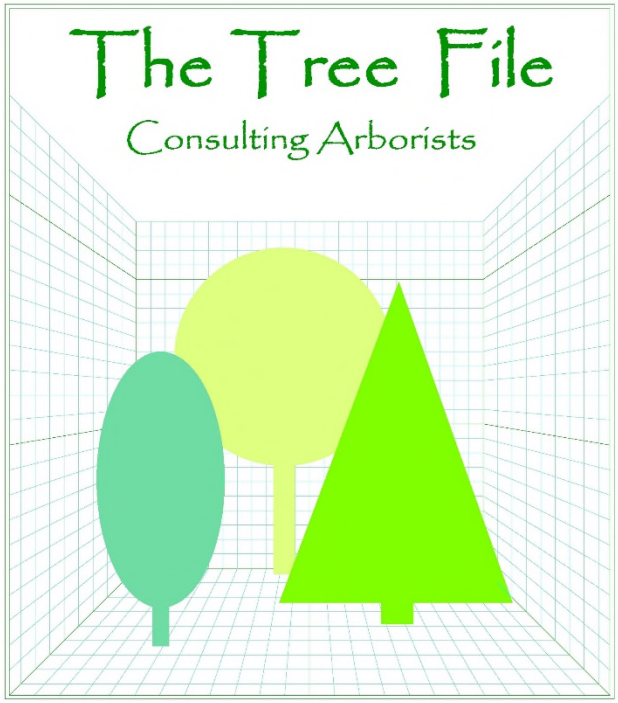

Arboricultural Report
Proposed Development at
St Teresa's
Temple Hill
Monkstown
Blackrock
Co Dublin
December 2021

The Tree File Ltd
Consulting Arborists
Ashgrove House
26 Foxrock Park
Dublin 18

086-3819011

Contents

Associated Drawings

This report must be read in conjunction with the drawings noted below

	Drawing Title	Drawing Subject
1)	St Teresas Tree Constraints Plan	Tree Constraints Plan A colour coded plan depicting the predevelopment location, size, calculated constraints, and simplified tree quality category system.
2)	St Teresas Tree Impacts Plan	Tree Impacts Plan This colour coded plan represents the effects of the proposed development works on the above tree population and depicts trees to be retained and removed.
3)	St Teresas Tree Protection Plan	Tree Protection Plan This colour coded plan depicts the nature, location and extent of tree protection measures required to provide for sustainable tree retention.

1 Report Summary

1.1 This report must be read in conjunction with the associated drawings set. The "Tree Constraints Plan" shows the site of the proposed strategic housing development. Each of the described trees are shown, indicated by number and colour code. The excellent quality "Category A" trees are indicated by green central buttons, the good to fair quality "Category B" trees, by a blue button, the poor quality "Category C" trees by a grey button. Finally, the poor quality, dead or unsustainable "Category U" trees, are defined by a red button.

1.2 The "Tree Impacts Drawing" illustrates the trees in the same manner as above, but differentiates between those being retained and those being removed. Any tree being retained is drawn with a continuous green crown outline, and those that will be removed are defined by a dashed pink outline.

1.3 The "Tree Impacts Drawing" includes the graphic representation of proposed building and dug services and infrastructure, thereby illustrating the relationship between the proposed development and the existing tree population. This drawing illustrates that concerns raised at earlier stages in this planning process have been addressed, for example, the attenuation tank have undergone minor relocation to avoid encroachment of the category "A" and "B" trees, and no building footprints extend into tree root protection areas.

1.4 Trees affect the development of this site on a fundamental basis. A review has noted that disregarding the site's poor quality "category U" trees, its hedges and its shrubbery, the site's category "A", "B" and "C" trees alone, generate a composite "root protection area" of circa 14,266m^2. This equates to circa 35% of the total site area 39.950m^2 that must remain "unchanged" to provide any guarantee of sustainable tree retention. Unfortunately, the 35% is not uniform or local, but tends to comprise individuals, groups and areas at various locations across the site space.

1.5 This report notes that all development related requirements including development densities, DMURS compliant roads and access, drainage, and attenuation, as well as general construction activity cannot be achieved within the remaining and randomly occurring 65% of site space. On this basis, a degree of tree loss appears unavoidable if the available site space is to be used efficiently. Accordingly, there appears to be a contradiction and conflict between the tree and woodland related objectives and the planning expectations for the site. In light of this apparent contradiction, it is believed that the proposed development represents a reasonable compromise, particularly in light of the extent of planting envisaged as part of the development proposals.

1.6 It should be noted, for the sake of completeness that, whilst the proposed development is similar in certain respects to the previously permitted development (2019), it will result in the loss of a small number of additional trees. Of the 184 items recorded in the survey of trees upon and adjoining the site, the development will result in the loss of 78 items. Of these, it is noted that 44 items where categorised as poorer quality grade "C" that offered limited sustainability, as well as 18 poor or dead category "U" trees that would be recommended for removal on the grounds of poor condition and no sustainability.

1.7 The tree losses are a result of a combination of factors. Appreciating that sustainable

tree retention requires the conservation of a specific area of ground associated with a tree's rooting system, then issues of development densities, Local Area Plan and Roads Department requirements for roads access alignments including DMURS, as well as standard requirements for engineering and the necessary provision of underground services, all combine to require the unavoidable disturbance and consumption of site space. This contest for available space necessarily impacts upon the ability to sustainably retain trees while making efficient use of site space.

1.8 Where possible, tree removals have been proposed taking cognisance of tree conditions and sustainability issues as illustrated by the tree survey, with poor quality and low sustainability trees being sacrificed first. The landscape design has intended to work with and to retain elements of the existing woodland, while at the same time, making them socially usable. This has been made possible by the adoption of controlled construction techniques and tree protection measures, for example by using low impacts techniques to create access paths and activity areas within the wooded areas. Also, the development design was also cognisant of the historic landscape context and layout, and efforts have been made to retain elements of this into the new landscape.

2 Introduction

2.1 This report was commissioned by-
Oval Target Limited

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

2.2 An Arboricultural report has been requested in respect of the proposed development. As "BS5837: 2012 Trees in Relation to Design, Demolition and Construction – Recommendations" is the accepted frameworks for such reports, then its composition, inclusions and recommendations have been followed as a general basis for such reporting.

Report Context

2.3 This report comprises an Arboricultural review of the proposed development. This includes an assessment of the site's existing tree population within its current context, as well as an assessment of their potential for sustainable retention in the post-development scenario and the likely effects and repercussions of the development and construction process upon those trees. It also provides information regarding the necessary tree protection and the avoidance of damage to trees during the construction process, necessary to achieve sustainable tree retention.

2.4 This assessment summarises the Arborist's findings and recommendations, arrived at after reviewing the proposed project details as provided, 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" at "Appendix 1" as well as a 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 assessment of the development implications relating to the sustainable retention of trees. This report is for planning purposes only.

Report Limitations

2.5 This report relates the Arborist's interpretation of information provided before the report compilation and gained during 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.

2.6 The "Implication Assessment" element of the report builds on assumptions and estimates, particularly in respect of the manner in which construction works might proceed on a day to day basis and appreciates the "design" stage of the project, as opposed to "detail design" or "construction" detail.

2.7 Many elements of the "Arboricultural Method Statement" are general in nature and will require confirmation at the construction stage, for example in respect of the size and nature of the equipment, plant and machinery that might be utilised.

2.8 Accordingly, this assessment is premised on all its elements/recommendations, and the omission or alteration of any part of it, particularly the application of tree protection methodologies, can radically alter outcomes in respect of sustainable tree retention.

3 Site Description

3.1 The St Teresa's site relates to a period dwelling and several associated institutional buildings located circa 500 metres south-east of Blackrock Village and on the southern side of the Blackrock Bypass.

3.2 The main buildings are located towards the north of the site centre with the greater proportion of the site centre and areas to the south, south-east and south-west comprising soft landscape. Whilst much of the site is broadly flat, it is noted that there are some gentle slopes to the west of the site and disparities between the site and its directly adjoining neighbours.

3.3 Whilst the site supports an extensive soft landscape, note is made that the existing buildings are services by substantial road surfaces providing access to both the north-east and north-west of the site. In addition to these road alignments, there are also areas of parking.

3.4 For the most part, the tree population associated with the site tends to be limited to its margins however, the south-western portion is far broader, effectively comprising a small woodland area. Elsewhere with sole exception of the ornamental gardens to the east of the existing buildings, most trees tend to be in narrow groups or alignments.

3.5 Much of the site has been managed, though the south-western portion is by comparison, substantially overgrown, with little evidence of management or intervention over recent decades.

4 Pre-Development Arboricultural Scenario

4.1 The period dwelling of St Teresa's and its associated buildings support a contextual landscape that includes an entrance drive, ornamental lawns and a perimeter to

broader paddocks to the south. Additionally, there is evidence to suggest a possibly less managed and more natural woodland to the south-west.

4.2 Review of the Historic Map 6 inch Colour (1837-1842) shows that the site area comprised the northern extent of the broader Rockfield House estate. At that time, the area comprised open fields with tree belts typically limited to the north-eastern and north-western boundaries. It is noted the site currently supports no material that would date to this period. By the end of the 19th century, the Historic Map 25 inch (1888-1913) indicates many of the building existing today, including what was then Craig More house and lodge, and a landscape including trees of a format very similar to that remaining today. This landscape remained broadly unchanged through to the 1930s, as illustrated by the 6 inch Cassini mapping, which though including extended school building and a “boys home”, appears to have retained much of the earlier landscape. Therefore and appreciating that many trees currently on the site are not old enough to date back to the pre-1900 period, there is much evidence to show that the current entrance avenue, drive access to the main house and the wooded belt to the south-west of the main house and extending to the folly tower, comprises much of the original landscape and planting scheme.

4.3 Today, the tree population has been augmented by elements of more recent ornamental planting. This is evident to the south-east of the site in respect of the younger trees that adjoin the continuing Avenue to the neighbouring convent where they appear to replace an earlier population and at various points about the garden areas where younger trees exist.

4.4 An additional and visually prominent element to what appears to be more recent planting also applies to the site's northern boundary with the existing Blackrock bypass. This stark alignment of Poplar and Cypress appears to have been planted to recreate a new northern boundary after the development of the current Blackrock bypass alignment.

4.5 In respect of health and sustainability, the tree population is broad and diverse. Many trees are affected by defect or ill-health and are now unsuitable for retention, with some specimens are regarded as dangerous. Other specimens are still healthy but are of poor form or support other mechanical issues that may undermine their safety or sustainability over time. Such trees offer only limited sustainability but might be suitable for limited retention for example to augment interim cover. Such retention may be limited and would be subject to suitability and the context within which they would be kept.

4.6 Many trees appear to suffer from ill-informed intent at planting time, the best example of this being the northern roadside boundary. In this respect, the combination of Leyland Cypress and Poplar appears to have been based on a requirement to provide rapid establishment rates and near instant effect. Unfortunately, both species have sustainability issues with Poplars developing both invasive and far-reaching root

systems as well as becoming brittle with age and Leyland Cypress are regarded with caution by most authorities in respect of their rapid growth rates and unsurmountable issues of management, a factor that has seen them cited particularly, in respect of the high hedges legislation in the UK. In this respect and whilst the tree alignment is noted to provide a significant landscape feature at present, its sustainability should be regarded as highly limited and that retention will require onerous and visually damaging degrees of pruning over time.

4.7 Other trees on the site offer substantial sustainability either through good health or location. Such trees, for example some of the parkland specimens, may prove eminently suitable for retention into a new landscape context. This will of course be dependent upon that context and the potential threats or issues such trees might raise. This issue would be particularly poignant in respect of younger trees that assert potential for growth, particularly where the species involved can attain large sizes at maturity.

4.8 This issue may also relate to the less managed, woodland areas, for example that to the south-west of the site. This area sees substantial numbers of naturally regenerating trees, typically including Sycamore and Ash. While small at present, both species offer immense potential for great size increase over time. While the Sycamore would be regarded as being resilient, some concern relates to the Ash in respect of Ash Decline, a pathogen that appears to be present both on the site and in the Rocklands Park area to the south-east.

4.9 While many of these young trees appear to offer substantial degrees of sustainability, crowding is already leading to suppression and competition and is leading to mechanical issues. Additionally, many of these trees and particularly the Sycamore have outcompeted all other species in their areas and therefore are contrary to increasing biodiversity. Therefore, there would be great advantage in managing and culling some of these trees, in favour of improving growth space for individuals and providing additional space for new planting with a more diverse array of species.

4.10 As can be seen from figs 1, 2 and 4 above, there is evidence of site management with a skewing of data showing a reasonable quality tree population that offers good sustainability. Under the categorisation system of BS 5837-2012, there are substantial numbers of category “B” and “C” trees. However category “U” still makes up a notable proportion. Unfortunately, some of the category “C” trees, may deteriorate over time and become category “U” trees. The age breakdown (fig 4) shows a reasonable balance of young and mature trees, this being reflected in a useful life expectancy (fig 4) that is dominated by trees with longer term potential.

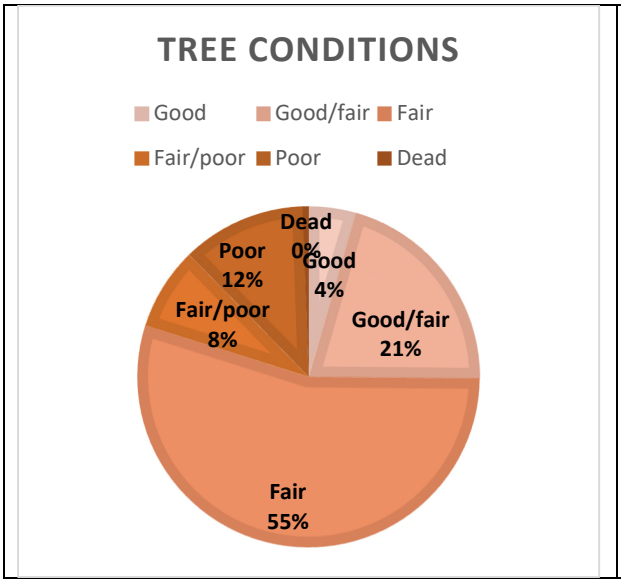

Fig 1

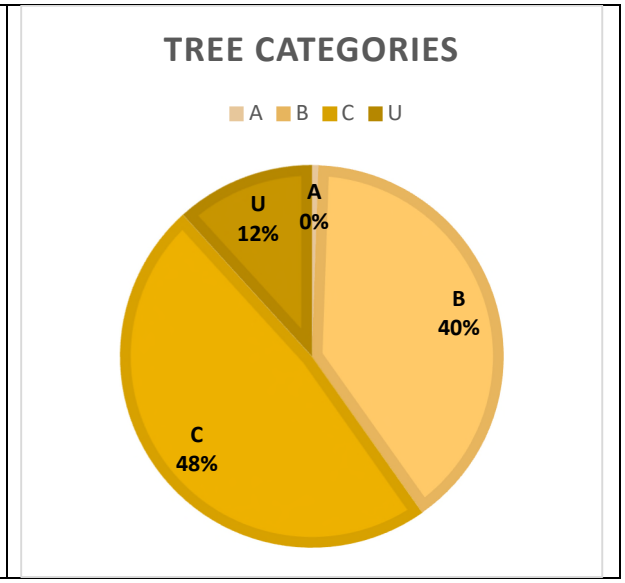

Fig 2

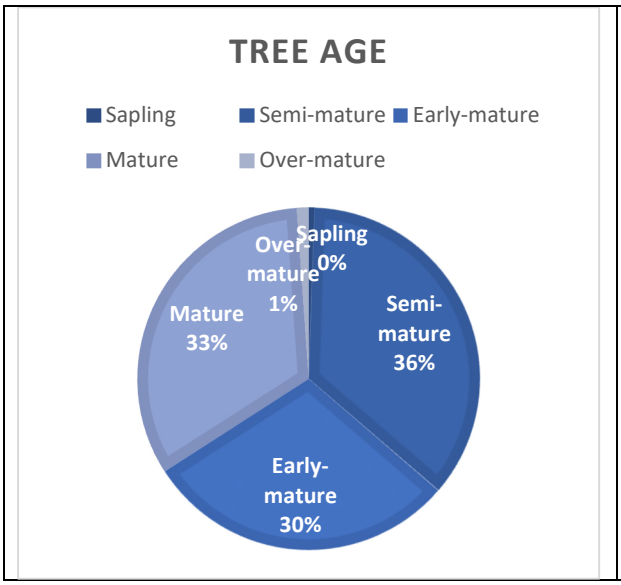

Fig 3

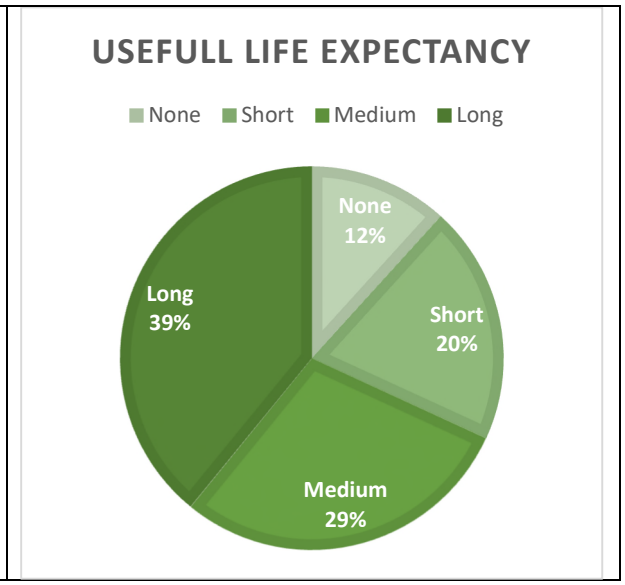

Fig 4

4.11 The information relating to species make-up, as illustrated in Fig 5 is also of interest. This graph illustrates the main species, with those occurring as three or less specimens being included within the “other” group. The overall population includes many species that would not be expected to arise naturally. This illustrates well, the planted nature of much of the population. In contrast, we note the high proportion of Sycamore across the site. This species group is dominated by young trees that are not likely to have been planted, and are more likely associated with natural regeneration, illustrating the somewhat invasive and dominating nature of Sycamore.

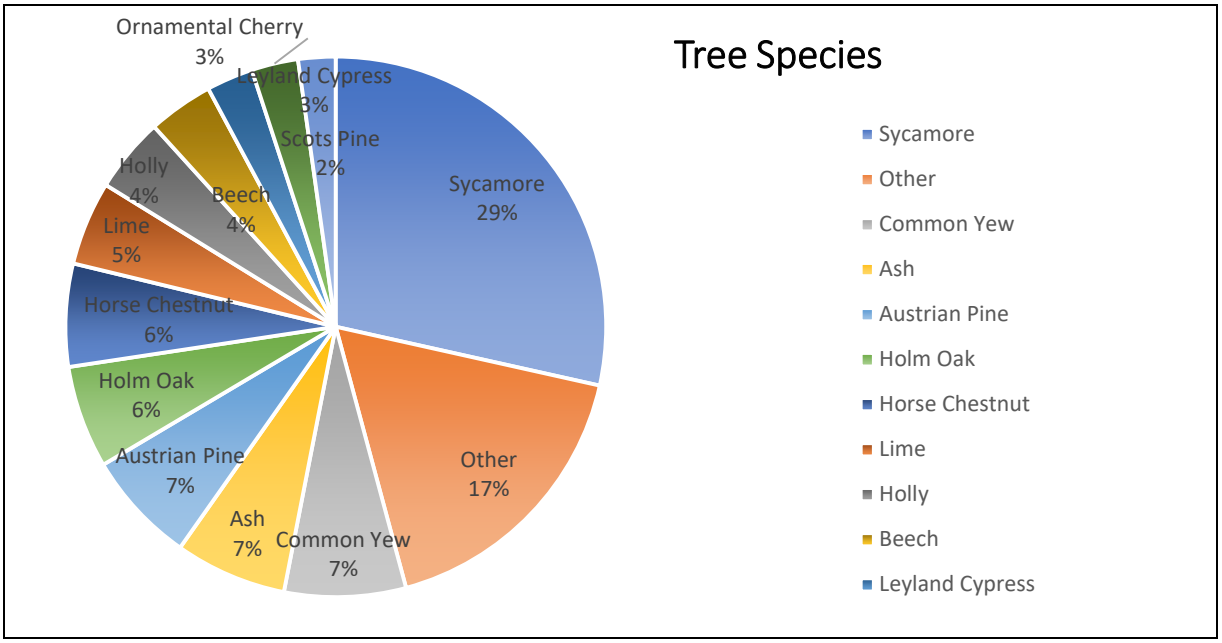

Fig 5

5 Planning Policy in Respect of Trees

5.1 In respect of trees as they relate to planning issues within the DunLaoghaire Rathdown Council area, note is made of two principal areas of guidance including the County Development Plan 2016 – 2022, and the DunLaoghaire Rathdown tree strategy document: A Tree Strategy for Dún Laoghaire-Rathdown 2011 – 2015)

5.2 Additionally, guidance is provided in-

Chapter 2, Sustainable Communities Strategy
2.1.3.5 Policy RES5: Institutional Lands notes the retention of trees in development proposals

Chapter 4, Green County Strategy
4.1.3.1 Policy LHB19: Protection of Natural Heritage and the Environment*
4.1.3.5 Policy LHB23: Non-Designated Areas of Biodiversity Importance*
4.1.3.6 Policy LHB24: County-Wide Ecological Network*
4.1.3.8 Policy LHB26: Hedgerows*
4.2.2.6 Policy OSR7: Trees and Woodland* (Tree Strategy for the County – 'DLR TREES 2011-201)

Chapter 8, Principles of Development
8.1.2.4 Policy UD7: Urban Tree Planting* (DLR TREES: A Tree Strategy for Dún Laoghaire-Rathdown 2011 – 2015)

8.2.3.2 Quantitative Standards, (ii) Residential Density (where lower densities may be considered or in sites where mature tree coverage prevents minimum densities being achieved across the entire site)

8.2.3.4 Additional Accommodation in Existing Built-up Areas, (vii) Infill, Infill development shall retain the physical character of the area including features such as boundary walls, pillars, gates/gateways, trees, landscaping, and fencing or railings.

8.2.3.5 Residential Development – General Requirements, (vi) Bonds To ensure the satisfactory completion of development works, such as roads, surface water drainage, public lighting and open space, including the protection of trees, on a site which has been the subject of a grant of permission, a bond or cash lodgement may be required until the development has been satisfactorily completed.

8.2.4.9 Vehicular Entrances and Hardstanding Areas, Impacts on features like boundary walls and pillars, and roadside grass verges and trees outside properties will require to be considered, and entrances may be relocated to avoid these.

(v) Financial Contributions
Where an existing on-street car parking space requires removal to facilitate a new or widened vehicular entrance, and cannot be conveniently relocated within the public domain, then a financial contribution will be required in accordance with the terms and conditions of the Transportation Section and Water Services Department.

Likewise, where a tree, located on-street, requires removal to facilitate a new or widened vehicular entrance and cannot be conveniently relocated within the public domain then a financial contribution will be required in lieu.

8.2.7.2 Sensitive Landscapes and Site Features
Existing site features such as specimen trees, stands of mature trees, hedgerows, rock outcrops and water features are properly identified and retained where appropriate and new planting or other landscaping appropriate to the character of the area will be provided

8.2.8.3 Public/Communal Open Space – Quality
Fragmented open spaces within a development layout, which result specifically from the necessity to protect existing site features (for example a stand of mature trees) may not be included in the calculation open space requirements, as they are necessary to ensure the protection of existing amenities

8.2.8.6 Trees and Hedgerows
New developments shall be designed to incorporate, as far as practicable, the amenities offered by existing trees and hedgerow and new developments shall have regard to objectives to protect and preserve trees and woodlands as identified on the County Development Plan Maps. Arboricultural assessments carried out by an independent, qualified arborist shall be submitted as part of planning applications for sites that contain trees or other significant vegetation. The assessment shall contain a tree survey, implications assessment and method statement. The assessment will inform the proposed layout in relation to the retention of the maximum number of

significant and good quality trees and hedgerows. Tree and hedgerow protection shall be carried out in accordance with BS 5837 (2012) 'Trees in Relation to Design, Demolition and Construction – Recommendations'

Where it proves necessary to remove trees to facilitate development, the Council will require the commensurate planting or replacement trees and other plant material. This will be implemented by way of condition. A financial bond may be required to ensure protection of existing trees and hedgerows during and post construction.

Chapter 8 Development Management
8.2.11.2 Architectural Heritage – Protected Structures
(iii) Development in Proximity to a Protected Structure Any proposal for development will be assessed in terms of the following: Impact on existing features and important landscape elements including trees, hedgerows and boundary treatments.

5.3 Review of the current development plan information illustrates no specific tree preservation orders applicable to the site area.

5.4 Note is made that the current "County Development Plan 2016 – 2022" indicates an objective to protect and preserve trees and woodlands on the site. This objective has been maintained in respect of the current draft County Development Plan 2022-2028.

Other Legal Constraints

5.5 Under the Forestry Act 2014, the felling of a tree standing in a county area requires a felling license unless the trees are exempted under Section 19 of the Act. An exemption applies where trees are being felled in line with a specific detail of a grant of planning permission.

5.6 Some "Section 19" exemptions are not applicable to the development scenario, for example, those applying to fire control, forest survey or gene pool protection relating to horticultural use or Christmas tree production.

5.7 Some exemptions are pertinent to the development scenario, particularly Section 19(1) (M)(ii), where "the removal of which is specified in a grant of planning permission".

5.8 Other non-specific exemptions may also be applicable, including-

- Trees standing in an urban area.
- Trees within 30 metres of a building (other than a wall or temporary structure), but excluding any building built after the trees were planted.
- Trees removed by a public authority in the performance of its statutory functions.
- A tree that is, in the opinion of the planning authority, dangerous on account of its age, condition or location.

- A tree within 10 metres of a public road and which, in the opinion of the owner (being an opinion formed on reasonable grounds), is dangerous to persons using the public road on account of its age or condition.

5.9 The above derogations do not apply where-

- The tree is within the curtilage or attendant grounds of a protected structure under Chapter 1 of Part IV of the Act of 2000.
- The tree is within an area subject to a special amenity area order
- The tree is within a landscape conservation area under section 204 of the Act of 2000.
- The tree is within a monument or place recorded under section 12 of the National Monuments (Amendment) Act 1994, a historic monument or archaeological area entered in the Register of Historic Monuments under section 5 of the National Monuments (Amendment) Act 1987, or a national monument in the ownership or guardianship of the Minister for the Arts, Heritage and the Gaeltacht under the National Monuments Acts 1930 to 1994 or is within a European Site or a natural heritage area within the meaning of Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011)

5.10 For further clarification, contact should be made with Forest Service (Department of Agriculture, Fisheries and Food).

5.11 Other legislation may affect tree cutting and felling. Particular note should be made of the "Wildlife Act 1976 (as amended), as well as the EU Habitats Directive. These offer protection to animals, including Bats that often root or even breed in trees. The protection afforded by the above legislation means that particular care must be taken in the pruning of felling of trees that may contain Bats. For this reason, specific specialist advice should be sought.

6 Construction Works and Trees

General

6.1 Tree retention is costly in respect of available space. There is a substantial difference between physically retaining a tree in situ and gaining any realistic expectation of it surviving into the future and remaining safe, the latter being dependent upon the extent and nature of protection it can be afforded.

6.2 Trees are living organisms and are highly reliant upon a continuity of environmental factors, the changing of which can easily undermine health and sustainability. As a perennial plant, a tree’s nature is to necessarily become larger on an annual basis. The survival of the plant and its funding of continued growth requires a minimum import of water and various nutrients, which are provided by the soil in which the tree is rooted.

6.3 A tree is highly dependent upon the ground from which it arises. The nature of that ground and a continuity of conditions and provisions that that ground provides are of particular importance to maintaining tree health and sustainability. Any change extending beyond the short-term, has the potential to affect a tree's metabolism, health, and sustainability.

6.4 Development works can easily result in the loss, changing or denaturing of this ground upon which a tree is dependant. Any action that removes, disturbed or denatures the existing soil environment in respect of gas flux, hydrology, soil strength or bulk density can damage tree roots and render a soil incapable of supporting plant root function. Therefore, these effects must be avoided in the areas upon which a tree is reliant.

6.5 Any structure or activity that results in the issues noted above must be regarded as contrary to sustainable tree retention. Where such issues arise within the minimum "root protection area" as defined under "BS5837-2012", then the affected tree is likely to be regarded as unsustainable and unsuitable for retention.

Construction Specific Issues

6.6 New buildings, roads, or other structures or their foundations (and/or basements) require the excavation of ground space. Foundation digs are often substantially larger than the building footprint, with depth often requiring safety related battering or benching of the excavation edges to avoid collapse. Many structures, including roads and paths, require that the ground beneath is compacted to provide a necessary bearing ratio. The combination of these typically results in the loss or denaturing of the soil volume that a tree would be reliant upon. Underground services require excavation and trenching, with the added complication that gravity led systems can often require the modification of ground levels to achieve necessary gradients and minimum overburdens, a factor that can often influence the finished levels of both the roads and buildings.

6.7 Most modern construction involves the use of substantial plant, equipment, and vehicles. The movement and activity of such machinery quickly denatures the ground, destroying the soil profile and structure, making them inhospitable and of no use the to the supported trees.

6.8 Though beyond the scope of this report, consideration might be given the broader changes to the ground environment, for example relating to possible hydrological issues relating to the proposed development. These may include changes during construction of basements and the need for irrigation of adjoining ground during excavation dewatering requirements and up until any groundwater equilibrium might be achieved.

Contextual Issues

6.9 Some tree losses may be justified because of poor-quality, ill-health or other deterioration. In such instances, the potential for, and suitability for their retention, would be limited regardless of any site development. However, some poorer-quality trees, if located in areas of reduced sensitivity, might offer some degree of limited retention, dependant on the retention context and the threat they may present.

6.10 Where the site context changes in respect of occupation and use near trees, repercussions may include a requirement for greater scrutiny and management. Some trees may require specific attention, including structural pruning improve their safety status within the changed context as well as to deal with issues of exposure and shelter loss.

6.11 Tree canopy cover varies by species and can change by season. Therefore, their relationship with the post development site must be considered in respect of additions issues, including shadow-cast and light admission and littering.

6.12 Tree retention close to buildings should consider the blockage of views and light, and the possible effects on daylight analysis. Trees can have a material effect on these issues and can lead to post development request for more tree removal, for example based on a requirement for artificial light during daylight hours.

6.13 Deciduous tree shed leaves each autumn that can be subject to local wind patterns, creating local drifts and accumulations. Such issues may require management and can lead to drainage issues including the blockage of drains and gullies, or to the creation of slippery surfaces.

7 Nature of Proposed Works

7.1 The details of the proposed development are-

7.1.1 The proposed development comprises 493 residential units delivered in a combination of new apartment buildings (ranging in height from 3- 10 storeys overall in height) and a relocated St. Teresa's Lodge.

St. Teresa's House provides for 6 apartments, comprising 5 no. 2-bed units and 1 no. 3-bed unit. The new build element of 487 units is set out in 11 no. residential development blocks (Blocks A1-C2 and D1 – E2) ranging in height from 3-10 storeys over basement comprising:

- Block A1 (5 storeys) comprising 37 no. apartments (33 no. 1 bed units and 4 no. 2 bed units)
- Block B1 (10 storeys) comprising 55 no. apartments (37 no. 1 bed units, 10 no. 2 bed units and 8no. 3 bed units)

- Block B2 (8 storeys) comprising 42 no. apartments (28 no. 1 beds, 9 no. 2 beds and 5 no. 3 beds)
- Block B3 (8 storeys) comprising 42 no. apartments (28 no. 1 beds, 9 no. 2 beds and 5 no. 3 beds)
- Block B4 (5 storeys) comprising 41 no. apartments (4 no. studio units, 4 no. 1 bed units, 27 no. 2 bed units and 6 no. 3 bed units).
- Block C1 (3 storeys) comprising 10 no. apartments (1 no. studio unit, 3 no. 1 bed units and 6 no. 2 bed units).
- Block C2 (3 storeys) comprising 6 no. apartments (2 no. 1 bed units, 4 no. 2 bed units,) together with a creche facility of 392 sq. m at ground floor level and outdoor play area space of 302sq.m
- Block C3 (1 storey plus basement level) comprising residential amenity space of 451 sq. m.
- Block D1 (6 storeys) comprising 134 no. apartments (12 no. studio units, 22 no. 1 bed units, 90 no. 2 bed units and 10 no. 3 bed units).
- Block E1 (6 storeys) comprising 70 apartment units (34 no. 1 bed units, 26 no. 2 bed units and 10 no. 3 bed units).
- Block E2 (6 storeys) comprising 50 units (1 no. studio unit, 29 no. 1 bed units, 18 no. 2 bed units and 2 no. 3 bed units).

Each residential unit has associated private open space in the form of terrace/balcony.

Resident amenity space c. 451 sq. m. accommodating a gym and studio space at basement level; residents' lounge/café, work booths/meeting room and reception/foyer/parcel store at ground floor.

Crèche facility of 392. sq. m.

252 no. residential car parking spaces (161 no. at basement level and 91 no. at surface level) and 20 motorcycle spaces at basement level are proposed. 8 no. car parking spaces for creche use are proposed at surface level.

1056 no. bicycle parking spaces (656 no. at basement level and 400 no. at surface level).

15,099.7 sq. m. public open space in the form of a central parkland, garden link, woodland parkland (incorporating an existing folly), a tree belt, entrance gardens, plazas, terraces, gardens, and roof terraces for Blocks B2 and B3.

7.2 Considering the scope and scale of the propsed development, it is considered likely that most of the issues dealt with at "Construction Works and Trees" above, will apply at various points and particularly regarding-

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) Construction activity and the use of large plant and machinery that can denature the ground.
e) A change in site context or a change in occupation or use that makes a tree unsuitable for retention.

8 Specific Issues and Arboricultural Concerns

8.1 The primary Arboricultural issue relating to this site (and many other sites) is one of contested space. Particularly, the proposed development and its constituent parts that comply with current development expectations and planning densities, require the unavoidable consumption of space to provide for the proposed apartment blocks and basement parking, DMURS compliant access roads and paths, as well as various other services and facilities and services. As the site's tree population occurs at various points across the site then it is typically difficult, if possible, to account for the conservation of the minimum ground space required to sustainably retain some trees.

8.2 To the north of the site, additional tree impacts have been imposed by broader planning requirements including the changing of the site's interface with the Blackrock bypass and the required amendment to the traffic interchange near the proposed entrance to the site.

8.3 The proposed development involves the building of substantial structures, some with large basements. Such projects will cause disturbance to areas typically larger than the footprint of the completed structures, adding an additional impact to tree retention. Some proposed tree losses relate to the pragmatism and understanding of interim and enabling works impacts.

8.4 Additional issue arise in respect of Part M of the Building Regulations, where existing ground levels and gradient may require modification to comply with minimum requirements. Such amendments can adversely affect tree health and sustainability.

8.5 The provision of site services and particularly gravity led drainage can adversely affect trees in that minimum overburdens can require the modification of ground or surface levels. Such amendments can adversely affect tree health and sustainability.

8.6 The simple retention of trees through the development process may prove short-sighted. The tree survey has illustrated a tree population in various states of health and sustainability. Additional tree losses will unavoidably occur over time in line with the aging and deterioration of the existing trees. Other issues may include the mechanical effects of shelter loss and exposure that could see some trees become subject to storm damage. The sustainable retention of a viable tree population on this

site will be subject to ongoing management over time and to new planting, both at development time and into the future.

8.7 It is appreciated that the scale of the proposed development will require the use, over a substantial period, of large plant, equipment and vehicles. This type of traffic is associated with the denaturing of the current ground and soil environments, to degrees that can render it incapable of supporting tree roots. Typically this requires that such disturbed ground be cultivated prior to planting, but such amelioration cannot apply to ground containing existing tree roots, without destroying those roots. Accordingly, sustainable tree retention will be limited to areas that not only involve no construction of new structures, but also to areas disturbs by access and activity associated with the achievement of the construction process.

9 Design Iterations and Arboricultural Considerations

9.1 An earlier tree survey was extended and updated in December of 2020 and further updated in September 2021. The preliminary results of the survey were provided to the design team at an early stage. Accordingly, there was an early appreciation of the site's tree cover, its quality, condition, and the constraints it presented.

9.2 Notwithstanding minimum development requirements and the compliance with planning and construction related standards, the design process has regularly accommodated iterations orientated towards the preservation and retention of trees.

9.3 Issues identified by Dun Laoghaire Rathdown County Council Parks Department, at earlier stages of the planning process have also been address. The two primary changes that of benefit to tree retention include the minor relocation of the attenuation tank to reduce encroachment on a category "A" and "B" tree (Nos.37 and 36 respectively), as well as the redesign of and relocation of Block B4, thereby removing building encroachments on the root protection areas of trees located to the south of the block.

9.4 Throughout the development, design details have been adopted to maximise tree retention. Such details included the retention of native ground levels to avoid grading or fill issues. In one instance, this has been achieved by the inclusion of small retaining walls, to avoid additional grading and thereby limit encroachment between the entrance road and footpath to the east Lime no.22.

9.5 The landscape scheme has adopted "low impact" approach to the development of pathway and new surfaces within areas of trees. This in combination with controlled works processed at construction stage will allow for the creation of serviceable access to the wooded areas without resulting in damaging tree disturbance.

10 Identification of Development Impacts to Trees

10.1 The expected tree impacts have been represented graphically on the tree impacts drawing "**St Teresas Tree Impacts Plan"**, as well as within the narrative of this report. This drawing combines the tree constraints plan information with the current stage development details including the architectural and services layouts below, thereby allowing for simple direct comparisons to be made between the existing site context and the development proposals in respect of new structures.

10.2 In this drawing, trees denoted with "Broken Pink" crown outlines are to be removed and those denoted with "Continuous Green" crown outlines are to be retained.

10.3 Detail of the development proposals is currently limited to drawings provided by-

- O'Mahony Pike Architects including – Architectural information
- JJ Campbell & Associates – Engineering, drainage and underground services information
- OCSC Consulting Engineers – Lighting and M&E services
- Mitchel & Assiociates – Landscape Architectural information

10.4 The evaluation is primarily based on minimum protection ranges as defined paragraphs 4.6.1, 4.6.2 and 4.6.3 of BS 5837:2012. 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.

10.5 The broader assessment attempts to consider both direct and indirect implications, based on perceived construction requirements, as well as how a tree will likely interact with the development in respect of growth, hazard development, light blockage and other social concerns in respect of the changing context, including its effect on tree amenity value.

11 Tree Retention and Loss

11.1 The drawing "St Teresa's Tree Impacts Plan" comprises the tree survey drawings overlaid by the development drawings, thus providing a graphic representation of the relationship between tree constraints and the development elements. In this drawing, the trees that will be removed, are highlighted in "pink dashed" outlines.

11.2 As noted within the survey data, the "red line" area supports a total of 179 individual trees and 5 groups of trees, shrubs or hedges (including multiple plants/trees/shrubs), which, for the purposes of this report, will be regarded as 184no. items.

- 1no. category "A" tree.
- 71no, category "B" trees,

- 86no, items including 84no. category “C” trees and 2no. category C groups.
- 25no. items including 21no. category “U” trees and 4no. category “U” groups.

11.3 Several trees have been categorised as category “U” (unsustainable or unsuitable for retention) trees within the tree survey and have been recommended for removal regardless of site development. Such trees include Nos.13, 33, 35, 38, Tree Line 40, 52, B, 114, 120, 125, 126, 127, 128, 129, 142 176. 197 and Hedge 1 that must be removed to facilitate the proposed works, but the overall site supports others that may also be removed for site safety and management reasons, though don’t necessarily require removal to facilitate works. These would include Nos.147, 155, 156, 172, TA2, 193 and TA1.

11.4 The site supports only one high-quality category “A” tree, No.37, that will be retained.

11.5 Of the site’s “fair” quality, category “B” trees, the development works will require the removal of tree Nos.1, 7, 8, 11, 17, 18, 26, 27, 31, 34, 46, 50, 69, 130, 169 and 179.

11.6 Of the site’s “poor” quality “C” trees, the development works appears to require the removal of Nos.2, 3, 4, 5, 6, 9, SG1, 10, 12, 14, 15, 16, 19, 20, 21, 30, 32, 44, 45, 47, 48, 49, 51, A, 117, 117a, 174, 175, 177, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 360, 402, 404, Tree Line 1 and Tree Line 2

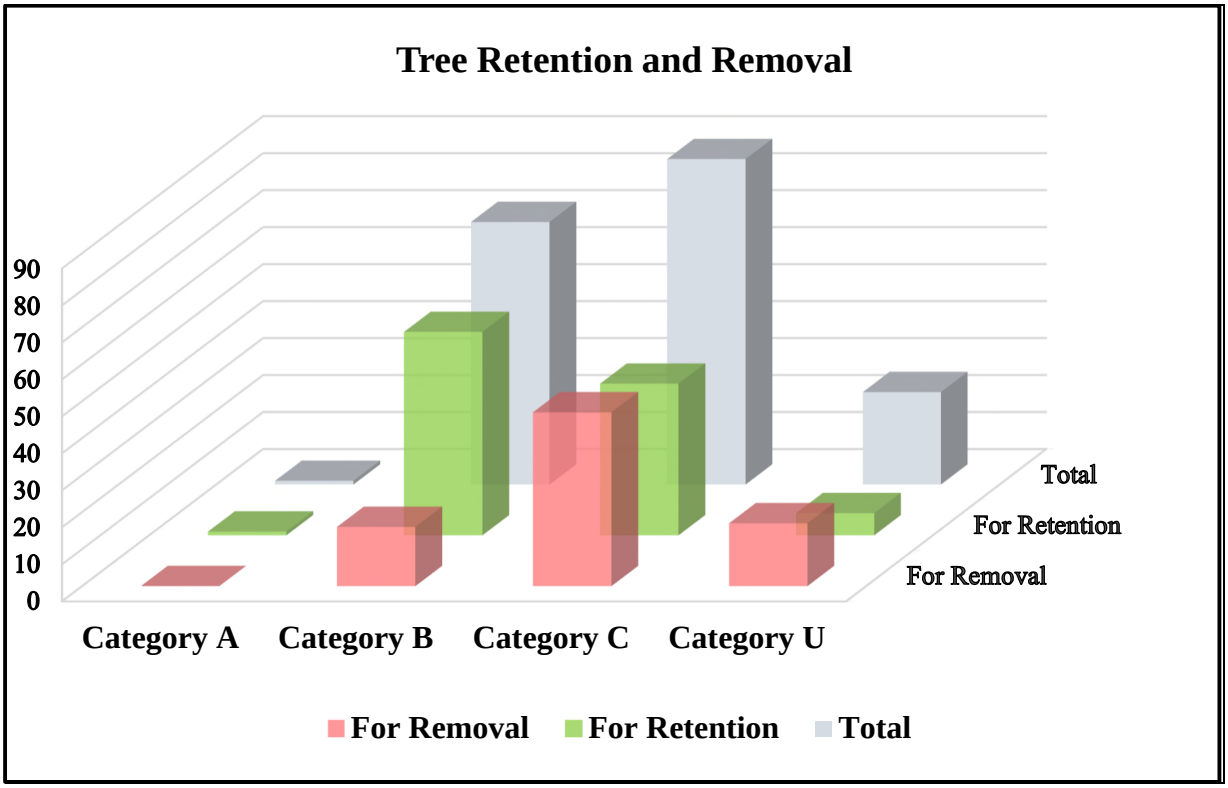

Fig 5 Graphic Representation of Tree Loss/Retention Scenario

11.7 The tree loss breakdown for the proposed developemnt will be-

- 0 Category “A” trees.
- 16 Category “B” trees.

- 44 items including 41 category “C” trees and 3 groups.
- 18 items including 16 category “U” trees and 2 groups.

12 Tree Protection within the Scope of a Development

12.1 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.

11.2 In respect of tree protection, whether vertical or horizontal, all must conform or equate to the recommendations of Section 6, 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.

12.3 This report provides a “Preliminary Arboricultural Method Statement” at “Appendix 1” to this report, as well as the associated “Tree Protection Plan” drawing “St Teresa’s Tree Protection Plan”.

12.4 In the drawing, the “Construction Exclusion Zone” is defined by an orange hatching with bold “Orange” lines representing the proposed location of the primary protective “Construction Exclusion Fencing”.

12.5 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. This drawing may require referral to a figured and dimensioned, “construction stage” 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.

12.6 Even at this early stage, the tree protection plan includes the use of special materials and methodologies intended to minimise the impacts of structures/works near trees. Examples of this includes elements of the proposed landscape plan. In these areas, nominated as “Controlled Work Zones” and depicted by pale blue hatching on the tree protection plan “St Teresa’s Tree Protection Plan”, it is intended to use manual and low-impact procedures and low impact methodologies that avoid the need for excavation or ground disturbance and maintain the drainage and porosity of the ground volume beneath. Examples of this would include the provision of paths within the broader landscape, beside trees and through wooded areas.

13 Preliminary Management Recommendations

13.1 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. Therefore, and in line with the changing context of the site,

some recommendations may no longer apply. Examples include where the felling of trees or other specific works are necessary to facilitate development requirements.

13.2 Many of the concerns raised in the tree survey relate to evidence suggesting mechanical failure to trees, ill-health or contextual issues. These may continue to a point where a trees suitability for retention may change over time.

13.3 Additionally, any development-related loss of trees can result in exposure and shelter loss issues. Therefore, all retained trees must be reviewed immediately after the primary site clearance works. This will allow for the updating and amending the "preliminary management recommendations" of the primary survey. Such amendments would address such issues as may arise and may include additional structural pruning works . Regular reviews of all retained trees must be maintained, so that early and prompt intervention and action can be applied as required.

14 Bibliography

14.1 British Standards Institution (2010) BS 3998:2010: Tree Work - Recommendations. London: British Standards Institution.

14.2 British Standards Institution (2012) BS 5837:2012: Trees in Relation to Design, Demolition and Construction - Recommendations. London: British Standards Institution.

14.3 Jackson, R.B et al (1996) A Global Analysis for Root Distribution in Terrestrial Biomes Oecologica, 108 (1996) pp389-411, Springer Verlag

14.4 Lonsdale, D. (2005) Principals of Tree Hazard Assessment and Management, London, TSO

14.5 Mattheck, C. and Breloer, H. (1994) The Body Language of Trees, London, TSO

14.6 Roberts, J. and Jackson, N. and Smith, M. (2006) Tree Roots in the Built Environment, London, TSO

14.7 Strouts, R.G. and Winter, T.G. (1994) Diagnosis of Ill-Health in Trees, London, HMSO

A1 Appendix 1 - Arboricultural Method Statement (and Tree Protection Plan)

Method Statement Outline

A1.1 This method statement provides guidance in respect of tree protection on a development site. This is a broad and prescriptive method statement, providing general advice and guidance in respect of trees and tree protection on a typical development site, dealing with issues known at planning stage.

A1.2 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.

A1.3 This method statement addresses, amongst others, two primary issues, those being –

a) The avoidance/prevention of physical damage to a tree to be retained.

b) The avoidance/prevention of physical damage or disturbance to the ground/earth upon which a tree is reliant.

Drawings

A1.4 This Arboricultural Method Statement must be read with the associated "Tree Protection Plan" drawing, "St Teresas Tree Protection Plan". The "planning stage" drawing must be updated for "Construction" stage purposes, to include tree protection ranges/dimensions as defined for that tree within the tree survey table or unless otherwise defined by the project Arborist.

Method Statement Use

A1.5 This Method Statement should be implemented under the direct guidance of the project Arborist.

Amendments and Modifications to Tree Protection Plan

A1.6 Any amendment to the tree protection plan must be agreed with the project Arborist, including the adoption of specific methodologies and/or procedures and structures for access into/use of certain parts of the above defined "Construction Exclusion Zones". Such procedures, including the provision of suitable ground protection may allow for the relocation of the "Construction Exclusion Fencing" to provide access to and across the previously protected areas.

Works Related Impacts

A1.7 In respect of any necessary and unavoidable structures/works 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.

Tree Works Specification Updates

A1.8 Many of the tree management recommendations stipulated within the “Preliminary Management Recommendation” section of the primary tree survey, relate to the “as was” site scenario. Because of changing site contexts, some may no longer apply and may require confirmation (and potential modification) to account for the changes that construction will cause.

General Method Statement

1.0) Overview and Implementation

1.1 **Prior to any site works, this method statement will be considered and discussed by all members of the construction team management, prior to any site works or construction/demolition related works or access**.

1.2 The project Arborist or another suitably qualified person will oversee the application of all tree protection measures and any necessary modifications to this Method Statement (any issues as may have arisen in respect of planning conditions or details as may have changed between the design stage) to provide a basis upon which tree protection will be managed on the construction site.

1.3 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.

1.4 As unforeseen tree losses may compromise project planning permissions, it is imperative that issues relating to tree protection and/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 and felling as defined in the Arboricultural report and/or grant of permission.

2.3 On completion of tree felling/site clearance works, the tree management plan will be reviewed, accounting for (if necessary) the updating of the “preliminary Management Recommendations” stipulated in the original Tree Survey.

2.4 Any revised pruning/cutting works will be agreed with the local authority and applied at the earliest possible opportunity.

2.5 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.

2.6 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". Such works must be agreed and overseen by Project Arborist.

2.7 At construction works completion stage, all retained trees will be reviewed regarding their condition and longer-term management recommendations and regarding site hand-over.

3.0) Tree Protection

3.1 All tree protection measures and locations must be agreed, overseen, and verified by the Project Arborist prior to works commencement.

3.2 All construction, works or access areas must be enclosed and defined by protective fencing, this comprising the "Construction Exclusion Zone" based upon drawings "St Teresas Tree Protection Plan" (Construction Stage version).

3.3 Unless specifically stipulated by the project Arborist, the default minimum range of the protective fencing from a tree is the range stipulated for that tree within the "RPA" (root protection area) column of the original survey.

3.4 Such a fence must be fit for purpose and commensurate with the nature of activity expected upon the site and should comply with "Section 6.2" of BS5837: 2012.

3.5 The fence should be affixed with notification signs such as "TREE PROTECTION AREA - KEEP OUT"

3.6 Structures such as "lock-ups", offices or other temporary site building, not 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.

3.7 If entry into the "RPA" (Root Protection Area) zones becomes unavoidable, ground protection systems agreed with the project Arborist, will be utilised.

3.8 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 "Construction Exclusion Area" ground.

4.2 Ground protection can comprise the use of proprietary materials/structures (installed to manufacturer's specifications and recommendations) 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 protection structure.

4.5 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 methodology.

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 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.

5.3 Preference must be given to manual labour and techniques within the fenced "RPA" zone.

5.4 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 Preference must be given to trench-less techniques including Mole-piping, Directional-drilling manual hydro-trenching (high-pressure water), "Air-Spade" or broken-trench techniques.

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 and the updating of the "Preliminary Management Recommendations" 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.

7.5 All additional works will be agreed with the local authority and/or other stakeholders and applied at the earliest possible opportunity.

7.6 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, with all persons undertaking works either before or after the principal development (site investigation works, Landscape Contractors) are subject to the above requirements

9.3 Works outside the "Construction Exclusion Zone" must be controlled to create no potential secondary hazard to tree health.

9.4 Large loads accessing the site must be reviewed regarding clearance and potential tree damage.

9.5 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.

9.6 No fires can be lit within 5 metres of any tree canopy extent.

9.7 No tree will be used for support regarding cables, signs etc.

9.8 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.

9.9 Any issue that has the potential to affect site trees must be brought to the attention of the Project Arborist for review and comment.

9.10 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.

9.11 It is possible 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.

A2 Appendix 2 - Tree Survey

Nature of Survey

A2.1 The criteria put forward in "BS5837:2012 – Trees in Relation to Design, Demolition and Construction – Recommendations" have provided a basis for this report.

A2.2 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.

A2.3 The survey, its findings and management recommendations relate to the site and the conditions thereon at the time of the survey. It relates to a "do nothing" or "as is" scenario and intends to provide an impartial representation of the site's tree population, regardless of any possible development works. It is likely that changes in site usage, development or other environmental changes will require an amendment of any 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

A2.4 The survey must be read with the "Tree Constraints Plan" drawing "St Teresas Tree Constraints Plan" 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 "St Teresas Tree Constraints Plan". Any such trees should be located and plotted by professional means to identify the constraints such trees have upon the site.

A2.5 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.

A2.6 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".

A2.7 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

A2.8 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

A2.9 The tree original survey works were commenced in November of 2017. The site was revisited, and the survey information was both updated and extended in September of 2020. 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.

A2.10 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 be estimated only.

Inspection and Evaluation Limitations and Disclaimers

A2.11 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.

A2.12 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.

A2.13 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.

A2.14 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.

A2.15 Throughout the undertaking of the survey, several factors acted against the inspectors, contriving to reduce the accuracy of the survey.

Seasonality

A2.16 The original survey was carried out during the late summer and winter 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.

Survey Key

Species	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 Dimensions	All dimensions are in meters. See notes regarding limitation of accuracy.
Ht.	Tree Height
CH	Lowest canopy height
N, E, 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	
P Poor	A specimen whom through defect, disease attack or reduced vigour has limited longevity or maybe un-safe
D Dead	A dead tree
Structural Condition	Information on structural form, defects, damage, injury, or disease supported by the tree
PMR – Preliminary Management Recommendations	Recommendation for Arboricultural actions or works considered necessary at the time of the inspection and relating to the existing site context and tree condition. Works considered as urgent will be noted.
Retention Period	
S – Short	Typically, 0 -10 years
M – Medium	Typically, 10 -20 years
L – Long	Typically, 20 – 40 years
L+	Typically, more than 40 years
Category System	The Category System is intended to quantify a tree regarding its Arboricultural value as well as a combination of its structural and physical health.
Category A	A typically a good quality specimen, which is considered to make a substantial Arboricultural contribution
Category B	Typically including trees regarded as being of moderate quality

Category C	Typically including generally poor-quality trees that may be of only limited value.
	The above categories are further subdivided regarding the nature of their values or qualities.
Sub-Category 1	Values such as species interest, species context, landscape design or prominent aspect.
Sub-Category 2	Mainly cumulative landscape values such as woods, groups, avenues, lines.
Sub-Category 3	Mainly cultural values such as conservation, commemorative or historical links.

Table 1 – Tree Data Table

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
1	Austrian Pine *(Pinus nigra)*	M	G/F	17.00	3.00	8.00	7.50	7.50	5.00	1	1184	14.21	A broad and spreading specimen, multi-stemmed by 4.00 m. Much of inner crown is obscured by dense ivy cover. Vigour remains good though crown supports notable amounts of dead-wood.	Cut ivy and review regularly.	L	B1-2
2	Leyland Cypress *(Cuppressocyparis leylandii)*	S/M	G	6.50	1.00	2.00	2.00	2.50	2.00	1	185	2.22	A young specimen of immense growth potential. Concerns exist regarding made and later life management in line with species predispositions.	Review in respect of development context.	M	C2
3	Sycamore *(Acer pseudoplatanus)* Leyland Cypress *(Cuppressocyparis leylandii)*	S/M	F	6.00	1.00	2.50	2.50	3.00	2.50	1	159	1.91	Two proximate stems combined create singular crown. Distortion and proximity to one another undermine sustainability as does Cyprus predispositions towards management issues in mid and later life.	Review regarding retention context.	S	C2
4	Sycamore *(Acer pseudoplatanus)*	S/M	F	8.00	1.50	3.00	2.50	2.50	2.50	1	261	3.13	Appears to be naturally arising from suppressed hedge element. Supports ivy and is of dubious retention merit.	Review regarding retention context.	S	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
5	Lime *(Tilia europea)*	M	F	14.00	2.00	4.00	3.50	5.00	5.00	1	783	9.40	Somewhat distorted and comprising the substantial sucker regeneration after severe cutting in past. Has been crudely decapitated with much of higher crown comprising sucker regeneration. Stem removal has also resulted in visible degrees of decay development and cavity development.	Tree remains vigorous and thus may offer some degree of sustainability subject to ongoing management including regular review and crown reduction type works.	M	C2
6	Horse Chestnut *(Aesculus hippocastanum)*	M	F	12.00	2.50	4.00	3.50	5.00	4.00	1	688	8.25	A remnant of a once larger tree having undergone substantial crown reduction type works. Regrowth appears vigorous though higher crown appears subject to localised decay. Note is made that primary stem is subject to localised decay at 1.50 m.	Tree may offer some degree of sustainability subject to regular review and application of works including crown reduction type works.	M	C2
7	Lime *(Tilia europea)*	M	G/F	21.00	1.75	7.00	10.00	6.50	7.50	1	1229	14.74	A large specimen heavily divided at 2.00 m. General vigour and vitality appears good with only limited dead-wood carriage noted at this time however, crown supports evidence of localised storm damage and application of reduction type pruning in recent past. Ivy is developing on lower stems. Divided crown is supported by mile still flexible cable at circa 7.00 m.	Cut ivy, review in respect of retention context and on regular basis thereafter.	L	B1-2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
8	Horse Chestnut *(Aesculus hippocastanum)*	E/M	F	16.00	2.50	6.00	6.50	5.00	4.00	1	684	8.21	Slightly one-sided as result proximity to near neighbours. Is heavily divided from 1.50 m with partial compression fork at configuration, supported by mile still flexible cable at circa 6.00 m. General vigour and vitality remains good.	Review regularly.	L	B2
9	Hawthorn *(Crataegus monogyna)*	E/M	F	5.50	2.50	2.00	1.50	4.00	1.50	1	159	1.91	A relatively small and still young specimen arising from adjoining group of shrubbery.	Review regarding retention context.	M	C2
SG1	Shrub Group 1 Viburnam *(Viburnam Sp.)* Holly *(Ilex aquifolium)*	E/M	G/F	3.50-5.00	0.50	2.00	2.00	2.00	2.00	1	162	1.95	A close-knit understory combining Viburnam, Holly and Yew of typically small stature is but maintaining good vigour and beginning to coalesce.	Review regularly.	L	C2
10	Laburnum *(Laburnum anagyroides)*	M	F	5.00	1.00	5.00	5.00	3.00	0.00	4	271	3.25	Heavily suppressed and unbalanced as result of position beneath canopy of dominating horse chestnut. Remains vigorous though consideration must be given to brittle nature and propensity towards failure and collapse in later life.	Review regularly.	S	C2
11	Holly *(Ilex aquifolium)*	E/M	F	4.50	2.00	2.50	2.00	1.50	2.00	1	194	2.33	Of variable but fair vigour.	Cut ivy.	M	B2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
12	Holm Oak *(Quercus ilex)*	S/M	F	5.00	1.25	3.00	4.00	3.00	0.00	1	261	3.13	One-sided and heavily suppressed, unbalanced to east towards and over entrance drive as result of position beneath canopy of larger neighbours. Remains vigorous but is of dubious sustainability. Arises from raised embankment relative to road and footpath.	Review regard retention context.	M	C2
13	Holm Oak *(Quercus ilex)*	M	P	12.00	1.00	5.00	5.00	2.50	3.00	1	560	6.72	Appears to comprise a remnant of a once larger specimen with evidence of previously cut stumps near base. Northern side of stem base supports fruiting bodies of Ganoderma, a common decay causing agent of this species. Trees position relative to roadway and entrance in conjunction with known decay related defect make it unsuitable for retention.	Remove.	N/A	U
14	Lime *(Tilia europea)*	E/M	F/P	13.00	2.00	4.50	5.00	3.50	1.00	1	598	7.18	Comprise a remnant of a once larger tree with additional stems to west having been previously cut, seeing retention of only one stem unbalanced to east, towards entrance drive. Tree remains young however deterioration and decay of larger adjoining stump will undermine stability, safety and sustainability.	Tree may be suitable for limited retention subject to regular review.	S	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
15	Common Yew *(Taxus baccata)*	S/M	F	4.50	0.00	2.50	3.00	2.00	1.50	1	197	2.37	A young and heavily suppressed specimen located on raised embankment adjoining large cottage. Position beneath canopy of adjoining wall not in conjunction with heavy ivy cover suggests limited sustainability.	Review cut ivy and review regarding retention context.	S	C2
16	Walnut *(Juglans regia)*	E/M	P	11.00	1.75	6.50	7.00	5.00	5.50	1	579	6.95	Heavily distorted specimen where much of south-western canopy has been lost to traumatic failure resulting in localised wounds and decay. Crown form, being unbalanced towards existing large cottage in conjunction with distortions suggesting limited sustainability and a need for regular management and pruning tag intervention.	Cut ivy and rereview. Consider application of pruning type works including crown reduction works subject to regular review.	S	C2
17	Sycamore *(Acer pseudoplatanus)*	E/M	G/F	15.00	2.00	4.50	5.00	4.50	5.00	1	493	5.92	Badly suppressed as result proximity to near neighbours and sees notable development of ivy about middle crown.	Cut ivy and review.	M	B2
18	Beech *(Fagus sylvatica)*	E/M	G/F	16.00	3.00	4.50	4.50	3.50	4.50	1	471	5.65	Young and relatively vigorous specimen of generally good form but seeing development of ivy cover about principal stem.	Cut ivy and review regularly.	L	B2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
19	Holm Oak *(Quercus ilex)*	M	F	14.00	2.00	6.00	7.50	6.00	2.00	3	780	9.36	Heavily unbalanced to east. Old wounds and evidence of fungal activity suggests high potential for decay, raising concern with regard to trees notable imbalance towards and over entrance drive concerns are exacerbated in light of extensive ivy cover that prevents detailed review at present.	Cut and remove ivy from basal region. Rereview in respect of decay and safety issues. Review regard retention context.	M	C2
20	Scots Pine *(Pinus sylvestris)*	M	F	16.00	4.00	4.50	5.00	3.00	3.50	1	503	6.04	A distorted specimen having suffered widespread mechanical failure and storm damage particularly to higher crown. Crown supports extensive dead-wood and broken crown sections. Tree is apparent predisposition to damage will be linked to suitability for retention of trees 19 and 21.	Cut ivy and cleanout. Review regard retention context.	M	C2
21	Lime *(Tilia europea)*	E/M	G/F	15.00	2.00	5.00	6.00	5.50	6.00	3	611	7.33	Supported on a distorted multi-stemmed system but appears be maintaining good vigour and vitality. Much of lower crown is obscured by dense ivy cover. Concern exists regarding trees possible predisposition towards damage in later life.	Cut ivy and remove basal suckers. Review regard retention context.	M	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
22	Austrian Pine *(Pinus nigra)*	M	G/F	22.00	6.00	6.00	6.50	6.00	7.00	1	713	8.56	Large and visually imposing specimen as one of approximate pair. Vigour and vitality appears good though crown supports notable dead-wood with principal stem being obscured by dense ivy cover.	Cut ivy and cleanout.	L	B1-2
23	Austrian Pine *(Pinus nigra)*	M	G/F	21.00	7.00	2.00	5.00	4.50	5.50	1	653	7.83	Of distorted form having been suppressed by proximity of 22, a busy maintaining reasonable vigour and vitality though supports some dead-wood as well as extensive ivy cover about principal stem.	Cut ivy and cleanout.	L	B1-2
24	Lime *(Tilia europea)*	M	G/F	19.00	2.50	4.50	5.00	5.00	6.00	1	751	9.01	Slightly distorted as result of proximity to adjoining pines but appears to be maintaining reasonable vigour and vitality. Basal region is obscured by combination of ivy cover and epicormic growth and some concern arises because of multi-stem stature from 1.50 m upwards.	Cut ivy and cut back epicormic growth to facilitate better review. Review regularly.	L	B1-2
25	Cappadocian Maple *(Acer cappadocicum)*	M	F	18.00	1.50	6.00	4.50	5.50	4.00	1	592	7.10	Crown is of distorted form as a result of proximity of large near neighbours. General vigour and vitality appear good notwithstanding heavy ivy cover about middle crown.	Cut ivy and cleanout.	L	B2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
26	Lime *(Tilia europea)*	M	F	19.00	2.00	7.00	5.50	8.00	9.00	1	1480	17.76	Large multi-stem specimen of spreading habit. Tree has been subject to recent mechanical failure and made crown stem fracture. Multi-stem form may leave tree predisposed this type of damage over time. Lower crown and bowl region is obscure by dense ivy cover.	Cut ivy and cleanout. Review regularly.	L	B1-2
27	Irish Yew *(Taxus baccata 'Fastigiata')*	E/M	F	7.00	2.00	4.00	4.50	3.50	3.50	1	598	7.18	Slightly distorted and unbalanced to east but appears be maintaining reasonable vigour and vitality. Crown sees ivy development towards centre.	Cut ivy and review regarding management requirements.	L	B2
30	Holly *(Ilex aquifolium)*	E/M	F	5.00	0.00	1.50	1.50	1.50	1.50	1	159	1.91	Appears to comprise an element of natural regeneration in conjunction with adjoining lapsed hedge.	Review regard retention context.	M	C2
31	Austrian Pine *(Pinus nigra)*	M	G/F	23.00	6.00	5.50	5.00	6.50	5.00	1	885	10.62	A large specimen of reasonable vigour but supporting dead-wood and extensive ivy cover about principal stem.	Cut ivy and cleanout. Review regularly.	L	B2
32	Leyland Cypress *(Cuppressocyparis leylandii)*	S/M	F	6.00	0.00	4.00	3.50	4.00	4.00	1	334	4.01	Young and vigorous with immense potential for continued growth over time. Concerns exist regarding species typical management issues in respect of made and later life.		S	C2
33	Silver Birch Stump *(Betula pendula)*	M	D	3.00	0.00	1.50	1.50	1.50	1.50	1	462	5.54	Effectively comprises an ivy clad stump supporting some suckering holly. Unsuitable for retention.	Remove.	N/A	U

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
34	Oak *(Quercus robur)*	M	F	17.00	4.50	5.50	6.50	5.50	4.50	1	748	8.98	Somewhat distorted specimen having undergone substantial crown reduction type works in past. Higher crown exhibits evidence of substantial mechanical failure suggesting possibility of chronic storm damage in past. Primary stem and middle crown region is obscure by dense ivy cover.	Cut ivy and cleanout. Rereview with regard to retention context.	M	B2
35	Leyland Cypress *(Cuppressocyparis leylandii)*	E/M	F/P	5.50	0.00	3.00	3.50	4.50	4.00	1	344	4.13	Distorted and of dubious sustainability in light of imbalance and suppressed nature.	Consider early removal.	N/A	U
36	Austrian Pine *(Pinus nigra)*	M	G/F	22.00	4.50	5.50	7.50	8.00	7.50	1	1162	13.94	A large specimen with minor imbalance to south. General vigour and vitality appears good with only limited dead-wood carriage though crown has been subject to localised storm damage in past.	Cut limited ivy and cleanout.	L	B1-2
37	Copper Beech *(Fagus sylvatica)*	M	G	19.00	1.50	7.50	6.50	6.50	7.50	1	1038	12.45	Still vigorous and in broadly good condition notwithstanding small amount of dead-wood.	Clean-out.	L	A1-2
38	Weeping Ash *(Fraxinus excelsior "Pendula")*	M	F/P	9.00	0.00	2.50	4.00	4.50	3.00	1	535	6.42	Comprises remnant of a once larger tree that is now subject to decay and appears to have been recently decapitated. Evidence exists to suggest in a notice attack thereby indicating ongoing and irreparable internal decay.	Decapitation or further reduction may afford limited sustainability though loss within short-term is likely to be inevitable.	N/A	U

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
39	Lime *(Tilia europea)*	M	G	19.00	2.00	5.50	7.00	6.50	5.00	1	844	10.12	Slightly one-sided but appears be maintaining good general vigour and vitality. Crown supports some, typically limited dead-wood and ivy appears to have been curtailed by prior management.	Cleanout and review regularly.	L	B1-2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
40	Common Yew Hedge *(Taxus baccata)*	E/M	P	4.50-11.00	0.00-3.00	Spread 9.00-10.00m (perpendicular)				1	398	4.77	Appears to comprise a lapsed, you hedge where symmetrical distortions exist at circa 1.50 m from ground level illustrating prior hedge trim height. At present, the hedge is wholly overgrown with many of the surviving specimens now attain heights of up to 11.00 m. Regarding the southern end of the group, note is made that the upright and elongated stems are now subject to failure with a substantial section of the hedge now broken and collapsed to west. The remaining hedge is of limited sustainability and is likely to be prone to similar damage as seen towards the southern end. Species capability of withstanding substantial cutting may provide secondary options for management however this would incur a long-term diminution in appearance and recuperation/regrowth. Measurable in many years. Accordingly, suitability pretension of this line is considered minimal.	Consider early removal.	N/A	U

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
41	Deodar Cedar *(Cedrus deodara)*	M	F	18.00	1.50	7.50	7.50	8.50	7.00	1	1311	15.74	A notably distorted specimen supporting a large dead-wood content raising concerns regarding longer term vitality retention. Loss of existing dead-wood will see substantial diminution in canopy cover. Consideration must be given to species predispositions and brittle nature regarding occupation and use of areas adjoining tree if retained. Regard retention context.	Cleanout remove large dead-wood only. Review	M	C1-2
42	Giant Redwood *(Seqoiadendron giganteum)*	M	G/F	23.00	4.00	5.50	5.00	4.50	4.50	1	1203	14.44	Large specimen asserting notable potential for continued growth over time. Crown supports substantial dead-wood and evidence of localised storm damage, illustrating potentially brittle crown nature.	Cleanout and review regard retention context.	L	B1-2
43	Ornamental Cherry *(Prunus variety)*	E/M	F/P	6.00	1.00	6.00	6.00	6.50	4.50	3	462	5.54	A relatively large and still vigorous specimen compromised by three-way compression fork union from ground level and notable decay to northernmost stem and buttress roots. Tree may offer some degree of limited sustainability though only over short-term.	Review regarding retention context.	S	C2
44	Ornamental Cherry *(Prunus variety)*	M	F	5.00	1.50	4.50	3.50	5.00	5.00	1	366	4.39	Somewhat distorted but apparently maintaining reasonable vigour and vitality notwithstanding ivy cover about middle-crown.	Cut ivy and review regard retention context.	M	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
45	Common Alder *(Alnus glutinosa)*	S/M	F	6.50	1.50	2.00	1.50	2.50	3.50	1	172	2.06	Young and still vigorous though slightly unbalanced to west.		M	C2
46	Walnut *(Juglans regia)*	M	G/F	17.00	1.50	8.00	9.00	7.50	7.00	1	780	9.36	Supports a broad and spreading crown of apparently good vigour and vitality. Bowl region and middle crown supports extensive ivy cover. dead-wood is limited.	Cut ivy and cleanout.	L	B2
47	Norway Maple *(Acer platanoides)*	S/M	F	6.00	1.50	4.50	3.50	4.00	4.50	1	197	2.37	Slightly suppressed and unbalanced to west as result of position beneath canopy edge of adjoining wall. Tree arises from position directly adjoining known underground services thereby undermining likely sustainability. Crown is compromised by notable compression fork rubbing stem issue.	Review regarding retention context	S	C2
48	Lime *(Tilia europea)*	M	F/P	18.00	1.50	7.50	7.00	7.00	7.00	1	1162	13.94	Large and spreading specimen of multi-stemmed format raising some concern regarding possible predisposition towards storm damage. Northern stem cluster appears to be subject to primary stem decay exacerbating above concerns.	Review regard retention context and suitability for retention with management.	M	C1-2
49	Domestic Plum *(Prunus Sp.)*	M	P	6.00	0.00	4.00	4.00	4.00	4.00	5	462	5.54	A large shrubby mass of multiple suckers. Is of dubious retention merit.	Review regard retention context.	S	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
50	Horse Chestnut *(Aesculus hippocastanum)*	M	G/F	15.00	1.50	7.00	7.50	7.00	7.50	1	739	8.86	A relatively young but broad and spreading specimen of good vigour and vitality. Tree already exhibits evidence of localised breakage, illustrative of brittle nature.	Cleanout review regularly.	L	B2
51	Leyland Cypress *(Cuppressocyparis leylandii)*	E/M	F	15.00	1.75	4.00	4.50	5.00	4.00	1	548	6.57	A young but still vigorous, multi-stem specimen considered likely to be part of the original and nearby hedge alignment. Species predispositions raise concerns regarding sustainability and management over time.	Review regarding retention context.	S	C2
52	Goat Willow *(Salix caprea)*	E/M	F/P	5.00	0.00	4.00	4.00	3.50	4.50	4	398	4.77	Typically regarded as a weed species, specimen appears to have arisen in conjunction with derelict unmanaged area terminus of defunct hedge. Is considered to be unsuitable for retention.		N/A	U
A	Hawthorn *(Crataegus monogyna)*	M	F	3.50	1.50	3.00	3.00	3.00	3.00	1	226	2.71	Possibly an ornamental variety. Appears be maintaining reasonable vigour and vitality. Though since supports elements of mark s and foliage suggesting possibility of health issues prior to dormancy.	Re-review in spring 2018.	S	C2
B	Domestic Plum *(Prunus Sp.)*	M	P	4.00	0.00	2.50	4.00	2.00	3.50	1	159	1.91	An elliptical group, re-suckering after the failure of the original tree. Unsuitable for retention.	Remove.	N/A	U

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
TL1	Tree Line 1 Leyland Cypress *(Cuppressocyparis leylandii)* Hybrid Black Poplar *(Populus x Canadensis)*	E/M	F/P	10.00-18.00	0.00-2.00	Spread 9.00-12.00m (perpendicular) Contiguous				1	398	4.77	A contiguous, continuous but irregular alignment dominated by Leyland cypress but including circa 5 notable Hybrid Black Poplar suggesting that the original alignment had included a combined planting matrix of both species. Though the poplar comprises the larger specimens within the alignment it is the Leyland Cypresses that dominate alignment length. Examples of mechanical failure are already evident within the alignment raising concerns in respect of management issues and limited longevity s associated with both species. The brittle nature of poplar's and the inability to successfully manage Leyland Cypress and middle age and maturity (see references in high hedges legislation UK) questions the sustainability and suitability for retention of these trees. Though they fulfil and apparent screening/shelter purpose at present, the ability to manage in the future and their associated longevity in association with site management and safety is highly limited and their loss/removal/replacement is considered inevitable.		S	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
TL2	Tree Line 2 Leyland Cypress *(Cuppressocyparis leylandii)* Hybrid Black Poplar *(Populus x Canadensis)*	E/M	F/P	12.00-13.00	0.00-2.00	Spread 9.00-10.00m (perpendicular) Contiguous				1	398	4.77	In effect a replica of tree line 1 excepting that the alignment appears to support only one poplar at its northernmost element. Same issues of an inability to manage over time and limited sustainability undermine any suitability for retaining these trees. Should a vegetative alignment be required in this area then consideration must be given to replacement planting.		S	C2
69	Silver Birch *(Betula pendula)*	E/M	G	6.50	1.50	2.50	2.50	2.50	2.50	1	216	2.60	Young and still vigorous.		L	B2
114	Ash Group *(Fraxinus excelsior)*	E/M	P	10.00	0.00	4.00	5.00	4.50	4.00	3	398	4.77	A multi-stemmed community arising from within the alignment of the original Yew hedge. Has served to completely dominate the original you in about its position but is particularly poor, distorted quality and ill-suited to retention.	Remove.	N/A	U
117	Holly *(Ilex aquifolium)*	M	F	6.50	0.00	4.00	4.00	4.50	4.50	1	433	5.19	Broad and spreading specimen of highly variable crown vigour and evidence of prior storm damage, breakage and associated decay. Tree offers limited sustainability.		S	C2
117a	Holly *(Ilex aquifolium)*	M	F	6.50	2.00	2.50	2.00	3.00	3.00	1	337	4.05	Suppressed and distorted as result of proximity to now-defunct hedge.	Review regard retention context.	M	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
120	Small Leaf Lime *(Tilia cordata)*	O/M	P	8.00	0.00	7.00	7.00	7.00	6.00	1	1751	21.01	A once larger specimen has sustained chronic failure and collapse.	Remove immediately.	N/A	U
124	Sycamore *(Acer pseudoplatanus)*	S/M	F	10.00	3.00	2.50	4.00	3.00	3.00	1	341	4.09	Young and vigorous sapling arising from within yew alignment and contributing to the suppression thereof. Is of upright and whip like format. Is of dubious retention merit.		S	C2
125	Wild Cherry *(Prunus avium)*	M	F	15.00	2.25	5.50	5.00	5.00	6.50	4	844	10.12	Heavily divided from low level raising concerns regarding predisposition towards mechanical failure. General vigour and vitality appear good though much of crown comprises dead-wood, possibly associated with shading out. Principal stem is obscured by ivy cover. Eastern side of stem is revealed chronic limb loss wound with associated decay as well as a substantial decay affected canker lesion. Tree is considered unsustainable beyond short-term.	Remove.	N/A	U
126	Ash Group *(Fraxinus excelsior)*	S/M	P	8.00	2.00	3.00	3.00	3.00	3.00	4	430	5.16	Multi-stemmed thicket like group considered likely to have arisen as sucker regeneration from stump of a previously cut tree. Is of poor quality and dubious sustainability.	Consider early removal.	N/A	U

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
127	Ash Group *(Fraxinus excelsior)*	S/M	P	7.00	2.00	3.00	3.00	3.00	3.00	1	414	4.97	Multi-stemmed thicket like group considered likely to have arisen as sucker regeneration from stump of a previously cut tree. Is of poor quality and dubious sustainability.	Consider early removal.	N/A	U
128	Cordyline *(Cordyline australis)*	E/M	P	5.50	2.50	2.00	2.00	2.00	1.00	3	271	3.25	Suppressed and distorted. Unsuitable for retention.	Remove.	N/A	U
129	Ornamental Cherry *(Prunus variety)*	E/M	P	5.00	0.00	4.00	2.00	1.00	3.00	1	229	2.75	Suppressed, broken and heavily distorted. Unsuitable for retention.	Remove.	N/A	U
130	Small Leaf Lime *(Tilia cordata)*	O/M	G/F	21.00	0.00	9.00	12.00	13.00	9.00	1	1693	20.32	A particularly large and aged specimen of reasonable vigour but compromised by onset of mechanical failure and loss of particularly large limbs to low north-west of crown. Ivy cover is extensive preventing detailed review and thus pathogen attack cannot yet be ruled out.	Review regard retention context. Cut ivy to facilitate better review in future. Cleanout to remove large dead-wood and broken debris	L	B1-2
136	Austrian Pine *(Pinus nigra)*	M	G/F	20.00	13.00	4.50	5.00	4.50	4.00	1	548	6.57	Upright and well balanced, of good vigour.		L	B1-2
137	Austrian Pine *(Pinus nigra)*	M	G/F	17.00	9.00	4.00	2.00	3.00	4.00	1	493	5.92	Slightly suppressed with limited high crown only. General vigour and vitality appear good.	Review regularly.	L	B2
138	Austrian Pine *(Pinus nigra)*	M	G/F	20.00	5.00	3.00	9.00	8.50	5.00	1	1038	12.45	Large specimen, one-sided and typically unbalanced to south. General vigour and vitality appear good though crown supports extensive dead-wood.	Review regard retention context and cleanout.	M	C1-2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
140	Sycamore *(Acer pseudoplatanus)*	S/M	F	8.50	2.50	4.00	4.00	2.50	4.50	1	401	4.81	Unbalanced to south and distorted. Remains vigorous asserts notable potential for continued growth.	Review regarding retention context.	M	C2
140a	Hawthorn *(Crataegus monogyna)*	M	F	4.50	0.50	3.00	3.50	1.50	3.00	1	271	3.25	Previously cut but now re-suckered.	Review regarding retention context.	M	C2
141	Sycamore *(Acer pseudoplatanus)*	S/M	F	6.00	2.00	3.50	0.00	1.00	3.00	2	229	2.75	A multi-stemmed and suckering group compromised by compression fork at 0.5 m and one-sided nature. Is of dubious retention merit.		S	C2
141a	Sycamore Group *(Acer pseudoplatanus)*	S/M	F	6.00	0.00	4.50	3.50	3.00	3.00	5	398	4.77	A multi-stemmed and suckering group of reasonable vigour and vitality but supporting extensive ivy cover. Is of poor quality and dubious sustainability.	Review regarding retention context.	S	C2
142	Holm Oak *(Quercus ilex)*	M	P	9.00	0.00	5.00	4.00	1.50	0.00	1	376	4.51	Once larger tree has sustained chronic failure and splitting on principal stem. Is unsuitable for retention.	Remove.	N/A	U
143	Austrian Pine *(Pinus nigra)*	M	G/F	25.00	11.00	7.00	8.00	7.50	5.00	1	942	11.31	Large and visually imposing specimen of apparently good vigour and vitality. Crown supports some dead-wood as well as evidence of substantial storm damage over previous years.	Cleanout review regard retention context.	L	B1-2
144	Austrian Pine *(Pinus nigra)*	M	G/F	18.00	6.00	2.00	8.00	8.50	6.00	1	700	8.40	Heavily one-sided and typically unbalanced to south. Tree is distorted form support some dead-wood and evidence of localised storm damage.	Cleanout review regard retention context.	L	B1-2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
145	Holly *(Ilex aquifolium)*	E/M	F	5.00	1.00	2.50	2.50	2.50	2.50	1	216	2.60	Young and vigorous though slightly suppressed on southern side.		M	C2
146	Ash *(Fraxinus excelsior)*	E/M	G/F	12.00	4.50	4.50	4.50	3.50	4.00	1	376	4.51	Young and vigorous with substantial potential for continued growth over time. Supports ivy cover on principal stem and arises from raised embankment.	Cut ivy and review.	L	B2
147	Ash *(Fraxinus excelsior)*	E/M	F/P	12.00	3.00	0.00	7.00	5.00	0.00	1	398	4.77	Heavily unbalanced to south east, across boundary wall and to extend that raises concerns regarding stability considering position being perched on raised embankment. Is of dubious retention merit.	Consider early removal.	N/A	U
148	Scots Pine *(Pinus sylvestris)*	E/M	G/F	13.00	2.50	3.50	4.50	2.50	2.50	1	382	4.58	Slightly suppressed as result of proximity to near neighbours and supports large amounts of ivy. Vigorous canopy is limited to higher levels only.	Cut ivy and cleanout.	L	B2
149	Common Yew *(Taxus baccata)*	E/M	F	7.50	1.25	2.50	3.00	2.00	2.50	1	334	4.01	Distorted as result of suppression. Vigour is impaired, further complicated by ivy cover.	Cut ivy and cleanout. Review regularly.	S	C2
150	Scots Pine *(Pinus sylvestris)*	E/M	F	13.00	3.00	3.00	3.50	1.50	1.00	1	376	4.51	Typically unbalanced to east and supports large amounts of ivy, obscuring much of crown. Appears to arise from embankment that has sustained excavation damage to west of stem, raising concerns regarding stability.	Cut ivy and cleanout review subsequent to cleaning works regarding suitability for retention.	M	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
151	Scots Pine *(Pinus sylvestris)*	E/M	F	12.00	3.50	2.50	4.50	2.00	0.00	1	398	4.77	Heavily unbalanced to east and arises from excavation damaged embankment with visible degrees of root damage.	Cut ivy and cleanout. Review regularly regarding ongoing suitability for retention.	S	C2
152	Sycamore *(Acer pseudoplatanus)*	M	G	17.00	3.50	6.00	6.00	4.50	6.00	1	844	10.12	A large and still vigorous specimen supporting only minimal dead-wood. Prior ivy cover appears to be declining.	Cut remaining ivy stems and remove large dead-wood.	L	B2
153	Sycamore *(Acer pseudoplatanus)*	E/M	G/F	15.00	3.00	2.50	5.50	3.00	5.00	1	503	6.04	Suppressed and has developed fanlike crown profile as result of position between adjoining sycamores. Vigour and vitality appear good with minimal ivy cover.	Cut ivy.	L	B2
154	Sycamore *(Acer pseudoplatanus)*	M	G/F	14.00	3.00	3.00	5.00	6.50	6.00	1	748	8.98	A typically one-sided and unbalanced to south-west. General vigour and vitality is good though middle crown supports notable ivy cover.	Cut ivy and review regularly.	L	B2
155	Sycamore Stump *(Acer pseudoplatanus)*	E/M	P	2.50	0.00	1.00	1.00	1.00	1.00	1	462	5.54	Decapitated at circa 2.00 m. Unsuitable for retention.	Remove.	N/A	U
156	Ash *(Fraxinus excelsior)*	E/M	P	10.00	3.00	2.00	2.00	7.50	4.50	1	484	5.81	Heavily unbalanced to south-east, across boundary wall. Is affected by Inonotus attack and will be subject to decay and eventual collapse.	Remove.	N/A	U

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
157	Sycamore *(Acer pseudoplatanus)*	E/M	F	12.00	0.00	5.50	4.50	4.50	5.00	1	688	8.25	Heavily divided from low level and arising from raised embankment feature. Appears vigorous but supports extensive ivy cover.	Cut ivy and rereview.	L	B2
159	Sycamore *(Acer pseudoplatanus)*	S/M	F	9.00	2.00	4.00	3.50	4.00	1.50	1	344	4.13	Suppressed as result of proximity to near neighbours but is maintaining good vigour and asserts substantial potential for continued growth over time.	Cut ivy.	L	B2
160	Sycamore *(Acer pseudoplatanus)*	S/M	F	6.50	2.00	1.00	2.00	1.50	1.00	1	159	1.91	Suppressed and whip like, comprises typical element of woodland regeneration.		M	C2
161	Sycamore Group *(Acer pseudoplatanus)*	S/M	F	7.00	2.00	2.00	4.00	4.00	2.00	1	261	3.13	Heavily divided 1.50 m comprising typical element of natural regeneration.	Review regularly.	M	C2
162	Sycamore *(Acer pseudoplatanus)*	S/M	F	6.00	2.00	0.50	1.00	3.00	2.00	1	185	2.22	Comprises typical element of woodland under story.		S	C2
164, 165, 167	Sycamore Group *(Acer pseudoplatanus)*	S/M	F	7.00	2.00	2.00	2.50	4.00	3.50	5	430	5.16	A multi-stemmed group possibly comprising sucker regeneration from the stump of previous tree. Is of poor quality and dubious sustainability.	Review regularly.	S	C2
166	Sycamore *(Acer pseudoplatanus)*	S/M	F	7.00	1.75	3.00	1.00	0.00	2.50	1	271	3.25	Suppressed distorted and drawn up. Comprises natural regeneration of dubious sustainability.	Review regularly.	M	C2
168	Sycamore *(Acer pseudoplatanus)*	S/M	F	7.00	1.00	2.00	3.50	2.00	2.50	2	334	4.01	Distorted and heavily divided from low level. Arises from uneven ground. Is of dubious sustainability.	Review regularly regarding suitability for retention.	S	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
169	Austrian Pine *(Pinus nigra)*	M	F	13.0	5.00	5.50	6.00	6.00	6.00	1	993	11.92	Large flat-topped specimen of reasonable vigour and vitality but partially obscured by dense primary stem ivy cover. Crown supports notable dead-wood.	Cut ivy and cleanout.	L	B2
170	Common Yew *(Taxus baccata)*	E/M	G/F	11.00	1.75	4.50	4.00	4.50	4.50	1	493	5.92	Relatively large and aged specimen. Suppressed at lower levels and supporting notable dead-wood however higher crown maintained good vigour and vitality. Tree appears to arise from an area of raised embankment.	Cut ivy and cleanout remove large dead-wood.	L	B2
171	Sycamore *(Acer pseudoplatanus)*	S/M	F	7.00	2.00	1.50	3.00	3.00	3.00	1	337	4.05	Heavily divided from low level and comprising typical element of natural regeneration. Is unbalanced to west.	Cut ivy and review.	M	C2
172	Common Yew *(Taxus baccata)*	E/M	F/P	9.00	2.00	4.50	5.00	2.00	3.00	3	560	6.72	Distorted and exhibiting evidence of fungal activity at 1.25 m raising concerns regarding sustainability and structural integrity. Is of dubious retention merit.	Consider early removal.	N/A	U
173	Sycamore *(Acer pseudoplatanus)*	S/M	F	9.00	3.00	3.50	2.50	2.00	3.50	1	325	3.90	Suppressed and drawn-up, comprising typical element of woodland under story.		M	C2
174	Holly *(Ilex aquifolium)*	M	F	9.00	0.00	4.00	2.50	2.50	3.00	1	385	4.62	Suppressed with best canopy cover at higher levels only.	Cut ivy and review.	M	C2
175	Common Yew *(Taxus baccata)*	E/M	F	11.00	0.00	5.00	4.50	5.00	4.50	1	624	7.49	Notably suppressed and of variable crown cover, with evidence of dead-wood development and storm damage.	Cut ivy and cleanout. Review regularly.	M	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
176	Ash *(Fraxinus excelsior)*	S/M	F/P	7.00	0.00	5.00	1.00	0.00	3.00	1	328	3.93	Chronically distorted and unbalanced to west. Unsuitable for retention.	Remove.	N/A	U
177	Ash Group *(Fraxinus excelsior)*	E/M	F/P	8.00	0.00	5.50	2.00	0.00	4.50	1	382	4.58	Chronically unbalanced to north and heavily divided at 1.00 m. Is of poor-quality specimen of dubious sustainability.	Cut ivy and rereview regarding suitability for retention.	S	C2
179	Beech *(Fagus sylvatica)*	M	F	17.00	2.00	6.00	7.00	6.50	6.00	1	920	11.04	Relatively large specimen based upon raised embankment. Vigour and vitality appear fair excepting at lower levels where shading out led to dead-wood development.	Cut and clear basal ivy to facilitate better rereview. Review in respect of retention context.	L	B2
180	Sycamore *(Acer pseudoplatanus)*	E/M	F	11.00	2.00	4.00	3.00	3.00	3.00	1	366	4.39	Comprises typical element of natural woodland regeneration.	Review regarding suitability for retention.	M	C2
181	Ash *(Fraxinus excelsior)*	M	F	13.00	1.50	6.50	4.50	2.00	5.00	1	611	7.33	Heavily one-sided and unbalanced to north. Is heavily divided at 2.00 m. Much of canopy is obscured by dense ivy cover. Tree appears to be of low quality but may benefit from rereview subsequent to ivy cutting.	Cut ivy and rereview.	M	C2
182	Sycamore *(Acer pseudoplatanus)*	S/M	F	8.00	1.50	4.50	3.00	0.00	3.00	1	369	4.43	Suppressed and heavily one-sided, unbalanced to north. Comprises typical element of woodland under story.		M	C2
183	Sycamore *(Acer pseudoplatanus)*	S/M	P	5.50	0.00	5.00	3.00	0.00	2.00	1	360	4.32	Chronically distorted and heavily unbalanced to north. Is ill suited to retention.	Consider early removal.	S	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
184	Sycamore *(Acer pseudoplatanus)*	S/M	F	8.00	1.50	4.00	3.50	3.00	3.50	1	382	4.58	Suppressed distorted and drawn up. Comprises typical element of woodland under story.		M	C2
185	Sycamore *(Acer pseudoplatanus)*	S/M	F	6.50	0.00	5.00	2.50	2.00	4.00	1	376	4.51	Heavily suppressed and unbalanced to north. Of dubious retention merit.		S	C2
186	Beech *(Fagus sylvatica)*	M	F	18.00	5.00	6.00	5.50	5.00	5.50	1	942	11.31	Relatively large specimen exhibiting evidence of crown thinning and possible decline and dieback about crown apex that may be indicative of health issues. Much primary stem is wholly obscured by dense ivy cover.	Cut and strip cut ivy and strip from stem base to facilitate further review.	M	C2
187	Beech *(Fagus sylvatica)*	S/M	P	9.00	1.50	4.00	5.00	3.00	0.00	1	261	3.13	Chronically suppressed and heavily unbalanced to east. Is of dubious sustainability.		S	C2
188	Common Yew *(Taxus baccata)*	E/M	F	7.00	2.00	3.50	3.00	4.00	4.00	1	430	5.16	Heavily suppressed and affected by ivy cover with limited canopy cover at higher levels only. Higher crown vigour appears to be fair.	Cut ivy and rereview regard suitability for retention.	M	C2
188a	Holly Group *(Ilex aquifolium)*	M	P	5.50	0.00	3.00	4.00	3.50	2.50	4	271	3.25	Appears to comprise sucker regeneration based around a decaying stump. Is considered unsustainable.		S	C2
189	Ash *(Fraxinus excelsior)*	S/M	F/P	9.00	2.00	5.00	5.00	3.00	0.00	2	334	4.01	One-sided remnant affected by collapse of nearby trees within thicket group. Considered to be of poor regenerative quality and ill-suited to retention.		S	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
TA2	Thicket Area 2 Ash *(Fraxinus excelsior)* Bramble *(Rubus fruticosus)* Ivy *(Hedera helix)*	E/M	P	6.00	1.00	Spread Contiguous				m/s	239	2.86	A naturally arising thicket area badly affected by partial collapse of beach 197. Entire areas considered unsuitable for retention.	Remove.	N/A	U
190	Common Yew *(Taxus baccata)*	S/M	F	5.50	0.00	2.50	2.50	2.50	2.50	1	271	3.25	Suppressed but is maintaining reasonable vigour and vitality.		L	B2
191	Sycamore *(Acer pseudoplatanus)*	E/M	G	13.00	4.00	6.00	5.00	5.50	5.50	1	525	6.30	Relatively young and still vigorous. Is of good form that supports notable ivy cover on principal stem and about much of crown.	Cut ivy.	L	B2
192	Common Yew *(Taxus baccata)*	E/M	F/P	7.00	1.50	4.50	4.50	4.50	4.50	1	675	8.10	Squat suppressed and of variable canopy cover. Is encroached upon by numerous regenerative Sycamores.	Cut ivy and cleanout, consider removal of competitive scrub and review regularly.	M	C2
193	Sycamore *(Acer pseudoplatanus)*	S/M	F	5.50	2.00	2.00	2.00	2.00	2.00	1	229	2.75	Young and still vigorous but compromised by compression fork at 0.30 m and arising from a position in contact with wall footing where continued growth will result in destruction of wall structure. Is unsuitable for retention.	Remove.	N/A	U

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
TA1	Thicket Area 1 Hawthorn *(Crataegus monogyna)* Blackthorn *(Prunus spinosa)* Holly *(Ilex aquifolium)* Ivy *(Hedera helix)* Bramble *(Rubus fruticosus)* Ash *(Fraxinus excelsior)*	M	P	2.00-5.00	0.00	Spread Contiguous				m/s	143	1.72	Review suggests a possibility of once having been an ornamental hedge but at this time, the hedge structure is now wholly overwhelmed by bramble and ivy. The thicket group is now considered wholly unsuitable for retention.	Remove.	N/A	U
194	Sycamore *(Acer pseudoplatanus)*	S/M	F	8.00	3.00	1.50	4.50	2.00	2.00	1	290	3.48	A multi-stemmed and suckering group possibly arising as sucker regeneration from the stump of a previous tree. Is of dubious retention merit.		S	C2
195	Sycamore Group *(Acer pseudoplatanus)*	S/M	F/P	8.00	1.00	4.00	2.50	2.50	3.00	4	366	4.39	A multi-stemmed and suckering group possibly arising as sucker regeneration from the stump of a previous tree. Is of dubious retention merit.		S	C2
197	Beech *(Fagus sylvatica)*	M	P	20.00	5.00	11.00	6.00	4.00	7.00	1	942	11.31	Comprises remnant of a once larger specimen in a state of chronic decay and collapse. Much of crown has already failed.	Remove immediately.	N/A	U

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
200	Sycamore *(Acer pseudoplatanus)*	E/M	G/F	14.00	5.00	5.00	5.00	5.00	4.50	1	525	6.30	Young, symmetrical and maintaining reasonable vigour and vitality. Sees ivy development about lower stem. Arises from edge of raised embankment.	Cut ivy and rereview.	L	B2
201	Sycamore Group *(Acer pseudoplatanus)*	S/M	F	10.00	3.00	3.00	3.00	3.50	2.50	1	271	3.25	A close-knit community dominated by one stem and comprising typical element of natural regeneration.	Review regard to retention context.	M	C2
354	Horse Chestnut *(Aesculus hippocastanum)*	M	F	13.00	2.00	4.00	4.50	4.00	4.50	1	624	7.49	A once larger specimen has undergone substantial crown reduction works. Sucker regeneration suggest reasonable vigour and vitality.	Re-review during spring of 2018,	L	B2
355	Holm Oak *(Quercus ilex)*	M	F	14.00	2.00	5.00	5.50	5.00	4.50	1	780	9.36	Triple stemmed from near ground level. General vigour and vitality appear good notwithstanding compression fork development at low level.	Review regularly.	L	B2
356	Sycamore *(Acer pseudoplatanus)*	S/M	F	11.00	3.00	3.50	3.50	4.00	4.00	1	344	4.13	Young and still vigorous though suppressed on northern side by proximity of Holm Oak.	Review regularly.	L	B2
357	Sycamore *(Acer pseudoplatanus)*	S/M	F	13.00	2.00	3.00	4.50	2.50	3.50	1	366	4.39	Twin-stemmed from near ground level and slightly suppressed as result of proximity to near neighbours. Vigour remains good thereby offering immense potential for continued growth over time.		L	B2
358	Common Yew *(Taxus baccata)*	S/M	F	5.00	0.50	2.00	3.50	2.50	1.00	1	229	2.75	Slightly suppressed but maintaining reasonable vigour and vitality.		M	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
359	Sycamore *(Acer pseudoplatanus)*	S/M	F	6.50	3.00	4.00	1.50	0.00	2.00	1	204	2.44	Suppressed and unbalanced to north but maintaining good general vigour and vitality.		L	B2
360	Horse Chestnut *(Aesculus hippocastanum)*	E/M	P	6.50	2.00	3.00	4.00	3.00	3.50	1	376	4.51	Originally decapitated by major wound at 4.00 m thus necessitating crown reduction works. Sucker growth appears vigorous.	Review regularly regarding ongoing need for management over time.	S	C2
361	Common Yew *(Taxus baccata)*	E/M	F	4.50	0.00	3.50	1.50	1.00	2.50	1	229	2.75	Is suppressed and distorted but of small stature and thus presenting no threat.	Review regularly.	M	C2
362	Beech *(Fagus sylvatica)*	E/M	G/F	12.00	2.00	5.50	5.50	5.00	5.50	1	477	5.73	Young and developing spreading crown.	Review regularly.	L	B2
363	Sycamore *(Acer pseudoplatanus)*	S/M	G/F	11.00	2.50	2.00	2.00	2.50	3.00	1	341	4.09	Young and vigorous.		L	B2
364	Laburnum *(Laburnum anagyroides)*	E/M	P	2.00	0.00	1.00	2.00	1.00	0.50	1	153	1.83	A decapitated remnant of a larger tree. Is of questionable sustainability.	Review regularly.	S	C2
365	Beech *(Fagus sylvatica)*	S/M	G	12.00	4.00	3.00	4.50	2.50	3.00	1	334	4.01	A tall and slender specimen of good vigour and vitality.		L	B2
366	Holm Oak *(Quercus ilex)*	S/M	G	5.00	0.00	2.00	2.00	1.00	1.00	1	143	1.72	Badly suppressed as result of proximity to adjoining neighbours but is maintaining good vigour and vitality.		L	B2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
367	Holm Oak *(Quercus ilex)*	M	F	11.00	2.50	5.50	5.00	5.00	6.00	1	866	10.39	Once larger specimen has undergone crown reduction type works to compensate for lower crown damage.	Review on regular basis in respect of need for continued management and safety related works over time.	M	C2
368	Holm Oak *(Quercus ilex)*	S/M	F	4.00	1.75	1.00	1.50	2.00	2.00	1	159	1.91	Suppressed and distorted but maintaining good vigour.		L	B2
369	Holly *(Ilex aquifolium)*	S/M	F	4.00	1.00	1.00	1.50	4.50	0.50	1	153	1.83	Suppressed but maintaining reasonable vigour and vitality.		L	B2
370	Holm Oak *(Quercus ilex)*	M	F	10.00	1.00	4.50	5.00	5.00	6.00	1	910	10.92	Multi-stem from near ground level and exhibiting evidence of historic stem damage and localise decay. General vigour and vitality remain good. Possible predisposition towards mechanical failure raises some concern.	Consider application crown reduction type works to improve structural integrity.	M	C2
373	Sycamore *(Acer pseudoplatanus)*	S/M	F	11.00	2.00	3.50	4.50	2.00	3.00	2	398	4.77	Distorted a multi-stemmed but vigorous and offering substantial potential for continued growth.	Review regularly.	M	C2
374	Horse Chestnut *(Aesculus hippocastanum)*	S/M	F	9.00	3.00	2.00	2.50	2.00	1.50	1	229	2.75	Distorted and suppressed but maintaining good vigour and vitality.		M	C2
375	Sycamore *(Acer pseudoplatanus)*	S/M	F	9.00	2.50	3.00	2.00	1.50	4.00	1	226	2.71	Unbalanced to west but maintaining reasonable vigour and vitality.		L	B2
376	Common Yew *(Taxus baccata)*	S/M	F	5.00	1.50	2.50	2.50	2.00	2.00	1	166	1.99	Badly suppressed but maintaining good general vigour and vitality.		L	B2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
377	Ash *(Fraxinus excelsior)*	S/M	F	10.00	2.00	3.00	4.00	2.50	1.00	1	334	4.01	Suppressed and notably one-sided, typically unbalanced to east.	Review regularly.	L	B2
378	Sycamore *(Acer pseudoplatanus)*	S/M	G/F	9.00	2.50	4.00	1.50	3.00	4.50	1	344	4.13	Suppressed and one-sided but maintaining good vigour and vitality.		L	B2
379	Common Yew *(Taxus baccata)*	S/M	F	4.00	1.75	2.00	2.00	2.00	3.00	1	229	2.75	Suppressed but maintaining good vigour.		L	B2
380	Viburnam *(Viburnam Sp.)*	M	F	3.50	1.50	1.00	2.00	2.00	0.00	3	197	2.37	Is of fair vigour.	Review regularly.	M	C2
381	Viburnam *(Viburnam Sp.)*	M	F	4.00	0.00	2.00	2.50	2.00	1.50	4	207	2.48	Suppressed but maintaining reasonable vigour and vitality.		L	B2
383	Holly *(Ilex aquifolium)*	E/M	F	4.50	1.50	2.00	1.50	1.00	2.00	1	153	1.83	Suppressed but maintaining good vigour and vitality.		L	B2
384	Sycamore *(Acer pseudoplatanus)*	S/M	G/F	9.00	3.00	3.50	4.00	3.00	2.00	1	341	4.09	Suppressed as result of proximity to near neighbours but is maintaining good vigour and vitality.		L	B2
385	Sycamore *(Acer pseudoplatanus)*	S/M	F	8.00	3.50	4.00	2.00	1.00	4.00	1	344	4.13	Suppressed and one-sided but maintaining good vigour and vitality.		M	C2
386	Horse Chestnut *(Aesculus hippocastanum)*	S/M	G/F	7.00	3.00	3.50	1.50	2.00	4.00	1	306	3.67	Suppressed and unbalanced to west but maintaining good general vigour and vitality.	Review regularly.	L	B2
387	Common Yew *(Taxus baccata)*	S/M	F	4.00	1.75	2.00	3.00	2.50	1.50	1	175	2.10	Slightly unbalanced to east but maintaining good general vigour and vitality.		L	B2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
388	Holm Oak *(Quercus ilex)*	S/M	F	5.50	1.00	1.50	3.50	2.50	0.50	1	223	2.67	Notably unbalanced to east but is maintaining good general vigour and vitality.		L	B2
389	Sycamore *(Acer pseudoplatanus)*	S/M	F	7.50	2.00	4.00	1.50	2.00	4.00	1	258	3.09	Unbalanced but maintaining good vigour and vitality.	Review regularly.	L	B2
392	Sycamore *(Acer pseudoplatanus)*	S/M	F	7.00	3.50	2.00	3.50	2.00	0.00	1	325	3.90	Imbalance to east and previously reduced.	Review regularly.	M	C2
393	Ash *(Fraxinus excelsior)*	S/M	G/F	11.00	3.50	4.00	3.00	2.00	3.50	1	334	4.01	Tall and slender having undergone prior limb removal.	Review regularly.	L	B2
394	Holm Oak *(Quercus ilex)*	S/M	F	5.50	1.00	1.50	2.00	1.50	1.50	1	175	2.10	Tall and slender, slightly suppressed.		L	B2
395	Sycamore *(Acer pseudoplatanus)*	S/M	G/F	9.00	2.50	2.00	3.50	2.50	1.50	1	341	4.09	Young and vigorous though support strangulation mark at circa 4.50 m and minor bark damage to buttress on south of stem.	Review regularly.	M	C2
396	Sycamore *(Acer pseudoplatanus)*	S/M	F	7.00	3.00	1.00	2.50	3.00	1.50	1	388	4.66	Previously crown reduced.	Review regularly.	M	C2
398	Sycamore *(Acer pseudoplatanus)*	E/M	F	13.00	2.00	4.50	4.50	5.00	4.00	1	560	6.72	Compromised by major bark inclusion at circa 1.00 m.	Review regularly.	M	C2
399	Sycamore *(Acer pseudoplatanus)*	M	F	13.00	3.00	6.00	4.50	1.50	5.00	1	592	7.10	Typically unbalanced to north west with stump to south suggesting prior suppression and explanation of imbalance. Tree is now somewhat exposed but appears vigorous.	Review regard retention context.	L	B2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
401	Austrian Pine *(Pinus nigra)*	E/M	F	13.00	10.00	3.00	3.00	1.50	4.00	1	452	5.42	Supports limited, elliptical crown at higher levels only. General vigour appears good.	Review regularly.	L	B2
402	Horse Chestnut *(Aesculus hippocastanum)*	E/M	P	8.00	2.00	3.00	4.50	3.00	1.00	1	611	7.33	A once larger tree was affected by substantial stem decay but has been heavily crown reduced to counteract mechanical issues. Tree would appear to present limited threat at present though sustainability must be regarded as limited.	Review on regular basis regarding suitability for retention and need for ongoing management.	S	C2
403	Horse Chestnut *(Aesculus hippocastanum)*	M	G/F	18.00	2.00	5.50	6.50	7.00	6.00	1	812	9.74	A large specimen of apparently good vigour and vitality. Tree has undergone prior pruning including crown reduction type works within previous decade.	Review regard retention context.	L	B2
404	Horse Chestnut *(Aesculus hippocastanum)*	M	P	8.00	2.50	4.00	3.00	4.50	4.50	1	748	8.98	A once larger tree affected by notable stem damage and decay has been heavily reduced. Likely threat appears diminished at present however sustainability is diminished and suitability for retention will be dependent upon ongoing management.	Review on regular basis regarding suitability for retention and need for management input.	S	C2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
101	Sycamore *(Acer pseudoplatanus)*	M	F	14.00	2.25	5.00	5.00	5.00	6.00	1	748	8.98	Apparently vigorous though partially obscured by Ivy cover. Arises from position directly adjoining existing boundary wall with stem in contact with wall at circa 2.00 m. Continued growth will result in wall damage. Tree has undergone prior crown reduction works with outer crown comprising substantial pole-wood redevelopment.		L	B2
102	Monterey Pine *(Pinus radiata)*	S	F	3.50	0.00	1.00	1.25	1.75	1.00	1	124	1.49	Young and vigorous specimen with immense potential for continued growth. Small stature suggests simple replacement if required.		L	C2
103	Sycamore *(Acer pseudoplatanus)*	E/M	G/F	14.00	2.00	4.00	5.00	5.00	5.00	1	567	6.80	Apparently vigorous though partially obscured by Ivy cover. Tree has undergone prior crown reduction works. Tree is set back from wall position. Tree is of distorted form because of proximity to adjoining chestnut.	Cut Ivy and review regarding retention context.	L	B2
104	Horse Chestnut *(Aesculus hippocastanum)*	E/M	G/F	13.00	2.00	2.00	4.00	5.00	5.00	1	493	5.92	One-sided and unbalanced because of proximity to adjoining Sycamore. General vigour and vitality appear good however much of crown is obscured by Ivy development and crown shows evidence of prior crown reduction works.	Cut Ivy and review regarding retention context.	L	B2

No.	Species	Age	Con	Ht	CH	N	E	S	W	Stm	Dia	RPA	Structural Condition	PMR	Yrs	Cat
105	Domestic Apple *(Malus variety)*	E/M	G/F	3.50	1.00	3.00	2.50	1.50	2.00	1	194	2.33	Slightly distorted but maintaining good vigour.		L	B2
106	Domestic Apple *(Malus variety)*	E/M	F	4.00	0.50	2.50	2.50	2.00	2.00	1	197	2.37	Young and still vigorous.		L	B2
107	Ornamental Cherry *(Prunus variety)*	E/M	G/F	5.00	1.00	3.00	2.50	2.50	2.50	3	398	4.77	Young and still vigorous but showing evidence of substantial cutting back in past. Tree is located close to retaining wall structure.		M	C2
108	Ornamental Cherry *(Prunus variety)*	E/M	F	4.50	0.00	2.50	2.00	2.50	2.00	2	334	4.01	Young and still vigorous. Root growth has resulted in substantial nearby drive surface disruption. Tree is located close to retaining wall structure.		M	C2
H1	Hedge 1 Privet *(Ligustrum ovalifolium)* Elder *(Sambucus nigra)* Bramble *(Rubus fruticosus)* Ivy *(Hedera helix)*	M	P	3.00	0.00	Spread 2.50m				m/s	50	0.60	A poor-quality hedge, heavily overgrown, not having been managed for some time. The hedge has been invaded by other species and is now discontinuous. Hedge would require harsh cutting back, from which it may not fully recuperate.	Consider removal and replacement.	N/A	U