Impact Assessment Report

Prepared for:

Kildare County Council

Proposed site:

Station Road Kildare

Prepared by:

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Arboricultural ASSOCIATION
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1 Summary

1.1 This arboricultural report has been commissioned by Kildare County Council to provide information to assist with the planning process in relation to the proposed development at the above location.

1.2 This report includes:

- an assessment of the trees, their quality and value in accordance with BS 5837:2012 - Trees in relation to design, demolition and construction;
- the site context and observations on the trees;
- local planning policies relevant to the consideration of trees on the site;
- measures to be taken to protect trees during the proposed works.
- An arboricultural impact assessment and a tree protection plan for the site identifying the trees impacted on by the proposed development

2.0 Introduction

2.1 Instructions

Arbor-Care Ltd (Professional Consulting Tree Service) was retained to undertake an on-site inspection of all trees and vegetation that could be potentially be impacted by the proposed development works within the site extents (Figure 1), the findings of the report will be used to inform the design team of development works and support a planning application for same.

The objective of the impact assessment was to identify the areas that contained trees, groups of trees, and to ensure where possible that these areas would be retained and to identify the trees that are to be removed to facilitate the scheme.

The below impact assessment 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.

2.2 Methodology

A tree survey and visual condition assessment was on the 15th of November 2023. 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. All trees were individually tagged with a metal disc. This was placed on the northern side of the tree where practical.

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/ groups located within and adjacent to the proposed development area. The objective of this survey was to gather information regarding the trees within or adjacent to the development area and the impact the proposed scheme may have on the trees. **Please refer to Appendix A for the tree inventory**.

A separate arboricultural impact assessment and a tree protection plan will also be prepared for the site identifying the trees impacted on by the proposed development once the final design in frozen.

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 three tier rating scale with the following descriptors:

Specimen condition 3-tier rating system

- Poor- 1-30%
- Fair- 31-60%
- Good- 61-100%

3.0 Initial Tree Survey Overview

3.1 The Site

Currently the site is a green field site. The site contains few trees of significance there is also Japanese knotweed within the site that has been treated.

Figure 1. Site Location, highlighted in red

4.0 The Trees.

A total of 24 trees were individually surveyed , the majority of the trees are located within residential garden and are of low quality

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

Category	Quantity	Category %
A-Tree of high quality	1	5%
B-trees of good quality	4	16%
C (Low quality or trees less than 75mm diameter)	19	79%
U (remove due to poor condition)	0	%
Total trees	24	100%

*In accordance with *BS 5837: 2012 Trees in relation to design, demolition and construction. Recommendations.,* Category A signifies those trees of high value and in such a condition as to be able to make a substantial contribution. Category B signifies those trees *of a "moderate value and in such a condition as to be able to make a substantial contribution*

Category C signifies those trees/hedgerows *of "a low quality and value that are currently in an adequate condition to remain until new planting could be established*

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.

View of the Trees.

View of the large mature high quality trees on the site . These trees are of high amenity value and should be retained

5.0 Statutory and Non-Statutory Designations

The National Planning Framework (NPF)

The National Planning Framework (NPF) seeks to ensure that new development is sustainable and underlines the importance of Green Infrastructure, of which trees form an integral part. This encompasses recognition of the importance of trees in relation to the management of air, soil and water quality along with other associated ecosystem services and climate change adaption. The NPF also seeks to achieve the protection and enhancement of landscapes and a net gain in biodiversity.

Kildare County Development Plan 2023-2029

The site is located within the jurisdiction of *Kildare* County *Council*. There are no TPO's identified within the development site.

6.0 The Proposed Development

Brief Summary Development Description

7.0 Analysis of the Proposal in Respect of Trees

This impact assessment sets out the likely principal direct and indirect impacts of the proposed development on the trees on or immediately adjacent to the site and suitable mitigation measures to allow for the successful retention of significant trees or to compensate for trees to be removed, where appropriate. The impact on the trees is low. No trees of significance or of amenity value will be removed. It is proposed to remove 8 trees on site. It must be noted all trees on site are of low quality

A brief summary of trees to be removed, related to the Proposed Scheme are detailed within the table below

Table 1: Schedule of trees to be <u>removed</u> to accommodate the design (To be read in conjunction with Appendix 1 and the Tree Protection Plan.

Tree number	Species	Age Class	Tree category
1703	Elder	Mature	C2
1705 x 4	Sycamore	Mature	C2
1706	Sycamore	Early mature	C2
Group 1	Sycamore/hawthorn	Mature	C2
1710	Sycamore	Mature	B2

The arboricultural impact of the proposed development on the site will be low. It is proposed to remove all trees to be removed, it must be stated that the majority of these are and of low quality and have been left unmanaged for several years.

Of the trees to be removed to accommodate the proposed design, these consist of 0 no. category A trees, 1 no. category B and 7 no. category C trees and 0 no. category U trees.

In accordance with *BS 5837: 2012 Trees in relation to design, demolition and construction. Recommendations.,* Category B 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 signifies those trees/hedgerows *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*)." *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.*

7.2 In the context of the overall development works the following points are also noted:

- **Arboricultural works** –No other tree pruning will be required
- Following the completion of the development, a **tree condition assessment** may be required on all retained trees for health and safety purposes.
- **Tree protection measures** - All retained trees can be successfully protected during the proposed development by using robust fencing which complies with the recommendations outlined within BS5837:2012.
- No materials or equipment other than those required to install tree protection will be delivered to the site until all fencing is in place.
- For details of the tree protection measures required during construction, please refer to the Tree Protection Plan.
- **Compound area** – The proposed site compound has not been designed; there is sufficient space available throughout the site to avoid any unnecessary impacts to retained trees, provided the tree protection measures as detailed within this report are carried out.
- **Site access.** The site will be accessed from the existing road.
- **Daylight and sunlight levels** - Shading by trees have not been assessed in relation to this proposal.
- **Drainage and services** – All new service runs should be located outside the RPAs of retained trees to avoid impacting their condition. If it is found necessary to locate services within tree RPAs, it is recommended that these works are carried out under arboricultural supervision. Methods of work should follow the recommendations in the NJUG guidance. BS5837 (2012) recommends the NJUG guidance as a normative reference to be used in these circumstances.
- **Boundary treatments** – Please refer to the landscape plan for further information

- **Landscape operations** - Landscaping operations will typically take place at the end of the construction period. These works will normally require the removal of protective fencing to facilitate access for works. There is a risk that plant and machinery may damage soil structure where tree roots are growing. These risks can be managed by maintaining good professional standards of work and working to a method statement. The principle of avoiding soil disturbance or changes in levels within the RPAs of retained trees should be followed unless arboricultural advice has been sought.

8.0 Discussion & Conclusion

General Change

8.1 My assessment is that loss of trees is low and will not have a negative impact on the character and appearance of the immediate surrounding landscape;

Proposal in relation to local planning policy

8.2 The proposed development complies with local planning policy as it relates to trees. A tree survey has been carried out in accordance with best practice and where possible trees have been retained and can be successfully protected during construction.

Conclusion

8.4 The proposal has been assessed in accordance with BS5837:2012 and special working methods have been recommended to minimise tree impacts.

8.5 Retained trees have been assessed and can be successfully protected during development by following the information provided within this report and adhering to industry best practice.

8.6 Provided the recommendations and methods of work, as outlined within this report, are adhered to, the proposed development can be successfully carried out without having a negative impact on the character or appearance of the surrounding landscape.

9.0 Recommendations

9.1 The proposal should be carried out in accordance with the recommendations outlined within this report.

9.2 The positioning of tree protective barriers should be installed as detailed within the Tree Protection Plan.

Appendix A: Key to Abbreviations Used in the Survey

Ref No	Specific identification number given to each tree or group. T=Tree/H=Hedge/G=Group/W=Woodland/S=Shrub.	
Tag No.	Tree marked with individual tree tag of this reference number on site.	
Species	Common name followed by botanical name shown in *italics*	
RPA	Root Protection Area (As defined by BS5837)	
Stem diameter	Diameter of main stem, measured in millimetres at 1.5 m above ground level. (MS = Multi-stem tree measured in accordance with BS5837 Annexe C)	Av / Average: indicates an average representative measured dimension for the group or feature
Spread	The width and breadth of the crown. Estimated on the four compass points in metres.	
Crown clearance	The estimated height (in metres) above ground level of the lowest significant branch attachments.	
#	Estimated dimensions	
*	Indicates estimated position of tree (not indicated on topographical survey).	
P	Privately owned tree (e.g. tree not located in the public highway or adjacent public land).	
Category	Categorisation of the quality and benefits of trees on Site as per Table 1 and 2 of BS5837:2012. 1=Arboricultural quality/value 2=Landscape quality/value 3=Cultural quality/value (including conservation)	
	A=High quality/value 40yrs+ (light green). B=Moderate quality/value 20yrs+ (mid blue) C=Low quality/value min 10yrs/stem diameter less than 150mm (grey). U=Unsuitable for retention (dark red).	
Life stage	**Young (Y):** Newly planted tree 0-10 years. **Semi-Mature (SM):** Tree in the first third of its normal life expectancy for the species (significant potential for future growth in size). **Early Mature (EM):** Tree in the second third of its normal life expectancy for the species (some potential for future growth in size) **Mature (M):** Tree in the final third of its normal life expectancy for the species (having typically reached its approximate ultimate size). **Over Mature (OM):** Tree beyond the normal life expectancy for the species. **Veteran (V):** Tree which is of interest biologically, aesthetically or culturally because of its condition, size or age.	
Structural condition	**Good:** No significant structural defects **Fair:** Structural defects which can be resolved via remedial works. **Poor:** Structural defects which cannot be resolved via remedial works. **Dead:** Dead.	
Physiological condition	**Good:** Normal vitality including leaf size, bud growth, density of crown and wound wood development. **Fair:** Lower than normal vitality, reduced bud development, reduced crown density, reduced response to wounds. **Poor:** Low vitality, low development and distribution of buds, discoloured leaves, low crown density, little extension growth for the species. **Dead:** Dead **Fair/Good** = Indicates an intermediate condition **Fair – Good** = Indicates a range of conditions (e.g. within a group)	
Preliminary management recommendations	Works identified during the tree survey as part of sound arboricultural management, based on the current context of the Site (where relevant reference has been made to tree management based on the potential future context of the site).	
Works to facilitate the development	Tree works identified as necessary to facilitate the Proposed Development following a desk top analysis of the proposals in relation to tree constraints.	

Appendix A: Tree Survey Schedule-Station Road Kildare

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
1703 x 3	Elder	EM	220	6	N=2 S=2 E=4 W=4	1	Fair	A cluster of elder that are in decline	Remove	Remove	C2	3.2m
T1	Sycamore	M	700	16	N=6 S=6 E=6 W=6	3	Fair	A large mature sycamore located within private property	No impact	Retain	A2	8m
Hedge 1	Leyland cypress	M	200	10	N=2.5 S=2.5 E=1 W=1	2	Good	A row of 8 cypress that form a hedge, they are off site but provide good screening	No impact	Retain	B2	3m
1704	Sycamore	M	300	10	N=4 S=4 E=4 W=4	2	Good	A mature sycamore	No impact	Retain	B2	4m
1705 x 4	Sycamore	M	300	10	N=2 S=2 E=2 W=2	1.5	Fair	A row of 4 sycamore in fair condition they have suffered from negative pruning and are engulfed with ivy	Remove	Remove	C2	
1706	Sycamore	EM	210	8	N=2 S=2 E=2 W=2	2	Fair	An early mature sycamore that is engulfed with ivy	Remove	Remove	C2	

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
Group 1	Sycamore x 4 Hawthorn x 2	EM	220	8	N=2 S=2 E=3 W=3	1	Fair	A group of overgrown vegetation	Remove	Remove	C2	
1707	Ash	M	400	10	N=4 S=2 E=3 W=4	1	Good	A mature ash	No impact	Retain	B2	5m
1708 x 4	Leyland cypress	M	200	10	N=1 S=1 E=1 W=1	2	Good	A row of 4 cypress	No impact	Consider for removal	C2	3m
1709	Sycamore	M	380	10	N=4 S=4 E=2 W=2	.5	Fair	A mature co-dominant sycamore that has included bark at the basal union and is beginning to split apart	No impact	Consider for removal	C2	4.8m
1710	Sycamore	M	400	14	N=4 S=4 E=4 W=4	4	Fair	A mature sycamore in good condition	Remove	Remove	B2	5m

Appendix B: Arboricultural Method Statement

Introduction
This report has been prepared in accordance with British Standard 5837: Trees in relation to design,demolition and construction – Recommendations (2012) which provides a methodology for the assessment and protection of trees and other significant vegetation on development sites.
Sequence of Operations
• Carry out the proposed tree works. • Installation of tree protection measures. • Enabling works. • Construction of proposal and the installation of drainage and services. • Landscaping. *Alternative sequences can be discussed and agreed with the local authority and project manager if required.*

Supervision

All key / critical activities that will affect trees during construction will be inspected and monitored bythe approved arboricultural consultant *if so requested by the local authority.*

- Pre-commencement meeting with site manager and local authority to confirm location of treeprotection measures.
- Inspection of all tree works and tree protection measures prior to the commencement ofworks.
- Supervision during the excavation works within the RPAs of retained trees.
- Supervision during the installation of all services within tree RPAs.
- Supervision during any other works that may affect retained trees.
- Inspection upon completion.

Arboricultural Method Statement	
Scope	**Methodology**
Pre-commencement meeting	Prior to the commencement of works, a meeting between the arboricultural consultant, local authority and the site manager will be held in order to discuss the tree protection measures and proposed works required in closeproximity to trees. (if requested) Contact details of all parties will be circulated to ensure all team membersare able to communicate correctly.
Tree Works	Please refer to the Tree Work Schedule at Appendix A for a list of all proposed tree works. The location of trees to be removed are highlighted on the Tree Removals Plan at Appendix B. It is the responsibility of the Site Manager to ensure all tree works have been approved by the local planning authority. All tree works will be carried out by a reputable arboricultural contractor inaccordance with the recommendations given in BS 3998:2010 – Tree Work Recommendations. All tree works should be carried out in accordance with Section 40 of the Wildlife Act 1976 and Section 46 of the Wildlife (Amendment) Act 2000. It is the responsibility of the arboricultural contractor to ensure that no protected species are harmed whilst carrying out site clearance or tree surgery works.
Tree Protection	None required as all trees are to be removed

Compound Area	The proposed site compound area has not yet been designed; however, the considerations below must be followed: The site compound must be located outside the designated TPZs as highlighted on the Tree Protection Plan at Appendix B.
Installation of fencing within RPAs	None required

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Yours in Conservation,
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