

**Dove Valley Business Park
- Plot 10c**

**British Standards 5837:2012 Tree
Survey: Tree Constraints Plan, Tree
Schedule, Arboricultural Impact
Assessment, Method Statement and
Tree Protection Plan**



Client:

Dove Valley Park Ltd

Report Reference:

RSE_11705_R1_V2_ARB

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PROJECT	
Client:	Dove Valley Park Ltd
Project:	Dove Valley Business Park - Plot 10c
Reference	RSE_11705_R1_V2_ARB
Report Title	BS 5837:2012 Tree Survey, Tree Constraints Plan (TCP), Tree Schedule (TS), Arboricultural Impact Assessment (AIA), Arboricultural Method Statement (AMS) & Tree Protection Plan (TPP)

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1 EXECUTIVE SUMMARY

- i RammSanderson Ecology Ltd was instructed by Dove Valley Park Ltd to carry out an assessment of trees at Plot 10c, Dove Valley Business Park which follows the guidance of BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations', and to provide a report on the arboricultural implications of the proposed development of the site.
- ii The current development proposals are for the the construction of a single employment unit (B2/B8 with ancillary E(g) uses) with associated landscaping, drainage, parking, refuse stores and other infrastructure.
- iii A current topographical survey of the site in AutoCAD format has been provided, and this formed the basis for the Tree Constraints Plan.
- iv Following consultation with the client regarding the arboricultural constraints, a site layout plan has been produced which is considered to represent the most appropriate integration between the proposals and existing trees. A provided AutoCAD copy of this proposed Site Plan (Drawing Reference: 15420-AEW-SI-XX-D-A-05100-S2-P04-Plot 10c Proposed Site Plan) has been considered during the Arboricultural Impact Assessment and used to produce a Tree Protection Plan.
- v The content and scope of this report are listed below:
 - BS 5837:2012 Tree Survey and Categorisation
 - Tree Constraints Plan
 - Tree Schedule
 - Arboricultural Impact Assessment
 - Arboricultural Method Statement
 - Tree Protection Plan

1.1 Findings and Recommendations

- i The survey assessed a total of 21 individual trees and 2 groups of trees. Tree cover across the site is low and entirely restricted to the northern and western site boundaries, which are defined by 2 moderate quality (Category B) tree groups. The 21 individual trees, located off site directly at the site boundary, are of low quality (Category C) and exhibit poor condition due to historical localized root damage from past ground-lowering operations within the site.
- ii South Derbyshire District Council confirmed, via their online mapping portal on 15/06/2026, that the site is not situated within a designated Conservation Area and that none of the trees detailed within this report are currently subject to a Tree Preservation Order (TPO).
- iii A review of the Ancient Tree Inventory (ATI) confirmed that no ancient or veteran trees are present within the application site boundary.
- iv There were no trees considered to have less than 10 years remaining contribution (Category U).
- v To accommodate the proposed construction of the commercial industrial unit, associated vehicle access infrastructure, hardstanding, and parking provisions, 0 tree removals are required. Therefore, there will be a negligible arboricultural, amenity, or landscape impact as a result of the proposed development.
- vi Proposed hardstanding encroaches within the RPAs of individual trees T12 and T13, as well as tree groups G1 and G2. However, because site levels in these specific zones were adjusted prior to this assessment, the rooting environments have been historically disturbed. Consequently, the installation of engineered 'no-dig' cellular confinement systems would offer no practical arboricultural benefit in these areas.
- vii Temporary protective fencing will be installed prior to the commencement of development in order to create a Construction Exclusion Zone (CEZ), which adequately protects the retained trees from damage during construction. This fencing should be erected at the outset of the development, before any activities are carried out or materials/plant is brought onto site. For full details, see the Tree Protection Plan (Appendix D).

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2 INTRODUCTION AND BACKGROUND

2.1 Purpose and Scope of this Report

- i This report has been prepared following the guidance within BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations'. Its purpose is to assess the likely arboricultural implications of the development proposals for the site and to be submitted in support of a planning application to the Local Planning Authority seeking consent for these proposals. The survey was carried out by a competent Arboriculturist. It also provides arboricultural guidance on how the proposed development can be achieved while minimising any potential detrimental impacts to retained trees.
- ii Whilst not definitive, the findings and any associated recommendations detailed within this report are considered reasonable, practicable, sustainable, and in the interests of promoting good arboricultural management.
- iii Recommendations included within this report are the professional opinion of an experienced Arboriculturist and are the view of RammSanderson Ecology Ltd. This is based on a review of the information provided by the Client, the brief, and a survey of the site. This report relates only to the conditions observed at the time of the survey.
- iv A qualified and suitably experienced Arboriculturist carried out both this report and the surveys it's based on.

2.2 Regulatory and Policy Framework

- i **Part VIII of the Town and Country Planning Act 1990** (as amended) and the **Town and Country Planning (Tree Preservation) (England) Regulations 2012** enable a Local Planning Authority to make a Tree Preservation Order (TPO) to protect specific trees, groups of trees, or woodlands in the interests of amenity. A TPO prohibits the cutting down, topping, lopping, uprooting, wilful damage, or wilful destruction of protected trees without the Local Planning Authority's written consent.
- ii **Section 211 of the Town and Country Planning Act 1990** makes provision for the protection of trees within a Conservation Area that are not subject to a TPO. These provisions require anyone intending to carry out works to a tree within a Conservation Area to give the Local Planning Authority six weeks' written notice before undertaking certain works, unless an exemption applies.
- iii **The Forestry Act 1967** requires that a Felling Licence, issued by the Forestry Commission, is obtained before felling trees unless an exemption applies. Such exemptions include the felling of small quantities of timber (less than 5m³ in any calendar quarter) or felling trees within certain areas (e.g. gardens, orchards, churchyards, or public open spaces).
- iv **The Wildlife and Countryside Act 1981** (as amended) provides statutory protection for a range of wildlife species and habitats. In relation to arboricultural works, this Act makes it an offence to intentionally damage or destroy the nest of any wild bird while it is in use or being built. It also provides protection for certain species, including bats, which may utilise trees as roosting sites. The Act also includes **Schedule 9**, which lists plant species that are invasive or otherwise considered harmful to the natural environment. Under this provision it is an offence to plant or otherwise cause such species to grow in the wild.
- v **The Conservation of Habitats and Species Regulations 2017** (the Habitats Regulations) provide protection for European Protected Species, including all species of bats. Under these Regulations, it is an offence to deliberately capture, injure, or kill a protected species, or to damage or destroy a breeding site or resting place. Trees with features suitable for roosting bats may therefore require ecological assessment prior to works.
- vi **The Occupiers' Liability Acts 1957 and 1984** establish the duty of care owed by landowners and occupiers to visitors and, to a lesser extent, trespassers. In the context of tree management, landowners have a

- responsibility to take reasonable steps to ensure that trees on their land do not present an unreasonable risk of harm to people or property.
- vii **The Anti-social Behaviour Act 2003 (Part 8 – High Hedges)** provides a mechanism for local authorities to address complaints relating to high evergreen hedges that adversely affect neighbouring residential properties. The legislation enables local authorities to issue remedial notices requiring hedge height reduction where justified.
 - viii **The Plant Health Act 1967** provides powers to control the spread of pests and diseases affecting plants and trees. Under this legislation, statutory plant health notices may be issued requiring the removal, treatment, or restriction of movement of infected plant material to prevent the spread of harmful organisms.
 - ix **The Hedgerows Regulations 1997** provide protection for certain hedgerows in England and Wales that are considered historically or ecologically important. The Regulations make it unlawful to remove such hedgerows without prior notification to the Local Planning Authority and consent where required.
 - x **The Highways Act 1980** places responsibilities on landowners to ensure that vegetation, including trees and hedges, do not obstruct the highway or endanger highway users. Local highway authorities have powers to require the cutting back or removal of vegetation that obstructs the highway or interferes with visibility.
 - xi **Keepers of Time: Ancient and Native Woodland and Trees Policy in England (2022)** sets out the Government's policy approach for the protection and enhancement of ancient woodland, ancient trees, and veteran trees. The policy emphasises the irreplaceable nature of these habitats and promotes their long-term conservation and appropriate management within the planning system.

2.3 Site Location and Context

- i Site Address: Dove Valley Business Park, Foston, Derby DE65 5SP
- ii Central Grid reference: (OSGR) SK 20259 31578
- iii The application site comprises an area of land situated entirely within an operational industrial development. The internal site footprint has undergone recent clearance and structural modification, with ground levels engineered, adjusted, and infilled with a hardcore surface.
- iv The immediate surrounding context is defined by active industrial units and associated built infrastructure to the east and south. Conversely, the northern and western margins are defined by established, linear tree groups that form the site boundaries, serving as a functional landscape buffer that partitions the internal industrial workspace from the adjacent public highways.

Figure 1: Site Location Plan



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3 SURVEY METHODOLOGY

3.1 Survey Methods

- i The site was visited on Wednesday 10th June 2026 to carry out an assessment in accordance with BS 5837:2012 – Trees in relation to Design, Demolition and Construction - Recommendations.
- ii The weather at the time was considered to be adequate for conducting the survey during which, the following information was collected:
 - Sequential reference number, including reference to type (tree, group, woodland, or hedgerow).
 - Species, recorded by common name (a key to scientific names is provided in Appendix B).
 - Height.
 - Stem diameter measured at 1.5m above ground level (for trees with more than one stem, the combined stem diameter was recorded as per BS 5837:2012 Section 4.6).
 - Branch spread (measured at the four cardinal points).
 - Existing height above ground level of first significant branch.
 - Life stage:
 - Y – Young
 - SM – Semi Mature
 - EM – Early Mature
 - M – Mature
 - OM – Over Mature
 - V – Veteran
 - A – Ancient
 - General observations, particularly of structural and/or physiological condition, and/or preliminary management recommendations as appropriate.
 - Estimated remaining contribution (future life expectancy) in years (<10, 10+, 20+, 40+).
 - Tree quality assessment category grading as per Section 4.5 and Table 1 of BS 5837:2012. 'U' or 'A' to 'C' grading with the subcategory 1, 2 or 3 reflecting arboricultural, landscape or cultural values, respectively.

Notes: Only individual trees with a stem diameter of 75mm or greater are included in the survey. It is not always practical or necessary to record individual details for every tree within a group or woodland. Only basic details (height and species) for domestic hedgerows and significant shrubs were recorded. More substantial hedgerows (including evergreen screens) are generally recorded in a similar manner to groups of trees.
- iii The measurement conventions used were as follows:
 - Height, crown spread, and crown clearance was recorded to the nearest half metre for dimensions up to 10m and to the nearest whole metre for dimensions over 10m.
 - Stem diameter was recorded in millimetres, rounded to the nearest 10mm.
 - Any estimated dimensions (for offsite or otherwise inaccessible trees where accurate measurements cannot be taken) were clearly identified as such in the tree schedule (Appendix A).
- iv The survey intends to include all trees relevant to the site footprint. No individual trees were plotted on the provided topographical survey; therefore, all surveyed trees have been plotted approximately by the consultant for the purposes of identification and schematic representation only. If precise spatial locations are required for design or engineering purposes, these positions should be formally confirmed on site.

4 LIMITATIONS

4.1 Survey

- i Each of the surveyed trees has been plotted and recorded as an individual tree or a tree group in accordance with the criteria detailed in section 4.4.2.5 of BS 5837:2012.
- ii The information contained within this report is based on the author's knowledge and experience in respect of tree related issues. Whilst the appropriate level of skill and care have been used, no investigative method can eliminate the possibility of obtaining imprecise, incomplete, or not fully representative information.
- iii Any survey work undertaken will have been subject to natural limitations, including seasonal and phenological aspects.
- iv Trees were assessed from ground level using the Visual Tree Assessment (VTA) method. The trees included in the survey were not climbed, no samples were removed, and no detailed internal investigation of decay was made.
- v Where other vegetation (e.g. ivy or dense ground cover) prevented full access to any tree, this is noted in the tree survey schedule (Appendix A). Dense ivy cover can prevent full access to a tree and so obscure the presence of cavities or other defects. Any such situations are noted in the tree survey schedule with, where appropriate, recommendations for the ivy to be removed and a re-inspection carried out. No ivy was removed from any tree during the survey.
- vi No liability can be accepted by RammSanderson Ecology Ltd. in respect of the trees unless the recommendations of this report are carried out under their supervision and within their recommended timescales. Acceptance of this report represents an agreement with the guiding principles and the terms listed.
- vii The findings and recommendations contained within this report are, assuming its recommendations are observed, valid for a period of twelve months from the date of survey. Trees are living organisms and their condition can change significantly over time – good practice dictates they are inspected on a regular basis for reasons of safety.
- viii Any hedgerows within the survey area were assessed solely for their general arboricultural condition and value. Further detailed assessment, following the Hedgerow Regulations 1997, is outside the scope of this report and no attempt has been made during this assessment to classify any hedgerow under the criteria within those Regulations.
- ix Tree rooting characteristics and soils are both enormously variable as are their interactions. This makes any attempts to quantify tree related subsidence risk assessment impossible. No attempt has been made to assess subsidence risk potential, nor should any be construed.
- x The report relates only to the trees included within the Tree Schedule (Appendix A).

5 RESULTS

5.1 Surveyors

- i The survey was carried out by a have been carried out by a competent Arboriculturist. As per the Terms and Definitions detailed in British Standards 5837:2012.
 - **ANH B.A. (Hons), RFS Cert. Arb, TechArborA**, is a Royal Forestry Society (RFS) certified Arborist and a Technician Member of the Arboricultural Association. He has also completed the LANTRA Professional Tree Inspection assessment examination and has extensive knowledge and training within arboriculture, having previously worked as an Arborist.
- ii The survey was completed during suitable conditions as detailed in the table below.

Table 1: Summary of conditions during survey

Abiotic Factor	Survey 1
Survey type	BS 5837:2012 Tree Survey
Date completed	10/06/2026
Temperature	14 °C
Wind speed (Beaufort Scale)	2-3
Cloud cover	60 %
Precipitation	0mm

5.2 Statutory Tree Protection

- i South Derbyshire District Council confirmed, via their online mapping portal on 15/06/2026, that the site is not situated within a designated Conservation Area and that none of the trees detailed within this report are currently subject to a Tree Preservation Order (TPO).
- ii The trees on site are therefore not currently subject to statutory protection, and there are no immediate legal restrictions on tree works. However, as TPOs can be served at any time, it is recommended that further confirmation is obtained from the Local Planning Authority (LPA) immediately prior to any future tree works to ensure the status remains unchanged.

5.3 Ancient and Veteran Trees

- i A review of the publicly available Ancient Tree Inventory (ATI) was undertaken for the site and surrounding area. No recorded ancient or veteran trees were identified within the application site boundary.

5.4 Tree Survey

- i The survey assessed 21 individual trees and 2 groups of trees, The quality and value of these trees are summarised in the table below, while the full survey results are provided in the Tree Schedule (Appendix A).
- ii The survey identified a low amount of tree cover on the site, with arboricultural features entirely confined to the northern and western boundaries as offsite groups. These boundaries are defined by two moderate-quality tree groups situated along the western and northern aspects of the site. Conversely, the individual trees located directly at the site boundary are of low quality and are considered to be in poor condition, as

the historic lowering of internal ground levels has caused clear, localized damage to their rooting environments.

- iii Tree canopy cover delivers significant environmental and amenity benefits to a site. It helps regulate microclimates by providing shade and reducing temperatures, intercepts rainfall to limit surface water runoff, and improves air quality through pollutant absorption and carbon sequestration. Canopy cover also supports biodiversity by providing habitat, while enhancing visual amenity and contributing to a sense of place. These combined benefits highlight the importance of retaining and protecting existing trees within development proposals where feasible and appropriate.

Table 2: Survey Results

BS 5837:2012 Tree Quality Assessment Category		Trees	Groups	Hedgerows	Woodlands	Total
A	Trees of high quality which are healthy and attractive with high visibility and no significant defects, and which can make a substantial contribution for a minimum of 40 years	0	0	0	0	0
B	Trees of moderate quality which are healthy and attractive but with some remediable defects such that they are in a condition to be able to make a significant contribution for a minimum of 20 years	0	2	0	0	2
C	Trees of low quality which are unremarkable, of limited merit and that are easily replaced, small-growing, young species which have a relatively low potential amenity value, and low landscape benefits. These trees typically include self-seeded trees of limited life span, small (below 150mm stem diameter) and young trees and trees of poor form and limited amenity value.	21	0	0	0	21
U	Trees which are in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years and/or are considered to be unsuitable for retention in the proximity of new dwellings or areas of public open space.	0	0	0	0	0
Total		21	2	0	0	23

6 ARBORICULTURAL IMPACT ASSESSMENT

6.1 Introduction

- i The arboricultural constraints, both above and below ground, identified during the tree survey (Section 5) and illustrated on the Tree Constraints Plan (Appendix C), have been used, through consultation with the project design team and client to inform the proposed site layout design.
- ii The following Arboricultural Impact Assessment evaluates the direct and indirect effects of the proposed design and provides recommendations for mitigation where necessary. It takes account of the effects of any tree loss required to implement the design and any proposed construction activities which may have the potential to damage retained trees.

6.2 Trees Suitable for Retention

- i In accordance with BS 5837:2012, Category A and Category B trees are generally considered suitable for retention and integration within development layouts. Category 'U' trees are unsuitable for retention other than for the very short-term or exceptionally for their conservation value and therefore should not be considered to be a constraint to development.
- ii In assessing the probable impact of the proposed development on the trees and vice versa, and therefore identifying which trees are suitable for retention and integration within the context of the proposed layout, the following factors have all been considered:
 - Root Protection Areas for Retained Trees
 - Shading
 - Direct Damage
 - Construction Activity
 - Demolition/Ground Works
 - Future Pressure for Tree Removal and Pruning
 - Seasonal Nuisance
 - Infrastructure
 - Future Management

6.3 Root Protection Areas (RPAs)

- i Recommended Root Protection Areas (RPAs) for all individual trees on or immediately adjacent to the survey area are detailed within the Tree Schedule (Appendix A) and illustrated on the Tree Constraints Plan (Appendix C).
- ii These RPAs have been calculated following the recommendations within BS 5837:2012 Section 4.6 and are illustrated on the Tree Constraints Plan as a circular area centred on the base of the tree stem. Should any deviation from this circular RPA be considered appropriate, for example where previous site conditions (the presence of roads, structures, and underground apparatus), topography, or soil type/structure will have influenced root growth, any modifications to the RPA will be clearly explained and reflect a soundly based arboricultural assessment of the likely root distribution for the individual tree. Any such modified RPA will be of an overall area which is equivalent to the BS 5837:2012 recommendation.
- iii Recommendations for RPAs for any groups of trees, woodlands, or hedgerows, where the positions of individual trees are not included on the provided topographical survey, also reflect a soundly based arboricultural assessment of the likely collective root distribution of the constituent trees.

6.4 Recommendations for Tree Removals

- i The survey identified no trees which are unsuitable for retention due to their condition.
- ii No trees have been identified as requiring removal solely to accommodate the proposed new site layout.

- iii Table 5 (section 7.1) provides a summary of all recommended tree works (pruning and removals). Tree owner permissions should be formally in place prior to any tree removal works.
- iv All arboricultural work should be carried out by suitably qualified and competent arborists in accordance with BS 3998:2010 'Tree Work – Recommendations'.

6.5 Tree Loss Evaluation

- i There will be a negligible arboricultural, amenity, or landscape impact as a result of the proposed development, as no tree removals are required to accommodate the layout.
- ii It is noted that existing boundary features have been impacted by past clearance works on site. As such, it is recommended that these remaining features are effectively protected within the landscape design, with the aim of maintaining an appropriate amount of tree cover whilst improving the long-term arboricultural value of the site.

6.6 Recommendations for Tree Pruning

- i Any recommendations within the Tree Survey Schedule (Appendix A) details pruning works solely in the context of the current use of the site that are recommended in the interest of good arboricultural management of the trees irrespective of any changes in use of the site. These recommendations should not be considered as necessary to implement or facilitate the proposed development.
- ii Any additional pruning which is recommended solely to accommodate the proposed site layout (e.g. access facilitation pruning) is detailed within Table 5 (section 7.1).
- iii All arboricultural work will be carried out by suitably qualified and competent arborists in accordance with BS 3998:2010 Tree Work – Recommendations.

6.7 Tree Protection Plan

- i The Tree Protection Plan (Appendix D), when read in conjunction with this report, details the required tree protection and mitigation measures for all trees proposed to be retained and integrated within the proposed layout.
- ii The Tree Protection Plan is superimposed on the proposed layout and includes details of:
 - Trees selected for retention and trees proposed for removal.
 - The precise location and specification of protective barriers to form a construction exclusion zone around the retained trees.
 - The extent and type of any temporary ground protection, and/or any additional physical measures, that are recommended in association with any temporary access or other activities which are permitted within the construction exclusion zone.
 - The position, extent and general construction specification of any new permanent, hard surfacing within the RPA.

6.8 Shading

- i Although there are circumstances where shade from trees could be considered beneficial, excessive shading of buildings by trees can be a problem, particularly where it affects rooms which require natural light. Similarly, it is often considered that open spaces such as gardens and sitting areas benefit from direct sunlight, for at least part of the day, and therefore that excessive shading of these areas by trees is undesirable.

- ii In this instance, no further investigation, illustration or mitigation is considered necessary due to the generally favourable layout orientation and the nature of the proposal (i.e. non-residential) which means that the development is not considered likely to be subjected to an unreasonable level of shading from trees.

6.9 Direct Damage

- i All new developments should consider the likelihood of direct damage occurring to any new structures, hard surfacing or associated utilities from incremental tree stem/root growth or mechanical damage resulting from encroachment of branches.
- ii The proposed layout locates all new structures and services outside of the recommended RPAs.
- iii For any proposed new planting, Table 3 below, taken from Annex A of BS 5837:2012, provides recommendations that are advised as minimum distances from structures and services for new tree plantings.

Table 3: Minimum distance between young trees or new planting and structures to avoid direct damage to a structure from future tree growth

Type of structure	Minimum distance between young trees or new planting and structure, in metres (m)		
	Stem dia. $\leq 300\text{mm}^{\text{A}}$	Stem dia. 300mm to 600mm ^A	Stem dia. $\geq 600\text{mm}^{\text{A}}$
Building and heavily loaded structures	---	0.5	1.2
Lightly loaded structures such as garages, porches etc.	---	0.7	1.5
Services			
$\leq 1\text{m}$ deep	0.5	1.5	3.0
$\geq 1\text{m}$ deep	---	1.0	2.0
Masonry boundary walls	---	1.0	2.0
In-situ concrete paths and drives	0.5	1.0	2.5
Paths and drives with flexible surfaces or paving slabs	0.7	1.5	3.0

A) Diameter of stem at 1.5m above ground level at maturity.

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6.10 Temporary Ground Protection

- i The proposed site layout does not include any conflict between the necessary construction working space and retained trees. Therefore, it is not considered that any temporary ground protection will be required to implement the development.
- ii British Standard 5837:2012 advises that temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction to underlying soil and further provides the following note:

The ground protection might comprise one of the following:

a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a

compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane.

b) for pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane.

c) for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

- iii Final on-site measurements should be taken to ascertain the extent of any tree protection measures and provide an indication of whether incursions, which have not been anticipated, into the RPAs of retained trees may be required.

6.11 Excavation/Ground Works

- i The installation of any protective mitigation measures, if necessary, prior to the commencement of any works on site, will allow excavations and ground works to take place whilst minimising any anticipated adverse effect and/or impact on the retained trees.
- ii All plant and vehicles engaged in ground works should either operate outside the RPAs, or run on appropriate ground protection, if necessary, in the proximity of retained trees.
- iii Where trees stand adjacent to hard surfaces and/or buildings to be removed, excavation should be undertaken inwards, from within the footprint of the existing hard surfacing, or outside of the RPAs.

6.12 Construction Within the Root Protection Area

- i The use of traditional strip foundations can result in extensive root loss and should be avoided. However, BS 5837:2012 recommends that the insertion of specially engineered structures within RPAs may be justified if it enables the retention of a good quality tree (usually Category A or B) that would otherwise be lost.
- ii The foundation design should minimise any adverse impact on the trees and should take into consideration all relevant site-specific constraints. In order to arrive at a suitable solution, the combined advice of the project arboriculturist and an engineer will be required.
- iii BS 5837:2012 recommends that root damage can be minimised by using piles, located optimally to avoid any structural roots, by means of hand tools or compressed air soil displacement, to a minimum depth of 600mm, or beams laid at or above ground level to avoid tree roots.
- iv Where piling is to be installed near to trees, the smallest practical pile diameter should be used to reduce the possibility of striking major tree roots. Temporary ground protection, appropriate to the size of the piling rig in use, should be used as detailed above in section 6.10.
- v It may be appropriate for slabs for minor structures (e.g. a shed base) to be formed within the RPA. It should however be placed on the existing ground level with no new excavation and should not exceed an area greater than 20% of the unsurfaced ground within the RPA.
- vi The proposed layout does not include any construction within the RPA and so there is no requirement for any specially engineered structures in this instance.

6.13 Hard Surfacing Within the Root Protection Area

- i In certain circumstances, specially engineered hard surfacing in the form of a 'no-dig' cellular confinement system can be employed as an appropriate mitigation measure for proposed new hard surfacing within a small percentage of tree RPA.

- ii Proposed hardstanding has been identified within the RPA of T12, T13, G1, and G2. However, site levels within these areas have already been adjusted prior to this assessment, resulting in historical disturbance to the root protection zones. Consequently, the installation of specially engineered 'no-dig' cellular confinement systems would offer no practical arboricultural benefit in this instance.
- iii To manage the ongoing health of these features, it is recommended that an annual monitoring program of their physiological condition be implemented to track any delayed impacts from the historical works. Furthermore, strict adherence to the location of the protective fencing is required to prevent any further ground compaction or structural disturbance within the remaining root zones throughout the remainder of the development process.

6.14 Construction Activity

- i The installation of any recommended protective or mitigation measures prior to the commencement of any works on site will allow the development to take place whilst minimising any anticipated adverse effect and/or impact on the retained trees.
- ii All plant and vehicles engaged in construction works should either operate outside the RPA, and/or run on appropriate ground protection.

6.15 Future Pressure for Tree Pruning/Removal

- i Whilst the presence of retained trees can often enhance the immediate environment upon completion, any proposed layout should provide sufficient space that will allow for future tree growth and to provide a subsequently reduced need for future, frequent remedial pruning.
- ii The tree works detailed in Table 5 are considered, in this instance, to provide an environment and layout juxtaposition that will allow for the future growth of the retained trees whilst minimising any immediate future pruning pressures.

6.16 Seasonal Nuisance

- i Seasonal leaf, seed, and cone fall can be considered by some to be a maintenance nuisance. However, requests to Local Planning Authorities to carry out pruning or crown management to negate these routine natural occurrences are often refused, due in part to the brief, seasonal nature of the issue.
- ii Providing a suitable juxtaposition when considering new layouts will help in minimising issues experienced by people living in proximity to trees.
- iii A certain level of leaf fall in the autumn will be inevitable due to the generally deciduous nature of the existing trees on the site. This is not considered to be unreasonable in the context of the site's use.

6.17 Infrastructure

- i Infrastructure requirements have been considered and there is no evidence to suggest that retained trees will have an impact on lighting, signage, CCTV sightlines or visibility splays.
- ii Where the installation of any underground apparatus and drainage is considered necessary then particular care should be taken in its routing and methods of installation and wherever possible be routed outside RPAs.
- iii Where routing services outside RPAs is not possible then detailed plans showing the proposed routing should be drawn up in conjunction with the project Arboriculturist. Trenchless insertion methods are considered appropriate for this purpose and BS 5837:2012 details solutions for differing utility apparatus requirements (see table 4 below).
- iv BS 5837:2012 suggests that in the event roots can be retained and appropriately protected during exposure, then excavation using hand-held tools might be acceptable for shallow service runs. The National Joint

Utilities Group's publication 'NJUG Volume 4' contains further guidelines on the installation of new underground services in proximity to trees.

Table 4: Trenchless solutions for differing utility apparatus installation

Method	Accuracy	Bore dia. ^{A)}	Max sub. ^{B)} length	Applications	Not suitable for
Micro tunnelling	≤20mm	100 to 300mm	40m	Gravity-fall pipes, deep apparatus, watercourse/roadway undercrossing	Low-cost projects due to relative expense
Surface-launched directional drilling	≈100mm	25 to 1,200mm	150m	Pressure pipes, cables including fibre optic	Gravity-fall pipes, e.g. drains and sewers ^{C)}
Pipe ramming	≈150mm	150 to 2,000mm	70m	Any large-bore pipes and ducts	Rocky and other heavily obstructed soils
Impact moling ^{D)}	≈50mm ^{E)}	30 to 180mm ^{F)}	40m	Gas, water and cable connections, e.g. from street to property	Any application that requires accuracy over distances in excess of 5m
Vacuum excavation (Vac-Ex)	≤25mm	N/A	Localised	Safe exposure of buried utilities, trial holes, root investigation within RPAs, confined or sensitive excavations	Long-distance installation, trenchless pipe installation, large-scale excavation works

A) *Dependent on strata encountered.*

B) *Maximum subterranean length.*

C) *Pit-launched directional drilling can be used for gravity fall pipes up to 20m subterranean length.*

D) *Impact moling (also known as thrust bore) generally requires soft, cohesive soils.*

E) *Substantial inverse relationship between accuracy and distance.*

F) *Figures given relate to single pass up to 300mm bore achievable with multiple passes.*

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6.18 Landscaping

- i BS 5837:2012 advises that any new tree planting and associated landscaping proposals should consider the ultimate height and spread, form, habit and colour, density of foliage, and maintenance implications, in relation to both the built form of the new development, and the retained landscape features.
- ii Consideration should also be given to the advice detailed in section 6.4 in respect of distances of newly planted trees in relation to new structures.
- iii For all new tree planting, the guidance within BS 8545:2014 'Trees: from nursery to independence in the landscape – Recommendations' should be followed.
- iv Detailed evaluation of proposed soft landscaping falls outside the scope of this baseline BS5837 arboricultural assessment, which focuses on the protection and retention of existing tree stock. However, it is noted that a dedicated landscaping scheme has been produced separately for the site.
- v Appropriate compensation for removed trees should be put in place through the landscaping design plan. Replacement tree planting should be incorporated within the landscape design to allow trees to establish

- and reach maturity. Planted trees should be of a standard size (8-10cm girth at 1.5 metres) and be of a suitable species in keeping with the species already present on site.
- vi Ultimately, the Local Planning Authority is best placed to determine the final threshold of acceptable compensatory planting ratios and implementation for the project, with associated local planning policy generally outlining requirements for replacement planting, which should be adhered to when available. It is always preferable for replacement planting to occur in a suitable area of the development site, however if there are constraints that do not allow the trees to grow to full maturity, other suitable sites are to be considered.
- vii Incorporation of hedgerow planting within the landscape design is also generally advised due to its ecological value and contribution to landscape character. Planting schemes should prioritize a diverse mix of native species, with preference given to those already established on-site to enhance habitat continuity and ecological integrity.

6.19 Issues to be Addressed by the Arboricultural Method Statement

- i The Arboricultural Method Statement (Section 7) provides the specific methodology required to protect retained trees and groups of trees during demolition and/or construction. This section details the necessary site controls and working practices for those aspects of the proposed development which have been deemed to have the realistic practicable potential to result in damage to the retained trees.

7 ARBORICULTURAL METHOD STATEMENT

7.1 Recommended Tree Works/Removals

- i Tree works detailed in Table 5 have been identified as a result of one or more of the following reasons:
- to directly implement the proposal,
 - to facilitate the implementation and construction of the proposals,
 - to assist in the creation of a balanced and desirable layout juxtaposition and
 - in the interests of reasonable arboricultural management.
- ii All tree works should be carried out by qualified and competent Arborists working to BS 3998:2010 'Tree Work – Recommendations'.

Table 5: Summary of Recommended Tree Works

Tree No.	Species	BS5837 Category	Recommended Works
T1	Field Maple	C1	Implement annual monitoring for a minimum of 3 years to assess long-term vitality following the historical RPA impacts caused by recent site clearance operations.
T2	Field Maple	C1	
T3	Field Maple	C1	
T4	Field Maple	C1	This monitoring is required due to disturbances that occurred prior to the proposed works.
T5	Field Maple	C1	
T6	Field Maple	C1	The trees should then be managed appropriately in light of ongoing condition and introduced targets.
T7	Field Maple	C1	
T8	Ash	C1	
T9	Field Maple	C1	
T10	Field Maple	C1	
T11	Ash	C1	
T12	Field Maple	C1	
T13	Field Maple	C1	
T14	Field Maple	C1	
T15	Field Maple	C1	
T16	Ash	C1	
T17	Field Maple	C1	
T18	Field Maple	C1	
T19	Field Maple	C1	
T20	Silver Birch	C1	
T21	Field Maple	C1	
G1	Hawthorn, Ash, Field Maple, Wild Cherry, Holly, Hazel, Silver Birch	B2	
G2	Hawthorn, Ash, Field Maple, Holly, Hazel, Silver Birch	B2	

7.2 Summary of Mitigation

- i The table below summarises the mitigation methods required for the site, specific to any trees where their RPA may be subject to impact by the proposed development.
- ii Each specific requirement is detailed further in the subsequent sections of this report.

Table 6: Summary of Mitigation Requirements

Tree No.	Species	Works affecting	Mitigation Required
Throughout the site		Retained trees in general proximity to the proposed construction works	Create a construction exclusion zone, by erecting and maintaining temporary tree protection fencing for the duration of the construction works. The tree protection fencing should be installed as detailed on the Tree Protection Plan (Appendix D).

7.3 Erection of Protective Fencing

- i It is recommended that temporary protective fencing should be erected in order to create a construction exclusion zone which adequately protects the retained trees from damage during the construction works. This fencing should be erected at the outset of the development works before any activities (including demolition and ground works) are carried out and materials/ plant are brought onto site.
- ii The recommended position for protective fencing is detailed on the Tree Protection Plan (Appendix D).
- iii The fencing should consist of a vertical and horizontal scaffold framework which is well braced to resist impacts as seen below in Figure 2.

Figure 2: Default specification for protective barrier



- iv All-weather warning notices should be attached to the fencing to clearly identify the area as a tree protection exclusion zone into which access is not permitted.
- v Once erected, the protected area should be regarded as sacrosanct and the fencing should not be removed or altered unless recommended by the project Arboriculturist and, where necessary, approval from the Local Planning Authority.
- vi Where the site circumstances and associated risk of damaging incursion into the RPAs do not necessitate the default level of protection, an alternative specification may be considered to be appropriate. For example, 2m tall, welded mesh panels on rubber or concrete feet as illustrated below in Figure 3.

Figure 3: Alternative Specification for Protective Fencing



- vii In this instance, it is considered that the associated risks to trees from the proposed development are such that the default specification for temporary protective fencing should be used.

7.4 Additional General Precautions Outside of the Exclusion Zone

- i Fires on site should be avoided wherever possible. Where they are unavoidable, they should be kept well away from the exclusion zone and only lit in positions where heat will not affect foliage or branches. The potential size of a fire and wind direction should be considered, and it should be attended at all times until safe to leave.
- ii Any materials, fuel, or chemicals where accidental spillage would cause damage to a tree should be stored and handled well away from the exclusion zone.

7.5 Site Monitoring

- i In this instance, it is considered necessary for the proposed works to be monitored as a number of retained trees are likely to be impacted by construction activities.
- ii A two-stage visit must be arranged with the Arboricultural Consultant at:
 - **Phase one:** to check the protective barrier installation (prior to any construction activity).
A visit should be arranged to check that the location of the installed protective barriers, and/or specific temporary ground protection conforms to the locations as depicted on the Tree Protection Plan (Appendix D).
This visit is also to speak with the site manager and ensure that they are aware of the constraints around the retained trees on site.
 - **Phase two:** a mid-construction spot check to ensure the site work force are adhering to the mitigation requirements.

- iii Trees T1-T21, G1 & G2 are to be monitored due to their condition, proximity to the development.
- iv Random site monitoring can take place throughout the duration of the construction to check that all guidelines are being adhered to.

7.6 Biosecurity (General)

- i 'Biosecurity' is the control of infectious diseases and invasive alien species that pose a threat to the health of plants in the UK. Tree pests and diseases can be transported via several pathways, including:
 - Live plants & tree products, such as potted plants.
 - Timber and wood packaging materials (WPM), such as shipping crates and pallets.
 - Dirty tools, kit, machinery, and vehicles, such as chainsaws, boots and all-terrain vehicles.
 - Soil and organic material, such as leaf litter.
 - Natural methods such as wind, water and wildlife.
- ii A biosecurity kit for staff and contractors working on site will help to implement simple measures limiting the introduction and spread of pests and diseases. The following items are recommended to be included within a biosecurity kit: a bucket (big enough to fit your boots and a few inches of water), boot pick, brush, disinfectant, hand sanitiser, water container, and a portable pressure washer (optional for cleaning equipment that won't fit in a bucket – handpump action is sufficient).
- iii Options for diseased timber and woodchip include either offsite disposal to a suitable landfill site or identifying a suitable location on the site away from other trees and the site boundary.
- iv All saws, machinery, boots, and the back of tipper trucks should be washed with soapy water after working on diseased trees.

7.7 Ground Works, Demolition & Construction Works

- i Installation of all recommended protective mitigation measures prior to the commencement of any works will allow the ground works to take place whilst minimising any adverse effect or impact on the retained trees.
- ii All plant and vehicles engaged in ground works should either operate outside the RPA or run on temporary ground protection or existing hard standing, where appropriate.
- iii During ground works and demolition, the utmost caution should be used to not sever any roots, especially those measuring ≥ 25 mm in diameter. Any uncovered roots should be wrapped/covered to prevent them from desiccation and rapid temperature changes (any wrapping should be removed prior to backfilling).
- iv In the case where plant or wide/tall loads are being used, it must be ensured that all parts of the equipment remain outside of the RPAs, in order that they can operate without coming into contact with any of the onsite or adjacent trees. All works must have appropriate supervision by a banksman, to ensure that adequate clearance from trees is maintained at all times.
- v Access facilitation pruning should not be necessary on site, but if it does become necessary to maintain a safe clearance, all work must be approved by the project Arboriculturist and carried out by a qualified and competent Arborist working to BS 3998:2010.
- vi If damage occurs to part of a tree during the works, the project Arboriculturist must be contacted without delay.

7.8 Soil Compaction and Remediation Measures

- i Soil that has been compacted will not provide suitable conditions for the survival and growth of vegetation, whether existing or new, and is a common cause of post-construction tree loss on development sites.
- ii Compacted soil will adversely affect drainage, gas exchange, nutrient uptake, and organic content, and will seriously impede or restrict root growth.

- iii Soil compaction should be avoided around existing vegetation, including trees, and in areas where new planting or seeding is proposed.
- iv Where soil compaction has occurred near to existing trees, remedial works might include sub-soil aeration using compressed air, and the addition of other materials, preferably of a bulky, organic nature (but excluding peat), to improve structure.
- v Heavy mechanical cultivation such as ploughing or rotavating should not occur within the RPA.
- vi Any cultivation operations should be undertaken carefully by hand to minimize damage to the tree, particularly the roots.
- vii Decompaction measures include forking, spiking, soil augering and tilted radial trenching. Care should be taken during such operations to minimise the risk of further damage to tree roots.

7.9 Contractors Storage, Parking & Access

- i Provision should be made for welfare facilities, the site office, contractor parking, storage for materials, plant and spoil, and space for mixing, all outside of the RPAs of retained trees.
- ii In this instance, it is considered that there is sufficient space for provision of the above, without placing significant constraints on the working space available for the construction and its associated activities.

7.10 Completion

- i At the completion of the construction works, before removal of any of the tree protection measures at the completion of the project, it is recommended that the advice of the project Arboriculturist is sought regarding whether a re-survey of the retained trees is necessary for signs or symptoms of damage and/or stress that the construction may have caused.
- ii The protective fencing and ground protection measures should remain in position until its use is considered unnecessary and any risk of damage to the retained trees and/or their respective RPAs e.g. soil compaction from vehicular plant or machinery, has completely passed.

7.11 Tree Planting & After Care

- i When planning and implementing any new tree planting scheme, it is recommended that the guidance contained within BS 8545:2014 Trees: from nursery to independence in the landscape – Recommendations is followed to ensure that newly planted trees are given the best opportunity to establish and develop successfully within the landscape.
- ii Successful establishment of newly planted trees is highly dependent on appropriate aftercare during the early establishment period. The following measures summarise good practice for the management and maintenance of newly planted trees:
 - **Watering**

Trees should be watered immediately after planting and regularly during the first growing season, typically providing 10–20 litres of water per tree per week depending on tree size and soil conditions. During periods of prolonged dry weather, watering frequency should be increased to prevent drought stress and aid root establishment.
 - **Weed and Vegetation Control**

Competing vegetation should be controlled to reduce competition for moisture and nutrients. Grass and weeds should not be permitted within a minimum 500mm radius of the tree stem during the establishment period.
 - **Mulching**

An organic mulch (e.g. composted woodchip or bark) should be applied and maintained to a minimum depth of 75mm, extending to at least a 500mm radius around the base of the tree. Mulch should be kept clear of direct contact with the stem and maintained as necessary to assist with moisture retention, soil conditioning, and weed suppression.

- **Tree Stakes and Ties**

Stakes and ties should be regularly inspected, typically at least annually, to ensure that they remain secure and are not causing abrasion or constriction of the stem. Adjustments should be made where necessary. Stakes should be removed once the tree has become sufficiently established to support itself independently, typically after 2–3 years.

- **Inspection and Maintenance**

Newly planted trees should be inspected periodically throughout the establishment period to identify any issues such as pest or disease presence, irrigation failure, mechanical damage, or vandalism. Any defects identified should be addressed promptly to minimise the risk of establishment failure.

- **Formative Pruning**

Formative pruning should be undertaken where necessary to encourage the development of a good structural framework. This may include the removal of dead, damaged, weak or crossing branches, epicormic growth, and basal suckers. Any pruning works should be carried out in accordance with good arboricultural practice.

- **Replacement of Failed Planting**

Any trees that die, become severely damaged, or fail to establish within the first five years following planting should be replaced during the next available planting season with stock of the same species and specification, unless otherwise agreed with the Local Planning Authority.

- **Protection from Damage**

Where necessary, newly planted trees should be protected from mechanical damage (e.g. mowing equipment or site activities) through the use of guards or protective measures until the trees are sufficiently established.

- iii The above measures should generally be maintained throughout the initial establishment period (typically the first 3–5 years) to ensure that the planting scheme successfully establishes and contributes positively to the long-term landscape structure and amenity of the site.

7.12 Contacts

- i RammSanderson Ltd. 0115 930 2493, info@rammsanderson.com

Appendix A: Tree Schedule

June 2026

Tree Nº	Species	Age	Height (m)	Dia. (mm)	Crown Spread (m)				Life Exp.	Cat.	Cond.	General Observations	Preliminary Management Recommendations	RPA (m²)	RPA Radius (m)
					N	E	S	W							
T1	Field Maple	M	12	377	4	2	4	4	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (east aspect of group). Historically sided up to 8m for site clearance. Ground levels altered on-site by approximately 0.5m with hardcore/gravel installed on eastern aspect, has resulted in localized mechanical damage to roots. Watercourse to west within RPA. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	99	5.6
T2	Field Maple	M	12	377	4	2	4	4	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (east aspect of group). Historically sided up to 8m for site clearance. Ground levels altered on-site by approximately 0.5m with hardcore/gravel installed on eastern aspect, has resulted in localized mechanical damage to roots. Watercourse to west within RPA. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	99	5.6
T3	Field Maple	M	12	377	4	3	4	4	10+	C1	Poor	Not plotted on topographical plan. Off-site adjacent to boundary (east aspect of group). Historically sided for	Annual monitoring for a minimum of 3 years to assess long-term vitality	113	6

Tree N°	Species	Age	Height (m)	Dia. (mm)	Crown Spread (m)				Life Exp.	Cat.	Cond.	General Observations	Preliminary Management Recommendations	RPA (m²)	RPA Radius (m)
					N	E	S	W							
												site clearance. Large wound present from removal of main branch at 2m on NE aspect. Ground levels reduced on-site by approximately 0.5m, causing mechanical damage to rooting environment. DBH estimated due to off-site location.	following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.		
T4	Field Maple	M	12	346	4	3	4	4	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (east aspect of group). Historically sided up to 8m for site clearance. Ground levels altered on-site by approximately 0.5m with hardcore/gravel installed on eastern aspect, has resulted in localized mechanical damage to roots. Watercourse to west within RPA. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	75	4.9
T5	Field Maple	M	12	377	4	2	4	4	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (east aspect of group). Historically sided up to 8m for site clearance. Ground levels altered on-site by approximately 0.5m with hardcore/gravel installed on eastern aspect, has resulted in localized mechanical	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any	72	4.8

Tree N°	Species	Age	Height (m)	Dia. (mm)	Crown Spread (m)				Life Exp.	Cat.	Cond.	General Observations	Preliminary Management Recommendations	RPA (m²)	RPA Radius (m)
					N	E	S	W							
												damage to roots. Watercourse to west within RPA. DBH estimated due to off-site location.	existing or introduced targets.		
T6	Field Maple	M	12	400	4	3	4	4	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (east aspect of group). Historically sided up to 8m for site clearance. Ground levels altered on-site by approximately 0.5m with hardcore/gravel installed on eastern aspect, has resulted in localized mechanical damage to roots. Watercourse to west within RPA. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	72	4.8
T7	Field Maple	M	12	400	4	2	4	4	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (east aspect of group). Historically sided up to 8m for site clearance. Ground levels altered on-site by approximately 0.5m on eastern aspect, has resulted in localized mechanical damage to roots. Watercourse to west within RPA. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	102	5.7
T8	Ash	M	15	450	5	4	5	5	10+	C1	Poor	Not plotted on topographical plan. Off-site adjacent to	Annual monitoring for a minimum of 3	92	5.4

Tree N°	Species	Age	Height (m)	Dia. (mm)	Crown Spread (m)				Life Exp.	Cat.	Cond.	General Observations	Preliminary Management Recommendations	RPA (m²)	RPA Radius (m)
					N	E	S	W							
												boundary (east aspect of group). Historically sided on east aspect, with major wounds at 3m from the removal of major branches. Ground levels reduced on-site by approximately 0.5m on south aspect, causing damage to moderate roots within RPA. 2m from stem. Watercourse to west within RPA. DBH estimated due to off-site location.	years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.		
T9	Field Maple	M	12	400	4	2	4	4	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (east aspect of group). Historically sided up to 8m for site clearance. Ground levels altered on-site by approximately 0.5m, has resulted in localized mechanical damage to roots. Watercourse to west within RPA. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	102	5.7
T10	Field Maple	EM	8	250	3	3	3	3	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (within treeline group). Ground levels altered on-site by approximately 0.5m, has resulted in localized mechanical damage to roots. 70mph highway	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing	41	3.6

Tree N°	Species	Age	Height (m)	Dia. (mm)	Crown Spread (m)				Life Exp.	Cat.	Cond.	General Observations	Preliminary Management Recommendations	RPA (m²)	RPA Radius (m)
					N	E	S	W							
												located north. DBH estimated due to off-site location.	condition and any existing or introduced targets.		
T11	Ash	EM	10	300	3	3	3	3	10+	C1	Poor	Not plotted on topographical plan. Off-site adjacent to boundary, within treeline group. Frequent moderate deadwood in lower canopy. Ground levels reduced on-site by approximately 0.5m, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	55	4.2
T12	Field Maple	EM	8	260	3	3	3	3	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (within treeline group). Ground levels altered on-site by approximately 0.5m, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	72	4.8
T13	Field Maple	EM	5	300	3	3	3	3	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (within treeline group). Ground levels altered on-site by approximately 0.5m with	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts.	72	4.8

Tree N°	Species	Age	Height (m)	Dia. (mm)	Crown Spread (m)				Life Exp.	Cat.	Cond.	General Observations	Preliminary Management Recommendations	RPA (m²)	RPA Radius (m)
					N	E	S	W							
												hardcore/gravel installed on southern aspect, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH estimated due to off-site location.	The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.		
T14	Field Maple	EM	5	260	3	3	3	3	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (within treeline group). Ground levels altered on-site by approximately 0.5m with hardcore/gravel installed on southern aspect, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	41	3.6
T15	Field Maple	EM	5	300	3	3	3	3	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (within treeline group). Ground levels altered on-site by approximately 0.5m with hardcore/gravel installed on southern aspect, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	41	3.6

Tree N°	Species	Age	Height (m)	Dia. (mm)	Crown Spread (m)				Life Exp.	Cat.	Cond.	General Observations	Preliminary Management Recommendations	RPA (m²)	RPA Radius (m)
					N	E	S	W							
												estimated due to off-site location.			
T16	Ash	EM	6	200	2	2	2	2	10+	C1	Poor	Not plotted on topographical plan. Located off-site adjacent to boundary within treeline group. Ground levels reduced on-site by approximately 0.5m, backfilled with hardcore/gravel on south aspect, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	28	3
T17	Field Maple	EM	5	260	3	3	3	3	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (within treeline group). Ground levels altered on-site by approximately 0.5m with hardcore/gravel installed on southern aspect, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	41	3.6
T18	Field Maple	EM	4	260	2	2	2	2	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (within treeline group). Ground levels altered on-site by	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts.	41	3.6

Tree N°	Species	Age	Height (m)	Dia. (mm)	Crown Spread (m)				Life Exp.	Cat.	Cond.	General Observations	Preliminary Management Recommendations	RPA (m²)	RPA Radius (m)
					N	E	S	W							
												approximately 0.5m with hardcore/gravel installed on southern aspect, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH estimated due to off-site location.	The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.		
T19	Field Maple	EM	4	260	2	2	2	2	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (within treeline group). Ground levels altered on-site by approximately 0.5m with hardcore/gravel installed on southern aspect, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	41	3.6
T20	Silver Birch	EM	6	250	3	3	3	3	10+	C1	Poor	Not plotted on topographical plan. Located off-site adjacent to boundary within treeline group. Ground levels reduced on-site by approximately 0.5m, backfilled with hardcore/gravel on south aspect, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	28	3

Tree N°	Species	Age	Height (m)	Dia. (mm)	Crown Spread (m)				Life Exp.	Cat.	Cond.	General Observations	Preliminary Management Recommendations	RPA (m²)	RPA Radius (m)
					N	E	S	W							
												estimated due to off-site location.			
T21	Field Maple	EM	5	260	3	3	3	3	10+	C1	Poor	Not plotted on topographical plan. Multi-stemmed from base, off-site adjacent to boundary (within treeline group). Ground levels altered on-site by approximately 0.5m with hardcore/gravel installed on southern aspect, has resulted in localized mechanical damage to roots. 70mph highway located north. DBH estimated due to off-site location.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	41	3.6
G1	Hawthorn, Ash, Field Maple, Wild Cherry, Holly, Hazel, Silver Birch	EM	15 (Est avg)	250 (Est avg)	/	/	/	/	20+	B2	Fair	Off-site dense group providing effective screening to site as a group, with fair ecological/habitat value. Ground levels have been reduced on-site by approximately 0.5m along the eastern aspect of the group, has resulted in localized mechanical damage to roots.	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts. The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.	/	3
G2	Hawthorn, Ash, Field Maple, Holly, Hazel, Silver Birch	SM	8 (Est avg)	150 (Est avg)	/	/	/	/	10+	C2	Fair	Off-site dense group providing effective screening to site as a group, with fair ecological/habitat value. Ground levels have been reduced on-site by	Annual monitoring for a minimum of 3 years to assess long-term vitality following RPA impacts.	/	1.8

Tree Nº	Species	Age	Height (m)	Dia. (mm)	Crown Spread (m)				Life Exp.	Cat.	Cond.	General Observations	Preliminary Management Recommendations	RPA (m²)	RPA Radius (m)
					N	E	S	W							

approximately 0.5m along the southern aspect of the group, has resulted in localized mechanical damage to roots.

The trees should then be managed appropriately in light of ongoing condition and any existing or introduced targets.

Tree Schedule Key:

Reference:	Description:
Tree No.	Sequential reference number as recoded within the Tree Constraints Plan (and subsequent plans). T: Individual Tree G: Group of trees H: Hedgerow W: Woodland
Species	Common name (list of scientific names will be included within the appendix within the arboricultural impact assessment or can be provided upon request).
Age	Y: Young (usually self-seeded or recently planted) SM: Semi-mature (within its first one third of life expectancy) M: Mature (within its final one third of life expectancy) OM: Over-mature (having reached its maximum life span and now in declining) V: Veteran (veteran trees are survivors that have developed some of the features associated with ancient trees. However are usually only in their second or mature stage of life. A: Ancient (Ancient trees are irreplaceable. They have passed maturity and as such are in their third and final life stage.)
Height	Estimated height calculated in metres
Diameter	Stem diameter measured to the nearest 10 millimetres at approximately 1.5m above ground level. For trees with more than one stem the combined diameter is recorded as per BS5837:2012 Section 4.6. (Avg.): Average stem diameter for a group of trees (Est.): Estimate stem diameter due to no access for exact measuring (e.g. offsite or inaccessible)
Crown Spread	Radial crown spread measured to the nearest metre from the centre of the trunk for each of the four cardinal points
Life Expectancy	An estimate of the remaining life expectancy of the tree given its condition during the survey and considering the context of the site <10: Less than 10 years 10+: More than 10 years 20+: More than 20 years 40+: More than 40 years
Category	Quality and value grade classification according to the British Standard 5837:2012 as per section 4.5 and Table 1

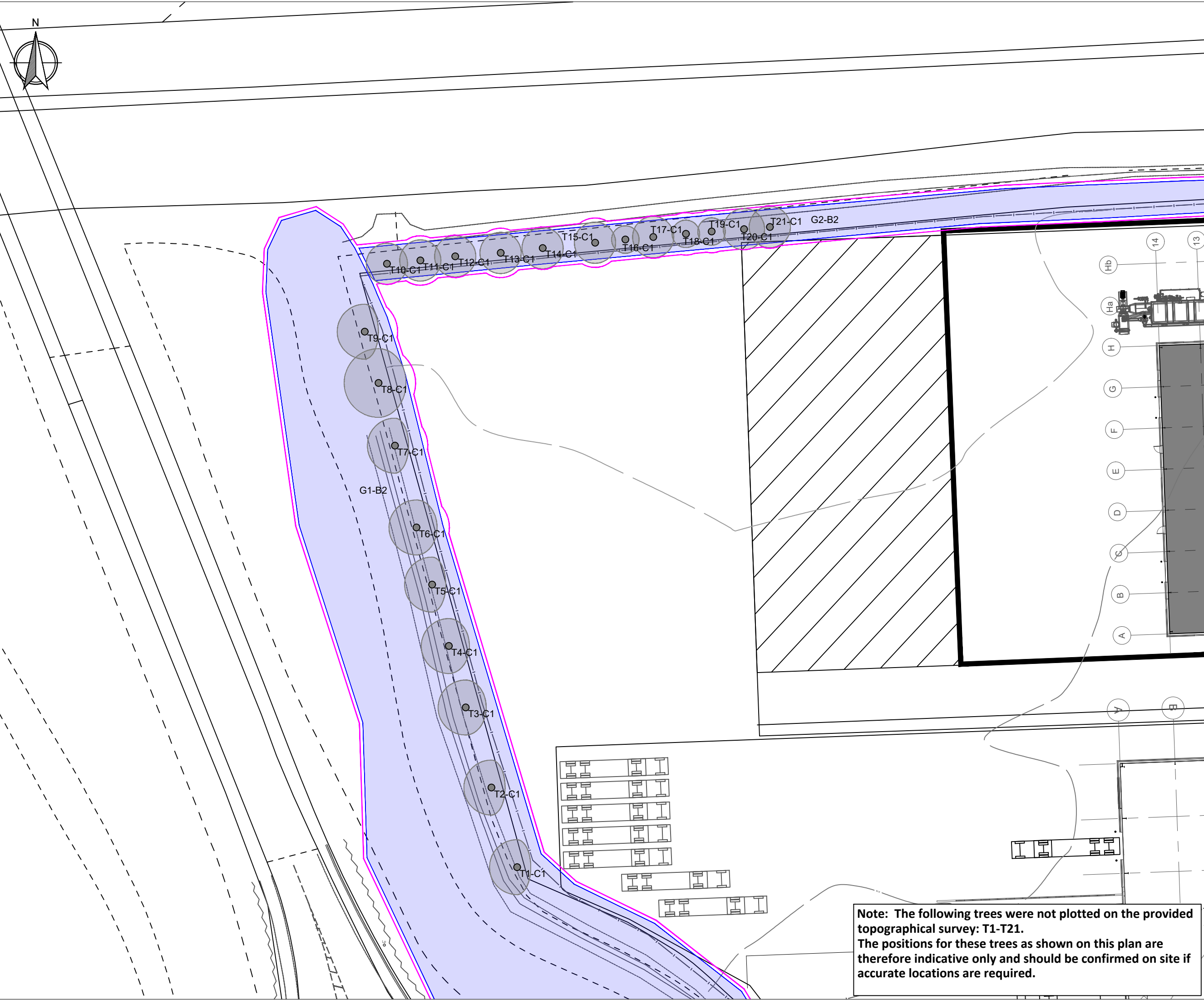
Category (continued)	A: Trees of high arboricultural value (typically with 40+ years life expectancy) B: Trees of moderate arboricultural value (typically with 20+ years life expectancy) C: Trees of low arboricultural value (typically with 10+ years of life expectancy) U: Trees unsuitable for retention (typically due to poor condition with <10 years of life expectancy) Subcategory: 1: Mainly arboricultural qualities 2: Mainly landscape/ amenity qualities 3: Mainly cultural values/ habitat value/ conservation value
Condition	A visual assessment considering both the physiological and structural condition of the tree are categorised as per the below: Fair: Generally in good health given the age and context of the tree with no significant defects Poor: Generally poor health (including structurally) which can't be remediated Dead: Dead tree
General Observations	Comments on the tree resulting from the visual tree inspection
Preliminary Management Recommendations	Preliminary management recommendations result from the visual tree inspection based upon the specific condition and context of each tree. These actions are recommended solely for the current site use. Such works constitute good arboricultural practice regardless of any existing or proposed development plans for the site.
RPA	Root Protection Areas are calculated in square metres (m ²) following the recommendations within BS5837:2012 Section 4.6. They are detailed on the Tree Constraints Plan as a circle centred on the base of the stem
RPA Radius	The Root Protection Area Radius is calculated in metres and is the distance from the base of the tree to the edge of the root protection area

NOTES:

- i. Any survey work undertaken remains subject to natural limitations. This includes seasonal and phenological aspects.
- ii. Trees were assessed from ground level using the Visual Tree Assessment (VTA) method. The trees included in the survey were not climbed. No samples were removed. No detailed internal investigation of decay was made.
- iii. Where other vegetation such as ivy or dense ground cover prevented full access to any tree this is noted in the tree survey schedule. Dense ivy cover can prevent full access to a tree and so obscure the presence of cavities or other defects. Any such situations are noted in the tree survey schedule. Where appropriate these include recommendations for the ivy to be removed and a re-inspection carried out. No ivy was removed from any tree during the survey.
- iv. Tree rooting characteristics and soils are both enormously variable as are their interactions. This makes any attempts to quantify tree related subsidence risk assessment impossible. No attempt has been made to assess subsidence risk potential nor should any be construed.
- v. Only individual trees with a stem diameter of 75mm or greater are included in the survey. It is not always practical or necessary to record individual details for every tree within a group or woodland. Should any relevant trees on or adjacent to the site have been missed on the topographical survey these have been included where appropriate. These are marked as 'Not plotted on topographical plan'. The positions indicated on any plans included within this report for all trees not included on the provided topographical survey have been approximately for the purposes of identification only. If accurate locations are required these should be confirmed on site.

Appendix B: Key to Species Scientific Names

Common Name	Scientific Name
Ash	<i>Fraxinus excelsior</i>
Field maple	<i>Acer campestre</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Holly	<i>Ilex aquifolium</i>
Silver birch	<i>Betula pendula</i>
Wild cherry	<i>Prunus avium</i>



LEGEND:

TXA

Category A -
Trees of High
Quality

TXB

Category B -
Trees of Moderate
Quality

TXC

Category C -
Trees of Low Quality

TXU

Category U -
Trees Unsuitable for Retention

Tree Trunk

Root Protection
Areas (RPA)

Tree Canopy Spread

Note: The following trees were not plotted on the provided topographical survey: T1-T21. The positions for these trees as shown on this plan are therefore indicative only and should be confirmed on site if accurate locations are required.

RammSanderson

ARBORICULTURE

Client :

Dove Valley Park Ltd

Project:

Dove Valley Business Park: Plot 10c

Drawing Title :

Tree Constraints Plan

Drg No.

RSE_11705_TCP

Rev :

V1

Dm By :

ANH

Scale :

1:500@A3

Date :

11/06/2026

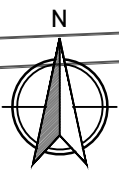
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East Midlands: Osprey House, Merlin Way, Ilkeston, DE7 4RA T: 0115 930 2493

West Midlands: Chase View Barn, Dunston Business Village, Stafford, ST18 9AB T: 01785 711 575

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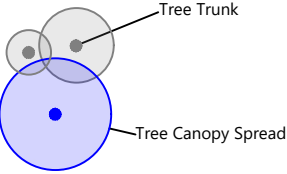
LEGEND:

- 

Category A -
Trees of High
Quality
TXA
- 

Category B -
Trees of Moderate
Quality
TXB
- 

Category C -
Trees of Low Quality
TXC
- 

Category U -
Trees Unsuitable for Retention
TXU
- 

Tree Trunk
Tree Canopy Spread
- 

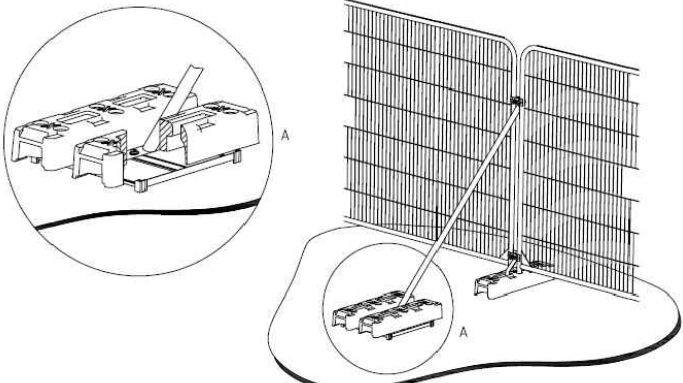
Tree Protection Fencing

Tree Protection Fencing

Tree protection fencing is to be installed at the positions shown at the commencement of works, before any ground works or soil stripping are carried out and before vehicles or materials are brought onto site.

The fencing will consist of a vertical and horizontal scaffold framework which is well braced to resist impacts as shown above. The areas enclosed are to be maintained as a total exclusion zone to all construction activity. All-weather warning notices will be attached to the fencing to clearly identify the area as a tree protection exclusion zone into which access is not permitted.

No working activity, storage of materials, ground level changes, excavations or vehicular access is permitted within the protected area. Once erected, the protected area are to be regarded as sacrosanct and the fencing must not be removed or altered unless recommended by the project Arboriculturist and, where necessary, approval from the local planning authority.



Client :
Dove Valley Park Ltd

Project:
Dove Valley Business Park: Plot 10c

Drawing Title :
Tree Protection Plan

Drg No. : RSE_11705_TPP
Rev : V2

Dm By : ANH
Scale : 1:500@A3
Date : 24/07/2026

RammSanderson Ltd
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