

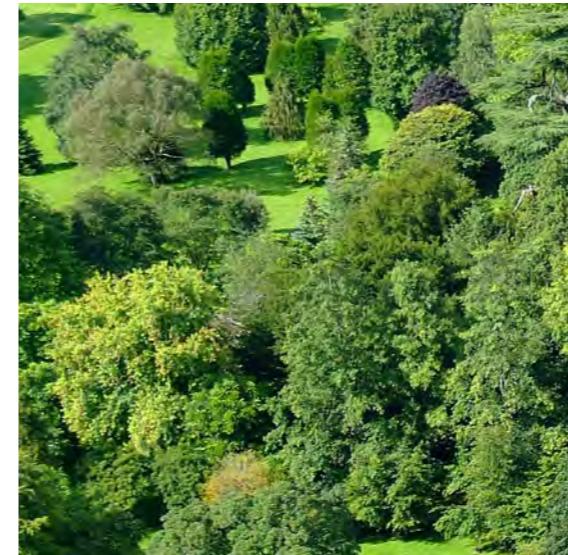
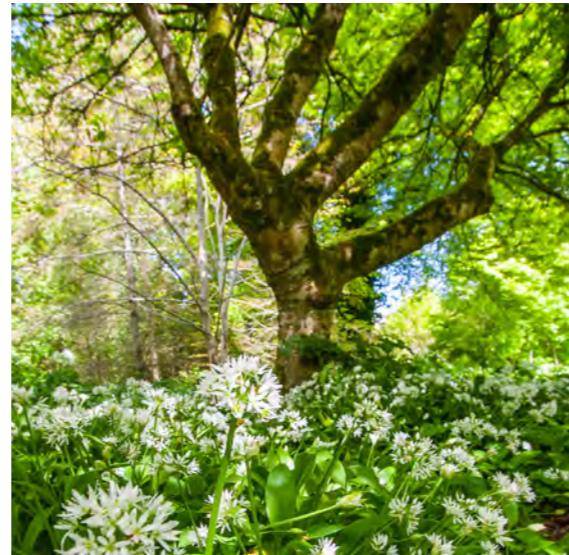


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APPENDIX 4

Landscape & Visual

VOLUME III | Appendices

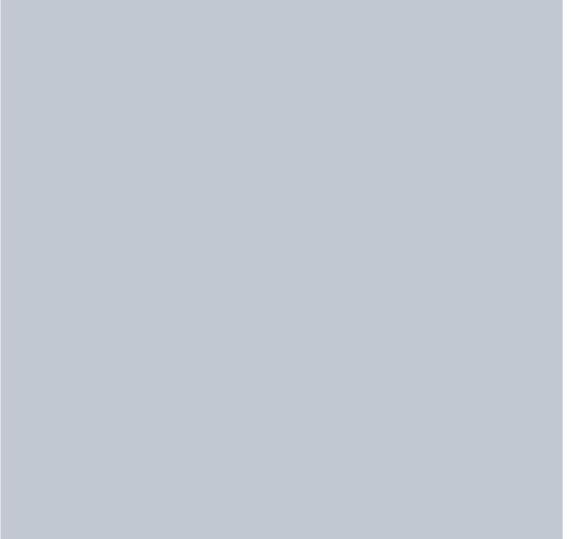
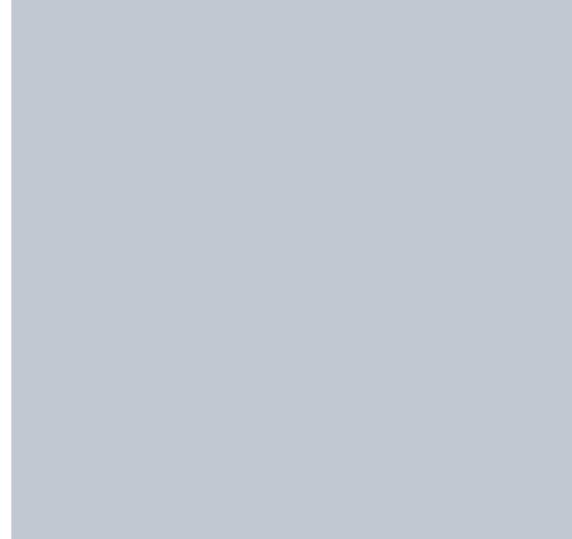




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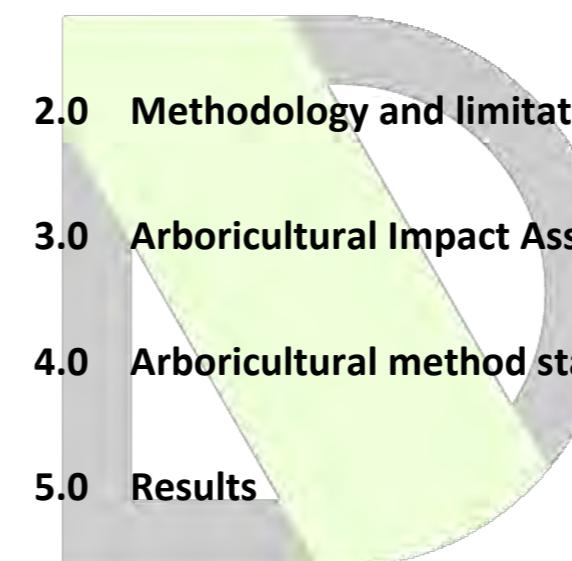
APPENDIX 4-1

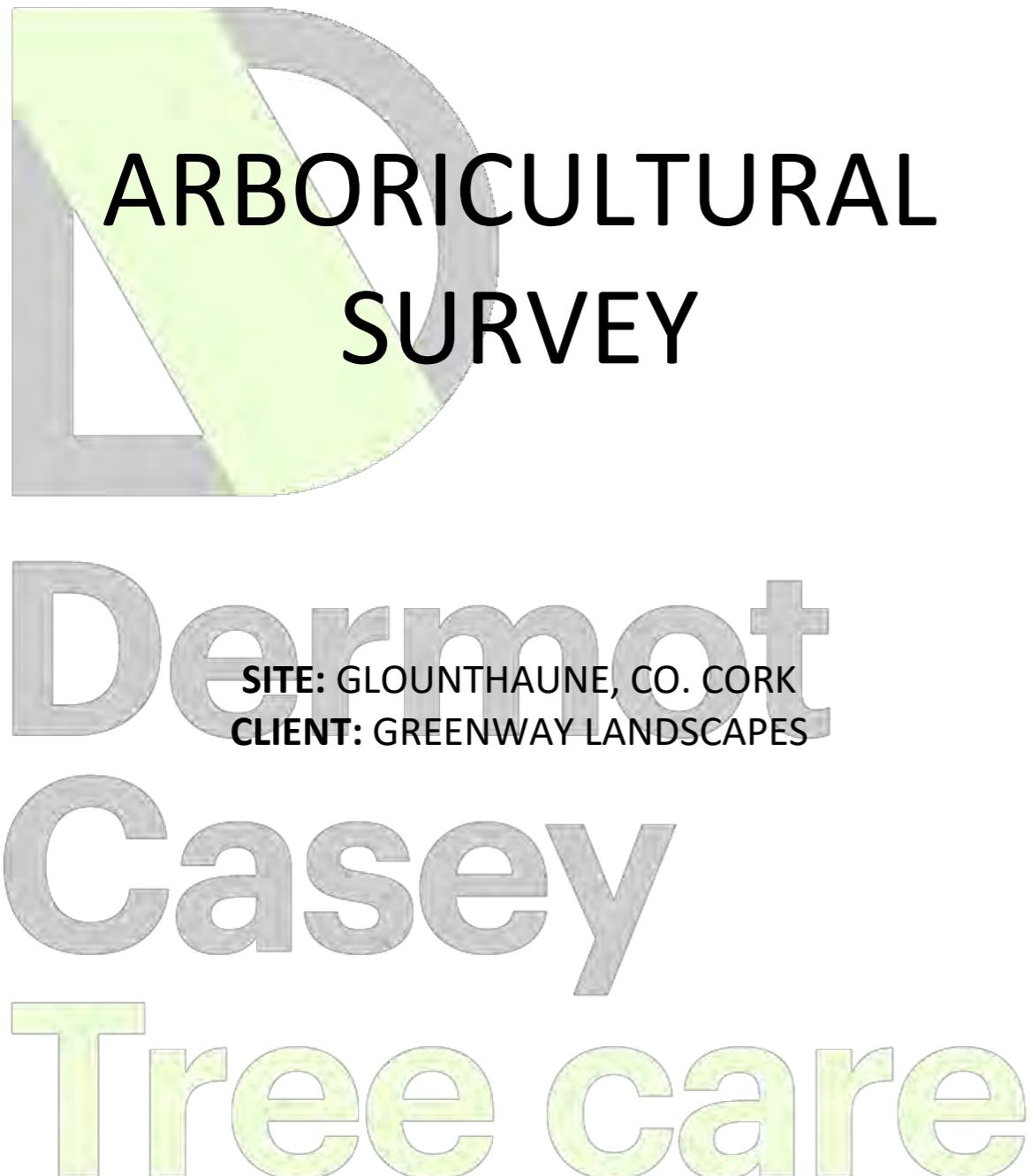
**Arboricultural Survey
- Dermot Casey Tree Care**



VOLUME III | Appendices

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SUMMARY

Dermot Casey Tree Care was requested by Greenway Landscapes to undertake a pre-development arboricultural survey and report to support the proposed residential development at Glounthaune, Co. Cork

The trees within the footprint of the site and within proximity to the proposed development were assessed independently.

The information contained within this report is in accordance with British Standard *BS 5837: 2012 Trees in relation to Design, Demolition and Construction – Recommendations* and provides information on the protection of the trees during the development phase.

The report should be read in conjunction with the drawings provided indicating the tree locations and their protection zones.

The report will provide guidance in regard to the constraint's trees may place on the development and arboriculture factors to be considered during the construction works of the proposed development.

The report contains an Arboricultural Impact Assessment and an Arboricultural Method Statement that details the protection needed for trees to be retained during the development phase.

87 trees, both individual and in groups were assessed as part of this report in accordance with BS 5837.

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1.0 INTRODUCTION**SCOPE OF THE REPORT**

The purpose of the report is to provide the appropriate information needed for the proposed development without having a negative impact on the trees located within or adjacent to the development. It also gives re-assurance that the health and consideration of the trees is an integral part of the proposed development.

The report will provide an Arboricultural Impact Assessment (AIA) based on BS 5837 to evaluate the direct and indirect effects the proposed development will have on the trees, both within the footprint of the proposed layout and within the exclusion zone required for construction plant machinery and works. Any trees outside this exclusion zone but whose root systems may enter it will also be assessed. Where there are impacts from the new development on trees this report will recommend, where it is possible, mitigating measures to be taken to try and ensure the protection of any important Category A or B trees. Where trees will have to be removed due to the constraints of the development or as a result of the findings in the survey potential mitigation measures will also be proposed. These protection considerations must be in accordance with Section 7 of BS 5837 (*Demolition and construction in proximity to existing trees*). This report should be read in conjunction with the Tree Survey Data located on P.26 and the attached Tree Constraints Plan

Drawing Ref: DWG TCP GLOUNTHAUNE 1 and
Tree Root Protection Plan – Ref: DWG TPP GLOUNTHAUNE 2

As part of this report an Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP) in accordance with BS 5837 are provided. The AMS and TPP will outline the methodologies and specifications needed for the implementation of any tree protection measures with important consideration been given to the root protection area. Any disturbance of the root protection area whether below ground or above ground during the development phase is likely to have a negative impact on the trees with the potential to making them unsafe structures and therefore unsuitable for retention post development.

TREE ASSESSMENT

The proposed residential development is situated between the Terrace and the L3004. It is on a steep slope that rises from the southern boundary to meet the northern boundary. There are private dwellings adjacent to the northwest and northeast of the site. A local landmark is Fitzpatricks shop which is located on the L3004 and the site is directly behind. The site has been neglected in recent years and has become very overgrown with bramble and is now primarily populated with young Ash (*Fraxinus excelsior*) and Sycamore (*Acer pseudoplatanus*) that have grown

from seed dispersal from mature trees. The trees are located throughout the site with the larger specimen trees been found mostly on the site boundaries.

The site requires consideration from an arboricultural perspective due to the presence of trees, within a landscape and woodland setting. A large percentage of these trees are deemed to be within impacting distance of the proposed development and the construction entrance and compound site. The tree survey and objective individual assessment resulted in the full range of retention categories, A – high, B – moderate, C – low and U – un-retainable as outlined in BS 5837. There are some notable older specimen trees within the footprint of the site, and they are highlighted in more detail in the results section of this report.

PLANNING CONTEXT

At the time of writing, it is not known to the author of this report whether any of the trees within the site are subject to a tree preservation order (TPO) or similar retention orders. A TPO can apply to a tree, trees, group of trees or woodland and can be implemented by the planning authority if it deems them to be desirable and appropriate in the interest of amenity or the environment. TPOs can be made under Part XIII of the Planning and Development Act 2000. The Forestry Act 2014 contains the main provisions for the felling of trees. Where a felling license is not required is a tree in an urban area (Part 2 of Schedule 5 and Schedule 6 of the Local Government Act 2001 before the enactment of the Local Government Reform Act 2014) and a tree within 30 meters of a building, excluding any building built after the trees were planted.

Before any recommended works are undertaken the trees should be inspected for any signs or activity of protected species within the trees. Under the Wildlife (Amendment) Act 2000 it is an offence to destroy or disturb nesting birds. Also, under the Wildlife Act and the EU Habitats Directive it is an offence to recklessly kill, injure or capture bats, to disturb them or destroy, obstruct or damage any bat roosts found. As some of the trees within the report have large cavities it may be prudent to conduct a bat survey prior to any works.

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2.0 METHODOLOGY AND LIMITATIONS

The inspection of these trees was carried out at various times during February and March 2021 and a further inspection took place in September 2021. The inspection was conducted from ground level only using visual tree assessment techniques (VTA) which only gives a snapshot of what is visible not obscured or accessible on the day of the survey. The survey does not include any climbing inspections, internal investigations of the tree or inspections below ground level.

Only relevant factors that are apparent at the time of the survey are included in this report. Trees are living organisms whose health and condition can change rapidly so as such any recommendations made within this report are valid for a period of 12 months only. It is suggested that further monitoring be required if potential hazards are to be avoided.

Climbing plants such as ivy can obscure decays or structural defects present at the time of the survey. Where the ivy is so dense a thorough examination is not possible and it is recommended that it be severed at ground level and the tree re-inspected once the ivy has died back.

The fruiting bodies of some important wood decay fungi can only be seen at certain times of the year and may not be present at the time of this survey.

The tree survey was conducted in accordance with BS 5837:2012. All trees over 150mm in diameter at breast height were given a unique reference number using metal tags and had their positions plotted on the survey drawings. All individual trees and groups of trees were assessed in relation to their – species, age class, tree height, crown spread, stem diameter at 1.5m above ground, minimum ground clearance, condition and management recommendations. The measurements for tree height, ground clearance and crown spread were taken to an accuracy of 0.5 m. The conditions of the trees both physiologically and structurally were assessed from being – good to fair to poor with additional information shown within the comments.

When categorizing a tree, as recommended in BS 5837:2012 – 4.5.5, the classification should begin by considering whether the tree falls within the scope of category U. If the tree does not fall into this category it should be considered according to the criteria for inclusion in category A. Subsequently if trees do not meet the criteria, they should be considered in light of the criteria for inclusion in category B. If this criterion is not met trees are placed in the low category C.

Definitions of the different categories as shown in the Cascade chart in 4.5 of BS 5837 are given below:

- Category U – those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.
- Category A – trees of high quality with an estimated remaining life expectancy of at least 40 years
- Category B – trees of moderate quality with an estimated remaining life expectancy of at least 20 years
- Category C – trees of low quality with an estimated remaining life expectancy of between 10 and 20 years

The above categories can be further subdivided regarding the nature of their values or qualities–

- Sub-category 1 - Arboricultural qualities: the trees influence as a good example of its species, its health and structure.
- Sub-category 2 - Landscape qualities: the trees importance within and as landscape features
- Sub-category 3 - Cultural qualities: trees of an age that have a significant conservation and historical value.

ROOT PROTECTION AREA (RPA)

The Root Protection Area (RPA) first appeared in the 2005 version of BS: 5837 and then within the updated version BS: 5837 - 2012. The BS describes the RPA as –

"layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability and where the protection of the roots and soil structure is treated as priority"

The Root Protection Area (RPA) is the area around an individual tree to be protected from disturbance during construction works. The RPA is shown as a radius in metres measured from the centre of the tree's stem. Protection of the roots and soil structure in the RPA should be treated as a priority.

For single stem trees the root protection area is calculated as a circle with a radius 12 times the stems diameter. A separate calculation should be used for trees with more than one stem. The calculated RPA for each tree should be capped at 707 m² or a circle with a radius of 15m. These calculations are based on the formulas set out in Section 4.6 and Annex D of BS 5837.

The RPA is generally regarded as a compromise between carrying out development and retaining a tree. Trees with a large stem diameter at 1.5 m can produce an RPA that if protected would not allow for developments to progress.

The RPA for each tree is plotted on the Tree Survey Drawings.

3.0 ARBORICULTURAL IMPACT ASSESSMENT

PROTECTION OF RETAINED TREES

Before any on-site works begin the protection measures outlined in detail in the Arboricultural Method Statement (AMS) should be adhered to. In general, this protection usually consists of a combination of barriers and ground protection. In general, but not exclusive to, the protection of all trees on-site must be able to accommodate all building works, ingress and egress routes outside the designated RPAs. Appropriate planning should be in place to accommodate the ingress and egress of plant machinery on-site, so no trees selected for retention are impacted.

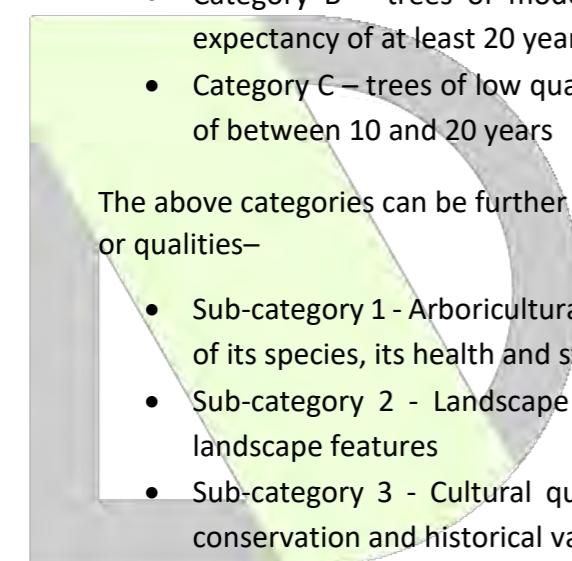
The majority of tree roots grow in the upper metre of soil and they may spread outwards in any direction. Any disturbance of the ground within the root spread of a tree can damage its roots and may severely injure the tree. Damage to roots will interrupt the supply of water and nutrients necessary to keep the tree alive and may cause decline in vigour, dieback or even death of the tree. Damage to roots can also de-stabilize the tree and pose an unacceptable threat to the safety of people.

To avoid damage to tree roots existing ground levels should be retained within the RPA. Intrusion into soil within the RPA is generally not acceptable and topsoil within it should be retained in situ. Where alternative design solutions are not available or practical, limited manual excavation within the RPA may be acceptable subject to justification and consultation with the on-site arborist. Such excavations should be undertaken carefully using hand-held tools and preferably by using an air-spade – the use of compressed air to expose the tree's root system. It should be noted that it is not realistic to plan for large excavations using hand-held tools due to the demands that manual excavation places on the development project and limitations arising from health and safety considerations.

Details of protection measures as recommended in Section 6.2 Barriers and Ground Protection of BS 5837 should be adhered to.

The on-site arborist should be responsible for checking and approving the position of all tree protection measures at the first site visit prior to the commencement of works.

Category A and B trees, as outlined in detail in Section 2, are trees of high quality and arboricultural, landscape or cultural value and are highlighted as such and their protection should be paramount.



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ARBORICULTURAL SURVEY

CONSTRUCTION AND ACCESS REQUIREMENTS AND CONSTRAINTS

During the construction phase of any development there will be a necessity for the use of plant machinery around the site. The constant movement of vehicles on the ground around the trees can cause compaction of the soil. Compaction will reduce soil pore space which can inhibit the tree's ability to access water and nutrients and can restrict root growth. Soil contamination from fuel and lubricants can also contaminate the roots as they access water and nutrients and subsequently have a negative effect on the tree.

The removal of any trees as a result of the development should be mitigated with the planting of as many trees where the space allows.

A tree constraints plan has been devised to mitigate against any negative impacts on the trees both above ground and below ground.

Above ground constraints are indicated by the crown spread of trees to be retained. Where the canopy is deemed to be in direct conflict with lifting machinery it may be necessary to increase the extent of the tree protection barriers to contain the canopy as set out in Section 5.2.2 of BS 5837.

Below ground constraints will include a layout design of the root protection area (RPA) which shows the minimum rooting area around the tree needed for its health and viability. The RPA is the area where the roots and the soil take priority and in accordance with BS 5837 no construction works can take place within it.

Based on the design, the majority of the trees within the footprint of the site will have to removed, because they are either within the footprint of the design or will be negatively impacted during the construction phase.

There are 79 trees individually tagged in this area. Of the 79 trees 3 are classed as Category A and 16 are classed as Category B. The remainder of the trees are classed as Category C – 48, and Category U – 12. Category U trees should be considered for removal irrespective of their constraints, or lack of, on the proposed development.

CELLULAR CONFINEMENT SYSTEMS

In order to ensure the health and vigour of trees, their roots need to be retained undamaged. To achieve this there must be no excavation, no soil stripping and no grading of the greenway within the RPA of the Category A and B trees recommended for retention.

Cellular confinement systems can be used for ground protection where tree roots are at risk from soil compaction and where it is unacceptable to dig into the ground to lay a conventional sub-base. Standard engineering practice is to remove the upper layer of soil and lay a compacted sub-base and a final surface that is level with the

surrounding ground. Surfaces constructed in this way can sever tree roots at a shallow depth and future root growth can be inhibited by soil compaction.

Standard tarmac surfacing would be inappropriate to be placed over cellular confinement systems because it seals the surface preventing the ingress of water and gaseous exchange between the soil and the atmosphere. If the cellular confinement system is to be used for the proposed greenway link than only permeable surfacing should be used.

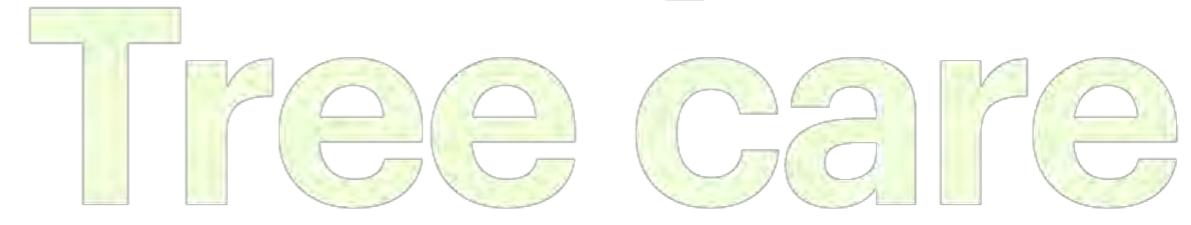
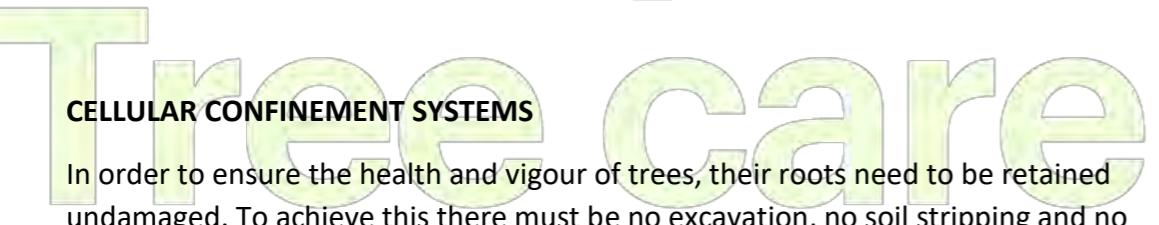
NEW PLANTING

To mitigate against the potential loss of any existing trees as part of the development it would be considered appropriate to replant as many trees as those lost if the space provides. This new planting schedule should be considered from the outset of the design and planning application phase. Any advice required for a new planting regime should be given by a landscape architect or otherwise competent person.

DEVELOPMENT OF RETAINED TREES

A number of the trees assessed as part of this report have the potential to remain as part of the landscape for many years. On-going management of these trees including a regular review and inspection system should be put in place. As trees are dynamic living organisms and their condition can change rapidly this report will only remain valid for a period of 12 months. If the landscape of the site is to be altered in the future a further assessment should be made on the impacts that proposed development would have on these trees.

Due consideration should be given to the Category A and B trees that have been recommended for retention as part of this report.



4.0 ARBORICULTURAL METHOD STATEMENT AND TREE PROTECTION PLAN

TREE PROTECTION AREA AND SEQUENCE OF OPERATION

Prior to any construction works commencing on the proposed development site, including any ground works, demolition, delivery of materials or the use of vehicular machinery, a sequence of operations will be implemented. All operations will follow this sequence in a systematic way in order to ensure that any trees selected for retention are protected during the construction phase.

TREE WORKS

Trees that were identified for removal either as a result of the proposed development or as result of the survey conducted for this report will be shown in the Tree Constraints Plan (TCP) and identified with a red outline. Any trees to be removed that are located within the RPA of trees to be retained will not be felled with the use of excavation machinery but will be done so according to best practice as recommended in BS 3998:2010 Tree Work Recommendations. All tree work operations recommended as part of this survey should be undertaken by suitably qualified tree surgeons with the appropriate insurance.

Where the stumps from trees that were felled are to be removed and are within the RPA of retained trees only the use of appropriate machinery, stump grinders, will be allowed within this restricted area. No excavation machinery will be allowed within the RPA of retained trees.

If tree works are to be undertaken within the bird nesting season, March – September, the trees in question will be assessed for the presence of any nests by a competent person before any works commence. If bird nests are present works will cease and an ecologist consulted before works can commence.

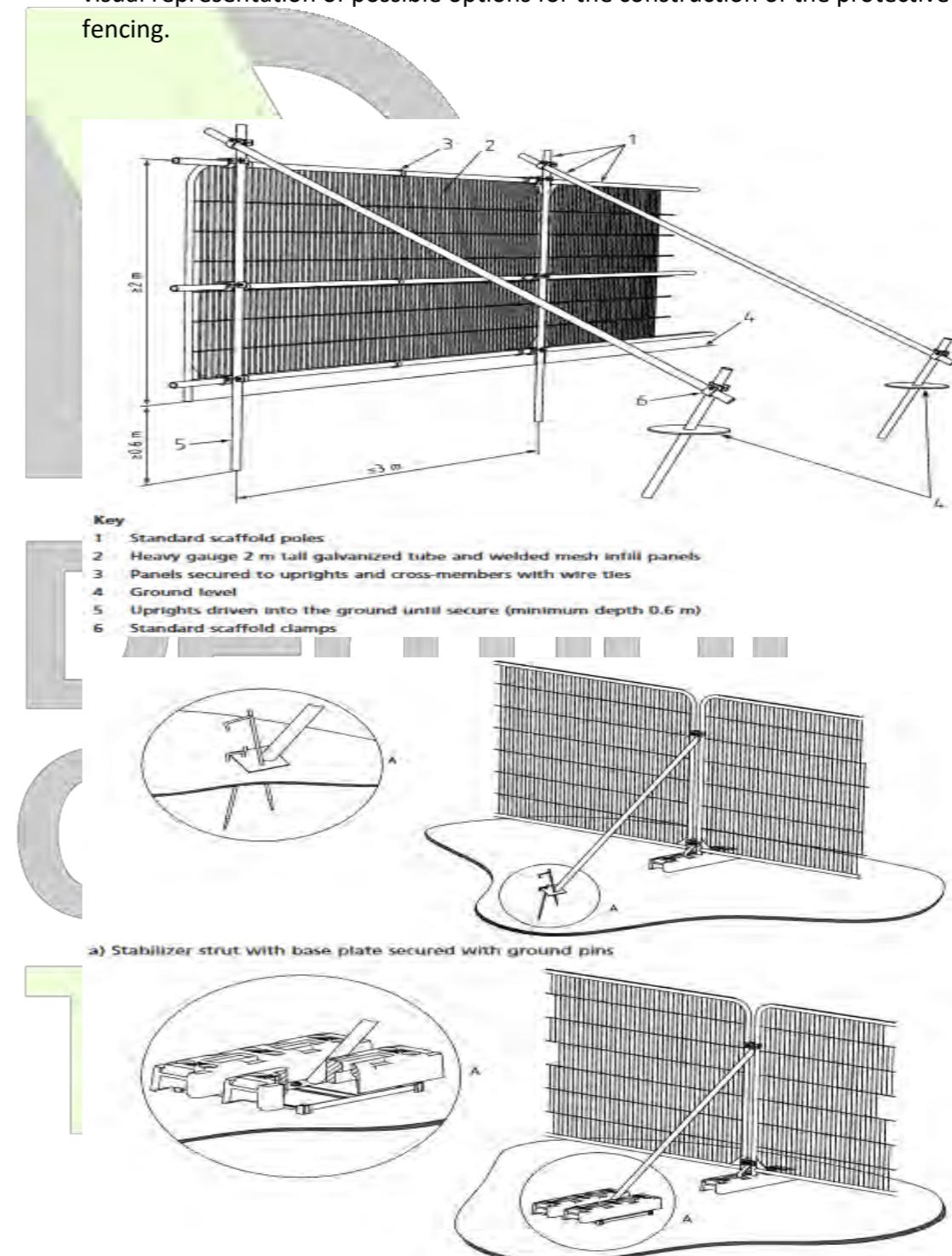
INSTALLATION OF PROTECTIVE BARRIERS

All protective barriers will be installed around those trees to be retained prior to the commencement of any works on the site. The location of all tree protection barriers will be visible on the Tree Protection Plan (TPP). The installation of the protective barriers will be done as outlined in Section 6.2 Barriers and Ground Protection of BS 5837.

The tree protection barriers will remain in place for the duration of the construction works and should only be removed once the on-site arborist has signed off on its removal.

The appropriate tree protection signage should be attached to the protective fencing, either a visual representation of tree protection or for example – T.P.A. Tree Protection Area Restricted Access Keep Out – should be used.

Below are illustrations as recommended in BS 5837. These illustrations provide a visual representation of possible options for the construction of the protective fencing.



GROUND PROTECTION

Where the RPAs of the trees selected for retention extend beyond the proposed location of the protective fencing adequate ground protection will be required.

Where there is no existing hard surface present ground protection must be used in order to protect the soils from compaction.

For pedestrian movement, the construction of an appropriate raised walkway or the use of load bearing geotextile membrane would be required.

For the use of machinery within the RPA the appropriate method should be selected depending on the weight of the machinery – inter-linked ground protection boards, compression resistant layers of geotextile membrane or pre-cast reinforced concrete slabs.

In all cases the objective should be to avoid compaction of the soil so that the tree root functions remain unimpaired.

INSTALLATION OF UNDERGROUND SERVICES

Where possible the location, direction and installation of new underground services should be designed so as not to enter the RPAs of retained trees. Where it is not feasible to re-route the services, the excavations should be done with hand tools in conjunction with an air-spade. The methodology for trenchless installation can be found in NJUG Vol.4: Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees.

DURING CONSTRUCTION WORKS

The tree protection barriers will be maintained at all times for the duration of the construction works. Any interference with or damage to the tree protection barriers should be recorded and the on-site arborist informed.

The location of the tree protection barriers will be visible on the Tree Protection Plan (TPP) and a copy should be retained on-site for reference at all times.

No machinery will enter the RPA exclusion zones for the duration of the on-site works. No excavations will take place within the RPAs as outlined on the TPP. The ground levels within the RPAs will not be altered at any stage of the construction works.

All diesel, petrol, concrete and other materials hazardous to the health of the trees will be kept within the confines of the designated storage area for the duration of the construction works.

No trees will be used to support cables, wires, or signage.

All on-site personnel will be briefed on the RPAs of the retained trees and their measures and requirements during their initial site induction.

REMOVAL OF TREE PROTECTION BARRIERS

The tree protection barriers will be assessed and signed off by the on-site arborist prior to their removal. During the removal of the barriers care will be taken to avoid any unnecessary damage to the trees. If machinery is being used, they should remain on the hard surfaces and outside the RPAs during the dismantling operations.

LANDSCAPING

Post construction phase there is usually a need for landscaping works to take place. The removal of the tree protection barriers in order for the landscaping works to commence will allow access to previously restricted areas. The landscape contractor should have access to the TPP and adhere to the exclusion zones. The landscape contractor should have his own method statement detailing his proposed work. No rotovating should take place within the RPAs. The use of machinery should be restricted from entering the RPAs and there should be no alteration of the soil levels within the RPAs.

CONCLUSION

Successfully preventing ground compaction and damage to the tree's rooting system during the construction phase needs to be adhered to from the outset. If any part of the arboricultural method statement is deemed unfeasible or needs to be altered in some way the on-site arborist should be consulted before any works re-commence.

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5.0 RESULTS

The tree survey was conducted on foot at various times during February and March 2021. The survey assessed 87 individual and groups of trees. Nineteen trees assessed were deemed to be trees of high or medium quality and are classified as category A or B trees. The table below gives a break-down of the 87 trees surveyed.

	INDIVIDUAL TREE QUALITY ASSESSMENT SUMMARY			U	A3	B1	B2	B3	C2	C3
	A	B	C							
Sycamore		3	20		5					
Ash		2	8			1				
Cedar			1							
Cherry				1						
Hawthorn					1					
Pine					1				1	
Scots pine				1			1			
Horse Chestnut					1					
Ponderosa Pine						1				
Spruce				1				1		
Birch		3	2							1
Western Red Cedar					1					
Sycamore & Ash (Group)				5						
Oak		3								
Willow			1							
Apple				1		1				
Beech	1	2	3		1					
Monterey Pine			2							
Yew			1							

Mirabelle Plum	1									
Western Hemlock		1								1
Ligustrum										1
Griselina								1		
Maple			1						1	
Chinese Plum								1		
yew										
Himalayan cotoneaster									1	
Various										1

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TREES TO BE REMOVED

Due to the constraints placed on the trees by the development, the following trees will have to removed.

Tag numbers - 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 287, 288, 291, 305, 313, 314, 315, 316, 317, 318, 319, 320, 321, 365, 366, 367, 373, 374.

To retain all the trees, the development cannot proceed.

It is the opinion of the author of this report that the three Category A trees and those Category B trees located on or close to the boundary be retained and incorporated into new developments and layouts where possible. The Category A trees are T294, T307 & T309. The decision on Category C trees should be left solely to the discretion of the management of the site but it is the author's recommendation that they be retained where possible as they still offer positive qualities to the landscape.

All Category U trees should be considered for removal irrespective of their influence on the proposed development site.

There are a number of trees growing on the adjacent land whose root systems may enter the proposed development site, as indicated in the Tree Constraints Plan. Care should be taken not to intentionally cause damage to the roots within the RPA of these trees.

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6.0 APPENDIX 1**SURVEY KEY**

Tree No	Refers to numbered metal tag on each tree.
Species	Refers to common and botanical name.
Age	Referred to in generalised categories.
Young	A tree planted within the last 10 years.
Semi Mature	A tree that has grown less than 1/3 its expected height
Early Mature	A tree between 50% & 80% its expected height
Mature	A tree that has reached its expected height but still has potential to grow.
Over Mature	A tree at the end of its time and the crown is starting to break up and decrease in size.
Ht	Tree height in meters
Spread(S)	Approximate tree canopy spread measured in meters
DBH	Tree diameter at breast height in cm
RPA	Root protection area as a radius from trees stem centre that is to be protected from disturbance during construction works. For a single stem, the root protection area is calculated as an area that is 12 times the stem diameter. The RPA is plotted on the tree constraints plan in meters.
Condition	Condition of the tree both physical and structural.
G – Good	A specimen of generally good form and health
F – Fair	A specimen with defects but can be managed and retained.
P – Poor	A specimen through defect, decay or reduced vigour has a limited life.
D – Dead	A dead tree
Comments	Additional description/commentary on each individual tree
Recommendations	Management recommendations are noted, including remedial pruning works and re-inspections where necessary.

Retention categories (RC)

The retention category is to identify the quality and value of an existing tree and make decisions whether trees should be retained or removed in accordance with BS 5837 section 4.5.

Category U – trees with no expected value in the immediate future and recommended for removal based on arboricultural best practice.

Category A – trees of high quality with a minimum 40-year life expectancy

Category B – trees of moderate quality with a minimum 20-year life expectancy

Category C – trees of low quality with a minimum 10-year life expectancy

Sub-category 1 - Arboricultural qualities: the trees influence as a good example of its species, it's health and structure.

Sub-category 2 - Landscape qualities: the trees importance within and as landscape features

Sub-category 3 - Cultural qualities: trees of an age that have a significant conservation and historical value.

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7.0 APPENDIX 2 – TREE SURVEY DATA – REAR OF FITZPATRICKS SHOP

Tree No	SPECIES	AGE	HT (M)	SPREAD (M)	DBH (CM)	RPA M	CONDITION-PHYSIOLOGICAL/ STRUCTURAL	COMMENTS	RECOMMENDATIONS	RETENTION CATEGORY
0244	Quercus robur (English oak)	M	23	10	80	9.6	Good	Large specimen overhanging road and neighboring entrance. Forked @3m with included bark. Deadwood throughout crown. Stay wire stuck in base of trunk.	Clean crown	B
0245	Fraxinus excelsior (Ash)	EM	14	6	50	6.0	Poor	Previously pruned hard. Unbalanced crown. Showing signs of decline. Large hollow section at base.	Fell	U
0246	Group of approx. 10no young Ash/Sycamore	Y	3/4M	1/2	10	2.4	Good	Young trees growing from seed. Of no real value	NAR	C
0247	Cedrus atlantica glauca (Atlas Cedar)	M	25	12	90	10.8	Good	Large specimen. Ivy clad. Deadwood present throughout.	Clean crown & Sever Ivy.	B

ARBORICULTURAL SURVEY

0248	Prunus Spp. (Cherry)	EM	7.5	2	20	2.4	Fair	Roadside tree with phone wire passing through. Leaning heavily (S). No obvious signs of decay.	NAR	C
0249	Fraxinus excelsior (Ash)	M	15	5	70	8.4	Fair	Large roadside tree – extensive storm damaged within crown. Showing signs of stress on lower southern limb.	Tidy damaged limbs. Reduce end weight on (S) limb.	C
0250	Pinus Spp. (Pine)	EM	8	3.5	45	5.4	Dead	Dead	Fell	U
0251	Fraxinus excelsior (Ash)	M	24	12	90	10.8	Good	Forked @ 2.5m. Ivy clad. Hanger in crown.	Crown reduce by approx. 20%. Remove hanger. Sever Ivy.	B
0252	Crataegus Monogyna (Hawthorn)	SM	6.5	1	15	1.8	Poor	Ivy Clad & in a state of decline.	Fell	U
0253	Pinus Spp. (Pine)	M	11	4	80	9.6	Dead	Dead	Fell	U
0254	Acer pseudoplatanus (Sycamore)	SM	10	3	20	2.4	Good	Young tree. Should thrive with removal of 0253.	NAR	C

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ARBORICULTURAL SURVEY

0255	Acer pseudoplatanus (Sycamore)	EM	10	5	60	7.2	Poor	Roadside tree in serious decline. Has suffered storm damage within crown & also mechanical damage to the root system. Cavities in lower stem.	Fell	U
0256	Acer pseudoplatanus (Sycamore)	SM	9	2	20	2.4	Fair	Roadside tree. Roots have suffered mechanical damage.	Fell	U
0257	Acer pseudoplatanus (Sycamore)	SM	11	4.5	20	2.4	Good	2 trees in close proximity. Slight lean. No obvious signs of decay.	NAR	C
0258	Acer pseudoplatanus (Sycamore)	SM	11	4.5	20	2.4	Good	2 trees in close proximity. Slight lean. No obvious signs of decay.	NAR	C
0259	Acer pseudoplatanus (Sycamore)	EM	14	5	40	4.8	Good	Well balanced crown. Ivy clad	Sever Ivy	B

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0260	Aesculus Hippocastanum (Horse Chestnut)	EM	14	7	70	8.4	Fair	Leaning heavily towards neighbours garage. Root pan lifting. Ivy clad.	Fell	U
0261	Picea abies (Norway spruce)	M	22	5	70	8.4	Fair	Evidence of dieback. Ivy clad.	Reduce leader by 4/5m. Sever ivy	B3
0262	Acer pseudoplatanus (Sycamore)	EM	9	3	20	2.4	Good	Forked @ base. No obvious signs of decay.	NAR	B
0263	Fraxinus excelsior (Ash)	EM	13	3	30	3.6	Fair	Hard to assess due to difficult terrain. Ivy Clad.	Sever Ivy	C
0264	Acer pseudoplatanus (Sycamore)	SM	13	1	15	1.8	Poor	Lacking vigour. Suppressed by larger trees.	Fell	U
0265	Picea abies (Norway spruce)	EM	17	2	40	4.2	Fair	Major deadwood. Ivy clad.	Clean crown. Sever Ivy	C
0266	Acer pseudoplatanus (Sycamore)	EM	14	5	50	6.0	Fair	Forked @ 5.5m. Broken limbs @ 5.5m & 10m.	Tidy broken limbs. Reduce height by approx. 3-4m.	C

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0267	Acer pseudoplatanus (Sycamore)	EM	14	5	25	3.0	Good	Forked @ base. Ivy clad.	Sever Ivy	C
0268	Pinus Ponderosa (Ponderosa pine)	M	24	7	65	7.8	Good	Nice specimen. Deadwood – lower trunk. heavy limb overhanging neighbouring garage.	Remove limb over garage & clean crown	A3
0269	Acer pseudoplatanus (Sycamore)	M	15	7	40	4.8	Poor	High risk to neighbour's property. Major lean in that direction.	Fell	U
0270	Betula pendula (silver birch)	M	21	7	50	6.0	Good	Forked @ 3m – Weeping from that fork. Deadwood throughout crown.	Clean crown & inspect fork. Cut back from 0271.	B
0271	Acer pseudoplatanus (Sycamore)	EM	12	3	35	4.2	Good	Suppressed slightly by 0270.	NAR	C
0272	Acer pseudoplatanus (Sycamore)	EM	9	4	35	3.6	Good	Forked @ 4m – Included bark	NAR	C

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0273	Acer pseudoplatanus (Sycamore)	EM	11	28	45	5.4	Good	Well-formed crown & well balanced
0274	Acer pseudoplatanus (Sycamore)	EM	9	30	30	3.6	Good	Well-formed crown & well balanced.
0275	Acer pseudoplatanus (Sycamore)	M	13	8	45	5.4	Good	Forked @ 4m -good union. Leaning slightly.
0276	Acer pseudoplatanus (Sycamore)	SM	8	5	15	1.8	Good	Young multi stem tree.
0277	Acer pseudoplatanus (Sycamore)	SM	9	2	20	2.4	Good	Young tree with good potential
0278	Acer pseudoplatanus (Sycamore)	SM	8	2	20	2.4	Good	Young tree with good potential
0279	Salix spp. (Willow)	E	8	4	25	2.4	Good	Suppressed by ash. Leaning & Ivy clad

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0280	Fraxinus excelsior (Ash)	EM	13	8	30	3.6	Good	Nice tree. Forked @ 2m. No obvious signs of decay.
0281	Malus sylvestris (Crabapple)	M	8	8	30	3.6	Fair	Multi-stemmed from base - Ivy clad. Weighted to (N)
0282	Fraxinus excelsior (Ash)	M	12	7	30	3.0	Good	A well-formed tree with good balance. No obvious signs of decay.
0283	Group of 10nr Fraxinus excelsior (Ash) at rear of neighbouring property.	SM	10-12	4-6	20-25	3.0	Good	Hard to assess properly due to access. Nice mix of multi stemmed and single stemmed trees.
0284,	Group of 10-15nr Fraxinus excelsior (Sycamore & Ash)- Back of Apartments	SM /E M	10-12	3-5	15-25	3.0	Good	Mix of multi-stemmed & single stemmed trees
0285,								Thin out block & cut back scrub.
0286								C
0287	Ligustrum lucidum (Chinese tree privet) On boundary with Apartments	M	10	4	25-30	3.6	Good	No obvious signs of decay - Showing good vigour

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288	Group/cluster of 20-30nr trees - <i>Fraxinus excelsior</i> (Ash)	y/s	10-12	1	10-20	2.4	Good/Fair	Mix of multi-stemmed & single stemmed trees	Thin out block & cut back scrub	C
0289,	<i>Griselina littoralis</i> (Papaua)	EM	14	7	50,27, 25,32	6	Good	Large multi stemmed specimen. Showing signs of decay on lower trunk (S).	Crown clean	A3
0290	<i>Fraxinus excelsior</i> (Ash)	EM	14	8	30	4.8	Good	No obvious signs of decay - Showing good vigour	NAR	B
0291	<i>Fraxinus excelsior</i> (Ash)	EM	16	6	30	3.6	Good	2 interlocking trees - Ivy clad	Sever Ivy	C
0292	<i>Fagus sylvatica</i> (beech)	EM	18	10	40	4.8	Good	Nice well-balanced specimen - signs of decay on lowest limb.	Remove lowest limb back to main trunk.	B
0293	<i>Fraxinus excelsior</i> (Ash)	EM	16	8	30	3.6	Good	A well-formed tree with good balance. No obvious signs of decay.	NAR	C
0294	<i>Pinus Radiata</i> (Monotery Pine)	M	20	14	60	7.2	Good	Large spreading specimen - Overhanging the path -	Tidy broken limbs- Sever Ivy	C2

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								Broken limbs throughout- Ivy clad		
0295	<i>Acer pseudoplatanus</i> (Sycamore)	EM	10	6	40	4.8	Good	Suppressed by Pine branching.	Cut back interfering branches from pine.	C
0296	<i>Pinus sylvestris</i> (scots pine)	EM	14	7	40	4.8	Fair/Poor	No obvious signs of decay - Showing good vigour	NAR	B1
								Trees between 296 & 294 are sitting on a very steep incline and inaccessible to individually tag. Some trees failed i.e., pine, while there are a few nice trees growing here i.e., beech, birch and pine.		
0297	<i>Fraxinus excelsior</i> (Ash)	EM	12	10	30	3.6	Good	Forked @ base. Minor deadwood throughout. Ivy clad.	Clean crown Sever Ivy	C
0298	<i>Betula ermanii</i> (Erman's birch)	M	14	5	30	3.6	Fair	Deadwood throughout. Ivy clad.	Clean crown Sever Ivy	C
0299	<i>Betula ermanii</i> (Erman's birch)	M	14	6	30	3.6	Fair	Suppressed by neighbouring Taxus. Deadwood throughout. Ivy clad.	Clean crown. Sever Ivy. Cut back Taxus branching.	C

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0300	Taxus bacatta (English yew)	EM	9	7	30	3.6	Good			Leaning from bank- No signs of decay.	NAR	B	
0301	Fagus sylvatica (beech)	EM	14	7	40	4.8	Good			Fork @ 3m – Heavy lean from bank.	NAR	B	
0302	Betula ermanii (Erman's birch)	M	14	6	40	4.8	Poor			fruiting bodies @ base (w). This tree is in decline -		C3	
0303	Acer henryi (Henry's Maple)	EM	14	8	60	7.2	Good			Tri-stemmed @ 2m. Showing good vigour. Wire stuck in stem. Growing on bank – Ivy clad.	Sever ivy	B	
0304	Acer pseudoplatanus (Sycamore)	M	9	9	40	4.8	Good			Nice well-balanced tree. No obvious signs of decay.	NAR	B	
0305	Quercus robur (English oak)	EM	8	10	50	6.0	Good			Nice specimen with a number of broken/split limbs. Suppressed by pine.	Clean crown	B	

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0306	Group of 3nr Prunus domestica (Mirabelle plum)	M	8	4	30	3.6	Good			Growing out from bank overhanging road.	Reduce weight on roadside branching.	B	
0307	Pinus Radiata (Monetary Pine)	M	22	20	132	12.0	Good			Very large spreading tree showing good vigour. Broken limbs throughout.	Tidy broken limbs.	A	
0308	Group of young sycamore from seed.	Y	7-10	1	10-15	N/A	Good			Mix of multi-stemmed & single stemmed trees	NAR/Thin out block & cut back scrub.	C	
0309	Fagus sylvatica purpurea (Copper beech)	EM	22	10	80	9.6	Good			Nice specimen –Well balance crown.	NAR	A	
0310	Tsuga heterophylla (Western hemlock)	M	23	20	222	15	Fair			Multi-stemmed @ 2.5m. Showing signs of decay at base	Fell/ Crown reduce by 30%	A3	
0311	Thuja plicata (Western Red Cedar)	M	27	13	87.85	10.4	Good			Large spreading specimen. Twin- stemmed @ 1.5m. On boundary with neighbouring property. No obvious signs of decay.	NAR	A3	
0312	Fraxinus Excelsior (Ash)	EM	14	7	35	4.2	Good			Nice well-balanced tree.	NAR	C	

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0313-0314	Group/cluster of 8-10nr trees ash/sycamore /Dead elms	Y	7-10	1	10-15	1.8	Good	Young single & multi-stemmed trees – some with good potential.
0315	Acer pseudoplatanus (Sycamore)	EM	14	6	30	3.6	Good	Slight lean (W). Ivy clad.
0316	Acer pseudoplatanus (Sycamore)	EM	14	4	30	3.6	Good	Good potential. Ivy clad.
0317	Acer pseudoplatanus (Sycamore)	EM	14	10	40	4.8	Fair	Tri-stemmed @ 1m. Large cavity (N) stem lower. Ivy clad.
0318	Acer pseudoplatanus (Sycamore)	EM	9	4	30	3.6	Good	Slight lean (E). No obvious signs of decay.
0319	Fagus sylvatica (beech)	EM	11	6	30	3.6	Good/Fair	Hard to assess due to Ivy-Heavy lean.
0320	Acer pseudoplatanus (Sycamore)	EM	9	4	20	2.4	Fair	Showing signs of stress on lower stem & mechanical damage.

ADDITIONAL SURVEY

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ABDOMINAL SURVEY

0321	Acer pseudoplatanus (Sycamore)	EM	11	5	35	4.2	Good	NAR	C
0322	Various	NA	N/A	N/A	N/A	Poor	The remainder of trees in this lower section of the site are of low value with the majority either in decline, dead, competing with scrub & other vegetation or waterlogged	Clean out scrub and remove dead trees.	U
0365	Cephalotaxus fortunei (Chinese Plum yew)	SM	4	5	15	1.8	Good	A nice specimen suppressed by surrounding trees and vegetation.	A3
0366	Quercus robur (English oak)	EM	15	6	20	2.4	Good	Twin stemmed- Hard to assess due to ivy.	B
0367	Acer pseudoplatanus (Sycamore)	EM	16	5	35	4..2	Good	Hard to assess due to ivy.	C
0368	Acer buergerianum (Trident Maple)	EM	15	5	35	4.2	Good	Due to heavy eleagnus growth and steep incline it was not possible to assess this tree properly.	A3

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		EM	18	12	50	6	Good		
0369	Betula spp. (birch)	SM	8	6	20	2.4	Fair	Nice specimen – wire stuck in trunk @ 1m (w). forked @ 3m. No obvious signs of decay.	Clean crown and remove scrub/vegetation around base of the tree.
0370	Fagus sylvatica (beech)	SM	12	7	30	3.6	Good	Leaning heavily (s)- Growing out of steep bank. In competition with tree no 0371.	Fell
0371	Fagus sylvatica (beech)	SM	12	7	30	3.6	Good	Nice specimen growing on top of steep bank. No obvious signs of decay.	U
0372	Fagus sylvatica (beech)	SM	10	8	30	3.6	Good	Nice specimen growing on top of steep bank. No obvious signs of decay.	Sever Ivy
0373	Malus domestica (apple)	M	12	10	35,34	4.2	Good	Forked @ base – Growing out of the bank. Leaning heavily (W) away from tree no 0304. Ivy clad – hard to assess	NAR
0374	Cotoneaster frigidus (Himalayan cotoneaster)	M	12	9	28,28, 27	3.36	Good	Multistem specimen growing out of the bank showing good vigour. Ivy clad lower down.	Sever Ivy – Crown thin & clean.

Dermot Casey Tree Care

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ARBORICULTURAL SURVEY

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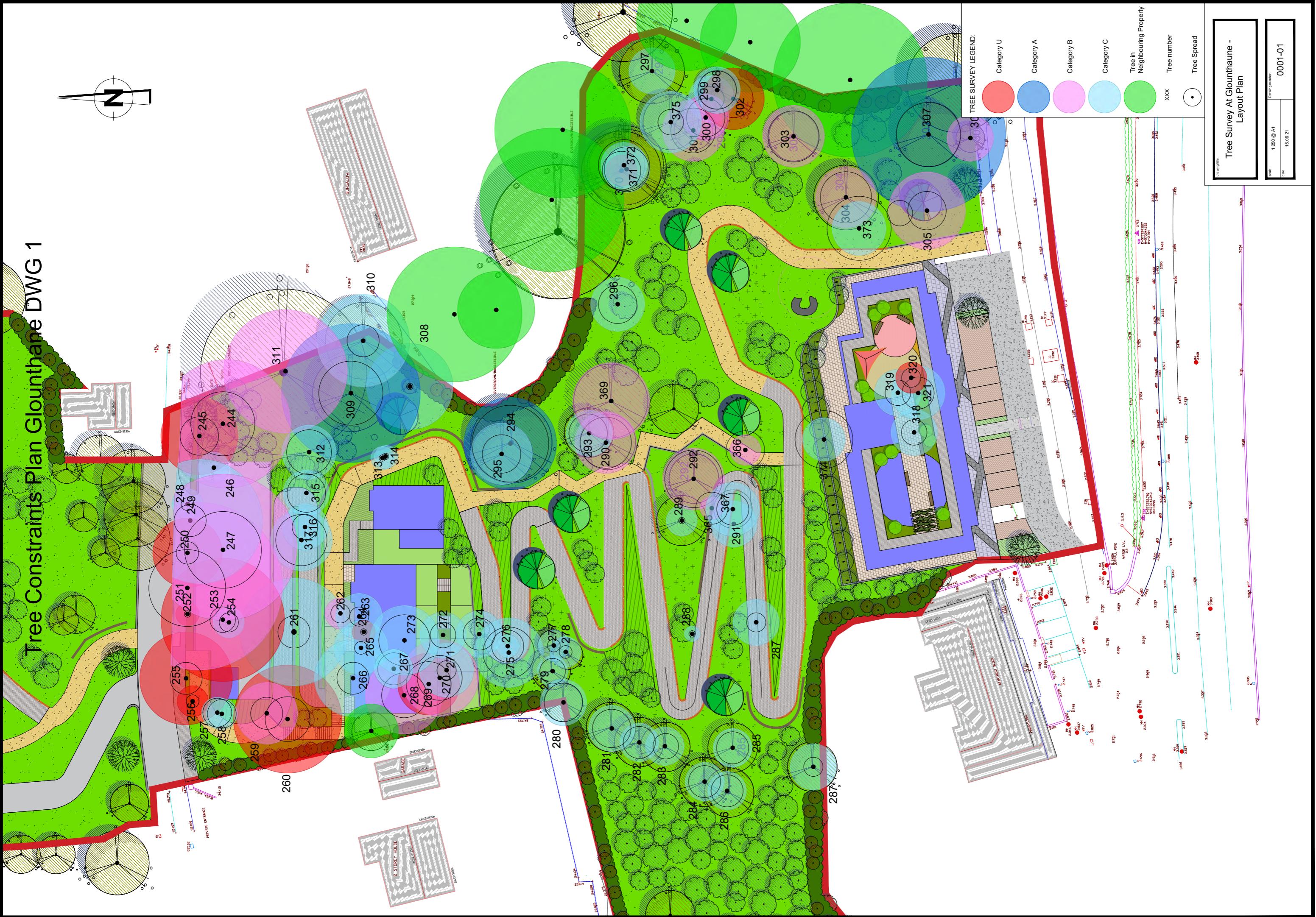
		EM	14	4	40	4.8	Good		
0375	Pinus sylvestris (Scots pine)						Minor deadwood throughout. Forked @ 10m.	Sever Ivy	C

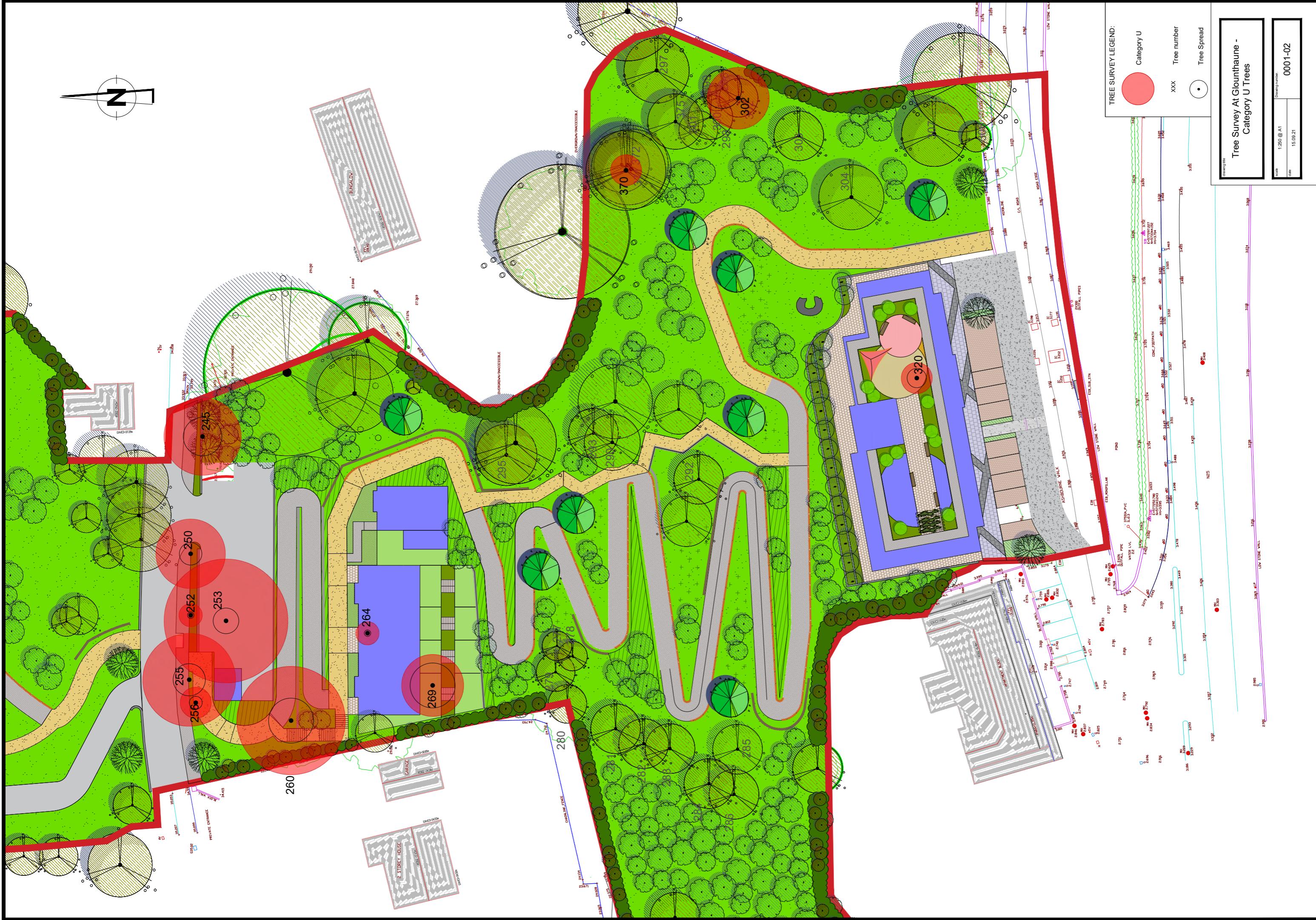
Dermot Casey Tree Care

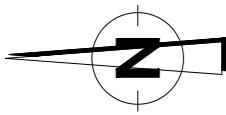
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ARBORICULTURAL SURVEY

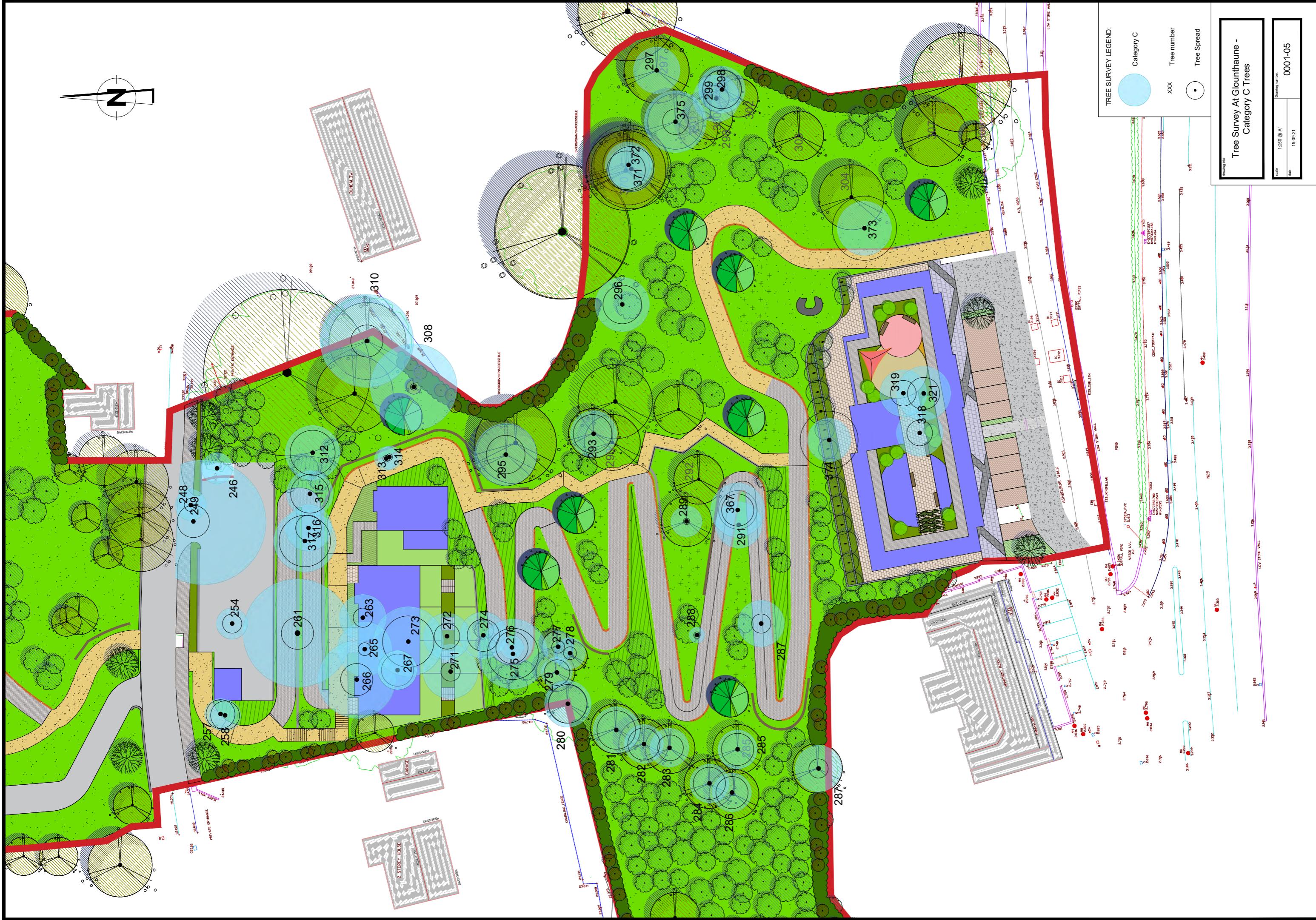
Tree Constraints Plan Glouonthane DWG 1



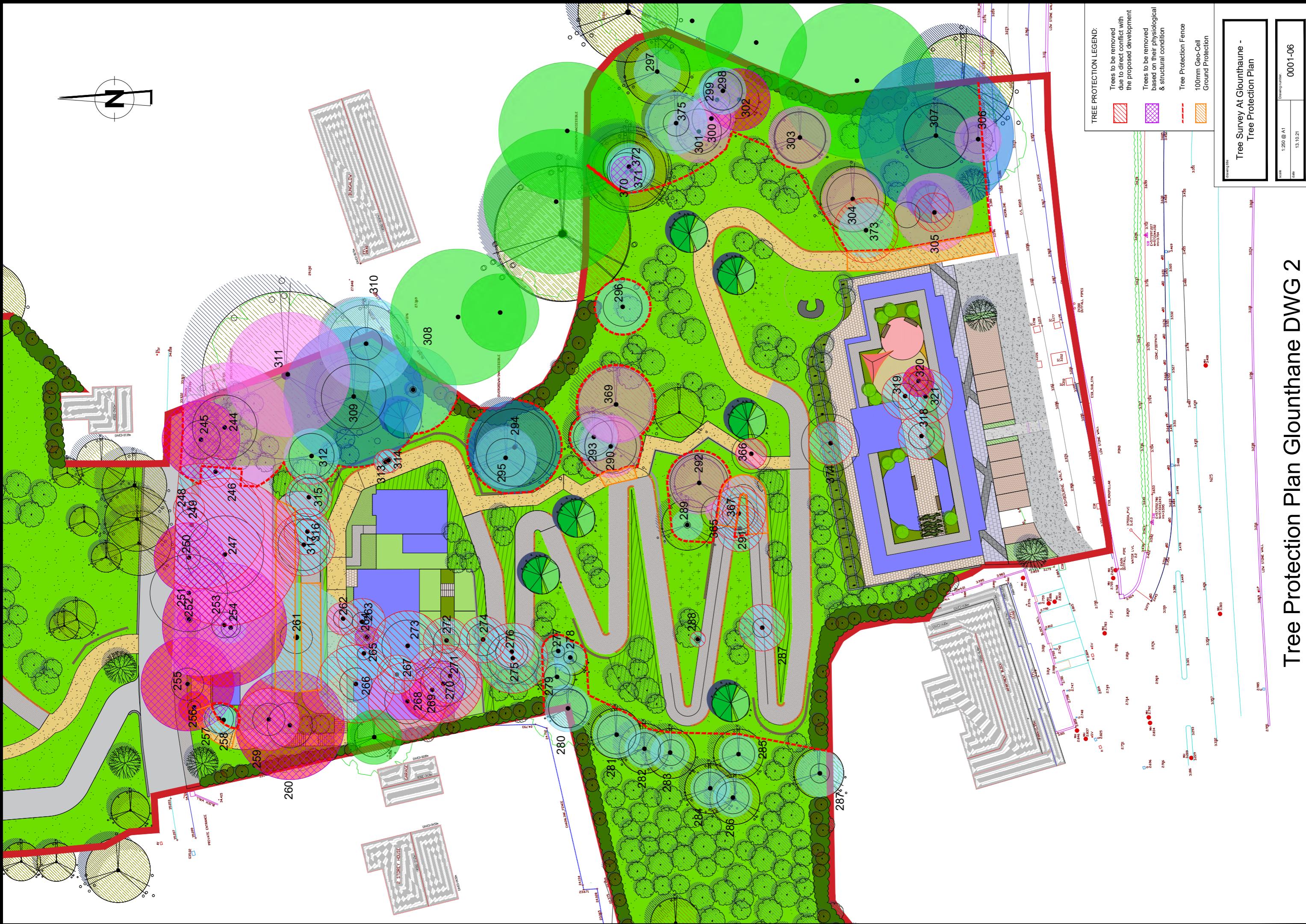








Tree Protection Plan Glounthane DWG 2

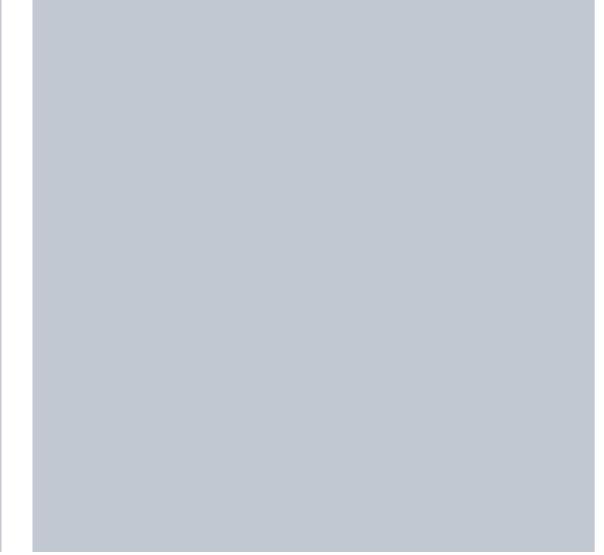
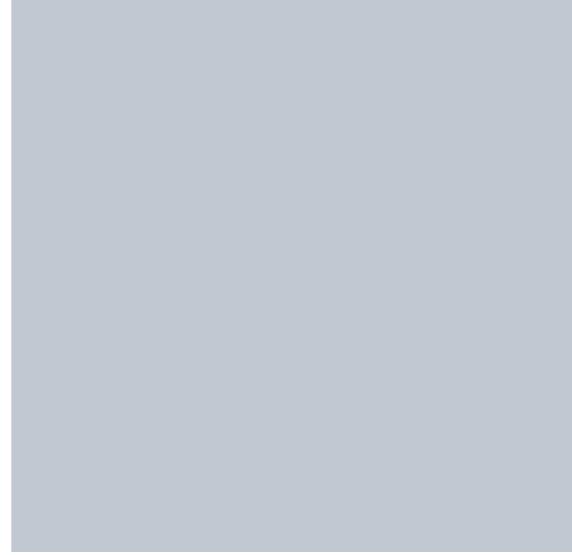




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APPENDIX 4-2

Arboricultural Report - Arborcare



VOLUME III | Appendices



Tree Survey Report

Prepared for:

Cunnane Stratton Reynolds

Proposed site:

Glounthaune, Co. Cork.

Prepared by:

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Executive Summary

Arbor-Care Professional Consulting Tree Service was retained by Cunnane Stratton Reynolds to undertake firstly, a Tree Survey, tree constraints plan outlining existing trees on or adjacent to the proposed development, this survey is undertaken without prejudice to the proposed development. The surveyed trees contained within this report are located within the parameters of the proposed site. The proposed site consists of a site of large green fields divided by natural hedgerows, there are also internal hedgerows within the site. The survey is commencing at the north of the site and working in a southerly direction.

The objective of the tree survey was to identify the areas that contained trees or hedgerows of quality, and to ensure where possible that these areas would be retained.

The Tree Survey and inventory report is based on the British standard *BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations*, this standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements.

The survey commenced on the 22nd July 2019.



Proposed development





1.0 Assignment

1. To undertake a visual tree/hedgerow survey to assess the tree's condition(s) and provide an inventory of trees.
2. Provide a table outlining the schedule of trees on site and provide recommendations for their preservation and/or removal.
3. Present a written report on the inspection of the trees.



Fig. 1 Survey area, highlighted in red

1.1 Limits of the Assignment

Unless otherwise stated tree inspections have been undertaken from ground level and using non-invasive techniques only. Comments on the condition and safety of any tree relate to the condition of that tree at the time of the survey. It should be recognised that tree condition is subject to change due to, for example the effects of disease, wind or nearby development works. Changes in land use are also significant in respect of risk assessment. Trees should therefore be inspected at intervals relative to identified site risks.

2.0 Methodology Employed

An initial tree survey and visual condition assessment was on the 22nd July 2019. The purpose of this report and in accordance with *BS 5837: 2012 Trees in relation to design, demolition and construction. Recommendations* only trees with diameters of 75mm or greater were surveyed. Also in accordance with section 4.4.2.3 of the British standard document where trees formed obvious groups these were assessed and recorded as groups. The survey commenced along the northern boundary and continued in an easterly direction

Section 4.4.2.3 of BS 5837: 2012 states:

Trees growing as groups or woodland should be identified and assessed as such where the arboriculturist determines that this is appropriate. However, an assessment of individuals within any group should still be undertaken if there is a need to differentiate between them, e.g. in order to highlight significant variation in attributes (including physiological or structural condition).

NOTE: The term "group" 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 of each of the three subcategories.

The survey concentrated primarily on the significant trees/hedgerows located within and adjacent to the proposed development area. The objective of this survey was to gather information regarding the trees location on the proposed development site and the impact the proposed development may have on the trees. **Please refer to appendix 1 for the tree inventory.**

Significant trees can be equated as those trees whose visual importance to the surrounding area are sufficient to justify special efforts to protect/preserve and whose loss would have an irremediable adverse impact on the local environment. Significance can also be placed depending on the trees age, another variable to imply significance can be the aesthetic merit of the tree based on its unusual size, intrinsic physical features or outstanding appearance or occurring in a unique location or context, and thus provides a special contribution as a landmark or landscape feature.

All above parts of the trees were visually examined. Tree diameters (DBH) were estimated at 1.5 meter above grade as per standard arboricultural practice. Tree height was measured with the use of a clinometer (Where practical). A generalised system was employed to describe the overall health of the trees. The system uses a five tier rating scale with the following descriptors:

Specimen condition 5-tier rating system

1. Very poor-1-20%
2. Poor- 21-40%
3. Fair- 41-60%
4. Good- 61-80%
5. Very good 81-100%

3.0 Trees surveyed

The survey commenced on the 22nd July 2019. A total of 297 trees were surveyed.

3.1 A breakdown of the Tree Categories on site as per BS 5837 2012 is set out in the table below:

Category	Quantity
A-Tree of high quality	25
B-trees of good quality	181
C (Low quality or trees less than 75mm diameter)	76
U (remove due to poor condition)	15
Total Trees surveyed	297

Tree Categorization.

Tree Categorization.

Category U

This category signifies those trees that are in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management.

Category A.

Those trees of a high quality and value, in such a condition as to be able to make a substantial contribution. (A minimum of 40 years is suggested)

Category B

This category signifies those trees of a moderate value and in such a condition as to be able to make a substantial contribution (A minimum life expectancy of 20 yrs is suggested)

Category C

This category signifies those trees of a low quality and value that are currently in an adequate condition to remain until new planting could be established (A minimum life expectancy of 10yrs is suggested), or young trees with a stem diameter below 150mm. 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.

The above categories have sub-categories attached to the tree categorisation.

Sub-category 1- Mainly Arboricultural Values eg-A1

Sub-category 2- Mainly Landscape Values- B2

Sub-category 3- Mainly cultural values, including conservation C2

Appendix 1 – Tree Inventory

Tree Inventory Legend

Tree Dimensions - All dimensions are in meters.

Ht - Tree Height

Crown clearance - Lowest canopy height (distance from ground level to the first live branch)

Crown spread - Tree Canopy Spread measured by radii at north, east, south and west

Dia. - Stem diameter at approx. 1.50m from ground level.

RPA - Root Protection Area, as a radius measured from the tree's stem centre.

Physiological Condition

Good - A specimen of generally good form and health

Fair - A specimen with defects or ill health that can be either rectified or managed typically allowing for retention

Poor - A specimen whom through defect, disease attack or reduced vigour has a limited longevity or may be un-safe

Dead - A dead tree

Structural Condition - Information on structural form, defects, damage, injury or disease supported by the tree

PMR (Preliminary Management Recommendations) – refers to Arboricultural actions or works considered necessary at the time of the inspection and relating to the existing site context and tree condition. *Note is also made of works considered as urgent.*

Species Common name is given; botanical name is also given upon its first entry, in Italics.

Appendix 1

Glounthaune, Co. Cork



Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown CI.(M)	Condition	Structural/Physiological Observations	Impact of the development	Category	R.P.A. Meters	
1146-1147	<i>Chamaecyparis Lawsoniana</i> Lawson Cypress	M	420	16	N=1 S=1 E=2 W=2	1	Good	A group of mature Lawson Cypress displaying over all good condition. These trees are bounded between the site and a neighbouring property, so they are possibly on private property. They provide a good screening between both the development site and existing house. On the southern section of the hedgerow there are trees that have succumbed to storm damage so there are a few gaps in the hedgerow, but, on the lower southern section the screening isn't as important as there is no house adjacent.	Unknown	Retain	B2	5.2m
1148	<i>Acer Pseudoplatanus</i> Sycamore	M	680	14	N=4 S=4 E=4 W=4	3	Good	A mature Sycamore displaying over all good condition	Unknown	Retain	B2	7.8m
1149	Sycamore	M	600	14	N=3 S=3 E=3 W=3	4	Good	A mature Sycamore displaying over all good condition	Unknown	Retain	B2	7.0m
1150	<i>Fraxinus</i> Ash	M	410	14	N=3 S=3 E=3 W=3	1.5	Good	A large mature co-dominant Ash displaying over all good condition	Unknown	Retain	B2	5.1m
1151	Ash	M	290	14	N=3 S=3 E=3 W=3	1.5	Good	A mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	3.9m



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Glounthaune, Co. Cork

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown CI.(M)	Condition	Structural/Physiological Observations	Impact of the development	Category	R.P.A. Meters	
1152	Ash	EM	260	10	N=2 S=2 E=2 W=2	2	Good	An early mature Ash displaying over all good condition	Unknown	Retain	B2	3.6m
1153	Ash	M	470	18	N=5 S=5 E=5 W=5	2	Good	A large mature co-dominant Ash displaying over all good condition	Unknown	Retain	B2	5.7m
1154	<i>Ulmus</i> Elm	EM	260	8	N=0.5 S=0.5 E=0.5 W=0.5	3	Good	An early mature Elm displaying over all good condition	Unknown	Retain	C2	3.6m
1155	Sycamore	M	400	14	N=3 S=3 E=5 W=5	1	Good	A large mature multi-stemmed Sycamore displaying over all good condition	Unknown	Retain	B2	5.0m
1156	Ash	M	510	12	N=2 S=2 E=3 W=3	3	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	6.1m



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Appendix 1
Glounthaune, Co. Cork

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact development	the PMR	Category	R.P.A. Meters
1157 x 4	Elm	SM	120	4	N=1 S=1 E=1 W=1	1	Good	This represents a cluster of 4 semi-mature Elm displaying over all good condition	Unknown	Retain	C2	2.2m
1158	<i>Crataegus Monogyna</i> Hawthorn	M	210	4	N=2 S=2 E=2 W=2	1	Good	A mature multi-stemmed Hawthorn displaying over all good condition	Unknown	Retain	B2	3.1m
1159	Ash	M	230	10	N=2 S=2 E=2 W=2	3	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	3.3m
1160	Ash	M	230	10	N=2 S=2 E=2 W=2	3	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	3.3m
1161	Elm	M	320	8	N=2 S=2 E=2 W=2	2	Good	A mature Elm displaying over all good condition	Unknown	Retain	B2	4.2m


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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact development	the PMR	Category	R.P.A. Meters
1162	Elm	M	260	12	N=2 S=2 E=2 W=2	2	Good	A mature Elm displaying over all good condition	Unknown	Retain	B2	3.6m
1163	Elm	M	240	12	N=2 S=2 E=2 W=2	2	Good	A mature Elm displaying over all good condition	Unknown	Retain	B2	3.4m
1164 x 4	Elm	SM	190		N= S= E= W=	2	Good	This represents a cluster of 4 semi-mature Elms displaying over all good condition	Unknown	Retain	B2	2.9m
1165	Ash	M	480	16	N=4 S=4 E=4 W=4	2	Good	A large mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	5.8m
1166	Elm	M	480	10	N=4 S=4 E=4 W=4	2	Good	A large mature Elm displaying over all good condition	Unknown	Retain	B2	5.8m


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Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. Meters
1167	Ash	M	700	18	N=5 S=5 E=5 W=5	2	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2	8.0m
1168	Ash	M	520	18	N=6 S=6 E=6 W=6	2	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2	6.2m
1169	Ash	M	470	16	N=5 S=5 E=5 W=5	2	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2	5.7m
1170	Lawson Cypress x 3	M	400	12	N=1 S=1 E=1 W=1	2	Fair	Represents a cluster of 3 mature Lawson Cypress displaying over all fair condition. These trees are in fair/poor condition, they appear to have suffered upper stem damage	Unknown	Consider for removal	C2	5.0m
1171	Lawson Cypress x 2	M	490	14	N=1 S=1 E=1 W=1	4	Poor	Represents 2 Lawson Cypress displaying over all poor condition. These trees have suffered extensive upper canopy damage	Unknown	Remove	U	5.9m

Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. Meters
1172	Lawson Cypress x 4	M	210	10	N=2 S=2 E=2 W=2	1	Fair	Represents a group of 4 Lawson Cypress displaying over all fair condition. These trees are showing evidence of decline, they have suffered upper canopy damage. These trees have low ecological value.	Unknown	Consider for removal	C2	3.1m
1173	Ash	M	360	12	N=3 S=3 E=3 W=3	3	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	4.6m
1174	Lawson Cypress	M	550	16	N=2 S=2 E=2 W=2	3	Good	A mature Lawson Cypress displaying over all good condition. This tree is of low ecological value	Unknown	Consider for removal	C2	6.5m
1175	Ash	M	430	12	N=4 S=4 E=4 W=4	1	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	5.3m
1176	Lawson Cypress	M	510	16	N=2 S=2 E=2 W=2	3	Fair	A mature Lawson Cypress displaying over all fair condition. This tree is of low ecological value	Unknown	Consider for removal	C2	6.1m



Cork Arboricultural
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Cambridge Tree Service

Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1177	Ash	M	380	16	N=3 S=3 E=3 W=3	4	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	4.8m
1178	Ash	M	530	16	N=3 S=3 E=3 W=3	4	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	6.3m
1179	Lawson Cypress	M	550	10	N=2 S=2 E=2 W=2	4	Fair	A mature Lawson Cypress displaying over all fair condition. This tree has suffered upper canopy damage. It is of low ecological value.	Unknown	Consider for removal	C2	6.5m
1180	Lawson Cypress	M	300	12	N=4 S=2 E=2 W=2	2	Good	A mature Lawson Cypress displaying over all good condition. This tree is contained within private rear garden and provides good screening between the proposed development and existing house.	Unknown	Retain	B2	4.0m
1181	Elm x2	M	400		N=1 S=1 E=1 W=1			Represents two mature Elms. These trees are dead.	Unknown	Remove	U	5.0m



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Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1182	Ash	M	500	16	N=4 S=4 E=4 W=4	2	Good	A large mature Ash displaying over all good condition. This tree is located within a private rear garden	Unknown	Retain	B2	6.0m
1183	Cypressus Macrocarpa Monterey Cypress	M	500	18	N=4 S=4 E=4 W=4	2	Good	A large mature Monterey Cypress displaying over all good condition. This tree is located within a private rear garden. It provides good screening between the proposed development and the existing house.	Unknown	Retain	B2	6.0m
1184	Ash	M	460	18	N=5 S=5 E=5 W=5	4	Good	A large mature co-dominant Ash displaying over all good condition.	Unknown	Retain	B2	5.6m
1185	Ash	M	660	22	N=6 S=6 E=6 W=6	2	Good	A large mature multi-stemmed Ash displaying over all good condition. This tree is located within the grounds of a private property.	Unknown	Retain	A2	7.6m
1186	Ash	M	600	18	N=3 S=3 E=3 W=3	4	Good	A large mature multi-stemmed Ash displaying over all good condition. This tree is located 2 to 3 metres outside the site boundary, it is within private property. It provides good screening between the proposed development and the existing house.	Unknown	Retain	B2	7m



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Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
1187	<i>Fagus</i> Beech	M	500	20	N=5 S=5 E=5 W=5	4	Good	A large mature Beech displaying over all good condition. This tree is located within a rear garden of private property.	Unknown	Retain	A2
1188	Sycamore	M	400	16	N=4 S=4 E=4 W=4	3	Good	A mature Sycamore displaying over all good condition. This tree is located within a rear garden of private property.	Unknown	Retain	B2
1189	Ash	M	400	14	N=3 S=3 E=5 W=5	2	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2
1190	Ash	M	400	14	N=3 S=3 E=5 W=5	2	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2
1191	Ash	M	600	20	N=2 S=5 E=5 W=3	4	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2

Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
1192	Ash	M	580	20	N=3 S=3 E=3 W=3	4	Good	A co-dominant Ash displaying over all good condition. This tree is located on the boundary of the site and a private property	Unknown	Retain	B2
1193	Sycamore	M	330	14	N=4 S=4 E=4 W=4	3	Good	A mature multi-stemmed Sycamore displaying over all good condition. This tree is contained within the grounds of private property. It provides good screening between the proposed development site and the existing house.	Unknown	Retain	B2
1194	Ash	M	580	18	N=4 S=4 E=4 W=4	4	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2
1195	Ash	M	380	16	N=3 S=3 E=3 W=3	4	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2
1196	Ash	EM	260	12	N=2 S=2 E=2 W=2	4	Good	An early mature Ash displaying over all good condition	Unknown	Retain	B2

Appendix 1
Glounthaune, Co. Cork

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1197	Ash	M	350	18	N=3 S=3 E=3 W=3	4	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	4.5m
1198	Ash	M	490	18	N=4 S=4 E=4 W=4	4	Good	A mature co-dominant Ash displaying over all good condition	Unknown	Retain	B2	5.9m
1199	Ash	M	380	18	N=4 S=4 E=4 W=4	4	Good	A mature co-dominant Ash displaying over all good condition	Unknown	Retain	B2	4.8m
1200	Ash	M	390	16	N=3 S=3 E=4 W=2	3	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	4.9m
1201	Ash	EM	240	12	N=3 S=3 E=3 W=3	3	Good	An early mature Ash displaying over all good condition	Unknown	Retain	B2	3.4m

Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1202	Ash	M	400	16	N=2 S=2 E=2 W=2	1	Fair	A mature multi-stemmed Ash displaying over all fair condition. This is a boundary tree, it is located on the shared embankment between the two properties	Unknown	Retain	C2	5m
1203	Ash	M	400	20	N=4 S=4 E=4 W=4	4	Good	A mature co-dominant Ash displaying over all good condition on a shared embankment.	Unknown	Retain	B2	5.0m
1204	Ash	EM	260	14	N=2 S=2 E=2 W=2	3	Good	An early mature Ash displaying over all good condition	Unknown	Retain	B2	3.6m
1205	Ash	M	370	20	N=4 S=4 E=4 W=4	3	Good	A mature co-dominant Ash displaying over all good condition	Unknown	Retain	B2	4.7m
1206	Ash	EM	280	14	N=3 S=3 E=3 W=3	4	Good	An early mature Ash displaying over all good condition	Unknown	Retain	B2	3.8m

Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
1207	Ash	M	310	16	N=2 S=2 E=4 W=2	3	Good	A mature co-dominant Ash displaying over all good condition	Unknown	Retain	B2
1208	Ash	M	310	16	N=2 S=2 E=4 W=2	3	Good	A mature co-dominant Ash displaying over all good condition	Unknown	Retain	B2
1209	Ash	M	330	14	N=2 S=2 E=2 W=2	2	Good	A multi-stemmed Ash displaying over all good condition. This tree is located on the boundary between the two properties.	Unknown	Retain	B2
1210	Ash	M	400	20	N=2 S=2 E=2 W=2	2	Good	A multi-stemmed Ash displaying over all good condition. This tree is located on the boundary between the two properties.	Unknown	Retain	B2
1211	Ash	M	360	20	N=4 S=4 E=4 W=4	3	Good	A large mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2

Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1212	Ash	M	520	18	N=3 S=3 E=3 W=3	4	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2	6.2m
1213	Ash	M	250	16	N=3 S=3 E=3 W=3	1.5	Good	A multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	3.5m
1214	Ash	M	290	16	N=3 S=3 E=3 W=3	1.5	Good	A co-dominant Ash displaying over all good condition	Unknown	Retain	B2	3.9m
1215	Ash	M	420	20	N=4 S=4 E=4 W=4	4	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2	5.2m
1216	Ash	M	420	20	N=4 S=4 E=4 W=4	4	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2	5.2m



Arboricultural Association

Conservation Care Service

Appendix 1

Gloonthaune, Co. Cork

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown C.I.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
1217	Ash	M	450	18	N=4 S=4 E=4 W=4	5	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2
1218	Ash	M	260	12	N=3 S=3 E=3 W=3	4	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2
1219	Ash	M	370	16	N=4 S=4 E=4 W=4	3	Good	A large mature co-dominant Ash displaying over all good condition	Unknown	Retain	B2
1220	Sycamore	M	780	18	N=4 S=4 E=4 W=4	3	Fair	A large mature multi-stemmed Sycamore displaying over all fair condition. There is a significant stem wound on the south side of this tree.	Unknown	Consider for removal	C2
1221	Sycamore	M	550	14	N=5 S=5 E=3 W=3	2	Good	A mature Sycamore displaying over all good condition. This tree is located at the southern entrance of the site near the old gate.	Unknown	Retain	B2



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Appendix 1

Gloonthaune, Co. Cork

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown C.I.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
1222	<i>Larix</i> Larch	M	480	18	N=0 S=0 E=0 W=0	2	Poor	This tree is dead, it appears to be located in the adjacent property. It is a roadside tree so it should be removed in the interest of health & safety	Unknown	Remove	U
1223	<i>Ilex</i> Holly	M	250	8	N=2 S=2 E=2 W=2	2	Good	A mature Holly displaying over all good condition	Unknown	Retain	B2
1224	<i>Laureus Nobilis</i> Laurel	M	280	8	N=3 S=3 E=5 W=3	1	Fair	A mature Laurel displaying over all fair condition. This tree is located within a private property but the upper canopy overhangs into the existing avenue of the development site. It is of low ecological value	Unknown	Retain	C2
1225	<i>Pinus Sylvestris</i> Scots Pine	M	400	20	N=3 S=3 E=3 W=3	5	Good	A mature Scots Pine displaying over all good condition. This tree is located within a private property.	Unknown	Retain	B2
1226	Holly	M	250	8	N=2 S=2 E=2 W=2	2	Good	A mature Holly displaying over all good condition	Unknown	Retain	B2



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
1227	Beech	M	620	24	N=5	2	Good	A large mature Beech displaying over all good condition. This tree is located within private property	Unknown	Retain	A2
1228	Scots Pine	M	440	20	N=3	6	Good	A mature Scots Pine displaying over all good condition. This tree is located within private property.	Unknown	Retain	B2
1229	Ash	M	340	20	N=3	3	Good	A mature Ash displaying over all good condition. This tree is located within private property.	Unknown	Retain	B2
1230	Ash	M	240	18	N=2	5	Good	A mature Ash displaying over all good condition. This tree is located within private property.	Unknown	Retain	B2
1231	Ash	M	300	20	N=4	4	Good	A mature Ash displaying over all good condition. This tree is located within private property.	Unknown	Retain	B2

Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
1232	Ash	M	300	20	N=4	4	Good	A mature Ash displaying over all good condition. This tree is located within private property.	Unknown	Retain	B2
1233	Larch	M	530	18	N=4	2	Poor	A large mature Larch displaying over all poor condition. This tree has advanced decline in the upper canopy. This tree is located within private property, however, it is leaning in towards the development site. Homeowners permission required for removal.	Unknown	Consider for removal	C2
1234	Ash	M	350	16	N=3	2	Fair	A co-dominant Ash displaying over all fair condition. This tree has suffered stem damage on the western side. This tree is contained within private property.	Unknown	Retain	C2
1235	Ash	M	290	18	N=3	3	Good	A co-dominant Ash displaying over all good condition. This tree is contained within private property.	Unknown	Retain	B2
1236	<i>Pinus Nigra</i>	M	1120	26	N=5	3	Good	A large mature Austrian Pine displaying over all good condition. This tree is contained within private property.	Unknown	Retain	B2
	Austrian Pine				S=5		E=5				12.2m
					W=5						



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1237	Beech	M	640	28	N=5 S=5 E=5 W=5	3	Good	A large mature Beech displaying over all good condition. This tree is located on the boundary between the proposed development and private property.	Unknown	Retain	A2	7.4m
1238	Elm	M	310	12	N=3 S=3 E=3 W=3	2	Poor	A multi-stemmed Elm. This tree is dead.	Unknown	Remove	U	
1239	Ash	M	1000	24	N=8 S=8 E=8 W=8	2	Good	A large mature Ash displaying over all good condition. This tree is located within private property.	Unknown	Retain	B2	11.0m
1240	Lawson Cypress	EM	190	8	N=2 S=2 E=2 W=2	2	Fair	A Lawson Cypress displaying over all fair condition. This tree has suffered some lower stem damage. It is located within private property.	Unknown	Retain	C2	2.9m
1241	Elm	M	340	16	N=3 S=3 E=3 W=3	2	Poor	A mature Elm displaying over all poor condition. This tree is dead.	Unknown	Remove	U	4.4m



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Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1242	Holly	M	200	8	N=2 S=2 E=2 W=2	1.5	Fair	A mature multi-stemmed Holly displaying over all good condition. This tree has been overgrown by a climber	Unknown	Retain	C2	3.0m
1243	Ash	M	360		N=2 S=2 E=2 W=2	2	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	4.6m
1244	Ash	M	350	18	N=4 S=4 E=4 W=4	3	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	4.5m
1245	Ash	M	360	18	N=4 S=4 E=4 W=4	3	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	4.6m
1246	Ash	M	360	18	N=4 S=4 E=4 W=4	3	Good	A mature Ash displaying over all good condition. At the base of this tree the decay fungus Dryads Saddle was noted, this has caused lower stem and root plate decay. This tree is in private property but is within falling distance of the development site.	Unknown	Consider for removal	C2	4.6m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1247	Elm	M	460	18	N=3 S=3 E=3 W=3	5	Good	A large mature Elm displaying over all good condition	Unknown	Retain	B2	5.6m
1248	Ash	M	450	22	N=4 S=4 E=4 W=4	7	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2	5.5m
1249	Laurel	M	340	8	N=2 S=2 E=2 W=2	2	Fair	A mature multi-stemmed Laurel displaying over all fair condition. This tree is showing signs of decline. It is of low ecological value	Unknown	Consider removal	C2	4.4m
1250	Elm	M	290	18	N=2 S=2 E=2 W=2	5	Fair	A mature Elm displaying over all fair condition. This tree is showing decline in the upper canopy.	Unknown	Retain	C2	3.9m
1251	Elm	M	450	18	N=4 S=4 E=3 W=3	3	Good	A mature Elm displaying over all good condition	Unknown	Retain	B2	5.5m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1252	Elm	M	380	14	N=3 S=3 E=3 W=3	4	Good	A mature Elm displaying over all good condition	Unknown	Retain	B2	4.8m
1253	<i>Laurus Nobilis</i> Bay	M	200	10	N=4 S=4 E=4 W=4	1	Good	A multi-stemmed Bay displaying over all good condition	Unknown	Retain	C2	3.0m
1254	Laurel	M		6	N=1 S=1 E=1 W=1	2	Fair	A large mature Laurel displaying over all good condition. This tree is of low ecological value	Unknown	Consider removal	C2	
1255	Laurel	M	220	8	N=6 S=6 E=3 W=3	1	Fair	A large mature multi-stemmed Laurel displaying over all fair condition. This tree has suffered stem damage. It is of low ecological value.	Unknown	Consider removal	C2	3.2m
1256	Monterey Cypress	M	1110	22	N=6 S=6 E=6 W=6	3	Fair	A large mature Monterey Cypress displaying over all fair condition. This tree has storm damaged limbs in the upper canopy.	Unknown	Consider removal	C2	12.1m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. Meters
1257	Ash	M	440	16	N=3 S=3 E=3 W=3	4	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	5.4m
1258	Ash	M	600	20	N=4 S=4 E=4 W=4	5	Fair	A large mature multi-stemmed Ash displaying over all fair condition. There is severe cankering on the tree and it has suffered damage on the mid canopy.	Unknown	Consider for removal	C2	10.0m
1259	Ash	M	900	18	N=4 S=4 E=4 W=4	3	Fair	A large mature Elm displaying over all good condition	Unknown	Retain	B2	7.0m
1260	Elm	M	480	20	N=3 S=3 E=3 W=3	4	Good	A large mature Elm displaying over all good condition	Unknown	Retain	B2	5.8m
1261	Elm	M	520	18	N=4 S=3 E=2 W=2	2	Good	A mature Elm displaying over all good condition	Unknown	Retain	B2	6.2m

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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. Meters
1262	Elm	M	440	16	N=3 S=3 E=3 W=3	2	Poor	A mature Elm. This tree is dead.	Unknown	Remove	U	5.4m
1263	Beech	M	550	18	N=2 S=2 E=2 W=2	4	Fair	A large mature Beech displaying over all fair condition. This tree has been heavily topped in the past; this has reduced its category rating.	Unknown	Retain	C2	6.5m
1264	Beech	M	700	18	N=2 S=2 E=2 W=2	4	Fair	A large mature Beech displaying over all fair condition. This tree has been heavily topped in the past; this has reduced its category rating.	Unknown	Retain	C2	8.0m
1265	Elm	EM	190	14	N=2 S=2 E=2 W=2	3	Good	An early mature Elm displaying over all good condition.	Unknown	Retain	B2	2.9m
1266	Lawson Cypress	M	420	16	N=3 S=3 E=3 W=3	2	Good	A large mature Lawson Cypress displaying over all good condition	Unknown	Consider for removal	C2	5.2m

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Dedicated
Caring for Trees

Professional
Conservation
Care

Appendix 1

Glounthaune, Co. Cork

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1267	Monterey Cypress	M	1200	26	N=8 S=8 E=4 W=4	4	Fair	A large mature Monterey Cypress displaying over all fair condition. This tree has suffered storm damage in the upper canopy and it is in decline.	Unknown	Consider for removal	C2	13.0m
1268	<i>Pinus Radiata</i> Monterey Pine	M	700	28	N=8 S=8 E=5 W=5	3	Good	A large mature Monterey Pine displaying over all good condition.	Unknown	Retain	B2	8m
1269	Monterey Cypress	M	980	24	N=8 S=8 E=6 W=6	2	Good	A large mature Monterey Cypress displaying over all good condition. This tree has suffered lower stem damage	Unknown	Remove broken limbs	B2	10.8m
1270	Ash	M	500	22	N=4 S=4 E=4 W=4	5	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2	6.0m
1271	Ash	M	610	22	N=4 S=4 E=4 W=4	5	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2	7.1m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1272	Ash	M	610	26	N=5 S=5 E=5 W=5	6	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2	7.1m
1273	Ash	M	380	20	N=3 S=3 E=2 W=2	6	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	4.8m
1274	Ash	M	530	24	N=5 S=5 E=3 W=3	4	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	6.3m
1275	Holly	M	170	10	N=3 S=3 E=3 W=3	2	Fair	A mature Holly displaying over all fair condition. This tree has suffered recent lower stem damage on the western side	Unknown	Consider for removal	C2	2.7m
1276	<i>Juniperus Juniper</i>	M	400	12	N=2 S=2 E=2 W=2	3	Good	A mature Juniper displaying over all good condition	Unknown	Retain	B2	5.0m



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Glounthaune, Co. Cork



Dangerous
Gardening/Ecology Service

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1277	Lawson Cypress	M	600	20	N=3 S=3 E=3 W=3	2	Good	A mature Lawson Cypress displaying over all good condition. This tree is of low ecological value	Unknown	Consider for removal	C2	7.0m
1278	Lawson Cypress	M	280	12	N= S= E= W=	2	Fair	A mature Lawson Cypress displaying over all fair condition. This tree has been suppressed by the larger surrounding trees	Unknown	Consider for removal	C2	3.8m
1279	<i>Prunus Avium</i> Cherry	Em	180	8	N=0 S=0 E=0 W=	3	Dead	A multi-stemmed Cherry. This tree is dead and can be removed	Unknown	Remove	U	
1280	Pittosporum	M	210	10	N=2 S=2 E=2 W=2	1	Fair	A mature Pittosporum displaying over all fair condition. This tree is of low ecological value.	Unknown	Consider for removal	C2	3.1m
1281	Lawson Cypress	M	330	10	N=2 S=2 E=2 W=2	0.5	Fair	A mature Lawson Cypress displaying over all fair condition.	Unknown	Consider for removal	C2	4.3m



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Dangerous
Gardening/Ecology Service

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1282	Lawson Cypress	M	330	10	N=2 S=2 E=2 W=2	0.5	Fair	A mature Lawson Cypress displaying over all fair condition	Unknown	Consider for removal	C2	4.3m
1283	Lawson Cypress	M	330	10	N=2 S=2 E=2 W=2	0.5	Fair	A mature Lawson Cypress displaying over all fair condition	Unknown	Consider for removal	C2	4.3m
1284	<i>Cedrus Atlantica</i> Glaucia Blue Atlas Cedar	M	330	10	N=2 S=2 E=2 W=2	0.5	Fair	A mature Blue Atlas Cedar displaying over all fair condition	Unknown	Consider for removal	B2	4.3m
1285	Sycamore	M	340	14	N=4 S=4 E=4 W=4	3	Good	A mature Sycamore displaying over all good condition	Unknown	Retain	B2	4.4m
1286	Laurel	M	230	8	N=3 S=3 E=3 W=3	2	Poor	A mature Laurel displaying over all poor condition. This tree has recently been damaged	Unknown	Remove	C2	3.3m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1287	Sycamore	M	280	16	N=3 S=3 E=3 W=3	5	Fair	A mature Sycamore displaying over all fair condition. This tree has suffered recent stem damage	Unknown	Consider removal	C2	3.8m
1288	Lawson Cypress	M	490	14	N=2 S=2 E=2 W=2	3	Fair	A mature Lawson Cypress displaying over all poor condition. This tree is of low ecological value.	Unknown	Consider removal	C2	5.9m
1289	Lawson Cypress	M	190	6	N=1 S=1 E=1 W=1	1	Poor	A mature Lawson Cypress displaying over all fair condition. This tree has suffered upper canopy damage	Unknown	Remove	U	2.9m
1290	Lawson Cypress	M	970	22	N=3 S=3 E=3 W=3	2	Fair	A large mature Lawson Cypress displaying over all fair condition. This tree is of low ecological value.	Unknown	Consider removal	C2	10.7m
1291	Lawson Cypress	M	850	22	N=3 S=3 E=3 W=3	2	Fair	A large mature Lawson Cypress displaying over all fair condition. This tree is of low ecological value.	Unknown	Consider removal	C2	9.5m

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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1292	Sycamore	M	280	16	N=3 S=3 E=3 W=3	3	Fair	A mature co-dominant Sycamore displaying over all fair condition. This tree has recently suffered some lower stem damage.	Unknown	Consider removal	C2	3.8m
1293	Lawson Cypress	M	440	12	N=3 S=3 E=3 W=3	4	Fair	A mature Lawson Cypress displaying over all fair condition. This tree has suffered recent stem damage. It is of low ecological value.	Unknown	Consider removal	C2	5.4m
1294	Lawson Cypress	M	500	14	N=2 S=2 E=2 W=2	0.5	Fair	A mature Lawson Cypress displaying over all fair condition. This tree is of low ecological value.	Unknown	Consider removal	C2	6.0m
1295	Sycamore	M	600	16	N=3 S=3 E=3 W=3	3	Good	A mature co-dominant Sycamore displaying over all good condition	Unknown	Retain	B2	7.0m
1296	Sycamore	M	270	12	N=2 S=2 E=2 W=2	3	Good	A mature Sycamore displaying over all good condition	Unknown	Retain	B2	3.7m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters	
1297	<i>Rhododendron Arboreum</i>	M	200	10	N=4 S=4 E=4 W=4	2	Fair	A mature Rhododendron displaying over all fair condition.	Unknown	Consider for removal	C2	3.0m
1298	<i>Malus Domestica</i> Apple	M	310	12	N=3 S=3 E=3 W=3	1.5	Good	A mature Apple displaying over all good condition	Unknown	Retain	B2	4.1m
1299	Lawson Cypress	M	500	12	N=4 S=4 E=4 W=4	4	Fair	A large mature Lawson Cypress displaying over all fair condition. This tree has suffered lower stem damage and it is of low ecological value.	Unknown	Consider for removal	C2	6.0m
1300	<i>Acer Capillipes</i> Snake Bark Maple	EM	200	10	N=2 S=2 E=2 W=2	2	Good	A mature Snake Bark Maple displaying over all good condition	Unknown	Retain	B2	3.0m
1301	Snake Bark Maple	EM	200	10	N=2 S=2 E=2 W=2	2	Good	A mature Snake Bark Maple displaying over all good condition	Unknown	Retain	B2	3.0m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters		
1302	Snake Maple	Bark	EM	200	10	N=2 S=2 E=2 W=2	2	Good	A mature Snake Bark Maple displaying over all good condition	Unknown	Retain	B2	3.0m
1303	Sycamore	M	380	16	N=3 S=3 E=3 W=3	1	Good	A mature Sycamore displaying over all good condition	Unknown	Retain	B2	4.8m	
1304	Ash	EM	220	14	N=3 S=3 E=3 W=3	2	Good	An early mature Ash displaying over all good condition	Unknown	Retain	B2	3.2m	
1305	Ash	EM	220	14	N=3 S=3 E=3 W=3	2	Good	An early mature Ash displaying over all good condition	Unknown	Retain	B2	3.2m	
1306 x 3	Sycamore	M	210	12	N=3 S=3 E=3 W=3	2	Good	Represents a cluster of 3 mature Sycamores displaying over all good condition	Unknown	Retain	B2	3.1m	



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1307	Sycamore	M	220	12	N=2 S=2 E=2 W=2	3	Good	A mature Sycamore displaying over all good condition	Unknown	Retain	C2	3.2m
1308	Sycamore	M	220	12	N=2 S=2 E=2 W=2	3	Good	A mature Sycamore displaying over all good condition	Unknown	Retain	C2	3.2m
1309	Sycamore	M	360	16	N=4 S=4 E=4 W=4	4	Good	A mature Sycamore displaying over all good condition	Unknown	Retain	B2	4.6m
1310	Ash	M	250	14	N=2 S=2 E=2 W=2	3	Poor	A mature Ash displaying over all poor condition. This tree has suffered significant stem damage	Unknown	Remove	U	3.5m
1311	Sycamore	EM	260	10	N=2 S=2 E=2 W=2	2	Good	An early mature Sycamore displaying over all good condition	Unknown	Retain	C2	3.6m

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1312	Ash	EM	260	10	N=2 S=2 E=2 W=2	2	Good	An early mature Ash displaying over all good condition	Unknown	Retain	C2	3.6m
1313	Ash	EM	280	10	N=2 S=2 E=2 W=2	2	Good	An early mature Ash displaying over all good condition	Unknown	Retain	C2	3.8m
1314	Ash	M	200	14	N=3 S=3 E=3 W=3	2	Fair	A mature multi-stemmed Ash displaying over all fair condition. This tree is in decline.	Unknown	Consider for removal	C2	3.0m
1315	Lawson Cypress	EM	200	10	N=1 S=1 E=1 W=1	2	Poor	An early mature Lawson Cypress displaying over all poor condition. This tree has suffered lower stem damage.	Unknown	Remove	C2	3.0m
1316	Sycamore	EM	270	10	N=2 S=2 E=2 W=2	3	Poor	An early mature Sycamore displaying over all poor condition. This tree is in decline in the upper canopy.	Unknown	Consider for removal	C2	3.7m

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1317	Lawson Cypress	M	260	10	N=2 S=2 E=2 W=2	2	Poor	A mature multi-stemmed Lawson Cypress displaying over all poor condition. This tree is has suffered significant lower stem damage to the south side.	Unknown	Remove	U	3.6m
1318	Ash	M	340	10	N=2 S=2 E=2 W=2	3	Fair	A mature Ash displaying over all fair condition. This tree is leaning significantly to the north-west.	Unknown	Consider for removal	C2	4.4m
1319	Sycamore	EM	300	10	N= S= E= W=	2	Good	An early mature Sycamore displaying over all good condition.	Unknown	Retain	C2	4.0m
1320	Sycamore	EM	300	10	N= S= E= W=	2	Good	An early mature Sycamore displaying over all good condition.	Unknown	Retain	C2	4.0m
1321	Ash	M	360	12	N=2 S=2 E=2 W=2	2	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	4.6m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. Meters	
1322	Lawson Cypress	M	300	12	N=2 S=2 E=2 W=2	3	Fair	A mature Lawson Cypress displaying over all fair condition.	Unknown	Consider for removal	C2	4.0m
1323	Lawson Cypress	M	300	12	N=2 S=2 E=2 W=2	3	Fair	A mature Lawson Cypress displaying over all fair condition	Unknown	Consider for removal	C2	4.0m
1324	Beech	OM	1100	28	N=6 S=6 E=6 W=6	2	Good	A large over mature Beech displaying over all good condition. This tree is located on the eastern side on the boundary between private property and the proposed development site	Unknown	Retain	A2	12.0m
1325	Beech	M	460	24	N=3 S=3 E=5 W=5	6	Good	A mature Beech displaying over all good condition.	Unknown	Retain	A2	5.6m
1326	Beech	M	710	28	N=3 S=3 E=5 W=5	4	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	8.1m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1327	Beech	M	520	26	N=4 S=4 E=5 W=5	3	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	6.2m
1328	Beech	M	710	28	N=4 S=4 E=4 W=8	5	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	8.1m
1329	Beech	M	630	28	N=4 S=4 E=4 W=4	6	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	7.3m
1330	Beech	M	500	16	N=0 S=0 E=0 W=0	2	Dead	A large mature Beech. This tree is dead.	Unknown	Remove	U	
1331	Beech	M	560	24	N=4 S=4 E=4 W=4	3	Good	A mature Beech displaying over all good condition	Unknown	Retain	A2	6.6m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1332	Beech	M	840	26	N=5 S=5 E=6 W=6	3	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	9.4m
1333	Beech	M	620	24	N=3 S=3 E=3 W=6	5	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	7.2m
1334	Beech	M	600	24	N=3 S=3 E=3 W=6	5	Good	A mature Beech displaying over all good condition	Unknown	Retain	A2	7.0m
1335	Beech	OM	960	28	N=4 S=4 E=8 W=8	5	Good	An over mature Beech displaying over all good condition	Unknown	Retain	A2	10.6m
1336	Beech	M	490	18	N=4 S=4 E=4 W=4	4	Good	A mature Beech displaying over all good condition	Unknown	Retain	B2	5.9m





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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1337	Beech	M	660	18	N=4 S=4 E=4 W=4	4	Good	A mature Beech displaying over all good condition	Unknown	Retain	B2	7.6m
1338	Beech	M	780	28	N=4 S=4 E=6 W=6	8	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	8.8m
1339	Beech	M	1100	28	N=6 S=6 E=6 W=6	3	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	12.0m
1340	Beech	M	600	24	N=4 S=4 E=4 W=4	6	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	7.0m
1341	Beech	M	710	26	N=5 S=5 E=5 W=5	3	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	8.1m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1342	Beech	M	800	26	N=5 S=5 E=5 W=5	3	Good	A large mature Beech displaying over all good condition	Unknown	Retain	A2	9.0m
1343	Beech	M	600	14	N=3 S=3 E=3 W=3	3	Good	A large mature Beech displaying over all good condition	Unknown	Retain	B2	7.0m
1344	Beech	M	600	12	N=1 S=1 E=0 W=5	2	Poor	A mature Beech displaying over all poor condition. This tree has suffered significant upper stem damage and appears to be in decline.	Unknown	Remove	U	
1345	Sycamore	SM	210	12	N=2 S=2 E=2 W=2	2	Fair	A semi-mature Sycamore displaying over all fair condition. This tree is leaning significantly to the west and has been suppressed by the larger surrounding trees.	Unknown	Consider for removal	C2	3.1m
1346	Sycamore	SM	250	12	N=2 S=2 E=2 W=2	3	Fair	A semi-mature Sycamore displaying over all fair condition.	Unknown	Retain	C2	3.5m



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1347	Sycamore	SM	220	12	N=3 S=3 E=3 W=3	2	Fair	A semi-mature co-dominant Sycamore displaying over all fair condition	Unknown	Retain	C2
1348	Sycamore	SM	250	12	N=2 S=2 E=2 W=2	2	Fair	A semi-mature multi-stemmed Sycamore displaying over all fair condition	Unknown	Retain	C2
1349	Sycamore	SM	210	12	N=2 S=2 E=2 W=2	4	Fair	A semi-mature Sycamore displaying over all fair condition	Unknown	Retain	C2
1350	<i>Quercus Robur</i> Common Oak	M	350	14	N=3 S=3 E=2 W=2	3	Good	A mature Common Oak displaying over all good condition	Unknown	Retain	B2
1351	<i>Betula Pendula</i> Silver Birch	M	360	18	N=3 S=3 E=3 W=3	2	Good	A mature Silver Birch displaying over all good condition	Unknown	Retain	B2



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	the PMR	Category	R.P.A. Meters
1352	Ash	M	370	16	N=3 S=3 E=3 W=3	4	Fair	A mature Ash displaying over all fair condition. This tree is leaning significantly to the north.	Unknown	Retain	C2
1353	Rhododendron	M	620	12	N=4 S=4 E=4 W=4	1	Good	A large mature Rhododendron displaying over all good condition. This tree is severely engulfed with ivy.	Unknown	Consider for removal	C2
1354	Lawson Cypress	M	280	8	N=1 S=1 E=1 W=1	2	Fair	A mature Lawson Cypress displaying over all fair condition. This tree has been suppressed by the larger surrounding Rhododendron. It is of low ecological value.	Unknown	Consider for removal	C2
1355	Beech	M	360	14	N=3 S=3 E=4 W=4	0.5	Good	A mature Beech displaying over all good condition	Unknown	Retain	B2
1356	Sycamore	EM	240	8	N=2 S=2 E=2 W=2	1	Fair	An early mature Sycamore displaying over all fair condition	Unknown	Retain	C2



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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. Meters
1357	Lawson Cypress	M	240	8	N=1 S=1 E=1 W=1	2	Poor	A mature Lawson Cypress displaying over all poor condition. This tree has suffered significant stem damage on the eastern side.	Unknown	Remove	U	3.4m
1358	Sycamore	SM	220	10	N=1 S=1 E=1 W=1	3	Fair	A semi-mature Sycamore displaying over all fair condition.	Unknown	Retain	C2	3.2m
Hedgerow 1	<i>Sambucus nigra</i> Elder Ash Hawthorn				N=3 S=3 E=3 W=3	1		Hedgerow 1 is a typical native hedgerow primarily consisting of low-lying Hawthorn, Ash and Elder. Contained within this hedgerow there are some larger trees which will be tagged and assessed individually.	Unknown			3.2m
1359	Ash	M	400	16	N=4 S=4 E=4 W=4	3	Good	A mature multi-stemmed Ash displaying over all good condition. This tree is the first large tree contained within 'Hedgerow 1'.	Unknown	Retain	B2	5.0m
1360	Common Oak	M	500	14	N=3 S=3 E=4 W=4	5	Good	A mature Common Oak displaying over all good condition. This tree is contained within 'Hedgerow 1'.	Unknown	Retain	B2	6.0m

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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. Meters
1361	Ash	M	460	16	N=3 S=3 E=3 W=3	2	Good	A large mature co-dominant Ash displaying over all good condition. This tree is contained within 'Hedgerow 1'.	Unknown	Retain	B2	5.6m
1362	Sycamore	M	320	14	N=3 S=3 E=3 W=3	1	Good	A mature multi-stemmed Sycamore displaying over all good condition. This tree is contained within 'Hedgerow 1'.	Unknown	Retain	B2	4.2m
1363	Beech	M	660	18	N=2 S=2 E=3 W=3	4	Fair	A mature Beech displaying over all fair condition. Adjacent trees have been removed exposing the western canopy.	Unknown	Consider removal	C2	7.6m
1364	Beech	M	520	16	N=3 S=3 E=2 W=2	2	Good	A mature Beech displaying over all good condition	Unknown	Retain	B2	6.2m
1365	Scots Pine	M	530	20	N=3 S=3 E=3 W=3	5	Good	A mature Scots Pine displaying over all good condition	Unknown	Retain	B2	6.3m

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Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
1366	Beech	M	480	16	N=2 S=2 E=4 W=4	2	Good	A mature Beech displaying over all good condition	Unknown	Retain	B2
1367	Beech	M	440	16	N=3 S=3 E=3 W=3	3	Good	A mature Beech displaying over all good condition	Unknown	Retain	B2
1368	Beech	M	550	18	N=3 S=3 E=4 W=2	3	Good	A large mature Beech displaying over all good condition	Unknown	Retain	B2
1369	Ash	M	530	18	N=5 S=5 E=5 W=5	4	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2
1370	Holly	M	310	10	N=3 S=3 E=3 W=3	2	Good	A large mature co-dominant Holly displaying over all good condition	Unknown	Retain	B2



Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
1371	Ash	M	580	18	N=5 S=5 E=5 W=5	2	Good	A large mature co-dominant Ash displaying over all good condition	Unknown	Retain	B2
1372	Ash	M	480	12	N=3 S=3 E=3 W=3	2	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2
1373	Ash	M	500	16	N=4 S=4 E=4 W=4	2	Good	A large mature Ash displaying over all good condition	Unknown	Retain	B2
1374	Common Oak	M	590	10	N=3 S=3 E=3 W=3	2	Fair	A mature multi-stemmed Common Oak displaying over all fair condition. This tree is severely engulfed in ivy.	Unknown	C2	6.9m
1375	Ash	M	510	14	N=4 S=4 E=4 W=4	3	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2





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Arboricultural Association

Dedicated to the Care of Trees

Conservation, Care, Service

Appendix 1

Glounthaune, Co. Cork

Tree #	Species Botanical Name	Age class	Size (mm) (M)	Height (mm) (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact development	the PMR	Category	R.P.A. Meters
1376 – 1377 x 5	Ash	M	380	20	N=3 S=3 E=3 W=3	3	Good	This represents 5 large mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	4.8m
1378	Common Oak	M	780	24	N=6 S=6 E=6 W=6	4	Good	A large mature Common Oak displaying over all good condition	Unknown	Retain	A2	8.8m
1379	Ash	M	260	18	N=3 S=3 E=3 W=3	1	Good	A mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	3.6m
1380	Ash	M	260	18	N=3 S=3 E=3 W=3	1	Good	A mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	3.6m
1381	Ash	M	240	18	N=3 S=3 E=3 W=3	1	Good	A mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	3.4m

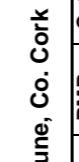


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Glounthaune, Co. Cork

Tree #	Species Botanical Name	Age class	Size (mm) (M)	Height (mm) (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact development	the PMR	Category	R.P.A. Meters
1382	Ash	M	240	18	N=3 S=3 E=3 W=3	1	Good	A mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	3.4m
1383	Ash	M	240	18	N=3 S=3 E=3 W=3	1	Good	A mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	3.4m
1384	Ash	M	550	18	N=4 S=4 E=4 W=4	2	Good	A large mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	6.5m
1385	Ash	M	550	20	N=3 S=3 E=3 W=3	4	Good	A large mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	6.5m
1386	Common Oak	M	650	18	N=8 S=8 E=8 W=8	3	Good	A large mature Common Oak displaying over all good condition	Unknown	Retain	A2	7.5m



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Appendix 1



Dedicated
Conserving Green Space

Glounthaune, Co. Cork

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1387	Ash	M	340	12	N=3 S=3 E=3 W=3	1.5	Good	A mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	4.4m
1388	Common Oak	M	680	16	N=4 S=4 E=4 W=4	2	Good	A mature Common Oak displaying over all good condition	Unknown	Retain	B2	7.8m
1389	Elm	M	300	14	N=2 S=2 E=2 W=2	3	Good	A mature Elm displaying over all good condition	Unknown	Retain	B2	4.0m
1390	Elm	M	300	14	N=2 S=2 E=2 W=2	3	Good	A mature Elm displaying over all good condition	Unknown	Retain	B2	4.0m
1391	Elm	M	300	14	N=2 S=2 E=2 W=2	3	Good	A mature Elm displaying over all good condition	Unknown	Retain	B2	4.0m



Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
1392	Elm	SM	200	8	N=2 S=2 E=2 W=2	2	Good	A semi-mature Elm displaying over all good condition	Unknown	Retain	B2	3.0m
1393	Ash	M	560	20	N=4 S=4 E=4 W=4	2	Good	A large mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	6.6m
1394	Ash	M	390	18	N=3 S=3 E=3 W=3	3	Good	A mature Ash displaying over all good condition	Unknown	Retain	B2	4.9m
1395	Ash	M	490	18	N=5 S=5 E=5 W=5	2	Good	A large mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	5.9m
1396	Ash	M	380	16	N=4 S=4 E=4 W=4	2	Good	A mature multi-stemmed Ash displaying over all good condition	Unknown	Retain	B2	4.8m



Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
Hedgerow 2					N= S= E= W=		This represents a typical native Hedgerow containing low-lying Hawthorn, Elder and dense Bramble, Ivy, Briars and Nettles. There are no large mature trees of significance contained within the Hedgerow.			
1397	Ash	M	250	12	N=3 S=3 E=3 W=3	1	Good	A large mature multi-stemmed Ash displaying over all good condition	Unknown	Retain B2 3.5m
1398	Ash	M	500	14	N=3 S=3 E=3 W=3	1	Good	A large mature co-dominant Ash displaying over all good condition	Unknown	Retain B2 6.0m
1399 – 1400 x 8	Ash	M	400	12	N=3 S=3 E=3 W=3	2	Good	Represents 8 mature roadside Ash displaying over all good condition. These trees are located at the northern end of the site.	Unknown	Retain B2 5m
1401	<i>Ulmus procera</i> English Elm	M	550	18	N=4 S=4 E=4 W=4	4	Good	A large mature English Elm displaying over all good condition	Unknown	Retain A2 6.5m

Appendix 1

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	Category	R.P.A. Meters
1402	Ash	M	380	14	N=3 S=3 E=2 W=2	4	Good	A mature Ash displaying over all good condition	Unknown	Retain B2 4.8m
1403 x 6	Elm	M	330	12	N=2 S=2 E=2 W=2	2	Good	Represents 6 mature Elm displaying over all good condition	Unknown	Retain B2 4.3m
Hedgerow 3	Lawson Cypress	M	300	24	N=3 S=3 E=3 W=3	1	Good	On the south-west boundary there is a mature Lawson Cypress Hedgerow displaying over all good condition. There appears to be a house to the south of it and the Hedgerow provides good screening between the existing house and the proposed development site.	Unknown	Retain B2 4m
1404 x 2	Cherry	M	600	20	N=4 S=4 E=4 W=4	2	Good	Represents 2 large mature Wild Cherry displaying over all good condition. This area is very overgrown, there is a lot of Scrub Willow within this area.	Unknown	Retain A2 7.0m
1405 x 8	Elm	M	350	18	N=2 S=2 E=2 W=2	2	Good	Represents a circular group of 8 mature Elm displaying over all good condition	Unknown	Retain B2 4.5m



This report was prepared by:

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Yours in Conservation,

Michael Garry.

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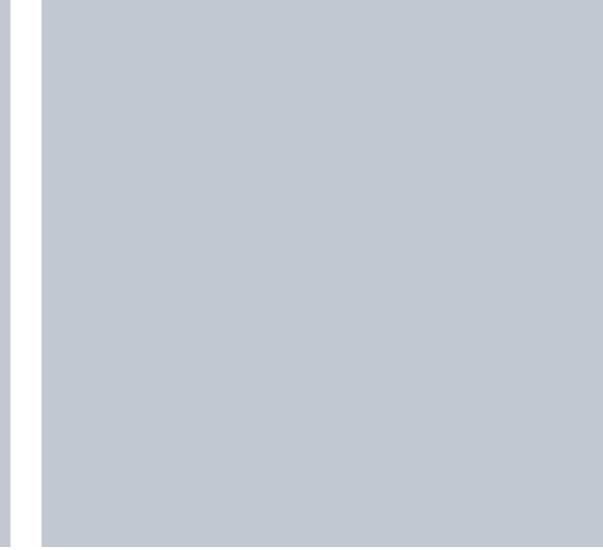
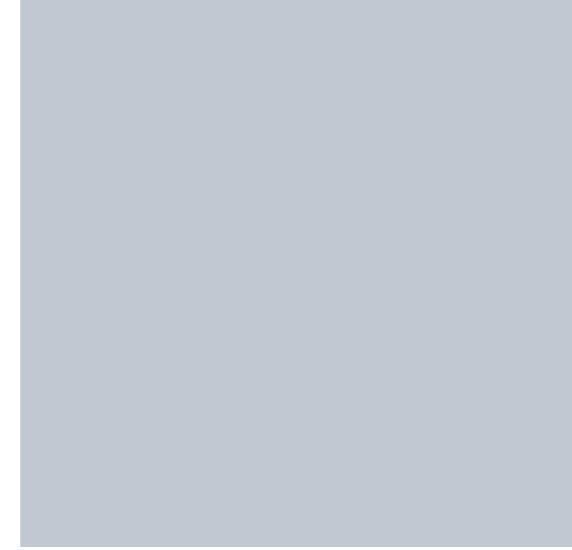
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APPENDIX 4-3

**Arboricultural Tree Report
- Tree Management Services**



VOLUME III | Appendices



Tree Management Services

Arboriculture, Landscape and Forestry Consultants

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Our Ref: TMS.CSR.09.21.02

Your Ref: 21/05072

Date: 30th. September 2021

Client: Barlow Properties Limited
Project No: TMS.CSR.09.21.02
Project Name: Ashbourne House Residential Development
Title: Arboricultural Tree Report



Project: Title: Ashbourne House Residential Development,
Glounthaune Co. Cork

Report Title: Arboricultural Champion and Heritage Tree
Report

Client(s): BARLOW PROPERTIES LIMITED

Planning Ref: 21/05072

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1. Introduction:

1.1 We have been commissioned by Cunnane Stratton Reynolds Town Planners and Landscape Architects, to carry out this Arboricultural Tree Report on behalf of their client(s) Barlow Properties Limited, on lands at Ashbourne House, Glounthaune, Co. Cork. This Tree Report is in response to a request for further information from Cork County Council - Planning Department items 1-4 about concerns raised in relation to a proposed residential development for the site in their letter to the applicant dated 16th June 2021 - Planning reference 21/05072.

1.2 The letter to the Applicant(s) raises concerns about the loss of a significant number of trees, about the likely presence or otherwise of Champion and Heritage trees on the site and about the protection of retained trees during the construction phase.

2. Scope of the Work

2.1 The study area are those lands outlined on the Aerial Location Map - Photo 1 below.



Photo 1: Aerial Location Map. (© Google maps).

3. Methodology

3.1 We carried out our field assessment from 7-29th. September 2021. As part of our field assessment we referred to the list of previously recorded champion and significant trees provided to us and as noted by the National Botanic Gardens and The Tree Council of Ireland. In addition to this list we also referred to the most recent brochure of the gardens of Ashbourne House Hotel indicating the layout of the gardens and the important trees listed at the various viewing points along the walking routes. In locating significant trees, we were also assisted by our Tree Survey Report carried out as a condition survey in 2020. Reference was also made to historical material and site visits by Alan Mitchell - a renowned dendrologist to the gardens in the 1970's and referenced in his book *Conifers in The British Isles* 1972. Material was also sourced from submissions by Mr. RH Beamish, owner of Ashbourne House to the Gardener's Chronicle during the early part of the twentieth century.

3.2 We carried out a full field assessment and recorded and measured all potentially important heritage and recorded champion trees. Refer to Tree Survey Schedule below. For selection of photo. images see Appendix 1. As our Tree Survey is a visual assessment, it should be noted that in certain areas, our assessments and measurements were impeded by heavy undergrowth of scrub, ground vegetation, ivy-covered stems, or limited or restricted access. Background research work was also carried out to determine site history, planting years and other information that might contribute to the presence or otherwise of champion/heritage trees. We defined Champion trees and Heritage trees as:

3.3 Champion Trees: The Tree Council of Ireland initiated The Tree Register of Ireland (TROI) in 1999 with the aim of compiling a database of champion trees in Ireland. Inclusion criteria for the Tree Register is based on Mitchell's (1994) criteria for choosing outstanding trees. These criteria were used in establishing the Register:

1. Trees of known planting date previously measured over a long period.
2. Old and venerable specimens that probably represent an ultimate size appropriate to the local site conditions.
3. Trees exhibiting good growth, horticultural or genetic value, disease or exposure resistance.
4. Any tree that occurs in a unique location or context and so provides a contribution to the landscape, including remnant native vegetation, and trees that form part of a historic landscape, park, garden or urban planting.
5. Rare or locally distributed taxa for which little data exist already.

3.4 A Heritage Tree is defined as a tree of biological, cultural, ecological or historical interest because of its age, size or condition.

4. Site History:

4.1 The site includes the lands attached to Ashbourne House, a former hotel that once housed a well-tended Arboretum with a fine collection of rare, exotic and Champion trees. These gardens at Ashbourne were founded by Richard Beamish - a recognised plantsman who travelled extensively, importing plants and trees from all areas of the world and from collections based at Glasnevin and Kew Botanical Gardens.

4.2 Old historical first edition maps from The Ordnance Surveys of 1898 indicates that the grounds were well laid out during that period with tree planting around the boundaries of the site and along the approach avenue to the main house. See historic OS map - Figure 1 below. The planted row of Lime - *Tilia spp.* can clearly be seen along the northern boundary of the site and where remnants of these trees exist to the present day.

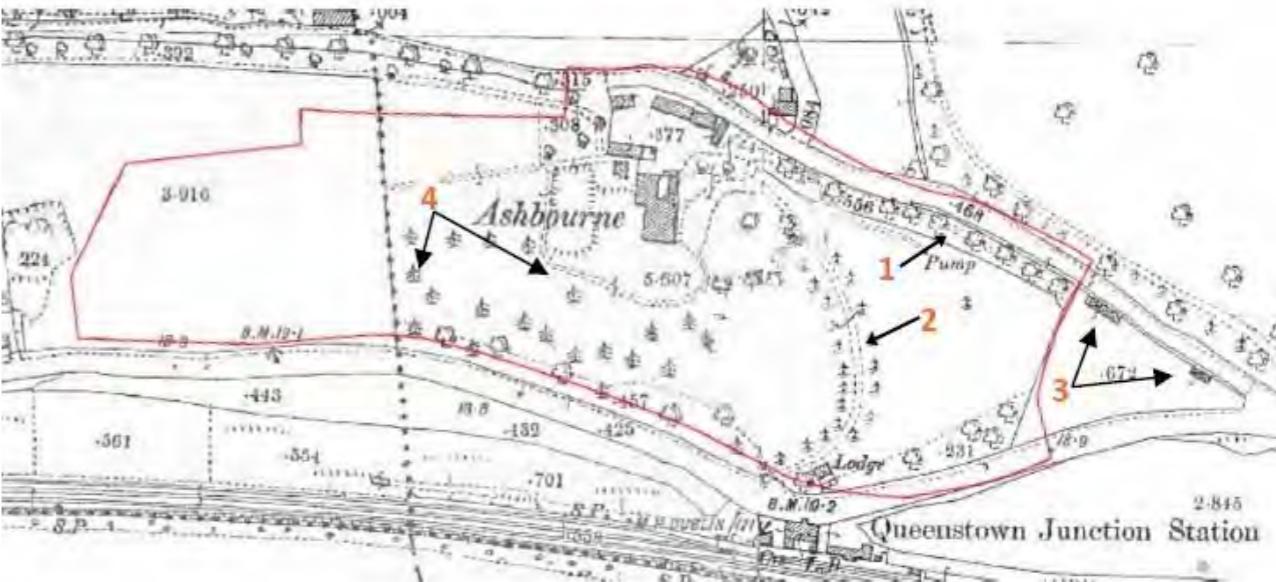


Figure 1: Ordnance Survey Map 1898 showing the layout of the grounds of Ashbourne with 1- Linear row of Lime trees; 2- Avenue tree planting; 3- Greenhouses abutting the boundary wall; 4-Conifer planting in the grounds (©Map supplied courtesy of Cunnane Stratton Reynolds Architects).

4.3 Around the early part of the twentieth century, Richard Henrik Beamish laid out the gardens with a number of distinguishing features including a bog garden on the eastern side of the approach avenue and an arched Irish Yew Walk with Cordyline trees interplanted planting between the Yew trees. See historic OS Map Figure 2 below. He also laid out a more formal woodland gardens which included many unusual and rare trees collected during his extensive

world travels as well as trees that came through from the collections at Glasnevin Botanical Gardens Dublin and Kew Botanical Gardens London.



Figure 2 Ordnance Survey Map 1929 showing the more formal layout of the grounds of Ashbourne with 1- Bog garden with pond; 2- Yew Walk; 3- Formal walkways; 4-Tree planting in grounds and around boundaries.

(©Map supplied courtesy of Cunnane Stratton Reynolds Architects).

4.4 The gardens changed ownership in 1960 and the new owners upgraded and open the gardens to guests and the general public. See Figure 3 below - Map of Grounds from 1990's brochure and a historic sketch drawing of gardens from the early 1960's Appendix 2. The trees were managed and maintained as a woodland arboretum with full-time gardening staff employed to nurture and maintain the extensive range of herbaceous, shrub and tree species.

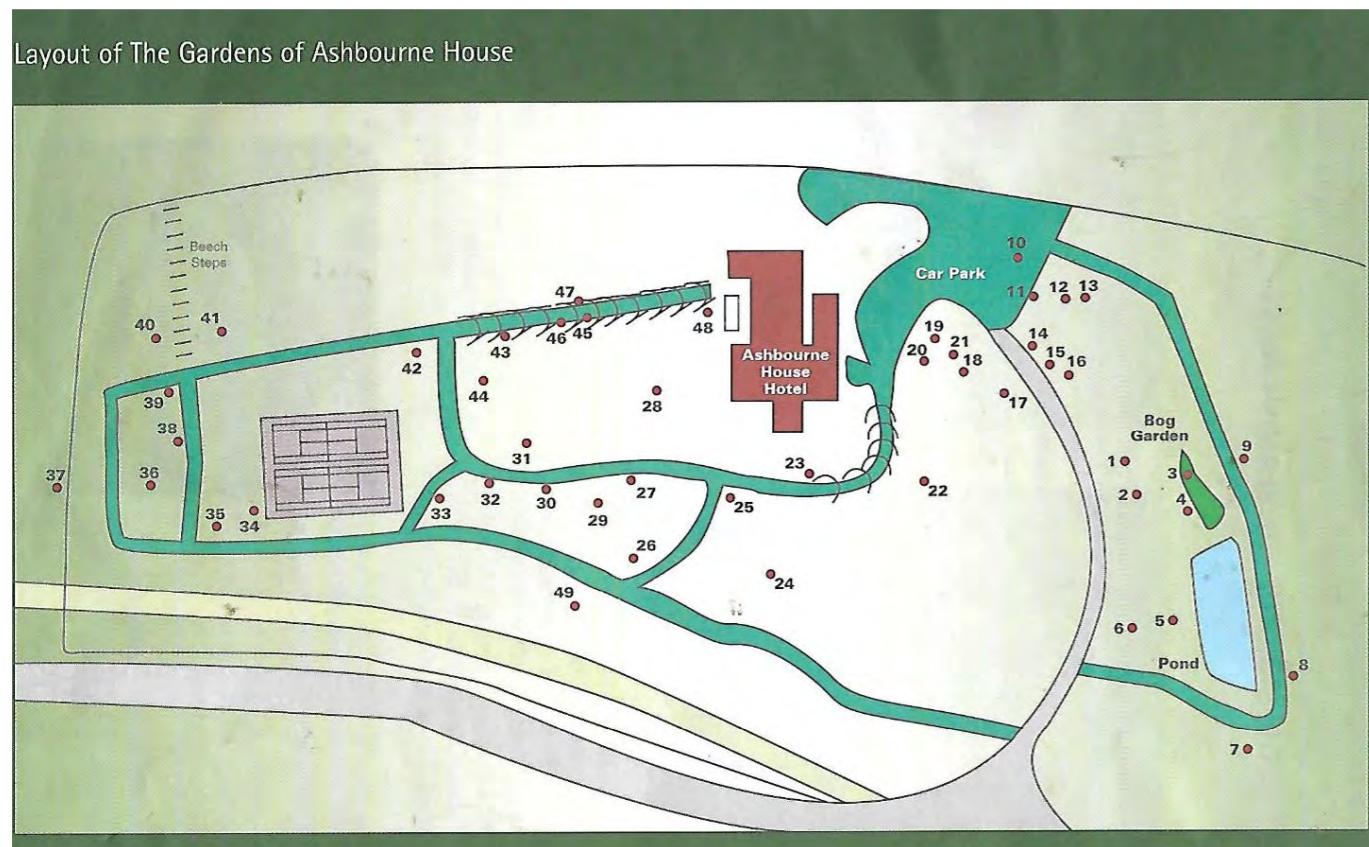


Figure 3: Map of the grounds from the Brochure 'The Gardens of Ashbourne House' publ. 1997.

4.5 The gardens of Ashbourne House Hotel in the 1990's had listed laid out walkways with notable trees at the various numbered stopping points. Significant trees at that time included at stop: **2** - *Gymnocladus dioicus* - rare Kentucky Coffee tree (no longer on site, but a new tree is close by probably self-seeded or derived from sucker growth); **5** - *Aesculus californica* - Californian Buckeye (on site but in poor condition); **6** - *Ginkgo Biloba* (2 x specimens on site); **7** - *Cercidiphyllum japonica* - Katsura (2 x trees on site); **10** - *Nothofagus Solanderi* - Mountain Beech (on site but overpruned in past); **13** - *Nothofagus Obliqua* - Roble Beech (on site); **14** - *Magnolia Cambelli* - Giant Himalayan Pink Tulip tree (on site); **16** - *Laurelia serrata* - Chilean laurel and later defined as *Laurelia philippiana* (3 x trees on site); **17** - *Pinus Wallichiana* - Bhutan Pine (on site); **18** - *Cupressus Cashmiriana* - Kashmir Cypress (no longer on site); **19** - *Robinia Pseudacacia* - Black Locust (not on site); **22** - *Eucalyptus spp.* Mountain Gum and Snow Gum (on site); **23** - *Podocarpus andinus* - Plum fruited Yew (not on site); **24** - *Pinus radiata* - Monterey Pine (planted throughout the site); **25** - *Sciadopitys Verticillata* - Japanese Umbrella Pine (on site); **26** - *Parrotia Persica* - Persian Ironwood (2 x trees on site); **27** - *Drimys Winteri* - Winters Bark (at least 2 x trees on site, one tree over-pruned in past); **32** - *Umbellularia California* - Californian Bay Laurel (on site); **34** - *Ehretia Dicksonii* - Ehretia a very rare tree (3 x trees now recorded on site when originally thought to be just one); **36** - *Quercus rubra* - Red Oak (on site); **38** - *Quercus pontica* - Pontine Oak (not on site); **41** - *Taxus baccata 'Fastigata'* - represents the formal Yew walk (now overgrown and in disrepair); **42** - *Pseudopanax Arborens* - Ivy tree (a number of trees on site); **43** - *Viburnum Cyclindricum* - Evergreen viburnum (has grown and seeded freely on site); **44** - *Ilex Dipyrena* - Himalayan Holly (a number of trees on site); **45** - *Eucalyptus Globulus* - Tasmanian Blue Gum (on site but topped in past); **47** - *Diosyros Lotus* (Date Plum not on site).

4.6 The site was sold around the year 2000 and there was a change of use from hotel at that time to a Direct Provision centre still in use to the present day. With the exception of the lawn areas around the main house, the woodland gardens ceased to be managed and the woodlands have fallen into a state of neglect. The condition of a number of trees has deteriorated since 2000 and a number of trees have been lost due to storms or natural failure.

4.7 Since about the year 2000, tree maintenance works have been carried out on an ad hoc basis, with remedial tree works based mainly around the safety and well-being of staff, residents and visitors of the Direct Provision centre. Works have been largely concentrated on trees around the main building and car parks, open lawn areas and immediately west of the main house. The remaining areas of the site have been neglected and allowed to naturalize so as to restrict and deter persons from entering these zones. The main woodland areas are now in an overgrown and neglected state. Tree condition varies from good to poor, with little or no arboricultural management practices carried out in the recent past.

4.8 While any tree works in an Arboretum environment should be carried out sensitively to protect the shape and size of the tree, nonetheless ongoing minor tree works would be necessary on a regular basis. Works could include the removal of any dangerous or dead limbs, the repair of broken or storm-damaged limbs and general light tip pruning to maintain shape and overall appearance. Such works would help maintain the trees in an overall good condition and prolong longevity. Good arboricultural management and timely intervention would also detect or prevent any tree diseases, fungal or biological attacks.

4.9 The overcrowded conditions particularly on the eastern side of the main avenue in and around the bog garden has resulted in the faster-growing trees of Magnolia, Cedar, Chilean Laurel and Katsura becoming the dominant tree species. The under canopy of planted bamboo has now colonized large areas of the site, swamping and killing off the slower-growing or light-sensitive lower-canopy shrub species. Examples of trees lost, suppressed or in decline include the *Stewartia pseudocamellia* - deciduous Camellia and the *Fuchsia Excorticata* - New Zealand Fuchsia.

5. Champion and Heritage trees;

5.1 From the tree list provided, there remains on the site a large proportion of the tree species of Champion and Heritage trees previously recorded on the site by the Tree Council of Ireland and The National Botanic Gardens at Glasnevin, Dublin.

5.2 References and dates from the list suggest that tree survey and measurement dates range from 1999 to 2004 with a small number of reassessments carried out in 2019. The 2019 assessments were carried out on the following trees - *Aesculus Californica*, *Drimys winterii*, *Ehretia dicksonii*, *Ginkgo biloba*, *Laureliopsis philippiana*, *Magnolia Campbellii* and a *Magnolia grandiflora*. It should be noted that, a Champion tree recorded in the past may not be a

Champion tree in the present day for a variety of reasons including tree failure, storm damage resulting in limb failure or loss of height from excessive pruning or topping or superseded by champion trees discovered elsewhere.

5.3 Our assessment strategy was to locate all Champion and Heritage trees on the site from the list provided and ascertain if the said trees were still present on the site. Once the presence of a tree was verified, we carried out height, diameter girth and circumference measurements as well as recording crown spread. Refer to the Tree Survey Schedule - Appendix 1. Based on the BS 5837:2012, the Root Protection Areas (RPA's) have been derived and plotted on the Tree Protection Plan drawing as well as the driplines of the trees or crown spread. Refer to Appendix 3 - Tree Location drawing indicating tree location, root protection areas and extent of tree crown spread.

5.4 The tallest tree on the site at present is tree no. 925 *Sequoiadendron giganteum* - Giant Sequoia with a recorded height of 36m. The tree with the largest girth is a *Pinus radiata* - Monterey Pine tree no 995 with a recorded girth diameter of 2300mm. In addition we have made new discoveries including the presence of an additional two trees of the very rare *Ehretia dicksonii* (only 3 no. previously recorded in Ireland) and a *Gymnocladus dioicus* - a rare Kentucky Coffee tree probably a self-seeded tree from the parent tree that had suffered from windblow in the past.

5.5 We have also highlighted trees previously recorded and now shown to be lost or no longer on site. In addition, we have compiled a list of other important, rare, or significant heritage trees that are worth noting and that could have Champion tree potential in time to come. These include *Pinus wallichiana* - Bhutan Pine (tree no. 984), 2x *Thuja plicata* - Western Red Cedar (tree nos. 14 and 941 that have achieved heights of 28m. and 25m. respectively), a *Chamaecyparis obtusa* - Hinoki cypress (tree no. 57) with a recorded height of 13m. and an *Acer campestre*- Field Maple (tree no. 988) with a recorded height of 22m. and a girth of 80 cms at 1.5m. A *Sequoia sempervirens* - Redwood (tree no 1061) was not previously recorded and has achieved a height of 30m. We would recommend that the updated list of trees and their updated measurements be submitted to The Tree Council of Ireland and the National Botanic Gardens for verification and for further evaluation and assessment.

6. Summary and Recommendations:

5.1 We have carried out a detailed survey of the tree population on the site. The main objective was to identify, record and measure all potential Champion and Heritage trees from the list as provided by The National Botanic Gardens and The Tree Council of Ireland. The assessments and measurements dates on the list are outdated and will require updating and verification in line with the criteria in the evaluation of Champion trees.

5.2 A large percentage of the trees on the Tree Council of Ireland list are still present on the site. A small number of trees from the list have been lost from storms or removed in the interests of health and safety and in line with the current land use. In addition, we have identified a number of additional important, rare, heritage or potential champion trees.

5.3 Large areas of the site are in a neglected state. Little or no maintenance works has been carried out over the past twenty years. Bamboo, vine and ground ivy are suppressing lower canopy trees and shrubs. Bare areas are now colonized by low category, self-seeded Ash and Sycamore trees, often recognized as scrub or low-value retention species. These vigorous self-seeding trees could suppress the slower growing and important species causing losses to occur.

5.4 From measurements taken, we have plotted the locations of the trees and their associated root protection zones and crown spread. This will assist in the development of a proposed residential site layout for the site while ensuring that champion and heritage trees are fully protected and retained.

Assumptions and Limitations

This was a Tree Identification Survey only, the main objective was to record any potential heritage and champion trees within the site area. Only those trees specified in the scope of work were assessed and assessments were performed within the limitations specified. Identification and basal assessments were, in some instances, impeded and limited due to dense scrub and other ground vegetation. We have been authorized to carry out this report with the full permission and consent of Cunnane Stratton Reynolds Architects and Barlow Properties Limited.

Larry Phelan M.S.I.F. Certified Arborist, Dip EIA Mgmt. Dip in Science (Forestry)

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Twomey, M. Fennell, A. McHugh, F. *The Tree Register of Ireland*. Society Of Irish Foresters 2016.
Photo 1: Aerial Photograph, © Google Maps.
Figure 1 and 2: Old OS maps, Cunnane Stratton Reynolds Architects and Town Planners.
Figure 3: From *The Gardens of Ashbourne House*. Raven Design, Cork 1997.

Larry Phelan is a Professional Forester and Certified Arborist. He has over 35 years' experience in a broad range of tree-related matters including Forestry, Arboriculture, Landscaping and related activities. He trained and worked for the semi-state Forestry Company – Coillte Teoranta for over 30 years in a number of forestry-disciplines including Tree Services, Private Afforestation and Private Timber procurement.

He is a Professional Member and Certified Arborist with The International Society of Arboriculture (ISA), Technical Member of the Society of Irish Foresters (MSIF) and an Approved Forester including Native Woodlands with the Forest Service, Department of Agriculture Food and The Marine.

Explanation of headings – Tree Survey Schedule

Tree No.:	Reference Number affixed to individual trees to allow for identification.
Latin or Scientific Name:	In taxonomy refers to the genera and species.
Common Name:	The commonly known name associated with each tree.
Physiological Condition:	Tree condition is based on a 3-tier rating system, and constitutes a general assessment of the physiological condition of the tree where a rating of: <i>Good</i> = represents good health and vigour <i>Fair</i> = Healthy and reasonable vigour <i>Poor</i> = Showing signs of decline, disease or decay.
Survey Date:	The date the tree was recorded and measured.
Ht.:	The approximate tree height to the nearest .5/m. is given.
DBH:	This is the trunk diameter range (in cms.) at a height of 1.5 m above ground level.
GIRTH:	This is the circumference of the main trunk (in ms.) at a height of 1.5 m above ground level.
CHAMPION TREE:	Previously recorded as a Champion tree
HERITAGE TREE:	Deemed to be a Heritage Tree because of its biological, cultural, ecological or historical significance.
COMMENTS:	Comments or points to note about the tree.

TREE SURVEY SCHEDULE

Denotes tree present
on site
Denotes tree no
longer present or not
found

Tag No	Latin Name	Common Name	Condition	Survey Date	Heritage Tree	Girth-(m)	Champion Tree	Comments
1010	<i>Abies nordmanniana</i>	Caucasian Fir	Good	17/09/2021	28	88	2.9	✓
948	<i>Aesculus californica</i>	Indian Horse Chestnut	Poor	14/09/2021	12	51	1.6	✓ Lacks vigour; Signs of early decline
	<i>Azara microphylla</i>	Small-leaved azara		17/05/2004	8	0.81		Not Found
	<i>Catalpa speciosa</i>	Northern Catalpa		17/05/2004	9.5	1.33		Not recorded in recent Surveys
1088	<i>Cedrus atlantica</i>	Blue Atlas Cedar	Dead	16/09/2021				Dead standing tree
916	<i>Cedrus deodara</i>	Deodar	Good	14/09/2021	31	154	5	✓ Signs of decay at base. Peeling bark along main trunk. Check species if Cedar of Lebanon
	<i>Cercidiphyllum japonicum</i>	Katsura Tree	Fair	14/09/2021	22	170	5.5	✓ Girth measured at 1m. Infected with <i>Ganoderma spp.</i>
919	<i>Cercidiphyllum japonicum</i>	Katsura Tree	Fair		20	130	4.1	✓ Infected with <i>Ganoderma spp.</i>
1180	<i>Cornus capitata</i>	Bentham's Cornel	Fair	14/09/2021	12	42.20	1.5	✓ x 2 stems from base and x 3 stems from 1m.
985	<i>Cypressus macrocarpa cashmeriana</i>	Cashmere Cypress		05/10/1999	22	2.81		Felled c. 2014-2018
983	<i>Cypressus macrocarpa</i>	Monterey Cypress	Good	14/09/2021	29	192	6	✓ High pruned in past.
952	<i>Drimys winteri</i>	Winter's Bark	Good	15/09/2021	28	122	4	✓ Forked from 1m. X 6 stems
	<i>Drimys winteri</i> 'Glauca'			06/10/1999	13	2.5		Not Found
1092	<i>Ehretia dicksonii</i>	Ehretia	Good	14/09/2021	21	48	1.3	✓ Leaning to NE. Clear stem to 5m.
922	<i>Ehretia dicksonii</i>	Ehretia	Good	14/09/2021	23	74	2.6	✓ Cable brace installed. Ivy growth attached.
2651	<i>Ehretia dicksonii</i>	Ehretia	Poor	14/09/2021	14	41	1.2	✓ Derived from old stump. Basal decay present. Multiple suckers from base.
62	<i>Eucalyptus dalrympleana</i>	Mountain Gum	Good	14/09/2021	35	151	5	✓ Check cable bracing in crown

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61	<i>Eucalyptus pauciflora</i>	Snow Gum	Good	14/09/2021	32	170	5.6	✓ Check cable bracing in crown
195	<i>Eucalyptus globulus</i>	Tasmanian Blue Gum	Good	15/09/2021	25	155E	4.5E	✓ Topped in past; Strong regrowth.
	<i>Ginkgo biloba</i>	Ginkgo/Maidenhair		05/10/1999	23.5	2.3		Probably Tree no 946
912	<i>Ginkgo biloba</i>	Ginkgo/Maidenhair	Good	14/09/2021	17	48	1.6	
946	<i>Ginkgo biloba</i>	Ginkgo/Maidenhair	Good	14/09/2021	22	100	3.1	✓ Forked at 3m.
	<i>Ginkgo biloba</i>	Ginkgo/Maidenhair		05/10/1999	16.5	0.65		Probably Tree no 912
	<i>Gleditsia triacanthos</i>	Honey Locust		18/06/2019	25		2.95	Probably Tree no 946
	<i>Gymnocladus dioica</i>	Kentucky Coffee Tree		06/10/1999	22		1.45	Not on site
34	<i>Gymnocladus dioica</i>	Kentucky Coffee Tree	Good	05/10/1999	19		1.57	Not on site
	<i>Gymnocladus dioica</i>			28/09/2021	10.5	11	0.55	✓ Leaning to south; Possibly a seedling or sucker from adjacent fallen tree
1176	<i>Ilex diphyrena</i>	Himalayan Holly	Fair	23/09/2021	15	40	2.37	✓ Could be a Champion tree
176	<i>Ilex diphyrena</i>	Himalayan Holly	Poor	20/09/2021	5	50E	2	✓ Suppressed by vine growth.
162	<i>Ilex x alticolaensis</i>	Highclere Holly	Poor	23/09/2021	13	30	1.1	✓ Good condition; Forked at 4m. Species to be confirmed.
950	<i>Laureliopsis philippiana</i>	Tepa, Laurela	Good	09/09/2021	20	69	2.2	✓ Could be a Champion tree. Good condition; Clear stem to 3m. Suppressed on west side by Magnolia tree.
929	<i>Laureliopsis philippiana</i>	Tepa, Laurela	Good	14/09/2021	16	58	1.95	✓ Close to tree no. 928
928	<i>Laureliopsis philippiana</i>	Tepa, Laurela	Good	14/09/2021	16	54	1.9	✓ Close to tree no. 929
	<i>Leptospermum scoparium</i>		Good	05/10/1999	10		1.1	Not Found
1062	<i>Liriodendron tulipifera</i>	Tulip Tree	Poor	20/09/2021	20	53	2.1	✓ Dead stem from 2m. Unbalanced and deformed crown.
955	<i>Magnolia acuminata</i>	Cucumber Tree	Good	09/09/2021	21	71	1.93	✓ Clear stem to 5m. Upright crown
32	<i>Magnolia campbellii</i>	Campbell's Magnolia	Good	09/09/2021	21.5	87	2.8	✓ Large open wound on main trunk east side. Cavity on west side.
943	<i>Magnolia grandiflora</i>	Evergreen Magnolia	Good	09/09/2021	15	74	2.4	✓ Species to be confirmed; x 3 stems from base; Orange bark; Could be a Champion tree
29	<i>Magnolia macrophylla</i>	Large-leaved Cucumber Tree	Good	09/09/2021	13	33.28,	1.2	✓ Decay at base to 1m. East side. Clear stem to 6m.
956	<i>Nothofagus obliqua</i>	Roble Beech	Fair	09/09/2021	29	116	3.8	✓ Possibly topped in past. Compact crown.

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ARBORICULTURAL TREE REPORT

2	<i>Nothofagus solandri</i> var. <i>cliffortioides</i>	Mountain Beech	Fair	09/09/2021	14.5	76	2.6	✓	Tarmacadam over root zone. Some damage to root system. Decay at base on northern side; Forked at 1.5m. Crown topped in past; Good response to pruning.
161	<i>Parrotia persica</i>	Persian Ironwood	Good	15/09/2021	12	27.26	1.7	✓	Wide-spreading;
213	<i>Parrotia persica</i>	Persian Ironwood	Good	15/09/2021	6.5	20	1.8	✓	Multi-stemmed
953	<i>Picea omorika</i>	Serbian Spruce	Good	14/09/2021	21	75	2.5	✓	Lighting fixture and cables attached
965	<i>Pinus armandii</i>	Armand's Pine	Fair	15/09/2021	10	36	1.12	✓	Could be <i>Pinus strobus</i>
995	<i>Pinus radiata</i>	Monterey Pine	Good	15/09/2021	23	230	6.8	✓	Forked from 1.5m. High pruned in past
1007	<i>Pittosporum</i> <i>eugenioloides</i> 'Variegatum'	Pittosporum	Good	14/09/2021	12	30	1.2	✓	Attractive foliage. Crown slightly suppressed by overhanging limbs.
1100	<i>Pittosporum</i> <i>terufolium</i>	Pittosporum	Good	20/09/2021	14	42	1.3	✓	Crooked stem see also tree no 1093 which has a smaller girth but ht measured at 18
	<i>Prunnopteryx andina</i>	Plum-Fruited Yew	Poor	17/05/2004	16.5	1.41		Not found	
980	<i>Pseudopanax arboreus</i>	Ivy tree	Poor	22/09/2021	10	20	2	✓	Multi-stemmed from .5m. Suppressed by Griselinia. Sparse foliage
180	<i>Pseudopanax arboreus</i>	Ivy tree	Good	23/09/2021	16	28.14	1.1 .22	✓	Forked from base
1091	<i>Quercus canariensis</i>	Mirbeck's Oak	Good	16/09/2021	28	97	3.1	✓	Close to Ehretia no 1092
1060	<i>Quercus rubra</i>	Red Oak	Good	16/09/2021	30	95	3	✓	Strong clear stem to 5m. Well-formed crown.
76	<i>Sciadopitys verticillata</i>	Japanese Umbrella Pine	Good	14/09/2021	12	46.44	1.61,.4	✓	Forked from base. Well-formed crown
925	<i>Sequoia sempervirens</i> <i>giganteum</i>	Wellingtonia, Giant Sequoia	Good	13/09/2021	36	170	5.1	✓	Sparse foliage in upper crown
951	<i>Stewartia pseudocamellia</i>	Deciduous Camellia	Poor	14/09/2021	7	54	1.8	✓	In advanced state of decline. Girth measured at .7m.
898	<i>Tilia platyphyllos</i>	Large-leaved Lime	Good	15/09/2021	35	70	2.3	✓	Crooked stem. the tallest Lime is no. 898
3	<i>Tilia platyphyllos</i>	Large-leaved Lime	Good	23/09/2021	25	80	2.8	✓	Joining car park
101	<i>Tilia platyphyllos</i>	Large-leaved Lime	Fair	23/09/2021	21	38	1.3	✓	Forked at 2m. Broken and storm-damaged limbs in crown. x 4 trees largest is 9m high. Suppressed by ivy
37	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	23/09/2021	9	26	0.9	✓	
37	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	23/09/2021	8	23	0.6	✓	
37	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	23/09/2021	7	25	0.8	✓	

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37	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	23/09/2021	7	24	0.7	✓	
1195	<i>Umbellularia</i> <i>californica</i>	Californian Laurel or Headache Tree	Good	15/09/2021	21	55.64	2.1.9	✓	x 2 stems. Wide-spreading. Forked at 2m. Leaning stems to east.
<u>Additional Important Trees</u>									
984	<i>Pinus wallichiana</i>	Bhutan Pine	Fair	09/09/2021	22	110	3.6	✓	High pruned to 18m. Lightly topped in past. Leaning over avenue; Could be a Champion tree
941	<i>Magnolia x soulangeana</i>	Saucer Magnolia	Good	09/09/2021	9	63	2.2	✓	Forked at 1m. Cavity on north side of main stem
14	<i>Thuja plicata</i>	Western Red Cedar	Good	14/09/2021	28	117	3.2	✓	Broken minor co-dominant stem
910	<i>Thuja plicata</i>	Western Red Cedar	Good	14/09/2021	25	112	3.7	✓	Minor storm damage in crown
57	<i>Chamaecyparis obtusa</i> 'Laciniata'	Hinoki Cypress	Good	14/09/2021	13	68	2.4	✓	Leaning to east; Remove heavy ivy growth.
184	<i>Pseudopanax arboreus</i>	Ivy tree	Fair	23/09/2021	13	25	0.9	✓	Leaning to north
196	<i>Eucalyptus globulus</i>	Tasmanian Blue Gum	Good	15/09/2021	30	64	2.2	✓	Vigorous growth habit
182	<i>Cornus capitata</i>	Bentham's Cornel	Good	16/09/2021	18	28.18, 17	2	✓	Forked from base
1061	<i>Sequoia sempervirens</i>	Redwood	Good	20/09/2021	30	75.31	2.5.1.1	✓	Minor co-dominant stem on west side
1109	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	20/09/2021	9	30.22	.9.6E	✓	Tag represents 2 x trees
1114	<i>Trachycarpus fortunei</i>	Chusan Palm	Good	20/09/2021	9	30	0.8E	✓	Suppressed by heavy ivy growth
172	<i>Viburnum cylindricum</i>	Viburnum	Poor	20/09/2021	8	25	0.5	✓	Partially fallen tree
82	<i>Magnolia x soulangeana</i>	Magnolia	Good	23/09/2021	8	30.30, 35	1.9	✓	Forked at .7m
80	<i>Drimys winteri</i>	Winter's Bark	Fair	23/09/2021	7	52	1.8	✓	Heavily pruned in past
139	<i>Ilex dipyrena</i>	Himalayan Holly	Fair	23/09/2021	15	25	0.9	✓	Close to adjoining Beech
1174	<i>Davidia involucrata</i>	Dove tree	Good	24/09/2021	13	24.263	1.1 0,.22	✓	Forked from base
988	<i>Acer campestre</i>	Field Maple	Good	24/09/2021	22	80	2.5	✓	Adjacent to car park; Could be a Champion tree
1204	<i>Araucaria araucana</i>	Monkey Puzzle	Good	25/09/2021	17.5	57	2	✓	Light ivy growth attached to main trunk
347	<i>Pseudopanax arboreus</i>	Ivy tree	Good	28/09/2021	12	8.7.5	0.4	✓	Forked from base

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Appendix 1:

Photo 2: Tree nos. 2 and 3.



Photo 3: Tree no. 956.



Photo 8: Tree no. 921.



Photo 9: Tree nos. 984 and 995.



Photo 4: Tree no. 953.



Photo 5: Tree nos. 955 and 37(4).



Photo 10: Tree no. 61.



Photo 11: Tree no. 76.



Photo 6: Tree nos. 928 and 929.



Photo 7: Tree no. 922.



Photo 12: Tree no. 195.



Photo 13: Tree no. 1195.



Photo 14: Tree no. 180.

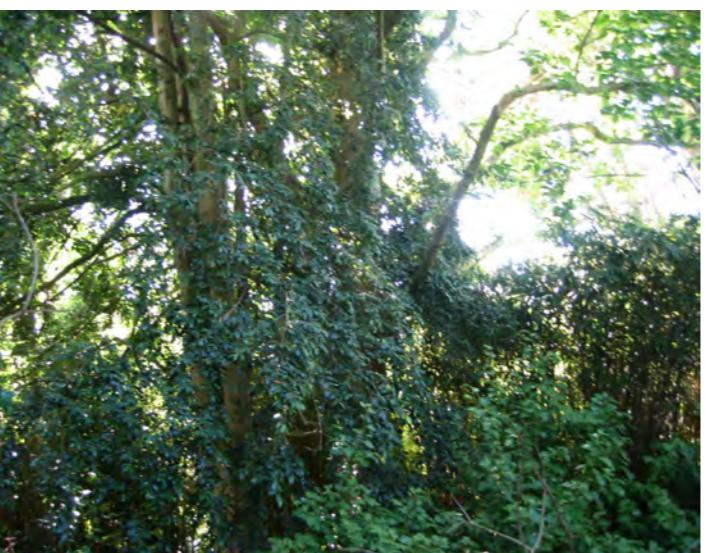


Photo 15: Tree nos. 950 and 32.



Photo 21: Tree no. 1007.



Photo 22: Tree no. 82.



Photo 16: Tree no. 948.

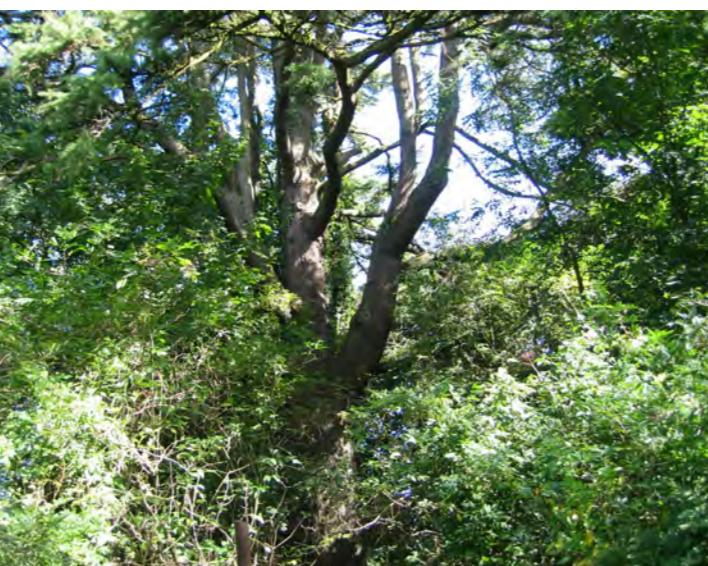


Photo 17: Tree no. 916.

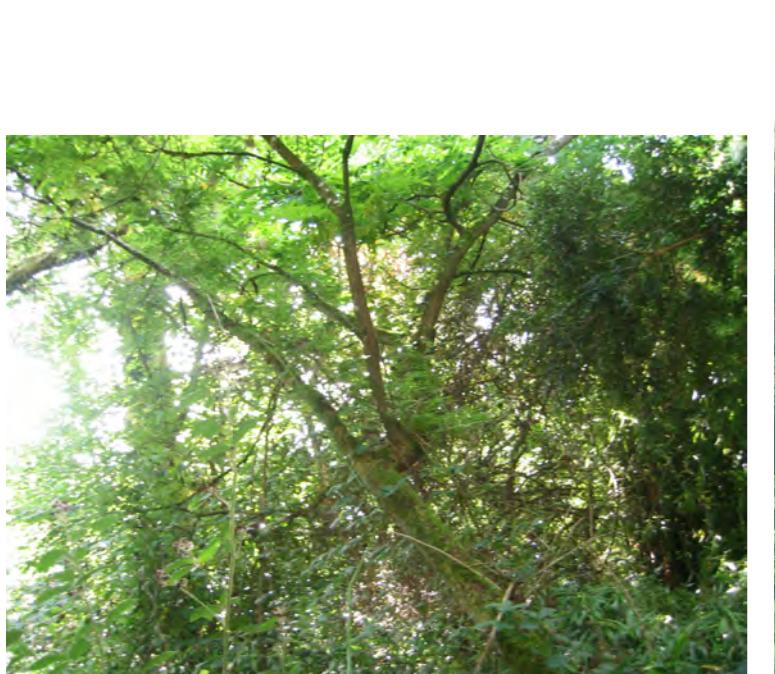


Photo 18: Tree no. 34.



Photo 19: Tree no. 988.



Photo 23: Tree no. 161.

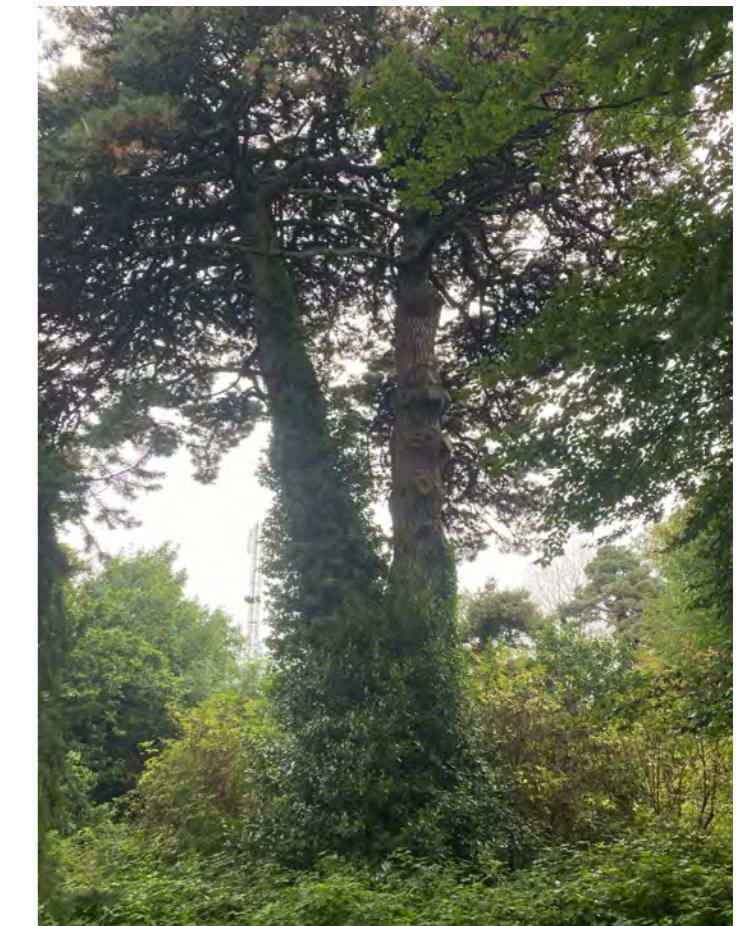
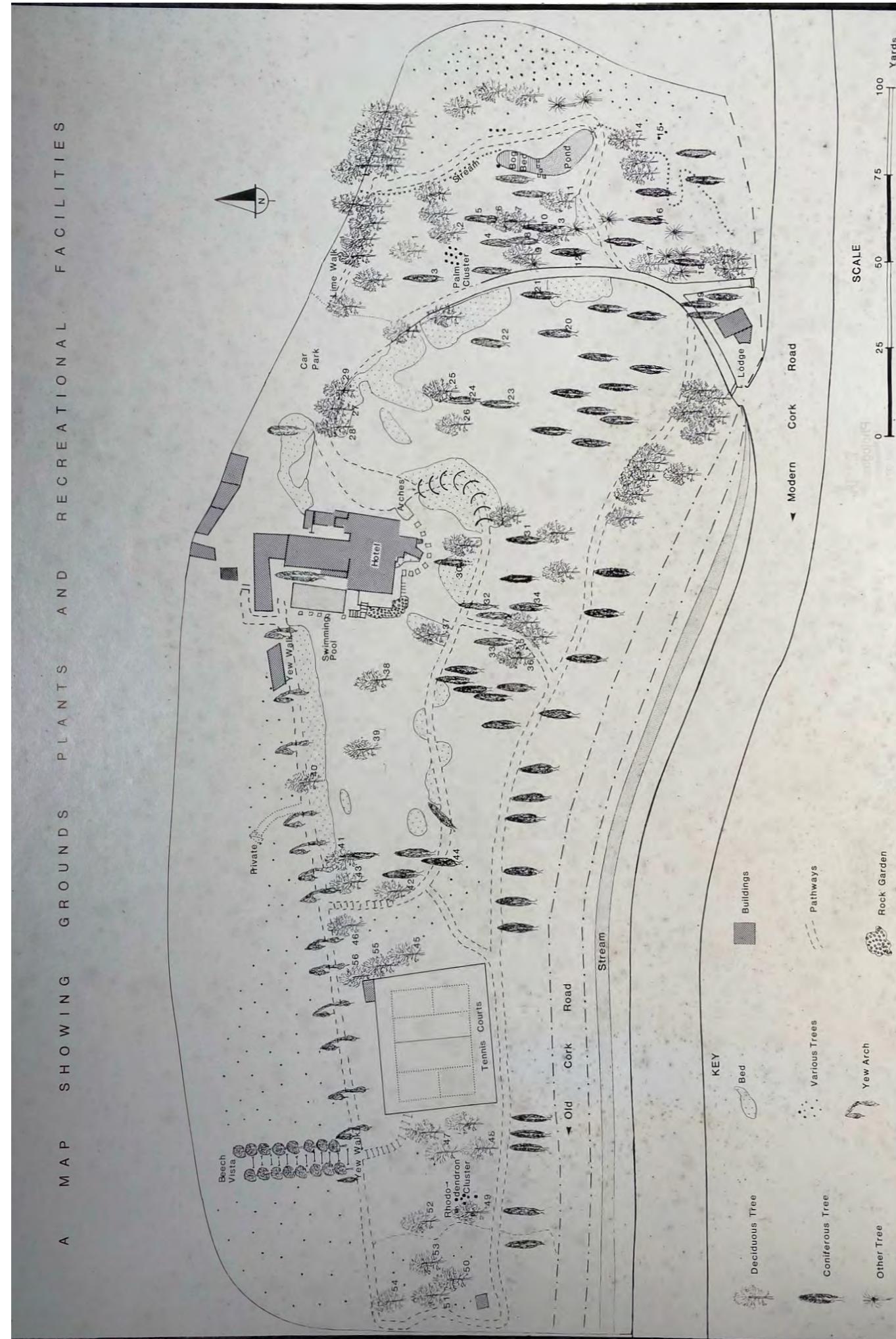
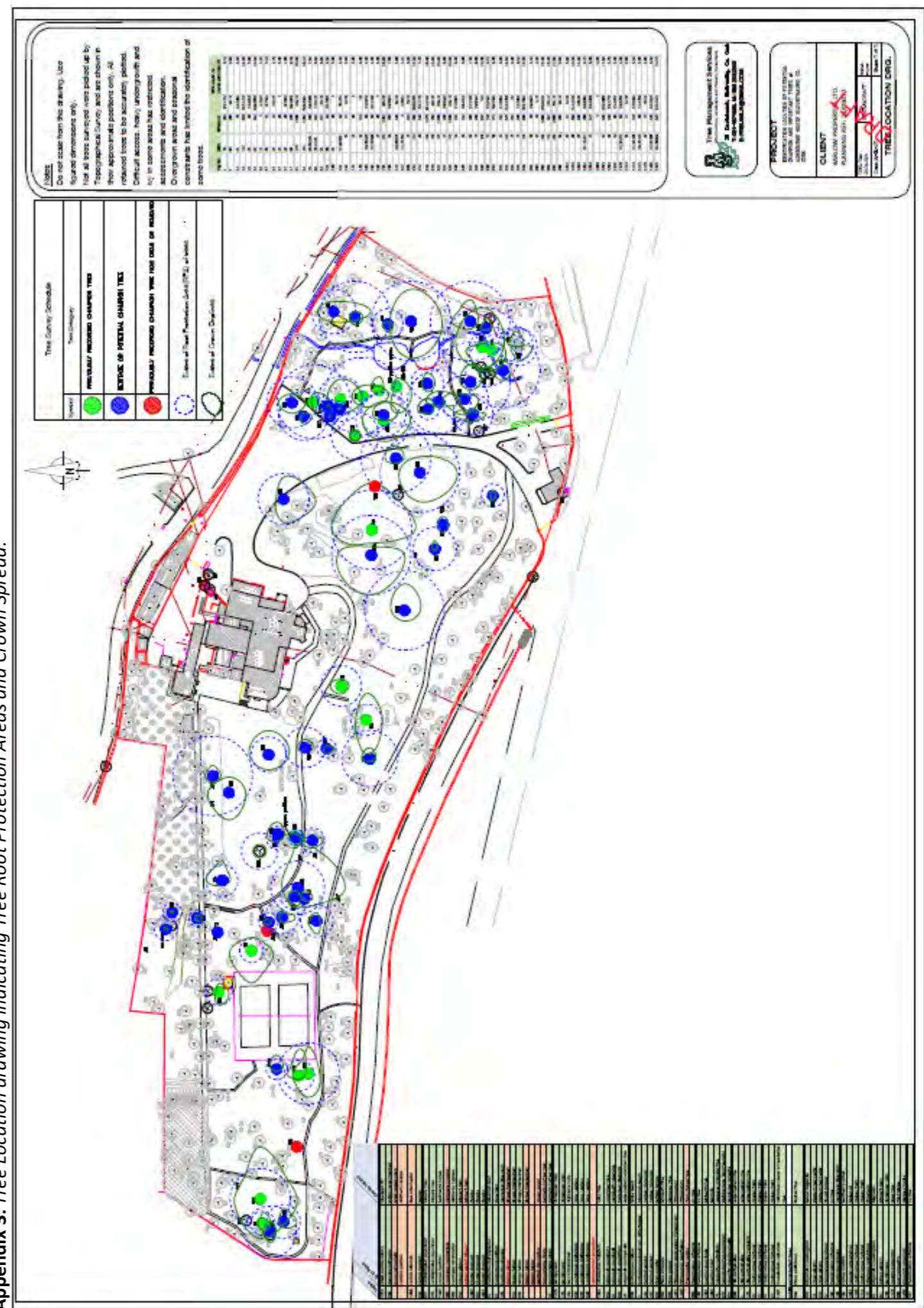


Photo 24: Tree no. 955.

Appendix 2: Past historic drawing showing layout of Gardens of Ashbourne House (c 1960's).

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Appendix 3: Tree Location drawing indicating Tree Root Protection Areas and Crown Spread:

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Tag No	DBH	RPA(m ²)	RPA equiv. to circle with rad. Of	Tag No	DBH	RPA(m ²)	RPA equiv. to circle with rad. Of		
2	76	261	83.1744	9.12	922	74	248	78.8544	8.88
3	80	290	92.16	9.60	925	170	1308	416.16	20.40
12	41	76	24.2064	4.92	928	54	132	41.9904	6.48
14	117	619	197.1216	14.04	929	58	152	48.4416	6.96
29	33	49	15.6816	3.96	941	63	180	57.1536	7.56
32	87	342	108.9936	10.44	943	74	248	78.8544	8.88
34	11	5	1.7424	1.32	946	100	452	144	12.00
37	26	31	9.7344	3.12	948	51	118	37.4544	6.12
37	23	24	7.6176	2.76	950	69	215	68.5584	8.28
37	25	28	9	3.00	951	54	132	41.9904	6.48
37	24	26	8.2944	2.88	952	122	673	214.3296	14.64
57	68	209	66.5856	8.16	953	75	255	81	9.00
61	170	1308	416.16	20.40	955	71	228	72.5904	8.52
62	151	1032	328.3344	18.12	956	116	609	193.7664	13.92
76	63.65532	183	58.3488	7.64	965	36	59	18.6624	4.32
80	73.5119	245	77.8176	8.82	980	20	18	5.76	2.40
82	55	137	43.56	6.60	983	192	1668	530.8416	23.04
101	38	65	20.7936	4.56	984	110	547	174.24	13.20
139	25	28	9	3.00	995	230	2393	761.76	27.60
161	37.48333	64	20.232	4.50	988	80	290	92.16	9.60
162	30	41	12.96	3.60	1007	30	41	12.96	3.60
172	25	28	9	3.00	1010	88	350	111.5136	10.56
176	50	113	36	6.00	1060	95	408	129.96	11.40
180	38.26225	66	21.0816	4.59	1061	81.15417	298	94.8384	9.74
182	37.37646	63	20.1168	4.49	1062	53	127	40.4496	6.36
184	25	28	9	3.00	1088	0	0	0.00	
195	155	1087	345.96	18.60	1091	97	426	135.4896	11.64
196	64	185	58.9824	7.68	1092	48	104	33.1776	5.76
213	48.98979	109	34.56	5.88	1100	42	80	25.4016	5.04
347	11.74734	6	1.9872	1.41	1109	37.20215	63	19.9296	4.46
898	70	222	70.56	8.40	1114	30	41	12.96	3.60
910	112	568	180.6336	13.44	1174	51.34199	119	37.9584	6.16
912	48	104	33.1776	5.76	1175	28.23119	36	11.4768	3.39
916	154	1073	341.5104	18.48	1176	40	72	23.04	4.80
919	130	765	243.36	15.60	1180	52.81098	126	40.1616	6.34
921	170	1308	416.16	20.40	1195	84.38602	322	102.5424	10.13

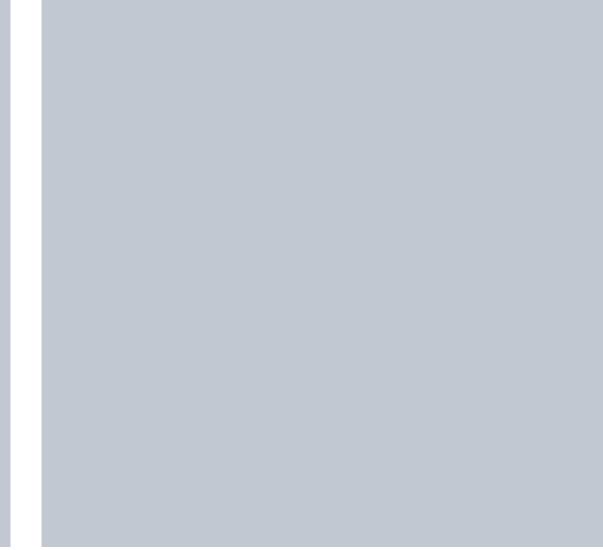
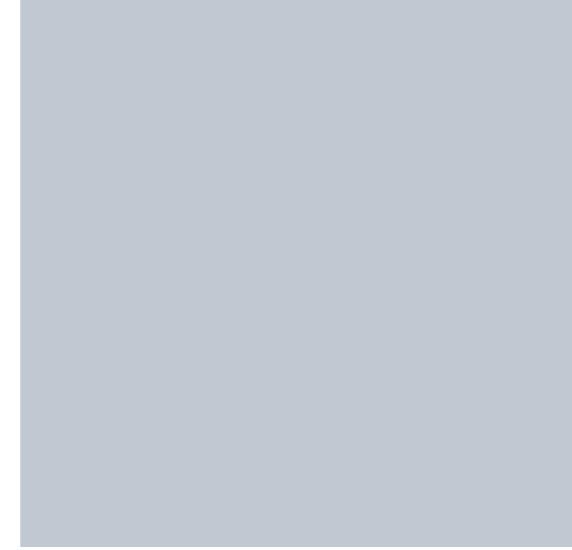
Appendix 4: Tree Root Protection Areas



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APPENDIX 4-4

**Tree Removal Plan
- Cunnane Stratton Reynolds**



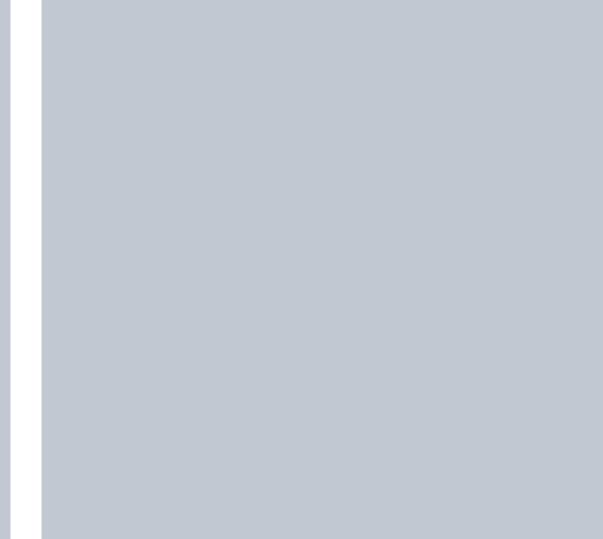
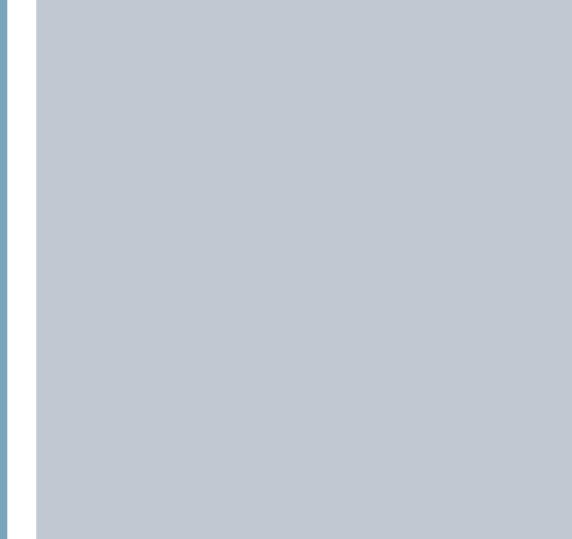
VOLUME III | Appendices



LACKENROE SHD

APPENDIX 4-5

Landscape Master Plan
- Cunnane Stratton Reynolds



VOLUME III | Appendices

Legend



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