## Arborist Associates Ltd.

# An Arboricultural Assessment on the Site Area for 'Ballyoulster SHD (Phase 1), Ballyoulster, Celbridge, Co. Kildare.

<u>Prepared for: Kieran Curtin, Receiver over certain assets of Maplewood</u>
<u>Developments Unlimited Company (in liquidation and in receivership)</u>

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**Date: 31<sup>st</sup> May 2022** 

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#### 1.0 Instructions

- 1.1 I have been instructed by Kieran Curtin, Receiver over certain assets of Maplewood Developments Unlimited Company (in liquidation and in receivership) to assess the site area for 'Ballyoulster SHD (Phase 1)', Ballyoulster, Celbridge, Co. Kildare and report on the following:
  - A To assess the present condition of the tree and hedge vegetation within this site area. See condition tree assessment schedule within 'Appendix 2' of this report and drawing 'No.BOC001' which has been prepared as a constraints drawing for details.
  - **B:** To assess the impact of the proposed development layout on the tree and hedge vegetation indicating on a drawing those for removal and retention. See 'Section 5' of our report and drawing No.BOC002 for detail.
  - C: To show on this drawing the lines of tree protective fencing to be erected around the tree and hedge vegetation being retained along with other mitigation measures to aid in their successful retention. See 'Section 6' of our report and drawing No.BOC002 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 there is any planning or tree preservation controls in operation, if they are it will then be necessary to obtain consent before undertaking any works (pruning or felling).

#### 3.0 Aims and Report Brief

3.1 Arborist Associates Ltd. has been commissioned to provide a condition assessment of the existing tree and hedge vegetation within the overall site area.

- 3.2 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 onto 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
- 3.3 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 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 a tree's 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, commemorative value.
- 3.4 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.

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.

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

**Category A -** Trees of high quality/value with a minimum of 40 years life expectancy. These trees would be seen as having the potential to contribute to the tree cover of this area for the long-term.

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

**Category B –** Trees of moderate quality/value with a minimum of 20 years life expectancy. These trees would be seen as having the potential to contribute to the tree cover of this area for the medium-term.

Any category 'B' trees within this site area have been identified on our drawings (Nos.BOC001 & BOC002) 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 and they should not be seen as a considerable constraint on the development of these lands. Where viable, they should be retained.

Any category 'C' trees within this site area have been identified on our drawings (Nos.BOC001 & BOC002) with a 'Grey' donut around their trunk positions.

3.5 The bulk of the trees have been plotted onto the attached drawing (DWG. No. BOC001) by the land survey company and where not, they have been positioned by ourselves to the best of our ability. 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 metres 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.
- 3.6 It is our opinion that our Arboricultural Assessment has had regard to the relevant policies and objectives set out in the Kildare Development Plan 2017-2023 and the Celbridge Local Area Plan and in particular to policies GI 8 to GI16 in the Development Plan.

#### 4.0 Summary of Survey Findings

- 4.1 The site area is located at 'Ballyoulster', Celbridge, Co. Kildare and 'Phase 1' forms part of a larger landholding. The subject site and the wider landholding has been surveyed in its entirety and included within this arboricultural assessment.
- 4.2 The overall land parcel is of an irregular shape, extending from the Celbridge Road to the Loughlinstown and Shinkeen Roads and can be accessed off the Celbridge and Loughlinstown Roads. This parcel of land is bounded to the north by Celbridge Road, commercial units, residential development and a cemetery, to the south it is bounded by residential development and agricultural lands in tillage, to the east it is bounded by the Loughlinstown Road and to the west by the Shinkeen Road. The boundaries around this parcel of land range from hedgerows to walls and steel palisade fencing.
- 4.3 This land parcel area consists of a series of interconnected fields, divided by typical type agricultural hedgerows for this area and the bulk of the lands are currently in use for production of arable crops. There are two areas of rough grassland, located on the western part where weeds and seedling trees are beginning to colonise. Ploughing for the arable crops extends close to the field hedgerow boundaries and extends in under the canopies of the trees, and in many cases this is resulting in surface root damage.
- 4.4 The hedgerows comprise mainly of Hawthorn, Blackthorn, Elder, Privet, Bramble and Dogrose, with Hazel, Holly, Cherry Laurel and Snowberry also present in some hedge lines. The hedge lines have been managed to contain their height and spread and this has helped to maintain good stock proof, low hedges in most places.
- 4.5 The majority of the trees are located within the field boundaries within the hedge lines. The main tree species present include Ash, Sycamore, Elm, Cherry, Holly, Poplar and Oak with Ash being the more abundant tree species. Some of the Ash is showing signs of stress/decline most likely due to the onset of infection by Ash Dieback (Hymenoscyphus Fraxineus) and this may impact on the long-term potential of some of the Ash trees and will require ongoing monitoring. The hedges provide screening towards the developments on the boundaries, in particular Hedgerows No. 2, 6, 14, 21 and 22. In addition, there are a number of tree lines and groups, located just off the site boundaries which have been included in the survey for information purposes; however no works are proposed to occur outside the applicant's site boundary.

4.6 Within the overall landholding, 55No. Trees were tagged individually (Nos.374-428), with 4 No. Trees, 9No.Tree Lines, 3No.Tree Groups and 22No.Hedges numbered numerically.

#### The following table gives a breakdown of their category grading:

Category Grade	No. of Trees
Category U	No Trees.
0 Trees	
Category A	No Trees.
0 Trees	
Category B	<b>Tree No.</b> 0374, 0387, 0388, 0391, 0392, 0393, 0395 &
8 Trees	Tree No.3
+ 2 Hedges	Hedge Nos. 14 & 21
+ 6 Tree Lines	<b>Tree Line Nos.</b> 3, 4, 5, 7, 8 & 9
+ 1 Tree Group	Tree Group No. 2
Category C 51 Trees	<b>Tree No.</b> 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 389, 390, 394, 396, 397, 398, 399-400 (10 Trees), 401, 402-Tree No.1 (4 Trees), 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 403, Tree No.2, 419, 420, 421, 422, Tree No.4, 423, 424, 425, 426 – 427 (9 Trees) & 428.
+ 20 Hedges + 3 Tree Lines	<b>Hedge No.</b> 1, 2, 3 (A & B), 4, 5, 6, 7, 8, 9, 10 11, 12, 13, 15, 16, 17, 18 (A & B), 19, 20 & 22 <b>Tree Line Nos.</b> 1, 2 & 6
+ 2 Tree Groups	Tree Group Nos. 1 & 3
Totals:	59 Trees + 22 Hedges + 9 Tree Lines & 3 Tree Groups

## 4.7 Within the red line site boundary for 'Phase 1', the following tree and hedge vegetation is present:

Category Grade	No. of Trees
Category U	No Trees.
0 Trees	
Category A	No Trees.
0 Trees	
Category B	Tree Nos. 0393 & 0395
32 Trees	<b>Tree Line Nos. 3</b> (6 Trees), <b>4</b> (9 Trees) <b>&amp; 5</b> (15 Trees)
+ 1 Hedge	Hedge No. 21
Category C	<b>Tree No.</b> 394, 397, 398, 399-400 (10 Trees), 401, 402-
37 Trees	Tree No.1 (4 Trees), 417, 418, 403, Tree No.2, 426 –
	427 (9 Trees) & 428.
+ 9 Hedges	Tree Line No. 6 (5 Trees)
	<b>Hedge No.</b> 8, 9, 10 11, 15, 16, 17, 18 (A) & 22
Totals:	69 Trees + 10 Hedges
	<b>Note:</b> This includes the counting of the trees individually
	within the tree lines within the site area.

#### 5.0.0 <u>Arboricultural Implication Study</u>

#### 5.1.0 Introduction

5.1.1 The site area consists of lands at Dublin Road and the Shinkeen Road, within the town lands of Donaghcumper and Ballyoulster, Celbridge, Co. Kildare. The application site is bound by a Greenfield site, Donaghcumper Cemetery and the Dublin Road to the north, the Rye River Brewing Company and the Ballyoulster Park housing estate to the north-east, the Primrose Gate housing estate to the south, agricultural lands to the east and Shinkeen Road to the west. Donaghcumper Medieval Church Ruins (RPS No. B11-02) and the house on Dublin Road, Donaghcumper (RPS No. B11-26), are protected structures located north of the application site

The proposed development comprises a Strategic Housing Development of 344 No. residential units (comprising 54 no. 1 beds, 30 no. 2 beds, 210 no. 3 beds and 50 no. 4 beds), a childcare facility with a GFA of c. 369 sq.m, public and communal open space, landscaping, car and cycle parking spaces, provision of an access road from Dublin Road and Shinkeen Road, associated vehicular accesses, internal roads, pedestrian and cycle paths, bin storage, pumping station and all associated site and infrastructural works.

- 5.1.2 This section of the document is designed to assess the impact of the proposed development layout on the tree and hedge vegetation within 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.
- 5.1.3 On drawing No.BOC002, I have identified the tree and hedge vegetation to be removed to facilitate this proposed development and management with 'Red' hatched crown spreads and those to be retained to form part of the long-term tree cover with a 'Green' hatched crown spread. Protective fencing has been shown on this drawing using 'Orange' hatching. These tree protection fences and other tree protection measures will need to be put in place at the start of the works and be maintained in place until all works are completed. This fencing is to protect the root zones and crown spreads of the tree and hedge vegetation, and to ensure their successful integration into the completed development of these lands.
- 5.1.4 The comments made within this impact assessment study are based on my understanding of the proposed development and what is required to allow for its construction.

#### 5.2.0 Design Rational

5.2.1 The current site layout has been finalized and modified based on the information provided in the initial condition tree assessment of the site area and the creation of the Tree Constraints Plan (DWG No.BOC001) which has resulted in changes

- in the layout of buildings, services and boundary treatments to ensure impact on the tree and hedge vegetation to be retained have been kept to a minimum.
- 5.2.2 The objective of the proposed development layout was such as to try and retain as much of the important tree and hedge lines, in particular around the perimeter of the site area and to incorporate these into the completed development where they will be an asset to the completed landscaped development and the surrounding area. This in my opinion has been achieved successfully with only a small proportion of the tree and hedge vegetation needing to be removed to facilitate the proposed development layout.

#### 5.3.0 Tree Loss

5.3.1 To accommodate the proposed development on this land parcel for 'Phase 1' or as part of active management, it will be necessary to remove the following vegetation:

Identification Number	Vegetation within 'Phase 1' Site	Hedge Lost	Trees Lost	Length in Meters Retained
	Area			
Hedge No.8	c.190m + 3 trees	c.40m	1 tree	c.150m + 2 trees
			(394 – C)	
Hedge No.9	c.204m + 13 trees	c.25m		c.179m + 13 trees
Hedge No.10	c.115m + 4 trees			c.115m + 4 trees
Hedge No.11	c.92m	c.92m		
Hedge No.15	c.142m + 3 trees	c.6m		c.136m +3 trees
Tree Line No.3	c. 6 trees			c. 6trees
Tree Line No.,4	c.9 trees			c.9 trees
Tree Line No.5	c.15 trees			c.15 trees.
Hedge No.16	c.75m	c.20m		c.55m
Tree Line No.6	c.5 trees		5 trees (C)	
Hedge No.17	c.107m + 1 Tree			c.107m + 1 tree
Hedge No.18A	c.85m			c.85m
Hedge No.21	c.125m	c.32m		c.93m
Tree Nos.426-	c. 9 trees			c.9 trees
427				
Tree No.428	1 tree		`	1 tree
Hedge No.22	c.237m	c.136m		c.101m
Totals	1,372m +69 Trees	c.351m	c.6 Trees	c.1,021m + 63Trees

5.3.2 **In summary**, to facilitate the 'Phase 1' development on these lands, it will be necessary to remove c.351m of the 1,372m of hedging which is c.25.6% of the total hedgerow length within the site area along with 6No. of the 69No. trees which is 8.7%.

- 5.3.3 The hedges being retained in most instances will require trimming to bring them back into active management and to incorporate them into the completed landscaped development. This will involve the trimming in of their sides, in particular the excessive spread of vegetation, especially Bramble and the poorer structured sections will need trimming/pruning to address stability issues. The objective of the trimming of the hedges is to help rejuvenate them with the encouragement of lower growth development and once trimmed back; there will be an opportunity to augment poor quality sections with new hedge planting to create better structured sustainable hedges for the future suitable for their new built urban environment. The future management of these hedges will see them being cut back on a three to five year cycle in order to contain their size, structure and quality.
- 5.3.4 Some of the trees within these hedgerows will also need remedial tree surgery works to address health and safety and to ensure a satisfactory juxtaposition within the completed development. A preliminary schedule of works is given within our condition tree survey within "Appendix 2" of this report and this will need to be reviewed on the ground once the development is laid out and the necessary tree pruning works will need to be undertaken by a competent tree surgery firm to the recommendations of "BS3998 2010". The Ash and Elm trees will also need ongoing monitoring on these lands, and if their condition deteriorates due to infection by Ash Dieback (Hymenoscyphus Fraxineus) or Dutch Elm Disease (Ophiostoma ulmi), remedial action will need to be taken to address safety to this site and the surrounding area which may need to include the removal of some of these trees.
- 5.3.5 The loss of the above hedge vegetation is being mitigated against with the planting of trees, shrub and hedging as part of the landscaping of the completed development which will complement the development and its incorporation into the surrounding area. It will also help to provide good quality and sustainable long-term tree cover, and as it establishes and grows in size, it will be continuously mitigating any negative impacts created with the loss of the existing tree vegetation to facilitate the proposed development. See landscape architects drawings and schedules for detail.

The planting strategy key factors are to:

existing residential properties.

- Create a sense of identity using trees, shrub and hedge planting.
- Create a robust landscape that performs all year round and is suitable for the current proposed use of this site area.
- Use vegetation to screen and enhance views.
- Use a more diverse mix of plant species that will include good pollinators.
- Plant robust species that will tolerate drought and site-specific micro-climates
- Plant species that are maintenance friendly

#### 5.4.0 Tree Retention

5.4.1 For the tree and hedge vegetation proposed for retention, all necessary mitigation measures will need to be put in place in order to prevent or reduce impact to its very minimum. Mitigation measures used will need to include the erection of protective fencing at the very start of the works, ground protection installation within root zones where fencing cannot be erected to enclose the entire root zones, monitoring of the site works by the project Arboriculturist throughout the construction process and the use of tree friendly techniques and products for the construction process.

#### 5.4.2 Main items for consideration during the proposed construction process:

ltem	Comments
Tree Pruning	As part of the initiating works, the crowns of some of the trees being retained 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.
	The hedges being retained in most instances will require trimming to bring them back into active management and to incorporate them into the completed landscaped development. This will involve trimming in of their sides, particularly excessive spread of vegetation especially Bramble and the poorer structured sections will need trimming/pruning to address stability issues. The objective of the trimming of the hedges is to help rejuvenate them with the encouragement of lower growth development and once trimmed back; there will be an opportunity to augment poor quality sections with new hedge planting to create better structured sustainable hedges for the future suitable for their new built urban environment.
	The future management of these hedges will see them being cut back on a three to five year cycle in order to contain their size, structure and quality.
	All tree felling and pruning work will need to be carried out by qualified and experienced tree surgeons <i>before</i> 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 that need to be removed, are to be ground out using a mechanical stump grinder taking care not to cause root damage

Item	Comments
	to the trees being retained.
Tree Management	Within the proposed development, trees will be positioned within close proximity to buildings and usable surfaces such as roads, footpaths and neighbouring properties. 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 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	Trees 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. The type of tree protection fencing for each area is to be agreed with the project Arboriculturist prior to its erection and it needs to be suitable for the types of works that will occur within its vicinity.
	Where it is expected that there will be a high concentration of construction works such as next to where buildings will be erected, the fencing will need to be 2.3m high and constructed in accordance with figure 2 of BS 5837 2012 (see type 1 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.
	Where it is expected that there will be a lesser intensity of works such as along the open spaces, a rail or wire mesh fence structure 1.5m high secured well to the ground will be sufficient, (see type 2 fencing detail within 'Appendix 1').
	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.BOC002) <b>prior</b> 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: <i>Trees in relation to design, demolition and construction</i> (2012) specifies appropriate fencing, see appendix 1 for details. All weather notices should 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 during the duration of the construction process and shall remain in

ltem	Comments
	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 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 of ground protection for light weight construction works.
	Care should 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 should not 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 should not be attached to any trees. Site offices, materials storage and contractor parking should all be outside the work exclusion zone.
Services	Services entering and leaving the site area are routed so they are located outside the root protection zones of the trees to be retained.
	Prior to the installation of any services routed near trees, these are to be marked out on site for review by the project Arboriculturist and a detailed 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 surrounding tree vegetation shown for retention.

ltem	Comments
	Any cabling for the lights along the paths where they come within the root zone of trees being retained will need to be installed in ducting within the buildup of these paths to ensure no soil or root damage is caused.
Boundary Treatments	The boundary treatments within the root zone of the tree and hedge vegetation being retained are of a fence type structure where there will only be a need to dig small diameter holes for the uprights. These holes for the uprights are to be dug manually with no machinery allowed inside the root protection areas. Work zones within the root protection areas for these trees will need to be protected during the construction of the boundary fences by boarding as per section 6.2.3 of BS 5837 2012.
	Where it is needed to install fences along existing hedges, it will be necessary to carry out some pruning of the lower vegetation to allow access. This is to be kept to a minimum and where necessary, the hedges are to be augmented with new hedge planting to fill openings and to bulk up screening.
Landscaping	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.
	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.
	In some places, paths/surfaces will encroach into the root zone of the tree and hedge vegetation to be retained and these sections of paths and surfacing will need to be installed using a 'No-Dig' method bringing the surface over the existing ground levels to avoid causing damage to the soil and roots underneath. Where it is necessary to provide extra support for heavier loading, it will be important to use a cellular confinement system such as 'CellWeb' within the construction of these sections of paths/surfaces.
	Please refer to Arboricultural Practice Note 12 'The use of Cellular Confinement Systems near trees' for detail on the installation of such products and surfaces.

#### 5.5.0 Monitoring

- 5.5.1 Any construction works within close proximity to retained trees 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 advice on any works within the RPA of retained trees to ensure successful tree retention and planning compliance.
- 5.5.2 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.
- 5.5.3 Copies of the tree retention and protection plan (DWG No. BOC002) a copy of BS 5837(2012) and NJUG 4 (2007) should all be kept available on site during the construction works and all works are to be in accordance with these documents.
- 5.5.4 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 drawing DWG No.BOC002, for the position of the protective fencing and other mitigation measures.
- 6.3 The protection of the tree vegetation shown for retention is divided into three main sections starting with the preconstruction stage right through to post construction and the reassessment of the retained trees.

#### 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 developer 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 <u>must be</u> 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, the project Arboriculturist and local authority to identify and finalize the trees for removal and the line of the protective fencing.

#### 6.6.0 Tree works

- 6.6.1 The developer 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 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.
- 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 works 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.

6.6.3 Remedial tree surgery works - The necessary remedial tree surgery works required to promote health and safety of the trees to be retained is 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 Once the trees have been removed, the line of the protective fencing that is required around the trees being retained <u>must be</u> erected as per DWG. No. BOC002.
- 6.7.2 Where it is expected that there will be a high concentration of construction works such as next to where buildings will be erected, the fencing will need to be 2.3m high and constructed in accordance with figure 2 of BS 5837 2012 (see type 1 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 Where it is expected that there will be a lesser intensity of works such as along the open spaces, a rail or wire mesh fence structure 1.5m high secured well to the ground will be sufficient, (see type 2 fencing detail within 'Appendix 1').
- 6.7.4 Signs need to be attached to these fences warning people to 'keep out'. See detail within drawing No.BOC002 & Appendix 1.
- 6.7.5 Once the protective fence line is erected, then the main construction works can commence on site.
- **6.8.0 Storage of Material, Work Yards and staff car parking -** These areas <u>must be</u> 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.

#### Stage 2:

#### 6.9.0 The Construction Works Stage

6.9.1 **Protective fencing -** During the course of the works, special attention must be paid to ensure that these tree 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 <u>must</u> only be removed when all the works are complete and at this stage incorporated into the finished landscape.

6.9.2 **Excavations -** The excavation works are only to commence once the protective fence line and all other protection measures are in place.

The excavations in the vicinity of the tree vegetation being retained will 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 trees to be retained and this may include such methods as retaining walls or similar.

No roots are to be severed by the construction works without prior approval by the project Arboriculturist. Where roots are encountered, the project Arboriculturist is to assess these prior to cutting and these are to be pruned back to appropriate pruning points beyond the excavation line. Where roots cannot be cut; alternative methods of construction will need to be considered. The excavated face is then to be covered with soil or with Hessian sacking to prevent further drying out and the death of root material. Where the Hessian sacking is used, it will be necessary to keep this moist especially during dry periods.

6.9.3 **Working within the RPA** (Root Protection Area) – If it becomes necessary to carry out works within the RPA of a tree/trees, these <u>must be</u> discussed and agreed with the project Arboriculturist. All works <u>must</u> 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 <u>must be</u> 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.

6.9.4 **Finished ground levels/Landscaping -** The existing ground levels within the RPA of trees <u>must</u> 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 <u>must</u> be carried out manually and the soil levels <u>must not</u> 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.

#### 6.10.0 Other items

- 6.10.1 The following is a list of additional activities <u>that are not allowed</u> 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:

#### 6.11.0 Post Construction Works

6.11.1 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 this site area and is for the sole use of the above named client and refers to only those trees and hedgerows 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 Felim Sheridan Felim Sheridan

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

Date 31st May 2022

#### 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.

#### Type 1 Protective Fence -

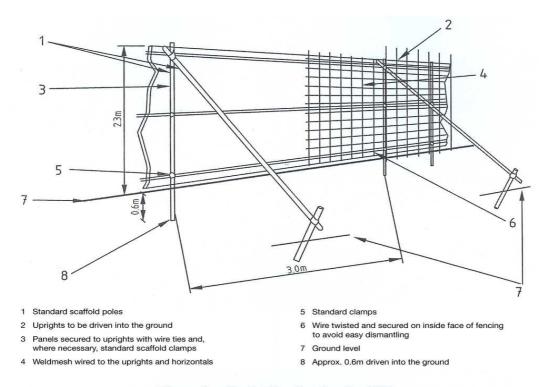
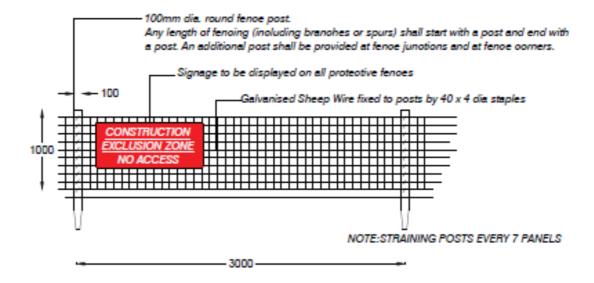


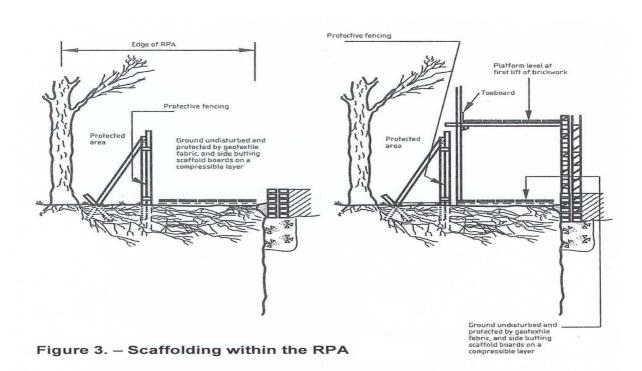
Figure 2. - Protective fencing for RPA

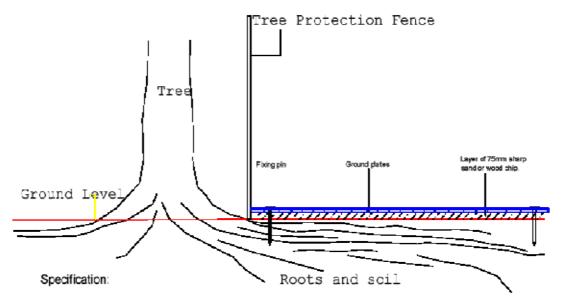
#### Fence Type 2 - Detail of Tree protection fencing for lower intensity work areas.





Sample of signage to be placed on fence pannels.





- 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



Arborist Associates Ltd. Arboricultural Assessment – Site Area for 'Ballyoulster SHD (Phase 1), Ballyoulster, Celbridge, Co. Kildare. May 2022

## **Appendix 2**

### **Condition Tree Assessment**

On the Site Area for 'Ballyoulster SHD (Phase 1), Ballyoulster, Celbridge, Co. Kildare.

Date: 28<sup>th</sup> August 2020

#### **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 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)

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
								hin the Site Area for , Celbridge, Co. Kildare.			
		Lough hedger then co	linstown rows on thontinues o	Road oppose ne eastern p on the weste	osite E eart of t ern side	<b>Ballyoulst</b> o the site, m e of the dra	er United oving in a ainage dit	AFC. It then proceeds along the field broadly south to north direction and ch, moving in a broadly anti-clockwise boundary at Willow Estate.			
Hedge No.1	Snowberry Symphoricarpos alba. Elder Sambucus nigra Sycamore Acer pseudo- platanus. Hazel Corylus avellana	This he area will like so and Syd the rece out. An	a mature aquank and hacamore exient past who overhead	nds in a broaughlinstown ge class in a as been regu tending abov	fair corlarly cure the government of the governm	ndition physit to its currileneral line side is some	siologically ent height. of the hed ewhat unm ength of th	and structurally. It is located on top of a There are isolated clumps of Elder, Hazel ge. The roadside has also been trimmed in lanaged with hedge specie encroaching	Continue present maintenant side. It would benefit from of field (west) side to contain s	cutting on the	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W-west Physphysiological.	A- average		
Hedge No.2	Cherry Laurel Prunus lauro-cerrasus Hawthorn Crataegus monogyna Snowberry Symphori-carpos alba Hazel Corylus avelana. Hawthorn Crataegus monogyna Elder Sambucus nigra Dog Rose Rosa canina	west di It is of a bounda Line No genera is contii spread  A.2	irection all a mature agary and scroot. 9) plante I hedge he nuous along this has h	ong the bou ge class in a eens the adja d at c.3m ce ight. There is	fair con accent p ntres a s an ove and has ate a we	with the addition physicizate proposed in the addition physicizate proposed in the additional power in the additional physicizate in the additional ph	djacent re siologically erty. It inclugth which haver line whi alarly clipped and hedge.	and structurally. It is growing on the site udes a number of ornamental trees (Tree have been allowed to develop above the ch traverses the hedge at the east end. It ed in the past to its current height and oto: Hedge No. 2 with Tree Line No. 9	It would benefit from cutting to contain spread.	on the site side	C2
Tree Line No. 1	Norway Maple Acer platanoides (4 trees)	A.8	A.120	A.N3 S3 E3	A.2	Young	Fair / Good	Fair / Good A line of twenty two trees planted along the line of Hedge No. 2. They have	No works required at the pre Ownership may need to be o		C2

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	Remain Contribute in years	Cat. Grade
	<b>Lime</b> Tilia sp.			W3				N-north S-south E-east W- west Physphysiological. grown above the hedge line and provide	A- average		
	(16 trees) Purple Plum Prunus cerasifera Nigra (2 trees)							screening along this boundary with the adjoining house. They are mostly single stem trees.			
Hedge No. 3A	Hawthorn Crataegus monogyna Bramble Rubus fruticosa	direction It is of a	on. It form a mature ag the northe	ns the bound ge class in a	dary be fair cor	etween two	o fields wi siologically	d of Hedge No. 2 in a south to north thin the site area.  and structurally. It is a short hedge line to current height and spread.	Continue present maintena	nce	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W-west Physphysiological.	A- average		
		Photo:	Hedge No	o. 3A, lookin	g sout	h.					
Hedge No. 3B	Hawthorn Crataegus monogyna Elder Sambucus nigra Bramble Rubus fruticosa Ivy Hedera helix.	with field It is of a has been are cold A.3  Photo:	elds and gramature agen cut to its position of the Hedge 3E	<b>ardens to th</b> ge class, in a	e east. fair/ goght and	pod conditions pread. It	on physiolo	pogically and a fair condition structurally. It us except for field access. Ivy and Bramble	Continue present maintenan	ce.	C1

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	Remain Contribute in years	Cat. Grade
			(111111)	(111)	(111)			N-north S-south E-east W- west Physphysiological.	A- average	iii years	
Tree Line No. 2	Ash Fraxinus excelsior	A.7	A.120	A.N3 S3 E3 W3	A.2	Young	Fair / Good	Fair / Good They are located in the adjoining garden at the northern end of Hedge 3B. They are establishing well and provide higher screening above the hedge along this boundary.	Management is outside of this site area.	40+	C2
0374	Ash Fraxinus excelsior	812	420	N3 S3 E3 W3	1	Early Mature	Fair / Good	Fair A single stem tree growing at the southern end of Hedge 3B, next to the field access. Very heavy lvy growth extends high into the crown, increasing the wind sail. Lower branches have been pruned in the past for clearance, leaving branch stubs.	Cut Ivy at ground level at present.	20+	B1
Hedge No. 4	Hawthorn Crataegus monogyna Blackthorn Prunus spinosa Privet Ligustrum vulgare Ash Fraxinus excelsior Snowberry Symphori-carpos alba Bramble Rubus fruticosa Ivy Hedera helix Holly Ilex aquifolium	It is of a a bank number hedge I	ary with a a mature ag and from h r of Ash tre height, intro	field to the s ge class in a nedge No.7, e es growing in oducing visua	fair corextending the heart	ndition physing south, it edge which est and dive	siologically is located have bee ersity. It ha	ern boundary of the site area. It forms a and structurally. It is growing on the top of on site side of a deep ditch. There are a n allowed to grow up over the general is been allowed to grow unmanaged for many are colonising the hedge line.	Cut back top and sides to she thicken hedge.	ape and	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W-west Physphysiological.	A- average		
			•	o. 4, looking							
0375	Ash	This he	edge conta	nins the follows	owing t	rees. Early	Fair /	Fair	No works required at the	10-20	C2
0070	Fraxinus excelsior	ŭ	230	S3 E3 W3	'	Mature	Good	It is growing on top of a bank of a deep ditch. It divides at c.1.8m into a multistem tree with an acute union formation between the stems.	present time.	10 20	32
0376	Ash Fraxinus excelsior	8	130/ 120/ 110/ 120/ 130	N3 S2 E3 W2	1	Early Mature	Fair / Good	Fair / Good A group of stems, most of them multiple- stemmed from base, growing up together forming a combined canopy. They have an acute union formation between the stems. There is a stump on the south side which is starting to re-grow. Ivy growth is beginning to extend up some of the stems.	Ivy growth will require management in the future.	10-20	C2
0377	Ash Fraxinus excelsior	7	300	N5 S3 E3	0	Early Mature	Fair / Good	Fair A single stem tree to c.1.6m where it was cut into the hedge in the past and now	No works required at the present time.	10-20	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
				W3				divides into three stems with a broad union formation between the stems. It is growing on top of a steep bank. Ivy growth is beginning to develop on the stems.	Ivy growth will require management in the future.		
0378	Ash Fraxinus excelsior	7	110/ 110/ 110/ 120/ 120	N6 S3 E3 W3	1	Early Mature	Fair	Fair A group of stems growing on top of a steep bank. They divide near ground level where they were previously cut into the hedge.	No works required at the present time.	10-20	C2
0379	Ash Fraxinus excelsior	9	130/ 140/ 120/ 120/ 120	N5 S3 E3 W3	1	Early Mature	Fair / Good	Fair A group of stems growing up together on top of a steep bank, developing from where they were cut into the hedge in the past. They divide near ground level with an acute union formation. Ivy growth is extending up some of the stems.	No works required at the present time.	10-20	C2
0380	Ash Fraxinus excelsior	8	280/ 290/ 290/ 300/ 310	N8 S6 E4 W5	1	Early Mature	Fair / Good	Fair A multi-stem tree from where it was cut into the hedge in the past and is growing out of the side of a steep bank. There is light deadwood in the crown. Ivy growth is extending up the main stems.	Ivy growth will require management in the future.	10-20	C2
0381	Ash Fraxinus excelsior	7	230/ 250/ 260/ 270/ 280	N9 S6 E3 W3	2	Early Mature	Fair / Good	Fair A multi-stem tree from near ground level from where it was cut into the hedge in the past. It is growing on top of a steep bank. Ivy growth is extending up the main stems. Heavy growth of hedge vegetation around the base limited the assessment.	Clear around base to allow a more detailed assessment.  Ivy growth will require management in the future.	10-20	C2

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	Remain Contribute in years	Cat. Grade		
								N-north S-south E-east W- west Physphysiological.	A- average				
0382	Ash Fraxinus excelsior	8	170/ 160/ 160/ 150/ 190	N6 S1 E4 W3	1	Early Mature	Fair / Good	Fair A multi-stem tree from near ground level. It is growing on top of a steep bank with Ivy growth is extending up the main stems.	Ivy growth will require management in the future.	10-20	C2		
0383	Ash Fraxinus excelsior	8	160 (6 stems)	N2 S5 E3 W4	0.5	Early Mature	Fair / Good	Fair It is a multi-stem tree from near ground level and is growing on top of a steep bank. Ivy growth is extending up the main stems.	Ivy growth will require management in the future.	10-20	C2		
0384	Ash Fraxinus excelsior	7	130 (6 stems)	N5 S3 E3 W3	2	Early Mature	Fair / Good	Fair It divides near the base into a multi-stem tree with an acute union formation between the stems. Ivy growth is extending up the main stems.	Ivy growth will require management in the future.	10-20	C2		
Hedge No.5	Elm Ulmus sp Blackthorn		-	ds on from th the adjac	_		-	ithern boundary in a broadly east to	Cut encroaching hedge speci hedge line to contain	C2			
	Prunus spinosa Hawthorn Crataegus monogyna Bramble Rubus fruticosa	some E the site	It is of a mature age class and is in fair/ poor condition physiologically and structurally. It contains some Elm and many of these are in decline due to 'Dutch Elm Disease'. It is a low hedge growing on the site side of a deep drainage ditch. Due to lapsed management, hedge species, particularly Bramble, is encroaching out, creating a broad, scrubby hedge.  A.7 - A.5 -										
Hedge No.6	Alder Alnus sp. Goat Willow Salix caprea. Dog rose Rosa canina	This hedge extends in a broadly north to south direction along the western boundary of the site area with the adjacent residential development. It includes a bridge / future vehicular access into the site.  It is of a semi mature age class and is in fair condition physiologically and structurally. It is located on the residential side of a steep bank above a deep water filled ditch/ stream. I suspect it has been									C2		

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average	•	
	Bramble Rubus fruticosa	-	-	the landscap are dead tree	-	-	-	al development and has some value for			
		A.7	-	A.5	-						
		Photo:	Hedge No	o. 6 looking	south.		Phot	o: Hedge No. 6 looking north.			
Hedge No.7	Cherry Prunus sp. Blackthorn		•		-	•	_	lo. 6 in a broadly east to west direction veen two fields within the site area.	Cut back encroaching growth line.	into the hedge	C2
	Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna	over the years which has contained hedge structure but has Bramble and Ivy dominating sections. It							∕th.		
	Privet Ligustrum vulgare Bramble	A.2.5	-	A.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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
	Rubus fruticosa	This he	edge conta	ains the follo	owing t	rees.		riiyspriysiological.			
0385	Ash Fraxinus excelsior	8	130 (8 stems)	N4 S5 E5 W5	0	Early Mature	Fair / Good	Fair Located at the eastern end of Hedge No. 7. It consists of a group of stems growing up together with a combined canopy. They have been cut into the hedge under past management and are multiple stemmed from base. Ivy growth is extending up some of the stems.	Ivy growth will require management in the future.	10-20	C2
0386	Ash Fraxinus excelsior	8	150 (6 stems)	N4 S3 E4 W3	1.5	Early Mature	Fair / Good	Fair Located at the eastern end of Hedge No. 7. It has been cut into the hedge during past management and forms a multiple-stemmed tree from here. It forms part of the higher bulking of this hedge.	Ivy growth will require management in the future.	10-20	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
Hedge No.8	Hawthorn Crataegus monogyna Ash Fraxinus excelsior Oak Quercus robur Elder Sambucus nigra Hazel Corylus avellana Holly Ilex aquifolium Privet Ligustrum vulgare Bramble Rubus fruticosa Dogrose Rosa canina	connect It is of a maintain structure hedge It is A.3	et up with an early maned as a love and stockine.	Hedge Nos. ature age clasow hedge with	6 & He ss in a h regulaty. A n	dge No.7. fair/ good car trimming umber of tr	It forms a condition p of its side	from Hedge No. 2 to Hedge No. 9 to in internal division between two fields. hysiologically and structurally. It has been is and top which has contributed to been allowed to develop above the general	Continue present maintenance	L ce	C2
0387	Oak Quercus sp.	13	640	N7 S8 E8 W7	3	Mature	Fair / Good	Fair / Good A single stem tree growing up within the hedge line. Close ploughing on the north and south sides is likely to have impacted the root zone. There is deadwood in the lower crown, some of this of a large size.	Remove dead / unstable growth. Cut Ivy at ground level.  Move ploughing line away from tree on both north and	20-40	B1

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
								Heavy Ivy growth is extending up into the crown.	south sides.		
0388	Ash Fraxinus excelsior	10	310	N4 S3 E5 W3	3	Early Mature	Fair / Good	Fair A single stem tree growing up above the hedge line. Close ploughing on the north and south sides is likely to have impacted the root zone. There is light deadwood and branch stubs in the crown. Light lvy growth is extending up the main stem.	Move ploughing line away from tree on both north and south sides.  Ivy growth will require management in the future.	20+	B1
0389	<b>Holly</b> Ilex aquifolium	6	300	N3 S3 E3 W3	3	Mature	Fair	Fair It has been allowed to grow up above the hedge line and is a multi-stem tree from near ground level.	Retain as part of the bulking of the hedge line.	10-20	C1
0390	<b>Holly</b> Ilex aquifolium	6	130 (6 stems)	N3 S1 E3 W2	3	Mature	Fair	Fair It has been allowed to grow up above the hedge line and is a multi-stem tree from near ground level. There are broken branch stubs on the south side, most likely due to machinery impacts.	Prune broken branch stubs to target pruning points.  Move ploughing line away from tree on both north and south sides.	10-20	C1
0391	Ash Fraxinus excelsior	11	110 (4 stems)	N6 S3 E6 W4	3	Mature	Fair / Good	Fair A multi-stem tree from near base and it is growing up above the hedge line. There is an acute union formation between the stems. Close ploughing on the north and south sides has caused some root damage. There are broken branch stubs present in the lower crown, most likely due to machinery impacts.	Prune broken branch stubs to target pruning points.  Move ploughing line away from tree on both north and south sides.	20+	B1
0392	Ash Fraxinus excelsior	11	360	N6 S5	2	Early Mature	Fair	Fair A single stem tree growing up above the	Move ploughing line away from tree on both north and	20+	B1

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average	-	
				E6 W4				hedge line. There is root damage present due to close ploughing on the north and south sides. Ivy growth is extending up the main stem.	south sides. Cut Ivy at ground level.		
0393	Ash Fraxinus excelsior	7	360	N8 S4 E5 W5	3	Early Mature	Fair	Fair A single stem tree growing up above the hedge line. There is root damage present due to close ploughing on the north and south sides. Light Ivy growth is extending up the main stem. The crown contains light deadwood.	Move ploughing line away from tree on both north and south sides.	20+	B1
0394	Elm Ulmus sp.	10	390	N5 S4 E7 W5	2	Early Mature	Fair	Fair A single stem tree growing on top of a small bank within the hedge line. Close ploughing is likely to have caused root damage on the north and south sides. Heavy Ivy growth is extending up the main stem. It may succumb to infection by 'Dutch Elm Disease'.	Move ploughing line away from tree on both north and south sides.  Cut Ivy at ground level.  Monitor condition for infection by 'Dutch Elm Disease'.	20+	C2
0395	Ash Fraxinus excelsior	10	440	N5 S4 E5 W3	3	Early Mature	Fair / Good	Fair A single stem tree growing on top of a small bank within the hedge line. There is root damage present due to close ploughing on the north and south sides. There is minor deadwood and branch stubs in the crown.	Move ploughing line away from tree on both north and south sides.  Cut Ivy at ground level.	20+	B1
Hedge No.9	Cherry Prunus sp. Blackthorn		•	ids in a broad	-			on from Hedge No. 6 to Hedge No. 8. It e site area.	Continue present maintenand	ce.	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
	Prunus spinosa Elder Sambucus nigra Hawthorn Crataegus monogyna Ash Fraxinus excelsior Holly Ilex aquifolium Privet Ligustrum vulgare Hazel Corylus avellana Sycamore Acer pseudo- platanus Yew Taxus baccata Bramble Rubus fruticosa	the pass hedge clearant and a litresultinend.  A.3	at and there line. To the ace and cor ne of trees g in root da	e are a number west is a de atrol encroach (0399-0400)	er of tre ep waten ment. . Arable cularly to	es which her filled dito It is not colle le crops/pl	nave been ch. It has b ntinuous alloughing has. There is	nd structurally. It has been maintained in allowed to develop above the general een cut on the east side to maintain long its length and it includes single trees as come to within 3m of base, most likely a group of dead Elm trees at the northern	Remove dead trees near the	north end.	
		This he	edge line o	ontains the	follow	ing trees.					
0396	<b>Cherry</b> Prunus sp.	10	120 (9 stems)	N2 S5 E3 W6	3	Early Mature	Fair	Fair A group of stems growing up together with a combined canopy. Ivy growth is extending high into the crowns,	Cut Ivy at ground level.	10-20	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological. increasing the wind sail.	A- average		
0397	Ash Fraxinus excelsior	8	150/ 150/ 180/ 200	N5 S4 E4 W5	3	Early Mature	Fair	Fair A multiple-stemmed tree from near ground level. The west stem divides again with an acute union formation between the stems. The crown is thin with minor deadwood present and lower branches have been cut back to raise crown over field. Ivy has been previously cut at ground level.	Retain for now as part of the bulking of this area.	10-20	C2
0398	Ash Fraxinus excelsior	8	150/ 130/ 130	N4 S1 E3 W3	3	Early Mature	Fair	Fair A multi-stem tree from near ground level. The stems have grown up above the hedge line forming a combined canopy. The crown foliage is thin and lower branches have been cut back to raise crown over field.	Retain for now as part of the bulking of this area.	10-20	C2
Tree Line (0399 – 0400) (10 trees)	Ash Fraxinus excelsior Sycamore Acer pseudoplatanus	A.6	A.180/ 160/ 160	A.N3 S3 E3 W3	A.3	Early Mature	Fair	Fair A short line of multi-stem trees growing along the hedge line. They are mostly multiple-stemmed from base and have acute union formations. Ivy growth is extending up the main stems and lower branches have been cut back to raise crown over field. They form the higher bulking of the hedge.	Retain for now as part of the hedge bulking of this area.	10-20	C2
0401	Ash Fraxinus excelsior	9	A.120 (6 stems)	N6 S5 E4 W6	3	Early Mature	Fair	Fair A multi-stem tree from near ground level. The lower branches were cut off on the east side to raise crown over field. It is growing on top of a bank on a deep ditch. There is light deadwood in the crown. Ivy	Cut Ivy at ground level.	20+	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
								growth is extending high up into the crown.			
Tree Line (0402 – Tree No. 1.) (4 trees)	Ash Fraxinus excelsior Sycamore Acer pseudo- platanus	A.6	A.140 (6 stems)	A.N3 S3 E3 W3	A.3	Early Mature	Fair	Fair A short line of multi-stem trees growing at the junction of Hedge Nos. 8, 9 & 10, forming the higher bulking. Heavy Ivy growth on some stems extends high into the crowns.	Retain for now as part of the bulking of this area.	10-20	C2
Hedge No. 10	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Ash Fraxinus excelsior Hazel Corylus avellana Holly Ilex aquifolium Sycamore Acer pseudo- platanus Bramble Rubus fruticosa Dog Rose Rosa canina	It is of a the pas There is with occ A.5	n between a mature ag t and has r s a deep, w casional ga	two fields were class in face cently beer	within the condition of	the site are ition physic current here eam on the	ea. blogically a ight and sp	on from Hedge No. 9. It forms an internal and structurally. It has been maintained in bread and is of good structure at present.  It is mostly continuous along its length	Continue present maintenar	nce.	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
Hedge No. 11	Hawthorn Crataegus monogyna Elder Sambucus nigra Yew Taxus baccata Elm Ulmus sp Privet Ligustrum ovalifolium Bramble Rubus fruticosa	It is of a along its way down back or has cor within.  A.2.5  Photo: No. 1	an interna an early ma s length wi wn the field the north ne close or  -  Hedge No	I division be ature age class th sections we diswith either of and south sign	etween ss in fa where E end bei des to e and ma  -	two fields air condition Bramble is coing more operation wide and have caused by the contain with the contai	physiolog colonising. Den and spot the but has used soil a	from Hedge No. 1 to Hedge No. 10. It	Continue present maintenan Its top may benefit from bein near future to contain height	g cut in the	C2
0404	<b>Elm</b> Ulmus sp	14	560	N7 S4 E2 W4	3	Early Mature	Fair	Fair A large, single stem tree which divides at c.4m into a multi-stem tree. There is heavy Ivy growth extending up into the crown. Close ploughing is likely to have	Cut Ivy at ground level.  Move ploughing line away from tree on both north and south sides.	10+	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
								caused root damage on the north side. This species is vulnerable to infection and death by 'Dutch Elm Disease'.			
0405	<b>Elm</b> Ulmus sp	14	540	N7 S6 E7 W3	4	Early Mature	Fair	Fair It divides at c.5m into a multi-stem tree and there is heavy lvy growth extending up into the crown. There is minor deadwood in the crown on the north side. Close ploughing is likely to have caused root damage on the north side. This species is vulnerable to infection and death by 'Dutch Elm Disease'.	Cut Ivy at ground level.  Move ploughing line away from tree on both north and south sides.	10+	C2
0406	<b>Elm</b> Ulmus sp	12	400	N6 S4 E4 W4	3	Early Mature	Fair	Fair A single stem tree to c. 3m where it divides into several stems with heavy lvy growth extending up into the crown. Close ploughing is likely to have caused root damage on the north side. This species is vulnerable to infection and death by 'Dutch Elm Disease'.	Cut Ivy at ground level.  Move ploughing line away from tree on both north and south sides.	10+	C2
0407	<b>Elm</b> Ulmus sp	11	200/ 190	N1 S3 E3 W2	3	Early Mature	Fair	Fair A twin stem tree from near the base with an acute union formation between the stems. Heavy Ivy growth is extending up into the crown. This species is vulnerable to infection and death by 'Dutch Elm Disease'.	Cut Ivy at ground level.	10+	C2
0408	<b>Elm</b> Ulmus sp	7	200	N2 S1 E3 W4	3	Early Mature	Fair	Fair It divides low down with a minor stem developing to the north and there is an acute union formation between the stems. There is heavy lvy growth	Cut Ivy at ground level.	10+	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
								extending up into the crown. This species is vulnerable to infection and death by 'Dutch Elm Disease'.			
0409	Elm Ulmus sp	10	200/ 190	N4 S1 E2 W1	3	Early Mature	Fair	Fair A group of stems growing up together with an acute union formation between the stems. There is heavy lvy growth extending up into the crown and there is minor deadwood in the crown on the north side. This species is vulnerable to infection and death by 'Dutch Elm Disease'.	Cut Ivy at ground level.	10+	C2
0410	Elm Ulmus sp	8	230	N1 S5 E2 W1	2	Early Mature	Fair	Fair A single stem tree, drawn up for light due to competition and the crown has been somewhat suppressed by Tree no. 0411 to the east. This species is vulnerable to infection and death by 'Dutch Elm Disease'.	Cut Ivy at ground level.  Move ploughing line away from tree on both north and south sides.	10+	C2
0411	Elm Ulmus sp	14	460	N4 S4 E6 W3	3	Mature	Fair	Fair It divides at c.2.5m into a multi-stem tree and there is a large scaffold limb extending to the east. Heavy Ivy growth extends high up into the crown. Close ploughing is likely to have caused root damage on both sides and there is some large size deadwood in the crown. This species is vulnerable to infection and death by 'Dutch Elm Disease'.	Cut Ivy at ground level.  Move ploughing line away from tree on both north and south sides.	10+	C2
0412	Elm Ulmus sp	11	430	N7 S5 E8	3	Mature	Fair	Fair A large tree with deadwood and die back in the upper crown. Very heavy lvy	Cut Ivy at ground level.  Move ploughing line away	10+	C2

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	Remain Contribute in years	Cat. Grade
Hedge No. 12	Elder Sambucus nigra Bramble Rubus fruticosa	north d  It is of a back to It is loca	dge exten lirection. It mature ac present he	W5  Ids at 90 deet forms an inge class in a seight and spreads west side or	grees f nternal fair cor ead an	division by distinct the distribution of the d	etween tw siologically wing. It forr	N-north S-south E-east W- west Physphysiological.  growth extending up into the crown. Close ploughing is likely to have caused root damage on the north side. This species is vulnerable to infection and death by 'Dutch Elm Disease' and it may already be infected.  Hedge No. 13 in a broadly south to vo fields within the site area.  and structurally. It has recently been cut ms an internal division between two fields. En cut down and allowed to re-grow which	A- average  from tree on both north and south sides.  Continue present maintenance	in years	C2
		Photo:	Hedge No	. 12 looking	north.	•					
Hedge No. 13	Elder Sambucus nigra Snowberry		•		_		-	th Hedge No. 12 along the northern e site from the adjacent residential	Cut back encroaching vegeta Interplant with hedge species		C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
	Symphori-carpos alba <b>Bramble</b> Rubus fruticosa	It is of a	apsed mar	ge class in a	d there	are gaps	along the l	and structurally. It has become overgrown ine. It consists of clumps of Elder with	Hawthorn and Blackthorn.		
Tree Group No. 1	Sycamore Acer pseudo- platanus	Photo	A. 280	N4 S4 E4	g east	Early Mature	Fair	Fair A group of three trees growing up together at the east end of Hedge No.13.	These trees may be outside the management control of this site area.	10-20	C1
				W3				They have grown up together with a combined canopy.			
Hedge No. 14	Blackthorn Prunus spinosa Hawthorn							roadly east to west direction along the creen between the site and adjacent	Continue present maintenan	ce.	B2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
	Crataegus monogyna Willow Salix sp. Sycamore Acer pseudo- platanus Leyland Cypress xCupresso- cyparis leylandii Aspen Populus tremuloides Holly Ilex aquifolium Lilac Syringia vulgaris Bramble Rubus fruticosa	It is of a power I clearant fire dan along it wall. It Sycamo	a mature agine running ice. It has has length exhas value ore form pa	g along the so been recently ion along the ccept for the	fair corouth side been been for western grand programme for the bulk f	de of this he trimmed on ollowing a fi n end where ast pruning king along s	edge and in the south in the south ire on the asection ghas helpe sections.	and structurally. There is an overhead thas been cut in the past to maintain (site side) to allow for ploughing. There is a djacent property. It is mostly continuous has been removed and replaced with a dist structure and condition. Ash and			
0413 – 0415	Aspen Populus	A.13	A.340	A.N5 S3	2	Early Mature	Fair / Good	Fair A group of three trees close planted and	These trees may be outside the management	10-20	C1
(3 trees)	tremuloides			E4	1			growing up together to form a combined	control of this site. They		

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W-west Physphysiological.	A- average		
			Hedge No								
				ontains the							
0417	Ash Fraxinus excelsior	10	240	N3 S2 E2 W2	2	Early Mature	Fair	Fair A single stem tree growing on top of a bank on a deep ditch. There is a Hawthorn developing at the base on the south side. Very heavy lvy growth is extending up into the crown.	Cut Ivy at ground level.	10-20	C1
0418	Elm Ulmus glabra	8	150 (6 stems)	N5 S2 E4 W4	1	Early Mature	Fair / Good	Fair It is a single stem tree which divides at c.2m into a multi-stem tree with an acute union formation between the stems. Very heavy Ivy growth is extending up into the crown. This species is vulnerable to infection by 'Dutch Elm Disease'. Close ploughing is likely to have caused root damage on the north side.	Cut Ivy at ground level.	10-20	C1
0403	Sycamore Acer pseudo- platanus	5	100/ 120/ 140	N2 S2 E2 W2	0	Young	Fair / Good	Fair A self-seeded seedling growing on the east side of a deep water ditch/ stream. It divides at c. 1.8m with an acute union formation between the stems.	Clear Bramble from around the base.	10-20	C1
Tree Line No. 3 (6 trees)	Norway Maple Acer platanoides.	A.7	A.200	N3 S3 E3 W3	2	Early Mature	Fair / Good	Fair / Good A short line of trees forming part of a longer line of trees growing on the adjacent property to the east and cordoned off from the site side area by fencing. They have been planted at 4.5m centres in a landscaped margin. The crowns of the trees are extending across the site boundary. They provide screening along this boundary.	Management of these trees is outside the control of this site.	20+	B2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
Tree Line No. 4 (9 trees)	Norway Maple Acer platanoides.	A.8	A.200	N3 S3 E3 W3	2	Early Mature	Fair / Good	Fair / Good Located to the west of Tree Line No. 3, it is a line of trees forming part of a larger line of trees growing on the adjacent property to the east. They have been planted at c.5m centres in a landscaped margin. The crowns of the trees are extending across the site boundary. They provide screening along this boundary.	Management of these trees is outside the control of this site.	20+	B2
Tree Line No.5	Ash Fraxinus excelsior Willow Salix sp.	A.9	A.210	A.N5 S4 E4 W6	2	Early Mature	Fair / Good	Fair Located to the west of Tree Line No. 4, on the adjoining property to the east. It consists of a group of close planted trees which have grown up together with a combined canopy. The crowns of the trees on the west side of the group are extending across the site boundary fence. They provide screening along this boundary. Ploughing on the site side comes within 2m of the base of the trees.	Management of these trees is outside the control of this site.	20+	B2
Hedge No. 16	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Bramble Rubus fruticosa Dog Rose Rosa canina	It is of a unmana power li	ge Road to mature ag aged on the ne with as	o the north. ge class in a e site side wi	fair cor ith Brar blic light clearar	ndition phys mble colonis ting running	siologically sing and e	and forms the boundary with the  and structurally. It is somewhat ncroaching out. There is an overhead hedge line and it has been cut in the past	Cut back vegetation on the s contain width.	ite side to	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
		Photo:	Hedge No	. 16.			Photo	p: Hedge No. 16, looking west.			
Tree Line No. 6 (5 trees)	<b>Plane</b> Platanus acerifolia.	A.10	A.220	A.N3 S3 E3 W3	A.2	Early Mature	Fair / Good	Fair This tree line is located to the north of Hedge No. on the roadside grass margin and they have been heavily pruned in the past to clear the adjacent overhead line and contain size. They provide screening along this boundary.	Management of these trees is outside the control of this site.	20+	C2
Hedge No. 17	Ash Fraxinus excelsior Cherry Prunus sp. Holly Ilex aquifolium Rugosa Rose Rosa rugosa Bramble Rubus fruticosa	It is of a low hea	the bound a mature ag Ige consist	ary with the ge class in fa ing mostly of	adjace ir cond dog ro	ent comme ition physic se. There	ercial propologically a sare a few t	n a broadly north to south direction and perty to the west.  and fair / poor condition structurally. It is a rees beginning to develop above the dispread in the past.	Carry out general tidy up and shape.	d cut back to	C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average	-	
		Photo:	Hedge No	. 17.			Photo:	Hedge No. 17, looking north			
		This he	edge conta	ins the follo	owing t	ree.					
Tree No. 2	<b>Cherry</b> Prunus sp.	8	280	N3 S3 E3 W3	2	Mature	Fair	Fair It is growing just off the site boundary on the adjoining property. The crown is being heavily suppressed by Ivy growth.	Management of this tree is outside the control of this site.	10-20	C1
Hedge No. 18A	Bramble Rubus fruticosa	west di	irection. It a mature ag	forms the b	ounda oor con	ry with the	e adjacent iologically	nd of Hedge No. 17 in a broadly east to commercial property to the north. and structurally. The original hedge plants	This hedge could be rejuven planting of hedge plants and works.	•	C2

Tree No.	Tree Species	Ht. (m)	Stem Dia. (mm)	Branch Spread (m)	C- Ht. (m)	Age Class	Phys. Con.	Structural Condition Other Comments  N-north S-south E-east W-west	Preliminary Recommendation  A- average	Remain Contribute in years	Cat. Grade
Hedge No. 18B	Hawthorn Crataegus monogyna Elder Sambucus nigra Bramble Rubus fruticosa	This he forms	edge exter the bound a mature aq	ary with the ge class and	hedge adjace	No. 18A eent comme	ercial prop	in a broadly east to west direction and perty to the north.  ally and fair/ poor condition structurally. It awthorn and Elder located along the line.	It would benefit from control planting of hedge species to line.		C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
		Photo:	Hedge No	o. 18B.							
Tree Line No. 7	Western Red Cedar Thuja plicata.	A.11	A.220	N4 S4 E3 W3	0	Early Mature	Fair/ Good	Fair / Good This tree line is located on the adjacent cemetery grounds cordoned off by the boundary wall. They provide screening and privacy. They have been subject to some clipping / pruning in the past on the site side to reduce encroachment.	Management of these trees is outside the control of this site.  Remove Bramble on site side.	20-40	B2
Tree Line No. 8 (3 trees)	Beech Fagus sylvatica.	A.10	A.240/ 230	A.N4 S3 E3 W3	2	Early Mature	Fair/ Good	Fair This short tree line is located at the southern end of Tree Line No.6 on the adjacent cemetery grounds cordoned off by the boundary wall. They have been close planted and are growing up with a combined canopy. They are multi stem trees from c.1.5 – 1.8m. The crowns are encroaching over the site boundary wall into the site. There has been recent pruning of lower branches on one of the trees.	Management of these trees is outside the control of this site.	20-40	B2
Hedge No. 19	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Elder Sambucus nigra Bramble Rubus fruticosa	And it	forms an i a mature aq en cut dow	<b>nternal divis</b> ge class and n in the past	sion be is fair o with Br	etween two condition p ramble, Do	o fields wi hysiologica g Rose an	y east to west direction to Hedge No. 10. thin the site area.  ally and fair/ poor condition structurally. It d Ivy colonising the line. An overhead line ted clumps of Hawthorn and Elder along the	Trim encroaching hedge spe interplant with hedgerow spe strengthen the hedge.		C2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
		Photo:	Hedge No	o. 19.							
Tree Line No. 9 (9 trees)	Western Red Cedar (8) Thuja plicata. Norway Maple (1) Acer platanoides.	A.9	A.230	A.N4 S4 E3 W3	0	Early Mature	Fair / Good	Fair / Good This tree line is located on the adjacent cemetery grounds cordoned off from the site area by the boundary wall. They are growing along the boundary and the crowns are starting to encroach over the boundary wall.	Management of these trees is outside the control of this site. Remove Bramble growing on the site side.	20+	B2
Tree No. 3	<b>Yew</b> Taxus baccata.	13	600	N5 S3 E3 W6	1	Mature	Fair / Good	Fair / Good Located just off the site boundary on the adjoining cemetery land. It is a large tree with heavy lvy growth extending high into the crown. The crown is encroaching over the site boundary.	Management of this tree is outside the control of this site. It would benefit from the lvy being cut at ground level.	40+	B2
0419	Ash Fraxinus excelsior	11	220	N3 S3 E3	2	Semi Mature	Fair / Good	Fair Most likely a self-sown seedling and it is a single stem tree growing out from the	Cut Ivy at ground level.	10-20	C1

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
				W3				base of the boundary wall to the cemetery. It may cause structural damage to the wall as it grows in size. Ivy growth is extending up into the crown.			
0420- 0421 (2 trees)	Ash Fraxinus excelsior	A.11	A.220	N3 S4 E1 W4	1	Early Mature	Fair / Good	Fair A pair of trees, most likely self-sown seedlings, growing up together with a combined canopy. They are located close to the base of the cemetery wall and may cause structural damage. Heavy Ivy growth is extending up into their crowns.	Cut Ivy at ground level at present.	10-20	C1
0422	Ash Fraxinus excelsior	10	200	N3 S2 E3 W2	2	Semi Mature	Fair	Fair A self-sown seedling, located just outside the site entrance off the Celbridge Road. Its lower branches have been removed/broken out to raise up its crown and it divides at c.3m into two co-dominant stems with a broad union formation between the stems. It is growing close to the base of the adjacent wall. It has no long-term potential in this location.	Retain for now but plan for removal	10+	C1
Tree No. 4	Ash Fraxinus excelsior	12	390	N5 S5 E4 W3	3	Early Mature	Fair	Fair Growing on a small bank, just off the site boundary on the adjacent property to the west. Most likely part of a previous hedge line, now removed. It is a single stem tree and it appears to have been topped at c.8m in the past but has re-grown from the cut point. The crown is thin and is carrying a heavy crop of seeds.	This tree is outside the management control of this site.	10-20	C1

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
Hedge No. 20	Hawthorn Crataegus monogyna Elder Sambucus nigra	boundard It is of a up while its stock located A.5	ary to the mature age the sides k-proof qual adjacent to	west and for ge class in fa have been r ality. There is	rms and ir cond manage a field here are	internal b ition physic ed, mainly d entrance lo e two very l	oundary lologically a on the sour pocated par arge trees	y east to west direction to the site between two fields within the site area.  and structurally. It has been allowed to grow thern side and this has helped to maintain it way along the line with a dead Elm tree is located towards the western end.  Hedge No. 20, looking west	Remove dead tree beside th	e field gap.	C2
0423	Ash Fraxinus excelsior	20	1000	N10 S7 E7 W8	2	Mature	Fair/ Poor	Fair/ Poor A very large tree growing on the hedgerow bank. It divides at c.3-3.5m into a multi-stem tree with a heavy scaffold limb to the south. Very heavy lvy growth extends high into the crown. The crown contains deadwood and is	Make safe large dead/ unstable growth and prune remaining crown to shape balance. Cut Ivy at ground level.  Move ploughing away from	10+	C1

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	Remain Contribute in years	Cat. Grade
0424	Ash Fraxinus excelsior	22	1000	N9 S12 E8 W4	3	Mature	Fair/ Poor	N-north S-south E-east W- west Physphysiological.  showing signs of decline. There is root damage on the south side due to close ploughing.  Fair/ Poor A very large tree growing on a hedgerow bank. It has a wide, spreading crown and it divides at c.5m with a broad union formation and there are heavy scaffold limbs extending out over the field. Heavy lvy growth extends high into the crown. The upper crown is thin, with deadwood and dieback present, suggesting the onset of decline. Close ploughing on the south side may have caused root damage.	the base of the tree.  Clear around the base to allow a more detailed assessment of lower trunk/ base.  Make safe large dead/ unstable growth and prune remaining crown to shape balance. Cut Ivy at ground level.  Cut Ivy at ground level.  Move ploughing away from the base of the tree.  Clear around the base to allow a more detailed assessment of lower trunk/	10+	C1
Hedge No. 21	Ash Fraxinus excelsior Sycamore Acer pseudo-platanus Elm Ulmus sp. Grey Poplar Populus x canescens	This broad hedge extends along the western boundary of the site area in a broad south direction on the boundary with the adjoining residential areas (Shinkeen It is of a mature age class in fair condition physiologically and structurally. A section at has been cut down to a lower height bordering with the rear garden of houses. The matappears to be growing on the site side of the ditch/ stream but there is vegetation on the also bulking up this hedge. It has been trimmed on the field side to contain in the past some dead Elm located along the line of the hedge. It forms a good screen barrier betom						and structurally. A section at the north end ar garden of houses. The main hedge line but there is vegetation on the other side d side to contain in the past. There are	base.  Cut out/ remove dead Elm al and make safe any other larg unstable growth, particularly potential to endanger the adj	ge dead/ that with	B2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological.	A- average		
	Hawthorn Crataegus	area ar	nd the adjo	ining develop	ed are	as.	•				
	monogyna  Blackthorn	A.2	-	A.3		-					
	Prunus spinosa Privet Ligustrum vulgare		Ū	o. 21, looking			Phot	o: Hedge No. 21, looking north			
0425	Sycamore	111	300	ains the follo	owing 1	Early	Fair	Fair	Cut Ivy at ground level.	10-20	C1
0720	Acer pseudo-platanus	11	300	S5 E4 W3		Mature	1 all	A single stem tree growing on the bank of the stream with heavy lvy growth extending high into the crown.	Tidy up around base to allow for a more detailed assessment.	10-20	01
Tree Group No. 2	Sycamore Acer pseudo-platanus Elm Ulmus glabra.	A.18	A.500	A.N5 S5 E5 W5	A.3	Early Mature / Mature	Fair / Good	Fair It consists of a group of three trees which have grown up together, on both sides of the stream to form a combined canopy. There is a Sycamore growing on both sides of the stream. Heavy lvy extends	Cut Ivy at ground level.  Access is required to carry out a more detailed assessment of these trees.	20+	B2

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	Remain Contribute in years	Cat. Grade
								N-north S-south E-east W- west Physphysiological. up into the crowns. The inspection was	A- average		
Tree Group (0426- 0427)	Grey Poplar Populus x canescens	A.13	A.250	N4 S4 E3 W3	2	Early Mature	Fair / Good	Fair A group of sapling trees growing up together with a combined canopy out from Hedge No. 21 at the southern end. They have been drawn up for light due to competition. They help bulk up Hedge No. 21 at this end. Ivy growth is extending up some of the stems.	Cut Ivy at ground level. Tidy up the undergrowth.	10-20	C2
Tree Group No. 3	Aspen Populus tremuloides	A.13	A.250	N4 S4 E3 W3	2	Early Mature	Fair / Good	Fair A group of sapling trees growing up together with a combined group canopy, just off the western boundary of the site area. They provide shelter to each other and they have been drawn up for light due to competition. They form part of a larger plantation and some of the trees are beginning to impact the boundary fence. They are self-seeding on the field side of the fence	Management of these trees is outside the control of this site.	10-20	C2
0428	Aspen Populus tremuloides	17	340	N5 S5 E4 W5	2	Early Mature	Fair / Good	Fair A single stem tree on the edge of Tree Group No. 5. It is growing up through the palisade fence line.	No works required at the present time.	10-20	C1
Hedge No. 22	Ash Fraxinus excelsior Hawthorn Crataegus monogyna Elder	It is of a structur	on along to a mature aq ally. It is no	nd along the he rear gard ge class and ot continuous ry fence/ wall	l <b>ens of</b> is in fa s along	the adjoin ir condition its length,	Trim in encroaching hedge vegetation and add in natural hedge planting to bulk up and improve structure.		C2		

Tree No.	Tree Species	Ht. (m)	Stem Dia.	Branch Spread	C- Ht.	Age Class	Phys. Con.	Structural Condition Other Comments	Preliminary Recommendation	Remain Contribute	Cat. Grade
	Оросио	(,	(mm)	(m)	(m)	0.0.00	00			in years	
			, ,	, ,				N-north S-south E-east W- west Physphysiological.	A- average		
	Sambucus nigra Bramble Rubus fruticosa	encroaching out in places. Bramble and Dog Rose are colonising sections along its length. There are sapling Ash trees developing at the east end.									
	Dog Rose Rosa canina	A.6	-	A.4				and the Contract of the Contract			
							Please	e: Hedge No. 22, looking east			
		Photo:	Heage No	. 22, looking	g west.	T	Photo				
Notes:											