LAND PLANNING & DESIGN

CUNNANE STRATTON REYNOLDS

TREE SURVEY

DUBLIN MOUNTAINS, VISITOR CENTRE.

June 2017

Produced on behalf of:

Comhairle Contae
Átha Cliath Theas
South Dublin County Council

by:

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SUMMARY

This report presents a record of those trees existing within or adjacent to the site area that may potentially be effected by the proposed Hellfire visitor center development. Trees have been surveyed as individuals or tree groups in accordance with BS 5837 (2012). The survey information was collected over multiple site visits by Cunnane Stratton Reynolds arborist between November 2016 and June 2017, where by an initial arboricultural overview informed the design team before focus areas of interest evolved with the advancement of the design team's work.

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This survey and report are based on the Topographic Survey information contained in drawing;

- Paul Corrigan & Associates Topographic Survey

A full survey record of is presented in Appendix 1, together with accompanying drawings Tree Survey Dwg No 16508/TTW/101 & 16508/TWG/101 Tree Constraints Dwg No 16508/TTW/102 & 16508/TWG/102. (It is intended that a Tree Protection Plan will also be developed at a later stage when all relevant detailed information is available). After introducing the terms of reference and the methodology of the survey, the report summarises the survey findings in an overview of the existing tree cover within the site.

A total of sixty individual trees and several tree groups were recorded.

Where assessment takes the form of a Tree Group – trees of greatest significance within these groups may also be identified. Every effort has been made to access all trees for inspection, however in some instances where site conditions prevent full access, some measurements may be visually estimated.

It is noted that the site contains a number of trees of significant maturity and size – it is appropriate that every effort should be made to safely retain these as part of any development proposal.

The proposed development will present an opportunity to implement additional new tree planting, both as part of a general landscape design scheme and also as part of an ongoing long term tree management program aimed at maintaining and improving the high quality diverse long-term amenity tree cover, in keeping with the setting and proposed site use.

The report concludes with recommendations for protection measures to ensure the conservation of retention trees during any development.

1. INTRODUCTION

Terms of Reference

Cunnane Stratton Reynolds (CSR) were appointed to provide ongoing arboricultural advice to the project design team for this project - the development of a proposed visitor centre associated with the Hellfire Club and the nearby Massys Woods located in the Dublin Mountains.

Due to the practicalities of dealing with the extensive project site area containing a mix of operational coniferous forestry plantation and managed mature mixed broadleaf woodland, CSR's arboricultural input at initial design stage was primarily advisory at the macro level - informing the conceptual master plan decision making processes. As the project evolved and greater detail became available, CSR's focus then shifted to locations of specific interest as directed by the project team, where individual trees were surveyed.

CSR have considered those tree and tree groups that might potentially be impacted by the proposed development and produced a subsequent tree survey report presenting our findings, (in accordance with BS 5837:2012), together with recommendations for their best practice management in relation to the proposed development.

This involved a survey of the principal trees / tree groups concerned in accordance with BS 5837 (2012).

Documents supplied to CSR for purposes of conducting a tree survey include:

- Paul Corrigan & Associates Topographic Survey
- Cunnane Stratton Reynolds Landscape Masterplan Dwg 16508-2-LMP

Site Inspection & Methodology

The site was surveyed on a number of occasions between November 2016 and June 2017 by a qualified Arborist. A visual inspection from the ground was performed on selected existing trees / tree groups on site. Where access allowed, principal individual trees were examined establishing existing reference number tags, critical measurements then taken and observations made.

A description was recorded of each tagged tree / group of trees, their species, age class, all relevant measured dimensions (height, stem diameter, crown spread radii and crown clearance height) and an assessment of the tree health / vitality, structural form, life expectancy and quality categorisation. Any recommended remedial works required were outlined. Tree groups are subject to group description and assessment, in accordance with BS 5837 (2012).

The findings of the survey are recorded and presented in this Tree Survey Report and Tree Schedule (Appendix 1).

This report is subject to the scope and limitations as given at the end of the report.

Accompanying Drawings

The tree survey report should be read in conjunction with;

- Tree Survey Overview Areas 1,2&3.(Dwg No 16508/T/100)
- Tree Classification (Dwg No 16508/TTW/101 and 16508/TWG/101).
- Tree Constraints (Dwg No 16508/TTW/102 and 16508/TWG/102).

Note:

(It is intended that a Tree Protection Plan will also be developed at a later stage when all relevant detailed information is available regarding the proposed construction requirements. It is envisaged that this will involve a combination of tree temporary tree protection fencing and ground protection methods in accordance with BS 5837:2012).

A1 size colour coded drawings which accompany this report, (monochrome drawings should not be relied upon). These drawings are based upon the topographical drawings supplied to CSR.

Site Location

The site are is currently a mix of operational coniferous forestry plantation and managed mature mixed broadleaf woodland located at Montpelier Hill in the Dublin Mountains, south county Dublin. The forestry and woodland is managed by Coillte as a public recreational facility.

The site is surrounded by a similar mix of agricultural and commercial forestry land with occasional residential and commercial developments interspersed.

2. DESCRIPTION OF EXISTING TREES

2.1 The overall site area (approximate area highlighted red – Fig 1) is an existing mix of operational coniferous forestry plantation, and a second area of managed mature mixed broadleaf woodland.

Fig 1 Site Location

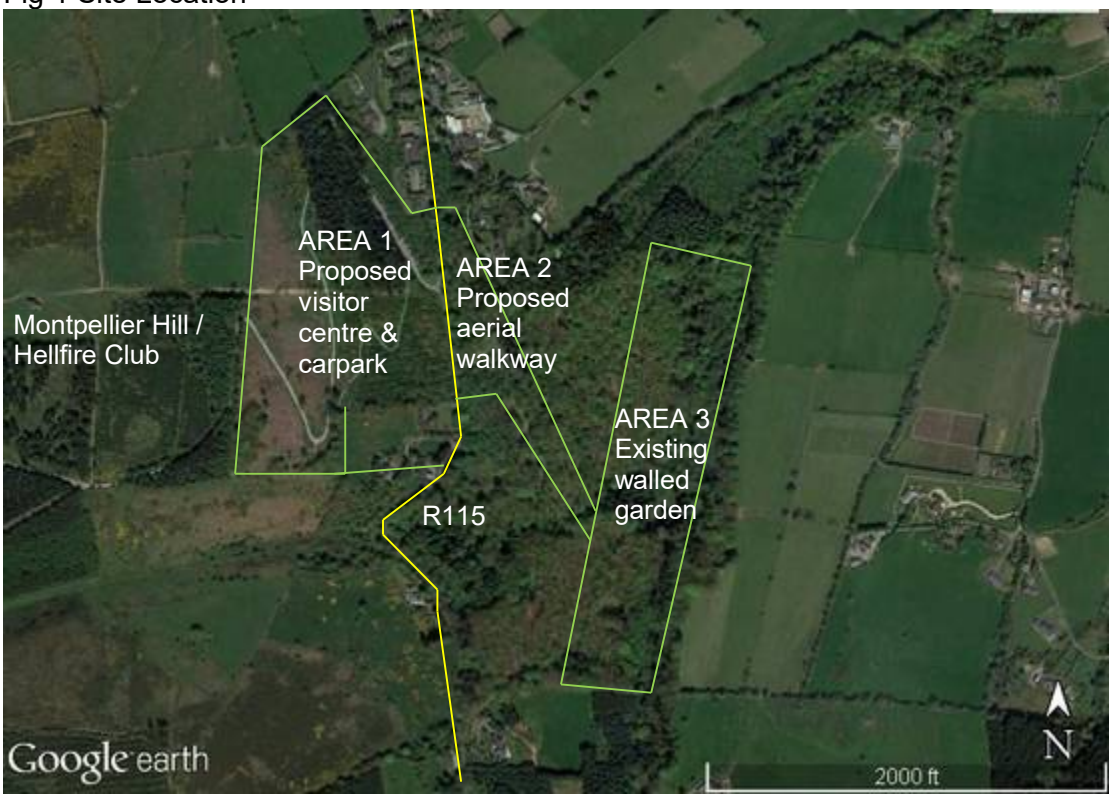

Fig 2.Woodland areas of detailed study

The R115 Kilakee Road runs through the site in an approximate north south alignment, dividing it into two areas - Montpelier Hill to the west and Massys Woods to the east.

The operational coniferous forestry plantation is located to the west of the R115 on Montpellier Hill, around the historic Hellfire Club building. The second area of managed mature mixed broadleaf woodland known as Massys Woods is located to the east of the R115 at a lower elevation.

Whilst an overview of the site as a whole was conducted, three areas within the were reviewed in greater detail, in order to further inform the design team during the design process, (identified in Figure 2);

Area 1 Montpellier Hill - location for the proposed visitor center and carpark.

An area of commercial Spruce plantation interspersed with intermittent broadleaf trees (primarily Beech) - located just above the existing Hellfire Club visitor carpark. Further uphill the commercial forestry has been recently clear felled leaving occasional free standing remnant Beech.

Area 2 Massys Woods - location for the proposed aerial walkway.

A mixed high value broadleaf woodland with occasional conifer, managed for recreation purposes, contains a large number of high quality mature trees.

Area 3 Massys Woods - location of the existing walled garden.

An overgrown former walled garden with a mix of moderate to high value broadleaf trees. The majority of trees being generally less mature than surrounding woodland.

2.2a Photographic Summary of Trees Surveyed – Area 1 Montpellier Hill

Entrance

Entrance

Carpark Woodland Area

Carpark Woodland Area

Sycamore at hairpin bend

Tree Group


Upper level of plantation / area of recent clearfell


Area of recent plantation clear-fell with remnant Beech trees

Area of recent plantation clear-fell with remnant Beech trees

Area of recent plantation clear-fell with remnant Beech trees

2.2b Photographic Summary of Trees Surveyed – Area 2 Massys Woods

2.2c Photographic Summary of Trees Surveyed – Area 3 Walled Garden.



Northern Section (Lower end)


Northern Section (Middle Area)


Northern Section (Middle Area)



Northern Section (Upper end)



Middle Section


Southern Section

A total of sixty individual trees and several tree groups were inspected. Their location, size and quality category may be reviewed with reference to the accompanying Tree Survey Dwg's No 16508/TTW/101 and No 16508/TWG/101 and the tree survey (Appendix 1).

2.3 The trees within the site vary significantly in both nature and quality, depending largely on their location;

Those trees located in Area 1 (Montpellier Hill) have grown either as an integral part of, or very close to, a commercial conifer plantation - which has recently been clear felled, leaving only remnant broadleaves standing. The growth of these broadleaves, (primarily Beech trees), has been heavily influenced by the now recently felled Spruce plantation.

Competition for light in the relatively dense planting of a conifer plantation has caused the broadleaf trees to 'bolt', i.e. grow upwards in a phototropic manner, resulting in spindly and contorted specimens. Those located on the outer edge of the plantation will generally have fared slightly better, but still display phototropic leans and contortions in habit.

Those trees located in Area 2, close to the location of the proposed aerial walkway, include a number of exceptionally fine standalone individuals of considerable maturity and size. A mix of species are present, predominantly Beech and Oak but also some Sweet Chestnut and Sycamore, creating a closed canopy woodland. Age profile varies from young to mature, the majority being mature.

Those trees located in Area 3 in and around the existing walled garden include a number of exceptionally fine standalone individuals of considerable maturity and size. A mix of species are present, predominantly Beech and Oak but also some Ash and Sycamore as well as imposing ornamental coniferous species such a Cedar and Redwood. Age profile varies from young to mature, but most are mature. The trees surrounding the walled garden are generally more mature larger specimens than those within, many of which appear to be the result of natural regenerative growth occurring since the abandonment of the walled garden.

Management is ongoing and interventions such as pruning and felling appears to be occurring on a cyclical basis, however most remain undisturbed. There is scope for minor selective management works to improve the quality of existing trees such as; general thinning to relieve areas of congestion and facilitate better long term development, the removal of; ivy, weak tree growth, overcrowding regenerative growth, rubbing limbs, deadwood etc. However on the whole the trees appear to be in good health. (A number of trees are currently heavily obscured by ivy growth and it would be beneficial to re-inspect when ivy has been removed).

The existing trees make a very positive contribution to the surrounding landscape setting, in addition to providing a high quality recreational and ecological amenity.

Trees often become more valuable as collective groups, than they might be when considered solely as individuals in isolation - a grouping or woodland being generally of significant visual and ecological value. As such it should be noted that the cumulative value of evaluated Tree Groups often reflects an increased catergorised value than might be awarded to the constituent trees if they were assessed in isolation as individuals.

3. ARBORICULTURAL IMPACT ASSESSMENT

3.1 This section discusses the potential impact of the proposed development on the existing tree cover on site and considers the need for mitigation measures, in accordance with BS 5837 (2012), for sustainable development.

The proposed site layout endeavors to work with the existing trees and tree groups on the site, with an overarching philosophy of incorporating them into the final scheme as far as practical. Mixed deciduous woodland has been prioritised for retention where possible, whilst commercial coniferous plantation blocks are considered to be less valuable, given their limited life expectancy and low ecological value.

3.2 Category 'U' trees are recommended for immediate removal (felling) on general management grounds, irrespective of site development. Three trees were assigned to category 'U'.

T137 Dead tree – should be addressed due to its proximity to footpath. Could be reduced to a safe height and left as a standing monolith (creating a valuable wildlife habitat) or felled and left on woodland floor.

T139 Acer pseudoplatanus - severe basal decay cavity render this tree potentially unsafe given the proximity to footpath. Could be reduced to a safe height and left as a standing monolith (creating a valuable wildlife habitat) or felled and left on woodland floor.

T150 Fraxinus excelsior – severe decay cavities render this tree potentially unsafe given the proximity to footpath. Could be reduced to a safe height and left as a standing monolith (creating a valuable wildlife habitat) or felled and left on woodland floor.

Direct Loss of Trees

3.3 The following trees are in direct conflict with the proposed development and are therefore proposed for removal, (see Tree Survey Overview Areas 1,2&3 Drawing 16508/T/100) ;

Area 1

It is proposed to remove a large portion of the existing conifer plantation immediately adjacent to the existing visitor's car park, to facilitate its expansion. Additionally some section of the regenerative woodland scrub will require to be removed to facilitate the aerial walkway landing point and access routes.

Area 2

It is not proposed to remove any trees of significance within the location of the aerial walkway – the walkway being designed to meander through the existing tree canopy, with a limited number of individual excavations required for support column footings. It is possible some limited removal of juvenile trees may be required and occasional limited pruning of trees to facilitate construction works access.

Area 3

It is not proposed to remove any trees other than ‘U Class’ trees for safety reasons. It is possible some limited removal of juvenile trees may be required and occasional limited pruning of trees to facilitate construction works access.

Indirect Impacts

3.4 Cognisance must also be given to indirect impacts - in particular care must be taken to ensure the proposed development and ancillary works do not represent an unacceptable conflict with the calculated ‘Root Protection Area’ of the existing trees - as illustrated in Constraints Dwg’s No 16508/TTW/102. & 16508/TWG/102.

Disturbance of ‘Root Protection Area’ may just as readily kill or destabilise a tree over time, by means of root damage/severance and or earth compaction/covering preventing essential transfer of water and air to roots.

No trees are proposed for removal due to indirect impacts, however it is anticipated that temporary ground protection measures will be required in areas where construction requirements will necessitate movement over the Root Protection areas of neighboring trees - particularly within Area 2. Temporary ground protection measures such as approved ground protection boards may be used with the approval and guidance of the project arborist.

Additional Loss of Trees – Considerations

3.5 None.

Summary of Trees to be Removed

3.6 Approximately 3 acres of commercial spruce plantation located at the visitors car park (Area 1). In addition three ‘U Class’ trees are recommended for removal or ‘monolithing’ on safety grounds.

Tree Protection

3.7 Adequate protection and so successful retention of those trees to be retained within the land take area, (including those not individually surveyed), will be achieved by rigidly excluding all construction activities from tree root protection areas by fit for purpose barriers/fencing and/or additional ground protection.

3.8 A tree protection drawing has not been compiled at this stage as the complexity of both the existing tree cover and the proposals, (in particular the aerial walkway which aims to meander through existing trees), will warrant a detailed on site decision making process to establish exact alignment.

It is envisaged that Tree Protection Areas (TPAs) will be established on site with the project arborist present using tree protection fence lines in accordance with BS5837:2012.

It is also envisaged that an arrangement of temporary ground protection measures, again in accordance with BS5837:2012, will be required to facilitate the construction

process. These measures may require regular readjustment to facilitate construction processes whilst protecting nearby trees and the greater woodland are as a whole.

As such is proposed that a detailed Tree Protection Plan will be developed by the project arborist at a later stage when all relevant detailed information, both construction and operational, is available.

Services

3.9 Services that are planned as part of this project must also avoid designated 'Root Protection Area' of tree / tree groups for retention.

4. RECOMMENDATIONS – Arboricultural Method Statement

Recommendations for the specific measures advised regarding management of the trees in relation to this development are detailed within Appendix 1. These recommendations should inform, and be referred to in, the method statements submitted for approval prior to commencement by the responsible building/engineering and landscape contractors whose works (subject to grant of permission) will affect retained trees and the Tree Protection Areas.

1. *Tree Works.*

Subject to the required permissions removal / felling works should be performed prior to project commencement, by reputable contractors in accordance with BS 3998:2010 and current best practice. Removal of scrub vegetation and ivy clearance should preferably be performed in winter outside of the bird nesting season. Tree felling should be preceded by a competent assessment as to the presence of any protected wildlife species, where required specialist advice should be sought if necessary.

2. *Protective Fencing.*

Following above permitted, priority tree works, protective fencing (barriers) should be erected in the positions and alignments as indicated on the Tree Protection Plan. Fencing should be in accordance with BS 5837:2012 unless otherwise agreed with the planning authority. Commencement of development should not be permitted without adequate protective fencing being in place. This fencing, enclosing the minimum tree protection areas indicated, must be installed prior to any plant, vehicle or machinery access on site. Fencing should be signed 'Tree Protection Area – No Construction Access'. Fencing is not to be taken down or re-positioned without written approval of the project Arborist. No excavation, plant or vehicle movement, materials handling or soil storage is to be permitted within the fenced tree protection areas indicated on plan.

3. Boundary Treatments

Landscape works and installation of / work to boundary treatments within the Root Protection Area should be undertaken to a specification and method statement in accordance with BS 5837: 2012 - submitted for approval prior to commencement of works, under the supervision of an Arborist and / or Landscape Architect.

4. Landscape Works

Proposed landscaping works including new planting, shall be performed in accordance with BS 5837:2012. During these works, the ground around retained trees must not compacted by vehicles, nor be mechanically excavated for planting, nor be significantly altered in terms of ground levels.

5. Monitoring & Compliance

A number of potentially critical future works in proximity to retained trees are potentially to be undertaken in association with the development of this sensitive site, these should be done in accordance with approved method statements and under direct supervision by a qualified consultant Arborist. Therefore, during the development, a professionally qualified Arborist is recommended to be retained as required by the principal contractor or developer to monitor and advise on any works within the RPA of retained trees to ensure successful tree retention and planning compliance.

It is advised that tree protection fencing, any required special engineering and supervision works etc must be included / itemised in the main contractor tender document, including responsibility for the installation, costs and maintenance of tree protection measures throughout all construction phases.

Copies of the Tree Survey and all accompanying drawings, a copy of BS 5837:2012 and NJUG 4 (2007)*'Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees'* should all be kept available on site by the contractor during development. All works are to be in accordance with these documents.

It is advised that all retained trees be subject to expert re-inspection within 12 months and/or prior to completion of development and public occupancy/access of the site.

Limitations and Scope of this Survey Report

This report covers only those trees individually inspected, (shown on the 'Tree Survey Drawings' and described in the 'Schedule'), and reflects the condition of those trees at the time of inspection. Inspection is limited to visual examination of the subject trees from the ground without; test boring, use of tomographic equipment, dissection, probing, coring, ivy removal or excavation to establish structural integrity.

The trees were not climbed and dimensions are approximate, but considered a reasonable reflection of the trees measurements. A number of trees were visually obscured by heavy ivy growth, which could potentially hide from view existing faults or weaknesses, as such they would benefit from re-inspection upon removal of ivy growth. This survey can only therefore be regarded as a preliminary assessment.

There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future. The currency of this survey report and its recommendations is one year.

The accompanying drawings are illustrative and based on the land (topographical) survey supplied; CSR Ltd accept no legal liability or responsibility for any errors in the information contained in the supplied drawings.

CSR Ltd accept no responsibility for the performance of trees subject to pruning or other site works (including construction activities) not performed in strict accordance with recommendations as specified in this report and/or in accordance with BS 3998:2010 and BS 5837:2012

All retained trees mentioned in this report should be subject to expert re-inspection within 12 months and prior to completion of development works and public occupancy of the site.

This report was produced as a part of a planning application for the scheme; the author accepts no responsibility or liability for actions taken by reason of this report by the client or their agents unless subsequent contractual arrangements are agreed. Public disclosure or submission of any part of this report without title, or permission from the author, renders this report invalid and legally inadmissible.

References/Bibliography

BS 5837 (2012). *Trees in Relation to Design, Demolition and Construction - Recommendations*. British Standards Institution. TSO, London.

BS 3998 (2010) *Tree Work - Recommendations*. British Standards Institution. TSO, London.

NJUG 4 (2007) *Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2).* National Joint Utilities Group.

APPENDIX 1

TREE SURVEY KEY

Information in the attached schedule is given under the following headings:

Tree No.

Individual trees have been numbered and tagged on site with corresponding survey tag or treated as a group where appropriate (e.g. Woodlands/hedgerows) and illustrated on accompanying tree survey drawing.

Species

Common & Latin names of species are provided

Height

Overall estimated height given in meters (measured using Truplus 200 Laser Rangefinder).

Stem Diameter

The diameter of the main trunk taken at a height of 1.5m on a single stem tree, or, on each branch of multi-stemmed (MS) trees.

Crown Spread

The largest radius of branch spread is provided in meters for North / East / South and West directions.

Height of lowest branch

The distance between ground level and first significant branch or canopy (and direction of growth) given in meters (m).

Any measurement or dimension that has been estimated (for offsite or otherwise inaccessible trees where accurate data cannot be recovered) is identified by the suffix #.

Life stage

The tree's age is defined as:

Y = Young, in first third of life (tree which has been planted in the last 10 years or is less than 1/3 the expected height of the species in question).

MA = Middle Age, in second third of life (tree, which is between a 1/3 and 2/3's the expected height of the species in question).

M = Mature, in final third of life (tree that has reached the expected height of the species in question, but still increasing in size).

OM = Over mature (tree at the end of its life cycle and the crown is starting to break up and decrease in size).

V = Veteran Tree (exceptionally old tree).

Physiological Condition

The tree's physiological condition is defined as:

Good -Good vitality: normal bud growth, leaf size, crown density and wound closure

Fair - Average to below average vitality: reduced bud growth, smaller leaf size, lower crown density and reduced wound closure

Poor - Low vitality: limited bud growth, small chlorotic leaves, sparse crown, poor wound closure

Dead - No longer living.

Structural Condition

The trees structural condition is defined as:

Good - No major structural defects observed (possibly some minor defects)

Fair - Minor defects present, (such as bark wounds, isolated decay pockets or structure affected due to overcrowding), that could be alleviated by tree surgery/management

Poor - Major structural defects present such as extensive deadwood, decay or defective to the point of being dangerous. (Significant defects are noted e.g. decay, collapsing etc).

Preliminary Management Recommendations & Timescale

Recommendations actions based on limitations of survey – (may include further investigation and or assessment of suspected defects by means and or methods not undertaken / within the remit of this survey).

Estimated Remaining contribution (Years)

Life of the tree is given as;

10 < less than 10 years remaining
10 + in excess of 10 years remaining
20 + in excess of 20 years remaining
40 + in excess of 40 years remaining

Tree Quality Assessment 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.

• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)

• Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline

• Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality

(NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve).

A High quality

Trees of high quality with an estimated remaining life expectancy of at least 40 years

A1 Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)

A2 Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features

A3 Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)

B Moderate quality

Those trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

B1 Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.

B2 Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.

B3 Trees with material conservation or other cultural value

C Low quality

Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.

C1 Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.

C2 Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.

C3 Trees with no material conservation or other cultural value

APPENDIX A

Tag	Species	Height (m)	Crown Spread (m) N/S/E/W	Girth (mm)@ 1.5m	RPA circle radius (m)	Ht of lowest branch (m) & direction of growth	Life Stage	Estimated remaining contribution (years)	Physiological Condition	Structural Condition	Preliminary management recommendations	Category of retention + sub-category	Notes / GPS Location
128	Acer pseudoplatanus	14	5/5/5/5	700	8.40	1m nw	M	40+	Good	Fair		A2	integrated wall
129	Acer pseudoplatanus	15	5/5/5/5	500/700	10.32	1m nw	M	40+	Fair	Poor		A2	some decay at base
130	Acer pseudoplatanus	14	6/6/6/6	580	6.96	4m all	MA	40+	Good	Good	Remove Ivy	B1	
131	Acer pseudoplatanus	15	4/4/4/4	250/400/300	6.70	4m all	MA	40+	Good	Good	Remove Ivy	B1	
132	Acer pseudoplatanus	16	6/6/6/6	950	11.40	5m all	MA	40+	Good	Good	Remove Ivy	A1	
133	Acer pseudoplatanus	16	4/4/4/4	590	7.08	6m all	MA	40+	Good	Fair	Remove Ivy	B1	
134	Acer pseudoplatanus	16	4/4/4/4	470	5.64	6m all	MA	40+	Good	Fair	Remove Ivy	B1	
135	Acer pseudoplatanus	16	4/4/4/4	600	7.20	6m all	MA	40+	Good	Fair	Remove Ivy	B1	
136	Acer pseudoplatanus	16	2/5/4/4	570	6.84	5m all	MA	40+	Fair	Fair	Remove Ivy	B1	
137		4	0/0/0/0	450							Monolith or fell	U	
138	Acer pseudoplatanus	16	7/7/7/7	720	8.64	6m all	MA	40+	Good	Good	Remove Ivy	A1	
139	Acer pseudoplatanus	15	6/6/6/6	500/400		1m w	MA	40+	Good	Poor	Remove Ivy	U	basal decay cavity
140	Fraxinus exclesior	12	5/5/5/5	470	5.64	7m all	MA	40+	Good	Fair	Remove Ivy	B1	
141	Fraxinus exclesior	13	5/5/5/5	500	6.00	3m all	MA	40+	Good	Fair	Remove Ivy & Crown Clean	B1	
142	Acer pseudoplatanus	9	3/3/3/3	200/300	3.60	2m all	MA	40+	Good	Fair	Remove Ivy	B1	
143	Magnolia sp.	11	6/6/6/6	400/500	6.40	1m ns	OM	20+	Poor	Fair	Remove Ivy	B1	
144	Magnolia sp.	11	7/7/7/7	300x6	8.82	2m all	OM	20+	Poor	Fair	Remove Ivy	B1	
145	Betula papyifera	15	3/3/5/0	400x3	8.32	1m w	M	40+	Fair	Fair	Remove Ivy	B1	heavy lean east
146	Acer pseudoplatanus	15	7/7/7/7	1100	13.20	2m s	MA	40+	Good	Good	Remove Ivy	A1	
147	Fraxinus exclesior	16	4/4/4/4	850	10.20	2m ew	MA	40+	Fair	Fair	Remove Ivy	B1	
150	Fraxinus exclesior	16	4/7/5/5	770	9.24	7m all	MA	40+	Good	Poor	Monolith or fell	U	three decay cavities
148	Fraxinus exclesior	13	3/3/3/3	450	5.40	10m all	MA	40+	Good	Fair	Remove Ivy	B1	
149	Fraxinus exclesior	13	5/3/3/3	450	5.40	7m n	MA	40+	Good	Fair	Remove Ivy	B1	
151	Fraxinus exclesior	16	3/3/3/3	730	8.76	7m nw	MA	40+	Good	Fair	Remove Ivy	B1	
152	Crataegus monogyna	8	3/3/3/3	550	6.60	3m all	MA	20+	Good	Fair	Remove Ivy	B1	
153	Acer pseudoplatanus	12	6/6/6/6	300/400/200	6.48	0m all	MA	40+	Good	Good	Remove Ivy	B1	
154	Acer pseudoplatanus	12	7/7/7/7	300/400/300	7.00	1m alk	MA	40+	Good	Fair		A1	Remove damaged limb on east side
155	Picea sitchensis	18	3/3/3/3	630	7.56	2m all	OM	20+	Good	Good		B1	
156	Fagus sylvatica	10	4/4/4/4	470	5.64	2m all	MA	40+	Good	Fair		B1	
157	Fagus sylvatica	10	4/4/4/4	460	5.52	2m all	MA	40+	Good	Fair		B1	
158	Taxus baccata	10	5/5/5/5	1000	12.00	3m all	MA	40+	Good	Good		A1	
159	Acer pseudoplatanus	8	4/4/4/4	400/300/200	6.48	2m all	MA	40+	Good	Fair	Remove Ivy	B1	
160	Fraxinus exclesior	12	3/3/3/3	470	5.64	7m all	MA	40+	Good	Fair	Remove Ivy	B1	heavy lean west
161	Acer pseudoplatanus	14	5/5/5/5	350x5	9.40	1m all	MA	40+	Good	Good	Remove Ivy	A1	
162	Fraxinus exclesior	18	5/5/5/5	790	9.48	5m all	MA	40+	Good	Good		A1	heavy lean east paper)
163	Acer pseudoplatanus	18	7/7/8/7	650	7.80	3m e	MA	40+	Good	Good		A1	lean east
164	Fraxinus exclesior	18	3/3/3/3	620	7.44	10m all	MA	40+	Fair	Good	Remove Ivy	B1	
165	Fagus sylvatica	20	6/6/6/6	840	10.08	6m all	MA	40+	Good	Good		A1	
166	Fraxinus exclesior	18	4/4/4/4	620	7.44	10m all	MA	40+	Good	Fair	Remove Ivy	B1	
167	Acer pseudoplatanus	20	7/7/7/7	650/450	9.48	1m ew	MA	40+	Good	Good		A1	

Tag	Species	Height (m)	Crown Spread (m) N/S/E/W	Girth (mm)@ 1.5m	RPA circle radius (m)	Ht of lowest branch (m) & direction of growth	Life Stage	Estimated remaining contribution (years)	Physiological Condition	Structural Condition	Preliminary management recommendations	Category of retention + sub-category	Notes / GPS Location
168	Acer pseudoplatanus	19	6/6/6/6	570	6.84	3m w	MA	40+	Good	Good		A1	
169	Acer pseudoplatanus	22	8/8/8/8	920	11.04	3m e	M	40+	Good	Good		A1	
NT	Fagus sylvatica	20	10/10/10/10	1400	16.80	3m all	M	40+	Good	Good		A1	no tag
170	Castanea sativa	18	4/4/4/4	670	8.04	4m all	MA	40+	Fair	Good		B1	
171	Castanea sativa	18	4/4/4/4	610	7.32	7m se	MA	40+	Good	Good		B1	
172	Castanea sativa	20	4/4/4/4	530	6.36	8m all	MA	40+	Good	Good		B1	
173	Acer pseudoplatanus	20	4/4/4/4	870	10.44	6m all	MA	40+	Good	Good		A1	
174	Castanea sativa	17	3/3/3/3	520	6.24	8m all	MA	40+	Good	Good		B1	
175	Castanea sativa	16	3/3/3/3	460	5.52	7m all	MA	40+	Good	Good		B1	
176	Castanea sativa	16	3/3/3/3	390	4.68	5m all	MA	40+	Good	Good		B1	
177	Castanea sativa	16	3/3/3/3	560	6.72	6m all	MA	40+	Good	Good		B1	
178	Fagus sylvatica	18	4/4/4/4	500	6.00	2m east	MA	40+	Good	Good		B1	
179	Fagus sylvatica	20	5/5/5/5	670	8.04	3m w	MA	40+	Good	Good		A1	
180	Acer pseudoplatanus	22	7/7/7/7	660	7.92	5m n	MA	40+	Good	Good		A1	
181	Quercus robur	23	6/6/6/6	900	10.80	3m s	MA	40+	Good	Good		A1	
182	Quercus robur	21	4/4/4/4	500	6.00	4m all	MA	40+	Good	Good		A1	
183	Quercus robur	21	6/6/6/6	1100	13.20	4m all	MA	40+	Good	Good	Remove Ivy	A1	not on survey
184	Acer pseudoplatanus	22	7/7/7/7	810	9.72	2m s	MA	40+	Good	Good	Remove Ivy	A1	not on survey
185	Acer pseudoplatanus	18	7/7/7/7	350x5	7.27	1m all	MA	40+	Good	Good		A1	
186	Fagus sylvatica	22	77/7/7	1080	12.96	3m s	MA	40+	Good	Good		A1	
187	Fagus sylvatica	18	7/7/7/7	730	8.76	2m all	MA	40+	Good	Good		A1	