible it should be possible to mitigate impact from this. As the name suggests, this would require no excavation at all within the RPA of the trees save for surface level vegetation to be carefully removed where the path is to go. The path would be built on top of existing ground level and comprise a cellular confinement system with granular infill (no fine material), timber edging and porous wearing course. This prevents damage to roots from excavation and reduces likelihood of soil compaction occurring. The porous nature of the footpath also allows gas and moisture exchange between the roots and surface. If considered unfeasible for whatever reason, it will be necessary to relocate the footpaths to an area where less trees, or trees of lower value, are located.
- 7.23 It should be noted that the group G8, referred to above in paragraph 8.20, is subject to TPO and therefore the no-dig footpath will make use of an existing track between two trees at the north west edge of the group. The gap in the trees has been used by vehicles in the past to travel through the group and will have therefore already been subject to some compaction and there should also be suitable ground clearance of canopies for pedestrians.
- 7.24 The CEZ will protect the retained trees during construction and is indicated on the Tree Protection Plan (see drawings 710 & 711).

# **Existing Canopy Spreads**

- 7.25 Where the RPA for retained trees do not extend to the edge of existing canopy spreads, it is possible that those parts of the trees extending beyond the CEZ may sustain damage during construction.
- 7.26 A preliminary assessment of potential pruning requirements has been undertaken for the trees at the Site based on the Masterplan. This has been done by assessing the recorded crown heights and extents for trees to ascertain whether any potential conflicts may occur with the build. It is considered that the build as it stands will not require any significant pruning works to retained trees. It may however be necessary to reduce the tertiary growth to one Category A tree (T9) on its south side by no greater than 1.5m, so as to remain clear of the adjacent works on this side. The works will be to tertiary growth only and will therefore not significantly impact the trees overall appearance or condition.
- 7.27 While pruning requirements are likely to be very limited, further future assessment will be required prior to the implementation of the development to ensure that there remains suitable clearance from the erection of fencing and the construction works.



# **Level Changes**

- 7.28 Trees can be profoundly impacted by changes to ground levels within their RPA, both cutting and filling, and this is a factor that has been considered in this assessment and would be mitigated for through the retention of existing ground levels within this new proposed use of the land.
- 7.29 At this stage, RPS has not been provided with any finished levels due to it being at Masterplan phase and this will therefore require further assessment once available.

### **Utilities / Services**

- 7.30 There should be no requirement to enter the RPA of any of the retained trees as there should be sufficient space to provide to work outside of them. There will be a requirement to remove one tree at the eastern end of the Category B group G8 as there will be a requirement to install underground pipe to feed rainwater into the attenuation basin located just to the south of the trees. While this group is subject to TPO, there is one outlying tree on the eastern end the loss of which would not significantly impact the appearance of the group.
- 7.31 In the unlikely event that it is unfeasible to avoid an RPA of any of the retained trees, this must be first assessed for impact by the Arboricultural Consultant and following this, if deemed tolerable by the tree, should allow for working methods that will minimise damage to trees. For example, reference to documents such as NJUG Volume 4 Guidelines for the planning, installation and maintenance of drainage in proximity to trees. (National Joint Utilities Group 2007) may be suitable.

# **Planning of Site Operations**

- 7.32 Planning of Site operations will take sufficient account of any retained trees to ensure that no access and movement of material into and around the Site impact on trees. Physical damage can result if this is not considered. Consequently, any movement of plant or materials in proximity to trees will be conducted under the supervision of a banksman, to ensure that adequate clearance from trees is always maintained.
- 7.33 All materials or fluids will not be stored within or near the RPA of retained trees, particularly those whose accidental spillage would cause contamination and damage to a tree. Fluids must be handled well away from the outer edge of the RPA of trees.
- 7.34 Correct planning of access routes and storage areas prior to start on Site will ensure no impacts from these activities will occur. It is considered that there should be ample space away from trees for purposes of storage.



# 8 PRE-DEVELOPMENT WORKS

#### Tree Removal

- 7.35 It will be necessary to remove 1 Category B individual (T71), partial removal of 2 Category B groups (G8 and G11) and full removal a further group (G20). Further to this, the removal of 8 Category C individuals (T52, T53, T57, T69, T70, T72, T100 and T101), full removal of 1 Category C group (G10) and partial removal of a further (G13).
- 7.36 Lastly, it will also be necessary to fully remove S31-39 and S52-57, and partially remove S10, S42 and S49.

# **Tree Pruning**

- 9.1 It is considered at this stage that there should be sufficient clearance to mean that only very limited pruning is likely to be required, albeit some light reduction of the crown of T9 on its south side may be required (no greater than 1.5m lateral reduction of tertiary growth).
- 9.2 This should be reassessed prior to the development commencing and in the event that minor tree works are required, these must accord with the guidance below (see Standard of Work). If for whatever reason more significant pruning works are required, this should be assessed by the Arboricultural Consultant and / or Tree Officer.

### **Standard of Work**

- 9.3 All tree works should be carried out in accordance with BS3998:2010 Tree Work Recommendations and latest arboricultural best practice.
- 9.4 All tree work should be carried out by suitably qualified, competent and insured arboricultural contractors.
- 9.5 All green and woody waste generated by the tree works shall be removed from Site and disposed of in an environmentally sustainable manner.

### **Timing of Works**

- 9.6 All tree works shall be completed prior to commencement of any construction works on the Site.
- 9.7 All works shall be timed to have regard to the phenological cycles of protected species that are associated with trees; notably birds and bats.

#### **Tree Protection Barriers**

9.8 All supplementary tree protection fencing (Heras style) should be erected to the position shown on the Tree Protection Plan (see drawings 710 & 711) during the pre-development periods also.



- 9.9 To ensure successful tree protection during this process, all operatives should be briefed on the need to pay full regard to existing trees and all operations adjacent to trees should be properly supervised. This will ensure the works will not adversely affect the trees.
- 9.10 Once the protective barriers are in place they must remain in situ throughout the course of the development until the completion of all works associated with that section of the Site.
- 9.11 Copies of the Tree Protection Plan (see drawings 710 & 711) shall be placed in the Site office for reference by all Site staff.
- 9.12 The protective fencing barrier is to be constructed in accordance with the specification detailed at Appendix D.
- 9.13 Signs detailing the purpose of the protective fencing shall be attached to the fencing at 10m intervals. Such signs should be weatherproof and shall be substantially in the form of the specimen provided at Appendix E. Signs must be replaced as necessary should they be removed or become illegible.



# 9 CONSTRUCTION WORKS

### **Construction Exclusion Zone**

- 9.1 The Construction Exclusion Zone (CEZ) as defined by the protective fence line shall be regarded as sacrosanct, and the protective fencing shall not be moved or taken down at any time.
- 9.2 Within the CEZ there must be no mechanical digging or scraping, no alteration to existing ground levels including soil stripping, no earthworks, no handling or discharge of any chemical substance, concrete washings or of any fuels.
- 9.3 Furthermore, vehicular or pedestrian access and the storage of any materials is **prohibited** within the CEZ.
- 9.4 Additionally, no materials that may contaminate the soil such as concrete mixings, diesel oil and vehicle washings shall be discharged within 10m of the stem of any tree and no fires shall be lit within 10m of the maximum extent of a trees crown.

# **Site Compounds and Materials Stores**

- 9.5 Activities related to the establishment of a temporary Site compound have the potential to impact upon retained trees by various means. In particular the storage and mixing of chemicals and materials such as concrete can have a damaging effect on tree health if precautions are not taken.
- 9.6 To prevent harm occurring to trees provision for materials storage, Site offices, deliveries and other related activities should be made available in areas away from retained trees.
- 9.7 The offices, parking of Site and contractor vehicles, along with secure storage will be provided in an area away from retained trees and this area will be directly controlled by the Site Manager.

## Monitoring

- 9.8 Following erection of the protective fencing and prior to commencement of the construction phase, an inspection of the Site by either the Council's Tree Officer or the Arboricultural Consultant should be arranged to confirm fencing has been installed in accordance with the Tree Protection Plan (see drawings 710 & 711).
- 9.9 It is also recommended that further monitoring visits be carried out following commencement of the works on Site, ideally on at least a monthly basis and by an Arboricultural Consultant, to ensure ongoing functionality of the CEZ and to check on tree condition.

### Reporting

9.10 During the construction phase of the development, the Site Manager will be responsible for liaising with the Council Tree Officer on all arboricultural issues.



9.11 Should any arboricultural issues become apparent during the works the Site Manager should immediately contact the appointed Arboricultural Consultant or the Council's Tree Officer for advice upon how to proceed.



# **Tables**

Table 1: Tree Data Schedule
Table 2: Group Data Schedule

Table 3: Shrub, Hedge & Young Trees Data Schedule

**Key to Inspection Report Form** 

rtoy to mopodition rto	00.01
Species	Genus and variety
Height	Measured Clinometer Reading or Estimated Height in Metres
Girth (dbh @ 1.5m)	Diameter measured in cms, or estimated, where multi stemmed below
	1.5m the diameter is taken as that just above the root flare
Spread (m)	Canopy height estimated in metres above ground level
Canopy height (m)	Crown Spread, radius estimated in metres
Physiological Condition	Good, Fair, Poor, Dead
Age Class	Y – Young MA – Maturing (Middle Aged)
	M – Mature OM - Over mature V – Veteran
Useful Life Expectancy	10, 10-20, 20-40, 40+
(years)	
BS Categorization	See Cascade Appendices 2

Table 1: Tree Data Schedule

Tree	Species	Diameter	Height	Cı	own	Sprea	ıd	Crown	First	Branch	Age	Vigour	Life	Structural Condition/Comments	BS5837
No.	·	(mm)*		N	s	E	w	Height	Branch Direction	Height above Ground	Class		Expectancy		Category
1	Salix caprea	320	9	6	0	2.5	6	1	West	3	M	Good	10-20	Tree is leaning at a 20angle in a NWdirection.Pruning wounds to stem.Restricted inspection due to access.Located off site.  Originally multi stemmed, single stem remaining.	C1
2	Malus sp.	380	8	3.5	3.0	3.0	3.0	2.5	NW	1.5	M	Fair	10-20	Epicormics growth on stem.Pruning wounds to stem and crown.Previous crown reduction.Deadwood in the crown of moderate extent.Restricted inspection due to access.Located off site.	C1
3	Malus sp.	300	6	3	4	3.5	4.0	0.5	SW	1.0	М	Good	20-40	Pruning wounds to crown.Previous crown reduction.Restricted inspection due to .Located off site.	B1
4	Crataegus monogyna	160	6	1.0	1.0	2.5	0.5	0.5	SE	1.0	EM	Good	10-20	Restricted inspection due to access.Located off site.	C2
5	Quercus robur	300	6	0.5	4.5	1.0	5	2.5	SW	1.5	SM	Fair	10-20	Tree is leaning at a 30 angle in a Southdirection. Epicormics growth on stem. Restricted inspection due to access. General poor form to tree. Located off site.	C2
6	Quercus robur	400	13	4	5	6	5	2.5	South	3	EM	Good	40+	Deadwood in the crown of minor extent.Restricted inspection due to access.Located off site.	A2
7	Salix caprea	110	5	0	3	5	0	1	SE	2	Y	Poor	<10	Tree is leaning at a 20angle in a SEdirection.Bark damage.Deadwood in the crown of minor extent.Restricted inspection due to access and vegetation.General poor form to tree.Located off site.Tree has no long term potential.	U
8	llex aquifolium	160	6	3	0.5	5	1	1	NE	2	SM	Fair	10-20	Tree is leaning at a 30 angle in a NEdirection.Restricted inspection due to access and vegetation.General poor form to tree.Located off site.	C2
9	Quercus robur	840	20	8	10.0	9	9	2.5	SW	2	M	Good	40+	Deadwood in the crown of minor extent.Restricted inspection due to access and vegetation.Located off site.  Good quality twin stemmed specimen.	A1
10	Fraxinus excelsior	320	14	3.0	8.0	5.0	5.0	2.5	SW	4.0	EM	Good	10-20	Restricted inspection due to access.Located off site.  National Chalara threat to species limits likely longevity.	C1
11	Prunus avium	200	12	2	2	4	1	0.0		0.0	SM	Fair	10-20	Restricted inspection due to access and vegetation.General poor form to tree.Located off site.	C2
12	llex aquifolium	120	8	2.0	1	1.5	1.5	0.5	East	1.0	Υ	Fair	10-20	Restricted inspection due to access.Located off site.	C2
13	Fraxinus excelsior	790	14	7	7	7	5	2.5	sw	3.5	M	Good	20-40	Growing off old stump.Stem cavity of majorextent.Deadwood in the crown of minor extent.  Old hedgerow ash, hollowed out bole. Chalara threat may promote decline if contracted.	

<sup>\*</sup> Where the tree is multi-stemmed the conventions within BS5837:2012 are applied



Species  Fraxinus excelsior  Prunus avium  Prunus avium	(mm)* 560 420 520	16		<b>s</b> 4.0	<b>E</b> 2.5	<b>W</b> 6.0	Height 3.0	Branch Direction East	Height above Ground	Class	01	Expectancy		Category B2
Prunus avium Prunus avium	420	12			2.5	6.0	3.0	East	0.0	М	0	00.40		R2
Prunus avium			4.5	4.5						***	Good	20-40	Stem cavity of majorextent.Deadwood in the crown of minor extent.Restricted inspection due to ivy.	DZ
Prunus avium			4.5	4.5									Old hedgerow ash, hollowed out bole. Chalara threat may promote decline if contracted.	
	520	4.4			4.5	4.5	2.0	SW	4.0	М	Good	40+	Good quality cherry specimen.	A1
O		11	2.5	5	2.5	2	4	SW	4.0	М	Poor	<10	Deadwood in the crown of minor extent.Branch dieback of minor extent.Tree has no long term potential.  Exposed heartwood with decay column.	U
Quercus robur	650	18	8	7	8	7	3	West	4	М	Good	40+	Deadwood in the crown of minor extent.Restricted inspection due to	A1
													access.Located off site. Good quality specimen.	
Ulmus sp.	150	9	1.0	2.0	2.0	1	2.5	South	2.0	Υ	Poor	<10	Deadwood in the crown of minor extent.Restricted inspection due to vegetation.  Almost dead from Dutch elm.	U
llex aquifolium	200	8	2.0	1.5	2.0	2	0.5	South	0.0	SM	Fair	10-20	Restricted inspection due to vegetation.General poor form to tree.	C2
Ulmus sp.	160	9	1.0	3.0	1.5	2	3.0	SW	1	Υ	Poor	<10	Deadwood in the crown of minor extent.  Almost dead from Dutch elm	U
Fraxinus excelsior	565	14	6	6	7	7	3	South	4.0	М	Fair	10-20	Stem cavity of majorextent.Deadwood in the crown of moderate extent.Previous branch failures noted.Restricted inspection due to vegetation.  Main larger stem dying back with established epicormic growth forming secondary crown.	C2
Quercus robur	940	16	6.0	10.0	6	8	1.5	SW	0.5	М	Good	40+	Pruning wounds to crown.Multi stemmed stem formed at 1.0 metres.Deadwood in the crown of minor extent.	A1
Quercus robur	715	13	8	7	5	6	3	South	2	М	Fair	20-40	Included main stem union.Pruning wounds to stem.Crossing branches in crown.Restricted inspection due to vegetation.	B1
Fraxinus excelsior	165	7	4	2	5	0	1	South	2	Υ	Poor	<10	Heavily suppressed crown.General poor form to tree.Tree has no long term potential.	U
Quercus robur	630	16	5	7	5.0	7	3	South	4	М	Fair	40+	Deadwood in the crown of minor extent.Branch dieback of minor extent.	A1
Ulmus sp.	110	7	1	2.0	2	0.5	0.0		0.0	Υ	Dead	<10	Dead elm.	U
Ulmus sp.	110	6	1.0	1	1	0.5	0.0		0.0	Υ	Dead	<10	Dead elm.	U
	Ulmus sp.  Fraxinus excelsior  Quercus robur  Quercus robur  Fraxinus excelsior  Quercus robur  Ulmus sp.	Ulmus sp. 160  Fraxinus excelsior 565  Quercus robur 940  Quercus robur 715  Fraxinus excelsior 165  Quercus robur 630  Ulmus sp. 110	Ulmus sp. 160 9  Fraxinus excelsior 565 14  Quercus robur 940 16  Quercus robur 715 13  Fraxinus excelsior 165 7  Quercus robur 630 16  Ulmus sp. 110 7	Ulmus sp. 160 9 1.0  Fraxinus excelsior 565 14 6  Quercus robur 940 16 6.0  Quercus robur 715 13 8  Fraxinus excelsior 165 7 4  Quercus robur 630 16 5  Ulmus sp. 110 7 1	Ulmus sp. 160 9 1.0 3.0  Fraxinus excelsior 565 14 6 6  Quercus robur 940 16 6.0 10.0  Quercus robur 715 13 8 7  Fraxinus excelsior 165 7 4 2  Quercus robur 630 16 5 7  Ulmus sp. 110 7 1 2.0	Ulmus sp. 160 9 1.0 3.0 1.5  Fraxinus excelsior 565 14 6 6 7  Quercus robur 940 16 6.0 10.0 6  Quercus robur 715 13 8 7 5  Fraxinus excelsior 165 7 4 2 5  Quercus robur 630 16 5 7 5.0  Ulmus sp. 110 7 1 2.0 2	Ulmus sp. 160 9 1.0 3.0 1.5 2  Fraxinus excelsior 565 14 6 6 7 7  Quercus robur 940 16 6.0 10.0 6 8  Quercus robur 715 13 8 7 5 6  Fraxinus excelsior 165 7 4 2 5 0  Quercus robur 630 16 5 7 5.0 7  Ulmus sp. 110 7 1 2.0 2 0.5	Ulmus sp. 160 9 1.0 3.0 1.5 2 3.0  Fraxinus excelsior 565 14 6 6 7 7 3  Quercus robur 940 16 6.0 10.0 6 8 1.5  Quercus robur 715 13 8 7 5 6 3  Fraxinus excelsior 165 7 4 2 5 0 1  Quercus robur 630 16 5 7 5.0 7 3  Ulmus sp. 110 7 1 2.0 2 0.5 0.0	Ulmus sp. 160 9 1.0 3.0 1.5 2 3.0 SW  Fraxinus excelsior 565 14 6 6 7 7 3 South  Quercus robur 940 16 6.0 10.0 6 8 1.5 SW  Quercus robur 715 13 8 7 5 6 3 South  Fraxinus excelsior 165 7 4 2 5 0 1 South  Quercus robur 630 16 5 7 5.0 7 3 South  Ulmus sp. 110 7 1 2.0 2 0.5 0.0	Ulmus sp. 160 9 1.0 3.0 1.5 2 3.0 SW 1  Fraxinus excelsior 565 14 6 6 7 7 3 South 4.0  Quercus robur 940 16 6.0 10.0 6 8 1.5 SW 0.5  Quercus robur 715 13 8 7 5 6 3 South 2  Fraxinus excelsior 165 7 4 2 5 0 1 South 2  Quercus robur 630 16 5 7 5.0 7 3 South 4  Ulmus sp. 110 7 1 2.0 2 0.5 0.0 0.0	Ulmus sp. 160 9 1.0 3.0 1.5 2 3.0 SW 1 Y  Fraxinus excelsior 565 14 6 6 7 7 3 South 4.0 M  Quercus robur 940 16 6.0 10.0 6 8 1.5 SW 0.5 M  Quercus robur 715 13 8 7 5 6 3 South 2 M  Fraxinus excelsior 165 7 4 2 5 0 1 South 2 Y  Quercus robur 630 16 5 7 5.0 7 3 South 4 M  Ulmus sp. 110 7 1 2.0 2 0.5 0.0 0 0.0 Y	Ulmus sp. 160 9 1.0 3.0 1.5 2 3.0 SW 1 Y Poor  Fraxinus excelsior 565 14 6 6 7 7 3 South 4.0 M Fair  Quercus robur 940 16 6.0 10.0 6 8 1.5 SW 0.5 M Good  Quercus robur 715 13 8 7 5 6 3 South 2 M Fair  Fraxinus excelsior 165 7 4 2 5 0 1 South 2 Y Poor  Quercus robur 630 16 5 7 5.0 7 3 South 4 M Fair  Ulmus sp. 110 7 1 2.0 2 0.5 0.0 T Dead	Ulmus sp. 160 9 1.0 3.0 1.5 2 3.0 SW 1 Y Poor <10  Fraxinus excelsior 565 14 6 6 7 7 3 3 South 4.0 M Fair 10-20  Quercus robur 940 16 6.0 10.0 6 8 1.5 SW 0.5 M Good 40+  Quercus robur 715 13 8 7 5 6 3 South 2 M Fair 20-40  Fraxinus excelsior 165 7 4 2 5 0 1 South 2 Y Poor <10  Quercus robur 630 16 5 7 5.0 7 3 South 4 M Fair 40+  Ulmus sp. 110 7 1 2.0 2 0.5 0.0 O Y Dead <10	Almost dead from Dutch elm.  Almost dead from

<sup>\*</sup> Where the tree is multi-stemmed the conventions within BS5837:2012 are applied



Tree	Species	Diameter	Height	Cı	rown	Sprea	ıd	Crown	First	Branch	Age	Vigour	Life	Structural Condition/Comments	BS5837
No.		(mm)*		N	S	E	w	Height	Branch Direction	Height above Ground	Class		Expectancy		Category
28	Ulmus sp.	160	8	1.0	1.5	1.5	1.5	0.0		0.0	Υ	Dead	<10		U
														Dead elm.	
29	Ulmus sp.	100	4	0.5	1.0	1	1	0.0		0.0	Υ	Dead	<10	Restricted inspection due to access and vegetation.	U
														Dead elm.	
30	Prunus avium	540	13	4.0	5	5	4	1	SW	2	M	Good	20-40	Deadwood in the crown of minor extent. Crossing branches in crown.	B1
31	Prunus avium	300	11	4.0	0.5	3	3	1	North	2	EM	Fair	10-20	Tree is leaning at a 10angle in a Northdirection.Included main stem union.Restricted inspection due to access.	C1
														Located on boundary line.	
32	Quercus robur	600	10	6	6	6	6	2	West	2.5	М	Good	40+	Bifurcated stem formed at 1metres.Deadwood in the crown of minor extent.Restricted inspection due to access.	A2
33	Fraxinus excelsior	500	17	6.0	6.5	6.0	5.0	2.0	NW	4.0	M	Fair	20-40	Deadwood in the crown of minor extent.Restricted inspection due to vegetation.	B1
														Chalara threat may promote decline in near future.	
34	Fraxinus excelsior	245	8	2	3	3	3	0.0	NW	0.0	SM	Poor	<10	Heavily suppressed crown.Restricted inspection due to vegetation.Tree has no long term potential.	U
35	Fraxinus excelsior	320	8	3	3.5	4	4	2	East	2	SM	Fair	10-20	Included main stem union.General poor form to tree.	C1
														Chalara threat may promote decline in near future.	
36	Fraxinus excelsior	245	8	3.5	3.0	3	3	2.5	North	2	SM	Fair	10-20	Included main stem union.Deadwood in the crown of minor extent.General poor form to tree.	C1
														Chalara threat may promote decline in near future. Multi stemmed.	
37	Crataegus monogyna	295	7	3	2.5	1.5	3.0	0.5	North	0.5	M	Good	10-20	Restricted inspection due to vegetation.	C1
38	llex aquifolium	180	7	1	2	2	2	0.5	SE	0.0	Υ	Good	10-20	Restricted inspection due to vegetation.	C1
39	Quercus robur	350	7	6	4	6.5	5	3	SE	4	EM	Fair	20-40	Deadwood in the crown of minor extent.Restricted inspection due to access and vegetation.General poor form to tree.Located off site.	B1
40	Quercus robur	750	18	9	9	8	7	2.0	NE	2	М	Good	40+	Deadwood in the crown of minor extent.Restricted inspection due to	A1
														access.Located off site. Good quality specimen.	
41	Chamaecyparis lawsonian	110	6	1.0	1.0	1.0	1.0	1.0	South	1.0	Υ	Fair	10-20	Heavily suppressed crown.Restricted inspection due to access.Located off site.	C2
42	Prunus avium	180	10	2.0	2.0	2.0	1.0	5.0	South	5.0	Υ	Fair	10-20	Tree is leaning at a 10angle in a Northdirection. Heavily suppressed crown. Restricted inspection due to access. Located off site.	C2



<sup>\*</sup> Where the tree is multi-stemmed the conventions within BS5837:2012 are applied

Tree		Diameter	Height	Cr	own	Sprea	ıd	Crown	First	Branch	Age	Vigour	Life	Structural Condition/Comments	BS5837
No.		(mm)*		N	s	E	w	Height	Branch Direction	Height above Ground	Class		Expectancy		Category
43	Chamaecyparis lawsonian	250	6	2.5	2.5	2.5	2.5	0.0	North	0.0	EM	Fair	10-20	Crown previously topped at 6.0 metres.Restricted inspection due to access.Located off site.	C2
44	Malus sp.	300	6	5	4	4	4	2	NE	0.5	M	Fair	10-20	Pruning wounds to crown.Restricted inspection due to access.Located off site.  Garden tree.	C1
45	Acer campestre	250	10	4	4	4	4	3	North	1.0	SM	Good	20-40	Restricted inspection due to access.Located off site.  Garden tree.	B1
46	Betula pendula	250	12	2	4	4	1	3	NW	2	SM	Fair	10-20	Tree is leaning at a 20angle in a Eastdirection.Heavily suppressed crown.Deadwood in the crown of minor extent.General poor form to tree.	C1
47	Betula pendula	560	19	5	3	6	4.5	3.5	North	3	M	Good	40+	Deadwood in the crown of minor extent.  Good quality specimen.	A1
48	Quercus robur	910	21	8	9	10	9.5	2	West	3	М	Good	40+	Deadwood in the crown of minor extent.  Excellent quality specimen.	A1
49	Quercus robur	540	19	5.0	5.0	6.0	5.0	2.0	SE	2.0	М	Good	40+	Deadwood in the crown of minor extent.  Good quality specimen. Minor bark damage to base.	A1
50	Betula pendula	220	13	2	2	5	0	2	East	3	EM	Fair	<10	Tree is leaning at a 15angle in a Eastdirection.Bark damage.Heavily suppressed crown.Tree has no long term potential.	U
51	Betula pendula	180	13	1.5	1.0	4	0.0	9	North	9	SM	Fair	<10	Basal Cavity of majorextent. Heavily suppressed crown. Tree has no long term potential.	U
52	Betula pendula	260	14	2	3	4.0	0.0	2	NE	3.5	EM	Good	10-20	Tree is leaning at a 15angle in a SEdirection.	C1
53	Betula pendula	290	14	2	2	4.5	1	2.5	North	5	EM	Good	10-20	Tree is leaning at a 10angle in a Eastdirection.Stem wounds.Bark damage.Tree has no long term potential.	C1
54	Betula pendula	190	12	2.0	1	3	1.0	3	NW	1	SM	Fair	10-20	Bark damage.Heavily suppressed crown.Tree has no long term potential.	C1
55	Quercus robur	380	14	2.0	2	7	3	3	NW	3	EM	Good	20-40	Deadwood in the crown of minor extent.  Lateral suppression from adjacent trees.	B1
56	Carpinus betulus	380	14	4	5	6	2	5	North	3	EM	Fair	20-40	Bark damage.Deadwood in the crown of minor extent.Crossing branches in crown.	B1
57	Betula pendula	380	14	3	4.5	5	1.5	2.5	North	0.5	M	Fair	10-20	Lateral suppression from adjacent trees. Tight fork.  Tree is leaning at a 20angle in a SEdirection.Deadwood in the crown of minor extent.Tree has no long term potential.  Lost leader in past.	C1



<sup>\*</sup> Where the tree is multi-stemmed the conventions within BS5837:2012 are applied

Tree	Species	Diameter	Height	Cr	own	Sprea	ıd	Crown	First	Branch	Age	Vigour	Life	Structural Condition/Comments	BS5837
No.	.,	(mm)*		N	S	E	W	Height	Branch Direction	Height above Ground	Class		Expectancy		Category
58	Prunus sp.	110	5	2	2	2	2	1	NW	1.5	Υ	Good	10-20	Restricted inspection due to access.Located off site.  Garden tree.	C1
59	Aesculus hippocastanum	880	18	5.5	5	6	8	3	West	4	М	Good	40+	Pruning wounds to stem.Deadwood in the crown of minor extent.  Excellent specimen for species.	A1
60	Cedrus atlantica	180	10	2.5	1.5	2	1	2	SW	2	Y	Good	20-40	Heavily suppressed crown.Restricted inspection due to access.Located off site.  Garden tree.	B1
61	Crataegus monogyna	150	6	1.5	1.5	1.5	1.5	2	NW	1	EM	Fair	10-20	Pruning wounds to stem and crown.Heavily suppressed crown.Deadwood in the crown of minor extent.	C1
62	Crataegus monogyna	175	5	1.5	1	1.0	2.0	4	South	1.5	EM	Fair	10-20	Heavily suppressed crown.Deadwood in the crown of minor extent.	C1
63	Prunus avium	170	9	2.5	0	1	3.5	3	West	4	SM	Fair	10-20	Tree is leaning at a 10angle in a NWdirection. Epicormics growth on stem. Heavily suppressed crown. Restricted inspection due to ivy. General poor form to tree.	C1
64	Prunus avium	540	11	4	4	6	5	5	NW	5	М	Good	20-40	Included main stem union.	B1
														Multi stemmed.	
65	Prunus avium	370	11	4.0	2	4	3	3	West	4	EM	Good	20-40	Bifurcated stem formed at 4.0metres.Restricted inspection due to ivy.  Multi stemmed.	B1
66	Prunus avium	230	7	5	0	6	0	4	North	3.5	EM	Fair	10-20	Heavily suppressed crown.Restricted inspection due to vegetation.General poor form to tree.	C1
67	x Cupressocyparis leylandii	120	3	1	1	1	1	0.5	West	0.5	Y	Good	10-20	Restricted inspection due to access.Located off site.  Garden tree.	C1
68	Acer campestre	170	5	3.0	3.0	2.5	2.0	2.0	North	0.0	Y	Good	20-40	Restricted inspection due to access.Located off site.  Garden tree.	B1
69	Malus sp.	245	6	2.5	2.5	2.5	2.5	2	West	0.5	EM	Fair	10-20	Epicormics growth on stem.Stem cavity of moderateextent.Pruning wounds to crown.  Twin stemmed apple in garden.	C2
70	Malus sp.	190	4	1.5	3	2.5	2.5	1.5	West	0.5	EM	Fair	10-20	Stem cavity of minorextent.Pruning wounds to crown.  Apple in garden.	C2
71	Pyrus sp.	320	9	2.5	4	2.5	3.5	2	South	2	М	Fair	20-40	Epicormics growth on stem.Deadwood in the crown of minor extent.  Twin stemmed pear in garden.	B2
72	llex aquifolium	300	11	2	2	2	2	6	West	5	EM	Fair	10-20	Restricted inspection due to ivy and vegetation.	C2



<sup>\*</sup> Where the tree is multi-stemmed the conventions within BS5837:2012 are applied

Tree	Species	Diameter	Height	Cr	own	Sprea	ıd	Crown	First	Branch	Age	Vigour	Life	Structural Condition/Comments	BS5837
No.		(mm)*		N	s	E	w	Height	Branch Direction	Height above Ground	Class		Expectancy		Category
73	llex aquifolium	280	12	2	2	2	2	2	North	1.5	EM	Good	20-40	Restricted inspection due to access and vegetation.Located off site. Holly located in residential garden.	B2
74	Crataegus monogyna	415	9	4.0	4.0	4.0	3.0	3.0	South	2.0	M	Good	20-40	Deadwood in the crown of minor extent.Restricted inspection due to vegetation.  Old multi stemmed hawthorn on boundary. Holly and elder growing around base.	B2
75	Crataegus monogyna	410	9	3	5	4	4	1	South	1.0	М	Good	20-40	Deadwood in the crown of minor extent.Restricted inspection due to vegetation.  Old multi stemmed hawthorn on boundary. Elder growing around base.	B2
76	llex aquifolium	295	7	2	2	2	2	2	North	2.5	SM	Good	10-20	Restricted inspection due to access.General poor form to tree.Located off site.  Multi stemmed holly in garden.	C2
77	Fraxinus excelsior	620	16	5	5	6	7	3	NW	3	M	Dead	<10	Deadwood in the crown of major extent.Restricted inspection due to vegetation.  Dead twin stemmed ash in dense vegetation.	U
78	Quercus robur	420	18	5	6	7	5	7	East	7	EM	Good	40+	Deadwood in the crown of minor extent.Restricted inspection due to vegetation.  Straight stemmed oak growing in dense vegetation.	A2
79	Fraxinus excelsior	550	12	3	7	5	7	2	North	0.5	M	Fair	20-40	Bifurcated stem formed at 3.5metres.Deadwood in the crown of minor extent.Restricted inspection due to vegetation.  Lateral suppression from larger oak.	B2
80	Quercus robur	500	18	6	6	6	6	9	SE	5	EM	Good	40+	Deadwood in the crown of minor extent.Restricted inspection due to vegetation.  Straight stemmed oak growing in dense vegetation.	A2
81	llex aquifolium	205	18	2	2	2	2	1	SE	0.0	SM	Good	10-20	Restricted inspection due to vegetation.General poor form to tree.  Multi stemmed holly.	C2
82	Fraxinus excelsior	820	13	5	5	8	8	2	NW	3	M	Fair	20-40	Deadwood in the crown of minor extent.Previous branch failures noted.  Multi stemmed old ash.	B2
83	Acer campestre	350	7	3.0	4.0	4.0	3.0	2.5	South	1.5	EM	Fair	10-20	Stem cavity of moderateextent.Deadwood in the crown of minor extent.Restricted inspection due to access and vegetation.Tree has no long term potential.  Base/stem is buried in spoil.	C2
84	Quercus robur	800	17	6.0	8.0	8.0	7.0	2.0	NE	2.5	М	Good	40+	Deadwood in the crown of minor extent.  Good quality mature oak. Minor bark damage near base.	A1
85	Quercus robur	810	17	7	6	8	8	2	NW	3	M	Good	40+	Deadwood in the crown of minor extent.  Good quality mature oak. Minor bark damage near base.	A1

<sup>\*</sup> Where the tree is multi-stemmed the conventions within BS5837:2012 are applied



Tree	Species	Diameter	Height	Cro	own :	Sprea	d	Crown	First	Branch	Age	Vigour	Life	Structural Condition/Comments	BS5837
No.		(mm)*		N	s	E	w	Height	Branch Direction	Height above Ground	Class		Expectancy		Category
86	Quercus robur	880	16	10.5	10.5	9	10.5	2	North	3	М	Good	40+	Multi stemmed stem formed at 3 metres.Deadwood in the crown of minor extent.Restricted inspection due to vegetation.  Good quality mature oak.	A2
87	Quercus robur	1010	17	12.5	12	9.0	12	2	SW	3	M	Good	40+	Bifurcated stem formed at 3.5metres.Deadwood in the crown of minor extent.Restricted inspection due to vegetation.  Good quality mature oak.	A2
88	Prunus avium	350	8	6	1	5	4	2	North	2	EM	Fair	10-20	Included main stem union.Deadwood in the crown of minor extent.Restricted inspection due to vegetation.  Lateral suppression from adjacent cherry.	C2
89	Quercus robur	580	9	7	5	6	7	2	NW	2	EM	Fair	20-40	Deadwood in the crown of minor extent.Restricted inspection due to vegetation.	B2
90	Quercus robur	315	5	2.0	3.0	4.0	1.0	2.0	SE	1.5	SM	Fair	<10	Tree is leaning at a 30angle in a Northdirection.Bark damage.Deadwood in the crown of minor extent.Restricted inspection due to vegetation.	U
91	Acer campestre	440	6	3.0	3.0	5.0	4.0	1.0	East	2.0	EM	Fair	10-20	Included main stem union.Deadwood in the crown of minor extent.Hanging branches in the crown.Previous branch failures noted.Restricted inspection due to access and vegetation.Grey Squirrel damage noted to tree.  Multi stemmed maple.	C2
92	Acer campestre	345	6	4	3	4.5	3	3	East	0.0	EM	Fair	10-20	Basal Cavity of moderateextent.Bark damage.Grey Squirrel damage noted to tree. Twin stemmed maple.	C2
93	Quercus robur	580	9	4	6	5	5	2.5	SE	3.5	EM	Fair	20-40	Epicormics growth on stem & crown.Deadwood in the crown of minor extent.Branch dieback of minor extent.Previous branch failures noted.Restricted inspection due to access.	B2
94	Quercus robur	900	12	8.5	8	8	7	2.5	East	3	M	Good	40+	Epicormics growth on stem.Deadwood in the crown of minor extent.Previous branch failures noted.Restricted inspection due to access.  Good quality mature oak.	A2
95	Quercus robur	960	13	7	8	9	8	2.5	SE	3	М	Good	40+	Deadwood in the crown of minor extent.	A2
														Good quality mature oak.	
96	Quercus robur	700	12	9.0	3.0	7.0	7.0	3.0	North	4.0	М	Good	20-40	Bifurcated stem formed at 4metres.Deadwood in the crown of minor extent.Restricted inspection due to ivy.	B2
97	Quercus robur	390	9	5	6	5	6	0.5	South	1	SM	Good	20-40	Restricted inspection due to vegetation.  Tri-stemmed oak growing in hedgerow.	B2
98	Cupressus macrocarpa	650	16	6	6	6	6	4	NW	3.5	M	Fair	10-20	Pruning wounds to stem.Deadwood in the crown of minor extent.Hanging branches in the crown.Previous branch failures noted.	C2



<sup>\*</sup> Where the tree is multi-stemmed the conventions within BS5837:2012 are applied

Tree	Species	Diameter	Height	Cr	own	Spre	ad	Crown	First	Branch	Age	Vigour	Life	Structural Condition/Comments	BS5837
No.		(mm)*		N	s	E	w	Height	Branch Direction	Height above Ground	Class		Expectancy		Category
99	Fraxinus excelsior	615	15	8	8	10	8	1.5	SE	4	M	Fair	20-40	Deadwood in the crown of minor extent.Restricted inspection due to vegetation.  Twin stemmed ash in hedgerow.	B2
100	Cedrus libani	350	6	3	2	5	2	1.5	NE	2	SM	Fair	10-20	Pruning wounds to stem and crown.Crown previously topped at 6 metres.Deadwood in the crown of minor extent.	C2
101	Prunus serrulata	260	7	4	4	4	4	2	East	0.5	EM	Fair	10-20	Lost leader in past.	C2



<sup>\*</sup> Where the tree is multi-stemmed the conventions within BS5837:2012 are applied

Table 2: Tree Group Data Schedule

Group No.	Species	Min/Max Diameter (mm)		Average Crown Spread	Ave. Crown Height	Max. Age Class	Vigour	Life Expectancy	Structural Condition/Comments	BS5837 Category
G1	Crataegus monogyna	100 200	7	3	1.5	М	Fair	10-20	Deadwood present of minor extent,Restricted inspection due to ivy.  Hedgerow remnant.	C2
G2	Prunus avium Acer campestre	300 450	11	5	3	М	Fair	20-40	Deadwood present of minor extent,Restricted inspection due to ivy.  Bark damage due to browsing livestock.	B2
G3	llex aquifolium	100 150	12	1.5	0	SM	Good	10-20	Included stem unions present. Heavily suppressed form. Restricted inspection due to vegetation.	C2
G4	Prunus avium	100 250	16	6	2	SM	Fair	10-20	Deadwood present of minor extent,Off site tree group. Restricted inspection due to access. Bark damage to stem. Leggy form.	C2
G5	Chamaecyparis lawsoniana	200 200	8	2	1	SM	Good	10-20	Off site tree group. Restricted inspection due to no access.	C2
G6	llex aquifolium	250 400	13	3	4	М	Good	20-40	Pruning wounds present. Off site tree group. Restricted inspection due to no access.  Crown lifted.	B2
G7	Betula pendula	140 250	17	3	3	ЕМ	Fair	10-20	Heavily suppressed form. Deadwood present of minor extent, Leaning east due to crown competition.	C2
G8	Populus x canadensis	300 600	23	7	6	ЕМ	Good	20-40	Heavily suppressed form. Deadwood present of minor extent, Previous branch failure, Restricted inspection due to ivy.  Extensive screen comprising densely planted poplar, resukting in tall leggy trees. Woodpecker holes present.	B2

Group No.	Species	Min/Max Diameter (mm)	•	Average Crown Spread	Ave. Crown Height	Max. Age Class	Vigour	Life Expectancy	Structural Condition/Comments	BS5837 Category
G9	Prunus avium	530 620	16	5	4	М	Good	20-40	Included stem unions present. Deadwood present of minor extent,Pruning wounds present. Restricted inspection due to ivy.	B2
G10	Sambucus nigra	200 250	5	2.5	1.5	М	Fair	10-20	Deadwood present of minor extent, Group is of no long term potential.  Pair of multi stemmed elder. Bark damage from active horse paddock.	C2
G11	Prunus domestica  Carpinus betulus	120 300	10	4	2	EM	Fair	20-40	Deadwood present of minor extent, Previous branch failure, Restricted inspection due to vegetation.  Boundary group within garden.	B2
G12	Ilex aquifolium  Betula pendula Chamaecyparis lawsoniana Acer campestre  Crataegus monogyna	100 250	9	5	1	EM	Fair	10-20	Heavily suppressed form. Deadwood present of minor extent, Previous branch failure, Restricted inspection due to vegetation.  Dense group of lower value trees.	C2
G13	llex aquifolium Corylus avellana Sambucus nigra Corylus avellana Ilex aquifolium	100 200	8	3.5	0.5	EM	Fair	10-20	Heavily suppressed form. Deadwood present of minor extent, Pruning wounds present. Restricted inspection due to vegetation.	C2
G14	nex aquilolium Prunus spinosa Crataegus monogyna Quercus robur	600 720	10	7	2.5	М	Fair	20-40	Deadwood present of moderate extent,  Pair of oak with livestock browsing damage to base. North tree has Ganoderma applanatum bracket growing from damaged area.	B2
G15	Quercus robur	610 630	9	7	3	М	Good	40+	Deadwood present of minor extent, Pair of similar oak.	A2
G16	Fraxinus excelsior	150 250	12	5	3	SM	Fair	10-20	Heavily suppressed form. Pruning wounds present. Group is of no long term potential. Restricted inspection due to ivy.Group of general poor form,	C2



Group No.	Species	Min/Max Diamete (mm)		Average Crown Spread	Ave. Crown Height	Max. Age Class	Vigour	Life Expectancy	Structural Condition/Comments	BS5837 Category
G17	Prunus avium	100 25	9	3.5	2	SM	Good	20-40	Deadwood present of minor extent,Off site tree group. Restricted inspection due to no access.	B2
									Group of predominantly cherry.	
G18	Ulmus sp.	100 18	7	2.5	2	Υ	Dead	<10	Deadwood present of major extent, Previous branch failure, Restricted inspection due to vegetation.	U
	Sambucus nigra								Group of predominantly dead elm.	
	llex aquifolium									
G19	Acer campestre	100 29	7	4	2	SM	Good	20-40	Epicormic growth on stem.Pruning wounds present.	B2
	Prunus avium Crataegus monogyna									
G20	x Cupressocyparis leylandii 'Haggerston grey'	400 42	8	2	1.5	EM	Good	20-40	Pruning wounds present.	B2
	riaggerstori grey								Pair of cypress.	
G21	x Cupressocyparis leylandii	170 28	) 7	3.5	1	SM	Poor	<10	Deadwood present of moderate extent, Hanging branches, Previous branch failure, Previously topped, Pruning wounds present. Group is of no long term potential. Restricted inspection due to vegetation.	U

Table 3: Woody Scrub / Shrubs / Hedge / Saplings

Section No.	Species		Height (m)	Comments
S1	llex aquifolium Crataegus monogyna	Sambucus nigra	5.0	Off site mass of understorey vegetation on woodland edge.
S2	llex aquifolium	Sambucus nigra	4.5	Off site mass of understorey vegetation on woodland edge.
S3	Crataegus monogyna		4	Small diameter stemmed clump of hawthorn.
S4	Corylus avellana		6.0	Off site hazel overhangs site.
S5	Corylus avellana		5.0	Multi stemmed hazel inside fence line.
S6	Crataegus monogyna		5	Hawthorn hedgerow remnant. Dieback present.
<b>S</b> 7	Crataegus monogyna		7	Clump of hawthorn behind holly.
S8	Crataegus monogyna		7	Hawthorn hedgerow remnant. Heavily suppressed.
<b>S</b> 9	Crataegus monogyna		7.0	Hawthorn hedgerow remnant. Heavily suppressed.
S10	Corylus avellana		5	Row of hazel on boundary.
S11	Crataegus monogyna Prunus spinosa	Sambucus nigra	4.0	Hedgerow section. Poor.
S12	Corylus avellana		7	Row of small diameter multi stemmed hazel.
S13	Sambucus nigra		3	Poor quality elder.
S14	x Cupressocyparis leylandii		2	Managed garden hedge.
S15	Fagus sylvatica		2.0	Managed garden hedge.
S16	Magnolia sp.		4	Garden tree.
S17	Chamaecyparis lawsoniana		2	Managed garden hedge.
S18	Chamaecyparis lawsoniana	Prunus laurocerasus	4.0	Boundary hedge. Predominantly cypress.
S19	Malus sp.		4.0	Garden tree.
S20	Prunus laurocerasus		3.0	Garden shrub.
S21	Prunus laurocerasus		3.0	Garden shrub.

Section No.	Species		Height (m)	Comments
S22	Prunus laurocerasus	Hedera helix	2	Garden hedge, mostly ivy.
S23	Prunus avium	Taxus baccata	6	Young garden trees.
S24	x Cupressocyparis leylandii		4	Managed garden hedge.
S25	Crataegus monogyna		4	Small diameter stemmed hawthorn.
S26	Ligustrum vulgare Viburnum tinus	Cotoneaster sp.	3	Garden shrubs.
S27	Taxus baccata		2	Managed garden hedge.
S28	Viburnum tinus		4	Garden shrubs.
S29	Crataegus monogyna		4.0	Small diameter stemmed hawthorn.
S30	Cotoneaster sp.		4.0	Large garden shrub.
S31	Sambucus nigra		4	Young elder.
S32	Sambucus nigra		3	Young elder.
S33	Sambucus nigra Salix caprea	Betula pendula llex aquifolium	4	Mass of vegetation.
S34	Prunus spinosa Sambucus nigra		3.5	Young elder.
S35	Sambucus nigra	llex aquifolium	4	Dense mass of vegetation.
S36	Sambucus nigra Corylus avellana	Prunus spinosa	4.0	Dense mass of vegetation.
S37	Sambucus nigra		5	Clump of elder.
S38	Crataegus monogyna		5.0	Young hawthorn.
S39	Crataegus monogyna	Sambucus nigra	1.5	Hedgerow section. Regularly trimmed.
S40	Prunus laurocerasus	Sambucus nigra	5.0	Cherry laurel and elder in corner of field.
S41	Sambucus nigra	llex aquifolium	4	Young elder and holly.
S42	Sambucus nigra Ilex aquifolium	Crataegus monogyna	5	Hedgerow section. No recent management.
S43	Crataegus monogyna		4	Hawthorn growing from base of oak.



Section No.	Species		Height (m)	Comments
S44	Crataegus monogyna		4.0	Hawthorn growing on boundary.
S45	Crataegus monogyna		3	Hawthorn growing on boundary.
S46	Sambucus nigra		3	Young elder.
S47	Sambucus nigra Rosa canina	Salix caprea Rubus fruticosus	3	Scrubby hedge growing along fence line.
S48	Crataegus monogyna Sambucus nigra		4	Young elder.
S49	Corylus avellana	Sambucus nigra	4.0	Hedgerow section. No recent management.
S50	x Cupressocyparis leylandii		4	Cypress hedge. Topped and pruned.
S51	Acer campestre		5	Hedgerow section. No recent management.
S52	Sambucus nigra Ilex aquifolium	Pittosporum tenuifolium Prunus laurocerasus 'Otto	6	Mass of of low value vegetation.
S53	Sambucus nigra	Luykens'	4	Young elder.
S54	Photinia fraserii	Fraxinus excelsior	4	Shrubs/young trees.
S55	Crataegus monogyna Sambucus nigra	Viburnum tinus Prunus laurocerasus 'Otto	3.5	Shrub bed.
S56	Sambucus nigra Ligustrum vulgare	luykens' Corylus avellana	5	Dense mass of shrub vegetation.
S57	Ligustrum vulgare	Sambucus nigra	4	Dense shrub mass.





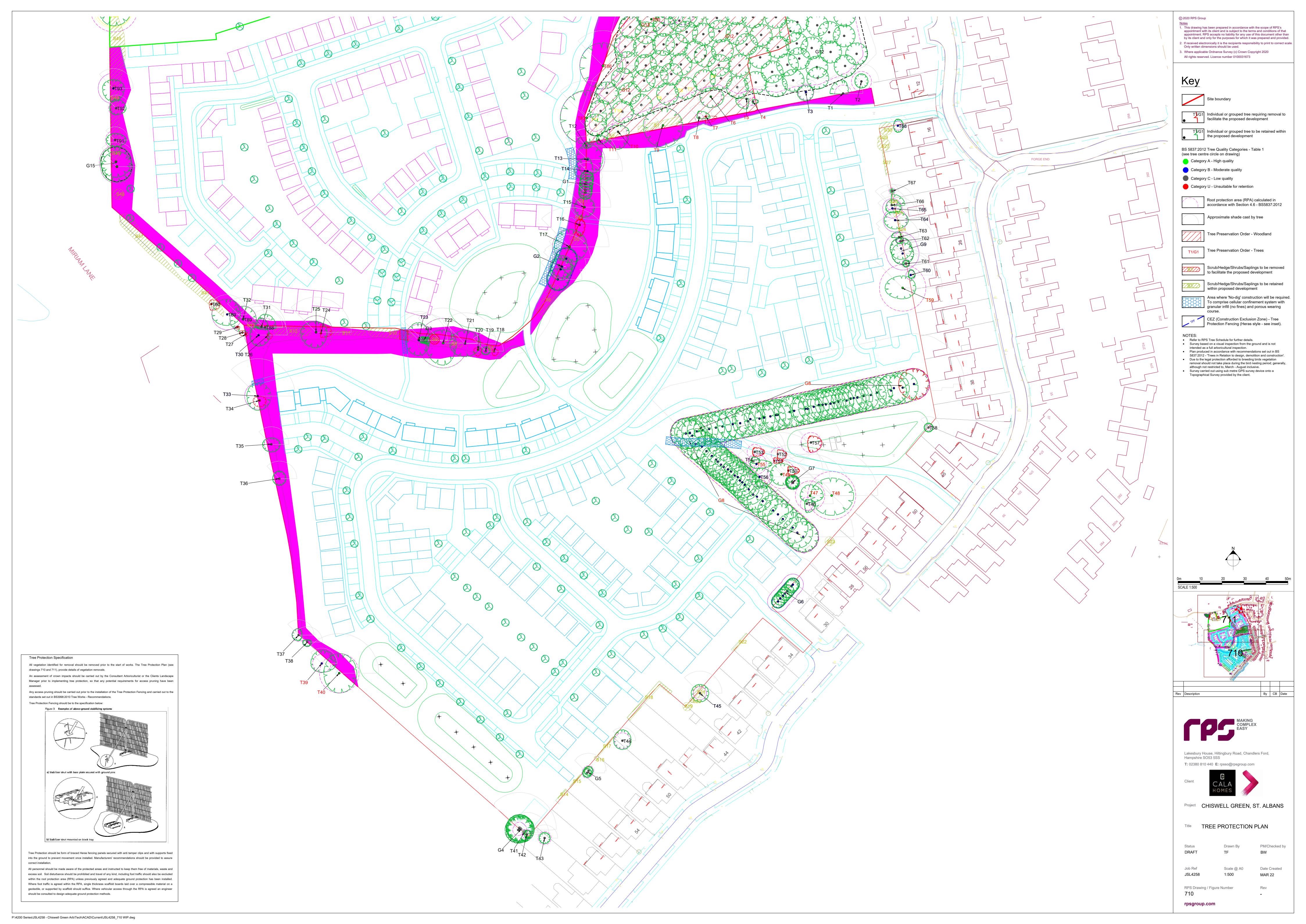
## **Figures**

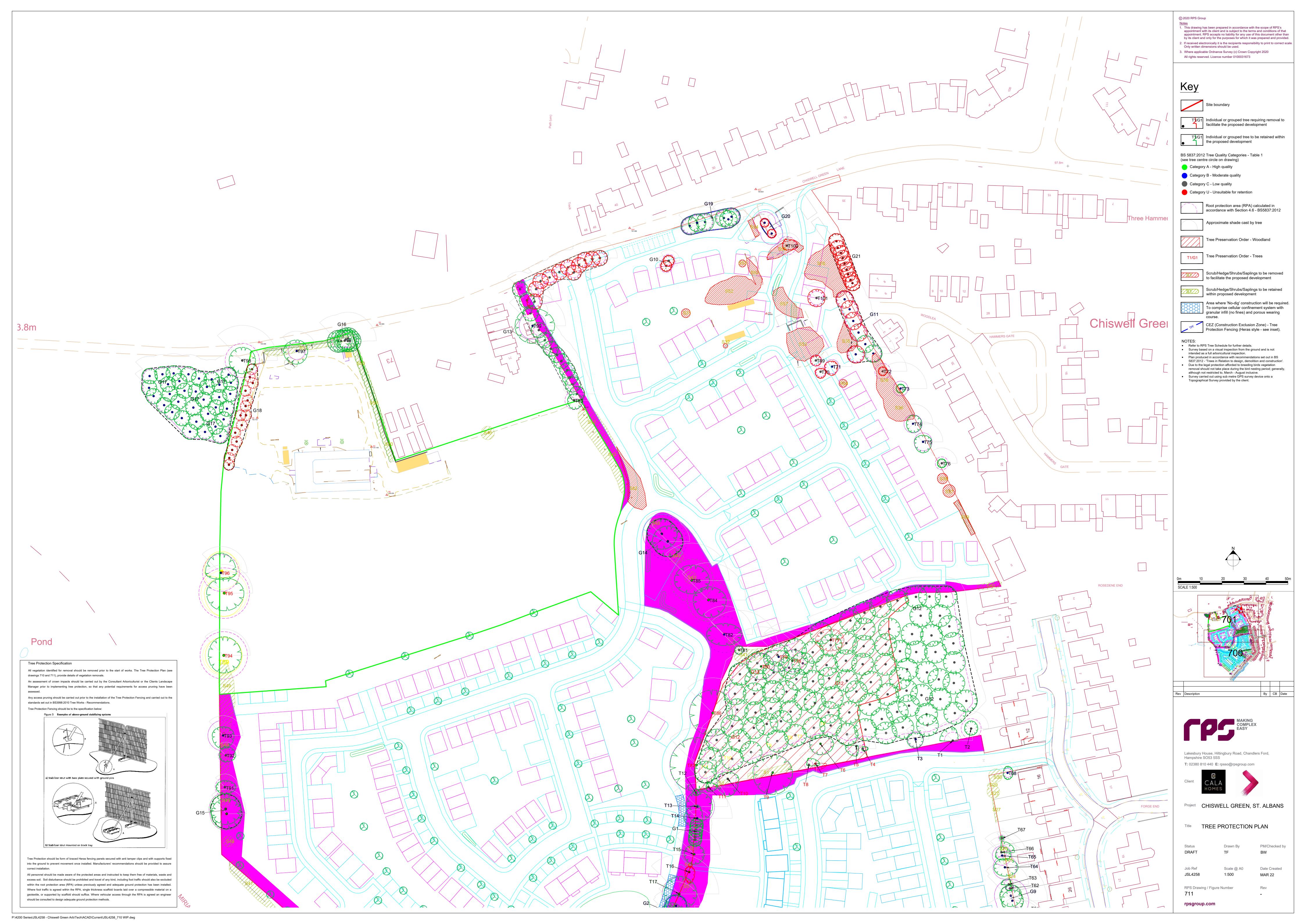
TREE CONSTRAINTS PLAN - JSL4258\_700 & 701

TREE PROTECTION PLAN - JSL4258\_710 & 711











## Appendix A

## Methodology

#### General

Trees were inspected from ground level during a Site visit. All data was recorded electronically within a ESRI ArcPad project and then upon return to the office it was imported into an MS Access database. Individual tree numbers and locations were plotted by eye on to a drawing at the time of the survey. Tree positions were then related to a Topographical survey of the Site provided, where not shown on the topographical survey tree positions have been plotted by eye only and require confirmation. Colour coded versions of the drawings form part of this report (see drawings 700 & 701).

#### The data recorded includes:

- Height data gathered using a Suunto optical clinometer PM 5/1520. Where access to the tree
  was not possible the Heights were estimated.
- Diameter measurements taken at 1.5 metres above ground level (or where multiple stems exist complying with requirements for BS5837).
- Tree crown spread estimated measurement of the four cardinal points to provide information to be used with the arboricultural constraints plan
- Tree Crown Clearance crown height above ground level
- Tree Condition judged visually using the guidelines produced in the report. The condition is indicated with the appropriate colour on the map found in the report (see drawings 700 & 701).
- Age class estimated from an examination of the tree in question.

#### **Age Classification**

The following classification is employed:

- Y Young: Saplings and young trees under 10 years of age
- SM Semi-Mature: Trees older than 10 years but less than 40% of the life expectancy of their species.
- EM Early-Mature: Trees between 40% and 70% of the life expectancy of their species.
- M Mature: Trees between 70% and 100 of the life expectancy of their species.



OM - Over mature: Trees considered being beyond the normal life expectancy of their species.

V – Veteran: Trees that show features of biological, cultural or aesthetic value that are characteristic of an individual surviving beyond the typical age range for the species.

#### **Estimated Remaining Contribution in Years**

The estimated remaining contribution in years is an estimate based on currently known factors of the possible remaining life of the tree as an asset. Clearly, it is impossible to predict changes in condition which may occur in the future and this reflects what is considered reasonable under existing circumstances. The following classification is employed:

Death or removal is likely within less than 10 years

Death or removal is likely within 10+ years.

Death or removal is likely within 20+ years.

Death or removal is likely beyond 40 years

The estimated remaining contribution in years will be dependent on the interaction of the typical longevity of the species, its current age and condition with prevailing environmental factors. The estimated remaining contribution in years also dependent on future tree management that can extend useful life in some instances.

#### **Tree Condition**

The tree survey assessed the individual condition of all trees identified on the Site. The assessment of condition is based on a visual and professional view.

The categories considered for Physiological Condition are good, fair, poor and dead.

Structural Condition is also commented on and this will include such items of presence of decay and physical defects.

Trees are living organisms and their condition can change rapidly in response to environmental variables. Condition remarks refer to the date of survey and cannot be assumed to remain unchanged. While there is no such thing as a safe tree, regular inspection of trees is recommended to reduce the foreseeable risks associated with trees. There is currently no published guidance from the UK insurance industry on the frequency of tree inspections. In the German courts a bi-annual routine inspection is normally expected for older street trees, giving an indication of the rapidity of change in condition that can occur.

#### **Preliminary Management Recommendations**



Recommendations are given where it is felt by the arborist that further investigations are required due to suspected defects and work recommendations for pre-construction tree work.

#### Tree Categorisation Using BS 5837 Methodology

The trees surveyed were categorised using the method explained in BS5837:2012. This method categorizes individual trees, groups and woodlands in a systematic way. Each tree, group or woodland is identified on an attached plan.

Groups are identified as those trees forming a single arboricultural feature with trees that provide companion shelter, are avenues or screens or cultural.

Initially the surveyor will determine if the tree should be regarded as a U category tree. U category trees are those that are low value trees that have little future due to physiological and structural condition.

Other trees are graded A, B or C. The initial category should reflex the trees value in making an important contribution to the amenity of the Site over a period of time. The higher the category the longer the perceived time period.

A sub category is included 1, 2 or 3. This sub category reflects the type of value the surveyor feels the tree presents in regards its value to 1 – arboricultural, 2 – landscape, 3 – cultural or conservation.

The cascade chart used is included as Appendix C of this report.



## **Appendix B**

#### The Tree Constraints Plan

The Tree Constraints Plan (see drawings 700 & 701) is designed to show the influence that the trees have upon the Site by virtue of their size and position. The plan seeks to act as a design tool that shows both the above and below ground constraints presented by the trees.

The information provided within this section of the report is to assist in the interpretation of the Tree Constraints Plan and aims to ensure that those trees selected for retention can be successfully integrated within the proposed development.

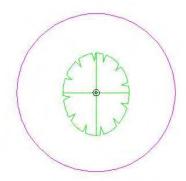
It should be noted that some of the tree positions shown on the plan have been plotted by eye to an Ordnance Survey base map and as such should be considered to be of a provisional nature.

#### **Below Ground Constraints**

#### **Root Protection Areas**

Root Protection Areas for each tree and group of trees surveyed have been determined in accordance with BS5837:2012 and a schedule of Root Protection Areas is attached to this report as Table 2.

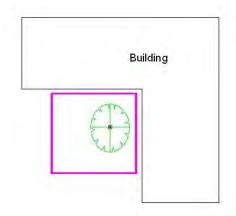
As shown below Root Protection Areas (RPA's) for the trees, where no significant constraints to root development are considered to be present, have been plotted onto the Tree Constraints Plan as circles, with the tree located centrally, extending to encompass the area of ground, and thus the rootable soil volume, required for protection.



Where tree root spread is considered to have been influenced by Site conditions the trees RPA's have been plotted to the Tree Constraints Plan as a polygon. The plotted polygon is of the same area as it would be as a circle and its shape reflects an arboricultural assessment of likely root distribution.

An example of a polygonal RPA, considered appropriate due to the presence of a building in close proximity to a tree, is shown below.



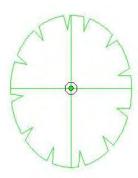


Where possible all development, including new hard landscaping, shall be situated outside of the retained trees designated Root Protection Areas.

#### **Above Ground Constraints**

#### **Existing Canopy Spreads**

The existing canopy spreads of the trees on Site are shown on the Tree Constraints Plan as depicted below.



The current spread of the tree is a constraint due to its dominance, size and movement in strong winds.

It will typically be unacceptable to design any built development within the current spread of a tree.

Where built development is proposed in close proximity to existing trees consideration should be given to the amount of working space required to allow its construction.

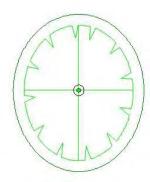
#### **Future Tree Growth**

Some of the trees surveyed are not yet mature and they have the potential for future growth. Where these are to be retained consideration to their ultimate crown spread should be given as future branch growth



may result in interference with proposed development, damage to branches and the need for a tree pruning regime.

To facilitate assessment of future tree growth maximum expected canopy spreads have been marked on the Tree Constraints Plan (see drawings 700 & 701) as shown below.



The area of mature tree spread is estimated by the arboriculturist and is their best judgement of mature crown spread based on experience and with regard to the current tree growth observed on the Site.

Within the area of maximum branch spread construction activities should be restricted for the long-term health and vigour of the trees.

In this respect it is considered that within the area of maximum branch the construction of utility buildings, such as single storey garages or sheds and the installation of hard surfaces would generally be an appropriate form of construction, however should car parking be proposed beneath the ultimate spread of trees the likelihood of fruit fall, leaf litter or sap exudate causing a nuisance must be considered.

In addition, it is important to consider the likelihood of damage to trees or structures that may be caused by continuous whipping of branches in windy conditions. In such circumstance's branches may have to be repeatedly cut back which will introduce wounds in the tree and may spoil its form or shape. In general terms trees should not be retained upon the basis that their ultimate branch spread can be significantly controlled by periodic pruning.

#### **Canopy Height / Clearance**

The height and growth direction of the lowest branch of each tree is recorded in the Tree Data Schedule contained within this report as Table 1. Additionally, the vertical clearance of the trees canopy above ground level is recorded within the Tree Data Schedule.

The two figures can be used to inform the extent to which a trees crown may be at risk of damage during development as a result of vehicular or plant movements within the Site and to assess the need for additional protective measures to be implemented to protect low branches.

In particular it should also be noted that where the Root Protection Areas for retained trees do not extend to the edge of existing canopy spreads it is possible that those parts of the trees extending beyond the RPA fencing may sustain damage during construction.

Where this occurs, there are two primary options available to manage and minimise the potential for damage to tree canopies to occur during development and these may be used singularly or in combination.



The first option is to create a Construction Exclusion Zone (CEZ), by the erection of protective fencing, around the full extent of the trees. The second is to undertake pre-development pruning works to the trees to reduce the potential for branch damage to occur.

#### **Shading**

It should be appreciated during the design of the development that trees can cause shading and obstruction of daylight and sunlight. It should be recognised that the extent of shading likely will vary with tree species, canopy shape and size, foliage density, time of year and sun elevation and that such shading will often be seasonal and diffuse.

Shading has been shown on the constraints plan, but this is a very basic shade pattern and it should not be considered as a definitive pattern. Shade and it affects/benefits to residential buildings should be considered by the designers within the overall Site appraisal for the building layout.



## **Appendix C**

**BS5837 Cascade Chart for Tree Quality Assessment** 



#### ARBORICULTURAL IMPACT ASSESSMENT

	Cascade chart for tree quality assessment					
Category and definition	Criteria (including subcategories where app	ropriate)		Identification on plan		
Trees unsuitable for retention (see	Note)					
Category U Those in such a condition	☐ Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse,  ☐ Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse,  ☐ Dark ☐ Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse,  ☐ Dark ☐ Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse,  ☐ Dark ☐ Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse,					
that they cannot realistically	including those that will become unviable after removal of other category U trees (e.g. where, for whatever					
be retained as living trees in	reason, the loss of companion shelter cannot be mitigated by pruning)					
the context of the current	☐ Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline					
land use for longer than	☐ Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low					
10 years	quality trees suppressing adjacent trees of better quality					
10 years	NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see <b>4.5.7</b> .					
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation			
Trees to be considered for retentio	n					
Category A	Trees that are particularly good	Trees, groups or woodlands of particular	Trees, groups or woodlands	Light Green		
Trees of high quality with an	examples of their species, especially if	visual importance as arboricultural and/or	of significant conservation,			
estimated remaining life	rare or unusual; or those that are	landscape features	historical, commemorative or			
expectancy of at least	essential components of groups or		other value (e.g. veteran			
40 years	formal or semi-formal arboricultural		trees or wood-pasture)			
	features (e.g. the dominant and/or					
	principal trees within an avenue)					
Category B	Trees that might be included in	Trees present in numbers, usually growing	Trees with material	Mid Blue		
Trees of moderate quality	category A, but are downgraded	as groups or woodlands, such that they	conservation or other			
with an estimated remaining	because of impaired condition (e.g.	attract a higher collective rating than they	cultural value			
life expectancy of at least	presence of significant though	might as individuals; or trees occurring as				
20 years	remediable defects, including	collectives but situated so as to make little				
	unsympathetic past management and	visual contribution to the wider locality				
	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					
Category C	Unremarkable trees of very limited	Trees present in groups or woodlands, but	Trees with no material	Grey		
Trees of low quality with an	merit or such impaired condition that	without this conferring on them	conservation or other			
estimated remaining life	they do not qualify in higher categories	significantly greater collective landscape	cultural value			
expectancy of at least		value; and/or trees offering low or only				
10 years, or young trees with		temporary/transient landscape benefits				
a stem diameter below						
150 mm						



## **Appendix D**

#### **Tree Protection Barriers**

#### **Root Protection Area Barrier Details**

Since trees are living organisms which interact with their immediate environment any changes made to their surroundings may have a bearing on that trees future. Developing a Site will undoubtedly place any trees within close proximity under some level of stress, which could predispose them to infection. The aim of this method statement is to limit the amount of stress induced by introducing protection measures.

The most effective way of offering protection is by erecting protective barriers set at a distance from the tree stem using the methods given within BS 5837: 2012 Trees in Relation to Design, Demolition and Construction. Barriers should be braced and constructed to resist impacts; see Figures 1 & 2 below for barrier specifications. Barriers can be of an alternative specification to that within the BS5837:2012 provided it is approved by the Local Planning Authority Tree Officer.

Barriers should be erected before any works commence on Site with the exception of recommended tree work. Areas of retained and future structure planting should be similarly protected.

All personnel should be made aware of the protected areas and instructed to keep them free of materials, waste and excess soil. Soil disturbance should be prohibited and travel of any kind, including foot traffic should also be excluded within the root protection area (RPA) unless previously agreed and adequate ground protection has been installed.

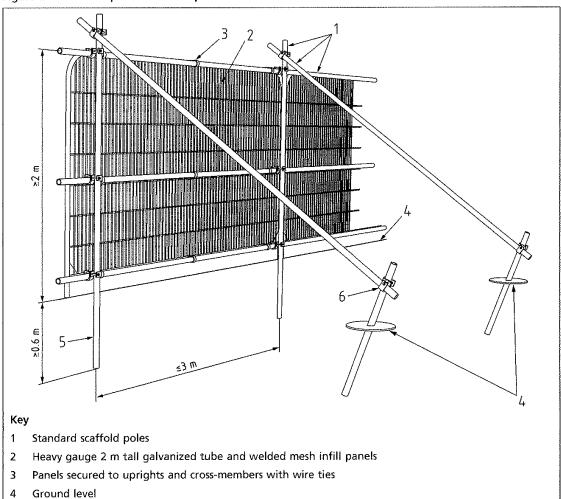
Where foot traffic is agreed within the RPA, single thickness scaffold boards laid over a compressible material on a geotextile or supported by scaffold should suffice. Where vehicular access through the RPA is agreed an engineer should be consulted to design adequate ground protection methods.



#### Suggested Barrier Specification (as per BS5837: 2012)

#### Figure 1

Figure 2 Default specification for protective barrier



Uprights driven into the ground until secure (minimum depth 0.6 m)

Standard scaffold clamps



## Figure 2.

a) Stabilizer strut with base plate secured with ground pins

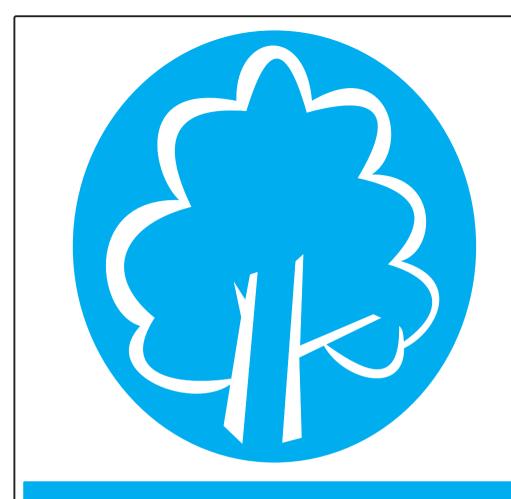
Figure 3 Examples of above-ground stabilizing systems

b) Stabilizer strut mounted on block tray



## **Appendix E**

**Construction Exclusion Signage – Example** 



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



## **Appendix F**

**Tree Preservation Orders** 



#### **Tree Preservation Order**

#### **Town and Country Planning Act 1990**

The St Albans City and District Council Tree Preservation Order No 1908 20 March 2018, Land south of Chiswell Green Lane, St Albans

The St Albans City and District Council, in exercise of the powers conferred on them by section 198 of the Town and Country Planning Act 1990 make the following Order-

#### Citation

1. This Order may be cited as TPO 1908, Land south of Chiswell Green Lane, St Albans 2018,

#### Interpretation

- 2.— (1) In this Order "the authority" means the St Albans City and District Council.
- (2) In this Order any reference to a numbered section is a reference to the section so numbered in the Town and Country Planning Act 1990 and any reference to a numbered regulation is a reference to the regulation so numbered in the Town and Country Planning (Tree Preservation)(England) Regulations 2012.

#### Effect

- 3.— (1) Subject to article 4, this Order takes effect provisionally on the date on which it is made.
- (2) Without prejudice to subsection (7) of section 198 (power to make tree preservation orders) or subsection (1) of section 200 (tree preservation orders: Forestry Commissioners) and, subject to the exceptions in regulation 14, no person shall-
  - (a) cut down, top, lop, uproot, wilfully damage, or wilfully destroy; or
  - (b) cause or permit the cutting down, topping, lopping, uprooting, wilful damage or wilful destruction of.

any tree specified in the Schedule to this Order except with the written consent of the authority in accordance with regulations 16 and 17, or of the Secretary of State in accordance with regulation 23. and, where such consent is given subject to conditions, in accordance with those conditions.

#### Application to trees to be planted pursuant to a condition

4. In relation to any tree identified in the first column of the Schedule by the letter "C", being a tree to be planted pursuant to a condition imposed under paragraph (a) of section 197 (planning permission to include appropriate provision for preservation and planting of trees), this Order takes effect as from the time when the tree is planted.

Dated this day 20th March

2018

[Signed on behalf of the St Albans City and District Council

Authorised by the Council to sign in that behalf

## [CONFIRMATION OF ORDER

## **SCHEDULE**

### **SPECIFICATION OF TREES**

## Trees specified individually

(encircled in black on the map)

Reference on map	Description	Situation
<u></u>	Oak	Close to field boundary between paddocks and
• •		Butterfly World land
T2	Oak	Close to field boundary between paddocks and Butterfly World land
Т3	Oak	Close to field boundary between paddocks and Butterfly World land

## Trees specified by reference to an area

(within a dotted black line on the map)

Reference Description on map

Situation

#### **Groups of trees**

(within a broken black line on the map)

Reference on map

**Description** 

Situation

None

None

### Woodlands

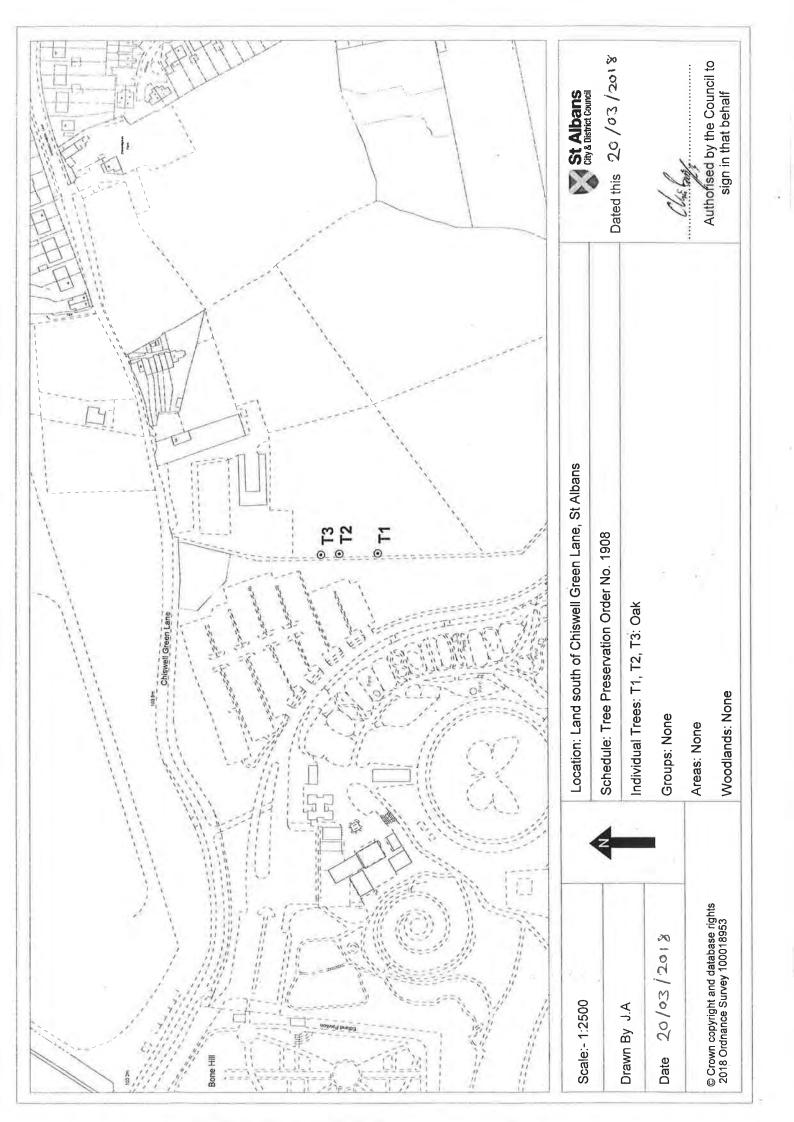
(within a continuous black line on the map)

Reference on map

**Description** 

Situation

None





## CITY AND DISTRICT OF ST ALBANS (TOWN AND COUNTRY PLANNING ACT 1990)

The Occupier 244 Watford Road Chiswell Green St Albans Herts AL2 3DL

#### TAKE NOTICE

- (1)That a Tree Preservation Order, a copy of which is attached to this Notice, relating to property at land rear of 244 Watford Road, Chiswell Green, St. Albans, Herts and which it is considered may affect your interests, has been made by the St Albans District Council. The effect of the Order is to require application to be made to the District Council before the trees can be felled, lopped or similarly dealt with.
- (2)The grounds on which the Council consider that the Order is made are: This Order covers woodland with important amenity value. The Order is being placed to safeguard visual amenity and to ensure the trees are considered as a material factor in any future planning application.
- A certified copy of the Order and map have been deposited for inspection (3)at the District Council Offices, Civic Centre, St Peter's Street, St Albans and may be inspected during normal office hours.
- (4) Objections or representations with respect to the Order may be made to the Central Administrative Officer, St Albans City and District Council, District Council Offices, Civic Centre, St Peter's Street, St Albans, AL1 3JE in accordance with Section 199(3) of the Town and Country Planning Act 1990, a copy of which is appended to this Notice.
- (5) If no objections or representations are duly made or any so made are withdrawn, then not less than forty-two days from the date of the service of this notice, the Order may be confirmed.
- The Order contains a Direction under Section 201 of the Town and Country (6)Planning Act 1990, the effect of which is to bring the Order into immediate effect without previous confirmation by the St Albans District Council. The Order takes effect provisionally on the date specified in Clause 13(1) and shall continue in force until the expiration of a period of six months from that date until the date the Order is confirmed.

Dated this 18th day of March 2005

M LOVELAD

**HEAD OF LEGAL** AND DEMOCRATIC SERVICES

St Albans City and District Council District Council Offices, St Peter's Street, St Albans, Herts ALI 3|E • Tel: 01727 866100 • 🞰 Textphone: 01727 819570 • www.stalbans.gov.uk



## TOWN AND COUNTRY PLANNING (TREES) REGULATIONS 1999 TREE PRESERVATION ORDER 1999

### Town and Country Planning Act 1990

### Land Rear of 244 Watford Road and Adjoining Forge End, Chiswell Green, St Albans, Herts

The St Albans District Council, in exercise of the powers conferred on them by sections 198, 201 and 203 of the Town and Country Planning Act 1990 hereby make the following Order—

#### Citation

1. This Order may be cited as the Tree Preservation Order 1441, land rear of 244 Watford Road and adjoining Forge End, Chiswell Green St Albans Herts

#### Interpretation

2. In this Order "the authority" means the City and District Council of St Albans and unless the context otherwise requires, any reference in this Order to a numbered section is a reference to the section so numbered in the Town and Country Planning Act 1990.

#### [Application of section 201

3. The authority hereby direct that section 201 (provisional tree preservation orders) shall apply to this Order and, accordingly, this Order shall take effect provisionally on 19 March 2005.

#### Prohibited acts in relation to trees

- 4. Without prejudice to subsections (6) and (7) of section 198 (power to make tree preservation orders)(1) [or subsection (3) of section 200 (orders affecting land where Forestry Commissioners interested)], and subject to article 5, no person shall—
  - (a) cut down, top, lop, uproot, wilfully damage or wilfully destroy; or
  - (b) cause or permit the cutting down, topping, lopping, uprooting, wilful damage or wilful destruction of,

any tree specified in Schedule 1 to this Order or comprised in a group of trees or in a woodland so specified, except with the consent of the authority and, where such consent is given subject to conditions, in accordance with those conditions.

<sup>(1)</sup> Subsection (6) of section 198 exempts from the application of tree preservation orders the cutting down, uprooting, topping or lopping or lopping trees which are dying, dead or have become dangerous, or the undertaking of those acts in compliance with obligations imposed by or under an Act of Parliament or so far as may be necessary for the prevention or abatement of a nuisance. Subsection (7) of that section makes section 198 subject to section 39(2) of the Housing and Planning Act 1986 and section 15 of the Forestry Act 1967.

#### Exemptions

## 5.—(1) Nothing in article 4 shall prevent—

- (a) the cutting down, topping, lopping or uprooting of a tree by or at the request of a statutory undertaker, where the land on which the tree is situated is operational land of the statutory undertaker and the work is necessary—
  - (i) in the interests of the safe operation of the undertaking;
  - (ii) in connection with the inspection, repair or renewal of any sewers, mains, pipes, cables or other apparatus of the statutory undertaker; or
  - (iii) to enable the statutory undertaker to carry out development permitted by or under the Town and Country Planning (General Permitted Development) Order 1995;
- (b) the cutting down, topping, lopping or uprooting of a tree cultivated for the production of fruit in the course of a business or trade where such work is in the interests of that business or trade;
- (c) the pruning, in accordance with good horticultural practice, of any tree cultivated for the production of fruit;
- (d) the cutting down, topping, lopping or uprooting of a tree where that work is required to enable a person to implement a planning permission (other than an outline planning permission or, without prejudice to paragraph (a)(iii), a permission granted by or under the Town and Country Planning (General Permitted Development) Order 1995) granted on an application under Part III of the Act, or deemed to have been granted (whether for the purposes of that Part or otherwise);
- (e) the cutting down, topping, lopping or uprooting of a tree by or at the request of the Environment Agency to enable the Agency to carry out development permitted by or under the Town and Country Planning (General Development Order) 1995;
- (f) the cutting down, topping, lopping or uprooting of a tree by or at the request of a drainage body where that tree interferes, or is likely to interfere, with the exercise of any of the functions of that body in relation to the maintenance, improvement or construction of watercourses or of drainage works, and for this purpose "drainage body" and "drainage" have the same meanings as in the Land Drainage Act 1991; or
- (g) without prejudice to section 198(6)(b), the felling or lopping of a tree or the cutting back of its roots by or at the request of, or in accordance with a notice served by, a licence holder under paragraph 9 of Schedule 4 to the Electricity Act 1989.

- (2) In paragraph (1), "statutory undertaker" means any of the following-
  - a person authorised by any enactment to carry on any railway, light railway, tramway, road transport, water transport, canal, inland navigation, dock, harbour, pier or lighthouse undertaking, or any undertaking for the supply of hydraulic power,
  - a relevant airport operator (within the meaning of Part V of the Airports Act 1986),
  - the holder of a licence under section 6 of the Electricity Act 1989,
  - a public gas transporter,
  - the holder of a licence under section 7 of the Telecommunications Act 1984 to whom the telecommunications code (within the meaning of that Act) is applied,
  - a water or sewerage undertaker,
  - the Civil Aviation Authority or a body acting on behalf of that Authority,
  - the Post Office.

## Applications for consent under the Order

- 6. An application for consent to the cutting down, topping, lopping or uprooting of any tree in respect of which this Order is for the time being in force shall be made in writing to the authority and shall—
  - (a) identify the tree or trees to which it relates (if necessary, by reference to a plan);
  - (b) specify the work for which consent is sought; and
  - (c) contain a statement of the applicant's reasons for making the application.

## Application of provisions of the Town and Country Planning Act 1990

- 7.—(1) The provisions of the Town and Country Planning Act 1990 relating to registers, applications, permissions and appeals mentioned in column (1) of Part I of Schedule 2 to this Order shall have effect, in relation to consents under this Order and applications for such consent, subject to the adaptations and modifications mentioned in column (2).
- (2) The provisions referred to in paragraph (1), as so adapted and modified, are set out in Part  $\Pi$  of that Schedule.

Directions as to replanting

- 8.—(1) Where consent is granted under this Order for the felling in the course of forestry operations of any part of a woodland area, the authority may give to the owner of the land on which that part is situated ("the relevant land") a direction in writing specifying the manner in which and the time within which he shall replant the relevant land.
- (2) Where a direction is given under paragraph (1) and trees on the relevant land are felled (pursuant to the consent), the owner of that land shall replant it in accordance with the direction.
- (3) A direction under paragraph (1) may include requirements as to-
  - (a) species;
  - (b) number of trees per hectare;
  - (c) the preparation of the relevant land prior to the replanting; and
  - (d) the erection of fencing necessary for the protection of the newly planted trees.

Compensation

- 9.—(1) If, on a claim under this article, a person establishes that loss or damage has been caused or incurred in consequence of—
  - (a) the refusal of any consent required under this Order; or
  - (b) the grant of any such consent subject to conditions,

he shall, subject to paragraphs (3) and (4), be entitled to compensation from the authority.

- (2) No claim, other than a claim made under paragraph (3), may be made under this article—
  - (a) if more than 12 months has elapsed since the date of the authority's decision or, where such a decision is the subject of an appeal to the Secretary of State, the date of the final determination of the appeal; or
  - (b) if the amount in respect of which the claim would otherwise have been made is less than £500.
- (3) Where the authority refuse consent under this Order for the felling in the course of forestry operations of any part of a woodland area, they shall not be required to pay compensation to any person other than the owner of the land; and such compensation shall be limited to an amount-equal to any depreciation in the value of the trees which is attributable to deterioration in the quality of the timber in consequence of the refusal.

- (4) In any other case, no compensation shall be payable to a person—
  - (a) for loss of development value or other diminution in the value of the land;
  - (b) for loss or damage which, having regard to the statement of reasons submitted in accordance with article 6(c) and any documents or other evidence submitted in support of any such statement, was not reasonably foreseeable when consent was refused or was granted subject to conditions;
  - (c) for loss or damage reasonably foreseeable by that person and attributable to his failure to take reasonable steps to avert the loss or damage or to mitigate its extent; or
  - (d) for costs incurred in appealing to the Secretary of State against the refusal of any consent required under this Order or the grant of any such consent subject to conditions.
- (5) Subsections (3) to (5) of section 11 (terms of compensation on refusal of licence) of the Forestry Act 1967 shall apply to the assessment of compensation under paragraph (3) as it applies to the assessment of compensation where a felling licence is refused under section 10 (application for felling licence and decision of Commissioners thereon) of that Act as if for any reference to a felling licence there were substituted a reference to a consent required under this Order and for the reference to the Commissioners there were substituted a reference to the authority.
- (6) In this article—

"development value" means an increase in value attributable to the prospect of development; and, in relation to any land, the development of it shall include the clearing of it; and

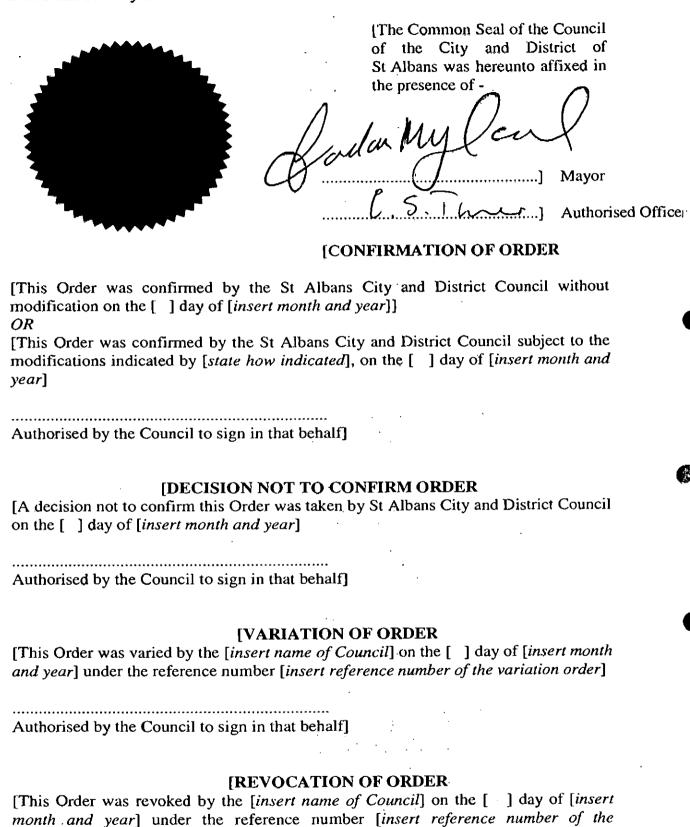
"owner" has the meaning given to it by section 34 of the Forestry Act 1967.

[Application to trees to be planted pursuant to a condition

[10.] In relation to the tree[s] identified in the first column of Schedule 1 by the letter "C", being [a tree] [trees] to be planted pursuant to a condition (being a condition imposed under paragraph (a) of section 197 (planning permission to include appropriate provision for preservation and planting of trees)), this Order takes effect as from the time when [that tree is planted] [those trees are planted].]

## [Orders made by virtue of section 300

[11.] This Order takes effect in accordance with subsection (3) of section 300 (tree preservation orders in anticipation of disposal of Crown land).]



Authorised by the Council to sign in that behalf

revocation order

#### SCHEDULE 1

## SPECIFICATION OF TREES

## Trees specified individually (encircled in black on the map)

Reference on map

:e) ·

**Description** 

**Situation** 

**NONE** 

Trees specified by reference to an area (within a dotted black line on the map)

**NONE** 

Groups of trees (within a broken black line on the map)

Reference on map

Description

**Situation** 

NONE

#### Woodlands

(within a continuous black line on the map)

Reference on map

Description

Situation

 $\mathbf{W}_{1}$ 

Mixed broadleaf

species

Land rear of 244 Watford Road and Adjoining Forge End, Chiswell

Green.

## **SCHEDULE 2**

# PART I PROVISIONS OF THE TOWN AND COUNTRY PLANNING ACT 1990 APPLIED WITH ADAPTATIONS OR MODIFICATIONS

Provision of the Town and Country Planning Act 1990	Adaptation or Modification		
Section 69 (registers)	(a) In subsection (1)—		
	(i) omit—		
		", in such manner as may be prescribed by a development order,",	
		"such" in the second place where it appears, and	
		"as may be so prescribed"; and	
	(ii)	substitute "matters relevant to tree preservation orders made by the authority" ☐ for "applications for planning permission".	
	(b) In subsection (2)—		
	(i)	(i) after "contain" insert ", as regards each such order"; and	
	(ii)	for paragraphs (a) and (b) substitute—	
		(a) details of every application under the order and of the authority's decision (if any) in relation to each such application, and	
		(b) a statement as to the subject-matter of every appeal under the order and of the date and nature of the Secretary of State's determination of it.".	
	(c) Omit su	bsections (3) and (4) (as required by section 198(4)).	

Section 70 (determination of applications: general considerations)

- (a) In subsection (1)—
  - (i) substitute—

"Subject to subsections (1A) and (1B), where" for "Where";

"the authority" for "a local planning authority";

"consent under a tree preservation order" for "planning permission" where those words first appear; and

"consent under the order" for "planning permission" in both of the other places where those words appear;

(ii) after "think fit", insert—

"(including conditions limiting the duration of the consent or requiring the replacement of trees)"; and

- (iii) omit "subject to sections 91 and 92,".
- (b) After subsection (1) insert—

"(1A) Where an application relates to an area of woodland, the authority shall grant consent so far as accords with the practice of good forestry, unless they are satisfied that the granting of consent would fail to secure the maintenance of the special character of the woodland or the woodland character of the area.

(1B) Where the authority grant consent for the felling of trees in a woodland area they shall not impose conditions requiring replacement where such felling is carried out in the course of forestry operations (but may give directions for securing replanting)."

(c) Omit subsections (2) and (3).

Section 75 (effect of	(a) In subsection (1) substitute—
planning permission)	(i) "Any" for the words from "Without" to "any";
	(ii) "consent under a tree preservation order" for "planning permission to develop land";
	(iii) "the consent" for "the permission"; and
	(iv) "the land to which the order relates" for "the land".
	(b) Omit subsections (2) and (3).

:

Section 78 (right to appeal against planning decisions and failure to take such decisions)

- (a) In subsection (1) substitute—
  - (i) "the authority" for "a local planning authority";
  - (ii) "consent under a tree preservation order" for "planning permission" in the first place where those words appear;
  - (iii) "consent under such an order" for "planning permission" in the second place where those words appear;
  - (iv) for paragraph (c) substitute—
    - "(c) give a direction under a tree preservation order, or refuse an application for any consent, agreement or approval of that authority required by such a direction; or
    - (d) fail to determine any such application as is referred to in paragraphs (a) to (c) within the period of 8 weeks beginning with the date on which the application was received by the authority,".
- (b) Omit subsection (2).
- (c) In subsection (3) for "served within such time and in such manner as may be prescribed by a development order."

  Substitute—

"in writing addressed to the Secretary of State, specifying the grounds on which the appeal is made; and such notice shall be served—

- (a) in respect of a matter mentioned in any of paragraphs (a) to (c) of subsection (1), within the period of 28 days from the receipt of notification of the authority's decision or direction or within such longer period as the Secretary of State may allow;
- (b) in respect of such a failure as is mentioned in paragraph (d) of that subsection, at any time after the expiration of the period mentioned in that paragraph, but if the authority have informed the applicant that the application has been refused, or granted subject to conditions, before an appeal has been made, an appeal may only be made against that refusal or grant.".
- (d) For subsection (4), substitute—
  - "(4) The appellant shall serve on the authority a copy of the notice mentioned in subsection (3).".
- (e) For subsection (5), substitute—
  - "(5) For the purposes of the application of section 79(1), in relation to an appeal made under subsection (1)(d), it shall be assumed that the authority decided to refuse the application in question.".

## Section 79 (determination of appeals)

- (a) In subsections (1) and (2), substitute "the authority" for "the local planning authority".
- (b) Omit subsection (3).
- (c) In subsection (4), substitute—
  - (i) "section 70(1), (1A) and (1B)" for "sections 70, 72(1) and (5), 73 and 73A and Part I of Schedule 5";
  - (ii) "consent under a tree preservation order" for "planning permission"; and
  - (iii) "the authority" for "the local planning authority and a development order may apply, with or without modifications, to such an appeal any requirements imposed by a development order by virtue of sections 65 or 71."
- (d) Omit subsections (6) and (6A).
- (e) In subsection (7), omit the words after "section 78".

# PART II PROVISIONS OF THE TOWN AND COUNTRY PLANNING ACT 1990, AS ADAPTED AND MODIFIED BY PART I

The following provisions of the Town and Country Planning Act 1990, as adapted and modified by Part I of this Schedule, apply in relation to consents, and applications for consent, under this Order.

#### Section 69

- (1) Every local planning authority shall keep a register containing information with respect to matters relevant to tree preservation orders made by the authority.
- (2) The register shall contain, as regards each such order—
  - (a) details of every application under the order and of the authority's decision (if any) in relation to each such application, and
  - (b) a statement as to the subject-matter of every appeal under the order and of the date and nature of the Secretary of State's determination of it.
- (5) Every register kept under this section shall be available for inspection by the public at all reasonable hours.

#### Section 70

- (1) Subject to subsections (1A) and (1B), where an application is made to the authority for consent under a tree preservation order—
  - (a) they may grant consent under the order, either unconditionally or subject to such conditions as they think fit (including conditions limiting the duration of the consent or requiring the replacement of trees); or
  - (b) they may refuse consent under the order.
- (1A) Where an application relates to an area of woodland, the authority shall grant consent so far as accords with the practice of good forestry, unless they are satisfied that the granting of consent would fail to secure the maintenance of the special character of the woodland or the woodland character of the area.
- (1B) Where the authority grant consent for the felling of trees in a woodland area they shall not impose conditions requiring replacement where such felling is carried out in the course of forestry operations (but may give directions for securing replanting).

. . . . *.* . . . .

Any grant of consent under a tree preservation order shall (except in so far as the consent otherwise provides) enure for the benefit of the land to which the order relates and of all persons for the time being interested in it.

#### Section 78

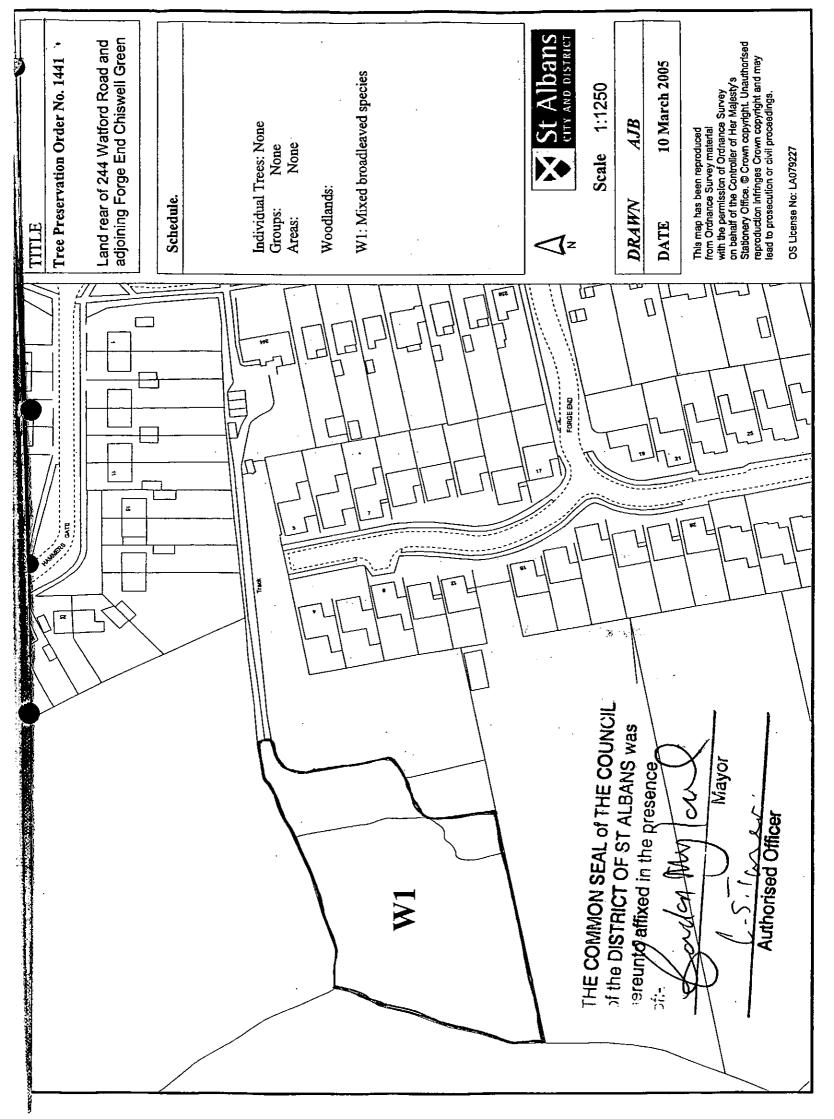
- (1) Where the authority-
  - (a) refuse an application for consent under a tree preservation order or grant it subject to conditions;

Tree Dreenwintins Order No. 1441

- (b) refuse an application for any consent, agreement or approval of that authority required by a condition imposed on a grant of consent under such an order or grant it subject to conditions;
- (c) give a direction under a tree preservation order, or refuse an application for any consent, agreement or approval of that authority required by such a direction; or
- (d) fail to determine any such application as is referred to in paragraphs (a) to
   (c) within the period of 8 weeks beginning with the date on which the application was received by the authority,

the applicant may by notice appeal to the Secretary of State.

- (3) Any appeal under this section shall be made by notice in writing addressed to the Secretary of State, specifying the grounds on which the appeal is made; and such notice shall be served—
  - (a) in respect of a matter mentioned in any of paragraphs (a) to (c) of subsection (1), within the period of 28 days from the receipt of notification of the authority's decision or direction or within such longer period as the Secretary of State may allow;
  - (b) in respect of such a failure as is mentioned in paragraph (d) of that subsection, at any time after the expiration of the period mentioned in that paragraph, but if the authority have informed the applicant that the application has been refused, or granted subject to conditions, before an appeal has been made, an appeal may only be made against that refusal or grant.
- (4) The appellant shall serve on the authority a copy of the notice mentioned in subsection (3).
- (5) For the purposes of the application of section 79(1), in relation to an appeal made under subsection (1)(d), it shall be assumed that the authority decided to refuse the application in question.



#### Section 79

- (1) On an appeal under section 78 the Secretary of State may-
  - (a) allow or dismiss the appeal, or
  - (b) reverse or vary any part of the decision of the authority (whether the appeal relates to that part of it or not),

and may deal with the application as if it had been made to him in the first instance.

- (2) Before determining an appeal under section 78 the Secretary of State shall, if either the appellant or the authority so wish, give each of them an opportunity of appearing before and being heard by a person appointed by the Secretary of State for the purpose.
- (4) Subject to subsection (2), the provisions of section 70(1), (1A) and (1B) shall apply, with any necessary modifications, in relation to an appeal to the Secretary of State under section 78 as they apply in relation to an application for consent under a tree preservation order which falls to be determined by the authority.
- (5) The decision of the Secretary of State on such an appeal shall be final.
- (7) Schedule 6 applies to appeals under section 78.

#### Town and Country Planning Act 1990

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LAND REAR OF 28-56 FORGE END, CHISWELL GREEN

### TREE PRESERVATION ORDER, 19 98.

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CITY AND DISTRICT OF ST ALBANS

in this Order called "the authority", in pursuance of the powers conferred in that behalf by sections 198 and 199 [[and] 201\*] [and] [300] of the Town and Country Planning Act 1990, and subject to the provisions of the Forestry Acts 1967 and 1979, hereby make the following Order:—

#### 1. In this Order:--

"the Act" means the Town and Country Planning Act 1990;

"owner" means the owner in fee simple, either in possession or who has granted a lease or tenancy of which the unexpired portion is less than three years; lessee (including a sublessee) or tenant in possession, the unexpired portion of whose lease or tenancy is three years or more; and a mortgagee in possession; and

"the Secretary of State" means the [Secretary of State for the Environment] [Secretary of State for the Environment]

- 2.—Subject to the provisions of this Order and to the exemptions specified in the Second Schedule hereto, no person shall, except with the consent of the authority and in accordance with the conditions, if any, imposed on such consent, cut down, top, lop, uproot, wilfully damage or wilfully destroy or cause or permit the cutting down, topping, lopping, uprooting, wilful damage or wilful destruction of any tree specified in the First Schedule hereto or comprised in a group of trees or in a woodland therein specified, the position of which trees, groups of trees and woodlands is defined in the manner indicated in the said First Schedule on the map annexed hereto<sup>‡</sup> which map shall, for the purpose of such definition as aforesaid, prevail where any ambiguity arises between it and the specification in the said First Schedule.
- 3.—An application for consent made to the authority under Article 2 of this Order shall be in writing stating the reasons for making the application, and shall by reference if necessary to a plan specify the trees to which the application relates, and the operations for the carrying out of which consent is required.
- 4.—(1) Where an application for consent is made to the authority under this Order, the authority may grant such consent either unconditionally, or subject to such conditions (including conditions requiring the replacement of any tree by one or more trees on the site or in the immediate vicinity thereof), as the authority may think fit, or may refuse consent:

Provided that where the application relates to any woodland specified in the First Schedule to this Order the authority shall grant consent so far as accords with the principles of good forestry, except where, in the opinion of the authority, it is necessary in the interests of amenity to maintain the special character of the woodland or the woodland character of the area, and shall not impose conditions on such consent requiring replacement or replanting.

NOTE: Where appropriate this Order has been updated to reflect statutory amendments which have resulted in the need to show substitutions or repeals of the prescribed form.

<sup>•</sup> Include only where Order contains a direction under section 201 of the Act.

<sup>‡</sup> Map to be to a scale of not less than 25 inches to one mile (1:2500), except in the case of large woodlands when the scale shall be 6 inches to one mile (1:10000 or 1:10560).

<sup>¶</sup> NOTE: If it is proposed to fell any of the trees included in this Order and the felling requires a licence under the Forestry Act 1967, an application should be made in the first place to the Forestry Commission.

- (2) The authority shall keep a register of all applications for consent under this Order containing information as to the nature of the application, the decision of the authority thereon, any compensation awarded in consequence of such decision and any directions as to replanting of woodlands; and every such register shall be available for inspection by the public at all reasonable hours.
- 5.—Where the authority refuse consent under this Order or grant such consent subject to conditions they may when refusing or granting consent certify in respect of any trees for which they are so refusing or granting consent that they are satisfied—

(a) that the refusal or condition is in the interests of good forestry; or

(b) in the case of trees, other than trees comprised in a group of trees or in a woodland, that the trees have an outstanding or special amenity value; or

(c) in the case of trees which are comprised in a group of trees or in a woodland, that the group of trees or the woodland, as the case may be, has an outstanding or special amenity value,

but a certificate shall not be given in the case of trees falling within (c) above if the application in respect of them has been referred by the Forestry Commissioners under section 15(1)(b) or 15(2)(a) of the Forestry Act 1967.

- 6.—(1) Where consent is granted under this Order to fell any part of a woodland other than consent for silvicultural thinning then unless—
  - (a) such consent is granted for the purpose of enabling development to be carried out in accordance with a permission to develop land under Part III of the Act, or
- (b) the authority with the approval of the Secretary of State dispense with replanting, the authority shall give to the owner of the land on which that part of the woodland is situated a direction in writing specifying the manner in which and the time within which he shall replant such land and where such a direction is given and the part is felled the owner shall, subject to the provision of this Order and section 204 of the Act, replant the said land in accordance with the direction.
- (2) Any direction given under paragraph (1) of this Article may include requirements as to—
  - (a) species;
  - (b) number of trees per acre (hectare);
  - (c) the erection and maintenance of fencing necessary for protection of the replanting:
  - (d) the preparation of ground, draining, removal of brushwood, lop and top; and
  - (e) protective measures against fire.
- 7.—On imposing any condition requiring the replacement of any tree under Article 4 of the Order, or on giving a direction under Article 6 of this Order with respect to the replanting of woodlands, the authority shall if such condition or direction relates to land in respect of which byelaws made by the National Rivers Authority, an internal drainage board, a water undertaker or a sewerage undertaker (as defined in the Water Act 1989) or any other authority whose functions are now exercised by the above bodies, restrict or regulate the planting of trees, notify the applicant or the owner of the land, as the case may be, of the existence of such byelaws and that any condition or direction has effect subject to the requirements of the byelaws, and the condition or direction shall have effect accordingly.
- 8.—The provisions set out in the Third Schedule to this Order, being provisions of Part III of the Act adapted and modified for the purposes of this Order, shall apply in relation thereto.
- 9.—Subject to the provisions of this Order, any person who has suffered loss or damage in consequence of any refusal (including revocation or modification) of consent under this Order or of any grant of any such consent subject to conditions, shall, if he makes a claim on the authority within the time and in the manner prescribed by this Order, be entitled to recover from the authority compensation in respect of such loss or damage:

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e in der the ver Provided that no compensation shall be payable in respect of loss or damage suffered by reason of such refusal or grant of consent in the case of any trees the subject of a certificate in accordance with Article 5 of this Order.

- 10.—In assessing compensation payable under the last preceding Article account shall be taken of:
  - (a) any compensation or contribution which has been paid whether to the claimant or any other person, in respect of the same trees under the terms of this or any other Tree Preservation Order under section 198 of the Act, or under the terms of any Interim Preservation Order made under section 8 of the Town and Country Planning (Interim Development) Act 1943, or any compensation which has been paid or which could have been claimed under any provision relating to the preservation of trees or protection of woodlands contained in an operative scheme under the Town and Country Planning Act 1932, and
  - (b) any injurious infection to any land of the owner which would result from the felling of the trees the subject of the claim.
- 11.—(1) A claim for compensation under this Order shall be in writing and shall be made by serving it on the authority, such service to be effected by addressing the claim to the authority and leaving it at or sending it by post to the principal office of the authority.
- (2) The time within which any such claim shall be made as aforesaid shall be a period of twelve months from the date of the decision of the authority, or of the Secretary of State, as the case may be, or where an appeal has been made to the Secretary of State against the decision of the authority, from the date of the decision of the Secretary of State on the Appeal.
- 12.—Any question of disputed compensation shall be determined in accordance with the provisions of section 205 of the Act.
- 13.—[(1) The provisions of section 201 of the Act shall apply to this Order and the Order shall take effect on 9 May 1998 .]\*
- [(2) This Order shall apply to any tree specified in the First Schedule hereto, which is to be planted as mentioned therein, as from the time when that tree is planted.]<sup>†</sup>

NOTE: Any person contravening the provisions of this Order by cutting down, uprooting or wilfully destroying a tree, or by wilfully damaging, topping or lopping a tree in such a manner as to be likely to destroy it is guilty of an offence and liable on summary conviction to a fine not exceeding the prescribed sum§ or twice the sum which appears to the court to be the value of the tree, whichever is the greater, or on indictment to a fine. The penalty for any other contravention of this Order is a fine not exceeding Level 4 on the standard scale‡ on summary conviction and, in the case of a continuing offence when the contravention is continued after conviction, a person is liable on summary conviction to an additional fine not exceeding £5 for every day on which the contravention is so continued.

If a tree is removed, uprooted or destroyed in contravention of an order or, except in the case of a tree to which the Order applies as part of a woodland, is removed, uprooted or destroyed or dies at a time when its cutting down or uprooting is authorised only by section 198(6)(a) of the Town and Country Planning Act 1990 relating to trees which are dying or dead or have become dangerous, it is the duty of the owner of the land, unless on his application the local planning authority dispense with the requirement, to plant another tree of appropriate size and species at the same place as soon as he reasonably can. Except in emergency, not less than 5 days previous notice of the removal, etc., should be given to the authority to enable the latter to decide whether or not to dispense with the requirement. In respect of trees in a woodland it is sufficient to replace the trees removed, uprooted or destroyed by planting the same number of trees either on or near the land on which the trees removed, uprooted or destroyed stood or on such other land as may be agreed between the authority and the owner of the land, and (in either case) in such places as may be designated by the authority.

<sup>•</sup> This provision is not to be included unless it appears to the authority that the Order should take effect immediately.

<sup>†</sup> This provision may be included in relation to trees to be planted pursuant to a condition imposed under section 197 of the Act.%XRhixsunxia reasoning £2000 hateprovisionxia medic under the Planning and Componentian Act x391 has affine consumnary
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#### FIRST SCHEDULE

#### TREES SPECIFIED INDIVIDUALLY\*

(encircled in black on the map)

No. on Map.	Description.	Situation.
T1 T2 T3 T4 T5	HORSE CHESTNUT OAK OAK OAK OAK	) LAND AT REAR ) OF 28-56 FORGE ) CHISWELL GREEN )

#### TREES SPECIFIED BY REFERENCES TO AN AREA\*

(within a dotted black line on the map)

No. on Map.DescriptionSituation.NONENONENONE

#### **GROUPS OF TREES\***

(within a broken black line on the map)

No. on Map.

Description.

Situation.

G1 61 POPLARS ) LAND AT REAR OF ) 28-56 FORGE END CHISWELL GREEN

<sup>\*</sup> The word "NONE" must be entered where necessary.

#### TOWN AND COUNTRY PLANNING ACT 1990 SECTION 199(3)

199(3) Provision may be made by regulations under this Act with respect to the form of Tree Preservation Orders, and the procedure to be followed in connection with the submission and confirmation of such orders; and the regulations may (without prejudice to the generality of this subsection) make provision as follows:-

REAR FORGE GREEN

- (a) that, before a Tree Preservation Order is confirmed by the Local Planning Authority, notice of the making of the Order shall be given to the owners and occupiers of land affected by the Order and to such other persons, if any, as may be specified in the regulations;
- (b) that objections and representations with respect to the Order, if duly made in accordance with the regulations, shall be considered before the Order is confirmed by the Local Planning Authority;
- (c) that copies of the Order, when confirmed by the authority, shall be served on such persons as may be specified in the regulations.

#### Note (1)

Every objection or representation with respect to an Order shall be made in writing and shall state the grounds thereof.

#### Note (2)

An objection or representation shall be duly made if it complies with paragraph (1) above and is received within 28 days from the date of this service of the Notice of the making of the Order.

REAR OF RGE END GREEN

#### **WOODLANDS\***

(within a continuous black line on the map)

No. on Map. Description Situation.

NONE NONE NONE

\* The word "NONE" must be entered where necessary.

#### SECOND SCHEDULE

This Order shall not apply so as to require the consent of the authority to

- (1) the cutting down of any tree on land which is subject to a forestry dedication covenant where
  - (a) any positive covenants on the part of the owner of the land contained in the same deed as the forestry dedication covenant and at the time of the cutting down binding on the then owner of the land are fulfilled;
  - (b) the cutting down is in accordance with a plan of operations approved by the Forestry Commission under such deed.
- (2) the cutting down of any tree which is in accordance with a plan of operations approved by the Forestry Commission under a grant scheme under section 1 of the Forestry Act 1979 except a scheme which applies to a forestry dedication covenant.
- (3) the cutting down, uprooting, topping or lopping of a tree
  - (a) by or at the request of the Post Office where the land on which the tree is situated is land which has been acquired for the purpose of the Post Office's undertaking and either works on such land cannot otherwise be carried out or the cutting down, uprooting, topping or lopping is for the purpose of securing safety in the operation of the undertaking; or the lopping in pursuance of the power conferred on any operator of a telecommunications code system by virtue of paragraph 19 of Schedule 2 to the Telecommunications Act 1984;
  - (b) by or at the request of
    - (i) a statutory undertaker or a holder of a licence under section 6(1) of the Electricity Act 1989 where the land on which the tree is situated is operational land as defined by the Act and either works on such land cannot otherwise be carried out or the cutting down, uprooting, topping or lopping is for the purpose of securing safety in the operation of the undertaking;
    - (ii) a licence holder within the meaning of Part I of the Electricity Act 1989, where such tree obstructs the construction by the licence holder of any electric line within the meaning of Part I of the said Act of 1989 or interferes or would interfere with the maintenance or working of any such line;
    - (iii) the National Rivers Authority or an internal drainage board established under the Water Act 1989, where the tree interferes or would interfere with the exercise of any of the functions of such authority or drainage board in relation to the maintenance, improvement or construction of water courses or of drainage works; or a water undertaker or sewerage undertaker appointed under section 11 of the Water Act 1989 in relation to their duties as such undertakers; or
    - (iv) the Secretary of State for Defence, the Secretary of State for Transport, the Civil Aviation Authority, or in relation to any airport managed by a company to which any property, rights or liabilities have been transferred in pursuance of a scheme made under section 1 or 15 of the Airports Act 1986, the person for the time being having the management of the airport, where in the opinion of such Secretary of State, Authority or person the tree obstructs the approach of aircraft to, or their departure from, any airport or hinders the safe and efficient use of aviation or defence technical installations;
  - (c) where immediately required for the purpose of carrying out development authorised by the planning permission granted on an application made under Part III of the Act, or deemed to have been so granted for any of the purposes of that Part;
  - (d) which is a fruit tree cultivated for fruit production growing or standing on land comprised in an orchard or garden.

#### THIRD SCHEDULE

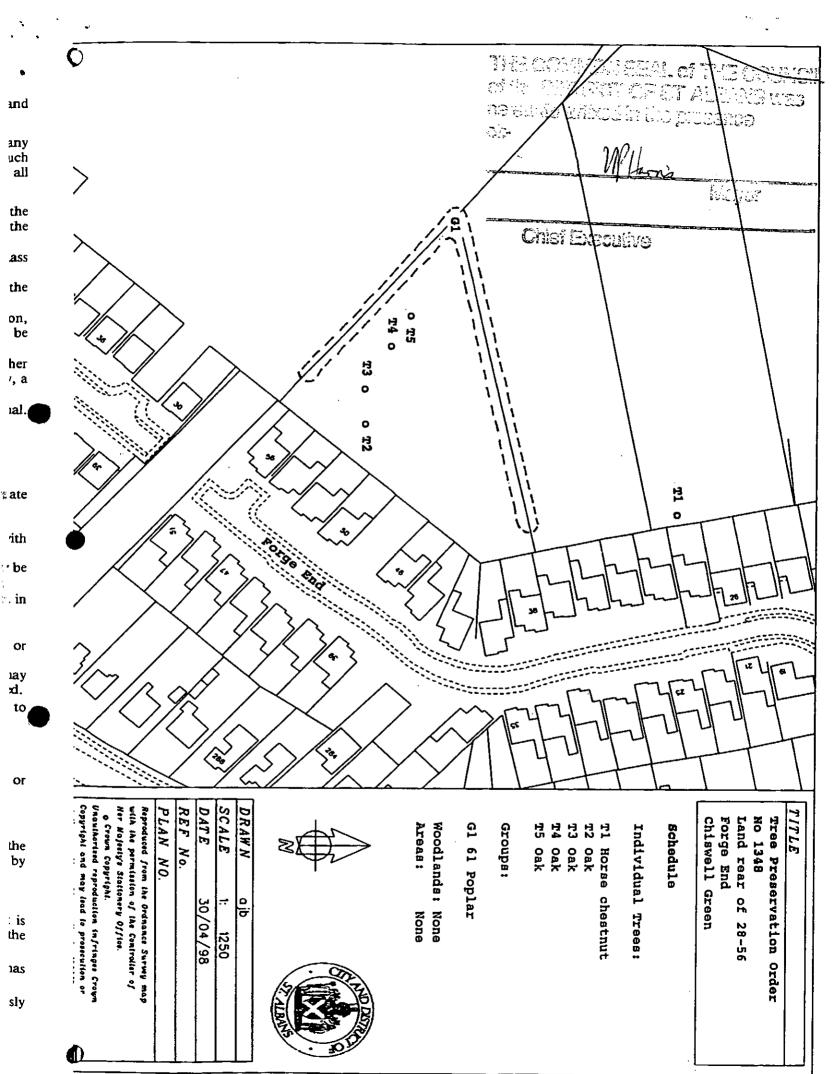
Provisions of the following parts of Part III of the Town and Country Planning Act 1990 as adapted and modified to apply to this Order.

- 75.—(1) Without prejudice to the following provisions as to the revocation or modification of consents, any consent under the Order, including any direction as to replanting given by the authority on the granting of such consent, shall (except in so far as the consent otherwise provides), enure for the benefit of the land and of all persons for the time being interested in it.
- 77. Reference of applications to the Secretary of State.—(1) The Secretary of State may give directions to the authority requiring applications for consent under the Order to be referred to him instead of being dealt with by the authority.
- (2) a direction under this section may relate either to a particular application or to applications of a class specified in the direction.
- (3) Any application in respect of which a direction under this section has effect shall be referred to the Secretary of State accordingly.
- (4) Where an application for consent under the Order is referred to the Secretary of State under this section, the provisions of Articles 4 and 5 of the Order shall apply as they apply to such an application which falls to be determined by the authority.
- (5) Before determining an application referred to him under this section the Secretary of State shall, if either the applicant or the authority wish, give each of them an opportunity of appearing before, and being heard by, a person appointed by the Secretary of State for the purpose.
  - (7) The decision of the Secretary of State on any application referred to him under this section shall be final.
  - 78. Appeals against decisions or in default of decision.—(1) Where an authority—
    - (a) refuse an application for consent under the Order or grant it subject to conditions, or
- (b) give any certificate or direction, on granting consent, the applicant may by notice appeal to the Secretary of State.
- (2) A person who has made an application for consent under the Order may also appeal to the Secretary of State if the authority have neither—
  - (a) given notice to the applicant of their decision on the application; nor
  - (b) given notice to him that the application has been referred to the Secretary of State in accordance with directions given under section 77 above,

within two months from the date of receipt of the application, or within such extended period as may at any time be agreed upon in writing between the applicant and the authority.

- (3) Any appeal under this section shall be made by notice in writing served within such time as is specified in subsection (4) below.
  - (4) The service of such a notice must be within-
    - (a) 28 days from the receipt of notification of the decision, certificate or direction, as the case may be, or such longer period as the Secretary of State may allow; or
    - (b) in the case of an appeal under subsection (2), 28 days or such longer period as the Secretary of State may allow from the end of the period of two months or, as the case may be, the extended period agreed.
      - (5) In relation to an appeal under subsection (2), it shall be assumed that the authority decided to refuse the application in question.
  - 79. Determination of appeals.—(1) On an appeal under section 78 the Secretary of State may—
    - (a) allow or dismiss the appeal,
    - (b) reverse or vary any part of the decision of the authority (whether the appeal relates to that part of it or not), or
  - (c) cancel any certificate or cancel or vary any direction,
- and may deal with the application as if it had been to him in the first instance.
- (2) Before determining an appeal under section 78 the Secretary of State shall, if either the appellant or the authority so wish, give each of them an opportunity of appearing before and being heard by a person appointed by the Secretary of State for the purpose.
  - (5) The decision of the Secretary of State on such an appeal shall be final.
- 97. Power to revoke or modify the consent under the Order.—(1) If it appears to the authority that it is expedient to revoke or modify any consent under the Order granted on an application made under Article 3 of the Order, the authority may by Order revoke or modify the consent to such extent as they consider expedient.
- (3) The power conferred by this section may be exercised at any time before the operations for which consent has been given have been completed.
- (4) The revocation or modification of consent shall not affect so much of those operations as has been previously carried out.





- 98. Procedure for s.97 Orders: opposed cases.—(1) Except as provided in section 99, an Order under section 97 shall not take effect unless it is confirmed by the Secretary of State.
- (2) Where an authority submit such an Order to the Secretary of State for confirmation, they shall provide the Secretary of State with a statement of their reason for making the Order and shall serve notice together with a copy of the statement on—
  - (a) the owner of the land affected,
  - (b) the occupier of the land affected, and
  - (c) any other person who in their opinion will be affected by the Order.
- (3) The notice shall specify the period within which any person on whom it is served may require the Secretary of State to give him an opportunity of appearing before, and being heard by, a person appointed by the Secretary of State for the purpose.
- (4) If within that period such a person so requires, before the Secretary of State confirms the Order he shall give such an opportunity both to him and to the local planning authority.
  - (5) The period referred to in subsection (3) shall be 28 days from the service of the notice.
- (6) The Secretary of State may confirm an Order submitted to him under this section either without modification or subject to such modifications as he considers expedient.
- (7) Where a notice has been served in accordance with the provisions of subsection (2) of this section, no operations or further operations as the case may be, in pursuance of the consent granted, shall be carried out pending the decision of the Secretary of State under this section.
  - 99. Procedure for s.97 Orders: unopposed cases.—(1) This section applies where—
    - (a) the authority have made an Order under section 97 above; and
    - (b) the owner and occupier of the land and all persons who in the authority's opinion will be affected by the Order have notified the authority in writing that they do not object to it.
- (2) Where this section applies, instead of submitting the Order to the Secretary of State for confirmation the authority shall advertise the fact that the Order has been made and the advertisement must specify—
  - (a) the period within which persons affected by the Order may give notice to the Secretary of State that they wish for an opportunity of appearing before, and being heard by, a person appointed by the Secretary of State for the purpose; and
  - (b) the period at the expiration of which, if no such notice is given to the Secretary of State, the Order may take effect by virtue of this section without being confirmed by the Secretary of State.
  - (3) The authority shall also serve notice to the same effect on the persons mentioned in subsection (1)(b).
- (4) The period referred to in subsection 2(a) must be not less that 28 days from the date the advertisement first appears.
- (5) The period referred to in subsection 2(b) must be not less than 14 days from the expiration of the period referred to in subsection (2)(a).
- (6) The authority shall send a copy of any advertisement published under subsection (2) to the Secretary of State not more than three days after the publication.
  - (7) If—
    - (a) no person claiming to be affected by the Order has given notice to the Secretary of State under subsection (2)(a) within the period referred to in that subsection, and
  - (b) the Secretary of State has not directed within that period that the Order be submitted to him for confirmation,

the Order shall take effect at the expiry of the period referred to in subsection 2(b) without being confirmed by the Secretary of State as required by section 98(1).

(8) This section does not apply to an Order revoking or modifying a consent granted or deemed to have been granted by the Secretary of State under Part III, Part VIII or Part VIII of the Act.

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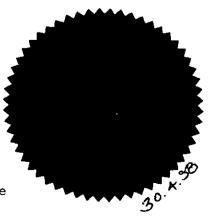
· COUNCIL OF THE CITY AND DISTRICT OF ST ALBANS

the 6th day of May

**19** 98

Mayor

Chief Executive



CITY & DISTRICT OF ST ALBANS COUNCIL.

### TOWN AND COUNTRY PLANNING ACT 990

1348

# TREE PRESERVATION OR ER

relating to

28-56 FORGE END, CHISWELL GREEN, ST BANS
HERTS



### Appendix G

#### **Arboricultural Glossary**

- Abiotic Factors Non-living factors of the environment, including temperature & wind.
- **Age-class** A general classification of the tree into either young, semi-mature/maturing, mature, overmature, or senescent.
- **Apical Bud/Shoot** The apical bud, also known as the leading shoot, is responsible for shoot extension and is dominant.
- **Apical Dominance** A singular, leading shoot remains dominant.
- Arboreal In connection with, or in relation to, trees.
- **Arboriculturist** Person who has, through relevant education, training and experience, gained recognised qualifications and expertise in the field of trees in relation to construction.
- **Arboricultural Implications Assessment (AIA)** Study, undertaken by an arboriculturist, to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of any Site layout proposal.
- **Arboricultural Method Statement (AMS)** Methodology for the implementation of any aspect of development that has the potential to result in the loss of or damage to a tree. Note The AMS is likely to include details of an on-Site tree protection monitoring regime.
- Biotic factors Living factors. For example, animals and pathogens.
- **Bottle Butt** Term used to describe shape of stem base, usually associated with an internal defect refer to 'Reaction Wood' below.
- **Branch union/junction** The point at which a branch joins a larger stem. Can be a point of weakness, especially in certain species.
- **Cambium** A lateral meristem (see below) in vascular plants located just beneath the bark responsible for secondary growth, e.g. production of annual growth rings.
- **Canker** A clearly defined area of dead and sunken or malformed bark, caused by bacteria or fungi.

  Can have a bearing on structural integrity of infected limb(s) depending on size and location.
- **Chlorosis/Chlorotic** Abnormal yellow or yellow-green coloration of usually green leaves. Essentially a reduction of chlorophyll levels often as a result disease or nutrient deficiency.
- **Co-dominant stems** A growth characteristic, where two or more stems of similar size grow from the same point. Can create an inherent weakness.
- **Compaction** The compressing & hardening of soil around tree root systems, due to vehicular/pedestrian use etc. Loss of pore space between soil granules limits water movement and gaseous exchange, and inhibits root growth.
- **Competent person** Person who has training and experience relevant to the matter being addressed and an understanding of the requirements of the particular task being approached



- Note 1 A competent person understands the hazards and the methods to be implemented to eliminate or reduce the risks that can arise. For example, when on Site, a competent person is able to recognise at all times whether it is safe to proceed.
- Note 2 A competent person is able to advise on the best means by which the recommendations of this British Standard may be implemented.
- **Condition** Assessment based on a visual and professional view giving consideration to many factors such as tree health, structural integrity and suitability of its position.
- **Construction Exclusion Zone** Area based on the RPA (in m²), identified by an arboriculturist, to be protected by development, including demolition and construction work, by the use of barriers and/or ground protection fit for purpose to ensure the successful long-term retention of a tree.
- **Coppice** The method of managing trees by cutting the stems at between 1.0 inch and 1.0 foot from the ground level on a regular cycle, the cut stumps of the trees or shrubs are allowed to re-grow many new stems.
- **Crown spread** Gives distances between extreme limits of the crown and the stem, usually along the four compass points. Helps to show crown symmetry.
- **Crown Reduction** The removal of branch ends to reduce the extreme limits of a trees branch spread and height.
- **Crown Thin** The removal of selected branches within the crown to thin the internal branch structure.
- **D.B.H.** 'Diameter at Breast Height', an industry standard to gauge tree stem size and development. Within arboriculture, breast height is taken to be 1.5m above ground level.
- **Dieback** The reduction in crown vigour and extension growth progressing to death of distal parts; often associated with decline.
- **Epicormic/adventitious growth** New growth from dormant buds that can often form tenuous attachments. Although some species readily form such shoots, it can be an indication of stress.
- Feathered Whip Size of tree for planting, usually ranging from 1.25m to 2.5m in height.
- Form A general assessment of the shape and position of the tree within its' environment.
- **Frass** Debris such as bore dust left by wood boring insects.
- **Hanger** Term used to describe a branch that has become detached and is being supported by other branches. Can be a hazard to persons and property below.
- **Hazard Beam** After the loss of a distal part, a limb concentrates growth upwards creating adverse end weights that can render the limb susceptible to failure.
- **Heavy Standard** Size of tree for planting, usually above 3.5m in height.
- Included bark Growth characteristic usually caused when two or more stems/branches growing in close proximity 'fuse' together entrapping the bark from when the parts were separate in the middle, creating a structural weakness.
- **Meristem** The undifferentiated plant tissue from which new cells are formed, such as that at the tip of a stem or root.



- **Meristematic Disorder** A growth disorder caused by a disruption of the meristem (see above) from any of a number of biotic factors (see above). Manifests as growths such as 'Witches Brooms' & 'Galls'.
- Necrosis/Necrotic Death of tissues usually characterised by a blackening in colour.
- Occlusion/Occluded Normally used to describe the overgrowth of a wound. Also, immoveable foreign objects in contact with a tree part can become encased or 'occluded' by the tree as it grows incrementally.
- **Pathogen** An agent that causes disease, especially a living microorganism such as a bacterium or fungus.
- Plasticity index The table used to calibrate the shrinkability of a clay soil.
- **Pollard** The removal and subsequent regular re-removal of the crown of a tree above animal browsing height. Can be an effective method of controlling the size of trees in urban areas. This is ideally begun in the trees early stages and maintained throughout its life.
- **Reaction wood** Essentially additional wood laid down by the tree to compensate for structural defects such as cavities.
- **Ring barking/Girdling** the removal of bark around the entire circumference of a stem or branch, causing the death of all distal parts.
- **Root Protection Area (RPA)** Layout design tool indicating the area surrounding a tree that contains sufficient rooting volume to ensure the survival of the tree, shown in plan form in m<sup>2</sup>.
- Saprophyte An organism which exists on dead plant material.
- Scaffold branches The main structural branches within the crown.
- **Services** Any above ground and piped and/or ducted underground infrastructure including water main, electricity supply, gas supply, fibre optic utilities, telecommunications cabling, storm and foul water drainage, including temporary storage for run-off, pumping stations, interceptors and other allied buried structures.
- **Shrinkable clay** Clay soil which alters in volume depending on moisture content. Property Sited on shrinkable clay can suffer subsidence damage due to soil desiccation; this can be due to the water uptake of nearby vegetation, including trees.
- **Special engineering** design of a structure with the physiological requirements of trees as the priority.
- Standard Size of tree for planting, usually ranging from 2m to 3.5m in height.
- **Structure** Man-made object, such as a building, carriageway, path, wall, services, and built and excavated earthworks.
- **Transplant** (1) size of tree for planting, usually ranges from 0.2m to 0.9m in height (2) the relocation of a tree or shrub including a given portion of the root system.
- **Tree Constraints Plan (TCP)** Plan prepared by an arboriculturist for the purposes of layout design showing the RPA and representing the effect that the mature height and spread of retained trees will have on layouts through shade, dominance, etc.



- **Tree Retention / Removal & Protection Plan** scale drawing prepared by an arboriculturist showing the finalised layout proposals, tree retention and tree and landscape protection measures detailed within the arboricultural method statement (AMS), which can be shown graphically.
- **U.L.E** 'Useful Life Expectancy' is an estimate based on currently known factors of the possible remaining life of the tree as an asset.
- **Veteran tree –** Tree that, by recognised criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.
- **Vigour -** A general classification, as to the present and future potential growth and development of a tree. A comment regarding the health status of the tree specific to its species.
- **Water Demand -** A generic classification of the water demand of specific species as outlined by the NHBC (National House Building Council).