



# Arborist Associates Ltd

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Ref: SFP0798676

5<sup>th</sup> June 2015

**For the Attention of Ms. Bridget Treacy**

Senior Executive Parks Superintendent  
Parks & Landscape Services  
Dùn-Laoghaire Rathdown County Council  
County Hall  
Marine Road  
Dùn-Laoghaire  
Co. Dublin

Dear Ms. Treacy,

**Re: An Arboricultural Assessment on the Site Area at 'Springhill Tennis Club',  
Springhill Park, Blackrock, Co. Dublin.**

I inspected the tree vegetation on the above site area and the proposed development layout drawings as requested and am pleased to submit my report.

Recommendations and comments made in this report are subject to the knowledge and expertise of the qualified Arboriculturist that carried out the assessment and their understanding of the proposed development works.

If you require further information please do not hesitate to contact us, and we will do our best to be of assistance.

Yours sincerely,  
For Arborist Associates Ltd.

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

**Felim Sheridan's qualifications:**

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

# **Arborist Associates Ltd.**

## **An Arboricultural Assessment on the Site Area at 'Springhill Tennis Club', Springhill Park, Blackrock, Co. Dublin.**

**Prepared for: Dún-Laoghaire Rathdown County Council**

**Prepared by: Felim Sheridan F. Arbor. A, RFS Dip, Nat. Dip & NCH in  
Arboriculture**

**Date: 5<sup>th</sup> June 2015**

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## **1.0 Instructions**

- 1.1 I have been instructed by Ms. Bridget Treacy, Senior Executive Parks Superintendent for Dún- Laoghaire Rathdown County Council to assess the tree vegetation within a site area at 'Springhill Tennis Club', Springhill Park, Blackrock, Co. Dublin and report on the following:
- A - To assess the present condition of the tree vegetation within the vicinity of this site area and to prepare a constraints drawing. See 'Appendix 2' and drawing No.SPT001 for detail of my findings.
  - B - To assess the impact of the proposed development layout on the tree vegetation located within the vicinity of site area indicating those for removal and retention. See 'section 5.0' and drawing No.SPT002 for detail.
  - C - To show on this drawing the position of the line of protective fencing and other mitigation measures that will need to be put in place around the tree vegetation to be retained at the very start of the works and be maintained until all construction works are complete. See 'section 6' & detail on drawing No.SPT002 for detail.

## **2.0 Report Limitations**

- 2.1 The inspection of the tree vegetation has been carried out from ground level only, is a preliminary report and does not include climbing inspections, internal investigations of the timber or below ground investigations. The assessment is based on what was visible at the time of the inspection and recommendations made are subject to the knowledge and expertise of the qualified Arboriculturist that carried out the above inspections.
- 2.2 This report only relates to factors apparent at the time of the inspection; as a result, further monitoring is imperative if potential problems/hazards are to be avoided. The recommendations within this report are valid for a 12 month period only, unless otherwise stated.

## **3.0 Survey Data Collection and Methodology**

- 3.1 The Arboricultural data which is presented within the attached tree schedule (see appendix 2), has been recorded in line with BS 5837:2012. The tree survey was conducted by collecting and assessing the following information on all significant trees located on site and plotted on the land survey map provided.
- Tree Number (metal tags attached to each tree).
  - Tree species both common and botanical.
  - Dimensions (Trunk diameter, height, crown spread and crown clearance).
  - Age Class
  - Physiological Condition
  - Structural Condition

- Preliminary Recommendations
- Estimated remaining contribution within their present environment
- Retention category

- 3.2 Each tree included within this assessment has been marked with a small aluminum tag with a reference number that relates to the main condition report. The tag numbers are attached to the trees at a height of 1.5- 2m from ground level and are orientated in such a way to assist in their relocation.
- 3.3 The inspection of the trees involves a visual assessment from ground level only and does not include any invasive means of assessing the trees internally, their below ground parts or the aerial parts that are not visible from the ground. Good, fair and poor have been used to summarize the physiological and structural conditions of these trees with the comments giving more detail. Other items that may limit the assessment of a tree included Ivy cover, scrub vegetation and/or basal suckers.
- 3.4 Their retention category has been assessed and categorized according to their quality and value within the existing context (BS-4.5), and not in conjunction with any proposed development plans. In making this assessment, particular consideration was given to;

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

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

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

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

The following summarizes each of the categories:

**Category U** – Those trees in such a condition that any existing value would be lost within 10 years. Most of these will be recommended for removal now or in the short-term for reasons of sound Arboricultural practice/ management.

From our assessment of the trees within this site area, three trees have been categorized as category 'U' 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. In some instances, this will

benefit the surrounding trees giving them more space to grow and develop.

These category 'U' trees have been identified on our drawings (No.SPT001 & SPT002) with a 'Red' donut around their trunk positions. Due to the condition of these trees, they should not be considered a constraint on the design layout of the proposed development of this site area.

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

From our assessment of the trees within this site area, nine individual trees and two tree lines have been categorized as category 'A' either due to good condition and their remaining life contribution to this area. As a result, a number of the semi-mature trees have been included within this category.

These category 'A' trees have been identified on our drawings (No.SPT001 & SPT002) with a 'Green' donut around their trunk positions.

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

From our assessment the trees within the vicinity of this site area; eight trees have been categorized as category 'B'. These would be seen as trees that have the potential to contribute to the tree cover of this area for the medium term and includes some of the younger trees that have the potential to develop and be of value to the treescape of this area long-term.

These have been identified on our drawings (No.SPT001 &SPT002) with a 'Blue' donut around their trunk positions.

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

From our assessment of the trees within the vicinity of this site area, twelve trees have been categorized as category 'C'. These trees would be seen as having the potential to provide tree cover for the short to medium term. As part of the future management, some of these would probably be removed for one reason or another. This category consists of trees of all age classes from young to mature. These trees should not be seen as a considerable constraint on the development of these grounds, but should be considered for retention where viable.

These have been identified on our drawings (No.SPT001 & SPT002) with a 'Grey' donut around their trunk positions.

- 3.6 The trees have been plotted onto the attached drawing (Dwg No.SPT001) by a land survey company and this drawing has been developed as a constraints plan to aid the design team in the layout of the development. The tag numbers referred to in the condition tree report have been shown on this drawing along with their crown spreads and their retention category colour coded as recommended by BS 5837 2012. The constraint (Minimum Root Protection Area) for each tree has been shown with an 'Orange Circle'.

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

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

For trees with more than one stem, one of the two calculation methods below should be used. The calculated RPA for each tree should be capped to 707 m<sup>2</sup> or a circle with a radius of 15m.

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

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

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

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

Any deviation in the RPA from the original circular plot takes account of the following factors whilst still providing adequate protection for the root system:

- a) The morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures, drainage ditches and underground apparatus);
- b) Topography and drainage;
- c) The soil type and structure;
- d) The likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

- 3.7 I have developed drawing No.SPT002 as an Arboricultural Impact Assessment/ Tree Protection drawing. I have identified on this drawing, the tree vegetation to be removed to facilitate the proposed development with 'Hatched Red' crown spreads and those to be removed purely due to condition physiologically and / or structurally with an 'Open Red' crown spread and those to be retained to form part of the tree cover on these grounds with a 'Hatched Green' crown spread. I

have also shown on this drawing the positioning of the protective fencing that will need to be erected at the start of the works and be maintained in place until all works are completed. This fencing is to protect the root zone of the tree vegetation and ensure their successful integration into the completed development.

#### **4.0 Findings**

- 4.1 The site area consists of part of 'Springhill Park' located around the existing tennis courts in the north- western corner of the park. The site area extends from 'Springhill Avenue' in the south to 'Mount Albany' to the north. It is adjoined along its northern boundary with the adjoining 'Newtownpark House/Court', to its south and east by the remaining part of the park and to the west by the boundary wall of the adjoining rear gardens of houses that back onto this area.
- 4.2 There is a diverse mix of tree species and age classes within this part of the park and these range from the mature trees that formed part of the earlier planting to those that have been added in more recent years as part of the rejuvenation of the tree cover.
- 4.3 The area around the trees is maintained in grass and there are a number of paths that bisect this area. The area is in high usage as a result of people coming and going from the tennis courts and using the remaining parts of the park.
- 4.4 The tennis courts have been developed into this area in more recent years. In some places, its construction has encroached into the root zone of trees and there is evidence of some soil alterations and disturbances around some of the larger mature trees.

## **5.0.0 Arboricultural Implication Study**

### **5.1.0 Introduction**

- 5.1.1 It is being proposed to carry out some works to the tennis club with a new club house and some hard landscaping. It will also be necessary to allow for infrastructural works such as services in and out of this area.
- 5.1.2 This section of the document is designed to assess the impact of the proposed development layout on the tree vegetation within this site area and to look at the necessary measures that will need to be undertaken to help retain the tree vegetation shown for retention free from adverse impacts for the duration of the construction period.
- 5.1.3 On drawing No.SPT002, I have identified the tree vegetation to be removed to facilitate this development and management with 'Hatched Red' crown spreads and those to be retained to form part of the tree cover on these grounds with a 'Hatched Green' crown spread. The protective fencing has been shown with 'Orange' hatching and this will need to be erected at the start of the works and be maintained in place until all works are completed. This fencing is to protect the root zone of the tree vegetation and to ensure their successful integration into the development of these grounds.



## **5.2.0 Impact Assessment**

### **5.2.1 Tree Loss**

To accommodate the proposed development on this site area, the following tree vegetation will need to be removed:

Tree Nos. 0969, 0978, 0979, 0980, 0981, 0982, 0983 & Shrub border No.1 will need to be removed to facilitate the installation of the proposed services which will be routed to and from the tennis grounds on this linear strip of ground between the footpath and the northern boundary wall. These are all, with the exception of tree No.0982 of a young to semi-mature age class planted in more recent years and all these trees are currently of a small size. Their loss to this area is minimal and is mitigated by the presence of other tree planting on the park side of the footpath and on the adjoining property side of the boundary wall within Newtownpark House/Court.

The positioning of the services within this area, diverts them away from all of the other trees, in particular the larger more prominent mature trees so this would be seen as the best option with least impact on the tree cover of this area.

Tree Nos. 1407 & 1409 are both large mature Lime trees of prominence within the treescape of this area, but are heavily infected by the fungus 'Ustulina deusta' leading to basal decay that will impact on their health and stability. As a result, both these trees are also being recommended for removal as part of active management and are not directly affected by the proposed development layout.

- 5.2.2 Tree pruning** is to form part of the initiating works. The crowns of some trees are to be pruned to clean out 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.
- 5.2.3 The attenuation tank** is located within an open area between the existing mature trees and its position can be worked so it is outside the root protection areas of the trees within this area. The surface water pipe coming from the area around the tennis courts and club house into this tank is to be routed in the linear strip of ground between the path and the northern boundary wall where the proposed foul sewer pipe is to be routed. This pipe is to be routed through the trees from this strip of ground into the tank and should have no impact on the surrounding trees.
- 5.2.4 A Fire tender access road** is to be route into the tennis club area from an entrance of Springhill Avenue and this is located away from the trees, so no impact is expected.

**5.2.5 Construction traffic** into and out of the site area should come in from 'Springhill Avenue' and use the fire tender access road and should have no impact on the trees within this area.

**5.2.6 Protective fencing** needs to be erected around the trees within the vicinity of this site area to ensure that their root zones are cordoned off and protected from the construction activities on this site area. Protective fencing is to be erected prior to the construction works commencing on site to enclose the RPA (Root Protection Area) of the tree vegetation to be retained as per drawing No.SPT002. This is to be marked out on site by the project Arboriculturist and once erected; it is to remain in place for the duration of the project.

All construction works are to be well planned in advance so as not to put pressure on the protective zone around the tree vegetation. All works are to occur from outside the protective zones. If any works need to occur from within the root protection areas, the ground within these areas required for these works will need to be protected by boarding to the recommendations of section 6.2.3 of BS5837 2012.

This site is of sufficient size to facilitate the construction work yards and storage of material, without a need to encroach into the RPA of the tree vegetation being retained. The areas where these are to occur will need to be identified on the work drawings prior to the construction work commencing.

Where work space between the construction 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 and to reduce the extent of soil and root damage occurring to the tree vegetation proposed for retention. See section 6.2.3 of BS5837 2012 for detail on working within the RPA and ground protection.

**5.2.7 Landscaping** around the trees and their incorporation into the completed development will need to retain the existing ground levels within their root protection areas (RPA). 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 tree vegetation to be retained are to be carried out manually and the soil levels are not to be lowered or raised resulting in root damage. All surfaces are to be porous to allow the free movement of air and moisture to the roots below. Recommendations of sections 8 of BS5837 2012 are to be adhered to during the landscaping within the RPA's of these trees.

### **5.3.0 Monitoring**

**5.3.1** Any construction works within close proximity to retained tree vegetation are advised to be undertaken in accordance with approved method statements prepared by the construction contractor under the direct supervision of a qualified consultant Arboriculturist. Therefore, during the construction works, a professionally qualified Arboriculturist is recommended to be retained by the

principal contractor or site manager to monitor and advice on any works within the RPA of retained trees to ensure successful tree retention and planning compliance.

- 5.3.2 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.
- 5.3.3 Copies of the tree retention and protection plan (Dwg No. SPT002) 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.
- 5.3.4 On the completion of the construction works, all tree vegetation 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.SPT002, for the position of the protective fencing and other mitigation measures.
- 6.3** The protection of the tree vegetation shown for retention within this proposed development is divided into three main sections starting with the preconstruction stage right through to post construction and the reassessment of the retained trees.

### **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 must be discussed with the appointed project Arboriculturist and the necessary mitigation measures put in place without delay and prior to the works being carried out.

#### **6.5.0 Site meeting**

6.5.1 Prior to any works commencing on site, it is necessary that a meeting be arranged between the project manager, site foremen, 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 site agent 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.

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

- 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 **must be** erected as per Dwg. No. SPT002.
- 6.7.2 The fencing needs to be 2.3m high and constructed in accordance with figure 2 of BS 5837 2012 (see fencing detail on drawing No.SPT002 & Appendix 1) using vertical and horizontal scaffold bars well braced together with the verticals spaced out at a maximum of 3m centres. Onto this, weld mesh panels are to be securely fixed with wire or scaffold clamps.
- 6.7.3 Signs need to be attached to these fences warning people to 'keep out'. See detail within drawing No.SPT002.
- 6.7.4 Once the protective fence line is erected, then the main construction works can commence on site.
- 6.7.5 **Storage of Material, Work Yards and staff car parking** - These areas **must be** identified on the work drawings prior to the construction works starting. These must be positioned outside the root protection areas around the trees being retained.

## **Stage 2**

### **6.8.0 The Construction Works Stage**

- 6.8.1 **Protective fencing** - During the course of the works, special attention must be paid to ensure that these fences 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 is to remain in place throughout the construction works phase and must only be removed when all the works are complete and at this stage incorporated into the finished landscape.

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

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

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

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

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

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

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

#### **6.9.0 Other items**

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

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



### Stage 3

#### 6.10.0 Post Construction Works

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

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

Signed Michael Xallop P.P  
Felim Sheridan  
F. Arbor. A, RFS Dip, Nat. Dip & NCH in Arboriculture

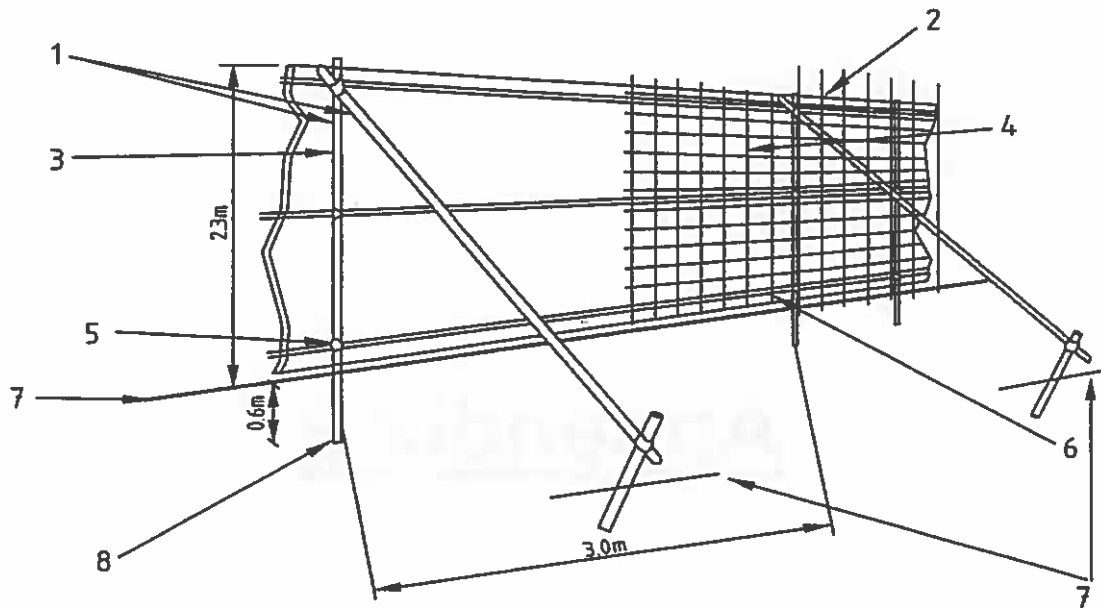
Date 5<sup>th</sup> / June / 15

**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.**



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

Figure 2. – Protective fencing for RPA

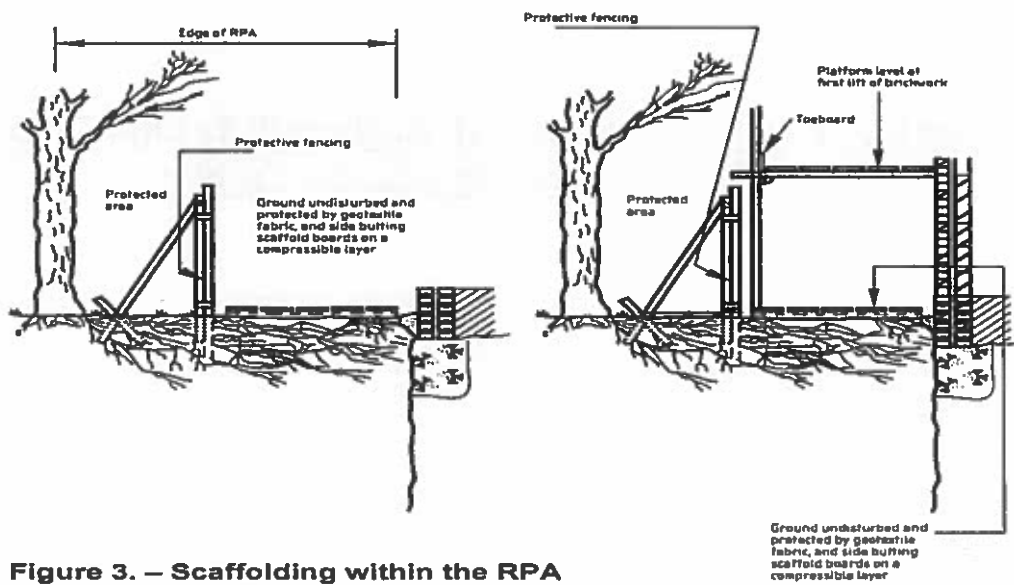


Figure 3. – Scaffolding within the RPA

# **Appendix 2**

## **Condition Tree Assessment**

**Of the trees on the Site Area at 'Springhill Tennis Club',  
Springhill Park, Blackrock, Co. Dublin.**

**Date: 3<sup>rd</sup> June 2015**

## 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 (Phy Con)***

**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 effective 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.

### **Category Grade (Cat Grade)**

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

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

### **Summary**

Main categories

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

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

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

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

### **Sub categories**

1 – Mainly Arboricultural Values

2 – Mainly Landscape values

3- Mainly Cultural and conservation value

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

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

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

### ***Reference to Crown spread, Height and Trunk Diameter:***

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

**Stem diameter (Stem Dia)** is the diameter of the main trunk taken at a height of 1.5m and is recorded in millimeters (mm). Where a measurement is given in brackets, this is the calculated stem diameter for multiple stemmed trees as per BS5837 2012.

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

**Branch Spread** records the extent of the branches normally in a north (N), south (S), east (E) and west (W) direction from the base of the tree and is given in meters (m).

**Clear crown height (C. Ht)** records the distance between the ground and the first branch from the base of the tree and are 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 Phys.-physiological.	MS- multi-stemmed A- average		
<b>A condition Assessment of the trees on the Site Area at 'Springhill Tennis Club', Springhill Park, Blackrock, Co. Dublin.</b>											
<b>The assessment starts on the boundary along Springhill Avenue.</b>											
<b>Tree Line No.1</b>	<b>Turkish Oak <i>Quercus cerris</i> (5 in total)</b>	A11	A 280- 330	A N5 S5 E6 W6	1	Semi Mature	Good	Good It consists of a short line of 5No. Turkish Oak. They are good quality trees with the potential to provide the long-term tree cover. The area around their bases has been kept weed free. Their lower branches have been pruned in the past in order to raise up their crowns.	They will require further pruning of their lower branches in order to maintain clearance.	40+	A2
Tree No.1	Walnut <i>Juglans regia</i>	6	90	N1 S1 E1 W1	2	Young	Fair / Poor	Poor It is located on the open lawn area and was planted as a replacement for a large mature tree further to the left. It has suffered branch breakage and this has affected its structure. It has suffered some bark wounding on the lower trunk. It is difficult to know whether or not this tree will establish successfully.	Adjust or remove the tree tie and stake as required.	10+	C1
1446	Ash <i>Fraxinus excelsior</i>	20	1100	N7 S5 E7 W7	5	Mature	Fair	Fair It is a large size tree and its crown overhangs the path to the playground. It is growing on the remnants of an old hedgerow bank and a lot of soil erosion has occurred with surface roots present. It contains both minor and major deadwood throughout its crown and there are some decay pockets present at old pruning wounds or where limbs have broken out in the past. It forms a twin-stemmed tree from c.3m up with an acute union formation	Clean out crown of dead/unstable growth and reduce end loading on heavy side limbs/ branches to help improve the shape/ balance of its crown and to lessen the risk of further storm damage.  Mulch the area around its base to protect the surface	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 Phys.-physiological.	MS- multi-stemmed A- average roots and the soil.			
								between stems with some included bark present. It has suffered storm damage on the southern side which has left its crown slightly more open and asymmetrical to the north as a result. It contains some heavy side branches throughout its crown. There are a lot of decay pockets where limbs have either broken out or were pruned in the past with decay progressing into the main trunk as a result.				
1447	Sycamore <i>Acer pseudoplatanus</i>	16	390	N7 S7 E4 W4	3	Early Mature	Fair	Fair It is growing up within a group environment and is being sheltered by the trees on either side. The lower branches have been pruned in the past in order to raise up its crown. It contains deadwood within its crown, generally of a small size.	Mulch the area around its base to protect the surface roots and the soil.	10-20	C2	
1448	Sycamore <i>Acer pseudoplatanus</i>	15	500	N6 S6 E7 W3	3	Mature	Fair/ Good	Fair It is being heavily suppressed by Ivy and some of this has been cut in the past. A lot of soil erosion and compaction has occurred around its base.	Mulch the area around its base to protect the surface roots and the soil.  Cut Ivy at ground level and ensure that it is killed off.	20+	C2	
		The following trees are located on a linear grass strip running on the eastern side of the tennis courts along the main central path. The assessment works in a south to north direction through these mature trees.										
0973	Southern Beech <i>Nothofagus betuloides</i>	9	240	N4 S4 E3 W4	2	Semi Mature	Good	Fair/ Good It is a well structured tree with good potential for the future. The lower branches have been pruned in the past in order to raise up its crown.	Requires no work at the present time.	40+	B1	
1449	Sycamore <i>Acer</i>	15	490	N6	3	Mature	Fair/	Fair/ Good	It will require repeat pruning	40+	A1	



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 Phys.-physiological.	MS- multi-stemmed A- average		
	<i>pseudoplatanus</i>			S6 E7 W6			Good	It is a reasonably good quality tree and the lower branches have been pruned / removed in the past in order to raise up its crown. It is beginning to encroach in onto the boundary fence of the tennis court and the lighting.	to maintain clearance.		
1450	Beech <i>Fagus sylvatica</i>	17	650	N9 S7 E6 W7	3	Mature	Fair/ Good	Fair There is a path located on its eastern side within its crown spread. The lower branches have been pruned / removed in the past in order to raise up its crown and there are some decay pockets at the old pruning wounds. It subdivides at a height of c.3.5m into a twin-stemmed tree with an acute union formation between these stems with included bark present. There is also some decay developing within its crown. A scaffold limb extending out to the north has a pocket of decay just above the weak union and this limb may be prone to breaking out as a result.	Clean out crown of dead/ unstable growth and reduce end weight on heavy scaffold limbs/ branches, particularly the lower scaffold limb with the decay cavity by c.2m taking care not to open up its crown too much.	40+	A1
1451	Sycamore <i>Acer pseudoplatanus</i>	15	680	N7 S6 E5 W5	3	Mature	Fair	Fair Some soil alterations have occurred around its base and it has suffered bark wounds on its lower trunk. The lower branches have been pruned in the past in order to raise up its crown and the Ivy has been cut at ground level.	It may require some pruning to maintain clearance with the boundary fence of the tennis court and the lighting.	40+	A1
1452	Atlas Cedar <i>Cedrus atlantica</i>	20	980	N8 S8 E10 W9	10	Mature	Fair / Poor	Fair It is a prominent tree within this area. It has a broad spreading crown and contains some large size heavy, scaffold limbs and deadwood. It is showing minor signs of stress / decline throughout its crown. Some	Clean out crown of dead/ unstable growth taking care not to open up its crown.  Monitor its condition on a twelve monthly basis.	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 Phys.-physiological.	MS- multi-stemmed A- average		
								soil alterations have occurred around its base in the past. It forms a twin-stemmed tree from c.1m up with some included bark present and the branches have fused together at a height of c. 3m. It is a prominent tree within this area. It may be prone to damage by snow which is common in this species. There is some decay developing within the underlying timber at bark wounds.	It may require further works.		
1453	Yew <i>Taxus baccata</i>	11	660	N4 S6 E7 W5	3	Mature	Fair / Good	Fair It forms a three-stemmed tree from c. 1m up with a slightly acute union formation between stems. It has suffered bark wounds on the lower trunk exposing the underlying timber to decay. The lower branches have been pruned / removed in the past in order to raise up its crown. Some soil alterations have occurred around its base.	Requires no work at the present time.	40+	B1
1454	Yew <i>Taxus baccata</i>	11	560	N4 S3 E4 W4	3	Mature	Fair	Fair / Poor It is growing up with tree No. 1453 and forms part of the one group/ canopy formation. A large portion of its crown has been removed in the past creating large size pruning wounds on the lower trunk at a height of c. 1.5m with decay developing into these wounds and other bark wounds up along the main trunk. This has also affected its crown structure leaving an asymmetrical crown. There is some new growth developing on the exposed side limbs.	Retain at the present time.	40+	B1
0968	Turkish Hazel	9	220	N3	2	Semi Mature	Good	Good It is a good quality replacement tree. The	Requires no work at the present time.	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 Phys.-physiological.	MS- multi-stemmed A- average		
	<i>Corylus columa</i>			S3 E3 W3				lower branches have been pruned in the past in order to raise up its crown. It has suffered some bark wounding during the grass maintenance works.			
0969	Ash <i>Fraxinus excelsior</i> Alder clump	5	90, 100, 80.	N3 S3 E3 W3	0	Semi Mature	Fair	Poor They are self-seeded into this area with a Cordyline and a Holly tree also growing up through them. They have low crowns and are of poor quality.	I would consider their <b>removal</b> as part of the selective thinning/ management.	<10	U
0970	Norway Maple <i>Acer platanoides</i>	9	290	N4 S4 E4 W4	2	Semi Mature	Good	Good It is a good quality tree with potential for the future. The lower branches have been removed in the past in order to raise up its crown.	Requires no work at the present time.	40+	A1
0971	Sweet Chestnut <i>Castanea sativa</i>	10	300	N5 S5 E4 W4	1	Semi Mature	Good	Good It is a good quality, well structured tree. The lower branches have been removed in the past in order to raise up its crown. It contains some naturally suppressed deadwood throughout its crown and has suffered some bark wounding on the lower trunk.	Requires no work at the present time.	40+	A1
0972	Tulip Tree <i>Liriodendron tulipifera</i>	7	160	N2 S3 E2 W2	2.5	Semi Mature	Fair/ Good	Fair The lower branches have been pruned / removed in the past in order to raise up its crown. It has suffered some storm damage which is typical for this species.	Requires no work at the present time.	40+	C1
1455	Lime <i>Tilia sp.</i>	20	770	N6 S7 E7 W6	3	Mature	Fair	Fair It is a prominent tree within this area. It contains both minor and major deadwood throughout its crown. The Ivy has been cut at ground level in the past.	Clean out crown of dead unstable growth.  Maintain basal suckers.	40+	A1
0974	Cappadocian	12	270	N4	1.5	Semi	Fair/ Fair	Fair	Requires no work at the	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 Phys.-physiological.	MS- multi-stemmed A- average		
	Maple <i>Acer cappadocicum</i>			S4 E4 W5		Mature	Good	There is an acute union formation between some stems and this may lead to structural problems in the future. It is suckering heavily from base. The lower branches have been pruned in the past in order to raise up its crown.			
0975	Oak <i>Quercus robur</i>	12	300	N4 S4 E5 W4	2	Semi Mature	Fair	Good It is a good quality replacement tree with potential for the future. It has a low crown formation, however some lower limbs have been removed in the past in order to raise up its crown. It has suffered bark wounding during the grass maintenance works.	Maintain a weed free area around its base.	40+	A1
0976	Irish Yew <i>Taxus Baccata Fastigiata</i>	8	160, 120, 130, 100.	N3 S2 E3 W2	0	Mature	Fair	Fair / Poor It has been heavily cut back in the past for one reason or another and this is impacting on its crown structure. It has an upright habit and is beginning to be heavily suppressed by Ivy which is suppressing its crown.	Cut Ivy at ground level and tidy up the area around its base.	20+	C1
0977	Irish Yew <i>Taxus Baccata Fastigiata</i>	6	200, 220, 150.	N3 S3 E3 W3	0	Mature	Fair	Fair It was initially heavily cut back/ topped in the past and is developing a new crown of an upright habit from the old pruning points. Holly is growing up through its base and is causing suppression.	Cut back the Holly in order to expose this tree.	20+	B1
0978	Turkish Hazel <i>Corylus colurna</i>	8	240	N3 S3 E3 W3	1	Semi Mature	Good	Good It is a good quality replacement tree with potential for the future. It has received some pruning of lower branches in order to raise up its crown. It is located on the grass verge between the footpath and the boundary wall.	It will require further pruning of lower branches in order to maintain clearance with the public pathway.	40+	A1
0979	Horse Chestnut	9	270	N4	1.5	Semi Mature	Good	Fair/ Good It is located within the linear grass verge	It will require further pruning of lower branches in order	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 Phys.-physiological.	MS- multi-stemmed A- average		
	<i>Aesculus hippocastanum</i>			S5 E4 W4				between the public footpath and the boundary wall. It is a reasonably good quality tree and the lower branches have been pruned in the past in order to raise up its crown. There is no evidence of any infection by 'Bleeding Canker' of Horse Chestnut.	to maintain clearance with the surrounding public pathway and the boundary wall.		
0980	Ash <i>Fraxinus excelsior</i>	7	160	N2 S2 E2 W2	2.5	Semi Mature	Fair/ Good	Fair Self-seeded into this area with some Sycamore seedlings growing around its base. It is growing close to the boundary wall.	Tidy up the area around its base and cut Ivy at ground level. It may need to be removed in the future due to its close proximity to the boundary wall.	20+	C1
0981	Paper Birch <i>Betula papyrifera</i>	5	80	N1 S2 E1 W1.5	2	Young	Fair/ Good	Fair It is being slightly overcrowded by the undergrowth.	Tidy up the undergrowth.	40+	C1
Shrub Border No.1	Mixed Ornamental Shrubs	--	--	--	--	Mature	Fair	Fair/ Poor It consists of ornamental shrubs along with some self-seeded Ash and Sycamore trees with Bramble and Elder.	Carry out general tidying works and remove scrub species and seedling trees.	--	C2
0982	Bay Laurel <i>Laurus nobilis</i>	12	120, 150, 100, 110.	N2 S2 E2 W3	0	Mature	Fair	Fair It forms a multiple-stemmed tree from base and is growing from an old stump of a fallen tree. The regrowth is of a small size at present, but it may become problematic as the stems grow in size due to the presence of decay at its base. The lower branches have been removed in the past in order to raise up its crown. There are suckers developing from its base.	Requires no work at the present time.	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 Phys.-physiological.	MS- multi-stemmed A- average		
0983	<b>Green Plum</b> <i>Prunus cerasifera</i>	6	120, 80.	N1 S2 E1 W1	0	Early Mature	Fair	Fair/ Poor It is growing from the base of the boundary wall to the gable end of the existing cabin. The lower branches have been cut / removed in the past in order to raise up its crown. There are suckers developing from its base.	Prune stubs back to proper pruning points and tidy up the area around its base.	10+	C1
1412	<b>Lucombe Oak</b> <i>Quercus x hispanica</i>	22	1200	N7 S11 E8 W7	1	Mature	Fair	Fair / Poor It is a large size tree forming part of the group canopy formation with tree No.1411. The pedestrian path runs on its eastern side. It has received some pruning of lower branches in the past in order to raise up its crown. There is a large open decay cavity present at its base with extensive internal decay present. It contains deadwood and heavy scaffold limbs throughout its crown with an acute union formation between a number of the main scaffold limbs/ branches and these are creating a structural weakness. There is some evidence of seepage coming down the main trunk from some of these unions.	Clean out crown of dead/ unstable growth and reduce end loading on all heavy side limbs/ branches by c.1-2m, taking care not to impact visually on its appearance or to leave its crown more open / exposed to winds it was previously sheltered from.  Monitor its condition on a twelve monthly basis.	10-20	C2
1411	<b>Holm Oak</b> <i>Quercus ilex</i>	13	460, 670.	N7 S5 E6 W7	1	Mature	Fair	Poor Basal decay is present and there is a secondary stem developing from its base with a large area of dead bark present. The decay at its base is also affecting the stability of this stem. It is growing up within a group environment and forms part of the group canopy formation with the neighbouring trees. It contains deadwood throughout its crown. It has received some trimming in the past, in particular to raise up its crown over	Reduce the lower scaffold limb extending southwards by 40% and reduce the remaining crown height by c. 2-3m.	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 Phys-physiological.	MS- multi-stemmed A- average		
								the path and to take back from the lighting. Without pruning, this tree is prone to large limb failure, most likely over the path.			
Tree Line No.2	Golden Ash Turkish Hazel Corylus colurna Beech Fagus sylvatica Lime Tilia sp.	A 11	A 200-220	A N3 S3 E3 W3	1	Semi Mature	Fair / Good	Fair/ Good It is a linear line of trees containing 1No. Golden Ash, 2No. Turkish Hazel, 1No. Beech and 1No.Lime tree. The Beech is in declining health with a lot of dieback evident throughout its crown. They are located on a wide grass verge and they have the potential to form part of the long-term tree cover.	Requires no work at the present time.	40+	A2
1410	Yew Taxus baccata	15	710	N4 S6 E5 W5	1	Mature	Good	Fair/ Good It has suffered soil compaction around its base and it has suffered a small bark wound on the western side with some localised decay present. Some lower branches have been removed in the past in order to raise up its crown.	It would benefit from the area around its base being mulched to help protect the soil.	40+	A1
1407	Lime Tilia sp.	22	830	N5 S6 E5 W6	0	Mature	Fair/ Poor	Poor It is a large, prominent tree within this area. It is located c.2m out from the eastern boundary wall of the neighbouring property. It contains both minor and major deadwood throughout its crown. It is suckering from base and there is also a heavy infestation at its base and at ground level by the fungus 'Ustulina deusta'. This is a serious wood decaying pathogen and is likely to impact on the stability of this tree.	I would recommend its <u>removal</u> due to the extent of decay.  If retained, reduce in height by c. 6m and prune in the remaining crown to reshape/ balance its crown. This pruning would be seen as a short-term solution and further pruning or removal would be	<10	U

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 Phys.-physiological.	MS- multi-stemmed A- average necessary in the future.		
1409	Lime <i>Tilia sp.</i>	22	830	N5 S6 E5 W6	0	Mature	Fair/ Poor	Poor It is a prominent, visual tree located out in isolation. It contains a lot of deadwood throughout its crown, both minor and major. It is located close to the public path and is suckering heavily from base. There is a heavy infestation at its base by the fungus 'Ustulina deusta' and this is likely to impact on its stability with hollowness evident at its base.	I would recommend its <u>removal</u> as the most appropriate option.  If retained, reduce its crown size by c. 5-6m. This pruning would be seen as a short-term solution and its removal or further pruning would be seen as necessary.	<10	U
<b>Notes:</b>											





