

Arboricultural Report Trees at Proposed Site at Cookstown Road Enniskerry Co Wicklow

April 2021

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Associated Drawings

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

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

1 Report Summary

- 1.1 Though the site is of an agricultural context, some trees, notably along the northern boundary, are planted and appear to relate to an older and planted context. These trees tend to be large and aged specimens when compared to the more naturally emergent trees, arising from the hedges of other boundaries.
- 1.2 A significant exception to the above relates to the eastern boundary, that consists of Cypress hedging to the north and a belt of mixed conifers to the south that relate to the neighbouring property.
- 1.3 The proposed housing development will consume much of the available site space. Some elements of the development encroach upon boundaries and areas that support trees. These encroachments involve activities, new structures, and amendments to ground levels, that will result notable change and disturb ground environments associated with some trees. Some trees will require review at construction stage in respect of better evaluating the extent of encroachments and also in respect of possible pruning works to address this issue and issues possibly associated with sight-line requirements/

2 Introduction

2.1 This report was commissioned by-

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This report has been prepared byAndy Worsnop Tech Arbor A, NCH Arb (PTI LANTRA)

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Report Brief

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 includes a Arboricultural review of the proposed development project. This includes an assessment of the sites 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 Arborists 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 impartial assessment of the development implications relating to the sustainable retention of trees, whether that be any, some, or all trees. This report is for planning purposes only and may be deficient for construction phase use.

Report Limitations

- 2.5 This report relates the Arborists interpretation of information provided to him before the report compilation and gained by him during the undertaking of the site review and tree survey. The site review data is subject to the limitations as set out under "Inspection and Evaluation Limitations and Disclaimers" in "Appendix 2" of this report. The findings and recommendations made within this report are compiled, based upon the knowledge and expertise of the inspecting Arborist.
- 2.6 The "Implication Assessment" element of the report builds on assumptions and estimates, particularly in respect of how construction works might proceed on a day to day basis and appreciates the "design" stage of the project, as opposed to "detail design" or "construction" detail.
- 2.7 Many elements of the "Arboricultural Method Statement" are deliberately broad and generic. They will require review, amendment and consolidation at the construction stage, for example in respect of the size and nature of the equipment, plant and machinery that might be utilised by any potential building contractor and any details as may change at "detail design" or "construction detail" stages.
- 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.

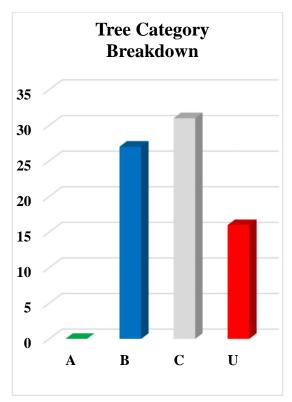
3 Site Description

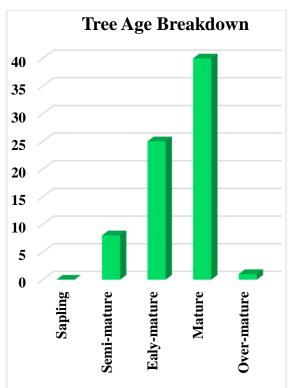
- 3.1 The site is located to the south of the Cookstown Road, to the east of the Powerscourt National School. The site is loosely rectangular, longest about its north-south axis, but with an extension to the west, along the front of the neighbouring school.
- 3.2 The primary site comprises an open field that, except for its boundaries, is devoid of vegetation other than grass and is currently used as pasture.
- 3.3 All boundaries of the site are defined by vegetation, including either hedges, thicket alignments or tree lines.

4 Pre-Development Arboricultural Scenario

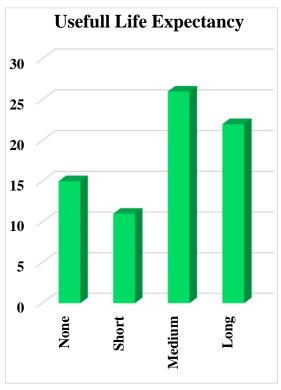
- 4.1 The site in question is broadly rectangular, slightly longer about its north-south axis. As the site comprises grazing and pasture, it is broadly devoid of any material of Arboricultural interest, except for its boundaries that supports often substantial vegetation including both trees and hedges.
- 4.2 The site's northern boundary adjoins the Cookstown Road and supports a highly diverse collection of vegetation ranging from a default boundary hedge thicket, dominated by Blackthorn and Bramble, through to what appears to be a remnant of an aged tree alignment including at least one particularly poor quality and over-mature Beech. These trees are different in respect of age, size and species regarding the other boundaries, and are more likely to be associated with the historic Summerhill House plantings relating to the lands to the north of the site.
- 4.3 The bulk of the low-level material as might be regarded as the boundary hedge is of particularly poor quality being dominated by Bramble and Blackthorn thicket. Whilst the site boundary effectively comprises a post and wire fence, the above thicket extends substantially, often 5 8 m south of the fence boundary in a highly variable thicket like fashion.
- 4.4. This boundary does support a small number of trees including which Elm, Ash and Beech though the majority appear to be naturally arising. The exception of this exists to the eastern end of the alignment where what appear to be more equidistant planted beech would suggest deliberate planting and adjoining the north-easternmost corner of the site, one particularly large beach was found to be of immense age. Unfortunately, this tree was found to be substantially decayed and in a state that constitutes a potential threat to the adjoining roadway and thus must be removed as a matter of urgency.
- 4.5 The sites eastern boundary is defined by a post and wire fence. In turn, this fence is adjoined by vegetation arising from the neighbouring property but oftentimes close enough to the boundary to be pertinent to the site. "Hedge 1", comprising Cherry Laurel and Leyland Cypress is relatively young and of good condition however it proximity to the site already sees some degree of overhang. Considering the inclusion of species such of Leyland Cypress then substantial further encroachment and trespass must be expected in the future. This issue may be pertinent to the site particularly

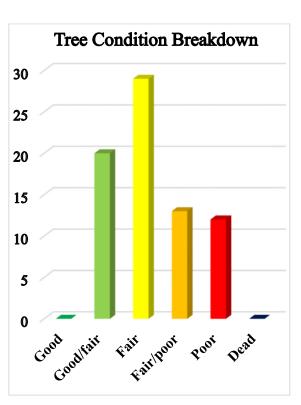
- considering the management issues associated with Leyland Cypress.
- 4.6 The bulk of the eastern boundary is dominated by what has been referred to as "Tree Line 1". This alignment or belt of trees is dominated by conifers including Sitka Spruce, Douglas Fir and Scots Pine. Most trees are approaching maturity and are already quite large. Note is made that the boundary fence is often attached to the westernmost specimens of this belt and thus their proximity to the site is unavoidable. This creates a twofold imposition, firstly in respect of what is often an obvious and extensive overhang of the site but also regarding what would be the nominally calculated root protection area.
- 4.7 Overall, the tree belt appears to be in relatively good condition and thus might offer some degree of sustainability. However, note is made of the fact that a small number of trees have failed in the past raising some concern in respect of the potential retention of such large growing trees near areas that may attain high rates of occupation and use.
- 4.8 The site's southern boundary is effectively devoid of trees except for a Sycamore towards it eastern end and Ash towards its western end and a small number of early mature ash at the truncated western corner. The remainder of the boundary is best defined by a post and wire fence and a scrub thicket ahead land, dominated by several species but most prominently Bramble.
- 4.9 This material is of poor quality and dubious merit regarding retention and therefore, should a vegetative alignment be required in this position then due consideration must be given to replacement planting as a better option.
- 4.10 The sites western boundary is again defined by a post and wire fence. In this instance, there are additional species including a small number of Hawthorne and Hazel together with the ubiquitous Ivy and Bramble. The hedge is highly variable both regarding height and spread with some positions extending substantially and often up to 8.00 m east of the fence line.
- 4.11 The western boundary supports a small number of larger trees though most comprise typically poor-quality Ash, most which are multi-stemmed and distorted suggesting possible early life decapitation and subsequent re-suckering. Such forms are mechanically flawed and commonly predispose the affected tree to mechanical failure, a factor that is already apparent in some specimens, resulting in their designation for removal.
- 4.12 The extended survey includes trees located on the northern side of the roadway as it adjoins the subject site. This includes the review of a number of particularly large trees that adjoin the road, but appear to relate to the historic Summerhill demesne.
- 4.13 Many of these trees can be reviewed in detail however, a notable proportion are substantially obscured, particularly by epicormic sucker growth in respect of lines is well as Ivy that affects multiple species. In this respect, commentary regarding potential pathological issues is limited at this time and requires further investigation subsequent to the removal of the growth that obscures views currently.





Graph 1 Graph 2





Graph 3 Graph 4

4.7 As can be seen from the graphs above, there is great diversity in all respects, across the tree population. There is little evidence to suggest ongoing management, this being well illustrated by the proportion of poorer quality tree showing in the tree categorisation

and condition breakdowns. This may equally reflect the broadly older age profile and may explain why the number of trees offering long term life expectancy appears low. Overall, the analysis illustrates that while some trees offer significant sustainability, that proportion is not large, and a greater proportion offer lesser or limited degrees of sustainability.

5 Planning Scenario in Respect of Tree

- 5.1 Trees and woodlands are dealt with under Chapter 10 Heritage, within the Wicklow County Development Plan 2016-2022. Particularly, Section 10.3.3 that sets out tree orientated objectives including
- 5.2 Woodlands, Trees and Hedgerows Objectives

NH14 To promote the preservation of trees, groups of trees or woodlands in particular native tree species, and those trees associated with demesne planting, in the interest of amenity or the environmental, as set out in Schedule 10.08 and Map 10.08 A, B & C of this plan.

NH15 To consider the making of Tree Preservation Orders (TPOs) to protect trees and woodlands of high value, where it appears that they are in danger of being felled.

NH16 Development that requires the felling of mature trees of environmental and/or amenity value, even though they may not have a TPO in place, will be discouraged.

NH17 To discourage the felling of mature trees to facilitate development and encourage tree surgery rather than felling where possible.

NH18 To encourage the preservation and enhancement of native and semi-natural woodlands, groups of trees and individual trees, as part of the development management process, and require the planting of native, and appropriate local characteristic species, in all new developments.

NH19 To encourage the retention, wherever possible, of hedgerows and other distinctive boundary treatment in the County. Where removal of a hedgerow, stone wall or other distinctive boundary treatment is unavoidable, provision of the same type of boundary will be required of similar length and set back within the site in advance of the commencement of construction works on the site (unless otherwise agreed by the Planning Authority).

Note is made that the sate area is affected by no specific or local objective and that the site does not support and "Tree Preservation Orders" as denoted on Schedule 10.08 Existing Tree Preservation Orders or as defined on Map 10.08A

6 Construction Works and Trees

6.1 Tree retention is costly in respect of available space and there is a substantial difference

between physically retaining a tree in situ and gaining any realist expectation of it surviving into the future and remaining safe.

- 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 trees 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, a large proportion of 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. Any change extending beyond the short-term has the potential to affect a tree's metabolism, health, and sustainability.
- 6.4 Development works typically result in the loss, changing or denaturing of this ground and thereby is contrary to sustainable tree retention. Critically, a tree is fundamentally reliant on the nature and environment of the ground that supports it. Any action that affects or denatures the existing soil environment in respect of gas flux, hydrology or soil strength can quickly make a soil incapable of supporting plant function. Therefore, these effects must be avoided in the areas upon which a tree is reliant.
- 6.5 BS 5837:2012: Trees in relation to design, demolition and construction Recommendations, is a standard referred to by many planning authorities. It sets out guidelines and parameters by which we can assess impacts to and protect trees from damage, thereby providing some degree of realistic expectation regarding sustainable tree retention.
- 6.6 BS 5837:2012 sets out a procedure and calculation whereby a minimum amount of ground space can be defined in respect of the requirement for the maintenance of a tree of any particular size. This calculation is based primarily on tree size considering issues of hydrological capacity, nutrient availability and anchorage.
- 6.7 The standard generates a "root protection area" (RPA) intended to define a minimum zone of conservation and preservation centred about the tree. This area is typically expressed in a symmetrical fashion and most commonly as a circle about the tree however, it is appreciated that physiological issues can have a bearing upon this and can radically alter what might otherwise be a symmetrical rooting pattern.
- 6.8 Examples of "RPA" distortion include physical features such as bedrock and its extent above and below ground level thus comprising a physical barrier to natural root development, rivers or watercourses extending to depths beneath normal root development depths and comprising soil conditions beneath their course that would be inhospitable to tree root growth or areas where materials or soil composition is beyond that capable of being exploited by trees, for example compressed and compacted areas such as hardcore and sub-bases to existing roads or areas where substantial or historic trafficking has caused soil compaction, high soil strength or a high CBR's (California Bearing Ratio)

- 6.9 In respect of the above, the tree survey information provided, intends to show the areas of minimum conservation associated with the sustainable retention of trees within the scope of a development project. In the case of the proposed development, these minimum areas are often exceeded, thus creating a scenario whereby it is reasonable to assume that the development works will have no direct effect or repercussions on tree health.
- 6.10 In other instances, obvious conflicts exist either total and direct whereby the tree's location will be wholly consumed by the position of a new building or structure or, partial whereby there is an encroachment upon this protection zone, meaning the minimum RPA cannot be achieved.
- 6.11 This latter issue occurs to varying degrees at various positions across the site. Where it occurs to a minor extent then consideration might be given to clause 5.3.1, a) and b) whereupon minor encroachments may be considered allowable and potentially inconsequential. Nonetheless, there are larger encroachments that would exceed this consideration and may constitute an impact harmful to tree health and sustainability. Such issues do not necessarily require the immediate removal of the tree and oftentimes construction works can be achieved without their removal, however, the impact may well lead to deterioration in tree health, limited sustainability, and early death.
- 6.12 Such issues must be considered in two forms. Firstly, affects to sustainability and long-term retention. Such issues might still consider the benefits of interim and short-term retention, for example during the establishment of new plantings. Secondly however, it must also appreciate that direct physical effect on tree root systems can also affect stability and safety and therefore considerations might be given to site safety factors.
- 6.13 In light of the above, we must be appreciated that any benefits gained by short to medium term retention, will be subject to ongoing and regular review, with regard to any developing symptoms of ill-health. In this respect, short to medium term retention might be achieved either with or without other management input.
- 6.14 In respect of the above, tree health-related affects and issues typically manifest themselves over time and only the most severe impact generates immediate effects. Tree damage relating to environmental change and disturbance can often result in a slow deterioration and decline, only becoming apparent after some years (2 5 years) with a slow deterioration where death may not occur for anything between 3 and 15 years. Understanding the timescale of possible interim benefits must appreciate the fact that its full extent or rate cannot be quantified at an early stage.
- 6.15 The Arboricultural report has identified many tree specimens that are considered wholly suitable for retention. Notwithstanding the natural and expected deterioration of an ageing tree population, many would offer a substantial degree of sustainability over time.

Construction Specific Issues

- 6.19 The new buildings and particularly 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 relates battering or benching of the excavation edges to avoid collapse. This issue will apply to this site; however, some critical areas have adopted the use of retaining structures and methodologies such as secant piling, that affectively limits excavation to the pile structure.
- 6.20 Similarly, roads typically also require excavation for foundations, but additionally, often require that the ground beneath is compacted to provide necessary bearing ratios. The combination of these typically results in the loss or denaturing of the soil volume that a tree would be reliant upon.
- 6.21 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 building noted above.
- 6.22 Achieving the above typically 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, rendering them inhospitable and of no use the to the supported trees.
- 6.24 Though beyond the scope of this report, consideration might be given the broader changes to the ground environment, for example relating to possible hydrological changes about the development area.

Contextual Issues

- 6.25 Some of the tree losses are of limited concern because of poor-quality, ill-health or ongoing deterioration, where the potential for and longevity of keeping such trees 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.
- 6.26 Where the site's current context will be changed in respect of occupation and use of space near trees, there may develop repercussions that require further scrutiny after first site clearance and felling works. 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.
- 6.27 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.

- 6.28 While the retention of trees within a development is commendable, tree retention close to buildings must 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.
- 6.29 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.

7 Project Works and General Impacts

- 7.1 The development will principally consist of:
 - The construction of 165no. dwellings and associated ancillary infrastructure.
 - 105 no. 2 storey houses consisting of 49no. 3 bedroom houses (House Types B, B1 & B2), 36no. 4 bedroom houses (House Types A, D & E1) and 20 no. 5 bedroom houses (House Type E).
 - 56no. apartments/duplex apartments in 6no. 3 storey buildings –(28no. 2 bedroom dwellings and 28no. 3 bedroom dwellings) all apartment units to have terrace.
 - 4no. 1 bedroom Maisonette dwellings in a 2-storey building
 - Part 2-storey and single storey creche (c. 510sqm)
 - Open space along southern boundary of c. 0.92 hectares (with pedestrian connections to boundary to 'Lover's Leap Lane' to the south and to boundary to the east and west). Hard and soft landscaping (including lighting) and open space (including boundary treatment), communal open space for duplex apartments; regrading/re-profiling of site where required (including import/export of soil as required) along with single storey bicycle/bin stores and ESB substation.
 - Vehicular access from the Cookstown Road from a new junction as well as 315 no. car parking spaces and 104 bicycle spaces.
 - Surface water attenuation measures and underground attenuation systems as well as connection to water supply, drainage and provision of underground local pumping station to Irish Water specifications.
 - 2 no. temporary (for 3 years) marketing signage structures along the Cookstown Road frontage and single storey marketing suite (c. 81sqm).
 - All ancillary site development / construction / landscaping works.
- 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 Identification of Development Impacts to Trees

- 8.1 The expected tree impacts have been represented graphically on the tree impacts drawing "Cookstown 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.
- 8.2 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.
- 8.3 Detail of the development proposals where gained from drawings provided by-
 - Barrat Mahony Consulting Engineers Drainage and Engineering information overlaid on Masterplan
 - Kevin Fitzpatrick landscape Architects Landscape Design
- 8.4 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.
- 8.5 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.

9 Specific Issues and Arboricultural Concerns

9.1 The greatest issues affecting trees has been the requirement to amend site levels to attain necessary finished levels. This has created issues adjoining the northern boundary, as well as to the western boundary.

- 9.2 To the north, tree nos.1 to 4 are encroached upon by the raised path and associated retaining wall. This means that the maximum extent of protection attainable is limited to circa 4.00 metre, as opposed to the calculated 10.10 and 10.30 metres recommended for tree nos.3 and 4. This may adversely affect tree health and sustainability.
- 9.3 In respect of the attenuation tanks and mains water line, the need for substantial excavation, especially if digs are to be battered, may encroach on the calculated protection radius of tree 11. This may adversely affect tree health and sustainability.
- 9.4 In respect of tree nos.13 to 15, the proposed hard standing will affect the minimum root protection areas. Finished levels are greatly raised, will require extensive fill and will require grading back to native levels, though the overall use of "grasscrete" if installed correctly, would appear to provide for a "low impact" and permeable solution to the vehicular access requirement. This may adversely affect tree health and sustainability.
- 9.5 Duplex blocks "C" and "D" and units 40 and 41 will, as a result of their proximity to the boundaries, require the trimming back of existing boundary vegetation, that appears to relate to the adjoining property.
- 9.6 The road end, north of unit 40 extends to a position very close to the boundary and "Tree Line 1" located there, that require a minimum protection zone of 5.10 metres. This issue is complicated by raised finished levels. It appears likely that the boundary line of trees will suffer some disturbance.
- 9.7 The road end south of unit 41 raised the issues noted above, complicated by finished levels lower than native levels meaning that excavation near the trees is unavoidable. Additionally, the water ring main and surface water gullies extend to positions adjoining the boundary and indicate a need for excavation directly beside the tree stems.
- 9.8 Notwithstanding the above, the general proximity of works and associated requirement to disturb ground and amend levels may affect trees adjoining the eastern boundary of the site.
- 9.9 To the west of the site, the proposed roadway south of unit 79, extends to a position close to Ash no.29. The proposed levels are similar, thereby reducing complications. This trees retention will be subject to the immediate confinement of roadworks to the currently defined point, with any requirements (by works extent or design) to encroach further to the west will result in the tree needing to be removed.
- 9.10 While trees can be retained on and adjoining the site, many will be retained near areas of greatly increased occupation and use. Particular concern relates to the proposed new homes near "Tree Line 1" of the site's eastern boundary, particularly where construction works and levels amendments are going to result in trees being disturbed.

10 Design Iterations and Arboricultural Considerations

10.1 An earlier tree survey was extended and updated in May of 2020 and the preliminary results were provided to the broader design team in early June 2020. Accordingly, there was an early appreciation of the site's tree cover, its quality, condition, and the constraints it presented.

11 Tree Retention and Loss

- 11.1 The drawing "Cookstown 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 69no. individually described trees and 5 tree groups/hedge that comprise multiple specimens, which, for the purposes of this report, will be regarded as 74no. items that have been categorised as:
 - No category "A" trees,
 - 27no, category "B" trees,
 - 31no. category "C" trees,
 - 16no. category "U" trees,
- 11.3 Normally, all category "U" trees (16 in total across survey area) identified in the survey would be removed. Many should be removed regardless of development works. However, of these trees, it is noted that nos.5, 8, 21, 28, 31, 34 exist within the red line area, and that nos.12, 17, 36, 48, 55, 60 and 67 appear to be outside the site jurisdiction, and therefore can only be removed by their respective owners.
- 11.4 It appears that no category "B" trees, need be removed to facilitate the proposed works11.5 Of the site's category "poor" quality "C" trees, the development works appears to require the removal of nos. 7, 9, 10, 30, 32, 33, 65 and 68.
- 11.6 The tree loss breakdown for the proposed developemnt will be-
 - 0 Category "B" items
 - 7 category "C" items
 - 6 category "U" trees (of 16 Category "U" items recorded across review area)
- 11.7 In addition to tree losses, the development will require the removal of
 - Circa 80% of Hedge 3 Category C)
 - Circa 45% Of Hedge 4 (category U)

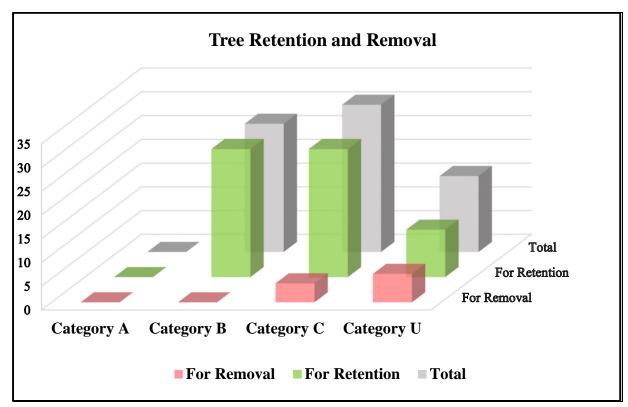


Fig 5 Graphic Representation of Tree Loss/Retention Scenario

11.7 Total development related tree loss - 13 Trees/tree 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.
- 12.2 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 "Cookstown 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.

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, such 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.

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

Method Statement Outline

- A1.1 This method statement intends to provide guidance in respect of tree protection on a development site. This is a broad and prescriptive method statement, intended to provide 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, "Cookstown 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 used under the direct guidance of the project Arborist. As limited "construction stage" detail was available at planning stage, it may require amendment and adjustment to address construction stage issues.

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, these may no longer apply and may require modification to account for the changes that the built project will cause.

General Method Statement

1.0) Overview and Implementation

- 1.1 Prior to any site works, this method statement will be addressed and discussed by all member of the construction team management, prior to any site works or construction/demolition related works or access.
- 1.2 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 "Cookstown 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, <u>not requiring excavation or underground ducting</u>, 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.
- 4.6 Protection installation will require a progressive laying down of ground protection, with previously laid material providing vehicular access to the next zone will be accepted as an approved 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 reevaluated 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 "Cookstown 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 "Cookstown 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 original survey was carried out in January and February of 2020, and updated in October and December of 2020. This survey portion of the overall report is <u>not</u> 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 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 Y - Young S/M - Semi-Mature	Referred to in generalized categories including: - A young and typically small tree specimen. A young tree, having attained dimensions that allow it to be
5/W - Schil-Mature	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

Recommendation for Arboricultural actions or works

considered necessary at

Recommendations 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

The Category System is intended to quantify a tree regarding its

Arboricultural value as well as a combination of its structural and

Category System 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

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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.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
1	Wych Elm (Ulmus glabra)	S/M	F	9.00	2.25	3.50	2.50	3.50	3.50	1	185	2.22	Young and naturally arising from boundary thicket. Slightly unbalanced to west because of proximity to near neighbour. Concerns exist regarding predisposition to attack by Dutch elm disease.		M	В2
2	Wych Elm (Ulmus glabra)	E/M	G/F	13.00	2.00	5.00	4.50	5.00	5.00	<u> </u>	465	5.58	Young and still vigorous. Of good form but supporting extensive ivy cover. Concerns exist regarding predisposition towards attack by Dutch elm disease.		M	B2
3	Ash (Fraxinus excelsior)	M	F/P	13.00	3.00	5.00	7.00	7.00	6.00	1	844	10.12	A large but distorted specimen supporting minor imbalance to south. Crown is of distorted form and heavily obscured by dense ivy cover. Debris within thicket beneath suggests high likelihood of prior mechanical failure, thus explaining poor form. Suitability for retention will require further review.	Cut ivy and review after ivy shedding.	S	C2
4	Ash (Fraxinus excelsior)	E/M	F	13.00	0.00	4.50	5.50	7.00	5.50	1	866	10.39	Heavily divided from ground level raising concern in respect of mechanical integrity. Entire tree is obscured by dense ivy cover preventing detailed review at present.	Cut ivy and re- evaluate.	M	C2
5	Ash (Fraxinus excelsior)	E/M	F	12.00	2.50	3.50	5.00	6.50	5.00	2	751	9.01	One-sided and typically unbalanced to north, towards field. Tree is heavily divided from ground level with substantial cavity on roadside of base. Middle-crown is further subdivided suggesting prior decapitation or crown loss, creating a distorted crown form of impaired mechanical form. Support of extensive ivy cover prevents detailed review at present.	Consider early removal.	N/A	U

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
7	Ash (Fraxinus excelsior)	E/M	F	13.00	1.50	4.50	3.00	5.50	6.50	ω	525	6.30	Triple stemmed from ground level and supporting notable ivy cover. Tree supports notable imbalance to west. General vigour and vitality is good though structural form is considered poor.	Review regarding suitability for retention in roadside position.	М	C2
8	Oak (Quercus robur)	E/M	P	7.00	1.75	3.00	2.50	5.00	2.50	1	430	5.16	Squat, suppressed and chronically distorted. Form would suggest prior decapitation and or failure. Tree supports extensive ivy cover. Is of limited suitability for retention.	Consider early removal.	N/A	U
9	Beech (Fagus sylvatica)	E/M	F/P	10.00	0.00	5.00	4.00	7.00	6.50	1	548	6.57	Young and still vigorous but heavily distorted as result of position beneath crown of adjoining oak. Entire crown is heavily unbalanced to south-west. Tree will be regarded as ill-suited to retention if isolated or exposed.	Review regard retention context.	M	C2
10	Oak (Quercus robur)	M	F	27.00	4.00	9.00	8.00	10.00	10.00	1	1191	14.29	A particularly large and aged specimen of variable crown vigour with extensive deadwood and evidence of decline noted within crown. Lower northern side of stem base has suffered repeated mechanical damage presumably from vehicular collision and has lost a substantial element of bark. Much of middle crown is obscured by dense ivy cover preventing detailed review at present.	Clean-out to remove existing large deadwood. Cut ivy and review after ivy withering. Review regarding retention context.	M	C1-2
11	Beech (Fagus sylvatica)	M	G/F	22.00	1.75	5.00	6.50	8.00	6.50	1	1006	12.07	A large and apparently vigorous specimen. Entire principal stem and much of higher crown is obscure by ivy cover preventing detailed review at present.	Cut ivy and review after ivy withering. Review regard retention context.	L	B1-2
11a	Wych Elm (Ulmus glabra)	S/M	F/P	6.00	2.50	3.00	3.00	2.50	3.00	1	271	3.25	Squat suppressed and comprising natural regeneration. Twiggy decline within higher crown suggests onset of Dutch elm disease. Tree is unlikely to prove sustainable.		S	С
11b	Wych Elm (Ulmus glabra)	S/M	F/P	6.00	2.50	4.00	2.50	1.50	2.50	<u> </u>	229	2.75	Crown has suffered previous damage and appears to be in a state of decline suggesting onset of Dutch elm disease. Is ill-suited to retention.	Consider early removal.	N/A	U

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
12	Ash (Fraxinus excelsior)	E/M	P	9.00	2.50	2.00	2.00	5.50	3.50	1	420	5.04	Apparently decapitated in past and now retaining small number of limbs orientated towards the south only. Is a large, ivy-covered stump.	Remove.	N/A	U
13	Oak (Quercus robur)	M	F/P	9.00	2.50	4.00	2.50	5.50	7.00		933	11.19	Distorted one-sided, typically unbalanced to south-west. Vigour and vitality is reduced with evidence of dead-wood development and decline throughout crown. Primary stem and lower middle-crown supports extensive ivy cover the prevents detailed review at present. Tree offers limited sustainability.	Review regard retention context. Cut ivy and review after ivy withering. Consider crown reduction and cleaning works for limited retention.	S	C2
14	Oak (Quercus robur)	M	F/P	20.00	1.50	9.00	5.00	12.00	6.50	1	910	10.92	A large specimen suppressed and distorted as result of proximity to near neighbours and has developed a fanlike crown profile exacerbated in a manner perpendicular to the overall alignment. Southern side of lower stem has sustained chronic widespread damage with exposed timber and surface decay. Vigour and vitality is fair though crown supports much visible large deadwood and supports extensive ivy cover on principal stem and about middle crown that have yours tree from review at present.	Cut ivy and cleanout. Consider application of crown-reduction type works for limited retention. Review regard retention context.	S	C1-2
15	Oak (Quercus robur)	M	F	20.00	2.00	8.00	11.00	10.00	7.00	1	1025	12.30	Large specimen supporting extensive ivy cover on principal stem and about middle crown that prevents detailed review at present. Southern side of lower stem has sustained bark damage and exposure of timber with evidence suggestive of possible fruiting body support. Crown supports substantial deadwood. Lower roadside of buttress flair has sustained repeated damage and exposure of timber that is now subject to decay and fungal activity thus raising concerns in respect of sustainability.	Review regard retention context. Cut ivy and review after ivy withering. Consider benefits of structural pruning in respect of limited sustainability.	M	C1-2

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
16	Beech (Fagus sylvatica)	E/M	F	13.00	1.50	5.50	4.50	6.00	5.00	-	592	7.10	Squat and suppressed but maintaining reasonable vigour and vitality.	Review regard retention context.	M	B2
17	Beech (Fagus sylvatica) Ash (Fraxinus excelsior)	E/M	F/P	8.00	0.00	6.50	4.50	4.50	3.00	ω	462	5.54	3 stems arise in a poor and mechanically flawed configuration. Considered ill-suited to retention in roadside position.	Remove.	N/A	U
18	Beech Group (Fagus sylvatica)	E/M	F	17.00	5.00	3.00	6.00	6.00	4.00	_	579	6.95	Somewhat distorted with majority of crown extending to south east, general vigour and vitality remains good. Much of crown is obscured by dense ivy cover preventing detailed review at present.	Cut ivy and review after ivy withering.	M	C2
19	Beech (Fagus sylvatica)	E/M	F/P	14.00	1.50	5.00	4.50	5.00	4.50	1	573	6.88	A squat, suppressed, distorted multi-stem specimen likely to comprise regenerative growth after the damage of a prior tree. Remains vigorous and offer some sustainability though poor form undermine suitability for retention in roadside position.	Review regard retention context.	S	C2
20	Beech (Fagus sylvatica)	E/M	F	16.00	2.00	6.00	5.00	5.50	4.50	1	576	6.91	Drawn up and become substantially divided at 1.50 m with what appears to be a developing compression fork. General vigour and vitality appear good though impaired mechanical form will undermine sustainability.	Review regard retention context.	M	C2
21	Beech (Fagus sylvatica)	O/M	P	4.00	1.50	1.50	1.50	1.50	5.00	_	1324	15.89	A once large specimen having suffered massive mechanical failure and collapse and exist solely as a large stump. Entire lower stem supports massive fortifications of Ganoderma depicting extensive internal decay.	Tree stump is considered hazardous and should be removed as a matter of urgency.	N/A	U
22	Sycamore (Acer pseudoplatanus)	M	F	11.00	1.00	5.50	6.00	5.50	6.00	1	780	9.36	A squat and spreading specimen of reasonable vigour and vitality. Ivy development is minimal at present.	Review regard retention context.	L	B2

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
23	Ash (Fraxinus excelsior)	M	F/P	18.00	2.00	8.00	6.00	6.50	8.00	<u> </u>	942	11.31	Crown is unbalanced, exacerbated by severe pruning on eastern side. Vigour and vitality appear fair though much of principal stem is obscure by dense ivy cover.	Cut ivy and review after ivy withering. Review regard retention context.	M	C2
24	Sycamore (Acer pseudoplatanus)	E/M	F	9.00	2.00	5.00	5.50	4.50	1.00	1	398	4.77	Heavily suppressed and notably unbalanced to east.	Review in respect of retention context.	M	C2
25	Ash (Fraxinus excelsior)	E/M	F	10.00	2.00	4.0	5.00	2.00	0.00	1	407	4.89	Is heavily divided at 1.50 m. Is of poor quality and dubious retention merit.	Review regard retention context.	M	C2
26	Ash (Fraxinus excelsior)	E/M	F	11.00	2.00	6.50	4.50	0.00	5.00	1	474	5.69	Heavily unbalanced and north because of suppression.	Review regard retention context.	M	C2
27	Ash (Fraxinus excelsior)	E/M	F	13.00	2.25	7.00	5.50	5.00	5.00	1	474	5.69	Slightly unbalanced and north but otherwise of good vigour and vitality. Supports notable ivy development about middle crown.	Cut ivy and review regard retention context.	L	B2
28	Sycamore (Acer pseudoplatanus)	M	P	17.00	2.50	10.00	9.00	7.00	6.50	1	993	11.92	Typically unbalanced to north east. Is affected by chronic decay and hollowing of primary stem predisposing tree to collapse. Unsuitable for retention.	Remove.	N/A	U
29	Sycamore (Acer pseudoplatanus)	E/M	G/F	10.00	1.75	4.50	5.00	4.50	4.00		525	6.30	Slightly unbalanced as result of suppression but otherwise of good condition. Supports notable ivy cover about middle crown.	Cut ivy and review.	L	B2
30	Ash (Fraxinus excelsior)	M	F/P	10.00	2.00	9.00	10.00	6.00	4.50	-	780	9.36	Multi-stem from ground level and typically unbalanced to south with some decay above ground level. Is of poor quality and mechanically flawed relating to multi-stem stature. General vigour and vitality are good though sustainability and suitability for retention is impaired.	Review regard retention context.	S	C2
31	Ash (Fraxinus excelsior)	M	P	9.00	2.00	6.00	5.00	4.00	6.00	1	1098	13.18	Comprises the remnant of a once larger specimen having suffered chronic collapse and splitting of primary stem. Supportive base is now subject to chronic decay.	Remove.	N/A	U

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
32	Ash (Fraxinus excelsior)	М	F	12.00	1.50	7.50	6.00	5.00	5.50	_	993	11.92	Multi-stemmed and broadly spreading raising some concern in respect of poor mechanical form. General vigour and vitality remain good though much of crown is obscured by dense ivy cover that prevents detailed review at present.	Cut ivy and re- evaluate after ivy shedding.	M	C2
33	Ash (Fraxinus excelsior)	M	F/P	12.00	1.50	6.00	5.00	6.00	6.00	ш	910	10.92	Has developed a multi-stemmed and spreading crown of poor mechanical form undermines suitability for retention and raises concern regarding suitability for retention.	Cut ivy and re- evaluate.	S	C2
34	Ash (Fraxinus excelsior)	M	P	9.00	1.00	7.00	5.50	6.00	6.50	1	1003	12.03	Multi-stem, broad and spreading with evidence of lower stem splitting. Is considered unsuitable for retention.	Remove.	N/A	U
35	Beech (Fagus sylvatica)	M	G/F	21.00	4.50	6.00	5.50	7.00	7.00	1	844	10.12	A large, apparently vigorous specimen whose principal stem is obscured by dense ivy cover. General health appears good though tree should be reviewed after ivy clearance.		L	В
36	Horse Chestnut (Aesculus hippocastanum)	S/M	F	10.00	0.00	4.00	3.00	3.50	4.00	1	430	5.16	A multi-stemmed group, arising from decayed stump of previous tree. Structural condition is particularly poor with high likelihood of failure as size increases. Is unsuitable for attention.	Remove.	N/A	U
37	Goat Willow (Salix caprea)	E/M	F	5.00	2.00	3.50	2.50	1.00	0.00	1	197	2.37	Distorted specimen of a species typically regarded as a weed.		M	C2
38	Monterey Cypress (Cupressus macrocarpa)	S/M	F	4.50	1.50	2.50	2.00	2.00	2.00	1	207	2.48	Young and suppressed. Asserts immense potential for continued growth.		L	C2
39	Sycamore (Acer pseudoplatanus)	E/M	F	14.00	2.00	5.00	2.00	2.00	3.50	1	398	4.77	Distorted, drawn up and typically unbalanced to north. Primary stem is obscure by ivy cover. Growth form suggests either prior damage and crown failure or heavy suppression during growth.	Cut ivy and rereview.	M	C2

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
40	Monterey Cypress (Cupressus macrocarpa)	M	F	22.00	2.00	7.00	5.50	9.00	8.50	1	1089	13.06	A large and visually imposing specimen. Vigour and vitality remain good correction remains reasonable though localised twiggy decline suggests Seiridium canker attack. Primary stem is obscure by dense ivy cover. Consideration should be given to species predisposition towards mechanical damage relative to position adjoining and overhanging roadway.		M	B1-2
41	Lime (Tilia europea)	M	G/F	19.00	0.00	4.50	5.00	5.00	3.50	1	748	8.98	Much of crown appears vigorous though primary stem is obscure by ivy cover. Minor twiggy decline is noted about crown periphery possibly indicating pathological issues.	Cut ivy and attempt to cut back epicormic growth at lower levels to facilitate better review.	M	C1-2
42	Monterey Cypress (Cupressus macrocarpa)	M	F	19.00	5.00	6.00	5.50	8.50	8.00	1	1022	12.26	Large specimen supporting visible degrees of deadwood as well as prior storm damage. Tree appears to be affected by localised Seiridium canker.	Cut ivy and review, consider natural predisposition towards storm damage relative to position adjoining roadway.	M	C1-2
43	Oak (Quercus robur)	M	F	13.00	3.00	5.50	4.50	5.00	4.00	1	910	10.92	Distorted and supporting typical imbalance to north. General vigour and vitality appear good though principal stem and middle crown is obscure by dense ivy cover.	Cut ivy and rereview.	M	B2
44	Lime (Tilia europea)	M	G/F	19.00	2.50	4.50	4.00	3.50	3.50	<u> </u>	780	9.36	Tree appears to be of good vigour and vitality however basal region is obscure by dense ivy cover on principal stem is obscure by ivy development.	Cut ivy and prune to clear basal growth to facilitate rereview.	L	B1-2
45	Lime (Tilia europea)	M	G/F	22.00	2.00	5.50	4.50	5.50	5.50	<u> </u>	844	10.12	Apparently vigorous. Epicormic growth is beginning to obscure lower stem.	Cleanout review regularly.	L	B1-2

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
46	Horse Chestnut (Aesculus hippocastanum)	M	G/F	23.00	3.00	9.00	8.00	8.50	7.00	1	1105	13.25	A particularly large and aged specimen exhibiting evidence of prior damage and localise cavity development at limb loss points. General vigour and vitality are good. Consideration should be given to brittle nature and potential for limb shedding in respect of roadside position.	Cleanout remove deadwood and consider weight reduction works, particularly on cavity/damage affected limbs.	L	B1-2
47	Beech (Fagus sylvatica)	M	G/F	22.00	4.00	6.00	5.00	6.00	4.50	<u> </u>	993	11.92	Large, imposing specimen of apparently good vigour and vitality.	Clear base reveals no evidence of pathogen attack. Review regularly.	L	B1-2
48	Lime (Tilia europea)	M	P	12.00	3.00	4.00	4.50	5.00	4.00	1	926	11.12	Decapitated and decayed. Effectively comprising a large stump supporting small number of limbs and suck regeneration. Stability of limbs and suckering material will diminish over time and in line with ongoing decay.	Consider early removal.	N/A	U
49	Horse Chestnut (Aesculus hippocastanum)	E/M	F	14.00	2.50	5.00	3.50	4.00	4.00	-	493	5.92	Badly distorted through position adjoining and beneath canopy of larger trees. General vigour and vitality are good notwithstanding minor imbalance to north.		L	B2
50	Monterey Cypress (Cupressus macrocarpa)	M	G/F	16.00	7.00	6.00	4.50	5.00	4.50	<u> </u>	611	7.33	Slightly distorted with minor imbalance to north. Vigour and vitality is fair.		M	B2
51	Lime (Tilia europea)	M	G/F	24.00	3.00	5.50	5.00	6.00	5.00	-	914	10.96	Large, visually imposing specimen of apparently good vigour and vitality.		L	B1-2
52	Lime (Tilia europea)	M	G/F	20.00	3.00	6.00	5.00	6.00	6.00	1	910	10.92	Large specimen of apparently good vigour and vitality however lower stem is heavily obscured by dense ivy cover thus preventing detailed review.	Clean out and prune to remove basal sucker growth to facilitate better review.	L	B1-2
53	Lime (Tilia europea)	M	G/F	19.00	3.00	6.00	6.50	7.00	6.00		993	11.92	Large specimen having undergone prior crown reduction works. Ivy is developing at ground level.	Review on annual basis. Cut ivy.	L	B1-2

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
54	Horse Chestnut (Aesculus hippocastanum)	E/M	G/F	12.00	2.25	5.00	4.00	3.00	2.00	1	716	8.59	Suppressed and distorted because of proximity to near neighbour.		L	B2
55	Horse Chestnut (Aesculus hippocastanum)	M	P	14.00	3.00	4.50	4.50	4.50	5.00		1031	12.38	Remnant of a once larger tree having suffered catastrophic failure and loss of much of higher crown. Stem top positions exhibit extensive decay and cavity development. Remaining stems will be subject to failure. Tree is considered unsuitable for retention in roadside position.	Remove.	N/A	U
56	Beech (Fagus sylvatica)	M	G/F	20.00	3.50	6.50	4.50	4.50	5.50	1	885	10.62	Slightly suppressed and has developed imbalance to north west. General vigour appears good.		L	B1-2
57	Sycamore (Acer pseudoplatanus)	M	F	20.00	2.50	7.00	6.00	7.00	5.00	1	910	10.92	General vigour and vitality are good however structure is compromised by substantial cavity development most notable at 2.25 m on northern stem.	Apply crown reduction works to reduce crown weight review annually.	M	C1-2
58	Beech (Fagus sylvatica)	M	F	14.00	2.00	3.50	4.00	5.00	4.00	-	548	6.57	Suppressed and slightly distorted but still maintaining good vigour and vitality.	Review regularly.	L	B2
59	Beech (Fagus sylvatica)	M	G/F	18.00	2.50	6.00	4.00	6.00	6.00	<u> </u>	783	9.40	Substantially multi-stemmed by 3.00 m. General vigour and vitality is good. Development of compression forks may undermine structural integrity.	Review regularly.	L	B1-2
60	Lime (Tilia europea)	E/M	P	10.00	2.00	3.00	2.00	4.00	3.00	1	493	5.92	Comprises a remnant of a once larger tree, apparently damaged by possible failure of adjoining tree. Specimen is now particularly poor quality and dubious suitability pretension.	Consider early removal.	N/A	U
61	Horse Chestnut (Aesculus hippocastanum)	M	G/F	20.00	2.00	5.50	6.00	8.50	4.00		990	11.88	Large specimen supporting notable imbalance to south, towards and over roadway. General vigour and vitality appear good however lower stem is obscure by ivy cover preventing detailed review.	Cut ivy to facilitate rereview. Consider crown reduction pruning works to reduce extent and weight carriage in over road positions.	L	B1-2

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
62	Lime (Tilia europea)	M	G/F	20.00	2.00	6.00	4.00	5.00	4.00	1	847	10.16	Slightly suppressed and drawn up because of proximity to near neighbours. General vigour and vitality appear good however basal region cannot be reviewed because of dense epicormic growth.	Prune to remove lower stem epicormic growth to facilitate better review.	L	B1-2
63	Beech (Fagus sylvatica)	M	G/F	22.00	4.00	6.50	5.50	7.00	5.00	_	961	11.54	A large specimen of apparently good vigour and vitality		L	B1-2
64	Lime (Tilia europea)	M	G/F	22.00	2.50	5.00	2.50	5.00	5.50	<u> </u>	681	8.17	Slightly one-sided through proximity to near neighbours. Is maintaining good vigour and vitality. Lower stem is obscured by dense epicormic growth.	Prune to remove lower stem epicormic growth to facilitate rereview.	L	B1-2
65	Wych Elm (Ulmus glabra)	S/M	F	5.00	1.00	3.50	2.50	3.00	3.50	<u> </u>	239	2.86	Multi-stem natural sucker redevelopment arising from roadside embankment. Is currently maintained reasonable vigour and vitality but with be subject to attack by Dutch elm disease.		M	C2
66	Wych Elm (Ulmus glabra)	S/M	P	3.00	0.50	2.50	2.00	2.00	2.00	1	175	2.10	Lower crown remnant of a once larger young apex is dead suggesting prior attack by Dutch elm disease.	Remove.	N/A	U
67	Sycamore (Acer pseudoplatanus)	E/M	P	5.50	1.00	2.00	2.50	4.50	5.00	_	366	4.39	A remnant of a once larger tree exhibiting evidence of chronic partial uprooting and disturbance in positions north east of stem base. Is unsuitable for attention.	Remove.	N/A	U
68	Sycamore (Acer pseudoplatanus)	E/M	F	12.00	1.50	3.00	5.00	5.00	2.00	<u> </u>	493	5.92	Distorted and naturally arising young tree. Arises from hi embankment circa 2.0 m above road level. Appears be maintaining good vigour and vitality but supports extensive ivy cover with root exposure noted below tree where supporting embankment is eroded.	Review regarding retention context.	S	C2
69	Horse Chestnut (Aesculus hippocastanum)	S/M	G	4.50	0.50	2.50	2.50	2.50	2.50	<u> </u>	197	2.37	A young, recently planted specimen of good vigour and vitality.		L	В2
70	Goat Willow (Salix caprea)	E/M	G/F	5.00	0.00	5.00	4.00	4.00	3.50	2	366	4.39	Distorted and multi-stemmed, typical for species. Is maintaining good vigour and vitality.		L	B2

No.	Species	Age	Con	Ht.	СН	N	E	S	W	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
71	Goat Willow (Salix caprea)	E/M	G/F	5.00	0.00	5.00	4.50	4.00	4.00	7	366	4.39	Young, vigorous but heavily multi stemmed.		L	C2
72	Norway Maple (Acer platanoides)	S/M	G/F	5.00	0.50	3.00	2.50	3.00	3.50	1	229		Support minor growth imbalance to west. Is affected by compression fork at 0.75 m.		L	C2
73	Norway Maple (Acer platanoides)	S/M	G/F	5.50	0.50	4.50	4.00	4.00	4.00	1	261	3.13	Young and vigorous specimen.		L	B2

Tree Lines, Groups and Hedges

No.	Species	Age	Con	Ht	СН	Spread	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
H1	Hedge 1 Cherry Laurel (Prunus laurocerasus) Leyland Cypress (Cuppressocyparis leylandii)	S/M	F	5.00-8.00	0.00	Spread 6.00-7.50	1	271	3.25	This boundary of site effectively supports no in-site trees however, the adjoining neighbouring site to the east support substantial tree population some of which may be pertinent to the subject site. Effectively planted as a contiguous alignment with stems being positioned at circa 3.00 m east of fence line. At present, crown overhang and trespass into site is minimal but will develop over time.		M	C2

No.	Species	Age	Con	Ht	СН	Spread	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
TL1	Tree Line 1 Sitka Spruce (Picea sitchensis) Douglas Fir (Pseudotsuga menziesii) Scots Pine (Pinus sylvestris) Sycamore (Acer pseudoplatanus) Lawson Cypress (Chamaecyparis lawsoniana) Holly (Ilex aquifolium)	M	F	16.00-22.00	2.50-5.00	Spread 5.00-9.00		430	5.16	Contiguous apparently planted in a belt like fashion and assumed to be intended as a shelter belt, particularly in positions west of the house. Progressing in a southerly direction however, the belt extends and becomes adjoined by a more substantive and can continuous woodland area, typically dominated by Ash. All stems are located outside of the site boundary however, several stems within the broad belt configuration directly adjoin the apparent fence boundary and indeed in many instances, the fence is attached to the stems of those trees. Accordingly, and with respect to ownership, the trees appear to be beyond the jurisdiction of the site. In respect of imposition on the site area, note is made of sometimes extensive overhangs, up to and exceeding 6.00 m in places as well as the affording of the nominal root protection area that extends substantially into the site zone. The tree species in question would not typically be regarded as suitable for retention within the amenity context and some concern exists in respect to the narrow format of the belt pertaining to the larger coniferous species and their possible predisposition towards failure. This latter concern appears to be compounded considering localised evidence of individual tree losses in the past.		M	C2

No.	Species	Age	Con	Ht	СН	Spread	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
H2	Hedge 2	S/M	F/P	-	0.00	Spread	m/s	n/a	2.50	What appears to comprise an ad hoc thicket		S	C2
	Bramble	M		1.50-5.00	8	Variable	s'	B	50	development in conjunction with a post and			
	(Rubus fruticosus)			5.0						wire fence. The hedgerow exhibits no specific			
	Ivy			0						evidence of once having comprised Hawthorn			
	(Hedera helix)									hedge but moreover, and narrow zone of			
	Elder									disused and unmanaged land directly			
	(Sambucus nigra)									adjoining the fence line that was initially			
	Sycamore									colonised by thicket species as above. It			
	(Acer									quality regarding sustainability and			
	pseudoplatanus)									management is considered poor.			
	Ash												
	(Fraxinus												
	excelsior)												
	Hazel												
	(Corylus avellana)												
	Goat Willow												
	(Salix caprea)												
	Holly												
	(Ilex aquifolium)												
	Gorse												
	(Ulex europaeus)												
	Dog Rose												
	(Rosa canina)												

No.	Species	Age	Con	Ht	СН	Spread	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
H3	_	S/M M	F/P	1.50-6.00	0.00	Spread Variable	m/s	n/a	2.50	Effectively defunct with the boundary in part being defined by a post and wire fence. In other positions, the hedge is extensive, comprising substantial Bramble thicket, often extending to more than 8.00 m West from the fence line. Additionally, and notwithstanding the small number of remaining Hawthorne, the alignment supports a small number of substantial Hazel whose broad canopy spread contributes to the highly variable but corridor like profile. Continuity of the hedgerow where complete is heavily reliant on Bramble suggesting that management and recuperation as a Thorn based hedge would require substantial under planting. The small number of Hazel may prove suitable for retention and indeed would be highly tolerant of severe cutting back to rejuvenate new, more compact crown forms. Nonetheless, the intermittent and highly variable nature of the hedge as it exists at present demands consideration for removal and replacement should a vegetative alignment be required in this position in the future.		S	C2

No.	Species	Age	Con	Ht	СН	Spread	Stm	Dia.	RPA	Structural Condition	PMR	Yrs.	Cat
H4	Hedge 4 Blackthorn (Prunus spinosa) Bramble (Rubus fruticosus) Ivy (Hedera helix)	E/M	P	1.50-2.50	0.00	Spread Variable	m/s	n/a	2.50	The northern boundary of the site is separated from the adjoining roadway by and overwhelmed, overgrown and somewhat dilapidated post and wire fence in conjunction with substantial Thorn thicket, hedgerow like configuration. Whilst the hedge exhibits no remaining evidence of once having comprised Hawthorn hedge, the likelihood is considered high though at present, Hawthorn is minimal within the population being substantially outnumbered by Blackthorn and Bramble and Ivy. The effect is one of a low and spreading thicket like affect often extending up to 7 – 8 m south of the roadside edge.		S	U
	Buddleia (Buddleia davidii)	M	F	3.00	0.00	Spread Contiguous	m/s	n/a	n/a	Intermittent areas of natural Buddleia arising. Species is non-native and typically regarded as invasive.		M	C2