van Dijk Architects

Tyrrells Land,

Stradbally Road,
Portlaoise, Co. Laois

Architectural Design Statement

August 2025

van Dijk Architects
Mill House, Mill Street,
Dundalk, Co. Louth A91 XTF7
042-9354466

Contents

This architectural design statement has been prepared by Van Dijk Architects for a proposed residential development located at Tyrrells Land, Stradbally Road, Portlaoise, Co. Laois.

This Design Statement is prepared in accordance with Laois County Development Plan (2021-2027) and in compliance with relevant national and local design criteria and development standards. It provides details of the site analysis, design principles and strategy, and compliance with the 12 criteria described by the Urban Design Manual - A Best Practice Guide (Department of Environment, Heritage and Local Government 2009).

The scheme has been designed by a multi disciplinary team and consideration has been given to delivering a sustainable, efficient and attractive neighbourhood.

Development Team

Client: Laois County Council

Architect: vanDijk Architects

Civil/Structural Engineer: Hayes Higgins Partnership

M&E Engineer & Sustainability: Hayes Higgins Partnership

Quantity Surveyor: McGahon Surveyors

Disclaimer
The diagrams and images presented in this report are intended for illustrative purposes only. For more detailed information, please consult the accompanying drawing package and particulars.

1.0 Introduction

1.0 Introduction

The Architectural Design Statement provides a comprehensive evaluation of this development proposal. The analysis focuses on understanding the site's potential and challenges, and demonstrates how it is an ideal setting for residential growth.

The analysis examines the site's physical characteristics, including its topography, ecology, and access to infrastructure, to demonstrate the factors that have influenced our decision making in the preliminary designs. Through examination of these various aspects, the emerging proposal creates a development which aims to enhance the local character and context, while meeting the growing demand for housing in the area.

The proposed new development will provide a vibrant and sustainable urban neighbourhood with a total of 67no. residential units. The proposal also includes the provision of public open space, car parking, upgraded vehicular access, all associated ancillary works including site development works, and hard and soft landscaping.

The proposed unit mix is as follows;

6 no. 1B-2P (9%)

5 no. 2B-3P (8%)

17 no. 2B -4P (25%)

35 no.3B-5P (52%)

4 no. 4B-7P (6%)

Houses

Detached House	8	(12%)
Semi Detached House	22	(33%)
Terrace House	16	(24%)

Total **46** Houses (69%)

Apartments

Total **21** Apartments (31%)

Total 67 Units

2.0 Site

The proposed 2.80H a (1.99 Residential Zone) site is situated along the Stradbally Road in Portlaoise, Co. Laois, and occupies a strategic and accessible location that holds both historical significance and development potential.

Nestled within the heart of Portlaoise, the site enjoys the mix of urban convenience and rural tranquility. The location is characterised by its close proximity to key amenities and services, rendering it an ideal setting for social and affordable housing. A short distance away, the vibrant town centre of Portlaoise offers a range of shops, restaurants, cultural venues, and medical facilities, catering to the diverse needs of residents.

The site's geographical advantages extend beyond immediate urban amenities. It benefits from excellent transport connections, being conveniently located near major roadways and public transportation networks. The Stradbally Road, ensures good connectivity. Additionally, the presence of nearby bus stops and rail links facilitates efficient commuting, contributing to a well-connected lifestyle for residents.

Despite its urban accessibility, the location maintains a sense of serenity through its surroundings. Nestled amidst lush greenery and tranquil landscapes, Tyrrells Land presents an opportunity to strike a balance between modern urban living and a connection to nature. The nearby open spaces provide avenues for leisure activities, recreation, and community engagement, reinforcing the development's holistic approach to social and affordable housing.

Historically, Portlaoise holds cultural significance, and the location of Tyrrells Land is no exception. It pays homage to the town's heritage while embracing its contemporary evolution. The site's strategic positioning respects the town's historical context while contributing to its future growth and development.

Tyrrells Land, located on the Stradbally Road in Portlaoise, Co. Laois, encapsulates the essence of convenience, connectivity, and community. Its proximity to urban amenities, seamless transport links, and harmonious coexistence with nature underscores its potential as an ideal location for the envisioned social and affordable housing development.

Site Location Map with the site outlined in red

Zoning

The designation of Tyrrells Land as Residential 2 within the Portlaoise Local Area Plan 2021—2027 allows the opportunity for the evolution of the urban landscape.

Residential 2 zoning embodies a multifaceted vision for the land, one that combines the need for housing with a harmonious integration into the existing urban fabric. The classification lays the groundwork for the creation of a diverse range of housing units that cater to the needs of various demographics, including social housing.

By allowing for a mix of dwelling types and sizes, Residential 2 zoning encourages an inclusive community where individuals and families of varying backgrounds can thrive. The zoning designation also aligns with the broader objectives of the Portlaoise Local Area Plan, which aims to cultivate vibrant neighborhoods characterized by accessibility, connectivity, and a high quality of life. The Residential 2 classification is an acknowledgment of the strategic location of Tyrrells Land and its potential to contribute to the town's growth while enhancing the overall living experience for residents.

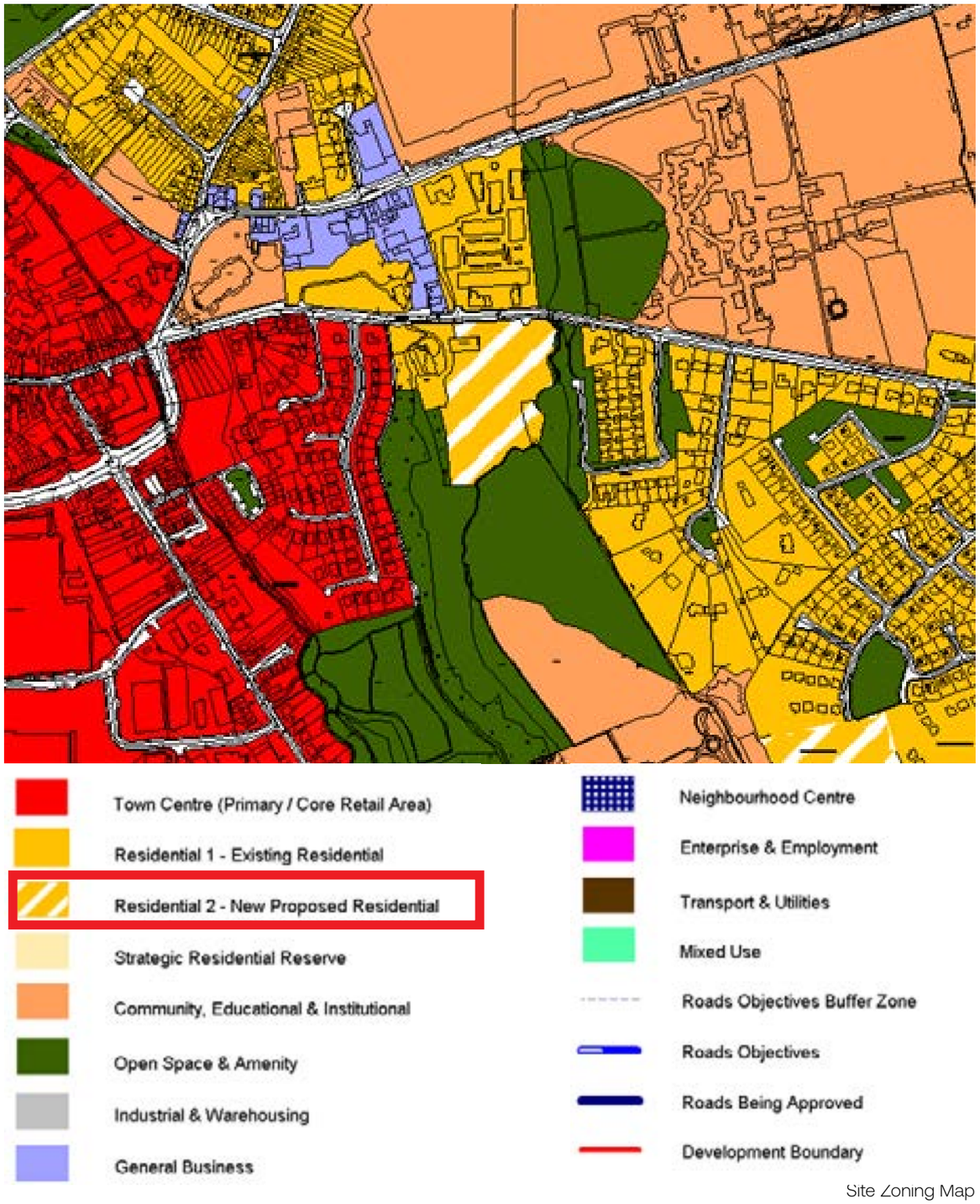
SITE REQUIREMENTS

10% Open Space

Required Density = 35 UPH

2 No. Car Spaces Per House
1.26 - 2 No. Car Spaces Per Apt.
1 No. Bicycle Spaces Per Bedroom.
+ Visitor Spaces

APPROPRIATE HOUSING MIX



Site Zoning Map

2021 Proposal

The 26 acre parkland site off the N80 Stradbally Road was bought by Laois County Council for €1.4 million in 2019.

The council first revealed plans to build 87 high density homes, in blocks up to five storeys tall, as well as some terraced town houses town houses. The plans went on public display autumn 2021, but councillors opposed all four and five storey blocks and urged a redesign.
Sinn Féin Cllr Caroline Dwane Stanley says it is a “a lost opportunity” to build family homes.
“It is a complete and utter lost opportunity for young families looking to get onto the property ladder. I and my party have been pushing affordable and cost rental and social homes. This is just a glorification of apartments, like something you’d see in Disneyland,” she said.
Cllr Caroline Dwane Stanley said that she had requested a mix also of cost rental, affordable to purchase and social homes.

“I was at a meeting recently with Clúid. One thing that came out of it is their concern at the rollout of cost rental outside Dublin. It is not feasible outside Dublin. Government policy needs to have a look at that. Clúid say clearly that they don’t see cost rental being a runner,”

The new proposed density level and hosuing mix needs to be considered in the context of this previous proposal and the response of the public consultation.

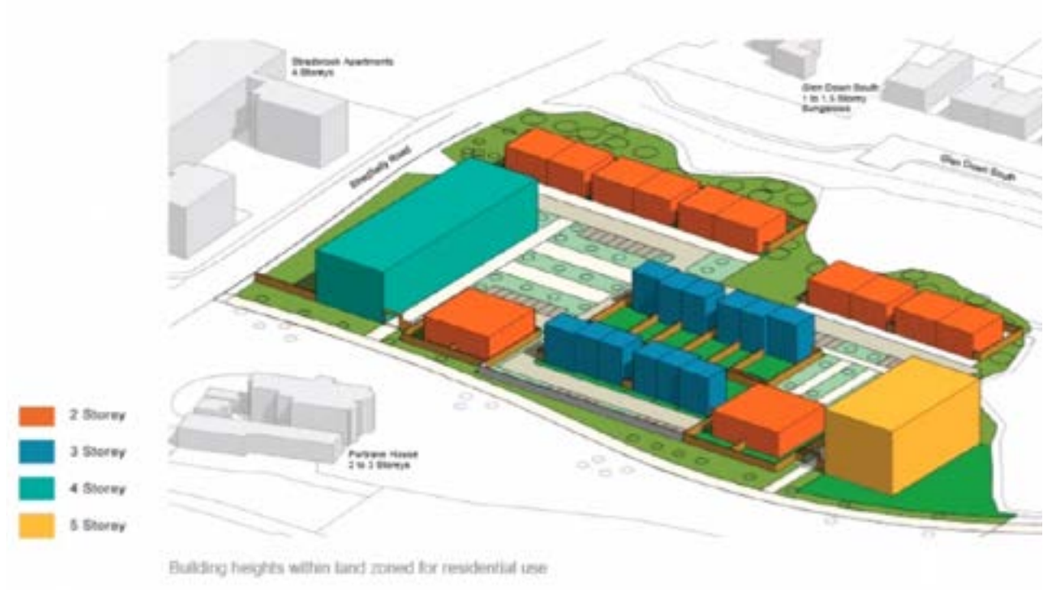
Colour coded masterplan indicating house types, main entrances and views from habitable rooms

Housing Layout

- 1 bed apartments– 10 units (11.5 %)
- 2 bed apartments - 37 units (42.5%)
- 1 bed duplexes– 10 units (11.5 %)
- 2 bed duplexes - 18 units (21%)
- 2 bed terraces/terraced cottages – 8 units (9%)
- 3 bed town houses – 4 units (4.5%)

KEY

- 1 & 2 Bed Apartments
- 2 Duplexes
- 1 & 2 Duplexes
- 2 Bed Townhouses
- 3 Bed Townhouses
- Active Frontages



Building heights within land zoned for residential use

Site Zoning Map

2.0 Site

The site is very well located in relation to public transport., healthcare, education, shopping and other amenities.

Given these factors, the site location presents an attractive opportunity for residential development combining accessibility, natural landscape, and historical significance.

The map to the right sets out key locations and demonstrates the site's proximity to the urban centre.

Key

1. Laois Shopping Centre
2. Portlaoise Train Station
3. Portlaoise Leisure Centre
4. St Fintans Hospital
5. St Francis School
6. Gaelscoil Phortlaoise
7. Portlaoise Educate Together
8. Holy Family Catholic Senior School
9. Midland Regional Hospital
10. Market Square

SUN PATH & WIND DIRECTION

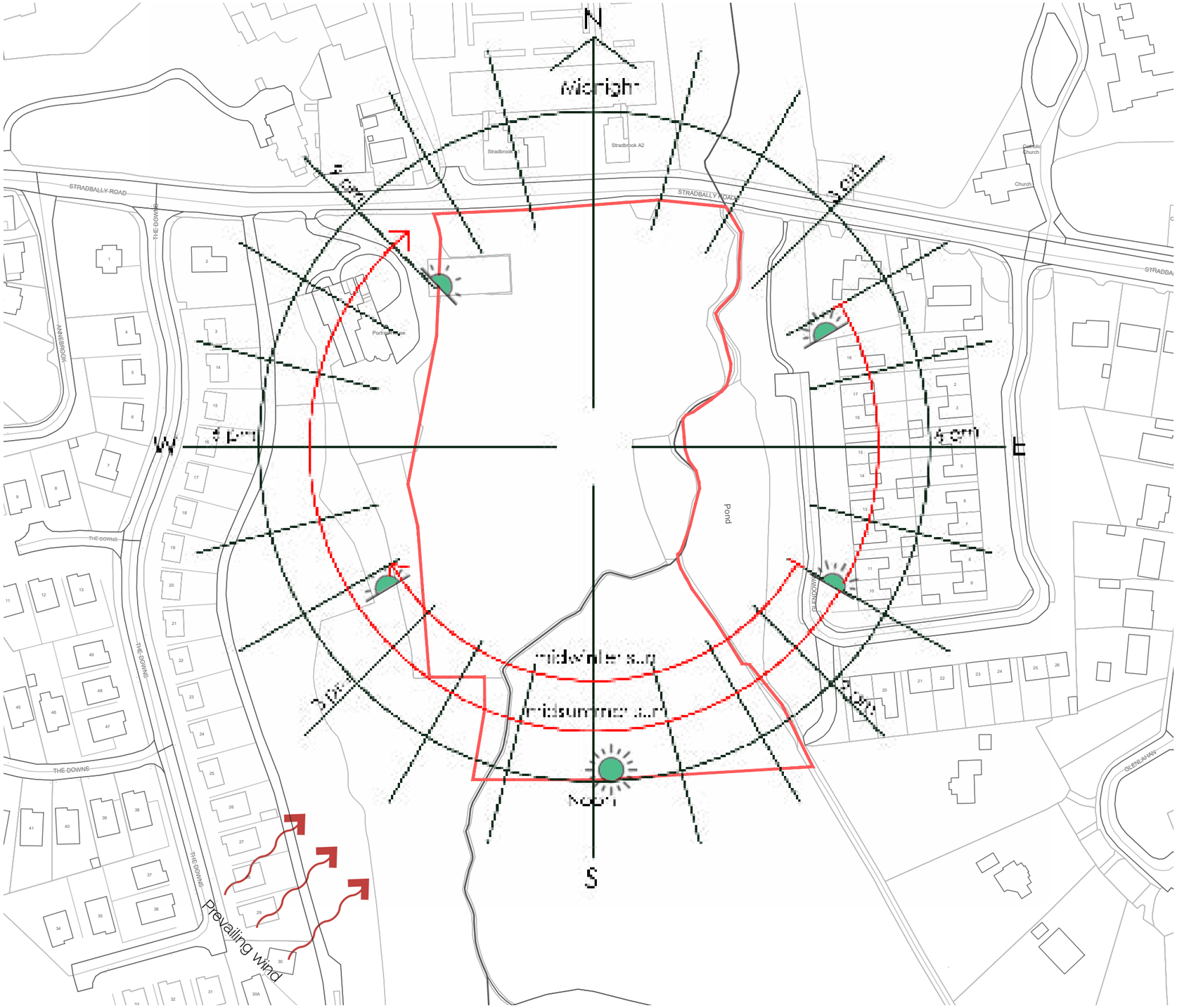
The orientation of dwellings should consider prevailing winds, views, and the sun's path throughout the year. The diagram on the right overlays the site's sun path at various times of the year, offering valuable insights into how sunlight interacts with the site.

Proper orientation is essential in the siting of houses to maximise energy conservation. Aligning dwellings to optimise solar gain, particularly on southern elevations, can reduce heating costs and enhance natural light, thereby reducing the reliance on artificial lighting and heating systems.

Moreover, the solid-to-void ratio on northern elevations must be carefully considered, as these areas receive limited solar gain. Minimising window openings on the northern side helps reduce heat loss, while maximising glazing on the southern side can capture more solar energy during the winter months.

Additionally, thoughtful orientation can also harness natural ventilation by positioning windows and openings to catch prevailing winds, reducing the need for cooling.

By addressing these factors, the overall energy efficiency of the dwellings is improved, creating more comfortable living spaces and contributing to long-term sustainability. A well-considered orientation also enhances the residents' connection to their surroundings, providing better views and fostering a stronger relationship with the outdoor environment.



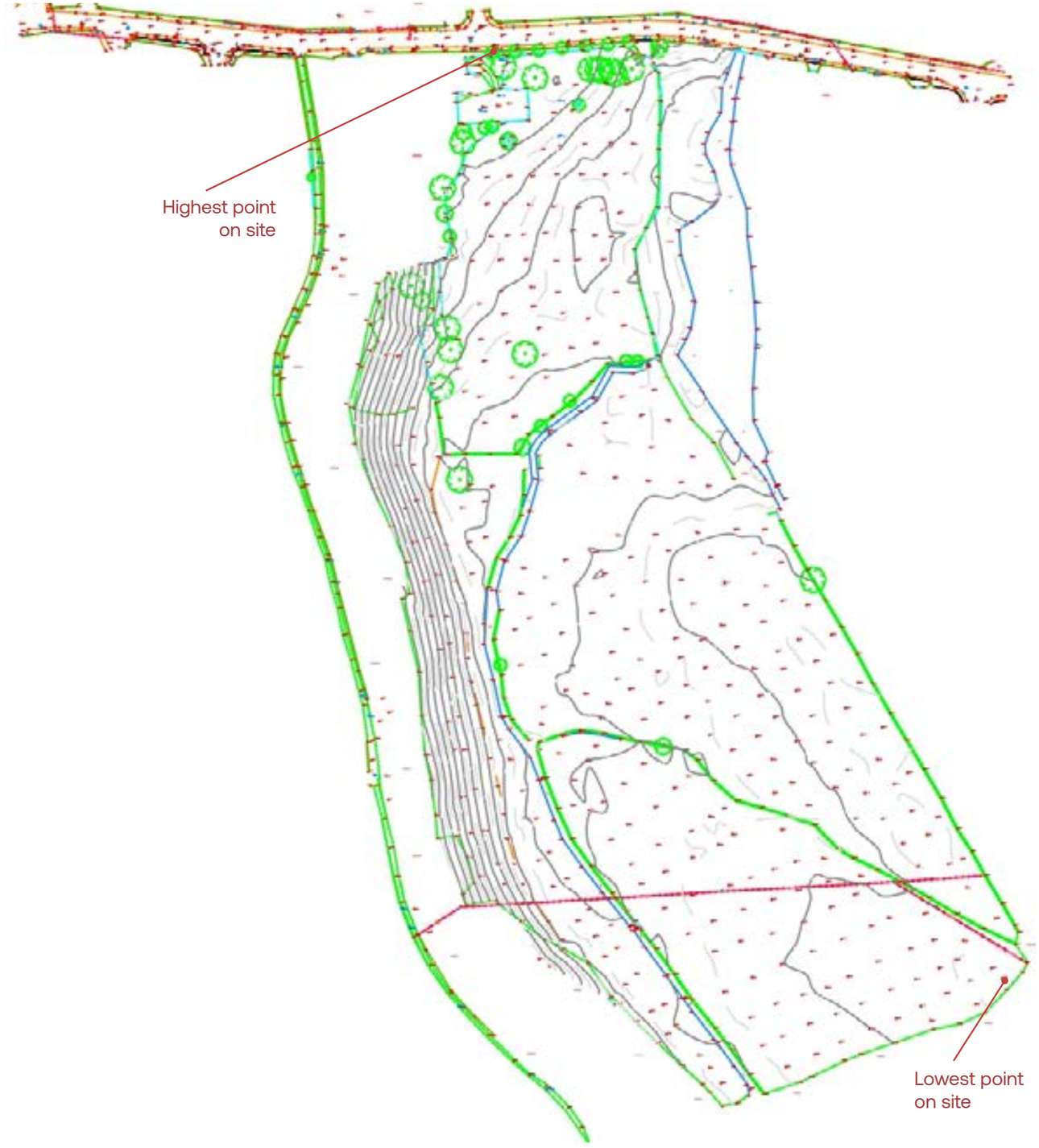
Topological Survey

A number of typographical survey was carried out as part of to determine the levels of the site, which presented challenges due to its overgrown nature.

The existing area of the site zoned for housing has a average fall of around 1.5m from north to south and a fall of around 4m west to east at the northern part of the site and around 5m towards the south of the site.

There is a pound to the east of the site, hence the fall towards it and a small stream which crosses the south section of the site at the end of the zone designated for housing.

Site Entrance




1


2


3


4


5


6


1
2
3
5
4
6

The site boasts a variety of ecological features that contribute to the area's natural richness and environmental value. These features reflect the site's biodiversity, landscape diversity, and potential for sustainable development.

Potential for Biodiversity Enhancement: As part of a sustainable development approach, efforts can be made to enhance the existing biodiversity. This could involve planting native species, creating wildlife corridors, and integrating wildlife-friendly landscaping into the design.

Trees and Woodlands: Established trees and woodlands contribute significantly to the ecological health of the site. They provide shade, oxygen, and habitat for various species, including birds and insects.

Wildlife Habitat Preservation: The site may serve as habitat for various species, including birds, insects, and small mammals. During development, efforts should be made to minimize disruption to these habitats and provide alternatives if necessary.

Landscaping and Green Infrastructure: A thoughtful landscaping approach can promote ecological balance by incorporating native plants, creating wildlife-friendly habitats, and maximizing green spaces within the development.

Assessment of Likely Effects Potential impacts on Natura 2000 sites from the proposed development are not anticipated but a stage two assessment has been completed to ensure no negative impact on the Natura sites is anticipated.

TOBIN Consulting Engineers were appointed by Laois County Council in August 2023 to undertake a Flood Risk Assessment (FRA).

The Planning System and Flood Risk Management Guidelines state that residential developments are appropriate within Flood Zone C, i.e., not liable to flooding during a 1-in- 1,000-year event.

Fluvial Flooding

To fully understand the extent of flooding at the subject site a site-specific hydraulic model was prepared for the subject site. The site-specific hydraulic model showed that portions of the subject site are predicted to be liable to flooding during the 1 in 1,000- year MRFS flood event. Residential developments are defined as highly vulnerable in terms of their sensitivity to flooding and should be located in Flood Zone C.
If the proposed development is designed to a minimum FFL of 96.4mOD, and the sequential approach is taken by locating residential units outside the flood zone, it is anticipated that the fluvial flood risk to the proposed development is minimal, with minimal pre work floodwater encroachment predicted at the subject site.

However, the proposed site layout proposes residential buildings within the predicted flood zone. As such, the site has been assessed against the criteria of the Justification Test. The minimum FFL of the dwellings across the subject site is agreed to be at minimum 96.95mOD. This agreed FFL will effectively raise the site out of the 0.1% AEP floodplain, providing a freeboard of 0.86m. On this basis it is assumed that residual risks to the site and to the proposed development during an extreme flood event can be managed to an acceptable level. It is estimated that a minimum of 376.1m3 of compensation storage will be required to ensure no impact to flood risk elsewhere. 400m3 of compensatory storage is included in the proposed site layout, to the south of the Maryborough drain.

It is proposed to reroute the Maryborough drain, which is denoted as an arterial drainage channel. Therefore, these works must be consented appropriately through the OPW Section 9 Application process.

Pluvial Flooding

There is no evidence to suggest that the subject site is at risk of pluvial flooding. There is one localised depression located within the subject site. However, this area will be removed as part of the proposed development.

Groundwater Flooding

There is no evidence to suggest groundwater as a potential source of flood risk to the subject site.

Coastal Flooding

The site is not at risk of coastal flooding due to its distance inland from coastal waters.

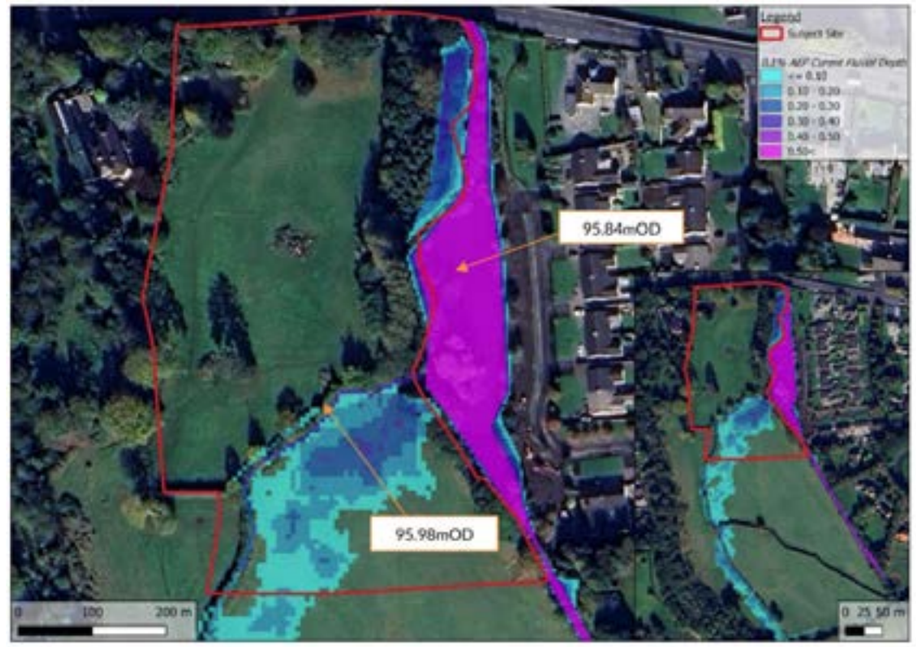


Figure 4-3 Predicted Flood Depth at Existing Site [1,000- year event without climate change]

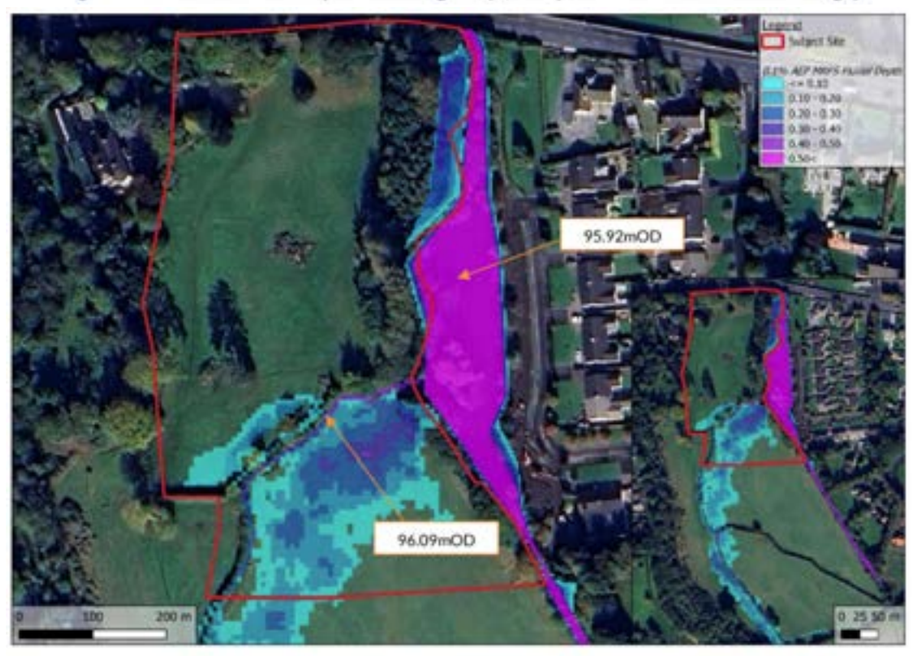


Figure 4-4 Predicted Flood Depths at Existing Site [1,000- year MRFS]

An assessment has been prepared on behalf of Laois County Council, by IAC Archaeology to study the impact, if any, on the archaeological and historical resource of the proposed residential development at Tyrrells Land, Stradbally Road, Portlaoise, Co. Laois. The proposed development area is located with former parkland associated with Portran House (now Portrane Veterinary Clinic) in the townlands of Borris Little and Beladd. The site comprises undeveloped fields of pasture, bordered by mature trees and a watercourse to the east. A townland boundary crosses the southern portion of the site. No recorded monuments are known within the proposed development area; however, the Zone of Archaeological Potential surrounding the historic town (LA013041) of Portlaoise (formerly Maryborough) is located c. 250m to the west.

Five further recorded monuments are known within the wider study area, of which the nearest are a church and graveyard (LA013-102, -102001) situated c. 360m to the northwest. No previous archaeological investigations have been carried out within the proposed development area. A review of the historic mapping did not reveal any features of previously unrecorded archaeological potential within the proposed development area. A large sunken rectangular feature (c. 18m x 37m) was observed as a crop mark in numerous aerial photos (1995-2022) in the centre west of the site. The function and date of this feature is uncertain, and while it may relate to modern land use (such as equestrian training) it may also have earlier origins. A field inspection confirmed a rectangular sunken area was evident at this location, although given the overgrown vegetation no definition of form was observed. The proposed development area comprises slightly undulating terrain, falling gently from the north and west towards the watercourse and body of water bordered by a copse of trees and scrub. The site is an undeveloped greenfield situated on the margins of a historic town bordered by a water course, and as such there is potential for previously unrecorded sub-surface archaeological remains to survive here. Water-side locations are considered to have archaeological potential as they were ideal settings for activities associated with exploitation of this resource throughout the prehistoric and historic periods.

IMPACT ASSESSMENT AND MITIGATION STRATEGY

Impacts can be identified from detailed information about a project, the nature of the area affected and the range of archaeological resources potentially affected. Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping; disturbance by vehicles working in unsuitable conditions; and burial of sites, limiting access for future archaeological investigation. Upstanding archaeology can be affected adversely by direct damage or destruction arising from development, from inadvertent damage arising from vibration, undermining etc. and also by indirect impacts to a building's visual setting, view or curtilage.

IMPACT ASSESSMENT

There are no recorded archaeological monuments within the proposed development area; however, the site comprises undeveloped greenfield on the margins of a historic town, bordered by a watercourse, and as such there is potential for previously unrecorded sub-surface archaeological remains to survive here. If present ground works associated with the proposed development may have a direct negative impact on any surviving archaeological remains.

MITIGATION

It is recommended that a programme of geophysical survey and targeted test trenching is carried out as a condition of planning to further investigate the archaeological potential of this site. If any features of archaeological potential are discovered during the course of the works further archaeological mitigation may be required, such as preservation in situ or by record. Any further mitigation will require approval from the National Monuments Service of the Department of Housing, Local Government and Heritage (DoHLGH).

Located just north east of the site is Portrane House. It is a detached five-bay two-storey former rectory, built c. 1800, with a three-bay two-storey wing with single-storey canted-bay window built c. 1890, front porch c. 1930, extension to north elevation c. 1980. There is a rear courtyard with range of two-storey outbuildings c.1800 enclosed to north by screen wall with tall stone archway opening. Set back from road in mature landscaped grounds. Hipped slate roofs with red brick chimney stacks having octagonal clay pots and clay ridge tiles. Bowed roof to south elevation.

Its substantial, well-proportioned early nineteenth-century house which retains its historic fabric and a good range of outbuildings. Located close to the town centre it once formed part of the historic ensemble of the former Maryborough Infirmary and St Fintan's hospital on Stradbally Road. The house is a key feature in the architectural landscape and makes a strong positive contribution to the special character of Portlaoise. Its is a protected structure (Reg no. 12507122) and must be considered to the proposal.

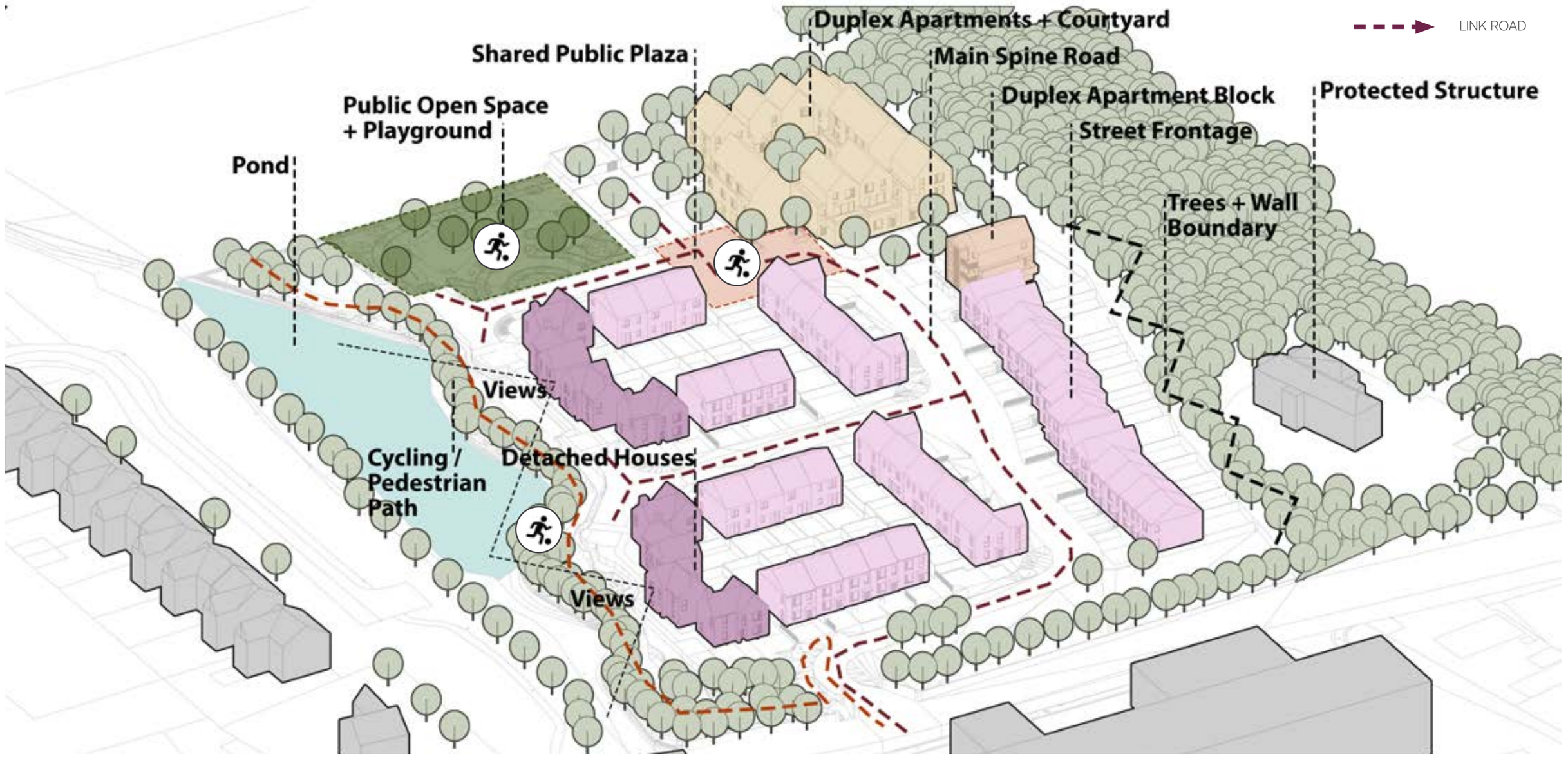
Survey Data

Reg No 12507122

KEY

Protected Structure

3.0 Design Strategy



The key Urban Design Principles for the site follow the established and best-practice principles of good, quality urban design;

- Connectivity within the new development and to existing residential neighbourhoods and parks.
- Distinctive character which creates a new sense of place and local identity. Variety in building height, form and materials.
- Landmark buildings in key locations, such as book end multi-unit buildings. These buildings will have their own identifiable materiality, creating a defined character area within the scheme.
- People-friendly public streets and spaces, with overlooked parks and plenty of ground level activity.
- Well defined boundaries between private terraces, semi-private courtyards and the public realm.
- A natural, landscaped buffer along the site and biodiversity in soft landscaping with an emphasis on sustainable native planting and pollinator-friendly species.
- Consideration of nearby protected structure
- Creation of public access routes along edge of the site to future park.

4.0 Design Proposal

Key Site Statistics

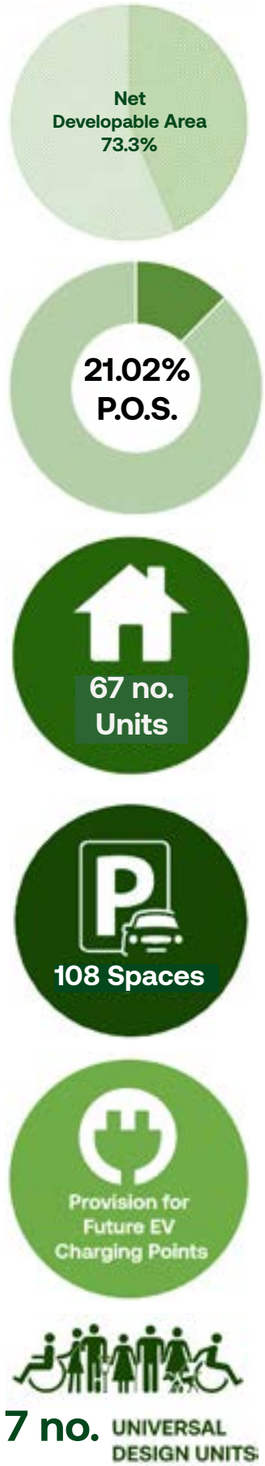
Site Area = 2.08Ha
Total Units = 67
Net Developable Area = 1.9Ha
POS = 0.47Ha (21.02%)

Net Density = 34 uph
Public Open Space @ 21.02%
Total = 0.47Ha

Other Statistics

Refuse Storage
Individual bin storage allocated to the rear of houses or when terraces to the front threshold. Apartment blocks have a series of communal bin stores.

Height & Massing
All houses are 2 storey pitched roof types. Duplex apartments are 3 storey also with pitched roofs.



Option 1 Site Layout

Schedule of Areas

Project: Tyrrells Land, Stradbally Rd, Portlaoise
Project No: 2302
Project Lead: Darryl Wylie

van Dijk Architects
Mill House, Mill Street, Dundalk, Co. Louth
+353 42 9354466
www.vandijkarchitects.com

Block	Unit No.	Unit Type	Description	Unit Type	Overall Floor Area sqm	Aggregate Floor Area of K/L/D	Aggregate Bedroom Floor Areas	Storage Space Area	Private Amenity Space Area	Dual Aspect
1	1	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	79	Y
	2	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	60	Y
	3	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	60	Y
	4	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	60	Y
	5	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	79	Y
2	6	D1.1	2 Storey 4 Bed Semi-Detached House	4 Bed 7 Person	125	40	47	7	65	Y
	7	E1.1	2 Storey 3 Bed Terrace House	3 Bed 5 Person	102	37	34	5	73	Y
	8	E1.1	2 Storey 3 Bed Terrace House	3 Bed 5 Person	102	37	34	5	74	Y
	9	E1.1	2 Storey 3 Bed Terrace House	3 Bed 5 Person	102	37	34	5	74	Y
	10	D1.1	2 Storey 4 Bed Semi-Detached House	4 Bed 7 Person	125	40	47	7	75	Y
3	11	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	79	Y
	12	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	60	Y
	13	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	60	Y
	14	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	79	Y
4	15	L1.2	2 Storey 3 Bed Detached House	3 Bed 5 Person	111	43	36	5	75	Y
	16	L2.2	2 Storey 3 Bed Detached House	3 Bed 5 Person	111	43	36	5	86	Y
	17	L2.1	2 Storey 3 Bed Detached House	3 Bed 5 Person	111	43	36	5	86	Y
	18	L1.1	2 Storey 3 Bed Detached House	3 Bed 5 Person	111	43	36	5	75	Y
5	19	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	79	Y
	20	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	61	Y
	21	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	62	Y
	22	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	84	Y
6	23	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	79	Y
	24	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	87	Y
7	25	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	81	Y
	26	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	61	Y
	27	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	75	Y
8	28	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	87	Y
	29	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	75	Y
	30	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	74	Y
9	31	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	92	Y
	32	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	85	Y
10	33	T1-A-GF	Triplex 2 Bed UD Apartment	2 Bed 3 Person	75	32	21	9	28	Y
	34	T1-B-FF	Triplex 2 Bed Apartment	2 Bed 4 Person	80	31	25	5	5	Y
	35	T1-C-SF	Triplex 2 Bed Apartment	2 Bed 4 Person	77	31	25	5	5	Y
11	36	D8-B1-GF	Duplex 2 Bed Apartment	2 Bed 3 Person	76	28	22	7	19	Y
	37	D8-Y1-FF	Duplex 3 Bed Apartment	3 Bed 5 Person	105	34	32	9	25	Y
	38	D15-A1-GF	Duplex 2 Bed Apartment	2 Bed 4 Person	75	31	25	7	8	Y
	39	D15-Y1-FF/SF	Duplex 3 Bed Apartment	3 Bed 5 Person	114	39	34	6	18	Y
	40	D15-A1-GF	Duplex 2 Bed Apartment	2 Bed 4 Person	75	31	25	7	8	Y
	41	D15-Y1-FF/SF	Duplex 3 Bed Apartment	3 Bed 5 Person	114	39	34	6	18	Y
	42	T2-A-GF	Triplex 2 Bed Apartment	2 Bed 3 Person	73	29	21	6	20	Y
	43	T2-B-FF	Triplex 2 Bed Apartment	2 Bed 4 Person	66	29	21	5	6	Y
	44	T2-C-SF	Triplex 2 Bed Apartment	1 Bed 2 Person	51	25	12	3	13	Y
	45	D7-A1-GF	Duplex 1 Bed Apartment	1 Bed 2 Person	55	23	14	5	14	y
	46	D7 B1-GF	Duplex 2 Bed Apartment	1 Bed 2 Person	51	25	11	3	6	Y
	47	D7 -A2-GF	Duplex 1 Bed Apartment	1 Bed 2 Person	54	23	12	5	15	Y
	48	D7-B2-FF	Duplex 1 Bed Apartment	1 Bed 2 Person	50	24	11	3	7	Y
	49	D8-B1-GF	Duplex 2 Bed Apartment	2 Bed 3 Person	76	28	22	7	19	Y
	50	D8-Y1-FF	Duplex 3 Bed Apartment	3 Bed 5 Person	105	34	32	9	25	Y
	51	T2-A-Gf	Triplex 2 Bed Apartment	2 Bed 3 Person	73	29	21	6	20	Y
	52	T2-B-FF	Triplex 2 Bed Apartment	2 Bed 4 Person	66	29	21	5	6	Y
	53	T2-C-SF	Triplex 2 Bed Apartment	1 Bed 2 Person	51	25	12	3	13	Y
12	54	L1.2	2 Storey 3 Bed Detached House	3 Bed 5 Person	111	43	36	5	76	Y
	55	L2.2	2 Storey 3 Bed Detached House	3 Bed 5 Person	111	43	36	5	103	Y
	56	L2.1	2 Storey 3 Bed Detached House	3 Bed 5 Person	111	43	36	5	103	Y
	57	L1.1	2 Storey 3 Bed Detached House	3 Bed 5 Person	111	43	36	5	75	Y
13	58	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	79	Y
	59	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	60	Y
	60	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	79	Y
14	61	D1.1	2 Storey 4 Bed Semi-Detached House	4 Bed 7 Person	125	40	47	7	65	Y
	62	E1.1	2 Storey 3 Bed Terrace House	3 Bed 5 Person	102	37	34	5	86	Y
	63	E1.1	2 Storey 3 Bed Terrace House	3 Bed 5 Person	102	37	34	5	86	Y
	64	D1.1	2 Storey 4 Bed Semi-Detached House	4 Bed 7 Person	125	40	47	7	75	Y
15	65	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	79	Y
	66	A1.1	2 Storey 2 Bed Terrace House	2 Bed 4 Person	95	34	28	6	60	Y
	67	B1.1	2 Storey 3 Bed Semi Deatched House	3 Bed 5 Person	99	34	32	6	79	Y

Project Summary	
Area of Site:	28044m2 / 2.80 Ha
Extent of Residential Zone	19995m2/ 1.99 Ha
Total Units:	
Unit Mix:	6 no. 1B-2P (9%)
	5 no. 2B-3P (8%)
	17 no. 2B -4P (25%)
	35 no.3B-5P (52%)
	4 no. 4B-7P (6%)
Site Density	34 Units / Ha
Open Space	4741m2 (>10% of Site Area)

The proposed scheme is predominantly low-rise, with the height and massing arranged to step gently with the site levels and the surrounding residential context.

The development is chiefly two-storey houses arranged in perimeter blocks and short terraces. A limited number of three-storey apartment buildings are located at the lower portion of the site, forming a defined edge and neighbourhood focus without dominating the wider scheme.

Scale & grain: modest plot widths and varied building lines create a fine residential grain, with occasional gables and bay elements to articulate corners and short vistas.

Roofscape: predominantly pitched roofs to reflect the local character; occasional feature gables used to mark junctions and greens.

Massing: compact, courtyard or L-shaped blocks that step in plan and section to break down perceived bulk, with recessed top floors and articulated entrances.

Placement rationale: set at the lowest part of the site to minimise visual impact, reinforce activity along primary routes, and provide passive surveillance to public spaces.

Transition & interfaces: A graduated height transition from 3 storeys at the bottom to 2 storeys across the wider site ensures no abrupt change in scale against existing neighbours.Setbacks, gable treatments and tree planting soften rear-to-rear relationships and protect residential amenity. Corner homes use dual-aspect elevations to turn streets and mark key nodes.

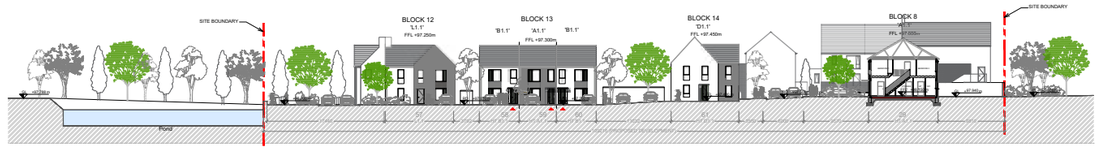
Streets & spaces: Building lines frame walkable streets and a series of pocket greens; apartment blocks address the most public frontages.

Key views terminate on articulated gables, landscape features or apartment entrances rather than blank façades.

Amenity & daylight: Block depth and spacing are set to secure good daylight/sunlight and outlook for dwellings; apartment blocks employ recessed top floors and varied façades to reduce overshadowing and apparent mass.

SITE STREET SECTION 1-1
Scale 1/250

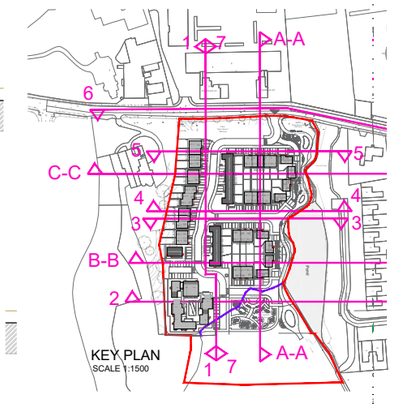
SITE STREET SECTION 2-2
Scale 1/250



SITE STREET SECTION 3-3
Scale 1/250

SITE STREET SECTION 4-4
Scale 1/250

SITE STREET SECTION 5-5
Scale 1/250



The layout, massing and boundary treatments have been developed to safeguard the special interest and setting of the protected structure in accordance with Part IV of the Planning and Development Act 2000 (as amended) and best-practice conservation guidance. The strategy prioritises visual separation and subdued massing near the curtilage.

New buildings within the closest approach zone step down with the fall of the site so ridge lines sit appreciably below parapet/eaves levels of the protected structure, maintaining a subordinate silhouette in key viewpoints from the curtilage and approach routes. Finished floor levels are calibrated to avoid excessive underbuilding and to keep overall height and bulk low at the shared boundary.

Units nearest the shared boundary are rear-facing away from the protected structure to minimise direct overlooking and visual competition. Private rear gardens form a soft buffer, with depth increased within the immediate setting to create breathing space between built forms.

A 2.1 m boundary wall provides a robust privacy and acoustic screen while avoiding visual overstatement. Where visible from the protected structure's curtilage, the wall is finished in a muted, locally appropriate render tone with a simple capped detail; piers are minimised to reduce visual clutter. The wall alignment respects existing mature vegetation and root protection areas (RPAs), with localised setbacks to avoid harm to significant trees/hedgerows.

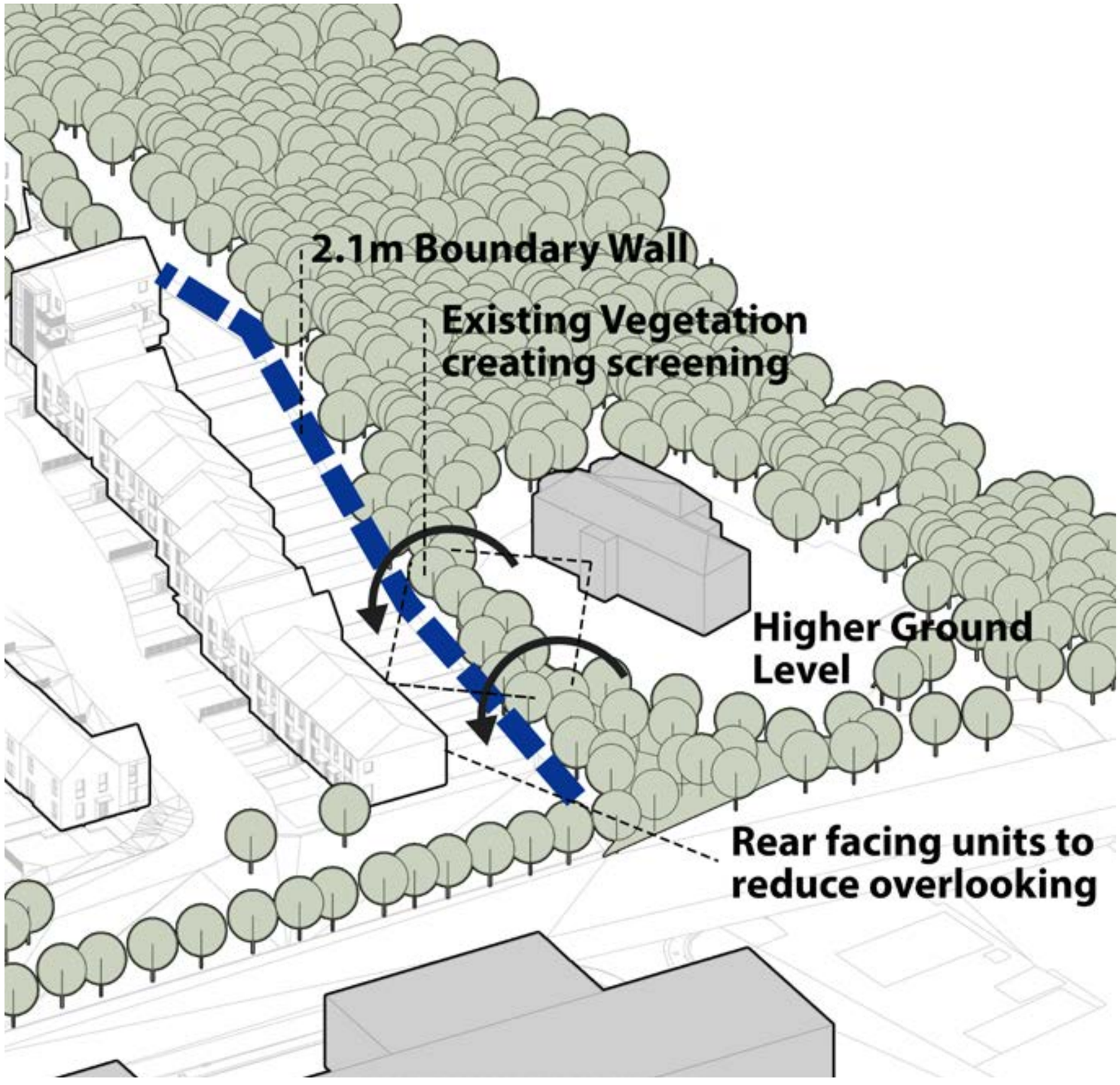
Existing trees and hedgerows along the common boundary are retained as primary screening. A tree survey informs protection measures (fencing to BS 5837 equivalents) during construction. Gaps in vegetation are supplemented with native, shade-tolerant understorey and semi-mature infill planting; species are selected to provide year-round filtration (deciduous structure with evergreen punctuation), avoiding dense evergreen belts that could appear artificial or harm biodiversity. Planting heights and spacing are coordinated with the 2.4 m wall to create layered screening: wall for immediate privacy; shrub/tree structure for medium- and long-term visual softening.

Building heights at the sensitive edge are limited to two storeys with shallow roof pitches; any taller elements are pulled back into the site to reduce cumulative mass near the boundary. Materials are recessive and matte—brick, render, and natural/slate-tone roofs—avoiding reflective finishes. Colourways are chosen to sit behind the protected structure in prominence and contrast. Detailing is simplified to prevent visual competition with the protected structure's finer architectural language.

Separation distances exceed local privacy standards at the sensitive edge; windows facing the boundary are controlled by orientation and cill heights. Garden levels are graded to avoid terraces or platforms that would create elevated overlooking toward the protected structure.

Vehicular routes and higher-intensity uses are pulled away from the boundary; the edge condition is pedestrian-dominant and low-activity.
External lighting is full cut-off, low-level and on curfew timers to protect the R

Through these measures the proposal preserves the structure's architectural and historic significance and delivers an appropriate, respectful interface between old and new.



DUPLEX COURTYARD

The proposed housing at Tyrrells Land is conceived as a contemporary interpretation of the traditional courtyard neighbourhood. The block is arranged around a central landscaped courtyard, which provides both a shared amenity space and a visual focus for the development. This inward-facing arrangement creates a sense of security, enclosure, and belonging, while still allowing for permeability and connection to the surrounding streets and the landscape beyond.

Each duplex unit benefits from own-door access, achieved through a system of shared external stairs and walkways. This approach avoids anonymous internal corridors, instead encouraging social interaction through visible, semi-public circulation spaces. These routes overlook the courtyard, enhancing passive surveillance and community safety while ensuring that each household retains a strong sense of identity and independence.

Variations in building height and roof form give the scheme a domestic scale, breaking down the mass of the block into smaller, more relatable elements. The use of pitched roofs in particular helps to echo the rhythms of surrounding residential typologies, creating a familiar silhouette that reinforces the idea of “home” rather than “institutional housing.”

The architecture draws on a mix of brick types and finishes, chosen to reflect both the site’s context and the desire for visual richness. Subtle variation in tone, texture, and detail creates depth and individuality across the facades, while still maintaining overall cohesion. This layered approach avoids monotony and ensures that the development feels crafted and characterful.

At the heart of the design is the courtyard, which acts as a communal garden and gathering space. It is designed to support a variety of uses, from informal play and neighbourly encounters to moments of quiet retreat. The combination of shared outdoor spaces, visible circulation routes, and active frontages generates a lively and inclusive community environment. Private amenity spaces are provided for each unit, while offering privacy also have a connection to the shared spaces. There is also a strong connection to the playspace and shared open space.

The duplex model itself supports diversity of household types, allowing for flexible living arrangements and a mix of residents. This diversity, combined with the emphasis on own-door access and domestic-scaled architecture, contributes to a strong sense of ownership, pride, and long-term sustainability of the community.

Overall, the design approach balances individual privacy with collective belonging, blending contemporary housing standards with the qualities of traditional neighbourhood-making. By integrating variation in form, rich materiality, and carefully considered shared spaces, the proposal seeks to create a development that is not only functional and efficient but also welcoming, enduring, and rooted in community values.

The materiality and detailing of the proposed development uses high quality materials, chosen for their robust and long lasting qualities. They work together to knit the development into the surrounding area with familiar textures that sometimes mimic the vernacular, but are executed in a way that presents as contemporary in nature.

The juxtaposition of black brick, buff brick, and white render forms a dynamic palette that captivates the eye and lends a timeless elegance to the development. Black brick, with its bold and distinctive character, serves as a grounding element, anchoring the structures with strength and presence. Its rich hue conveys a sense of solidity and permanence, while also adding depth and contrast to the overall composition.

In contrast, buff brick introduces warmth and texture, infusing the buildings with a sense of welcoming charm. Its soft, earthy tones evoke a connection to the surrounding environment, creating a visual dialogue between the built and natural landscapes. White render acts as a unifying force, imparting a sense of cohesion and lightness to the architecture. Its clean, crisp surface exudes a contemporary sophistication, while also enhancing the play of light and shadow across the facades.

Windows with solid side panels further enhance the design, offering both functionality and aesthetic appeal. These carefully proportioned openings frame views of the picturesque surroundings while maintaining privacy and security. The solid side panels add a sense of solidity to the windows, echoing the robustness of the brick elements and contributing to the overall sense of balance and proportion.

Together, these materials create a harmonious composition that celebrates the unique character of Tyrrells Land, Portlaois, while also embodying a vision of modern living that is both timeless and refined, as well as being low maintenance and robust. Some good precedents are Goldsmith Street by Mickhail Riches Architects and Ballyogan Court and Lagore Lawn by vanDijk Architects.

Lagore Lawn and Ballyogan Housing are two recently completed VDA projects. In both these projects small details have been used to elevate the design of the units and create a personailsed and high quality finish. Design features that can be utilised include;

- Canopy / entrance details
- Positioning and style of entrance lighting / door numbers / postboxes / door bells
- Positioning / screening of ESB meters + ETU boxes
- Window proportions
- Material palettes
- Boundary Treatments
- Landscaping

VDA's approach to ESB meters in this development was to conceal them where possible, for example around corners on end units, and where this was not possible, placing them on a gossip wall located beside the front door under the canopy. We have had success in other social and affordable developments in Ireland in arranging the ESB meter, essential ETU boxes, doorbell, postbox and lighting in such a way to reduce the collective visual impact of these pieces.

Ballyogan Housing, Dublin

Example of ESB meters on front facade

Full masonry facade version

Painted facade version

Considered placement of elements

Lagore Lawn, Dunshaughlin

Example of brick feature wall and cohesive entrance design

Considered placement of elements

Successful material palettes

Design Intent:
The project aims to redefine social housing by prioritising resident well-being, safety, and a sense of community through a design that seamlessly integrates defensible space principles, a vibrant public realm and thoughtfully curated private amenity spaces. By fostering a balance between security, social interaction, and individual privacy, this housing development seeks to elevate the living experience for its residents while establishing a model for future sustainable and people-centric housing solutions.

Defensible Space:
The design of the scheme seeks to incorporate the concept of defensible space, creating an environment where residents feel secure and empowered. Strategically placed landscaping, lighting, and natural surveillance points work in tandem to discourage unwanted activities and promote a sense of ownership among residents. Clear sightlines, well-defined pathways, and controlled access points ensure that public and private areas are distinct, enhancing safety and accountability.

High-Quality Public Realm:
The heart of the proposed development lies in its thoughtfully designed public realm, which functions as a shared gathering space which promotes interaction and a sense of belonging. Green space and communal gardens encourage connections among residents whilst providing spaces for organised events and activities. Seating arrangements and landscaping seek to contribute to an inclusive and vibrant atmosphere.

Private Amenity Spaces:
A key aspect of the proposed development is the integration of private amenity space, designed to cater to individual needs while respecting the value of privacy. These spaces offer residents a retreat within the communal setting, becoming an extension of the living spaces, promoting a stronger connection to the outdoors and a healthier work-life balance.

4.0 Design Proposal

The landscape design intent is to provide a visually permeable scheme, using a diversity of native and pollinator-friendly planting and management techniques to improve biodiversity, while being conscious of maintenance requirements.

Key design strategy factors that can be incorporated include:

- Native wildflower meadows
- Native microforest planting
- Retention of existing hedgerows, managed to increase visibility
- Swale and raingarden habitats
- Herb gardens
- Fruit trees
- Stormwater management
- Habitat preservation
- Integration of residential buffer planting

These elements contribute to the overall ecological balance and resilience of the development.

Edible species which can be introduced range from native species for foraging in townland boundaries and in microforest planting, to more cultural varieties of fruit trees in parks, herb planting and fruit bushes in communal areas, and more intensive community gardens where vegetables and other edibles can be grown by the residents.

It is envisaged that as a community develops, residents may take an active role in some operations associated with landscape management and maintenance. Engagement of the local community in realistic and meaningful management roles empowers the residents and assists in building a cohesive community spirit and sense of place and local stewardship.

Boundaries - Permeability & Visibility

EXISTING BOUNDARIES

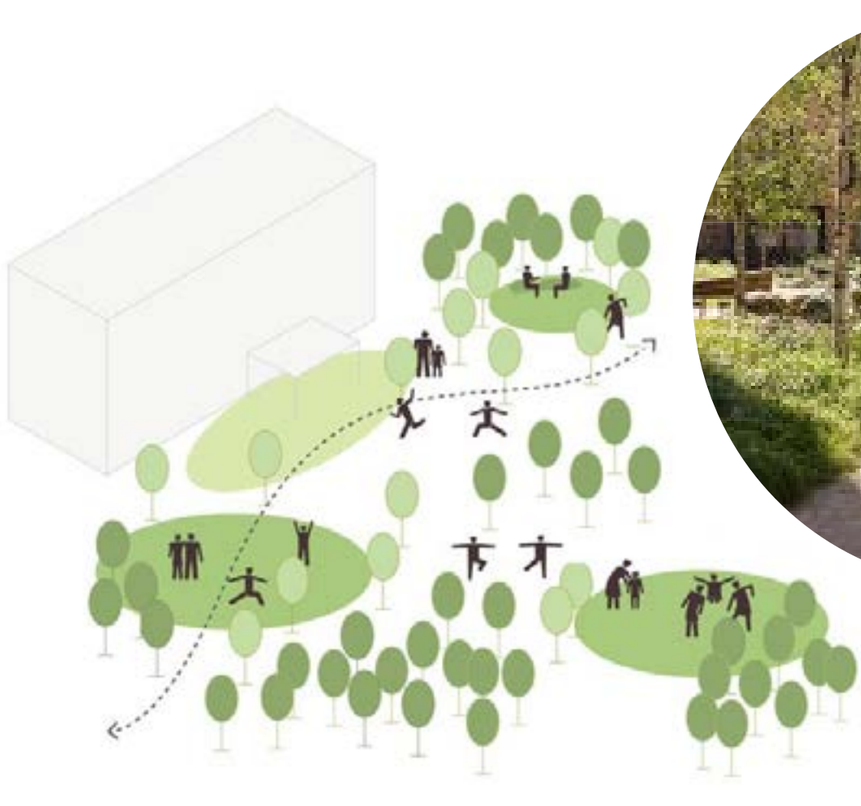
Existing boundaries consist of dense hedgerows. The aim is to partially retain the boundaries for their historical and biodiversity value.

PERMEABILITY & VISIBILITY

Significant trees and solitary shrubs to be retained, undergrowth of shrubs largely removed to increase visibility through the townland boundaries. Path connections through.

ADDITIONAL PLANTING

Additional clearstem tree planting along the boundaries and low undergrowth planting of groundcover and low shrubs to keep visibility.



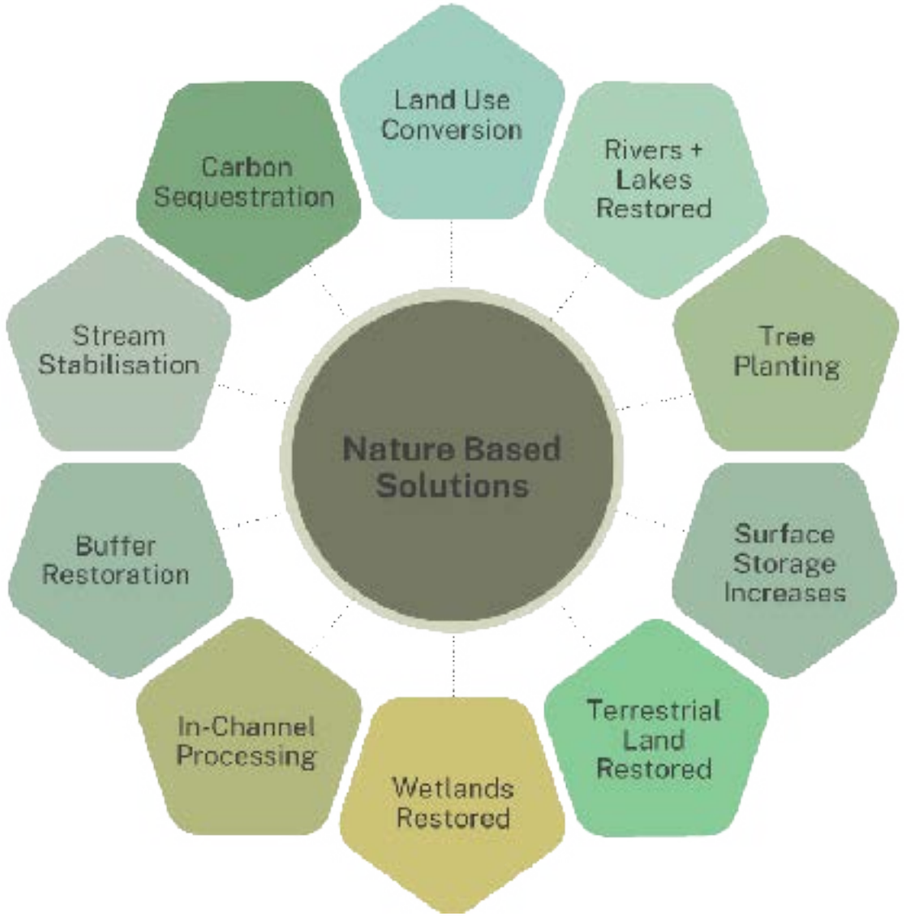
"Nature-based solutions" generally refer to the sustainable management and use of nature for tackling societal challenges such as climate change, water security, food security, human health, and disaster risk management. Van Dijk Architects have been applying the principles of Nature Base Solutions to their projects for many years. In March 2022, the Department of Housing, Local Government and Heritage published "Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas – Best Practice Interim Guidance Document".

Water Sensitive Urban Design (WSUD) is an approach to design that delivers greater harmony between the water cycle, the environment, and communities. This is achieved by integrating water cycle management with the built environment through sustainable urban planning and urban design. Allied to nature based rather than engineered methodologies to attenuate surface water runoff.

The particular characteristics of NBS are:

- NBS Solutions are on the surface at or below adjacent ground or street level, designed to accommodate rainfall runoff from the surrounding areas;
- They consist of mixed planting into a specially designed engineered soil which is usually contained within an engineered structure.
- They can also include appropriately designed tree pits.
- Underground drainage is included to carry away rainwater runoff from the surrounding area that has percolated through the planted area.

NBS Solutions typically include appropriately designed swales, rain gardens, green roofs, living walls, tree pits and drainage channels. As architects, we guide, encourage and manage the combination of urban design, engineering and landscape design in order to achieve integrated environments which incorporate Nature Based Solutions.



The following measures are proposed for this development::

Swale to provide "natural" attenuation storage

Lisnadara Dundalk by VDA

Rain Garden to provide "natural" filtration diversion

Greenhills, Maynooth by VDA

Green Roof to reduce water discharge from roofs

Ardee Civic Centre by VDA

Climbing plants mitigate bio-diversity loss / increase water use

Image from Pinterest

Tree pits to to attenuate surface water runoff

Croker's Hill, Kilkenny by VDA

Supporting developmental needs / theories of learning in childhood

Key theorists and relevance to design include Maria Montessori, Reggio Emilia and Maslow's (triangle) hierarchy of needs. The latter recognizes that through the design of our physical environments, we can go beyond basic needs, promoting a higher level of interaction to further nourish and support the development of our children.

Safe environments

In order to go beyond basic needs, we must create child-friendly, safe environments to enhance the child's experience and support those caring for them. We bear in mind variables which relate to the child's stage of development, their specific developmental needs and how they might interpret their world through their senses.

Affordances and environmental cues

A child will interpret their environment using their senses, perception and fill in missing information using past experiences to make predictions. Children tend to interpret and understand the world in a playful manner. As mentioned, the design of the physical environment informs interaction & opportunities; an inclined plane or steps might be interpreted by children in a different manner to how the designer intended. The design of the outdoor open spaces and landscaping are key in making successful intergenerational spaces which have been considered to afford playful and meaningful activity.

Sensory experience

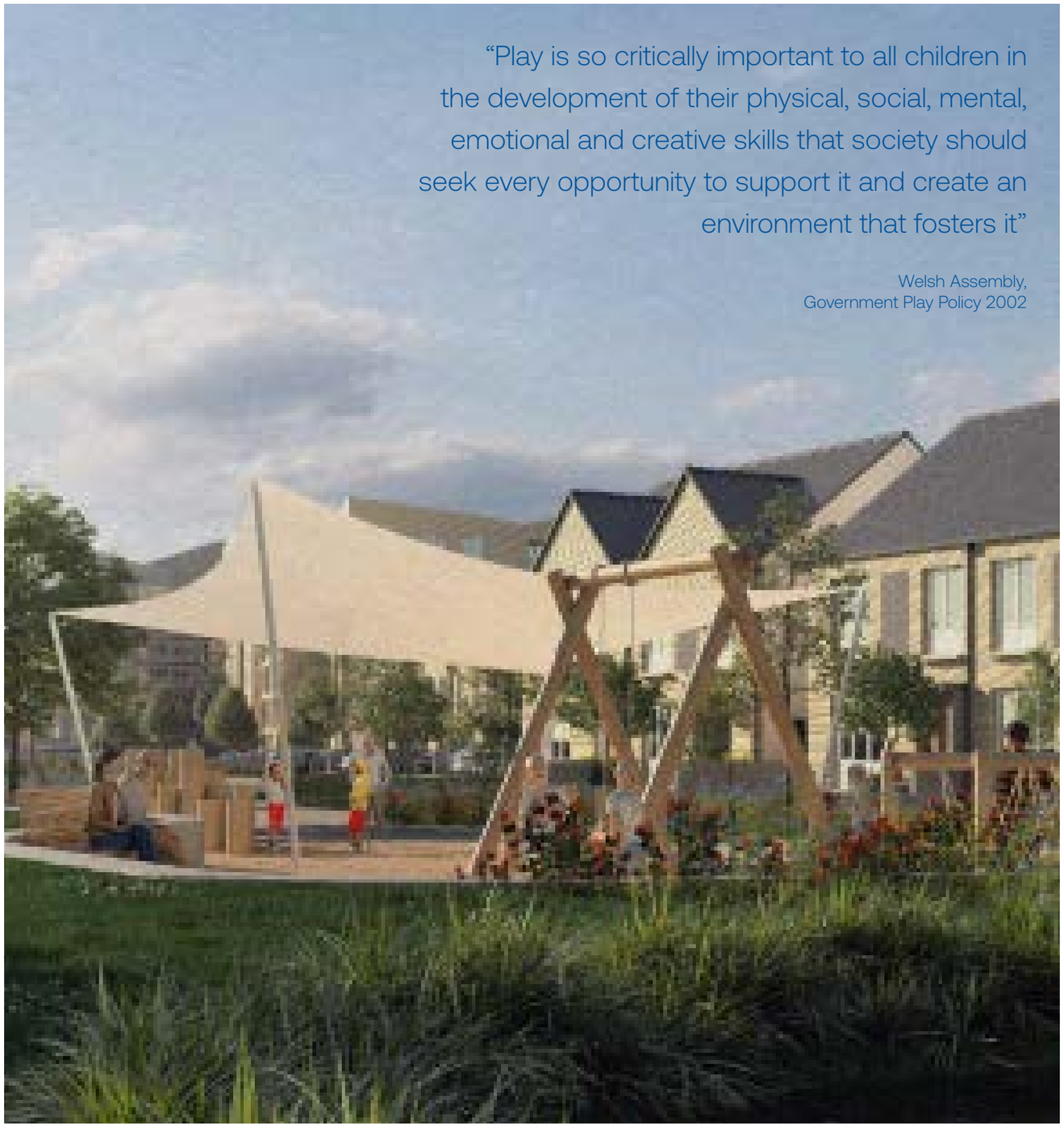
As part of how affordances are used, we also use our senses to inform us. We recognise the diverse range of needs we might need to cater for, extending to those with special needs such as autism spectrum disorder (ASD) who would be sensitive to the sensory environment.

Appropriately designed heights & other features

Appropriately positioned windows, steps and objects will be more meaningful and suitable for children. This is a key element when designing spaces for children. Design for children can also add a layer of fun and joy to the development; colour can be injected and art also plays a role for storytelling and assists with making for easier wayfinding.

In 'Designing Child-Friendly Neighbourhoods' (2020), Krysiak outlines factors which have been found to positively contribute to children's health & wellbeing include access to nature, walkability, spatial playability, social connectedness, a sense of ownership and agency. These attributes help form a holistic vision for neighbourhood that prioritises children's everyday freedom to play, socialise, belong and connect to the natural and built environment. She highlights that given the significant benefits of play on children health, wellbeing and happiness, the design of a new residential community should begin with the question: How can we provide the youngest residents with opportunities to freely play outdoors, walk independently, and feel a sense of belonging and ownership within their communities?

Images from Designing Child-Friendly Neighbourhoods, Natalia Krysiak, 2020



3D image of a proposal in Midleton, Cork by VDA

Physical, sensory and cognitive impairment

As we age the likelihood to experience physical impairment becomes increasingly likely, but less thought of in terms of design for older people are those with sensory or cognitive impairment. Achieving quality in the design of our homes should also consider those with visual, auditory and cognitive impairment such as dementia.

The role of affordances in design

We interpret and read our environment based on past experiences. If the design of everyday objects such as entrances, door handles, washbasin taps are intuitive, then our interaction with the physical environment is more successful. The smaller domestic scale of a home versus that of a larger scale residential/nursing home (long term care setting) provides a familiar environment. This aspect is particularly relevant for someone living with dementia or who has sensory impairment. That is to say that our physical environment should make it easy to use and make sense.

Supporting ageing-in-place

Our homes provide a familiar environment of which we spend a large proportion of our time in. The design of our homes and the associated outdoor amenity spaces (both private and public open space) is therefore vital in supporting wellbeing and ageing-in-place/ remaining living in communities for older persons.

Fostering a sense of community

Safe, secure environments are imperative for all. This principle is applicable for all stages of life. Quality public open spaces can also foster a sense of community and promote interaction.

Landscaping and the external environment

Access to quality, outdoor space, and meaningfully programmed external physical environment is important to support purposeful activity and ageing-in-place. Through the design of intergenerational outdoor spaces, we can encourage social interaction. Through the incorporation of design features such as raised beds at appropriate heights, it can double up as seating.

Age friendly design focus:

- Supportive and welcoming for families/friends visiting
- Playful and well programmed outdoor spaces
- Walkability
- Wayfinding
- Level access, good for prams, wheelchairs/walking aids and rollators.

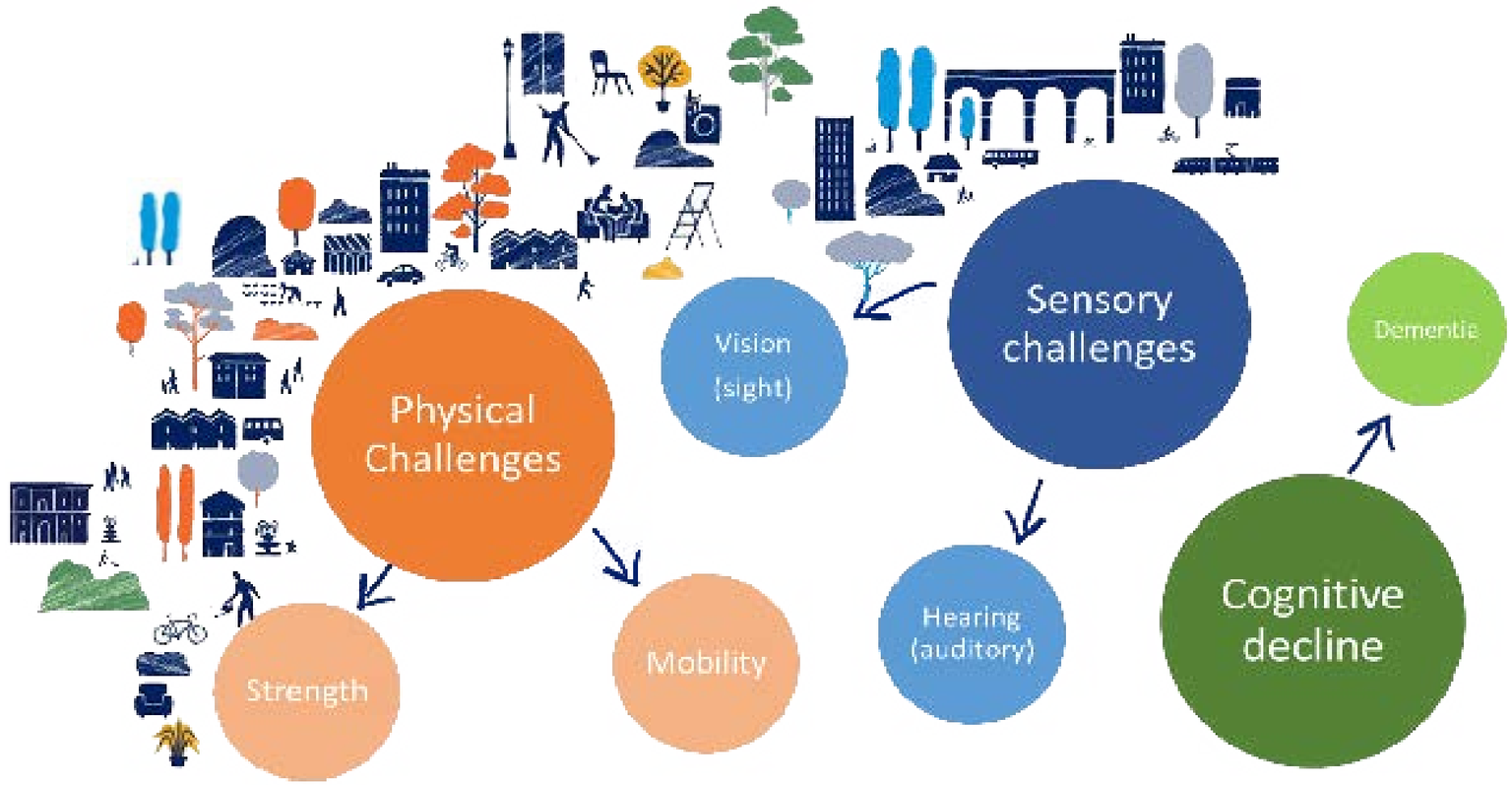


Image Credit: Pinterest

Ashbourne, County Meath by VDA

Ashbourne, County Meath by VDA

Throughout history, the artist has shown an overwhelming desire to engage with the physical and geographical context of society. This has been successfully achieved when the artwork engages with a specific place or event. It can contribute to the distinctiveness of the local area and can offer a different reading or interpretation of history or the environment. In Ireland, we look to artists' work and their interpretation of place to gauge our own development as a community. This interpretation gains more significance when it is placed in a particular site or area.

In many ways, art and architecture are complementary; architecture offers the practical framework for human activity, while art provides the emotional and aesthetic dimensions that contribute to a memorable space. A great example of this end is represented by the elaborate mosaics and frescoes that decorate the ancient Roman villas' walls or the sculptures and carvings of Gothic cathedrals.

In recent times we have all become more conscious of the environment and the effect it has on our lives. Art has a vital role to play in our environment and has, in fact, become an integral part of many urban areas. A high quality environment is essential for good quality of life and high quality public art is necessary to create that environment, be it an open space, public building, hospital or education facility.

The Per Cent for Art scheme is a government initiative, first introduced in 1978, whereby 1% of the cost of any publicly funded capital, infrastructural and building development can be allocated to the commissioning of a work of art for the same development. Since 1997 this scheme has been made available to all capital projects across all government departments.

The Per Cent for Art Scheme is a great opportunity for collaboration between artist and community. We believe public art should be developed and created with local ownership and involvement in mind, and is something that can really help deliver a sense of place and belonging for residents and users of the schemes where it is implemented.

DKIT Project by VDA

Clos na Manach Project by VDA

DKIT Project by VDA

Dundalk Town Hall by VDA

The Star District, O'Brien Architects

As part of this scheme we are providing 10% of units to 'Universal Design' (UD) standards. This ensures some of the units will excel in terms of accessibility and inclusivity for residents within, regardless of age or ability. This approach might involve incorporating features like enhanced corridors widths, turning circles, and wider doorways. By doing so, the development accommodates diverse needs, promoting long-term usability and comfort for a broader range of people, including those with disabilities, aging residents, and families with young children.

Universal Design Guidelines For Homes in Ireland as published by the Centre for Excellence in Universal Design, outlines the 4 key features in UD home Design:

1 - Home Location and Approach
Homes integrated into the neighbourhood, with clear, safe, routes for bike, car or public transport to the entrance of the home

2 - Entering and Moving About the Home
Shelter at the door is required to provide protection from inclement weather while a person is unlocking the door, or waiting for the door to be opened for them. Level thresholds at doorways for simple, easy movement and ease of cleaning and maintenance. Wide front door, rear doors and internal doors for ease of movement for all. More spacious entrances and hallways for multipurpose uses and ease of movement within the home.

3 - Spaces for Living
Flexible or open-plan layouts, Reinforced walls and ceilings as 'hard-spots' around the toilet, shower and bath to support the easy installation of handrail, ceiling hoists and drop down supports as required. Enough space in a bedroom for easy manoeuvring and access to possible soft spot to knock into adjacent bathroom. Flexible space in living rooms for social interaction. Enough space for a kitchen to adapt easily for different layouts. A toilet at entrance floor level that can adapt to a shower room.

4 - Elements and Systems
Sockets, light switches and window sills at levels that are within easy reach and view for everyone. Easy control and use of systems and the capability to integrate smart entertainment, energy efficiency and security systems or assistive technologies. Choice of materials and colour, with fittings and finishes that are easy to use, maintain and are attractively and smartly designed. Optimised use of natural light, ventilation and energy efficiency.

van Dijk Architects are committed to the provision of UD houses in all schemes and we seek to implement it in line with national policy and at the highest rate acceptable to our clients. We had success in the provision of UD at Avondale's "Beyond the Trees" project, where a fully accessible scheme delivered a public attraction for all abilities, culminating in our winning of an RIAI award for UD in 2023.

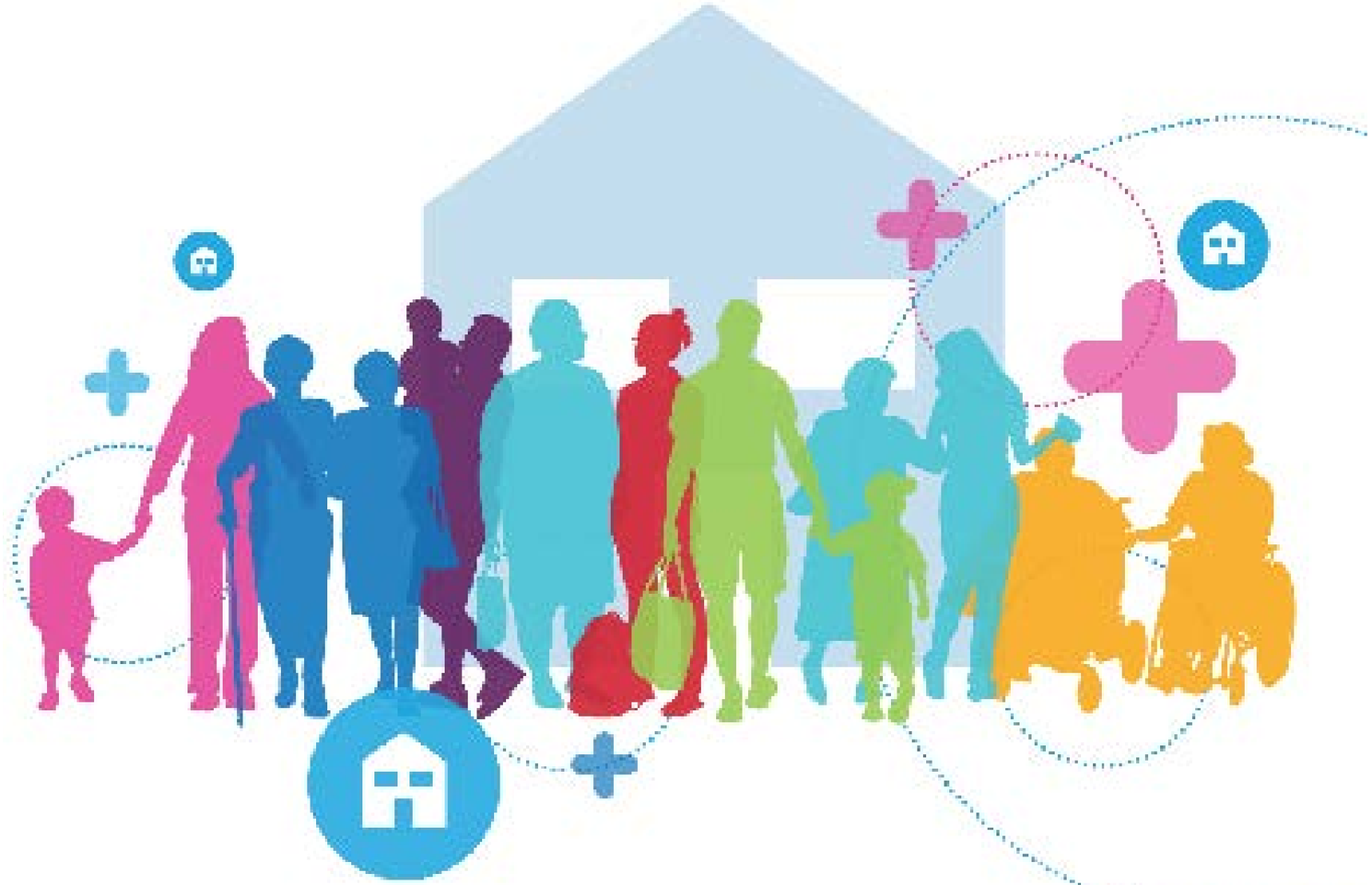


Image Credit: Centre for Excellence in Universal Design

VDA won the RIAI Universal Design Award in 2023 for our Beyond the Trees Avondale project

7 no. UNIVERSAL DESIGN UNITS

UD Provision in line with National Policy

What we build matters, and so does how we make it! We believe Building with sustainability in mind should be the minimum standard. A sustainable house is a home that has the least possible negative impact on our environment. Sustainability means energy efficiency, avoiding environmental toxins, and responsibly using materials and resources while having a positive physical and psychological effect on its inhabitants.

01. Location
Choosing a location is the first step in building a sustainable home. Building a home within walking distance of public transportation will reduce impact on our environment. The availability of utilities and infrastructure vary across Ireland, by utilising existing provisions and in avoiding environmentally sensitive or hazardous areas (flood zones), we reduce our impact!

02. Orientation
Orientation is important for sustainable homes. We live in a cold climate in the Northern Hemisphere, so must take advantage of the sun! Considered orientation will help heat your home and maximise natural light.

03. Size
Smaller Houses Are More Efficient. Building a smaller home will reduce your material use and energy needs. A larger space will use more materials and require more energy for heating and cooling. Smaller houses are inherently more efficient and less wasteful!

04. Layout
Building a very wide and spread out house will have more heat loss and less efficiency than a compact house. Density is critical to efficient and sustainable land use!

05. Insulation
At VDA we believe in a fabric first approach, this starts with insulating. There are lots of different insulation types and techniques. Good insulation is one of the most important energy-efficient measure to implement. The better insulation you have, the less energy you will use.

06. Airtightness
Airtightness is important for avoiding heat loss as it means less uncontrolled air movement in and out of the building. Less heat loss also means your heating system will work more efficiently, thereby reducing heating bills & energy wastage. It also contributes to maintaining thermal comfort.

07. Build to last
If you want to build a sustainable house, you need to build it to last. Durability is essential for sustainable homes. If your house constantly needs repairs, that is not sustainable. At VDA we deploy robust material selection and specification.

08. Local & Recycled Materials
Using local materials in your new sustainable house will reduce the need for transport. It is significantly greener, and supports local businesses. With a focus on specifying recycled materials / products we reduce energy consumption and a decrease our carbon footprint.

09. Water Conservation
Protects drinking water resources & diverts less water from our resources, which helps keep the environment healthy. Reducing water and wastewater treatment costs and the amount of energy used to treat, pump, & heat water.

10. Intelligent Planting
By prioritising Biodiversity, our housing developments can contribute to the preservation & restoration of natural habitats, improve air/water quality and enhance the quality of life for residents. We plant native species known to thrive in our climate, ensuring these plants can survive with minimal maintenance and watering.

11. Energy Efficiency
Using energy-efficient appliances, equipment and lighting / heating design is key to delivering energy-efficient homes. Reducing unnecessary energy consumption, greenhouse gas emissions and the demand for non-renewable resources.

12. Renewable Energy
No more Fossil Fuels! Photovoltaic generate our energy from the Sun.

4.0 Design Proposal

'Woonerf' is a Dutch solution to urban planning. It translates as 'living street', meaning that the urban street is transformed into a wide social space shared among pedestrians, cyclists, and motor vehicles; however, pedestrians have priority over cars. It is essentially a more person centric approach to that already promoted by the Design Manual for Urban Roads and Streets. The original concept was developed in the late 1960s by Niek de Boer. The citizens of Delft, Netherlands, were at the forefront of this urban change. Residents were upset by the traffic speeding through their neighborhood, making it unsafe. They replaced their brick streets with winding serpentine paths. Thus, initiating the Woonerf concept.

The key principles of Woonerf are:

Signage: Street entrances are distinctly marked by a sign showing the different street users along side a house. The car is smaller than the people and is shown in the background. Demonstrating the hierarchy of the pedestrians among the street users.

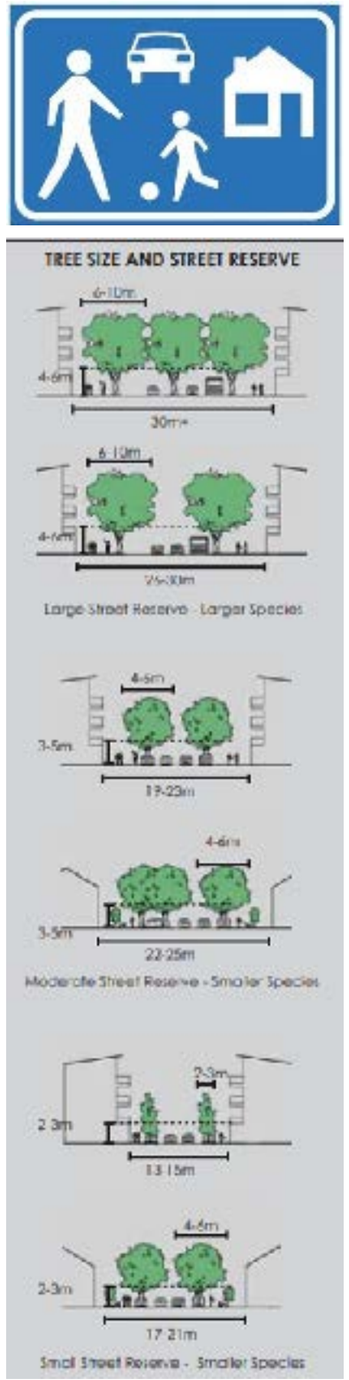
Shared spaces: The Woonerf is an open, connected, and busy shared space. The road is not divided into a road and pathway. There are no continuous height differences in the cross-section of a road.

Using physical barriers: Physical barriers such as bollards, posts and trees, as well as curving and winding the street to slow down traffic. Drivers within a Woonerf may not drive faster than at walking pace and are not permitted to park in a Woonerf except at places which are identified by the appropriate traffic sign. As a result, low traffic volumes and a general absence of traffic had positive environmental contributions, and road accidents were reduced by 50%.

Landscaping and street furniture: Introducing trees, plants and other vegetation into the Woonerf helps to relax the feeling of a busy street, making it a more enjoyable space to be in, and benefits the biodiversity in the area. Incorporating outdoor furniture such as benches, chairs and tables, encourages people to sit outside and meet their neighbours.

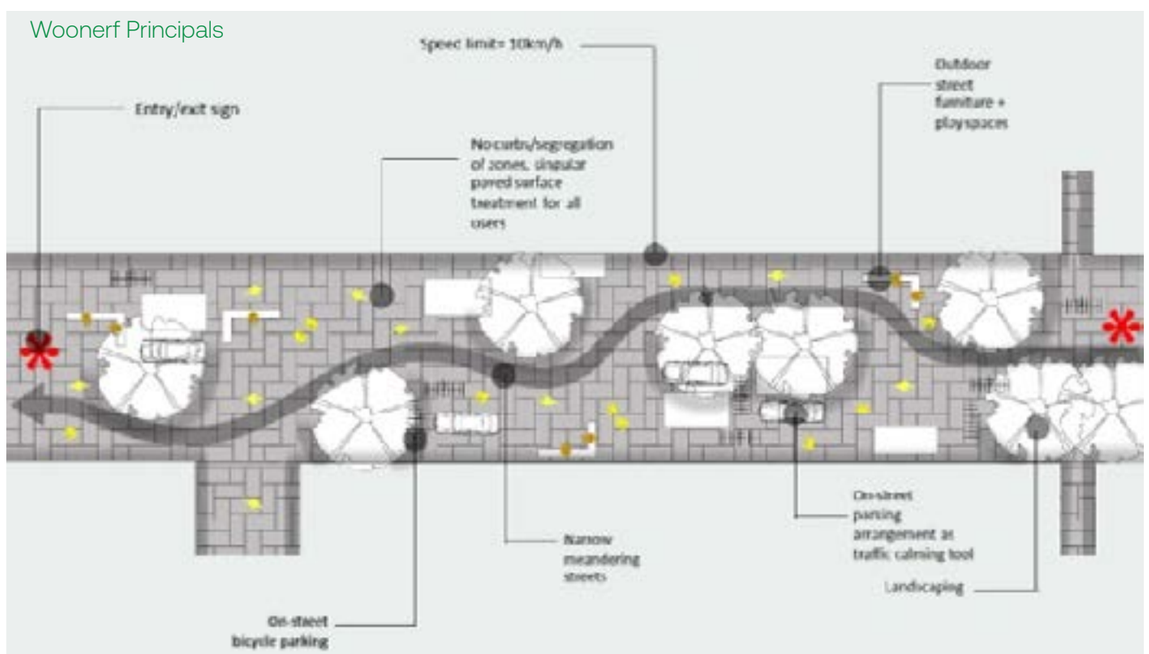
The key advantages to applying Woonerf to residential project design are:

- Reduced road traffic accidents.
- Safer environment for cyclists and pedestrians.
- Less carbon emissions produced by cars.
- More sociable community. Neighbour's children can play together safely in the street.
- Direct connection with Nature for residents.
- Improved Passive surveillance.
- More Bio-diversity / NBS Opportunities.
- Potential cost saving – less hard surfaced area.



From DMURS, 2019

Woonerf Principals




Proposed Entrance View


View Along Main Spine Road


View to Public Plaza


View along Cycle + Pedestrian Path

5.0 12 Criteria of the UDM

7.0 The 12 Criteria of the Urban Design Manual - A Best Practice Guide (2009)

7.0 The 12 Criteria of the Urban Design Manual - A Best Practice Guide (2009)

01 CONTEXT
HOW DOES THE DEVELOPMENT RESPOND TO ITS SURROUNDINGS?

The proposed scheme evolves naturally as part of the growth of Portlaoise. The stradbbally road contains a number of housing developments stretching out from the town centre, the proposed site can be viewed as an infill site, there is the Gemsdowns development to the East and the Downs to the East. The proposal responds to the size and layout of these housing developments and continues the rhythm of the development along the Stradbally road. It is inline with the zoning designation in the development plan.

The density of the site is 34/ha this is an appropriate in terms of achieving a relatively high level of density will maintaining amenity space , family homes, a sense of community and place and responding to the immediate context..The development has been designed to highlight vistas, provide a sense of enclosure, respect neighbouring properties and to celebrate public open spaces which will include both new environmentally sensitive planting and some retained elements of the existing flora and habitat. The architecture is clearly modern but speaks of the area through form and materiality.

The proposal has the potential to contribute positively to the character and identity of the neighborhood in various ways. Designed thoughtfully, the new housing can enhance the existing fabric of a community while fostering a sense of identity and belonging. The proposal takes careful consideration of the specific boundary conditions. To the East a shared cycle and pedestrian path creates a blurred boundary with the existing trees and pond, it also provides an important link to the public park to the south. The buildings to the south are carefully considered to respond to the new proposed green spaces and the units to the east respect the woodland boundary.

02 CONNECTIONS
HOW WELL CONNECTED IS THE NEW NEIGHBOURHOOD

The proposal includes a strong pedestrian and cycle along the eastern boundary. This space will provide a nature corridor along the water edge connecting Stradbally round to the new public green space to the south.

The scheme is located very close to the key amenities and services,. A short distance away, within 20min walking distance, the vibrant town center of Portlaoise offers a range of shops, restaurants, cultural venues, and medical facilities, catering to the diverse needs of residents. The site benefits from excellent transport connections, being conveniently located near major roadways and public transportation networks. The Stradbally Road, ensures good connectivity. Additionally, the presence of nearby bus stops, the closest being outside St.Peter and Paul's Church. Portlaoise Train Station is also within a 20min walk (or accessible via bus) with rail links that would facilitates efficient commuting, contributing to a well-connected lifestyle for residents.

Well designed roads, footpaths and shared surfaces through the development provides vehicular, cycle and pedestrian to movement through the site. Alternative pedestrian routes cross the planned open spaces linking the various parts of the development together. As discussed the site is well connected to the centre of Portaoise, it has the benifited to being within walking distance to 4 local schools , 3 to the south of the site which would be very well connected through the new public green space.

The increased housing in this area would help support the existing public transport system which supports the surrounding area.

03 INCLUSIVITY
HOW EASILY CAN PEOPLE USE AND ACCESS THE DEVELOPMENT?

The proposal includes 1, 2, 3 and of 4 bedroomed units consisting of terraced houses, semi detached houses, detached houses and duplex to provide a range of dwelling types.

The proposed duplex buildings will be fully compliant with all Building Regulations relating to accessibility, with 10% of the development following Universal Design.

Public open space is provided as landscaped seating areas as well as a children's play area. Public open spaces are well located with strong passive surveillance from surrounding dwellings and are therefore readily accessed by all. The use of neighbourhood pocket parks means that no dwelling is a significant walk for an area of useable public open space.

Example of Ground Floor UD Apartment

04 VARIETY
HOW DOES THE DEVELOPMENT PROMOTE A GOOD MIX OF ACTIVITIES?

The development of this area will provide an enhanced sense of urban living for existing residents as well as much needed housing for the growing population of Portlaoise. Despite its urban accessibility, the location maintains a sense of serenity through its surroundings. Nestled amidst lush greenery and tranquil landscapes, Tyrrells Land presents an opportunity to strike a balance between modern urban living and a connection to nature. The nearby open spaces provide avenues for leisure activities, recreation, and community engagement, reinforcing the development's holistic approach to housing.

Neighbouring uses are compatible with each other. This primarily residential development complements and is compatible with similar adjoining developments. Housing types and tenure add to the choice available in the area. The mix of house types proposed will provide variety to this new neighbourhood.

The proximity to the town centre and existing amenities means that the development will help support and grow the existing town centre.

The buildings provide active frontage and an animated streetscape. They are welcoming to passers-by and also provide privacy to the occupants by means of a planted buffer strip to living areas or front garden

7.0 The 12 Criteria of the Urban Design Manual - A Best Practice Guide (2009)

05 EFFICIENCY
HOW DOES THE DEVELOPMENT MAKE APPROPRIATE USE OF RESOURCES, INCLUDING LAND?

The proposal looks at the potential of higher density taking into account appropriate accessibility by public transport and the objectives of good design. A density of over 34 units per hectare is proposed in aspiration with National policy. A higher density scheme was put forward for public consultation but faced objections from local residents and TDs for use of apartment blocks. This scheme proposes the highest level of density achievable while responding to feedback from the local community and providing the type of housing and communities that will be supported locally.

Landscaped areas are designed to provide amenity and biodiversity and protect buildings and spaces from the elements and incorporate sustainable urban drainage systems. The landscape areas have been carefully considered to not just provide visual amenity and create pleasant spaces, but also work hard in terms of SUDs, providing biodiversity, create privacy and provide shelter.

Buildings, gardens and open spaces are laid out to exploit the best solar orientation. Insofar as possible blocks of houses are oriented on a North-South axis so houses have an East-West orientation.

Appropriate recycling facilities are to be provided.

06 DISTINCTIVENESS
HOW DO THE PROPOSALS CREATE A SENSE OF PLACE?

The overall vision is to create a high quality, attractive living environment for the residents of the proposed development and enhance the existing adjoining residential development. The proposal has undergone intensive design to produce a project that is of a superior and distinct quality. The house types and open space are all site specific. The housing design has aimed to provide a contemporary solution for housing.

A sense of place is created by recognisable features formed by the new nodal buildings and parks, so that people can describe where they live and form an emotional attachment to the place. The design of the residential dwellings responds to the scale of the adjacent developments and have been designed within a landscaped parkland setting. The layout makes the most of opportunities presented by existing buildings, landform and ecological features to create a memorable layout. Existing hedgerows and trees (albeit there are very few of them and none of very high quality) have been incorporated into the design.

The scheme makes the most of the views in and out of the site which befits from views to woodland, pond , and the new public park on the East, South and West of the site. The North views onto the road, this view both in and out will be screened by maintaining the existing trees and the planting of new trees and other carefully planting.

The proposal is centres around a the main spinal road which has a number of views to pockets parks and the new public park. The view from this main round terminates with the triplex units creating a sense of structure and enclosure, while also offering vignettes of the public park beyond.

07 LAYOUT
HOW DOES THE PROPOSAL CREATE PEOPLE FRIENDLY STREETS AND SPACES?

The access and circulation strategy for the development is derived from the existing site topography and the planning strategy. The main vehicular and pedestrian access to the site is via the Stradbally Road, with the new pedestrian and cycle path running along the waters edge down to the Green space. The layout for the development has been arrived at following consideration of a series of design concepts and development parameters set out as follows:

The proposal provides a development appropriate to its location creating passive surveillance. It provides an interesting mix of public and private open spaces. Provides housing appropriate in scale. Allows for connectivity and permeability to the existing residential development. Encourages pedestrian permeability through the site. The proposed buildings provide visual termination to roadways enhancing a sense of enclosure. Gathering spaces have been included as priority areas for people and activities rather than vehicles to encourage social interaction and aid accessibility. The layout of the streets and open spaces is intended to be clearly legible giving a sense of inter connectivity of each part of the development .

The layout focusses activity on the streets by creating active frontages with front doors directly serving the street. This is the main driving force in the generation of the design presented.

Traffic speeds are controlled by design and layout rather than by speed humps. The Link Street and other streets have all been designed to DMURS principles—see Engineering Report by DBFL.

08 PUBLIC REALM
HOW SAFE, SECURE AND ENJOYABLE ARE THE PUBLIC AREAS?

All public open space is overlooked by surrounding homes so that amenities are “owned” by the residents and safe to use. The landscape plan has been designed to maximise permeability, movement and social interaction through the creation of a series of convivial open spaces that are safe and easy to use by all.

The public realm is considered as a usable integrated element in the design of the development. A variety of open spaces are provided which encourage connectivity and permeability through the site while meeting the amenity needs of the residents and other occupants of the site.

Children’s play areas are sited where they will be overlooked, safe and contribute to the amenities of the neighbourhood. Children’s play areas have been located in well considered locations.

There is a clear definition between public, semi private and private open space. Boundary details included with the landscape design proposals show how the different types of open space within the development will be demarcated.

Roads and parking areas are considered as an integral landscaped element in the design of the public realm. The landscape layout accompanying the application shows how the streets and raised tables are all integral to the landscape structure within the development with the use of shared surfaces and subtle traffic calming measures.

7.0 The 12 Criteria of the Urban Design Manual - A Best Practice Guide (2009)

09 ADAPTABILITY
HOW WILL THE BUILDINGS COPE WITH CHANGE?

The design exploits good practice lessons such as the knowledge that certain house types are proven to be ideal for adaptation. A variety of residential types are included within the development specifically designed to meet the short, medium and long term needs of the local populace. The units can be designed to allow for future adaptation should that be required.

The homes are energy efficient and equipped for challenges anticipated from a changing climate. Please refer to the accompanying Building Life Cycle report for further details. Homes can be extended without ruining the character of the types, layout and outdoor space. Due to the various types and scales of dwellings, there is scope within the project to adapt the units in the future. The mix of units proposed also allows for residents to upsize or downsize over time and stay within the same community.

The structure of the home and its' loose fit design allows for adaptation and sub-division such as the creation of an annexe or small office. Should this wish to happen, annex spaces can be created.

Space in the roof or garage can be easily converted into living accommodation. Should the occupants wish to do so, the attic space can be converted.

10 PRIVACY AND AMENITY
HOW DOES THE SCHEME PROVIDE A DECENT STANDARD OF AMENITY?

Each home has access to an area of useable private outdoor space. All terraced, semi-detached and detached units have private amenity spaces that meet or exceed the requirement of the Local Area Plan. Apartments and duplex units have balconies or ground floor patio areas and can immediately access public open space areas.

The design maximises the number of units with dual aspect. The majority of dwellings are dual aspect. Those apartments that are single aspect are east, west or south facing.

Homes are designed to prevent sound transmission by appropriate acoustic insulation or layout. All units will incorporate robust acoustic insulation / details to ensure that any party walls or floors achieve the acoustic requirements of the Building Regulations Technical Guidance Document Part E. Windows are sited to avoid views into the home from other houses or the street and adequate privacy is afforded to the ground floor units.

Distances to adjoining existing residences are greater than the minimum allowable in the development plan or national house design guidelines. Detail design to the front of units provided defensible spaces providing a buffer and visual break for ground floor units.

The homes are designed to provide adequate storage including space within the home for the sorting and storage of recyclables. Storage in each unit has been provided in accordance with relevant Design Standards for New Dwellings. Recyclable storage will be provided within kitchen units and as part of communal bin storage / recycling areas.

11 PARKING
HOW DOES THE PARKING FUNCTION?

Appropriate parking is on-street or within easy reach of the home's front door. The majority of parking is in cartilage. Where on street car parking is provided it is within easy reach of the front door.

Parked cars are overlooked by houses, pedestrians and traffic or stored securely with a choice of parking appropriate to the situation. All parking areas are overlooked for passive surveillance. Parking is provided communally to maximise efficiency and accommodate visitors without the need to provide additional dedicated spaces.

Materials used for parking areas are of similar quality to the rest of the development.A permeable and asphalt finish will be used in the parking areas to contribute to align with SUDS requirements.

Adequate secure facilities are provided for bicycle storage. Secure cycle parking facilities are provided throughout the development—see architects drawings and details.

12 DETAILED DESIGN
IS THE BUILDING AND LANDSCAPE DESIGNED THOUGHTFULLY?

The materials and external design make a positive contribution to the locality. The buildings are designed to be contemporary and durable. High Quality materials have been selected to produce an exemplary development.

The landscape design facilitates the use of public spaces from the outset. The development will incorporate the contemporaneous development of the adjoining public, semi private and private open spaces. These will be carried out to a high quality in accordance with the Landscape drawings being submitted with the application. The landscape design will be constructed from high quality minimal maintenance details conducive to good quality design and long term durability.

Open spaces are immediately accessible for maintenance purposes and are clearly visible to users of the site and the wider public to encourage their maintenance. Features within the open space and the buildings themselves will be designed to minimise maintenance requirements.

Open car parking areas are considered as an integral element within the public realm design and are treated accordingly.

Care will be taken at detailed design stage that flues and vents will not be unsightly and will not be located where staining can occur on surrounding finishes.
The Bin enclosures have been designed to be properly screened and so that they are easily accessible for occupiers from entrance areas.

6.0 Conclusion

7.0 Conclusion

Key Site Statistics

Site Area = 2.08Ha
Total Units = 67
Net Developable Area = 1.9Ha
POS = 0.47Ha (21.02%)

Net Density = 34 uph
Public Open Space @ 21.02%
Total = 0.47Ha

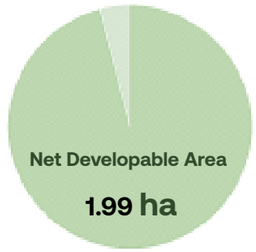
Other Statistics

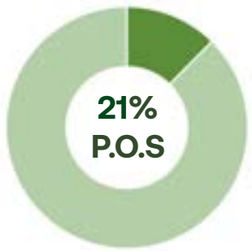
Refuse Storage
Individual bin storage allocated to the rear of houses or when terraces to the front threshold. Apartment blocks have a series of communal bin stores.

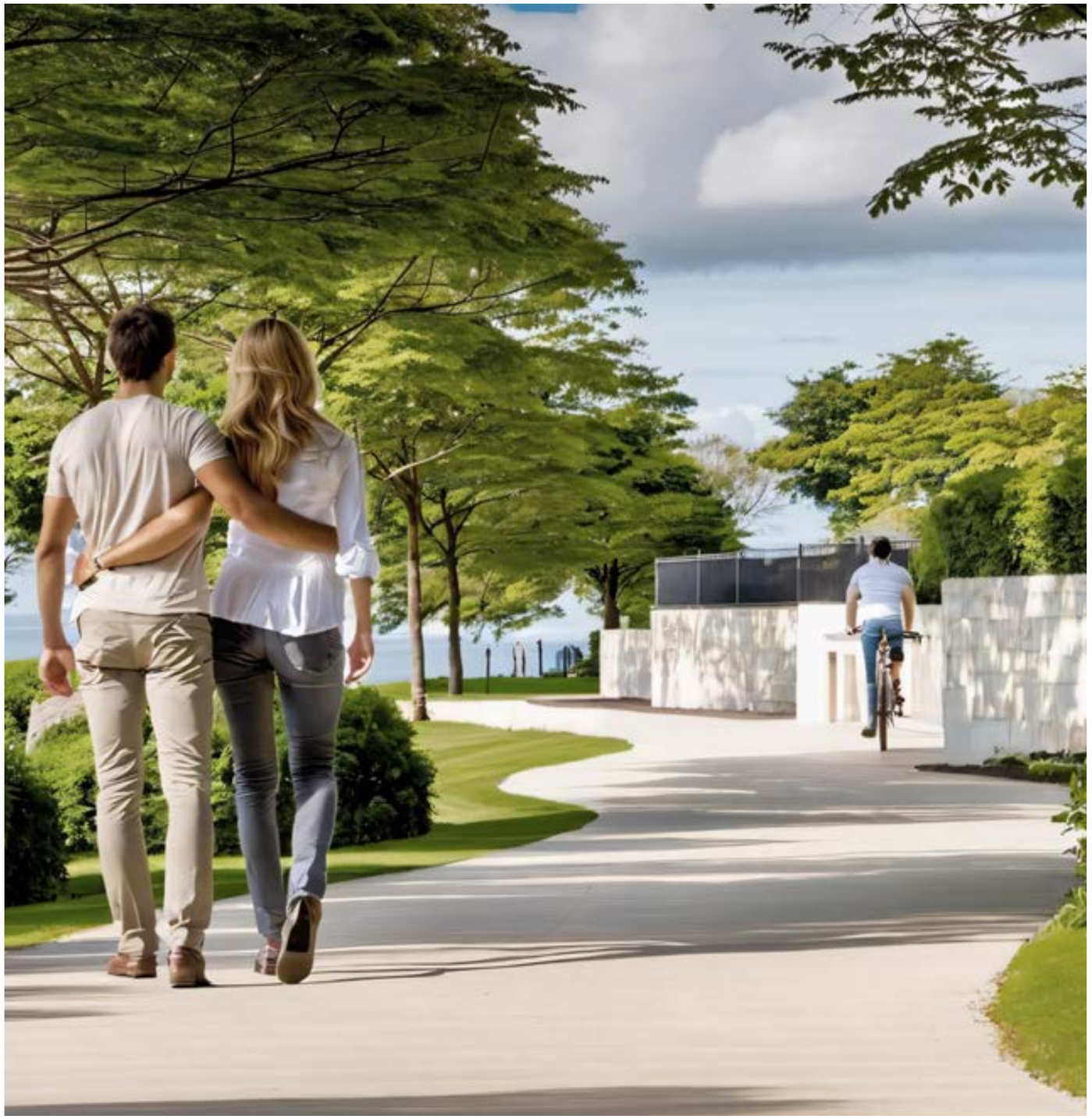
Height & Massing
All houses are 2 storey pitched roof types. Duplex apartments are 3 storey also with pitched roofs.

The proposed development of 67 new homes at Tyrrells Land, Portlaoise, has been carefully designed to deliver high-quality new homes. The layout, scale, and landscaping integrate the scheme into its surroundings, retaining existing vegetation, introducing appropriate boundary treatments, and making use of the natural site levels to maintain the structure's visual prominence.

The proposal represents a sustainable and contextually sensitive addition to the town, supporting local housing needs in accordance with national, regional, and local planning policy.







Proposed Cycle and Pedestrian Route