Manor Farm Cables - Iver Substation Corridor

Arboricultural Baseline Report & Impact Assessment

Juniper Energy Ltd

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SLR Project No.: 402.065673.00001

8 October 2025

Revision: 02

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
01	3 October 2025	AG	MMS	RB
02	8 October 2025	RB	MMS	RB

Basis of Report

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Executive Summary

This Arboricultural Baseline Report & Impact Assessment has been prepared by SLR Consulting Limited on behalf of Juniper Energy Limited (hereafter referred to as “Juniper” and/or “the Applicant”) in support of a planning application for grid connection cables (“Proposed Development”) on land between National Grid Substation in Iver, Buckinghamshire and a proposed data centre and Battery Energy Storage System (“BESS”) at Manor Farm, Slough (“the Site”).

A Tree Survey in accordance with BS 5837:2012 ‘Trees in Relation to Design, Demolition and Construction- Recommendations’ (BS 5837:2012) was undertaken on the 22nd May, 19th June , and 16th and 17th September 2025.

The survey records all trees within and adjacent to the site, recording a number of parameters including species, crown spread and Root Protection Area (RPA).

Section 3 of BS 5837 defines the RPA as the area of ground around a tree ‘*where the protection of the roots and soil structure is treatred as a priority*’. The extent of the RPA is calculated in accordance with BS 5837:2012 and is an important metric for understanding the impact a proposal will have on tree removal and retention and how to protect those trees retained.

The BS 5837:2012 compliant tree survey recorded:

- Fourteen individual trees (three category A, six category B and five category C).
- Forty-two tree groups (six category A, thirty category B and six category C).
- Four hedgerows.

There are 53 trees and tree groups subject to Tree Preservation Orders located adjacent to the application site, as illustrated on the Tree Constraints Plan.

No areas along the proposed route are part of a Conservation Area.

No part of the proposed route is listed in the Ancient Woodland Inventory

No ancient and/or veteran trees are present within or adjacent to the application site.

Juniper Energy Ltd have committed to a policy of ‘no tree loss’, as such the proposed development will not require the removal of any trees.

Where the proposed cable is located within the RPA of trees, appropriate construction methods, such as Horizontal Directional Drilling (HDD) or hand digging trenches will be used.

All trees/groups and hedgerows within the application site are to be retained.

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Acronyms and Abbreviations

AIA	Arboricultural Impact Assessment
AMS	Arboricultural Method Statement
CEZ	Construction Exclusion Zone
DBH	Diameter at Breast Height
RPA	Root Protection Area
TCP	Tree Constraints Plan
TPO	Tree Preservation Order
TPF	Tree Protection Fencing
TPP	Tree Protection Plan

Glossary of Arboricultural Terms

Ancient tree: An ancient tree is exceptionally valuable attributed with great age/size/cultural heritage/biodiversity value as a result of significant wood decay and the habitat created from the ageing process. All ancient trees are veteran trees with very few trees of any species reaching the ancient life-stage.

Bark: A term usually applied to all the tissues of a woody plant lying outside the vascular cambium.

Buttress zone: The region at the base of a tree where the major lateral roots join the stem, with buttress-like formations on the upper side of their junction.

Canker: A lesion formed by the death of bark and cambium often due to fungal or bacterial infection.

Condition: An indication of the physiological vitality of the tree. Where the term ‘condition’ is used in a report, it should not be taken as an indication of the stability of the tree.

Conservation Area: A designated area that requires notice (currently six weeks) to be given to the local planning authority prior to the commencement of any tree works.

Crown/Canopy: The main foliage bearing section of the tree.

Crown lifting: A term used to describe the removal of limbs and small branches to a specified height above ground level.

Deadwood: Branch or stem wood bearing no live tissues. Retention of deadwood provides valuable habitat for a wide range of species and seldom represents a threat to the health of the tree. Removal of deadwood can result in the ingress of decay to otherwise sound tissues and climbing operations to access deadwood can cause significant damage to a tree. Removal of deadwood is generally recommended only where it represents an unacceptable level of hazard.

Dieback: The death of parts of a woody plant, starting at shoot-tips or root-tips.

Habit: The overall growth characteristics, shape of the tree and branch structure.

Hazard beam: An upwardly curved part of a tree in which strong internal stresses may occur without being reduced by adaptive growth; prone to longitudinal splitting.

Minor deadwood: Dead wood of a diameter less than 25mm and or unlikely to cause significant harm or damage upon impact with a target beneath the tree.

Notable: Notable trees are usually mature trees which may stand out in the local environment because they are large in comparison with other trees around them

Pollarding: is the removal of the tree canopy, back to the stem or primary branches. Pollarding may involve the removal of the entire canopy in one operation or may be phased over several years. The period of safe retention of trees having been pollarded varies with species and individuals. It is usually necessary to re-pollard on a regular basis, annually in the case of some species.

Primary branch: A major branch, generally having a basal diameter greater than 0.25 x stem diameter.

Pruning: The removal or cutting back of twigs or branches, sometimes applied to twigs or small branches only, but often used to describe most activities involving the cutting of trees or shrubs.

Snag/stub: In woody plants, a portion of a cut or broken stem, branch or root which extends beyond any growing-point or dormant bud; a snag usually tends to die back to the nearest growing point.

Stem/s: The main supporting structure/s, from ground level up to the first major division into branches.

Topping: In arboriculture it is the removal of the crown of a tree, or of a major proportion of it.

Veteran tree: A loosely defined term for an old specimen that is of interest biologically, culturally or aesthetically because of its age, size or condition and which has usually lived longer than the typical upper age range for the species concerned.

1.0 Introduction

1.1 Purpose of the report

This Arboricultural Baseline Report & Impact Assessment has been prepared by SLR Consulting Limited on behalf of Juniper Energy Limited (hereafter referred to as "Juniper" and/or "the Applicant") in support of a planning application for grid connection cables ("Proposed Development") on land between National Grid Substation in Iver, Buckinghamshire and a proposed data centre and Battery Energy Storage System ("BESS") at Manor Farm, Slough ("the Site").

The planning application seeks permission for the following:

"Installation of underground and ground mounted structures to support electrical connection and communication cables with temporary construction compounds, and associated infrastructure and works."

The cable corridor passes through four different administrative boundaries of Buckinghamshire County Council ("BCC"), London Borough of Hillingdon ("LBH"), Slough Borough Council ("SBC") and Royal Borough of Windsor and Maidenhead ("RBWM"). As a result, identical applications are submitted to all four Local Planning Authorities ("LPAs").

A full planning application ref. P/10076/013 was submitted to SBC in December 2024 for a data centre and BESS ("the Facility") on land known as Manor Farm, off Poyle Road to the east of Slough. An appeal has been lodged under Section 78(2) of the Town and Country Planning Act (1990) ("TCPA") against the non-determination of the application (appeal ref. APP/J0350/W/25/3366043). The Facility is to be powered from existing substations at Iver and Laleham, which requires the creation of two electrical cable corridors to connect each substation with the Facility.

This application seeks permission for the cable corridor to the Iver Substation ("the Iver Substation Corridor"), and a separate planning application has been submitted for the route to Laleham Substation ("the Laleham Substation Corridor").

Such cabling can be installed by utility providers without the need for planning permission under Part 15 of The Town and Country Planning (General Permitted Development) (England) Order 2015 (as amended). In this case planning permission is being sought as the Applicant, a joint venture between Tritax Power Box Limited and EDF Power Solutions UK & Ireland, does not benefit from the same permitted development rights. However, the proposed development is of a form which would often be considered permitted development.

1.2 Methodology and Scope

Given that Juniper Energy Ltd have committed to a policy of 'no tree loss' during the design process, and that where there is potential for impacts of trees within and adjacent to the site, the proposed development will be installed using Horizontal Direction Drilling (HDD), or hand digging will be used, in order to maintain proportionality, where works are to be within the highway boundaries, no tree survey was undertaken. Where the application site includes areas of soft landscaping within the highway boundary or is outside the highway boundary a tree survey was conducted in line with the methodology detailed within BS 5837:2012 and included all trees within the proposed development boundary and adjacent off-site trees where there is potential for development within the site to cause direct impact.

The data recorded is shown in Appendix A (Tree Survey Schedule) and methodology used is summarised in Tables A-1 (Tree Survey Schedule Key) and A-2 (Cascade Chart of Tree Quality Assessment (Taken from BS 5837:2012)).

The tree survey data has been used to produce Tree Constraints Plans (TCP) (Appendix B). This depicts the Root Protection Area (RPA) and canopy constraints posed by the arboricultural features within the survey area.

Trees are recorded as the following arboricultural features: individual trees, tree groups, woodlands or hedgerows. In accordance with paragraph 4.4.2.3 of BS 5837:2012, trees that "*form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally, including for biodiversity (e.g. parkland or wood pasture)* have been recorded as groups.

The locations of all arboricultural features illustrated on the Tree Constraints Plan (TCP) (Appendix B) are based on a combination of Bluesky's National Tree Map (NTM)[1] data and where required augmented with GPS data collected with a Garmin GLO 2 Global Positioning System (GPS), with an accuracy of approximately +/- 3 metres, and Bluesky's National Tree Map (NTM) data. The NTM identifies trees over 3 metres in height and estimates canopy extents using proprietary algorithms that process high-resolution aerial photography, surface and terrain data, and colour infrared imagery. While this provides a helpful representation of tree locations and dimensions, all mapped features should be regarded as indicative only and confirmed by a detailed topographical survey where greater positional accuracy is required.

1.2.1 Categorisation of Arboricultural Features

In accordance with BS 5837:2012, all arboricultural features have been categorised as A, B, C or U, categories A to C are also categorised for their quality within the three subcategories of 1 (Arboricultural), 2 (Landscape) and/or 3 (Cultural). A description of each category can be found in Table A-2 (Cascade Chart of Tree Quality Assessment) of Appendix A.

The trees illustrated by the TCP are presented in line with 'Table 2: Identification of tree categories' of BS 5837:2012, reproduced below.

Table 1-1: Colour Coding of BS 5837:2012 Categories

Category	Colour	RGB Code
U	Dark red	127-000-000
A	Light green	000-255-000
B	Mid blue	000-000-255
C	Grey	091-091-091

1.2.2 Root Protection Areas (RPA)

The RPA provides a notional circular buffer around a tree, based on the stem diameter measured at 1.5m (also known as Diameter at Breast Height (DBH)**)** above ground level in accordance with Annex C of BS 5837:2012.

BS 5837:2012 defines the RPA as representing "*the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority."*

However, this is not necessarily representative of the full extent of a tree's root system e.g., the roots may extend beyond the RPA boundary on one side and remain inside it on the opposite, dependent on ground conditions and/or other pre-existing site conditions. The root

[1] The National Tree Map (NTM) is a comprehensive database of location, height and canopy/crown extents for every single tree 3m and above in height. This has been created using the most up-to-date high resolution national aerial photography, accurate terrain and surface data, and colour infrared imagery.

network extent is dependent on many factors including species, age, soil conditions, topography and exposure etc.

BS 5837 acknowledges that the following factors will influence the extent of root growth and subsequent RPA:

- past or existing site conditions, e.g. the presence of roads, structures and underground apparatus.
- topography and drainage.
- soil type and structure.
- the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

The RPA illustrated for tree groups and woodland have been calculated based on the maximum stem diameter taken for tree groups, and the maximum stem diameter for trees along the edge of woodland.

In accordance with paragraph 5.2.1 of BS 5837:2012, the TCP illustrates the RPA of category A, B and C trees only. It should be noted that although category U trees are defined as "*Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years*" they may provide conservation, heritage or landscape value, and be desirable to retain where issues concerning their safety can be appropriately managed.

1.3 Limitations and Assumptions

Limitations to the tree survey include the following key points:

- No soil survey data is included in this report.
- No data for individual trees within surveyed groups was recorded. An exception to this is when a tree was deemed notable within a group.
- Where access was restricted, tree measurement data has been estimated. This has been indicated within the Tree Survey Schedule (Appendix A) with the use of an '#' next to the tree number.
- The health and condition of trees can change rapidly and all trees, even healthy ones, are at risk from unpredictable climatic and man-made events. This report is based on the observed health and structural condition of the trees at the time of survey by suitably qualified inspectors. The health, condition and safety of trees should be checked on a basis commensurate with the level of risk and preferably on an annual basis, as recommended in Common Sense Risk Management of Trees (National Tree Safety Group, 2024). The tree survey conducted for this report is not a tree health and safety survey and should not be used as such.
- A search for symptoms of disease, parasites, or fungi that may be affecting trees was undertaken as part of the survey and noted where identified. However, symptoms are not always apparent, therefore it is possible that trees affected by disease / parasites / fungi are present within the survey area but could not be identified by surveyor.
- Where the main trunks of trees have limited access due to dense vegetation, epicormic growth or are ivy (*Hedera helix*) clad, a full inspection of the tree(s) was not possible. As such, the category grading for these trees should be considered provisional. Further inspection may be necessary following the removal of the obstruction.
- Where woodlands or large groups of trees are present, the survey has been limited to those trees within influencing distance of the site boundary that could potentially be

affected by the proposed development. This would typically include trees within 15 metres of the site boundary. However, in line with best practice, ancient or veteran trees located beyond this distance have also been considered where there is potential for direct or indirect impacts.

- The identification of veteran trees is limited to the definition within NPPF Annex 2 only. Trees meeting the definition of ‘veteran’ as defined within the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024 are not recorded.

2.0 General Arboricultural Principles

2.1 General Principles

Trees are dynamic living organisms which provide essential benefits to society and the wider environment. Any proposed development with the potential to impact on trees must take into consideration the value of trees on site, the impact of any proposed activity, and any potential future conflicts on the site. Suitable measures to safeguard retained trees or mitigate the loss of trees (to be removed) will need to be fully considered and may be subject to a condition of planning consent.

Tree branches and roots frequently grow across site boundaries and off-site trees can pose a constraint and should be carefully considered when assessing the developable space within a site.

2.2 Below Ground Constraints

Tree roots and the soil environment in which they grow need to be protected if the tree is to be retained. Trees grow in association with fungi and other soil organisms which are of key importance to tree health. Roots are essential for anchorage, the uptake of water and nutrients, and the storage of energy (carbohydrates) for the future growth and function of the tree.

Roots can be damaged by physical severance or wounding (e.g., following excavation of the soil) which can lead to the development of decay and a decline in vitality and/or instability. Raising the soil level can compact the soil and create soil unsuitable for root growth. Toxic materials discharged into the soil (such as cement-based aggregates, fuel and chemicals) can lead to root death and dysfunction. Soils can be compacted to levels inhospitable to tree growth with even a single pass of machinery, regular pedestrian traffic or the storage of plant and materials. Relieving compaction can be problematic and may require costly remedial works. Changes in drainage/water levels can also have significant long-term impacts for tree health.

The effects of these incursions may take many years to manifest, with a resulting decline in amenity value and potentially the death or failure of the tree. It should be noted that older trees are particularly sensitive to damage and changes in conditions.

The RPA is a notional area considered to be the minimum zone that must be protected to avoid any adverse impacts on retained trees. This area is deemed to be particularly important for tree stability, growth, function and health. However, roots may extend far greater distances, with the distribution of the root system relating directly to the availability of suitable conditions for growth (namely oxygen, water and nutrients). It is accepted that tree roots grow predominantly near the surface, with 80-90% being located in the upper 60cm of soil, however, roots may develop at deeper levels where conditions allow.

The RPA of the existing tree stock is an important material consideration when assessing site constraints and planning development activities. The default position should be that all development, including any associated services will occur outside the RPAs of retained trees. Where this is unavoidable, it may be appropriate to use special measures to install structures, services or surfacing within RPAs which allow the protection of roots and soil structure which are essential for tree growth and keep any incursion to a minimum. Further steps to improve or increase the useable rooting area available to the tree may also be required.

2.3 Soils

On shrinkable clay soil, tree growth can lead to the differential movement of structures as moisture is removed from the soil during the growing season. Soils must be carefully

assessed. Where trees which predate existing structures are to be removed, this can result in heave as the soils are re-wet.

The advice of a suitably qualified engineer should be obtained to inform any potential issue of heave. Specific advice in relation to this issue is beyond the scope of this report.

2.4 Above Ground Constraints

Tree stems and branches can restrict available space on a development site. Damage or wounding (including excessive pruning) can significantly reduce the amenity contribution of the tree and may lead to the development of dysfunction and decay, with significant long-term implications for tree health. The future impact of existing trees should be carefully considered, including individual species characteristics (such as potential future size, fruit fall, shade etc.) and how the tree will interact with any proposed development and future land use. Annual tree growth can lead to direct damage if stems/branches (or roots) come into physical contact with structures and this should also be taken into consideration.

2.5 Trees and Risk in the Context of Development

Tree owners/managers have a legal duty to prevent foreseeable harm. It is generally accepted that this duty can be fulfilled by undertaking proactive inspections of significant trees to identify obvious defects and by taking appropriate remedial action or gaining further advice as appropriate.

Further guidance is available from the National Tree Safety Group (https://ntsgroup.org.uk/)

The tree survey carried out as the basis of this report is primarily for planning purposes, focusing on the quality and benefits of the trees and is not specifically designed to assess the safety of the trees identified. However, when obvious issues have been identified recommendations have been included in the Tree Survey Schedule (Appendix A).

The Construction (Design and Management) Regulations (2015) states that developers and contractors have responsibilities for health and safety as a result of their actions. Should trees be left in an unstable or hazardous condition the Health and Safety Executive (HSE) could seek to prosecute those responsible along with the potential for further civil claims for damages.

2.6 Trees and Wildlife

Full consideration must be given to the presence of species protected under the Wildlife and Countryside Act (1981 - as amended), the Countryside Rights of Way Act (2000) and the Conservation of Habitats and Species Regulations (2017), in particular the presence of bats and nesting birds. It is recommended that wherever possible, significant tree/hedge works take place outside of the typical bird nesting season, typically March to August, but this may vary regionally and advice from a suitably qualified ecologist should be sought. The advice of a suitably qualified ecologist is also recommended in relation to any potential impacts on protected species.

3.0 Planning and Legal Considerations

3.1 National Planning Policy Framework (NPPF)

The National Planning Policy Framework sets out the Government's planning policies for England and how these should be applied. In respect to trees, the NPPF includes the following paragraphs

Paragraph 187 states that '*Planning policies and decisions should contribute to and enhance the natural and local environment by:*

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

Paragraph 193 states: '*When determining planning applications, local planning authorities should apply the following principles:*

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists….'

3.2 Town and Country Planning Act

Local Planning Authorities (LPA) in the UK have a statutory duty to consider both the protection and planting of trees when considering planning applications. The potential impact of development on all trees (including those not protected by a Tree Preservation Order or other statutory designation) is therefore a material consideration.

In planning terms lower quality trees can generally be removed to facilitate development where their loss can be mitigated with replacement tree planting or where no replacement planting is necessary. This is likely to apply to C category and U category trees where there are no other constraints in place (e.g., ecological or heritage). Whereas higher quality trees (A and B category) should be retained and protected wherever possible; however, in some cases it may also be feasible to remove trees of this quality where there is no reasonable alternative and where the benefit of the development outweighs the impact of the loss of the tree(s).

Prior to the removal of the trees or groups listed in this report, or any tree surgery works being undertaken, it is essential that the trees are assessed again for legal protected status. These include Tree Preservation Orders, Conservation Areas, Sites of Special Scientific Interest (SSSI), locally or nationally designated sites, designed landscapes and ancient woodland.

Works (either above or below ground) to trees protected by Tree Preservation Order or within a Conservation Area is an offence under the Town and Country Planning Act 1990 (as amended), and in the Town and Country Planning (Tree Preservation) (England) Regulations 2012 and Section 192 of the Planning Act 2008.

3.3 Tree Preservation Orders

The following acts are relevant to Tree Preservation Orders:

- Town and Country Planning Act 1990 (as amended).
- Town and Country Planning (Tree Preservation) (England) Regulations 2012.
- Planning Act 2008.
- Localism Act 2011.

A Tree Preservation Order prohibits the cutting down, topping, lopping, uprooting, wilful damage and wilful destruction of trees without the Local Planning Authority's written consent. If consent is given, it can be subject to conditions which have to be followed. The cutting of roots is also a prohibited activity and requires the Local Planning Authority's consent.

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

There is also a duty requiring landowners to replace a tree removed, uprooted or destroyed in contravention of a Tree Preservation Order.

Anyone found guilty in the magistrates' court of an offence under section 210(4) is liable to a fine of up to Level 4 (currently £2,500).

3.4 Conservation Areas

Trees in a Conservation Area that are not protected by a Tree Preservation Order are protected by the Town and Country Planning Act 1990. These provisions require people to notify the local planning authority, using a 'section 211 notice', 6 weeks before carrying out certain work on such trees, unless an exception applies. The work may go ahead before the end of the 6-week period if the local planning authority gives consent. This notice period gives the authority an opportunity to consider whether to make an Order on the tree.

The authority then has six weeks to respond. Objections to the works will lead to a Tree Preservation Order being placed on tree groups or individual trees.

Anyone who cuts down, uproots, tops, lops, wilfully destroys or wilfully damages a tree in a Conservation Area (if that tree is not already protected by an Order), or causes or permits such work, without giving a Section 211 notice (or otherwise contravenes Section 211 of the Town and Country Planning Act 1990) is guilty of an offence, unless an exception applies. The same penalties as those for contravening a Tree Preservation Order apply.

3.5 Felling Licence

The felling of trees is regulated in England by the Forestry Act 1967 (the Act). Forestry England (FE) is the government regulator that enforces the provisions of the Act.

The felling of growing trees in England is restricted under section 9 of the Act. It requires that felling is either authorised by a felling licence issued by the FE or the felling activity is exempt from the need for a licence.

There are many exceptions to the need for a licence, based on the type of tree, the location of the tree, the size of the tree, the nature and scope of the felling activity and the person responsible for the felling. These are primarily set out in section 9 of the Act as well as the Forestry (Exceptions from Restriction of Felling) Regulations 1979.

The most relevant exemption is;

'Section 9-Requirement of licence for felling (1) A felling licence granted by the appropriate forestry authority shall be required for the felling of growing trees, except in a case whereby or under the following provisions of this Part of this Act this subsection is expressed not to apply…

(d) is immediately required for the purpose of carrying out development authorised by planning permission granted or deemed to be granted under the Town and Country Planning Act 1990

or the enactments replaced by that Act, or under the Town and Country Planning (Scotland) Act 1997.'

Advice from a suitably qualified arboriculturist should be sought before any felling takes place on site.

The granting of permission to remove trees covered by a Tree Preservation Order by the Local Planning Authority does not remove the need to obtain a felling licence from the Forestry Commission if more than $5m^3$ of timber are to be felled in a calendar quarter and none of the exemptions apply.

4.0 Tree Survey

The site was visited and surveyed by a qualified SLR arboriculturist on the 22nd May, 19th June, and 16th and 17th September 2025.

4.1 Desk Study

The proposed cable route passes through the following local authorities:

- Buckinghamshire County Council
- London Borough of Hillingdon
- Slough Borough Council
- Royal Borough of Windsor and Maidenhead

4.1.1 Tree Preservation Orders

A check for Tree Preservation Orders (TPOs) was undertaken on 30th September as detailed below.

- Buckinghamshire County Council interactive map (Chiltern and South Bucks Area TPO Search) confirmed the following TPO are adjacent to the application boundary:
    - Iver Lane, Iver: SBDC/2000/44 (G1, T1 to T8)
    - North Park, Iver: SBDC/1989/03-T1
    - North Park, Iver: BCC/1952/18
- London Borough of Hillingdon interactive map Protected Trees confirmed the following TPO are adjacent to the application boundary:
    - St John's Road, Uxbridge: 426, 637 and 283
    - Whitehall Road, Uxbiridge: 727, 79, 108 and 178
    - Station Road, Cowley: 272, 357 and 177
    - Iver Lane, Iver: 10
- Slough Borough Council interactive map (https://maps.slough.gov.uk/connect/analyst/mobile/#/) confirmed the following TPO are adjacent to the application boundary:
    - High Street, Langley: 1981-10/Tithe Farm and 1981-10/T1
    - London Road, Langley: 1954-01/London Road and 1/1954-T9, 1998-01/47 London Road, Slough: 1998-01 T1 to T18, 2006-09/597 London Road 9/2006-G11 and 9/2006-T1
    - Laburnum Grove, Slough: 2012-03/Laburnum Grove and 1992-01/63-79 Laburnum Grove
- Royal Borough of Windsor and Maidenhead have no online TPO map and were contacted via email and we are awaiting a response.

4.1.2 Conservation Areas

A check for Conservation Areas (CAs) was undertaken on 30th September using the interactive mapping tools provided by the relevant local authorities as detailed below.

- Buckinghamshire County Council interactive map (Chiltern and South Bucks Area TPO Search) confirmed the Site is within or adjacent to the following Conservation Areas:
    - Iver
- London Borough of Hillingdon interactive map Heritage Assets confirmed the Site is within or adjacent to the following Conservation Areas:
    - Uxbridge Moor
    - Rockingham Bridge
    - The Greenway
    - Cowley Lock
- Slough Borough Council: The interactive TPO map (https://maps.slough.gov.uk/connect/analyst/mobile/#/) confirmed there are no Conservation Area within or adjacent to the site.
- Royal Borough of Windsor and Maidenhead: The interactive TPO map Royal Borough of Windsor and Maidenhead: Maps confirmed there are no Conservation Area within or adjacent to the site. Ancient Woodland

The Ancient Woodland Inventory was checked on the 30th September for the presence of ancient woodland within or adjacent to the study area. This inventory is located on the Multi-Agency Geographical Information for the Countryside (MAGIC) website (https://magic.defra.gov.uk/MagicMap.html). This is a spatial dataset that describes the geographic extent and location of Natural Environment and Rural Communities Act (2006) Section 41 habitats of principal importance.

No part of site is listed in the Ancient Woodland Inventory.

4.1.3 Ancient and Veteran Trees

The Ancient Tree Inventory (https://ati.woodlandtrust.org.uk) was checked on 30th September for the presence of verified veteran/ancient trees within the survey area. National Planning Policy Framework (Ministry of Housing, Communities & Local Government, 2024) refers to veteran trees as "*irreplaceable habitat*" which due to their "*age, size and condition, is of exceptional biodiversity, cultural or heritage value*".

No trees within the site boundary appeared within this inventory. SLR's qualified arboriculturists did not identify any trees, during survey, which they considered ancient or veteran (as defined within NPPF Annex 2, Dec 2024).

4.2 Field Survey

4.2.1 General Site Observations

The proposed cable corridor is primarily located within the highway network, and, where feasible, within the adjacent soft verges within a predominantly urban setting.

Various individual trees and groups of trees are present along the route, comprising a range of native and non-native species, with a broad mix of age and size classes. These trees are typically located within highway verges, adjacent private land, and areas of informal public open space. Tree cover along the route provides screening to residential properties or transport corridors.

4.2.2 Tree Survey Results

The full findings of the tree survey are presented in the Appendix A (Tree Survey Schedule) and Appendix B (Tree Constraints Plans).

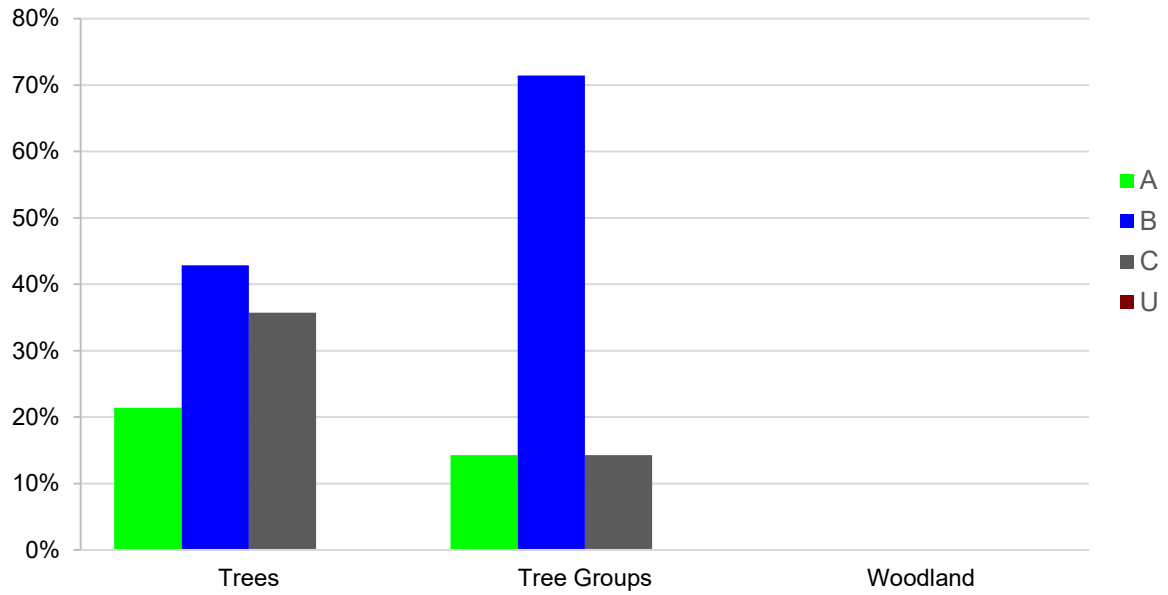
Table 4-1 below provides a summary of the numbers of arboricultural features recorded within each BS 5837 category.

Table 4-1: Arboricultural Features by BS 5837:2012 Category.

Category	Trees	Tree Groups	Woodland	Hedgerows	Total
A	3	6	0	N/A	9
B	6	30	0	N/A	36
C	5	6	0	N/A	11
U	0	0	0	N/A	0
Totals	14	42	0	4	60

Figure 4-1 below provides a graphical summary of the BS 5837:2012 categories for each feature (trees, tree groups, woodland and hedgerows) recorded during the survey.

Figure 4-1: Summary of BS 5837:2012 Categories by Arboricultural Feature



The following general principles should be applied when considering development within the site:

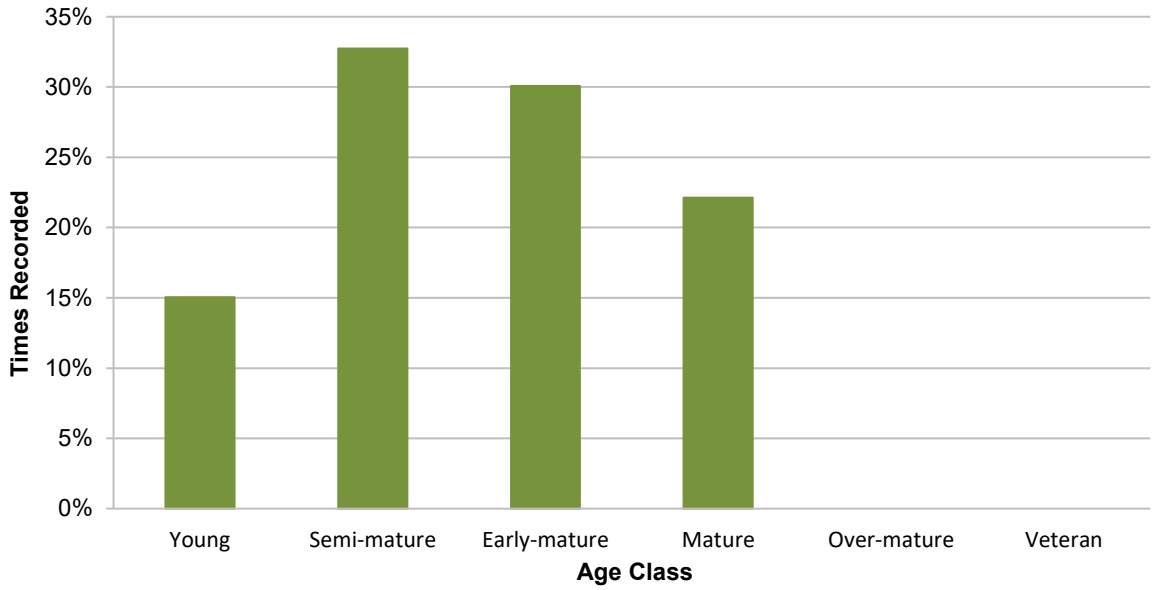
- Category ‘A’ trees are of high quality and value and should be retained.
- Category ‘B’ trees are of moderate quality and value and should be considered for retention where possible, although care should be taken to avoid misplaced retention. Any scheme should consider the retention and protection of trees, but also the tree’s future growth.
- Category ‘C’ trees are of low quality and value and should not place a constraint on the proposals.

- From an arboricultural point of view, the Category 'U' trees cannot realistically be considered for retention as a living tree in the context of the current land use due to their low life expectancy of less than 10 years in their current poor condition.

4.2.2.1 Age Class Diversity

The age diversity of features recorded during the survey is illustrated in Figure 4-2 below. It should be noted that this includes for features such as groups and woodland where more than one age class may be present.

Figure 4-2: Summary of BS 5837:2012 Age Classes

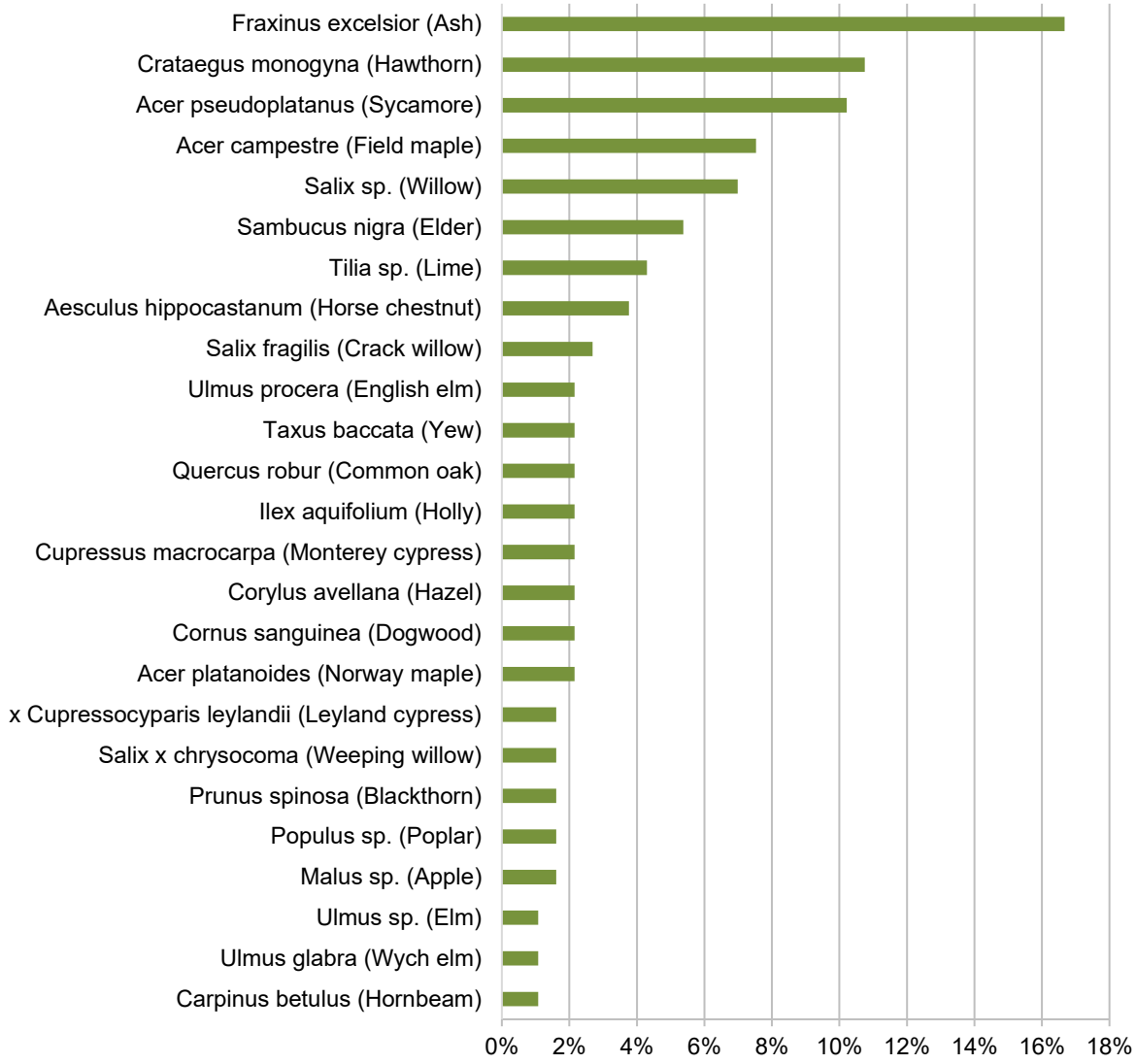


4.2.2.2 Species Diversity

The tree survey recorded forty-two different species. Figure 4-3 provides a summary of the key species recorded as individual trees, tree groups, woodlands and hedgerows. It should be noted that this does not represent the numbers of each species but provides a summary of times a species is recorded. The following species were also recorded during the survey but individual species represent less than 1% of the records have not been included in the chart below:

- *Acer negundo* (Box elder), *Acer saccharinum* (Silver maple), *Alnus glutinosa* (Common alder), *Alnus incana* (Grey alder), *Alnus* sp. (Alder), *Betula pendula* (Silver birch), *Cedrus* sp. (Cedar), *Chamaecyparis lawsoniana* (Lawson cypress), *Fraxinus* sp. (Ash), *Juglans regia* (Common walnut), *Paulownia tomentosa* (Foxglove tree), *Pinus* sp. (Pine), *Pinus sylvestris* (Scots pine), *Populus x canadensis* (Hybrid black poplar), *Prunus domestica* (Damson), *Quercus petraea* (Sessile oak), *Salix alba* (White willow),

Figure 4-3: Summary of Tree Species Recorded



5.0 Arboricultural Impact Assessment

The Arboricultural Impact Assessment (AIA) sets out the direct and indirect impacts of the proposed development on the trees on or immediately adjacent to the site and provides suitable mitigation measures to allow for the successful retention of all the retained trees or to compensate for trees to be removed, where appropriate.

5.1 Proposed Development

The proposed development will be majority underground and will involved the following:

- The excavation of a temporary trench to accommodate the cabling infrastructure consisting of up to two 33 kilovolt *kV) dual circuits, together with associated communications cabling, unless a trenchless solution is proposed, for example under the M25 infrastructure or watercourse.
- In limited sections, the cable may be located above ground, for example connected to a bridge structure.
- Each 33kV cable will comprise of three strands of cables, with each cable in a separate duct.
- The construction trench will be approximately 0.6 m wide and a depth of up to 3 m, however it will typically be 1.0 m deep.
- The construction trench will be infilled once the required cabling components have been laid.
- At approximately 500 m intervals along the grid connection route, it is necessary to install a joint bay where lengths of the cable can be joined together. Each joint pit would be below ground level and would measure circa 500 m x 300 mm.

Juniper Energy Ltd have committed to a policy of ‘no tree loss’ during the design process, as such where there is potential for impacts of trees within and adjacent to the site, the proposed development will be installed using Horizontal Direction Drilling (HDD) to enable all construction works to remain outside the RPA and canopy extents of trees within and adjacent to the site.

Any HDD will be undertaken at least 1m below ground level, with the entry/exit pits located outside any RPA and canopy extents of adjacent trees thus removing the potential for impacts on trees within or adjacent to the route.

The construction works will also follow the requirements of NJUG Volume 4, *Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees* which includes the following:

- *To prevent root damage from percussive boring, trenchless service runs should be installed at least 600mm below ground level.*
- *Boring equipment must not be lubricated with anything other than water when working within the Prohibited Zone—materials such as oil or bentonite are not permitted.*
- *Launch and reception pits for trenchless installations must be positioned outside the RPAs of all retained trees.*

Should it be found that there are constraints which prevent the use of HDD within specific areas, small sections of the cable would be installed in accordance with the following NJUG recommendations for hand-dig methodologies:

- *Trenches will be excavated using hand-dig methodology. The excavation will proceed in small increments, with careful monitoring for roots. Any roots over 25mm in diameter will be retained and accommodated where feasible.*
- *Where significant roots are encountered and installation cannot continue, an alternative route should be considered, if no alternative route is available excavation will transition to air spading to avoid unnecessary root damage.*
- *Exposed roots will be covered with damp hessian to prevent desiccation. Where roots require pruning, this will be undertaken using sharp, clean tools in accordance with BS 3998:2010 (Tree Work – Recommendations).*
- *The trench will be backfilled with the original excavated soil where suitable. If compaction has occurred or soil conditions are poor, an appropriate rooting substrate, such as a mix of topsoil, sharp sand, and organic matter (e.g. well-composted woodchip or leaf mould), will be used to maintain soil structure, porosity, and nutrient availability. This will promote root recovery and sustained tree health.*
- *All works within the RPA will be supervised by a qualified arboriculturist to ensure compliance with best practice and to make on-site decisions regarding root retention.*

By following these precautions, the impact on retained trees will be minimised, ensuring their long-term health and structural integrity.

Due to health and safety risks, it was not possible to record survey data from a number of locations adjacent to the application boundary, these areas include (but are not limited to): sections of Iver Lane, Thorney Lane North and Horton Road. As stated in Section 1.1, the site forms a corridor for the proposed development as flexibility is required to allow for unforeseen construction constraints. Should works be required within the proximity to any unsurveyed trees, the guidance within NJUG Volume 4, Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees would be followed, including seeking advice from a suitably qualified arboriculturist and liaising with the local authority Tree Officer prior to undertaking any works.

5.1.1 Watercourse Crossings

Watercourses crossed by the cable route will be crossed via a variety of methods as detailed in Table 5-1 below and include (but not limited to) open-cut channel work, on-bridge and trenchless solutions such as Horizontal Directional Drilling (HDD). The determination of the appropriate method in each case will be subject to determination at a later stage.

Table 5-2: Proposed Watercourse Crossings

Crossing Number	Watercourse Name	Crossing Type	Crossing Description
I-1	River Colne / Colne Brook	On bridge solution	On bridge solution crossing of the River Colne / Colne Brook using the existing bridge along the A4007
I-2	Grand Union Canal	On bridge solution	Cable to be installed using an on-bridge solution over the Grand Union Canal along the A4007
I-3	Fray's River	On bridge solution	Cable to be installed using an on-bridge solution over the Frays' River along the A4007
I-4	Fray's River	On bridge solution	Cable to be installed using an on-bridge solution over the Fray's River along Iver Lane

Crossing Number	Watercourse Name	Crossing Type	Crossing Description
I-5	Grand Union Canal	Trenchless	Trenchless Solution under the Grand Union Canal
I-6	River Colne	On bridge solution	Cable to be installed using an on-bridge solution over the River Colne along Iver Lane
I-7	Unnamed Ditch 01	Excavation underneath Culvert	Crossing of ditch along Iver Lane underneath the existing culvert
I-9	Colne Brook	Trenchless	Trenchless crossing of the Colne Brook to the south of the B470 Iver Lane
I-10	Grand Union Canal	On bridge solution	On bridge crossing of the Grand Union Canal along Thorney Lane North
I-12	Horton Brook	On bridge solution	Cable to be installed using an on-bridge solution over the Horton brook along North Park
I-14	Horton Brook	Trenchless	Trenchless crossing of the Horton Brook from Crown Meadow Nature Site across to Horton Road
I-15	Unnamed Ditch 02	On bridge solution	Cable to be installed using an on-bridge solution over Unnamed ditch 02 at Stanwell Road.
I-16	Colne Brook	On bridge solution	Cable to be installed using an on-bridge solution over Colne Brook at Stanwell Road.
I-17	Unnamed Main River 01	On bridge solution	Cable to be installed using an on-bridge solution over Unnamed Main River 01 at Stanwell Road.

5.1.2 M25 Crossing

The proposed cable route is required to cross the M25 between Ford Lane and the B470 Iver Lane which includes substantial areas of trees. This section will be installed using HDD with entry and exist pits located outside the extents of all adjacent trees to avoid potential arboricultural impacts.

5.2 Tree Protection Fencing

Where construction works are required within the proximity of tree canopies and RPA as illustrated on the Tree Constraints Plan (Appendix A) temporary fencing to meet the requirements of BS 5837 will be installed.

5.3 Trees to be Removed

No trees are to be removed during the construction of the proposed development.

5.4 Trees Work

Due to the context of the proposed development largely being within a highway context, trees work will only be necessary where the proposed development is installed within verges or footpaths. Dependent upon the final route of the cable, there may be a requirement for minor trees works to facilitate construction access. Where required, tree works will be kept to a minimum and follow the recommendations of *BS 3998: 2010 Tree Work – Recommendations* and be carried out by suitably qualified and insured contractors.

6.0 Conclusions

6.1 Baseline Survey

The BS 5837:2012 compliant tree survey conducted on 22nd May, 19th June , and 16th and 17th September 2025, recorded:

- Fourteen individual trees (three category A, six category B and five category C).
- Forty-two tree groups (six category A, thirty category B and six category C).
- Four hedgerows.

There are 53 trees and tree groups subject to Tree Preservation Orders located adjacent to the application site, as illustrated on the Tree Constraints Plan.

No areas along the proposed route are part of a Conservation Area.

No part of site is listed in the Ancient Woodland Inventory

No ancient and/or veteran trees are present within or adjacent to the application site.

6.2 Summary of Arboricultural Impacts

The proposed development will not require the removal of any trees.

Where the proposed cable is located within the RPA of trees, appropriate construction methods, such as Hydraulic Directional Drilling (HDD) or hand digging trenches will be used.

All trees/groups and hedgerows within the application site are to be retained.

7.0 References

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Forestry Commission. 2023. *Tree Felling – Getting Permission*.

Lonsdale, D., 1999. *Principles of tree hazard assessment and management*. London: TSO.

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National Tree Safety Group. 2024. *Common sense risk management of trees*.

Appendix A Tree Survey Schedule

Manor Farm Cable – Iver Substation Corridor Route

Tree Survey Report & Arboricultural Impact Assessment

Juniper Energy Ltd

SLR Project No.: 402.065673.00001

October 2025

Table A-1: Tree Survey Schedule

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G1	*Salix* sp. (Willow) *Fraxinus excelsior* (Ash) *Tilia* sp. (Lime) *Populus* sp. (Poplar) *Prunus spinosa* (Blackthorn)	5 - 15	480 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	0 - 2	Semi-mature Mature	Dead specimen(s) Crown reduced Ivy clad stem Dieback - Minor	40+	B2	5.8
G2	*Salix fragilis* (Crack willow) *Fraxinus excelsior* (Ash)	13 - 15	950 maximum	As shown on Tree Constraints Plan. Average canopy spread 12.5m				N/A	2 - 3	Mature	Multi-stemmed Ash die back Tearouts Old pruning wounds Ivy clad stem - not fully surveyed	40+	A2	11.4
T3	*Salix fragilis* (Crack willow)	10	840	8.5	5.5	4	4#	2 - E	0.5 - 4	Mature	Tearouts Cavities Old pruning wounds Dieback - Minor Leaning significantly to the east, self corrects at 25m	40+	A1	10.1
T4	*Salix fragilis* (Crack willow)	18	1160	9.5	15	9	8#	4 - E	3 - 6	Mature	Dieback - Minor Tearouts Bark wound Fungal fruiting bodies Leaning heavily to the east	40+	A1	13.9
G5	*Salix* sp. (Willow) *Fraxinus excelsior* (Ash)	10 - 14	650 maximum	As shown on Tree Constraints Plan. Average canopy spread 11m				N/A	2 - 5	Semi-mature Mature	Dead specimen(s) Crown reduced Ivy clad stem - not fully surveyed Dieback - Minor	40+	B2	7.8
T6	*Malus* sp. (Apple)	6	230	5	2.5	3	4	1 - All	1 - 2	Semi-mature	No obvious visible defects	40+	B1	2.8
T7	*Chamaecyparis lawsoniana* (Lawson cypress)	11	550	6.5	6#	4.5	5	1 - N	0 - 1	Early-mature	Crown lifted Dieback - Minor	40+	C1	6.6
G8	*Cupressus macrocarpa* (Monterey cypress) *Prunus* sp. (Cherry) *Malus* sp. (Apple)	10 - 14	500 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 4	Early-mature	Cut back from road and bin store	20-40	B2	6
G9	*Fraxinus excelsior* (Ash) *Aesculus hippocastanum* (Horse chestnut) *Prunus* sp. (Cherry) *Sambucus nigra* (Elder) *Ulmus procera* (English elm) *Acer pseudoplatanus* (Sycamore) *Ilex aquifolium* (Holly) *Populus* x *canadensis* (Hybrid black poplar) *Ulmus glabra* (Wych elm) *Crataegus monogyna* (Hawthorn) *Corylus avellana* (Hazel)	5 - 20	800 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	0 - 8	Young Mature	Mutual suppression Many ivy clad - not fully surveyed Crown lifted over road Ash die back	40+	A2	9.6
H10	x *Cupressocyparis leylandii* (Leyland cypress)	18	300 average	As shown on Tree Constraints Plan.				N/A	N/A	Early-mature	Unmanaged Low canopies dead	40+	N/A	3.6

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
				Average hedgerow width 6m										
T11	*Quercus robur* (Common oak)	18	900#	10	9#	8	8	3.5 - NW	4 - 10	Mature	Cut back from drive leaving long stubs Deadwood Not accessible, in private gardens - not fully surveyed	40+	A3	10.8
H12	x *Cupressocyparis leylandii* (Leyland cypress) *Acer platanoides* (Norway maple) *Taxus baccata* (Yew) *Cupressus macrocarpa* (Monterey cypress)	6	200 average	As shown on Tree Constraints Plan. Average hedgerow width 4m				N/A	N/A	Semi-mature	Partially managed/flailed In private residence - not fully surveyed	20-40	N/A	2.4
G13	*Crataegus monogyna* (Hawthorn) *Sambucus nigra* (Elder) *Fraxinus excelsior* (Ash) *Acer pseudoplatanus* (Sycamore) *Salix* sp. (Willow) *Aesculus hippocastanum* (Horse chestnut) *Acer platanoides* (Norway maple)	3 - 18	700 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 5	Young Mature	Many ivy clad Mutual suppression and etiolated Lifted over road Signs of ash die back	40+	B2	8.4
G14	*Acer pseudoplatanus* (Sycamore) *Taxus baccata* (Yew) *Fraxinus excelsior* (Ash) *Cupressus macrocarpa* (Monterey cypress) *Ulmus procera* (English elm) *Crataegus monogyna* (Hawthorn)	8 - 20	600 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	1 - 5	Semi-mature Mature	Mutual suppression Etiolated Some ivy clad In private property - not fully surveyed	40+	B2	7.2
G15	*Salix* x *chrysocoma* (Weeping willow) *Acer negundo* (Box elder) *Tilia* sp. (Lime)	14 - 20	800 maximum	As shown on Tree Constraints Plan. Average canopy spread 5m				N/A	0 - 5	Early-mature Mature	Associated with river Some ivy clad Mutual suppression	40+	A2	9.6
G16	*Fraxinus excelsior* (Ash) *Salix* x *chrysocoma* (Weeping willow) *Acer pseudoplatanus* (Sycamore) *Crataegus monogyna* (Hawthorn)	4 - 20	700 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 6	Semi-mature Mature	Many ivy clad - not fully surveyed Associated with river Ash die back Mutual suppression	40+	B2	8.4
G17	*Alnus incana* (Grey alder) *Prunus* sp. (Cherry) *Fraxinus excelsior* (Ash)	10 - 16	340 maximum	As shown on Tree Constraints Plan. Average canopy spread 2.5m				N/A	2 - 4	Semi-mature Early-mature	Many Prunus infected with *Phellinus pomaceus* Mutual suppression Some ivy clad Ash die back One dead tree	20-40	B2	4.1
T18	*Acer saccharinum* (Silver maple)	20	750	7	8	7.5	8	4 - S	2.5 - 5	Mature	Numerous small branches shed Epicormic growth at base Low limb on south side removed, showing internal decay	20-40	B1	9

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G19	*Acer campestre* (Field maple) *Acer pseudoplatanus* (Sycamore) *Betula pendula* (Silver birch)	8 - 14	350 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	1.5 - 3	Semi-mature Early-mature	Street trees in verge and private residence Crown lifted over road and pavement	40+	B2	4.2
G20	*Acer campestre* (Field maple) *Fraxinus excelsior* (Ash) *Tilia* sp. (Lime)	14 - 16	320 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	2 - 3	Semi-mature Early-mature	Single age planting Minor mutual suppression In grass Ash die back	40+	B2	3.8
G21	*Tilia* sp. (Lime) *Acer pseudoplatanus* (Sycamore) *Cupressus macrocarpa* (Monterey cypress) *Prunus* sp. (Cherry) *Ilex aquifolium* (Holly)	3 - 16	400 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	2 - 5	Semi-mature Early-mature	In private gardens - not accessible, not fully surveyed	20-40	B2	4.8
G22	*Acer pseudoplatanus* (Sycamore) *Crataegus monogyna* (Hawthorn) *Sambucus nigra* (Elder) *Fraxinus excelsior* (Ash) *Cornus sanguinea* (Dogwood) *Salix fragilis* (Crack willow) *Populus* sp. (Poplar)	3 - 19	850 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 8	Young Mature	Associated with river Many ivy clad - not fully surveyed Crown lifted over industrial estate Mutual suppression Cut back from footpath	40+	B2	10.2
G23	*Fraxinus excelsior* (Ash) *Carpinus betulus* (Hornbeam) *Acer pseudoplatanus* (Sycamore)	4 - 10	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	2 - 2.5	Semi-mature	Tree planting along edge of pub car park Most Ivy clad - not fully surveyed Spacing approximately 5m	40+	B2	3.6
G24	*Salix* sp. (Willow) *Carpinus betulus* (Hornbeam) *Salix* x *chrysocoma* (Weeping willow) *Fraxinus excelsior* (Ash) *Acer pseudoplatanus* (Sycamore) *Alnus* sp. (Alder)	12 - 20	900 maximum	As shown on Tree Constraints Plan. Average canopy spread 5m				N/A	2 - 5	Semi-mature Mature	Not fully accessed Many ivy clad - not fully surveyed Associated with river Ash die back Within pub car park Some mutual suppression	40+	A2	10.8
G25	*Fraxinus excelsior* (Ash) *Acer pseudoplatanus* (Sycamore) *Crataegus monogyna* (Hawthorn) *Prunus domestica* (Damson)	3 - 19	750 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 6	Young Mature	Ash die back Many ivy clad - not fully surveyed Occasional gaps	40+	B2	9
G26	*Aesculus hippocastanum* (Horse chestnut) x *Cupressocyparis leylandii* (Leyland cypress) *Fraxinus excelsior* (Ash) *Crataegus monogyna* (Hawthorn)	5 - 20	750 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	0 - 6	Semi-mature Mature	Planting between road and property Four large trees then smaller understorey Ivy up trees and fence - not fully surveyed	40+	B2	9
G27	*Ulmus glabra* (Wych elm) *Acer pseudoplatanus* (Sycamore) *Acer campestre* (Field maple) *Sambucus nigra* (Elder) *Fraxinus excelsior* (Ash) *Salix* sp. (Willow)	5 - 18	800 maximum	As shown on Tree Constraints Plan. Average canopy spread 3.5m				N/A	0 - 6	Young Mature	Mutual suppression Etiolated Many ivy clad - not fully surveyed Ash die back Associated with river	40+	B2	9.6

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G28	*Fraxinus excelsior* (Ash) *Quercus petraea* (Sessile oak) *Acer pseudoplatanus* (Sycamore) *Tilia* sp. (Lime) *Crataegus monogyna* (Hawthorn) *Aesculus hippocastanum* (Horse chestnut) *Ilex aquifolium* (Holly)	4 - 18	750 maximum	As shown on Tree Constraints Plan. Average canopy spread 3.5m				N/A	0 - 6	Young Mature	Mixed age group Many ivy clad - not fully surveyed Mutual suppression Separates footpath from road Ash die back	40+	A2	9
G29	*Acer campestre* (Field maple) *Fraxinus excelsior* (Ash) *Crataegus monogyna* (Hawthorn) *Sambucus nigra* (Elder) *Cornus sanguinea* (Dogwood)	2 - 6	180 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 3	Semi-mature	Lapsed hedgerow, partly managed	40+	C2	2.2
G30	*Acer campestre* (Field maple) *Salix* sp. (Willow) *Quercus robur* (Common oak) *Sambucus nigra* (Elder)	6 - 10	240 maximum	As shown on Tree Constraints Plan. Average canopy spread 5m				N/A	0 - 2	Semi-mature	Not fully surveyed Not accessible	40+	C2	2.9
T31	*Sambucus nigra* (Elder)	5	230, 170, (286)	2.5	2.5	2.5	3	2 - N	2 - 3	Semi-mature	Twin-stemmed Old pruning wounds	40+	C1	3.4
T32	*Fraxinus excelsior* (Ash)	6	160	2.5	2.5	3	2.5	1 - S	0.5 - 1	Young	Ash die back	<10	C1	1.9
G33	*Salix* sp. (Willow) *Corylus avellana* (Hazel) *Acer pseudoplatanus* (Sycamore) *Crataegus monogyna* (Hawthorn)	8 - 10	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 6m				N/A	2 - 3	Semi-mature Early-mature	Not fully surveyed Not accessible	40+	C2	3.6
G34	*Cornus sanguinea* (Dogwood) *Fraxinus excelsior* (Ash) *Acer campestre* (Field maple) *Crataegus monogyna* (Hawthorn) *Prunus* sp. (Cherry)	6 - 10	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	0 - 3	Semi-mature	Not accessible - not fully surveyed Surveyed from roadside only Access into field not possible	40+	B2	3.6
G35	*Cornus sanguinea* (Dogwood) *Fraxinus excelsior* (Ash) *Acer campestre* (Field maple) *Crataegus monogyna* (Hawthorn) *Acer pseudoplatanus* (Sycamore) *Tilia* sp. (Lime) *Prunus spinosa* (Blackthorn)	6 - 10	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 5.5m				N/A	0 - 3	Semi-mature	Not accessible - not fully surveyed Surveyed from roadside only	40+	C2	3.6
H36	*Crataegus monogyna* (Hawthorn) *Acer campestre* (Field maple) *Acer pseudoplatanus* (Sycamore)	2	100 average	As shown on Tree Constraints Plan. Average hedgerow width 1.8m				N/A	N/A	Semi-mature	Heavily managed/flailed	40+	N/A	1.2

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G37	*Ilex aquifolium* (Holly) *Fraxinus excelsior* (Ash) *Acer pseudoplatanus* (Sycamore) *Salix* sp. (Willow) *Ulmus procera* (English elm) *Taxus baccata* (Yew) *Acer campestre* (Field maple) *Sambucus nigra* (Elder)	2 - 18	550 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 4	Young Early-mature	Mutual suppression Some ivy clad - not fully surveyed Ash die back	40+	B2	6.6
T38	*Juglans regia* (Common walnut)	15	600	6	7	7.5	6	2 - W	1.5 - 3	Early-mature	Minor deadwood Cars parking within RPA	40+	B1	7.2
G39	*Crataegus monogyna* (Hawthorn) *Prunus spinosa* (Blackthorn) *Fraxinus excelsior* (Ash) *Acer campestre* (Field maple) *Corylus avellana* (Hazel) *Ulmus procera* (English elm)	2 - 16	400 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 3	Young Early-mature	Similar aged group Planting to industrial estate Mutual suppression Ash die back Not fully surveyed due to busy fast road	40+	B2	4.8
G40	*Fraxinus excelsior* (Ash) *Malus* sp. (Apple) *Ulmus* sp. (Elm) *Acer pseudoplatanus* (Sycamore) *Aesculus hippocastanum* (Horse chestnut)	6 - 16	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 5	Young Early-mature	Mutual suppression Surveyed from other side of road Ivy clad - not fully surveyed Screening value Cut back from road	40+	B2	3.6
G41	*Quercus robur* (Common oak) *Aesculus hippocastanum* (Horse chestnut)	14 - 16	600 maximum	As shown on Tree Constraints Plan. Average canopy spread 5m				N/A	0 - 4	Mature	3 trees, 2 oaks, 1 horse chestnut Mutual suppression Ivy clad - not fully surveyed	40+	A2	7.2
G42	*Pinus sylvestris* (Scots pine)	12 - 14	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 2.5m				N/A	0 - 3	Early-mature	3 trees Ivy clad - not fully surveyed	40+	B2	3.6
G43	*Tilia* sp. (Lime)	8 - 12	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 2	Semi-mature	Line of trees along edge of road Epicormic growth	40+	B2	3.6
H44	*Acer campestre* (Field maple) *Crataegus monogyna* (Hawthorn) *Sambucus nigra* (Elder)	7	200 average	As shown on Tree Constraints Plan. Average hedgerow width 4m				N/A	N/A	Semi-mature	Occasional gaps Unmanaged	20-40	N/A	2.4
G45	*Fraxinus excelsior* (Ash) *Acer platanoides* (Norway maple)	14 - 16	380 maximum	As shown on Tree Constraints Plan. Average canopy spread 3.5m				N/A	1.5 - 3	Early-mature	3 ash and one maple Ash die back Exposed roots Mutual suppression	20-40	B2	4.6

Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G46	*Salix* sp. (Willow) *Ulmus* sp. (Elm) *Crataegus monogyna* (Hawthorn)	4 - 16	200 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 1	Young Semi-mature	Ivy clad - not fully surveyed Mutual suppression Screening park from road Roadside edge faced up as a hedgerow Ash infected with ash die back disease	40+	B2	2.4
T47	*Salix* sp. (Willow)	18	296	13	14	10	12	2 - S	1 - 4	Mature	Ivy clad - not fully surveyed Partial tear out wound Deadwood Branch cut back from access track	40+	B1	10.7
G48	*Crataegus monogyna* (Hawthorn) *Corylus avellana* (Hazel) *Prunus* sp. (Cherry) *Salix* sp. (Willow) *Acer campestre* (Field maple)	6 - 14	350 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	0 - 3	Semi-mature Early-mature	Ivy clad - not fully surveyed Some collapsed specimens Cut back from path Mutual suppression	20-40	B2	4.2
T49	*Salix* sp. (Willow)	16	343	8	11	12	8	0 - S	0 - 3	Mature	One partially collapsed stem with subsequent regrowth Ivy clad – not fully surveyed splitting stem Crown lifted over path	20-40	B1	10.1
T50	*Fraxinus excelsior* (Ash)	18	350	6	7	7.5	6	3.5 - SW	1 - 4	Early-mature	Previously crown lifted Partially occluded wound on trunk with decay Infected with ash die back disease	10-20	C1	4.2
G51	*Salix* sp. (Willow) *Alnus glutinosa* (Common alder) *Crataegus monogyna* (Hawthorn) *Fraxinus excelsior* (Ash) *Taxus baccata* (Yew)	8 - 18	350 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 2	Young Early-mature	Several specimens have historic pollarding Ash die back Growing on boggy ground Phoenix trees Collapsed trees Mutual suppression Screening value from road Associated with water course Many ivy clad - not fully surveyed	40+	B2	4.2
T52	*Fraxinus excelsior* (Ash)	10	500, 400, (640)	5	5	5	5	3 - N	3 - 5	Mature	Twin-stemmed Ash die back Not fully surveyed Not accessible Road works restricts access, first branch n/a, measurements estimated, canopy as per NTM	<10	C1	7.7
G53	*Fraxinus excelsior* (Ash) *Acer platanoides* (Norway maple)	10 - 16	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	Min Clearance - 23	Semi-mature Early-mature	Mutual suppression Ash die back	20-40	B2	3.6

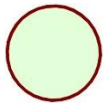
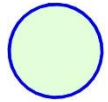
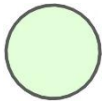
Ref No.	Species Botanical name (Common Name)	Estimated Height (m)	Stem Diameter (mm)	Canopy Extent (m)				First Significant Branch (m) and Direction	Canopy Clearance Height (m)	Life Stage	Observations	Estimated Remaining Contribution (years)	Category	RPA Radius (m)
				N	S	E	W							
G54	*Cedrus* sp. (Cedar) *Pinus* sp. (Pine) *Prunus* sp. (Cherry) *Paulownia tomentosa* (Foxglove tree)	6 - 13	500 maximum	As shown on Tree Constraints Plan. Average canopy spread 3.5m				N/A	1.5 - 3	Young Early-mature	Snapped branches	40+	B2	6
G55	*Salix alba* (White willow) *Fraxinus excelsior* (Ash) *Tilia* sp. (Lime) *Quercus robur* (Common oak) *Crataegus monogyna* (Hawthorn)	8 - 18	450 maximum	As shown on Tree Constraints Plan. Average canopy spread 3.5m				N/A	0 - 4	Young Early-mature	Mutual suppression Good screening value Ash die back	40+	B2	5.4
G56	*Salix fragilis* (Crack willow) *Sambucus nigra* (Elder) *Fraxinus excelsior* (Ash) *Fraxinus* sp. (Ash)	10 - 18	500 maximum	As shown on Tree Constraints Plan. Average canopy spread 4m				N/A	0 - 4	Young Mature	Mutual suppression Associated with dry ditch Some ivy clad - not fully surveyed	40+	B2	6
G57	*Acer campestre* (Field maple) *Acer pseudoplatanus* (Sycamore)	10 - 13	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 3m				N/A	2 - 2.5	Young Early-mature	Mutual suppression In garden - not fully surveyed	40+	C2	3.6
G58	*Acer campestre* (Field maple) *Crataegus monogyna* (Hawthorn) *Fraxinus excelsior* (Ash) *Acer pseudoplatanus* (Sycamore)	8 - 18	300 maximum	As shown on Tree Constraints Plan. Average canopy spread 2m				N/A	0 - 6	Young Semi-mature	Mutual suppression Etiolated Many ivy clad - not fully surveyed	40+	B2	3.6
T59	*Aesculus hippocastanum* (Horse chestnut)	14	700	5	6#	5	4	1 - W	2 - 3	Mature	Tagged - 0407 Large parts covered occluded wounds on trunks Infected with *Guignardia aesculi* Crown reduced	20-40	B2	8.4
G60	*Populus* sp. (Poplar)	6 - 6	800 maximum	As shown on Tree Constraints Plan. Average canopy spread 1m				N/A	2 - 2	Mature	Pollarded to 4 m With subsequent regrowth Two specimens	20-40	C2	9.6

Table A-2: Tree Survey Schedule Key

Parameters Assessed	Details
Tree ID	'T' denotes Tree, 'G' denotes Tree Group, 'W' denotes Woodland, 'H' denotes Hedgerow. The original tree survey numbering is shown in brackets.
Species	Botanical and common name.
Height	Measured using a clinometer. Measured to the nearest metre.
Stem Diameter	Measured at 1.5 m above ground level. For multi-stem trees each stem diameter is recorded. For trees with 2-5 stems the overall diameter is calculated by squaring each stem diameter, adding these figures together and square rooting the result. For trees with more than 5 stems the mean stem diameter is squared and multiplied by the number of stems. The result is then square rooted to give the overall diameter. The results of the calculations for multi-stemmed trees are shown in brackets on the schedule. Where the tree is inaccessible due to vegetation or obstacles then the stem diameter has been estimated. For groups and woodlands, the stem diameter shown is the maximum recorded.
RPA Radius	The Root Protection Area (RPA) is calculated using the stem diameter. The RPA is an area equivalent to a circle with a radius 12 times the stem diameter for a single stem tree. BS 5837:2012 limits the maximum RPA to 707 square metres (m²), i.e. equivalent to a circle with a radius of 15m or a square with approximately 26m sides. The RPA of veteran/ancient trees is calculated using the standing advice Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK. this states that the RPA for ancient or veteran trees should be an area equivalent to a circle with a radius at least 15 times the stem diameter or 5m beyond the tree canopy, whichever is the greater. All ancient woodland requires an RPA of at least 15m.
Branch Spread	Measured at the four cardinal points to derive an accurate representation of the crown and is recorded on the tree survey plan. Where the tree is inaccessible due to vegetation or obstacles then the branch spreads have been estimated. Measured to the nearest metre using a laser measurer. Direction measured using a compass.
Life Stage	Young: Newly planted tree 0-10 years. Semi-Mature: Tree in the first third of its normal life expectancy for the species (significant potential for future growth in size). Early Mature: Tree in the second third of its normal life expectancy for the species (some potential for future growth in size) Mature: Tree in the final third of its normal life expectancy for the species (having typically reached its approximate ultimate size). Over Mature: Tree beyond the normal life expectancy for the species. Veteran: Tree, which is of interest biologically, aesthetically or culturally because of its condition, size or age.
General Observations	Particularly of structural and / or physiological condition (e.g. the presence of any decay and physical defect) and / or preliminary management recommendations. External features assessed based upon – The Body Language of Trees, Research for Amenity Trees No 4. (Mattheck and Breloer, 1994).

Parameters Assessed	Details
Category Grading	Recorded on the tree survey plans and schedule. See Table A-3 for Cascade Chart for Tree Quality Assessment. British Standard (BS) 5837 (2012), “Trees in relation to design, demolition and construction – Recommendations”. Occasionally trees are given more than one category grading, where trees would otherwise be categorised as U, but have identifiable conservation, heritage or landscape value, even though only for the short term, they may be upgraded, although they might be suitable for retention only where issues concerning their safety can be appropriately managed. A – Trees of high quality with an estimated remaining life expectancy of at least 40 years. (Shown as green on the tree survey plans). B – Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. (Shown as blue on the tree survey plans). C – Trees of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150 mm. (Shown as grey on the tree survey plans). U – Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. (Shown as red on the tree survey plans). 1 – Mainly arboriculture qualities. 2 – Mainly landscape qualities. 3 – Mainly cultural values, including conservation
Notes	Trees can be grouped if they form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally, including for biodiversity (e.g. parkland or woodland pasture). The category grading for a group of trees does not necessarily imply that the individual trees within that group are the same grading. The group is viewed as a whole and individual trees within it may have a lower grading.
#	Estimated dimensions
*	Indicates estimated position of tree (not indicated on topographical survey).
**	RPA limited to the maximum diameter of 15m in accordance with BS 5837:2012

Table A-3: Cascade Chart of Tree Quality Assessment (Taken from BS 5837:2012)

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

Appendix B Tree Constraints Plans

Manor Farm Cable – Iver Substation Corridor Route

Tree Survey Report & Arboricultural Impact Assessment

Juniper Energy Ltd

SLR Project No.: 402.065673.00001

October 2025

Appendix C Tree Retention and Removals Plan

Manor Farm Cable – Iver Substation Corridor Route

Tree Survey Report & Arboricultural Impact Assessment

Juniper Energy Ltd

SLR Project No.: 402.065673.00001

October 2025

Appendix D Preliminary Arboricultural Method Statement

Manor Farm Cable – Iver Substation Corridor Route

Tree Survey Report & Arboricultural Impact Assessment

Juniper Energy Ltd

SLR Project No.: 402.065673.00001

October 2025

D.1 Overview

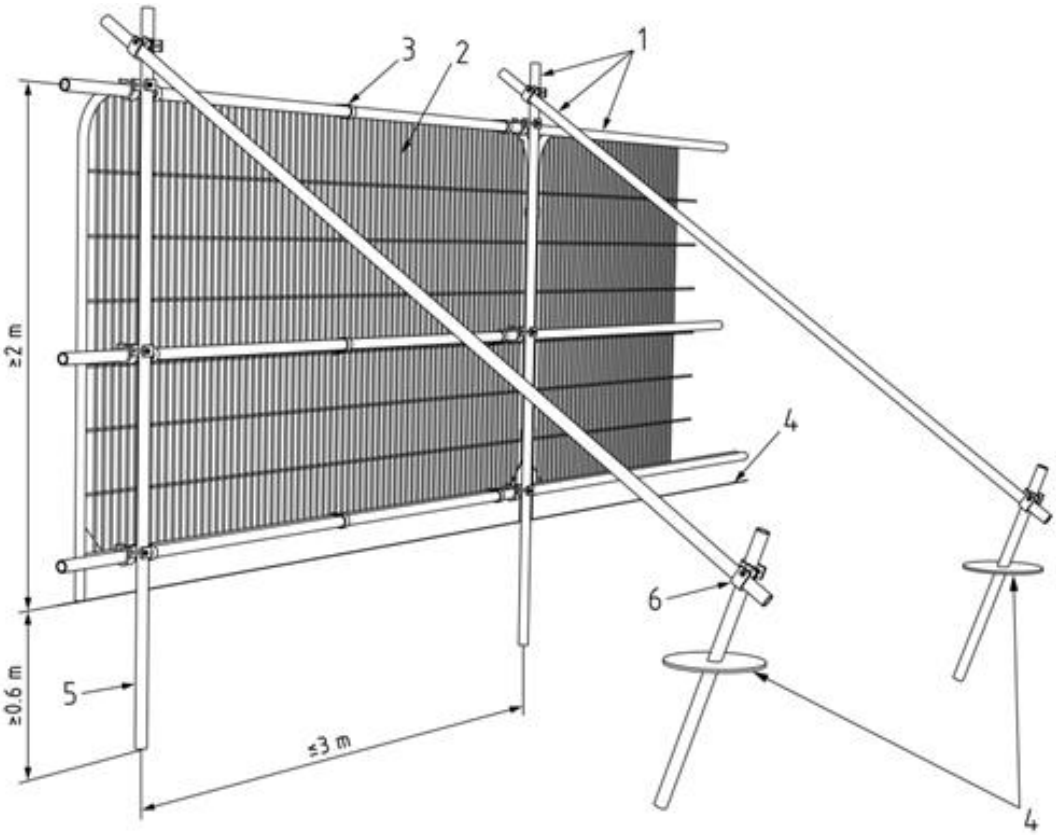
This Preliminary Arboricultural Method Statement (AMS) provides generic best practice measures to be adopted in order to protect retained trees during the development process. It has been prepared in order to inform the planning and the construction/ development process. Should a bespoke AMS be required, this shall be produced by a suitably qualified arboriculturist.

D.2 Protective Fencing

The purpose of this fencing is to provide protection to the RPAs of retained trees and tree groups. Paragraph 6.2.2.1 of BS 5837:2012 states that "*Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree(s). Barriers should be maintained to ensure that they remain rigid and complete.*"

The default specification for Tree Protection Fencing (extract from BS 5837:2012) shall be as illustrated in Figure D-1 below.

Figure D-1: Default specification for protective barrier (Figure 2 of BS 5837:2012)



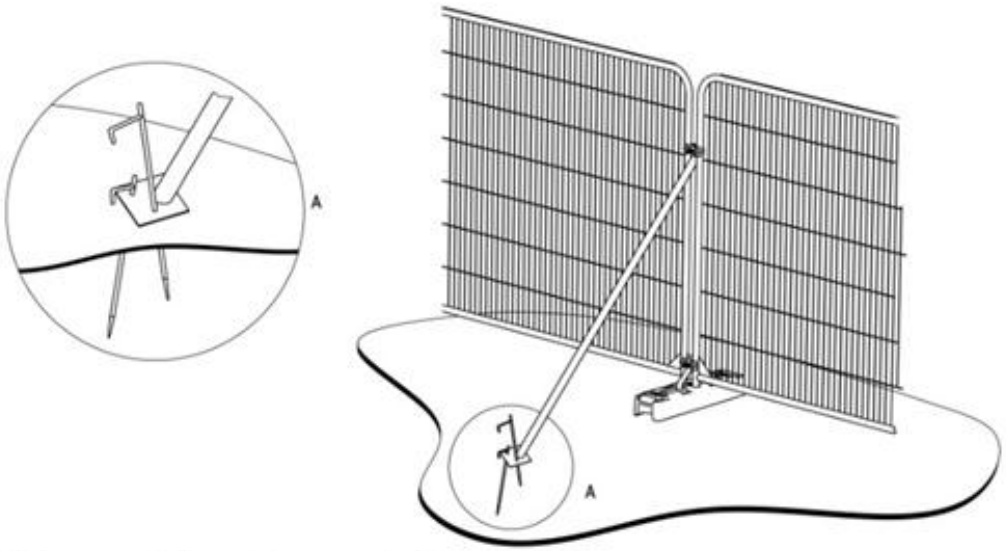
Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

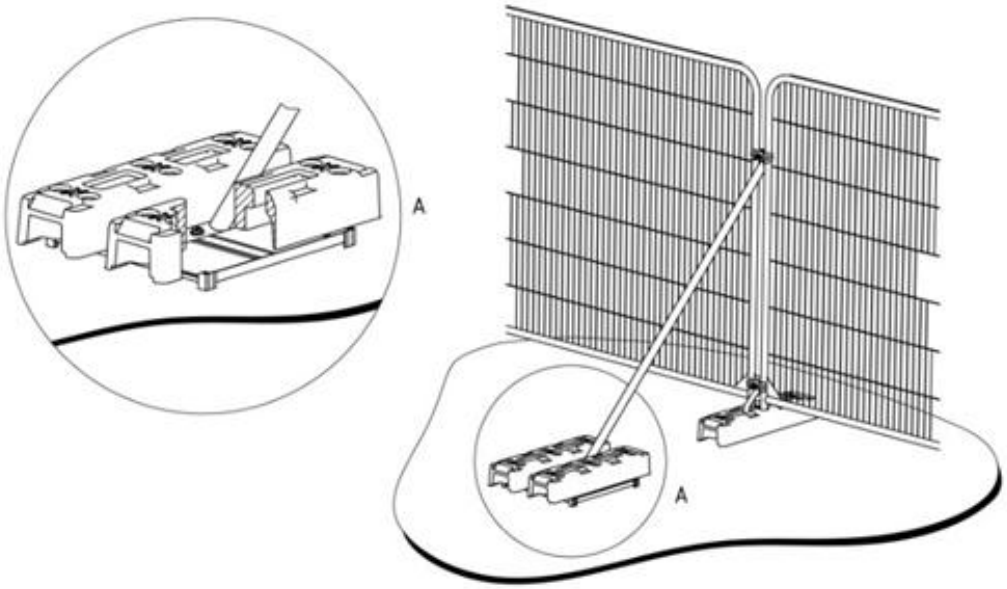
In accordance with paragraph 6.2.2.3 of BS 5837: 2012 states "*Where the site circumstances and associated risk of damaging incursion into the RPA do not necessitate the default level of protection, an alternative specification should be prepared by the project arboriculturist and, where relevant, agreed with the local planning authority*."

Where it is agreed with the local planning authority that the default specification is not necessary, the specification illustrated in Figure D-2 below, may be used.

Figure D-2: Examples of above ground stabilising systems (Figure 3 of BS 5837:2012)



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Weather-proof notices shall be attached to any protective fencing located adjacent to retained trees displaying the words "Construction Exclusion Zone" and listing restrictions which apply. All personnel must be made aware of these restrictions.

Figure D-3: Example of Protective Fencing Signs

D.3 Construction Exclusion Zones

The Construction Exclusion Zone (CEZ) is the area identified by a suitably qualified arboriculturist as the area to be protected during development, from site clearance and construction work through the use of barriers and/or ground protection to ensure the successful long-term retention of a tree. Fencing or ground protection shall not be taken down or relocated at any time without prior agreement and/or site supervision as recommended by the arboriculturist.

All areas protected by Tree Protection Fencing shall be treated as CEZs, and the following restrictions shall apply:

- No construction activity must occur within these areas.
- No works on trees unless agreed by a suitably qualified arboriculturist.
- No alterations of ground levels or conditions.
- No chemicals or cement washings.
- No excavation.
- No temporary structures.*
- No storage of soil, rubble or other materials.
- No vehicles or machinery to be used or parked without appropriate ground protection measures as per BS5837:2012. This will require the use of a proprietary system of reinforced concrete slabs/steel road plates on a compressible layer, or side butting

scaffold boards/ 18mm plywood sheets on a compressible layer. The type of ground protection used shall be appropriate for the likely loading applied.

- No fixtures (lighting, signs etc.) to be attached to trees.
- No fires within 10 metres of the canopies of any tree or hedgerow.

*Site huts, provided they are of the “Jack Leg” type, can be sited to act as ground protection for the duration of the construction.

D.4 Temporary Ground Protection

New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil. The ground protection might comprise one of the following:

- 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.
- For pedestrian-operated plant up to a gross weight of 2t, 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.
- For wheeled or tracked construction traffic exceeding 2t 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.

D.5 New Permanent Surfacing Within RPAs

Any new surfacing within the RPAs shall occur above ground level without soil stripping. New surfaces shall be constructed on a cellular confinement system to prevent localised compaction of the rooting medium post development. Porous geotextile membranes shall be used both above and below the cellular confinement system to prevent mixing of materials with the binding layer or the soil. The new surface needs to be permeable to air and water (resin bound gravel or similar is recommended). This is to allow roots to respire without there being a build-up of carbon dioxide, and to ensure the roots continue to receive the moisture and oxygen they require to function. Traditional kerbing requires excavation to install and will therefore not be suitable within the root protection areas of retained trees. As an alternative, haunched kerbing, treated timber edging, aluminium L-shaped edging, galvanised metal edging or no fixed edging shall be used. Construction of the new surface will require access into the CEZ defined by the temporary ground protection. The ground protection shall not be removed until new surface is installed. The root protection areas should not be left exposed during construction.

D.6 General Canopy Protection

Since the canopies of retained trees may be in close proximity to areas of plant operation, the following restrictions will apply:

- All plant will be sited outside the defined RPAs of retained trees / groups, and the appointed contractor will ensure all relevant personnel shall be made aware of the location of branches and the need to avoid causing damage to them.
- Prior to the implementation of lifting operations, a representative from the equipment supply company shall visit the site and ensure all operations can be completed without

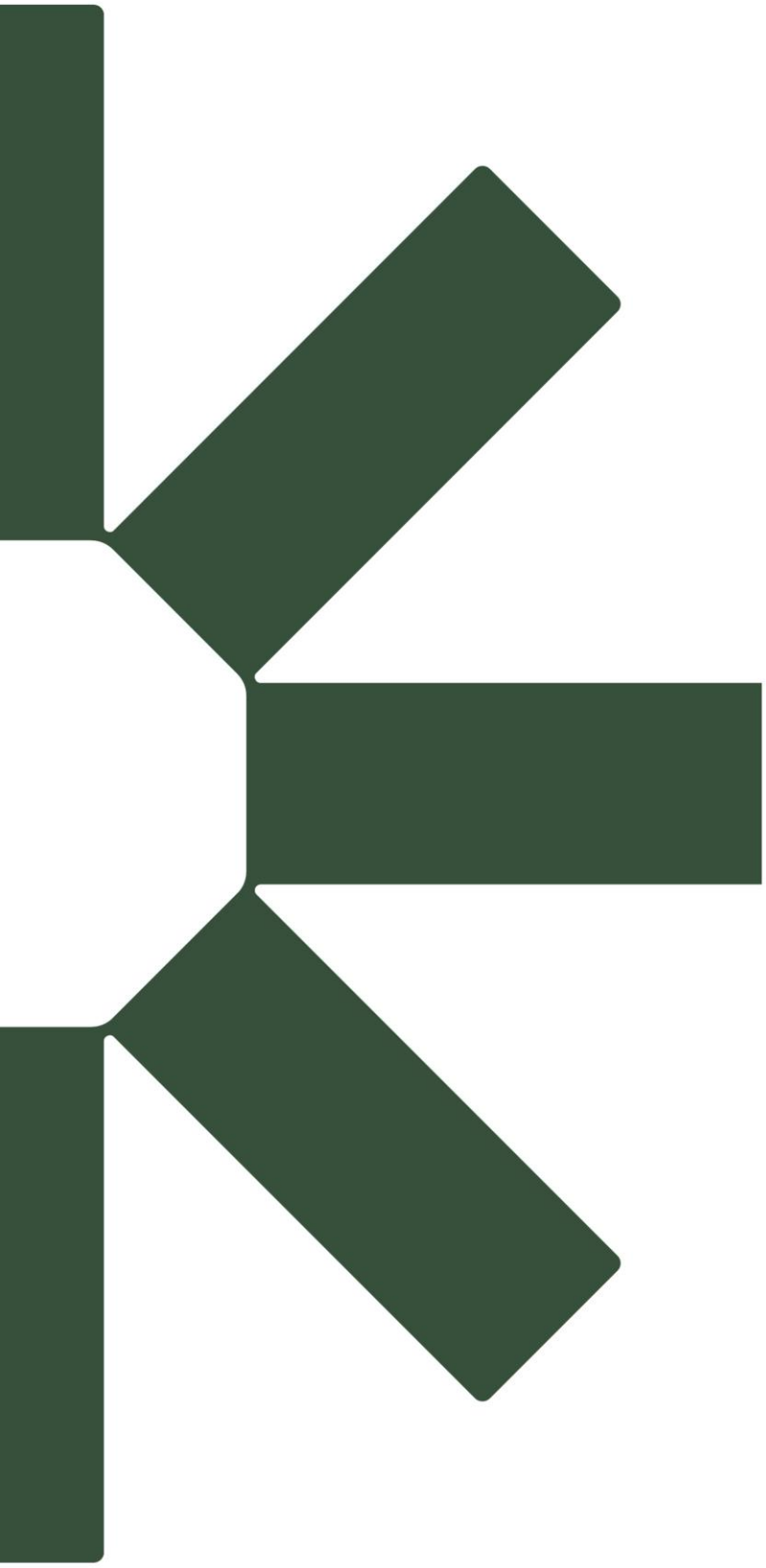
causing damage to retained trees. A lifting plan will be prepared and submitted for approval prior to all lifting operations. The lifting plan will make provision for the potential for damage of retained trees.

- All lifting operations will be completed under the close direction of a qualified banksman, who will be briefed by the appointed contractor as to the need to avoid damage the stems and branches of retained trees.
- Should additional tree removal or tree works be required the Local Authority Tree Officer shall be contacted and the scope of works agreed in writing.

D.7 Hazardous Materials

The delivery, storage, mixing and discharge of hazardous materials shall be carried out so that there is no run-off and spillage near the RPAs of retained trees. No substances that are potentially injurious to plant tissue (including diesel, bitumen, concrete, mortar, salts, builders' sand, herbicides and other phyto-toxic materials) shall be stored, discharged, prepared or used, where direct contact, infiltration or run-off might reasonably be considered liable to harmfully affect existing root growth, other parts of retained trees or beneficial soil organisms.

Hazardous chemicals are to be stored in suitable containers as specified by the Control of Substances Hazardous to Health (COSHH) Regulations (2002) (Ref 4). It is now standard practice to have emergency spillage kits available to minimise the impacts of any accidental spillages to the local environment. All cement mixing, vehicle washing or any other activity where toxic chemicals are used shall have the provision to contain any accidental spillage. This can be achieved by creating a bunded area using concrete slabs, timber framework or sandbags. Heavy duty plastic sheeting should be used to line the area as necessary to prevent leaking. Alternatively, all activities should take place on suitable spill trays or on an existing impermeable surface with runoff controls and at least 10m from the edge of the RPA of retained trees.



Making Sustainability Happen