

PROPOSED STRATEGIC HOUSING DEVELOPMENT

AT KILBARRY, CORK

ON BEHALF OF CORK COUNTY GAA BOARD

ARCHITECTS DESIGN STATEMENT



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1.0 INTRODUCTION

The design for the proposed development has been undertaken following the guidance contained in the following documents:

- **The Urban Design Manual, 2009, Department of Environment**
- **Cork City Development Plans 2015-2021 & 2022-2028**
- **Design Manual for Urban Road and Streets, 2013, Department of Environment, Heritage and Local Government**
- **Sustainable Urban Housing: Design Standards for New Apartments, March 2018.**

The following design objectives have informed the design process of the proposed scheme

- Creation of a high-quality living environment for residents and enhancement of the social, environmental and visual quality of the area;
- Design of the layout to discourage anti-social behaviour, particularly by ensuring that the development overlook all access, parking and public open areas;
- Promoting the concepts of enclosure, the clear separation of public/ private realm and permeability as the means to achieve a high-quality residential environment; and
- Maximise amenity and energy efficiency through climate sensitive design that takes account of orientation and typography, and the retention of existing site features of merit.

2.0 SITE LOCATION, DESCRIPTION AND CONTEXT

The subject lands are located within Kilbarry on the northern fringe of Cork City. The site consists of a total landholding of 15.52 Hectares which abounds the old Whitechurch Road to the west, the City North Business Park to the south, the existing GAA grounds of Delaney's GAA Club to the east and with the Glenamought River along the northern boundary. The site includes a portion of the Delaney's GAA club grounds as well as the existing access road to the GAA club from Dublin Hill to facilitate the creation of a link road from the Old Whitechurch Road to Dublin Hill. The main area of the lands can be separated into two distinct sections, the relatively flat areas to the south which encompasses the residentially zoned lands and the areas which slope steeply down to the river valley along the northern portion of the lands which are zoned for Open Space. There are a number of existing residential dwellings in the southwestern corner of the site as well as further houses which are located on the opposite side of the Old Whitechurch Road to the west of the site. There is a large industrial unit to the south which is close to the boundary with the site and is accessed from the Kilbarry Industrial Estate. The lands are open along the northern boundary with views across the river valley and there are significant views west along the edge of the slope towards the existing railway viaduct across the Bride Valley.

The site can currently be accessed at two locations, from an existing laneway access off the Whitechurch Road to the southwest corner of the site just to the north of the existing dwellings and also from the carpark of the Delaney's GAA grounds to the east. There are high tension ESB cables and pylons which are located in the northeast corner of the site. The site contains a now disused hurley factory and other small ruined buildings adjacent to this in the southwest corner of the site. The previous access laneway to the Delaney's GAA pitch, which was the access prior to the completion of the link road from Dublin Hill also runs through the site from the old Whitechurch Road. An area of filled ground is located on the eastern side of the site adjacent to the boundary with Delaney's GAA pitch.

Existing Boundaries on the site vary. To the east the site is open to the existing carpark for Delaney's GAA grounds with palisade fencing along here. To the north of the clubhouse however the boundary changes with a mix of blockwork walls to a ball alley and a line of large existing trees contained within the Delaney's GAA grounds to the north of this. Along the northern boundary to the Glenamought River and the western boundary to the Old Whitechurch road are overgrown areas which include some large existing trees.

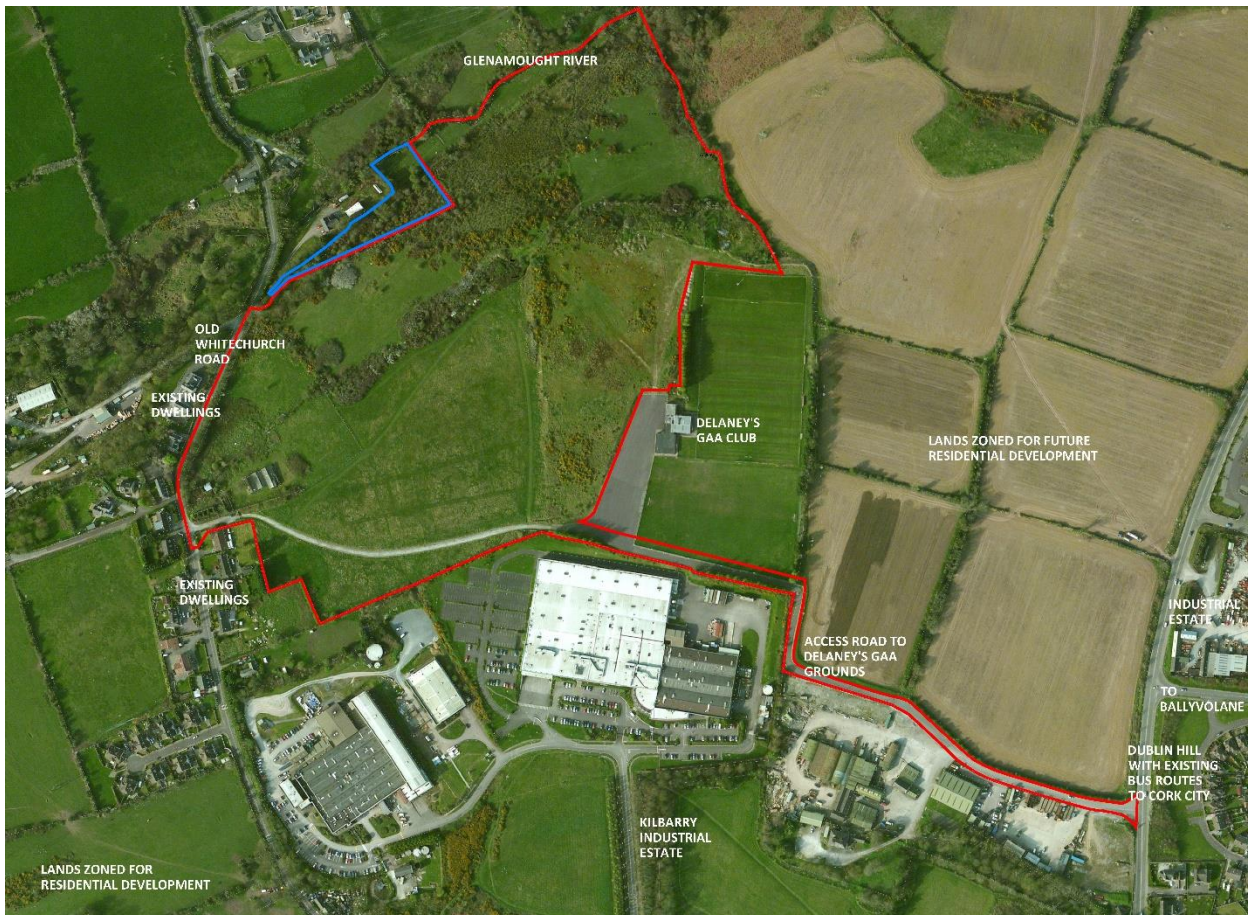


Figure 1. Aerial Photo of Site in Context



Figure 2. View of southern boundary of the site to City North Business Park looking west.



Figure 3. View of large industrial building to the south of the site within the Kilbarry Industrial Estate.



Figure 4: View from site into existing carpark in Delaney's GAA grounds



Figure 5: View from site looking northeast into Delaney's GAA grounds showing the clubhouse, ball alley to the rear of this and existing trees within Delaney's GAA grounds to the edge of the main pitch.



Figure 6: Existing Trees within Delaney's GAA grounds to the northeast corner of the residential development.



Figure 7: View from along Glenamought River at northern boundary of the site.



Figure 8. View out of site looking west over open space zoned lands towards railway viaduct



Figure 9. View of site from along the Old Whitechurch Road in northwest corner looking south

3.0 DESIGN APPROACH AND PROVISIONS

The following is a design review based upon the twelve criteria set out in the Urban Design Manual, whilst also referring to the other guidance above.

3.1 NEIGHBOURHOOD

3.1.1 CONTEXT: How well does the development respond to its surroundings?

The design layout responds to the site's context, and to on-site constraints and potentials. The design proposes a new entrance building in the form of a 3 storey duplex block as you enter the site from the Old Whitechurch Road. This block which has its parking in a courtyard to the rear creates an urban edge to the proposed new road into the development, and also to the existing Old Whitechurch Road while being setback from this to protect the amenity of the existing houses here.



Figure 10: Duplex Block A at the entrance to the development from the Old Whitechurch Road.

The road from the entrance off the Old Whitechurch Road continues through the southern portion of the site to form a link road from west to east to connect to the Delaney's GAA pitch to the west and its access road which affords connection from the development to Dublin Hill. Public transport connections to Cork City are available from Dublin Hill and it will also allow access to the retail services and other facilities in Ballyvolane.



Figure11: Proposed Link Road from the Old Whitechurch Road to the existing GAA access road off Dublin Hill

Along the northern boundary of the residential lands the ground falls away down to the Glenamought river which is below the site. In order to create an urban edge to the development and the wider area 3 apartment blocks which are 4 and 5 storeys tall are proposed along the edge of the development lands. These blocks step down a full level in response to the existing slopes and overlook the proposed new public park to the north of the site. Other housing has also been designed to overlook this park as one travels both east and west from the apartments.



Figure 12: View of Apartments and houses from the north overlooking the public park



Figure 12. Proposed Apartment Blocks along interface with Public Park

Throughout the scheme, appropriate responses are made to the nature of specific boundary conditions. Along the southern portion of the GAA grounds the development has been turned to face the boundary to assist in passive surveillance of the GAA facilities and to create an appropriate entrance to the development as you travel west along the link road from Dublin Hill. Where sides of houses face the carpark these are designed as dual fronted houses (types G and F2). Two possible future access points from the housing development have been allowed for within the design subject to agreement with Delaney's GAA club which can assist in integrating the GAA club and its amenity resource into both the development and by extension the wider area.

The design's overall form, architecture & landscaping respond suitably to the location creating a sense of place and the development positively contributes to the character and identity of the neighbourhood.



Figure 13: Proposed Design of the scheme adjacent to the existing carpark with Delaney's GAA club, with housing overlooking the carpark and facilities and potential future pedestrian access points subject to agreement with Delaney's GAA.



Figure 14: showing the relationship of housing to the existing Delaney's GAA carpark and grounds in the southeast corner of the site.

3.1.2 CONNECTIONS: How well connected is the new neighbourhood?

The site is located within an existing urban environment on the northern fringe of Cork City. A number of new connections are proposed from the site to neighbouring facilities and infrastructure. A new link road with footpath and cycleway facilities is proposed along the southern section of the site linking the old Whitechurch Road through the Delaney's GAA lands to the east to connect via its access road to Dublin Hill. In addition to this cycleway heading west to east two other cycleways are included heading north south through the development. The first links the public plaza adjacent to the creche to the public park along the northern fringe of the site.



Figure 15: Showing cycleway from plaza heading north to connect to public park

The second cycle route links from the distributor road at its eastern end within the site through the scheme linking the second plaza space with the various recreation facilities included within the development such as the playground, kick about area and the external gym and finally onto the cycle routes that are proposed within the public park.



Figure 16: Recreation Spine through the scheme with plaza, playground, kick-about area and gym off cycle route

These routes connecting the development to the link road along the south of the site will also make it easy to access a bus service should this serve the scheme along the link road in the future, once connections to the proposed Northern Distributor Road to the north of the site are confirmed. The layout links to existing movement routes and the places people will want to get to. As part of the development a new public park is proposed along the northern boundary of the site and both pedestrian links and cycleways access this proposed

park from the residential development. These paths also provide links to the adjacent IDA lands and to a future riverside walk heading west towards the Mallow Road.

3.1.3 INCLUSIVITY: How easily can people use and access the development?

The residential accommodation offers a wide variety of layouts for different preferences and uses. These cover conventional 2/3 storey housing of different styles and character and a variety of apartment and duplex accommodation. A wide selection of principal house types that come in a variety of different configurations are proposed (these vary in form and utilise 2,3 and 4 bed terraced & semi-detached typologies. There are 4 separate duplex apartment block types proposed (Blocks A – D) which vary in form. Blocks A, C and D contain ground floor 1 bed units with 2 bed units and a small number of 3 bed units over two floors above. Block B, which steps down a full level in response to existing gradients on the site in the vicinity of this block contains 2 bed units to the ground and lower ground floor with 1 bed units overhead generally. There are 3 separate shared access apartment block (Blocks E, F and G) which contain a mix of 21 apartments in a block varying from 4-5 storey which also steps down a full level in response to gradients, with full lift access to all apartments. This wide variety of house types and sizes, caters for a wide variety of people of different ages and abilities and facilitates downsizing as well as upsizing for residents depending on their changing circumstances. The scheme overall is designed to afford easy access by all people, with pedestrian friendly spaces, significant facilities for cyclists and also connections to other facilities in the neighbourhood.



Figure 17: Proposed playground overlooked by houses and apartments.

Within the scheme there is a range of public, communal and private amenity spaces and facilities for children of different ages, parents and the elderly. This ranges from the large public park with amenity walks and cycleways, to a number of usable open space areas within the development which are designed for informal play, to the recreation facilities located along the pedestrian and cycleway which runs north south along the eastern side of the development. These facilities include a public plaza designed to be suitable to external performances to a playground area for younger children, a kick about area for older children and an outdoor gym for adults and older people. Areas defined as public open space will also be clearly defined, accessible and open to all.

3.1.4 VARIETY: How does the development promote a good mix of activities?

The proposed development connects to and is part of the wider urban environment which includes a range of housing types and community and sports facilities. As outlined at 3.1.3 above there is a wide range of housing types and sizes proposed within the development which will broaden the range of choice available in the area at present, through the provision of a mix of 1, 2 & 3 bed apartments and own door duplex apartments, as well as 2, 3 and 4 bed housing will add greatly to the variety of housing types available and help meet different housing needs.



Figure 18: Proposed Creche facility.

A creche with a capacity for a total of 71 children is also proposed within the development. This creche has been located along the proposed link road at the proposed public plaza with direct cycle and pedestrian connections within the site and also to areas outside the site so that it can be easily accessed by both the residents of the scheme itself as well as neighbouring areas.

Activities generated by the development will also contribute to the quality of life in this locality. As part of the development, a large public park is proposed which will with the provision of a significant number of paths and cycleways which can link along the riverside will create a large amenity for both the residents of this development as well as neighbouring areas.

3.2 SITE

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

The proposal achieves an appropriately scaled development within the constraints of the land, it's topography and neighbouring uses and the design therefore achieves a sustainable use of development land. The proposal looks at the potential of higher density, taking into account appropriate accessibility by public transport and the objectives of good design.



Figure 19: Type E house type, wide fronted house with all habitable rooms facing south.

The houses, apartments and duplex units are designed and arranged on site to maximise solar gain. The apartments have been designed with an east west alignment to ensure efficient use of lifts. Houses are arranged to minimise the number of north facing rear gardens, and specific wide fronted house types (House Types C and E) have been designed so that all the main habitable rooms facing south maximise solar gain (see figure 19 above).

Landscaped areas are designed to provide amenity and biodiversity. A range of amenity areas are provided which vary, from the large public park, to smaller pocket parks within the development. A biodiversity area is proposed to the northern section of the public park along the Glenamought river which will not be accessible to the public. The scheme will also incorporate sustainable urban drainage systems.

3.2.2 DISTINCTIVENESS: How do the proposals create a sense of place?

The scheme has been designed with a number of recognisable features so that people can describe where they live and form an emotional attachment to the place. At the entrance to the scheme on the Old Whitechurch Road a focal point is created with the design of a duplex block of apartments with its parking to the rear. This is reinforced further through the creation of a public space formed by the three Duplex Apartment blocks A, C and D and the creche.



Figure 20: Public plaza at Creche and Duplex Blocks.

A further node is created in the east of the layout where the two local access roads meet. Here a public open space with tiered seating to provide an external performance space is created adjacent to a large area of open space.



Figure 21: Pedestrian Public Plaza

These two spaces will ensure that the scheme is a positive addition to the identity of the locality, with the creation of discernible focal points within the development.

The layout makes the most of the opportunities presented the existing sloped ground of the river valley in the northern portion of the site through the creation of a new public park which is overlooked by the development and interconnected with it. In this regard the proposed apartment buildings are crucial, providing an urban edge, whilst also ensuring overlooking of a significant portion of the open space and also successfully exploiting views out of the site to the north and west.

The development also uses 4 different Character Areas to assist in creating a more varied and distinctive layout, making the scheme more legible and easier to understand and get around. These 4 Character Areas called Entrance, Avenue, Eastern and Parkland are shown on drawing no 19012-1010-1-PA. Each Character Area uses a mix of changing materials, varying house typologies, sizes and scale, as well as landscape features to differentiate each area from the others.

The Entrance character area encompasses the 4 duplex blocks A-D and the creche located as you enter the scheme from the Old Whitechurch Road. These duplex blocks are 3 storey, with monopitch roofs, and blue engineering brick elements. These blocks are also arranged around a distinctive public plaza space along the new link road through the scheme.



Figure 22: Entrance Character Area with 3 storey own door duplex units with monopitch and flat roofs

The Avenue character area is made up of predominantly traditional 2 storey terraced houses and wide fronted terraced houses with a small number of semi-detached houses also. This character area is comprised of the central area of the site, with a strong urban form, arranged around the large pocket park within this character area. Finishes are slate roofs, with red brick elements and plastered walls and light coloured windows.



Figure 23: Avenue Character Area, with two storey terraced housing, in a tight urban form.

The parkland area comprises the 3 apartment blocks which are 4 and 5 storey and are set within larger areas of open space between them and between these blocks and the adjacent housing. Again there are brick elements but these are blue engineering brick, with flat roofs and dark grey windows and glazed balustrades. These blocks overlook the large public park proposed within the northern section of the lands.



Figure 24: Parkland character area, with large apartment blocks within landscaped space.

Finally there is the Eastern character Area, which is predominantly semi detached in nature and is the area located closest to the Delaney's GAA grounds. The design of this area is a mix of small courtyards and homezone streets, with again a mix of housing from 2 storey semi-detached, a small number of terraced units and 3 storey houses at its northern end where the character area overlooks the public park. Finishes here are plaster with a light buff brick on particular elements and dark windows.



Figure 25: Eastern character area, with two storey mainly semi-detached houses in street and homezone settings

3.2.3 LAYOUT: How does the proposal create people friendly streets and spaces?

In accordance with the Design Manual for Urban Streets and Roads, the design has a clear hierarchy of roads within the scheme. Two access points are proposed off the proposed link road to the south of the site which connects the Old Whitechurch Road through the Delaney's GAA club to Dublin Hill. These two access roads connect at the second public plaza, with the road travelling north towards the apartment block G. Off these linked access roads are minor access roads and finally shared surfaces and home-zones within the quieter residential areas. 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 and also linking the development to neighbouring sites and facilities.

The streets are 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, with traffic speeds controlled by design and layout rather than by speed bumps. Along the link road at the creche a public plaza has been introduced with a

raised table and high-quality surface finishes which creates an urban space within the scheme framed by the Creche and by Duplex Blocks, A, C and D. Similarly at the second plaza space a further raised table space is created extending the open space out and incorporating the road space to facilitate easy access for pedestrians to the open space area.



Figure 26: Excerpt from site plan showing proposed public plaza, shared surfaces, public spaces and raised table

Where possible home-zones have been designed within the quieter residential areas. These spaces which will have narrow roads at 4.8 metre widths, small narrow refuge areas for more vulnerable pedestrians as they exit the house curtilage and are at a raised level with differentiated surface treatment and clear signage to alert drivers of the change in priority. An example is shown in figure 27 below where the home-zone acts as an extension of the open space to the north of it.

3.2.4 PUBLIC REALM: How safe secure and enjoyable are the public areas?

As set out above the area of open space to the northern portion of the lands are to be developed as a Public Park. The park within the development site occupies 4.4Ha of the overall 21.3Ha. open space zoning contained in the City Development Plan for the overall area. This section of the public park will be the first section to be realised and developed and may be extended with further phases east of the current development site.

It is proposed to recontour areas of the slope to accommodate looped walking and cycling routes connecting to the Old Whitechurch Road, to the proposed development and terminating at three points on the eastern boundary to extend into future public park areas and other zoned areas on the plateau above.

a large mown turf open space area for passive recreation where the slope condition is least severe and smaller spaces where interventions such as SUDS attenuation tanking is installed covered and turfed to provide flat terrace areas.

The landscape where more severely sloped is proposed to be retained as a range of woodland and open meadows with long and short grass management interspersed some woodland edge tree planting to infill some areas especially where disturbance from earthworks occurs.

The landscape needs to remain close to its current range of meadow & woodland habitats. Primarily to ensure that existing dry acid grassland on the upper slope is maintained as a Marsh Fritillary Habitat. This habitat area will be enclosed with a 1.2m paladin fence, secure access gates for maintenance and a defensive hawthorn hedge. Further areas of existing meadow will also be retained and managed to extend the existing Fritillary Habitat.

The upper slope areas also need to remain sufficiently open to view from the apartments above for the provision of passive surveillance. To accommodate Suds runoff a dry cobble stream bed will be constructed from an outfall below the lower trail. This is proposed to take a naturally meandering through the existing scrub wood avoiding trees to reach the existing wet meadow below where an outfall to the Glenamought river will be formed.

The terrain is severely sloped below the lower trail as it falls to the wet meadow along the river. No paths are to be constructed to access this area as it is to be maintained as existing; a rich range of habitats. The range of existing woodland and meadow and its importance for biodiversity already existing on site requires that the park area is viewed primarily as a nature reserve where human use is secondary. The park area has terrain is too severe to accommodate active play in terms of games but the existing GAA Club which forms part of the open space zoning already provides for such activity. The terrain can accommodate walking and bicycle activity and trail routes in excess of 2 kilometres of these are proposed. The routes are looped with spurs proposed to immediately link the park area to further open space and industrial zoned lands up stream. There is a link to the Old Whitechurch Road so that existing residents have direct access at the western side of the park providing permeability for existing residential areas along the road. The Old Whitechurch Road allows for a connection with a proposed new amenity route leading west from the Glenamought Bridge down the glen passing the Kilnap Bridge and Viaduct and continuing along the northern city edge with a proposed southern branch leading into Blackpool district of the city.



Figure 27: The public park area in the Glennamought River Valley (4.46ha)

All of the public open space areas within the development area are overlooked by surrounding homes so that this amenity is owned by the residents and safe to use. A number of pocket parks are located throughout the development and these are designed so that they are overlooked by the adjacent houses. In the case shown below the access road to the north of the open space is traffic calmed, by reducing its width, and by giving it a raised table with a different surface treatment through the use of coloured tarmac to signify to drivers that there is a change in priority along this section of road. This ensures that the open space will be safe to use by children and will be easy to access by housing on the northern side of this road. To the south of the open space, a section of the road in front of the houses has been turned into a home-zone which allows for the road space itself to become integrated with the open space and to become an extension of this.



Figure 28: Pocket Park with traffic calmed section of access road to north and homezone to south.

The public realm is therefore being considered as a usable integrated element in the design of the development. Further evidence of this is in the design of public plaza space shown below is located along the north-south combined pedestrian and cycle route which traverses the site connecting the distributor road to the public park. The plaza incorporates the road adjacent to make it a pedestrian friendly space while also assisting in reducing traffic speeds at a key junction in the overall development.



Figure 29: Public Plaza

Children's play areas are sited where they will be overlooked, safe and contribute to the amenities of the neighbourhood. A proposed playground is located centrally within the scheme immediately off one of the proposed cycle routes and overlooked by adjacent houses and apartments. The playground is also set within a larger landscaped space creating a safer environment for children, with a landscape buffer to adjacent roads and parking areas.



Figure 30: Children's Playground

3.3 HOME

3.3.1 ADAPTABILITY: How will the buildings cope with change?

All homes are energy-efficient and are designed to be equipped for challenges anticipated from a changing climate. Homes can be extended without ruining the character of the types, layout and outdoor space available to them with the structure of the home and its loose fit design allows for adaptation and subdivision, such as the creation of an annexe or small office and space in the roof can be easily converted into additional living accommodation.

The design provides for persons / users with a wide range of abilities and the intention is to make the design appealing to all end users / residents. There are a wide variety of unit types within the development to cater for this. There are 85 no. dwelling units which are designed so that they can be converted to become fully accessible. These units have level access with all accommodation on one level and no internal stairs required, and which could then be used as step down accommodation or for use by persons with specific needs. These units are located within the 3 apartment blocks E, F and G as well as in the ground floor units of Duplex Blocks A, C and D. There are also many ground-floor own door units spread throughout the scheme.

3.3.2 PRIVACY & AMENITY: How does the scheme provide a decent standard of amenity?

Each home has access to an area of high quality useable private outdoor space. The layout maximises the number of homes enjoying dual aspect and as many houses as possible having either south, west or east facing rear gardens. There is a clear separation of private amenity space from the public realm. This is achieved in a number of ways. Firstly, housing is designed to turn corner and limit the rear garden walls visible from public space. Furthermore, where private walls of rear gardens meet the public realm in a number of locations the front garden of the house wraps around the corner of the house creating a defensible space within the house curtilage which has a low railing to its front, a landscape strip behind and then the rear garden wall. This not only separates the private amenity from the public realm, but it also creates an opportunity for landscape screening within this landscape strip to soften the overall impact of the 1.8m high plastered wall.

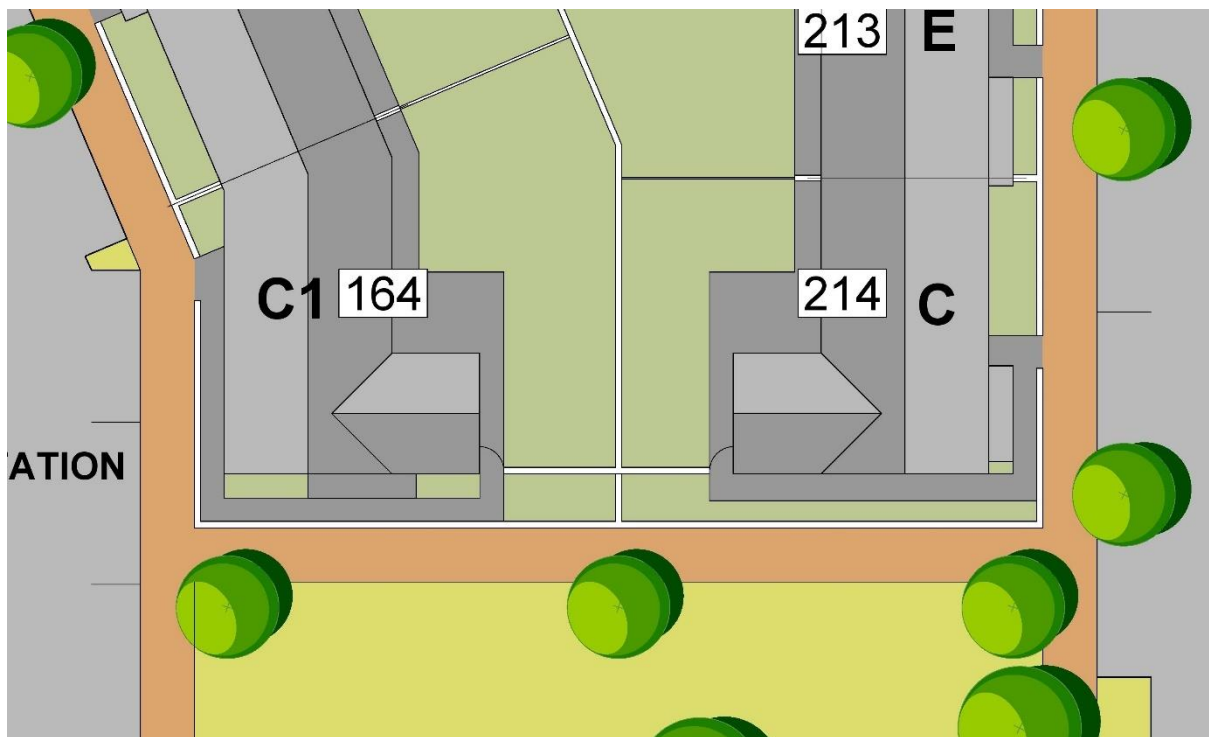


Figure 31 showing corner houses designed with a front garden space between the public realm and the private rear garden wall.

In other areas private amenity is separated the public realm and screened by 2 metre wide planting strips (see figure 31 below)

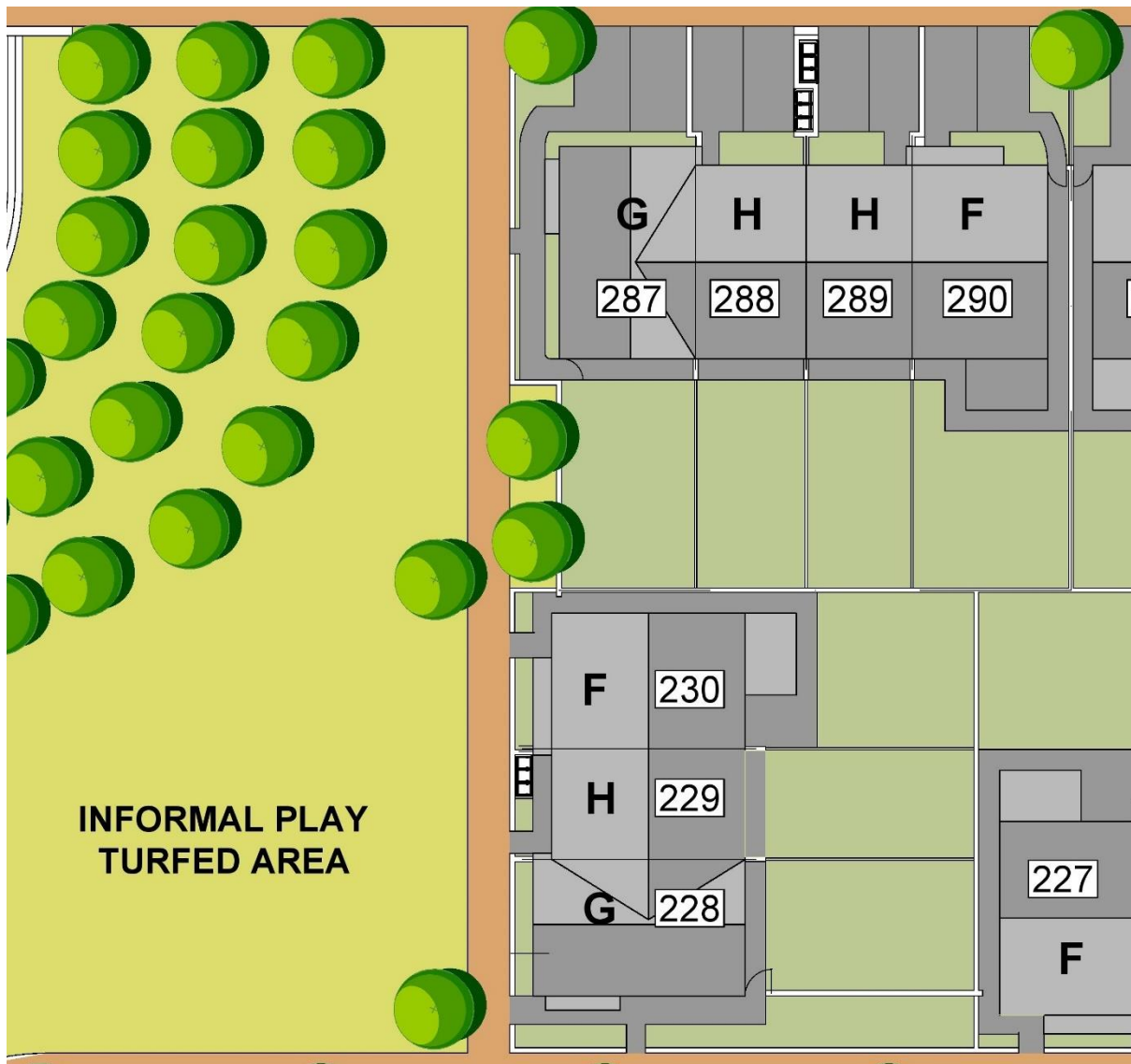


Figure 32 Showing Private Amenity separated by planting strip from public realm.

Windows are sited to avoid views into the home from other houses or the street and adequate privacy is affordable to ground floor units. The ground floor units within duplex and apartments have a setback from the street and footpaths giving an element of privacy from the public. Boundary treatments have been selected to increase the level of privacy to ground floor Duplex apartment amenity areas where these meet public space. Hedging will be used to create a soft boundary and separation between private and public and level change where possible will also be used to assist in this, such as along the western elevation of Block C.



Figure 33: showing the western elevation of Block C, where the private amenity is raised above the footpath to give a greater privacy to this area. In other areas hedge planting is used.



Figure 34: showing the western elevation of Block D, where the private amenity is separated from the adjacent public space by a railing and a hedge

All homes are designed to provide adequate storage including space within the home for the sorting and storage of recyclables. Duplex units have external storage areas for bins, with corner units C and D having a shared amenity space at the rear with these facilities (see figure 32 below), in a semi-public space overlooked by the apartments.

Every apartment has private amenity space in accordance with the guidelines set down in the Sustainable Urban Housing, Design Standards for New Apartments, 2018. Additional private amenity space in the form of private gardens to the ground floor apartments are also provided.

Storage for belongings and recyclables is incorporated into apartment and duplex units designs with storage provisions in accordance with the areas set down in the Sustainable Urban Housing, Design Standards for new Apartments 2018 (refer to Quality Housing Assessment in Appendix 1 below)

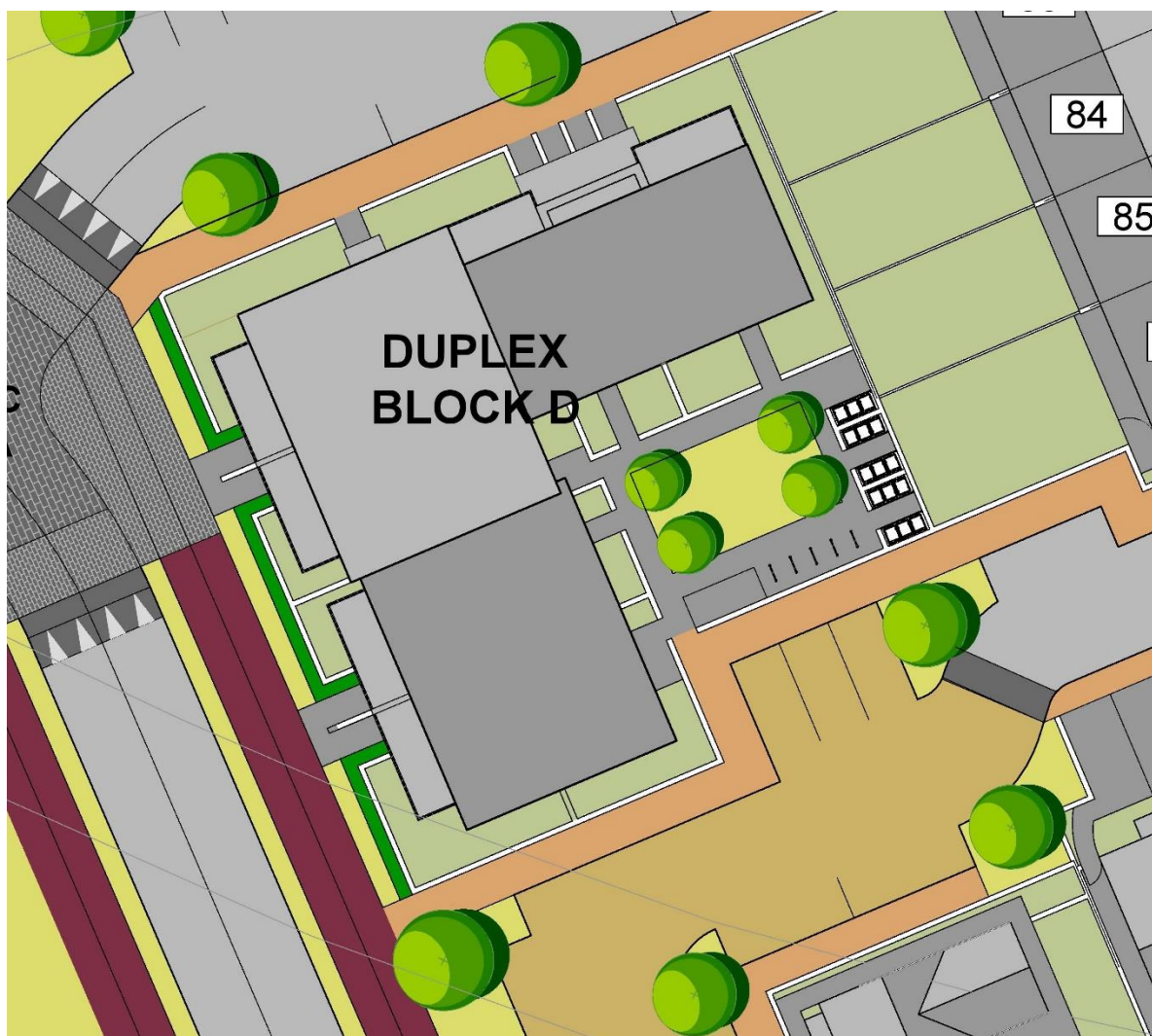


Figure 35: Duplex Block D, Shared Bin and Bike Storage area to rear. Hedging is used to create privacy to ground floor units fronting on the public road.

3.3.3 PARKING: How will the parking be secure and attractive?

The layout has been designed with car parking generally on-street or within easy reach of the home's front door. In all situations, parked cars are overlooked by houses, pedestrians and traffic. There is a mix of on-curtilage parking and shared on-street parking to the houses throughout the scheme. 2 parking spaces per house are provided. For the duplex apartments and the apartments 1 space per unit is provided in a shared arrangement to maximise the efficient use of these spaces. The duplexes and apartments are located along cycleways and secure facilities are also provided for bicycle storage, with all duplex units having shared covered bicycle parking areas provide either in open space areas of in communal semi-public courtyards to the rear of the units (see figure 18 above and figure 20 below. All apartments have an internal bike storage area incorporated into the basement level where there are steps in level. Communal motorbike parking is provided within shared parking areas to all duplexes and apartments in accordance with the Cork City Development Plan.

Materials used for parking areas are of similar quality to the rest of the development and communal spaces are designed with significant landscaping to reduce the visual impact of parked cars on the development (see figure 19 below)



Figure 36: Showing area where a variety of different forms of parking are provided, with on-curtilage parking, and shared parking both perpendicular and parallel to reduce impact, with landscaping included.

3.3.4 DETAILED DESIGN: How well thought through is the building and landscape design?

The materials and external design of the proposed housing within the development will make a positive contribution to the locality, with high quality materials and finishes proposed. The landscape design facilitates the use of the public spaces from the outset. Communal car parking areas are considered as an integral element within the public realm design and have been designed with generous landscape areas incorporated within the parking areas.

Bin stores for the terraced houses have been designed within the public areas to be close to the houses they serve and small in nature so that they can be accommodated within landscaped areas and adequately screened. Bin stores for the apartments are incorporated internally into the basement floor level, where there are steps in section. For the duplex units, bin stores are generally either located on the property where possible through the creation of small private amenity areas at ground level. Where bin stores are shared they are located in sheltered areas within larger landscape public spaces such as between blocks A and B (figure 33 below), or in the rear semi private courtyard of blocks C and D (see figure 32 above)



Figure 37: Bin and Bike Store to Duplex Blocks A and B

4.0 APPENDICES

4.1 KEY OVERALL FIGURES

Non Residential Uses	Area (sq.m.)
Creche	519
Substations (4 no.)	20
Total	539

Total Residential Development area	
Total Housing Development	22,261.00
Block A	1,980.30
Block B	775.60
Block C	836.40
Block D	996.60
Block E	2,116.60
Block F	2,116.60
Block G	2,116.60
TOTAL	33,199.70

Total Overall Development area	
Total Residential Development Area	33,199.70
Other Development	539.00
Total	33,738.70

HOUSING MIX		
	NUMBERS	PERCENTAGE
4 BED UNITS	25	12.32%
3 BED UNITS	128	63.05%
2 BED UNITS	50	24.63%

APARTMENT MIX		
	NUMBERS	PERCENTAGE
1 BED UNITS	15	23.81%
2 BED UNITS	48	76.19%

OVERALL RESIDENTIAL MIX		
	NUMBERS	PERCENTAGE
1 BED UNITS	41	12.85%
2 BED UNITS	123	38.56%
3 BED UNITS	130	40.75%
4 BED UNITS	25	7.84%
TOTAL	319	100.00%

DUPLEX MIX		
	NUMBERS	PERCENTAGE
1 BED UNITS	26	49.06%
2 BED UNITS	25	47.17%
3 BED UNITS	2	3.77%

Part V Units Houses

House type	No. of Storeys	No. of beds	Gross Floor Area (sq.m.)	No of units			Total No of Units	Cumulative Floor Area (sq.m.)
				Terraced	Semi-Det	Detached		
F	2	3	113	7	2		9	1,017.00
F1	2	3	113	1			1	113.00
G	2	3	112.1	2			2	224.20
H	2	2	83.7	10			10	837.00
Total				20	2		22	2,191.20

Part V Units Apartments

Block	No of Beds	Gross Floor Area	No of Units	Cumulative Floor Area (sq.m.)	
BLOCK E	2	79	5	395.00	
	1	58	4	232.00	
	2	80.7	11	887.70	
	1	51.8	1	51.80	
BLOCK G	2	79	5	395.00	
	1	58	4	232.00	
	2	80.7	11	887.70	
	1	51.8	1	51.80	
Total				42	3,133.00

TOTAL Part V	62	5,324.20
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DENSITY	
Total Site Area	15.52
Total Open Space Zoned Lands	4.463
Remaining Site Area (Existing Roads and GAA grounds)	0.781
Total Residential Zoned Land	10.276
Undevelopable Areas: (Hectares)	
Lands required for Road Objective and Creche	0.895
Lands Too Steep to be developed inc Wayleave	1.152
Total	2.047
Total Developable Area	8.229
Density (Units /Hectare)	38.77
Density (Units /Acre)	15.69

PLOT RATIO	
Total Development 33,738.70	Net Developable Area (Ha) 8.229
Plot Ratio	0.41

SITE COVERAGE		
Development Footprint		Net Developable Area (Ha)
Housing	10,947.00	8.229
Block A	695	
Block B	289	
Block C	301	
Block D	361	
Block E	514.25	
Block F	514.25	
Block G	514.25	
Total	14,135.75	
Site Coverage		17%

OPEN SPACE PROVISION				
			Ha	%
Total Site Area			15.52	100
Total Open Space Provision on overall lands			7.051	45%
Total Active Open Space on overall lands			2.777	18%
Total Developable Site Area			8.229	100
Active Open Space within developable area			1.22	14%

CARPARKING PROVISION	
Housing on curtilage parking @2	
spaces per dwelling	182
Housing Shared parking @2	
spaces per dwelling	224
Apartments Block E	21
Apartments Block F	21
Apartments Block G	21
Duplex Block A	22
Duplex Block B	9
Duplex Block C	10
Duplex Block D	12
Creche	12
Total	534

MOTORBIKE PARKING	
Block A	2
Block B	1
Block C	1
Block D	1
Block E	2
Block F	2
Block G	2
Creche	1
Total	12

BICYCLE PARKING PROVISION	
Block A & B	16
Block C	8
Block D	10
Block E	28
Block F	28
Block G	28
Creche	6
Total	124

4.2 QUALITY HOUSING ASSESSMENT

APARTMENTS (BLOCK TYPE E,F,G) RESIDENTIAL DEVELOPMENT, KILBARRY CO. CORK													
APART. NOS	SCHEME NOS	NO. OF BEDS	TOTAL AREA (m ²)	AGGREGATE LIVING AREA (m ²)	BED 1 AREA (m ²)	BED 2 AREA (m ²)	BED 3 AREA (m ²)	BED 4 AREA (m ²)	AGGREGATE BEDROOM AREA (m ²)	STORAGE (m ²)	ASPECT	PRIVATE AMENITY SPACE (m ²)	FLOOR TO CEILING HEIGHT (m)
1	132, 183 & 242	2	79.0	31.4	13.1	11.4	-	-	24.5	6.0	DUAL	15.7	2.7
2	133, 184 & 243	1	55.3	25.5	11.4	-	-	-	11.4	5.1	SINGLE	5.0	2.7
3	134, 185 & 244	2	80.7	30.0	13.9	11.4	-	-	25.3	6.7	DUAL	37.2	2.7
4	135, 186 & 245	2	80.7	30.0	13.1	11.4	-	-	25.3	6.7	DUAL	8.7	2.7
5	136, 187 & 246	2	79.0	31.4	13.9	11.4	-	-	24.5	6.0	DUAL	8.9	2.7
6	137, 188 & 247	1	55.3	25.5	11.4	-	-	-	11.4	5.1	SINGLE	5.0	2.7
7	138, 189 & 248	2	80.7	30.0	13.9	11.4	-	-	25.3	6.7	DUAL	17.0	2.7
8	139, 190 & 249	2	80.7	30.0	13.9	11.4	-	-	25.3	6.7	DUAL	18.7	2.7
9	140, 191 & 250	2	80.7	30.0	13.1	11.4	-	-	25.3	6.7	DUAL	8.7	2.7
10	141, 192 & 251	2	79.0	31.4	13.9	11.4	-	-	25.3	6.7	DUAL	8.9	2.7
11	142, 193 & 252	1	55.3	25.5	11.4	-	-	-	11.4	5.1	SINGLE	5.0	2.7
12	143, 194 & 253	2	80.7	30.0	13.9	11.4	-	-	25.3	6.7	DUAL	17.0	2.7
13	144, 195 & 254	2	80.7	30.0	13.9	11.4	-	-	25.3	6.7	DUAL	6.3	2.7
14	145, 196 & 255	2	80.7	30.0	13.1	11.4	-	-	25.3	6.7	DUAL	8.7	2.7
15	146, 197 & 256	2	79.0	31.4	13.9	11.4	-	-	24.5	6.0	DUAL	8.9	2.7
16	147, 198 & 257	1	55.3	25.5	11.4	-	-	-	11.4	5.1	SINGLE	5.0	2.7
17	148, 199 & 258	2	80.7	30.0	13.9	11.4	-	-	25.3	6.7	DUAL	17.0	2.7
18	149, 200 & 259	2	80.7	30.0	13.9	11.4	-	-	25.3	6.7	DUAL	6.8	2.7
19	150, 201 & 260	2	80.7	30.0	13.1	11.4	-	-	25.3	6.7	DUAL	8.7	2.7
20	151, 202 & 261	2	79.0	31.4	13.9	11.4	-	-	24.5	6.0	DUAL	8.9	2.7
21	152, 203 & 262	1	51.8	23.8	11.4	-	-	-	11.4	3.4	DUAL	5.2	2.7
TOTAL AREA OF THE BUILDING													1555.7

DUPLIX UNIT (BLOCK A) RESIDENTIAL DEVELOPMENT, KILBARRY CO. CORK													
UNIT NO.	NO. OF BEDS	TOTAL AREA (m ²)	AGGREGATE LIVING AREA (m ²)	BED 1 AREA (m ²)	BED 2 AREA (m ²)	BED 3 AREA (m ²)	BED 4 AREA (m ²)	AGGREGATE BEDROOM AREA (m ²)	STORAGE (m ²)	ASPECT	PRIVATE AMENITY SPACE (m ²)	FLOOR TO CEILING HEIGHT (m)	
1	1	51.1	23.1	11.4	-	-	-	11.4	3.0	DUAL	11.8	2.7	
2	1	51.1	23.1	11.4	-	-	-	11.4	3.0	DUAL	11.9	2.7	
3	1	51.1	23.1	11.4	-	-	-	11.4	3.0	DUAL	17.9	2.7	
4	1	51.1	23.1	11.4	-	-	-	11.4	3.0	DUAL	17.9	2.7	
5	1	51.1	23.1	11.4	-	-	-	11.4	3.0	DUAL	18.8	2.7	
6	1	51.1	23.1	11.4	-	-	-	11.4	3.0	DUAL	19.6	2.7	
7	1	49.6	23.0	11.4	-	-	-	11.4	3.4	DUAL	59.9	2.7	
8	1	50.5	23.0	11.4	-	-	-	11.4	3.4	DUAL	23.5	2.7	
9	1	51.1	23.1	11.4	-	-	-	11.4	3.0	DUAL	17.2	2.7	
10	1	51.1	23.1	11.4	-	-	-	11.4	3.0	DUAL	18.1	2.7	
11	1	50.4	23.7	11.5	-	-	-	11.5	5.0	DUAL	18.3	2.7	
12	2	115.2	33.5	15.1	14.8	-	-	29.9	15.1	DUAL	7.0	2.7	
13	2	113.9	32.3	17.4	15.4	-	-	32.8	12.3	DUAL	7.0	2.7	
14	2	107.8	32.3	16.7	13.0	-	-	29.7	12.3	DUAL	7.0	2.7	
15	2	107.8	32.3	16.7	13.0	-	-	29.7	12.3	DUAL	7.0	2.7	
16	2	107.8	32.3	16.7	13.0	-	-	29.7	12.3	DUAL	7.0	2.7	
17	2	107.8	32.3	16.7	13.0	-	-	29.7	12.3	DUAL	7.0	2.7	
18	2	126.5	35.2	13.1	12.1	7.3	-	32.5	9.1	DUAL	9.0	2.7	
19	2	124.3	36.1	17.4	12.0	7.8	-	37.3	9.7	DUAL	9.0	2.7	
20	2	107.8	32.3	16.7	13.0	-	-	29.7	12.3	DUAL	7.0	2.7	
21	2	107.8	32.3	16.7	13.0	-	-	29.7	12.3	DUAL	7.0	2.7	
22	2	117.9	34.8	16.1	12.8	-	-	29.0	8.4	DUAL	7.0	2.7	
TOTAL AREA OF THE BUILDING													1803.9

DUPLIX UNIT (BLOCK B) RESIDENTIAL DEVELOPMENT, KILBARRY CO. CORK													
UNIT NO.	NO. OF BEDS	TOTAL AREA (m ²)	AGGREGATE LIVING AREA (m ²)	BED 1 AREA (m ²)	BED 2 AREA (m ²)	BED 3 AREA (m ²)	BED 4 AREA (m ²)	AGGREGATE BEDROOM AREA (m ²)	STORAGE (m ²)	ASPECT	PRIVATE AMENITY SPACE (m ²)	FLOOR TO CEILING HEIGHT (m)	
23	2	103.3	30.1	14.8	11.4	-	-	26.1	8.2	DUAL	30.9	2.7	
24	2	103.3	30.1	14.8	11.4	-	-	26.1	8.2	DUAL	25.4	2.7	
25	2	103.3	30.1	14.8	11.4	-	-	26.2	8.2	DUAL	24.2	2.7	
26	2	97.8	31.4	13.0	12.2	-	-	25.2	8.4	DUAL	16.7	2.7	
27	2	103.1	30.6	13.0	11.7	-	-	24.8	9.0	DUAL	37.3	2.7	
28	1	53.2	23.0	11.4	-	-	-	11.4	3.1	DUAL	6.7	2.7	
29	1	53.2	23.0	11.4	-	-	-	11.4	3.1	DUAL	6.7	2.7	
30	1	53.2	23.0	11.4	-	-	-	11.4	3.1	DUAL	6.7	2.7	
31	1	53.1	23.0	12.1	-	-	-	12.1	3.0	DUAL	8.4	2.7	
TOTAL AREA OF THE BUILDING													723.5

DUPLIX UNIT (BLOCK C) RESIDENTIAL DEVELOPMENT, KILBARRY CO. CORK												
UNIT NO.	NO. OF BEDS	TOTAL AREA (m ²)	AGGREGATE LIVING AREA (m ²)	BED 1 AREA (m ²)	BED 2 AREA (m ²)	BED 3 AREA (m ²)	BED 4 AREA (m ²)	AGGREGATE BEDROOM AREA (m ²)	STORAGE (m ²)	ASPECT	PRIVATE AMENITY SPACE (m ²)	FLOOR TO CEILING HEIGHT (m)
32	1	48.2	23.7	11.5	-	-	-	11.5	3.1	DUAL	13.2	2.7
33	1	48.1	23.7	11.5	-	-	-	11.5	3.0	DUAL	21.2	2.7
34	2	55.2	34.2	19.2	16.4	-	-	35.6	8.4	DUAL	7.5	2.7
35	2	55.2	34.2	19.2	16.4	-	-	35.6	8.4	DUAL	7.5	2.7
36	2	55.2	34.2	19.2	16.4	-	-	35.6	8.4	DUAL	7.5	2.7
66	1	51.9	23.5	11.4	-	-	-	11.4	3.0	DUAL	12.4	2.7
67	1	51.9	23.5	11.4	-	-	-	11.4	3.0	DUAL	7.8	2.7
68	1	48.1	23.7	11.6	-	-	-	11.6	3.0	DUAL	24.3	2.7
69	2	93.1	30.0	13.4	11.9	-	-	25.3	6.1	DUAL	8.6	2.7
70	2	93.1	30.0	13.4	11.9	-	-	25.3	6.1	DUAL	7.4	2.7
TOTAL AREA OF THE BUILDING												600.0

DUPLIX UNIT (BLOCK D) RESIDENTIAL DEVELOPMENT, KILBARRY CO. CORK												
UNIT NO.	NO. OF BEDS	TOTAL AREA (m ²)	AGGREGATE LIVING AREA (m ²)	BED 1 AREA (m ²)	BED 2 AREA (m ²)	BED 3 AREA (m ²)	BED 4 AREA (m ²)	AGGREGATE BEDROOM AREA (m ²)	STORAGE (m ²)	ASPECT	PRIVATE AMENITY SPACE (m ²)	FLOOR TO CEILING HEIGHT (m)
71	1	50.0	23.0	11.9	-	-	-	11.9	3.4	DUAL	39.6	2.7
72	1	50.0	23.0	11.9	-	-	-	11.9	3.4	DUAL	11.2	2.7
73	1	48.1	23.6	11.4	-	-	-	11.4	3.0	DUAL	14.7	2.7
74	1	48.2	23.7	11.4	-	-	-	11.4	3.2	DUAL	14.7	2.7
75	1	48.1	23.7	11.5	-	-	-	11.5	3.0	DUAL	15.2	2.7
76	1	48.1	23.7	11.5	-	-	-	11.5	3.0	DUAL	29.9	2.7
77	2	93.1	30.0	13.4	11.9	-	-	25.3	6.1	DUAL	8.6	2.7
78	2	93.1	30.0	13.0	13.2	-	-	26.2	6.0	DUAL	7.4	2.7
79	2	110.4	34.2	19.2	16.4	-	-	35.6	8.9	DUAL	7.3	2.7
80	2	110.4	34.2	19.2	16.4	-	-	35.6	8.9	DUAL	7.3	2.7
81	2	104.1	34.2	15.4	12.5	-	-	27.9	8.9	DUAL	7.3	2.7
82	2	104.1	34.2	15.4	12.5	-	-	27.9	8.9	DUAL	7.3	2.7
TOTAL AREA OF THE BUILDING												907.7

HOUSE TYPES, RESIDENTIAL DEVELOPMENT, KILBARRY CO. CORK												
HOUSE TYPE	NO. OF BEDS	TOTAL AREA (m ²)	AGGREGATE LIVING AREA (m ²)	BED 1 AREA (m ²)	BED 2 AREA (m ²)	BED 3 AREA (m ²)	BED 4 AREA (m ²)	AGGREGATE BEDROOM AREA (m ²)	STORAGE (m ²)	ASPECT	PRIVATE AMENITY SPACE (m ²)	NUMBER OF PEOPLE PER HOUSE
A	4	146.6	43.7	13.6	12.0	7.1	18.8	51.1	9.7	DUAL	-	7
A1	4	146.6	43.7	13.6	12.0	7.1	18.8	51.1	9.7	DUAL	-	7
B	4	148.5	45.5	15.2	12.2	7.1	16.9	49.4	8.1	DUAL	-	7
C	4	137.7	54.1	14.4	11.4	11.8	7.2	45.2	6.0	DUAL	-	7
C1	4	149.5	60.2	14.4	11.4	11.8	7.2	48.1	9.0	DUAL	-	7
D	3	114.8	39.4	15.6	14.0	9.3	-	39.1	5.0	DUAL	-	5
E	3	114.5	42.7	13.8	11.7	7.9	-	33.2	6.7	DUAL	-	5
E1	3	114.5	42.7	13.8	11.7	7.9	-	33.2	6.7	DUAL	-	5
E2	3	114.5	42.7	13.8	11.7	7.9	-	33.2	6.7	DUAL	-	5
F	3	113.0	43.0	16.5	12.0	7.1	-	35.5	6.0	DUAL	-	5
F1	3	113.0	43.0	16.5	12.0	7.1	-	35.5	6.0	DUAL	-	5
F2	3	113.0	43.0	16.5	12.0	7.1	-	35.5	6.0	DUAL	-	5
G	3	112.1	42.8	15.1	11.4	7.1	-	34.5	7.0	DUAL	-	5
H	2	83.7	32.8	14.3	11.4	-	-	25.5	4.0	DUAL	-	4
J	3	114.5	45.5	14.3	11.4	-	-	32.2	5.3	DUAL	-	5

4.3 ASSESSMENT OF APARTMENTS AND DUPLEXES UNDER GUIDANCE CONTAINED IN “SUSTAINABLE URBAN HOUSING – GUIDELINES FOR PLANNING AUTHORITIES” 2018.

SPPR 1 & 2 – Housing Mix.

Apartment Developments may include up to 50% one bedroom or studio type units.

Block A: 11 1 bed units, 9, 2 bed units, 2 3 bed units. **This complies**

Block B: 4 1 bed units 5 2 bed units **This complies**

Block C: 5 1 bed units 5 2 bed units **This complies**

Block D: 6 1 bed units 6 2 bed units **This complies**

BLOCKS E, F & G: 5 1 bed units and 16 2 bed units **This complies**

SPPR 3 – Minimum Apartment Floor Areas.

1-bedroom apartments (2 person) 45 sq.m.

2-bedroom apartments (4 persons) 73 sq.m.

3-bedroom apartments (5 persons) 90 sq.m.

All apartments have overall areas in excess of these requirements.

In addition the total number of apartments and breakdown of unit types is as follows:

1 bed apartments	41 units	= total minimum development = 41 x 45 sq.m.	= 1,845 sq.m.
2 bed apartments	73 units	= total minimum development = 73 x 73 sq.m.	= 5,329 sq.m.
3 bed apartments	2 units	= total minimum development = 2 x 90	= 180 sq.m.

Total	116 units	total minimum development	= 7,354 sq.m.
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1 beds + 10% min area	= 41 x 4.5 sq.m.	= 184.5 sq.m.
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2 beds + 10% min area	= 18 x 7.3 sq.m.	= 131.4 sq.m.
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Total + 10% of majority	= 59 units	= 315.9 sq.m.
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Total Minimum Floor Area = 7,354 + 315.9 = 7,669.9 sq.m.

Total Net Floor area of apartments = 8,701 sq.m

All Apartments therefore comply.

SPPR 4 – Dual Aspect Ratios.

In suburban or intermediate locations it is an objective that there shall generally be a minimum of 50% dual aspect apartments in a single scheme.

Block A – all Apartments are dual aspect **This complies**

Block B – all Apartments are dual aspect **This complies**

Block C – all Apartments are dual aspect **This complies**

Block D – all Apartments are dual aspect **This complies**

Block E – 4 Apartments are single aspect, 17 apartments are dual aspect **This complies**

Block F – 4 Apartments are single aspect, 17 apartments are dual aspect **This complies**

Block G – 4 Apartments are single aspect, 17 apartments are dual aspect **This complies**

SPPR 5 – Floor to Ceiling Height.

Ground floor level apartments floor to ceiling heights shall be a minimum of 2.7m and shall be increased in certain circumstances, particularly where necessary to facilitate a future change of use to a commercial use.

All apartments have a floor to ceiling height of 2.7m. Due to the location in a suburban development it is not envisaged that the ground floor units would in the future be changed to a commercial use.

SPPR 6 – Lift and Stair Cores.

A maximum of 12 apartments per floor per core may be provided in apartment schemes.

The maximum no of apartment on any floor accessing a single stair and lift core is 5.

Minimum Floor Areas and Standards.

Minimum aggregate floor areas for living/dining/kitchen rooms and minimum widths for the main living/dining rooms:

1 bed unit minimum width - 3.3m minimum aggregate area - 23 sq.m.

All apartments comply

2 bed 4 person unit minimum width - 3.6m minimum aggregate area - 30 sq.m.

All apartments comply

3 bed 5 person unit minimum width - 3.8m minimum aggregate area - 34 sq.m.

All apartments comply

Minimum bedroom floor areas/widths

Single Bedrooms 2.1 m width, 7.2 sq.m. area

Double Bedroom 2.8 m width, 11.4 sq.m. area

All apartments comply

Minimum aggregate bedroom floor areas

2 bedrooms 4 persons 11.4 +13 sq.m. = 24.4 sq.m.

3 bedrooms 5 persons 11.4 +13 + 7.2 sq.m. = 31.6 sq.m.

All apartments comply

Minimum storage space requirements

1 bedroom = 3 sq.m.

2 bedrooms (4 persons) = 6 sq.m.

3 bedrooms (5 persons) = 9 sq.m.

All apartments comply

Minimum floor areas for private amenity space

1 bedroom = 5 sq.m.

2 bedrooms (4 persons) = 7 sq.m.

3 bedrooms (5 persons) = 9 sq.m.

All apartments comply