

LAND PLANNING & DESIGN

CUNNANE STRATTON REYNOLDS

TREE SURVEY

Proposed Creche & Community Facility,
at Cuil Duin Avenue,
Citywest,
Dublin.

March 2023

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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 impacted by a proposed development incorporating a Community Centre and a Creche facility. Trees have been surveyed as individuals in accordance with BS 5837 (2012). The survey was undertaken on 16th of March 2023 by Cunnane Stratton Reynolds arborist.

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

- National Land Survey LTD Dwg No: CW1a

A full survey record is presented in Appendix 1, together with accompanying drawings Tree Survey Dwg No 22262_T_101 and Constraints Dwg No 22262_T_102. After introducing the terms of reference and the methodology of the survey, the report summarizes the survey findings in an overview of the existing tree cover within the site.

A total of two individual trees were recorded.

Every effort has been made to access these trees for inspection, however in some instances where site conditions or ivy growth preclude full access girths may be visually estimated.

The removal of trees and scrub vegetation as part of a proposed development will present an opportunity to implement replacement tree planting both as part of a general landscape design scheme and as part of a tree management program aimed at maintaining 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 instructed by Harcourt Developments to conduct a tree survey, to inform the design and planning of a proposed three storey Creche and Community Centre facility site located at Cuil Duin Avenue, Co Dublin.

CSR considered those two that might potentially be impacted upon by the proposed redevelopment 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 concerned in accordance with BS 5837 (2012).

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

- National Land Survey Ltd Dwg No: CW1a
- Cunnane Stratton Reynolds Ltd Dwg No: 22262-2-101

Site Inspection & Methodology

The site was surveyed on 16th of March 2023. A visual inspection from the ground was performed on all existing trees on site. Where access allowed, principal individual trees were examined, critical measurements taken and observations made.

A description was recorded of each tree, 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 categorization. Any recommended remedial works required were outlined. Significant tree within/bounding the site 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 Classification (Dwg No 22262_T_101).
- Arboricultural Impact Assessment (Dwg No 22262_T_102).

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

Site Location

The site is an undeveloped area of land that is accessed from Cuil Duin Avenue which runs along its southern boundary.

The Boherboy Stream runs through the site from north to south and is an important biodiversity asset which caters for numerous flora or fauna species.

The N7 (Naas Road) national route is runs close to the northern site boundary, whilst the LUAS line bounds the southern boundary along Citywest Drive and Fortunestown Lane. Surrounding land uses are a mix of residential, educational.

2. DESCRIPTION OF EXISTING TREES

2.1 The approximate site area (highlighted red – Fig 1) represents a greenfield site that has been disturbed in areas, located just south of the N7 near Citywest new residential developed site and 'Citywest Educate Together National School'. The existing ground level is relatively flat overall with an overflow channel and mounds existing in and around the site.

The two existing trees identified are located at the west and north-west of site with a one of the trees being external to the site itself.



Figure 1: Medium resolution aerial photograph approximate site area (courtesy Google Earth)

2.2 A total of two individual trees and were inspected. Their location, size and quality category may be reviewed with reference to the accompanying Tree Classification Dwg No 22262_T_101 and the tree survey (Appendix).

2.3 Photographic Summary of Trees Surveyed (16th of March 2023)



T1- spring



T1- summer (courtesy Google Earth)



T2 – spring



T2 – summer (courtesy Google Earth)

2.3. The quality of two inspected trees is poor with both clearly suffering from Ash dieback disease.

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 development is compatible with the retention of the tree (T1) located outside the northern site boundary to the north of Boherboy Stream. The location of the tree to the north of the stream suggests a low likelihood of tree roots being present to the south of the stream within the site.

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

Direct Loss of Trees

3.3 Direct loss of trees is limited to the removal of one tree, located in the site premises (T2) along with other areas of early stage regenerative tree and scrub growth from within the site, which is not considered to be of arboricultural significance - particularly in the context of the proposed level of tree planting within the scheme as set out in the Landscape Masterplan.

Tag No	Tree Species	Tree Class	Number of trees
T2	Ash (<i>Fraxinus excelsior</i>)	U	1

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 Tree Constraints Dwg No 15422/T/101.

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

Additional Loss of Trees – Considerations

3.5 Scrub and tree removal should be ideally taking place outside the bird nesting season (March-August).

Both trees display symptoms of Ash dieback disease. T2 is unsuitable for retention due to its size and extent of infection. T1 is a younger tree with early stage infection and can be retained and monitored for the time being.

Ash Dieback Disease

Ash dieback' is a disease caused by the *Hymenoscyphus fraxineus* fungi which is developing rapidly across Ireland since its presence was first detected in Ireland in 2012. The disease is spread by windborne spores and once a tree is infected it will lead to its terminal decline within a few years.

At present there is no available remedy and the outlook for the survival of Ash trees in Ireland is poor, with infection rates appearing to accelerate over the past couple of years.

It is hoped that genetic diversity may mean some trees might prove resistant to the disease, however there is still great uncertainty at this time regarding survival rates. The Woodland Trust estimate that at least 80% of Ash trees in the UK will die.

The retention or removal of Ash trees must therefore be viewed in the context of Ash Dieback disease, and the likelihood that at least 80% of Ash trees are likely to die over the coming years.

Summary of Trees to be Removed

3.6 T2 being U class is proposed for removal as tree is exhibiting significant signs of Ash Dieback to the crown which is likely to become detrimental to the tree's structural stability.

Tree Protection

3.7 Tree protection are not required . (Note no tree protection plan has been prepared as it is not necessary in this instance).

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.

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 and outside of the bird nesting season (1st March - 31st August). 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.

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. 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

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 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 1

Tag	Species	Height (m)	Crown Spread (m) N/S/E/W	Dia' (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
T1	Fraxinus excelsior	7	3/3/3/3	# 4 x150	3.60	0m all	Y	>10	Poor	Fair	Monitor	C1	
T2	Fraxinus excelsior	9	5/5/5/5	#400	4.80	3m all	MA	>10	Poor	Poor	Fell	U	