

Arborist Associates Ltd.

An Arboricultural Assessment of the Tree Vegetation within the Site Area off 'Lahauntstown Lane' at Cherrywood, Dublin 18.

Prepared for: ABK Architects

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1.0 Instructions

- 1.1 I have been instructed by AKD Architects (project architects) to assess the tree vegetation within the site area off 'Lehaunstown Lane', Cherrywood, Dublin 18 and to report on the following:
- A -** To assess the present condition of the tree vegetation within this site area. See '**Appendix 2**' and drawing 'No.LTL001' which has been prepared as a constraints plan for detail.
 - B -** To assess the impact of the proposed development layout on the tree vegetation located within the site area indicating those for removal and retention. See 'Section 5.0' of our report and drawing No.LTL002 for detail.
 - C -** To show the position of the tree protective fencing and other tree protection measures that will need to be put in place at the commencement of the works and be maintained in place until all construction works are complete. See 'Section 6.0' of our report and drawing No.LTL002 for detail.

2.0 Report Limitations

- 2.1 The inspection has been carried out from ground level only and is a preliminary report. It does not include climbing inspections or below ground investigations on any tree/s. Should a more detailed inspection be thought necessary on any tree/s, then this will be highlighted within my recommendations.
- 2.2 The assessment is based on what was visible at the time and recommendations made are subject to the knowledge and expertise of the qualified Arboriculturist that carried out the above inspections.
- 2.3 This survey has been carried out in support of the planning and design of a attenuation pond on these lands and only concerns those trees on and around the site area that are considered to be relevant to this project.
- 2.4 Trees should be inspected on a regular basis as their health and condition can change rapidly due to biotic and abiotic agents. The recommendations within this report are valid for a twelve month period only and this may be reduced in the case of any change in conditions to or in the proximity of the trees.
- 2.5 Before undertaking any work to these trees, it would be advisable to check whether any planning or tree preservation controls are in operation, if they are it will be necessary to obtain consent before undertaking any works (pruning or felling).

3.0 Survey Methodology

3.1 The Arboricultural data which is presented within the attached report (**see 'Appendix 2'**) has been recorded in line with BS 5837:2012. The survey was conducted by collecting and assessing the following information within the vicinity of the proposed site area:

- Tree Number (metal tags attached to each tree).
- Tree species both common and botanical.
- Dimensions (Trunk diameter, height, crown spread and crown clearance).
- Age Class
- Physiological Condition
- Structural Condition
- Preliminary Recommendations
- Estimated remaining contribution within their present environment
- Retention category

3.2 The tree vegetation was assessed and given a retention category according to their quality and value within the existing context (BS-4.5), and not in conjunction with any proposed development plans. In making this assessment, particular consideration was given to the following:

- **Arboricultural Value** – including health, structural form, life expectancy, species and its physical contribution to or affects on other features located on site.
- **Landscape Value** – an assessment of their locality including their contributions to other features as well as to the site as a whole.
- **Cultural Value** – additional contributions made such as conservation, historical, commemorative value.

3.3 In order to assess their retention value, the trees have been divided into one of the following categories, in accordance with the cascade chart illustrated in table 1 of BS 5837:2012. The classification process begins by determining whether the tree falls within the (U) category, if not then the process will continue by assuming that all trees are considered according to the criteria for inclusion in the high category (A). Trees that do not meet these strict criteria will then be considered in light of the criteria for inclusion in the moderate category (B) and failing this, they will be allocated a low category (C).

The following summarizes each of the categories:

Category U – Those trees in such a condition that any existing value would be lost within 10 years. Most of these will be recommended for removal for reasons of sound Arboricultural Practice/ Management.

Any category 'U' trees within this site area have been identified on our drawings (Nos.LTL001 & LTL002) with a 'Red' donut around their trunk positions.

Category A - Trees of high quality/value with a minimum of 40 years life expectancy.

From our assessment of the tree vegetation on this site area, no trees have been allocated to this category grade.

Category B – Trees of moderate quality/value with a minimum of 20 years life expectancy.

Any category 'B' trees within this site area have been identified on our drawings (Nos.LTL001 & LTL002) with a 'Blue' donut around their trunk positions. These trees would be seen as having the potential to contribute to the tree cover of these grounds for the medium-term.

Category C – Trees of low quality/value with a minimum of 10 years life expectancy

Any category 'C' trees within this site area have been identified on our drawings (Nos.LTL001 & LTL002) with a 'Grey' donut around their trunk positions. These trees would be seen as having the potential to provide tree cover for the short to medium term and they should not be seen as a considerable constraint on the development of these lands. Where viable, they should be retained.

- 3.4 The trees have been plotted onto the attached drawing (DWG No.LTL001) by ourselves and may not be fully accurate and their positions would need to be checked by a land survey company for accuracy.

The tree reference numbers referred to in the condition tree report have been shown on this drawing along with their crown spreads and their retention category colour coded as detailed above and recommended by BS 5837 2012.

The constraints for each tree were worked out as per the formulas in BS5837 2012 and have been shown on this drawing using an 'Orange Circle' to aid the design team in their final development layout to ensure tree vegetation proposed for retention is retained successfully. The Root Protection Area (RPA) is the minimum area around individual trees to be protected from disturbance during construction works and is expressed as a radius in meters measured from the tree stem. Any deviation in the RPA from the original circular plot takes account of the following factors whilst still providing adequate protection for the root system:

- a) The morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures, open drainage ditches and underground apparatus);

- b) Topography and drainage;
- c) The soil type and structure;
- d) The likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

4.0 Brief Site Description and Survey Findings

- 4.1 The site area is rectangular in shape with a private residential property protruding into this shape at the north western corner which is not part of the site area. The main site area is in agricultural use for grazing livestock and consists of one open field which slopes from west to east with a steep gradient centrally before flattening out at the eastern end.
- 4.2 It is adjoined to the eastern half of the northern boundary by other lands in agricultural use, the western end of the northern boundary by two private residential properties, to the south by lands that were in agricultural use but have now laid derelict for some time, to the east by a small river/stream and beyond this by the gardens of residential properties and to the west by other lands in agricultural use.



Figure 1: Site area shown outlined in red.
Line for illustrative purposes only.

- 4.3 The tree and hedge vegetation is located around the perimeter of this field and the following summarizes the vegetation:

Hedge No.1 runs in a north to south direction along the western boundary between two fields. It consists of clumps of Hawthorn and Elder with a large infill of Bramble and Dogrose along with gaps/openings with little or no vegetation allowing passage from one field to the other. It has been impacted upon by the livestock sheltering and grazing which has further impacted on its structure and quality. Due to lapsed management this hedge has fallen into disrepair and

sections have failed with Bramble encroaching out to create a broad scrub hedge. Some of the hedge plants are being suppressed by Ivy which is increasing their wind sail leaving them more prone to wind/storm damage. Within this hedge, the trees were numbered Tree Group No.1, Tree line No.1 & Tree Nos. 1401 – 1405 and these consist of Ash and Sycamore.

Tree No.1406 is located out from the boundary hedges and has self-seeded at the base of the out buildings/sheds and is twin-stemmed from base. It may lead to structural damage to the shed building as it grows larger in size.

Hedge No.2 extends east to west along the southern boundary and is a typical agricultural type hedge for this area. The original hedge line is located on a soil bank on the site side of a drainage ditch which is deep at the western end. The lands to the rear of this hedge are now part of an active construction site and it may be impacted by these works. This hedge has been allowed to grow tall and out wide with scrub species such as Bramble growing out impacting on its structure and it has also been impacted upon in places by livestock sheltering and grazing within.

Within this hedge, 16 Trees (Nos.0658-0671 & 1407-1409) and one Tree Group (No.2) were commented on within this report. All of these trees are Ash and with the exception of Tree No.0671, an early-mature Ash at the eastern end, all are of a mature age class and they form the upper canopy of this hedge and collectively they are of some value to the treescape of this area forming a prominent line of trees, but individually, they are of low quality due to physiological and structural issues and evidence of infection throughout by 'Ash Dieback' (*Hymenoscyphus fraxineus*).

Hedge No.3 runs north to south along the eastern boundary of the site area bordering with the small river/stream. The main hedge line is located on the adjoining property side of the stream with mainly naturally occurring scrub vegetation on the site side being dominated by Bramble.

The larger trees on the site side of this hedge have been tagged 0672-0678 with two trees numbered 1 & 2 located on the adjoining property side of the river/stream. These trees are of a semi-mature to early-mature age class and most of them are multiple-stemmed from base. The trees consists of a line of predominantly Willow with one Alder (No.0676) all of which would have established here naturally from seed with a dense undergrowth of Bramble. Again this line of vegetation is of more visual value to the treescape of this area collectively than as individual trees due to mainly structural issues.

Hedge No.4 extends east to west along the northern site boundary and has been divided into two parts as follows:

Hedge No.4A is located at the eastern end extending from Hedge No.3 and forms the boundary with the adjoining agricultural field to the north. The main hedge species is Hawthorn and Blackthorn with other species in smaller numbers with an undergrowth of Bramble. This hedge has been cut and has received management in the past, in particular on the site side and in more recent years it has been allowed to grow out wide with Blackthorn and Bramble encroaching out

on either side to create a broad hedge and scrub areas particularly on the northern side. Within this section of hedge, one Tree (No.0679) has been tagged and this is an early-mature Ash.

Hedge No.4B extends westwards from hedge No.4A and this forms the boundary between this site area and the grounds of two private residential properties to the north. The main hedge line is located on the private properties side of the boundary fence with a dense scrub area of mainly Bramble on the site side making access difficult into this hedge. The main hedge is made up of ornamental shrub species with some small trees within, with three larger trees numbered numerically as 3, 4, 5 & 6 and these are of an early-mature age class. This hedge has value along this boundary for screening and security. On the site side, the scrub species that have established have been impacted by the grazing livestock.

Hedge No.5 runs parallel with Hedge No.4B at the western end of the site area and forms the boundary between a private residential property to the south and a linear strip of land which was an access point into the field at one point in the past to its north. The hedge is made up of Leyland Cypress of an early-mature age class and it is located on the adjoining property side of the boundary fence with scrub species such as Elder, Bramble and Sycamore seedlings growing up through it, in particular on the site side. Bramble is also encroaching out from this hedge to create a scrub area and this is also blocking off this entrance to the field.

Hedge 6A & 6B run around the residential property which sits into the field area. Hedge No.6A is predominantly made up of Leyland Cypress while hedge No.6B is made up of Griselinia. The hedges have received maintenance over the years to contain their size and most recently having been cut with a flail hedge cutter which has caused some damage to the top of the hedge. Ivy and some Bramble have begun to grow up through the hedge and may smother and over power the hedge in the future.

At the corner of Hedge No.6B and Hedge No.7A is Tree No.7 an early mature Sycamore of relative good quality.

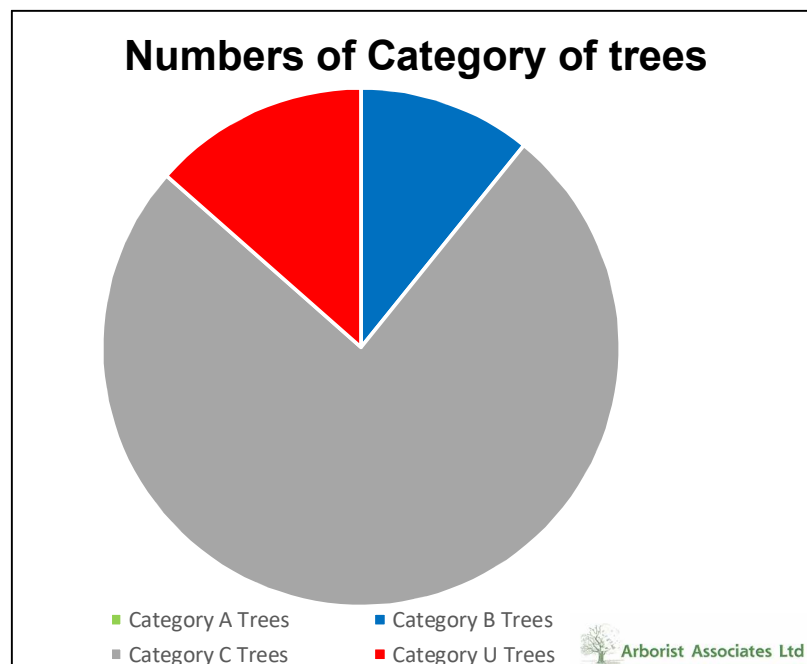
Hedge No.7A & 7B extend westwards from Hedge No.6B along the southern boundary of the private residential property that protrudes into this side area. Hedge No.7A is predominantly Bramble growing on the site side of the boundary wall while Hedge No.7B is Leyland Cypress which has a heavy growth of Bramble developing through it. The hedge has been cut back recently and this has removed a large portion of its live foliage and may impact on the hedge.

Tree line No.2 a short line of Larch is located at the western end of hedge No.7B on the field entrance side of Hedge No.7B and the boundary with the private residential property. These are of an early mature age class and are being heavily suppressed by Ivy which is leaving them more prone to wind damage.

- 4.4 Within the overall site area, 30No.Trees were tagged individually along with 7No. Trees, 2No.Tree Group, 2 No. Tree Lines and 6No.Hedges numbered numerically.

The following table and pie chart give a breakdown of the category grading allocation as per the cascade chart in BS5837 2012:

Category Grade	No. of Trees
Category U 5 Trees	Tree Nos. 0659, 0660, 0666, 0667, & Tree No. 6.
Category A Trees = 0	Tree Nos. --
Category B 4Trees + 1 Tree Line + 1 Tree Group	Tree No. 1401, 1404 & Tree No.3 & Tree No.7. Tree line No.1 Tree Group No. 1
Category C 28Trees + 1 Tree Line + 1Tree Group + 7 Hedges	Tree Nos. 1402, 1403, 1405, 1406, 1407, 1408, 1409, 0658, 0661, 0662, 0663, 0664, 0665, 0668, 0670, 0671, 0672, Tree No.1, 0673 - 0674, 0675, 0676, 0677, 0678, Tree No.2, 0679, Tree No.4 & Tree No.5. Tree Line No. 2 Tree Group No. 2 Hedge No. 1, 2, 3, 4 (A &B) , 5, 6 (A & B) & 7 (A & B)
Total	37 Trees + 2 Tree Group + 2 tree lines + 7 Hedges



4.5 Site Photographs



Figure 2: A view across the site from south to north towards Hedge No.4 A and B.



Figure 3 Above: Shows the soil alterations taking place close to Hedge No.2 on the adjoining land side.

Figure 4 right: A view from the bottom of the site facing Hedge No.2



5.0.0 Arboricultural Implication Study.

5.1.0 Introduction.

- 5.1.1 This part of our report has been prepared to accompany a planning application for the proposed residential development scheme at its western end on lands at Cherrywood, Dublin 18 off 'Lehaunstown Lane' and it will be necessary to allow for infrastructural works such as services.
- 5.1.2 There is an attenuation pond proposed for the eastern half of this site area, a new access road to service these lands to the west of this site area and a new cycle path to be installed to the south of this site area and all these have been dealt with under separate planning applications and the implications of these works on the tree and hedge vegetation within this site area are not being revisited within this assessment. This impact assessment is only dealing with the impacts for this proposed development on the surrounding tree and hedge vegetation.
- 5.1.3 This document is designed to assess the impact of the current proposed development layout for this site area on the existing tree vegetation on this site area and to look at the necessary measures that will need to be undertaken to help retain the tree and hedge vegetation shown for retention free from adverse impacts for the duration of the construction period.
- 5.1.4 On the accompany drawing Dwg No.LTL002 I have marked the trees for retention with 'Hatched Green' crown spreads and those for removal directly as a result of the development layout or as part of management with 'Hatched Red' crown spreads.
- 5.1.5 I have also shown on this drawing using 'Orange Hatching' the position of the tree protective fencing that needs to be erected around all tree and hedge vegetation to be retained at the very start of the works and be maintained in place throughout the construction works period around those trees to be retained.

5.2.0 Impact on the Tree and Hedge Vegetation.

5.2.1 Within the site area for this proposed development, the following is our arboricultural implication assessment.

Hedge No.1 is located along the sites western boundary and to facilitate the access road into this site area, it will be necessary to remove a c.15m central section of this hedge.

The shape and area of the bioretention swale will need to be designed to work around the root zones of this hedge and the trees within being retained.

Any boundary treatment along by this hedge will need to be of a fence type structure and to facilitate his, it will be necessary to carry out some trimming in of the encroaching hedge vegetation. The erection of the boundary fence will have minimal impact on this hedge and there will only be a need to dig small diameter holes to facilitate the fence upright and these will need to be dug manually avoiding cause excessive soil and root damage.

Tree No.1406 a category grade 'C' Ash tree is to be removed to facilitate the proposed development and specifically the demolition works to the adjoining shed.

Hedge No.2 is being retained with only minor impacts. It will be necessary to remove a c.10m section at the western end to facilitate a path connection to the cycle path to be installed as part of another project to the south of this hedge.

Any changes within the ground levels through this development are to be kept outside the root zone of this vegetation and to facilitate this, there may be a need to slope/grade or install retaining elements to retain these existing ground levels around this vegetation.

The hedge will be trimmed in on site side to facilitate landscaping and boundary treatment works.

The trees within this hedge are all Ash mostly of a mature age class and some are already showing infection by 'Ash Dieback' (*Hymenoscyphus fraxineus*) and this is likely to worsen and require the removal of others in the future as their condition deteriorates. This will need ongoing monitoring and management to address health and safety. At present, the trees are in need of some remedial tree surgery works to address current health and safety issues and this will need to be review with the trees in the completed development particularly trees that will be on the boundary of the rear gardens of the houses and other surfaces and structures. The works on these mature trees including the cutting of Ivy will need to be undertaken in consultation with the project ecologist to ensure compliance with the wild life act.

Hedge No.3 is to the east of this proposed development and will not be impacted by this proposed residential scheme.

Hedge No.4 is to the north of this proposed development and will not be impacted by this proposed residential scheme although there may be impacts on some sections of this hedge by the proposed development of the attenuation pond.

Hedge No.5 is located on the boundary with the adjoining private residential property and will not be affected by this proposed residential scheme although there may be some impacts by the proposed development of the attenuation pond.

Hedge No. 6 is located on the boundary with the adjoining private residential property and it will form the boundary between this house and the residential scheme to be built and will have rear gardens of the proposed houses backing onto it. The existing ground levels within the root zone of this hedge will need to be retained and to achieve this, there may be a need to grade this existing level into the constructed new rear gardens or to install a step. Any boundary treatment along these rear gardens will need to be a fence type structure where there will only be a need to dig small diameter holes to facilitate the fence upright and these will need to be dug manually avoiding causing excessive soil and root damage.

Tree No.7 is located within the rear garden of a private property and is cordoned off from the site area by the boundary wall, so impact from the development will be minimal. It is causing structural damage to the wall and this may have implication for its retention long term.

Hedge No.7A is located on the boundary with the adjoining private residential property and will not be affected by this proposed residential scheme, but it is a low quality hedge being predominantly Bramble and it would be best removed and replace with good quality new hedging.

Hedge No.7B is located on the boundary with the adjoining private residential property and will not be impacted upon by this proposed residential scheme. It will be incorporated into an open space and it will be trimmed on site side to facilitate the erection of boundary treatment which will need to be of a fence type structure with minimal impact on the hedge. There will only be a need to dig small diameter holes to facilitate the fence upright and these will need to be dug manually avoiding cause excessive soil and root damage.

Tree Line No.2 a line of mature Larch are located along the boundary with the adjoining private residential property and are taken to be located outside this site area within the management of this private residence. They are in need of some remedial tree surgery works to make safe large size dead/unstable growth and Ivy will require management to improve the windsail of their crowns.

On the site side, there is a need to erect boundary treatment which will need to be of a fence type structure to minimize impact on these trees and there will only be a need to dig small diameter holes to facilitate the fence upright and these will need to be dug manually avoiding cause excessive soil and root damage.

There is also a need to install a new path along by these trees on the site side and this will need to be installed using a No-Dig methodology where the path surface is installed above existing ground levels above tree roots to avoid causing damage to the detriment of the trees.

5.2.2 **In summary**, 3No. Trees plus one section of hedge and c.25m of two other sections of hedges are being shown for removal to facilitate the proposed residential scheme.

The tree and hedge vegetation for removal is as follows:

Hedge No.1 – c.15m central section plus 2No. trees.

Hedge No.2 – c.10m section of hedge.

Tree No.1406

Hedge No.7A – its complete length (c.32m).

The trees and hedge vegetation to be removed to facilitate the proposed development will have minimal impact on the overall treescape of this area and is to be mitigated against within the landscaping of this completed development which will see new tree, hedging and shrubs planted using a mix of tree species and sizes to complement these grounds. See landscape architect's drawings and schedules for full detail on tree planting.

5.3.0 Tree Retention.

5.3.1 The following are the main areas for consideration during the proposed development/ construction works:

Item	Comments
<p>Tree Pruning</p>	<p>As part of the initiating works, the crowns of some of the trees are to be pruned to remove dead/unstable growth, the pruning of individual limbs/branches or entire crowns to reduce size due to structural weaknesses or to improve their juxtaposition within the built environment. A preliminary list of these works is given within the condition tree assessment in 'Appendix 2' of this report and these are to be reviewed on site prior to being carried out.</p> <p>All tree felling and pruning work to facilitate this proposed development on these grounds need to be carried out by qualified and experienced tree surgery firm <i>before</i> any construction work commences; all tree work should be in accordance with <i>BS3998 (2010) Tree Work – Recommendations</i>.</p> <p>All trees for removal will need identified by the project Arboriculturist and to be felled to stumps. All stumps in particular those which are located within the root zone of trees being retained are to be ground out using a mechanical stump grinder taking care not to cause root damage to the trees being retained.</p> <p>All tree works to be undertaken in consultation with project ecologist to ensure compliance with the wild life act.</p>
<p>Tree Protection</p>	<p>The tree and hedge vegetation being retained will need to be protected from unnecessary damage during the construction process by effective construction-proof barriers that will define the limits for machinery drivers and other construction staff.</p> <p>Ground protected by the fencing will be known as the 'Work Exclusion Zone' and sturdy protective fencing will need to be erected along the points identified in the Tree Protection Plan (Dwg No.LTL002) prior to any soil disturbance and excavation work starting on site. This is essential to prevent any root or branch damage to the retained trees. The British Standard <i>BS5837: Trees in relation to design, demolition and construction (2012)</i> specifies appropriate fencing, see 'Appendix 1' for details.</p> <p>All weather notices will need to be erected on the fences with words such as: "Tree Protection Fence — Keep Out". When the fencing has been erected, the construction work can commence. The fencing should be inspected on a regular basis</p>

Item	Comments
	<p>during the duration of the construction process and shall remain in place until heavy building and landscaping work have finished and its removal is authorized by the project Arboriculturist.</p>
Construction	<p>It will be important that good housekeeping is in place at all times so that the site does not become congested.</p> <p>All construction works are to be well planned in advance so as not to put pressure on the protective zone around the tree vegetation being retained. All works are to occur from outside the protective zones.</p> <p>Where work space between the building lines and the protective fence lines is limited/ restricted, alternative work methods will need to be looked at so as to keep the work areas to their minimum in order to reduce the extent of soil and root damage occurring to the trees proposed for retention. See section 6.2.3 of BS5837 2012 for detail on working within the RPA and ground protection. For light access works within the work exclusion zone, the installation of suitable ground protection in the form of scaffold boards, woodchip mulch or specialist ground protection mats/plates may be acceptable. These are to be reviewed with the project Arboriculturist and installed to their recommendations. See detail in 'Appendix 1' of this report for sample.</p> <p>Care will need to be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious damage to them and might make their safe retention impossible.</p> <p>Materials, which can contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, cannot be discharged within 10m of a tree stem.</p> <p>Fires cannot be lit in a position where their flames can extend to within 5 m of foliage, branches or trunk. This will depend on the size of the fire and the wind direction.</p> <p>Notice boards, wires and such like cannot be attached to any trees. Site offices, material storage and contractor parking will need to be located outside the work exclusion zones of the tree vegetation being retained.</p>
Services	<p>See project engineer's drawings for detail for service routes. Services entering and leaving the site area are to be routed so they run outside the work exclusion zones (fenced off areas) of the trees being retained.</p> <p>Prior to the installation of any services, these are to be marked out on site for review by the project Arboriculturist and a detail</p>

Item	Comments
	method statement is to be prepared by the installation contractor in conjunction with the project Arboriculturist on how these services are to be installed while providing protection to the tree vegetation shown for retention.
Landscaping	<p>The existing ground levels within the RPA of the trees are to be retained and incorporated into the finished landscaped development. Where changes in levels occur, these are to be either graded into the finished levels starting outside the RPA or alternatively, retaining wall structures are to be used differentiating between the different levels.</p> <p>All soft and hard landscaping within the RPA of the trees to be retained are to be carried out manually and the soil levels are not to be lowered or raised resulting in root damage to the trees. All surfaces are to be porous to allow the free movement of air and moisture to the roots below. Recommendations of sections 8 of BS5837 2012 are to be adhered to during the landscaping within the RPA's of these trees.</p> <p>It will be important within these areas that all works are carried out manually with minimal intervention with machinery and where machinery is required; this will need to be of a small light weight type and all works will need to be supervised by the project Arboriculturist. Where this machinery needs to transverse the root protection areas of trees, the route for this will need to be protected by boarding or other means to meet the requirements of 'Section 6 of BS5837 2012'.</p>
Boundary Treatments	It is my understanding that any boundary treatments required along by the tree and hedge vegetation being retained are to be of a fence type structure where there will only be a need to excavate small diameter holes for the fence uprights and these will need to be dug manually or with an augur with no machinery allowed to operate within the work exclusion zones fenced off by the tree protection fencing. The working ground area required during these works will need to be protected from impacts/damage by a suitable ground protection such as scaffold planks laid butt jointed on a bed of woodchip.

5.4.0 Monitoring.

- 5.4.1 Any construction works within close proximity to retained trees and hedge vegetation are advised to be undertaken in accordance with approved method statements prepared by the construction contractor under the direct supervision of a qualified consultant Arboriculturist. Therefore, during the construction works, a professionally qualified Arboriculturist is recommended to be retained by the principal contractor or site manager to monitor and advise on any works within the RPA of retained trees to ensure successful tree retention and planning compliance.

- 5.4.2 It is advised that tree protection fencing, any required special engineering and supervision works must be included in the main tender documents, including responsibility for the installation, cost and maintenance of tree protection measures throughout all construction phases.
- 5.4.3 Copies of the tree retention and protection plan (Dwg No.LTL002) a copy of BS 5837(2012) and NJUG 4 (2007) should all be kept available on site during development. All works are to be in accordance with these documents.
- 5.4.4 On the completion of the construction works, all trees retained are to be reviewed by the project Arboriculturist and any necessary remedial tree surgery works required to promote the health of the trees and safety are to be implemented.

6.0 Arboricultural Method Statement/Tree Protection Strategy.

- 6.1 The objective of this arboricultural method statement/tree protection strategy is to provide information for the main building contractor/site manager on how trees need to be protected during a construction project and so that they can prepare their own site specific detailed method statement for their works.
- 6.2 It is necessary for tree protective fencing to be erected and all other mitigation measures required to be put in place prior to the development works commencing on site and these are to enclose and protect the root zone of the tree vegetation proposed for retention. See Dwg No.LTL002, for the position of the protective fencing and other mitigation measures.
- 6.3 The protection of the tree vegetation shown for retention within this proposed development is divided into three main sections starting with the preconstruction stage right through to post construction and the reassessment of the retained trees.

6.4.0 Stage 1 - Pre-Commencement of the Construction Works.

- 6.4.1 Prior to the main construction works commencing on site the following needs to be planned:
1. The client or main contractor needs to appoint an Arboriculturist for the duration of the project. The Arboriculturist is to make regular site visits to ensure that the tree protection measures are in place and adhered to.
 2. The main contractors and all sub-contractors work force are to be briefed on the tree protection and ensure that these measures are to be kept in place throughout the construction period.
 3. All personnel are to adhere to the recommendations of the appointed Arboriculturist.
 4. Any issues in relation to the trees shown for retention must be discussed with the appointed project Arboriculturist and the necessary mitigation measures put in place without delay and prior to the works being carried out.

6.4.2 Site meeting.

Prior to any works commencing on site, it is necessary that a meeting be arranged between the project manager, site foremen, the project landscape architect, the project Arboriculturist and local authority parks department to identify and finalize the trees for removal and the line of the protective fencing.

6.4.3 Tree works.

The client or the main contractor is to appoint a tree surgery company competent of carrying out the remedial tree surgery works and tree felling that are required on this site. The tree surgery contractor is to produce a method statement detailing how they plan to undertake the works and informing the site foreman of the process so the necessary steps can be taken to ensure the works are carried

out safely and efficiently. The works are to be carried out by appropriately trained personnel taking account of the recommendations of BS3998 2010.

Tree removal - Trees for removal are to be identified by the project Arboriculturist and the method of removing the stumps is to be carried out to the recommendations of the project Arboriculturist. The trees in the way of the development layout are to be removed in such a manner not to cause damage to those being retained. Where necessary to avoid damage to the trees to be retained, these are to be removed in sections by a tree surgeon (Arborist). Where necessary, the roots and stumps are to be dug out with a digger except where the stumps are located within the RPA (root protection area) of trees being retained. In this instance, the stumps are to be ground out with a mechanical stump grinder taking care not to cause damage to the roots of trees being retained.

Remedial tree surgery works - The necessary remedial tree surgery works required to promote health and safety of the trees to be retained are to be carried out. A schedule of these works is to be produced by the project Arboriculturist taking into consideration the trees within their new built environment and prior to these works being carried out; they are to be agreed with the local authority.

6.4.4 Erection of the protective fencing.

Once the trees have been removed, the line of the protective fencing that is required around the trees being retained **must be** erected as per Dwg No.LTL002.

The fencing needs to be 2.3m high and constructed in accordance with figure 2 of BS 5837 2012 (see fencing detail on Dwg No.LTL002 & appendix 1) using vertical and horizontal scaffold bars well braced together with the verticals spaced out at a maximum of 3m centres. Onto this, weld mesh panels are to be securely fixed with wire or scaffold clamps.

Signs need to be attached to these fences warning people to 'keep out'. See detail within Dwg No.LTL002& 'Appendix 1'.

Once the protective fence line is erected, then the main construction works can commence on site.

Storage of Material, Work Yards and staff car parking - These areas must be identified on the work drawings prior to the construction works starting. These must be positioned outside the root protection areas around the trees being retained.

6.5.0 Stage 2 -The Construction Works Stage.

6.5.1 **Protective fencing** - During the course of the works, special attention must be paid to ensure that these fences remain upright, rigid and complete at all times.

They must be checked daily by the main contractor/foreman and any damage noted must be fixed immediately.

If works need to take place inside the protective fence lines, then the project Arboriculturist and the local authority parks department must be informed in advance of the works taking place and the mitigation measures required to reduce impact on the trees and hedges agreed. These mitigation measures will include the supervisions of these works by the project Arboriculturist.

The protective fencing is to remain in place throughout the construction works phase and must only be removed when all the works are complete and at this stage incorporated into the finished landscape.

6.5.2 **Excavations** - The excavation works are only to commence once the protective fence line is in place.

The excavations need to be viewed on site once marked out with the project manager, site foreman and the project Arboriculturist in advance of excavation to determine the extent of the impact and the work space required to allow for the construction works to proceed and to assess what additional mitigation measures if any will be required to protect those trees to be retained. In certain areas, it may be necessary to use an alternative method of excavating to prevent encroachment into the RPA of the trees to be retained and this may include such methods as retaining walls or similar.

Where roots of trees to be retained are exposed during the excavation works, these are to be assessed by the project Arborist and pruned back beyond damaged material. The excavated face is then to be covered with soil or with Hessian sacking to prevent further drying out and death of root material. Where the Hessian sacking is used, it will be necessary to keep this moist especially during dry periods.

6.5.3 **Working within the RPA (Root Protection Area)** – If it becomes necessary to carry out works within the RPA of a tree/trees, these must be discussed and agreed with the project Arboriculturist. All works must be carried out manually. Root pruning is to be undertaken by an Arboriculturist using proprietary cutting tools such as a secateurs or hand pruning saw.

The ground within the RPA of the trees must be protected from damage as per the recommendations of **section 6.2.3** of BS5837 2012. See detail within '**appendix 1**' on ground protection using boarding for pedestrian loading.

6.5.4 **Finished ground levels/Landscaping** - The existing ground levels within the RPA of trees must be retained and incorporated into the finished landscaped development. Where changes in levels occur, these are to be either graded into the finished levels starting outside the RPA or alternatively, retaining wall structures are to be used differentiating between the different levels.

All soft and hard landscaping within the RPA of the trees to be retained must be carried out manually and the soil levels must not be lowered or raised resulting in root damage to the trees. All surfaces are to be porous to allow the free

movement of air and moisture to the roots below. Recommendations of sections 8 of BS5837 2012 must be adhered to during the landscaping within the RPA of the trees being retained.

6.5.5 Other items

The following is a list of additional activities ***that are not allowed*** within the RPA or within the vicinity of the trees being retained.

- 1 - Storage of equipment, fuel, construction material, or the stockpiling of soil or rubble.
- 2 - Burning rubbish
- 3 - The washing of machinery
- 4 - Attaching notice boards, cables or other services to any part of the tree.
- 5 - Using neighbouring trees as anchor points.
- 6 - Care is required when using machinery such as Tele-porters, cranes or other equipment close to trees so as not to damage the crown or any other parts.

6.6.0 Stage 3 - Post Construction Works.

- 6.6.1 This project is not to be considered complete until all retained trees have been re-examined by the project Arboriculturist and the remedial works necessary to ensure the health of the trees and the immediate safety of the end user of this development are implemented.

This report has been produced as part of a planning application for these lands and is for the sole use of the above named client and refers to only those trees identified within. Its use by any other person(s) in attempting to apply its contents for any other purpose renders the report invalid for that purpose.

Signed Michael Yallop
Michael Yallop MArborA

Date 10/04/24

MArborA, MSc in Arb and Urban Forestry, Bsc hons Hort, ISA Cert, Lantra professional tree inspection, NPTC City and Guilds, Member of the institute of Chartered foresters, Health and Safety Cert.

This report and findings have been reviewed by:

Signed *Felim Sheridan*
Felim Sheridan
 F. Arbor. A, RFS Dip, Nat. Dip & NCH in Arboriculture

Date 10/04/2024

Felim Sheridan's qualifications:

Fellow of the Arboricultural Association (F. Arbor. A), Professional diploma Arboriculture (RFS), National diploma Arboriculture (ND) and National certificate Horticulture (NCH).

Appendix 1

Sample of Temporary Tree Protection Fencing Detail and Ground Protection.

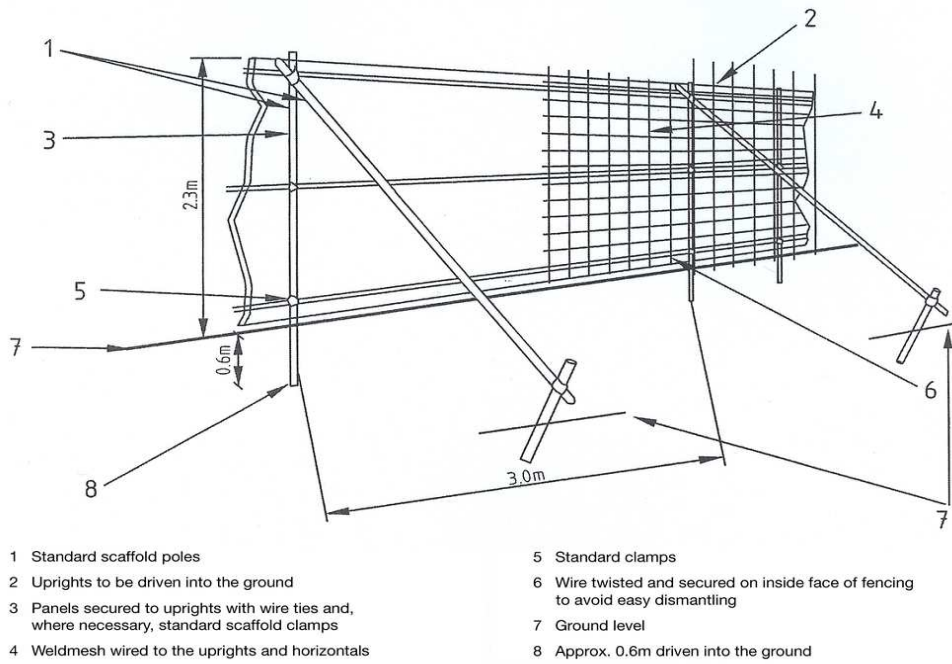


Figure 2. – Protective fencing for RPA



Sample of signage to be placed on fence panels.

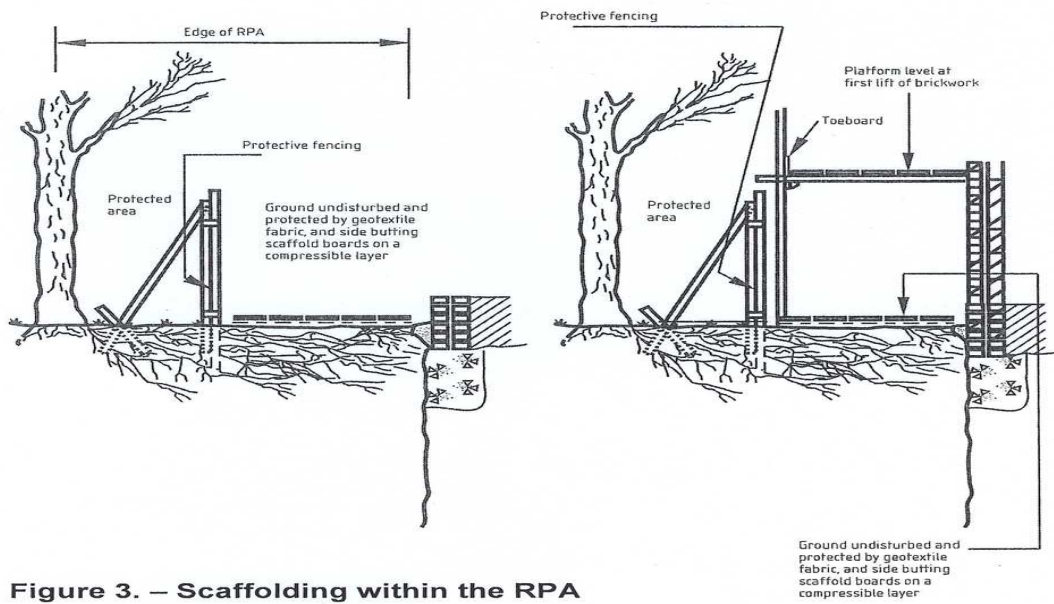
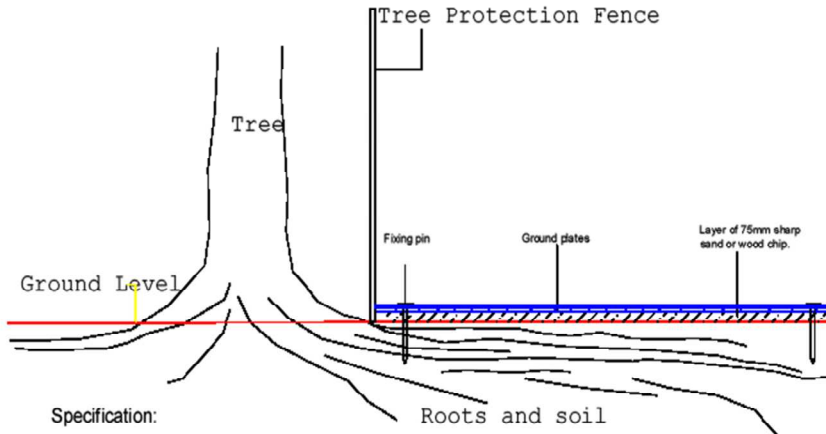


Figure 3. – Scaffolding within the RPA

Sample of temporary ground protection



Specification:

1. Lay min. 75mm depth of sharp sand/wood chip over identified ground area
2. Lay side-butting scaffold boards/15mm poly propylene road plate over sand/wood chip
3. Fix ground protection cover into place with pins/pegs

Appendix 2

Condition Tree Assessment.

On Site Area off 'Lahauntstown Lane' on Lands at Cherrywood, Dublin 18.

Date: 19th February 2024

Survey Notes

All codes referred to in this report are approximate and serve as a general guide only.

Reference to Numbers: The trees have metal tags attached and these correspond with the numbers in this report.

Reference to age class is as follows:

Young:	A tree, which has been planted in the last 10 years.
Semi Mature	A tree that is less than 1/3 the expected height of the species in question.
Early Mature:	A tree, which is between a 1/3 and 2/3's the expected height of the species in question.
Mature:	A tree that has reached the expected height of the species in question, but still increasing in size.
Over Mature:	A tree at the end of its life cycle and the crown is starting to break up and decrease in size.

Reference to Physiological, Structural Condition and other comments:

Physiological Condition

- Good:** A tree with no major defects, but possibly including some small defects.
- Fair:** A tree with some minor defects such as bark Wounds, isolated decay pockets or structure affected due to overcrowding.
- Poor:** A tree with more serious defects such as extensive deadwood, decay or defective to the point of being dangerous.

Structural condition and other comments –

This records noted visual defects and other information about the trees health and structure.

Estimated Remaining Contribution in years

This is based on an Arboricultural assessment of the tree and is estimated based of the findings noted at time. Trees still need to be reviewed on a regular basis, preferably annually.

- Less than (<) 10 years remaining contribution
- 10 + years remaining contribution
- 20 + years remaining contribution
- 40 + years remaining contribution.

Retention Categories

The purpose of the tree categorization method is to identify the quality and value of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained should development occur.

It is carried out in accordance with section 4.5 (Tree Categorization Method) of BS 5837 2012.

Summary

Main categories

Category U – Those trees in such a condition that any existing value would be lost within 10 Years. Most of these will be recommended for removal for reasons of sound Arboricultural practice.

Category A - Trees of high quality/value with a minimum of 40 years life expectancy.

Category B – Trees of moderate quality/value with a minimum of 20 year life expectancy.

Category C – Trees of low quality/value with a minimum of 10 years life expectancy

Sub categories

1 – Mainly Arboricultural Values

2 – Mainly Landscape values

3- Mainly Cultural and conservation value

Note: Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation.

If a layout design places Category U trees in an inaccessible location such that concerns over public safety are reduced to an acceptable level, it may be preferable or possible to defer the recommendation to fell.

The terms ‘Group, woodland or tree line’ is intended to identify trees that form cohesive Arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally including for biodiversity (e.g. parkland or wood pasture), in respect to each of the three subcategories.

Reference to Crown spread, Height and Trunk Diameter:

This gives a **guide** to the area taken up by the tree.

Trunk diameter is the diameter of the main trunk taken at a height of 1.5m and is recorded in millimetres (mm).

Height records the overall height of the tree and is given in meters (m).

Crown Spread records the extent of the branches normally in a north, south, east and west direction from the base of the tree and is given in meters (m).

Clear crown height records the distance between the ground and the first branch from the base of the tree and is given in meters (m)

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade									
								N-north S-south E-east W- west Phys.-physiological.	A- average											
		A Condition Assessment of the tree and hedge vegetation within the site area off 'Lehaunstown Lane' Cherrywood, Dublin 18.																		
		The main site area is rectangular in shape and is currently in agricultural use for grazing livestock.																		
		The assessment starts in the north west corner at the agricultural entrance and works in a general anti-clockwise direction around the site area.																		
Hedge No. 1	Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i>	<p>It runs in a north/south direction on the western boundary of the site area between two fields. It is of a mature age class in fair/ poor condition physiologically and structurally with the northern section being of better quality. It consists of clumps of Hawthorn and Elder with large infills of Bramble and Dogrose with gaps/openings with little or no vegetation allowing passage from one field to the other, particularly at the southern end. It has been impacted by livestock sheltering/grazing affecting its structure and quality. Due to lapsed management this hedge has fallen into disrepair and sections have failed with Bramble encroaching out to create a broad scrub hedge. Some of the hedge plants are being suppressed by Ivy which is increasing their wind sail leaving them more prone to wind/storm damage.</p> <table border="1" data-bbox="443 901 846 970"> <tr> <td>A.</td> <td>---</td> <td>A.</td> <td>---</td> </tr> <tr> <td>3.5</td> <td></td> <td>6</td> <td></td> </tr> </table> <p>The following trees are located within this hedge working from north to south.</p>									A.	---	A.	---	3.5		6		Carry out general tidying works and trim in encroaching hedge species. The height of the hedge should be cut back to c.1.5m, in particular the poorly structured sections to improve structure and encourage lower growth development. Carry out some infill planting in gaps in order to bulk up this hedge and to improve its diversity and structure. Cut Ivy at ground level on the hedge plants where it is very heavy and leaving plants prone to storm damage.	C2
A.	---	A.	---																	
3.5		6																		
Tree Group No. 1	Sycamore <i>Acer pseudoplatanus</i>	14	500 ave	6,6,6,6	0.5	Mature	Fair	Fair. It is a mature group of stems, with heavy Ivy cover on their main stems.	It would benefit from Ivy being cut at ground level where heavy.	20+	B2									
Tree Line No. 1	Sycamore <i>Acer pseudoplatanus</i> , Ash <i>Fraxinus excelsior</i>	12	300	4,4,4,4	0	Early mature	Fair	Fair. They are growing as part of a group from an old hedge/embankment in Hedge No. 1 and there is heavy Ivy along their main stems. Our assessment is restricted due to dense undergrowth of Bramble which has extended out into the field.	Clear back heavy Bramble growth to allow access for inspection to the lower stem and base. Cut Ivy at ground level where heavy in trees.	20+	B2									

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
1401	Sycamore <i>Acer pseudoplatanus</i>	14	440, 450, 400, 550	5,5,6,6	0.5	Mature	Fair/ Good	Fair. It consists of four large stems growing in Hedge No.1. They have received little past maintenance and there is Ivy on the main stems beginning to extend into its crown.	Cut Ivy at ground level.	20+	B2
1402	Ash <i>Fraxinus excelsior</i>	13	650	4,2,5,4	1	Mature	Fair	Fair. It is growing within Hedge No.1 and it has an asymmetrical crown. Heavy Ivy cover and Bramble has limited inspection of stem and basal area.	Cut Ivy at ground level and clear around the base to allow re-inspection.	10+	C1
1403	Ash <i>Fraxinus excelsior</i>	18	900	4N 3S 5E 5W	10	Mature	Fair	Fair / Poor It is being suppressed by Ivy and a large size limb has been removed on the south side, leaving a decaying stump and has left its crown more open/ exposed. It has suffered some recent storm damage. The visual assessment has been limited due to Ivy and undergrowth.	Cut Ivy at ground level and tidy around base to allow a more detailed assessment.	10-20	C1
1404	Sycamore <i>Acer pseudoplatanus</i>	14	490	N3 S4 E3 W4	3.5	Early Mature	Fair/ Good	Fair It is growing up through the hedge and has heavy Ivy coverage. Heavy undergrowth has limited its inspection of the base and lower stem.	Cut Ivy at ground level and tidy around base to allow a more detailed assessment.	20+	B1
1405	Ash <i>Fraxinus excelsior</i>	16	800	N6 S6 E7 W6	2	Mature	Fair	Fair It is growing on the hedge line with heavy Ivy cover extending into its crown which has limited our inspection	Remove large size deadwood. Cut Ivy at ground level and allow to die off for reassessment	10+	C1
1406	Ash	14	350/	N5	2	Early	Fair	Fair/Poor	Cut Ivy at ground level at	10+	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
	<i>Fraxinus excelsior</i>		280	S6 E5 W6		Mature		It is self-seeded and located out from the hedgerow and is growing from the base of the shed. It is twin-stemmed from base with an acute union formation between stems. Soil erosion has been caused around its base by livestock and Ivy cover is extending into its crown. It may lead to structural damage to the shed as it grows in size.	present. Monitor stability and potential structural damage to shed.		
Hedge No. 2	Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Ash <i>Fraxinus excelsior</i>	It runs at ninety degrees to Hedge No.1 and is located along the southern boundary of this site area, running in an east-west direction. It is of a mature age class in fair condition physiologically and in fair/ poor condition structurally. It consists of clumps of Hawthorn, Elder, Blackthorn, Bramble and Dogrose and is located on the north side (site side) of a deep drainage ditch which is dry at present. Ash trees form the upper canopy formation and due to lapsed management, the hedge species have been allowed to grow unmanaged, in particular Bramble encroaching out in places creating scrub areas and making access difficult. It has been impacted upon along its length on the site side by the livestock sheltering and grazing. There are some bagger sets present within the hedgerow bank. Construction has begun to take place on the neighbouring site to the south with stripping of soil. Tree protection fencing should be erected to protect the hedge on that side.							Carry out general tidying works and trim in encroaching hedge species. The poorly structured section of hedge should be cut back to address stability and to improve structure and encourage lower growth development. Carry out infill planting in order to bulk up this hedge and to improve its diversity and structure. Cut Ivy at ground level on the hedge sections where it is very heavy and leaving plants prone to storm damage. Monitor the condition of the Ash trees in particular impacts from infection by 'Ash Dieback'.	C2	
		A.	---	A.	---						
		3.5		6							
		The following trees are located within this hedge and the assessment works from west to east.									
1407	Ash <i>Fraxinus excelsior</i>	16	350 (5 stems)	N3 S5 E5 W5	2.5	Mature	Fair	Fair It is multiple stemmed from base and is growing from the south side of the boundary drainage ditch. Ivy is extending up into the crown causing suppression. Heavy undergrowth of Bramble is extending into	Remove large size dead/unstable growth. Cut Ivy at ground level at present.	10+	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
								the field.			
1408	Ash <i>Fraxinus excelsior</i>	18	450 (5 stems)	N5 S7 E7 W	2	Mature	Fair	Fair It is multiple stemmed from base with heavy Ivy cover extending into its crown. Some storm damage in its crown is leaving it more open/ exposed and there is some deadwood present. Soil erosion is being caused by livestock. Heavy undergrowth has limited the inspection.	Remove dead/ unstable growth and prune in heavy exposed side branches. Cut Ivy at ground level and tidy around base to allow a more detailed assessment.	10+	C2
1409	Ash <i>Fraxinus excelsior</i>	16	360 (6 stems)	N7 S7 E8 W5	2	Mature	Fair	Fair It is multiple stemmed from base with heavy Ivy cover extending up into its crown causing suppression. It has a broad spreading crown and fencing wire is attached to the lower trunk. Soil erosion around its base is being caused by livestock. There is some minor decay around its base.	Make safe large dead/ unstable growth. Cut Ivy at ground level and tidy around base to allow a more detailed assessment.	10+	C2
Tree Group No.2	Ash <i>Fraxinus excelsior</i>	A.18	A.350 (5 stems)	A.N7 S7 E7 W7	A.4	Mature	Fair	Fair It consists of a line of Ash trees located on the north side (site side) of a deep drainage ditch. They are growing at close spacing and form part of the one continuous canopy line. Most of these trees are multiple stemmed from base with large crown overhangs on the site side. Heavy Ivy cover on some trees is extending up into their crowns and they have been impacted around their bases by grazing livestock. Some trees have suffered storm damage and there are decay cavities at the base of some stems and this would need to be reviewed for the future site plans. Soil alterations are taking	Make safe large dead/ unstable growth and lighten in heavy side limbs/branches, particularly those with structural issues such as decay wounds. Cut Ivy at ground level.	10+	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
								place on the south side and may impact their root zones.			
0658	Ash <i>Fraxinus excelsior</i>	18	900/ 300	N8 S10 E11 W7	2.5	Mature	Fair/ Poor	Fair/Poor It is growing on the hedgerow bank and has a broad spreading crown slightly asymmetrical to the west. It contains some heavy side branches and I suspect that it suffered storm damage in the past which has left its crown more open/ exposed. Heavy lvy cover on the main trunk is extending up into its crown and is increasing its crowns windsail. It is showing some signs of stress/ decline throughout most likely due to "Ash dieback" (<i>Hymenoscyphus fraxineus</i>) and contains deadwood as a result. There is a secondary stem developing from its base. Heavy undergrowth around the base has limited the inspection.	Make safe large size dead/ unstable growth and lighten in heavy exposed side limbs/branches. Cut lvy at ground level and remove to a height of c.2m to allow a more detailed assessment of its base and lower trunk for structural weaknesses. It may require some additional pruning, depending on the development in this area. Monitor infection by 'Ash Dieback'.	10+	C2
0659	Ash <i>Fraxinus excelsior</i>	17	320/ 500	N10 S9 E9 W5	2	Mature	Fair	Poor It is a large, tall tree within this area. Multiple-stemmed from base and one stem has completely failed while another leans heavily and is prone to breaking out. This has left the remaining crown more open/exposed and prone to further storm damage. Heavy lvy cover on the main stems is extending up into its crown. It is located within a low risk hazard area, at present.	Tidy up the area around its base and cut lvy at ground level and remove to a height of c.2m to allow a more detailed assessment of its base and lower trunk. It is likely that it will require pruning or removal to reduce the	<10	U

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
									risk of failure. Review when the site is laid out.		
0660	Ash <i>Fraxinus excelsior</i>	16	840	N9 S7 E5 W4	3	Mature	Fair/ Poor	Poor It is a large size, twin-stemmed tree from c.1.4m up. Extensive basal decay is present and this is likely to have an impact on its stability. It has an open crown due to storm damage and decline. It was initially being heavily suppressed by Ivy which has since been cut at ground level. It is prone to either partial or complete failure.	I will most likely need to be removed as part of management. Review in the development of this area.	<10	U
0661	Ash <i>Fraxinus excelsior</i>	15	800/ 360	N9 S5 E3 W5	3	Mature	Fair	Fair / Poor Heavy Ivy cover on the main trunk is beginning to extend up into its crown. It subdivides from base into multiple-stems and a large size limb on the east side has broken out in the past with decay developing into its base from this point. There are also other pockets of decay present. It has an open/ exposed crown due to previous storm damage.	Make safe large size dead/ unstable growth. Cut Ivy at ground level and remove from base to a height of c.2m to allow a more detailed assessment of its base and lower trunk. Review within the completed development. It is likely to require further pruning to address structural issues.	10+	C2
0662	Ash <i>Fraxinus excelsior</i>	15	540	N6 S5 E5 W4	6	Mature	Fair/ Poor	Fair/ Poor It is a tall tree growing up within a group environment; however it is becoming more open/ exposed by the storm damage/ failure of the neighbouring trees. Heavy Ivy cover on	Make safe large size deadwood and prune in exposed heavy side limbs/branches by up to 2m.	10+	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
								the main trunk is extending up into its crown and is increasing its crowns wind sail. Some lower scaffold limbs/ branches have been removed in the past in order to raise up its crown. I suspect that it is infected by 'Bacteria Canker' of Ash and is showing signs of stress/ decline within its crown most likely due to "Ash dieback" and it contains deadwood.	Cut Ivy at ground level and remove to a height of c. 2m to allow a more detailed assessment of its base and lower trunk.		
0663	Ash <i>Fraxinus excelsior</i>	14	240	N0 S2 E2 W2	3.5	Early Mature	Fair	Fair/ Poor It was initially twin-stemmed from base and one stem has either broken out or was cut off leaving a large size decay pocket at this point. It is growing off the hedgerow bank and leans away from the site area to the south. It is being sheltered by the surrounding trees with heavy Ivy cover on the main stems.	Cut Ivy at ground level in order to improve the wind sail of its crown. Tidy around base to allow a more detailed assessment. It will most likely need pruning to address structural issues.	10+	C2
0664	Ash <i>Fraxinus excelsior</i>	15	780	N7 S8 E7 W2	2	Mature	Fair/ Poor	Fair/Poor It is growing on the hedgerow bank within a group environment and is a tall, sheltered tree. Heavy Ivy cover on the main trunk is extending up into its crown and is increasing its crowns wind sail. There are some small decay pockets on the lower trunk and base. It contains deadwood within its crown with some heavy, end loaded side branches and it is also showing signs of stress/ decline throughout its crown most likely due to infection by "Ash dieback".	Remove large size dead/ unstable growth and lighten end loading on heavy side limbs/ branches by up to c.2m to lessen the risk of further storm damage. Cut Ivy at ground level and remove to a height of c.2m to allow a more detailed assessment of its base and lower trunk. Tidy up the area around its base.	10+	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
0665	Ash <i>Fraxinus excelsior</i>	15	500/ 480/ 290	N10 S5 E4 W2	3.5	Mature	Fair/ Poor	Fair/ Poor Multiple-stemmed from base with an asymmetrical crown weighed heavily towards the site area. It has been left more open/exposed by the storm damage/ failure or some neighbouring trees. One scaffold limb has broken out from near its base due to a weak union formation leaving its crown more open as a result. Heavy Ivy cover on the main trunk is extending up into its crown and is increasing its crowns windsail. It is showing signs of stress/ decline within its crown most likely due to infection by "Ash dieback" and it contains deadwood throughout. There is some infection throughout its crown by 'Bacteria Canker' of Ash.	Remove large size dead/ unstable growth and lighten end loading on heavy side limbs/ branches by up to c.2m to lessen the risk of further storm damage. Cut Ivy at level and remove to a height of 2m to allow a more detailed assessment of its base and lower trunk. Tidy up the area its base.	10+	C2
0666	Ash <i>Fraxinus excelsior</i>	14	410	N5 S8 E4 W3	3.5	Mature	Fair/ Poor	Poor It was initially multiple-stemmed from base, but some stems have broken out allowing for the entry of decay into its base. As a result, the remaining crown is very open/ exposed and asymmetrical and the remaining two stems are prone to storm damage/ failure due to the presence of decay at its base. It is being heavily suppressed by Ivy.	Cut down to a c.1m high stump and allow to sprout to form part of the bulking within the hedge line.	<10	U
0667	Ash <i>Fraxinus excelsior</i>	13	300/ 400	N4 S9 E1 W2	0	Mature	Fair/ Poor	Poor The main central stem has broken out leaving some side branches and secondary stems from its base to form an open crown. There is heavy Ivy cover on the main trunk. It forms part of the hedge bulking within this area and	Cut Ivy at ground level and tidy up the area around its base. Re-evaluate as part of the site layout but will most likely need to be cut	<10	U

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
								will be prone to further storm damage as these stems grow further in size. There is evidence of decay within the stems and stem unions.	down to address safety.		
0668	Ash <i>Fraxinus excelsior</i>	16	320/ 430	N7 S7 E5 W5	2	Mature	Fair	Fair It forms a twin-stemmed tree from base and is growing up forming part of the group canopy formation with Tree No. 0670. Heavy Ivy cover on the main trunk is extending up into its crown. It is sheltered within its present group environment. Heavy undergrowth has limited our assessment.	Cut Ivy at ground level in order to improve the windsail of its crown. Tidy up the area around its base to allow a more detailed assessment of its base and lower trunk.	10+	C2
0669	Tag Missing	-	-	-	-	-	-	-	-	-	-
0670	Ash <i>Fraxinus excelsior</i>	17	900	N6 S4 E8 W3	4	Mature	Fair	Fair/Poor It is a large size tree being heavily suppressed by Ivy and this has limited the visual assessment to some degree and is leaving it more susceptible to wind damage. There is evidence to suggest that it has suffered storm damage on the southern side in the past. It has a slightly open crown with some minor stress/ decline evident throughout, most likely indicating onset of infection by "Ash Dieback".	Cut Ivy at ground level and remove to a height of c. 2m to allow a more detailed assessment of its base and lower trunk. It will most likely require some pruning to address structural issues and risk of wind damage.	10+	C2
0671	Ash <i>Fraxinus excelsior</i>	10	410	N4 S4 E4 W4	3	Early Mature	Fair	Fair It is establishing well with heavy Ivy cover on the main trunk beginning to establish up into its crown. Dense undergrowth has limited the visual assessment to some degree.	Cut Ivy at ground level and tidy up the undergrowth.	10+	C1
Hedge No. 3	Crack Willow <i>Salix fragilis</i> Alder <i>Alnus gluttons</i>	It runs at ninety degrees to hedge No.2 and extends along the eastern boundary bordering with the stream. It is of a mature age class of fair to poor quality. It is located on the bank of the stream and consists of a few clumps of Crack Willow and Alder with a dense undergrowth of Bramble and Dogrose. It also contains							Carry out general tidying works and trim in encroaching hedge species on site side. Carry out some infill planting in order to		C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade								
								N-north S-south E-east W- west Phys.-physiological.	A- average										
	Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Giant Hogweed <i>Heraclea mantegazzianum</i> Ash <i>Fraxinus excelsior</i>	some Giant Hogweed throughout. The vegetation located along the boundary is strengthened with the trees and shrub vegetation growing in the gardens of the adjoining properties on the east side of the stream.						<table border="1"> <tr> <td>A.</td> <td>---</td> <td>A.</td> <td>---</td> </tr> <tr> <td>2</td> <td></td> <td>6</td> <td></td> </tr> </table>	A.	---	A.	---	2		6		bulk up this hedge and to improve its diversity and structure.		
A.	---	A.	---																
2		6																	
0672	Willow <i>Salix fragilis</i>	17	310/ 190	N4 S4 E3 W4	3	Early Mature	Fair	Poor It is growing off the bank of the stream and its stability may be affected due to its position on the bank and its species. It is multiple-stemmed from low down with a dense undergrowth of Bramble which has limited the inspection.	Clear around the base to allow more detailed inspection.	10-20	C2								
Tree No. 1	Ash <i>Fraxinus excelsior</i>	14	600/ 330	N7 S6 E6 W6	1.5	Early Mature	Fair	Fair It is located on the adjoining landside of the stream with a crown overhang into the site area and it has suffered branch breakage in winds. It forms a twin-stemmed tree from low down. It shows evidence of 'Ash dieback' in its crown. The visual assessment has been limited to the site side only.	Management is located outside the control of the site area.	10+	C1								
0673-0674	Willow <i>Salix fragilis</i>	A.7	A. 90 (8 stems)	N5 S6 E6 W5	1.5	Early Mature	Fair	Fair / Poor They form part of the higher bulking along the bank of the stream. They are multiple-stemmed with a dense undergrowth of Bramble. Some stems have fallen over and have re-established and they will be prone to ongoing limb failure. The area has become heavily over grown and Bramble has extended	Clear around the base to allow an inspection of the stem base	10-20	C2								

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
								up into the crowns and out into the field. This had limited the assessment of the lower stems and base.			
0675	Willow <i>Salix fragilis</i>	8	A. 90 (5 stems)	N2 S1 E2 W2	2	Early Mature	Fair	Fair / Poor It forms part of the bulking along the bank of the stream. It is multiple-stemmed from base with a dense undergrowth of Bramble.	Tidy up the undergrowth at the present time.	10-20	C2
0676	Alder <i>Alnus glutionsa</i>	6	A.90 (4 stems)	N3 S2 E1 W2	2	Semi Mature	Fair	Fair / Poor It forms part of the bulking along the bank of the stream and is multiple-stemmed from base. Wire has been tied to its main stem and is causing damage as it grows into the stem. Heavy undergrowth of Bramble is limiting our assessment.	Tidy up the undergrowth at the present time.	10-20	C2
0677	Willow <i>Salix fragilis</i>	8	320	N4 S2 E3 W6	1	Early Mature	Fair	Fair / Poor Multiple-stemmed from low down and is growing off the bank of the stream with a dense undergrowth of Bramble. It has suffered storm damage in the past with limbs breaking out as a result. It forms part of the bulking within this area.	Tidy up the undergrowth at the present time.	10-20	C2
0678	Willow <i>Salix fragilis</i>	7	140/ 90	N7 S2 E3 W5	1	Early Mature	Fair	Fair/ Poor It consists of a group of stems with a dense undergrowth of Bramble. Some stems have broken out or have failed due to structure. Heavy undergrowth of Bramble has extended out from the original hedge line and has limited the inspection.	Retain as part of the bulking at the present time. Clear back Bramble to allow a more detailed inspection.	10-20	C2
Tree No.2	Leyland Cypress	14	300	4N	2	Early	Fair	Fair.	Clear around the base to	20+	C1

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade	
								N-north S-south E-east W- west Phys.-physiological.	A- average			
	<i>Cupressocyparis leylandii</i>			4S 4E 4W		mature		It is growing on the adjoining land side of the stream with the dense undergrowth which has limited access and the inspection from the site side.	allow access for inspection.			
Hedge No. 4A	Hawthorn <i>Crataegus monogyna</i> Elder <i>Sambucus nigra</i> Bramble <i>Rubus fruticosus</i> Dogrose <i>Rosa canina</i> Ash <i>Fraxinus excelsior</i> Blackthorn <i>Prunus spinosa</i>	It runs at ninety degrees to hedge No. 3 and extends up along the northern boundary of the site area and forms the boundary between two fields. It is of a mature age class in fair condition both physiologically and structurally. It consists of clumps of Hawthorn, Elder and Blackthorn with a dense undergrowth of Bramble and Dogrose. There are some Ash seedlings developing throughout and due to lapsed management, Bramble and Blackthorn have encroached out in places creating a broad hedge and scrub areas. There is no defined boundary drainage ditch.										
		A. 3.5	---	A. 8	---							
		The following tree is located within hedge No. 4A										
0679	Ash <i>Fraxinus excelsior</i>	8	290	N5 S5 E4 W4	1	Early Mature	Fair	Fair It has self-seeded in the hedge line and is establishing above the hedge height. It is located on the adjoining landside of the rail fence. There is Ivy cover on the main trunk.	Cut Ivy at ground level at present.	10+	C1	
Hedge No.4B	Mixed Ornamental Shrubs Bramble <i>Rubus fruticosus</i>	It extends west of hedge No.4A on the northern boundary with private residential properties. It is of a mature age class in fair condition physiologically and structurally. The main hedge line is located on the garden side of the boundary line and consists of a mix of ornamental shrubs planted as an informal hedge. On the site side, scrub species particularly Bramble is encroaching out to create a broad hedge. Within this hedge, there are a number of young to early-mature trees forming part of the hedge bulking. It provides good screening along the boundary of these private residences.										
		A. 4.5	A. 320	A. 6	0							

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
		The following tree protrudes up over this hedge line.									
Tree No.3	Norway Maple <i>Acer platanoides</i>	10	500 ave	4N 4S 4E 4W	2	Early Mature	Fair	Fair Protruding up over the hedge line and is growing from a neighbouring garden. It has minor Ivy on the stem.	Management is outside of this site area.	20+	B1
Tree No .4	Tulip Tree <i>Liriodendron tulipifera</i>	9	250, 200, 150 Ave	3N 3S 3E 3W	2	Early Mature	Fair	Fair Protruding up over the hedge line and is growing from a neighbouring garden side of the boundary fence. It is multiple-stemmed from base with acute union formation between some stems.	Management is outside of this site area.	20+	C1
Tree No.5	Birch <i>Betula pendula</i>	8	350	4N 4S 4E 2W	2	Early Mature	Fair	Fair It is growing within Hedge No. 4B on the neighbouring garden side of the boundary fence. It has an asymmetrical crown weighed to the east due to cutting to clear overhead utility lines	Management is outside of this site area.	20+	C1
Tree No. 6	Ash <i>Fraxinus excelsior</i>	12	500	3N 3S 1E 3W	3	Mature	Fair/Poor	Poor It is located on a hedgerow bank and was originally twin-stemmed from size. One of these stems has broken out due to basal decay and the other stem has been heavily cut back in the past and has a small crown of regrowth forming a small compact crown. There is heavy Ivy cover extending into crown.	Cut Ivy at ground level. Management may be outside of this site area.	<10	U
Hedge No.5	Leyland Cypress <i>Cupressocyparis leylandii</i>	It runs east to west on the southern side of an old field entrance track parallel to hedge No.4B on the boundary with a private residence. It is of a mature age class in fair/poor condition both physiologically and structurally. It has been heavily trimmed in the past to contain which has removed a large portion of live foliage and has a dense							It would benefit from tidying works, particularly the trimming in of encroaching Bramble on the track side and cutting the Ivy and Bramble growing		C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
		undergrowth of Bramble which is encroaching out on the track and also up into hedge along with Ivy to cause suppression. It provides screening along this boundary of the residential property.							up through the hedge.		
		A. 3	A. 240	A. 4	0						
Hedge No.6A	Leyland Cypress <i>Cupressocyparis leylandii</i> Griselinia <i>Griselinia littoralis</i>	It runs ninety degrees to Hedge No.5 to the rear of the residential property. It is of a mature age class in fair/poor condition physiologically and structurally. It forms the boundary on the field bordering the house and the garden. It has been heavily reduced in height and sides with a flail hedge cutter removing most of its live foliage. It is suppressed by Ivy and Bramble throughout which has limited its growth habit.							Management is outside of this site. It would benefit from cutting the Ivy and Bramble at ground level.		C2
		A. 8	A. 100	A. 3	0						
Hedge No. 6B	Griselinia <i>Griselinia littoralis</i>	It extends south of Hedge No.6A on the boundary between the field (site) and the private house. It is of a mature age class in fair condition physiologically and structurally. It has been kept cut low and provides limited screening with private property. Ivy and Bramble growing up through crown.							Management is outside of this site. It would benefit from cutting the Ivy and Bramble at ground level.		20+ C2
		H.T. 1.2	A. --	C.S. A2	A --						
Tree No.7	Sycamore <i>Acer pseudoplatanus</i>	8	380, 350	3N 3S 3E 3W	2	Early mature	Fair	Fair. It is growing inside the garden wall of the adjoining property in the corner of Hedge No. 6B and Hedge No. 7A. This has limited our inspection. It is twin stemmed from low down and it has Ivy on main stem extending up into its crown. It has caused structural damage to boundary wall.	Management is outside of this site. It would benefit from having the Ivy cut at ground level.	20+	B2
Hedge	Bramble	It runs at ninety degrees to Hedge No.6B on the field side of the boundary wall of the private							Remove bramble and re-plant a more		C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread N.S.E.W (m)	C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Phys.-physiological.	A- average		
No.7 A	<i>Rubus fruticosus</i>	residence. It is of a mature age class in poor condition physiologically and structurally. It consists predominantly of Bramble and has been recently cut to contain. It screens the boundary wall on site side.							appropriate hedge.		
Hedge No. 7B	Leyland Cypress <i>Cupressocyparis leylandii</i> Ornamental Shrubs	It extends west wards from Hedge No.7A along the boundary of the neighbouring residential property to the north. It is in a mature age class in fair/poor condition physiologically and structurally. It has been heavily trimmed and this has removed a large portion of its live foliage and Bramble and Ivy is growing through the hedge. The inspection has been limited to visual only due to its location.							Management is outside of this site area. It would benefit from the management/cutting of the Bramble and Ivy growing through the hedge.	C2	
		A.	A.	A.		0					
Tree Line No. 2	European Larch <i>Larix decidua</i>	A11	350 ave	A2N 2S 2E 2W	A2	Mature	Fair/ Poor	Fair/Poor. They are growing as part of a short line along the entrance track way to the field outside the boundary to the private residence. There is Ivy on the main stems and heavily suppressing their crowns. They have received damage to the lower stems from machinery using the field entrance track.	Cut Ivy at ground level and re-evaluate. Management may be outside of this site control.	10+	C2

