



ARCHITECTS DESIGN STATEMENT

CASTLELAKE SHD

Lands at Castl lake, Terrysland, Carrigtwohill, Cork
Prepared for BAM Property Ltd. – June 2022

ARCHITECT'S DESIGN STATEMENT

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01_INTRODUCTION

1.1 Scheme Overview

A Planning Application is being lodged to an Bord Pleanála by BAM Property Ltd. for a Strategic Housing Development at Castlake, Terrysland, Carrigtwohill, Co. Cork. The application site is positioned to the north-west of the centre of Carrigtwohill, comprised of a series of land parcels with a combined area of 18.30 hectares, 16.30 hectares of which are developable lands and accommodating 716 dwelling units distributed across the development as varying Character Areas and a 2 storey creche.

The proposed development comprises 224 no. houses, 284 no. duplex units and 208 no. apartments. The two storey houses comprise 48 no. detached, 126 no. semi-detached and 50 no. terraced Houses containing 60 no. two bed units, 139 no. three bed units and 25 no. four bed units. The part-one to part-three storey duplex units are contained in 122 no. buildings providing 82 no. one bed units, 142 no. two bed units and 60 no. three bed units. There are 7 no. apartments blocks ranging in height from part-1 to part- 5 no. storeys.

- Block 1 is 4 no. storeys and contains 34 no. units (7 no. one bed units, 19 no. two bed units and 8 no. three bed units).
- Block 2 is part-1 to part-5 no. storeys and contains 42 no. units (15 no. one bed units, 20 no. two bed units and 7 no. three bed units).
- Block 3 is 5 no. storeys and contains 17 no. units (8 no. one bed units and 9 no. two bed units).
- Block 4 is 4 no. storeys and contains 13 no. units (6 no. one bed units and 7 no. two bed units).
- Block 5 is 4 no. storeys and contains 13 no. units (6 no. one bed units and 7 no. two bed units).
- Block 6 is 4 no. storeys and contains 13 no. units (6 no. one bed units and 7 no. two bed units).
- Block 7 is 5 no. storeys over basement and contains 76 no. units (23 no. one bed units, 41 no. two bed units and 12 no. three bed units).
- All blocks contain ancillary internal and external resident amenity space.

The proposed development also provides for: hard and soft landscaping; boundary treatments; public realm works; car parking; bicycle stores and shelters; bin stores; lighting; plant rooms; and all ancillary site development works above and below ground.

The design of the proposed development has evolved following a full analysis/feasibility study of the lands and its surrounding landscape and through the formulation of a number of design options for the site.

For specific detailed site descriptions refer to both the accompanying EIAR and the Landscape Design Rationale Report prepared by Cunnane Stratton Reynolds.



Streetscape - Castlake Residential Development

OVERALL ACCOMMODATION MIX		
Type	Number	%
1 Bed 2 Person	153	21.4%
2 Bed 4 Person	312	43.6%
3 Bed 5 Person	226	31.6%
4 Bed 7 Person	25	3.5%
Total	716	100.0%

Fig.1.1 Building Data - Accommodation Mix

01_INTRODUCTION

1.2 Site Analysis

The application site comprises seven parcels of greenfield lands, with a stated area of some 18.30 ha, located at Castlelake, Terrylands, Carrigtwohill, Co. Cork. Carrigtwohill is located approx. 16 Km east of Cork city.

The site lies north of the N25 motorway corridor and has both road frontage and main vehicular access road connections onto Station Road with two underpasses constructed along the northern boundary of the site to accommodate future development lands.

- Access to the development will be via the existing main distributor road system in Castlelake to the south-west, Station Road to the east and the planned connector roads between these and the underpass to the north.
- There are no buildings on the subject lands and are largely characterised by overgrown scrub. There are existing power lines located along the western edge of Castlelake North, that do not form part of the developable site area.
- The development area is predominantly low lying rising north from the River Lee to an outcrop of small hills just to the north of the town.
- The site has a change in level of approximately 6m rising from south to north, and 1.6m from east to west.
- The lands are bounded to the north by the railway tracks, to the east by station road and to the west by existing residential development. Carrigtwohill train station is located to the north of Station Road. There are 2 no. existing under passes beneath the train tracks, on the northern portion of the lands, identified as Blandcrest.
- To the South of the application site are Castlelake Avenue and the proposed Carrigtwohill Education Campus. There is a landscaped park with a lake located to the south with Main Street, Carrigtwohill located further to the south.
- To the East of the application site are the existing housing developments of Maple Close, Maple Lane, Bramble Close, Bramble Lane, Hazel Court, Ashbrook and Oakbrook.
- To the West of the application site is Station Road
- An east-west link road is currently under construction and will abut the southern boundary of a significant portion of the subject lands.

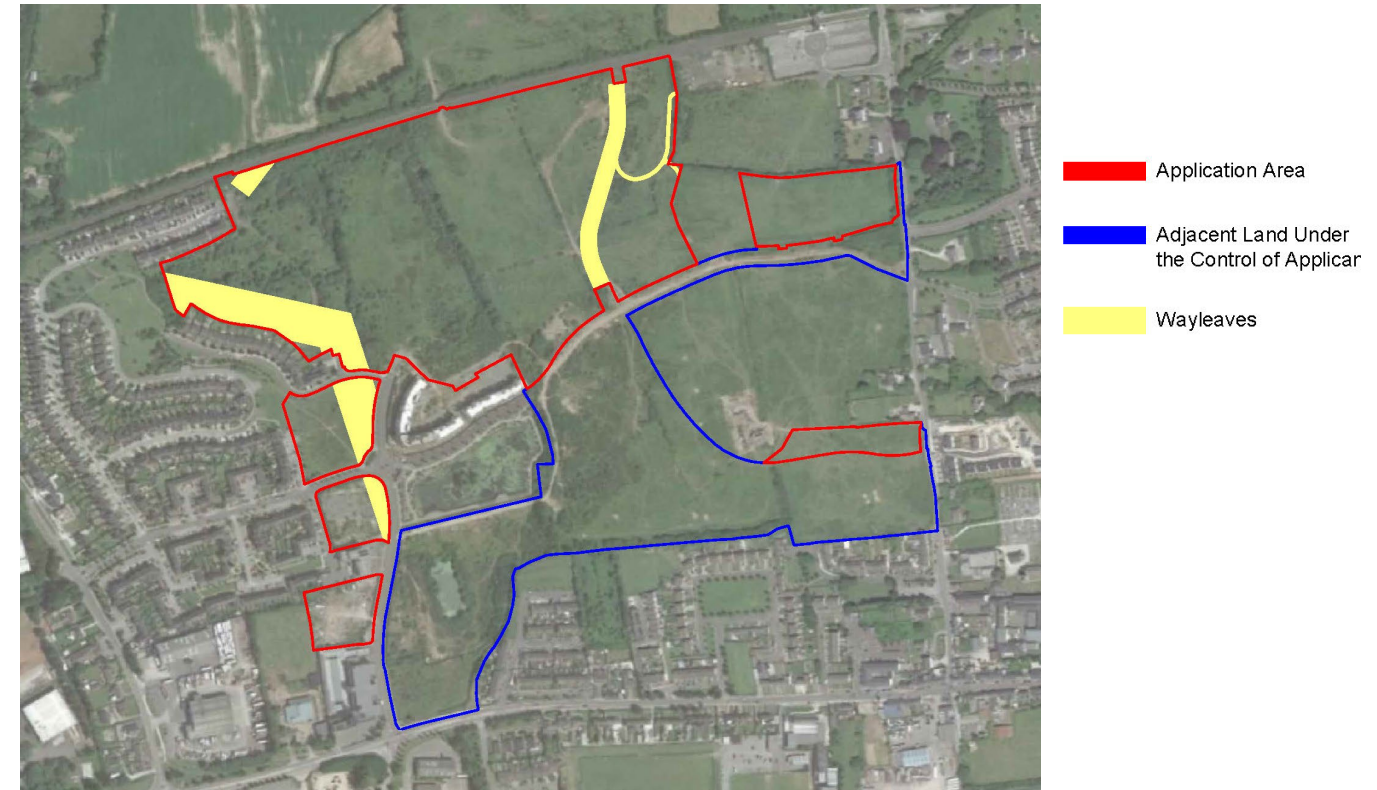


Fig.1.2.1 Site Wayleaves



Fig.1.2.2 Site Conditions

Castlelake SHD

1.3 Design Objectives

The Design approach reflects both the opportunities and constraints of the development site. A series of residential buildings are positioned across the site that respond to the site orientation, existing natural site amenities and enhance site profile by promoting the creation of a high-quality public domain by establishing a high standard of design in architecture, landscape and infrastructure.

The proposed development seeks to rejuvenate a strategic parcel of land through higher density in line with zoning objectives.

The preparation of the design approach to the site has been prepared by Wilson Architects and has been informed by the policies and objectives of the relevant Development Plans and Guidelines pertaining to the area;

Cork County Development Plan 2022-2028

The Cork County Development Plan 2022-2028 contains a range of policies relevant to establishing the landscape and visual values and sensitivities for the site and site environs. These are set out below.

It is stated the core strategy will through the plans' policies and objectives will deliver county wide a number of key aims which include:

- a. Enhanced quality of life for all;
- b. Sustainable patterns of growth in urban and rural areas;
- c. Sustainable and balanced economic investment;
- d. An effective physical and community infrastructure;
- e. quality built environment;
- f. A network of enhanced natural resources; and
- g. Responsible guardianship of the County.

This Development Plan sets out four main strategic planning areas in the county which include: County Metropolitan Cork Strategic Planning Area; Greater Cork Ring Strategic Planning Area; North Cork Strategic Planning Area and West Cork Strategic Planning Area.

The plan seeks to direct significant future growth within the Metropolitan Cork Area while protecting other settlements.

The strategy sets out a number of key regional objectives including;

- Protection of existing regional assets,
- Facilitating the orderly provision of supporting infrastructure,
- Maximising benefits arising from infrastructure investment,
- Supporting the regions socioeconomic goals,
- Creating places capable of providing high quality of life, Protection of the environment including the protection, restoration and enhancement of Water and biodiversity resources.



Fig.1.3 Design Objectives

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1.4 Overall Concept

The brief identified the need for a mixture of house types with the majority of the accommodation being 2-3 bed family house and Duplex units together with a mix of 1 and 2 bed apartment units. The layout strategy was to provide high quality dwellings set around shared public parks and establishing a number of residential 'home zones' within varying character areas.

The Site Strategy establishes a series of organising principles in line with the LAP that underpin the design. It anchors the project to its context by creating an integrated landscape strategy that provides connectivity to the greater Carrigtwohill Area.

These principles include:

- The layering of the development into *character areas* within the existing Castlelake Area and environs of Carrigtwohill reflecting the site parcel configuration.

- Castlelake North
- Castlelake West
- Castlelake South 01 + 02
- Blandcrest
- Station Road North
- Station Road South

- The establishment of a central landscaped park providing a 'view corridor' through the proposed residential development at Castlelake along a north-south axis together with secondary views and routes to landscape features within and beyond the site as a principle organising device.
- The creation of a sequence of external amenity spaces that create an inter-connected and permeable landscape that extends West to East within the development site.
- The scaling of a residential development from south to north with taller development located along the main distributor roads and reducing across the site to two-storeys residential estates up to the boundary with the rail line along the northern boundary.
- The creation of a sequence of connections with adjacent development, existing and future, so as to create a high level of permeability through the development.
- The creation of a transport hierarchy that looks to give primacy to pedestrians and cyclists through the introduction of shared surfaces, pedestrian-only areas and traffic-calming in accordance with DMURs and current best practice.
- The creation of 'active frontage' throughout the development at street level by locating apartment foyers and communal facilities along key street frontages combined with 'own-door' apartment/ duplex units and houses to secondary streets.
- The creation of a new pedestrian and cycle route to connect to the proposed link to existing Carrigtwohill Rail Station and the development lands to the northern edge of the rail line.

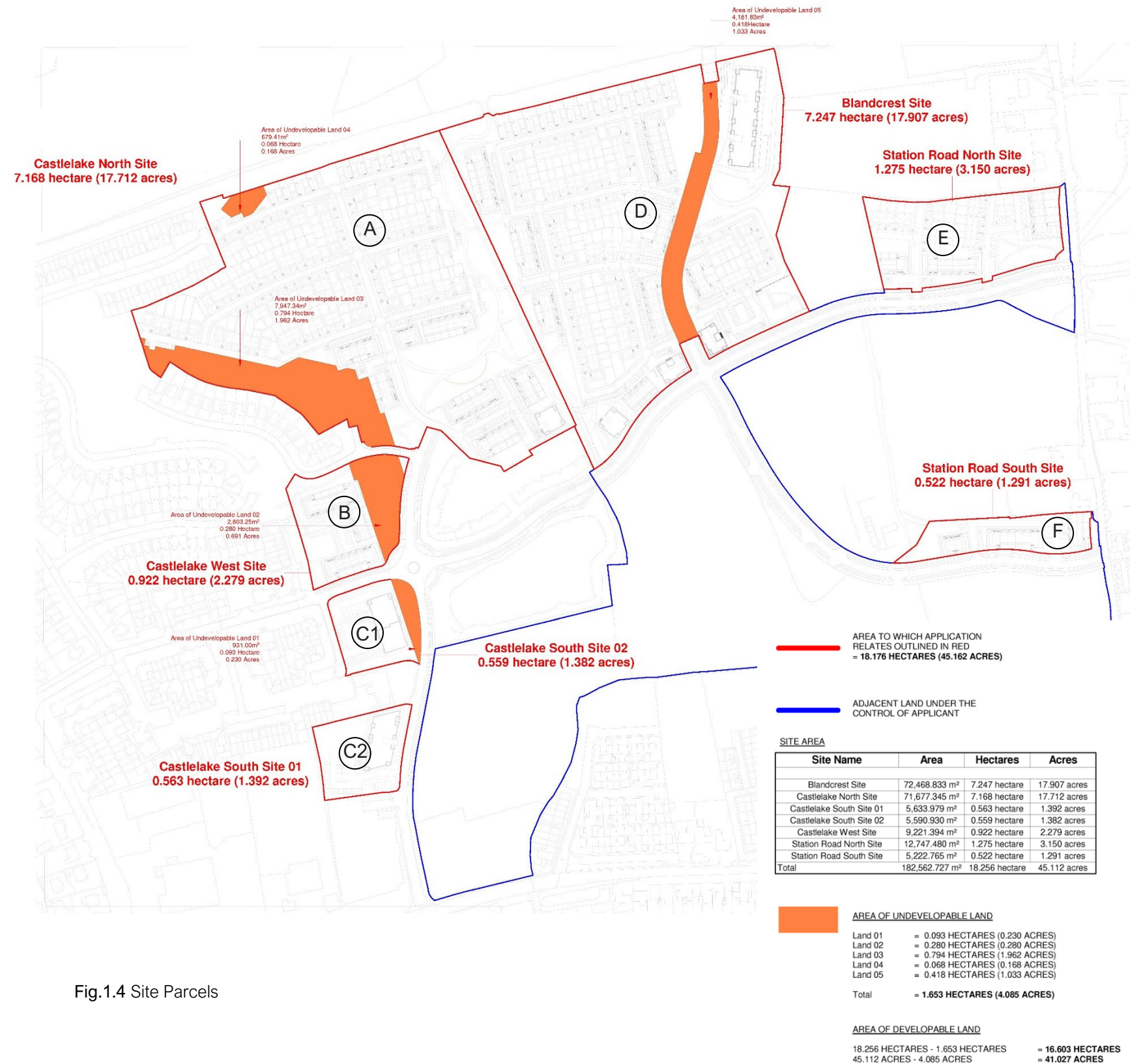


Fig.1.4 Site Parcels

01_INTRODUCTION

1.5 Design Elements

Key Design elements adopted are;

Connectivity + Inclusivity

Located close to established and recent neighbourhoods, new connection points will be provided to existing local amenities through routes/walkways promoted by an active landscape scheme demonstrating the routes to individual destinations in the immediate and wider context. A potential to provide a range of unit mix, inclusivity is ensured for all households and so resulting a vibrant and dynamic neighbourhood. The public open spaces and the public pedestrian routes are clearly identifiable as such and are open to all for access.

Permeability

The Site strategy provides a pedestrian- friendly, permeable framework that permits pedestrians freedom of movement within the development as well as extending connections beyond the site and integrated into the existing and future road infrastructure.

Public Open Space

The proposed landscape areas consist of a series of open spaces including 2 large neighbourhood parks; 8 local parks, a 'Village Green/ Plaza' area; communal amenity space for the apartments; incidental open space; and streetscape planting. All public open spaces have been clearly defined by both the housing development and the various proposed apartment blocks, which ensure quality, well designed amenities with both active and passive uses.

Place Making / Character Area

Across the site, within the different housing character areas, placemaking is achieved in how the buildings address each other, the nature of the road layouts and the adjoining landscape parks. Materials and finishes are used to distinguish shared surface areas from roads, while tree lined margins identify green routes connecting pocket parks and larger areas and create specific unique character identities within the whole site Design Strategy.

Development Landmarks

The site layout introduces prominent focal points through the creation of specific public areas, in particular the ' Central Neighbourhood Park / Village Green ' strategically positioned to setup a key vista along the main park and connect to the main distributor road and beyond to the school campus and lake.

Height Strategy

The variation of the building Form and Heights to create a significant visual Interest across the residential development with the taller multi unit buildings positioned along the main road circulation providing a built edge stepping down to meet the two-storey housing development. The articulation of the buildings and the distancing of the buildings results in any potential or minimised overlooking and overshadowing.



Fig.1.6.1 Diagram and Communal Space

02_SITE DESIGN STRATEGY

2.1 Design Development

A key factor in the design of the proposed residential scheme was to ensure that a collection of buildings was developed as a way of managing the numerical and brief requirements of the project. The proposed development is the latest stage in an overall masterplan for the Castlelake area of Carrigtohill with the currently constructed scheme located to the west and south of the proposed development.

The proposed development area is split up into 7 land parcels that are interwoven into the existing built development and each of the 7 parcels, which vary in size, react specifically to their position within the broader Carrigtohill town context. The proposed landscape design draws upon the rural context of this satellite town of Cork City. The concepts of urban form, sense of place, focal points, permeability and legibility, aspect and views have informed the design in terms of sustainable land use composition and the built form.

A critical aspect to any new residential development is the importance of placemaking – to create places where people can enjoy living. Placemaking brings character and identity to a new development through working with the existing physical characteristics of the site and surrounding context to inform the design process from initial concept to a considered, resolved design that is the most appropriate development for the site.

In developing this strategy the configuration of roads and buildings underwent a number of iterations before resulting in the current Site Layout.

Stage 1 - Section 247 Meeting

The scheme presented for the developable lands proposed a number of strategic site considerations leading on from the density and other issues that had been raised by ABP in the refusal of planning application reference 17/05399. This layout consisted of varying residential typologies laid out in line with topography, road connections, and connectivity of open spaces with pedestrian and cycle routes. The scheme proposed a development layout delivering a density of 40.5 units to the hectare with useable open space of 18.6%

Stage 2 - Section 5 Consultation

Following discussions on the linking in and alignment of the SHD proposal and other infrastructural works, and the wider constraints of the road network key aspects of the scheme design were developed to improve the useability of open space and to enhance the proposed character of the residential areas.

Stage 3 - Tripartite Meeting & Bord Pleanala Opinion

The Tripartite Meeting resulted in a review of a number of design issues, including;

- *Justification of the housing and open space layout and connectivity in the context of the existing pattern of development in the area.*
- *Further consideration of variation in external building designs.*
- *Further consideration of the distribution and integration of smaller green spaces to add defensibility and an improved sense of residential amenity*
- *Further consideration of the long cul-de-sacs layout proposed and consideration of improved connectivity to open space / play areas for all future residents.*

All of these revisions combined address the recommendations and concerns raised by CCC and An Bord Pleanala, and result in a site layout which consolidates the original concept objectives and strengthens the overall design.



Fig.2.1 CGI Aerial view of the current scheme layout

02_SITE DESIGN STRATEGY

2.2 Scheme Proposals

2.2.1 Section 247 meeting with Cork City Council

A Section 247 meeting with Cork City Council (Council Reference: SHD33) was held on the 15th July 2021. The scheme presented for the developable lands proposed a number of strategic site considerations leading on from the density and other issues that had been raised by ABP in the refusal of planning application reference 17/05399 which had proposed a scheme layout representing a change of layout and house types on part of the lands previously permitted under the overall 'Castlelake' development granted permission under planning register reference number 00/7674 (An Bord Pleanála Reference Number PL 04.131129).

The proposed Castlelake SHD Site Strategy proposal adopted an Urban Design approach that;

- Proposed a development layout delivered a Density of 40.5 units to the hectare with useable open space of 18.6%
- Improved pedestrian connectivity throughout and proposed a landscape scheme with passive surveillance over the public open space.
- Proposed multi unit buildings at corner and other key nodal site locations with 3 story units on the distributor roads.
- Delivered a number of 4 storey apartment buildings with semiprivate space, with own doors where possible and generally in cul-de-sacs.

The Council representatives noted the following in relation to the proposal;

- It was noted that the proposed density is appropriate for the area and that the East/West connectivity will assist the development.
- Concerns about useability of open space and that the masterplan would need to be fleshed out more to reference the proposed character of areas. It was also noted that potential noise impact from the railway needed to be considered for units adjacent.
- A discussion on the linking in and alignment of the SHD proposal and other infrastructural works, and the wider constraints of the road network followed. It was noted that issues such as local impacts from proposed school development etc need careful consideration.



Fig.2.2.1 - Site Strategy - Presented at CCC Section 247 meeting

02_SITE DESIGN STRATEGY

2.2 Scheme Proposals

2.2.2 Section 5 Consultation

A Section 5 Consultation meeting took place via Microsoft Teams on the 3rd February 2022 with representatives of the prospective applicant, the planning authority and An Bord Pleanála in attendance. The Planning Authority submission, while welcoming the completion of the existing residential development at Castlake consistent with the Council's overall plans and policies for the area, recognised a number of requirements for further design development and clarification within the overall scheme proposal.

The comments raised by Cork County Council are addressed within the current scheme proposal. An Bord Pleanála issued an Opinion on the Section 5 consultation stating that the documentation submitted with the consultation request (i) constitute a reasonable basis for an application for Strategic Housing development.

In addition to the Planning Statement and response to An Bord Pleanála's opinion the following items are addressed below;

1. Compliance with CDP Policy, Local Area and Carrigtwohill URDF.
2. Urban Design Approach
3. Public open space quantum and quality, landscaping and ecology.
4. Traffic, Transport and connectivity.
5. Noise Impact Assessment and railway line.

1.Compliance with CDP Policy, Local Area and Carrigtwohill URDF.

An Bord Pleanála representatives sought further consideration on the following;

- Density, core strategy, mix of tenure.
- Integration with the wider area; to the north, to existing residential to the west, to the train station, to the school site and to the 'TC' zoned site.

Applicant response;

Cork County Council considered the density appropriate and in compliance with the County Development Plan (CDP). The Urban Design strategy anticipates a phasing of the residential development from west to east across the land parcels, to integrate initially with the existing Castle Lake Development with more conventional housing to the western end of the site. The proposed development will contain 46 units per hectare – upper end of the 20 – 50 u/ha set out in the CDP. The scheme provides 7 apartment blocks positioned along the main East-West / North-South distributor roads recognising the higher density of the apartments as more appropriate when fronting onto these road locations. Density increases in the proposed developments further east towards the train station with provision made for connectivity to the train station. The scheme design has cognisance to the Northern Station road and the Southern Station road, the School Site and the Town Centre.



Fig.2.2.2. - Site Strategy - Presented for Section 5 Consultation

02_SITE DESIGN STRATEGY

2.2 Scheme Proposals

2.2.2 Section 5 Consultation

2. Urban Design Approach

An Bord Pleanála representatives sought further consideration on the following;

- *Justification that the proposal provides a high-quality approach to the design and layout of new housing.*
- *Justification at application stage for the architectural design approach chosen.*
- *Justification of the housing and open space layout and connectivity in the context of the existing pattern of development in the area.*

Applicant response;

The urban design principles applied to the proposed development have cognisance of distributor roads and connectivity to the underpass. The design approach proposes a clear street network which provides safe secure permeability connectivity. is based on higher density on wider roads and closer to the train station, buildings turn corners and open spaces are well overlooked and supervised while the distributor roads have been clearly defined to discourage through-traffic in the centre of the site. The homezone network will create neighbourhoods of distinctive character. A DMURS compliant scheme has been proposed with resident and pedestrian safety prioritised, with the materiality of these streets enabling a sense of pedestrian ownership and safety.

- *Further consideration of the long cul-de-sacs layout proposed and consideration of improved connectivity to open space / play areas for all future residents.*

Applicant response;

The design rationale for the development takes its cues for the provision of a strong street network punctuated by well-proportioned public open spaces which are linked by home-zones and pedestrian routes. Working with the Landscape Consultant we have sought to achieve a consistent spatial geometry for the residential blocks that would both suit the site and would be easier for pedestrian and cycle navigation. While the housing units at Castl lake to the west of the site are evenly orientated and distributed as an extension of the current *conventional* built environment (Maple Lane), this pattern is partially continued to the eastern side of the central neighbourhood park into Blandcrest. A number of cul-de-sacs are incorporated into the Castl lake scheme layout as terminations of the road network onto the edge of this park with pedestrian and cycling connectivity extended across open space and play areas to the east of the park, where the edge condition with the park places greater emphasis on home zone areas. The shared surface on the eastern side of the central Neighbourhood Park will be designed to soften and allow for a less formal approach between road, parking and pedestrian/cycling route, but with clear delineation of each surface and its use through the application of different material finishes. The terminations of the urban blocks are punctuated with brick bookends in all locations, and there are no blank gables.

- *Further consideration of variation in external building designs.*

Applicant response;

Distinct Duplex blocks with strong corner elements and diversity of materiality and colour are introduced along the north south axis to the east of the neighbourhood park terminating as perimeter blocks onto the play and recreational areas at the southern end of the park. The Duplex type is also repeated along the distributor roads and to increase the residential unit mix across the development sites. The apartment buildings within the scheme are located along the existing distributor roads and have a distinctive external façade composition shared across all buildings with variation in each reflecting internal unit layouts and orientation. See Section 4.12.5 on *Material Palette and Design Precedents* within this statement.

- *The positioning of the Creche facility relative to the housing and its delivery within the overall development phasing strategy.*

Applicant response;

The masterplan has developed to provide enhanced connectivity to the distributor roads and the relocation of the creche facility reflects the anticipated traffic and pedestrian movements and the requirement for the Creche to sit more centrally within the scheme. The creche building provides important street frontage onto the East - West distributor road with traffic access for drop-off and pick-up located off the main north south distributor road within the smaller Blandcrest development along the eastern edge of the site and the cycle and pedestrian route proposed as part of the Carrigwohill to Middleton Inter-urban Cycleway.

02_SITE DESIGN STRATEGY

2.2 Scheme Proposals

2.2.2 Section 5 Consultation

3. Public open space quantum and quality, landscaping and ecology.

An Bord Pleanála representatives sought further consideration on the following;

- *Further consideration of the distribution and integration of smaller green spaces to add defensibility and an improved sense of residential amenity.*

Applicant response;

The urban design proposal seeks to integrate the public realm with public open spaces of varying characteristics and dimensions. These spaces, together with the varying buildings across the scheme, create a series of landscaped routes and pedestrian connections designed to provide an animated streetscape through the provision of dedicated play areas and larger open spaces with site topography and existing natural features further integrated into the Landscape Plan. The Masterplan incorporates a hierarchy of open space; the Neighbourhood Park, Local Parks, Communal Open Space, Pocket Parks and Play Areas.

Refer to the Landscape Design Rationale Report, prepared by Cunnane Stratton Reynolds for further descriptions.

Document Reference: 21642-2-D01 Landscape Design Rationale Rpt_V1 220513

4. Traffic, Transport and connectivity.

- *Compatibility with other adjoining key proposed and existing infrastructure, road network initiatives and projects.*
- *Delivery of public realm infrastructure.*
- *Phasing plan*

Applicant response;

Developments within the local area have been taken into consideration to help integrate the proposed residential development into the wider environs of Carrigtwohill. One key scheme is the proposed Carrigtwohill URDF initiative which seeks to improve the public realm of Carrigtwohill and provide better connectivity with residential developments. The URDF proposal include upgrading the full length of Station Road of which part of the scheme directly borders the site's eastern ends.

Concerns were raised on how Apartment Block A7 would interact with the 4m wide cycle and pedestrian route proposed in the Part 8 – Carrigtwohill to Midleton Inter-urban Cycleway Phase 1, in particular, the layout proposal's potential to compromise the alignment of the route, the geometry of levels and its connection to the development. These issues have been addressed in the current scheme with an adoption of the original layout and a resolution of the vehicular access to Apartment 7 with a recognition that the proposal is an important, key north south route high quality route to connect the schools complex to housing.

A phasing plan is submitted as part of the application. Drawing reference CHD-WIL-ZZ-ZZ-DR-A-0081 - Proposed Phasing Plan

5. Noise Impact Assessment and railway line.

- *A noise impact assessment report is required to be submitted with any future application.*
- *Further consideration and justification in relation to separation distances of housing units to the railway line and boundary treatments, provisions of a suitable buffer with the railway line and to consider the relationship of finished house levels to avoid opportunity for noise pollution and overlooking from passing trains.*

Applicant response;

The houses adjacent to the railway line have been specifically designed to mitigate the negative impacts associated with this location. To avoid the space becoming an unsupervised and anti-social area the houses are placed to the north of the access road. The custodianship of the area between the houses and the railway line boundary is then vested in the occupants of each house. The privacy is mitigated by taking a hierarchical approach to private open space. The space directly east of the house structures is surrounded by high walls enclosing a fully private open space. The area of this space is over 50m² in all cases. The space between the house and this space, and the railway line boundary is semi-private open space that can be used to store bins and bicycles, garden sheds and to carry on other domestic activities not required to be fully private. The minimum distance between any house structure and the railway line boundary is 6.0m. The noise is mitigated by the omission of apertures in the north and west facades of all the houses and by the high walls enclosing the private open spaces.

Noise and Vibrations are discussed at Chapter 4 of the accompanying Environmental Impact Assessment.

02_SITE DESIGN STRATEGY

2.2 Scheme Proposals

2.2.3 Response to Bord Pleanála Opinion

The team have considered the scheme in further detail following our initial meeting with An Bord Pleanála and Cork County Council, to evolve proposals in line with urban design principles and all statutory guidance. A number of Urban and Architectural Design related points are extracted from the Bord Pleanála **Notice of Pre-Application Consultation Opinion** and are further detailed within the relevant sections of this document and accompanying reports.

Extracts from the Bord Pleanála's *Notice of Pre-Application Consultation Opinion* numbered as listed in Opinion

1. An updated Architectural Design Statement - The statement should include a justification for the proposed development, having regard to, inter alia, urban design considerations, visual impacts, site context, the locational attributes of the area, linkages through the site, pedestrian connections and national and local planning policy. The statement should specifically address layout, urban design, disposition and quality of public open space and communal open space, finishes of the blocks, the design relationship between the individual blocks within the site, and to existing residential property to the west.

The statement should be supported by contextual plans and contiguous elevations and sections.

Response;

The Design Statement has been updated in response to the requirements highlighted above.

4. A detailed statement of justification of the density proposed, in terms of suburban location, sequential approach, the road network, topography of the site and specific local objectives pertaining to the lands contained in the Cobh Municipal District Local Area Plan 2017.

Response;

The Castl lake SHD proposal as submitted provides a housing density figure of 43.12 per hectare. Extract 3.6.83 of the Cobh Municipal District Local Area Plan 2017 states that one of the key development opportunities in Carrigtwohill remains the undeveloped land south of the rail line adjacent to the Station Car Park and that given the proximity of these lands to the station it is appropriate to adopt a high-density mixed-use core and where the highest densities in the town, 50+ units per hectare, are considered appropriate.

6. Cross-sections at appropriate intervals, photomontages, and any other information deemed relevant, illustrating FFL's levels, ground levels and topography of the site. In particular, showing proposal relative to the train line and to any adjoining existing development in the vicinity, useability and functionality of public open space and private open space/ rear gardens.

Response;

The scheme proposal is described in the submission drawings and illustrated in the CGI's attached to this Design Statement as Appendix A.

Drawing reference - CHD-WIL-ZZ-ZZ-DR-A-0110 / 0114 - Contiguous Elevations - Sheets 01-04

12.A Housing Quality Assessment that provides details in respect of the proposed apartments set out as a schedule of accommodation, with the calculations and tables required to demonstrate compliance with the various requirements of the 2020 Guidelines on Design Standards for New Apartments. It is important that the proposal meets and preferably exceeds the minimum standards in terms of dual aspect and proportion of apartments which exceed the floor area by 10%. In the interests of clarity clear delineation/ colour coding of floor plans indicating which of the apartments are considered by the applicant as dual/ single aspect, single aspect north facing and which apartments exceeds the floor area by 10%.

Response;

A Housing Quality Assessment Report accompanies the Design Statement

13. A Daylight and Shadow Impact Assessment of the proposed development, specifically with regard to:

I. Impact upon adequate daylight and sunlight for individual units, public open space, courtyards, communal areas, private amenity spaces and balconies.

II. Impact to any neighbouring properties.

Response;

A detailed Daylight and Shadow Analysis prepared by DK Partnership is submitted and a summary Report attached as Appendix D

14.A report that addresses issues of residential amenity (both existing residents of adjoining development and future occupants), specifically with regards to potential overlooking, overshadowing and overbearing. The report shall include full and complete drawings including levels and cross-sections showing the relationship between the proposed development and adjacent residential development.

Response;

The proposed development aims to maintain the privacy of its residents and to prevent overlooking.

Privacy and Amenity issues are dealt with in section 4.10 of the Design Statement.

A series of Diagrams illustrate

- Building separation,
- Proximity of units
- Orientation of the primary and secondary aspects within the apartment Units.

02_SITE DESIGN STRATEGY

2.3 Scheme Design

2.3.1 Adopted Site Strategy

Schedule of Accomodation			
Types	no of Types	Total no of Units	Percentage (%)
Houses			
2B House (4P), 2 Story			
Type H21	37	60	8.4%
Type H21X	13		
Type H23	10		
3B House (5P), 2 Story			
Type H31	63	139	19.4%
Type H31X	63		
Type H33	13		
4B House (7P), 2 Story			
Type H41	25	25	3.5%
Total Houses		224	31.3%
Duplexs			
2B Duplex (4P) over 2B Duplex (4P) over 2B Duplex (4P), 3 Story			
Type D21	3x3	9	8%
Type D22	17x3	51	
3B Duplex (5P) over 3B Duplex (5P) over 3B Duplex (5P), 3 Story			
Type D31	1x3	3	8%
Type D32	19x3	57	
2B Duplex (4P) over 1B Duplex (2P), 3 Story			
Type D41	70x2	140	23%
Type D41A	9X2	18	
Type D41B	3X2	6	
Total Duplex		284	39.7%
Apartments			
Apartment Block 1 (Type A1), 4 Story			
1 Bed (2P)	8	34	5%
2 Bed (4P)	18		
3 Bed (5P)	8		
Apartment Block 2 (Type A2), 4/5 Story			
1 Bed (2P)	15	42	6%
2 Bed (4P)	20		
3 Bed (5P)	7		
Apartment Block 3 (Type A3), 5 Story			
1 Bed (2P)	8	17	2%
2 Bed (4P)	9		
Apartment Block 4 (Type A4), 4 Story			
1 Bed (2P)	6	13	2%
2 Bed (4P)	7		
Apartment Block 5 (Type A5), 4 Story			
1 Bed (2P)	6	13	2%
2 Bed (4P)	7		
Apartment Block 6 (Type A6), 4 Story			
1 Bed (2P)	6	13	2%
2 Bed (4P)	7		
Apartment Block 7 (Type A7), 5 Story			
1 Bed (2P)	23	76	11%
2 Bed (4P)	41		
3 Bed (5P)	12		
Total Apartments		208	29.1%
Total		716	100%



02_SITE DESIGN STRATEGY

2.3 Scheme Design Objectives

The concepts of urban form, sense of place, focal points, permeability and legibility, aspect and views have informed the design in terms of sustainable land use composition and the built form.

Enhanced Connections and Routes

The new development provides connections to the existing rail and road infrastructure including significant new pedestrian and cycling routes and permeable open space. The provision and nurturing of a network of walking and cycling routes will further strengthen the community essence of the development.

New Public Spaces

The layout proposes a series of internal routes and connected public spaces, some of which are shared surface between vehicles and pedestrians (homezones). The objective is to create a strong series of informal routes and spaces. The homezone proposals are a significant proportion of the new urban streets within the development. Vistas across the site and a strong emphasis on the views through the various significant public open spaces within the site are provided.

Place

The public realm will play a major role in the organisation of the proposed residential development, with the creation of a central neighbourhood park along the north south axis forming greater connectivity to the wider community. The proposed landscape design draws upon the rural context of this satellite town of Cork City.

Scale and Context

The establishment of clear urban grain of blocks and plots is essential to creating new places and it is essential that the new street hierarchy forms a clearly legible urban structure, both in terms of vehicular access and also in terms of pedestrian movement and orientation. Materiality is a key consideration in terms of the urban landscape and building, informing the design proposals on the site. As design consideration, the scale of buildings should reflect the nature and importance of the routes and spaces they address. An increase in scale can reinforce the civic qualities of a place and provide points of interest and identity. In other instances, a reduced scale will protect the amenity of streets and backyards to ensure optimum climatic and light conditions.

The provision of higher buildings will be provided in key locations along the principal routes and increase densities along the site and will create points of reference. Buildings of scale are provided overlooking public open spaces or at nodal points (to the north) within the site.

Urban Design

Key visual connection points have been identified to better relate the site with its environs and community focal spaces while key connection routes have been identified to better relate the site with its surroundings. These routes guarantee that the development is accessible in its entirety and well linked. Linkage between streets and public open space are highlighted in which the scheme shows a well-connected proposal based on inclusivity. Density ranges across the site are appropriate to existing developments to adjoining lands and the varying boundaries, mainly to parkland or public roads, and are designed to address the public realm with passive supervision.

Ecology and Landscape

To preserve ecosystems and landscape by incorporating distinct habitats and established landscape features into open spaces. *The green infrastructure plan for this development will draw upon that set out in the Country Development Plan.*



Fig.2.3 Scheme Layout



Fig.2.4 Phased Delivery

Appropriate phasing of the development will ensure it is supported by all necessary infrastructure, services, amenities and facilities.

3.1 Detail Design

Our Design intention is to create a mixed density, sustainable residential development with a strong sense of place and identity. We have sought to create unique character areas within the development as the following paragraph sets out.

1 Character Area 1 – Central Neighbourhood Park

This area is defined by central park which forms the primary axis and spine of the development, stretching from the northern trainline boundary towards the East-West Connection road to the south bordering Castl lake Park. This character area describes the central open space that is enclosed on three sides by a variety of house types, Duplex units and Apartments to provide a civic scale to the ‘Village Green’. The urban design strategy is to position along the perimeter of the public park, three storey duplexes that form a distinctive urban edge, terminating cul-de-sac streetscapes, enveloping pocket parks and addressing ‘homezone’ areas ensuring strong levels of passive surveillance and enclosure. The landscape proposal is for a naturalistic design which develops upon the park’s existing green and blue infrastructure. Diverse planting of native trees, scrub and wildflower meadows to enhance existing hedgerows and scrub. A linear blue/ green corridor consisting of the enhanced existing ditch and stream which will be incorporated into the proposed site’s SUDs scheme.

2 Character Area 2 – Castl lake North

This area describes the proposed housing enveloped by the central park and connecting into the existing street network at Maple Lane and Maple Close with two storey semi-detached and terraced housing forming an urban edge to match the scale of the adjacent developments, with a road design layout in line with DMURS, providing an active edge to regulate car speeds and create a more intimate experience for pedestrians and cyclists.

3 Character Area 3 – Blandcrest

This area describes a series of East-West aligned streets that are accessed from the proposed Blandcrest Main Street and extend to the western edge of the central park connecting as ‘Homezone’ Areas. The housing is predominantly two storey semi-detached and terraced housing at its core with Duplex units to the perimeter of the development linking to a series of apartment blocks located along the East-West connection road.

4 Character Area 4 – Castl lake Avenue and the East West Connection Road

This area describes the development site edge and is home to the higher density residential units within the scheme proposal. A series of 7 Apartment buildings provide a strong urban edge along the proposed main distribution road as an extension of the existing Castl lake Avenue connecting to Station Road with the ‘Village Green’ acting as a focal point along this route and the Creche building providing active frontage. The proposed buildings have been set back, along with the boundaries of the duplex and apartments, to provide a 2m tree and shrub lined strip to provide a buffer between private and public zones and to accommodate a cycle and pedestrian route that will connect into the proposed Carrigtwohill to Middletown Inter Urban Cycleway and the Carrigtwohill Greenway currently under construction.



Fig.3.1 Character Areas + Urban Building Mix

03_DESIGN OVERVIEW

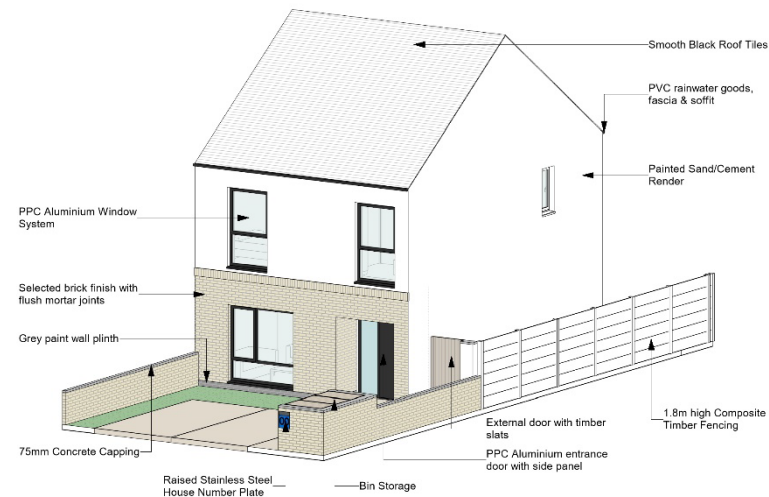
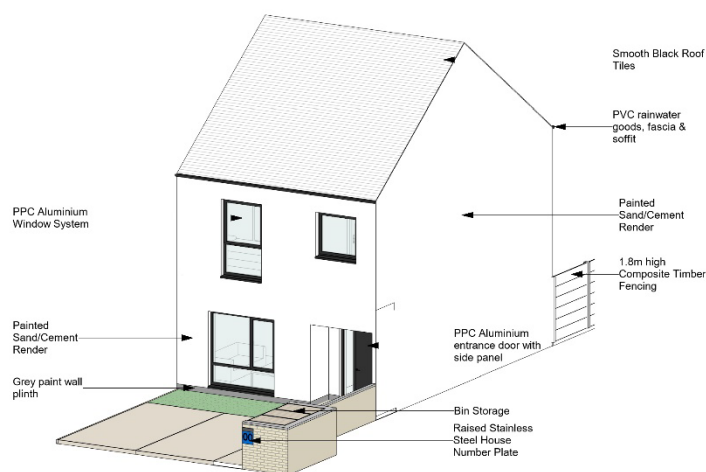
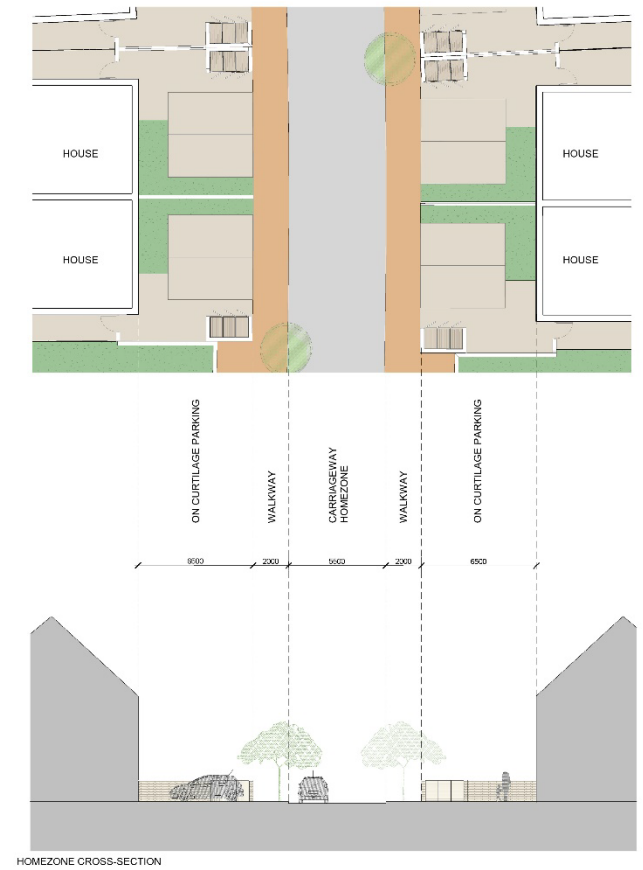
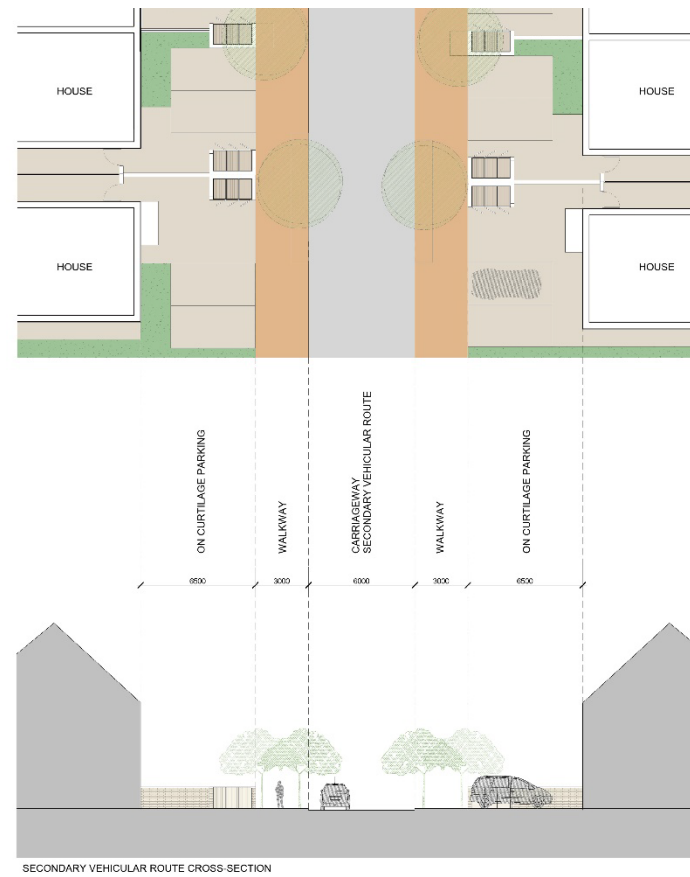
3.2 Residential Typologies

House Units

The proposed housing units are comprised of 2 & 3-storey units, with **7 no. unit types**.

- All units are primarily finished in a brick and/or pre-coloured render finish, contemporary fenestration, and metal cladding.
- Two brick tones are proposed for the house units to reflect distinctive character areas with a red brick being the primary proposal at houses to Castlake North to compliment the redbrick context of the neighbouring developments and a light buff brick to houses located at Blandcrest.
- All units are proposed with either a canopied or recessed entrance in the front façade, to offer a contemporary entrance portal. All fenestration will be double glazed units to one selected colour throughout with low cills where possible to maximise light into the living spaces.

The house frontages transition from the public to private realm with off street on curtilage parking combined with a 1.5-2m landscaped planted perimeter.



03_DESIGN OVERVIEW

3.2 Residential Typologies

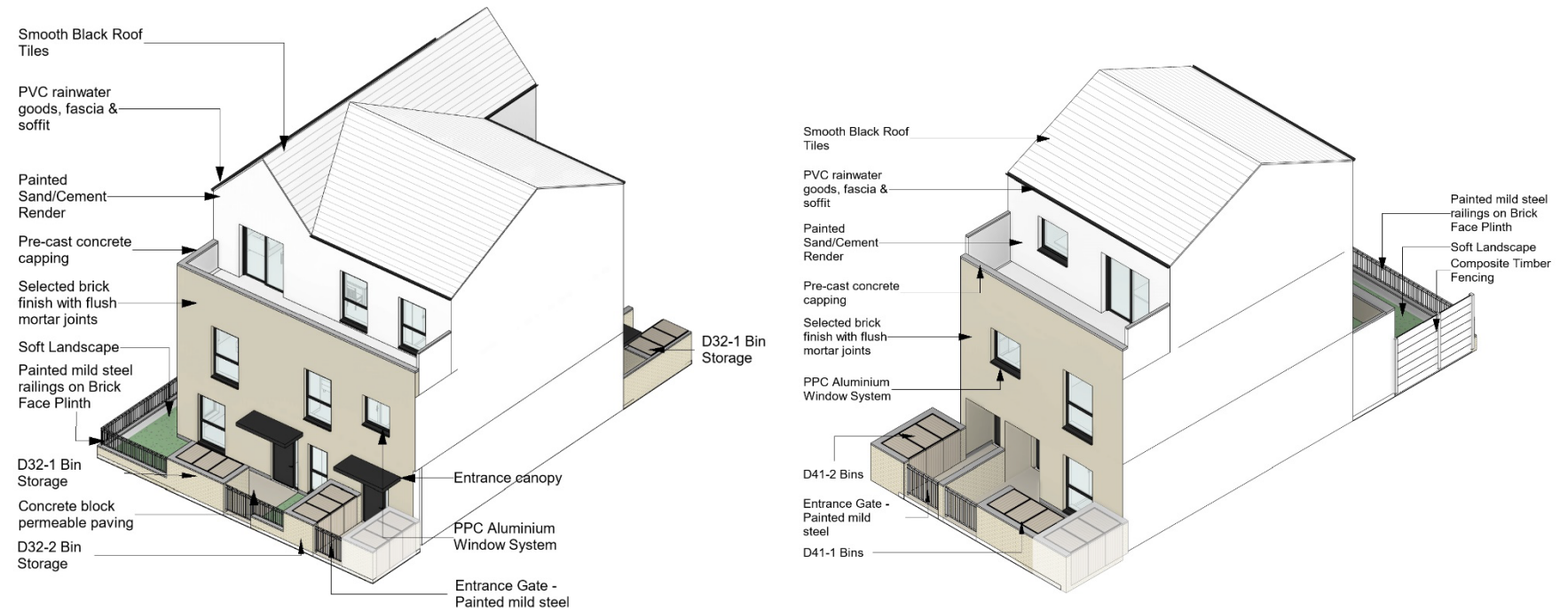
Duplex Units

The proposed Duplex units are all three storey volumes, finished with brickwork and precoloured render.

There are **7 no. Duplex typologies** used within the scheme, offering a variety of design and expression within the site;

- Duplex units D21- D31 are designed to bookend duplex terraces with Duplex Units D22,D32, D41, D41a, D41b.
- Varying unit types and numbers are combined to create terraces with dual frontage façades finished with brick at the ground and corner elevations with precoloured render at the first and second levels.
- Stepped facades offer external terraces at first and second floor levels enclosed within brick parapets / balustrades.
- The material combination of brickwork, and metal cladding canopy cover at entrances, offers a distinctive aesthetic for these units.

The Duplex terraces are a distinctive feature in the proposed scheme and are deployed to terminate streetscapes and provide a layer of supervision and passive surveillance onto the public realm and occasional pocket parks dotted across the housing layout.



CGI of Residential Building 7

03_DESIGN OVERVIEW

3.2 Residential Typologies

Residential Block 1 comprises 34 apartments in a 4 storey block

Total Residential Units		34
Building Heights	Residential	4 storeys
Communal Amenity Space	Outdoor	1541.7sqm
	Indoor	409.4sqm
Cycle Parking : Resident / Visitor		136
Car Parking		45 spaces

Design Concept

- Residential Building 1 has a height of 4 storeys and is a standalone apartment building located at the very southern end of the development.
- It sits adjacent to the existing ALDI shopping centre and the Carrigtwohill primary care centre. The ground floor contains an amenity area for community use with potential for public functions and providing active frontage onto Maple Crescent.
- Car parking is provided at grade with the outdoor semiprivate amenity landscaped space.

Massing + Height

- Form and massing studies supported the design development and refinement to improve integration with its surroundings, minimising the impact on neighbouring residential amenities * while achieving an appropriate site density.
- The building volume and scale has been subdivided into different elements to break down the scale.

* See Appendix E – Residential Amenity Report



CGI of Residential Building 1



Residential Building 1 Axonometric

03_DESIGN OVERVIEW

3.2 Residential Typologies

Residential Block 2 comprises 42 apartments in a 4 storey block

Total Residential Units		42
Building Heights	Residential	4-5 storeys
	Outdoor	465sqm
	Indoor	355.4sqm
Cycle Parking : Resident / Visitor		106
Car Parking at grade		42 spaces

Design Concept

- Residential Building 2 has a height of 4 -5 storeys and is located to the north of apartment building 1.
- It sits adjacent to the lake and the Cascade Apartment complex at the roundabout on Maple Crescent.
- The ground floor contains a community/ amenity providing active frontage onto Maple Crescent.
- 3 number 1 bed units are positioned along its northern edge to enclose a courtyard carpark located behind the building and accessed from the existing residential development at Oakbrook.

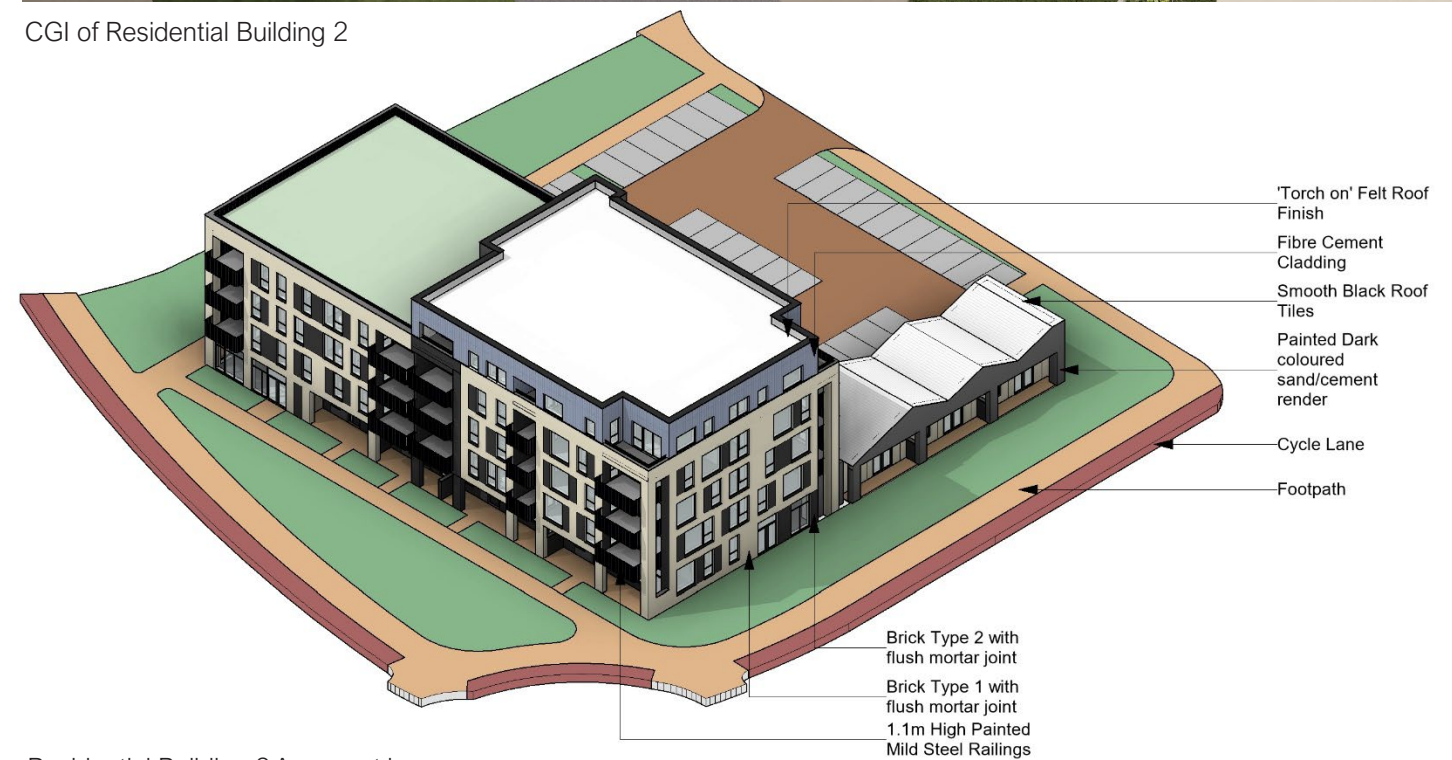
3.3.1 Massing + Height

- Form and massing studies supported the design development and refinement to improve integration with its surroundings, minimising the impact on neighbouring residential amenities* while achieving an appropriate site density.
- The building volume and scale has been subdivided into different elements to break down the scale relative to the adjoining proposed and existing buildings.

* See Appendix E – Residential Amenity Report



CGI of Residential Building 2



Residential Building 2 Axonometric

03_DESIGN OVERVIEW

3.2 Residential Typologies

Residential Block 3,4,5 & 6 collectively combine to provide 56 apartments

Total Residential Units		56 (combined total across 4 Blocks)
Building Heights	Residential	4-5 storeys
Communal Amenity Space	Outdoor	1,049.7sqm
	Indoor	504.4sqm
Cycle Parking : Resident / Visitor		192
Car Parking		60 spaces

Design Concept

- Residential Buildings 4,5,6 have a height of 4 storeys, with building 3 having an additional storey as a feature building located within the Plaza and forming a built edge along a key north-south vista along the central park within the scheme.
- The ground floor of each contains a community room which provide public functions and active frontage onto the main pedestrian routes. The amenity space does lend itself to future commercial use if required.
- Apartment parking spaces are distributed on-street or within parking courts in proximity to the apartment buildings

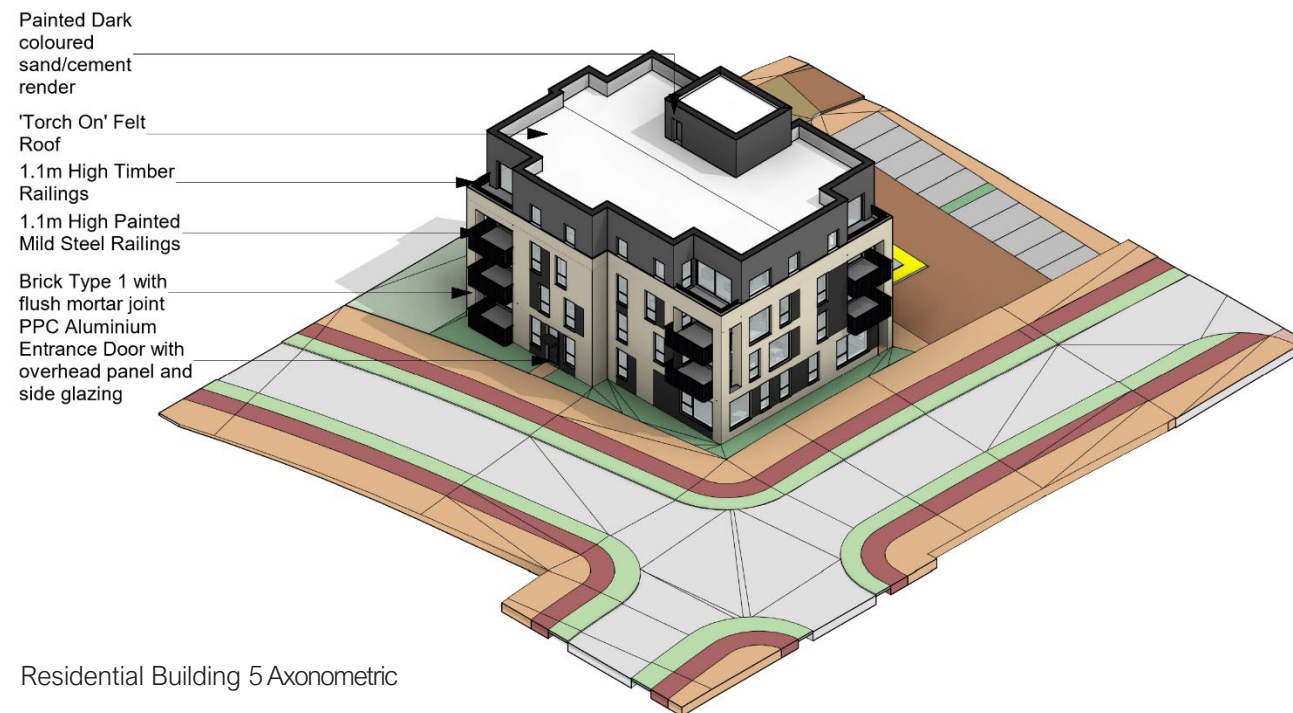
Massing + Height

- Form and massing studies supported the design development and refinement to improve integration with its surroundings, minimising the impact on neighbouring residential amenities* while achieving an appropriate site density.
- The volume and scale of these residential buildings is compact in design and layout with the buildings positioned at key locations as pavilion like blocks articulating the corner junctions at the southern ends of Castlelake and Blandcrest along the proposed main distributor roads. The buildings sits adjacent to the school campus and lake.

* See Appendix E – Residential Amenity Report



CGI of Residential Building 5 & 6



Residential Building 5 Axonometric

Castlelake SHD

03_DESIGN OVERVIEW

3.2 Residential Typologies

Residential Block 7 comprises 81 apartments in a 5 storey over ground block

Total Residential Units		76
Building Heights	Residential	5 storeys
Communal Amenity Space	Outdoor	1439.10sqm
	Indoor	511.7sqm
Cycle Parking : Resident / Visitor		202
Car Parking		54 spaces

Design Concept

- Residential Building 7 has a height of 5 storeys and is located to the northeast of the development site. The building is orientated north-south with a slight angular deflection in plan form and elevation in response to site constraint.
- The site slopes upwards from the proposed access road towards the eastern boundary enabling a semi basement carpark taking advantage of the differential change at ground level. The sloped terrain is incorporated into the adjoining landscape park and enables level access to the perimeter amenity spaces, 4 no, located at the east and west elevations at ground level.
- The apartment building sits adjacent to both the rail line and Carrigtwohill rail station with pedestrian and cycle routes at its perimeter with the potential to link to the future access route along the eastern boundary of the site to the existing Carrigtwohill rail station.

Massing + Height

- Form and massing studies supported the design development and refinement to improve integration with its surroundings, minimising the impact on neighbouring residential amenities* while achieving an appropriate site density that reflects the buildings proximity to the rail station.

* See Appendix E – Residential Amenity Report



CGI of Residential Building 7



Residential Building 7 Axonometric

Castlelake SHD

WILSON ARCHITECTURE

OMM|W

03_DESIGN OVERVIEW

3.3 Contiguous Elevations



Key Plan



Contiguous Elevation AA - Part 1 of 2



Contiguous Elevation AA - Part 2 of 2



Contiguous Elevation BB



Contiguous Elevation CC

03_DESIGN OVERVIEW

3.3 Contiguous Elevations



Key Plan



Contiguous Elevation DD - Part 1 of 3



Contiguous Elevation DD - Part 2 of 3



Contiguous Elevation DD - Part 3 of 3



Contiguous Elevation EE - Part 1 of 3



Contiguous Elevation EE - Part 2 of 3



Contiguous Elevation EE - Part 3 of 3

03_DESIGN OVERVIEW

3.3 Contiguous Elevations



Key Plan



Contiguous Elevation FF - Part 1 of 2



Contiguous Elevation FF - Part 2 of 2



Contiguous Elevation GG - Part 1 of 2



Contiguous Elevation GG - Part 2 of 2

04_URBAN DESIGN CRITERIA

4.1 Context

How does the development respond to its surroundings?

Does the development seem to have evolved naturally as part of its surroundings?

Do appropriate increases in density respect the form of buildings and landscape around the site's edges and the amenity enjoyed by neighbouring users?

Has the form, architecture and landscaping been informed by the development's place and time?

Does the development positively contribute to the character and identity of the neighbourhood?

Have appropriate responses been made to the nature of specific boundary conditions?

- The subject application is part of an overall masterplan for the Castlflake development which was first established under the 2001 planning for some 1600 residential units. As such certain key elements were established under that plan which remain in place such as the main connector roads through the site.
- The immediate neighbours to the site are town commercial units and low-density residential units with some high density residential. Proximity to town centre and local amenities are good with transport link capabilities easily improved in tandem with development
- The general physical height of existing development in Carrigtwohill is predominantly two storeys and the proposed development sets out to use the 2 storey as 'datum' with increased height achieved in specific locations appropriate to higher density and increased scale of building. The proposed building heights and scale are considered appropriate for its location. The scaling of a residential development from south to north with taller development located along the main distributor roads and reducing across the site to two-storeys residential estates up to the boundary with the rail line along the northern boundary apart from the 5 storey Apartment Building 7 which is strategically located in proximity to the existing Carrigtwohill rail station.
- Density across the overall development reflects the node points identified in the development plan namely the proposed town centre area at the entrance to Carrigtwohill and the train station located adjacent to the north-east corner of this application. In these areas both a higher density and a physical increase in building height is proposed.
- On the western edge of the proposal the development extends as a continuation of the neighbouring lower density family homes with a mix of street frontage and street layouts.
- A public realm strategy promotes and encourages pedestrian and cycle movements, increasing on-street activity and casual encounters, with a clear hierarchy of main and minor streets. A street tree strategy introduces the inclusion of chicanes within the roads to allow for tree to be planted on the street, in turn limiting traffic speed within the residential zones. The development offers a variety of public and provides an amenity offering and spaces for residents and the broader community to meet and socialize in gathering spaces promoting a strong sense of community.



Fig.4.1 Building Heights

04_URBAN DESIGN CRITERIA

4.2 Connections

How well connected is the new neighbourhood?

Are there attractive routes in and out for pedestrians and cyclists?

Is the development located in or close to a mixed-use centre?

Does the development's layout make it easy for a bus to serve the scheme?

Does the layout link to existing movement routes and the places people will want to get to?

Does appropriate density, dependent on location, help support efficient public transport?

- The Site Strategy provides a pedestrian-friendly, permeable framework that permits pedestrians freedom of movement within the development as well as extending connections beyond the site. These same links allow the wider neighbourhood to enjoy the parks, with existing axes, views and vistas used to generate secondary routes within the site.
- The masterplan describes a series of pedestrian routes that north-south and east-west across the site. The site is very permeable for pedestrian access allowing a variation of routes from one end of the site to the other and from focal points within the site to the key destinations outside the site that people may wish to go to. Pedestrians will have a choice of travelling through connecting park areas such as from the central park north to the second underpass. This will be similar to the existing green finger route from the central park to the north-west corner of the site.
- The site strategy looks to give primacy where possible to cyclists and pedestrians throughout the development. Dedicated shared pedestrian and cycle routes are proposed along the proposed park along a north-south axis. Cycle connectivity is also proposed between the proposed development and the rail station connecting to a proposed north-south route adjoining the eastern boundary of the development (subject to agreement).



Connectivity

- Traffic calming measures have been integrated into road design to create a safe environment for pedestrians and cyclists. Measures include the introduction of regular junctions throughout the development so as to limit the ability for cars to establish speed together with the introduction of 'Tables' or shared surfaces in accordance with DMURs to encourage slow vehicular speeds.
- Density ranges across the site are appropriate to adjoining lands and boundaries, mainly to parkland or public roads, are designed to address the public realm with passive supervision.

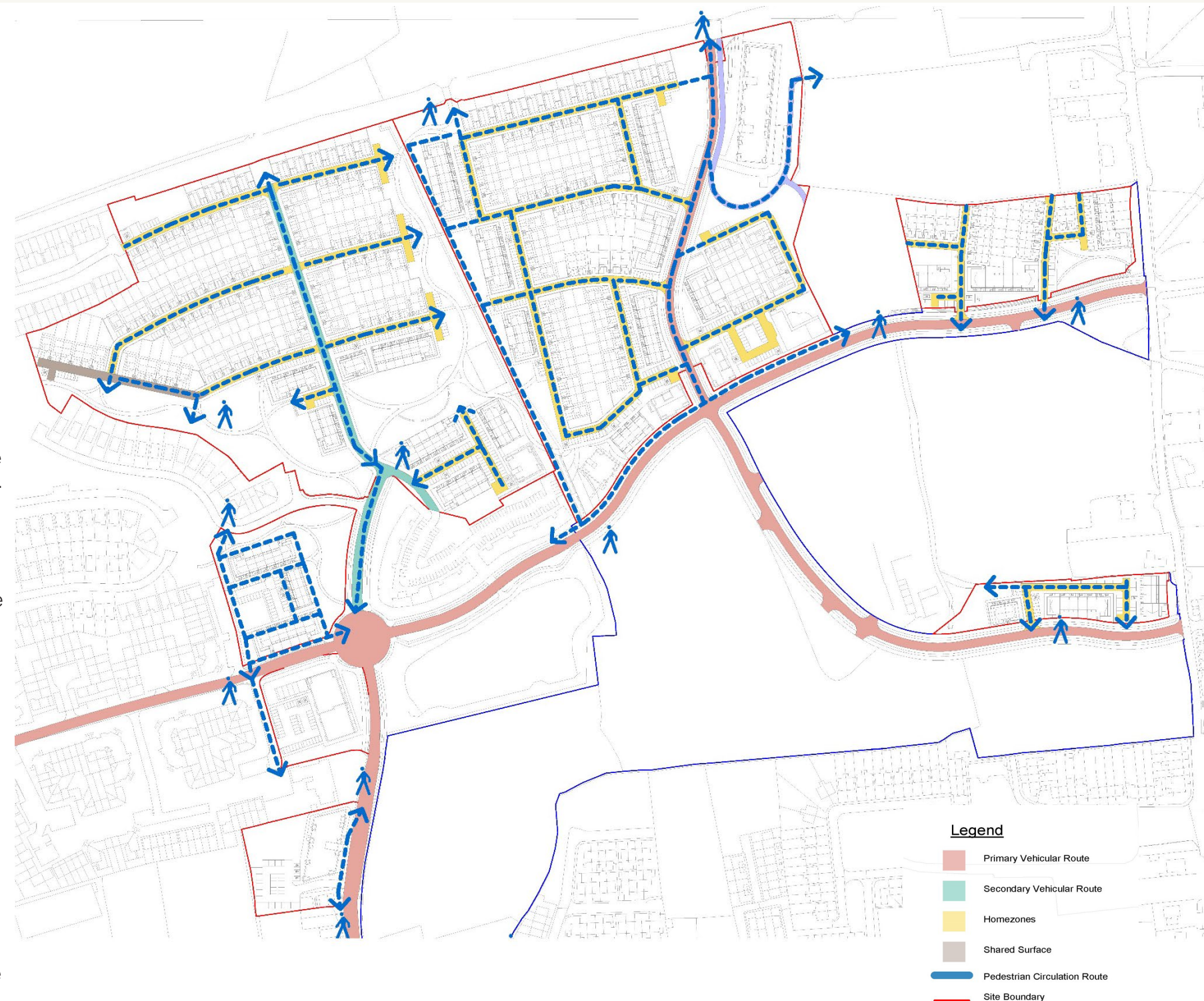


Fig.4.2 Circulation Diagram

04_URBAN DESIGN CRITERIA

4.4 Variety

How does the development promote a good mix of activities ?

Do activities generated by the development contribute to the quality of life in its locality?

Are the uses that attract the most people in the most accessible places?

Are neighbouring uses and activities compatible with each other?

Do housing types and tenure add to the choice available in the area?

Have opportunities been taken to provide shops, facilities and services that complement those already available in the neighbourhood?

- A variety of housing types are proposed within the development expanding the accommodation choice within the Carrigtwohill area while supporting existing commercial facilities within the town.
- The scheme meets the requirement for both smaller rented accommodation such as the apartments, starter homes and terraced or smaller semi-detached units while also providing family house types as larger semis or detached homes.
- The application site is situated close to existing schools and a commercial town centre with sports clubs and the local church all within easy distance from the proposed residential scheme.
- The overall Site Strategy delivers a strong mix of activities within the scheme, a green network as part of a series of interconnected amenities. The public and private realms are clear, and streets are considered an integral part of the place and of the spatial experience. Landscaping, boundary treatments, pathways and building enclosure all contribute to delineating between public and semi-private spaces.
- Activities are easily accessible by vehicle but are principally arranged to be accessible by pedestrian and bicycle.
- A creche facility is included in the proposed development. The 2 storey building has been located centrally within the development to the southern end of Blandcrest site alongside the residential development at Station Road North. The Creche is designed to provide for 150 child places across the age groups to 6 yrs old and 16 creche staff. The building with associated play areas and staff carparking.



The proposed Creche Building



Public Realm



Aerial Views of the overall Scheme proposal

04_URBAN DESIGN CRITERIA

4.5 Efficiency

How does the development make the appropriate use of resources, including land ?

Does the proposal look at the potential of higher density, taking into account appropriate accessibility by public transport and the objectives of good design?

Have landscaped areas been designed to provide amenity and biodiversity, protect buildings and spaces from the elements and incorporate sustainable urban drainage systems (SUDS)?

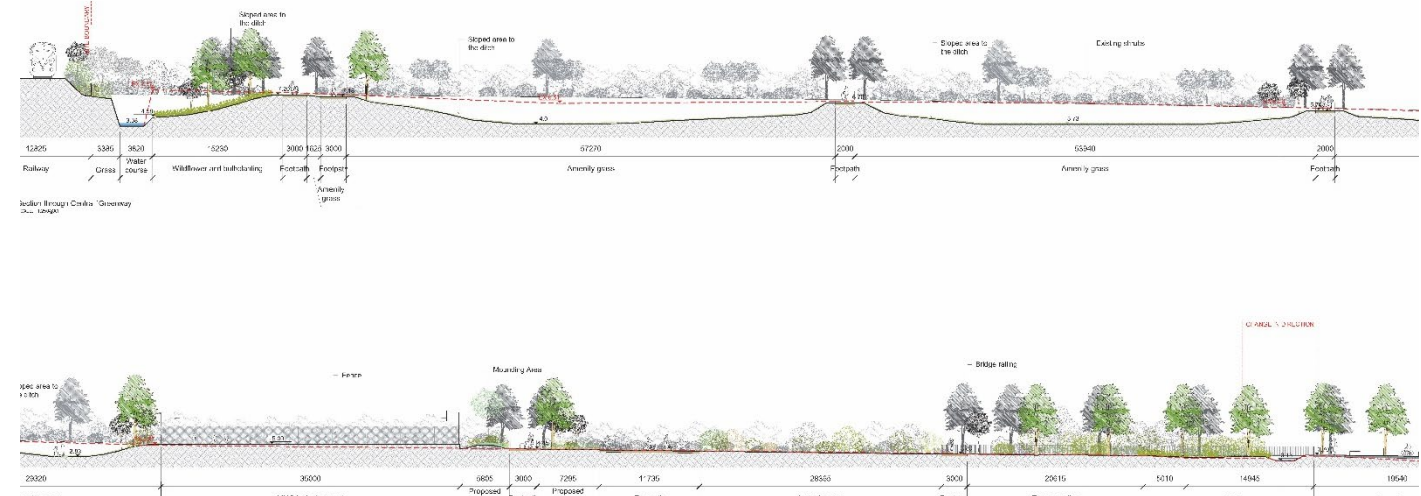
Are buildings, gardens and public spaces are laid out to exploit the best solar orientation?

Does the scheme bring a redundant building or derelict site back into productive use?

Have appropriate recycling facilities are provided?

- The development lands have specific site constraints and the scheme design and layout seeks the most efficient use of the land where possible. The proposal balances density within the setting with the resultant proposed housing providing efficient net densities. The development provides a density of c. 43 units/ha across the site which is considered appropriate for this location.
- This application proposes a density appropriate level to sustain transport network and support neighbourhood services. Higher density development is located closest to the railway station facilitating future easy connection to public transport.
- Landscaped areas are both amenity spaces and visual break between the clusters of buildings. Some act as connectors for pedestrians such as the link from the northern play park to the central park. The development is designed so as not to have a negative impact on any potential redevelopment of adjoining lands.
- The wildlife corridor along the southern edge of the railway line is to continue on from the existing development to the west.
- Individual buildings and gardens are orientated to maximise daylight opportunities and solar gain. Daylight/Sunlight analysis demonstrate an acceptable level of residential amenity for future occupiers of the proposed housing; within individual rooms, , in communal open spaces and in public areas within the development.
- The development has been designed to achieve Part L NZEB compliance with a minimum BER of A2 with compliance demonstrated using the DEAP (Dwelling Energy Assessment Procedure) methodology.
- Efficient heating systems are proposed throughout the development, including the use of photovoltaic panels for the multi-unit apartment and duplex units, with each building designed to achieve efficiencies to minimise running and maintenance costs.
- Each of the buildings will provide appropriate locations for recycling facilities.

LANDSCAPE



Landscape Section Drawings – Extract Drawing no. 21642-2-203-revB

BUILDING



Mixed Housing Typologies

04_URBAN DESIGN CRITERIA

4.6 Distinctiveness

How do the proposals create a sense of place?

Does the place have recognisable features so that people can describe where they live and form an emotional attachment to the place?

Does the scheme present a positive addition to the identity of the locality?

Does the layout make the most of the opportunities presented by existing buildings, landform, and ecological features to create a memorable layout?

Does the proposal successfully exploit views into and out of the site?

Is there a discernable focal point to the scheme, or do the proposals reinforce the role of an existing centre?

The Site Strategy seeks to create a design proposal that could interface with the existing public realm, achieve inter-connectivity and integration of the varying sites to deliver a cohesive single SHD proposal. The scheme will contribute strongly to the sense of place in the locality bringing an emblematic series of buildings and landscape settings into the public realm.

The Open Space Strategy is to clearly differentiate between areas of public, communal and private open space and ensures that areas of open space are accessible, usable and available for all. The Landscape approach across the sites is to produce a coherent and well considered design theme with a strong identity and distinctive sense of place that fosters a connection and attachment between existing and new residents and their surrounding environment.

It is considered that the overall scheme development can be a positive addition to the identity of the locality and enhance the sense of place through the quality architecture, landscaping and urban design in addition to the development's amenity offering and spaces for residents and the broader community to meet and socialise.

The proposal for the varying residential buildings establishes an integrated design approach by employing a strict material palette with a common design approach applied to each of the proposed buildings form and fenestration. The brick palette proposes a range of standard bricks laid in a variety of bonds and styles which aims to provide patterning and rhythm to the facades to break down their scale where required. In addition, a tonal palette will be used throughout the development to further enhance the appearance of both the Housing and Apartments.

LANDSCAPE



MUGA Playpark at lower end of the central 'Greenway'

BUILDING



Apartment Buildings 5 & 6 provide a 'gateway' at the junction onto Blandcrest Main road from the East/West Connector Road

04_URBAN DESIGN CRITERIA

4.7 Layout

How does the proposal create people friendly streets and spaces?

Does the layout align routes with desire lines to create a permeable interconnected series of routes that are easy and logical to navigate around?

Does the layout focus activity on the streets by creating active frontages with front doors directly serving the street?

Are the streets designed as places instead of roads for cars, helping to create a hierarchy of space with less busy routes having surfaces shared by pedestrians, cyclists and drivers?

Are traffic speeds controlled by design and layout rather than by speed humps?

Do block layouts place some public spaces in front of building lines as squares or greens, and some semi-private space to the back as communal courts?

- The residential layout strategy has evolved from a considered response to the site and brief. The permeable layout aligns pedestrian and cycle routes through the site along desire lines. The central 'Greenway' expands north and south between Castlake and Blandcrest and links up to streetscapes at pocket parks or shared surface homezones, providing an interconnected network of open space for residents to explore and enjoy.
- In accordance with the Design Manual for Urban Streets and Roads, the design has a clear hierarchy of roads within the scheme. The proposed routes through the site follow the principles of DMURS ensuring that traffic speeds are minimised and that the pedestrian is favoured. Vertical deflections in the road create areas of raised tables adjoining open spaces to create a sense of pedestrian priority. Road widths, turning radii, surface finishes and detailing will differentiate each road type.
- Furthermore, dedicated pedestrian and cycling facilities are provided throughout the scheme linking each part of the development to neighbouring sites and facilities.
- The design scheme focuses activity on the streets through the use of active frontages with all accommodations accessed via front doors directly serving the street. Road junctions and scheme corners are generally articulated by 3 story apartment / duplex units with the ability to provide overlooking in both directions. The scheme is largely designed as a series of quiet streets linking outward to the local road network and wider community. Internally there are either enclosed green spaces or, as in the case of the green spine running north south, an open-ended amenity and natural landscaped corridor connecting the neighbourhoods. This will extend to existing and proposed amenities.
- The layout aims to unify public space to maximise its potential for use by the widest range of children and adults and extending beyond the site boundary to connect directly to existing and planned amenity space.
 - Well overlooked amenity spaces
 - Link from school to railway.
 - Link between parks.
- The built fabric conveys a clear distinction between public and private space making it secure and ideal for fostering community adhesion.



Typical Scheme Streetscape



View westwards with parking and pocket park at termination of Castlelake Street 3 onto edge of 'Greenway' with the Duplex housing bookending the terraced housing

04_URBAN DESIGN CRITERIA

4.8 Public Realm

How safe, secure and enjoyable are the public areas?

Is all public open space overlooked by surrounding homes so that this amenity is owned by the residents and safe to use?

Is the public realm considered as a usable integrated element in the design of the development?

Are children's play areas sited where they will be overlooked, safe and contribute to the amenities of the neighbourhood?

Is there a clear definition between public, semi-private, and private space?

Are roads and parking areas considered as an integral landscaped element in the design of the public realm?

The overall SHD Site strategy for the public realm is clearly defined in the scheme, with buildings used to create enclosure and public spaces linked and overlapped to create a sequence of places as one moves through the scheme. Children's play areas are overlooked, the public and private realms are clear, and streets are considered an integral part of the place and of the spatial experience.

- Public space is generally overlooked by surrounding homes to create a sense of ownership by residents and safety for users. The open space areas are open ended and continuous where possible throughout the development to intensify their use and reinforce that sense of security for users when enjoying exercise and play outdoors.
- Play areas are sited where they will be overlooked safe and contribute to the amenities of the neighbourhoods proposed within this design.
- Public, semiprivate and private space is clearly defined throughout the design.
- Roads & parking areas have been addressed in the context of the design of the public realm.
- The proposed dwellings provide a continuity of street frontage with minimal set-back distance providing definition and enclosure to the public realm and entrances from the street. Efforts have been made to protect the privacy and amenity of the homes on the ground floor through the provision of private, planted buffer zones between the public and private zones on ground floor, while maintaining direct street access as mentioned above.

The design approach of the public realm within the application lands was to produce a scheme with a strong identity and distinctive sense of place. This has been achieved through careful design considerations including;

- Well defined and overlooked public spaces
- Usable spaces with varying character, dynamics and emphasis
- Retention of existing hedgerows where possible
- Provision of passive and active recreational opportunities for a variety of age groups and abilities
- Connectivity and permeability providing pedestrian (and cycle pathways) that link the various strategic spaces and pocket parks within the scheme and to the wider environment and adjoining residential developments
- Provision of cycle/pedestrian access - providing pedestrian and cycle routes



View along Castlelake Street 4 with, to the left, detached courtyard housing adjacent to the rail line on the northern boundary and typical detached corner house unit to right.



View down the Central 'Greenway' towards the southern end of the proposed development

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4.9 Adaptability

How will the buildings cope with change?

Do designs exploit good practice lessons, such as the knowledge that certain house types are proven to be ideal for adaptation?

Are the homes energy-efficient and equipped for challenges anticipated from a changing climate?

Can homes be extended without ruining the character of the types, layout and outdoor space?

Does the structure of the home and its loose fit design allow for adaptation and subdivision, such as the creation of an annex or small office?

Can space in the roof or garage be easily converted into living accommodation?

- Across the development a varied mix of dwelling types is proposed.
- Modular construction has influenced the various unit design and typologies to provide a faster and sustainable construction delivery
- The development is to be phased under a broader site phasing strategy.

The general principles adopted for each residential building to future proof flexibility and change are as follows;

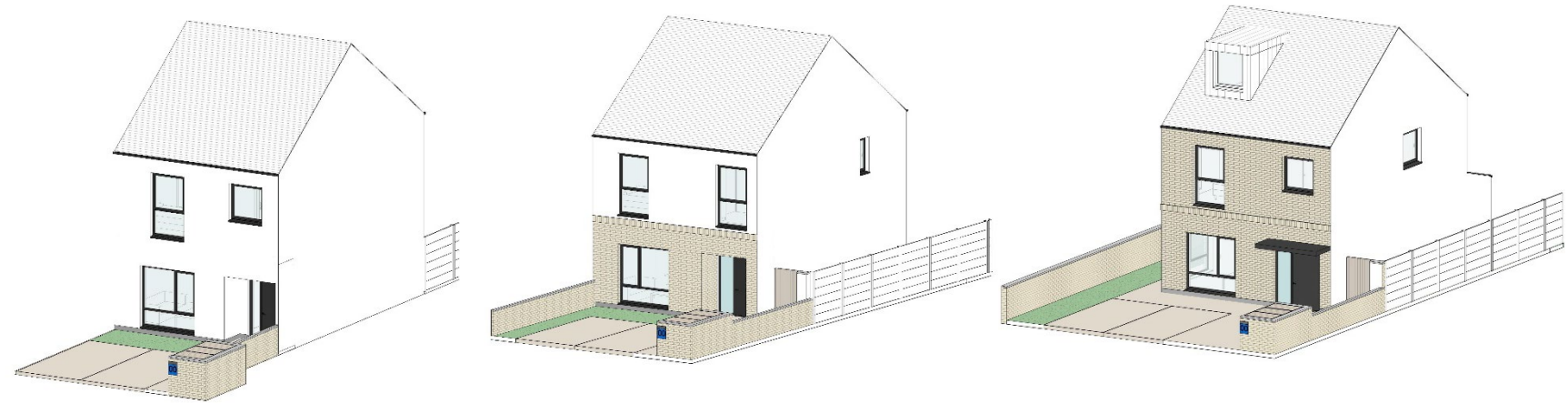
House Units;

Housing is designed in accordance with Best Practice Guidelines: 'Quality Housing for Sustainable Communities' published by Dept. of Environment Heritage and Local Government. 2007 A Housing Quality Schedule has been prepared for each unit to demonstrate compliance and forms part of this submission.

- ✓ House design exploits good practice with the provision of house types that are adaptable.
- ✓ To mitigate against noise levels along the boundary with the rail-line a house type has been developed that presents a narrow blank gable onto rail line and orientates the living and bedroom windows onto a private side courtyard garden and presents
- ✓ The homes proposed will achieve current energy-efficiency targets and meet the challenges anticipated due to climate change.
- ✓ House designs are capable of extension without such works being detrimental to the general architectural character, street layout and outdoor amenity of the development.
- ✓ House designs where possible allow for adaptation enabling residents to work from home part or full time etc.

Apartment and Duplex Units;

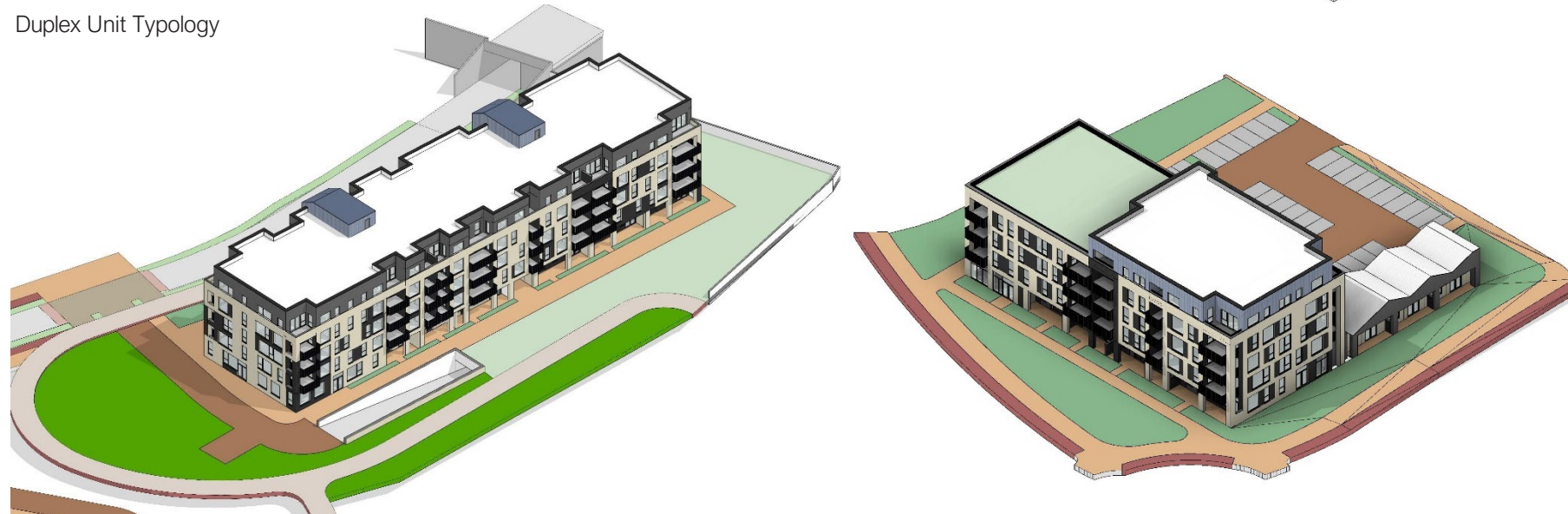
- ✓ The scheme provides for a mix of one, two and three bedroom units in a traditional corridor type plan configuration. Party walls between units and this corridor will be fixed structural elements, whereas internal partitions are envisaged as non-structural and therefore flexible, allowing for future reconfiguration. Wet service zones and service risers are stacked vertically adjacent to the central corridors and will not be required to move.
- ✓ Residential Units will be constructed with adequate ceiling heights, concrete frame with lightweight interior partitions and adequate circulation cores enables adaptability for future uses. Ground floor units have a ceiling height in excess of 2.85m, allowing for possible conversion to commercial/community or office uses in the future.



House Unit Typology



Duplex Unit Typology



Apartment Typology

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4.10 Privacy and Amenity

How does the scheme provide a decent standard of amenity?

Does each home have access to an area of useable private outdoor space?

Does the design maximise the number of homes enjoying dual aspect?

Are homes designed to prevent sound transmission by appropriate acoustic insulation or layout?

Are windows sited to avoid views into the home from other houses or the street and is adequate privacy afforded to ground floor units?

Are the homes designed to provide adequate storage including space within the home for the sorting and storage of recyclables?

House Units;

- ✓ Every home is designed to have useable private garden space.
- ✓ Every home has at least dual aspect.
- ✓ Acoustic insulation and barriers are employed to minimise sound transmission.
- ✓ Privacy within homes is maximised through design and location of windows etc.
- ✓ Storage for belongings and recyclables is incorporated into the house designs.

Apartment and Duplex Units;

- ✓ Each residential unit has access to outdoor private amenity space, with dual aspect enjoyed by over 70% of apartments and all houses.
- ✓ Balconies are semi or fully recessed where possible for privacy, and are generally south, west or east facing.
- ✓ Each Apartment has been designed to prevent sound transmission between units by using the appropriate acoustic insulation.
- ✓ All units meet or exceed the Development Plan / Apartment Guidelines standards for storage and internal living space.
- ✓ Adequate and accessible bin storage and bicycle storage is also provided for within the scheme.
- ✓ Ground floor units include landscaped buffers to ensure reasonable levels of privacy while maintaining passive surveillance of the streets and spaces that the units address.
- ✓ All public and communal open spaces receive good access to sunlight in line with BRE requirements.

The proposed layout successfully utilises the existing landscape elements including the topography where achievable. The primary design consideration within the landscape was to consider the requirements of the future residents, through the provision of high-quality public spaces with a strong landscape character.

The proposed landscape strategy forms part of the overall public space network within the overall development. The public spaces are distributed throughout the development to complement and enhance the site layout plan, with the main public spaces located within the centre of the development.

A key objective for the proposed scheme is to provide opportunities for passive and active recreation, by way of fitness areas/exercise stations, kick-about areas, play facilities and pathways through the public spaces. These proposed spaces in addition to providing recreational opportunities, will also promote connectivity within the overall lands and adjoining areas.

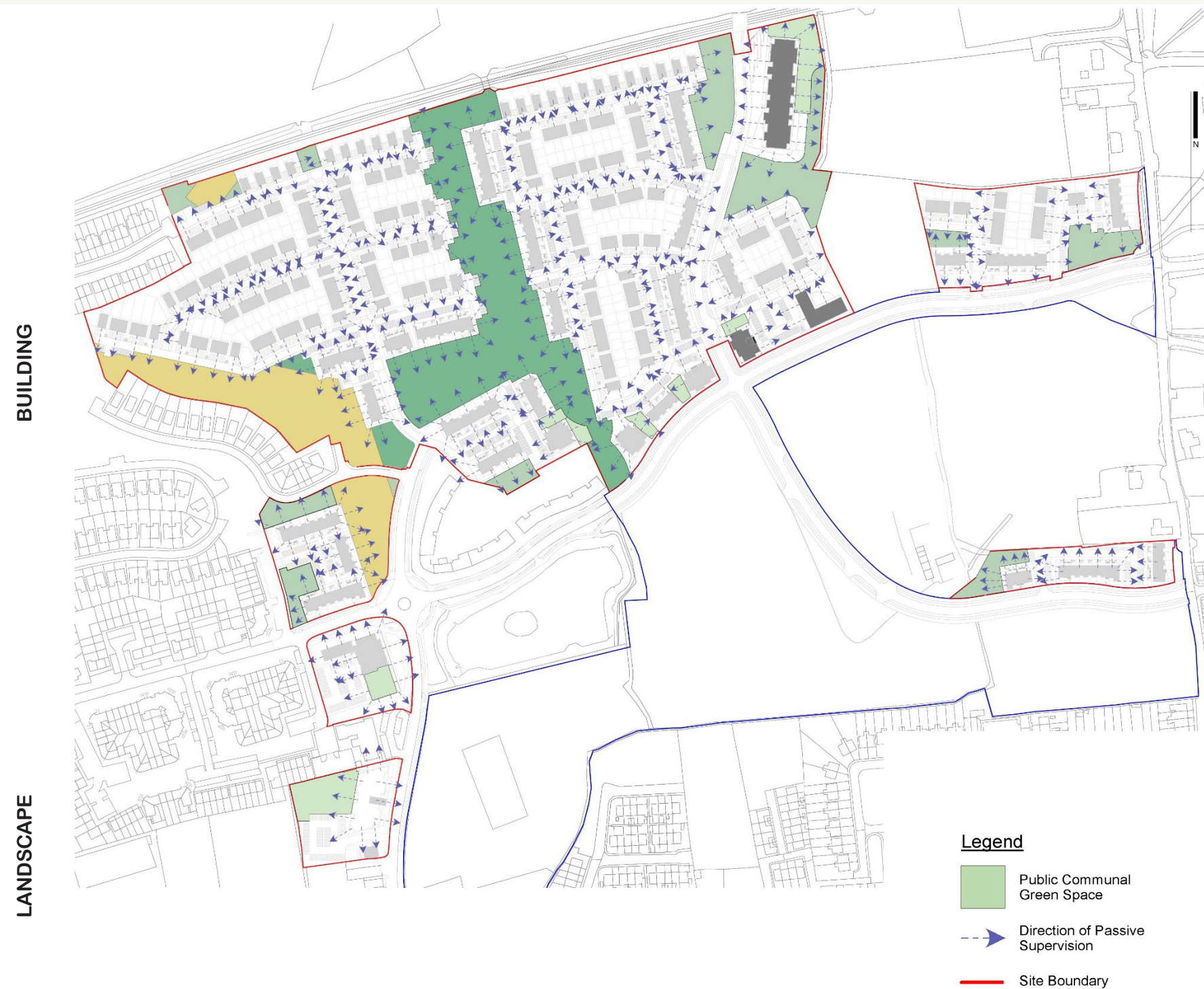


Fig.4.3 Passive Supervision Diagram

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4.11 Parking

- How will the parking be secure and attractive?
- Is appropriate car parking on-street or within easy reach of the home's front door?
- Are parked cars overlooked by houses, pedestrians and traffic, or stored securely, with a choice of parking appropriate to the situation?
- Is parking provided communally to maximise efficiency and accommodate visitors without the need to provide additional dedicated spaces?
- Are materials used for parking areas of similar quality to the rest of the development?
- Are adequate secure facilities provided for bicycle storage?

Cars and Motorcycles - The majority of parking is provided as on-street parallel and perpendicular parking distributed along access roads throughout the development and interspersed with planting. Parking provision is based on 2 space per house and 0.5 spaces per unit., with additional visitor parking provision distributed across the scheme. Parallel parking or group parking is used where appropriate for urban design reasons such as traffic calming and to avoid relentless front garden parking on the main approach. Parking is always close to the dwelling entrance. Materials used for parking in the public realm will be as allowed for taking in charge.

There is a ground level, below podium, parking strategy for the larger apartment buildings but in general there is no underground car parking provision . Apartment parking spaces are distributed throughout the development predominantly on-street or within parking courts in proximity to the apartment buildings 1 to 7. Motorcycle parking is distributed throughout the development.

CAR PARKING PROVISIONS	
Type	Provided
Front of House Parking	646
Duplex Parking	332
Apartments Parking	201
Creche Parking	11
Visitors Parking	36
Accessible Parking	41
Allocated EV Parkings	30
Total	1297

OVERALL BICYCLE PARKING PROVISIONS			
Type	Required	Provided	
Houses	2 Per Unit	Spaces in Private Areas	
Duplexes	1 Per Bedroom	Spaces in Private Areas	
Secured Apartments Cycle Spaces	372	460	
Allocated Apartments Visitor Cycle Spaces	104	176	
Creche Cycle Spaces	-	22	
On-Street Visitor Cycle Spaces	254	260	
Total	730	918	

Cycle parking provision is made in accordance with DHPLG New Apartment Guidelines 2020. Spaces are provided at ground floor within apartment buildings generally for ease of access with covered external shelters integrated into the development in certain locations as part of the architectural language of the scheme. Visitor cycle parking is distributed throughout the development adjacent to apartment entrances and within primary and secondary public spaces. Cycling parking space provision is located to each housing unit.

In the residential apartment buildings , bicycle parking is provided in interior rooms by way two-tier parking rack systems. Rooms are to be accessible only by residents and will be well lit and maintained by the management company. Secure and covered bicycle parking is provided for all apartments at ground floor level within the footprint of the building. Bicycle parking for the duplex Units houses can be accommodated on curtilage.

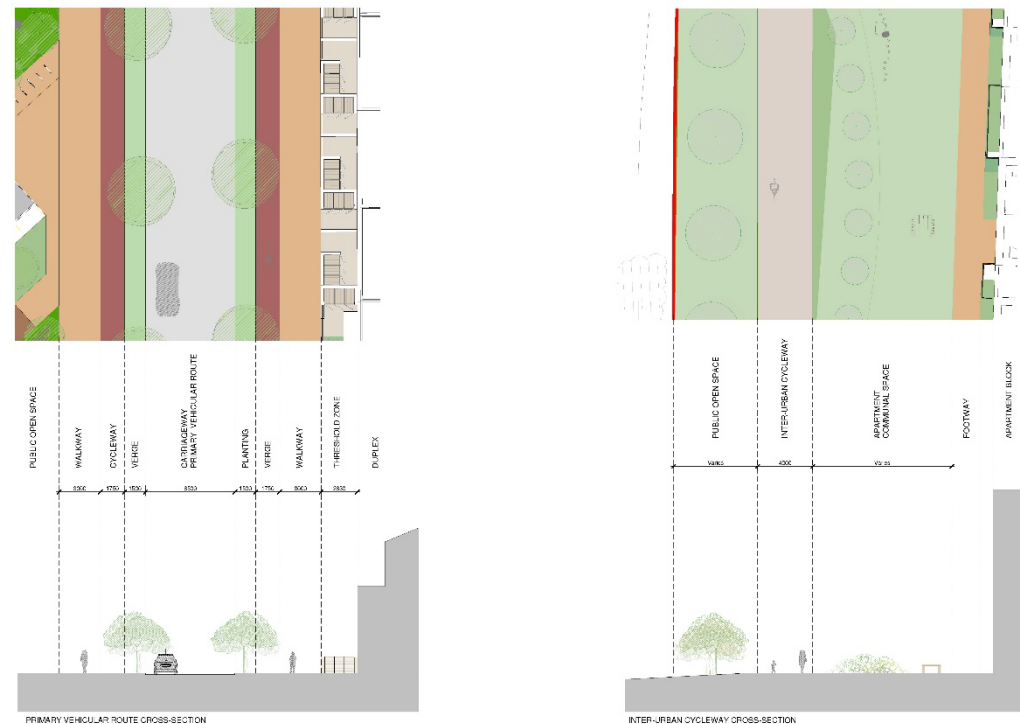


Fig.4.4 Urban Design Criteria - Road Types

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4.12 Detailed Design

How well thought through is the building and landscape design?

Do the materials and external design make a positive contribution to the locality?

Does the landscape design facilitate the use of the public spaces from the outset?

Will the design of the buildings and public space facilitate easy and regular maintenance?

Are open car parking areas considered as an integral element within the public realm design and are treated accordingly?

Has adequate care been taken over the siting of flues, vents and bin stores?

The development proposal is an amalgamation of distinctive land parcels distributed across the application site forming distinct character areas within the development. Materials and finishes proposed will vary within each character area. The design focuses on creating a variety of interconnected streets and spaces which respond to their surroundings and a variety of building form, height and materials creates visual interest in the streetscape which contributes to a recognisable neighbourhood.

The integration of landscape and buildings is central to the scheme concept with the use of the public spaces and movement through the site. Parking, streets and movement are all considered together in how the scheme is used.

To create a legible environment for people to live within and move through, a hierarchy of materials (paving, street furniture etc.) and planting will be employed to create different zones and provide visual cues to how people may move through or use these spaces. While different paving materials and textures will be used to demarcate changes in levels, verges, pedestrian priority zones, cycle paths and to guide the visually impaired, it is proposed that materials including paving, lighting, street furniture and tree planting will be chosen from a limited palette to encourage visual cohesion within the scheme. Focal points will also be incorporated at appropriate locations within the lands to enhance this sense of place and to assist with way-finding through this scheme.

- The layout is informed by existing topography, ensuring excavation and earth works are kept to a minimum.
- Electric car points will be provided for within the scheme. Covered bicycle parking and bin storage included.
- Sustainable urban drainage solutions have been incorporated throughout the site to control water run-off, These measures include swales within public areas.
- All areas of soft landscaped open space are easily accessible by personnel and machines to facilitate efficient and practical maintenance.

Refer to the Landscape Design Rationale Report and Drawing package prepared by Landscape Consultants Cunnane Stratton Reynolds

BUILDING



LANDSCAPE



Landscape - Illustration of the combined housing and public realm provision across the development site

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4.12.1 Residential Density

The proposed development comprises a variety of residential accommodation in a number of built forms distributed throughout the development. The proposed development comprises 224 no. houses, 284 no. duplex units and 208 no. apartments totalling 716 units

These include:

- Semi-detached and terraced two-storey own-door access houses with back gardens,
- Duplex units with own-door access
- Apartments at ground floor with own-door access
- Apartments of varying sizes (One to three-bed units) in multi-storey blocks.

Type	Unit number			
House	224*	*	<i>Detached</i>	21.40 %
Duplex	284		<i>Semi-Detached</i>	56.30 %
Apartment	208		<i>Terrace</i>	22.30 %

4.12.2 Density

Please refer to the Housing Quality Assessment Report accompanying the application submission.

The scheme development statistics;

Housing Units

60	no.	2 Bed Houses
139	no.	3 Bed Houses
25	no.	4 Bed Houses

Duplex Units

82	no.	1 Bed Duplex Units
142	no.	2 Bed Duplex Unit
60	no.	3 Bed Duplex Unit

Apartment Units

71	no.	1 Bed Apartment Units
110	no.	2 Bed Apartment Unit
27	no.	3 Bed Apartment Unit

SITE AREA		
Description	Area (m ²)	ha
Overall Site Area	182,562.7	18.3
Undevelopable Land	16,530.0	1.7
Developable Land	166,032.7	16.6
Density		43.1 per Ha

SITE COVERAGE AREA		
Footprint	Developable (m ²)	Overall (m ²)
Site	166,032.7	182,562.7
Residential	29,515.3	29,515.3
Creche	546.5	546.5
Bike Storage	64.3	64.3
Existing ESB Sub Station	41.0	41.0
%	18.2%	16.5%

PLOT RATIO		
	Developable (m ²)	Overall (m ²)
Site	166,032.7	182,562.7
Residential GIA	71,910.1	71,910.1
Ratio	0.43	0.39

4.12.3 Minimum Floor Area and Standards

Each building proposal is designed to meet or exceed the requirements of Sustainable Urban Housing – Design Standards for New Apartments (December 2020) which sets out minimum standards in respect of room areas, private open space and storage for each home.

A thorough check of the apartment aspect, compliance with these standards is provided in the **Housing Quality Assessment Schedules** submitted with this application.

4.12.4 Refuse Storage and Collection

Housing and Duplex Units - Bin Strategy

Adequate storage, recycling and composting areas have been provided which accommodate the separation of waste for disposal.

- Bin stores have been provided at the rate of three bins per house / duplex unit.
- All house and Duplex units have been provided with securely enclosed bin stores located to the front or to the side/rear of the units in dedicated store areas.

Apartments – Bin Strategy

Residents of the apartments will be required to segregate their waste into the following main waste categories within their own apartment units;

The residents will be required to provide and maintain appropriate waste receptacles within their units to facilitate segregation at source of these waste types. The location of the bins within the units will be at the discretion of the residents. As required, the residents will need to bring these segregated wastes from their apartments to the main residential Waste Storage Area (WSA) located at ground level typically.

The main residential WSA has been appropriately sized to accommodate the estimated waste arisings for the residential units based on a weekly collection frequency and the provision of the appropriate waste management equipment, correctly laid out and efficiently managed.

An **Operational Waste Management Plan** is submitted with the application documentation

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4.12.5 Material Palette and Precedents

A Materials & Finishes Report is attached as Appendix C to the Design Statement

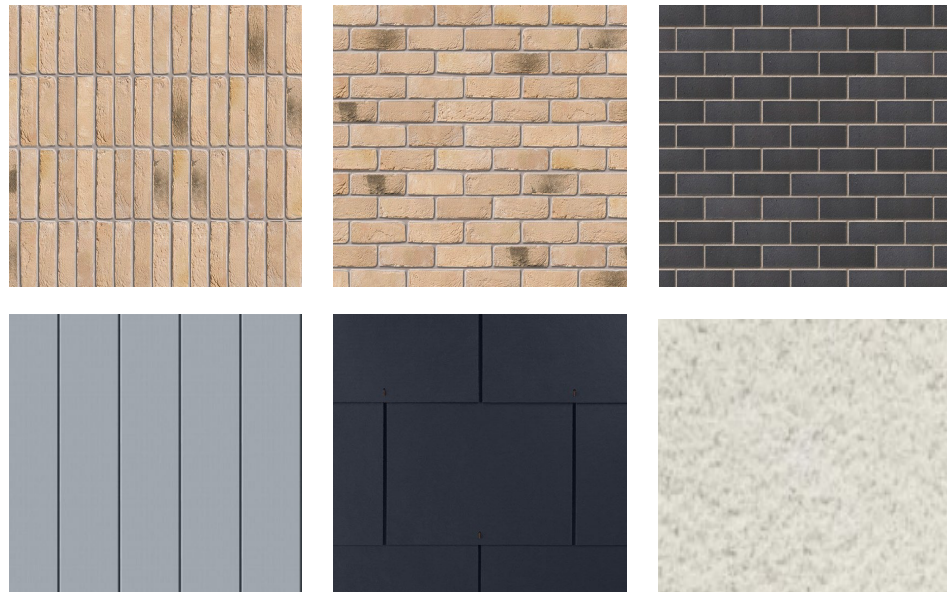
Material and Finishes are selected for their Aesthetics, Durability, Quality, Economy & Low maintenance and the development is constructed with a small palette of good quality, robust and easily maintained materials. Maintaining common materials throughout the development is integral to harmonizing the varying buildings architecturally and contributing to the creation of a quality amenity space on the site.

The homezone area propose the use of brick as the principle facing material throughout the development with the majority of the building façades to consist of a palette of bricks used in a variety of bonds and styles laid to break up the elevation into a clean, elegant and modern architectural rhythm. Walls are generally brick with coloured render with boundary walls onto the public realm consisting of both brick and render walls and railings with hedging.

Pavements and parking areas are finished with a mixture of buff coloured tarmacadam, resin bound gravel and permeable paving to create a sense of shared ownership and to slow traffic down

At the Apartment buildings, the brick colour and texture will vary in tone from block to block and within blocks so as to provide variation and a modulation of scale across the development while also contrasting with planting. Ground level will incorporate more robust brick and concrete finishes appropriate to parking and service areas while upper floors will be finished predominantly with brick with complimentary dark render and cement fibre cladding panels to distinguish the stepping back of the massing at upper levels .

A design palette of styles & elevational treatments are used across the development, with specific consideration to material choice at public and semi public thresholds, horizontal and vertical junctions and hard landscape within the public realm.



Material Palette



Landscape - Illustration of the combined housing and public realm provision across the development site

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4.12.6 UNIVERSAL DESIGN

A **Statement of Compliance with Universal Design** is submitted with the application documentation

Consideration of the guidance set out in the 2013 Universal Design Guidelines for Homes in Ireland has informed the Site Masterplan layout and landscaping proposal. The main features of the proposed development are therefore as follows:

- ✓ All buildings houses have level access delivering ease of access for all. The public realm is designed to ensure accessibility on equal terms for people of a range of ages and physical mobility.
- ✓ A range of apartment types have been proposed in terms of both size and design meeting the aspirations of a range of people and households.
- ✓ The proposed development presents a welcoming and positive aspect to passers-by, creating a new accessible urban, public realm and allowing for direct connectivity to open spaces and adjoining lands, thus avoiding unnecessary physical and visual barriers.
- ✓ Connectivity to adjoining lands has been incorporated into the design of the layout. The network of paths and cycle routes ensure full permeability throughout the scheme and ensures connectivity from the subject site to the surrounding area and local facilities beyond.
- ✓ Falls and gradients have been minimized wherever possible on site and level access will be provided at all parking locations. All units within the development will meet the requirements of Part M of the Technical Guidance Documents where accessibility is concerned.
- ✓ Public spaces, streets and parks, are all designed so that every member of society can use them. Dwellings address these spaces so that they are passively supervised, creating safe spaces for everyone. The quality generated here enhances the open space realm.



Each of the Residential Apartment have been designed with a set of core principles dictating the building layouts to enable easy access by all and fully comply with Part M of the Building Regulations. Building for Everyone:

A Universal Design Approach has been used as a guideline for both external and internal environment design.

1.External Environment.

Provision made for Universal Access parking.
Universal Access compliant footpaths and ramps.
Tactile paving surfaces.

2.Entrances and Horizontal Circulation.

Entrance lobbies sized to allow for a wheelchair turning circle.
Corridors wide enough to accommodate wheelchair users.
Doors and ironmongery are compliant with access requirements.

3.Vertical circulation.

Lift provision.
Handrails on both sides of circulation stairs. Refuge space in all stair cores.

4.Internal Environment.

All public spaces well lit.
Proposed visual colour contrast in public areas.
Proper signage in public spaces.

5.Sanitary Facilities.

Bathroom spaces meets Universal Access requirements.
Proper lighting in sanitary facilities

6.Facilities.

Sanitary facilities are located in the zone for wheelchair users.
Heights of window sills meets the requirements of the wheelchair user.

7.Building Types

Entrances by design are clearly identified due to the choice of material finish.
Approach is compliant to regulations with regard to Universal Access.

8.Building Management.

Maintenance Room located on site.
Entrance Lobbies as a point of reference for notifications & building information.
Evacuation plans set by the management of the building

