Arborist Associates Ltd

An Arboricultural Assessment on the Site Area at "Ballinahinch", Ashford, Co Wicklow.

Prepared for: Wicklow County Council.

Prepared by: Michael Yallop MArborA.

Date: 19th March 2024

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1.0 Instructions.

1.1 I have been instructed by Wicklow County Council to assess the site area at 'Ballinahinch', Ashford Co Wicklow and report on the following:

A - To assess the present condition of the tree vegetation within this site area. See condition tree assessment schedule within **'Appendix 2'** of this report and drawing No.BHP001 which has been prepared as a 'Tree Constraints Drawing' for details.

B - To assess the impact of the proposed development layout on the surrounding tree vegetation within the site area indicating those for removal and retention. See 'Section 5.0' of our report and 'Drawing No.BHP002 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 and be maintained in place until all construction works are complete. See 'Section 6.0' and **'Appendix 1'** of our report and 'Drawing No.BHP002' 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. 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 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 12-month period only and this may be reduced in the case of any change in conditions to or in the proximity of the trees.

2.4 Before undertaking any work to these trees, it would be advisable to check whether or not there is 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). The 'Forestry and Wildlife Acts' will also need to be taken into consideration prior to carrying out any tree works.

3.0 Survey Data Collection and Methodology.

3.1 The Arboricultural data which is presented within the attached tree schedule (see **'Appendix 2'**), has been recorded in line with BS 5837:2012. The tree survey was conducted by collecting and assessing the following information on all significant trees located on site and plotted on the land survey map provided.

- 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/category grade

3.2 Each tree included within this assessment has been marked with a small aluminum tag with a reference number that relates to the main condition report.

3.3 The inspection of the trees involves a visual assessment from ground level only and does not include any invasive means of assessing the trees internally, their below ground parts or the aerial parts that are not visible from the ground. Good, fair and poor have been used to summarize the physiological and structural conditions of these trees with the comments giving more detail. Other items that may limit the assessment of a tree included Ivy cover, scrub vegetation and/or basal suckers.

3.4 Their retention category has been assessed and categorized 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;

Arboricultural Value: An assessment of the trees health, structural form, life expectancy, species and its physical contribution to or effects on other features located on site.

Landscape Value: An assessment of a trees locality including its contributions to other features as well as to the site as a whole.

Cultural Value: Additional contributions made such as conservation, historical or commemorative value.

3.5 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.

These would be seen as trees that have little or no potential either due to their physiological and/or structural condition and their removal would be seen necessary either now or in the short-term as the most appropriate management option. Due to the condition of these trees, they should not be considered a constraint on the design layout of the proposed development of this site area.

Any category 'U' trees identified within this site area have been shown on our drawings (DWG Nos.BHP001 & BHP002) with a 'Red' donut around their trunk positions.

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

These would be seen as trees that have the potential to contribute to the tree cover of this area for the long-term.

From our assessment of the tree vegetation within and adjoining this site area, none were deem of sufficient quality to be included within this category grade.

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

These would be seen as trees that have the potential to contribute to the tree cover of this area for the medium term.

Any category 'B' trees identified within this site area have been shown on our drawings (Dwg Nos.BHP001 & BHP002) with a 'Blue' donut around their trunk positions.

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

These trees would be seen as having the potential to provide tree cover for the short to medium term. As part of the future management, some of these would probably be removed for one reason or another. These trees should not been seen as a considerable constraint on the development of these lands, but should be considered for retention where viable.

Any category 'C' trees identified within the site area have been shown on our drawings (Dwg Nos.BHP001 & BHP002) with a 'Grey' donut around their trunk positions.

3.6 The trees have been plotted onto the attached drawing (Dwg No.BHP001) by a land survey company and where not, they have been positioned by ourselves to the best of our ability and these positions may not be fully accurate. This drawing has been developed as a 'Tree Constraints Plan' to aid the design team in the layout of the development and the tag 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 recommended by BS 5837 2012. The constraint (Minimum Root Protection Area) for each tree has been shown with an 'Orange Circle' and all proposed development should be planned to be positioned outside those trees proposed for retention allowing for additional space for construction activities.

The Root Protection Area (RPA) is the minimum area around individual trees to be protected from disturbance during construction works; RPA is usually 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, 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 located to the south of the existing residential housing development 'Ballinahinch Park'. It is broken into two sections, the first section is on the east side of the estate and the second part is to the west of this separated by a central open space.

4.2 Both parts of the site area are adjoined to the north by the adjoining residential properties, to their south by a linear woodland belt running along both sides of a river and the first part of the site area is adjoined to the east by agricultural lands and the second area is adjoined to its west also by agricultural lands. There are a number of services already routed through this site area particularly along the sites southern boundary.

Figure 1: The site area at 'Ballinahinch Park', Ashford, outlined in red.
Redline boundary for indicative purposes only.

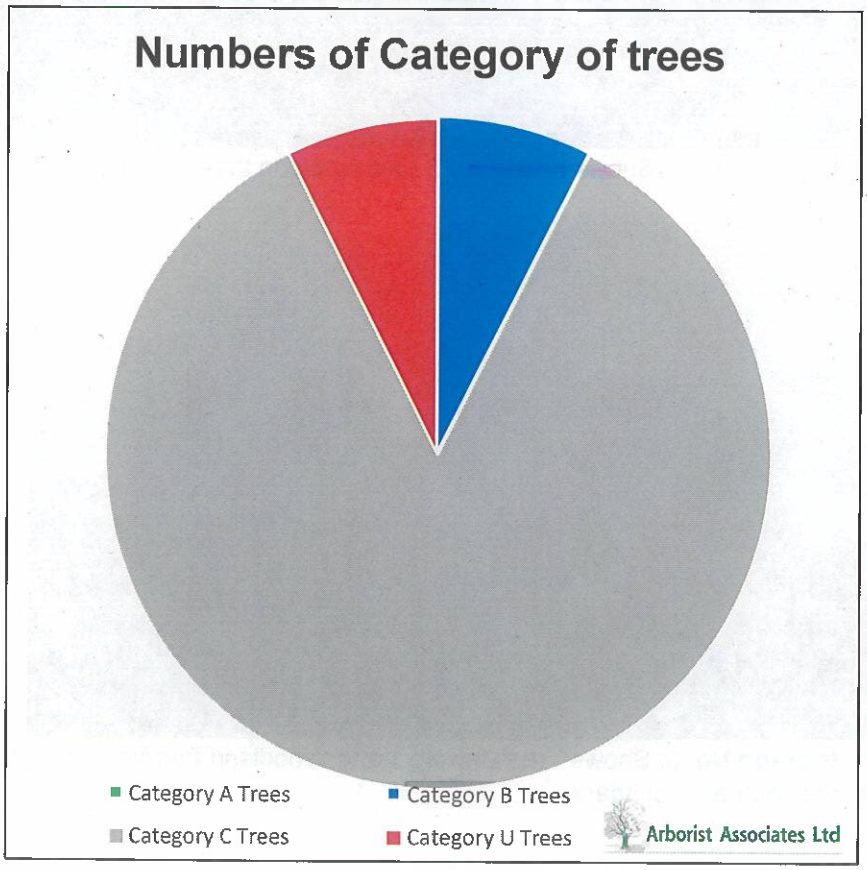
4.3 Both areas have been left derelict for some time and are dominated by course grass and weed vegetation with some scrub species such as Bramble and Gorse establishing out from the boundaries to create scrub areas. This is particularly true for the site area to the west where the hedge and scrub vegetation have been

allowed to encroach out smothering the site boundaries particularly along its northern boundary.

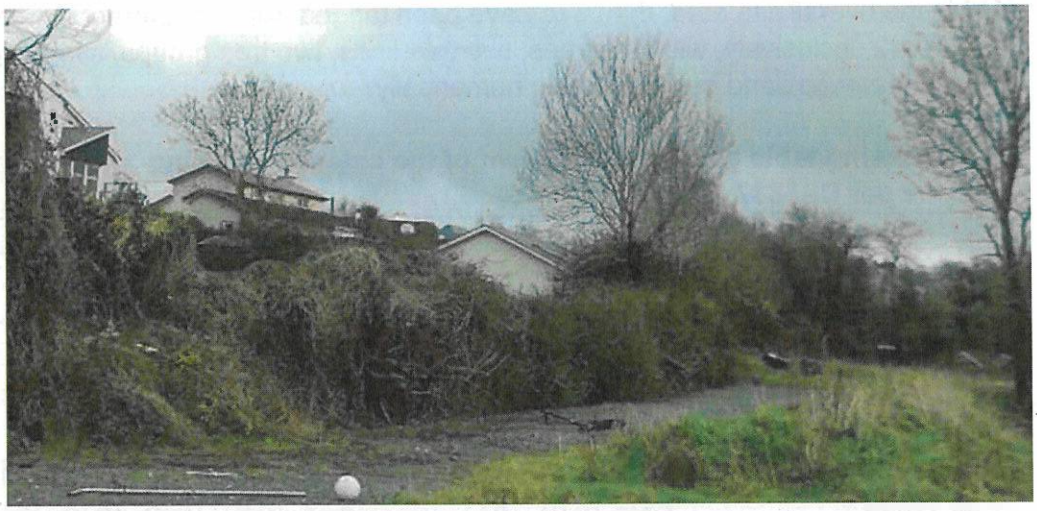
4.4 Within the overall site area, the trees have been tagged with the reference numbers 1801-1842, inclusively, with five trees, two tree lines, two tree groups, two hedges and a linear woodland belt numbered numerically.

The following table gives a breakdown of the category grading given to the trees as per BS5837 2012.

Category Grade	Tree Nos.
Category U **4 Trees**	**Tree Nos.**1801, 1808, 1827 & 1837.
Category A **0 Trees**	**Tree Nos.**
Category B **5 Trees**	**Tree Nos.** 1804, 1814, Tree 3, 1817 & 1825.
Category C **38 Trees +** **2 Tree Lines +** **2 Tree Groups +** **1 Woodland Belt +** **2 Hedges**	**Tree Nos.** Tree 1, 1802, 1803, Tree 2, 1805, 1806, 1807, 1809,1810, 1811, 1812,1813, 1815, 1816, 1818, 1819, 1820, 1821, 1822, 1823, 1824, 1826, 1828, Tree 4, 1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, Tree 5, 1838, 1839, 1840, 1841 & 1842. **Tree Line Nos. 1 & 2** **Tree Group Nos. 1 & 2** **Woodland Belt No.1** **Hedge Nos. 1 & 2**
Total	**47Trees + 2 Hedges**



4.5 Site Photos.



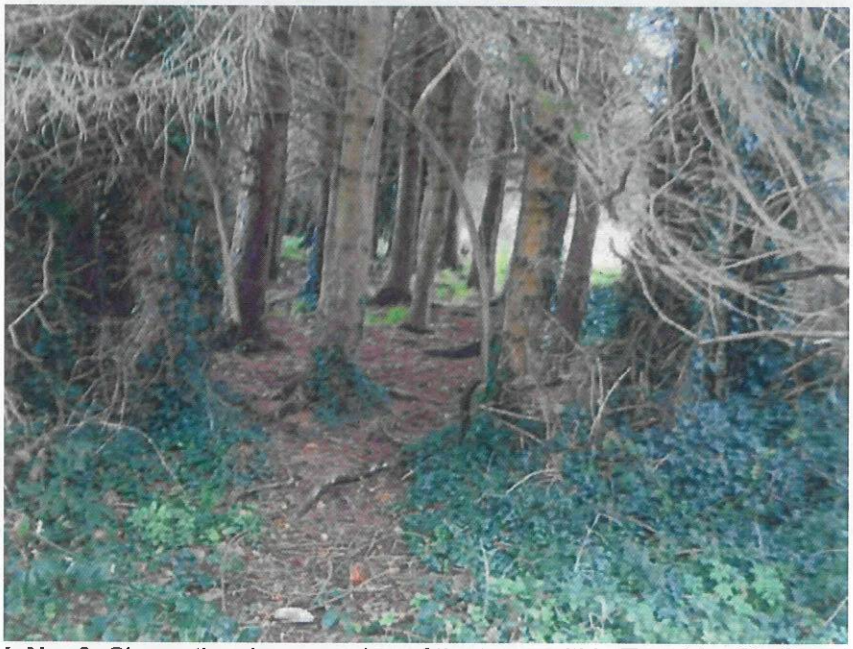
Photograph No. 1: Shows Hedge No.1 along part of the northern boundary.

Photograph No. 2: Shows Hedge No.2 running along the site eastern boundary.

Photograph No. 3: Shows Tree Line No.1 and Woodland Belt No.1 in the background along the site southern boundary.

Photograph No. 4: Shows another view of Woodland Belt No.1 looking from east to west.

Photograph No. 5: Shows Tree Line No.2. along the sites western boundary.



Photograph No. 6: Shows the close spacing of the trees within Tree Line No.2 and the area underneath the trees.

Photograph No. 7: Shows a view of the trees along the northern boundary at the western end of the site area.

Photograph No. 8: Shows Tree Group No.1.

5.0.0 Arboricultural Implication Study

5.1.0 Introduction

5.1.1 Planning permission is being sought to develop the site area to the south of the existing residential development known as 'Ballinahinch Park', Ashford, Co. Wicklow for further residential use and it will be necessary to allow for infrastructural works such as services.

5.1.2 This section of our document is designed to assess the impact of the proposed development layout on the surrounding tree vegetation and to look at the necessary measures that will need to be undertaken to help retain the tree vegetation shown for retention free from adverse impacts for the duration of the construction period.

5.1.3 On drawing No.BHP002, I have identified the tree vegetation to be removed to facilitate the proposed development with a 'Red Hatched' crown spread and those to be retained with a 'Green Hatched' crown spread.

On this drawing, I have also shown the necessary protective fencing and work exclusion zones with 'Orange Hatching' around the tree, vegetation to be retained. These will need to be put in place at the start of the works and be maintained in place until all works are completed.

5.1.4 The comments made within this impact assessment study are based on my understanding of the proposed development works and what is required to allow for its construction.

5.2.0 Impact on the Tree Vegetation

5.2.1 See **'Appendix 2'** of this report and drawing Nos.BHP001 & BHP002 which provide more details on the tree vegetation.

5.2.2 Following the preparation of our tree constraints plan and our assessment of the potential impact of the proposed development layout on the surrounding tree vegetation, the following is our assessment of the proposed impacts on the surrounding tree vegetation:

- To facilitate the proposed development, it is necessary to remove Hedge No.1, Tree Line No.2 and Tree Nos.1840, 1841 & 1842 directly due to the development layout. It will also be necessary to trim in the encroaching vegetation from Woodland Belt No.1 to facilitate the perimeter path.

- Indirectly, we would recommend the removal Tree No.1801 an early- mature Ash due to root damage caused previously and Tree Nos.1836, 1837, 1838 & 1839 due to their species, size and proximity to the proposed dwellings to address safety concerns to these new dwellings.

  Along the eastern boundary of the site area, Tree Nos.1802 & 1803 which are both mature Ash trees are being retained along the boundary of relatively small urban gardens, but long term, they are likely to succumb to Ash Dieback and this will most likely lead to their decline and removal as part of

future management. Their retention will require ongoing monitoring and management.

The lower vegetation around the boundaries of the site area will need trimming back to contain and to facilitate the erection of boundary treatments which will consist of a fence type structure.

5.2.3 **In summary**, directly and indirectly due to the development layout, we are showing 8 of the 47No. surveyed individual trees along with one tree line and one hedge for removal.

The 8 tree entries for removal are made up of the following category grades:

- **2** of the 4 **category 'U'** trees,
- **0** of the 0 **category 'A'** tree,
- **0** of the 5 **category 'B'** trees
- **6** of the 38 **category 'C'** trees plus one tree line & one hedge.

5.2.4 The loss of the above tree vegetation is to be mitigated against within the landscaping of this completed development with new tree, shrub and hedge planting that will complement the development and help provide good quality and suitable long-term tree cover.

5.2.5 As part of the management of the trees retained, it will be necessary to carry out remedial tree surgery works to address current health and safety issues and to ensure a satisfactory juxtaposition within the completed development.

A preliminary schedule of these works is given within the condition tree survey report in '***Appendix 2'*** and this will need to be reviewed and updated taking into consideration the trees within their new built environment. All tree works will need to be carried out by a competent tree surgery firm to the recommendations of BS3998 2010.

5.2.6 The main tree protection on this site area is to be provided by the use of tree protection fencing excluding the root protection areas of the tree vegetation from the works area and this will need to be installed at the commencement of the works prior to the machinery coming on site and be left in place for the duration of the works. See our Tree Protection Plan (No. BHP002) for the position and '***Appendix 1'*** for detail on this fencing.

5.3.0 Tree Retention and Protection

5.3.1 The following are the main items for consideration during the proposed construction process:

Item	Comments
Tree Pruning	As part of the initiating works, the crowns of some of the trees are to be pruned to remove dead/unstable growth, as well as 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 and agreed on site prior to being carried out. All tree work should be carried out by qualified and experienced tree surgeons *before* any construction work commences; all tree work should be in accordance with *BS3998 (2010) Tree Work – Recommendations.* All trees for removal will need to be felled to stumps and 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. The hedges and understory of vegetation being retained in most instances will require some trimming particularly of their sides to contain their width and encroachment out onto the surrounding areas and to better incorporate them into the completed landscaped areas and allow for boundary treatment. Where hedges are weak these will need to be augmented with similar hedge planting to bulk them up and to improve their structure.
Tree Management	Trees will be positioned within close proximity to existing structures and usable surfaces as is the current situation. As a result, it will be necessary to continue to review the condition of these trees on a regular basis and to carry out any necessary remedial tree surgery works required as part of management to promote health and safety. Any new tree planting carried out will require maintenance to encourage good growth habits and to alleviate any safety concerns that they may present as they grow in size.
Tree Protection	The tree 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. 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. BHP002) **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 BS5837: Trees in relation to design, demolition and construction (2012) specifies appropriate fencing, see **'Appendix 1'** for details.

Item	Comments
	All weather notices need to be erected on the fences with words such as: "Tree Protection Fence — Keep Out". When the fencing has been erected and ground protection is in place, the construction work can commence. The fencing will need to be inspected on a regular basis during the duration of the construction process and is to remain in place until heavy building and landscaping work have finished and its removal is authorised by the project Arboriculturist.
Construction	It will be important that good housekeeping is in place at all times so that the site does not become congested. All construction works are to be well planned in advance so as not to put pressure on the protective zone around the trees. All works are to occur from outside the protective zones. Where work space between the building works 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 zones, the installation of suitable ground protection in the form of scaffold boards, woodchip mulch or specialist ground protection mats/plates may be acceptable. These will need to be reviewed with the project Arboriculturist and installed to their recommendations. See detail in **'Appendix 1'** of this report for samples of ground protection for light weight construction works. Care will need to be taken when planning site operations to ensure that wide or tall loads or plant machinery 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. Materials, which can contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, should not be discharged within 10m of a tree stem. Fires are not to 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. Notice boards, wires and such like are not to be attached to any trees. Site offices, materials storage and contractor parking are all to be outside the work exclusion zone.
Boundary Treatments	Construction of the new boundary treatments within the root zone of trees and hedge vegetation being retained are to use a fencing system based on support posts rather than one that uses strip foundations where the post holes should be excavated manually or by augur or '*Air-spade*' when inside the RPAs of any trees intended for retention. Some of the perimeter hedge vegetation will also need trimming back to facilitate the fencing.

Item	Comments
Landscaping	The existing ground levels within the RPA of the trees will need to be retained and incorporated into the finished landscaped areas. 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 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. Any surfaces required within the root zones of the trees will need 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.

5.3.2 Monitoring

Any construction works within close proximity to the tree, vegetation being retained is 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 their retention and planning compliance.

It is advised that protection fencing, any required special engineering and supervision works must be included in the main tender documents, including the responsibility for the installation, cost and maintenance of the protection measures throughout all construction phases.

Copies of the tree protection plan (DWG No. BHP002) a copy of BS 5837(2012) and NJUG 4 (2007) will need to be kept available on site during the construction works and all works are to be in accordance with these documents.

On the completion of the construction works, all tree vegetation retained will need to be reviewed by the project Arboriculturist and any necessary remedial tree surgery works required to promote the health of this vegetation and its 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 contractor/site manager on how the tree vegetation needs 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 protective fencing to be erected and all other mitigation measures required to be put in place prior to the construction works commencing on site and these are to enclose and protect the root zone of the tree vegetation proposed for retention. See drawing (DWG No. BHP002), 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 site area is divided into three main sections starting with the preconstruction stage right through to post construction.

Stage 1:

6.4.0 Pre-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 protection measures are in place and adhered to.
2. The main contractors and all sub-contractors work force are to be briefed on the 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 tree vegetation 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.

6.5.0 Site Meeting

6.5.1 Prior to any works commencing on site, it is necessary that a meeting be arranged between the project manager, site foremen and the project Arboriculturist to identify and finalize the tree protection detail.

6.6.0 Tree Works

6.6.1 The client or the main contractor is to appoint a tree surgery company competent of carrying out the remedial tree surgery works and felling that are required on this site. The tree surgery contractor is to produce a method statement detailing how he plans 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.

6.6.2 **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.

6.7.0 Erection of the Protective Fencing

6.7.1 The line of the protective fencing that is required around the tree vegetation being retained **must be** erected at the commencement of the site works as per DWG No. BHP002.

6.7.2 The fencing will need to be 2.3m high and constructed in accordance with figure 2 of BS 5837 2012 (see fencing detail within '**Appendix 1**') using vertical and horizontal scaffold bars well braced together with the verticals spaced out at a maximum of 3m

centres and onto this, weld mesh panels are to be securely fixed with wire or scaffold clamps.

6.7.3 Signs need to be attached to these fences warning people to 'keep out'. (See detail within **'Appendix 1'**).

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

6.7.5 **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 tree vegetation being retained.

Stage 2:

6.8.0 The Construction Works Stage

6.8.1 **Protective fencing** - During the course of the works, special attention must be paid to ensure that these fences and all other protection measures are kept in place, in good order and 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 must be informed in advance of the works taking place and the mitigation measures required to reduce impact on the tree vegetation agreed. These mitigation measures will include the supervisions of these works by the project Arboriculturist.

The protective fencing and all other protection measures are 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.

6.8.2 **Excavations** - The excavation works are only to commence once the protective fence line and all other protection measures are 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 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 tree vegetation 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.

6.8.3 **Working within the RPA** *(Root Protection Area)* – If it becomes necessary to carry out works within the RPA of a tree, 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.

6.8.4 **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. 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.

6.9.0 Other Items

6.9.1 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.

Stage 3:

6.10.0 Post Construction Works

6.10.1 This project is not to be considered complete until all retained tree vegetation has 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 area are implemented.

This report has been produced as part of a planning application for this site area and is for the sole use of the above named client and refers to only those hedges/ 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* Date:12/02/2024

Michael Yallop MArborA

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* Dat 19/03/2024

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

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

1.1 Sample of Temporary Tree Protection Fencing Detail.

1.2 Sample of Ground Protection within Root Zone.

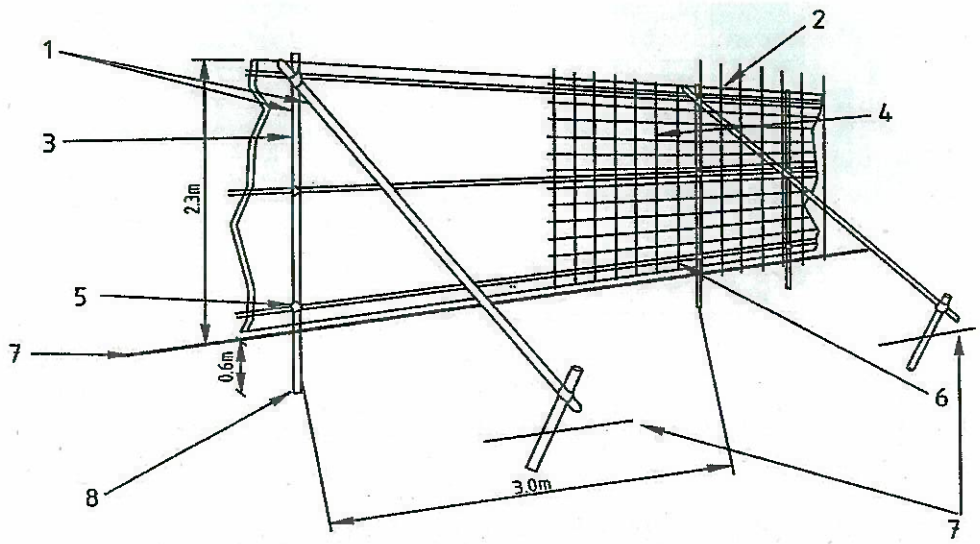
1.3 Sample of Trunk Protection

1.4 Sample of Toolbox Talk Sheet

1.5 Sample of Site Monitoring Sheet

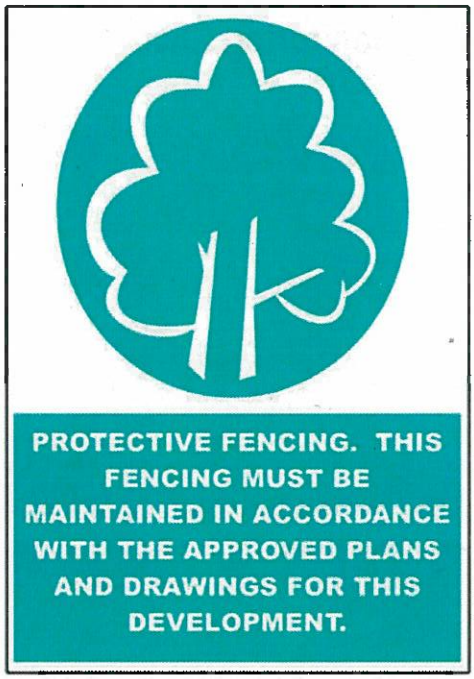
Appendix 1.1

Protective Fence



1 Standard scaffold poles
2 Uprights to be driven into the ground
3 Panels secured to uprights with wire ties and, where necessary, standard scaffold clamps
4 Weldmesh wired to the uprights and horizontals
5 Standard clamps
6 Wire twisted and secured on inside face of fencing to avoid easy dismantling
7 Ground level
8 Approx. 0.6m driven into the ground

Figure 2. – Protective fencing for RPA



Sample of signage to be placed on fence pannels.

Appendix 1.2 – Samples of ground protection within root zones

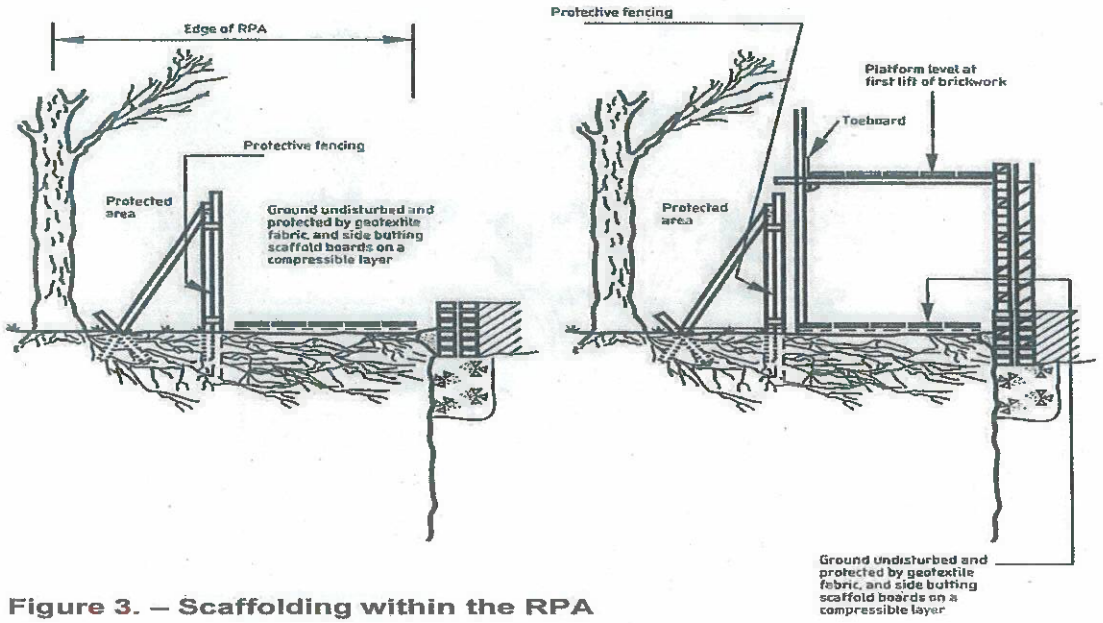
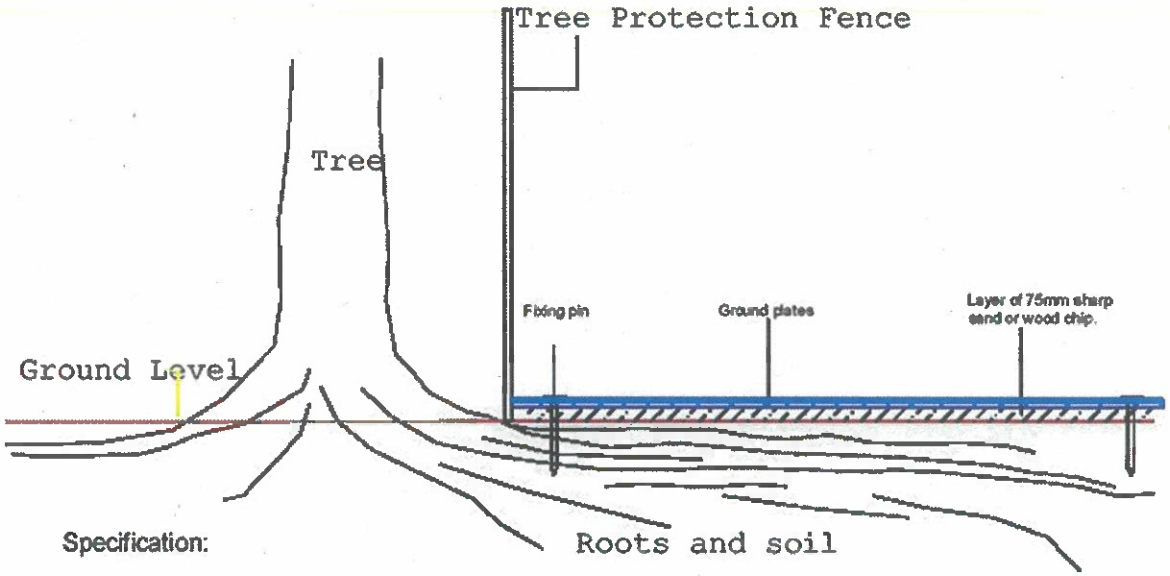


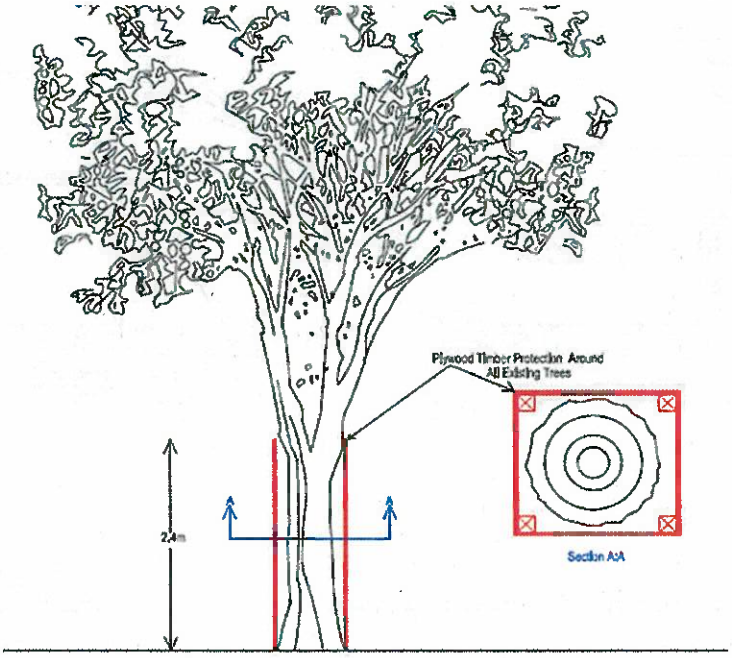
Figure 3. – Scaffolding within the RPA



Specification:

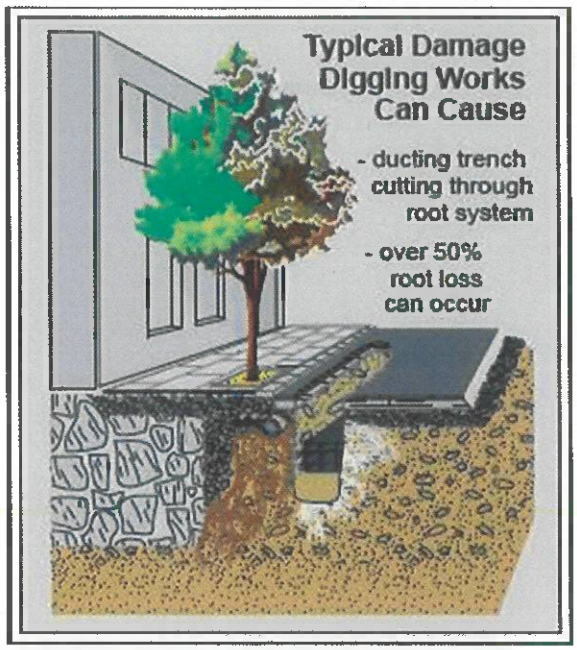
1. Lay min. 75m depth of sharp sand/wood chip over identified ground area
2. Lay side-butting scaffold boards/15mm poly propylene road plate over sand/wood chip
3. Fix ground protection cover into place with pins/pegs
4. Erect protection fence (where feasible).
5. Remove ground protection upon completion/landscaping only.

Appendix 1.3 – Sample of trunk protection.



Detail on individual trunk protection

Appendix 1.4 – Sample of Toolbox talk.



Do

- ✓ when excavations are to be carried out within 10m of a tree ask a foreman or site engineer for the correct procedures
- ✓ report any signs of trees roots to your foreman or site engineer
- ✓ always have the tree specialist on site when excavations are in close proximity to urban trees
- ✓ always use a vacuum extractor or air spade for excavations under or near urban trees even if the trees are located on the pavement
- ✓ cover any exposed tree roots with hessien matting and soak matting throughout the period of excavation
- ✓ backfill excavations near trees with similar soils that were originally excavated

Don't

- ✗ Dig near any trees without asking the foreman or site engineer for the correct procedures
- ✗ Use an digger/excavator or hand dig within 10m of a tree on the street
- ✗ Excavate near trees without having the tree specialist on site to monitor the works
- ✗ Leave trees roots uncovered or dried out

Appendix 1.5 – Sample of site monitoring sheet

Protected Tree Monitoring Form
Site Inspection Report

Zone:

Location:

Tree Group / Number

Tree Protection Checked By: **Date:**

Status of tree protection:

Remedial measures / comments:

Copied to:

Project Manager **Yes / No**

Project Manager's Arboricultural Consultant: **Yes / No**

Copied To Project Manager: **Yes / No**

Contact Name

Signed: **Date**

Appendix 2

Condition Tree Assessment

Site Area at "Ballinahinch", Ashford Co Wicklow.

Date: 19th March 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 (Y): A tree, which has been planted in the last 10 years.

Semi Mature (SM): A tree that is less than 1/3 the expected height of the species in question.
Early Mature (EM): A tree, which is between a 1/3 and 2/3's the expected height of the species in question.
Mature (M): A tree that has reached the expected height of the species in question, but still increasing in size.
Over Mature(OM): 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.

ULE – Useful Life Expectancy

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 10Years. 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 form the base of the tree and is given in meters (m).

RPA – Root Protection Area

This is the minimum area around individual trees to be protected from disturbance during construction works; RPA is usually expressed as a radius in meters measured from the tree stem.
The Root Protection Area (RPA) is the minimum area around individual trees to be protected from disturbance during construction works.

For single stem trees, the root protection area (RPA) should be calculated as an area equivalent to a circle with a radius 12 times the stem diameter.

For trees with more than one stem, one of the two calculation methods below should be used. The calculated RPA for each tree should be capped to 707 m2.

a) For trees with two to five stems, the combined stem diameter should be calculated as follows:

$$\sqrt{((\text{stem diameter } 1)2 + (\text{stem diameter } 2)2 \ldots + (\text{stem diameter } 5)2)}$$

b) For trees with more than five stems, the combined stem diameter should be calculated as follows:

$$\sqrt{((\text{mean stem diameter})2 \times \text{number of stems})}$$

The RPA for each tree is plotted on the Tree Constraints Plan (**); 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:

Annex D (normative)

Root protection area

The RPAs given in Table D.1 should be used for single stem trees and the equivalent resultant combined stem diameter for multi-stemmed trees.

Table D.1 Root protection areas

Single stem diameter mm	Radius of nominal circle m	RPA m^2	Single stem diameter mm	Radius of nominal circle m	RPA m^2
75	0.90	3	675	8.10	206
100	1.20	5	700	8.40	222
125	1.50	7	725	8.70	238
150	1.80	10	750	9.00	255
175	2.10	14	775	9.30	272
200	2.40	18	800	9.60	290
225	2.70	23	825	9.90	308
250	3.00	28	850	10.20	327
275	3.30	34	875	10.50	346
300	3.60	41	900	10.80	366
325	3.90	48	925	11.10	387
350	4.20	55	950	11.40	408
375	4.50	64	975	11.70	430
400	4.80	72	1 000	12.00	452
425	5.10	81	1 025	12.30	475
450	5.40	92	1 050	12.60	499
475	5.70	102	1 075	12.90	519
500	6.00	113	1 100	13.20	547
525	6.30	124	1 125	13.50	573
550	6.60	137	1 150	13.80	598
575	6.90	150	1 175	14.10	625
600	7.20	163	1 200	14.40	652
625	7.50	177	1 225	14.70	679
650	7.80	191	1 250+	15.00	707

NOTE These figures are derived from the calculations described in 4.6.

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
		A condition assessment of the trees within the site area at 'Ballinahinch', Ashford, Co. Wicklow.													
		The survey starts on the north east of the site area and works in a clockwise direction across the site.													
Hedge No. 1	**Beech** *Fagus sylvatica*, **Cherry Laurel** *Prunus laurocerasus*, **Box** *ornamental*, **Bramble** *Rubus fruticosus*	2.5	60	1	1	1	1	0	Early Mature	Fair/ Poor	Poor. It runs in an east/west direction and is located on the northern boundary of the site bordering a private residence. It has been heavily reduced previously behind the houses and a new road way has been built at its base on its southern side.	It would benefit from general tidying works and pruning to create a better structure hedge. It would also benefit from infill planting to bulk up this hedge.	10+	C2	0.72
		The following tree is located in this hedge.													
Tree No. 1	**Ash** *Fraxinus excelsior*	8	260	3	4	4	4	3	Early Mature	Fair	Fair. It is growing outside the site boundary so unable to inspect base.	Management is located outside the boundary of this site area.	10+	C1	3.12
Hedge No. 2	**Hawthorn** *Crataegus monogyna* **Leyland Cypress** *Cupressocyparis leylandii*	4.5	200	2	2	2	2	1	Mature	Fair	Fair. It runs north/south from east end of hedge No. 1 and is growing on the sites eastern boundary. It is an old field boundary hedge which has received little recent maintenance work. Ground disturbance has possibly happened around its base impacting its roots zone.	It would benefit from general tidy works and infill planting to improve structure.	20+	C2	2.4
		The following trees are located within this hedge working from north to south.													
Tree No.1801	**Ash** *Fraxinus excelsior*	15	380 340	4	5	4	5	3	Early Mature	Fair	Poor. Construction work has taken place within its root zone on its northern side and a large amount of soil has been built up	I would recommend its **removal** as part of management due to concerns over stability as a	<10	U	6.12

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
											around its base. There has also been damage to the lower crown from machinery. Root damage may have been caused when the road was built. It is twin stemmed from the base.	result of damage caused to roots.			
Tree No.1802	**Ash** *Fraxinus excelsior*	16	750 500	5	5	6	4	1	Mature	Fair	Fair. It is twin stemmed from the base with an acute union formation between stems. Heavy Ivy growth has limited the inspection of the union and the Ivy has progressed into the crown. It is part of the old field boundary line.	Cut Ivy at ground level and clear around the base to allow a more detailed assessment.	10+	C1	7.99
Tree No.1803	**Sycamore** *Acer pseudoplatanus*	16	600	5	5	5	5	3	Mature	Fair	Fair/Poor. It is growing on the site boundary within hedge no.2. It has multiple stems from circa 2.8m up with acute union formations between stems with included bark. The Visual assessment is from site side only. There is minor deadwood within the crown.	Requires no work at the present time.	10+	C1	7.2
Tree line No.1	**Sycamore** *Acer pseudoplatanus*, **Ash** *Fraxinus excelsior*	A17	A520	A 7	A 3	A 3	A 3	A 2	Mature	Fair	Fair. This tree line is cordoned off by a fence and maybe outside the site boundary. It consists of a line of trees on the edge of the woodland along the site southern boundary on the side of a bank. They have grown as part of the conifer woodland group and they hang over the open space. They are heavily suppressed by Ivy.	Monitor large size dead/unstable growth. Cut Ivy at ground level at present. Monitor Ash trees for 'Ash Dieback' and manage accordingly.	10-20	C2	3

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
Woodland Belt No. 1	**Ash** *Fraxinus excelsior* **Alder** *Alnus glutinosa* **Goat Willow** *Salix caprea* **Holly** *Ilex aquifolim* **Elder** *Sambucus nigra* **Bramble** *Rubus fruticosus*	A15	A500	A 4	A 4	A 4	A 4	A1	Mature	Fair	Fair It consists of a linear belt of trees growing along the river banks on the sites southern boundary. It is fenced off on the site side and may be outside the site boundary. Some of the trees particularly the Willow are collapsing and falling over and being suppressed by Ivy. The Ash within are showing signs of decline and infection by Ash Dieback.	Its management is taken to be outside the boundary of the site. Make safe large size dead/unstable growth. It would benefit from general tidying works and Ivy to be cut where heavy on trees.	20+	C2	A6
	The survey moves into the second part of the site area and begins along the river bank line and works clockwise around this section of the site area. There is an understory containing Hazel, Conifer, Elder, Bramble, and Dogrose and some of these in particular the Bramble and Dogrose are extending out onto the site area creating a scrub area.														
Tree No.1804	**Sycamore** *Acer pseudoplatanus*	12	450	6	6	7	7	1	Mature	Fair	Fair. It is growing on the river bank and is multiple stems from base. There are Alder stems are growing at its base. It is a structural tree for the river bank. Livestock have caused some lower bark damage and, there has been dumping of debris around the base .There is an Ash (Tree 2) growing on the river side.	Remove dead/unstable growth.	20+	B2	13.23
Tree No. 2	**Ash** *Fraxinus excelsior*	11	280 150	3	2	3	3	2	Early Mature	Fair	Fair. It is growing at the bottom of the river bank. It forms one crown canopy formation with Tree No. 1804.	Requires no work at the present time.	10+	C2	3.81
Tree No.1805	**Ash** *Fraxinus excelsior*	11	330 300	4	6	5	4	1	Early Mature	Fair	Fair. It is growing along the bank of the river	Requires no work at the	10+	C1	7

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
			240 290								and is multi stemmed from the base. It provides structural stability to the bank. Ivy is establishing along the main stems. It shows some signs of decline from Ash Dieback (*Hymenoscyphus fraxineus*).	present time.			
Tree No.1806	**Common Alder** *Alnus glutinosa*	13	210 200 150 110	4	5	4	3	2	Early Mature	Fair	Fair. It is growing along the river bank and is multi stemmed from the base. There is deadwood and poor stem formation at its base. The embankment has made lower side assessment difficult.	Cut Ivy at ground level and clear around the base to allow a more detailed assessment.	20+	C2	4.24
Tree No.1807	**Common Alder** *Alnus glutinosa*	10	240	2	3	1	2	2	Early Mature	Fair	Fair. It has self-seeded at the top of the river bank at an old watering point. There is minor Ivy on the lower stem.	Requires no work at the present time.	20+	C1	2.88
Tree No.1808	**Sycamore** *Acer pseudoplatanus*	8	140	1	3	2	1	2	Semi Mature	Fair/ Poor	Poor. Self-seeded at the top of the river bank. Wire has been nailed to its stem and animals have damaged the bark. The top section has died off.	Retain at present as part of bulking along river bank but it has no potential.	<10	U	1.68
Tree No.1809	**Common Alder** *Alnus glutinosa*	10	250 300 250 260 75	4	5	4	4	2	Early Mature	Fair	Fair. It is growing at the bottom of the river bank, it is multi stemmed from the base with minor Ivy cover. It provides support to the river bank. There is minor deadwood in the crown.	Requires no work at the present time.	20+	C2	6.44
Tree No.1810	**Common Alder** *Alnus glutinosa*	11	300 300	5	5	4	6	1	Early Mature	Fair	Fair/Poor. It is growing at the river edge and has poor basal formation. It is twin stemmed from low down with a third stem further	It requires no work in its current surroundings. Its lower base may lead to	10+	C2	5.09

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
											up. Items have been tied to the base to stop animals entering in the river.	future failures.			
Tree No.1811	**Sycamore** *Acer pseudoplatanus*	12	310	5	5	4	5	1	Early Mature	Fair	Fair. It grows up with Tree No.1810 in close formation and they share their crowns. It has self-seeded on the bank. They will need to be managed as a pair	Requires no work at the present time.	20+	C2	3.72
Tree No.1812	**Ash** *Fraxinus excelsior*	15	400	5	6	6	6	3	Mature	Fair/ Poor	Fair. It is growing right at the bottom of the bank of the river. It has Ivy along the main stem, with a sparse crown and shows signs of infection by Ash dieback (*Hymenoscyphus fraxineus*).	Cut Ivy at ground level at present.	10+	C2	4.8
Tree No. 3	**Sycamore** *Acer pseudoplatanus*	10	330 240	4	4	4	3	2	Early Mature	Fair	Fair. It is growing on the river edge, with a lean out over the river. It is inaccessible due to its location on the bank. There is Ivy on the main stem. It is twin stemmed with possible poor union at this point.	Cut Ivy at ground level and clear around the base to allow a more detailed assessment.	20+	B2	3.96
Tree No.1813	**Elder** *Sambucus Nigra*	9	150	3	4	4	4	1	Early Mature	Poor	Poor. It consists of a cluster of stems growing along the river bank. They have significant deadwood and Ivy on the main stem. They provide support to the bank.	Cut Ivy at ground level where heavy at stems.	10+	C2	4.41
Tree No.1814	**Sycamore** *Acer pseudoplatanus*	11	300 230 150	4	4	2	6	2	Mature	Fair	Fair. It is growing low down on the river bank and grows close to Tree No.1815. It has heavy Ivy on the main stem extending up into its crown.	Cut Ivy at ground level.	20+	B2	4.88

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
Tree No.1815	**Ash** *Fraxinus excelsior*	12	400	3	4	4	5	2	Mature	Fair/ Poor	Fair. It is growing at the top of the river bank and has heavy Ivy along the main stem which has limited the inspection. It shows signs of decline within the crown most likely due to 'Ash Dieback'.	Cut Ivy at ground level and clear around the base to allow a more detailed assessment. Cut Ivy at ground level where heavy.	10+	C2	4.8
Tree line No. 2	**Sitka Spruce** *Picea sitchensis*	17	400	A 4	A 4	A 4	A 4	0	Mature	Fair	Fair. It consists of multiple rows of planted Sitka Spruce along the sites western boundary. They have grown up tall as a group canopy formation and provide support/shelter to one another. They have some undergrowth of Bramble and some trees have Ivy extending up into their crowns.	They are best managed as part of the one group canopy formation. Thin out poorly formed trees and tidy up undergrowth.	20+	C2	4.2
	The survey moves to the linear tree belt on the bank along the northern boundary of the site area. The area has become heavily overgrown and the property boundaries are not defined as the undergrowth has merged across the sites. The trees are growing along a steep embankment with a mix of tree species with dense undergrowth containing Cherry and Laurel.														
Tree No.1816	**Cherry Laurel** *Prunus laurocerasus* (Group)	11	150	6	2	4	9	0	Mature	Fair	Poor. It consists of a group of multiple stems, some of which have fallen over. They form part of the lower bulking for the area.	Clean up dead material, bramble and cut back poor formed stems to address stability issues.	10+	C2	1.8
Tree No.1817	**Oak** *Quercus rubur*	9	300	1	1	1.5	1	3	Early Mature	Fair/ Good	Fair. It is growing as part of the group formation and it has grown up tall for light as a result. It grows on the steep bank	Requires no work at the present time.	20+	B1	3.6
Tree	**Cordyline**	9	190	1	0.	0.	1	3	Semi	Fair	Fair/Poor	Requires no work at the	10+	C1	2.28

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
No.1818	*Cordyline australis*				5	5			Mature		It has been planted as part of a line from the neighbouring garden. It grows on the steep embankment and is being overcrowded.	present time.			
Tree No.1819	**Willow** *Salix fragilis*	12	420	5	0.5	3	1	5	Mature	Fair	Poor. It has a significant lean out of the canopy on the steep embankment raising concern over stability. It has been smothered by a climber which has grown into its crown.	Clean up around the base and lower stem and cut climber at base.	10+	C1	5.04
Tree No.1820	**Cider Gum** *Eucalyptus gunnii*	20	680	7	5	5	6	6	Mature	Fair	Fair. A large prominent mature tree growing at the edge of the top of the embankment. Its location has made a total assessment difficult. It shows signs of lower bark dysfunction.	Cut Ivy at ground level and clear around the base to allow a more detailed assessment.	20+	C2	8.16
Tree No.1821	**Cordyline** *Cordyline australis*	6	130	1	0.5	1	1	3	Early Mature	Fair	Fair. It is growing as part of the line of cordylines. There is a large hanger in its crown.	Remove broken/damaged branches.	20+	C1	1.56
Tree No.1822	**Silver Birch** *Betula pendula*	6	210	2	0.5	2	1	4	Early Mature	Fair/ Poor	Poor. It is a tall tree growing up for light due to competition affecting its condition. There is Ivy on main stem.	Cut Ivy at ground level.	10-20	C1	2.52
Tree No.1823	**Lawson Cypress** *Chamaecyparis lawsoniana*	16	370	3	2	3	3	2	Mature	Fair	Fair. It is growing as part of the overall group on the lower side of the embankment. It has an asymmetrical crown due to overcrowding/competition. Best managed as part of a group	Requires no work at the present time.	20+	C1	4.44

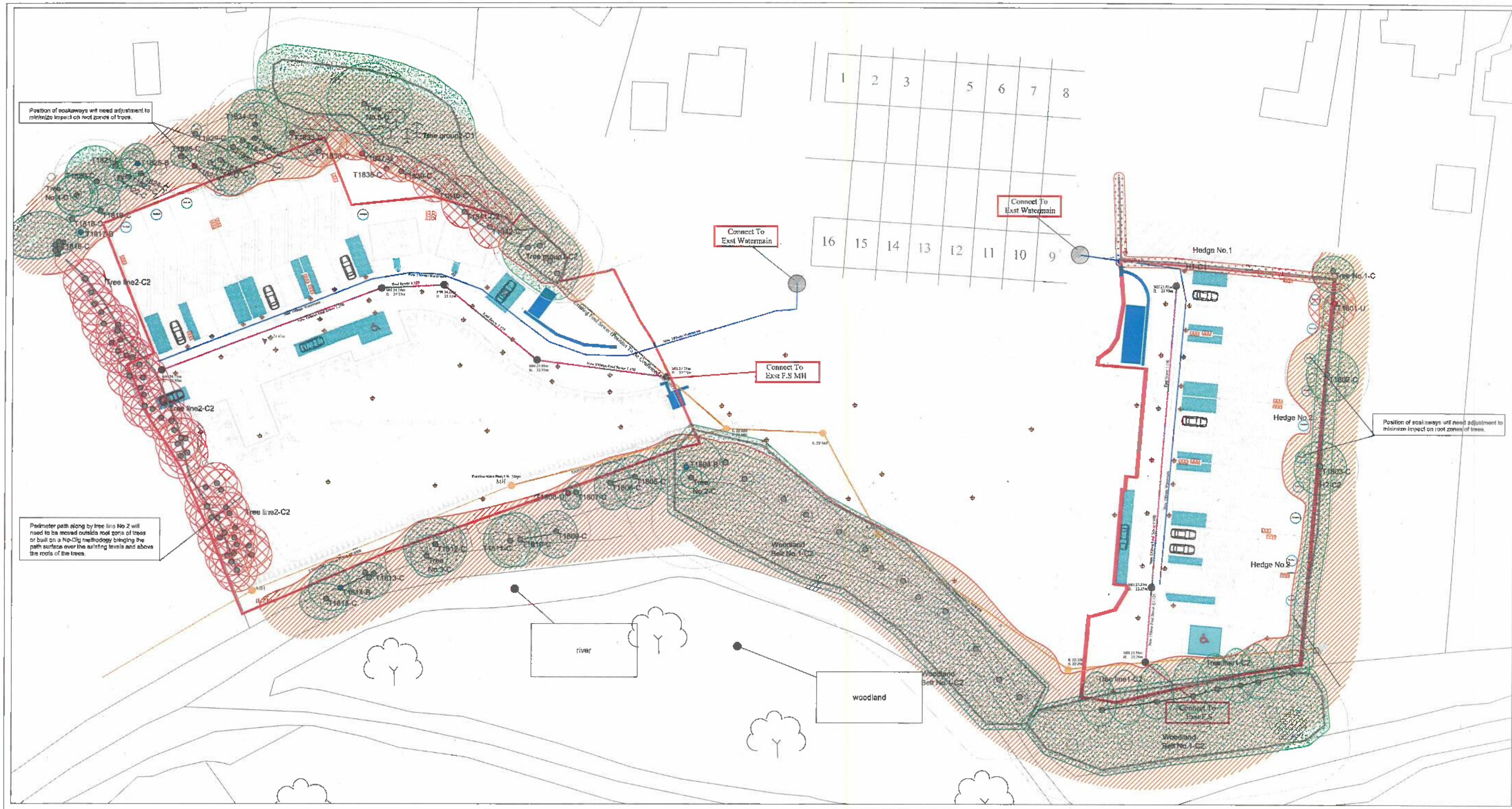
Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
Tree No.1824	**Laburnum** *Laburnum anagyroides*	12	220 160 180	5	0	2	5	2	Early Mature	Fair	Fair/Poor It is growing as part of the group canopy formation and is being overcrowded. It has a significant lean off the embankment and has been smothered by surrounding vegetation.	Tidy up and cut back undergrowth.	10+	C1	3.91
Tree No.1825	**Sycamore** *Acer pseudoplatanus*	13	300	4	2	3	3	5	Early Mature	Fair	Fair. It is growing up as part of the overall group canopy formation. It has grown tall for light due to competition. Best managed as part of the group canopy formation.	Requires no work at the present time.	20+	B1	3.6
Tree No.1826	**Lawson Cypress** *Chamaecyparis lawsoniana*	11	600	2	2	2	2	2	Mature	Fair	Fair/Poor. It is growing on the steep embankment and it has an asymmetrical crown shape due to overcrowding/competition. Poor lower stem formation at the base with possible root plate shift	Monitor for root plate movement.	10+	C1	7.2
Tree No.1827	**Sycamore** *Acer pseudoplatanus*	7	240	2	0	0	2	3	Early Mature	Fair/ Poor	Poor. It was a tall tree which has lost its upper crown and has somewhat regrown. It is of poor quality overall. There is decay where the top broke off previously.	Requires no work at the present time. It may need to be removed as part of management.	<10	U	2.88
Tree No.1828	**Ash** *Fraxinus excelsior*	9	230	4	1	3	2	3	Semi Mature	Fair/ Poor	Poor. It is growing on the edge of the embankment. It has poor shape and form and Ivy has extended up into its crown. Its crown is showing decline most likely due to 'Ash Dieback'.	Cut Ivy at ground level at present.	10+	C1	2.76

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
Tree No. 4	**European Larch** *Larix decidua*	16	300	4	3	3	4	4	Mature	Fair	Fair. It is growing on the boundary line and is of a mature size and age. Inspection is limited due to its location. It has a large amount of lower deadwood.	Located outside the boundary of the site. It requires further inspection from the neighbouring property	10+	C1	3.6
Tree No.1829	**Cordyline** *Cordyline australis*	7	190	2	0.5	1	0.5	3	Early Mature	Fair	Fair. It is growing along the bank as part of a line of cordylines from the neighbouring garden	Requires no work at the present time.	20+	C1	2.28
Tree No.1830	**Cordyline** *Cordyline australis*	7	180	1.5	1	2	0.5	4	Early Mature	Fair	Fair. It is growing along the top of the embankment as part of the line of cordylines.	Requires no work at the present time.	20+	C1	2.16
Tree No.1831	**Ash** *Fraxinus excelsior*	12	285	2	2	3	1	3	Early Mature	Fair	Fair. It is growing on the steep embankment as part of the overall group canopy formation. The location has limited our inspection. Ivy on the main stem is progressing into the crown.	Cut Ivy at ground level.	10+	C1	3.42
Tree No.1832	**European Larch** *Larix decidua*	14	430	7	4	5	2	5	Mature	Fair/ Poor	Fair/ Poor. It forms part of the group canopy formation. It is showing signs of low vitality and appears to be in decline.	Cut Ivy at ground level at present.	10+	C2	5.16
Tree No.1833	**Sitka Spruce** *Picea sitchensis*	23	780	8	5	7	6	2	Mature	Fair	Fair. It is part of a group of large mature trees at the corner of the site. Heavy undergrowth and steep bank has made assessment difficult. A number of smaller trees around its base have fallen over the	Clear around the base for a more detailed inspection	20+	C2	9.36

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
											years and deadwood, dumping and undergrowth surround its base.				
Tree No.1834	**Sitka Spruce** *Picea sitchensis*	25	750	7	5	6	5	7	Mature	Fair	Fair/ Poor. It is growing on the higher slopes of the embankment. Large amounts of debris have been piled around its base. The location has made assessment difficult.	Clear around its base to allow a more detailed inspection	10+	C2	9.0
Tree No.1835	**European Larch** *Larix decidua*	22	420	7	5	6	5	5	Mature	Fair/ Poor	Fair/Poor. Shows signs of declining health and is growing in a group and is being suppressed.	Retain as bulking.	10+	C2	5.04
Tree No.1836	**Sitka Spruce** *Picea sitchensis*	25	1200	7	3	5	5	3	Mature	Fair	Fair. It is a large mature prominent tree. It has heavy Ivy cover on the main stem and some deadwood throughout the crown. The location has made assessment difficult.	Cut Ivy at ground level. Remove major deadwood and broken/damaged branches.	10-20	C2	14.4
Tree No.1837	**Sitka Spruce** *Picea sitchensis*	9	330	4	1	2	4	4	Mature	Poor	Poor. It grows beneath the canopy of its neighbour and is being suppressed out. It has an asymmetrical crown and Ivy on the main stem. It is showing some signs of decline in its crown.	Clear around its base to allow a more detailed inspection. It will most likely need to be removed as part of management.	<10	U	3.96
Tree No.5	**Ash** *Fraxinus excelsior*	23	700	8	6	9	7	5	Mature	Fair	Fair/Poor. A large mature prominent tree growing on side of the embankment. It has a broad spreading crown with large scaffold limbs. There is visual evidence of decay in limbs in its upper crown. The assessment has been carried out from a	It requires a more detailed assessment prior to making management decision.	10+	C2	8.4

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
											distance only due to its location.				
Tree No.1838	**Douglas Fir** *Pseudotsuga menziesii*	19	400	3	2	3	3	8	Mature	Fair/ Poor	Fair/Poor. It is growing as part of a group of trees along the base of a steep embankment. Heavy Ivy on the main stem has limited inspections. There are signs of decay within the tree. Another neighbouring tree has fallen and is hung up with in its lower crown.	Fell and remove the hung-up tree and cut Ivy at ground level, allow to die and re-assess.	10+	C1	4.8
Tree No.1839	**Douglas Fir** *Pseudotsuga menziesii*	19	400	3	2	3	3	8	Mature	Fair/ Poor	Fair/ Poor. It is growing as part of the group canopy formation. It is heavily suppressed by Ivy. It has grown tall and slender in the group and is sheltered by neighbouring trees.	Cut Ivy at ground level and clear around the base to allow a more detailed assessment.	10+	C2	4.8
Tree No.1840	**Douglas Fir** *Pseudotsuga menziesii*	20	500	7	2	3	4	2	Mature	Poor	Poor. It is has been suppressed by Ivy. A smaller tree grows beneath its canopy close by and is being suppressed out.	Fell the smaller tree and cut Ivy at ground level.	10+	C2	6
Tree No.1841	**Douglas Fir** *Pseudotsuga menziesii*	22	620	7	3	4	4	2	Mature	Fair	Fair. It is a mature tree with an asymmetrical crown formation. Ivy is progressing into the main stem. The lower canopy has been suppressed by a creeper.	Tidy up the lower canopy and cut Ivy at ground level	10+	C2	7.44
Tree No.1842	**Douglas Fir** *Pseudotsuga menziesii*	22	680	7	4	4	4	2	Mature	Fair	Fair. It is a large sized tree growing as part of this overall group canopy formation. It is suppressed by a creeper in its lower crown.	Remove creeper and cut Ivy at ground level.	10+	C2	8.16
Tree Group No. 1	**Sitka Spruce** *Picea sitchensis*	22	600-	A 5	A 5	A 5	A 5	0.5	Mature	Fair	Fair. A group of conifers at the corner of the	Located outside the	10+	C2	6

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)				C-Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	ULE	Cat. Grade	RPA (radius) (m)
				N	S	E	W				N-north S-south E-east W- west C-Ht.-crown height, Dia.-diameter Phys.-physiological.	ULE-useful life expectancy Cat.-category, A-average			
			800								site. They are growing up as a group on the lower slope of the embankment with no access. They are being suppressed low down by a creeper and Ivy is extending up into some trees. There is heavy bramble undergrowth restricting access.	boundary of the site area.			
Tree Group No. 2	**Sitka Spruce** *Picea sitchensis*	17	600-800	A 5	A 5	A 5	A 5	0.5	Mature	Fair	Fair. A group of trees growing on the embankment. The assessment hasn't been possible due to access. They have grown up as part of a group canopy formation.	Located outside the boundary of the site.	20+	C2	6



Notes:

Tree Constraints/Root zones
For trees being retained, all construction works need to be planned to occur outside this area
0439
Tag Number
Category grade
Actual Crown Spread

BS5837: 2012 - Category Retention Rating

- **Category U Trees-** Trees in such a condition that any existing value would be lost within 10 years or being recommended for removal sound arboricultural practice.
- **Category A Trees** Trees of high quality/value with a min. of 40 years life expectancy.
- **Category B Trees** Trees of moderate quality/value with a min. of 20 years life expectancy.
- **Category C Trees** Trees of low quality/value with a min. of 10 years life expectancy

Sub Categories
1 - Mainly Arboricultural values
2 - Mainly Landscape value
3 - Mainly cultural and conservation values

Tree & hedge vegetation being retained

Trees & Hedge Vegetation being removed.

Tree Protection Detail

Work Exclusion Zone

Tree

Protective fence line to protect work exclusion zone around trees being retained.

Protective fence detail as per BS 5837 2012.

Detail of signage

ARBORIST ASSOCIATES LTD.
54 BALLYBAWN COTTAGES, ENNISKERRY, CO. WICKLOW
TEL: 01-2742011 / 087-2626500

TITLE :	Tree Protection Plan	
Site :	Ballinahinch Park, Ashford, Co. Wicklow	
DATE:	Dwg No.BHP002	Scale 1:250 @ A0

Notes:

Tree Constraints/Root zones
For trees being retained, all construction works need to be planned to occur outside this area
Tag Number
Category grade
Actual Crown Spread

BS5837: 2012 - Category Retention Rating

Category U Trees-
Trees in such a condition that any existing rating would be less within 10 years or being recommended for removal around arboricultural practice.

Category A Trees
Trees of High quality/value with a min. of 40 years life expectancy.

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

Category C Trees
Trees of low quality/value with a max. of 10 years life expectancy

Sub Categories
1- Mainly Arboricultural values
2 - Mainly Landscape values
3 - Mainly conservation values.

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94 BALLYBAWN COTTAGES, ENNISKERRY, CO. WICKLOW
TEL: 01-2742011 / 087-2620589

TITLE : Tree Constraints Plan

Site : Ballinahinch Park, Ashford, Co. Wicklow

DATE: | Dwg No.BHP001 | Scale 1:250 @ A0