Residential Development at Former Teagasc Lands, Kinsealy, County Dublin

Ronan Mac Diarmada & Associates

Landscape Architects & Consultants

TREE RETENTION REPORT

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1. SITE CONTEXT

Site Location





Gross Site Area c.8.2 ha

School Site

The proposed development consists of the demolition of existing buildings and structures on a site associated with the former Teagasc Research Centre, and the construction of 193 no. residential dwellings comprising 153 no. two storey houses (consisting of 30 no. two-bed; and 123 no. three-bed terraced houses) and 40 no. duplex units (comprising 20 no. two-bed ground floor apartments with 20 no. three-bed duplexes above) arranged in three storey blocks.

The proposed development includes a single storey childcare facility (approx. 283 sqm gross floor area) with the capacity for approximately 50 children.





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Existing Vegetation







Subject Lands



Existing Trees

2. ARBORICULTURAL IMPACT

Tree Removal Overview



EXISTING TREES



Within the overall site area, the trees have been tagged with the reference numbers 1774-1964 & 1982-1990 with three tree lines, three woodland blocks, four tree groups, two shrub borders and ten hedges numbered numerically.



REMOVAL TREES

162no.

A total of 162 trees are slated for removal to accommodate the proposed development and as part of active management.

Tree Canopy Enhancement



RETAINED TREES

38no. (within redline)

A total of 38 trees are set to be preserved on-site.



proposed trees 612no.

The site proposes a total of 612 trees, significantly surpassing the current tree count on-site. Street Trees / Front Garden 1 Tilia Tomentosa 'Brabant' Pyrus calleryana 'Chanticleer' Carpinus betulus 'Fastigiata' Sorbus aucuparia Tilia cordata 'Greenspire'

Open Space 14-16cm / 20-25

Betula pendula Pinus sylvestris Alnus glutinosa Quercus robur 'Koster' Quercus robur





14-16cm ,	Aesculus hippocastanum Fagus sylvatica Prunus avium
	Front Garden 12-14cm Amelanchier lamarckii
5cm	Mulitstemmed Trees 4 stem min. 250-400cm Prunus avium 'Plena' Malus 'John Downie'^ Betula utilis var. jaquemonti

Existing Trees to be Replanted



Additional existing trees, including pioneer species, have been selected for retention. These trees will be transplanted onto the existing mounding on the site's eastern boundary.

This approach serves multiple benefits: preserving mature trees and their established canopy significantly enhances the site's biodiversity by supporting local flora and fauna. Additionally, retaining these trees minimizes the ecological impact of the site development by maintaining natural vegetation and stabilizing the landscape.







Subject Lands

Trees to be selected for nursery ≈3600m²

Pioneer Trees ≈3600m²

Mounding: location for trees to be planted

Tree Canopy Statement







5626 sq.m

A total of 38 trees are set to be preserved on-site.

These selected trees have been carefully chosen based on their robust health, contribution to local biodiversity, and alignment with the overarching landscape design strategy.

The layout of the proposed development has been shaped by the intention to preserve key trees that serve as prominent focal points and essential elements in the landscape design.

PROPOSED CANOPY

2260 SQ.M (AFTER 6YEARS)

A total of 612 trees are proposed, significantly surpassing the current tree count on-site.

The envisioned tree planting scheme prioritizes biodiversity, incorporating native species and those that resonate with the existing landscape character to enhance the ecological richness of the area.



CANOPY LOSS 7619 sq.m

A total of 162 trees are slated for removal, many due to their poor condition and quality, along with 3 Tree Lines, 1 Tree Groups, 4 Hedges, 4 Shrub Borders, and 3 Woodland Blocks.

Removing trees in strategic locations is essential to meet the project's objectives while preserving the integrity of the site's landscape. Other trees that do not align with the desired aesthetic or functional aspects of the landscape plan have been selectively removed to ensure a cohesive and visually pleasing design scheme. A very limited number of high quality mature trees are proposed for removal to accommodate essential infrastructure. A significant portion of the canopy loss can be attributed to the removal of trees that do not contribute positively to biodiversity, are not suited to a residential development context, or are non-native species.

Arboricultural Impact

Proposed Miyawaki Forest Planting



The Miyawaki Mini Forest Method







Miyawaki mini-forest locations

The Miyawaki Method is a reforestation technique that involves planting a diverse mixture of native tree species in a small area, closely packed together to mimic the natural density and biodiversity of a forest. The method aims to accelerate the growth of a dense, native forest in a short period, typically within 20 to 30 years, compared to the decades or centuries required for traditional reforestation techniques. This technique is known for its ability to restore degraded land, improve soil quality, increase biodiversity, and mitigate climate change by sequestering carbon dioxide. It has gained popularity worldwide as an efficient and sustainable approach to ecological restoration and urban greening.





Arboricultural Impact

Proposed Trees



Betula jacquemontii multi stem



Malus domestica



Pinus sylvestris



Proposed Trees Planting Location



Amelanchier lamerkii



Prunus domestica









Prunus avium

Sorbus aucuparia

Quercus robur





Fagus sylvatica



MULTIDISCIPLINARY DESIGN TEAM



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