Arboricultural Impact Assessment

Prepared for:

Tulfarris CG LTD

Proposed site:

Cloonmore Regeneration LRD

Project Title:

Housing Scheme

Prepared by:

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Arboricultural ASSOCIATION
Professional Member

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Executive Summary

1.0 This arboricultural report has been commissioned by MWP to provide information to assist with the planning process in relation to a proposed development at the above location.

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;
- the impact of the proposed development upon the tree population in and around the site;
- methods of reducing impacts on trees; and
- measures to be taken to protect trees during the proposed works.

2.0 Introduction

Arbor-Care Ltd (Professional Consulting Tree Service) was retained to undertake an on-site tree and hedgerow survey of all trees that could be potentially be impacted by the proposed development and within the site extents (Figure 1), the findings of the report will be used to inform design 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 development.

The survey commenced at the entrance boundary and continued in a southerly direction. The site is a private residence and gardens containing mainly low quality trees. The survey concentrated on the trees within and adjacent area the proposed development area.

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. This impact assessment report will be accompanied by an inventory of trees and hedgerows on site and a tree protection plan. The Arboricultural Impact Assessment and a tree protection plan was prepared for the site identifying trees that may be impacted on by the proposed development based on the proposed design.

2.2 Methodology

An initial tree survey and visual condition assessment was on the 28th of July 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 located within the development area and has been based on the topographical survey plan provided.

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**.

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

The site consists a private residential house with the prinipal trees planted within the lawn area east of the entrance. The western boundary is a green field with litte vegetation of significance. The rear of the property contains a orchard, there are also a row of large mature Poplar trees that are not suited to the site and maybe a potential hazaed fo the new development.

Figure 1 Site location highlighted in red

4.0 The Trees.

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	2.6%
B-trees of good quality	10	26%
C (Low quality or trees less than 75mm diameter)	27	71%
U (remove due to poor condition)	0	0%
Total trees	38	100%

The majority of the trees on the site (71%) are low quality category C trees, the remaining trees on the site (26%) are of moderate value. Therefore there is an opportunity to replant the site with appropriate native trees that will enhance the arboreal footprint and biodiversity of the site.

In accordance with BS 5837: 2012 Trees in relation to design, demolition and construction. Recommendations., Category A signifies those trees of a high quality , 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.

Row of large mature Poplar at the rear of the site, these are recommended for removal

A view of the main avenue looking out, note the majority of he trees within the lawn area will be removed

5.0 Statutory and Non-Statutory Designations

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.

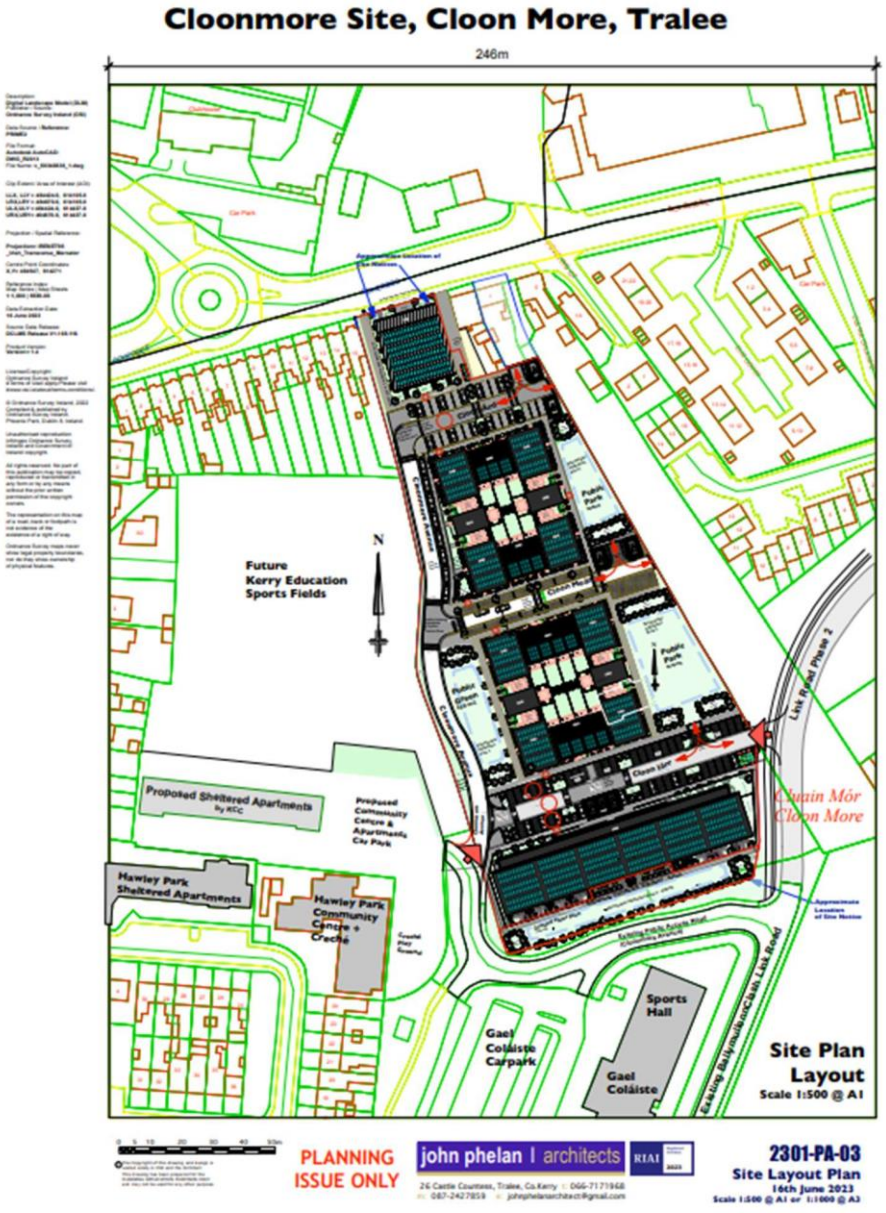
The site is located within the jurisdiction of *Tralee Town Council*. The Local Planning Authorities have a statutory duty to consider both the protection and planting of trees when considering planning applications. The potential impact of development on all trees (including those not protected by a Tree Preservation Order or other statutory designation) is therefore a material consideration. I have reviewed the *Tralee Town Council Development Plan 2018-2024 Tree Preservation Orders (TPO's) .* There are no TPO's identified within the development site.

6.0 The Proposed Development

Development Description

The proposed development will involve the demolition of two dwelling houses, a guesthouse and ancillary structures on site. The construction of 147 Residential Units, comprising Apartment Building 'A' (containing 15 No. one or two bedroom apartments), Apartment Building 'B' (containing 66 No. one or two bedroom apartments), 8 Triplex Apartment Buildings (each containing 6No. one or two bedroom apartments), 14 two bedroom Townhouses and 4 three bedroom townhouses. It will also include the construction new vehicular access to the site from Access Road (Cloonmore Avenue) off new Ballymullen-Clash Relief Road.

Figure 2: Proposed Development



Arboricultural Impact Assessment

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 high, all trees are to be removed to facilitate the development . A significant tree replanting scheme will be undertaken to mitigate against the tree loss. Please review the landscape report for further details.

the table below

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

Tree number	**Age class**	**Species**
994 x 4	EM	Sycamore cluster
995 x 4	EM	Sycamore cluster
996	M	Alder
997	M	Beech
998 x 2	M	Sycamore
999	M	Beech
1000	M	Cherry
1001	M	Beech
1002	M	Maple
1003	M	Beech
1004	M	Beech
1005	M	Beech
1006	EM	Maple

1007	M	Birch
1008	M	Beech
1009	M	Beech
Group 1	EM	Willow scrub
Group 2 x 15	M	Lawson cypress
Tree line 1 x 10	M	Poplar

7.1 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** will not be required out on all retained trees for health and safety purposes.
- **Tree protection measures** – not required as all trees will be removed.
- For details of the trees to be removed, please review, 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 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.
- **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 high however the majority of the trees to be removed are non native and of low quality. A significant tree planting scheme will ensure the arboreal footprint of the site will be enhanced

Appendix A: Tree Survey

Key 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.	

CLoonmore-Tralee

Tree No	Species	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	RPA
994 x 4	Sycamore cluster	EM	300	8	N=2 S=2 E=2 W=2	2	Good	A cluster of sycamores adjacent to the entrance	Remove to facilitate ethe development	Remove	B2	
995 x 4	Sycamore cluster	EM	300	8	N=2 S=2 E=2 W=2	2	Good	A cluster of sycamores adjacent to the entrance	Remove to facilitate ethe development	Remove	B2	
996	Italian alder	M	420	16	N=3 S=3 E=2 W=2	3	Good	A large mature alder displaying a good overall condition	Remove to facilitate ethe development	Remove	B2	
997	Copper beech	M	380	10	N=4 S=4 E=4 W=4	2	Good	A mature copper beech displaying a good overall condition	Remove to facilitate ethe development	Remove	A2	
998 x 2	Sycamore	M	400	14	N=3 S=3 E=3 W=3	2	Good	Represents 2 large mature multi-stemmed sycamore	Remove to facilitate ethe development	Remove	B2	

Tree No	Species	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	RPA
T1	Sycamore	EM	300	8	N=2 S=2 E=2 W=2	2	Good	A mature sycamores displaying good condition	Remove to facilitate ethe development	Remove	B2	
999	Copper beech	M	360	8	N=2 S=2 E=2 W=2	2	Good	A mature copper beech displaying a good overall condition	Remove to facilitate ethe development	Remove	B2	
1000	Cherry	M	280	6	N=4 S=4 E=4 W=4	1	Good	A mature cherry	Remove to facilitate ethe development	Remove	B2	
1001	Copper beech	EM	260	6	N=2 S=2 E=2 W=2	2	Good	A mature copper beech displaying a good overall condition	Remove to facilitate ethe development	Remove	B2	
1002	Norway maple	M	300	10	N=2 S=2 E=2 W=2	2	Good	A mature maple	Remove to facilitate ethe development	Remove	B2	

1003	Copper beech	M	300	8	N=2 S=2 E=2 W=2	2	Good	A mature beech displaying good condition	Remove to facilitate ethe development	Remove	B2	
1004	Copper beech	M	360	8	N=2 S=2 E=2 W=2	2	Good	A mature copper beech displaying a good overall condition	Remove to facilitate ethe development	Remove	B2	
1005	Beech	M	500	14	N=3 S=3 E=3 W=3	2	Good	A large mature beech	Remove to facilitate ethe development	Remove	A2	
1006	Norway maple	M	300	8	N=2 S=2 E=2 W=2	2	Fair	A mature multi-stemmed maple	Remove to facilitate ethe development	Remove	C2	
1007	Silver birch	M	320	8	N=3 S=3 E=3 W=3	2	Good	A mature birch	Remove to facilitate ethe development	Remove	B2	

Tree No	Species	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	RPA
1008	Beech	M	480	8	N=3 S=3 E=3 W=3	1	Good	A mature beech displaying good condition	Remove to facilitate ethe development	Remove	B2	
1009	Beech	M	300	8	N=3 S=3 E=2 W=2	2	Good	A mature beech displaying a good overall condition	Remove to facilitate ethe development	Remove	B2	
Group 1	Scrub willow	EM	100	4	N=3 S=3 E=3 W=3	1	Poor	a large scrub area	Remove to facilitate ethe development	Remove	C2	
Group 2	Leyland cypress x 15	M	200	12	N=2 S=2 E=1 W=1	1	Fair	a row of leylandii that have been left unmanaged	Remove to facilitate ethe development	Remove	C2	
Tree Line 1	Poplar x 10	M	500	18	N=3 S=3 E=3 W=3	2	Poor	A row of large mature poplar many have suffered limb loss. These are in poor condition and are no longer appropriate for the site.	Remove to facilitate ethe development	Remove	C2	

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. • 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.*

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 removal measures. (if requested)
Tree Works	Please refer to the Tree Work Schedule at Appendix A for a list of all proposed tree works 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.
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. No excavation works within tree RPAs are permitted to install temporary services for site cabins and facilities. Any temporary services within tree RPAs must be above ground and protected accordingly. No operating generators or toxic liquids will be stored within the RPAs of retained trees during construction. Overhanging tree canopies must be taken into consideration when transporting, installing and removing site cabins near tree crowns. A banksman will be present during this process to ensure that all operations are carried out in a controlled manner and no part of the cabin meets overhanging tree crowns.
Landscape Operations	All landscape operations within the protected area will be carried out by hand, using hand tools only, unless otherwise agreed with by the arboricultural consultant.

This report was prepared by:

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Yours in Conservation,
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