

# **Arboricultural Report**

Trees at Proposed Site at St Paul's, Sybil Hill Raheny Dublin 5 Consulting Arborists Ashgrove House Kill Avenue Dun Laoghaire Co Dublin 01-2804839

The Tree File Ltd

October 2019

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## **Associated Drawings**

This report is to be read with the drawings noted below

1)	<u>Drawing Title</u> D1-TCP-St Pauls-10-19	Drawing Subject Tree Constraints Plan A plan depicting the predevelopment location, size, calculated constraints and simplified tree quality category system
2)	D2-AIA-St Pauls-10-19	Arboricultural Implication Plan This plan represents the effects of the proposed development works on the above tree population and depicts trees to be retained and removed.
3)	D3-TPP-St Pauls-10-19	<b>Tree Protection Plan</b> This plan depicts the nature, location and extent of tree protection measures required to provide for sustainable tree retention.

### **Introduction**

This report has been prepared by-Andy Worsnop Tech Arbor A, NCH Arb (PTI LANTRA) **The Tree File Ltd** Ashgrove House Kill Avenue Dun Laoghaire Co Dublin

### **Report Brief and Context**

This report was requested by "**Crekav Trading GP Ltd**.". It comprises an Arboricultural review of the proposed development project. The various elements of this report provide an assessment of the sites existing tree population in respect of suitability for retention and sustainability in their current scenario, as well as an assessment of their potential for sustainable retention in the post-development scenario and the effects of the development process. It also provides information in respect of the necessary tree protection and the avoidance of damage to trees during the construction process, required to achieve sustainable tree retention.

This assessment summarises the Arborists findings and recommendations, arrived at after the screening process and considerations defined within the "Implication Assessment Scope" and after an evaluation of trees as defined and described in the tree survey at "Appendix 2". This report also includes a preliminary Arboricultural Method Statement and Tree Protection Plan that illustrates the requisite conservation and protection methodologies necessary to maintain tree sustainability. This report is not intended as a critique of the proposed development but is an impartial assessment of the development implications relating to the sustainable retention of trees, whether that be any, some or all trees. This report is for planning purposes only.

This report must be read with the three associated drawings.

- 1. The "Tree Constraints Plan" drawing "D1-TCP-St Pauls-10-19" that provides a graphic representation of tree survey data, depicting the constraints asserted by the site trees, as well as a categorisation of their condition and potential value.
- 2. The drawing "Arboricultural Implication Plan" drawing, "D2-AIA-St Pauls-10-19" depicts the expected impacts by overlaying the tree constraints information with the architectural and engineering information.
- 3. The "Tree Protection Plan", "D3-TPP-St Pauls-10-19" depicts the location and extent of the tree protection measures required to prevent damage and disturbance to trees intended for retention.

#### **Report Limitations**

This report relates the Arborists interpretation of information provided to him before the report compilation and gained by him during the undertaking of the site review and tree survey. The site review data is subject to the limitations as set out under "Inspection and Evaluation Limitations and Disclaimers" in "Appendix 2" of this report. The findings and recommendations made within this report are compiled, based upon the knowledge and expertise of the inspecting Arborist.

The "Implication Assessment" element of the report builds on assumptions and estimates, particularly in respect of how construction works might proceed on a day to day basis and appreciates the "design" stage of the project, as opposed to "construction" detail. Many elements of the "Arboricultural Method Statement" are deliberately broad and generic. They will require review, amendment and consolidation at the construction stage, for example in respect of the size and nature of the equipment, plant and machinery that might be utilised by any potential building contractor and any details as may change at "detail design" or "construction detail" stages. Accordingly, the accuracy of this assessment premised on all its elements/recommendations, and the omission or alteration of any part can alter outcomes in respect of sustainable tree retention.

#### **Report Summary**

Details of the proposed development have been scrutinised considering the findings of the preliminary tree survey. Simple assumptions have been made in respect of normal construction practices, the nature of works and the extent of disturbance that a development of this nature can cause to the parent site. Considering this, the assessment as below has been arrived at, taking a pragmatic approach to those trees that simply cannot be retained because their positions conflict with various elements of the development.

The impacts to trees are broadly minimal, a factor contributed to by the fact that much of the intended development work occurs within the confines of an open field. Nonetheless, a small number of trees will be affected, both within and directly adjoining the development zone, most of which requiring removal to facilitate the works.

Of the total of 213 items reviewed within the tree survey, tree losses associated with the site works have been limited to some 22 items, 7 of which were recommended for removal because of poor condition and regardless of development works and as outlined within the Arboricultural report below.

This has been achieved by development design and the incorporation of specific tree protection methodologies as outlined within the Arboricultural method statement at "Appendix 2" to this report

This report accepts that there will be longer term and broader ramifications to the development that will require the ongoing review of trees within and adjoining the site area to account for ancillary and secondary impacts relating to the development of the site. This includes changes in site context, including changes in rates of occupation and use as well as interference and disturbance of trees both upon and directly adjoining the site works zone.

#### Site Description

For contextual clarity, the survey area includes the adjoining school and Sybil Hill House lands, though they are outside of the proposed development area. Accordingly, the broader site is of irregular shape, comprising a period building and associated grounds to the north-west, a denser development associated with existing school facilities to the south-west. The area of the broader site intended for development comprises predominantly a large grass field to the east of the site, together with a narrow access corridor to Sybil Hill Road to the west.

The site's tree population tends to be limited and sporadic, with many areas of soft landscape being dominated by grass. Exceptions to this include the areas of woodland towards the north-west corner of the site, where "Woodland 1 and "Tree Line 2" dominate the landscape. Elsewhere, trees tend to be in a more open fashion or in more loose groups.

Note is made that whilst the eastern site is almost completely devoid of trees, the field are surrounded to the north-east and south by notable alignments and belts of trees. Whilst the western edge of the field supports a small number of trees and there is one Ash within the site confines to the south, all other trees arise from positions outside of the site boundary, but in some cases, near it.

In broad terms, the site can be regarded as quite level and at the time of the tree review, exhibited no signs of drainage issues.

### Pre-Development Arboricultural Scenario

Many of the trees located near Sybil Hill House are relatively young, most apparently having been planted within the past 25 years. Exceptions do exist, including a Lime (No.1) to the north as well as two Horse Chestnut and a Sycamore (Nos.38, 39 and 40) to the south-east. Also, to the west and across the lawn, a Sycamore and Beech (17 and 18), are of significant age, as is Beech 86 to the south, all suggesting planting dates about the late 19th or early 20th century and possibly contemporary with Sybil Hill House.

Unfortunately, many of these older specimens are of poor quality and limited sustainability and thus their suitability or value for retention is somewhat questionable over and above the short term.

Nonetheless, the area about Sybil Hill House supports a substantial number of younger trees, some of which have been planted, whilst others appear to be self-seeded. Retention values are highly variable, with some specimens being small and others, even the recently installed specimens, being found to be faulty and unsuitable for retention.

To the west of Sybil Hill House, "Woodland 1" and "Tree Line 2" dominated the landscape. Whilst offering some potential, these elements are flawed and raise issues of site safety and management over time. "Woodland 1" supports a substantial number of failed or partially failed specimens. Through suppression and competition, many trees overhang and extend across the Sybil Hill Road boundary. As a cohesive group, the constrained and often "drawn-up" forms of many trees, predisposes them to damage and failure of a type having already commenced. It is reasonable to assume that such damage will continue and whilst some structural pruning options may exist regarding the broadleaf elements, the centrally located alignment of Cypresses offer no such option and thus may prove less sustainable. Though outside the site and works area, it may possible for the owners to retain and augment the wood.

A similar issue arises in respect of "Tree Line 2", whereby the close-knit and linear arrangement of the Cypresses will be affected by loss and disturbance regarding the road construction at its southern end, that may result in some structural and failure issues within the short to medium term. Thus, this alignment, whilst being significant within the current landscape, should be regarded as being of dubious sustainability, with few if any management options that are not both unsightly and/or serving to exacerbate structural issues.

Along the western boundary of the site with Sybil Hill Road, the alternating alignment of Silver Birch and Lawson Cypress are of generally good quality and though tending not to be a hugely long-lived species, nonetheless, appear to offer a substantial degree of sustainability.

Most other trees within the wall define school area to the west of the site tend to be relatively young and quite small specimens. The only exception to this in Beech No.86 to the south, as this tree was found to be in decline and unsuitable for retention. All such trees will remain outside of the development scope and accordingly, their management will remain with the school.

The east of the site is dominated by a grass field. The area supports a small number of trees along its western edge as well as a single Ash to the south.

It appears that prior intervention and ground works may have disturbed many of the more mature trees to the west of the field. Most specimens exhibit signs of reduced vigour and vitality and some have suffered mechanical damage and crown failure. Accordingly, some of the more visually significant trees require immediate removal or would at best, be only suitable for short term retention.

Note is made that towards the north of the group there are several small conifers. Most appear to be of good health though many are of poor structure quality and their small stature is such that they currently provide little visual impact. Therefore, and whilst they offer some degree of sustainability, this is limited, and their small stature offers the potential for replacement planting as being a better option.

To the north of these trees, note is made of a substantial scrub area, dominated by Elderberry and Bramble, with a small number of poor-quality Sycamore towards the northern most edge. This area comprises a raised area of spoil that rises some metres above surrounding ground levels. The area offers little if any Arboricultural interest and it is assumed that the area including the scrub thicket it supports, will be removed.

To the north, there are no trees within the paladin boundary fence, though two are positioned immediately outside the Paladin fence and there exists a typically young woodland belt beyond a substantial ditch.

The Ash No. "AA" and Poplar "BB" arise from the narrow embankment between the Paladin fence and the ditch and accordingly offer a substantial overhang of the site.

Outside of the site area, there is a substantial woodland belt that runs the entire length of the portion of the site's northern boundary, though it is divided from the site by either a boundary ditch or a substantial 3.50 metre boundary wall. Both features are substantial barriers to root penetration and trespass into the site and their combination is considered such as to have likely prevented any significant root entry into the site area. Accordingly, and notwithstanding the apparent proximity to the site of this woodland belt, it appears that activities to the south of either the wall or ditch are unlikely to result in any damage to the trees. It is nonetheless, it is appreciated that the proximity of these trees and their potential for growth over time by lead to a diminution in ambient light but being located to the north, is unlikely to have any effect on direct light or by way of shadow cast.

To the east of the site, there exists a substantial alignment of young Holm Oak. These trees are currently between 5.00 and 8.00 metres tall and offer minimal overhang of the Paladin fence. Some concerns relate to longer term sustainability considering the potential for future growth and the likelihood of the trees attaining some 15.00 to 18.00 metres in time. This factor that may result in a far greater degree of site boundary overhang as well as a potentially significant degree of shadow cast and light diminution especially during the morning periods.

To the south of the site and school area, we note a substantial alignment of typically mature trees – the Avenue in St. Anne's Park – dominated by Holm Oak, Monterey and Austrian Pine. The health and nature of these trees varied greatly though for the most part appeared eminently suitable for retention. The current size of these trees, whilst suggesting minimal potential for further growth over time, equally suggests

substantial potential for shadow cast along the southern edge of the site. Equally, it is noted that there is currently a notably degrees of site overhang.

## Nature of Proposed Works and Likely Impacts

The proposed site development calls for –

The construction of a residential development set out in 9 no. blocks, ranging in height from 5 to 9 storeys accommodating 657 no. apartments, residential tenant amenity spaces and a crèche.

At basement level the Site will accommodate car parking spaces, bicycle parking, storage, services and plant areas.

Landscape works will include extensive semi-private communal amenity areas, and a significant area of public open space.

The Proposed Development also includes for the widening and realignment of an existing vehicular access onto Sybil Hill Road and the demolition of an existing pre-fab building to facilitate the construction of an access road from Sybil Hill Road between Sybil Hill House (a protected structure) and St Paul's College incorporating upgraded access to Sybil Hill House and St Paul's College and a proposed pedestrian crossing on Sybil Hill Road.

The Proposed Development also includes for the laying of a foul water sewer in Sybil Hill Road and the routing of surface water discharge from the Site via St Anne's Park to the Naniken River and the demolition and reconstruction of the existing pedestrian bridge crossing in St Anne's Park with integral surface water discharge to Naniken River.

Whilst the footprint of the proposed structures and buildings, access roads, parking area and paths are readily understandable regarding the spatial requirements, additional and ancillary space is commonly required for construction works and associated activities. Additionally, note is made that the proposed development will require substantial amendments to current ground levels across notable areas of the site.

Site trees can readily be affected by one of three primary impacts including-

- A. Direct conflict with proposed structures, thus requiring tree removal.
- B. A partial conflict where the "Root Protection Area" is encroached upon by works or ground amendments and cannot be preserved/protected in full.
- C. Environmental damage e.g. compaction, capping, sealing changing the existing ground environment to one that can no longer support tree root function.
- D. A change in site context or a change in occupation or use that makes a tree unsuitable for retention.

## **Design Iterations and Arboricultural Considerations**

This report assesses Arboricultural implications and impacts of the proposals, making recommendations in respect of tree protection relating to those trees that might be retained and as outlined below.

From the outset, the entire design team was aware of the nature and extent of trees and the constraints they asserted both upon and adjoining the site area. Accordingly, there was an early appreciation of the fact that much of the main site area to the east, was broadly open and devoid of trees.

Nonetheless, and particularly with regard to ancillary design features such as drainage and access, great care and attention was paid to locations and extents, and where possible, the protection zones associated with trees has been respected in an attempt to maximise sustainable tree retention across the largest number of trees.

### **Identification of Impacts**

The review of likely Arboricultural implications is based upon the recommendations and criteria as defined within BS5837: 2012 Trees in Relation to Design, Demolition and Construction – Recommendations. The assessment attempts to consider both direct and indirect implications, including those below, where and if they apply to the subject development.

Attention is drawn to the scope of the "Arboricultural Implication Assessment" as defined at "Appendix 1" to this report. This appendix outlines the extent and nature of consideration typically considered and reviewed during the assessment. In this respect, it is appreciated that not all elements apply to all development projects.

This report, its findings and recommendations have arisen from the scrutiny of development proposal drawings as provided by the O'Mahony Pike Architects, drainage/service information in the form of drawings provided by OCSC Consulting Engineers and by Brady Shipman Martin, project Landscape Architects, in conjunction with the most recent tree survey data (as appended to this report) including updates to the original April 2015 survey, review during the summer and autumn of 2017, May 2018 and the latest review undertaken on 11<sup>th</sup> April 2019. The evaluation is primarily based on minimum protection ranges as extrapolated from the tree survey data in accordance with paragraphs 4.6.1, 4.6.2 and 4.6.3 of BS5837: 2012 and any element of the proposed development of works associated with is that affects the defined protection areas.

In respect of tree impacts, any structure, action or apparent need to enter or otherwise disturb/convert the "root protection area" of a site tree has been considered likely to have a negative impact, with the potential to render a tree wholly unsuitable for retention, unsafe or unsustainable.

Additionally, the tree specimens have been evaluated in respect of health, sustainability and suitability for retention within the new context and adjoining the proposed development. Such considerations can readily affect the "predevelopment suitability for retention" scenario.

The perceived development impacts have been illustrated graphically on the "tree impacts drawing", "D2-AIA-St Pauls-10-19", within which trees denoted with "Dashed Red" crown outlines will be removed and those denoted with "Continuous Green" crown outlines will be retained.

#### Arboricultural Implications of Proposed Development

From the outset, the extent and nature of the proposed development that includes basement car parking is appreciated to require extensive mechanization and the use of large machines and vehicles. It is equally appreciated that such plant, equipment and transport facilities will require access space above and beyond the specific footprint of the proposed development structures. Therefore, the simple working of the site asserts immense potential environmental disturbance and damage of a nature that is readily regarded as capable of damaging trees.

In addition to the above, it is also appreciated that the provision of modern services and particularly drainage infrastructure serves to increase the footprint of the principal development structures by requiring trenching and excavation at various positions across the site. All such works has immense potential damage and disturbance to trees and tree roots.

In respect of the above, attention is drawn to the primary tree survey "tree constraints plan" drawing "D1-TCP-St Pauls-10-19". This has provided a basis for assessing the likely impacts of works where the need to occur near trees.

The "tree impacts" drawing "D2-AIA-St Pauls-10-19" comprises the tree survey drawings overlaid by the development drawings, thus providing a graphic representation of the tree related impacts, with those trees that will be removed, being denoted by red dashed outlines.

The nature and extent of the proposed development and its unavoidable need to convert or otherwise disturb much of the existing site conditions, effectively requires the removal of the trees listed below.

Across the broader site, note is made that several trees have been categorised as category "U" (unsustainable or unsuitable for retention) trees and have been recommended for removal regardless of site development.

In respect of those trees located outside the red line area, their management and or removal will be beyond the jurisdiction of the development works and will remain at the discretion of the school and its management.

In addition to those trees described above, note has been made that the broader site works have the potential to disturb the root protection areas associated with trees otherwise suitable for retention. Most such issues relate to site levels in conjunction with new site services. In respect of this, secondary works including the provision of drainage and the provision of usable level surfaces commensurate with the broader site mean that level changes may be required in positions near trees. While such works would not necessarily require the removal of the affected trees, such issues can readily affect the health status of such a tree, possibly to the extent of undermining its sustainability. In this respect, substantial efforts has been made to minimise such effects, for example regarding the landscape near trees 97 to 118 that has been designed specifically to minimise the disturbance of native ground levels near trees. Nonetheless, it is appreciated that the provision of underground services along the eastern edge of this zone has required encroachments on the preferred root protection area.

Similar issue arose along the proposed access road. In this area, the southernmost portion of "Tree Line 2" will be lost, as will tree Nos.34 and 35. Additionally, and requiring review at the time of excavation and

works commencement, it is likely that there will be secondary encroachment on impacts to additional trees in "Tree Line 2" and also to tree Nos.37 and 37, that will require liaison and discussion with the tree owners, as they exist outside of the red line zone.

It is proposed to provide an area of public open space along the Avenue in St Anne's Park, and as such there will be no impact on this feature.

As part of the design process and the provision of site drainage, consideration is being given to providing an outfall to the Naniken Stream, to the north-east of the main site. As part of these works, it will be necessary to exit the main site at its north-eastern corner and circa two of the small Holm Oak specimens in that area will be lost. Whilst the proposed alignment of the connective pipework raises no tree related issues, it is appreciated that the outfall to the Naniken Stream and the possible replacement of the existing footbridge will might result in tree disturbance, and as such, works control will be required to minimise impacts on existing trees in this area.

The provision of services, its requirement to attain specific gradients and requirements for minimum overburden has created issues in some instances. Along the northern boundary, Poplar BB will be encroached upon by some affect both in respect of pipe trajectory and the modification of ground levels. The project engineers have nominated pipe jacking as a methodology for pipeline installation at depth and without disturbing tree roots however, impact will occur with regard to the excavation for manholes Chambers and the cover levels for the Chambers will require ground modification within the general area. This has the effect of governing landscape surfaces and associated paving within the vicinity of the tree. Accordingly, it is advised that the works be reviewed at construction stage and it is likely that additional remedial works, possibly including "crown reduction" type works will be advised.

Some of the necessary ancillary and infrastructural works extend along Sybil Hill Road. Particularly, note is made of modifications intended for the hard surfaces and pavements at position south of tree "F". The works do not require the removal of the tree but will encroach upon its root protection zone and therefore, and under the auspices of the Arboricultural method statement, it would be advised that construction techniques, methodologies and materials be reviewed so as to achieve the creation of new surface without extensive tree root disturbance.

Within the roadway corridor, it is noted that a new foul sewer section is to be installed. Its location would appear to encroach upon and potentially interfere with trees "D", "E", "R", "S", "T" and "U". However, in this instance, due consideration must be given to existing ground features and conditions, particularly including the fact that tree roots have a tendency not to extend into or beneath modern road structures. This relates to standard road engineering, levels of compaction and high "California Bearing Ratios" that create ground environments not conducive to tree root function or development and indeed are often capable of preventing any or all tree root penetration. In respect of this, it is likely that no tree roots will be encountered though nonetheless, it is still advised that trial pits be opened up prior to final trenching works so that the realistic impacts might be better assessed.

Wherever it occurs, the loss of trees will have repercussions in respect of amenity value. In this instance, most of the tree losses to the west of the site relate to the alignment of the access road. Most of these trees are of limited visual value in respect of their being surrounded by existing buildings and thus offering limited context from a public place. Similar might be said to the trees to the west of the main site where their current location within this broader site being surrounded by trees means that their importance

is somewhat diminished. Whilst their retention may appear important to the completed site, the fact that additional, nearby trees are to be retained means that a notable degree of continuity will still be gained in respect of amenity value, a factor that would be augmented by the degree of new tree planting about the site

In respect of tree preservation orders, it appears that the broader site supports no specific orders and is zoned Z15, to protect and provide for institutional and community uses. Note is however made that the site supports a protected structure, that being Sybil Hill House, a factor that may serve to afford some degree of protection in respect of the boundary thereof.

As the proposed development intends to provide new residential units then, the degree of occupation and use in positions close to trees will inevitably increase. This in turn raises issues regarding tree related safety and the potential for trees to present a threat of harm and damage. In this respect, it is noted that the site supports a broad spectrum of tree sizes, ages and conditions. Some concern relates to the more mature trees considering what is perceived to be the fragmentation and diminution of a once larger tree population. This scenario serves to increase exposure and diminish shelter thus increasing the risks of mechanical tree failure over time. A specific example of this and as noted above, relates to the loss of the southernmost specimens of "Tree Group 2", as the Leyland Cypress can be particularly sensitive to exposure of this nature.

Where exposure issues occur, it will also require that all trees retained adjoining areas of known occupation and use be monitored closely throughout the future. Though causing less concern regarding the immediate future, note is also made that the site supports a notable number of young and middle age trees. Most such specimens assert immense potential for continued growth over time and whilst they appear to present little if any threat at present, should again be reviewed regularly, particularly as their size increases.

Note is also made of the tree related context in respect of the broader site. Though not relating specifically to site trees, the broader environs supports a great many trees relating to the broader St Anne's Park as well as to what might be regarded as the original Sybil Hill estate. In this respect, and whilst direct overhanging appears unlikely, it appears that there will be some degree of light diminution relating to what will be a raised horizon relating to the woodland areas surrounding the site. Such issue should however be limited to the particularly early and late parts of the day only.

The extent of tree planting envisaged across the site will in part mitigate the above losses. Details have been provided within the proposed landscape plans as provided by Brady Shipman Martin Landscape Architects.

### Particulars of Tree Loss

The drawing "D2-AIA-St Pauls-10-19" comprises the tree survey drawings overlaid by the development drawings, thus providing a graphic representation of the tree related impacts, with those trees that will be removed, being denoted by red dashed outlines.

The nature and extent of the proposed development and its unavoidable need to convert or otherwise disturb the existing site conditions effectively requires the removal of all site trees as outlined below-

The pre-development review area supports a total of 213No. individual trees and 11 tree lines/groups, totalling some 224No. items, including-

- 4 category "A" trees,
- 123No, category "B" trees and/or groups,
- 76No. category "C" trees and/or groups,
- 19No. category "U" trees

As on most development sites, all category "U" trees will be removed including Nos. 98, 99, 100, 103, 104, 112 and 113, which require removal regardless of development. The review area supports 19 category "U" items cumulative, but some are located outside of site jurisdiction and can only be removed by the relevant owners.

Of the site's "fair" quality, category "B" trees, the development works will require the removal of tree Nos.22, 23, 24, 25, 26, 27, 28, 63, 64, and 65, (10 items cumulative)

Of the site's category "poor" quality "C" trees, the development works appears to require the removal of Nos.34, 35, 38, and I, plus part of Tree Line 2 (5 items)

The tree loss breakdown for the site will be-

- 7 No. Category U trees
- 10 No. Category B trees
- 4 No. category C trees plus part of Tree Line 2 (5 No. items)



### Tree Protection within the Scope of a Development

The design and management recommendations as set out in "BS5837:2012" are considered as "best practice" regarding the selection, retention, protection and management of tree within the scope of new developments.

In respect of tree protection, whether vertical or horizontal, all must conform or equate to the recommendations of Section 9, BS5837: 2012, must be fit for purpose and commensurate with the nature of development and the expected day-to-day activities of the site works.

This report provides a "Preliminary Arboricultural Method Statement" at "Appendix 1" to this report, as well as the associated "Tree Protection Plan" drawing "D3-TPP-St Pauls-10-19".

In this drawing, the edges "Construction Exclusion Zone" is defined by the bold "Orange" lines that represent the proposed location of the primary protective "Construction Exclusion Fencing", with the "Orange" hatched area representing the primary "Construction Exclusion Zone".

The tree protection plan includes the use of special materials and methodologies intended to minimise the impacts of structures near trees. Examples of this includes the proposed pedestrian link. In these areas, nominated as "Controlled Work Zones" and depicted by pale blue hatching on the tree protection plan "D3-TPP-St Pauls-10-19", it is intended to use manual procedures and low impact methodologies that limit need for excavation or ground disturbance and maintain the drainage and porosity of the ground volume beneath.

The above drawing provides only a representation of the protection locations and extents that must be located, positioned and erected under the guidance of the project Arborist and may require referral to a figured and dimensioned version of the "Tree Protection Plan" drawing. All recommended protection measures will be installed before the commencement of any site works and must remain in situ (unless under the guidance of the site Arborist) until the completion of all site works.

#### Preliminary Management Recommendations

Provided in the tree survey table (Table 1) are "Preliminary Management Recommendations". These recommendations relate to the trees as they existed at the time of the tree review and therefore and in line with the changing context of the site, such recommendations may no longer apply. Examples include where tree felling or specific works are necessary to facilitate development requirements.

Additionally, the proposed development and particularly its unavoidable loss of trees will raise exposure and shelter loss issues in respect of those trees that will remain. For this reason, all retained trees should be reviewed immediately after the primary site clearance works with a view to updating and amending the "preliminary management recommendations" provided in the original tree survey and intending to address such issues as may arise. On an ongoing basis, all retained trees must be reviewed regularly so that early intervention and action is applied promptly.

### Appendix 1 - Arboricultural Method Statement (and Tree Protection Plan)

### Method Statement Outline

Set out below is a broad and prescriptive method statement, intended to provide advice and guidance for most events, occurrences and issues that arise in respect of trees and tree protection on typical development sites. This statement intends to instruct and to advise regarding the execution of the proposed development works in a manner that will be least detrimental to the retained tree population.

#### **Drawings**

This Arboricultural Method Statement must be read with the associated "Tree Protection Plan" drawing, "D3-TPP-St Pauls-10-19". This drawing, as was submitted as part of the Arboricultural planning package must be updated and confirmed for "Construction" stage purposes, for example by the inclusion of specific tree protection ranges and dimensions. Accordingly, and in respect of tree protection rages from any tree, reference must be made to the root protection area radius as defined for that tree within the tree survey table.

### Method Statement Use

This Method Statement should be used under the direct guidance of the project Arborist, as site/project specific issues arise, and new information becomes available, it may be amended and adjusted by him/her to address project-specific issues. In this respect, limited "construction management" detail was available at compilation time, and therefore this method statement deals with tree protection in its broadest terms and may require modification to deal with project specific details to this development, e.g. to account for specific plant/machinery/access issues.

#### Amendments and Modifications

In some situations, and with the adoption of specific ground protection procedures and structures, parts of the above defined "Construction Exclusion Zones" might still be utilised during the construction process. In respect of vehicular/plant/machinery access, the provision of suitable ground protection measures that avoid soil compaction and maintain drainage/percolation and breathability, that are acceptable to the project Arborist and subject to engineering confirmation, can be utilised. Such might include the various form of "roll-out" temporary access surfaces or might include the "three-dimensional cellular confinement systems that utilise specific forms of confined hard-core. The effective use of either system is subject to the avoidance of excavation and level changes, by use upon existing ground surfaces. Where provided, the above systems would allow for the relocation of the "Construction Exclusion Fencing" to exclude and provide access to and across the newly protected areas.

#### Works Related Impacts

In respect of any necessary and unavoidable structures required within or entry into the "RPA" zone, all efforts must be made to minimise impacts. Aerial issues may require "access facilitation pruning" or clearance pruning. Subterranean works that require excavation must, by design, location and action, minimise impacts to trees. The adoption of "manual only" procedures so that root damage can be minimised, for example by hand digging or the use of "air-spades" for excavation or trenching, may be

required. All such works must be undertaken under the guidance of the project Arborist who will advise on likely repercussions and necessary tree management issues.

### **Tree Works Specification Updates**

It must be noted that many tree management recommendations, as stipulated within the "Preliminary Management Recommendation" section of the primary tree survey, were made prior to any grant of permission, relate to a changing site context and may no longer be applicable, or may require modification to account for the changes that the built project will cause.

### **General Method Statement**

Any inability to conform to the recommendations of this method statement or the associated tree protection plan could readily change the sustainability of trees and/or their suitability for retention.

### 1.0) Overview and Implementation

- 1.1 This method statement will be addressed and discussed by all member of the construction team management, prior to any site works or construction/demolition related works or access.
- 1.2 A review must be undertaken to identify any issues as may have arisen in respect of planning conditions or details as may have changed between the design stage and construction stage development details.
- 1.2 The project Arborist or another qualified person will oversee the application of all tree protection measures and any necessary modifications to this Method Statement to provide a basis upon which tree protection will be managed on the construction site.
- 1.3 The tree constraints (radial range) associated with any tree to be retained on site is to be regarded as sacrosanct and is not to be entered for any reason without confirmation by, and agreement with, the project Arborist.
- 1.4 Any situation that requires entry into the "root protection zones" of a tree intended for retention must be brought to the attention of the Project Arborist regarding the adoption/amendment of suitable tree protection measures.
- 1.5 As unforeseen tree losses may compromise project planning permissions, it is imperative that issues relating to tree protection or tree damage be brought to the immediate attention of the project Arborist for review and possible discussion with the relevant planning authority.

### 2.0) Works Sequence

- 2.1 No construction related works or mechanised site access will occur until the agreed level of tree protection, in accordance with the "Tree Protection Plan", is completed.
- 2.2 The only exception to the above will relate to the undertaking of tree works including tree felling and cutting as defined in the Arboricultural report.
- 2.3 The Project Arborist will oversee and liaise with the tree works contractor regarding the nature and extent of tree/woodland access to facilitate felling works.
- 2.4 On completion of the felling works, the tree management plan will be reviewed by the Project Arborist to address changed context, land use, rates of occupation and use and to account for potential impacts upon the newly built environment, thereby amending (if necessary) the "preliminary Management Recommendations" stipulated in the original Tree Survey.
- 2.5 Any revised pruning/cutting works will be agreed with the local authority and applied at the earliest possible opportunity.

- 2.6 After the completion of primary tree clearance but prior to the commencement of construction works, all "Construction Exclusion" and "Protective" fencing must be erected and "signed-off" as complete by the Project Arborist.
- 2.7 Only on completion of all construction works will any/all tree protective measures be removed, and only then in a manner, that does not compromise the "Protection Zones". This must be completed in a "Progressive" manner, with each section being removed whilst utilizing protection systems still in situ. Such works must be agreed and overseen by Project Arborist.
- 2.8 At construction works completion stage, all retained trees will be reviewed regarding the condition and longer-term management recommendations and regarding site hand-over.

## 3.0) Tree Protection

- 3.1 All tree protection measures must be agreed, overseen and verified by the Project Arborist prior to works commencement and regarding maintenance for the duration of site works
- 3.2 Tree protection will be based upon drawings "D3-TPP-St Pauls-10-19" (Construction version) that relates all trees for retention, as well as the location of all tree protection measures.
- 3.3 Unless specifically stipulated by the project Arborist, the default minimum range of protective fencing or construction exclusion fencing is the range stipulated in the primary tree survey for that tree and within the "RPA" (root protection area) column.
- 3.4 If entry into the "RPA" (Root Protection Area) zones becomes unavoidable, ground protection systems agreed with the project Arborist, that allow for the relocation of the "Construction Exclusion Fencing", will provide for an extension of accessible ground space.
- 3.5 All construction, works or access areas must be enclosed and defined by protective fencing, this comprising the "Construction Exclusion Zone"
- 3.6 Such a fence must be fit for purpose and commensurate with the nature of activity expected upon the site and should be 2.00 metres in height, constructed of robust materials and be suitably braced to withstand impact and may include sheet panels attached to timber posts or weld-mesh panels supported upon a scaffold bar system. All footings must be firm and immobile and must not use mobile rubber or cement footings, (an illustration (Fig 1-facsimile of BS5837: 2012, is appended to this document to illustrate a possible option for the construction of the protective fencing)
- 3.7 The fence should be affixed with notification signs such as "TREE PROTECTION AREA KEEP OUT"
- 3.8 Where applicable, structures such as "lock-ups", offices or other temporary site building, <u>not</u> requiring excavation or underground ducting, might be positioned such as to comprise part of the "Construction Exclusion Zone" fencing. All remaining fencing must be continuous with such features and effectively prevents access to protected ground.
- 3.9 No amendment, alteration, relocation or removal of the tree protection fencing shall occur without prior liaison and approval from the Project Arborist.

## 4.0) Provision of Ground Protection (If Required)

- 4.1 No vehicular/mechanised access whatsoever will be allowed onto unprotected ground.
- 4.2 Ground protection can comprise the use of proprietary materials/structures or procedures that avoid ground damage/disturbance/compaction, or the use of procedures that avoid such effects e.g. manual/pedestrian installation procedures.
- 4.3 Any system utilised must effectively spread load-weight, avoid compaction, maintain drainage/percolation/aeration and be installed in a manner that avoids these issues.
- 4.4 Newly provided access will be strictly limited to the area of the new structure
- 4.5 Where proprietary ground protection systems are utilised, it is imperative that the manufacturer's specifications and recommendations are adhered to in full regarding the provision and installation of this type of ground protection.
- 4.6 Protection installation will require a progressive laying down of ground protection, with previously laid material providing vehicular access to the next zone will be accepted as an approved

### 5.0) Works within "RPA" Zone

- 5.1 Only works and construction practices, agreed with the Project Arborist prior to commencement, will be allowed in the "RPA" area.
- 5.2 The "RPA" zone associated with all retained trees must be protected from the effects of construction works.
- 5.3 Amended tree protection measures as agreed with the Project Arborist and including the relocation of fencing and the provision of ground protection will be installed in accordance with the tree protection measures prior to commencement.
- 5.4 All works will be undertaken under the supervision and guidance of the Project Arborist who will have the authority to stop works if activities are considered such as to have the potential to damage trees.
- 5.5 Preference must be given to manual labour and techniques within the fenced "RPA" zone.
- 5.6 On completion of the required works, the area will be inspected by the Project Arborist regarding the reinstatement of the original protection and the relocation of the protective fencing to a position relating to the original "RPA" area.

## 6.0) Service Installation

- 6.1 The "Project Arborist" must be consulted for advice and procedural recommendations, in respect of any installation of services within or requiring entry into the "Root Protection Area" of any tree intended for retention.
- 6.2 Any such works found to be unavoidable, must be undertaken with special care, incorporating the recommendations of both "BS5837: 2012 and the National joint utility groups, guidelines for the planning, installation and maintenance of utility services in proximity to trees (NJUG 10)
- 6.3 No open trenching will be allowed. All works must be commensurate with the preservation of the affected tree root system.
- 6.4 Preference will be given to trench-less techniques including Mole-piping, Directional-drilling manual hydro-trenching (high-pressure water), "Air-Spade" or broken-trench techniques.
- 6.5 All works carried out within the "RPA" zone or "Construction Exclusion Zone" must be agreed with and supervised by the Project Arborist.

## 7.0) Tree Management and Works

- 7.1 All tree works should be undertaken under the guidance of the project Arborist
- 7.2 The primary site clearance and felling should be undertaken at the earliest stage of the overall development works, to enable the re-assessment of all ostensibly retainable trees in respect of possible amendments to the "Preliminary Management Recommendations" and to account for context changes and construction access and/or other issues coming to light.
- 7.3 All Tree Works must adopt safe work procedures and must be undertaken by staff suitably trained for the purpose at hand and compliant with all legislative, safety and insurance requirements.
- 7.4 Additional works including formative pruning, crown reduction etc., may be nominated for various trees in the interests of mitigating the potential effects of exposure and isolation.
- 7.5 All additional works will be agreed with the local authority and/or other stakeholders and applied at the earliest possible opportunity.
- 7.6 All Tree Surgery/Pruning works will be undertaken under the guidance of the Project Arborist; the precise nature and extent of work being agreed before commencement.
- 7.7 On completion of site works, the retained tree population will be reviewed and re-evaluated regarding its ongoing condition and the likely requirements of any ongoing or future monitoring or management needs.

## 8.0) Demolition

- 8.1 All demolition procedures must be agreed and overseen by the Project Arborist or other suitably skilled staff to monitor for damage and to protect exposed roots/cut-trim exposed roots/oversee backfilling of exposed roots.
- 8.2 Where access into unprotected "RPA" zone becomes unavoidable then suitable ground protection, provided in accordance with an engineer's direction and agreed with the Project Arborist will be installed.
- 8.3 Care will be taken to avoid damage to soil volumes beneath and adjoining demolished structures that may contain tree root material.
- 8.4 Whilst existing foundations/structures may provide temporary protected access to areas within the "RPA" zone, preference must be given to the location of demolition plant outside of the "RPA" zone.
- 8.5 Where tree(s) exist near a structure to be demolished then the demolition should be undertaken inwards within the footprint of the existing building (Top Down, Pull Back).
- 8.6 Underground structures (services etc.) within the "RPA" zone should be reviewed with regards to decommissioning and retention in situ in the interest of avoiding tree damage.
- 8.7 Preference should be given to the retention existing sub-bases where hard surfaces are removed, particularly if the hard surface is to be replaced.

## 9.0) Ancillary Precautions

- 9.1 The methodologies as set out in this document apply to all undertakers of work upon or adjoining the site as may require access to the "Construction Exclusion Zone" or the "RPA" area of any tree.
- 9.2 This document will be disseminated to all persons requiring access to the work site.
- 9.3 All persons undertaking works either before or after the principal development (site investigation works, Landscape Contractors) are subject to the above requirements
- 9.4 Works outside the "Construction Exclusion Zone" must be controlled to create no potential secondary hazard to tree health.
- 9.5 Large loads accessing the site must be reviewed regarding clearance and potential tree damage.
- 9.6 Care must be taken regarding materials that may contaminate the ground. No concrete mixings, diesel or fuel, washings or any other liquid material may be discharged within 10 metres of a tree.
- 9.7 No fires can be lit within 5 metres of any tree canopy extent.
- 9.8 No tree will be used for support regarding cables, signs etc.
- 9.9 The trees should be reviewed on a regular basis throughout the development process and on completion. At that time, additional recommendations regarding tree management may be required.
- 9.10 Any issue that has the potential to affect site trees must be brought to the attention of the Project Arborist for review and comment.
- 9.11 Any circumstances that become known whilst the development project is ongoing that either involves trees or access to/works within the construction exclusion zone must be brought to the attention of the Project Arborist for evaluation and advice regarding approach and methodology.
- 9.12 It is likely that liaison/agreement will be required with the Local Planning Authority regarding compliance with, as well as the verification of the required tree protection measures.

#### Appendix 2 - Tree Survey

#### Nature of Survey

The criteria put forward in "BS5837:2012 – Trees in Relation to Design, Demolition and Construction – Recommendations" have provided a basis for this report. The data collected has been represented in table form as "Table 1" within "Appendix 1" to this report. This appendix includes a Survey Methodology, Survey Key, Survey Abbreviations, Condition Category Definitions and a brief resume of the typical application of Tree Protection measures as defined within the above standard and as relates to the "RPA" zones defined both within the survey table and on the "TCP" drawing.

The survey, its findings and management recommendations relate to the site and the conditions thereon at the time of the survey. It is likely that changes in site usage, development or other environmental changes will require an amendment of a tree's potential retention status and its preliminary management recommendations and in some instances, may require the re-classification of a tree's suitability for retention.

#### **Drawing References**

The survey must be read with the "Tree Constraints Plan" drawing "D1-TCP-St Pauls-10-19" regarding the representation of tree positions, crown forms, "RPA" extents and colour reference to category systems. Trees omitted from the supplied drawing may be "sketched in" to "D1-TCP-St Pauls-10-19". Any such trees should be located and plotted by professional means to identify the constraints such trees have upon the site. A green coloured outline represents each tree crown. It is scaled to represent the north, east, south and west crown radii as denoted in the survey table. Each tree (categories A-green, B-blue and C-grey only) have been apportioned a "Root Protection Area" (RPA see below) denoted as a dashed orange circle.

The development of a Tree Constraints Plan (TCP) provides a design tool regarding tree retention. Such a plan combines the topographical land survey drawing with additional information as provided by the tree survey. The aspects of the tree's existence recorded on the "TCP" are, firstly, the tree canopies, represented by the four cardinal compass point radii (Sp: R in survey Table 1). Secondly, and following paragraphs 4.6.1, 4.6.2 and 4.6.3 of BS5837: 2012, we represent each tree's "Root Protection Area" (RPA). For design purposes, it approximates the position of the tree protection fencing to be erected before the commencement of any site works, thus excluding all site activities other than those dealt with by way of the "Arboricultural Implication Assessment" and "Arboricultural Method Statement".

The "Tree Constraints Plan" (TCP) depicts the extent and location of constraints, placed upon the site by the trees. The "TCP" represents both the true canopy form (north, east, south and west radii) but also the "RPA" as defined above. These constraints are provided to advise regarding the design and layout of a proposed development.

#### Survey Intent and Context

This document intends to highlight the extent and nature of the material of Arboricultural interest on the site in question.

### Survey Data Collection and Methodology

#### The Survey

The original survey was carried out in April 2015, updated in 2017, 2018 and again most recently in April 2019. This survey portion of the overall report is not an Implication Assessment though but provided some of the basic information regarding its compilation. The compilation of this survey was guided by the recommendations of BS 5837: 2012. This survey typically includes trees of stem diameters exceeding 150mm at approximately 1.50 metres from ground level. The survey relates to current site conditions, setting and context.

Each tree in the survey has a consecutive number that relates directly to the survey text. Measurements are metric and defined in metres and millimetres. All trees referred to in the survey text have been measured to provide information regarding canopy height and canopy spread (north, east, south and west radii), level of canopy base and stem diameter at 1.50 meters from ground level. The dimensions provided are intended to provide a reasonable representation of a tree's size and form. While efforts are made to maintain accuracy, visual obstruction, especially regarding trees in groups, requires that some tree dimensions are estimated only.

#### **Inspection and Evaluation Limitations and Disclaimers**

The information set out in this report relates to the review of a tree population on the site in question. As such, the information provided is based on a general review of trees and does not constitute a detailed review of any one of the individual specimens. Such an evaluation (tree report) would require the gathering of substantially more information than that dealt with in this survey.

The survey is not a safety assessment and the parameters reviewed within this survey context would be substantially deficient in extent to provide for a reliable safety assessment. The survey is intended to provide a general and qualitative review to assist in gauging the suitability of an individual tree for retention within a development context. All trees are subject to impromptu failure and damage. The assessment of risk as may be presented by a tree requires the review of numerous factors more than those noted herein and as such, remains outside the scope of this document and any attempt to use the information herein for such proposes will render the information invalid.

A competent and experienced Arborist has completed all inspection and tree assessment. The inspection involves visual assessment only, which has been carried out from ground level. No below ground, internal, invasive or aerial (climbing) inspection has been carried out. Trees are living organisms whose health, condition and safety can change rapidly. All trees should be re-evaluated regarding their condition on an annual basis or after substantial trauma such a storm event, other damage or injury. The results and recommendations of this survey will require review and reassessment after one year from the date of execution. This survey does not constitute a review of tree or site safety. Attempts to use the contents herein for such purposes will render the contents invalid.

Throughout the undertaking of the survey, several factors acted against the inspectors, contriving to reduce the accuracy of the survey.

#### Seasonality

The original and subsequent survey was carried out during the spring periods. Some of the signs, typically symptomatic of ill-health or defect within a tree, may not have been available to view at the time

of the survey or may have been obscured by seasonality related factors. Some of the fruiting bodies of various fungi, parasitic upon or causing decay or disease in trees, may have been out of season and unavailable to view. This survey can only comment upon symptoms of ill-health or defects visible at the time of the inspection.

# <u>Survey Key</u>

Specie	S	Refers to the specific tree species
Age		Referred to in generalized categories including: -
Y -	Young	A young and typically small tree specimen.
S/M -	Semi-Mature	A young tree, having attained dimensions that allow it to be regarded
		independently of its neighbours but typically, would be less than 50% of its
		ultimate size.
E/M -	Early-Mature	A specimen, typically 50% - 100% of ultimate dimensions but with substantial
		capacity for mass and dimensional increase remaining.
M -	Mature	A specimen of dimensions typical of a full-grown specimen of its species. Future growth would tend to be extremely slow with little if any dimensional increase.
O/M -	Over-Mature	An old specimen of a species having already attained or exceeded its naturally expected longevity.
V -	Veteran	An extremely old, veteran specimen of a species, usually of low vigour and typically subject to rapid decline and deterioration or of very limited future longevity.
Tree I	Dimensions	All dimensions are in meters. See notes regarding limitation of accuracy.
Ht		Tree Height
СН		Lowest canopy height
N, E, 9	S, W	Tree Canopy Spread measured by radii at north, east, south and west
Dia		Stem diameter at approx. 1.50m from ground level.
RPA.		Root Protection Area, as a radius measured from the tree's stem centre.
Con		Physical Condition
G	Good	A specimen of generally good form and health
G/F	Good/Fair	
F	Fair	A specimen with defects or ill health that can be either rectified or managed typically allowing for retention
F/P	Fair/Poor	
Р	Poor	A specimen whom through defect, disease attack or reduced vigour has limited
		longevity or maybe un-safe
D	Dead	A dead tree
Struct	ural Condition	Information on structural form, defects, damage, injury or disease supported by the tree
PMR	– Preliminary	Recommendation for Arboricultural actions or works considered necessary at the
Mana	gement	time of the inspection and relating to the existing site context and tree condition.
Recon	nmendations	Works considered as urgent will be noted.
Reten	tion Period	
S - Sh	ort	Typically, 0 -10 years
M - M	ledium	Typically, 10 -20 years
L - Lc	ong	Typically, $20 - 40$ years
L+	~ .	Typically, more than 40 years
Categ	ory System	The Category System is intended to quantify a tree regarding its Arboricultural
<b>C</b> .	T T	value as well as a combination of its structural and physical health.
Catego	ory U	Typically relates to trees that are dead, dying or dangerous. Such trees may
Cataor	A	A turically a good quality anguiner which is considered intermediable.
Calego	ory A	A typically a good quality specifien, which is considered to make a substantial
Catag	Der D	Arboncultural contribution
Catego	$\mathbf{D} \mathbf{y} \mathbf{D} \dots \dots \mathbf{D} \mathbf{y}$	Typically including generally near quality trees that may be of only limited value
Calego	лу С	The above categories are further subdivided regarding the nature of their values of
		and above categories are further subdivided regarding the nature of their values of qualities
Sub-C	ategory 1	Yuanuos. Values such as species interest species context landscape design or prominent
540-C	utozory 1	and such as species interest, species context, failuscape design of prolificint
Sub-C	ategory ?	Mainly cumulative landscape values such as woods groups, avenues, lines
Sub-C	ategory 3	Mainly cultural values such as conservation commemorative or historical links
~~~ C		

# <u> Table 1 – Tree Data Table</u>

No.	Species	Age	Con	Ht.	CH	Ν	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
1	Lime (Tilia europea)	М	F/P	9.00	1.50	4.50	3.00	3.50	4.50	5	844	10.12	A squat and suckering specimen that has been substantially decapitated in past. Is multi-stemmed with much of crown comprising sucker regeneration. Vigour remains good though ongoing management will be required over time.		М	C2
2	Silver Birch (Betula pendula)	M/A	F	5.50	2.00	4.50	2.50	1.50	1.00	1	229	2.75	Heavily unbalanced to north presumably as result of suppression. Is of poor form but is maintaining good vigour and vitality.		М	C2
3	Lime (Tilia europea)	S/M	G/F	6.00	1.50	3.00	1.50	3.50	3.00	2	261	3.13	Suppressed and slightly distorted. Is twin- stemmed from ground level creating some concern with regard mechanical integrity in later life. Presents no tangible threat at present.	Review regularly.	М	C2
4	Silver Birch (Betula pendula)	М	G	11.00	1.75	3.00	2.50	2.50	2.50	1	407	4.89	Heavily divided at circa 2.25 m. General vigour and vitality appears good. Ivy is developing on primary stem.	Cut Ivy and review regularly.	L	B2
5	Lime (Tilia europea)	E/M	G	6.00	2.25	3.50	3.50	3.50	3.50	1	331	3.97	Young and vigorous requiring no attention at present.		L	A2
6	Lime (Tilia europea)	E/M	G	5.50	2.00	3.50	3.00	3.50	3.50	1	286	3.44	Has sustained minor damage to lower crown.	Cleanout review regularly.	L	B2
8	Red Oak (Quercus rubra)	E/M	F	7.00	1.00	0.00	2.50	4.50	2.00	1	347	4.16	Heavily suppressed and notably unbalanced to south. Basal region exhibits evidence of possible bark necrosis that could indicate pathogen attack.	Review regularly.	М	C2
9	Red Oak (Quercus rubra)	E/M	F	6.50	2.25	2.00	1.50	3.50	4.00	1	293	3.51	One-sided because of suppression but appears to be maintaining reasonable vigour.	Review regularly.	М	C2

No.	Species	Age	Con	Ht.	СН	Ν	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
10	Red Oak (Quercus rubra)	E/M	F	6.50	3.00	2.50	2.00	0.50	2.00	1	178	2.14	One-sided and exhibiting evidence of basal damage.	Review regularly.	М	C2
11	Ash (Fraxinus excelsior)	E/M	G/F	12.00	2.50	3.50	3.00	3.00	3.00	1	315	3.78	Is maintaining good vigour but has sustained widespread buttress-root bark- damage.	Review regularly.	L	B2
12	Holly ( <i>Ilex aquifolium</i> )	M/A	F	4.50	1.00	1.50	1.00	1.00	1.00	1	283	3.40	Large element of widespread shrubby material in general area.	Review regularly.	М	C2
13	Blue Atlas Cedar (Cedrus atlantica "Glauca")	E/M	F	9.50	2.00	3.50	3.00	3.50	3.00	1	420	5.04	Appears be maintaining reasonable vigour but supports dead-wood considered typical for species as well as localised storm damage.	Review regularly.	L	B2
13a	Sycamore (Acer pseudoplatanus)	S/M	F/P	9.50	0.00	4.50	4.50	4.50	4.50	7	462	5.54	Exists as sucker regeneration from stump of previous tree. Remains young and vigorous with immense potential for continued growth but is structurally poor and will be subject to potential mechanical failure.	Review regularly regarding ongoing suitability for retention.	S	C2
14	Ash (Fraxinus excelsior)	M/A	G/F	12.00	2.50	3.00	4.50	4.00	4.50	1	532	6.38	Appears to be maintaining reasonable vigour. Has developed secondary leader on western side of primary stem.	Review regularly.	L	B2
15	Beech (Fagus sylvatica)	М	F	12.00	2.50	5.00	3.00	2.00	3.50	1	382	4.58	Supports typical imbalance to north. General vigour and vitality remain good.	Review regarding Ivy development on principal stem.	L	B2
16	Beech (Fagus sylvatica)	M/A	G	13.00	2.00	4.50	6.00	6.00	5.00	1	544	6.53	Supports minimal imbalance to South. Is maintaining good vigour and vitality but has sustained minor localised breakage as well as removal of lower crown branches retaining unsightly stumps.	Consider cleaning out.	L	B2

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
17	Sycamore (Acer pseudoplatanus)	М	Р	20.00	2.00	7.00	5.00	5.00	5.00	1	987	11.84	A particularly large specimen having sustained chronic failure in the past and now supporting an extensive area decay and cavity development on primary stem. Concern exists regarding predisposition to additional and ongoing failure.	Consider removal. Alternatively apply structural pruning works including crown reduction works for limited and monitored retention.	S	C1-2
18	Beech (Fagus sylvatica)	М	F	23.00	2.50	10.00	9.00	9.00	7.00	1	780	11.84	A particularly large and aged specimen having undergone limb removal and decapitation in past. In some instances, past decapitation has resulted in areas of known decay. Structural form is distorted though vigour and vitality appear reasonable. Primary stem is obscured by dense Ivy cover raising some concern regarding the potential for indicators of disease attack to be obscured. Tree appear suitable for retention but should be reviewed regularly.	Cut Ivy.	Μ	C1-2
19	Ornamental Cherry (Prunus variety)	Μ	F	2.50	1.00	3.50	4.00	4.50	2.50	1	525	6.30	A broad and spreading specimen of highly variable crown vigour and vitality. Appear suitable for retention may prove to be short lived.		М	C2
20	Ornamental Apple (Malus variety)	М	F	3.00	1.25	2.50	3.50	3.00	2.00	1	398	4.77	Slightly distorted as result of suppression but maintaining reasonable vigour.	Review regularly.	М	C2
21	Ornamental Cherry (Prunus variety)	М	F/P	5.00	2.50	7.00	5.00	4.50	4.50	1	430	5.16	Multi-stemmed group together with some poor-quality Laburnum. Is of variable vigour and exhibits evidence of canker related lesions on primary stem. Is of dubious sustainability and limited longevity.	Review regularly regarding ongoing suitability for retention.	S	C2
22	Ornamental Cherry (Prunus variety)	M/A	G/F	5.50	1.25	2.50	2.50	2.50	2.50	1	286	3.44	Ornamental drive side planting. Is of good vigour and vitality.	Review regularly.	L	B2

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
23	Ornamental Cherry (Prunus variety)	M/A	G/F	3.00	1.00	2.50	2.50	3.00	3.00	1	325	3.90	Squat suppressed. Has sustained substantial cutting in past.	Review regularly.	М	C2
24	Ornamental Cherry (Prunus variety)	M/A	F	3.00	1.00	1.50	3.00	3.00	3.00	1	318	3.82	Broad and spreading, maintaining good vigour.		L	B2
25	Ornamental Cherry (Prunus variety)	M/A	F	3.50	1.25	2.00	3.00	3.00	3.00	1	236	2.83	Somewhat distorted but maintaining good vigour and vitality.		L	B2
26	Ornamental Cherry (Prunus variety)	M/A	G/F	4.50	2.00	3.50	4.50	4.00	4.00	1	398	4.77	Heavily divided near ground level. Is maintaining good vigour and vitality.		L	B2
27	Ornamental Cherry (Prunus variety)	M/A	G	3.50	1.00	3.00	4.00	4.50	4.00	S	398	4.77	Multi-stemmed with spreading crown. Vigour and vitality is good.	Review regularly.	L	B2
28	Ornamental Cherry (Prunus variety)	M/A	G/F	3.50	1.00	3.50	4.00	4.00	4.00	1	382	4.58	Multi-stemmed and slightly distorted but maintaining good general vigour and vitality.		L	B2
29	Red Alder (Alnus rubra)	M/A	G/F	13.00	2.00	4.50	4.00	4.50	4.00	1	382	4.58	Appears to be maintaining good vigour and vitality but has sustained minor localised mechanical failure in past.	Review regularly.	L	B2
30	Ornamental Apple variety (Malus Sp.)	ОМ	F/P	3.50	1.00	2.50	1.50	3.00	3.00	1	592	7.10	A particularly aged specimen exhibiting evidence of decline deterioration and dead-wood development that may be suggestive of limited longevity.	Review on regular basis regarding ongoing suitability for retention.	S	C2
31	Rowan (Sorbus aucuparia)	S/M	F	3.00	1.00	2.00	2.00	2.00	2.00	1	191	2.29	Young and vigorous.		L	B2
32	Rowan (Sorbus aucuparia)	S/M	F	3.00	1.00	2.00	2.00	2.00	2.00	1	232	2.79	Young and vigorous.		L	B2
33	Apple variety (Malus Sp.)	М	F/P	5.00	1.75	2.00	1.50	4.50	4.50	1	347	4.16	Suppressed and unbalanced, but variable vigour and vitality with evidence of prior dieback suggestive of limited longevity.	Review regularly regarding ongoing suitability for retention.	S	C2

No.	Species	Age	Con	Ht.	СН	Ν	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
34	Ornamental Cherry (Prunus variety)	М	F/P	9.00	2.00	3.50	1.00	4.50	4.50	1	430	5.16	Heavily one-sided and typically unbalanced to west. Has sustained prior storm damage and support some dead- wood. Tree supports notable lesion on primary stem.	Review on regular basis.	М	C2
35	Ash (Fraxinus excelsior)	M/A	F	13.00	2.50	3.50	4.50	6.00	2.00	ω	548	6.57	Poor quality and heavily distorted but appears be maintaining reasonable vigour. Appears to present limited threat at present.	Review regularly.	М	C2
36	Horse Chestnut (Aesculus hippocastanum)	M/A	F/P	11.00	2.50	6.00	4.50	3.00	7.00	1	452	5.42	Heavily distorted and typically unbalanced to north-west. Appears to comprise a close-knit group of suckers. Appears to present little if any threat at present though may prove to be of limited sustainability.	Review regularly.	М	C2
37	Horse Chestnut (Aesculus hippocastanum)	M/A	F	13.00	2.25	2.50	5.00	7.50	4.00	1	522	6.26	Again, heavily unbalanced and of dubious sustainability. Currently maintained reasonable vigour and vitality though may prove to be of limited sustainability.	Review regularly.	М	C2
38	Horse Chestnut (Aesculus hippocastanum)	М	F	13.00	2.25	5.50	5.00	6.00	6.00	<u> </u>	933	11.19	Once large specimen appears to have sustained substantial mechanical failure in recent past followed up with notable decapitation. Tree remains vigorous but will require ongoing monitoring and in particular, attention to sucker redevelopment.	Review regularly.	М	C2
38a	Sycamore (Acer pseudoplatanus)	E/M	G	12.00	2.25	2.50	1.50	3.00	3.50	<u> </u>	385	4.62	Young and vigorous supporting minor imbalance to west.		L	B2

No.	Species	Age	Con	Ht.	СН	Ν	Ε	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
39	Horse Chestnut (Aesculus hippocastanum)	М	F/P	16.00	2.50	7.00	6.50	5.50	5.50	I	875	10.50	Squat and slightly distorted specimen exhibiting classic signs of decline and Twiggy dieback throughout crown periphery suggestive of ill-health. Has undergone substantial cutting and limb loss in past, some of which has lead to development of notable crown cavities. Tree could be predisposed to mechanical failure.	Consider application of crown-reduction type works.	М	C2
40	Sycamore (Acer pseudoplatanus)	M	Р	16.00	3.00	5.00	6.00	6.50	6.50	<b></b>	896	11.61	A once larger specimen has undergone substantial decapitation. Lower stem exhibit evidence of substantial wounding now colonised by Ustulina on lower north- western side. Tree appears to present limited threat at present though should be regarded as being of limited sustainability.	Review regularly regarding ongoing suitability for retention.	S	C2
41	Sycamore (Acer pseudoplatanus)	S/M	F	5.50	1.75	4.00	2.00	3.00	3.50	1	264	3.17	Substantially unbalanced to north-west but maintaining good vigour.		L	B2
42	Grey Alder (Alnus incana)	E/M	F	8.00	3.00	2.50	2.50	2.50	2.50	1	191	2.29	Young and vigorous.		L	B2
43	London Plane (Platanus x hispanica)	S/M	Р	7.50	2.50	2.50	2.50	2.50	2.50	1	207	2.48	Young and vigorous but compromised by failed compression fork at 1.75 m.	Remove and replace.	N/A	U
44	London Plane (Platanus x hispanica)	S/M	Р	10.00	2.50	2.50	3.50	3.50	3.50	1	210	2.52	Has sustained substantial damage in past with remaining ascending stem exhibiting evidence of defect.	Remove and replace.	N/A	U
45	London Plane ( <i>Platanus x</i> <i>hispanica</i> )	E/M	F/P	11.00	2.50	4.50	4.50	3.00	3.00	1	290	3.48	Heavily divided at 2.00 m with evidence of compression fork development that may predispose tree to failure. Is of dubious sustainability.		М	C2
46	London Plane (Platanus x hispanica)	S/M	Р	7.50	3.50	3.00	2.50	2.50	3.00	1	274	3.29	Has sustained chronic crown failure. Is of dubious sustainability.	Consider removal and replacement.	S	C2

No.	Species	Age	Con	Ht.	СН	Ν	Ε	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
47	Fastigiate Pear (Pyrus Sp.)	M/A	F	9.00	2.00	2.50	1.00	1.00	2.00	1	185	2.22	Fastigiate form in keeping with variety. Slightly suppressed by joining shrubbery.		М	B2
48	Lime (Tilia europea)	E/M	G/F	9.00	2.00	3.00	3.00	3.00	3.00	1	277	3.32	Young and vigorous requiring no specific action at present.		L	B2
49	Fastigiate Pear (Pyrus Sp.)	M/A	F	9.00	1.50	1.50	2.50	3.00	0.50	1	207	2.48	Slightly unbalanced with portions of crown beginning to sag.	Review regularly.	М	C2
50	Lime (Tilia europea)	E/M	G	9.50	2.50	2.50	2.50	2.50	2.50	1	210	2.52	Young and vigorous.		L	A2
51	Sycamore (Acer pseudoplatanus)	E/M	G	11.00	2.50	3.50	4.00	2.50	1.50	1	347	4.16	Slightly unbalanced as result of suppression but maintaining good vigour and vitality.		L	B2
52	Sycamore (Acer pseudoplatanus)	S/M	F/P	9.50	2.50	0.00	0.00	3.00	3.50	1	210	2.52	Heavily suppressed and notably one-sided raising concerns regarding sustainability.	Consider early removal.	N/A	U
53	Sycamore (Acer pseudoplatanus)	E/M	G/F	10.00	2.00	2.50	2.00	3.00	4.00	1	350	4.20	Slightly unbalanced as result of suppression but maintaining reasonable vigour and vitality.	Review regularly.	М	C2
54	Ash (Fraxinus excelsior)	E/M	F	9.00	2.50	2.50	2.50	2.50	4.00	1	286	3.44	Suppressed as result of proximity to near neighbours. Vigour is poor with apparent dieback about crown.	Review during late summer regarding ongoing suitability for retention.	S	C2
H1	Golden Cypress Hedge	S/M	G/F	3.00	0.00	Spread 3.00				1	111	1.34	What appears to be in relatively recently installed hedge is growing vigorously but exhibits little if any evidence of management to date. Species growth rate raises substantial concern regarding ultimate size and difficulties relating to ongoing management over time.	Review regularly.	M	C2

No.	Species	Age	Con	Ht.	СН	Ν	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
TL1	Tree Line 1 Ornamental Apple variety ( <i>Malus Sp.</i> )	E/M	F	3.00	1.25	1.25	1.25	1.25	1.25	<b>P</b>	95	1.15	An alignment of 7 individual specimens having been recently installed and still retaining their supportive stakes. Appear to be maintaining good vigour and most exhibit evidence of excellent establishment and vitality.	Remove supporting stakes and review.	L	B2
WA 1	Woodland Area 1 Hawthorn ( <i>Crataegus</i> monogyna) Monterey Cypress ( <i>Cupressus</i> macrocarpa) Sycamore ( <i>Acer</i> pseudoplatanus) Cherry Laurel ( <i>Prunus</i> laurocerasus) Beech ( <i>Fagus sylvatica</i> ) Wych Elm ( <i>Ulmus glabra</i> ) Ash ( <i>Fraxinus excelsior</i> ) Bramble ( <i>Rubus fruticosus</i> )	E/M-M	F-P	6.00-15.00	Various	Various	Various	Various	Various	n/a	various	contiguous	A cohesive woodland group exhibits evidence planting as well as natural redevelopment. A of the area running parallel to the Sybil Hill is and alignment of Lawson Cypress that the irregular regarding some trees having sustain being suppressed. Most specimens appear to raising concern regarding longer term sustai as well as roadside safety. On either side of exists a typically haphazard irregular woodla by variable sized Sycamore ash and elm. Ma to be of reasonable vigour and vitality some for retention however, notable proportion ar and evidence of mechanical failure and colla within the woodland area. Whilst defined at Sybil Hill Road boundary and by a block-bu the north, the woodland edge of the creation northern edge is best defined by somewhat s typically unbalanced alignment of Portugues Considering the conditions as noted above, t several concerns regarding management and arises regarding the proximity of the nature of Hill Road boundary particularly considering is advised that structural pruning and tree fet to be applied in a judicious manner both to i improve woodland sustainability. It should the woodland as is unlikely to prove sustainable ongoing deterioration and mechanical failure and replacement planting programme will be	ce of both artificial long the central axis Road boundary there ough still continuous is ned failure and others be hugely drawn up nability and stability the alignment, there and thicket dominated any specimens appear what appear suitable e mechanically flawed, apse is readily notable its western side by the ilt boundary wall to of the woodland's suppressed and se and Cherry Laurel. the woodland raises l site safety. Concern of trees to the Sybil recent tree failures. It lling works will need mprove safety and to be appreciated that the and will be subject to e. Accordingly, a a rotational removal e necessary.	S-L	B-U

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
PL1	Plantation 1 Lime ( <i>Tilia europea</i> ) London Plane ( <i>Platanus x</i> <i>hispanica</i> ) Norway Maple ( <i>Acer platanoides</i> ) Portuguese Laurel ( <i>Prunus lusitanica</i> ) Beech ( <i>Fagus sylvatica</i> ) Silver Birch ( <i>Betula pendula</i> ) Cherry Laurel ( <i>Prunus</i> <i>laurocerasus</i> )	E/M	G/F	8.00-10.00	2.00	3.00	3.00	3.00	3.00	1	302	3.63	Young and relatively close-knit plantation of what appear to be broadly even aged trees. Comprise a substantial and sustainable thicket with most specimens exhibiting evidence of excellent vigour and vitality sustainability at present.		L	В
TL2	Tree Line 2 Leyland Cypress (Cuppressocyparis leylandii)	Μ	F	15.00	1.50	3.50	3.50	3.50	3.50	1	366	4.39	A close-knit and triple lined row of cypresses combining to create a single large hedge like effect. At present, the hedge is substantially overgrown and is arguably beyond management. Concerns exist regarding sustainability and management over time as the drawn-up nature of most specimens will leave predisposed to storm damage and mechanical failure over time. As this begins to occur, it is likely to progress throughout the alignment at an accelerating rate.	Review regularly with regard retention context and management issues.	М	C2
55	Lawson Cypress (Chamaecyparis lawsoniana)	М	F	6.00	0.00	3.00	3.00	3.00	3.00	1	334	4.01	Appears to be maintaining reasonable vigour.		L	B2
56	Silver Birch (Betula pendula)	М	G/F	13.00	2.00	3.00	3.50	3.00	3.00	-	487	5.84	Of good form and vigour notwithstanding fork at 1.75 m.		L	B2

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
57	Lawson Cypress (Chamaecyparis lawsoniana)	М	G/F	6.00	0.00	3.00	3.00	3.00	3.00		318	3.82	Appears to be maintaining reasonable vigour.		L	B2
58	Silver Birch (Betula pendula)	М	G	13.00	2.00	3.50	3.00	3.00	3.50	1	497	5.96	Of good form and vigour.		L	B2
59	Lawson Cypress (Chamaecyparis lawsoniana)	М	G/F	5.50	0.00	3.00	3.00	3.00	3.00	1	328	3.93	Appears to be maintaining reasonable vigour.		L	B2
60	Silver Birch (Betula pendula)	М	G/F	12.00	2.00	3.50	2.50	3.00	3.00	1	506	6.07	Heavily divided at 1.50 m but maintaining good general vigour.		L	B2
61	Lawson Cypress (Chamaecyparis lawsoniana)	М	G/F	5.00	0.00	3.00	3.00	3.00	3.00	<u> </u>	334	4.01	Appears to be maintaining reasonable vigour.		L	B2
62	Silver Birch (Betula pendula)	М	G	13.00	2.25	4.00	3.50	3.50	4.00	1	525	6.30	A strong and dominating specimen.		L	B2
63	Lawson Cypress (Chamaecyparis lawsoniana)	М	G/F	4.00	0.00	3.00	3.00	3.00	3.00	<u> </u>	350	4.20	Appears to be maintaining reasonable vigour.		L	B2
64	Silver Birch (Betula pendula)	М	G/F	14.00	1.00	4.50	4.50	4.00	4.50	1	707	8.48	A strong dominating specimen seeing Ivy development about lower stem.	Cut Ivy.	L	B2
65	Lawson Cypress (Chamaecyparis lawsoniana)	М	G/F	5.00	0.50	3.00	3.00	3.00	3.00	1	271	3.25	Appears to be maintaining reasonable vigour.		L	B2
66	Lawson Cypress (Chamaecyparis lawsoniana)	М	G/F	6.50	0.50	3.00	3.00	3.00	3.00	1	302	3.63	Appears to be maintaining reasonable vigour.		L	B2
67	Silver Birch (Betula pendula)	М	G/F	12.00	2.00	3.50	3.50	3.00	3.00	1	602	7.22	Is of reasonable vigour but is notably divided at .50 m.		L	B2

No.	Species	Age	Con	Ht.	СН	Ν	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
68	Lawson Cypress (Chamaecyparis lawsoniana)	Μ	G/F	4.50	0.00	3.00	3.00	3.00	3.00	1	318	3.82	Appears to be maintaining reasonable vigour.		L	B2
69	Silver Birch (Betula pendula)	М	G	12.00	2.25	3.00	3.00	3.00	3.50		433	5.19	Of typically good form and vigour.		L	B2
70	Lawson Cypress (Chamaecyparis lawsoniana)	М	G/F	4.50	0.00	3.00	3.00	3.00	3.00	1	334	4.01	Appears to be maintaining reasonable vigour.		L	B2
71	Silver Birch (Betula pendula)	Μ	G/F	9.00	0.50	5.00	3.50	3.50	3.50	1	497	5.96	A broad and spreading specimen supporting extensive lateral limb to north. Ivy is becoming notable on principal stem.	Cut Ivy.	L	B2
72	Lawson Cypress (Chamaecyparis lawsoniana)	М	F	6.00	0.00	3.00	3.00	3.00	3.00	1	302	3.63	Appears to be maintaining reasonable vigour.		L	B2
73	Silver Birch (Betula pendula)	Μ	G/F	10.00	1.50	4.00	3.00	3.50	3.00	1	548	6.57	Becomes substantially multi-stemmed by 0.50 m. General vigour and vitality is good though Ivy development is becoming notable.	Cut Ivy.	L	B2
74	Lawson Cypress (Chamaecyparis lawsoniana)	М	F	5.50	0.00	3.00	3.00	3.00	3.00	1	302	3.63	Appears to be maintaining reasonable vigour.		L	B2
75	Silver Birch (Betula pendula)	М	G/F	9.00	2.00	3.50	3.00	3.00	3.00	1	477	5.73	Young and vigorous.		L	B2
76	Lawson Cypress (Chamaecyparis lawsoniana)	М	F	5.50	0.50	3.00	3.00	3.00	3.00	1	350	4.20	Appears to be maintaining reasonable vigour.		L	B2
77	Lawson Cypress (Chamaecyparis lawsoniana)	Μ	F	5.50	0.50	3.00	3.00	3.00	3.00	1	350	4.20	Appears to be maintaining reasonable vigour.		L	B2
78	Silver Birch (Betula pendula)	Μ	G/F	9.00	1.00	5.00	4.00	3.50	4.00	1	598	7.18	Substantially multi-stemmed from near ground level with what appears to be relatively stable forks good general vigour.	Cut Ivy.	L	B2

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
79	Lawson Cypress (Chamaecyparis lawsoniana)	М	G/F	5.00	0.00	3.00	3.00	3.00	3.00	1	302	3.63	Appears to be maintaining reasonable vigour.		L	B2
80	Silver Birch ( <i>Betula pendula</i> )	М	G	9.00	2.00	3.50	3.00	4.00	3.00	<u> </u>	0	0.00	Exhibits evidence of reduced vigour with twiggy dead-wood and dieback evident within crown suggesting possible pathogen attack.	Review during growing season regarding identifying extent of vigour loss and possible cause of decline.	S	C2
81	Lawson Cypress (Chamaecyparis lawsoniana)	М	F	5.50	0.00	3.00	3.00	3.00	3.00	1	318	3.82	Appears to be maintaining reasonable vigour.		L	B2
82	Silver Birch (Betula pendula)	М	G/F	10.00	2.00	3.00	3.50	3.00	3.00	1	462	5.54	Young and generally vigorous but supporting extensive Ivy cover on lower stem.	Cut Ivy.	L	B2
83	Lawson Cypress (Chamaecyparis lawsoniana)	М	F	5.00	0.00	3.00	3.00	3.00	3.00	1	318	3.82	Appears to be maintaining reasonable vigour.		L	B2
84	Silver Birch (Betula pendula)	М	G/F	11.00	1.25	3.50	3.50	4.00	3.00	1	493	5.92	Multi-stem from 1.00 m with Ivy developing on northern stem.	Cut Ivy.	L	B2
85	Lawson Cypress (Chamaecyparis lawsoniana)	М	F	5.00	0.75	2.50	2.50	2.50	2.50	1	271	3.25	Maintaining good general vigour and vitality.		L	B2
TL3	Tree Line 3 Purple Plum ( <i>Prunus cerasifera</i> ) Ornamental Apple ( <i>Malus variety</i> ) Rowan ( <i>Sorbus aucuparia</i> ) Norway Maple ( <i>Acer platanoides</i> )	S/M	G/F	3.00-5.00	1.50	2.00	2.00	2.00	2.00	1	95	1.15	An alignment of 13 young and apparently recently planted trees. Most exhibit evidence of good general vigour and vitality though a large proportion have sustained grass cutting/strimmer damage near ground level with substantial bark wound is in evidence. Most remains young and vigorous with immense potential for growth however, damage relating defects near ground level may impair sustainability.		M	C2

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
86	Previously removed by school															
87	Ornamental Apple (Malus variety)	E/M	F	4.50	1.00	1.00	1.50	1.00	1.00	-	153	1.83	Young and vigorous but constrained by adjoining buildings.		М	B2
88	Ornamental Cherry (Prunus variety)	E/M	G/F	5.00	1.00	2.00	3.00	2.50	2.50	1	248	2.98	Broad and spreading specimen whose ongoing growth is bringing it into near contact with adjoining buildings.	Review regularly.	L	B2
89	Silver Birch (Betula pendula)	M/A	G/F	8.00	2.00	2.00	2.00	2.00	1.00	1	220	2.64	Slightly unbalanced to east but maintaining good general vigour and vitality.		L	B2
90	Whitebeam (Sorbus aria)	M/A	F	7.00	1.50	2.50	3.00	3.00	3.50	1	497	5.96	Previously cut on northern side review regularly in relation to encroachment on building.		Μ	B2
91	Whitebeam (Sorbus aria)	M/A	F	7.00	2.00	2.50	3.00	2.50	2.50	1	458	5.50	Previously cut on northern side in relation to proximity to adjoining buildings.		М	B2
92	Whitebeam (Sorbus aria)	M/A	F	8.00	2.00	3.50	3.50	3.50	3.00	<u> </u>	481	5.77	Previously cut presumably in relation to encroachment of adjoining buildings.		М	B2
93	Whitebeam (Sorbus aria)	M/A	F	7.00	2.00	3.00	4.00	3.50	3.50	1	462	5.54	Apparently maintaining good general vigour and vitality notwithstanding prior cutting on northern side in relation proximity to buildings.		М	B2
Spo	orts Fields															

No.	Species	Age	Con	Ht.	СН	Ν	Ε	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
94	Ash (Fraxinus excelsior)	M	P	19.00	2.50	5.50	6.00	5.50	5.00	1	875	10.50	Once larger specimen has sustained upper crown loss, to which appears to comprise natural trauma nought north-western element appears to comprise natural decapitation. Primary stem is subject to decay with notable cavity at circa 8.00 m. Higher crown is of reduced vigour. Tree sustainability and safety is questionable. Retention would be wholly context dependent with tree being regarded as unsuitable for retention in area of high use and occupation.	Consider early removal. Alternatively consider structural pruning works including crown reduction works to reduce dimensions to regular review.	S	C1-2
95	Sycamore (Acer pseudoplatanus)	М	Р	17.00	2.50	4.00	5.50	5.50	5.00	<u> </u>	796	9.55	In a state of extensive decline with entire crown apex already dead and lower crown being subject to vigour loss. Unsuitable for retention.	Remove.	N/A	U
96	Horse Chestnut (Aesculus hippocastanum)	М	F/P	17.00	2.50	7.00	8.00	5.00	6.00	1	1095	13.14	A broad and spreading specimen having undergone prior decapitation. Decapitation point at apex of remaining primary stem is now subject to decay. Additional pruning has been undertaken including on school side of crown. High proportion of crown appears to be regenerative and may be subject to brittleness considering weight accrual.	Is of dubious merit but may provide interim retention on foot of structural pruning works including crown reduction works. Review with regard retention context.	M	C1-2
97	Horse Chestnut (Aesculus hippocastanum)	M	F/P	21.00	2.50	7.00	7.00	6.00	5.00		1050	12.61	Large specimen is apparently suffered substantial mechanical failure as well as severe pruning in past. Tree appears to support of numerous cavities and areas of decay. Higher crown exhibits classic signs of vigour reduction with twiggy deadwood in evidence. Concerns exist regarding structural form and predisposition towards damage. Suitability for retention will be context dependent.	Review regarding retention context. Consider structural pruning works for limited retention on foot of regular review.	M	C1-2

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
98	Sycamore (Acer pseudoplatanus)	М	Р	20.00	2.50	6.00	7.50	6.50	4.50	1	780	9.36	Large specimen having been previously decapitated are subject to highest decay. Central apex appears be subject to decline deterioration and dead-wood development. Primary stem appears to be subject to canker development the possible decay of underlying timber. The specimen Is of poor quality and dubious retention merit.	Consider early removal.	N/A	U
99	Sycamore (Acer pseudoplatanus)	E/M	Р	8.00	1.00	4.50	3.50	3.50	3.50	4	525	6.30	Multi-stem suckering specimen likely to have arisen as this redevelopment from the stump of previous tree. Has already been subject to mechanical failure with loss of western portion of crown resulting in substantial stem damage and ongoing decay. Unsuitable for retention.	Remove.	N/A	U
100	Lime (Tilia europea)	E/M	Р	7.50	1.00	3.50	3.50	3.50	2.00	1	366	4.39	Multi-stem sucker regeneration adjoining decaying stump. Unsuitable for retention.	Remove.	N/A	U
101	Horse Chestnut (Aesculus hippocastanum)	M	F	24.00	2.00	5.00	6.00	5.00	5.00		1082	12.99	Vigour and vitality about higher crown is notably diminished with evidence of deadwood development, most apparent about higher mid- northern crown. Prior mechanical failure has undermined additional limbs and illustrates a likely continuance of failure over time. Interim retention would require substantial structural pruning.	Clean-out and review with regard retention context.	S	C1-2
102	Sycamore (Acer pseudoplatanus)	М	Р	13.00	2.00	5.00	5.50	4.50	4.50	1	726	8.71	Squat specimen of substantially reduced vigour about crown apex. Is subject to cavity development and decay at base and stem. Is of dubious sustainability beyond extreme short-term and only then, subject to retention context and structural pruning.	Review regard retention context in suitability for retention.	S	C2
103	Sycamore (Acer pseudoplatanus)	S/M	Р	5.50	1.00	4.00	2.00	2.50	2.00	1	366	4.39	Comprises sucker regeneration based upon decaying stump.	Remove.	N/A	U

No.	Species	Age	Con	Ht.	СН	N	Ε	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
104	Sycamore (Acer pseudoplatanus)	М	Р	20.00	2.50	6.00	6.00	5.00	3.50	1	780	9.36	Tree is in state of decline with much of apex subject to dieback decay and prior mechanical loss. Lower crown retains some vigour though tree is considered unsustainable beyond extreme short-term subject to chronic cutting back.	Consider early removal. Alternatively, subject to retention context, consider application of crown reduction works for short-term retention.	N/A	U
105	Collapsed															
106	Sycamore (Acer pseudoplatanus)	S/M	F	6.00	2.50	3.00	1.00	0.00	1.00	1	271	3.25	Suppressed and heavily unbalanced to west.	Review regarding retention context.	Μ	C2
108	Austrian Pine (Pinus nigra)	S/M	F	6.00	2.25	3.00	3.00	1.50	1.50	1	318	3.82	Suppressed and slightly unbalanced but maintaining reasonable vigour.	Review regarding retention context.	L	B2
109	Austrian Pine (Pinus nigra)	E/M	F	9.00	2.00	3.00	3.00	3.00	3.00	1	382	4.58	Multi-stem poor structural form raising concerns regarding long-term sustainability.	Review regarding retention context.	Μ	C2
110	Austrian Pine (Pinus nigra)	E/M	F	10.00	2.00	3.00	3.00	3.00	3.00	1	462	5.54	Young and vigorous but compromised by compression fork near ground level that may render tree subject to mechanical failure.	Review regarding retention context.	S	C2
111	Austrian Pine (Pinus nigra)	E/M	F	9.00	2.25	3.00	3.00	3.00	3.00	1	341	4.09	Of good general vigour but becomes multi-stemmed at circa 4.00 m as result of prior apex loss.	Review regarding retention context.	М	C2
112	Lodgepole Pine (Pinus contorta)	S/M	Р	5.00	3.00	1.00	1.00	1.00	1.00	1	115	1.38	A particularly poor quality and approaching death.	Remove.	N/A	U
113	Sycamore (Acer pseudoplatanus)	E/M	Р	7.00	2.25	2.00	4.00	3.00	3.00		452	5.42	Possibly self-set and of distorted form. Remains vigorous but has sustained chronic prior damage. Unsuitable for retention.	Remove.	N/A	U

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
114	Sycamore (Acer pseudoplatanus)	E/M	F	9.00	2.00	5.00	2.00	3.00	4.50	1	452	5.42	Unbalanced as result of suppression but apparently maintaining reasonable vigour. Is heavily divided at 1.00 m with developing compression fork that may predispose tree to mechanical damage in later life.	Review regarding retention context.	М	C2
115	Lime (Tilia europea)	S/M	Р	7.00	0.00	4.00	3.00	1.50	2.00	1	401	4.81	Comprises sucker regeneration from what appears to be the stump of previous tree. Is of particularly poor quality and limited sustainability.		S	C2
116	Austrian Pine (Pinus nigra)	E/M	F/P	10.00	2.50	3.00	3.00	1.50	2.00	-	369	4.43	Suppressed compromised by heavy fork at 2.00 m.	Review regarding retention context.	М	C2
117	Austrian Pine (Pinus nigra)	M	F	7.00	1.75	3.00	3.00	3.00	3.00	-	382	4.58	Squat and spreading compromised by heavy fork at 1.25 m.	Review regarding retention context.	S	C2
118	Lodgepole Pine (Pinus contorta)	S/M	F	5.50	2.25	3.00	2.50	4.00	1.00	<u> </u>	267	3.21	Heavily suppressed distorted but maintaining reasonable vigour.	Review.	S	C2
ST	Scrub Thicket Elder (Sambucus nigra) Bramble (Rubus fruticosus)	E/M	F/P	1.00-3.00	0.00	Ν/Α	Ν/Α	N/A	N/A	1	N/A	N/A	This area of the site appears to comprise an overgrown area of substantial grounds attain above general field levels. The area support dominated by elder and very and Bramble th side of the earth from embankment, sporadi Sycamore regeneration are noted however, the the trees remaining appears to suggest attem past, as all are of multi-stemmed forms, sug felling. The calibre of this material is consider and not worthy of consideration regarding re- it will be asserted this area of apparent histor considered such as to support no material co- such as to require retention.	unmanaged and a circa $3.00 - 4.00$ m s immense vegetation nicket. On the northern c elements of the the structural form of apted cutting in the gested attempted lered particularly poor etention. Accordingly, rical dumping is onsidered of a value	N/A	U

No.	Species	Age	Con	Ht.	CH	Ν	Ε	S	W	Stm	Dia.	RPA	Structural Condition PMR	Yrs.	Cat
	Woodland Area North	E/M M/A	F	12.00-15.00	0.00-2.00	Contiguous	Ν/Α	Ν/Α	N/A	1	N/A	N/A	Portion of the site's northern boundary is furnished with an existing 3.30 m brick-built boundary wall. This effectively defines the site from the adjoining lands and what appears to be a substantial drainage ditch located immediately on the northern side of the site wall. Nonetheless, it is appreciated that the lands pertaining to sedans Park and immediately to the North of the wall support a visually significant block of relatively young and apparently naturally regenerating woodland dominated by ash and Sycamore. These trees attain typical heights of the order of $12.00 - 15.00$ m those located closest to the boundary wall provide a notable degree of overhang, up to circa 6.50 m at the eastern end. The structure of the wall is unknown however nominal with his circa $600 - 650$ mm suggesting substantial structure and the likelihood of a significant vegetation. Therefore, and considering research such as that carried out by Jackson (et al 1996) it is likely that should the wall footing extend to a depth of 0.50 m or more than the likelihood of root deflection and prevention of trespass into the site is highly likely. Regarding positions east of the wall terminus, it is noted that a substantial feature, descending more than 1.00 m below average ground levels runs parallel with the site boundary. Therefore, regarding trees located in positions to the north of the ditch then, it is considered unlikely that any route trespass whatsoever would be possible. Nonetheless, it is equally appreciated that a small number of individual trees have arisen from the narrow margin on the southern side of the ditch and directly adjoining the security fence of the school and loss such trees could be influenced by site works.	L	C2
BA	Tree A Ash (Fraxinus excelsior)	M/A	F	12.00	1.50	5.50	5.00	5300	4.50	2	525	6.30	Apparently vigorous but substantially multi-stemmed. Arises from southern side of ditch feature.Review regarding retention context.	M	C

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
BB	Tree B Hybrid Black Poplar (Populus x Canadensis)	М	F	19.00	2.50	8.00	10.00	9.00	8.00	1	1006	12.07	Tree appears be maintaining reasonable vigour and vitality but is of a divergent and multi-stemmed form from 2.50 m and is likely to be predisposed to mechanical failure. Middle-crown currently supports large amounts of deadwood possibly indicative of early decline. General canopy cover appears good. Lower stems to circa 5.00 m heavily obscured by Ivy cover.	Review regarding retention context.	М	С
	Boundary Scrub Hawthorn ( <i>Crataegus</i> monogyna) Elder ( <i>Sambucus nigra</i> )	M/A	F/P	2.00-6.00	0.00	N/A	N/A	N/A	N/A	1	0	N/A	Material arising from the narrow strip, betw paladin fence and the ditch position typically and Elder, typically not exceeding 6.00 m, the afforded by low level Bramble thicket. In po- boundary ditch, is made of a notable woodla comprising Sycamore and Ash as the predor of these trees exceed 12.00 to 14.00 m most by way of light admittance. The typical age of most trees encountered is appreciated that there remains immense pote growth in the future. Accordingly, many of will attain exceed 20.00 m.	een the boundary y comprises Hawthorn hough a greater bulk is ositions, north of the and belt and minant species. Many appear healthy the site relatively fast it is ential for ongoing the trees noted to date	S	C2
	Eastern Boundary Holm Oak (Quercus ilex)	E/M	G/F	5.00-8.00	0.00	Contiguous	Ν/Α	N/A	N/A		271	3.25	With the sole exception of a small proportio end of this alignment, the entire boundary is young alignment of evergreen. These trees of between 5.00 and 8.00 m and, because of the m centres in a zigzag fashion have develope The clear majority assessment encountered a general vigour and vitality have grown such another to provide a continuous and contigu trees should be regarded as being relatively accordingly, there potential for ongoing grov remains immense. For this reason, it must be time the evergreen barrier of circa $5.00 - 7.0$ potentially increase to a height of more than what will be a substantial constraint to light potential for immense shadow cast about this	n the southernmost furnished with a currently attain heights e planting at circa 2.50 d hedge like format. maintaining good as to blend into one ous format. These young at present and wth in the future e appreciated that over 00 m height, will 18.00 m, affording admittance and the is portion of the site.	L	B1-2

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
The pro the cha tree requ Onl Par and	e westernmost end of vided a substantial co group of 6 younger L nge or works undertain s to the site of the fac uiring ongoing manag y Ash 130 is located k. In this respect, it is Monterey Pine.	the all nstrai imes ken w t that gemen within notec	ignme: nt to n located ithin t some t of ov n the fi l that t	nt tha latural d clos he sita overh ver tin ield's he sou	t is ad l root e to th e are c ang th ne. palad uthern	joins t develo ne Syb consid ne site in fend boun	the exi opmen bil Hill ered h bound ce, the dary c	isting t. The Road ighly dary to dary to ough t	schoo erefore l entra unlike o a no he boo site is	l facil e, and ince to ely to minal undar; adjoir	lities i in acc the p influe exten y is fu ned by	s sepa cordan bark a ence that. Suc rnishe y a su	arated by a substantial, 2.50 m high boundary ace with this assumption, it is advised that 10 re effectively physiologically detached from nese trees. Some consideration should however th encroachment may, dependent upon the de- ed with a substantial visual facade pertaining botantial element of trees dominated by align	wall that would appear Holm Oak, 2 Austrian I the site that any environ ver be given to the proxir evelopment context, raise to the tree population of ment of Holm Oak and A	to have Pine an mental nity of e issues St Ann Austria	the n's n
TL4	Tree Line 4 Holm Oak ( <i>Quercus ilex</i> ) Austrian Pine ( <i>Pinus nigra</i> )	М	G/F	8.00-13.00	0.00-4.00	Various				1	796	9.55	Whilst most trees assert root protection areas in the order of 9.00 m plus, it is considered likely that the physiological existence of existing boundary wall may dramatically curtail/deflect tree roots and accordingly, the likelihood of roots extending into the site is considered minimal.			B1-2
In p bar 200	bositions, east of main rier by way of ground mm. Notwithstandin	scho envii g this	ol grou conment, it is c	unds a nts in consid	and the respect lered t	e sout et of ti hat th	h of th rees w e natu	e site ithin s re of t	, it is St Ani the div	noted ne's Pa vision	that tl ark or betwe	he site the site een th	boundary is defined only by a post and wire te. Note is however made of minor disparitie e 2 sides would afford the potential for root	e panel fence that affords es in ground levels of circ trespassing.	little ca 150	_
119	Holm Oak (Quercus ilex)	M	G/F	13.00	2.50	6.00	5.00	6.50	5.00	-	579	6.95	Of reasonable vigour and vitality having undergone prior pruning. Crown supports nominal dead-wood.		L	B1- 2-3
120	Austrian Pine (Pinus nigra)	М	F	17.00	2.00	6.00	8.00	4.00	4.00	Ļ	716	8.59	Quickly becomes multi-stem. Crown vigour and vitality is less than that expected for tree of this age.	Review regularly.	Μ	C1- 2-3
121	Holm Oak (Quercus ilex)	М	G/F	6.00	0.00	5.00	4.50	7.00	4.50	<u> </u>	780	9.36	Appears to be maintaining reasonable vigour and vitality. Has undergone prior pruning.		L	B1- 2-3
122	Previously removed															

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
123	Holm Oak (Quercus ilex)	E/M	F	6.00	0.50	2.50	2.50	2.50	2.50	<b>—</b>	271	3.25	Young and vigorous. Is affected by Ivy development.	Cut Ivy.	L	B1- 2-3
124	Austrian Pine (Pinus nigra)	М	F/P	19.00	4.00	5.50	5.00	9.00	5.00	1	812	9.74	Broad and spreading specimen of substantially reduced vigour and vitality. Supports notable imbalance to south away from site.	Review regularly regarding ongoing decline in suitability retention.	S	C1- 2-3
125	Holm Oak (Quercus ilex)	М	G/F	17.00	1.00	5.50	6.00	5.00	7.00	1	939	11.27	Large specimen supporting minor imbalance to south. Appears to be maintaining good vigour though crown supports notable dead-wood and evidence of prior damage.	Review regularly consider cleaning out.	L	B1- 2-3
126	Holm Oak (Quercus ilex)	М	G/F	16.00	1.50	4.50	5.00	6.50	5.00	1	796	9.55	Appears to be maintaining good vigour. Tree has undergone substantial prior pruning.	Review regularly.	L	B1- 2-3
127	Holm Oak (Quercus ilex)	М	G/F	16.00	1.00	5.00	6.00	5.50	5.50	1	910	10.92	Large specimen whose lower stem is obscured by substantial Ivy cover thereby preventing detailed visual appraisal. General vigour and vitality appears good.	Cut Ivy and re- evaluate.	L	B1- 2-3
128	Austrian Pine (Pinus nigra)	М	Р	12.00	3.00	4.00	5.00	7.00	2.50	1	551	6.61	Previously decapitated heavily unbalanced to south away from site. Continued deterioration and mechanical failure is expected.	Tree should be considered for early removal.	N/A	U
129	Holm Oak (Quercus ilex)	М	G/F	15.00	2.00	4.50	4.00	7.00	3.50		812	9.74	Suppressed and notably unbalanced to south, away from site. Higher crown appears to be in decline as result of suppression by near neighbours.		М	C1- 2-3
130	Ash (Fraxinus excelsior)	М	F	16.00	2.25	4.00	6.00	4.00	7.00	1	716	8.59	Heavily divided and apparently previously cut. Arises from position within the site's boundary fencing. Is obscure by dense Ivy cover that prevents detailed visual appraisal at present. Vigour and vitality appears fair though tree has been subject to prior damage and failure.	Cut Ivy and re- evaluate.	M	C1- 2-3

No.	Species	Age	Con	Ht.	СН	Ν	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
131	Austrian Pine (Pinus nigra)	М	Р	20.00	2.50	3.00	4.50	7.00	5.00	Ļ	732	8.79	Substantially one-sided and unbalanced to south. Is of notably reduced vigour with foliage loss.	Review regularly regarding ongoing suitability retention.	S	C1- 2-3
132	Holm Oak (Quercus ilex)	М	G/F	14.00	2.00	4.00	4.00	5.50	3.50	1	748	8.98	Squat and slightly suppressed but maintaining good vigour. Ivy is becoming stem.	Cut Ivy.	L	B1- 2-3
133	Monterey Pine (Pinus radiata)	М	Р	13.00	1.50	3.00	4.00	9.00	1.00	1	939	11.27	Chronically suppressed currently retaining only one viable limb extending to south. Is of particularly poor form and minimal sustainability.	Consider early removal.	N/A	U
134	Holm Oak (Quercus ilex)	М	G/F	18.00	1.50	4.50	6.00	8.00	5.00	1	844	10.12	Large and specimen of reasonable vigour and vitality. Tree has sustained prior mechanical damage, pruning supports dead-wood.	Consider cleaning out.	L	B1- 2-3
135	Monterey Pine (Pinus radiata)	М	F/P	18.00	1.00	6.00	5.00	9.00	5.00	1	1025	12.30	Large specimen of distorted form supporting extensive low limb extending to south. Vigour and vitality is substantially less than that expected retrieve this age suggesting likely onset of decline.	Review regularly regarding ongoing suitability retention.	S	C1- 2-3
136	Holm Oak ( <i>Quercus ilex</i> )	М	G/F	13.00	1.00	5.50	5.00	7.00	5.00	-	589	7.07	Squat but vigorous.		L	B1- 2-3
137	Austrian Pine (Pinus nigra)	М	F/P	22.00	1.00	5.00	7.00	6.00	5.00	1	907	10.89	Tall specimen exhibiting evidence of ongoing decline and vigour loss suggestive of limited sustainability.	Cut Ivy and review regularly regarding ongoing suitability retention.	S	C1- 2-3
138	Holm Oak (Quercus ilex)	М	G/F	15.00	2.00	5.00	5.00	8.00	3.50	<b></b>	592	7.10	Slightly unbalanced to South but otherwise of good vigour and vitality.		L	B1- 2-3

No.	Species	Age	Con	Ht.	СН	Ν	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
139	Monterey Pine (Pinus radiata)	М	F/P	17.00	1.00	5.00	7.00	11.00	6.00	1	1035	12.41	Is typically one-sided and unbalanced to south. Northern side of crown has been substantially cut back in past. Vigour and vitality is less than that expected retrieve this age suggesting possible limited sustainability.	Review regularly regarding management and ongoing suitability retention.	М	C1- 2-3
140	Holm Oak (Quercus ilex)	М	G/F	13.00	1.00	5.50	4.00	9.00	7.00	1	614	7.37	Squat and suppressed but maintaining reasonable vigour.		L	B1- 2-3
141	Holm Oak (Quercus ilex)	М	G/F	13.00	4.50	6.00	5.00	8.00	5.00	<b>—</b>	716	8.59	Suppressed but maintaining reasonable.		L	B1- 2-3
142	Austrian Pine (Pinus nigra)	М	F	20.00	7.00	4.00	4.50	6.00	4.00	<b>—</b>	716	8.59	Heavily divided at circa 3.500 m raising some concern regarding mechanical defects.	Review regularly.	М	C1- 2-3
143	Holm Oak (Quercus ilex)	М	G/F	15.00	2.00	6.50	6.00	9.00	8.00		770	9.24	Broad and spreading specimen of good general vigour and vitality. Lower eastern side of stem base reveals evidence of prior damage and localise decay.	Review regularly.	М	C1- 2-3
144	Austrian Pine (Pinus nigra)	М	F	18.00	7.00	4.00	4.00	5.00	5.00	1	516	6.19	Drawn-up with limited high crown. General vigour and vitality is slightly less than that expected.	Review regularly.	М	B1- 2-3
145	Holm Oak (Quercus ilex)	М	F	9.00	1.00	3.50	4.00	6.00	3.00	<u> </u>	525	6.30	Squat and suppressed specimen of fair but reduced vigour. Primary stem supports extensive Ivy cover preventing detailed visual appraisal.	Cut Ivy.	М	C1- 2-3
146	Austrian Pine (Pinus nigra)	М	Р	20.00	3.00	7.00	3.00	9.00	6.00	1	1022	12.26	A broader multi-stem specimen has sustained prior mechanical failure onto boundary fence. Broken limb base is now subject to decay. Tree is of dubious sustainability.	Clean-out and cut Ivy. Review regularly regarding ongoing suitability retention.	М	C1- 2-3
147	Holm Oak (Quercus ilex)	М	G/F	16.00	1.50	5.00	5.00	8.00	5.00		780	9.36	Appears to be maintaining good general vigour and vitality.		L	B1- 2-3

No.	Species	Age	Con	Ht.	CH	Ν	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
148	Austrian Pine (Pinus nigra)	М	G/F	20.00	1.00	6.00	5.00	8.00	6.00	<b>—</b>	987	11.84	A once larger specimen has suffered chronic loss of northernmost extending stem creating large wound above ground level. Remaining crown appears vigorous.	Review on regular basis regarding sustainability.	М	C1- 2-3
149	Holm Oak (Quercus ilex)	М	G/F	16.00	1.25	5.50	4.50	6.50	5.00	1	844	10.12	Appears to be of good general vigour and vitality.		L	B1- 2-3
150	Austrian Pine (Pinus nigra)	М	G/F	15.00	3.00	6.00	6.00	7.00	7.00	-	939	11.27	Large and slightly distorted specimen of variable crown vigour. Supports notable Ivy cover on principal stem.	Review regularly.	М	C1- 2-3
151	Holm Oak (Quercus ilex)	М	G/F	15.00	0.00	5.00	4.50	5.00	5.00		748	8.98	Squat but of good vigour.		L	B1- 2-3
152	Holm Oak (Quercus ilex)	М	G/F	13.00	4.50	5.00	5.00	6.00	5.00	-	579	6.95	Broad and squat but of good vigour.	Cut Ivy.	L	B1- 2-3
153	Austrian Pine (Pinus nigra)	М	G/F	22.00	2.00	3.00	6.00	7.00	6.00		828	9.93	Primary stem supports notable wound on northern side that is now subject to substantial decay. Tree is heavily unbalanced to south away from site. Tree is of dubious sustainability.	Review regularly regarding ongoing suitability retention.	S	C1- 2-3
154	Holm Oak (Quercus ilex)	М	F	13.00	1.50	7.00	6.00	9.00	7.00	-	987	11.84	Broad and spreading specimen of reasonable vigour and vitality.		L	B1- 2-3
155	Monterey Pine (Pinus radiata)	M/A	F	10.00	1.00	5.00	4.50	4.50	2.50	-	525	6.30	Heavily suppressed to western side as result evergreen oak. Vigour and vitality is good notwithstanding Ivy cover.	Cut Ivy.	L	B1- 2-3
156	Holm Oak (Quercus ilex)	M	G/F	13.00	1.50	7.00	5.50	7.00	5.50	-	764	9.17	Slightly suppressed an east-west manner as result of proximity to near neighbours. Is developing notable Ivy cover.	Cut Ivy consider cleaning out.	L	B1- 2-3

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
157	Holm Oak (Quercus ilex)	М	F/P	17.00	4.50	7.00	6.50	7.00	7.00	1	780	9.36	Tree has suffered chronic crown failure and loss of stem fork at circa 2.25 m resulting in creation of extensive wound. Remaining stem to north-east is now at substantial risk of failure and thus presents a tangible threat to school boundary. Entire tree is of dubious sustainability.	Remove failed debris. Review regularly regarding suitability for retention and benefit to be gained by structural pruning including crown reduction type works.	N/A	U
158	Holm Oak (Quercus ilex)	Μ	G/F	13.00	0.00	6.50	6.00	5.50	7.00	1	732	8.79	A broad squat specimen with low descending crown. Tree becomes substantially multi-stemmed and low-level raises concern with regard possible predisposition towards failure.	Review regularly regarding sustainability.	М	C1- 2-3
159	Holm Oak (Quercus ilex)	М	F	10.00	0.00	6.00	5.50	5.50	5.00	1	748	8.98	Squat and spreading but apparently maintaining good vigour and vitality.	Review regularly.	L	B1- 2-3
160	Holm Oak (Quercus ilex)	М	G/F	13.00	0.00	6.00	5.00	7.00	6.50	1	844	10.12	Entire northern and western crown exhibit evidence of widespread in chronic decline and dieback, possibly indicative of pathological attack. Concern exists regarding sustainability over time and suitability for retention.	Review regularly.	S	C1- 2-3
161	Holm Oak (Quercus ilex)	M/A	F	8.00	0.00	5.00	5.50	5.50	4.50	1	430	5.16	A relatively small, squat and spreading specimen is maintaining good vigour and vitality. Note is made of the arising of competitive elder this is affected crown development.	Consider removal of Elderberry.	L	B1- 2-3
162	Monterey Pine (Pinus radiata)	M/A	G/F	14.00	2.00	4.00	4.00	4.00	2.00	1	334	4.01	A young and vigorous specimen with immense potential for ongoing growth over time.	Review regularly.	L	B1- 2-3
163	Holm Oak (Quercus ilex)	М	G/F	12.00	0.00	7.00	6.50	6.50	6.50	<u> </u>	700	8.40	A broad and spreading specimen maintaining good vigour and vitality.		L	B1- 2-3

No.	Species	Age	Con	Ht.	СН	Ν	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
164	Holm Oak (Quercus ilex)	M	F	12.00	0.00	7.00	6.00	7.00	7.00	2	907	10.89	A broad and spreading specimen heavily divided from ground level. Northern most stem has sustained prior mechanical failure loss of original crown apex. Will become subject to decay and further failure over time.	Review regularly regarding ongoing suitability. Consider structural pruning.	М	C1- 2-3
165	Holm Oak (Quercus ilex)	М	G/F	15.00	0.00	6.00	5.00	7.00	7.00	<u> </u>	716	8.59	A broad and spreading specimen having sustained minor localised bark damage on primary stem. Crown supports nominal dead-wood.	Consider cleaning- out.	L	B1- 2-3
166	Lime (Tilia europea)	М	G/F	12.00	2.00	7.00	7.00	4.00	5.00	1	388	4.66	Slightly unbalanced but maintaining good general vigour and vitality.	Review regularly.	L	B2
167	Lime (Tilia europea)	M/A	G	13.00	2.00	4.50	4.50	4.50	4.50	1	395	4.74	Young and vigorous requiring no specific action at present.		L	B2
168	Lime (Tilia europea)	M/A	G	13.00	2.00	4.00	2.50	4.00	4.00	1	382	4.58	Young and vigorous requiring no specific action at present.		L	B2
169	Lime (Tilia europea)	M/A	G	12.00	1.75	4.00	4.00	4.00	4.00	1	366	4.39	Young and vigorous requiring no specific action at present.		L	B2
170	Lime (Tilia europea)	M/A	G	12.00	1.75	4.50	4.50	4.50	4.50	-	366	4.39	Young and vigorous requiring no specific action at present.		L	B2
171	Lime (Tilia europea)	E/M	F/P	7.00	2.00	3.00	2.00	3.00	3.00	-	229	2.75	Supports notably late leaf flush suggesting possible health issues.	Review late summer 2019.	S	C2
172	Lime (Tilia europea)	E/M	G/F	9.00	1.50	2.50	2.50	2.50	2.50	<u> </u>	261	3.13	Young and vigorous requiring no action at present.		L	B2
A	Lime (Tilia europea)	E/M	G/F	8.00	2.00	3.00	3.50	3.50	4.00	<u> </u>	261	3.13	A relatively small specimen having undergone substantial pruning in hast. Is already encroaching upon overhead roadside wires.	Review regularly.	L	B2

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
В	Lime (Tilia europea)	M/A	G/F	13.00	2.50	4.50	4.50	4.50	4.50	1	341	4.09	A still young and substantially vigorous specimen of excellent form. Has undergone minor lower crown pruning in past.		L	A2
C	Lime (Tilia europea)	M/A	F/P	13.00	4.00	5.50	5.00	4.50	5.00	1	493	5.92	A relatively large specimen of highly variable condition with extensive elements of dieback and bark necrosis particularly about the middle, south-eastern and southern crown raising concern regarding sustainability.	Tree must be reviewed during spring of 2020 in respect of better identifying vigour and vitality and suitability for retention.	S	C2
D	Lime (Tilia europea)	E/M	G	11.00	2.00	5.00	4.50	4.00	4.50	1	344	4.13	Supports a minor growth imbalance to south-west relation to north-west but otherwise of good condition and vitality.		L	A2
Е	Lime (Tilia europea)	E/M	G/F	10.00	2.00	4.50	3.50	4.00	3.50	1	334	4.01	young and vigorous requiring no specific action at present.		L	B2
F	Lime (Tilia europea)	M/A	G/F	13.00	3.00	4.50	4.00	4.50	4.00	1	385	4.62	Relatively young but still vigorous specimen requiring minimal attention at present.		L	B2
G	Lime (Tilia europea)	M/A	G/F	15.00	2.50	5.00	6.00	5.00	5.00	1	471	5.65	Relatively young and still vigorous specimen heavily divided at 2.50 m with notable compression fork junction. Tree has sustained localised storm damage and limb breakage about middle south-eastern crown.	Clean-out review on regular basis regarding management requirements.	L	B2
Н	Norway Maple (Acer platanoides)	E/M	Р	13.00	4.50	5.00	5.50	5.00	5.50	1	490	5.88	In an advanced state of decline with substantial dieback and dead-wood development throughout crown suggesting highly limited sustainability. Extent of deadwood carried at present constitutes a potential threat.	Clean-out and crown- reduce for short-term retention only. Review regularly regarding suitability for retention.	S	C2

No.	Species	Age	Con	Ht.	СН	Ν	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
Ι	Norway Maple (Acer platanoides)	E/M	F/P	9.50	3.00	2.50	1.50	3.00	2.50	1	309	3.71	Appears to be of notably reduced vigour and vitality with twiggy decline and dieback evidenced throughout crown. Tree is encroached upon by Birch No.64	Tree should be reviewed during spring of 2020 in respect of better ascertaining condition and vitality is well as suitability for retention.	S	C2
J	Lime (Tilia europea)	E/M	G/F	12.00	2.00	4.50	4.00	4.00	3.50	1	318	3.82	Slightly distorted form but is maintaining good vigour and vitality. Crown has sustained minor localised storm damage and is encroached upon by Birch No.60	Review regularly.	L	B2
K	Norway Maple (Acer platanoides)	E/M	F/P	8.00	2.50	2.00	1.00	2.00	2.50	1	207	2.48	A small and suppressed specimen of reduced vigour and vitality raising some concern in respect of sustainability. Tree is heavily encroached upon by Birch No.58 from within site and has developed a somewhat one-sided crown form.	Review during spring of 2020 in respect of vitality and sustainability.	S	C2
L	Lime (Tilia europea)	E/M	G	11.00	1.50	4.50	4.50	4.00	4.00	1	353	4.24	Young and vigorous. Potentially compromised by compression fork at 2.50 m. Crown supports minor deadwood		L	B2
М	Lime (Tilia europea)	E/M	G	9.50	2.50	3.50	3.50	3.50	3.50	1	290	3.48	Young and vigorous. Potentially compromised by developing compression fork at 2.25 m. Crown is supports minor mechanical damage.		L	B2
N	Norway Maple (Acer platanoides)	E/M	G/F	14.00	3.00	5.50	5.00	5.00	5.50	1	525	6.30	A large dominating specimen of good vigour and vitality and immense potential for continued growth. Buttress root development is extensive with overgrowth to footpath and apparent uplifting of cement surface.	Review regarding management requirements.	L	B2
0	Lime (Tilia europea)	E/M	G/F	12.00	2.00	4.00	4.00	4.00	4.00	1	312	3.74	Young and vigorous with minor imbalance to north. Crown is heavily divided from 2.50 m.		L	B2

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
Р	Norway Maple (Acer platanoides)	E/M	Р	12.00	3.50	5.50	6.00	5.50	6.00	1	436	5.23	A broad and spreading specimen supporting extensive evidence of decline and dieback about higher crown centre with notable deadwood being supported in over road and over footpath positions. Concerns exist regarding tree safety and suitability pretension.	Consider early removal.	N/A	U
Q	Norway Maple (Acer platanoides)	E/M	F/P	12.00	3.00	4.50	4.50	5.00	4.50	1	436	5.23	A tree in poor condition having suffered extensive surface root damage and is now in decline with deadwood development and dieback evidence throughout crown sphere. Deadwood presents a tangible threat though tree is considered unsustainable beyond extreme short-term.	Consider removal and replacement.	N/A	U
R	Lime (Tilia europea)	E/M	F	11.00	2.50	3.50	4.50	3.50	3.00	1	258	3.09	Young and still vigorous. Supports minor storm damage and has sustained minor lower stem damage.	Review regularly.	L	B2
S	Lime ( <i>Tilia europea</i> )	S/M	F	8.00	2.00	3.50	3.00	3.00	2.50	1	207	2.48	Young and still vigorous though stem has sustained minor localised damage.		L	B2
Т	Lime (Tilia europea)	E/M	G/F	11.00	2.00	4.00	3.50	4.00	4.00	1	334	4.01	Young and broadly vigorous.		L	B2
U	Lime (Tilia europea)	E/M	G	10.00	2.00	4.50	4.00	3.50	3.00	1	290	3.48	Young and broadly vigorous.		L	B2
173	Lime ( <i>Tilia europea</i> )	S/M	F	9.00	5.00	2.50	1.00	1.50	2.00	1	175	2.10	Tall and slender specimen supporting notable Ivy on lower stem. Vigour is good.		L	B2
174	Lime (Tilia europea)	S/M	G	9.00	2.00	2.50	1.50	2.50	1.50	1	207	2.48	Young and still vigorous but suppressed at lower levels. Lower stem supports developing Ivy cover. Middle crown supports minor deadwood.		L	B2

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
175	Lime (Tilia europea)	S/M	G	10.00	2.25	3.50	2.50	3.00	4.00	1	328	3.93	Young and vigorous, arising from bank top position. Lower stem supports developing Ivy cover.		L	B2
176	Lime (Tilia europea)	S/M	G/F	8.50	2.25	1.00	1.00	3.00	4.50	1	226	2.71	Slightly unbalanced to west but is maintaining reasonably good vigour.	Review regularly.	L	B2
177	Norway Maple (Acer platanoides)	E/M	G/F	11.00	2.25	2.50	4.50	4.50	4.50	1	376	4.51	Young and vigorous though slightly suppressed and unbalanced to South. Has developed compression forks between 2.00 and 2.50 m.	Review regularly.	L	B2
178	Lime (Tilia europea)	S/M	G	8.50	1.50	1.50	3.50	3.00	1.50	1	229	2.75	Badly suppressed and unbalanced but maintaining good vigour and vitality.		L	B2
179	Lime (Tilia europea)	S/M	F	8.00	1.50	2.50	4.00	1.00	0.50	1	223	2.67	Heavily suppressed and notably one-sided, unbalanced to east. Vigour is fair though sustainability is impaired by proximity to position beneath canopy of adjoining larger trees.		М	C2
180	Lime (Tilia europea)	E/M	G	13.00	2.00	4.50	6.00	4.00	4.50	1	398	4.77	Young and vigorous, a dominant specimen within locality. Is developing Ivy cover on lower stem.		L	B2
181	Ash (Fraxinus excelsior)	S/M	G/F	9.50	1.75	2.00	4.50	4.00	2.00	1	328	3.93	Slightly suppressed and misshapen as result of proximity to near neighbours but is maintaining good vigour and vitality. Ivy is developing on lower stem.		L	B2
182	Lime (Tilia europea)	S/M	G	10.00	2.50	3.50	4.50	2.50	1.50	1	312	3.74	Suppressed by proximity of near neighbours but is maintaining good vigour. Supports notable Ivy development and minor deadwood.		L	B2
183	Lime (Tilia europea)	S/M	F/P	5.50	1.75	2.00	3.00	3.00	0.00	1	175	2.10	Chronically suppressed and misshapen as result of position beneath canopy of larger neighbours.	Cut Ivy and review regularly.	М	C2
184	Lime (Tilia europea)	E/M	G	12.00	3.00	4.50	4.00	4.00	3.00	1	385	4.62	Large and dominating specimen of good vigour and vitality. Sees development of Ivy at lower levels.	Cut Ivy.	L	B2

No.	Species	Age	Con	Ht.	СН	Ν	Е	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
185	Lime (Tilia europea)	S/M	F	8.00	2.00	1.50	4.50	1.00	1.50		175	2.10	Young and vigorous but drawn up and whip like.		L	B2
186	Lime (Tilia europea)	E/M	G	$\begin{array}{c} 10.0\\ 0\end{array}$	1.75	1.50	2.00	3.00	1.50	<b>—</b>	239	2.86	One-sided through suppression but is maintaining good vigour and vitality.		L	B2
187	Lime (Tilia europea)	S/M	G	9.50	3.00	4.00	2.50	2.50	4.00	<u> </u>	229	2.75	Slightly unbalanced as result of suppression but is maintaining good vigour and vitality. Supports extensive Ivy cover.	Cut Ivy.	L	B2
188	Lime (Tilia europea)	E/M	G/F	12.00	1.50	3.50	1.50	2.50	4.00	1	334	4.01	Tall specimen slightly distorted through suppression. Supports Ivy cover about primary stem.		L	B2
189	Lime (Tilia europea)	E/M	F	$\begin{array}{c} 11.0\\ 0\end{array}$	4.00	2.50	2.00	2.00	1.00		220	2.64	Tall and slender.		L	B2
190	Lime (Tilia europea)	S	F/P	4.50	1.75	2.75	2.50	2.00	2.00	<b>—</b>	188	2.25	Heavily suppressed and typically deflected to north because of position beneath canopy edge of adjoining Holme Oak.		М	C2
191	Lime (Tilia europea)	S	Р	2.25	0.50	0.50	0.50	0.50	0.50	-	159	1.91	Exists as a decapitated stump only.	Remove.	N/A	U
192	Lime (Tilia europea)	S	Р	3.00	0.00	1.50	1.50	1.00	0.75	1	181	2.18	Previously declined and now decapitated to circa 2.00 metres	Remove.	N/A	U