# Proposed Residential Development at Boreen Bradach, Kinnegad, Co, Westmeath

# **Landscape Design Rationale**



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# **Existing Site Conditions**

#### Introduction

The Landscape Design strategy for this development at Boreen Bradach Kinnegad, Co. Westmeath is to create a scheme with a strong 'genius loci' that compliments the architectural structures while also integrating the development into the surrounding environment and landscape.

The landscape design aims to create a new setting with a unique and distinctive aesthetic with a strong sense of place that will offer a quality amenity and environment.

The landscape design aims to create a high quality scheme with good pedestrian and cycle connections with existing and future environs, a series of spaces that provide for passive and active recreation.

The overall site is 4.279ha in area.

The site is irregular in shape comprised of three fields.

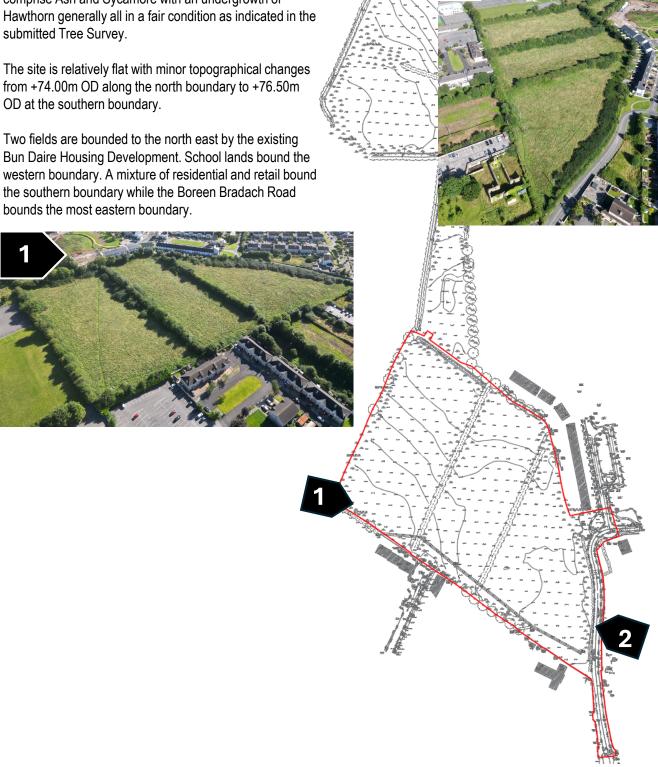


#### **Overview**

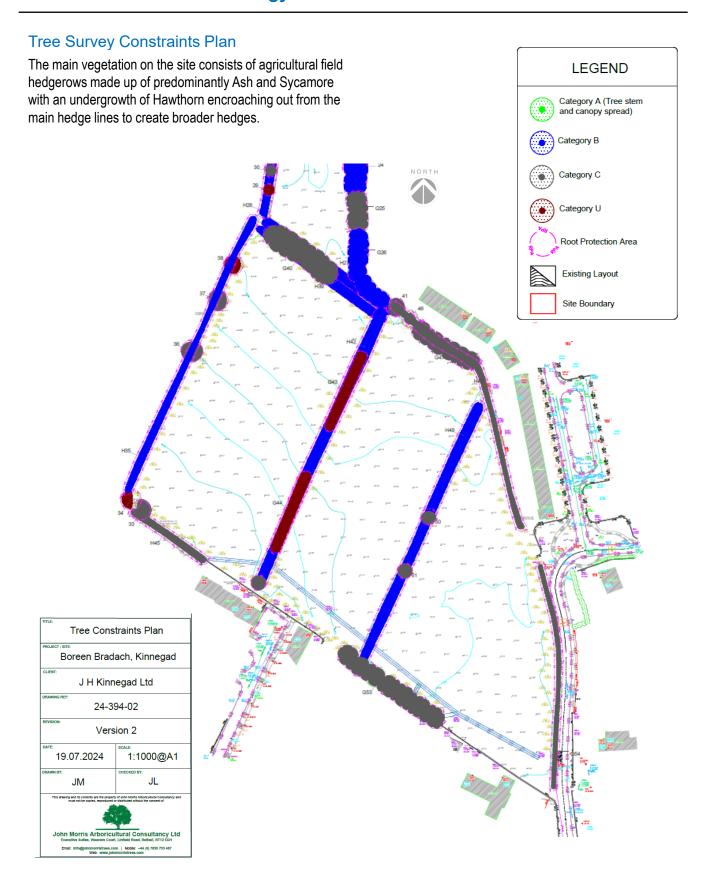
#### Site Description

The site of the proposed development is located north of the main urban centre of Kinnegad town accessed from from L-5014 (Boreen Bradach Road).

The site comprises three fields and old agricultural hedgerows bounding all sides. Hedgerows predominantly comprise Ash and Sycamore with an undergrowth of Hawthorn generally all in a fair condition as indicated in the submitted Tree Survey.



# **Green Infrastructure Strategy**

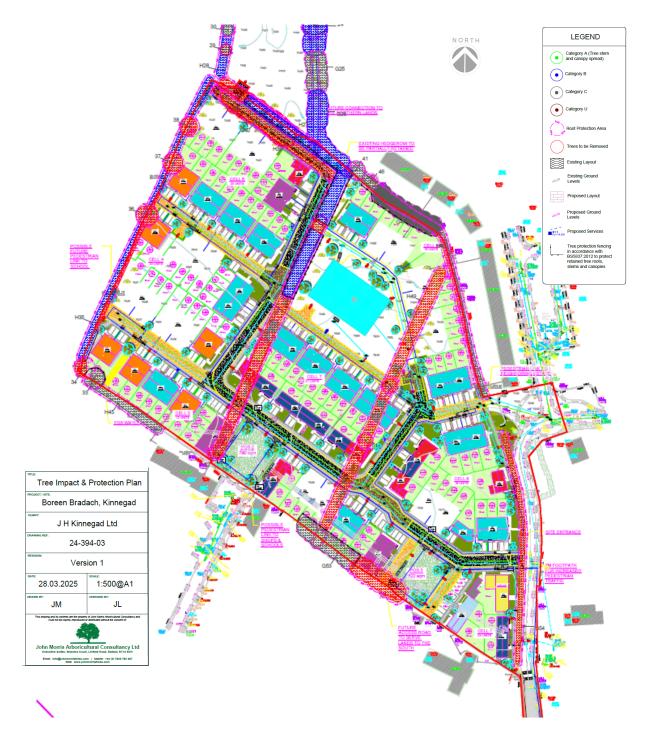


## **Green Infrastructure Strategy**

#### Tree Impacts Plan

To facilitate the proposed development or as part of management, it will be necessary to remove the vegetation as indicated on the submitted Tree Impacts Plan.

The loss of vegetation is to be mitigated within the landscaping of this completed development which will see new trees, hedges and shrubs planted using a mix of species and sizes to complement this development, the change in land use and secure the tree cover for the future.



# **Green Infrastructure Strategy**

#### **Green Infrastructure Gains**

While it is proposed to remove some sections of hedgerows to facilitate proposed development, the overall emphasis will be to maintain, enhance and manage sustainable hedgerow systems in the context of new site use. To ensure green infrastructure connectivity, new tree and hedgerow planting will create the linkages to existing hedgerows.

The summary tables below provide analysis of retention, removals and new planting for the proposed development.

#### **HEDGEROW SUMMARY TABLE**

Description	Linear M	
Total Hedgerows within Application Boundary	964	
Hedgerows Removed due to Site Constraints	548	
Hedgerows Retained and Protected	416	
New Native Hedgerows to be Planted in open spaces	88	
New Native Hedgerows to be planted in front gardens	488	
Hedgerow Planting Net Gain	28	

#### TREE SUMMARY TABLE

Description	Quantity
Total Trees within Application Boundary	10
Trees Removed due to Current Condition	1
Trees Removed due to Site Constraints	6
Trees Retained and Protected	3
New Trees to be Planted	111
Total Trees to be Removed	7
Tree Planting Net Gain	104

## **Project Layout**

#### **Proposed Development**

The development will comprise a Large-Scale Residential Development (LRD) on a site at Boreen Bradach, Kinnegad, Co. Westmeath.

The proposed development will comprise 129 no. houses (1 bed, 2 beds, 3 beds and 4 beds) and the provision of a crèche facility. Provision of car, cycle and motorbike parking. Provision of a new vehicular access and additional pedestrian/cyclist access from L-5014 (Boreen Bradach Road) and associated upgrades to the local road. All associated site development works and services provision, bin stores, residential private open space, public open space, substation, boundary treatments, landscaping and all associated site development works.



## **Landscape Design Strategy**

#### Landscape Design Approach

The landscape design has evolved from a series of practical considerations and needs stemming from the end users of the development, the daily management and accessibility taking into account relevant building regulations.

While being close to Kinnegad town centre, the rural environs plays a key role in the selection of planting species.

The design approach is to retain trees and hedgerows where possible and sustainable. Some lengths of internal and perimeter hedgerows will be removed to facilitate vehicular and pedestrian connections. Substitute planting comprising over 111 new trees and 576 linear metres of new mixed species native hedgerow will be put in place to mitigate loss of existing trees and hedgerows and comprise native and pollinating species.

Ensuring universal access / accessibility for all is a primary consideration in the design approach addressing the passive and active needs of the residents in order to promote social interaction and create a sustainable community.



# **SuDS & Surface Water Drainage Strategy**

#### Sustainable Urban Drainage Systems

The surface water drainage strategy is designed in collaboration with ORS Engineers to ensure that surface runoff utilises nature-based solutions intending to improve surface water management.

The choice of landscaped features is guided by the infiltration conditions of the site and incorporates permeable paving within the private parking areas and grass swales in the central open space areas.



## **Open Space Hierarchy**

#### **Open Space Strategy**

The hierarchy of open space is defined by the quality and quantity of functions presented in each area of open space and indicates the landscape structure of the site and functionality of spaces at a higher level.

Primary open space is determined by the variety of functions and provision of activities.

Conversely secondary open spaces present a single function and may provide less significant activities for residents.

Primary open spaces are designed with opportunities for natural play including kickabout space and natural features such as boulders and old tree stumps and logs.

In developing the functionality of spaces, access and circulation play an important role in their distribution and purpose. The arrangement of well serviced open space is developed in conjunction with pedestrian access and hierarchy of open spaces. Pedestrian circulatory routes link to open spaces and to future potential linkages to adjoining lands.















## **Vegetative Typologies**

#### Large/Parkland Trees



Aesculus hippocastanum



Fagus sylvatica



Pyrus 'Chanticleer'



Pinus sylvestris

#### **Street Trees**



Crataegus 'Stricta'



Acer 'Elsrijk'



Betula pendula



Sorbus 'Sheerwater Seedling'

#### **Small to Medium Trees**



Prunus avium



Malus sylvestris



Corylus avellana

#### **New Tree Planting**

A total of 111 new trees are to be planed throughout the site, comprising a number of native and pollinating species. Proposed tree planting will improve the diversity of tree planting in the landscape.

Green infrastructure and biodiversity play a major role in the public realm strategy. Native tree planting in combination with the augmentation of all existing public realm hedgerows will provide enhanced linkages or corridors for wildlife in the area.

The proposed tree species are selected for longevity, suitability to local soil conditions and microclimate, biodiversity (native species) and where requires suitability to close proximity to residential buildings.

Proposed tree sizes will be planted in a range of sizes to ensure maturity at different times.

Additionally, improved biodiversity is proposed to be achieved by the planting of pollinator friendly species. Tree species have been specified in accordance with the *All Ireland Pollinator Plan* (2015-2020).

## **Vegetative Typologies**

# Hedge, Shrub, Bioretention, Groundcover and Bulb Planting

Native hedgerow planting is primarily used along the boundaries of public open space where it is provided within the space to establish and grow, augmenting existing vegetation in these areas. An evergreen mixed hedgerow of hazel and holly planting is utilised to define and reinforce sub-spaces within the streetscape environment.

The lower shrub layer of planting includes pollinator friendly species providing year round interest and biodiversity around buildings and within dwelling curtilages creating vegetative buffers for privacy and shelter to adjoining residences.





Wildflower meadows to the outer edge of lawn areas will be established where frequent mowing of grass will not be required. Re-used cut logs from the felling will be incorporated into the space as natural play elements.









## **Materials Palette**



Driveways -Permeable paving



Public open space tarmacadam path



Public open space concrete path



Picnic seating



Composite Age Friendly Seating



Informal Precast Concrete Seating

## **Local Authority Opinion & Response**

#### LRD24-03-S2: Written Opinion

6. Design and Layout

Design proposal should provide for the following:

iv. Revised boundary treatment plan to be superimposed onto landscape plan delineating high quality boundary treatment to front and side of all dwellings.

Response: The landscape plan is now shown on the Boundary Treatment Plan, Drawing No. 05 and clearly shows the extent and type of proposed boundary treatments including 1200mm high railing and hedgerow planting delineating front of dwellings and 2000mm high Brick walls delineating side of dwellings.

v. Provision of a defensive space around the curtilage of all residential units to be defined with appropriate boundary treatment.

Response: Front curtilage of all units comprises a vegetative buffer of hedgerow and low-level planting providing definition to each space and seasonal interest throughout the year.

